

Work Plan



**Brownfield Remedial
Investigation
221 Main Street
City of White Plains
Westchester County,
New York**

BCP Site # C360073

January 2006



Stearns & Wheeler
Companies

WORK PLAN

BROWNFIELD REMEDIAL INVESTIGATION
221 MAIN STREET
CITY OF WHITE PLAINS
WESTCHESTER COUNTY, NEW YORK

Prepared for

LC MAIN, LLC
115 Steven Avenue
Valhalla, New York 10595

Prepared by

S&W Redevelopment

of North America, LLC
430 East Genesee Street
Syracuse, New York 13202

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REMEDIAL INVESTIGATION WORK PLAN
BCP Site # C360073
221 MAIN STREET
WHITE PLAINS, NEW YORK

SECTION 1 - INTRODUCTION AND PURPOSE

This document presents a Remedial Investigation (RI) Work Plan for the 221 Main Street site in White Plains, Westchester County, New York (Figure 1). This RI Work Plan has been prepared in accordance with the Brownfield Cleanup Agreement (BCA) between the volunteer/owner of the site, LC Main, LLC, and the New York State Department of Environmental Conservation (NYSDEC). The basis for the RI approach derived from the draft *Remedial Investigation and Interim Remedial Measure (RI/IRM) Work Plan*, prepared by J.M. Associates, dated October 2005. This RI Work Plan describes and expands upon the work elements specific to the RI program that were introduced in the draft October 2005 document. A separate IRM Work Plan has also been created based on the aforementioned October 2005 draft document, to accompany this RI Work Plan.

The site (BCP Site # C360073) is currently improved with several commercial buildings along Main St and Hamilton Ave, and a municipal parking lot on the west side of the site (Figure 2). Plans have been drawn up to redevelop the site into a hotel and residential condominium complex, which would produce a visually attractive and economically valuable asset to the local community (Figure 3). In order to support such a plan, existing site buildings are targeted for demolition, and a new street, Court Street Extension, will be constructed through the western side of the site.

Historically, it is known that underground storage tanks (USTs) have existed in various locations at the site. Previous site investigations have verified that at least a dozen abandoned underground storage tanks (USTs) still exist at the site, and there is evidence of soil and groundwater contamination as well. These findings have complicated the planned redevelopment of the site. Specifically, the redevelopment plan requires that soils be excavated to a depth of approximately 50 feet to make way for new building foundations and construction. The site has been accepted into the BCP because the potential for encountering contaminated soil, groundwater, and abandoned USTs has complicated the excavation program, potentially impacting the site's redevelopment

potential. In addition, there is evidence of off-site contamination downgradient of the site, derived from on-site contamination in the northwest corner of the site.

Based on the finding of previous site investigations, it is known that contamination at the site can be divided into two (2) types:

(1) soil and groundwater contamination in the northwest corner of the site that has affected an off-site property downgradient of the site (the New York Power Authority), and

(2) soil contamination in the remainder of the site, which is mainly confined to on-site soils.

These two site areas are shown on Figure 2. The northwest site area in which soil and groundwater contamination has caused off-site contamination is referred to hereinafter as the “PA area”. The balance of the site, where contamination confined to on-site soils, is referred to hereinafter as the “221 area”.

Because the nature and extent of contamination at the PA area and the 221 area is different, the strategies to further investigate and/or remediate the two areas of the site will also be different. The PA area will require further investigation to determine the nature and extent of groundwater and free product contamination that may have migrated off site, so that an appropriate remedial action strategy can be developed. The 221 area will not require further investigation, because the contamination has been delineated (i.e. it is confined primarily to on-site soils), and accordingly an interim remedial action strategy has already been developed to address contamination at the 221 area.

This RI will be conducted in the PA area of the site, in accordance with NYSDEC’s draft *Brownfield Cleanup Program Guide* (May 2004) and *Technical Guidance for Site Investigation and Remediation* (DER-10). The RI will verify the nature and extent of contamination on site and off site, both horizontally and vertically, relative to the PA area.

The RI will be conducted as a flexible program consistent with the U.S. EPA and NYSDEC Triad Approach to Streamline Brownfield’s Site Assessment and Cleanup Activities. Part of this flexibility will be provided by coordinating RI activities with a

concurrent but separate Interim Remedial Measure (IRM) program for the 221 area of the site. It is expected that the IRM will help verify the presence of contamination and substantiate the location of potential contaminant sources. By coordinating RI tasks with IRM tasks, RI activities can be modified as the IRM indicates the need for further investigation.

Following the completion of the RI and the IRM, a Remedial Action Work Plan (RAWP) will be provided to address remaining contaminant exposure issues, if any, relative to the completed construction of the proposed building complex.

The following sections of this Work Plan describe the conduct of the RI program, with reference to the separate IRM program as appropriate. The background information presented and the proposed scope of work is based on the information that was initially presented in the draft RI/IRM Work Plan document (J.M. Associates, October 2005). Appendices to this RI Work Plan are also derived from the October 2005 draft document, and include:

- Appendix A Previous Investigation Data & Reports
- Appendix B Quality Assurance Project Plan
- Appendix C Health and Safety Plan
- Appendix D Community Air Monitoring Plan
- Appendix E Citizen Participation Plan

SECTION 2 – SITE HISTORY AND DESCRIPTION

2.1 GENERAL SITE INFORMATION

2.1.1 Physical Setting

The site is located at 221 Main Street in downtown of White Plains, Westchester County, New York (Figure 1). The site occupies the majority of one City block and contains 203 – 227 Main Street, and 293-303 Hamilton Ave (the municipal parking lot).

The area surrounding the site is commercial with a mix of retail and office space. The site is bound by Hamilton Avenue to the north, Church Street to the east, Main Street to the south, and the New York Power Authority (NYPA) Parking Garage to the west. The NYPA office building is located west of the parking garage (123 Main Street).

As indicated previously, the site is divided into two main areas, the PA area and the 221 area, as shown on Figure 2. These two site areas are described below:

The 221 area includes the former “Main Street building” (203-227 Main Street) and what is formerly known as the “Annex” building¹, plus former parking areas located behind (north of) the former Main Street building, and west of the Annex building. The Main Street Building had two (2) floors and contained retail establishments on the first floor and offices and two studio apartments on the second floor. The stores had basements used for storage, which exited to the parking area located behind the building. The Annex contained office space. The parking lot north of the Main Street building was known as the Halpern Lot and was privately owned and operated. The parking area west of the Annex building is the southern portion of former City Lot, which served as a municipal parking lot.

The northern portion of the City Lot, where a police station was formerly located, comprises the PA area of the site. This portion of the City Lot is adjacent to the NYPA garage, west of the site.

¹ Since the initial draft of this Work Plan document, the Main Street and Annex buildings have been demolished to prepare the site for redevelopment, and soil excavation has begun. The features described for each site area are no longer present as described.

Some of the properties that occupy the same block as the site are not considered part of the site under the BCA, and will remain intact after the site is redeveloped. These properties include a church at the southeast corner at the intersection of Main Street and Church Street; an office building located north of the church, at the intersection of Hamilton Avenue and Church Street; a building known as the Bar Building located next to the Main Street Building, at the south side of the site at the intersection of Court St and Main St.

Municipal water and sewer serve the site and the surrounding area. The nearest surface water body is the Bronx River, located approximately 1500 feet west of the Site.

2.1.2 Site Geology and Hydrogeology

Previous site investigations (see Section 2.3 below) indicate a fairly uniform stratigraphic soil sequence across the site. A mixture of coarse-grained fill material and construction and demolition (C&D) debris exists from 2 to approximately 11 feet below ground surface (bgs). Medium to fine sand with silt and gravel exists below the fill from 13.5 to approximately 27 feet bgs. Below this layer, from approximately 30 feet bgs to a maximum soil boring depth of 59 feet bgs, is a layer of gray brown sand with silt and gravel, with occasional cobbles and boulders. Figure 4 shows a cross section for the site overburden sequence, based on soil boring logs from previous investigations (see Section 2.3). Rock cores taken at the site during prior investigations indicate that the overburden is underlain by gneiss of the Fordham formation.

Groundwater was encountered in soil borings completed at the site from 19 to 35 feet bgs. Groundwater flow is to the west, toward the Bronx River, as determined by previous site investigation (see Appendix A-3, GZA, 1993).

2.2 SITE HISTORY

J.M. Associates, Inc. completed a Phase I Environmental Site Assessment (ESA) for the Site in October 2002. The Phase I ESA Report is attached as Appendix A. Historical information obtained during the Phase I ESA indicates that a gas filling station was previously located on the Halpern Lot, with an associated parking area, sometime prior to 1930. A filling station was also located on the adjacent property east of the Halpern Lot, at the intersection of Church St and Hamilton Ave that was later an Exxon Gas Station

(see Figure 5). This adjacent off site filling station is upgradient of the site, and had a spill number assigned to it (#97-07887) due to the discovery of petroleum contaminated soil at the time a 1,000 gallon UST was removed from that location.

The City Lot previously consisted of 2 buildings, one containing an Elk's Club and the other a B.P.O.E. lodge. These buildings were located on the property sometime before 1930. Between 1930 and 1950, the buildings were demolished and a new building was constructed that contained the Board of Education offices, City Court and a City of White Plains Police Station. The Main Street building was constructed sometime before 1930.

2.3 PREVIOUS INVESTIGATIONS

In addition to the Phase I ESA, prior environmental investigations conducted at the site include an investigation on the City Lot completed for the NYPA, and a limited soil boring investigation performed on the Halpern Lot and City Lot for LC Main, LLC. Data from these previous investigations, including laboratory analysis results, soil boring logs, and well construction details, are included as Appendix A to this Work Plan.

A summary of previous investigation results is presented below, and provides a basis for identifying specific areas of concern (AOCs) requiring further study under the BCP RI.

2.3.1 Main Street Building/Annex Building

The Main Street Building was visually inspected as part of the Phase I ESA conducted in 2002. Several tanks were noticed during the Phase I ESA site inspection. Two 275-gallon aboveground storage tanks (ASTs) containing No. 2 fuel oil were located in the basement of one of the retail establishments and a 2500-gallon AST also containing No. 2 fuel oil was located in the boiler room, in the basement of 203 Main St, which is an entrance to the upstairs level of the building. The tank in the boiler room is located in an inaccessible vault area of the basement, and is the subject of a spill assigned by the NYSDEC due to the tank failure of a tightness test.

A visual inspection of the sidewalk area located in front of the Main Street Building revealed the presence of fill ports in front of 2 of the establishments, indicating the possible presence of underground storage tanks (USTs). Review of a previous environmental report done on the property indicated the presence of two USTs, one 1000-

gallon and one 500-gallon, which had both been abandoned in place. There is no further record of these tanks or their closure.

The NYSDEC files indicated that there was another UST located in the basement of one of the Main St building establishments. It is recorded as a 10,000-gallon No. 6 fuel oil tank and the registration expired in 1996. There is no record of the tank being removed, and it is possible that the tank still exists under the basement slab.

A UST is known to exist adjacent to the Annex, on the west side of the building. The tank is located outside of the building, under the sidewalk. The condition of the tank is unknown.

2.3.2 Halpern Lot

Records indicated historical USTs associated with the filling station that was previously located on the Halpern lot. No records of the tanks were found regarding their condition or their closure. Review of NYSDEC spill records revealed an open spill for the Exxon Station located on the adjacent property to the east of the Halpern lot. The spill was assigned during the excavation of a UST due to contaminated soil. As of 2002, the spill had not been closed due to the failure of Exxon to submit a closure report.

In December 2002, soil borings were installed on the Halpern Lot and soil and groundwater samples were collected. The results are summarized in Appendix A, in a memo dated January 7, 2003. Three borings were installed (B-1, B-2 and B-3) and soil samples were collected at approximate 5-foot intervals. Monitoring wells were installed in the completed borings (MW-1, MW-2 and MW-3) into the top 10 feet of water, and groundwater samples were collected. Groundwater was encountered in the borings at 20 feet below ground surface (bgs).

Soil samples collected from the borings were analyzed for Volatile Organic Compounds (VOCs) via EPA method 8021 and Semi-Volatile Organic Compounds (SVOCs) via EPA Method 8270. Groundwater samples collected from the monitoring wells were sampled for VOCs only. The sample results indicated no soil contamination in borings B-1 and B-2, and no groundwater contamination in any of the wells. Petroleum contamination was detected in the 3'-5' interval in soil boring B-3. The locations of the borings are shown on Figure 6 and the results of the sampling are summarized in Tables 1 and 2. Figure 6

notes that there are two “B-1” borings and two “B-2” borings from previous site investigations, installed in 2002 and 2004, respectively. The legend of the figure indicates the locations of the respective 2002 and 2004 borings that share a common name.

2.3.3 City Parking Lot

Historical records indicate two USTs associated with the former police station on the City Lot property. A February 1987 record with the NYSDEC indicated that a gasoline UST on the property had failed a tightness test. As indicated in the NYPA Investigation in Appendix A, the two tanks were removed in September 1988 and consisted of one gasoline tank and one heating oil tank. It was reported that twelve (12) drums of gasoline waste were removed from the gasoline tank. Contaminated soil surrounding the gasoline was also removed, but the volume of soil is unknown. There were also reports of USTs associated with the former lodge building located on the property prior to 1950, but no records were found as to their condition or removal.

The former leaking UST on the City Lot was the subject of an investigation completed by the NYPA in 1993. The tank was located directly east of the NYPA parking garage. The investigation was the result of petroleum contamination discovered at the parking garage wall. Samples were collected during the NYPA investigation and the remaining soil contamination that was not removed with the tank was delineated and the extent of the groundwater contamination was estimated. The 1993 Investigation Report, prepared by GZA Environmental, is included as Appendix A, and sample locations are shown on Figure 6. Figure 7 shows the approximate area of contamination adjacent to the NYPA garage, as identified by the 1993 GZA investigation.

J.M. Associates installed soil borings in the City Lot in January 2003. Two borings (B-4 and B-5) were installed and soil samples were collected at approximate 5-foot intervals. Monitoring wells were installed in the borings (MW-4 and MW-5) into the top 10 feet of water and groundwater samples were collected. Groundwater was encountered at 15-foot bgs in the two borings. Two existing monitoring wells adjacent to the NYPA parking garage and on the NYPA property (MW-8 and MW-7), were also sampled. These wells are directly west of the City Lot. The results are summarized in Appendix A, in a memo from JM Associates dated January 7, 2003.

No contamination was detected in any of the soil samples collected from B-4 and B-5. B-5 was located directly east of the former police station UST location, as shown on Figure 6. No contamination was detected in MW-4, and low levels of petroleum contamination were detected in MW-5. Gasoline product was discovered in the existing MW-8 during purging. Sample results show significant levels of contamination in MW-8 and contamination above groundwater standards in MW-7. Sampling locations are shown on Figure 6 and the results are summarized in Tables 1 and 2.

Two additional borings were installed on the southern portion of the City Lot, west of the Annex, in May 2004. Boring B-1 was installed on the southeast portion of the Lot, directly west of the suspected UST location next to the Annex Building. Groundwater was encountered at 15 feet bgs and had a sheen and a petroleum odor. Soil and groundwater samples were collected and the results indicated petroleum contamination above cleanup objectives in the soil and low levels of groundwater contamination, but below groundwater standards. It appeared that the contamination in B-1 was a result of the UST located outside of the Annex.

Boring B-2 was installed on the southern end of the Lot, southwest of Boring B-1. Groundwater was encountered at 15 feet bgs and did not appear contaminated. Soil and groundwater sample results indicate that soil and groundwater are not contaminated in this area. The location of borings B-1 and B-2 are shown on Figure 6 and the results are summarized in Table 3. A summary report dated May 26, 2004 and the sample results are included in Appendix A.

2.4 AREAS OF CONCERN (AOCs)

Since the previous investigations were completed, initial stages of soil excavation have begun at the site to prepare for its redevelopment. As the excavation has progressed, at least ten USTs were unearthed, and contaminated soils were also discovered. The tanks evidently contained a variety of petroleum products, including gasoline and various types of fuel and heating oil. The findings made during the excavation program have added to the overall understanding of site conditions relative to potential contaminant sources and the extent of contamination. Based on what has been learned from the previous site investigation and the initial excavation activities, there are at least five specific areas of concern (AOCs 1 through 5) at the site. The identified AOCs are shown on Figure 8, and are described below:

AOC-1 includes a former UST that existed in an enclosed concrete vault at the former 203 Main Street building. This UST, which evidently contained fuel oil, was discovered in the former boiler room vault when the building was demolished. Based on its size, the UST volume was estimated to be 25,000 gallons. When the vault was opened it contained fuel oil that had evidently leaked from the UST, but the fuel oil appeared to be contained within the vault, with little evidence that it had impacted soil outside the vault. The UST, the remaining fuel oil, and the vault were all removed as part of the building demolition.

AOC-2 includes at least four (4) USTs west of the Annex building. Previous soil samples collected adjacent to the tank (B-1, May 2004) showed elevated levels of petroleum contamination.

AOC-3 includes the west side of the Halpern Lots, in the vicinity of previous soil boring B-3 (December 2002). AOC-3 is associated with the old movie theater that occupied that portion of the site. Specifically, a UST is located in a concrete vault within the theater's former boiler room.

AOC-4 is the former location of the police department tank on the northwest side of the City Lot, adjacent to the NYPA garage. Although contaminated soils from this former tank have been excavated from the site, groundwater is known to be contaminated in this area, and is believed to extend downgradient (west) onto NYPA property.

AOC -5 is in the northeast corner of the site, near the former gasoline service station, where at least four (4) USTs have been discovered. Although these tanks and some contaminated soil have been removed, the general excavation for site redevelopment has not yet occurred in this area.

As previously indicated, this RI will investigate only the PA area of the site, which includes AOC-4 in the northwest portion of the City Lot. This is because the 221 area of the site, which includes AOCs 1, 2, 3, and 5, can be remediated without further investigation, as an IRM. A separate IRM Work Plan has been prepared which describes a systematic process by which USTs and contaminated soil will be removed from the 221 area and properly disposed of as they are uncovered during the excavation (see *Interim Remedial Measure (IRM) Work Plan*, SWRNA, November 2005). In addition, the IRM

prescribes methods for treating and handling contaminated groundwater that is encountered during the excavation. By implementing the IRM the on-site contaminant sources and impacted media in the 221 area will be completely removed from the site.

AOC-4, in the PA area of the site, requires additional investigation because the removal of soil from this area as an IRM will not address issues related to known contamination downgradient of the area, on the NYPA property. Based on GZA's 1993 study (see Appendix A) at least four feet of free product was measured in monitoring well W-8 (Figure 7) located within a few feet of a footing drain. Free product was not observed in other wells from that study, so it was concluded by GZA that product might be pooling in that particular location against the building wall.

Although the two USTs and contaminated soil at the former police station in the PA area were reportedly removed sometime between 1987 and 1988, contamination has evidently migrated off site to the NYPA garage. The GZA Report indicates that a Phase I ESA conducted by Malcolm Pirnie at the NYPA garage in 1991 identified an oily sheen in water collection troughs in the lowest level of the garage, and a tar-like material was observed on the eastern wall of the parking garage level B-2. It was concluded by Malcolm Pirnie that the parking garage footing drain had lowered groundwater along the eastern wall of the garage, causing gasoline to collect there.

SECTION 3 – REMEDIAL INVESTIGATION APPROACH

The RI approach for the PA area focuses primarily on determining the extent of soil and groundwater contamination that exists in this area, and also delineating the extent of groundwater and free product that has migrated downgradient of this area (to the west). In addition, the RI will investigate soil vapor impact relative to former contaminant sources across the entire site (including the PA and 221 areas). This will involve collecting sub-slab and indoor air samples from buildings on properties adjacent to the site.

The RI will also evaluate the data to determine the potential for human and ecological receptors to be exposed to site related contaminants, both on site and off site, after the planned site redevelopment is completed.

3.1 DATA ACQUISITION APPROACH

Additional data will be collected to define the off-site extent of groundwater contamination downgradient of the PA area. Soil borings and monitoring wells will be installed in the PA area, adjacent to the NYPA garage. In addition, monitoring wells are proposed on the NYPA property. A soil and groundwater sample program will be undertaken to determine the extent of petroleum contamination that has migrated from the PA area, from the police department tank on the west side of the City Lot, onto the adjacent NYPA garage property.

In addition, an indoor air sampling program will be conducted in off site buildings adjacent to the site to evaluate the potential for human exposure to soil vapors off site.

3.2 DATA EVALUATION APPROACH

The data collected from the RI will be evaluated along with previous investigation data (as appropriate) to determine the potential for human and local wildlife receptors to be exposed to site related contamination. This evaluation will consider both on-site and off-site receptors, and will be based on both existing and future planned uses for the site and immediately adjacent areas.

The general data evaluation approach will also include a data usability study, which will result in the preparation of a Data Usability Summary Report (DUSR) by an independent third party.

SECTION 4 - RI SCOPE

4.1 PERIMETER SOIL BORINGS

Soil borings will be advanced around the site boundary so that soldier piles can be installed for the soil excavation/construction phase of the redevelopment project. These perimeter borings provide an opportunity to evaluate subsurface conditions in AOC-4, specifically along the site property line adjacent to the NYPA garage near the former UST.

Soldier pile soil borings drilled in AOC-4, north and south of existing well MW-8 (see Figure 9), will be used to further evaluate the nature and extent of petroleum contamination in AOC-4 along the PA area's western boundary, upgradient of the NYPA garage. This line of borings, along a north-south line and approximately 12 feet east of the NYPA garage, has borings spaced on 8-foot centers, down to bedrock. These borings will screen for the presence of contamination in the area near the former UST, as shown on Figure 9. Additional soil pile borings, north and/or south of the borings proposed on Figure 9, may also be screened if visual or olfactory evidence warrants additional screening.

Drilling for the soldier pile borings will utilize 14-inch diameter hollow stem augers, and will extend to bedrock. Soil samples collected continuously during the drilling process will be screened with a PID, and examined visually, with descriptions recorded in a written boring log. If contamination is apparent based on visual and PID screening (above 75 ppm) results, a soil sample will be taken from each soil boring where contamination is evident, and analyzed in a laboratory for VOCs by USEPA method 8260 and SVOCs by USEPA method 8270.

4.2 DOWNGRADIANT GROUNDWATER INVESTIGATION (NYPA)

An off-site groundwater investigation will be completed as part of the RI to verify the extent of contamination on the NYPA property, downgradient of the PA area of the site. The objectives for the off site groundwater investigation are to determine the extent of migration and the levels of the groundwater contamination under the NYPA parking garage. In addition, the nature and extent of potential soil contamination under the lower level concrete slab of the garage, known as the B-2 area, will be determined. Based on

the results of these investigation activities, remediation goals and a remedial approach will be developed.

As previously noted, the investigation will utilize a flexible approach, consistent with USEPA and NYSDEC Triad approach objectives. For this RI, field observations will be used to determine whether additional investigation needs to be completed, beyond the basic scope identified below. Further detail on how this will be accomplished is provided in the following sections.

4.2.1 Drilling and Well Installation Program

Two wells will be installed along the eastern edge of the NYPA garage, between proposed retaining wall for the redevelopment project and the garage, as shown on Figure 9. The wells will serve a dual purpose: for the RI, the two wells will help characterize the subsurface soil and groundwater conditions, by visual observation and PID screening, in the area between the NYPA garage and the PA area of the site. In addition, these wells will also be used for construction dewatering and ground water remediation that will be conducted as a separate IRM.

These two wells will be installed prior to the installation of the soldier piles, and behind the proposed soldier beam earth retention system down to the top of bedrock. The well locations will be based upon observations made during the soldier pile boring installations, in areas of high groundwater and low bedrock.

The boreholes for each of these two wells will be 24" in diameter, and the boreholes will be cased to full boring depth. The boreholes will be drilled approximately one foot into bedrock. An 8-inch perforated pipe will then be inserted into the cased borehole, and the annulus will then be backfilled with clean crushed stone. The casing will be withdrawn as the crushed stone is inserted from the bottom up. The perforated section (i.e. screen interval) for these two wells will extend from bedrock and up to 8 to 10 feet below ground surface. This will straddle the water table, which for this area of the site may be depressed to approximately 25 feet below grade due to the nearby presence of the footing drain for the NYPA garage.

As previously indicated, these two wells will be used during the RI to provide a qualitative sense of the nature and extent of soil and groundwater impact between the site

and the eastern edge of the NYPA garage building. Because groundwater will be dewatered during the proposed IRM and for construction (see IRM Work Plan, December 2005), and soil will be excavated to the bottom of the east side of the garage, no analytical soil or groundwater samples are proposed from these two wells for the purpose of the RI.

The nature and extent of groundwater and free product contamination will also be determined further downgradient on the NYPA site, and also underneath the NYPA garage, to further delineate the extent of impact coming from the site.

Two additional 4- inch diameter groundwater monitoring wells will be installed – one near the northwest outside wall and one near the southwest outside wall – of the NYPA garage to delineate the downgradient extent of contamination (see Figure 9). The depth of the wells will be determined based on the depth to groundwater. The objective will be to drill to a depth that allows the well screen to be installed so it extends a minimum of 5 feet above the seasonal high water table to a depth of 10 to 15 feet below the water table. The wells will be constructed of PVC, with a minimum diameter of 4-inches to enable them to be potentially used for groundwater and/or free product recovery. The screen slot size will be 0.01 inches. A sand pack material graded for 0.02 slot well screen will be placed from the bottom of the well screen to a minimum of one foot above the screen, and at least two feet of bentonite grout will be placed on top of the sand filter pack. The remaining annulus will be sealed with a bentonite/cement grout mixture to ground surface. Each will be completed with a locking j-plug, with a bolt-down flush mounted protective cover. A minimum of ten (10) well volumes will be evacuated from the wells to develop the well screens and sand filter pack, in order to provide representative groundwater samples.

In addition, four monitoring wells will be installed in and around the chain link sump area within the garage building, through the floor slab (see Figure 9). The installation of these four wells will be preceded by first drilling small diameter cores through the concrete wall east of the chain link sump area, in the B-2 lower garage area, to determine the height of trapped water behind the wall and allow the dissipation of hydrostatic pressure from behind the wall and beneath the slab (see IRM Work Plan, December 2005). Groundwater that is released/extracted by this means will be collected and routed for on-site treatment or vacuumed up for direct disposal via a vacuum truck. This is proposed to prevent excessive amounts of contaminated groundwater from “geysering”

up as the monitoring wells are installed. Following the dissipation of this hydrostatic pressure (if any), the four interior monitoring wells will be installed in the B-2 level sump area. Due to the low headroom of this area, specialized drilling equipment (such as a tripod-mounted rig) will be used to drill the wells. Otherwise, the objective will be to construct and develop monitoring wells in accordance with the previous description.

The depth of the interior wells will 8 to 10 feet below the concrete slab, or to refusal, whichever comes first. The screen length will depend on the depth of the well, and the objective will be to straddle the water table.

Groundwater and free product samples will be obtained from the interior sampling points to determine the extent of contamination. Free product from the existing sump will be fingerprinted for product type, and possibly other analyses for correlation to the original UST release.

It is recommended that the installation of the interior wells be completed after the two wells are installed along the eastern edge of the NYPA garage, and soil excavation down to bedrock has occurred adjacent to the east side of the garage, so that the hydraulic pressure below the garage is reduced. Note that the excavation of soils is an IRM task that will need to be carried out in a coordinated fashion with the RI.

The Triad approach will be utilized as the two exterior and four interior groundwater monitoring wells are installed within and adjacent to the NYPA garage, and as the separate IRM is carried out. As previously stated, the objective of the Triad approach will be to use real-time observations obtained during the RI and IRM to make appropriate decisions regarding whether the scope of the RI should be adjusted. Specifically, as the two exterior and four interior monitoring wells are being installed on NYPA property, if visual observations and/or PID screening (above 75 ppm) indicate that additional soil borings and/or monitoring wells may be necessary to delineate groundwater contamination or free product, NYSDEC will be immediately notified, and a decision will be made regarding the need for and locations for additional borings/monitoring wells. In addition, if the IRM program identifies contaminant sources on site which could potentially affect a larger off site area than the RI currently targets, the Triad approach will permit adjustments to the scope of the RI as needed. Specifically, additional soil boring and monitoring locations can be added to other on-site and off site areas if it is determined necessary.

4.3 PUMPING TEST

If sufficient groundwater is encountered during the above tasks, pumping tests may be performed as an optional scope item, using the two new recovery wells, if it is determined necessary to evaluate the quantity and quality of water to be disposed of during the groundwater remediation program, and to facilitate the construction at the site. One or both of these two wells would be pumped and other existing site monitoring wells would be monitored for draw down, and recharge when pumping stops. The duration of pumping will be dependent upon the amount of recharge and available water.

Prior to the full-scale pumping test, a short-term pumping test would be performed by discharging water to a disposal truck and obtaining samples for laboratory analyses of volatile organic compounds and semi-volatile organic compounds. Based on the analytical test results, the groundwater recovered during the full-scale pumping tests may be either disposed of off-site (if there is an unsustainable or low flow rate) or treated and discharged to the storm sewer (if there is a sustainable high flow rate). If water is disposed of off-site, it will be handled by a licensed hauler and disposed of at a licensed facility. If it is treated on-site, treatment may include oil-water separation, carbon filtration, and/or air stripping.

4.4 GROUNDWATER SAMPLING

The six newly installed monitoring wells at the NYPA property, including the two wells north and south of the garage, respectively, and the four interior wells, will be sampled along with existing monitoring wells at the site (including the PA and 221 areas). This single sampling event will occur after the newly installed NYPA wells are developed.

Prior to sampling, the wells will be gauged for depth to the water surface from the top of the casing and for the depth to bottom of the well from the casing to determine the elevation of groundwater and the volume of water in each well. Each well will be purged a minimum of three well volumes with a dedicated disposable bailer, and will then be allowed sufficient time to recharge. The pH, temperature, conductivity and turbidity will be measured for each well. Samples for laboratory analysis will be collected using dedicated disposable bailers. Samples will be collected in laboratory provided sample jars and placed on ice for shipping or delivery under chain-of-custody protocols.

Groundwater samples on the LC Main Site will be analyzed prior to discharge for BETX Compounds. As requested by the NYPA groundwater samples will taken on the NYPA property, included the samples taken below the B-2 Level concrete slab will be analyzed for VOCs and Semi-VOCs, MTBE, dissolved metals (6010B/7000, TPH (GRO & DRO Method8015C). Quality Assurance/Quality Control Measures to be followed are discussed in the Quality Assurance Project Plan (QAPP) in Appendix B.

The monitoring wells will be re-sampled on a quarterly basis for one year following installation. Quarterly reports will be prepared that show groundwater flow direction based on depth to water measurements, and summary tables of the analytical results for each sampling quarter. The nature and extent of groundwater contamination, including free product, will be determined based on the results of the one-year quarterly sampling program.

4.5 SURVEY

At the completion of the RI, a survey will be completed that includes the locations and elevations of the monitoring wells.

4.6 SUB-SLAB, INDOOR AIR, AND SOIL VAPOR SAMPLING

A combination of sub-slab, indoor air, and exterior (ambient) air samples will be collected as part of the RI. Figure 10 shows the locations of off-site properties on which air sampling for organic vapors will be conducted. The sampling and analysis methods will follow New York State Department of Health (NYSDOH) *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (February 2005).

Sub-slab vapor sampling will be completed inside the lowest levels of the adjacent Bar Building, NYPA office building, and the church. Two samples will be collected from each building listed through the basement slabs, from within the sub-floor aggregate below the slab. A hand-held rotary hammer drill will be used to drill a one-inch diameter hole through the lowest level floor slab of the specified buildings. The drill will penetrate no more than 2 inches below the slab, into the sub-slab aggregate. Small diameter polyethylene tubing (1/4 inch or less) will be inserted into the hole through the slab and into the sub-slab aggregate. An annular surface seal (such as putty or quick-drying cement) will be placed around the tube, and a summa canister will be used to draw a sub-

slab air sample from the tube. Figure 11 shows a sampling schematic for collecting sub-slab vapor samples. The sub-slab samples will be collected at a rate not to exceed 0.2 liters per minute, and analyzed by USEPA Method TO-15 for VOCs, at a detection limit of 5 ppb (by volume)

Indoor air sampling will also be completed in the Bar building, the NYPA office building, and in the Church. Air samples will be collected from the basement and also the lowest level occupied space (if other than the basement) for each building. In addition, one air sample will be collected outside each of these building to provide ambient outdoor air levels for comparison. Summa canisters will be used to collect the indoor and outdoor air samples, over a minimum duration of six (6) hours. These air samples will be analyzed for VOCs by USEPA method TO-15, using a detection limit of 1 ug/m³.

Soil vapor samples will also be collected, from AOC-5 adjacent to the off-site office building (see Figure 10). Three (3) soil vapor probes will be installed as temporary direct push or augered well points. The design of the soil vapor monitoring points is shown on Figure 12. Soil vapor samples will be collected from each of the three vapor wells using summa canisters, at a flow rate not to exceed 0.2 liters per minute.

Each designated soil vapor sampling location will be purged of a minimum of three volumes using an SKC low volume pump, and then capped with bee's wax. A ¼-inch inside diameter sampling tube (polyethylene or Teflon) will be inserted through the wax cover to the bottom of each gas well probe. The other end of the soil gas tube will be attached to a regulator, and secured with a clamp. The regulator will then be attached to a 1-liter summa canister.

The soil vapor sampling effort will include the use an inert tracer gas (such as helium, propane, or butane) to verify that the soil vapor samples are not diluted by ambient air. The atmosphere around the sampling tube will be enriched with the tracer gas, and the soil vapor sample will be collected in the presence of the enriched tracer atmosphere. The tracer will be analyzed in the soil vapor sample to see if some of the tracer was inadvertently drawn into the sample. This will be accomplished by placing an inverted plastic pail over the sampling point, and filling the pail with the tracer gas via a small tube penetrating the site of the pail. Figure 12 includes the sampling setup for the tracer

gas. The soil vapor samples will be analyzed by USEPA Method TO-15 for VOCs, plus the tracer gas, at a detection limit of 5 ppb (by volume)

The holding time for the summa canister samples will not exceed 24 hours.

4.7 HUMAN HEALTH EXPOSURE ASSESSMENT

A qualitative human health exposure assessment will be performed to evaluate whether the site poses a hazard to the surrounding population by qualitatively evaluating actual or potential exposures to site contaminants. The Exposure Assessment will be completed in accordance with the New York State Department of Health's Qualitative Human Health Exposure Assessment guidance document and will be included in the RI/IRM Report. Sampling data will be reviewed along with the physical conditions of the contaminant sources or physical hazards near the site, which may pose a health risk to the community. Potential on-site and off-site exposures will be evaluated. The Exposure Assessment will describe the nature and size of the population exposed, or potentially exposed, to the contaminants that are present at, or migrating from, the site and will characterize the exposure setting, identify exposure pathways, and evaluate contaminant fate and transport.

Site contaminants will be selected for further evaluation based upon consideration of concentrations of contaminants in environmental media both on-site and off-site, field data quality, laboratory data quality and sampling design, and comparison of on-site and off-site contaminant concentrations in environmental media with typical background levels.

Several objectives will be completed for the exposure assessment. First, applicable site information and characterization data for environmental media of concern will be evaluated. Applicable NYSDEC guidance, including NYSDEC TAGM 4046 for soil and Class GA groundwater regulations for groundwater, will be used for purposes of identifying site contaminants of concern (COCs). An assessment of current and future site activities and site use will be conducted in relation to potential human exposure. Next, potential exposure pathways will be identified, and each element of the exposure pathway will be evaluated. Soil and groundwater contamination will be addressed. The surrounding area of the Site is fully developed and is served by public water. This will be confirmed with the local health department and water department. Finally, soil gas and

groundwater data gathered during the investigation will be used to assess the possibility of vapors in basements of surrounding properties.

4.8 FISH AND WILDLIFE RESOURCE EVALUATION

A Fish and Wildlife Resources Impact Analysis (FWIA) Decision Key will be completed to determine if a FWIA is needed. Contaminant migration pathways and any fish and wildlife exposure pathways will be identified. As stated in the FWIA, “if no resources are associated with the site or if there is no potential for contaminant migration to the resources, then only the necessary information to support that conclusion should be provided.” If the results from the RI, along with site inspections, support this conclusion, documentation will be submitted with the RI/IRM Report.

If resources are identified, or migration pathways exist, a FWIA will be completed and submitted as part of the RI/IRM Report. The FWIA would be completed to identify actual or potential impacts to fish and wildlife resources from site contaminants. The FWIA would qualitatively determine the route, intensity, frequency, and duration of actual or potential exposures to chemicals, describe the nature and size of the population exposed to the contaminants that are present at or migrating from the site and characterize the exposure setting, identifying exposure pathways, and evaluating contaminant fate and transport.

4.9 DUSR

Following the completion of the laboratory analysis program, a Data Usability Summary Report (DUSR) will be completed, and included as part of the RI Report. The DUSR will include available datasets from previous investigations, as well as data from this phase of site characterization. The DUSR is carried out as specified in DER-10 to evaluate the quality control measures that were implemented during the field and laboratory analytical programs, with the objective of determining whether the reported analytical data are representative and usable for decision making. The DUSR will evaluate whether the data are technically defensible (i.e. were all analytical requirements met and documented). Data usability analysis reviews the site data to determine whether they are adequate to draw conclusions regarding the nature and extent of contamination.

The items that will be reviewed as part of the DUSR will include the following:

- Completeness (number of samples collected and analyzed compared to plans)
- Chain of custody complete and accurate
- Holding times
- Instrument calibration
- Relative percent difference between field duplicates
- Reasonableness of data (e.g. relationships between total and soluble analytes)
- Blank contamination

The DUSR will be conducted in accordance with guidelines provided under Appendix 2B of DER-10.

4.10 REPORTING

Following the completion of the RI activities and the receipt of sample results, and RI Report will be prepared. The Report will summarize the activities completed during the RI and will include analytical results, well logs, the Human Health Exposure Assessment, conclusions from the FWIA, a Data Usability Summary Report (DUSR) and scaled figures showing actual excavation areas of the AOCs, location of confirmatory samples, locations of soil gas sampling and monitoring well locations. Sampling results will be summarized and discussed and the need for further remediation will be evaluated.

The RI will also provide a summary of the actions taken as part of the separate IRM, and will include an IRM Memorandum as an attachment. If further remedial action beyond the IRM is necessary, remedial alternatives will be evaluated and a recommendation will be made.

SECTION 5 - PROJECT ORGANIZATION

The following personnel are involved with this project. The project responsibilities and contact information are also provided.

Name	Company	Project Position	Address	Phone Number
John Manfredi	JM Associates, Inc.	Environmental Project Manager	225 Railroad Ave Bedford Hills, NY 10507	(914) 241-3795
Jim Bruno or Frank Van Zandt	LC Main, LLC	Volunteer Contact	14 Mamaroneck Ave. White Plains, NY 10601	(914) 287-7676
Jim Bruno or Frank Van Zandt	G.A. Fuller Development Co.	General Contractor	14 Mamaroneck Ave. White Plains, NY 10601	(914) 287-7676
Chris Zwingle, P.E	SESI Consulting Engineers	Environmental Engineer Consultant	12 a Maple Ave Pine Brook, NJ 07058	((973) 808-9050
David W. Stoner	S&W Redevelopment of North America	Brownfield Environmental Consultant	430 East Genesee Street, Syracuse, NY 13202	(315) 422-4949
Michelle Tipple	NYSDEC	Project Manager	21 S Putt Corners Road, New Paltz, NY 12561	(845) 256-3153
Ian Ushe	NYSDOH	Project Manager	547 River Street Troy, NY 12189	(518)402-7860

All on-site project personnel will be required to follow on-site health and safety procedures as outlined in the site-specific Health and Safety Plan (HASP), included as Appendix C. Subcontractors have not yet been selected. All subcontractors will be required to develop HASPs commensurate with their specific project assignments, and name a representative responsible for carrying out its on-site safety procedures.

SECTION 6 - QUALITY ASSURANCE / QUALITY CONTROL

Quality Assurance and Quality Control (QA/QC) is addressed in the Quality Assurance Project Plan (QAPP) included as Appendix B. The QAPP outlines procedures to be followed for sampling and analysis to ensure quality of the results. A DUSR will be prepared with the final reports to document the reliability of the sample results.

SECTION 7 - HEALTH AND SAFETY

A site-specific HASP has been prepared and is included as Appendix C. All on-site personnel and visitors involved in the RI will be required to read and sign the HASP prior to entry of the Site.

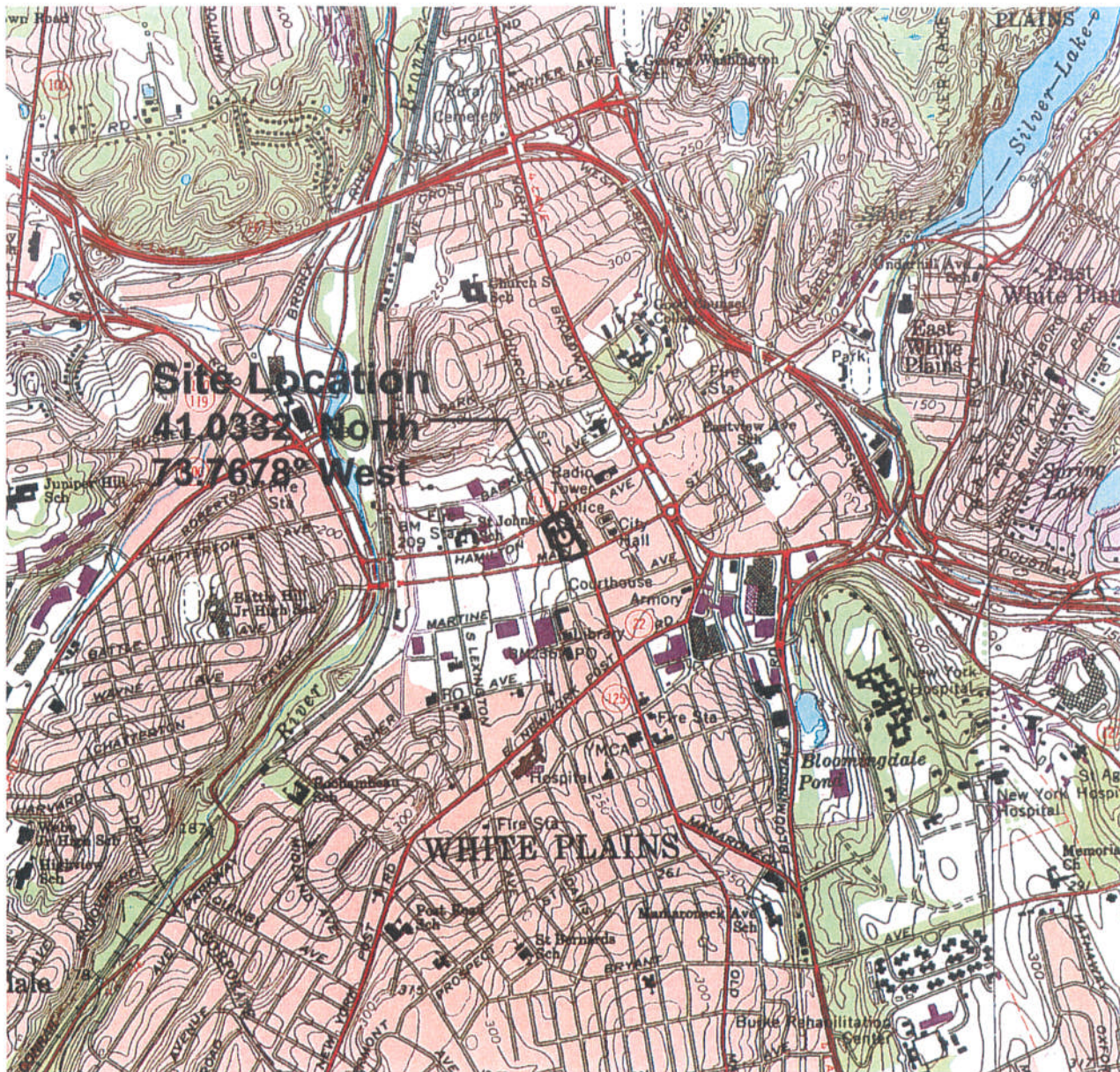
SECTION 8 - COMMUNITY AIR MONITORING

A Community Air Monitoring Plan (CAMP) is provided as Appendix D, in accordance with DER-10 requirements for remedial investigation. The CAMP sets forth air monitoring procedures that will be utilized to measure airborne emissions during the RI, in order to minimize the release of contaminants to off site areas.

SECTION 9 - CITIZEN PARTICIPATION

Citizen participation activities will be performed throughout the RI and IRM process to involve and inform the public. The specific citizen participation activities to be performed are outlined in the Citizen Participation Plan (CPP), included as Appendix E. A Fact Sheet is included in the CPP.

Figures




SCALE in FEET



Contour Interval: 10 Feet

Map Taken From: USGS 7.5 Minute Series
 Topographic Quadrangles White Plains (1967,
 Photorevised 1979) &
 Glenville (1960, Photorevised 1971)
 (www.nysgis.state.ny.us/quads/usgsdrg.htm)



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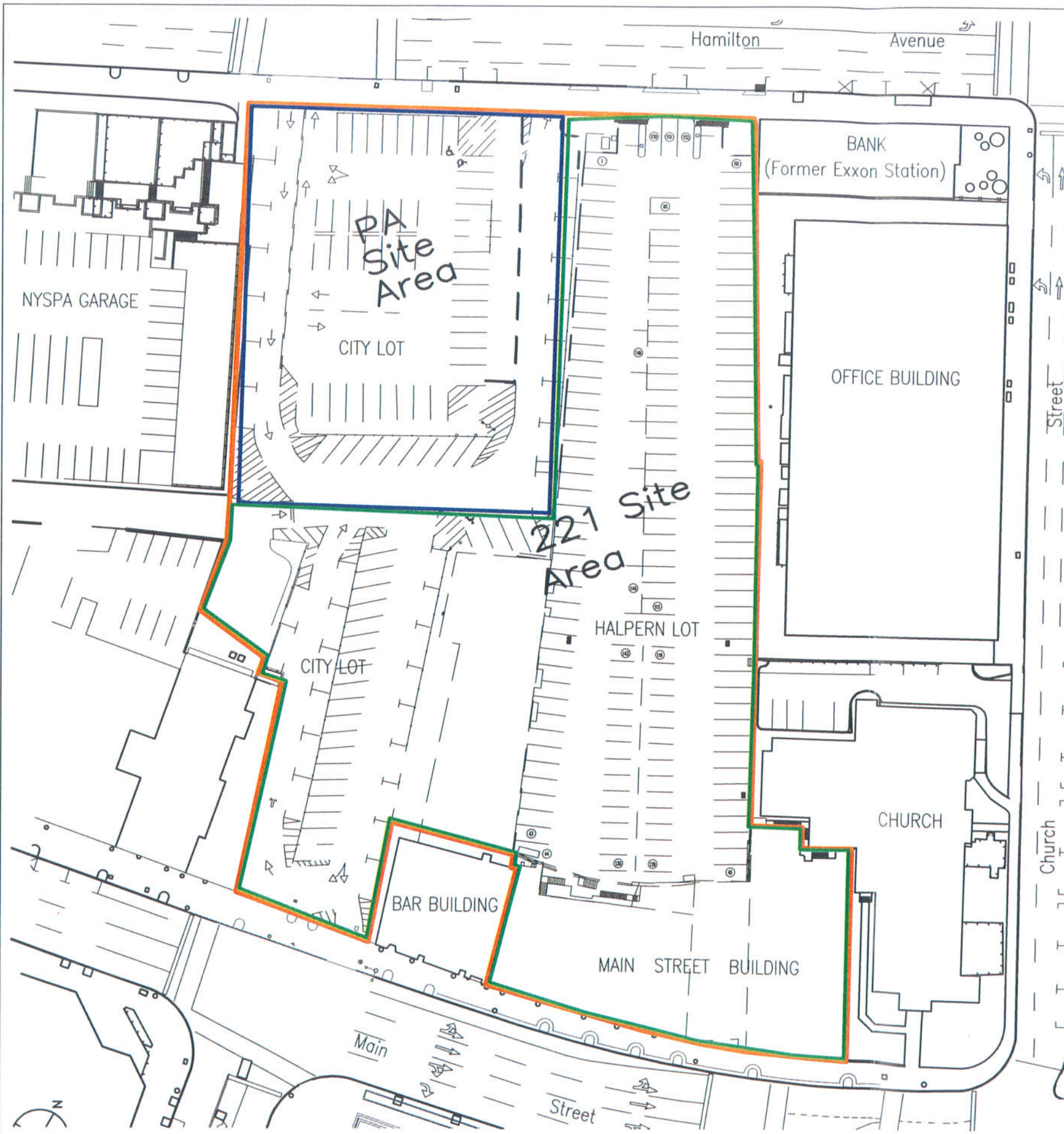
DATE:12/2005 JOB No.:N5023

Remedial Investigation Work Plan
 221 Main St. Site, City of White Plains
 Westchester County, New York

Figure 1
Site Location

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X-REF: NAMES?
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- Site boundary (Location Approximate)
- PA area boundary (Location Approximate)
- 221 area boundary (Location Approximate)

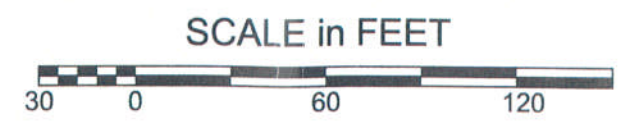



Figure based on Survey by J.W. Delano Surveying as provided by SESI Consulting Engineers.

 <p>S&W Redevelopment of North America, LLC</p> <p>Syracuse, New York</p> <p>DATE:12/2005 JOB No: N5023</p>	<p>Remedial Investigation (RI) Work Plan 221 Main Street Site City of White Plains Westchester County, New York</p>
<p>Figure - 2 Site Plan</p>	



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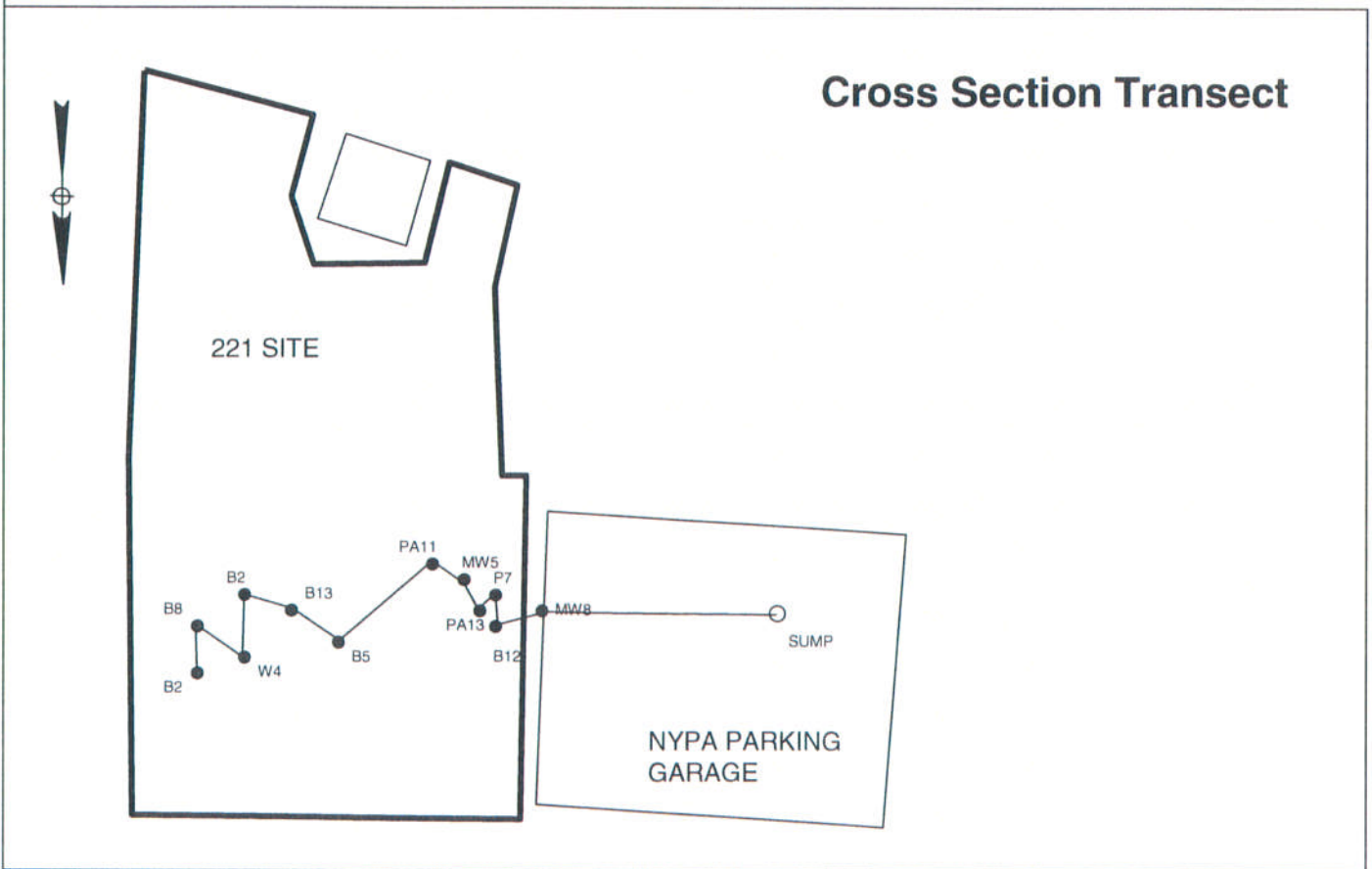
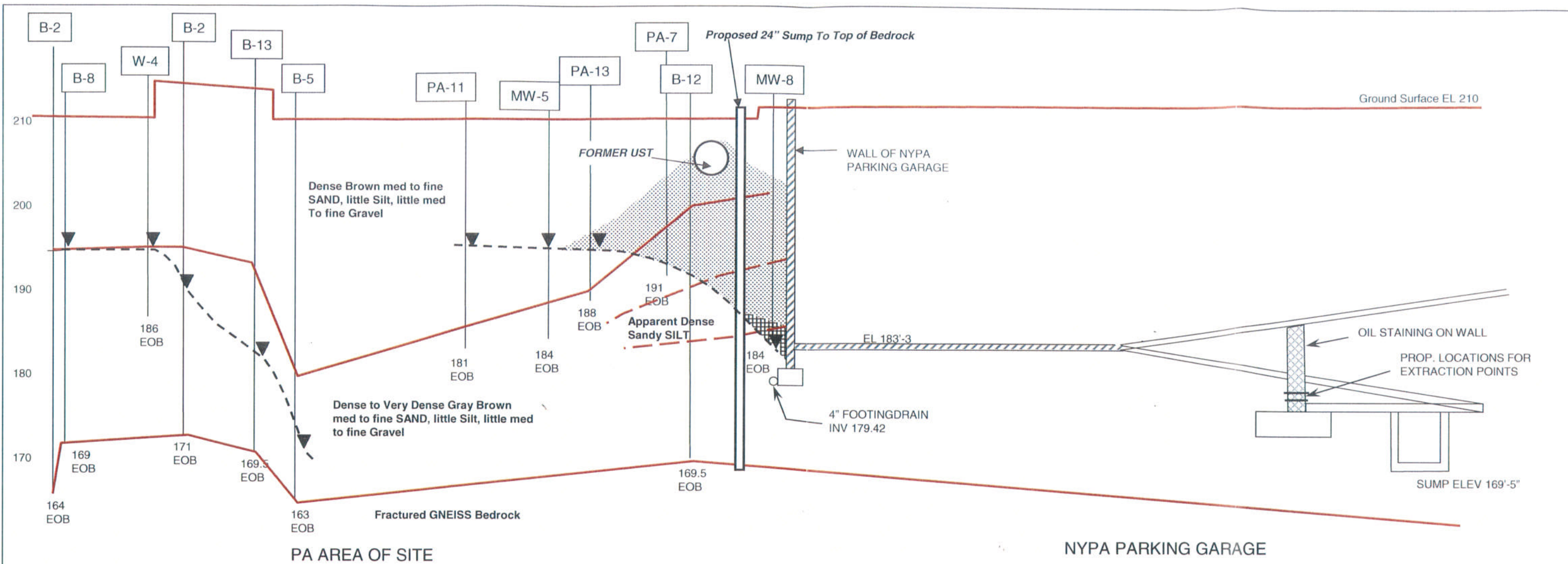
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Syracuse, New York

REMEDIAL INVESTIGATION (RI) WORK PLAN
221 MAIN STREET
CITY OF WHITE PLAINS
WESTCHESTER COUNTY, NEW YORK

FIGURE 3
PROPOSED REDEVELOPMENT CONCEPT

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General stratigraphic sequence of site, in cross section. Figure is Based on data provided by JM Associates, and SESI Engineering.

The break in the transect between borings B-5 and PA-11 forces the Disconnect in the depicted water table.


Figure shows petroleum impacted soil near former UST as

Free product represented by

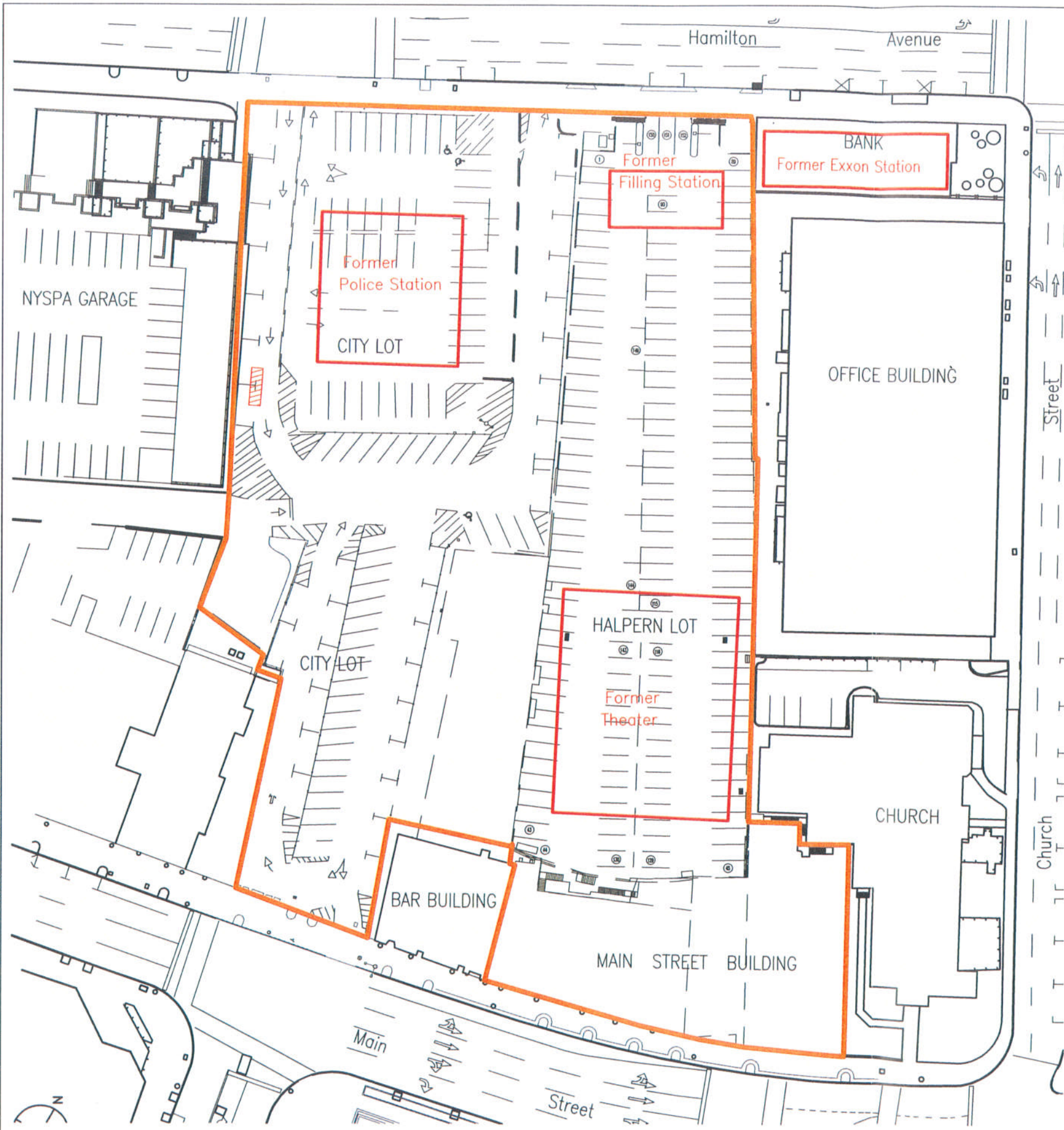
Boring I.D.s indicated by Text Boxes: B-12

EOB = End of Boring Elevation

Water Table

 S&W Redevelopment of North America, LLC Syracuse, New York	REMEDIAL INVESTIGATION (RI) WORK PLAN 221 MAIN STREET CITY OF WHITE PLAINS WESTCHESTER COUNTY, NEW YORK
	FIGURE 4 GENERAL STRATIGRAPHIC SEQUENCE
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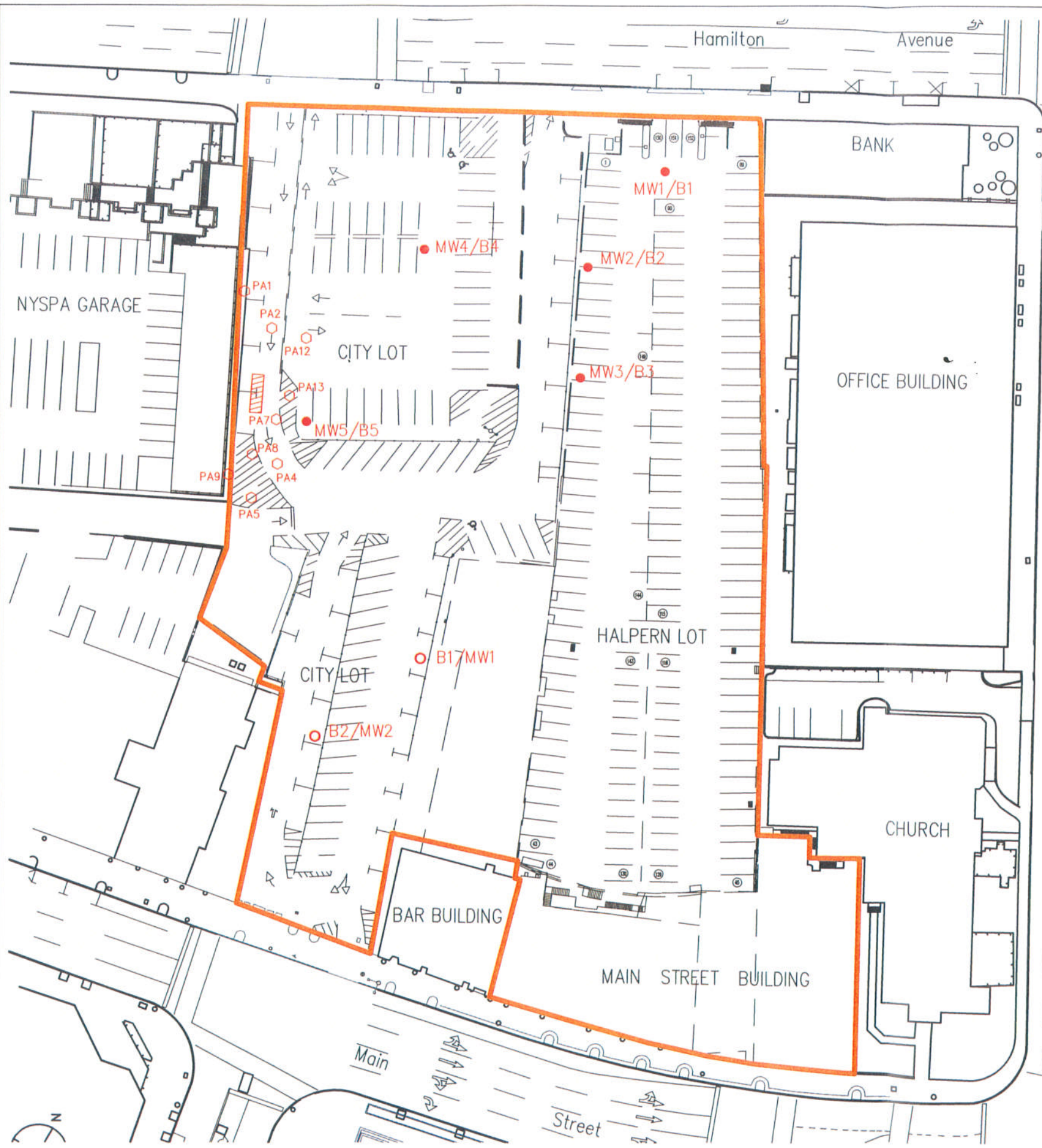
-  Site boundary (Location Approximate)
-  Key historical features. (Based on information provided in Phase 1 Environmental site Assessment, JM Assoc., Oct 2002)
-  Former UST Location (Approximate, not to scale)



Figure based on Survey by J.W. Delano Surveying as provided by SESI Consulting Engineers.

 <p>S&W Redevelopment of North America, LLC</p> <p>Syracuse, New York</p> <p>DATE:12/2005 JOB No:N5023</p>	<p>Remedial Investigation (RI) Work Plan 221 Main Street Site City of White Plains Westchester County, New York</p>
	<p>Figure - 5 Historic Site Features</p>

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- Site boundary (Location Approximate)
- PA1
- 1993 GZA Sample Locations (Approximate)
- MW/B
- 2002/2003 Sample Locations (Approximate)
- B/MW
- 2004 Sample Locations (Approximate)
- Former UST Location (Approximate, not to scale)

Notes:
 Well locations approximate. Based on data provided by JM Associates

Figure provides partial representation of historic sample locations for the site. Other sample locations are known to exist, but are not represented on the figure in order to provide greater clarity relative to the specific sample location referenced in the RI Work Plan text.

See Appendix A of the RI Work Plan for additional information regarding historical sampling programs.



Figure based on Survey by J.W. Delano Surveying as provided by SESI Consulting Engineers.

 S&W Redevelopment of North America, LLC Syracuse, New York DATE:12/2005 JOB No: N5023	Remedial Investigation (RI) Work Plan 221 Main Street Site City of White Plains Westchester County, New York
	Figure - 6 Previous Sample Locations



Approximate Area of Contamination

PA SITE AREA

Approximate Location Of Former UST

MW-4

PA-5

PA-4

PA-8

MW-7

PA-9

PA-11

MW-5

PA-3

PA-13

PA-7

MW-8

W-8

PA-12

PA-2

PA-1

168

168

164

162

160

158

NYPA GARAGE

170

Interior Sump Area (B-2 Level)

Existing Concrete Retaining Wall

Fence Enclosure

HAMILTON AVENUE

◆ 1993 Sample Location (GZA)

◆ Other Sampling Location

--- Top of Bedrock Elevation Contour (ft)

*Note: Other sample locations may exist which may not be represented on figure, in order to provide greater clarity relative to key sampling positions that are indicated.

See Appendix A of RI Work Plan for additional information regarding historical sampling programs.



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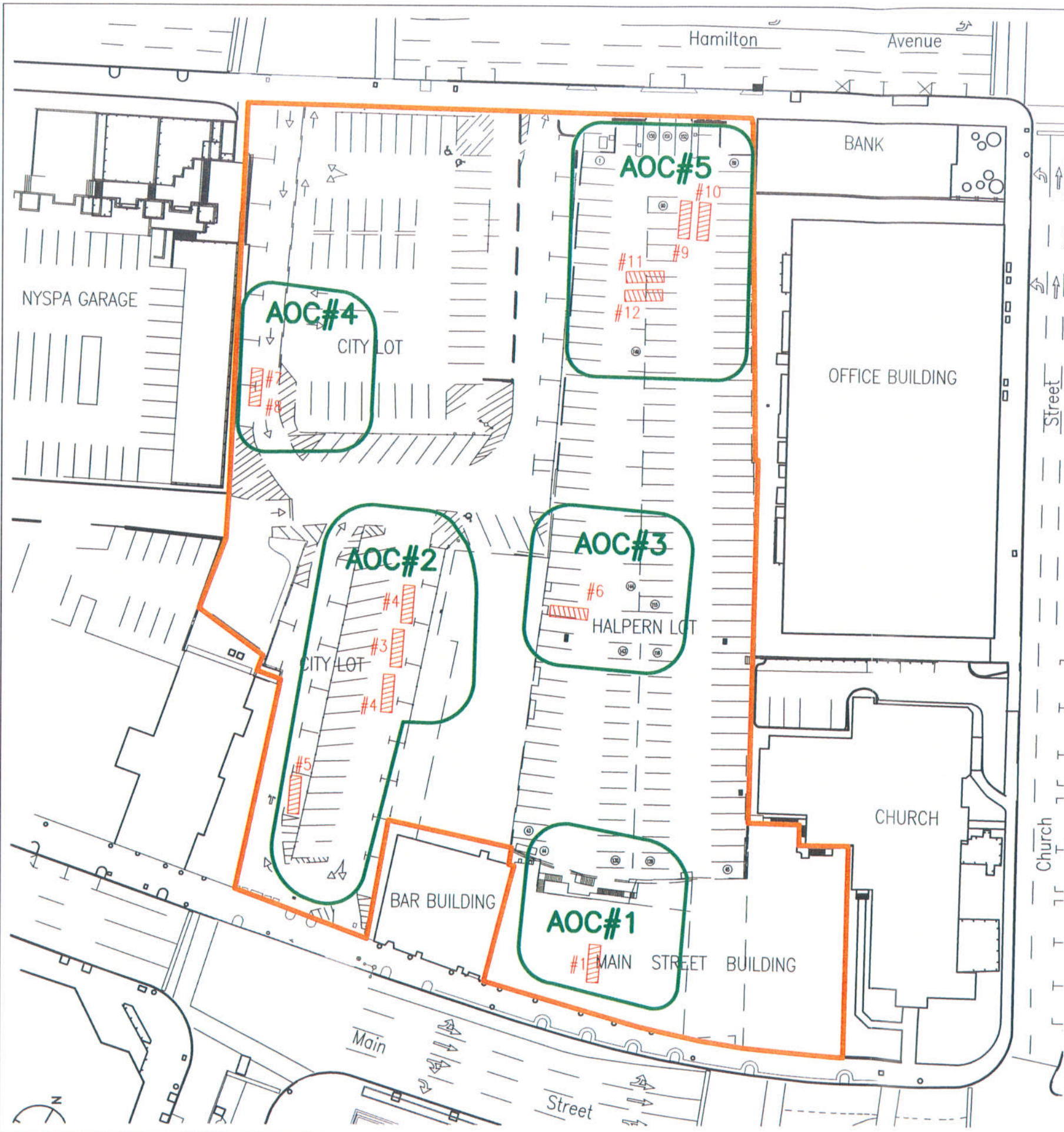
REMEDIAL INVESTIGATION (RI) WORK PLAN
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FIGURE 7
1993 OFF SITE SAMPLE LOCATIONS

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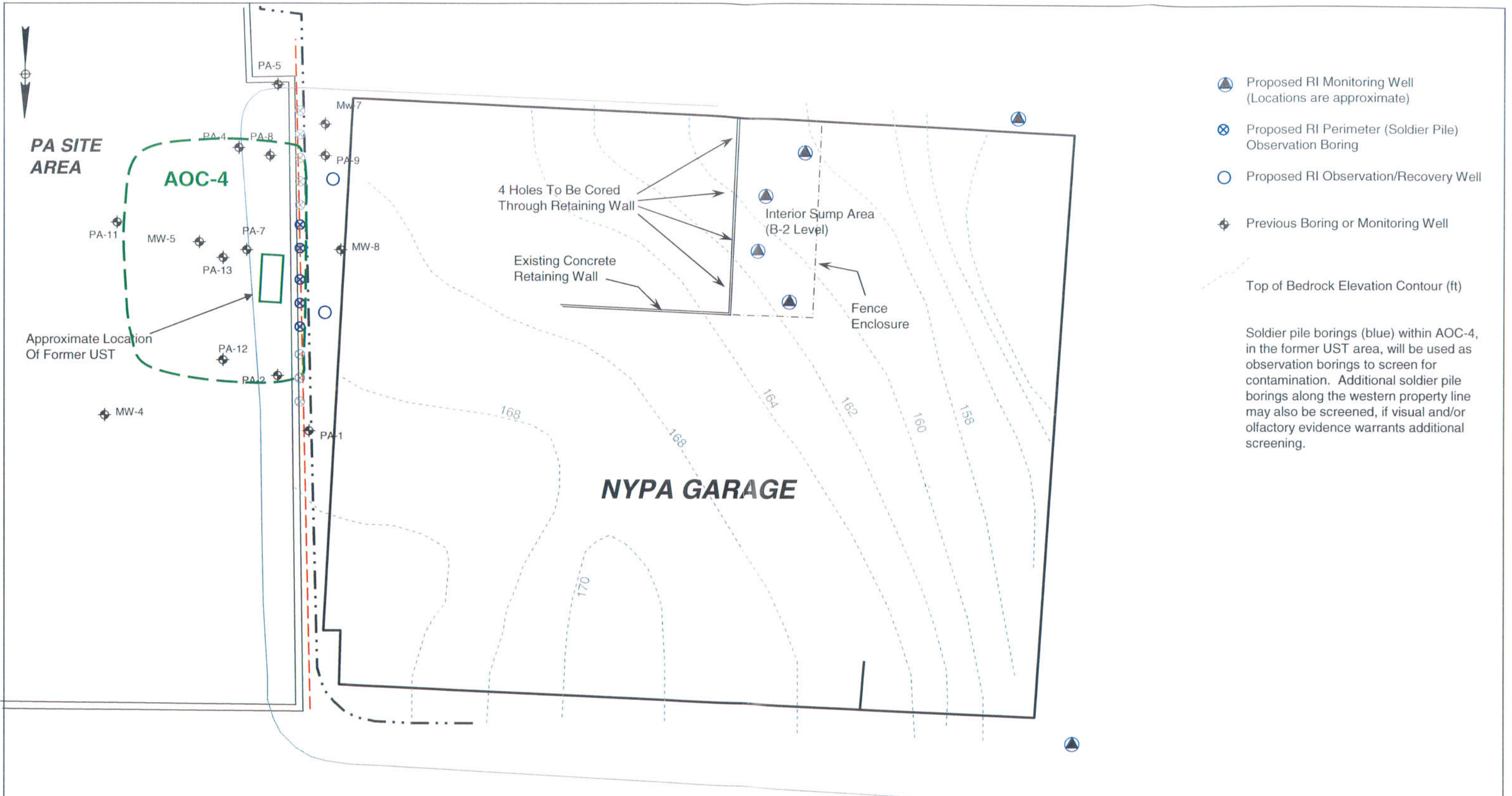
-  Site boundary (Location Approximate)
 -  Former UST Location (Approximate, not to scale)
 -  Areas of Concern (AOC) (Locations Approximate)
- AOC #1**
 Tank #1 - 550 Gal. UST in concrete vault.
- AOC #2**
 Tank #2 - Leaking 5,000 Gal. UST in concrete vault.
 Tank #3 - 5,000 Gal. UST
 Tank #4 - 5,000 Gal. UST in concrete vault.
 Tank #5 - 750 Gal. UST.
- AOC #3**
 Tank #6 - 4,000 Gal. UST (#4 Oil) in concrete vault.
- AOC #4**
 Tank #7 - 10,000 Gal. UST (Gasoline).
 Tank #8 - Heating Oil UST.
- AOC #5**
 Tank #9 - 275 Gal. UST.
 Tank #10 - 3' x 3' UST.
 Tank #11 - 1,000 Gal. UST.
 Tank #12 - 1,000 Gal. UST.



Figure based on Survey by J.W. Delano Surveying as provided by SESI Consulting Engineers.

 S&W Redevelopment of North America, LLC Syracuse, New York DATE:12/2005 JOB No: N5023	Remedial Investigation (RI) Work Plan 221 Main Street Site City of White Plains Westchester County, New York
	Figure - 8 Areas of Concern (AOCs)



PA SITE AREA

AOC-4

NYPA GARAGE

HAMILTON AVENUE

4 Holes To Be Cored Through Retaining Wall

Existing Concrete Retaining Wall

Interior Sump Area (B-2 Level)

Fence Enclosure

Approximate Location Of Former UST

Top of Bedrock Elevation Contour (ft)

Soldier pile borings (blue) within AOC-4, in the former UST area, will be used as observation borings to screen for contamination. Additional soldier pile borings along the western property line may also be screened, if visual and/or olfactory evidence warrants additional screening.


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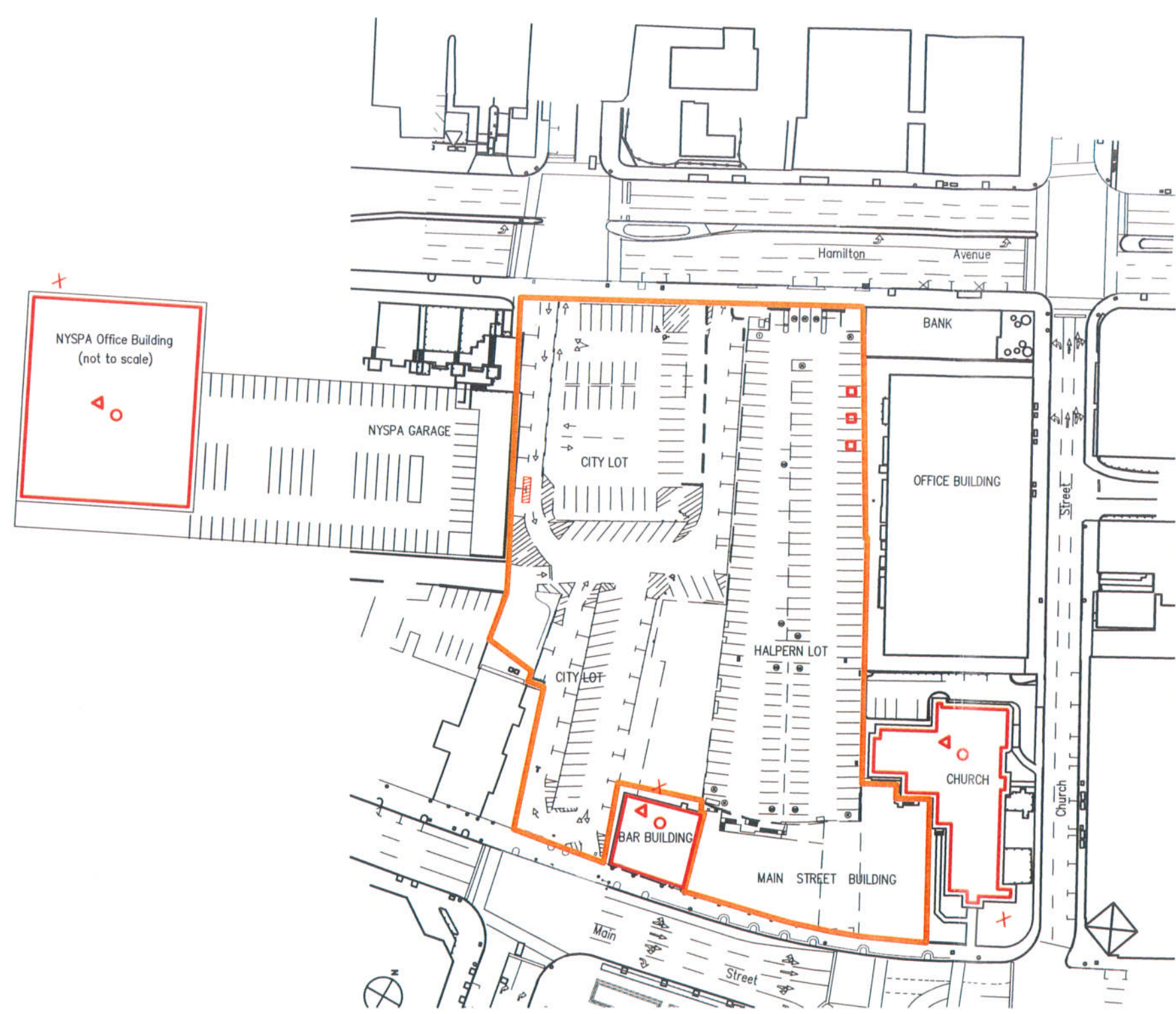
REMEDIAL INVESTIGATION (RI) WORK PLAN
 221 MAIN STREET
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FIGURE 9
PROPOSED RI SAMPLE LOCATIONS

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-  Site boundary (Location Approximate)
-  Sub-slab soil vapor sample (2 per location)
-  Indoor air sample (one per location)
-  Soil vapor sample (one per location)
-  Outdoor air sample (one per location)

Note: Air vapor samples will be collected using summa canisters, and in accordance with NYSDOH Guidance for Evaluating Soil Vapor Intrusion in New York State (February 2005).

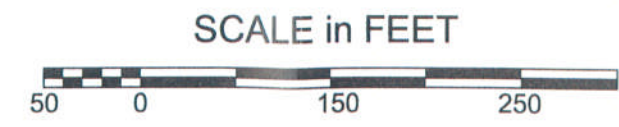

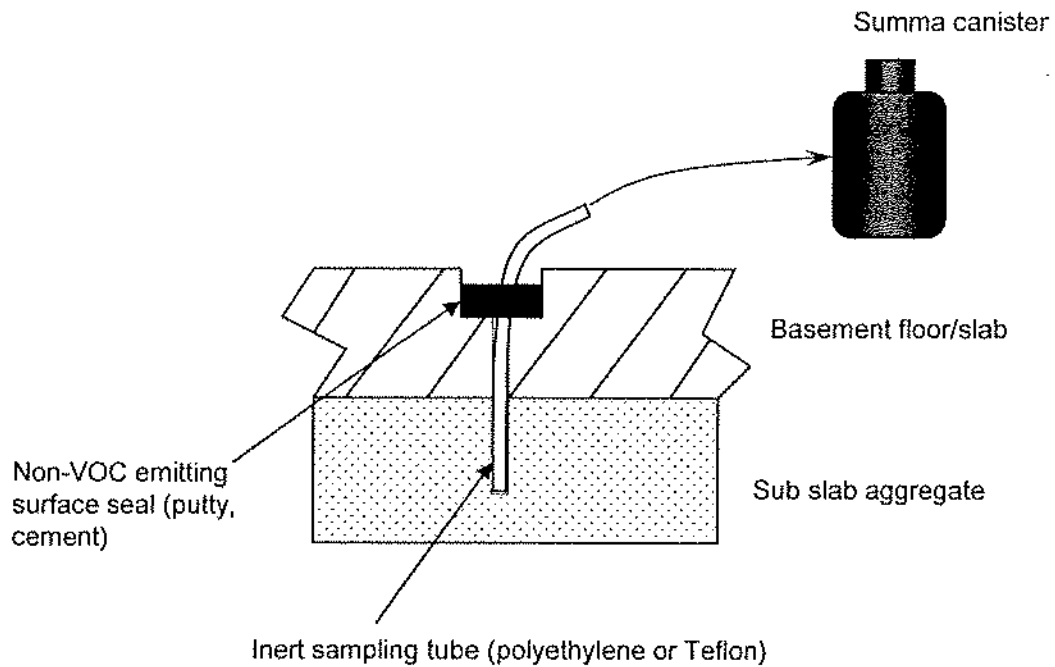


Figure based on Survey by J.W. Delano Surveying as provided by SESI Consulting Engineers.

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	<p>Figure - 10 Proposed Air Sampling Program</p>



Typical sub-slab sampling setup



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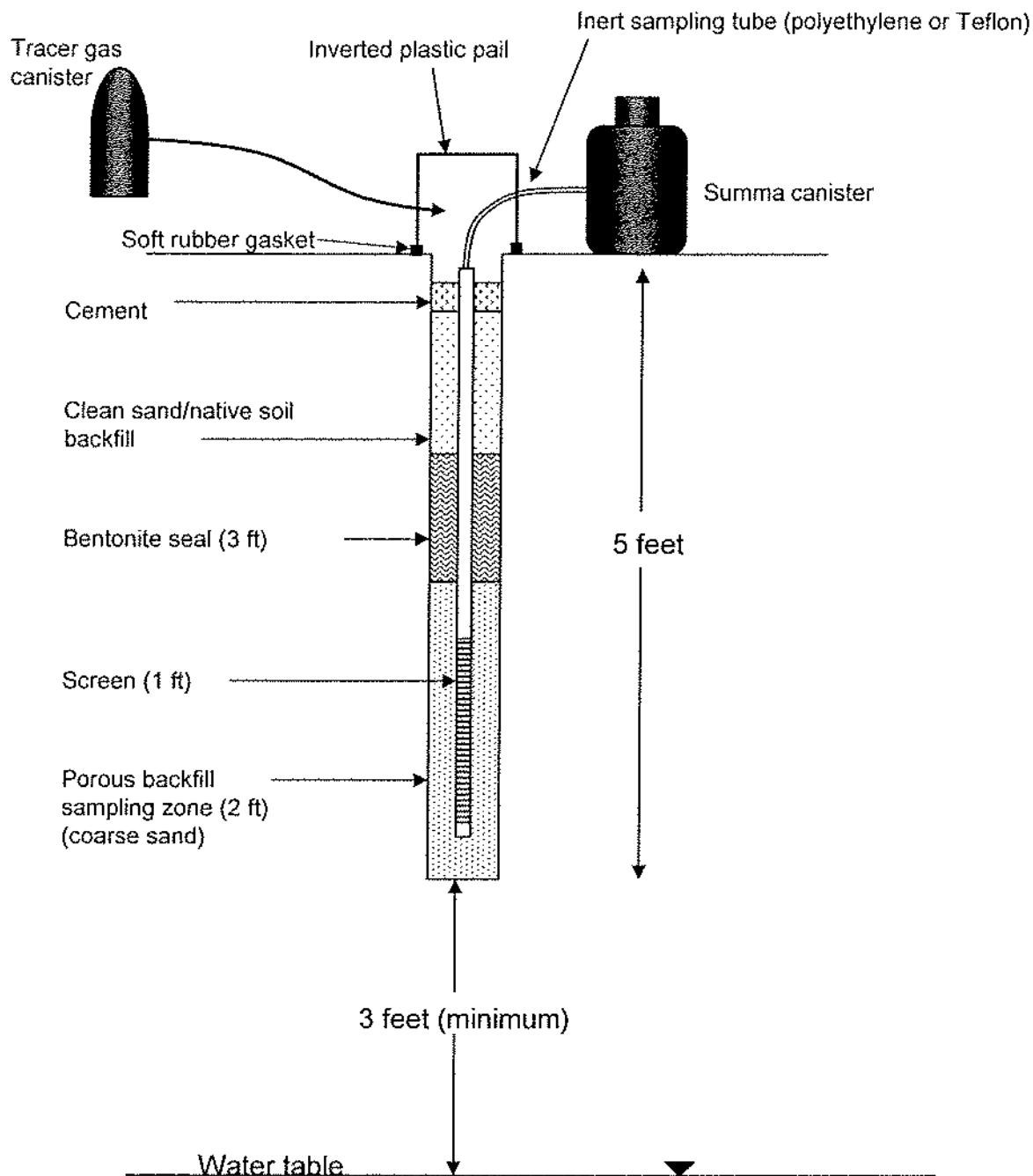
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REMEDIAL INVESTIGATION (RI) WORK PLAN
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FIGURE 11
SUB-SLAB/SOIL VAPOR SAMPLING



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FIGURE 12
SOIL VAPOR SAMPLING WELL

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TABLES

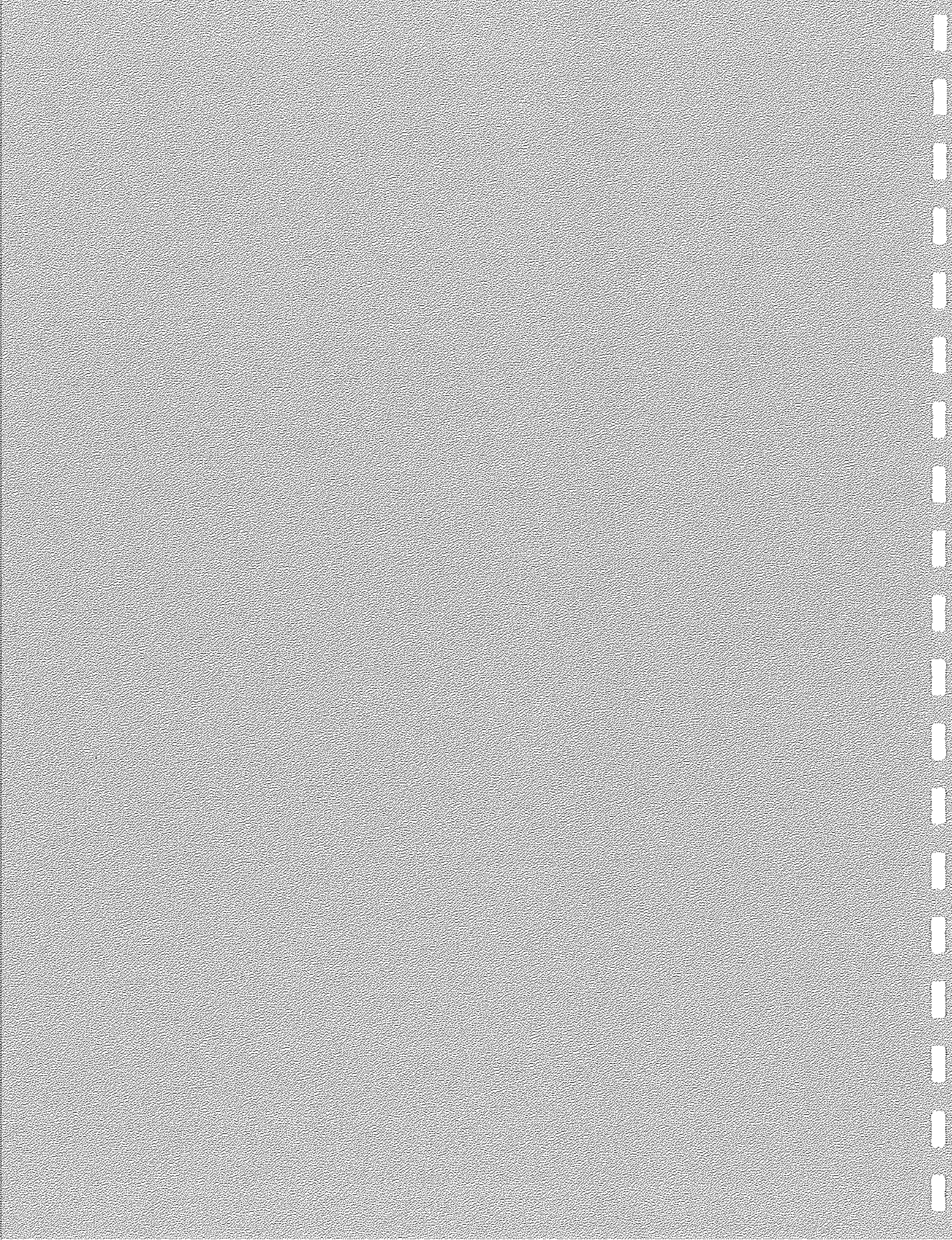


Table 1
Data Quality Objectives
Samples to be Collected

Media	Location	Type	Frequency	Analysis	Applicable Method	Other Sampling	Objective
Soil	Sidewall of excavation	Grab	1 per 30 linear feet	VOCs	EPA 8021	PID, visual inspection	To confirm excavation of petroleum contaminated soil
				SVOCs	EPA 8270		
	Bottom of excavation	Grab	1 per 900 square feet	VOCs	EPA 8021	PID, visual inspection	To confirm excavation of petroleum contaminated soil
				SVOCs	EPA 8270		
Soil Gas	Adjacent buildings	Continuous	5 samples	VOCs	EPA 8021		To determine if contamination has migrated off-site
Groundwater	Throughout Site	Grab		VOCs	EPA 8021		To determine extent of groundwater contamination
				SVOCs	EPA 8270		

Table 3
 Previous Site Investigation
 Soil and Groundwater Results
 2004

Contaminant* (ppb)	RSCO	City Lot May 2004								
		B-1 (0-7')	B-1 (10'-17')	B-1 (20'-21')	B-2 (1-7')	B-2 (10'-17')	B-2 (20'-21')	B-1 Water	B-2 Water	
1,2,4-Trimethylbenzene		ND	ND	ND	ND	ND	ND	ND	21	ND
Isopropylbenzene		ND	ND	10	ND	ND	ND	ND	ND	ND
Naphthalene		ND	99	78	ND	ND	ND	ND	110	ND
n-Propylbenzene		ND	ND	ND	ND	ND	ND	ND	12	ND
p-Isopropyltoluene		ND	6	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene		ND	ND	10	ND	ND	ND	ND	ND	ND
Acenaphthene		ND	3100	410	ND	ND	ND	ND	ND	ND
Anthracene		120	4500	590	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene		460	7400	770	91	ND	ND	ND	ND	ND
Benzo(a)pyrene		400	6200	480	64	ND	ND	ND	ND	ND
Benzo(b)fluoranthene		320	7300	450	57	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene		ND	1300	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthrene		370	6400	490	68	ND	ND	ND	ND	ND
Chrysene		450	5800	600	80	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene		ND	530	ND	ND	ND	ND	ND	ND	ND
Fluoranthene		730	9300	1400	160	ND	ND	55	ND	ND
Fluorene		ND	3200	460	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene		ND	1300	96	ND	ND	ND	ND	ND	ND
Naphthalene		ND	1900	250	ND	ND	ND	ND	ND	ND
Phenanthrene		240	9700	1500	80	ND	ND	50	ND	ND
Pyrene		780	8300	1300	150	ND	ND	53	ND	ND

Arsenic		7.77	3.75	1.62	2.74	1.51	2.95	ND	ND
Barium		221	3000	74.3	84.2	38.5	111	0.117	0.366
Cadmium		1.14	1.82	ND	ND	ND	ND	ND	ND
Chromium		40.2	63.1	14.3	19.7	9.82	21.7	ND	0.076
Lead		111	818	11.7	29.2	2.13	7.18	0.037	0.124
Selenium		1.12	2.13	ND	1.42	1.27	ND	ND	ND
Silver		ND	ND	ND	ND	ND	ND	ND	ND
Mercury		0.12	0.17	ND	ND	ND	ND	ND	0.0004

*Contaminants not detected in any sample are not listed

ND - Not Detected

Table 4
Summary of Groundwater Results

Contaminant (ppb)	Water Quality Standard ppb	May 1993**,**										
		PA-1	PA-3	PA-9	PA-13	PA-14	PA-15	W-1	W-2	W-3	W-7	W-8
VOCs												
1,2,4-Trimethylbenzene	5	3.4	3200	1600	5400	0.32	0.29	2100	2	ND	1.4	45000
1,3,5-Trimethylbenzene	5	1.4	1300	760	5700	0.4	1.0	950	1.4	ND	0.95	39000
Benzene	1	0.39	2500	ND	60000	0.020	0.72	ND	0.22	ND	ND	120000
Ethylbenzene	5	ND	3500	1900	3700	0.29	0.81	3000	ND	ND	1.6	49000
Isopropylbenzene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	5	0.33	140	150	1300	1.2	0.92	140	1.4	ND	2.1	27000
n-Propylbenzene	5	ND	450	300	4900	ND	0.23	330	2.3	ND	ND	7900
Total Xylenes	5	1.56	18000	8100	217000	3.5	3.7	9590	0.29	ND	5.1	193000
p-Isopropyltoluene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec Butylbenzene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.48	ND
tert Butylbenzene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	5	0.57	20000	12000	180000	2.1	6.3	2000	0.38	ND	2.1	180000

*Results taken from the GZA Report in Appendix B

**See Figure 10 for location of wells

NA - Not Analyzed, ND - not detected

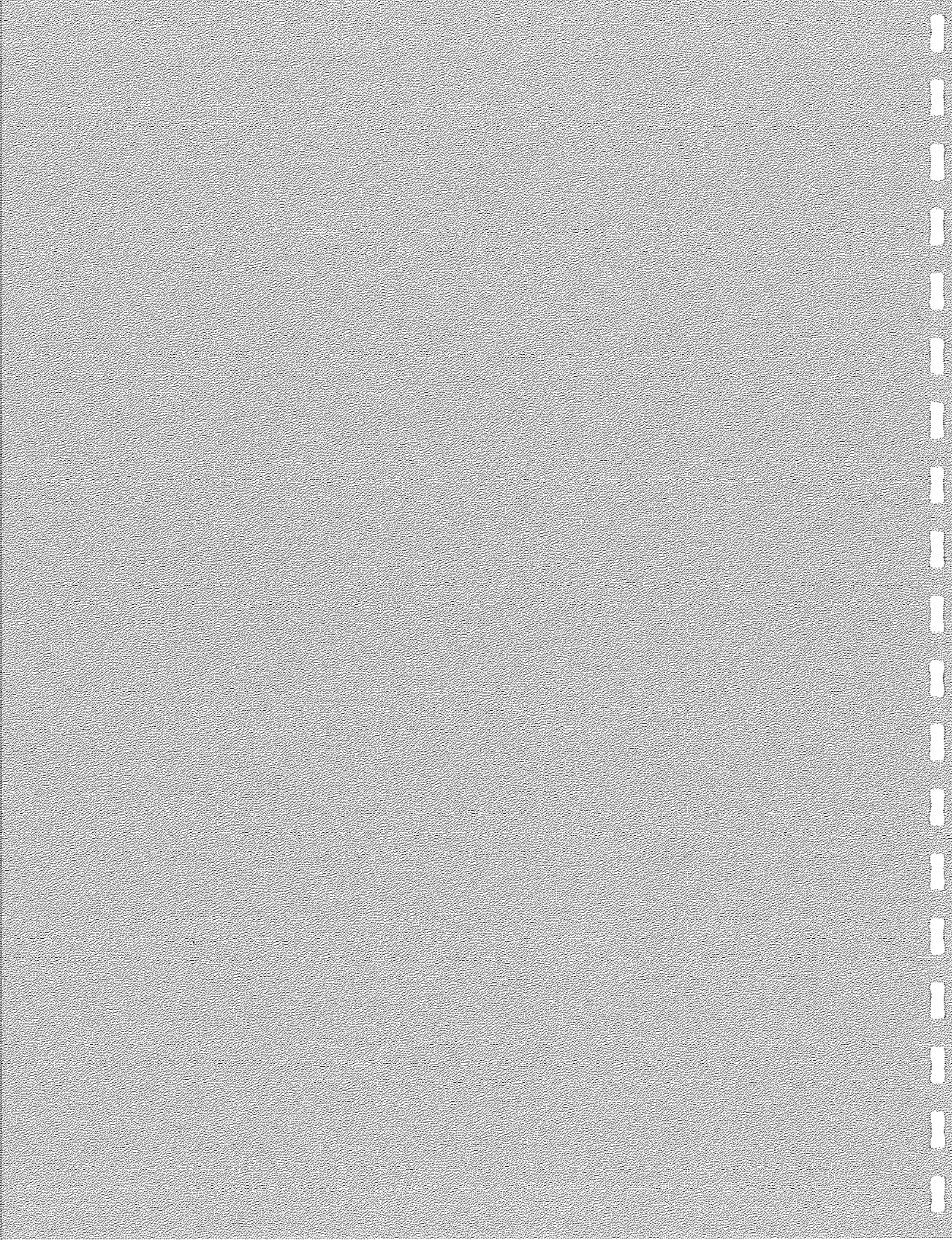
Table 4
 Summary of Groundwater Results
 (continued)

Contaminant (ppb)	Water Quality Standard ppb	December 2002			January 2003			
		MW-1	MW-2	MW-3	MW-4	MW-5	W-8	W-1
VOCs								
1,2,4-Trimethylbenzene	5	ND	2	2	ND	45	7200000	2500
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	14	1800000	590
Benzene	1	ND	ND	ND	ND	3	410000	ND
Ethylbenzene	5	ND	ND	ND	ND	11	1200000	2300
Isopropylbenzene	5	ND	ND	ND	ND	1	120000	81
Naphthalene	5	ND	ND	ND	ND	ND	1300000	52
n-Butylbenzene	5	ND	2	1	ND	1	290000	ND
n-Propylbenzene	5	ND	ND	ND	ND	5	420000	250
Total Xylenes	5	ND	2	ND	ND	38	12600000	8000
p-Isopropyltoluene	5	ND	ND	ND	ND	1	200000	ND
sec Butylbenzene	5	ND	ND	ND	ND	2	ND	ND
tert Butylbenzene	5	ND	ND	ND	ND	5	33000	290
Toluene	5	ND	ND	ND	ND	5	4100000	190

ND = Not Detected

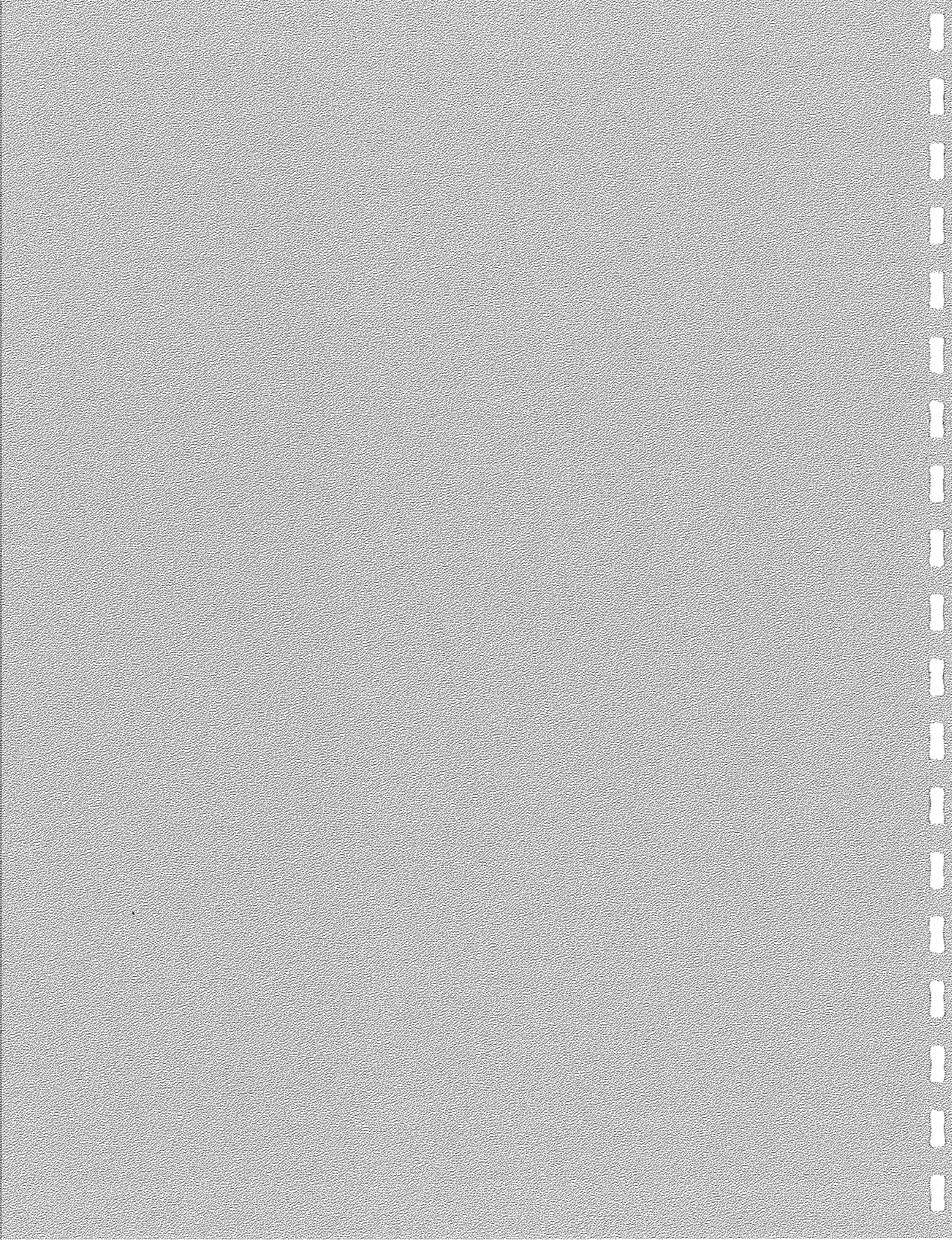
RI WORK PLAN
APPENDIX A

PREVIOUS INVESTIGATION DATA & REPORTS



APPENDIX A-1

Phase 1 Report
JM Associates, Inc.
October 23, 2002



October 23, 2002

Phase I Environmental Site Assessment

Location:

*203-227 Main Street, 293-303 Hamilton Ave
White Plains, NY*

Prepared by:

JM ASSOCIATES, INC.
•On-Site Environmental Services•

(914) 241-3795
(914) 241-4499 Fax

225 Railroad Avenue
Bedford Hills, NY 10507

PHASE I ENVIRONMENTAL ASSESSMENT

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Executive Summary Findings and Conclusions

A Phase I Environmental Site Assessment following the general guidance of the ASTM Phase I Standard Practice has been conducted at the 203-227 Main Street, 293-303 Hamilton Avenue and the Paved Municipal Parking Lot off of Hamilton Avenue and the extension of Court Street. The study includes a Site reconnaissance, a review of the Site history, a review of selected local, state and federal regulatory records, and interviews with persons and agencies familiar with the Site. No subsurface explorations or chemical testing of groundwater was conducted and no assessment for the presence of lead hazards, radon or asbestos was completed. Visual inspection showed that no asbestos pipe insulation exists or asbestos boiler insulation exists in any of the studied buildings.

On the basis of the observations made, and the information reviewed during the course of the Site Assessment and the available historical data, it is in JMA's opinion that some recognized environmental conditions exist at the Site. One of the conditions is from the 2,500-gallon UST in building located at 203 Main Street. Inspection of the site has revealed that there is a 2,500-gallon #2 fuel oil tank in a vaulted area that failed a tightness test. A NYSDEC Spill number 02-06130 has been assigned. Two copies of letters were received via fax on October 23, 2002 from the Stillman Management Inc. regarding the 2,500-gallon UST. One letter dated September 23, 2002 from Eastmond & Sons Boiler Repair Co. clearly states that oil was entering back into the tank after it was emptied through a hole in the bottom of the tank. This indicates that free product has accumulated under the tank as a result of the tank leaking. Because this UST is in a vaulted area in the basement the removal of the UST and the associated contaminated soil will all have to be performed by hand and the tank cut up and removed. The second letter dated October 23, 2002 from G&M Enterprises states they will enter the tank take a soil sample from under the tank have it analyzed and fill the tank in place with foam. In the Eastmond letter it is clear that the UST has oil under the tank caused by a hole in the bottom of the tank. Filling the tank in place with foam will not remove the free product or remediate the soil under the tank. Future remediation cost can be expected when the building is demolished. Two 275-gallon Aboveground Fuel Oil Storage Tanks are located in the 225 Main Street building. Visual inspection of the tanks shows no sign of leakage. The NYSDEC Petroleum Bulk Storage Registration indicates that a 10,000-gallon #6 fuel oil storage tank was located in the basement of building 235 Main Street. The registration for this tank expired 12-2-96. There is no record of the tank having been taken out of commission. It is possible that this tank is still buried under the basement slab of building at 235 Main Street.

The 1930 and 1950 Sanborn Maps show two filling stations, two Lodge Buildings and a Municipal Police Station within the study area. The records do not show that any of the USTs have been removed or that any soil or groundwater was impacted by any of the USTs that may have been leaking. It is recommended that soil and groundwater borings be made in the areas where the filling stations, Lodges and Police Station were located to determine if any negative environmental impact was caused by any petroleum leakage.

Based on the above information the probability of finding a number of buried USTs and potential petroleum contaminated soil and groundwater is high. Remediation costs associated with the proper removal and disposal of the USTs and contamination on the study site may be as high as \$400,000.00 to \$500,000.00. This estimate is based on the remediation being performed as part of the demolition of the existing building along with the excavation required for the new structures. This estimate is based on removal and disposal of an estimated 5000 tons of petroleum contaminated soil at the transportation and disposal price of \$75.00 per ton, for an estimated cost of \$375,000.00. The estimate also includes: 1. The additional handling of the contaminated soil to be separated and stockpiled from the clean soil excavated. 2. The covering and reloading of the contaminated soil for disposal. 3. The on-site monitoring and field sampling to delineate the clean soils from the contaminated soil to reduce the amount of contaminated soil requiring disposal. 4. The laboratory soil sampling fees as required by the NYSDEC and the engineering reports to the agency, as required. If the removal and remediation of the known buried USTs in the basement of building 203, the two abandoned USTs, 1000 and 550-gallon located under the Main Street sidewalk of building 225 and building 227 respectively and the suspected 10,000-gallon #6 fuel oil UST abandoned in the in the basement of the 235 building is required, the cost would higher because the areas are inaccessible and the removals would have to be performed by hand excavation. This estimate does not include any groundwater contamination remediation that may be required from petroleum contamination deriving from the old removed gas station that was previously located on the private paved parking lot, with a keyed entrance, on Hamilton Ave. Historical data does not confirm if any of the USTs were removed or if they were leaking. This is also true of the Municipal Police Station USTs and the two USTs associated with the Lodge Buildings previously located on the Municipal Parking Lot Area.

1.00 PURPOSE

The purpose of performing a Phase I Environmental Site Assessment is to identify recognized adverse environmental conditions with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA").

The term "recognized environmental conditions" means the presence or likely presence of any hazardous substances or petroleum products on the property under conditions that indicate existing release, a past release or a material threat of a release of any hazardous substance or petroleum products into structures on the property or into the ground, the ground water or the surface water of the property.

JM Associates, Inc. has performed this Phase I Environmental Site Assessment for the strip of retail service building located at 203-207 Main Street and the paved parking areas located on Hamilton Avenue whose previous building address were 279, 293-303 Hamilton Avenue, White Plains, NY 106021 at the request of Cappelli Enterprises, Inc. The Assessment was requested as part of a due diligence effort to investigate any and all existing recognized environmental conditions on the property and its structures.

The Phase I Environmental Site Assessment was conducted in accordance with the recommended guidelines of the American Society for Testing and Materials ("ASTM") Standard Practice E-1527 for conducting Phase I Environmental Site Assessment for commercial and industrial real estate.

The purpose of performing a Phase I Environmental Site Assessment is to identify recognized adverse environmental conditions with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and to evaluate whether other potential contaminants are present, such as petroleum, aromatic hydrocarbons and metals, regulated under the Resource Conservation and Recovery Act ("RCRA").

2.00 PROJECT AUTHORIZATIONS AND PROPERTY INFORMATION

This report presents the results of a Phase I Environmental Site Assessment conducted by JM Associates, Inc. (JMA) for Cappelli Enterprises, Inc. at the property identified as the two story masonry strip of retail service stores on the first floor and one office offices and two studios on the second floor. The

addresses of these stores are 203-227 Main Street. The 293-303 Hamilton Avenue portion of the property currently is a paved asphalt parking lot with a key operated private parking lot. Historical information obtained on this property shows that there formally was a filling station located on the property. The area west of the 203-227 private parking lot is the municipal paved asphalt parking lot. This lot is directly north (behind) the Bar Building located on the corner of Main Street and Court Street. The entrance to this Municipal Parking area is both from Hamilton Avenue and from the Main Street and Court Street extension. The paved Municipal Parking Lot areas previously housed a City Court Police Station that had an address of 279 Hamilton Ave, City of White Plains, NY 10601. The Grace Church Parcel is located on the northwest corner of Main and Church Streets. The subject properties are designated on the City of White Plains tax maps as Block 6, Lots 7, 8, 8A, 9, 14, 14A, 14B and 15. The retail buildings consist of the following building address: 203 serve as the entrance to the second floor office and studio area. Also the basement boiler room access is from building 203. The 2500-gallon #2 fuel oil tank is located in an inaccessible fault in the basement. This 2500-gallon tank has recently failed a tightness test and a NYSDEC spill number 02-06130 has been assigned and is still active. 205 is a Chinese Restaurant. 211 is a retail clothing store. 215 is a retail Jewelry store. 217 & 221 is a Chinese Restaurant. 224 is "The One Dollar Limit" store and 227 is a beauty salon. The site visit portion of an environmental assessment of the property was conducted on October 16, 2002.

3.00 PROJECT OBJECTIVE

The objective of this Phase I Environmental Site Assessment is to render an opinion as to whether superficial or historical evidence indicates the presence of recognized environmental conditions which could result in hazardous materials in the environment, as defined in the American Society for Testing and Materials (ASTM) Standard Practice E1527-97 for Phase I Environmental Site Assessments. According to the ASTM Method E1527-97, "the term recognized environmental condition means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, past release, or material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property."

4.00 SCOPE OF SERVICES

JMA's assessment of the site was completed in accordance with the ASTM Method E1527-97 and JMA's proposal for services. JMA's scope of services consisted of the following activities:

1. Review of federal and state regulatory agency databases identified by ASTM for the Site and a selected radius around the Site;
2. Review of the Site history through available ASTM Standard Historical Resources;
3. Site reconnaissance to make superficial observations for evidence of recognized environmental conditions;
4. A vicinity reconnaissance of properties within ¼ mile radius of the Site, and
5. Preparation of this report based on our findings.

This report presents JMA's field observations, results, and opinions. This report is subject to modification if JMA or any other party obtains subsequent information.

5.00 BACKGROUND SITE INFORMATION

The following information was obtained during JMA's Site reconnaissance. Photographs depicting Site conditions at the time of JMA's assessment are presented in Appendix 1.

Additional information on Site Description and Current Use is contained in Section 2.20. Information concerning area observations is contained in Section 6.0.

5.10 SITE LOCATION

The Site is within the main business district of White Plains, County of Westchester NY. Main Street, Church Street, Hamilton Avenue and the Court Street extension binds the subject property. See Vicinity Map in Appendix 1.

5.20 SITE DESCRIPTION AND CURRENT USE

The study Site consists of a series of ground floor storefronts (address 203-227 Main Street) with offices and studios above. All of the retail stores have a basement mainly used for storage with basement exits to the parking areas behind. The Grace Church and Parish House are on the corner of Main Street and Church Street. The private and Municipal Parking Lots are on Hamilton Avenue with the Municipal Parking extending through to Main Street from the Court Street extension.

Visual inspection of the basements did not reveal any Asbestos Containing Materials (ACM). The first floor retail stores did have ACM floor tile in most of the areas. Inspection did not reveal any suspected materials that would be considered hazardous or containing any petroleum products. Two 275-gallon #2 fuel oil Aboveground Storage Tanks (AGST) are located in the basement of the 225 Main Street building and one 2500-gallon #2 fuel oil tank located in an inaccessible vault area is located in the basement of the 203 Main Street building. Visual inspection of the 221 Main Street buildings showed additional fill ports in the sidewalk in front of the Buildings 225 and 227 Main Street. These fill ports provided evidence that there may have been additional Underground Storage Tanks (USTs) that existed at these buildings. Review of a previous environmental assessments performed by Testwell Craig Laboratories, Inc (TCL) dated 1991 for the 221 Main Street property did list one 1000-gallon UST and one 500-gallon UST were located under the side walk in front of the two buildings. The report stated that it is believed that both the 1000 and the 500-gallon UST were filled with sand and abandoned. There is no record indicating that these USTs were properly abandoned in place as required in the NYSDEC NYCRR Part 613.9 regulations.

5.30 ADJOINING PROPERTY USE

Office buildings and commercial/service buildings surround the subject site. Historical data obtained shows that this section of White Plains has been developed for non-agricultural usage since the 1700's. The NY U.S.G.S. Map shows the area to be 210 feet above mean sea level.

5.40 SITE UTILITIES

Potable water and sewer for the property are supplied by municipal water and sewer systems. All electric services are underground and fed from the street.

6.00 ENVIRONMENTAL SETTING

The study site is located in the middle of the business district of downtown White Plains. This section of White Plains has been developed for non-agricultural use since the early 1700's. The surrounding buildings consist of primarily office buildings and commercial/service buildings. There are no industrial manufacturing facilities located within a ¼ mile radius of the property.

6.10 SUBSURFACE AND GROUNDWATER CONDITIONS

As part of our Phase I Site Investigation no soil sampling or groundwater sampling was performed. No subsurface exploration was conducted and no assessment was made of the subsurface conditions at the site.

6.20 WETLANDS

There are no wetlands on or adjoining the study property. The Bronx River is the nearest surface water to this site and is 2000 feet west of the property. The Bronx River flows in a southerly direction.

7.00 HISTORICAL USE INFORMATION

See Appendix 2 for the complete ASTM Environmental Site Assessment Questionnaire prepared from information supplied by a representative of Stillman Management, Inc.

7.10 SITE AND AREA HISTORY REVIEW SUMMARY

A review of the Sanborn Maps shows that in the 1930 and the 1950 maps two filling stations existed on Hamilton Ave. One was located within the subject study site area the other was located on the adjacent property just east of the study site. See Sanborn Maps in Appendix 1 showing the filling station locations. Also on the same 1930 and 1950 Sanborn Maps there was buildings in the present Municipal Parking Lot. The 1930 map shows two buildings, one an Elk's Club Building and one B.P.O.E. Lodge. The latter 1950 Sanborn Maps shows that a City Court Police Station Building replaced the two lodge buildings. Records review show that on the adjacent property located east of the private parking lot on Hamilton Avenue of the study site at 274 Hamilton Avenue was an Exxon Gas Station and two NYSDEC spill numbers were assigned to the site. One was assigned because while

removing a 1000-gallon UST contaminated soil was discovered indicating a fuel release. The spill number is 97-07887. This spill number has not been removed from the active list as of this date because Exxon did not submit a final closure report. Database records also show that at the City Court Police Station Building (Police Station), 279 Hamilton Ave, there was a leaking UST reported but it was a tightness test failure and that records show the status as "completed". The Police Station had two USTs that were reportedly to be decommissioned sometime between 1987 and 1988. No reports could be found to indicate that these USTs were removed from the ground or that there was no soil or groundwater contamination. No records were found regarding the removal of the USTs from the Lodge buildings. The second filling station shown on the Sanborn Maps of 1950 and 1930 was located on Hamilton Ave where the paved private parking lot is now located. This filling station also had USTs and there are no records to indicate if the tanks were removed or if there was any soil contamination or groundwater contamination associated from these USTs.

8.00 PREVIOUS SITE INVESTIGATIONS

Previous Phase I Environmental Assessments were performed by General Consolidated Industries, Inc. (GCI) in 1994, BCM Engineering prepared an environmental assessment of the 203-227 Main Street and 293-303 Hamilton Avenue properties in 1993 and Testwell Craig Environmental Assessment for the 221 Main Street and 301 Hamilton Avenue properties in 1991. The present owner provided these reports to this office for review.

9.00 AREAS OF POSSIBLE ENVIRONMENTAL CONCERNS

The purpose of JMA's Site reconnaissance was to make superficial observations for evidence of recognized environmental conditions that could result in the presence of hazardous materials in the environment. John Manfredi of JM Associates, Inc. visited the Site on August 8, 2002 and the inspection did not reveal any evidence of any recognized environmental impact on the subject property. However review of the Sanborn Maps and historical data did reveal evidence of potential environmental impacts to the study property.

9.10 EXTERIOR OBSERVATIONS

As described above our visual observations did not reveal any presence of any hazardous substances within the building that would cause an environmental concern with the exception of the below-described USTs.

9.20 UNDERGROUND STORAGE TANKS (USTs)

Inspection of the site has revealed that there is a 2500-gallon #2 fuel oil tank in a vaulted area that failed a tightness test. A NYSDEC Spill number 02-06130 has been assigned. Two copies of letters were received via fax on October 23, 2002 from the Stillman Management Inc. company regarding the 2500-gallon UST. One letter dated September 23, 2002 from Eastmond & Sons Boiler Repair Co. clearly states that oil was entering back into the tank after it was emptied through a hole in the bottom of the tank. This indicates that under the tank we have free product that leaked out of the tank. Because this UST is in a vaulted area in the basement the removal of the UST and the associated contaminated soil will all have to be removed by hand and the tank cut up and removed. Because of where the tank is located all of this work will have to be performed by hand. The second letter dated October 23, 2002 from G&M Enterprises states they will enter the tank take a soil sample from under the tank have it analyzed and fill the tank in place with foam. In the Eastmond letter it is clear that the UST has oil under the tank caused by a hole in the bottom of the tank. Filling the tank in place with foam will not remediate the soil under the tank. Future remediation cost can be expected when the building is demolished. Two 275-gallon Aboveground Fuel Oil Storage Tanks are located in the 225 Main Street building. A visual inspection of the tanks shows no sign of leakage. The 1930 and 1950 Sanborn Maps show two filling stations in the study area along with two Lodge Buildings and a Municipal Police Station within the study area and no records that show that any of the USTs have been removed and that no soil or groundwater was impacted by any of these UST that may have been leaking. It is recommended that soil and groundwater boring be made in the areas where the filling station, Lodges and Police Station were located to determine if any negative environmental impact was caused by any petroleum leakage. The NYSDEC Petroleum Bulk Storage Registration indicates that a 10,000-gallon #6 fuel oil storage tank was located in the basement of building 235 Main Street. The registration for this tank expired 12-2-96. There is no record of the tank being taken out of commission. It is possible that this tank is still buried under the basement slab of building 235.

9.30 HAZARDOUS SUBSTANCES OR PETROLEUM PRODUCTS USE

There are no hazardous substances housed or used on the site. Visual inspection of the paved parking lot areas did not reveal any extensive staining or ponding of water. No drums or containers were observed in the parking lot areas or in the buildings that would have contained any hazardous materials. There is no site history of hazardous substance use or discharge on the property.

SOLID WASTE

Some debris was observed in the basement of the stores. None of the debris observed is of a hazardous substance.

WASTEWATER

There is no discharge of wastewater on to any adjoining properties and there is no processed wastewater being discharged from the site.

SOIL/WATER SAMPLING

No ground or groundwater sampling was performed as part of the Phase I Environmental Site Assessment.

CHEMICAL USE AND STORAGE AREAS

There is no on-site chemical use. There are no chemical storage areas.

HAZARDOUS WASTES GENERATED AND WASTE STORAGE AREAS

The Site does not generate hazardous waste. There are no hazardous waste storage areas.

10.00 REGULATORY DATABASE REVIEW

The following section is based on public information obtained from various federal, state, and local agencies that maintain environmental regulatory databases. These databases provide information about the regulatory status of a property and incidents involving storage, spilling, or transportation of oil or hazardous materials. Information was gathered by a professional data

search service, Toxics Targeting, Inc. (TT). Federal, state, and local regulatory information is presented in Appendix 3.

THE DATA BASE DID NOT REVEAL ANY ACTIVE ENVIRONMENTAL VIOLATIONS ON THE SUBJECT PROPERTY WITH THE EXCEPTION OF SPILL NUMBER 02-06130 ASSIGNED TO THE 2500-GALLON UST LOCATED IN THE BASEMENT OF BUILDING 203.

FINDINGS AND CONCLUSIONS, SEE EXECUTIVE SUMMARY ON PAGE 3 OF THIS REPORT

11.00 LIMITATIONS

JMA's findings and conclusions must be considered not as scientific certainties, but rather as our professional opinion concerning the significance of the limited data gathered during the course of the Environmental Site Assessment. No other warranty, expressed or implied, is made. Specifically, JMA does not and cannot represent that the Site contains no hazardous material, oil, or other latent condition beyond that observed by JMA during its Site Assessment.

It should be noted that when an assessment is completed without subsurface explorations and chemical screening of soil and groundwater beneath the Site, no data can be generated regarding latent subsurface conditions that may be the result of on-Site or off-Site sources.

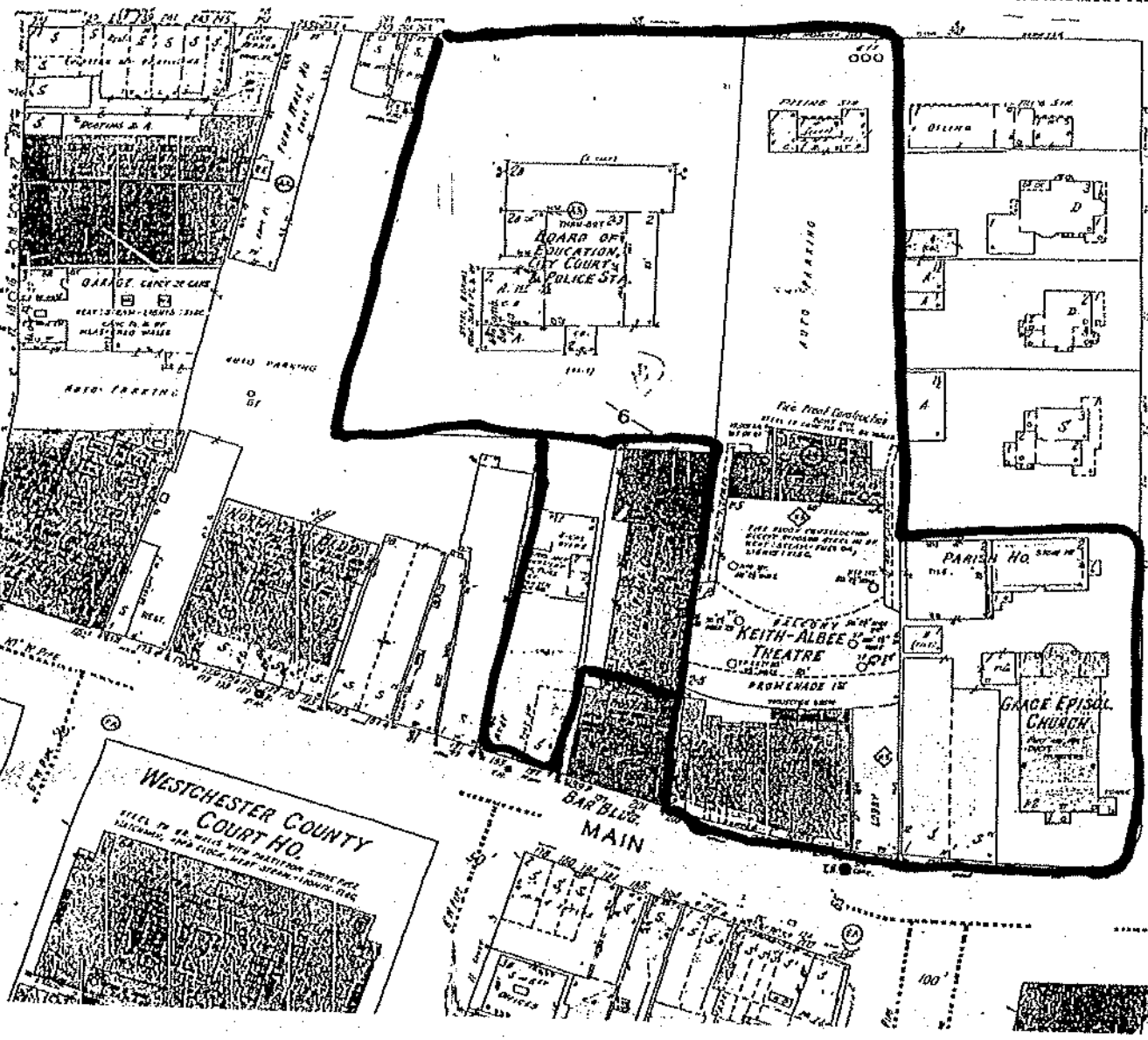
We thank you for allowing JM Associates, Inc. to serve as your Environmental Consultant for this project.

Should you have any questions regarding the content of this report, please feel free to call us and we will be glad to discuss them in further detail.

Signed: _____

Dated: _____

WILLIAM



2

WESTCHESTER COUNTY
COURT HO.

KEITH-ALBEE
THEATRE

GACE EPISCOPAL
CHURCH

MAIN
BAR BLVD.

2

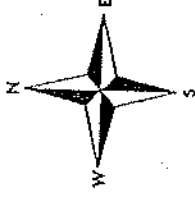
2

100'

SITE MAP
221 MAIN STREET
WHITE PLAINS, NY



Westchester County



Scale: 1 inch = 1669 feet

EASTMOND & SONS BOILER REPAIR

DIVISION OF A. L. EASTMOND & SONS, INC.

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SEPTEMBER 23RD, 2002

TO: STILLMAN MANAGEMENT
 ATTN: JOHN JANUS
 RE: 203 MAIN STREET (WHITE PLAINS)

GENTLEMEN,

ON SEPTEMBER 11TH 2002, EASTMOND PUMPED OUT AND SQUEEGEE CLEANED THE 2,500- GALLON FUEL STORAGE TANK AT THE ABOVE REFERENCE LOCATION. UPON ENTERING TANK TO PLUG OFF LINES FOR AIR TESTING (STATE REQUIREMENT, AFTER FAILURE OF SYSTEM CHECK). TECHNICIAN NOTICED OIL RETURNING INTO TANK FROM TANK BOTTOM. FLOOR STEEL WAS HAMMER TESTED, AND FOUND TO BE THINNING. TANK WAS LEFT EMPTY, BUT THE PRESENCE OF OIL BENEATH THE TANK WILL CONTINUE TO SEEP BACK INTO TANK.

YOUR DEC SPILL # IS 0206130.


 RENE LEWIS (TANK MANAGER)

G & M ENTERPRISES UIC. WC11929 HO

247 Westchester Ave.
Tuckahoe, N.Y. 10787

Phone 779-6269
Fax 914-779-6137

October 23, 2002

Mr. Roy Stillman
Stillman Management
141 Halstead Ave.
Manhasset Neck, N.Y. 10543

Re: 203 Main St. White Plains N.Y.

Dear Sir,

In my last message to you I indicated that the Health Dept. of Westchester had decided that it was necessary to enter the tank retrieve a sample of soil through the bottom of the tank have it analyzed and then decommission the tank in place by filling it with an approved foam substance.

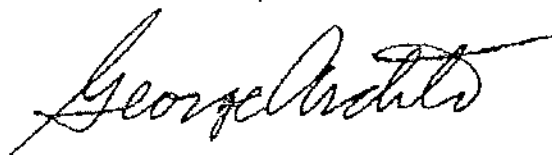
In our first phase #1 contract retrieving a sample of soil was included but since we were not able to enter the tank due to space restrictions and we were not successful in spite of removing piping that stood in the way. We therefore owe Stillman management a credit of \$650. off the phase #1 contract.

Phase #2 the supply and connection of the 1000 gal. temporary tank raises no issues.

Phase #3 . Enclosed please find the proposal to cut and enter and clean the tank and retrieve a sample through the bottom and decommission the tank as per DEC protocol with closure paperwork to follow.

We were told initially that the tank had been emptied and cleaned out. However, on attempting to enter the tank we discovered that there still remained some oil in the tank thus requiring the additional expense of recleaning to the satisfaction of the Health Department before the tank can be decommissioned.

Sincerely,



George Arditi

Spill # 0206130



ENVIRONMENTAL SITE ASSESSMENT TRANSACTION SCREEN QUESTIONNAIRE

This document is an excerpt of E 1528-93: Standard Practice for Environmental Site Assessments: Transaction Screen Process, which is under the jurisdiction of ASTM Committee E-50 on Environmental Assessment and is the direct responsibility of Subcommittee E 50.02 on Commercial Real Estate Transactions. This questionnaire represents only items 5.1 through 6.1 of E 1528-93 and should not be construed as being the complete

standard. It is necessary to refer to the full standard prior to using this questionnaire. COPYRIGHT© 1993 AMERICAN SOCIETY FOR TESTING AND MATERIALS, Philadelphia, PA. PCN: 13-515280-65. For the complete standard, or to order additional copies of this questionnaire, contact ASTM Customer Service at (215) 299-5585.

5. Introduction to Transaction Screen Questionnaire

5.1 Process—The *transaction screen process* consists of asking questions contained within the *transaction screen questionnaire of owners and occupants of the property*, observing site conditions at the *property* with direction provided by the *transaction screen questionnaire*, and, to the extent *reasonably ascertainable*, conducting limited research regarding certain *government records* and certain *standard historical sources*. The questions asked of *owners* when conducting *site visits* are the same questions as those asked of *occupants*.

responses, or the questions have been asked in writing sent by certified or registered mail, return receipt requested, postage prepaid, or by private, commercial overnight carrier and no responses have been obtained after at least two follow-up telephone calls were made or written request was sent again asking for responses.

5.5.3 The *transaction screen questionnaire* and the *transaction screen guide* sometimes include the phrase "to the best of your knowledge." Use of this phrase shall not be interpreted as imposing a constructive knowledge standard when it is not included or as imposing anything other than an *actual knowledge* standard for the person answering the questions, regardless of whether it is used. It is sometimes included as an assurance to the person being questioned that he or she is not obligated to search out information he or she does not currently have in order to answer the particular question.

5.2 Guide—The *transaction screen questionnaire* is followed by a guide designed to assist the person completing the *transaction screen questionnaire*. The guide to the *transaction screen questionnaire* is set out in Sections 7 through 10 of this practice. The guide is divided into three sections: Guide for Owner/Occupant Inquiry, Guide to Site Visit, and Guide to Government Records/Historical Sources Inquiry.

5.6 Conclusions Regarding Affirmative or Unknown Answers—If any of the questions set forth in the *transaction screen questionnaire* are answered in the affirmative, the *user* must document the reason for the affirmative answer. If any of the questions are not answered or the answer is unknown, the *user* should document such nonresponse or answer of unknown and evaluate it in light of the other information obtained in the *transaction screen process*, including, in particular, the *site visit* and the *government records/historical sources inquiry*. If the *user* decides no further inquiry is warranted after receiving no response, an answer of unknown or an affirmative answer, the *user* must document the reasons for any such conclusion.

5.2.1 To assist the *user*, its employee or agent, or the *environmental professional* in preparing a report, the guide repeats each of the questions set out in the *transaction screen questionnaire* in both the guide for *owner/occupant inquiry* and the guide to *site visit*. The questions regarding *government records/historical sources inquiry* are also repeated in the guide to that section.

5.2.2 The guide also describes the procedures to be followed to determine if reliance upon the information in a prior *environmental site assessment* is appropriate under this practice.

5.6.1 Upon obtaining an affirmative answer, an answer of unknown or no response, the *user* should first refer to the guide. The guide may provide sufficient explanation to allow a *user* to conclude that no further inquiry is appropriate with respect to the particular question.

5.2.3 A *user*, his employee or agent, or *environmental professional* conducting the *transaction screen process* should not use the *transaction screen questionnaire* without reference to, or familiarity from prior usage with, the guide.

5.6.2 If the guide to a particular question does not, in itself, permit a *user* to conclude that no further inquiry is appropriate, then the *user* should consider other information obtained from the *transaction screen process* relating to this question. For example, while on the site performing a *site visit*, a person may find a storage tank on the *property* and therefore answer Question 10 of the *transaction screen questionnaire* in the affirmative. However, during or subsequent to the *owner/occupant inquiry*, the *owner* may produce evidence that substances now or historically contained in the tank (e.g., water) are not likely to cause contamination.

5.3 User and Preparer—The *user* conducting the *transaction screen process* is the party seeking to perform *appropriate inquiry* with respect to the *property*. The *user* may delegate the preparation of the *transaction screen questionnaire* to an employee or agent of the *user* or may contract with a third party to prepare the questionnaire on behalf of the *user*. The person preparing the questionnaire is the *preparer*, who may be either the *user* or the person to whom the *user* has delegated the preparation of the *transaction screen questionnaire*.

5.4 Exercise of Care—The *preparer* conducting the *transaction screen process* should use good faith efforts in determining answers to the questions set forth in the *transaction screen questionnaire*. The *user* should take time and care to check whatever records are in the *user's* possession. The *preparer* should ask all persons to whom questions are directed to give answers to the best of the respondent's knowledge. As required by Section 9601(35)(B) of CERCLA, the *user* or *preparer* should discuss with a responsible person in authority in the *user's* organization (if any) any specialized knowledge or experience relating to *hazardous substances* on the *property* and the *preparer* should understand such information.

5.6.3 If either the guide to the question or other information obtained during the *transaction screen process* does not permit a *user* to conclude no further inquiry is appropriate with respect to such question, then the *user* must determine, in the exercise of the *user's* reasonable business judgment, based upon the totality of unresolved affirmative answers or answers of unknown received during the *transaction screen process*, whether further inquiry may be limited to those specific issues identified as of concern or should proceed with the full *Phase I Environmental Site Assessment*.

5.5 Knowledge—The owner or occupant of the *property* to which portions of the *transaction screen questionnaire* are directed should have sufficient knowledge and experience with respect to the *property* or in the *owner's* or *occupant's* particular business to understand the purpose and use of the *transaction screen questionnaire*. All answers should be given to the best of the *owner's* or *occupant's actual knowledge*.

5.7 Presumption—A presumption exists that further inquiry is necessary if an affirmative answer is given to a question because the answer was unknown or no response was given. In rebutting this presumption, the *user* should evaluate information obtained from each component of the *transaction screen process* and consider whether sufficient information has been obtained to conclude that no further inquiry is necessary. The *user* must determine, in the exercise of the *user's* reasonable business judgment, the scope of such further inquiry; whether to proceed with a *Phase I Environmental Site Assessment* prepared in accordance with Practice E 1527 or a lesser inquiry directed at specific issues raised by the questionnaire.

5.5.1 While the person conducting the *transaction screen process* has an obligation to ask the questions set forth in the *transaction screen questionnaire*, in many instances the parties to whom the questions are addressed will have no obligation to answer them. The *user* is only required to obtain information to the extent it is *reasonably ascertainable*.

5.8 Further Inquiry Under Practice E 1527—Upon completing the *transaction screen questionnaire*, if the *user* concludes that a *Phase I Environmental Site Assessment* is needed, the *user* should proceed with such inquiry with the advice and guidance of an *environmental professional*. Such further inquiry should be undertaken in accordance with Practice E 1527.

5.5.2 If the preparer asks the questions set forth in the *transaction screen questionnaire*, but does not receive any response or receives partial responses, the questions will be deemed to have been answered provided the questions have been asked, or were attempted to be asked, in person or by telephone and written records have been kept of the person to whom the questions were addressed and their

5.9 Signature—The *user* and the *preparer* of the *transaction screen questionnaire* must complete and sign the questionnaire as provided at the end of the questionnaire.

6. Transaction Screen Questionnaire

6.1 *Persons to be Questioned*—The following questions should be asked of (1) the current owner of the property, (2) any major occupant of the property or, if the property does not have any major occupants, at least 10% of the occupants of the property, and (3) in addition to the current owner and the occupants identified in (2), any occupant likely to be using, treating, generating, storing or disposing of hazardous substances or petroleum products on or from the property. A major

occupant is any occupant using at least 40% of the leasable area of the property or any anchor tenant when the property is a shopping center. In a multifamily property containing both residential and commercial uses, the preparer does not need to ask questions of the residential occupants. The preparer should ask each person to answer all questions to the best of the respondent's actual knowledge and in good faith. When completing the site visit column, the preparer should be sure to observe the property and any buildings and other structures on the property. The guide provides further details on the appropriate use of this questionnaire.

Description of Site: Address:

203-227 MAIN STREET, (221 MAIN ST.)
293-303 HAMILTON AVE
WHITE PLAINS, N.Y 10601

Question	Owner <i>pl</i>			Occupants (if applicable)			Observed During Site Visit		
	Yes	No	Unk ¹	Yes	No	Unk	Yes	No	Unk
1. Is the property or any adjoining property used for an industrial use?	Yes	<input checked="" type="radio"/> No	Unk ¹	Yes	No	Unk	Yes	No	Unk
2. To the best of your knowledge, has the property or any adjoining property been used for an industrial use in the past?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	Yes	No	Unk
3. Is the property or any adjoining property used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?	<input checked="" type="radio"/> Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
4. To the best of your knowledge, has the property or any adjoining property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?	<input checked="" type="radio"/> Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
5. Are there currently, or to the best of your knowledge have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal (19 L) in volume or 50 gal (190 L) in the aggregate, stored on or used at the property or at the facility?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	Yes	No	Unk
6. Are there currently, or to the best of your knowledge have there been previously, any industrial drums (typically 55 gal (208 L)) or sacks of chemicals located on the property or at the facility?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	Yes	No	Unk
7. Has fill dirt been brought onto the property that originated from a contaminated site or that is of an unknown origin?	Yes	<input checked="" type="radio"/> No	<input checked="" type="radio"/> Unk	Yes	No	Unk	Yes	No	Unk
8. Are there currently, or to the best of your knowledge have there been previously, any pits, ponds, or lagoons located on the property in connection with waste treatment or waste disposal?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	Yes	No	Unk
9. Is there currently, or to the best of your knowledge has there been previously, any stained soil on the property?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	Yes	No	Unk
10. Are there currently, or to the best of your knowledge have there been previously, any registered or unregistered storage tanks (above or underground) located on the property?	<input checked="" type="radio"/> Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
11. Are there currently, or to the best of your knowledge have there been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the property or adjacent to any structure located on the property?	<input checked="" type="radio"/> Yes	No	Unk	Yes	No	Unk	Yes	No	Unk
12. Are there currently, or to the best of your knowledge have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting foul odors?	Yes	<input checked="" type="radio"/> No	Unk	Yes	No	Unk	Yes	No	Unk

¹ Unk = "unknown" or "no response"
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Question	Owner	Occupants (if applicable)	Observed During Site Visit
13. If the <i>property</i> is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government environmental/health agency?	Yes <input checked="" type="radio"/> No <input type="radio"/> Unk	Yes No Unk	Yes No Unk
14. Does the <i>owner</i> or <i>occupant</i> of the <i>property</i> have any knowledge of <i>environmental liens</i> or governmental notification relating to past or recurrent violations of environmental laws with respect to the <i>property</i> or any facility located on the <i>property</i> ?	<input checked="" type="radio"/> Yes No Unk	Yes No Unk	Yes No Unk
15. Has the <i>owner</i> or <i>occupant</i> of the <i>property</i> been informed of the past or current existence of <i>hazardous substances</i> or <i>petroleum products</i> or environmental violations with respect to the <i>property</i> or any facility located on the <i>property</i> ?	<input checked="" type="radio"/> Yes No Unk	Yes No Unk	Yes No Unk
16. Does the <i>owner</i> or <i>occupant</i> of the <i>property</i> have any knowledge of any <i>environmental site assessment</i> of the <i>property</i> or facility that indicated the presence of <i>hazardous substances</i> or <i>petroleum products</i> on, or contamination of, the <i>property</i> or recommended further assessment of the <i>property</i> ?	<input checked="" type="radio"/> Yes No Unk	Yes No Unk	Yes No Unk
17. Does the <i>owner</i> or <i>occupant</i> of the <i>property</i> know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any <i>hazardous substance</i> or <i>petroleum products</i> involving the <i>property</i> by any <i>owner</i> or <i>occupant</i> of the <i>property</i> ?	Yes <input checked="" type="radio"/> No <input type="radio"/> Unk	Yes No Unk	Yes No Unk
18. Does the <i>property</i> discharge <i>wastewater</i> on or adjacent to the <i>property</i> other than storm water into a sanitary sewer system?	Yes <input checked="" type="radio"/> No <input type="radio"/> Unk	Yes No Unk	Yes No Unk
19. To the best of your knowledge, have any <i>hazardous substances</i> or <i>petroleum products</i> , unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned, on the <i>property</i> ?	Yes <input checked="" type="radio"/> No <input type="radio"/> Unk	Yes No Unk	Yes No Unk
20. Is there a transformer, capacitor, or any hydraulic equipment for which there are any records indicating the presence of PCBs?	Yes <input checked="" type="radio"/> No <input type="radio"/> Unk	Yes No Unk	Yes No Unk

Government Records/Historical Sources Inquiry
(See guide, Section 10 of ASTM E 1528-93)

21. Do any of the following Federal government record systems list the *property* or any *property* within the circumference of the area noted below:

National Priorities List (NPL)—within 1.0 mile (1.6 km)?

Yes No

CERCLIS List—within 0.5 mile (0.8 km)?

Yes No

RCRA TSD Facilities—within 1.0 mile (1.6 km)?

Yes No

22. Do any of the following state record systems list the *property* or any *property* within the circumference of the area noted below:

List maintained by state environmental agency of *hazardous waste sites* identified for investigation or remediation that is the state agency equivalent to *NPL*—within approximately 1.0 mile (1.6 km)?

Yes No

List maintained by state environmental agency of sites identified for investigation or remediation that is the state equivalent to *CERCLIS* within 0.5 mile (0.8 km)?

Yes No

Leaking Underground Storage Tank (LUST) List—within 0.5 mile (0.8 km)?

Yes No

Solid Waste/Landfill Facilities—within 0.5 mile (0.8 km)?

Yes No

23. Based upon a review of *fire insurance maps* or consultation with the local fire department serving the *property*, all as specified in the guide, are any buildings or other improvements on the *property* or on an *adjoining property* identified as having been used for an industrial use or uses likely to lead to contamination of the *property*?

Yes No N/A

The preparer of the transaction screen questionnaire must complete and sign the following statement.
(For definition of preparer and user, see 5.3 or 3.3.25 of ASTM E 1528-93.)

This questionnaire was completed by:

Name PAUL DELLA DONNA
Title SUPT of PREMISES
Firm STILLMAN MANAGEMENT
Address 141 HALSTED AVE
WALWARTON, NY
Phone number 813 1900
Date 10/16/02

If the preparer is different than the user, complete the following:

Name of user _____
User's address _____
User's phone number _____
Preparer's relationship to site _____
Preparer's relationship to user _____
(for example, principal, employee, agent, consultant)

Copies of the completed questionnaire have been filed at:

Copies of the completed questionnaire have been mailed or delivered to:

CARPELLI BWT INC
115 STEVENS AVE
VAHALLA, NY 10595 } →

Preparer represents that to the best of the preparer's knowledge the above statements and facts are true and correct and to the best of the preparer's actual knowledge, no material facts have been suppressed or misstated.

Signature J Manfred Date 10/22/02
Signature _____ Date _____
Signature _____ Date _____

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*Toxics Targeting
Computerized
Environmental Report*

**221 Main St
White Plains, NY 10601**

August 23, 2002

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Introduction

Toxics Targeting has combined environmental database searches, extensive regulatory analysis and sophisticated mapping techniques to produce your *Computerized Environmental Report*. It checks for the presence of 16 categories of government-reported toxic sites and provides detailed, up-to-date information on each identified site. The findings of your report are presented in an easy-to-understand format that:

1. *Maps* the approximate locations of selected government-reported toxic sites identified on or near a specified target address.
2. *Estimates* the distance and direction between the target address and each identified toxic site.
3. *Reports* air and water permit non-compliance and other regulatory violations.
4. *Profiles* some aspects of the usage, manufacture, storage, handling, transport or disposal of toxic chemicals at individual sites.
5. *Summarizes* some potential health effect information and drinking water standards for selected chemicals reported at individual sites.

The Three Sections Of Your Report

The first section highlights your report's findings by summarizing identified sites according to: a) distance intervals, b) direction, c) proximity to the target address and d) individual site categories. In addition, the locations of all identified toxic sites are illustrated on individual maps for each radius search distance used in your report. Finally, a close-up map illustrates the locations of all identified toxic sites at the shortest radius search distance used in your report.

The second section of your report contains *Toxic Site Profiles* that provide detailed information on each identified toxic site. The information in each *Toxic Site Profile* varies according to its source. Some toxic site categories have extensive information, some have limited information. All the information is updated on a regular basis.

The third section of the report contains appendices that identify: 1) on-site spills reported to the national Emergency Response Notification System (ERNS), 2) various toxic sites that cannot be mapped due to incomplete or erroneous addresses or other mapping problems, 3) codes that characterize hazardous wastes reported at various facilities, 4) methods used to map toxic sites identified in your report and 5) information sources used in your report.

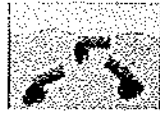
How to Use Your Report

- Check Table One to see the number of identified sites by distance intervals.
- Check Table Two to see identified sites sorted by direction.
- Check Table Three to see identified sites ranked by proximity to the target address.
- Check Table Four to see identified sites sorted by site categories.
- Refer to the various maps to see the locations of identified toxic sites. Refer to the *Toxic Site Profile* and *Appendix* sections for additional information.

Toxic Site Databases Analyzed In Your Report

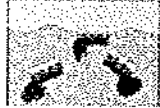
Search Radius

One-Mile



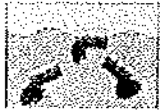
1) *New York Inactive Hazardous Waste Disposal Site Registry*: a state listing of sites that can pose environmental or public health hazards requiring investigation or clean up.

One-Mile



2) *CERCLIS* (Comprehensive Environmental Response, Compensation and Liability Information System): a federal listing of sites that can pose environmental or public health hazards requiring investigation or clean up.

One-Mile



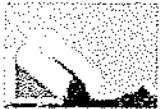
3) *National Priority List for Federal Superfund Cleanup*: a listing of sites known to pose environmental or health hazards that are being investigated or cleaned up under the Federal Superfund program.

One-Mile



4) *New York Hazardous Substance Disposal Site Draft Study*: a state listing of sites contaminated with toxic substances that can pose environmental or public health hazards. These sites are not eligible for state clean up funding programs.

One-Mile



5) *New York Solid Waste Facilities Registry, including New York City 1934 Sites*: active and inactive landfills, incinerators, transfer stations or other solid waste management facilities.

One-Mile



6) *New York State Major Oil Storage Facilities*: sites with more than a 400,000 gallon capacity for storing petroleum products.

One-Mile



7) *New York and Federal Hazardous Waste Treatment, Storage or Disposal Facilities*: sites reported by the NYS manifest system and the USEPA's Resource Conservation and Recovery Act Information System (RCRIS). Also includes the following databases:

- *RCRA violations*: waste facilities with violations reported by the USEPA pursuant to the Resource Conservation and Recovery Act.
- *RCRIS corrective action activity (CORRACTS)*: waste facilities with RCRIS corrective action activity reported by the USEPA.

Half-Mile



8a) *Toxic Spills: active* stationary source spills reported to state environmental authorities, including unremediated leaking underground storage tanks.

Half-Mile



8b) *Toxic Spills: closed* stationary and non-stationary source spills reported to state environmental authorities, including remediated leaking underground storage tanks.

Quarter-Mile



9) *New York and Local Petroleum Bulk Storage Facilities*: sites with more than an 1,100 gallon capacity for storing petroleum products.

Quarter-Mile



10) *New York and Federal Hazardous Waste Generators and Transporters*: sites reported by the NYS manifest system and the USEPA's Resource Conservation and Recovery Act Information System (RCRA). Also includes the following databases:

- *RCRA violations*: waste facilities with violations reported by the USEPA pursuant to the Resource Conservation and Recovery Act.
- *RCRIS corrective action activity (CORRACTS)*: waste facilities with RCRIS corrective action activity reported by the USEPA.

Quarter-Mile



11) *New York Chemical Bulk Storage Facilities*: Sites storing hazardous substances listed in 6 NYCRR Part 597 in aboveground tanks with capacities of 185 gallons or more and/or underground tanks of any size

Quarter-Mile



12) *New York Toxic Release Inventory Facilities*: discharges of selected toxic chemicals to air, land, water or treatment facilities.

Quarter-Mile



13) *Federal Permit Compliance System Toxic Wastewater Discharges*: permitted toxic wastewater discharges.

Quarter-Mile



14) *Air Discharges*: Air pollution point sources monitored by U.S. EPA and/or state and local air regulatory agencies.

Quarter-Mile



15) *Federal Civil Enforcement Docket*: civil judiciary cases filed on behalf of the U. S. Environmental Protection Agency by the Department of Justice.

Property only



16) *ERNS: Federal Emergency Response Notification System Spills*: a listing of federally reported spills.

Limitations Of The Information In Your Report

The information presented in your *Computerized Environmental Report* has been obtained from various local, state and federal government agencies. Please be aware that: 1) additional information on individual sites may be available, 2) newly discovered sites are continually reported and 3) all map locations are approximate. As a result, this report is intended to be the FIRST STEP in the process of identifying and evaluating possible environmental threats to specific properties and can only serve as a guide for conducting on-site visits or additional, more detailed toxic hazard research.

Toxics Targeting tries to ensure that the information in your report is presented accurately and with minimal alteration. The only systematic changes that are made correct obvious address errors in order to allow sites to be mapped. Any address changes that are made are noted in the map information section at the top of each corresponding *Toxic Site Profile*. Since the information presented in your report is not edited, please be aware that it can contain reporting errors or typographical mistakes made by the site owners/operators or government agencies that produced the information. Please be aware of some other limitations of the information in your report:

- The computerized map used by *Toxics Targeting* is the same one used by the U. S. Census. While the map is generally accurate, no map is perfect. In addition, *Toxics Targeting's* mapping methods estimate where toxic site addresses are located if the address is not specifically designated on the Census map. FOR THESE REASONS, ALL MAP LOCATIONS OF ADDRESSES AND REPORTED TOXIC SITES SHOULD BE CONSIDERED APPROXIMATE AND SHOULD BE VERIFIED BY ON-SITE VISITS;
- UNDISCOVERED, UNREPORTED OR UNMAPPABLE TOXIC SITES MIGHT NOT BE IDENTIFIED BY THIS REPORT'S CHECK OF 16 TOXIC SITE CATEGORIES. TOXIC SITES REPORTED IN OTHER GOVERNMENT DATABASES MIGHT ALSO EXIST. FOR THESE REASONS, YOUR REPORT MIGHT NOT IDENTIFY ALL THE TOXIC SITES THAT EXIST IN THE AREA IT SEARCHES;
- The appendix of your report contains a listing of sites that could not be mapped due to incomplete or erroneous address information or other mapping problems. This listing includes unmappable toxic sites in zip code areas within one mile of the target address as well as toxic sites without zip codes reported in the same county. IF YOU WOULD LIKE INFORMATION ON ANY OF THE LISTED SITES, PLEASE CONTACT TOXICS TARGETING AND REFER TO THE SITE ID NUMBER.
- Some toxic sites identified in your report may be classified as **known hazards**. Most of the toxic sites identified in your report involve **potential hazards** related to the on-site use, manufacture, handling, storage, transport or disposal of toxic chemicals. Some of the toxic sites identified in your report may be the addresses of parties responsible for toxic sites located elsewhere. YOU SHOULD ONLY CONCLUDE THAT TOXIC HAZARDS ACTUALLY EXIST AT A SPECIFIC SITE WHEN GOVERNMENT AUTHORITIES MAKE THAT DETERMINATION OR WHEN THAT CONCLUSION IS FULLY DOCUMENTED BY THE FINDINGS OF AN APPROPRIATE SITE INVESTIGATION UNDERTAKEN BY LICENSED PROFESSIONALS;
- Compass directions and distances are approximate. Compass directions are calculated from the subject property address to the mapped location of each identified toxic site. The compass direction does not necessarily refer to the closest property boundary of an identified toxic site. The compass direction also can vary substantially for toxic sites that are located very close to the subject property address.
- The information presented in your report is a summary of the information that *Toxics Targeting* obtains from government agencies on reported toxic sites. YOU MAY BE ABLE TO OBTAIN ADDITIONAL INFORMATION ABOUT REPORTED SITES WITH THE FREEDOM OF INFORMATION REQUEST FORM LETTERS THAT ARE PROVIDED ON THE INSIDE OF THE BACK COVER.

Section One:

Report Summary

- *Table One: Number of Identified Toxic Sites By Distance Interval*
- *Table Two: Identified Toxic Sites By Direction*
- *Table Three: Identified Toxic Sites Ranked By Proximity*
- *Table Four: Identified Toxic Sites By Category*
- *Map One: One-Mile Radius Map*
- *Map Two: Half-Mile Radius Map*
- *Map Three: Quarter-Mile Radius Map*
- *Map Four: Quarter-Mile Radius Close up Map*

NUMBER OF IDENTIFIED SITES BY DISTANCE INTERVAL

Database Searched	0 - 100 ft	100 ft - 1/8 mi	1/8 mi - 1/4 mi	1/4 mi - 1/2 mi	1/2 mi - 1 mi	Site(s) Category Totals
NYS Inactive Hazardous Waste Disposal Sites *	0	0	0	0	0	0
CERCLIS Sites *	0	0	0	0	0	0
National Priority List Sites *	0	0	0	0	0	0
Hazardous Substance Waste Disposal Sites *	0	0	0	0	0	0
NYS Solid Waste Facilities *	0	0	0	2	0	2
NYS Major Oil Storage Facilities *	0	0	0	0	0	0
RCRA Hazardous Waste Treatment, Storage, Disposal Sites *	0	0	0	0	0	0
NYS Toxic Spills (incl. Leaking Undergrnd Storage Tanks) **	7	37	104	87(49)	Not searched	235(49)
Local & State Petroleum Bulk Storage Sites ***	4	22	45	Not searched	Not searched	71
RCRA Hazardous Waste Generators & Transporters ***	6	15	15	Not searched	Not searched	36
NYS Chemical Bulk Storage Sites ***	0	0	0	Not searched	Not searched	0
Toxic Release Inventory Sites (TRI) ***	0	0	0	Not searched	Not searched	0
Permit Compliance System Toxic Wastewater Discharges ***	0	0	0	Not searched	Not searched	0
NYS Air Discharges ***	0	0	0	Not searched	Not searched	0
Civil Enforcement Docket Facilities ***	0	1	0	Not searched	Not searched	1
ERNS (Onsite) *****	0	Not searched	Not searched	Not searched	Not searched	0
Distance Interval Totals	17	75	164	89(49)	0	345(49)

Search Radius: * 1 Mile Search Radius ** 1/2 Mile Search Radius *** 1/4 Mile Search Radius **** 1/8 Mile Search Radius ***** on-site only

Numbers in () indicate spills not mapped and profiled, and are found in the tables at the end of the active and closed spills sections. See these tables for a description of the parameters involved with identifying these spills.

Identified Toxic Sites by Direction

221 Main St
White Plains, NY 10601

* Compass directions can vary substantially for sites located very close to the subject property address.

Sites less than 100 feet from subject property sorted by distance

Map Id#	Site Name	Site Street	Approximate Distance & Direction From Property	Toxic Site Category
68	POLICE	279 HAMILTON	0 feet	Closed Status Tank Test Failure
165	IN STREET	55 CHURCH STREET	0 feet	Closed Status Spill (Misc. Spill Cause)
238	PUBLIC SAFETY BUILDING	279 HAMILTON VAE	0 feet	Petroleum Bulk Storage Site
309	WHITE PLAINS, CITY OF, FIRE PREVENTION	BUREAU-279 HAMILTON AVENUE	0 feet	Hazardous Waste Generator/Transporter
310	WHITE PLAINS, POLICE DEPT	279 HAMILTON AVE	0 feet	Hazardous Waste Generator/Transporter
311	WHITE PLAINS POLICE DEPT	279 HAMILTON AVENUE	0 feet	Hazardous Waste Generator/Transporter
312	WHITE PLAINS TOWN CENTER	MAMARONECK AVE & MAIN ST	0 feet	Hazardous Waste Generator/Transporter
239	MACYS WHITE PLAINS	220 MAIN ST	23 feet to the ESE*	Petroleum Bulk Storage Site
313	TST WHITE PLAINS	220 MAIN ST	23 feet to the ESE*	Hazardous Waste Generator/Transporter
240	CODI BROS EXXON 3-7118	220 MAIN ST	24 feet to the NNW*	Petroleum Bulk Storage Site
314	EXXON USA	-- 274 HAMILTON AVENUE	24 feet to the NNW*	Hazardous Waste Generator/Transporter
30	ABANDONED MACY'S STORE	220 MAIN ST	24 feet to the NNW*	Petroleum Bulk Storage Site
31	EXXON SERVICE STATION	-- 274 HAMILTON AVE	29 feet to the ESE*	Hazardous Waste Generator/Transporter
69	EXXON, WHITE PLAINS	-- 274 HAMILTON AVE.	29 feet to the NNW*	Active Haz Spill (Unknown/Other Cause)
241	RECKSON OPERATING PARTNERSHIP	235 MAIN ST	29 feet to the NNW*	Closed Status Tank Test Failure
166	213 MAIN STREET	213 MAIN ATREET	29 feet to the ESE*	Petroleum Bulk Storage Site
117	LIGHTHOUSE FOR THE BLIND	44 CHURCH STREET	49 feet to the S*	Closed Status Spill (Misc. Spill Cause)
			66 feet to the NE*	Closed Status Spill (Unkn/Other Cause)

Sites between 100 ft and 660 ft from the subject property sorted by direction and distance

Map Id#	Site Name	Site Street	Approximate Distance & Direction From Property	Toxic Site Category
243	AMCOTT ASSOC	300 HAMILTON AVE	136 feet to the N*	Petroleum Bulk Storage Site
245	AMCOTT ASSOC	95 CHURCH ST	186 feet to the N*	Petroleum Bulk Storage Site
167	AMERICAN SAVINGS BANK	99 CHURCH STREET	223 feet to the N	Closed Status Spill (Misc. Spill Cause)
246	99 CHURCH STREET	99 CHURCH STREET	226 feet to the N	Petroleum Bulk Storage Site
257	BARKER AVENUE APT. CORP.	33 BARKER AVENUE	546 feet to the N	Petroleum Bulk Storage Site
269	35 BARKER AVE. REALTY CORP.	35 BARKER AVE.	571 feet to the N	Petroleum Bulk Storage Site
72	APARTMENT BLDG	40 BARKER AV	600 feet to the N	Closed Status Tank Test Failure
262	40 BARKER AVE.	40 BARKER AVENUE	606 feet to the N	Petroleum Bulk Storage Site
251	AT&T	360 HAMILTON AVENUE	383 feet to the NNE	Petroleum Bulk Storage Site
317	RECHSON ASSOCIATES	360 HAMILTON AVE	383 feet to the NNE	Hazardous Waste Generator/Transporter
318	AT&T	360 HAMILTON AVE	383 feet to the NNE	Hazardous Waste Generator/Transporter
168	OFFICE BLDG(UNDER CONST)	360 HAMILTON ROAD	384 feet to the NNE	Closed Status Spill (Misc. Spill Cause)
258	WHITE PLAINS	400 HAMILTON AVE	555 feet to the NE	Petroleum Bulk Storage Site
322	AT&T LONG LINES DEPT/WHIT	400 HAMILTON AVE	555 feet to the NE	Hazardous Waste Generator/Transporter
323	WHITE PLAINS LL CENTRAL OFFICE	400 HAMILTON AVENUE	555 feet to the NE	Hazardous Waste Generator/Transporter

324	AMERICAN TELEPHONE & TELEGRAPH	400 HAMILTON AVENUE	555 feet to the NE	Hazardous Waste Generator/Transporter
33	400 HAMILTON AVE.	400 HAMILTON AVE.	556 feet to the NE	Active Haz Spill (Unknown/Other Cause)
50	AT & T TELEPHONE CO	400 HAMILTON AV	556 feet to the NE	Closed Status Tank Failure
124		400 HAMILTON AVENUE	556 feet to the NE	Closed Status Spill (Unk/Other Cause)
179	AT&T CORPORATION	400 HAMILTON AVENUE	556 feet to the NE	Closed Status Spill (Misc. Spill Cause)
180	VAULT 9058	400 HAMILTON AVE	556 feet to the NE	Closed Status Spill (Misc. Spill Cause)
181	VAULT 6174	400 HAMILTON AVE	556 feet to the NE	Closed Status Spill (Misc. Spill Cause)
71	CITY HALL	255 MAIN ST.	258 feet to the E	Closed Status Tank Test Failure
248	MUNICIPAL BUILDING	255 MAIN ST	265 feet to the E	Petroleum Bulk Storage Site
315	WHITE PLAINS, CITY OF	255 MAIN ST	265 feet to the E	Hazardous Waste Generator/Transporter
316	WHITE PLAINS DEPT OF PUBLIC WORKS	255 MAIN STREET	265 feet to the E	Hazardous Waste Generator/Transporter
32	CITY BANK	244 MAIN ST	365 feet to the E	Active Haz Spill (Unknown/Other Cause)
260	MARTINE REALTY CO.	234-254 MARTINE AVENUE	587 feet to the SE	Petroleum Bulk Storage Site
70	OFFICE BUILDING	14 MANARONECK AVE	120 feet to the SSE*	Closed Status Tank Test Failure
119	WOOLWORTH STORE BASEMENT	24-34 MAMARONECK AVE.	284 feet to the SSE	Closed Status Spill (Unk/Other Cause)
44	UNOCCUPIED COMMERCIAL	31 MAMARONECK AV	309 feet to the SSE	Active Haz Spill (Misc. Spill Cause)
250	CHASE MANHATTAN BANK N.A.	31 MAMARONECK AVE.	311 feet to the SSE	Petroleum Bulk Storage Site
121	QUICK PICK SHOES	40 MAMARONECK	388 feet to the SSE	Closed Status Spill (Unk/Other Cause)
169	CAMERA STORE	44 MAMARONECK AVE.	428 feet to the SSE	Closed Status Spill (Misc. Spill Cause)
170	MINSKOFF CORP.	179 MARTINE AVE.	433 feet to the SSE	Closed Status Spill (Misc. Spill Cause)
122		MAMARONECK AVE/MARTINE AV	450 feet to the SSE	Closed Status Spill (Unk/Other Cause)
253	204 MARTINE ASSOCIATES / ICG	204 MARTINE AVE	476 feet to the SSE	Petroleum Bulk Storage Site
254	47 MAMARONECK AVE CORP	4M MAMARONECK AVE	490 feet to the SSE	Petroleum Bulk Storage Site
255	48 MAMARONECK AVENUE ASSOC.	48 MAMARONECK AVENUE	497 feet to the SSE	Petroleum Bulk Storage Site
329	1-HOUR PHOTO FINISH	60-B MANARONECK AVE	655 feet to the SSE	Hazardous Waste Generator/Transporter
120	MINSKOFF MANAGEMENT	39-47 COURT STREET	360 feet to the S	Closed Status Spill (Unk/Other Cause)
171	LITTLE HOUSE RESTAURANT	169 MARTINE AVE.	450 feet to the S	Closed Status Spill (Misc. Spill Cause)
252	82ND - 83RD STREET VENTURE	167-183 MARTINE AVE.	452 feet to the S	Petroleum Bulk Storage Site
45		412 MARTIN AND COURT	496 feet to the S	Active Haz Spill (Misc. Spill Cause)
49	THE MICHIGALLIAN OFFICE	MARTINE AVE. & COURT ST.	496 feet to the S	Closed Status Tank Failure
174	INTERSECTION OF COURT ST.	COURT ST. & MARTINE AVE.	496 feet to the S	Closed Status Spill (Misc. Spill Cause)
256	WEST COUNTY MICHAELIAN OFFICE	148 MARTINE AVE 001	542 feet to the S	Petroleum Bulk Storage Site
319	DEPARTMENT OF ENVIRONMENTAL FACILITIES	MOB 1 148 MARTINE AVE	542 feet to the S	Hazardous Waste Generator/Transporter
320	WESTCHESTER CITY OFFICE BLDG	148 MARNINE AVE(RAD OIL)	542 feet to the S	Hazardous Waste Generator/Transporter
321	CROTON POINT SANITARY LANDFILL	148 MARTINE AVENUE	542 feet to the S	Hazardous Waste Generator/Transporter
123		148 MARTEEN AVENUE	548 feet to the S	Closed Status Spill (Unk/Other Cause)
176	CITY OF WHITE PLAINS M.P.	148 MARTENE AVE.	548 feet to the S	Closed Status Spill (Misc. Spill Cause)
177	MICHAELIAN OFFICE BLDG.	148 MARTINE AVE.	548 feet to the S	Closed Status Spill (Misc. Spill Cause)
178	COUNTY OFFICE BLD	MARTINE AVE	548 feet to the S	Closed Status Spill (Misc. Spill Cause)
345	WESTCHESTER COUNTY OF ENVIR FA	148 MARTINE AVE	555 feet to the S	Civil Enforcement Docket Site
242	BRIAN HOLDING COMPANY	203 MAIN STREET	123 feet to the SSW*	Petroleum Bulk Storage Site
244	BAR BUILDING	199-201 MAIN ST	151 feet to the SSW*	Petroleum Bulk Storage Site
48	RESIDENCE	185- 187 MAIN ST	214 feet to the SW	Closed Status Tank Failure
247	WYASSUP-LAUREL GLEN CORP.	175 MAIN ST	236 feet to the SW	Petroleum Bulk Storage Site
118	OFFICE BLDG	175 MAIN ST	242 feet to the SW	Closed Status Spill (Unk/Other Cause)
249	2 WILLIAM ST./ 169 MAIN ST.	2 WILLIAM ST./ 169 MAIN ST.	272 feet to the SW	Petroleum Bulk Storage Site
172	VAULT #0070	MAIN ST & GROVE ST	459 feet to the SW	Closed Status Spill (Misc. Spill Cause)

173	WHITE PLAINS GARAGE	MAIN ST & GROVE ST	459 feet to the SW	Closed Status Spill (Misc. Spill Cause)
261	NEW YORK POWER AUTHORITY	123 MAIN STREET	598 feet to the WSW	Petroleum Bulk Storage Site
325	NY POWER AUTH	123 MAIN ST	600 feet to the WSW	Hazardous Waste Generator/Transporter
326	BANK OF NEW YORK	123 MAIN STREET	600 feet to the WSW	Hazardous Waste Generator/Transporter
327	NEW YORK POWER AUTHORITY	123 MAIN STREET	600 feet to the WSW	Hazardous Waste Generator/Transporter
328	NEW YORK POWER AUTHORITY	123 MAIN STREET	600 feet to the WSW	Hazardous Waste Generator/Transporter
73	CENTROPLEX ASSOC.	123 MAIN STREET	603 feet to the WSW	Closed Status Tank Test Failure
74	ODDESY CORP. MAINT. DEPT.	123 MAIN ST.	603 feet to the WSW	Closed Status Tank Test Failure
125	SHARP	123 MAIN ST	603 feet to the WSW	Closed Status Spill (Unk/Other Cause)
182	OFFICE BLDG	123 MAIN ST	603 feet to the WSW	Closed Status Spill (Misc. Spill Cause)
126	OFFICE BUILDING	170 HAMILTON AV	644 feet to the W	Closed Status Spill (Unk/Other Cause)
263	170 HAMILTON AVENUE	170 HAMILTON AVENUE	646 feet to the W	Petroleum Bulk Storage Site
175	MANHOLE # 4146	BARKER AVE & CHURCH ST	505 feet to the NNW	Closed Status Spill (Misc. Spill Cause)

Sites equal to or greater than 660 ft from subject property sorted by direction and distance

Map Id#	Site Name	Site Street	Approximate Distance & Direction From Property	Toxic Site Category
105	PINE HOLLOW GARDENS	79 NORTH BROADWAY	2042 feet to the N	Closed Status Tank Test Failure
106	PACE UNIVERSITY	78 NORTH BROADWAY	2070 feet to the N	Closed Status Tank Test Failure
107	PACE	78 N BROADWAY	2070 feet to the N	Closed Status Tank Test Failure
111	VILLAGE GREEN CO-OP	95 NORTH BROADWAY	2398 feet to the N	Closed Status Tank Test Failure
116	GARDEN APARTMENTS	101 N. BROADWAY	2617 feet to the N	Closed Status Tank Test Failure
85	PRESBYTERIAN CHURCH	39 N. BROADWAY	1136 feet to the NNE	Closed Status Tank Test Failure
293	WHITE PLAINS PRESBYTERIAN CHUR	39 N BROADWAY	1136 feet to the NNE	Petroleum Bulk Storage Site
295	ROYAL VIEW	42 BARKER AVE	1145 feet to the NNE	Petroleum Bulk Storage Site
138	41 BARKER AVE.	41 BARKER AVE.	1165 feet to the NNE	Closed Status Spill (Unk/Other Cause)
296	KINGSLEY HOUSE	41 BARKER AVE.	1169 feet to the NNE	Petroleum Bulk Storage Site
297	KINGSLEY HOUSE	41 BARKER AVE.	1169 feet to the NNE	Petroleum Bulk Storage Site
38	MANHOLE 1955	NORTH BROADWAY/BARKER AVE	1193 feet to the NNE	Active Haz Spill (Unknown/Other Cause)
139	MANHOLE 4148	NO BROADWAY & BARKER AVE	1193 feet to the NNE	Closed Status Spill (Unk/Other Cause)
140	MANHOLE 3570	BARKER ST/N BROADWAY	1193 feet to the NNE	Closed Status Spill (Unk/Other Cause)
231	MANHOLE # 3570	BARKER AVE & N BROADWAY	1193 feet to the NNE	Closed Status Spill (Misc. Spill Cause)
302	BROADLAKE CO	44 N BROADWAY	1245 feet to the NNE	Petroleum Bulk Storage Site
235		44 NORTH BROADWAY	1251 feet to the NNE	Closed Status Spill (Misc. Spill Cause)
57	50 N. BWAY. OWNERS INC.	50 NORTH BROADWAY	1341 feet to the NNE	Closed Status Tank Failure
330	AT&T	440 HAMILTON AVE	708 feet to the NE	Hazardous Waste Generator/Transporter
134	HAMILTON AVE	AT NORTH BROADWAY	993 feet to the NE	Closed Status Spill (Unk/Other Cause)
219	ATT	HAMILTON AVE & S. BROADWAY	993 feet to the NE	Closed Status Spill (Misc. Spill Cause)
288	16 NO BROADWAY OWNERS INC	16 NO BROADWAY	1048 feet to the NE	Petroleum Bulk Storage Site
222	APT. BUILDING	16 NORTH BROADWAY	1054 feet to the NE	Closed Status Spill (Misc. Spill Cause)
290	BROADLAWN APARTMENTS INC	20 NO BROADWAY	1076 feet to the NE	Petroleum Bulk Storage Site
47	APARTMENT BLDG	20 NORTH BROADWAY	1083 feet to the NE	Active Haz Spill (Misc. Spill Cause)
223	BROADLAWN APART.	20 NORTH BROADWAY	1083 feet to the NE	Closed Status Spill (Misc. Spill Cause)
294	WESKORA OWNERS CORP.	30 NORTH BROADWAY	1137 feet to the NE	Petroleum Bulk Storage Site

95	JSD MANAGEMENT	15 LAKE ST.	1682 feet to the NE	Closed Status Tank Test Failure
22	RESIDENCE	30 LAKE STREET	2031 feet to the NE	Active Tank Test Failure
104	BELTMORE TOWERS APTS.	30 LAKE ST.	2032 feet to the NE	Closed Status Tank Test Failure
23	DEROSA	25 LAKE STREET	2106 feet to the NE	Active Tank Test Failure
151	CANATORE RESIDENCE	1 EASTVIEW AVE.	2181 feet to the NE	Closed Status Spill (Unk/Other Cause)
110	NATIONAL CAR RENTAL	42 LAKE STREET	2209 feet to the NE	Closed Status Tank Test Failure
153	WHITE PLAINS EXTRA MART	42 LAKE ST	2209 feet to the NE	Closed Status Spill (Unk/Other Cause)
154	TEXACO	42 LAKE ST	2209 feet to the NE	Closed Status Spill (Unk/Other Cause)
66	EMPTY WAREHOUSE	48 LAKE STREET	2432 feet to the NE	Closed Status Tank Failure
112	RAAB CO.	48 LAKE STREET	2432 feet to the NE	Closed Status Tank Failure
159	STORE AT	41 LAKE ST	2524 feet to the NE	Closed Status Spill (Unk/Other Cause)
161	SAVINO RESIDENCE	21-23 SOUTH KENSICO AVE.	2575 feet to the NE	Closed Status Spill (Unk/Other Cause)
28	GETTY GAS STATION	43 LAKE ST	2586 feet to the NE	Active Tank Test Failure
113	GETTY S/S	43 LAKE STREET	2586 feet to the NE	Closed Status Tank Test Failure
5	OFFICE BUILDING	15 NORTH BROADWAY	836 feet to the ENE	Active Tank Failure
279	WHITE PLAINS PLAZA	1 NORTH BROADWAY	855 feet to the ENE	Petroleum Bulk Storage Site
80	LASALLE PARTNERS	1 NORTH BROADWAY	859 feet to the ENE	Closed Status Tank Test Failure
132	WHITE PLAINS PLAZA	1 NORTH BROADWAY	859 feet to the ENE	Closed Status Spill (Unk/Other Cause)
338	NEW YORK SPORTS CLUBS	1 N BROADWAY	859 feet to the ENE	Hazardous Waste Generator/Transporter
286	TIBBETS PARK APTS INC	10 NORTH BROADWAY	1041 feet to the ENE	Petroleum Bulk Storage Site
289	TWO NORTH BROADWAY	2 NORTH BROADWAY	1073 feet to the ENE	Petroleum Bulk Storage Site
12	PRESIDENTIAL MANAGEMENT	2 WESTCHESTER AVE.	1080 feet to the ENE	Active Tank Test Failure
58	RESIDENCE	325 MAIN ST	1409 feet to the ENE	Closed Status Tank Failure
90	BRENTWOOD CONDOS	300 MAIN STREET	1443 feet to the ENE	Closed Status Tank Test Failure
91	BRENT WOOD APTS	300 MAIN ST	1443 feet to the ENE	Closed Status Tank Test Failure
92	APT BUILDING	300 MAIN ST	1444 feet to the ENE	Closed Status Tank Test Failure
142	APT BLDG	312 MAIN ST	1537 feet to the ENE	Closed Status Spill (Unk/Other Cause)
7		2 AMHERST PL	1889 feet to the ENE	Active Tank Failure
2	WHITE PLAINS MUN INC		2561 feet to the ENE	Solid Waste Facility
184	MAIN AND BROADWAY	270 1/2 MAIN STREET	758 feet to the E	Closed Status Spill (Misc. Spill Cause)
128	FRONT OF SEARS	275 MAIN ST	837 feet to the E	Closed Status Spill (Unk/Other Cause)
333	SEARS	275 MAIN ST	837 feet to the E	Hazardous Waste Generator/Transporter
130	TM #782	1 SOUTH BROADWAY/MAIN ST	854 feet to the E	Closed Status Spill (Unk/Other Cause)
131	APARTMENT BUILDING	1 SOUTH BROADWAY	854 feet to the E	Closed Status Spill (Unk/Other Cause)
190	APARTMENT BUILDING	1 SOUTH BROADWAY	854 feet to the E	Closed Status Spill (Misc. Spill Cause)
278	WHITE SWAN APARTMENT	1 SOUTH BROADWAY	855 feet to the E	Petroleum Bulk Storage Site
82	ES GORDON	7-11 SOUTH BROADWAY	909 feet to the E	Closed Status Tank Test Failure
282	EDWARD S. GORDON CO.	7-11 SOUTH BROADWAY	915 feet to the E	Petroleum Bulk Storage Site
218	TRANSFORMER VAULT 3954	IFO 15 SO BROADWAY	977 feet to the E	Closed Status Spill (Misc. Spill Cause)
291	12 WESTCHESTER AVENUE TENANTS	12 WESTCHESTER AVE	1105 feet to the E	Petroleum Bulk Storage Site
225	M B TRUCKING	12 WESTCHESTER AVE	1110 feet to the E	Closed Status Spill (Misc. Spill Cause)
226	PARK ROSE	12 WESTCHESTER AVE	1110 feet to the E	Closed Status Spill (Misc. Spill Cause)
230	DRIVEWAY APT. HOUSE	1 FRANKLIN AVE.	1178 feet to the E	Petroleum Bulk Storage Site
298	ONE FRANKLIN OWNERS CORP	ONE FRANKLIN AVE	1180 feet to the E	Petroleum Bulk Storage Site
55	APT. BUILDING	3-5 FRANKLIN AVE.	1245 feet to the E	Closed Status Tank Failure
234	3-5 FRANKLIN AVE. OWNERS	3-5 FRANKLIN AVE.	1245 feet to the E	Closed Status Spill (Misc. Spill Cause)
86	3-5 FRANKLIN AVE	3-5 FRANKLIN AVE.	1247 feet to the E	Closed Status Tank Test Failure
303	3-5 FRANKLIN AVE	3-5 FRANKLIN AVE	1247 feet to the E	Petroleum Bulk Storage Site
145	WHITE PLAINS CRYSLER PLM	70 WESTCHESTER AVE.	1698 feet to the E	Closed Status Spill (Unk/Other Cause)
146	WESTCHESTER CHRY PLYM	70 WESTCHESTER AVE	1698 feet to the E	Closed Status Spill (Unk/Other Cause)
96	FRANKLIN APTS	25 FRANKLIN AVE	1740 feet to the E	Closed Status Tank Test Failure

237	APARTMENT HOUSE	25 FRANKLIN AVE	1740 feet to the E	Closed Status Spill (Misc. Spill Cause)
102	KEY FORD	80 WESTCHESTER AVE	1808 feet to the E	Closed Status Tank Test Failure
152	NEW PLAZA SITE	BLOOMINGDALE AVE & WESTCH	2207 feet to the E	Closed Status Spill (Unk/Other Cause)
157	BANK OF NEW YORK	150 WESTCHESTER AVE	2521 feet to the E	Closed Status Spill (Unk/Other Cause)
1	BROCKWAY PLACE T.S.1	P.O. BOX 364	2539 feet to the E	Solid Waste Facility
78	BART GOLDBERG APT. BLDG	277 MARTINE AVE.	789 feet to the ESE	Closed Status Tank Test Failure
269	BROADMAR COMPANY	277 MARTINE AVE.	793 feet to the ESE	Petroleum Bulk Storage Site
285	CAMEO HOUSE OWNERS INC	300 MARTINE AVE	998 feet to the ESE	Petroleum Bulk Storage Site
224	CON LED HOLE # TM 2514	MARTINE AVE WEST OF BOWAY	1091 feet to the ESE	Closed Status Spill (Misc. Spill Cause)
343	CONSOLIDATED EDISON	V7303-MITCHELL&SOUTH BWAY	1252 feet to the ESE	Hazardous Waste Generator/Transporter
308	34 SOUTH BROADWAY	34 S BROADWAY AKA 25 HALE AVE	1277 feet to the ESE	Petroleum Bulk Storage Site
147	WESTCEHSTER MALL	HIRAM ST/PAULDING ST	1782 feet to the ESE	Closed Status Spill (Unk/Other Cause)
62	WESTCHESTER SHOPPING CENT	WEST AVE.& PAWLING ST.	1979 feet to the ESE	Closed Status Tank Failure
3	28 MITCHELL PLACE	28 MITCHELL PLACE	777 feet to the SE	Active Tank Failure
77		28 MITCHELL PLACE	777 feet to the SE	Closed Status Tank Test Failure
268	28 MITCHELL PLACE INC.	28 MITCHELL PLACE	783 feet to the SE	Petroleum Bulk Storage Site
4	APT COMPLEX	32 MITCHELL PL	790 feet to the SE	Active Tank Failure
185		32 MITCHELL PL	790 feet to the SE	Closed Status Spill (Misc. Spill Cause)
186		32 MITCHELL PL	790 feet to the SE	Petroleum Bulk Storage Site
272	SEA MANAGEMENT	23 MITCHELL PLACE	819 feet to the SE	Closed Status Tank Test Failure
79		25 MITCHELL PLACE	826 feet to the SE	Closed Status Tank Failure
54		40 MITCHELL PLACE	829 feet to the SE	Closed Status Tank Failure
273	APT. BUILDING	33 MITCHELL PLACE	830 feet to the SE	Petroleum Bulk Storage Site
189	WIL SHORE REALTY APTS.	37-43 MITCHELL PLACE	850 feet to the SE	Closed Status Spill (Misc. Spill Cause)
281	37-43 MITCHELL PLACE INC.	45 MITCHELL PLACE	878 feet to the SE	Petroleum Bulk Storage Site
81	MGH CO	45 MITCHELL PLACE	905 feet to the SE	Closed Status Tank Test Failure
209	PUCKHINKONNUCK CORP	190 E POST RD	905 feet to the SE	Closed Status Spill (Misc. Spill Cause)
300	PIP PRINTING	190 E POST RD	1226 feet to the SE	Petroleum Bulk Storage Site
342	193-197 EAST POST RD VENTURE	193-197 EAST POST RD	1226 feet to the SE	Hazardous Waste Generator/Transporter
306	240 EAST POST RD	240 EAST POST RD	1272 feet to the SE	Petroleum Bulk Storage Site
56	WHITE PLAINS HOTEL	MAPLES AVE.	1283 feet to the SE	Closed Status Tank Failure
144	ROAD (ON PAVEMENT)	CARHART & DEKALB	1685 feet to the SE	Closed Status Spill (Unk/Other Cause)
164			2618 feet to the SE	Closed Status Spill (Unk/Other Cause)
76	MITCHELL PLACE ASSOC.	10 MITCHELL PLACE	761 feet to the SSE	Closed Status Tank Test Failure
266	76 MAMARONECK AVE ASSOC	76 MAMARONECK AVE	766 feet to the SSE	Petroleum Bulk Storage Site
267	TEN MITCHELL PLACE	10 MITCHELL PLACE	768 feet to the SSE	Petroleum Bulk Storage Site
270	DEVON PLAZA REALTY	9 MITCHELL PL	813 feet to the SSE	Petroleum Bulk Storage Site
271	MITCHELL PLACE GARAGE	9 MITCHELL PL	813 feet to the SSE	Petroleum Bulk Storage Site
53	GAS STATION	9 MITCHELL PL	820 feet to the SSE	Closed Status Tank Failure
10	INNS OF COURT	99 COURT ST	940 feet to the SSE	Active Tank Test Failure
283	THE INNS OF COURT PROPERTIES	99 COURT ST.	942 feet to the SSE	Petroleum Bulk Storage Site
284	110 MAMARONECK AVENUE ASSOC.	110 MAMARONECK AVENUE	990 feet to the SSE	Petroleum Bulk Storage Site
11	SILVERMAN REALTY	107 MAMARONECK AVE.	991 feet to the SSE	Active Tank Test Failure
83	NICKY'S RESTAURANT	109 MAMARONECK AVE	1029 feet to the SSE	Closed Status Tank Test Failure
287	DEVON PLAZA REALTY	109 MAMARONECK AVE	1047 feet to the SSE	Petroleum Bulk Storage Site
220	DEVON PLAZA REALTY	109 MAMARONECK AVE	1048 feet to the SSE	Closed Status Spill (Misc. Spill Cause)
221	RESIDENCE	109 MAMARONECK AV	1048 feet to the SSE	Closed Status Spill (Misc. Spill Cause)
84	PER-BAR	124 MAMARONECK AVENUE	1131 feet to the SSE	Closed Status Tank Test Failure
292	124 MAMARONECK AVENUE	124 MAMARONECK AVENUE	1131 feet to the SSE	Petroleum Bulk Storage Site
233	GREEN POINT SAVINGS BANK	134 MAMARONECK AVENUE	1230 feet to the SSE	Closed Status Spill (Misc. Spill Cause)

301	GREENPOINT BANK	134 MAMARONECK AVENUE	1231 feet to the SSE	Petroleum Bulk Storage Site
14	HALPERN ENTERPRISES	170 EAST POST ROAD	1268 feet to the SSE	Active Tank Test Failure
305	BARCLAYS BANK OF NEW YORK NA	138 MAMARONECK AVENUE	1270 feet to the SSE	Petroleum Bulk Storage Site
307	DEVON PLAZA REALTY	170 EAST POST RD	1273 feet to the SSE	Petroleum Bulk Storage Site
15	OFFICE BLDG	171 EAST POST RD	1309 feet to the SSE	Active Tank Test Failure
16	COMMERCIAL	130-144 E POST RD	1409 feet to the SSE	Active Tank Test Failure
18	165 MAMORNECK AVE	SAME	1532 feet to the SSE	Active Tank Test Failure
60	JOHN DALE INC	178 MAMORNECK AVE	1618 feet to the SSE	Closed Status Tank Failure
236	SAM ASH MUSIC	180 MAMARONECK AVE	1653 feet to the SSE	Closed Status Spill (Misc. Spill Cause)
148		200 MAMARONECK AV	1818 feet to the SSE	Closed Status Spill (Unk/Other Cause)
21	OFFICE BLDG	203 MAMARONECK AVE	1846 feet to the SSE	Active Tank Test Failure
61	PIRRO, MONSELL REALTY	40 WALLER AVE	1893 feet to the SSE	Closed Status Tank Failure
63	WHITE PLAINS DPW	MAPLE & MAMARONECK AVE.	1979 feet to the SSE	Closed Status Tank Failure
103	WHITE PLAINS-FIRE HOUSE 6	MAMARONECK & MAPLE AVE.	1979 feet to the SSE	Closed Status Tank Failure
64	CITY PARKING GARAGE	CHESTER AVE. MARBLE AVE.	1987 feet to the SSE	Closed Status Tank Failure
27	YMCA	260 MAMARONECK AVE.	2364 feet to the SSE	Active Tank Test Failure
156	PARKING LOT	WHALER & CARHART ST.	2500 feet to the SSE	Closed Status Spill (Unk/Other Cause)
9	PROFESSIONAL BUILDING	280 MAMARONECK AVENUE	2557 feet to the SSE	Active Tank Failure
29	C STAR DINER	285 MAMARONECK ST	2616 feet to the SSE	Active Tank Test Failure
163	ROADWAY	285 MAMARONECK AVE	2616 feet to the SSE	Closed Status Spill (Unk/Other Cause)
135	POST OFFICE SQUARE	QUARROPAS ST	1036 feet to the S	Closed Status Spill (Unk/Other Cause)
341	NYSDEC	GRAND & QUARRAPUS	1052 feet to the S	Hazardous Waste Generator/Transporter
299	GRAND REALTY COMPANY	150 GRAND STREET	1209 feet to the S	Petroleum Bulk Storage Site
232	OFFICE BLDG.BASEMENT	150 GRAND STREET	1211 feet to the S	Closed Status Spill (Misc. Spill Cause)
141	PRIVATE RESIDENCE	177 GRAND ST	1398 feet to the S	Closed Status Spill (Unk/Other Cause)
93	WHITE PLAIN HOUSING AUTH.	225 GROVE ST.	1563 feet to the S	Closed Status Tank Test Failure
94	COACHMAN HOTEL	123 EAST POST ROAD	1572 feet to the S	Closed Status Tank Test Failure
59	WESTCHESTER OFFICE BLDG.	112 EAST POST ROAD	1592 feet to the S	Closed Status Tank Failure
143	WESTCHESTER HOBBIES	106 EAST POST RD	1621 feet to the S	Closed Status Spill (Unk/Other Cause)
20	RESIDENTS	8 CHESTER AVE	1706 feet to the S	Active Tank Test Failure
40	STORM SEWER	EAST POST RD / WINCHESTER	2069 feet to the S	Active Haz Spill (Unknown/Other Cause)
331	WHITE PLAINS CITY OF	MARTINE AVE PUBLIC LIBRARY	713 feet to the SSW	Hazardous Waste Generator/Transporter
277	WESTCHESTER COUNTY COURTHOUSE	110 GROVE ST	846 feet to the SSW	Petroleum Bulk Storage Site
280	WESTCHESTER COUNTY COURTHOUSE	111 GROVE ST TOWER	874 feet to the SSW	Petroleum Bulk Storage Site
339	WESTCHESTER COUNTY COURTHOUSE	111 GROVE STREET	874 feet to the SSW	Hazardous Waste Generator/Transporter
37	WESTCHESTER COURTHOUSE	GROVE ST AND QUARROPAS ST	1181 feet to the SSW	Active Haz Spill (Unknown/Other Cause)
6	SLADER NEIGHBORHOOD CNTR	2 FISHER CT	1782 feet to the SSW	Active Tank Failure
41	UNK	134 S LEXINGTON AV	2157 feet to the SSW	Active Haz Spill (Unknown/Other Cause)
109	UNK	134 SOUTH LEXINGTON AVE	2157 feet to the SSW	Closed Status Tank Test Failure
25	WHITE PLAINS HOSPITAL	EAST NY POST ROAD	2285 feet to the SSW	Active Tank Test Failure
42	WHITE PLAINS HOSPITAL	41 EAST POST RD	2285 feet to the SSW	Active Haz Spill (Unknown/Other Cause)
65	WHITE PLAINS HOSPITAL	DAVIS AVE.	2285 feet to the SSW	Closed Status Tank Failure
155	FORMER NORTHVILLE GAS STA	34 EAST POST ROAD	2356 feet to the SSW	Closed Status Spill (Unk/Other Cause)
43	CLOSED GETTY GAS STATION	26 EAST POST RD	2421 feet to the SSW	Active Haz Spill (Unknown/Other Cause)
158	POST RD	DAVIS AV	2522 feet to the SSW	Closed Status Spill (Unk/Other Cause)
8		12 EAST POST RD	2552 feet to the SSW	Active Tank Failure
67		11 EAST POST RD.	2615 feet to the SSW	Closed Status Tank Failure
114	GETTY SERVICE STATION	11 EAST POST ROAD	2615 feet to the SSW	Closed Status Tank Test Failure
115	GETTY S/S	11 EAST POND ROAD	2615 feet to the SSW	Closed Status Tank Test Failure
100	OUR LADY OF MOUNT CARMEL	92 SO. LEXINGTON AVE.	1807 feet to the SW	Closed Status Tank Test Failure

101	OUR LADY OF MT. CARMEL CH	92 LEXINGTON AVE	1807 feet to the SW	Closed Status Tank Test Failure
26	PEPE MOTORS	50 BANK ST	2356 feet to the SW	Active Tank Test Failure
160	WHITE PLAINS MOTOR SVC.	22 W. MORELAND AVE.	2565 feet to the SW	Closed Status Spill (Unk/Other Cause)
162	GETTY SERVICE STATION	69 BANK ST	2599 feet to the SW	Closed Status Spill (Unk/Other Cause)
265	NYNEX	111 MAIN ST	734 feet to the WSW	Petroleum Bulk Storage Site
51	NYNEX	111 MAIN ST	735 feet to the WSW	Closed Status Tank Failure
75	NY TEL	111 EAST MAIN STREET	735 feet to the WSW	Closed Status Tank Test Failure
183	BELL ATLANTIC	111 MAIN ST	737 feet to the WSW	Closed Status Spill (Misc. Spill Cause)
332	NEW YORK TELEPHONE COMPANY	111 MAIN STREET	737 feet to the WSW	Hazardous Waste Generator/Transporter
187	IN FRONT OF GALERIA MALL	MAIN ST	827 feet to the WSW	Closed Status Spill (Misc. Spill Cause)
334	EXPRESSLY PORTRAITS	100 MAIN ST	838 feet to the WSW	Hazardous Waste Generator/Transporter
335	C.P.J PHOTO FINISH	100 MAIN ST STE 301	838 feet to the WSW	Hazardous Waste Generator/Transporter
336	THE PICTURE PLACE-389 GALLERIA MALL	100 MAIN ST	838 feet to the WSW	Hazardous Waste Generator/Transporter
337	J.C PENNEYS	100 MAIN ST	838 feet to the WSW	Hazardous Waste Generator/Transporter
274	THE GALLERIA AT WHITE PLAINS	100 MAIN STREET	841 feet to the WSW	Petroleum Bulk Storage Site
275	JC PENNEY	100 MAIN ST.	841 feet to the WSW	Petroleum Bulk Storage Site
276	MACY'S WHITE PLAINS	100 MAIN ST	841 feet to the WSW	Petroleum Bulk Storage Site
129	J.C.PENNY DEPT. STORE	100 MAIN STREET	842 feet to the WSW	Closed Status Spill (Unk/Other Cause)
188	GALLERIA	100 MAIN STREET	842 feet to the WSW	Closed Status Spill (Misc. Spill Cause)
304	GATEWAY 1	1 NORTH LEXINGTON AVE.	1256 feet to the WSW	Petroleum Bulk Storage Site
344	AMERICAN TELEPHONE & TELEGRAPH	ORDER NO. PETERBORO	1257 feet to the WSW	Hazardous Waste Generator/Transporter
87	GATEWAY BLDG.	1 NORTH LEXINGTON AVE.	1258 feet to the WSW	Closed Status Tank Test Failure
88	1 N.LEXINGTON AVE.	1 N. LEXINGTON AVE.	1258 feet to the WSW	Closed Status Tank Test Failure
89	GATEWAY OFFICE BLDG.	1 N LEXINGTON AVE	1258 feet to the WSW	Closed Status Tank Test Failure
149	MARITIME AVE	MARITIME & BANK STS	1988 feet to the WSW	Closed Status Spill (Unk/Other Cause)
150	BRONX RIVER AT WHITE PLN.	BRONX RIVER PARK & MAIN	2173 feet to the WSW	Closed Status Spill (Unk/Other Cause)
34	WHITE PLAINS SUB STATION	9 NEW ST	899 feet to the W	Active Haz Spill (Unknown/Other Cause)
35	WHITE PLAINS SUB STATION	9 NEW ST	899 feet to the W	Active Haz Spill (Unknown/Other Cause)
36	WHITE PLAINS SUB STATION	9 NEW STREET	899 feet to the W	Active Haz Spill (Unknown/Other Cause)
46	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W	Active Haz Spill (Misc. Spill Cause)
133	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W	Closed Status Spill (Unk/Other Cause)
191	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
192	FEEDER 38W01	WHITE PLAINS SUBSTATION	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
193	WHITEPLAINS SUBSTATION	WHITE PLAINS SUB 9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
194	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
195	WHITE PLANES SUB STATION	9 NEW STREET	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
196	WHITE PLAINS SUB STATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
197	WHITE PLAINS SUB STATION	9 NEW STREET	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
198	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
199	WHITE PLAINS SUBSTATION	9 NEW STREET	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
200	WHITE PLAINS SUB STATION	9 NEW STREET	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
201	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
202	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
203	WHITE PLAINS SUB STATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
204	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
205	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
206	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
207	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
208	WHITEPLAINS SUB STATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
340	CONSOLIDATED EDISON	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
210	WHITE PLAINS SUB STATION	SAME	901 feet to the W	Hazardous Waste Generator/Transporter
			972 feet to the W	Closed Status Spill (Misc. Spill Cause)

211	WHITE PLAINS SUB STATION	UNKNOWN	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
212	WHITE PLAINS SUB STATION	UNKNOWN	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
213	WHITE PLAINS SUB STATION	NEW ST	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
214	CON ED	NEW ST	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
215	TRANSFORMER #8	WHITE PLAINS SUBSTATION	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
216	TRANSFORMER #7	WHITE PLAINS SUBSTATION	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
217	TRANSFORMER #6	WHITE PLAINS SUBSTATION	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
136	WHITE PLAINS SUB-STATION	5 NEW STREET	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
13	OFFICE BLDG	4 NEW KING ST	1042 feet to the W	Closed Status Spill (Unk/Other Cause)
227	WHITE PLAINS SUB-STATION	2 NEW STREET	1093 feet to the W	Active Tank Test Failure
228	WHITE PLAINES SUB STA	NEW ST/LEXINGTON ST	1115 feet to the W	Closed Status Spill (Misc. Spill Cause)
229	MH #186	NEW ST & LEXINGTON AVE	1163 feet to the W	Closed Status Spill (Misc. Spill Cause)
39	INTO BRONX RIVER	OFF EXIT 21 BRONX PRKWAY	2004 feet to the W	Active Haz Spill (Unknown/Other Cause)
127	MANHOLE	WATER ST & BAKER ST	717 feet to the WNW	Closed Status Spill (Unk/Other Cause)
264	ROBERT MARTIN LLC	1 BARKER AVENUE	731 feet to the WNW	Petroleum Bulk Storage Site
52	EDGAR	1 BARKER AV	735 feet to the WNW	Closed Status Tank Failure
98	FIRE STATION # 2 WH PLAIN	20 FERRIS AVE	1805 feet to the WNW	Closed Status Tank Test Failure
99	FIRE STATION # 2	20 FERRIS AVE	1805 feet to the WNW	Closed Status Tank Test Failure
19		47 PARK AVE	1684 feet to the NW	Active Tank Test Failure
108	GABERIAL	7 FAIRVIEW AV	2084 feet to the NW	Closed Status Tank Test Failure
137	IN FRONT OF	41 ROCKLEDGE AVE.	1124 feet to the NNW	Closed Status Spill (Unk/Other Cause)
17	188	CHURCH ST	1433 feet to the NNW	Active Tank Test Failure
97		7 PARK CIRCLE	1791 feet to the NNW	Closed Status Tank Test Failure
24		21 PARKVIEW CT	2144 feet to the NNW	Active Tank Test Failure

Identified Toxic Sites by Proximity

221 Main St, White Plains, NY 10601

* Compass directions can vary substantially for sites located very close to the subject property address.

Map Id#	Site Name	Site Street	Approximate Distance & Direction From Property	Toxic Site Category
68	POLICE	279 HAMILTON	0 feet	Closed Status Tank Test Failure
165	IN STREET	55 CHURCH STREET	0 feet	Closed Status Spill (Misc. Spill Cause)
238	PUBLIC SAFETY BUILDING	279 HAMILTON VAE	0 feet	Petroleum Bulk Storage Site
309	WHITE PLAINS, CITY OF, FIRE PREVENTION	BUREAU-279 HAMILTON AVENUE	0 feet	Hazardous Waste Generator/Transporter
310	WHITE PLAINS POLICE DEPT	279 HAMILTON AVE	0 feet	Hazardous Waste Generator/Transporter
311	WHITE PLAINS POLICE DEPT	279 HAMILTON AVENUE	0 feet	Hazardous Waste Generator/Transporter
312	WHITE PLAINS TOWN CENTER	MAMARONECK AVE & MAIN ST	0 feet	Hazardous Waste Generator/Transporter
239	MACYS WHITE PLAINS	220 MAIN ST	0 feet	Petroleum Bulk Storage Site
313	TST WHITE PLAINS	220 MAIN ST	23 feet to the ESE*	Hazardous Waste Generator/Transporter
240	CODI BROS EXXON 3-7118	274 HAMILTON AVE	23 feet to the ESE*	Hazardous Waste Generator/Transporter
314	EXXON USA	274 HAMILTON AVENUE	24 feet to the NNW*	Petroleum Bulk Storage Site
30	ABANDONED MACY'S STORE	274 HAMILTON AVENUE	24 feet to the NNW*	Hazardous Waste Generator/Transporter
31	EXXON SERVICE STATION	274 HAMILTON AVE	29 feet to the ESE*	Hazardous Waste Generator/Transporter
69	EXXON, WHITE PLAINS	274 HAMILTON AVE.	29 feet to the NNW*	Active Haz Spill (Unknown/Other Cause)
241	RECKSON OPERATING PARTNERSHIP	235 MAIN ST	29 feet to the NNW*	Active Haz Spill (Unknown/Other Cause)
166	213 MAIN STREET	213 MAIN ATREET	29 feet to the ESE*	Closed Status Tank Test Failure
117	LIGHTHOUSE FOR THE BLIND	44 CHURCH STREET	49 feet to the S*	Petroleum Bulk Storage Site
70	OFFICE BUILDING	14 NANARONECK AVE	66 feet to the NE*	Closed Status Spill (Misc. Spill Cause)
242	BRIAN HOLDING COMPANY	203 MAIN STREET	120 feet to the SSE*	Closed Status Spill (Unk/Other Cause)
243	AMCOTT ASSOC	300 HAMILTON AVE	123 feet to the SSW*	Closed Status Tank Test Failure
244	BAR BUILDING	199-201 MAIN ST	136 feet to the N*	Petroleum Bulk Storage Site
245	AMCOTT ASSOC	95 CHURCH ST	151 feet to the SSW*	Petroleum Bulk Storage Site
48	RESIDENCE	185- 187 MAIN ST	186 feet to the N*	Petroleum Bulk Storage Site
167	AMERICAN SAVINGS BANK	99 CHURCH STREET	214 feet to the SW	Closed Status Tank Failure
246	99 CHURCH STREET	99 CHURCH STREET	223 feet to the N	Closed Status Spill (Misc. Spill Cause)
247	WYASSUP-LAUREL GLEN CORP.	175 MAIN ST	226 feet to the N	Petroleum Bulk Storage Site
118	OFFICE BLDG	175 MAIN ST	236 feet to the SW	Petroleum Bulk Storage Site
71	CITY HALL	175 MAIN ST	242 feet to the SW	Closed Status Spill (Unk/Other Cause)
248	MUNICIPAL BUILDING	255 MAIN ST.	258 feet to the E	Closed Status Tank Test Failure
315	WHITE PLAINS, CITY OF	255 MAIN ST	265 feet to the E	Petroleum Bulk Storage Site
316	WHITE PLAINS DEPT OF PUBLIC WORKS	255 MAIN STREET	265 feet to the E	Hazardous Waste Generator/Transporter
249	2 WILLIAM ST./ 169 MAIN ST.	2 WILLIAM ST./ 169 MAIN ST.	272 feet to the SW	Hazardous Waste Generator/Transporter
119	WOOLWORTH STORE BASEMENT	24-34 MAMARONECK AVE.	284 feet to the SSE	Petroleum Bulk Storage Site
44	UNOCCUPIED COMMERCIAL	31 MAMARONECK AV	309 feet to the SSE	Closed Status Spill (Unk/Other Cause)
250	CHASE MANHATTAN BANK N.A.	31 MAMARONECK AVE.	311 feet to the SSE	Active Haz Spill (Misc. Spill Cause)
120	MINSKOFF MANAGEMENT	39-47 COURT STREET	360 feet to the S	Petroleum Bulk Storage Site
32	CITY BANK	244 MAIN ST	365 feet to the S	Closed Status Spill (Unk/Other Cause)
251	AT&T	360 HAMILTON AVENUE	383 feet to the E	Active Haz Spill (Unknown/Other Cause)
317	RECHSON ASSOCIATES	360 HAMILTON AVE	383 feet to the NNE	Petroleum Bulk Storage Site
318	AT&T	360 HAMILTON AVE	383 feet to the NNE	Hazardous Waste Generator/Transporter
168	OFFICE BLDG(UNDER CONST)	360 HAMILTON ROAD	383 feet to the NNE	Hazardous Waste Generator/Transporter
121	QUICK PICK SHOES	40 MAMARONECK	384 feet to the NNE	Closed Status Spill (Misc. Spill Cause)
169	CAMERA STORE	44 MAMARONECK	386 feet to the SSE	Closed Status Spill (Unk/Other Cause)
170	MINSKOFF CORP.	179 MARTINE AVE.	428 feet to the SSE	Closed Status Spill (Misc. Spill Cause)
122		MAMARONECK AVE/MARTINE AV	433 feet to the SSE	Closed Status Spill (Misc. Spill Cause)
			450 feet to the SSE	Closed Status Spill (Unk/Other Cause)

171	LITTLE HOUSE RESTAURANT	169 MARTINE AVE.	450 feet to the S	Closed Status Spill (Misc. Spill Cause)
252	82ND - 83RD STREET VENTURE	167-163 MARTINE AVE.	452 feet to the S	Petroleum Bulk Storage Site
172	VAULT #0070	MAIN ST & GROVE ST	459 feet to the SW	Closed Status Spill (Misc. Spill Cause)
173	WHITE PLAINS GARAGE	MAIN ST & GROVE ST	459 feet to the SW	Closed Status Spill (Misc. Spill Cause)
253	204 MARTINE ASSOCIATES / ICG	204 MARTINE AVE	476 feet to the SSE	Petroleum Bulk Storage Site
254	47 MAMARONECK AVE CORP	4M MAMARONECK AVE	490 feet to the SSE	Petroleum Bulk Storage Site
45		412 MARTIN AND COURT	496 feet to the S	Active Haz Spill (Misc. Spill Cause)
49	THE MICHALLIAN OFFICE	MARTINE AVE. & COURT ST.	496 feet to the S	Closed Status Tank Failure
174	INTERSECTION OF COURT ST.	COURT ST. & MARTINE AVE.	496 feet to the S	Closed Status Spill (Misc. Spill Cause)
255	48 MAMARONECK AVENUE ASSOC.	48 MAMARONECK AVENUE	497 feet to the SSE	Petroleum Bulk Storage Site
175	MANHOLE # 4146	BARKER AVE & CHURCH ST	505 feet to the NNW	Closed Status Spill (Misc. Spill Cause)
256	WEST COUNTY MICHAELIAN OFFICE	148 MARTINE AVE 001	542 feet to the S	Petroleum Bulk Storage Site
319	DEPARTMENT OF ENVIRONMENTAL FACILITIES	MOB 1 148 MARTINE AVE	542 feet to the S	Hazardous Waste Generator/Transporter
320	WESTCHESTER CITY OFFICE BLDG	148 MARNINE AVE(RAD OIL)	542 feet to the S	Hazardous Waste Generator/Transporter
321	CROTON POINT SANITARY LANDFILL	148 MARTINE AVENUE	542 feet to the S	Hazardous Waste Generator/Transporter
257	BARKER AVENUE APT. CORP.	33 BARKER AVENUE	546 feet to the N	Petroleum Bulk Storage Site
123		148 MARTEEN AVENUE	548 feet to the S	Closed Status Spill (Unk/Other Cause)
176	CITY OF WHITE PLAINS M.P.	148 MARTEENE AVE.	548 feet to the S	Closed Status Spill (Misc. Spill Cause)
177	MICHAELIAN OFFICE BLDG.	148 MARTINE AVE.	548 feet to the S	Closed Status Spill (Misc. Spill Cause)
178	COUNTY OFFICE BLD	MARTINE AVE	548 feet to the S	Closed Status Spill (Misc. Spill Cause)
258	WHITE PLAINS	400 HAMILTON AVE	555 feet to the NE	Petroleum Bulk Storage Site
322	AT&T LONG LINES DEPT/WHIT	400 HAMILTON AVE	555 feet to the NE	Hazardous Waste Generator/Transporter
323	WHITE PLAINS LL CENTRAL OFFICE	400 HAMILTON AVE	555 feet to the NE	Hazardous Waste Generator/Transporter
324	AMERICAN TELEPHONE & TELEGRAPH	400 HAMILTON AVENUE	555 feet to the NE	Hazardous Waste Generator/Transporter
324	WESTCHESTER COUNTY OF ENVIR FA	148 MARTINE AVE	555 feet to the NE	Hazardous Waste Generator/Transporter
345	400 HAMILTON AVE.	400 HAMILTON AVE.	555 feet to the S	Civil Enforcement Docket Site
33	AT & T TELEPHONE CO	400 HAMILTON AV	556 feet to the NE	Active Haz Spill (Unknown/Other Cause)
50		400 HAMILTON AVE	556 feet to the NE	Closed Status Tank Failure
124		400 HAMILTON AVE	556 feet to the NE	Closed Status Spill (Unk/Other Cause)
179	AT&T CORPORATION	400 HAMILTON AVENUE	556 feet to the NE	Closed Status Spill (Misc. Spill Cause)
180	VAULT 9058	400 HAMILTON AVE	556 feet to the NE	Closed Status Spill (Misc. Spill Cause)
181	VAULT 6174	400 HAMILTON AVE	556 feet to the NE	Closed Status Spill (Misc. Spill Cause)
259	35 BARKER AVE. REALTY CORP.	35 BARKER AVE.	556 feet to the NE	Closed Status Spill (Misc. Spill Cause)
260	MARTINE REALTY CO.	234-254 MARTINE AVENUE	571 feet to the N	Petroleum Bulk Storage Site
261	NEW YORK POWER AUTHORITY	123 MAIN STREET	587 feet to the SE	Petroleum Bulk Storage Site
72	APARTMENT BLDG	40 BARKER AV	598 feet to the WSW	Petroleum Bulk Storage Site
325	NY POWER AUTH	123 MAIN ST	600 feet to the N	Closed Status Tank Test Failure
326	BANK OF NEW YORK	123 MAIN STREET	600 feet to the WSW	Hazardous Waste Generator/Transporter
327	NEW YORK POWER AUTHORITY	123 MAIN STREET	600 feet to the WSW	Hazardous Waste Generator/Transporter
328	NEW YORK POWER AUTHORITY	123 MAIN STREET	600 feet to the WSW	Hazardous Waste Generator/Transporter
328	CENTROPLEX ASSOC.	123 MAIN STREET	600 feet to the WSW	Hazardous Waste Generator/Transporter
73	ODDESY CORP. MAINT. DEPT.	123 MAIN ST.	603 feet to the WSW	Closed Status Tank Test Failure
74	SHARP	123 MAIN ST	603 feet to the WSW	Closed Status Tank Test Failure
125	OFFICE BLDG	123 MAIN ST	603 feet to the WSW	Closed Status Spill (Unk/Other Cause)
182	40 BARKER AVE.	123 MAIN ST	603 feet to the WSW	Closed Status Spill (Misc. Spill Cause)
262	OFFICE BUILDING	40 BARKER AVENUE	606 feet to the N	Petroleum Bulk Storage Site
126	170 HAMILTON AVENUE	170 HAMILTON AV	644 feet to the W	Closed Status Spill (Unk/Other Cause)
263	1-HOUR PHOTO FINISH	170 HAMILTON AVENUE	644 feet to the W	Petroleum Bulk Storage Site
329	AT&T	60-B MAMARONECK AVE	655 feet to the SSE	Hazardous Waste Generator/Transporter
330	WHITE PLAINS CITY OF	440 HAMILTON AVE	708 feet to the SSE	Hazardous Waste Generator/Transporter
331	MANHOLE	MARTINE AVE PUBLIC LIBRARY	713 feet to the NE	Hazardous Waste Generator/Transporter
127	ROBERT MARTIN LLC	WATER ST & BAKER ST	717 feet to the SSW	Hazardous Waste Generator/Transporter
264	NYNEX	1 BARKER AVENUE	717 feet to the WNW	Closed Status Spill (Unk/Other Cause)
265	NYNEX	111 MAIN ST	731 feet to the WNW	Petroleum Bulk Storage Site
51		111 MAIN ST	734 feet to the WSW	Petroleum Bulk Storage Site
			735 feet to the WSW	Closed Status Tank Failure

52 EDGAR
75 NY TEL
183 BELL ATLANTIC
332 NEW YORK TELEPHONE COMPANY
184 MAIN AND BROADWAY
76 MITCHELL PLACE ASSOC.
266 76 MAMARONECK AVE ASSOC
267 TEN MITCHELL PLACE
3 28 MITCHELL PLACE
77
266 28 MITCHELL PLACE INC.
78 BART GOLDBERG APT. BLDG
4
185 APT COMPLEX
186
269 BROADMAR COMPANY
270 DEVON PLAZA REALTY
271 MITCHELL PLACE GARAGE
272 SEA MANAGEMENT
53 GAS STATION
79
187 IN FRONT OF GALERIA MALL
54
273 APT. BUILDING
5 OFFICE BUILDING
128 FRONT OF SEARS
333 SEARS
334 EXPRESSLY PORTRAITS
335 C P I PHOTO FINISH
336 THE PICTURE PLACE-389 GALLERIA MALL
337 J C PENNEYS
274 THE GALLERIA AT WHITE PLAINS
275 JC PENNEY
276 MACY'S WHITE PLAINS
129 J.C.PENNY DEPT. STORE
188 GALLERIA
277 WESTCHESTER COUNTY COURTHOUSE
189 WIL SHORE REALTY APTS.
TM #782
130 APARTMENT BUILDING
131 APARTMENT BUILDING
190 WHITE SWAN APARTMENT
278 WHITE PLAINS PLAZA
279 LASALLE PARTNERS
80 WHITE PLAINS PLAZA
132 NEW YORK SPORTS CLUBS
338 WESTCHESTER COUNTY COURTHOUSE
280 WESTCHESTER COUNTY COURTHOUSE
339 37-43 MITCHELL PLACE INC.
281 WHITE PLAINS SUB STATION
34 WHITE PLAINS SUB STATION
35 WHITE PLAINS SUB STATION
36
46 WHITE PLAINS SUBSTATION

1 BARKER AV
111 EAST MAIN STREET
111 MAIN ST
111 MAIN STREET
270 1/2 MAIN STREET
10 MITCHELL PLACE
76 MAMARONECK AVE
10 MITCHELL PLACE
28 MITCHELL PLACE
28 MITCHELL PLACE
28 MITCHELL PLACE
277 MARTINE AVE.
32 MITCHELL PL
32 MITCHELL PL
32 MITCHELL PL
277 MARTINE AVE.
9 MITCHELL PL
9 MITCHELL PL
23 MITCHELL PLACE
9 MITCHELL PL
23 MITCHELL PLACE
MAIN ST
25 MITCHELL PLACE
40 MITCHELL PLACE
15 NORTH BROADWAY
275 MAIN ST
275 MAIN ST
100 MAIN ST
100 MAIN ST STE 301
100 MAIN ST
100 MAIN ST
100 MAIN STREET
100 MAIN ST
100 MAIN STREET
100 MAIN STREET
110 GROVE ST
33 MITCHELL PLACE
1 SOUTH BROADWAY/MAIN ST
1 SOUTH BROADWAY
1 SOUTH BROADWAY
1 SOUTH BROADWAY
1 NORTH BROADWAY
1 NORTH BROADWAY
1 NORTH BROADWAY
1 N BROADWAY
111 GROVE ST TOWER
111 GROVE STREET
37-43 MITCHELL PLACE
9 NEW ST
9 NEW ST
9 NEW STREET
9 NEW ST

735 feet to the WNW
735 feet to the WSW
735 feet to the WSW
737 feet to the WSW
758 feet to the E
761 feet to the SSE
766 feet to the SSE
768 feet to the SSE
777 feet to the SE
777 feet to the SE
783 feet to the SE
789 feet to the ESE
790 feet to the SE
790 feet to the SE
790 feet to the SE
793 feet to the ESE
813 feet to the SSE
813 feet to the SSE
819 feet to the SE
820 feet to the SSE
826 feet to the SE
827 feet to the WSW
829 feet to the SE
830 feet to the SE
836 feet to the ENE
837 feet to the E
838 feet to the WSW
838 feet to the WSW
838 feet to the WSW
838 feet to the WSW
841 feet to the WSW
841 feet to the WSW
841 feet to the WSW
842 feet to the WSW
842 feet to the WSW
846 feet to the SSW
850 feet to the SE
854 feet to the E
854 feet to the E
854 feet to the E
855 feet to the E
855 feet to the ENE
859 feet to the ENE
859 feet to the ENE
859 feet to the ENE
874 feet to the SSW
874 feet to the SSW
878 feet to the SE
899 feet to the W
899 feet to the W
899 feet to the W
899 feet to the W

Closed Status Tank Failure
Closed Status Tank Test Failure
Closed Status Spill (Misc. Spill Cause)
Hazardous Waste Generator/Transporter
Closed Status Spill (Misc. Spill Cause)
Closed Status Tank Test Failure
Petroleum Bulk Storage Site
Petroleum Bulk Storage Site
Active Tank Failure
Closed Status Tank Test Failure
Petroleum Bulk Storage Site
Closed Status Tank Test Failure
Active Tank Failure
Closed Status Spill (Misc. Spill Cause)
Closed Status Spill (Misc. Spill Cause)
Petroleum Bulk Storage Site
Petroleum Bulk Storage Site
Petroleum Bulk Storage Site
Petroleum Bulk Storage Site
Petroleum Bulk Storage Site
Closed Status Tank Failure
Closed Status Tank Test Failure
Closed Status Spill (Misc. Spill Cause)
Closed Status Tank Failure
Petroleum Bulk Storage Site
Active Tank Failure
Closed Status Spill (Unk/Other Cause)
Hazardous Waste Generator/Transporter
Hazardous Waste Generator/Transporter
Hazardous Waste Generator/Transporter
Hazardous Waste Generator/Transporter
Hazardous Waste Generator/Transporter
Petroleum Bulk Storage Site
Petroleum Bulk Storage Site
Petroleum Bulk Storage Site
Closed Status Spill (Unk/Other Cause)
Closed Status Spill (Misc. Spill Cause)
Petroleum Bulk Storage Site
Closed Status Spill (Misc. Spill Cause)
Closed Status Spill (Unk/Other Cause)
Closed Status Spill (Unk/Other Cause)
Closed Status Spill (Misc. Spill Cause)
Petroleum Bulk Storage Site
Petroleum Bulk Storage Site
Closed Status Tank Test Failure
Closed Status Spill (Unk/Other Cause)
Hazardous Waste Generator/Transporter
Petroleum Bulk Storage Site
Hazardous Waste Generator/Transporter
Petroleum Bulk Storage Site
Active Haz Spill (Unknown/Other Cause)
Active Haz Spill (Unknown/Other Cause)
Active Haz Spill (Unknown/Other Cause)
Active Haz Spill (Misc. Spill Cause)

133	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W	Closed Status Spill (Unk/Other Cause)
191	WHITE PLAINS SUBSTATION	9 NEW STREET	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
192	FEEDER 38W01	WHITE PLAINS SUB 9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
193	WHITEPLAINS SUBSTATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
194	WHITE PLAINS SUBSTATION	9 NEW STREET	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
195	WHITE PLANES SUB STATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
196	WHITE PLAINS SUB STATION	9 NEW STREET	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
197	WHITE PLAINS SUB STATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
198	WHITE PLAINS SUB STATION	9 NEW STREET	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
199	WHITE PLAINS SUBSTATION	9 NEW STREET	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
200	WHITE PLAINS SUB STATION	9 NEW STREET	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
201	WHITE PLAINS SUBSTATION	9 NEW STREET -N LEXINGTON	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
202	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
203	WHITE PLAINS SUB STATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
204	WHITE PLAINS SUB STATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
205	WHITEPLAINS SUBSTATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
206	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
207	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
208	WHITEPLAINS SUB STATION	9 NEW ST	899 feet to the W	Closed Status Spill (Misc. Spill Cause)
340	CONSOLIDATED EDISON	9 NEW ST	901 feet to the W	Hazardous Waste Generator/Transporter
81	MGH CO	45 MITCHELL PLACE	905 feet to the SE	Closed Status Tank Test Failure
209	ES GORDON	45 MITCHELL PL	905 feet to the SE	Closed Status Spill (Misc. Spill Cause)
82	EDWARD S. GORDON CO.	7-11 SOUTH BROADWAY	909 feet to the E	Closed Status Tank Test Failure
282	INNS OF COURT	7-11 SOUTH BROADWAY	915 feet to the E	Petroleum Bulk Storage Site
10	THE INNS OF COURT PROPERTIES	99 COURT ST	940 feet to the SSE	Active Tank Test Failure
283	WHITE PLAINS SUB STATION	99 COURT ST.	942 feet to the SSE	Petroleum Bulk Storage Site
210	WHITE PLAINS SUB STATION	SAME	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
211	WHITE PLAINS SUB STATION	UNKNOWN	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
212	WHITE PLAINS SUB STATION	UNKNOWN	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
213	WHITE PLAINS SUBSTATION	NEW ST	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
214	CON ED	NEW ST	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
215	TRANSFORMER #8	WHITE PLAINS SUBSTATION	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
216	TRANSFORMER #7	WHITE PLAINS SUBSTATION	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
217	TRANSFORMER #6	WHITE PLAINS SUBSTATION	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
218	TRANSFORMER VAULT 3954	WHITE PLAINS SUBSTATION	972 feet to the W	Closed Status Spill (Misc. Spill Cause)
284	110 MAMARONECK AVENUE ASSOC.	IFO 15 SO BROADWAY	977 feet to the E	Closed Status Spill (Misc. Spill Cause)
11	SILVERMAN REALTY	110 MAMARONECK AVENUE	990 feet to the SSE	Petroleum Bulk Storage Site
134	HAMILTON AVE	110 MAMARONECK AVE	991 feet to the SSE	Active Tank Test Failure
219	ATT	AT NORTH BROADWAY	993 feet to the NE	Closed Status Spill (Unk/Other Cause)
285	CAMEO HOUSE OWNERS INC	HAMILTON AVE.& S.BROADWAY	993 feet to the NE	Closed Status Spill (Misc. Spill Cause)
83	NICKY'S RESTAURANT	300 MARTINE AVE	998 feet to the ESE	Petroleum Bulk Storage Site
135	POST OFFICE SQUARE	107 MAMARONECK AVE.	1029 feet to the SSE	Closed Status Tank Test Failure
286	TIBBETS PARK APTS INC	QUARROPAS ST	1036 feet to the S	Closed Status Spill (Unk/Other Cause)
136	WHITE PLAINS SUB-STATION	10 NORTH BROADWAY	1041 feet to the ENE	Petroleum Bulk Storage Site
287	DEVON PLAZA REALTY	5 NEW STREET	1042 feet to the W	Closed Status Spill (Unk/Other Cause)
220	DEVON PLAZA REALTY	109 MAMARONECK AVE	1047 feet to the SSE	Petroleum Bulk Storage Site
221	RESIDENCE	109 MAMARONECK AVE	1048 feet to the SSE	Closed Status Spill (Misc. Spill Cause)
288	16 NO BROADWAY OWNERS INC	109 MAMARONECK AV	1048 feet to the SSE	Closed Status Spill (Misc. Spill Cause)
341	NYSDEC	16 NO BROADWAY	1048 feet to the NE	Petroleum Bulk Storage Site
222	APT. BUILDING	GRAND & QUARRAPUS	1052 feet to the S	Hazardous Waste Generator/Transporter
289	TWO NORTH BROADWAY	16 NORTH BROADWAY	1054 feet to the NE	Closed Status Spill (Misc. Spill Cause)
290	BROADLAWN APARTMENTS INC	2 NORTH BROADWAY	1073 feet to the NE	Petroleum Bulk Storage Site
12	PRESIDENTIAL MANAGEMENT	20 NO BROADWAY	1076 feet to the NE	Petroleum Bulk Storage Site
		2 WESTCHESTER AVE.	1080 feet to the ENE	Active Tank Test Failure

47 APARTMENT BLDG
 223 BROADLAWN APART.
 224 CON ED HOLE # TM 2514
 13 OFFICE BLDG
 291 12 WESTCHESTER AVENUE TENANTS
 225 M B TRUCKING
 226 PARK ROSE
 227 WHITE PLAINS SUB-STATION
 137 IN FRONT OF
 84 PER-BAR
 292 124 MAMARONECK AVENUE
 85 PRESBYTERIAN CHURCH
 293 WHITE PLAINS PRESBYTERIAN CHUR
 294 WESKORA OWNERS CORP.
 295 ROYAL VIEW
 228 WHITE PLAINES SUB STA
 229 MH #186
 138 41 BARKER AVE.
 296 KINGSLEY HOUSE
 297 KINGSLEY HOUSE
 230 DRIVEWAY APT. HOUSE
 298 ONE FRANKLIN OWNERS CORP
 37 WESTCHESTER COURTHOUSE
 38 MANHOLE 1955
 139 MANHOLE 4148
 140 MANHOLE 3570
 231 MANHOLE # 3570
 299 GRAND REALTY COMPANY
 232 OFFICE BLDG.BASEMENT
 300 PUCKHINKONNUCK CORP
 342 PIP PRINTING
 233 GREEN POINT SAVINGS BANK
 301 GREENPOINT BANK
 55 APT. BUILDING
 234 3-5 FRANKLIN AVE. OWNERS
 302 BROADLAKE CO
 86 3-5 FRANKLIN AVE
 303 3-5 FRANKLIN AVE
 235
 343 CONSOLIDATED EDISON
 304 GATEWAY 1
 344 AMERICAN TELEPHONE & TELEGRAPH
 87 GATEWAY BLDG.
 88 1 N.LEXINGTON AVE.
 89 GATEWAY OFFICE BLDG.
 14 HALPERN ENTERPRISES
 305 BARCLAYS BANK OF NEW YORK NA
 306 193-197 EAST POST RD VENTURE
 307 DEVON PLAZA REALTY
 308 34 SOUTH BROADWAY
 56 240 EAST POST RD
 15 OFFICE BLDG
 57 50 N. BWAY. OWNERS INC.

20 NORTH BROADWAY
 20 NORTH BROADWAY
 MARTINE AVE WEST OF BOWAY
 4 NEW KING ST
 12 WESTCHESTER AVE
 12 WESTCHESTER AVE
 12 WESTCHESTER AVE
 2 NEW STREET
 41 ROCKLEDGE AVE.
 124 MAMARONECK AVE
 124 MAMARONECK AVENUE
 39 N. BROADWAY
 30 NORTH BROADWAY
 42 BARKER AVE
 NEW ST/LEXINGTON ST
 NEW ST & LEXINGTON AVE
 41 BARKER AVE.
 41 BARKER AVE.
 41 BARKER AVENUE
 1 FRANKLIN AVE.
 ONE FRANKLIN AVE
 GROVE ST AND QUARROPAS ST
 NORTH BROADWAY/BARKER AVE
 NO BROADWAY & BARKER AVE
 BARKER ST/N BROADWAY
 BARKER AVE & N BROADWAY
 150 GRAND STREET
 150 GRAND STREET
 190 E POST RD
 190 EAST POST RD
 134 MAMARONECK AVENUE
 134 MAMARONECK AVENUE
 3-5 FRANKLIN AVE.
 3-5 FRANKLIN AVE.
 44 N BROADWAY
 3-5 FRANKLIN AVE.
 3-5 FRANKLIN AVE
 44 NORTH BROADWAY
 V7303-MITCHELL&SOUTH BWAY
 1 NORTH LEXINGTON AVE.
 ORDER NO. PETERBORO
 1 NORTH LEXINGTON AVE.
 1 N. LEXINGTON AVE.
 1 N LEXINGTON AVE.
 170 EAST POST ROAD
 138 MAMARONECK AVENUE
 193-197 EAST POST RD
 170 EAST POST RD
 34 S BROADWAY AKA 25 HALE AVE
 240 EAST POST RD
 171 EAST POST RD
 50 NORTH BROADWAY

1093 feet to the NE
 1093 feet to the NE
 1091 feet to the ESE
 1095 feet to the W
 1105 feet to the E
 1110 feet to the E
 1110 feet to the E
 1115 feet to the W
 1124 feet to the NNW
 1131 feet to the SSE
 1131 feet to the SSE
 1136 feet to the NNE
 1136 feet to the NNE
 1137 feet to the NE
 1145 feet to the NNE
 1163 feet to the W
 1163 feet to the W
 1165 feet to the NNE
 1169 feet to the NNE
 1169 feet to the NNE
 1178 feet to the E
 1180 feet to the E
 1181 feet to the SSW
 1193 feet to the NNE
 1193 feet to the NNE
 1193 feet to the NNE
 1193 feet to the NNE
 1209 feet to the S
 1211 feet to the S
 1226 feet to the SE
 1226 feet to the SE
 1230 feet to the SSE
 1231 feet to the SSE
 1245 feet to the E
 1245 feet to the E
 1245 feet to the NNE
 1247 feet to the E
 1247 feet to the E
 1251 feet to the NNE
 1252 feet to the ESE
 1256 feet to the WSW
 1257 feet to the WSW
 1258 feet to the WSW
 1258 feet to the WSW
 1258 feet to the WSW
 1268 feet to the SSE
 1270 feet to the SSE
 1272 feet to the SE
 1273 feet to the SSE
 1277 feet to the ESE
 1283 feet to the SE
 1309 feet to the SSE
 1341 feet to the NNE
 Active Haz Spill (Misc. Spill Cause)
 Closed Status Spill (Misc. Spill Cause)
 Closed Status Spill (Misc. Spill Cause)
 Active Tank Test Failure
 Petroleum Bulk Storage Site
 Closed Status Spill (Misc. Spill Cause)
 Closed Status Spill (Misc. Spill Cause)
 Closed Status Spill (Misc. Spill Cause)
 Closed Status Spill (Unk/Other Cause)
 Closed Status Tank Test Failure
 Petroleum Bulk Storage Site
 Closed Status Tank Test Failure
 Petroleum Bulk Storage Site
 Petroleum Bulk Storage Site
 Closed Status Spill (Misc. Spill Cause)
 Closed Status Spill (Misc. Spill Cause)
 Closed Status Spill (Unk/Other Cause)
 Petroleum Bulk Storage Site
 Closed Status Spill (Misc. Spill Cause)
 Petroleum Bulk Storage Site
 Closed Status Spill (Misc. Spill Cause)
 Closed Status Spill (Unk/Other Cause)
 Petroleum Bulk Storage Site
 Closed Status Spill (Misc. Spill Cause)
 Petroleum Bulk Storage Site
 Active Haz Spill (Unknown/Other Cause)
 Active Haz Spill (Unk/Other Cause)
 Closed Status Spill (Unk/Other Cause)
 Closed Status Spill (Unk/Other Cause)
 Closed Status Spill (Misc. Spill Cause)
 Petroleum Bulk Storage Site
 Closed Status Spill (Misc. Spill Cause)
 Petroleum Bulk Storage Site
 Hazardous Waste Generator/Transporter
 Closed Status Spill (Misc. Spill Cause)
 Petroleum Bulk Storage Site
 Closed Status Tank Failure
 Closed Status Spill (Misc. Spill Cause)
 Petroleum Bulk Storage Site
 Closed Status Tank Test Failure
 Closed Status Tank Test Failure
 Active Tank Test Failure
 Petroleum Bulk Storage Site
 Petroleum Bulk Storage Site
 Petroleum Bulk Storage Site
 Petroleum Bulk Storage Site
 Closed Status Tank Failure
 Active Tank Test Failure
 Closed Status Tank Failure

141	PRIVATE RESIDENCE	177 GRAND ST	1398 feet to the S	Closed Status Spill (Unk/Other Cause)
16	COMMERCIAL	130-144 E POST RD	1409 feet to the SSE	Active Tank Test Failure
58	RESIDENCE	325 MAIN ST	1409 feet to the ENE	Closed Status Tank Failure
17		CHURCH ST	1433 feet to the NNW	Active Tank Test Failure
90	BRENTWOOD CONDQS	300 MAIN STREET	1443 feet to the ENE	Closed Status Tank Test Failure
91	BRENT WOOD APTS	300 MAIN ST	1443 feet to the ENE	Closed Status Tank Test Failure
92	APT BUILDING	300 MAIN ST	1444 feet to the ENE	Closed Status Tank Test Failure
18	165 MAMORNECK AVE	SAME	1532 feet to the SSE	Active Tank Test Failure
93	WHITE PLAIN HOUSING AUTH.	225 GROVE ST.	1563 feet to the S	Closed Status Tank Test Failure
94	COACHMAN HOTEL	123 EAST POST ROAD	1572 feet to the S	Closed Status Tank Test Failure
142	APT BLDG	312 MAIN ST	1587 feet to the ENE	Closed Status Tank Test Failure
59	WESTCHESTER OFFICE BLDG.	112 EAST POST ROAD	1592 feet to the S	Closed Status Spill (Unk/Other Cause)
60	JOHN DALE INC	178 MAMORENECK AVE	1618 feet to the SSE	Closed Status Tank Failure
143	WESTCHESTER HOBBIES	106 EAST POST RD	1621 feet to the S	Closed Status Spill (Unk/Other Cause)
236	SAM ASH MUSIC	180 MAMARONECK AVE	1653 feet to the SSE	Closed Status Spill (Misc. Spill Cause)
95	JSD MANAGEMENT	15 LAKE ST.	1682 feet to the NE	Closed Status Tank Test Failure
19		47 PARK AVE	1684 feet to the NW	Active Tank Test Failure
144	WHITE PLAINS HOTEL	MAPLES AVE.	1685 feet to the SE	Closed Status Spill (Unk/Other Cause)
145	WHITE PLAINS CRYSTLER PLM	70 WESTCHESTER AVE.	1698 feet to the E	Closed Status Spill (Unk/Other Cause)
146	WESTCHESTER CHRY PLYM	70 WESTCHESTER AVE	1698 feet to the E	Closed Status Spill (Unk/Other Cause)
20	RESIDENTS	8 CHESTER AVE	1706 feet to the S	Active Tank Test Failure
96	FRANKLIN APTS	25 FRANKLIN AVE	1740 feet to the E	Closed Status Tank Test Failure
237	APARTMENT HOUSE	25 FRANKLIN AVE	1740 feet to the E	Closed Status Spill (Misc. Spill Cause)
6	SLADER NEIGHBORHOOD CNTR	2 FISHER CT	1782 feet to the SSW	Active Tank Failure
147	WESTCEHSTER MALL	HIRAM ST/PAULDING ST	1782 feet to the ESE	Closed Status Spill (Unk/Other Cause)
97		7 PARK CIRCLE	1791 feet to the NNW	Closed Status Tank Test Failure
98	FIRE STATION # 2 WH PLAIN	20 FERRIS AVE	1805 feet to the WNW	Closed Status Tank Test Failure
99	FIRE STATION # 2	20 FERRIS AVE	1805 feet to the WNW	Closed Status Tank Test Failure
100	OUR LADY OF MOUNT CARMEL	92 SO. LEXINGTON AVE.	1805 feet to the SW	Closed Status Tank Test Failure
101	OUR LADY OF MT. CARMEL CH	92 LEXINGTON AVE	1807 feet to the SW	Closed Status Tank Test Failure
102	KEY FORD	80 WESTCHESTER AVE	1807 feet to the SW	Closed Status Tank Test Failure
148		200 MANARONECK AV	1808 feet to the E	Closed Status Tank Test Failure
21	OFFICE BLDG	203 MAMARONECK AVE	1818 feet to the SSE	Closed Status Spill (Unk/Other Cause)
7		2 AMHERST PL	1846 feet to the SSE	Active Tank Test Failure
61	PIRRO, MONSELL REALTY	40 WALLER AVE	1889 feet to the ENE	Active Tank Failure
62	WESTCHESTER SHOPPING CENT	WEST AVE.& PAWLING ST.	1893 feet to the SSE	Closed Status Tank Failure
63	WHITE PLAINS DPW	MAPLE & MAMARONECK AVE.	1979 feet to the ESE	Closed Status Tank Failure
103	WHITE PLAINS-FIRE HOUSE 6	MAMARONECK & MAPLE AVE.	1979 feet to the SSE	Closed Status Tank Failure
64	CITY PARKING GARAGE	CHESTER AVE. MARBLE AVE.	1979 feet to the SSE	Closed Status Tank Test Failure
149	MARITINE AVE	MARITINE & BANK STS	1987 feet to the SSE	Closed Status Tank Failure
39	INTO BRONX RIVER	OFF EXIT 21 BRONX PRKWAY	1988 feet to the WSW	Closed Status Spill (Unk/Other Cause)
22	RESIDENCE	30 LAKE STREET	2004 feet to the W	Active Haz Spill (Unknown/Other Cause)
104	BELTMORE TOWERS APTS.	30 LAKE ST.	2031 feet to the NE	Active Tank Test Failure
105	PINE HOLLOW GARDENS	79 NORTH BROADWAY	2032 feet to the NE	Closed Status Tank Test Failure
40	STORM SEWER	EAST POST RD / WINCHESTER	2042 feet to the N	Closed Status Tank Test Failure
106	PACE UNIVERSITY	78 NORTH BROADWAY	2069 feet to the S	Active Haz Spill (Unknown/Other Cause)
107	PACE	78 N BROADWAY	2070 feet to the N	Closed Status Tank Test Failure
108	GABERIAL	7 FAIRVIEW AV	2070 feet to the N	Closed Status Tank Test Failure
23	DEROSA	25 LAKE STREET	2084 feet to the NW	Closed Status Tank Test Failure
24		21 PARKVIEW CT	2106 feet to the NE	Active Tank Test Failure
41		134 S LEXINGTON AV	2144 feet to the NNW	Active Tank Test Failure
109	UNK	134 SOUTH LEXINGTON AVE	2157 feet to the SSW	Active Haz Spill (Unknown/Other Cause)
150	BRONX RIVER AT WHITE PLN.	BRONX RIVER PARK.& MAIN	2157 feet to the SSW	Closed Status Tank Test Failure
			2173 feet to the WSW	Closed Status Spill (Unk/Other Cause)

151	CANATORE RESIDENCE	1 EASTVIEW AVE.	2181 feet to the NE	Closed Status Spill (Unk/Other Cause)
152	NEW PLAZA SITE	BLOOMINGDALE AVE & WESTCH	2207 feet to the E	Closed Status Spill (Unk/Other Cause)
110	NATIONAL CAR RENTAL	42 LAKE STREET	2209 feet to the NE	Closed Status Tank Test Failure
153	WHITE PLAINS EXTRA MART	42 LAKE ST	2209 feet to the NE	Closed Status Spill (Unk/Other Cause)
154	TEXACO	42 LAKE ST	2209 feet to the NE	Closed Status Spill (Unk/Other Cause)
25	WHITE PLAINS HOSPITAL	EAST NY POST ROAD	2285 feet to the SSW	Active Tank Test Failure
42	WHITE PLAINS HOSPITAL	41 EAST POST RD	2285 feet to the SSW	Active Haz Spill (Unknown/Other Cause)
65	WHITE PLAINS HOSPITAL	DAVIS AVE.	2285 feet to the SSW	Closed Status Tank Failure
26	PEPE MOTORS	50 BANK ST	2356 feet to the SW	Active Tank Test Failure
155	FORMER NORTHVILLE GAS STA	34 EAST POST ROAD	2356 feet to the SW	Closed Status Spill (Unk/Other Cause)
27	YMCA	260 MAMARONECK AVE.	2364 feet to the SSE	Active Tank Test Failure
111	VILLAGE GREEN CO-OP	95 NORTH BROADWAY	2398 feet to the N	Closed Status Tank Test Failure
43	CLOSED GETTY GAS STATION	26 EAST POST RD	2421 feet to the SSW	Active Haz Spill (Unknown/Other Cause)
66	EMPTY WAREHOUSE	48 LAKE STREET	2432 feet to the NE	Closed Status Tank Failure
112	RAAB CO.	48 LAKE STREET	2432 feet to the NE	Closed Status Tank Test Failure
156	PARKING LOT	WHALER & CARHART ST.	2500 feet to the SSE	Closed Status Tank Test Failure
157	BANK OF NEW YORK	150 WESTCHESTER AVE	2521 feet to the E	Closed Status Spill (Unk/Other Cause)
158	POST RD	DAVIS AV	2522 feet to the SSW	Closed Status Spill (Unk/Other Cause)
159	STORE AT	41 LAKE ST	2524 feet to the NE	Closed Status Spill (Unk/Other Cause)
1	BROCKWAY PLACE T.S.	P.O. BOX 364	2539 feet to the E	Closed Status Spill (Unk/Other Cause)
8		12 EAST POST RD	2552 feet to the SSW	Solid Waste Facility
9	PROFESSIONAL BUILDING	280 MAMARONECK AVENUE	2557 feet to the SSE	Active Tank Failure
2	WHITE PLAINS MUN INC		2561 feet to the ENE	Active Tank Failure
160	WHITE PLAINS MOTOR SVC.	22 W. MORELAND AVE.	2565 feet to the SW	Solid Waste Facility
161	SAVINO RESIDENCE	21-23 SOUTH KENSICO AVE.	2575 feet to the NE	Closed Status Spill (Unk/Other Cause)
28	GETTY GAS STATION	43 LAKE ST	2575 feet to the NE	Closed Status Spill (Unk/Other Cause)
113	GETTY S/S	43 LAKE STREET	2586 feet to the NE	Active Tank Test Failure
162	GETTY SERVICE STATION	69 BANK ST	2586 feet to the NE	Closed Status Tank Test Failure
67		11 EAST POST RD.	2599 feet to the SW	Closed Status Tank Test Failure
114	GETTY SERVICE STATION	11 EAST POST ROAD	2615 feet to the SSW	Closed Status Spill (Unk/Other Cause)
115	GETTY S/S	11 EAST POND ROAD	2615 feet to the SSW	Closed Status Tank Failure
29	C STAR DINER	285 MAMARONECK ST	2615 feet to the SSW	Closed Status Tank Test Failure
163	ROADWAY	285 MAMARONECK AVE	2616 feet to the SSE	Closed Status Tank Test Failure
116	GARDEN APARTMENTS	101 N. BROADWAY	2616 feet to the SSE	Active Tank Test Failure
164	ROAD (ON PAVEMENT)	CARHART & DEKALB	2617 feet to the N	Closed Status Spill (Unk/Other Cause)
			2618 feet to the SE	Closed Status Tank Test Failure

Identified Toxic Sites by Category

221 Main St
White Plains, NY 10601

* Compass directions can vary substantially for sites located very close to the subject property address.

Solid Waste Facilities

MAP ID	FACILITY ID	FACILITY NAME
1	60T16	BROCKWAY PLACE T.S.
2	60I05	WHITE PLAINS MUN INC

FACILITY STREET
P.O. BOX 364

DISTANCE & DIRECTION
2539 feet to the E
2561 feet to the ENE

Active Tank Failures

MAP ID	FACILITY ID	FACILITY NAME
3	9903630	28 MITCHELL PLACE
4	0108164	OFFICE BUILDING
5	9207265	SLADER NEIGHBORHOOD CNTR
6	9810451	PROFESSIONAL BUILDING
7	0011055	
8	0103645	
9	9511135	

FACILITY STREET
28 MITCHELL PLACE
32 MITCHELL PL
15 NORTH BROADWAY
2 FISHER CT
2 AMHERST PL
12 EAST POST RD
280 MAMARONECK AVENUE

DISTANCE & DIRECTION
777 feet to the SE
790 feet to the SE
836 feet to the ENE
1782 feet to the SSW
1889 feet to the ENE
2552 feet to the SSW
2557 feet to the SSE

Active Tank Test Failures

MAP ID	FACILITY ID	FACILITY NAME
10	9506466	INNS OF COURT
11	0011270	SILVERMAN REALITY
12	8800351	PRESIDENTIAL MANAGEMENT
13	9809692	OFFICE BLDG
14	8804996	HALPERN ENTERPRISES
15	9811157	OFFICE BLDG
16	0002215	COMMERCIAL
17	9905239	188
18	9701601	165 MAMORNECK AVE
19	9815351	
20	9610861	RESIDENTS
21	9710787	OFFICE BLDG
22	9905417	RESIDENCE
23	9808490	DEROSA
24	0005871	
25	9506062	WHITE PLAINS HOSPITAL
26	9607100	PEPE MOTORS
27	9013259	YMCA
28	0004195	GETTY GAS STATION
29	9712450	C STAR DINER

FACILITY STREET
99 COURT ST
110 MAMARONECK AVE
2 WESTCHESTER AVE.
4 NEW KING ST
170 EAST POST ROAD
171 EAST POST RD
130-144 E POST RD
CHURCH ST
SAME
47 PARK AVE
8 CHESTER AVE
203 MAMARONECK AVE
30 LAKE STREET
25 LAKE STREET
21 PARKVIEW CT
EAST NY POST ROAD
50 BANK ST
260 MAMARONECK AVE.
43 LAKE ST
285 MAMARONECK ST

DISTANCE & DIRECTION
940 feet to the SSE
991 feet to the SSE
1080 feet to the ENE
1093 feet to the W
1268 feet to the SSE
1309 feet to the SSE
1409 feet to the SSE
1433 feet to the NNW
1532 feet to the SSE
1684 feet to the NW
1706 feet to the S
1846 feet to the SSE
2031 feet to the NE
2106 feet to the NE
2144 feet to the NNW
2285 feet to the SSW
2356 feet to the SW
2364 feet to the SSE
2586 feet to the NE
2616 feet to the SSE

Active Haz Spills (Unknown Causes & Other Causes)

MAP ID	FACILITY ID	FACILITY NAME
30	0000781	ABANDONED MACY'S STORE
31	9707887	EXXON SERVICE STATION
32	9803921	CITY BANK
33	9416809	400 HAMILTON AVE.
34	9914136	WHITE PLAINS SUB STATION
35	9914063	WHITE PLAINS SUB STATION
36	9511820	
37	0010532	WESTCHESTER COURTHOUSE

FACILITY STREET
220 MAIN ST
274 HAMILTON AVE
244 MAIN ST
400 HAMILTON AVE.
9 NEW ST
9 NEW ST
9 NEW STREET
GROVE ST AND QUARROPAS ST

DISTANCE & DIRECTION
29 feet to the ESE*
29 feet to the NNW*
365 feet to the E
556 feet to the NE
899 feet to the W
899 feet to the W
899 feet to the W
1181 feet to the SSW

1193 feet to the NNE
 2004 feet to the W
 2069 feet to the S
 2157 feet to the SSW
 2265 feet to the SSW
 2421 feet to the SSW

DISTANCE & DIRECTION
 309 feet to the SSE
 496 feet to the S
 899 feet to the W
 1083 feet to the NE

DISTANCE & DIRECTION
 214 feet to the SW
 496 feet to the S
 556 feet to the NE
 735 feet to the WSW
 735 feet to the WNW
 820 feet to the SSE
 829 feet to the SE
 1245 feet to the E
 1283 feet to the SE
 1341 feet to the NNE
 1409 feet to the ENE
 1592 feet to the S
 1618 feet to the SSE
 1893 feet to the SSE
 1979 feet to the ESE
 1979 feet to the SSE
 1987 feet to the SSE
 2285 feet to the SSW
 2432 feet to the NE
 2615 feet to the SSW

DISTANCE & DIRECTION
 0 feet
 29 feet to the NNW
 120 feet to the SSE
 258 feet to the E
 600 feet to the N
 603 feet to the WSW
 603 feet to the WSW
 735 feet to the WSW
 761 feet to the SSE
 777 feet to the SE
 789 feet to the ESE
 826 feet to the SE
 859 feet to the ENE
 905 feet to the SE

MANHOLE 1955
 INTO BRONX RIVER
 STORM SEWER
 WHITE PLAINS HOSPITAL
 CLOSED GETTY GAS STATION

Active Haz Spills (Miscellaneous Spill Causes)

MAP ID	FACILITY ID	FACILITY NAME
44	9704158	UNOCCUPIED COMMERCIAL
45	0108867	
46	0005405	WHITE PLAINS SUBSTATION
47	9808000	APARTMENT BLDG

Closed Status Tank Failures

MAP ID	FACILITY ID	FACILITY NAME
48	9708138	RESIDENCE
49	9310783	THE MICHICALLIAN OFFICE
50	9604857	AT & T TELEPHONE CO
51	9609101	NYNEX
52	9807932	EDGAR
53	9710474	GAS STATION
54	9905959	
55	9207566	APT. BUILDING
56	9903233	240 EAST POST RD
57	9212081	50 N. BWAY. OWNERS INC.
58	9710553	RESIDENCE
59	9009334	WESTCHESTER OFFICE BLDG.
60	9810809	JOHN DALE INC
61	8709325	PIRRO, MONSELL REALTY
62	9310531	WESTCHESTER SHOPPING CENT
63	9111846	WHITE PLAINS DPW
64	9109520	CITY PARKING GARAGE
65	9303501	WHITE PLAINS HOSPITAL
66	9410005	EMPTY WAREHOUSE
67	8600048	

Closed Status Tank Test Failures

MAP ID	FACILITY ID	FACILITY NAME
68	8606771	POLICE
69	8707486	EXXON, WHITE PLAINS
70	9613653	OFFICE BUILDING
71	8707220	CITY HALL
72	9713796	APARTMENT BLDG
73	8907863	CENTROPLEX ASSOC.
74	8906607	ODDESY CORP. MAINT. DEPT.
75	9314933	NY TEL
76	8902485	MITCHELL PLACE ASSOC.
77	9901259	
78	9008032	BART GOLDBERG APT. BLDG
79	8809894	
80	8807326	LASALLE PARTNERS
81	9904849	

NORTH BROADWAY/BARKER AVE
 OFF EXIT 21 BRONX PRKWAY
 EAST POST RD / WINCHESTER
 134 S LEXINGTON AV
 41 EAST POST RD
 26 EAST POST RD

FACILITY STREET
 31 MAMARONECK AV
 412 MARTIN AND COURT
 9 NEW ST
 20 NORTH BROADWAY

FACILITY STREET
 185- 187 MAIN ST
 MARTINE AVE. & COURT ST.
 400 HAMILTON AV
 111 MAIN ST
 1 BARKER AV
 9 MITCHELL PL
 25 MITCHELL PLACE
 3-5 FRANKLIN AVE.
 240 EAST POST RD
 50 NORTH BROADWAY
 325 MAIN ST
 112 EAST POST ROAD
 178 MAMORONECK AVE
 40 WALLER AVE
 WEST AVE. & PAWLING ST.
 MAPLE & MAMARONECK AVE.
 CHESTER AVE. MARBLE AVE.
 DAVIS AVE.
 48 LAKE STREET
 11 EAST POST RD.

FACILITY STREET
 279 HAMILTON
 274 HAMILTON AVE.
 14 NANARONECK AVE
 255 MAIN ST.
 40 BARKER AV
 123 MAIN STREET
 111 EAST MAIN STREET
 10 MITCHELL PLACE
 28 MITCHELL PLACE
 277 MARTINE AVE.
 23 MITCHELL PLACE
 1 NORTH BROADWAY
 45 MITCHELL PLACE

82	9303840	ES GORDON	7-11 SOUTH BROADWAY	909 feet to the E
83	8900599	NICKY'S RESTAURANT	107 MAMARONECK AVE.	1029 feet to the SSE
84	8802839	PER-BAR	124 MAMARONECK AVE	1131 feet to the SSE
85	8705816	PRESBYTERIAN CHURCH	39 N. BROADWAY	1136 feet to the NNE
86	8600464	3-5 FRANKLIN AVE	3-5 FRANKLIN AVE.	1247 feet to the E
87	9108659	GATEWAY BLDG.	1 NORTH LEXINGTON AVE.	1258 feet to the WSW
88	9000726	1 N LEXINGTON AVE.	1 N LEXINGTON AVE.	1258 feet to the WSW
89	8908197	GATEWAY OFFICE BLDG.	300 MAIN STREET	1443 feet to the ENE
90	9209346	BRENTWOOD CONDOS	300 MAIN ST	1444 feet to the ENE
91	8708398	BRENT WOOD APTS	300 MAIN ST	1563 feet to the S
92	9810968	APT BUILDING	225 GROVE ST.	1572 feet to the S
93	8904683	WHITE PLAIN HOUSING AUTH.	123 EAST POST ROAD	1682 feet to the NE
94	9306655	COACHMAN HOTEL	15 LAKE ST.	1740 feet to the E
95	8902337	JSD MANAGEMENT	25 FRANKLIN AVE	1791 feet to the NNW
96	8801525	FRANKLIN APTS	7 PARK CIRCLE	1805 feet to the WNW
97	9909558	FIRE STATION # 2 WH PLAIN	20 FERRIS AVE	1805 feet to the WNW
98	8800670	FIRE STATION # 2	20 FERRIS AVE	1807 feet to the SW
99	8800487	OUR LADY OF MOUNT CARMEL	92 SO. LEXINGTON AVE.	1808 feet to the E
100	8704169	OUR LADY OF MT. CARMEL CH	80 WESTCHESTER AVE	1979 feet to the SSE
101	8703713	KEY FORD	MAMARONECK & MAPLE AVE.	2032 feet to the NE
102	8606267	WHITE PLAINS-FIRE HOUSE 6	30 LAKE ST.	2042 feet to the N
103	8707149	BELTMORE TOWERS APTS.	79 NORTH BROADWAY	2070 feet to the N
104	8706628	PINE HOLLOW GARDENS	78 NORTH BROADWAY	2070 feet to the N
105	8708679	PACE UNIVERSITY	78 N BROADWAY	2084 feet to the NW
106	9202112	PACE	7 FAIRVIEW AV	2157 feet to the SSW
107	8701540	GABERIAL	42 LAKE STREET	2209 feet to the NE
108	0000372	UNK	95 NORTH BROADWAY	2398 feet to the N
109	0008525	NATIONAL CAR RENTAL	48 LAKE STREET	2432 feet to the NE
110	9013260	VILLAGE GREEN CO-OP	43 LAKE STREET	2586 feet to the NE
111	9705548	RAAB CO.	11 EAST POST ROAD	2615 feet to the SSW
112	9308180	GETTY S/S	11 EAST POND ROAD	2615 feet to the SSW
113	9208369	GETTY SERVICE STATION	101 N. BROADWAY	2617 feet to the N
114	9710611	GETTY S/S		
115	9210753	GARDEN APARTMENTS		
116	8904418			
Closed Status Spills (Unknown Causes & Other Causes)				
MAP ID	FACILITY ID	FACILITY NAME	DISTANCE & DIRECTION	
117	9314430	LIGHTHOUSE FOR THE BLIND	66 feet to the NE	
118	9910497	OFFICE BLDG	242 feet to the SW	
119	9408182	WOOLWORTH STORE BASEMENT	284 feet to the SSE	
120	9110040	MINSKOFF MANAGEMENT	360 feet to the S	
121	9407242	QUICK PICK SHOES	386 feet to the SSE	
122	0103591		450 feet to the SSE	
123	8900947		548 feet to the S	
124	9606368	SHARP	556 feet to the NE	
125	8606381	OFFICE BUILDING	603 feet to the WSW	
126	9601379	MANHOLE	644 feet to the W	
127	9510002	FRONT OF SEARS	717 feet to the WNW	
128	8803493	J.C.PENNY DEPT. STORE	837 feet to the E	
129	9204133	TM #782	842 feet to the WSW	
130	9906848	APARTMENT BUILDING	854 feet to the E	
131	0012204			

132 9112715
 133 9901956
 134 9607354
 135 8807856
 136 9610321
 137 9301825
 138 9004325
 139 9910090
 140 9608601
 141 9614068
 142 9900500
 143 9712582
 144 9003827
 145 8808621
 146 0008186
 147 0005456
 148 9608405
 149 8607289
 150 8908949
 151 8907214
 152 9400978
 153 9602457
 154 0012562
 155 9406684
 156 9311904
 157 0108346
 158 9908220
 159 9700669
 160 8904481
 161 9011063
 162 9808620
 163 9511162
 164 9408567

WHITE PLAINS PLAZA
 WHITE PLAINS SUBSTATION
 HAMILTON AVE
 POST OFFICE SQUARE
 WHITE PLAINS SUB-STATION
 IN FRONT OF
 41 BARKER AVE.
 MANHOLE 4148
 MANHOLE 3570
 PRIVATE RESIDENCE
 APT BLDG
 WESTCHESTER HOBBIES
 WHITE PLAINS HOTEL
 WHITE PLAINS CRYSTLER PLM
 WESTCHESTER CHRY PLYM
 WESTCEHSTER MALL
 MARITIME AVE
 BRONX RIVER AT WHITE PLN.
 CANATORE RESIDENCE
 NEW PLAZA SITE
 WHITE PLAINS EXTRA MART
 TEXACO
 FORMER NORTHVILLE GAS STA
 PARKING LOT
 BANK OF NEW YORK
 POST RD
 STORE AT
 WHITE PLAINS MOTOR SVC.
 SAVINO RESIDENCE
 GETTY SERVICE STATION
 ROADWAY
 ROAD (ON PAVEMENT)

1 NORTH BROADWAY
 9 NEW ST
 AT NORTH BROADWAY
 QUARROPAS ST
 5 NEW STREET
 41 ROCKLEDGE AVE.
 41 BARKER AVE.
 NO BROADWAY & BARKER AVE
 BARKER ST/N BROADWAY
 177 GRAND ST
 312 MAIN ST
 106 EAST POST RD
 MAPLES AVE.
 70 WESTCHESTER AVE.
 70 WESTCHESTER AVE
 HIRAM ST/PAULDING ST
 200 MANARONECK AV
 MARITIME & BANK STS
 BRONX RIVER PARK.& MAIN
 1 EASTVIEW AVE.
 BLOOMINGDALE AVE & WESTCH
 42 LAKE ST
 42 LAKE ST
 34 EAST POST ROAD
 WHALER & CARHART ST.
 150 WESTCHESTER AVE
 DAVIS AV
 41 LAKE ST
 22 W. MORELAND AVE.
 21-23 SOUTH KENSICO AVE.
 59 BANK ST
 285 MAMARONECK AVE
 CARHART & DEKALB

859 feet to the ENE
 899 feet to the W
 993 feet to the NE
 1036 feet to the S
 1042 feet to the W
 1124 feet to the NNW
 1165 feet to the NNE
 1193 feet to the NNE
 1193 feet to the NNE
 1398 feet to the S
 1587 feet to the ENE
 1621 feet to the S
 1685 feet to the SE
 1698 feet to the E
 1698 feet to the E
 1782 feet to the ESE
 1818 feet to the SSE
 1988 feet to the WSW
 2173 feet to the WSW
 2181 feet to the NE
 2207 feet to the E
 2209 feet to the NE
 2209 feet to the NE
 2356 feet to the SSW
 2500 feet to the SSE
 2521 feet to the E
 2522 feet to the SSW
 2524 feet to the NE
 2565 feet to the SW
 2575 feet to the NE
 2599 feet to the SW
 2616 feet to the SSE
 2618 feet to the SE

Closed Status Spills (Miscellaneous Spill Causes)

MAP ID
 165 9307797
 166 9107596
 167 9202126
 168 9907484
 169 9211618
 170 9201879
 171 8902366
 172 9908279
 173 9110939
 174 8905963
 175 9906915
 176 9202919
 177 9103040
 178 8806957
 179 9610406
 180 0010088
 181 0010086

FACILITY NAME
 IN STREET
 213 MAIN STREET
 AMERICAN SAVINGS BANK
 OFFICE BLDG(UNDER CONST)
 CAMERA STORE
 MINSKOFF CORP.
 LITTLE HOUSE RESTAURANT
 VAULT #0070
 WHITE PLAINS GARAGE
 INTERSECTION OF COURT ST.
 MANHOLE # 4146
 CITY OF WHITE PLAINS M.P.
 MICHAELIAN OFFICE BLDG.
 COUNTY OFFICE BLD
 AT&T CORPORATION
 VAULT 9058
 VAULT 6174

FACILITY STREET
 55 CHURCH STREET
 213 MAIN ATREET
 99 CHURCH STREET
 360 HAMILTON ROAD
 44 MAMARONECK AVE.
 179 MARTINE AVE.
 169 MARTINE AVE.
 MAIN ST & GROVE ST
 MAIN ST & GROVE ST
 COURT ST. & MARTINE AVE.
 BARKER AVE & CHURCH ST
 148 MARTINE AVE.
 148 MARTINE AVE.
 MARTINE AVE
 400 HAMILTON AVENUE
 400 HAMILTON AVE
 400 HAMILTON AVE

DISTANCE & DIRECTION
 0 feet
 49 feet to the S*
 223 feet to the N
 384 feet to the NNE
 428 feet to the SSE
 433 feet to the SSE
 450 feet to the S
 459 feet to the SW
 459 feet to the SW
 496 feet to the S
 505 feet to the NNW
 548 feet to the S
 548 feet to the S
 548 feet to the S
 556 feet to the NE
 556 feet to the NE
 556 feet to the NE

182	9910168	OFFICE BLDG	123 MAIN ST	603 feet to the WSW
183	9808850	BELL ATLANTIC	111 MAIN ST	735 feet to the WSW
184	9211082	MAIN AND BROADWAY	270 1/2 MAIN STREET	758 feet to the E
185	9611679	APT COMPLEX	32 MITCHELL PL	790 feet to the SE
186	9611678		32 MITCHELL PL	790 feet to the SE
187	9809244	IN FRONT OF GALERIA MALL	MAIN ST	827 feet to the WSW
188	9102767	GALLARIA	100 MAIN STREET	842 feet to the WSW
189	9012116	WIL SHORE REALTY APTS.	33 MITCHELL PLACE	850 feet to the WSW
190	0006248	APARTMENT BUILDING	1 SOUTH BROADWAY	854 feet to the E
191	9910526	WHITE PLAINS SUBSTATION	9 NEW STREET	899 feet to the W
192	9904581	FEEDER 38W01	WHITE PLAINS SUB 9 NEW ST	899 feet to the W
193	9903934	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W
194	9902937	WHITE PLAINS SUBSTATION	9 NEW STREET	899 feet to the W
195	9813824	WHITE PLANES SUB STATION	9 NEW ST	899 feet to the W
196	9805046	WHITE PLAINS SUB STATION	9 NEW STREET	899 feet to the W
197	9709088	WHITE PLAINS SUB STATION	9 NEW ST	899 feet to the W
198	9707420		9 NEW STREET	899 feet to the W
199	9704372	WHITE PLAINS SUBSTATION	9 NEW STREET	899 feet to the W
200	9703031	WHITE PLAINS SUB STATION	9 NEW STREET - N LEXINGTON	899 feet to the W
201	9703022	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W
202	9702276	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W
203	9613212	WHITE PLAINS SUB STATION	9 NEW ST	899 feet to the W
204	0107806		9 NEW ST	899 feet to the W
205	0106581	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W
206	0103948	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W
207	0009830	WHITE PLAINS SUBSTATION	9 NEW ST	899 feet to the W
208	0008660	WHITE PLAINS SUB STATION	9 NEW ST	899 feet to the W
209	9510979	MGH CO	45 MITCHELL PL	905 feet to the SE
210	9805977	WHITE PLAINS SUB STATION	SAME	972 feet to the W
211	9700960	WHITE PLAINS SUB STATION	UNKNOWN	972 feet to the W
212	9700959	WHITE PLAINS SUB STATION	UNKNOWN	972 feet to the W
213	9700350	WHITE PLAINS SUBSTATION	NEW ST	972 feet to the W
214	9606340	CON ED	NEW ST	972 feet to the W
215	0008659	TRANSFORMER #8	WHITE PLAINS SUBSTATION	972 feet to the W
216	0008658	TRANSFORMER #7	WHITE PLAINS SUBSTATION	972 feet to the W
217	0008657	TRANSFORMER #6	WHITE PLAINS SUBSTATION	972 feet to the W
218	9905110	TRANSFORMER VAULT 3954	IFO 15 SO BROADWAY	977 feet to the E
219	9310543	ATT	HAMILTON AVE. & S. BROADWAY	993 feet to the NE
220	9512203	DEVON PLAZA REALTY	109 MAMARONECK AVE	1048 feet to the SSE
221	9510997	RESIDENCE	109 MAMARONECK AV	1048 feet to the SSE
222	8802449	APT. BUILDING	16 NORTH BROADWAY	1054 feet to the NE
223	9500251	BROADLAWN APART.	20 NORTH BROADWAY	1083 feet to the NE
224	9414918	CON ED HOLE # TM 2514	MARTINE AVE WEST OF BDWAY	1091 feet to the ESE
225	8710547	M B TRUCKING	12 WESTCHESTER AVE	1110 feet to the E
226	8607154	PARK ROSE	12 WESTCHESTER AVE	1110 feet to the E
227	0104086	WHITE PLAINS SUB-STATION	2 NEW STREET	1115 feet to the W
228	9909123	WHITE PLAINES SUB STA	NEW ST/LEXINGTON ST	1163 feet to the W
229	9905722	MH #186	NEW ST & LEXINGTON AVE	1163 feet to the W
230	9311258	DRIVEWAY APT. HOUSE	1 FRANKLIN AVE.	1178 feet to the E
231	9906674	MANHOLE # 3570	BARKER AVE & N BROADWAY	1193 feet to the NNE
232	8908740	OFFICE BLDG BASEMENT	150 GRAND STREET	1211 feet to the S
233	9509489	GREEN POINT SAVINGS BANK	134 MAMARONECK AVENUE	1230 feet to the SSE
234	9305571	3-5 FRANKLIN AVE. OWNERS	3-5 FRANKLIN AVE.	1245 feet to the E

235 9610799
236 9710426
237 0005174

SAM ASH MUSIC
APARTMENT HOUSE

44 NORTH BROADWAY
180 MAMARONECK AVE
25 FRANKLIN AVE

1251 feet to the NNE
1653 feet to the SSE
1740 feet to the E

Petroleum Bulk Storage Sites

MAP ID
FACILITY ID

FACILITY NAME

238 3-169528
239 3-167029
240 3-164135
241 3-049980
242 3-049999
243 3-259241
244 3-049824
245 3-259233
246 3-149071
247 3-032433
248 3-169552
249 3-505153
250 3-600118
251 3-177342
252 3-177903
253 3-173398
254 3-060929
255 3-074632
256 3-168777
257 3-169668
258 3-179302
259 3-496502
260 3-412015
261 3-496812
262 3-139734
263 3-466034
264 3-600999
265 3-184713
266 3-074659
267 3-492132
268 3-600900
269 3-506966
270 3-412384
271 3-168998
272 3-600172
273 3-600486
274 3-492205
275 3-600104
276 3-173665
277 3-169742
278 3-277622
279 3-485969
280 3-168750
281 3-412481
282 3-600456
283 3-601002
284 3-074640

PUBLIC SAFETY BUILDING
MACYS WHITE PLAINS
CODIBROS EXXON 3-7118
RECKSON OPERATING PARTNERSHIP
BRIAN HOLDING COMPANY
AMCOTT ASSOC
BAR BUILDING
AMCOTT ASSOC
99 CHURCH STREET
WYASSUP-LAUREL GLEN CORP.
MUNICIPAL BUILDING
CHASE MANHATTAN BANK N.A.
AT&T
82ND - 83RD STREET VENTURE
204 MARTINE ASSOCIATES / JCG
47 MAMARONECK AVE CORP
48 MAMARONECK AVENUE ASSOC.
WEST COUNTY MICHAELIAN OFFICE
BARKER AVENUE APT. CORP.
WHITE PLAINS
35 BARKER AVE. REALTY CORP.
MARTINE REALTY CO.
NEW YORK POWER AUTHORITY
40 BARKER AVE.
170 HAMILTON AVENUE
ROBERT MARTIN LLC
NYNEX
76 MAMARONECK AVE ASSOC
TEN MITCHELL PLACE
28 MITCHELL PLACE INC.
BROADMAR COMPANY
DEVON PLAZA REALTY
MITCHELL PLACE GARAGE
SEA MANAGEMENT
APT. BUILDING
THE GALLERIA AT WHITE PLAINS
JC PENNEY
MACY'S WHITE PLAINS
WESTCHESTER COUNTY COURTHOUSE
WHITE SWAN APARTMENT
WHITE PLAINS PLAZA
WESTCHESTER COUNTY COURTHOUSE
37-43 MITCHELL PLACE INC.
EDWARD S. GORDON CO.
THE INNS OF COURT PROPERTIES
110 MAMARONECK AVENUE ASSOC.

FACILITY STREET
279 HAMILTON VAE
220 MAIN ST
274 HAMILTON AVE
235 MAIN ST
203 MAIN STREET
300 HAMILTON AVE
199-201 MAIN ST
95 CHURCH ST
99 CHURCH STREET
175 MAIN ST
255 MAIN ST
2 WILLIAM ST / 169 MAIN ST.
31 MAMARONECK AVE.
360 HAMILTON AVENUE
167-183 MARTINE AVE.
204 MARTINE AVE
4M MAMARONECK AVE
48 MAMARONECK AVENUE
148 MARTINE AVE 001
33 BARKER AVENUE
400 HAMILTON AVE
35 BARKER AVE.
234-254 MARTINE AVENUE
123 MAIN STREET
40 BARKER AVENUE
170 HAMILTON AVENUE
1 BARKER AVENUE
111 MAIN ST
76 MAMARONECK AVE
10 MITCHELL PLACE
28 MITCHELL PLACE
277 MARTINE AVE.
9 MITCHELL PL
9 MITCHELL PL
23 MITCHELL PLACE
40 MITCHELL PLACE
100 MAIN STREET
100 MAIN ST
100 MAIN ST
110 GROVE ST
1 SOUTH BROADWAY
1 NORTH BROADWAY
111 GROVE ST TOWER
37-43 MITCHELL PLACE
7-11 SOUTH BROADWAY
99 COURT ST.
110 MAMARONECK AVENUE

DISTANCE & DIRECTION

0 feet
23 feet to the ESE*
24 feet to the NNW*
29 feet to the ESE*
123 feet to the SSW*
136 feet to the N*
151 feet to the SSW*
186 feet to the N*
226 feet to the N
236 feet to the SW
265 feet to the E
272 feet to the SW
311 feet to the SSE
383 feet to the NNE
452 feet to the S
476 feet to the SSE
490 feet to the SSE
497 feet to the SSE
542 feet to the S
546 feet to the N
555 feet to the NE
571 feet to the N
587 feet to the SE
598 feet to the WSW
606 feet to the N
646 feet to the W
731 feet to the WNW
734 feet to the WSW
766 feet to the SSE
788 feet to the SSE
783 feet to the SE
793 feet to the ESE
813 feet to the SSE
813 feet to the SSE
819 feet to the SE
830 feet to the SE
841 feet to the WSW
841 feet to the WSW
841 feet to the WSW
846 feet to the SSW
855 feet to the E
855 feet to the ENE
874 feet to the SSW
878 feet to the SE
915 feet to the E
942 feet to the SSE
990 feet to the SSE

285	3-171069	CAMEO HOUSE OWNERS INC	300 MARTINE AVE	998 feet to the ESE
286	3-173312	TIBBETS PARK APTS INC	10 NORTH BROADWAY	1041 feet to the ENE
287	3-053554	DEVON PLAZA REALTY	109 MAMARONECK AVE	1047 feet to the SSE
288	3-167223	16 NO BROADWAY OWNERS INC	16 NO BROADWAY	1048 feet to the NE
289	3-139750	TWO NORTH BROADWAY	2 NORTH BROADWAY	1073 feet to the ENE
290	3-167320	BROADLAWN APARTMENTS INC	20 NO BROADWAY	1076 feet to the NE
291	3-104655	12 WESTCHESTER AVENUE TENANTS	12 WESTCHESTER AVE	1105 feet to the E
292	3-412007	124 MAMARONECK AVENUE	124 MAMARONECK AVENUE	1131 feet to the SSE
293	3-173169	WHITE PLAINS PRESBYTERIAN CHUR	39 N BROADWAY	1136 feet to the INNE
294	3-259217	WESKORA OWNERS CORP.	30 NORTH BROADWAY	1137 feet to the NE
295	3-039136	ROYAL VIEW	42 BARKER AVE	1145 feet to the NNE
296	3-506842	KINGSLEY HOUSE	41 BARKER AVE.	1169 feet to the NNE
297	3-504637	KINGSLEY HOUSE	ONE FRANKLIN AVE	1169 feet to the NNE
298	3-104663	ONE FRANKLIN OWNERS CORP	150 GRAND STREET	1180 feet to the E
299	3-176885	GRAND REALTY COMPANY	190 E POST RD	1209 feet to the S
300	3-032476	PUCKHINKONNUCK CORP	134 MAMARONECK AVENUE	1226 feet to the SE
301	3-601013	GREENPOINT BANK	44 N BROADWAY	1231 feet to the SSE
302	3-259225	BROADLAKE CO	3-5 FRANKLIN AVE	1245 feet to the NNE
303	3-165409	3-5 FRANKLIN AVE	1 NORTH LEXINGTON AVE.	1247 feet to the E
304	3-496871	GATEWAY 1	138 MAMARONECK AVENUE	1256 feet to the WSW
305	3-412201	BARCLAYS BANK OF NEW YORK NA	193-197 EAST POST RD	1270 feet to the SSE
306	3-178683	193-197 EAST POST RD VENTURE	170 EAST POST RD	1272 feet to the SE
307	3-050067	DEVON PLAZA REALTY	34 S BROADWAY AKA 25 HALE AVE	1273 feet to the SSE
308	3-104434	34 SOUTH BROADWAY		1277 feet to the ESE

Hazardous Waste Generators, Transporters

MAP ID	FACILITY ID	FACILITY NAME	DISTANCE & DIRECTION
309	NYT000861245	WHITE PLAINS, CITY OF, FIRE PREVENTION	0 feet
310	NYD986876019	WHITE PLAINS POLICE DEPT	0 feet
311	NYP000877423	WHITE PLAINS POLICE DEPT	0 feet
312	NYR000062356	WHITE PLAINS TOWN CENTER	0 feet
313	NYR000054361	TST WHITE PLAINS	23 feet to the ESE*
314	NYD013387436	EXXON USA	24 feet to the NNW*
315	NYD987015146	WHITE PLAINS, CITY OF	265 feet to the E
316	NYD000877423	WHITE PLAINS DEPT OF PUBLIC WORKS	265 feet to the E
317	NYR000071779	RECHSON ASSOCIATES	383 feet to the E
318	NYD986998060	AT&T	383 feet to the NNE
319	NYN300000034	DEPARTMENT OF ENVIRONMENTAL FACILITIES	383 feet to the NNE
320	NYD072705213	WESTCHESTER CITY OFFICE BLDG	542 feet to the S
321	NYN000060S01	CROTON POINT SANITARY LANDFILL	542 feet to the S
322	NYD070955828	AT&T LONG LINES DEPT/WHIT	555 feet to the NE
323	NYD980529192	WHITE PLAINS LL CENTRAL OFFICE	555 feet to the NE
324	NYD980525919	AMERICAN TELEPHONE & TELEGRAPH	555 feet to the NE
325	NYD986983468	NY POWER AUTH	600 feet to the WSW
326	NYD982280059	BANK OF NEW YORK	600 feet to the WSW
327	NYD986982999	NEW YORK POWER AUTHORITY	600 feet to the WSW
328	NYD980779573	NEW YORK POWER AUTHORITY	600 feet to the WSW
329	NYR000035253	1-HOUR PHOTO FINISH	600 feet to the WSW
330	NYD987037199	AT&T	655 feet to the SSE
331	NYD986951986	WHITE PLAINS CITY OF	708 feet to the NE
332	NYD980582480	NEW YORK TELEPHONE COMPANY	713 feet to the SSW
333	NY0000923193	SEARS	737 feet to the WSW
334	NY0000969121	EXPRESSLY PORTRAITS	837 feet to the E
			838 feet to the WSW

335	NYR000034082	C P I PHOTO FINISH	100 MAIN ST STE 301	838 feet to the WSW
336	NYR000084806	THE PICTURE PLACE-389 GALLERIA MALL	100 MAIN ST	838 feet to the WSW
337	NY0000806901	J C PENNEYS	100 MAIN ST	838 feet to the WSW
338	NY00002194652	NEW YORK SPORTS CLUBS	1 N BROADWAY	859 feet to the ENE
339	NYR000028902	WESTCHESTER COUNTY COURTHOUSE	111 GROVE STREET	874 feet to the SSW
340	NYR000023275	CONSOLIDATED EDISON	9 NEW ST	901 feet to the W
341	NYP003600954	NYSDEC	GRAND & QUARRAPUS	1052 feet to the S
342	NY0000298893	PIP PRINTING	190 EAST POST RD	1226 feet to the SE
343	NYP004016648	CONSOLIDATED EDISON	V7303-MITCHELL&SOUTH BWAY	1252 feet to the ESE
344	NYD986984698	AMERICAN TELEPHONE & TELEGRAPH	ORDER NO. PETERBORO	1257 feet to the WSW

Civil Enforcement Docket Sites

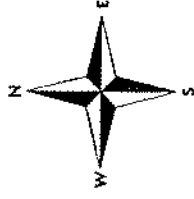
MAP ID	FACILITY ID	FACILITY NAME	FACILITY STREET	DISTANCE & DIRECTION
345	NYD072705213	WESTCHESTER COUNTY OF ENVIR FA	148 MARTINE AVE	555 feet to the S

Toxics Targeting 1 Mile Buffer Search Map

221 Main St
White Plains, NY 10601



Westchester County



- NPL/CERCLIS/NYSDEC Inactive Hazardous Waste Disposal Site
- Hazardous Waste Treatment, Storer, Disposer
- Hazardous Substance Waste Disposal Site
- Major Oil Storage Facility
- Solid Waste Facility

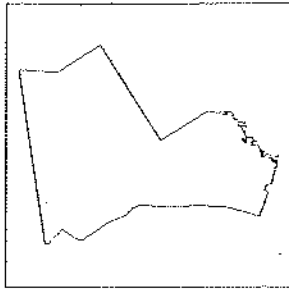
- Subject Area
- Minor Roads
- Major Roads
- Expressways
- 1 Mile Radius
- 1/2 Mile Radius
- 1/4 Mile Radius
- Waterbody
- County Border
- Railroad Tracks



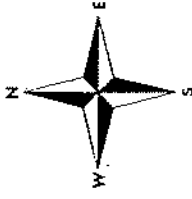
Scale: 1 inch = 1669 feet

Toxics Targeting 1/2 Mile Buffer Search Map

221 Main St
White Plains, NY 10601



Westchester County



- MTBE Gasoline Additive Spill
- Hazardous Material Spill

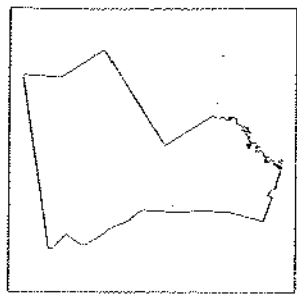
- Subject Area
- Minor Roads
- Major Roads
- Expressways
- 1 Mile Radius
- 1/2 Mile Radius
- 1/4 Mile Radius
- Waterbody
- County Border
- Railroad Tracks
- 1/2 Mile Radius
- 1/4 Mile Radius



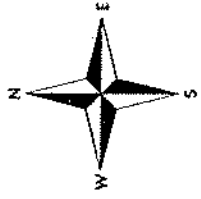
Scale: 1 inch = 881 feet

Toxics Targeting 1/4 Mile Buffer Search Map

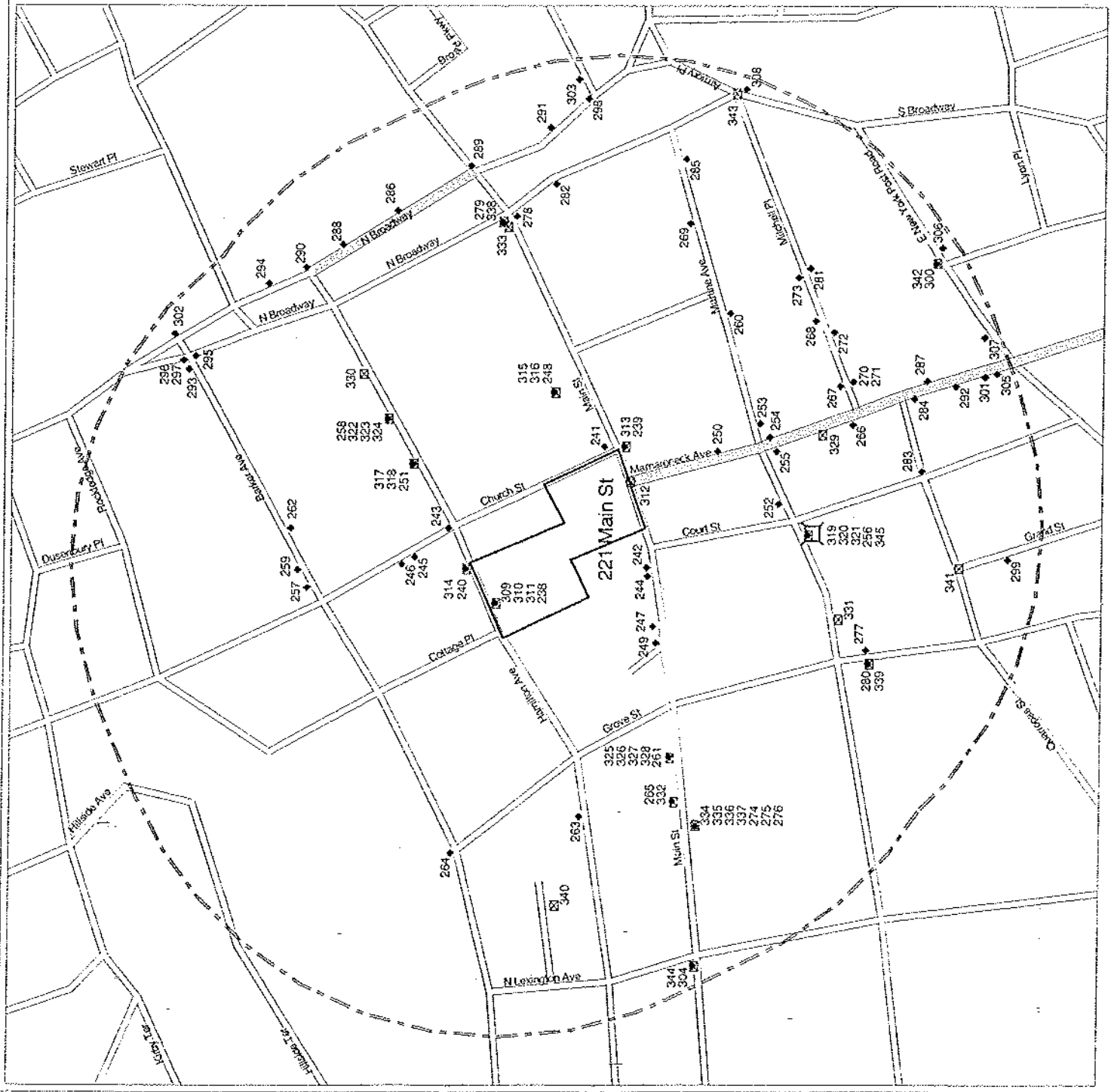
221 Main St
White Plains, NY 10601



Westchester County



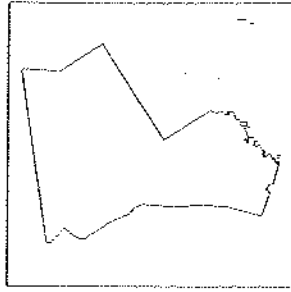
- | | | | | |
|---------------------------|------------------------------------|---------------------------------|-----------------------------------|-----------------|
| Chemical Storage Facility | Hazardous Waste Generator, Transp. | Air Release | Civil Enforcement Docket Facility | Waterbody |
| Toxic Release | Wastewater Discharge | Petroleum Bulk Storage Facility | County Border | Railroad Tracks |
| Subject Area | Minor Roads | Major Roads | Expressways | 1/2 Mile Radius |
| 1 Mile Radius | 1/4 Mile Radius | | | |



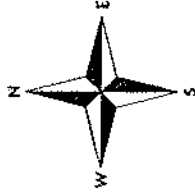
Scale: 1 inch = 488 feet

Toxics Targeting 1/4 Mile Buffer Closeup Map

221 Main St
White Plains, NY 10601



Westchester County



⊕ NPL/CERCLIS/NYSDEC Inactive
Hazardous Waste Disposal Site

⊞ Hazardous Waste Treater,
Storer, Disposer

⊕ MTBE Gasoline
Additive Spill

⊗ Solid Waste
Facility

★ Major Oil
Storage Facility

⊞ Chemical Storage
Facility

⊞ Hazardous Waste
Generator, Transp.

⊞ Air
Release

⊞ Wastewater
Discharge

◆ Petroleum Bulk
Storage Facility

▭ Subject
Area

▭ Waterbody

▭ Minor
Roads

▭ Major
Roads

▭ Expressways

▭ 1 Mile
Radius

▭ 1/2 Mile
Radius

▭ 1/4 Mile
Radius

▭ County
Border

▭ Railroad
Tracks

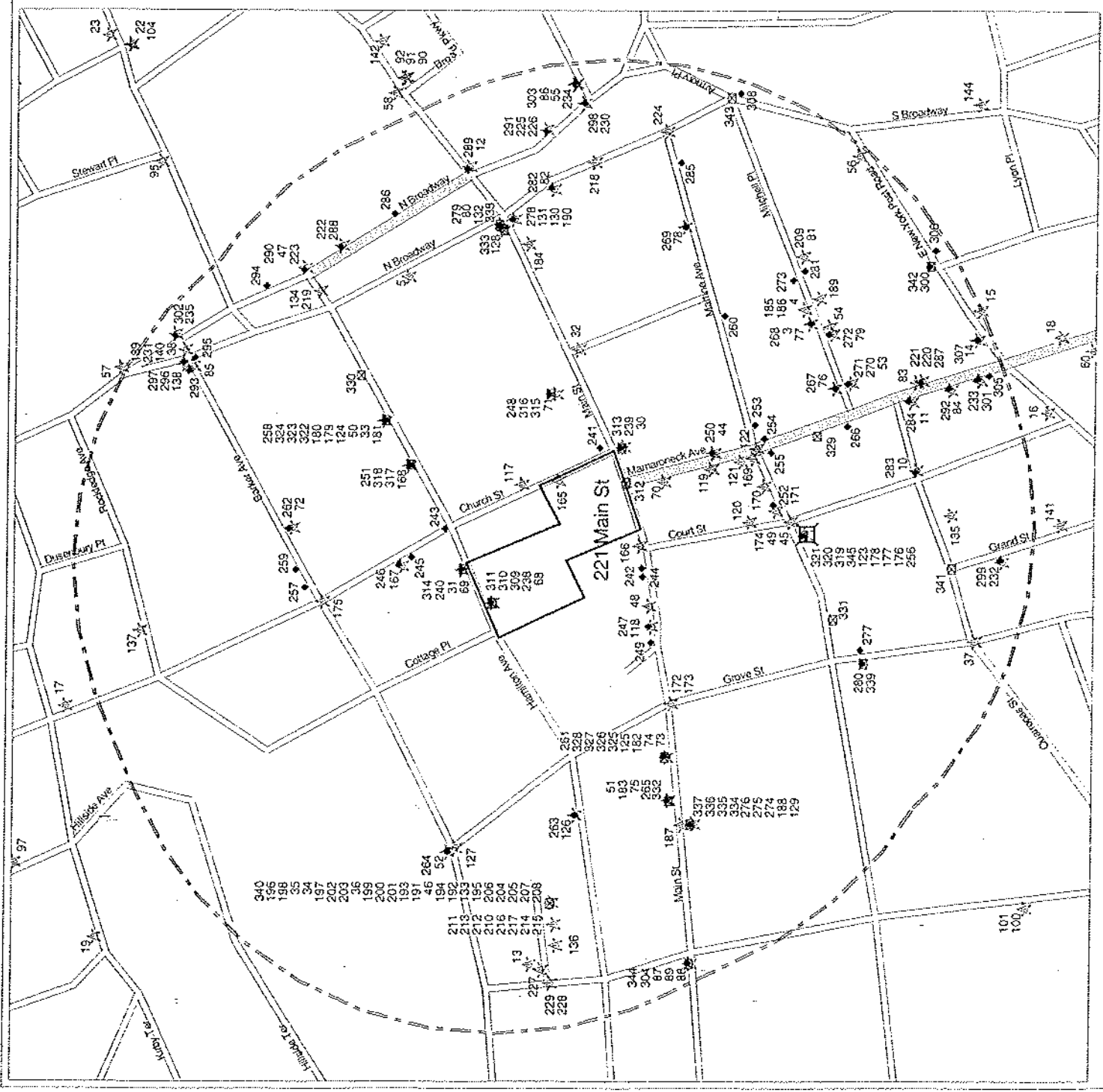
▭ 1/2 Mile
Radius

▭ 1/8 Mile
Radius

▭ 1 Mile Search Radius

▭ 1/2 Mile Search Radius

▭ 1/4 Mile Search Radius



Scale: 1 inch = 488 feet

1/4 Mile Search Radius

1/2 Mile Search Radius

1 Mile Search Radius

County Border

Railroad Tracks

1/2 Mile Radius

1/8 Mile Radius

1 Mile Search Radius

1/2 Mile Search Radius

1/4 Mile Search Radius

YORK
ANALYTICAL LABORATORIES, INC.

Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 12/19/2002
Re: Client Project ID: 221 Main Street
York Project No.: 02120349

CT License No. PH-0723 New York License No. 10854 Mass. License No. M-CT106 Rhode Island License No. 93 EPA I.D. No. CT60106



ONE RESEARCH DRIVE STAMFORD, CT 06906 (203) 325-1371 FAX (203) 357-0166

Page 1 of 6

Report Date: 12/19/2002
 Client Project ID: 221 Main Street
 York Project No.: 02120349

JM Associates, Inc.
 225 Railroad Ave.
 Bedford Hills, NY 10507
 Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 12/12/02. The project was identified as your project "221 Main Street".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			JMA-01		JMA-02	
York Sample ID			02120349-01		02120349-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			11	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			82	5.0	67	5.0
Total Xylenes			11	10	Not detected	10

YORK

Client Sample ID			JMA-01		JMA-02	
York Sample ID			02120349-01		02120349-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			Not detected	330	870	330
Anthracene			Not detected	330	1200	330
Benzo[a]anthracene			Not detected	330	1700	330
Benzo[a]pyrene			Not detected	330	990	330
Benzo[b]fluoranthene			Not detected	330	840	330
Benzo[g,h,i]perylene			Not detected	330	510	330
Benzo[k]fluoranthene			Not detected	330	2200	330
Chrysene			Not detected	330	1700	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	3900	330
Fluorene			Not detected	330	540	330
Indeno[1,2,3-cd]pyrene			Not detected	330	570	330
Naphthalene			Not detected	330	420	330
Phenanthrene			Not detected	330	3900	330
Pyrene			Not detected	330	3300	330

Client Sample ID			JMA-03		JMA-04	
York Sample ID			02120349-03		02120349-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	6	5.0
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330

YORK

Client Sample ID			JMA-03		JMA-04	
York Sample ID			02120349-03		02120349-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

Client Sample ID			JMA-05	
York Sample ID			02120349-05	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Volatiles-8021 SFARS Table 2	SW846-8260	ug/Kg	---	---
1,2,4-Trimethylbenzene			Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0
Benzene			Not detected	5.0
Ethylbenzene			Not detected	5.0
Isopropylbenzene			Not detected	5.0
Naphthalene			Not detected	5.0
n-Butylbenzene			Not detected	5.0
n-Propylbenzene			Not detected	5.0
o-Xylene			Not detected	10
p- & m-Xylenes			Not detected	10
p-Isopropyltoluene			Not detected	5.0
sec-Butylbenzene			Not detected	5.0
tert-Butylbenzene			Not detected	5.0
Toluene			Not detected	5.0
Total Xylenes			Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/kG	---	---
Acenaphthene			Not detected	330
Anthracene			Not detected	330
Benzo[a]anthracene			Not detected	330
Benzo[a]pyrene			Not detected	330
Benzo[b]fluoranthene			Not detected	330
Benzo[g,h,i]perylene			Not detected	330
Benzo[k]fluoranthene			Not detected	330
Chrysene			Not detected	330
Dibenz[a,h]anthracene			Not detected	330
Fluoranthene			Not detected	330
Fluorene			Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330
Naphthalene			Not detected	330
Phenanthrene			Not detected	330
Pyrene			Not detected	330

YORK

Client Sample ID			JMA-06		JMA-07	
York Sample ID			02120349-06		02120349-07	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/L	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	1	2	1
1,3,5-Trimethylbenzene			Not detected	1	Not detected	1
Benzene			Not detected	1	Not detected	1
Ethylbenzene			Not detected	1	Not detected	1
Isopropylbenzene			Not detected	1	Not detected	1
Naphthalene			Not detected	1	Not detected	1
n-Butylbenzene			Not detected	1	2	1
n-Propylbenzene			Not detected	1	Not detected	1
o-Xylene			Not detected	2	Not detected	2
p- & m- Xylenes			Not detected	2	2	2
p-Isopropyltoluene			Not detected	1	Not detected	1
sec-Butylbenzene			Not detected	1	Not detected	1
tert-Butylbenzene			Not detected	1	Not detected	1
Toluene			Not detected	1	Not detected	1
Total Xylenes			Not detected	2	2	2

Client Sample ID			JMA-08	
York Sample ID			02120349-08	
Matrix			WATER	
Parameter	Method	Units	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/L	---	---
1,2,4-Trimethylbenzene			2	1
1,3,5-Trimethylbenzene			Not detected	1
Benzene			Not detected	1
Ethylbenzene			Not detected	1
Isopropylbenzene			Not detected	1
Naphthalene			Not detected	1
n-Butylbenzene			1	1
n-Propylbenzene			Not detected	1
o-Xylene			Not detected	2
p- & m- Xylenes			Not detected	2
p-Isopropyltoluene			Not detected	1
sec-Butylbenzene			Not detected	1
tert-Butylbenzene			Not detected	1
Toluene			Not detected	1
Total Xylenes			Not detected	2

Units Key:

For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

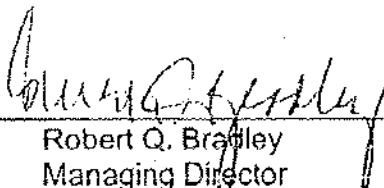
YORK

Report Date: 12/19/2002
Client Project ID: 221 Main Street
York Project No.: 02120349

Notes for York Project No. 02120349

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By: _____


Robert Q. Bradley
Managing Director

Date: 12/19/2002

YORK

YORK

ANALYTICAL LABORATORIES, INC.
 ONE RESEARCH DRIVE
 STAMFORD, CT 06906
 (203) 325-1371 FAX (203) 357-0166

Field Chain-of-Custody Record

DUW0349

Company Name JMA Associates, Inc.	Report To: JMA Associates, Inc.	Invoice To: JMA Associates, Inc.	Project ID/No. 221 Main Street Hempden Parking Lot
Company Name JMA Associates, Inc.	Report To: JMA Associates, Inc.	Invoice To: JMA Associates, Inc.	Project ID/No. 221 Main Street Hempden Parking Lot
Company Name JMA Associates, Inc.		Report To: JMA Associates, Inc.	
Company Name JMA Associates, Inc.		Report To: JMA Associates, Inc.	

Sample No.	Location/ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
JMA-01	B-3 0'-2.5'	12/11/02		X			4.0Z
JMA-02	B-3 3'-5'	12/11/02		X			4.0Z
JMA-03	B-3 10'-15'	12/11/02		X			4.0Z
JMA-04	B-3 15'-20'	12/11/02		X			4.0Z
JMA-05	B-3 20'-30'	12/11/02		X			4.0Z
JMA-06	Monitoring Well 1 (B-1)	12/11/02	X			20Z1 on per sample (Table 4)	4.0Z
JMA-07	Monitoring Well 2 (B-2)		X				2.40 ml, 4.0Z
JMA-08	Monitoring Well 3 (B-3)		X				2.40 ml, 4.0Z

Chain-of-Custody Record	Sample Relinquished by C. J. S. W.	Date/Time 12/11/02	Sample Received by B. Van Passen	Date/Time 12/12/02
Bottles Relinquished from Lab by			Sample Received in LAB by	
Bottles Received in Field by			Turn-Around Time	
Comments/Special Instructions		4.3°C	Standard	RUSH(define)

02010126

YORK

ANALYTICAL LABORATORIES, INC.
ONE RESEARCH DRIVE
STAMFORD, CT 06905
(203) 325-1371 FAX (203) : 57-0166

Field Chain-of-Custody Record

Company Name: JM ASSOCIATES, INC. Report To: JM ASSOCIATES

Company Name: JM ASSOCIATES, INC. Invoice To: JM ASSOCIATES

Project ID/No.: 256 HAMILTON (WHITE PLAINS)

Sample Collected By (Signature): Chris Slag

Name (Printed): Chris Slag

Sample No.	Location /ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
MA-01	B-4 5'-7'	1/6/03		X			8021 + 8270 on per STARS TABLE
MA-02	B-4 10'-12'	1/6/03		X			" " "
MA-03	B-4 15'-17'	1/6/03		X			" " "
MA-04	B-4 25'-26 1/2'	1/6/03		X			" " "
MA-05	B-5 1'-7'	1/6/03		X			" " "
MA-06	B-5 10'-12'	1/6/03		X			" " "
MA-07	B-5 1'-16'	1/6/03		X			" " "
MA-08	B-5 20'-22'	1/6/03		X			" " "
L-09	Guidance 6	1/6/03	X				8021 on per STARS TABLE
A-10	Guidance 17	1/6/03	X				8021 on per STARS TABLE

Relinquished From Lab by: R. Van Dorem Date/Time: 1/6/03

Relinquished in Field by: Chris Slag Date/Time: 1/6/03

Sample Received in LAB by: R. Van Dorem Date/Time: 1/7/03

Sample Received in Field by: Chris Slag Date/Time: 1/6/03

Prints/Special Instructions

03010125

Page 1 of 1

Field Chain-of-Custody Record

YORK

ANALYTICAL LABORATORIES, INC.
ONE RESEARCH DRIVE
STAMFORD, CT 06901
(203) 325-1371 FAX (203) 357-0156

Company Name: JM Associates, Inc. Report To: JM Associates, Inc. Invoice To: JM Associates Project ID/No.: 256
8021
Humpton
City Lot

Samples Collected By (Signature): [Signature]
 Name (Printed): Chris Stagle

Sample No.	Location/ID	Date Sampled	Sample Matrix				ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air	OTHER		
JMA-01	Grumw #4	1/7/03	X				8021 in per s TABS <u>Table 1</u>	2 Normal
JMA-02	Cummins #5	1/7/03	X					2 Normal

Chain-of-Custody Record

Bottles Relinquished from Lab by: [Signature] Date/Time: 1/7/03

Bottles Received in Field by: [Signature] Date/Time: 1/7/03

Comments/Special Instructions: Sample Relinquished by [Signature] 4:00 Date/Time 1/7/03

Sample Received in LAB by: [Signature] Date/Time: 4:00

Turn-Around Time: [Signature]

YORK

ANALYTICAL LABORATORIES, INC.

Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 12/18/2002
Re: Client Project ID: 221 Main Street
York Project No.: 02120296

CT License No. PH-0723 New York License No. 10854 Mass. License No. M-CT106 Rhode Island License No. 93 EPA ID No. CT00306



Report Date: 12/18/2002
 Client Project ID: 221 Main Street
 York Project No.: 02120296

JM Associates, Inc.
 225 Railroad Ave.
 Bedford Hills, NY 10507
 Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 12/11/02. The project was identified as your project "221 Main Street".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			JMA-01/B-1 0-2'Sinches		JMA-02/B-1 2'Sinches-4'Sinches	
York Sample ID			02120296-01		02120296-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			1.2	5.0	Not detected	5.0

YORK

Client Sample ID	JMA-01/B-1 0-2' Inches			JMA-02/B-1 2'5inches-4'5inches		
York Sample ID	02120296-01			02120296-02		
Matrix	SOIL			SOIL		
Parameter	Method	Units	Results	MDL	Results	MDL
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/Kg	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

Client Sample ID	JMA-03/B-1 5'-7'			JMA-04/B-1 7'-10'		
York Sample ID	02120296-03			02120296-04		
Matrix	SOIL			SOIL		
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			1.5	5.0	Not detected	5.0
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/Kg	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330

YORK

Client Sample ID			JMA-03/B-1 5'-7'		JMA-04/B-1 7'-10'	
York Sample ID			02120296-03		02120296-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

Client Sample ID			JMA-05/B-1 15'-17'		JMA-06/B-1 17'-20'	
York Sample ID			02120296-05		02120296-06	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	1.5	5.0
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SWS46-8270	ug/Kg	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

YORK

Client Sample ID			JMA-07/B-2 0.5'-2.5'		JMA-08/B-2 2.5'-4.5'	
York Sample ID			02120296-07		02120296-08	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/Kg				
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[e]fluoranthene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

Client Sample ID			JMA-09/B-2 5'-7'		JMA-10/B-2 10'-12'	
York Sample ID			02120296-09		02120296-10	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10

YORK

Client Sample ID			JMA-09/B-2 5'-7'		JMA-10/B-2 10'-12'	
York Sample ID			02120296-09		02120296-10	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

Client Sample ID			JMA-11/B-2 15'-17'		JMA-12/B-2 20'-22'	
York Sample ID			02120296-11		02120296-12	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	1.0	5.0
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330

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Client Sample ID			JMA-11/B-2 15'-17'		JMA-12/B-2 20'-22'	
York Sample ID			02120296-11		02120296-12	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

Units Key: For Waters/Liquids: mg/L = ppm; ug/L = ppb For Soils/Solids: mg/kg = ppm; ug/kg = ppb

Notes for York Project No. 02120296

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By: _____

Robert Q. Bradley
Managing Director

Date: 12/18/2002

YORK

02120270

Field Chain-of-Custody Record

Page 1 of 2

YORK
 ANALYTICAL LABORATORIES, INC.
 ONE RESEARCH DRIVE
 STAMFORD, CT 06905
 (203) 325-1371 FAX (203) 357-0166

Company Name: JM ASSOCIATES, INC. Report To: JM ASSOCIATES, INC.
 Project ID/No.: 221 Main Street/Halpern Parking Lot.
 Samples Collected By (Signature): *J. Manfredi*
 Name (Printed): J. MANFREDI

Sample No.	Location ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
JMA-01	B-1 0'-2.5"	12/10/02		X		8021 + 8270 as per STARS Table #2	402
JMA-02	B-1 2.5"-4.5"	12/10/02		X			402
JMA-03	B-1 5'-7'	12/10/02		X			402
JMA-04	B-1 7'-10'	12/10/02		X			402
JMA-05	B-1 10'-17'	12/10/02		X			402
JMA-06	B-1 17'-20'	12/10/02		X			402
JMA-07	B-2 0.5'-2.5'	12/10/02		X			402
JMA-08	B-2 2.5'-4.5'	12/10/02		X			402
JMA-09	B-2 5'-7'	12/10/02		X			402
JMA-10	B-2 10'-12'	12/10/02		X			402

Chain-of-Custody Record

Bottles Relinquished From Lab by: *Jan S/10* Date/Time: 12/10/02
 Sample Requisitioned by: *Jan S/10* Date/Time: 12/10/02
 Bottles Received in Field by: _____ Date/Time: _____
 Sample Relinquished by: _____ Date/Time: _____
 Sample Received in LAB by: *Jan S/10* Date/Time: _____
 Comments/Special Instructions: _____
 Turn-Around Time: Standard RUSH (define): _____

02120218

Field Chain-of-Custody Record

YORK
 ANALYTICAL LABORATORIES, INC.
 ONE RESEARCH DRIVE
 STAMFORD, CT 06906
 (203) 325-1371 FAX (203) 357-0166

Company Name JM ASSOCIATES, INC.	Report To: JM ASSOCIATES, INC.	Invoice To: JM ASSOCIATES	Project L/No. 221 Maria Street Madison Park PARKING LOT
Samples Collected By (Signature) <i>[Signature]</i>		Name (Printed) J. MANFREDI	

Sample No.	Location #/D	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
JMA-11	15'-17'	12/10/02		X			4 oz. can
JMA-12	20'-22'	12/10/02		X			4 oz.

Chain-of-Custody Record	
Samples Requested From Lab by <i>[Signature]</i> 12/10/02 Date/Time	Sample Received by <i>[Signature]</i> 12/11/02 Date/Time
Sample Retrievished by <i>[Signature]</i> 12/10/02 Date/Time	Sample Received in Lab by <i>[Signature]</i> 12/11/02 Date/Time
Bolts Received in Field by Date/Time	Turn-Around Time X Standards RUSH (define)
Comments/Special Instructions	

Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 1/10/2003
Re: Client Project ID: 256 Hamilton City Lot
York Project No.: 03010126

CT License No. PH-0723 New York License No. 10854 Mass. License No. M-CT106 Rhode Island License No. 93 EPA I.D. No. CT00106



JM Associates, Inc.
 225 Railroad Ave.
 Bedford Hills, NY 10507
 Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 01/07/03. The project was identified as your project "256 Hamilton City Lot".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			JMA-01		JMA-02	
York Sample ID			03010126-01		03010126-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles- STARS List	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
Total Xylenes			Not detected	10	Not detected	10

YORK

Client Sample ID			JMA-01		JMA-02	
York Sample ID			03010126-01		03010126-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
STARS Target Semi-Volatiles	SW846-8270	ug/kG	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

Client Sample ID			JMA-03		JMA-04	
York Sample ID			03010126-03		03010126-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles- STARS List	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/kG	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330

YORK

Client Sample ID			JMA-03		JMA-04	
York Sample ID			03010126-03		03010126-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Fluorene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

Client Sample ID			JMA-05		JMA-06	
York Sample ID			03010126-05		03010126-06	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles- STARS List	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/kG	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

YORK

Client Sample ID			JMA-07		JMA-08	
York Sample ID			03010126-07		03010126-08	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles- STARS List	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/KG	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

Client Sample ID			JMA-09		JMA-10	
York Sample ID			03010126-09		03010126-10	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-STARS List	SW846-8260	ug/L	---	---	---	---
1,2,4-Trimethylbenzene			7200000	10000	2500	50
1,3,5-Trimethylbenzene			1800000	10000	590	50
Benzene			410000	10000	Not detected	50
Ethylbenzene			1200000	10000	2300	50
Isopropylbenzene			120000	10000	81	50
Methyl-tert-butyl ether			Not detected	10000	Not detected	50
Naphthalene			1300000	10000	52	50
n-Butylbenzene			290000	10000	Not detected	50
n-Propylbenzene			420000	10000	250	50

YORK

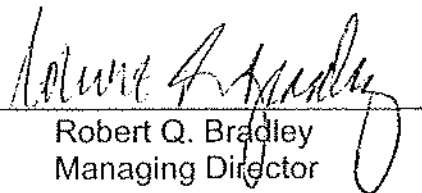
Client Sample ID			JMA-09		JMA-10	
York Sample ID			03010126-09		03010126-10	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
o-Xylene			3500000	20000	1300	100
p- & m- Xylenes			9100000	20000	6700	100
p-Isopropyltoluene			200000	10000	Not detected	50
sec-Butylbenzene			Not detected	10000	Not detected	50
tert-Butylbenzene			33000	10000	290	50
Toluene			4100000	10000	190	50
Total Xylenes		--	12600000	20000	8000	100

Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 03010126

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:


Robert Q. Bradley
Managing Director

Date: 1/10/2003

YORK

02010126

YORK

Field Chain-of-Custody Record

ANALYTICAL LABORATORIES, INC.
 ONE RESEARCH DRIVE
 STAMFORD, CT 06916
 (203) 325-1371 FAX (203) 57-0155

Page 1 of 1

Company Name

ASSOCIATES, INC.

Report To:

JM ASSOCIATES, INC.

Invoice To:

JM ASSOCIATES

Project ID/No.

~~256 HAMILTON~~
 256 HAMILTON
 (WHITE PLAINS)

Samples Collected By (Signature)

Chris Slaglic

Name (Printed)

Chris Slaglic

Sample No.	Location /ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
1A-01	B-4 5'-7'	1/6/03		X			B-02
1A-02	B-4 10'-12'	1/6/03		X			B-02
A-03	B-4 15'-17'	1/6/03		X			B-02
A-04	B-4 25'-26 1/2'	1/6/03		X			B-02
1A-05	B-5 5'-17'	1/6/03		X			B-02
1A-06	B-5 10'-12'	1/6/03		X			B-02
1A-07	B-5 1'-16'	1/6/03		X			B-02
1A-08	B-5 20'-22'	1/6/03		X			B-02
1-09	GUMMIF 6'	1/6/03	X				B-02
1-10	GUMMIF 17'	1/6/03	X				B-02
8021 on per STARS Table #2							2 Grams

Field Chain-of-Custody Record

Relinquished From Lab by

Chris Slaglic

Date/Time

1/6/03

Received in Field by

R. Adam Jensen

Date/Time

1/7/03

Notes/Special Instructions

Sample Received in LAB by

Date/Time

4/24

YORK

ANALYTICAL LABORATORIES, INC.
ONE RESEARCH DRIVE
STAMFORD, CT 06901
(203) 325-1371 FAX (203) 357-0155

Company Name
JM Associates, Inc.

Report To:
JM Associates, Inc.

Invoice To:
JM Associates

Project ID/No.
256 ~~Hamilton~~
Hamilton
City Lot

Samples Collected By (Signature)
Chris Stagle

Name (Printed)
Chris Stagle

Field Chain-of-Custody Record

Sample No.	Location/ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
JMA-01	GUMW #4	1/7/03	X				2-40ml
JMA-02	GUMW #5	1/7/03	X				2-40ml

Chain-of-Custody Record

Bottles Relinquished from Lab by: *Chris Stagle* Date/Time: 1/7/03

Bottles Received in Field by: *Chris Stagle* Date/Time: 1/7/03

Sample Relinquished by: *Chris Stagle* Date/Time: 1/7/03

Sample Received by: *R. [Signature]* Date/Time: 4:00

Sample Received in LAB by: _____ Date/Time: _____

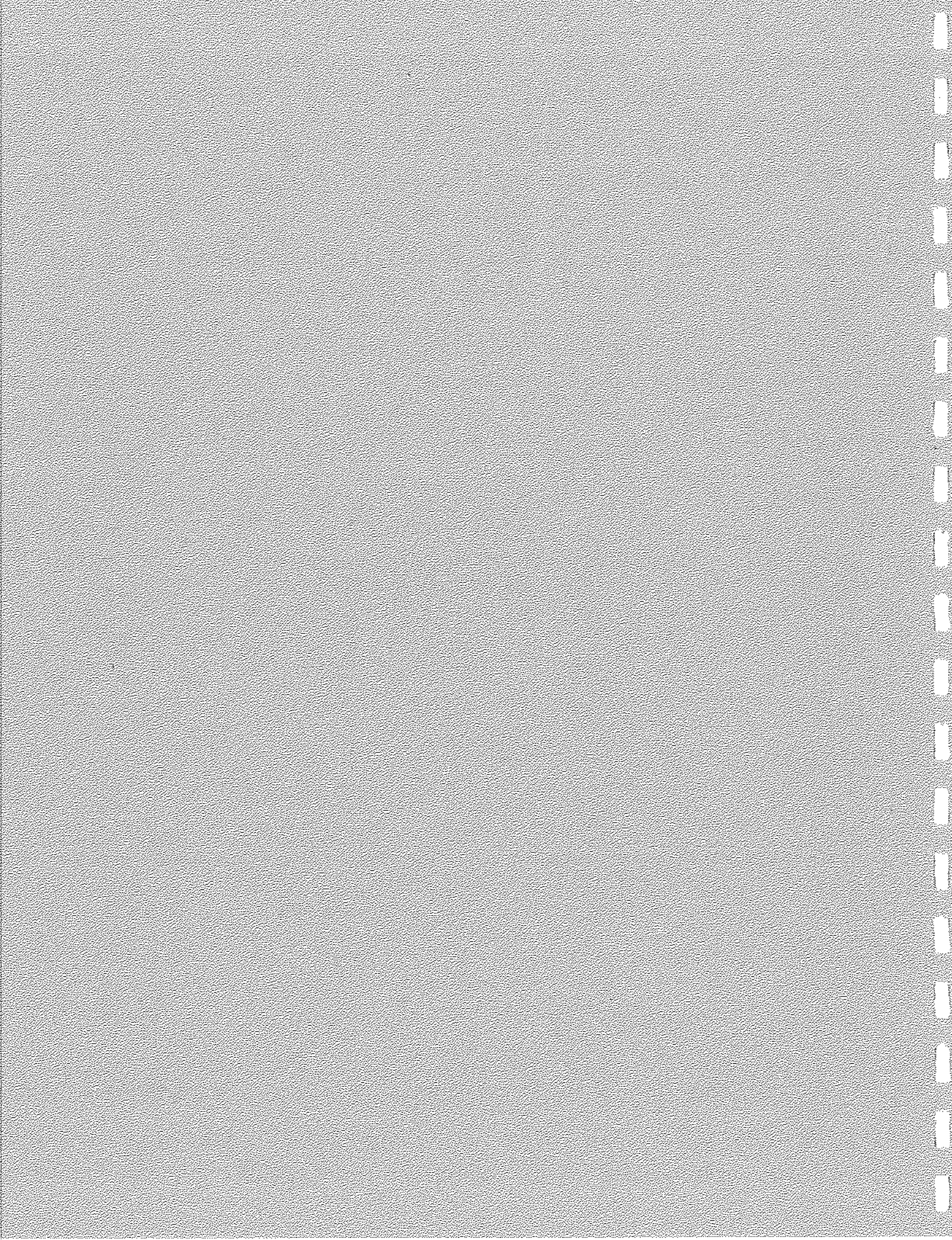
Turn-Around Time: _____

SAK Standard: _____ ASAP

03010125

APPENDIX A-2

New York Power Authority Investigation Report
GZA Geoenvironmental, Inc
August 1993



**PETROLEUM CONTAMINATION
SITE INVESTIGATION AND
FEASIBILITY STUDY
123 MAIN STREET
WHITE PLAINS, NEW YORK**

PREPARED FOR:
New York Power Authority
123 Main Street
White Plains, New York

PREPARED BY:
GZA GeoEnvironmental, Inc.
204 Spring Hill Road
Trumbull, Connecticut 06611

June, 1993
Revised August, 1993
File No. 50726

June 10, 1993
Revised August 5, 1993
File No. 50726



New York Power Authority
123 Main Street
White Plains, New York

Attention: Mr. Edward Holman

204 Spring Hill Road
Trumbull, Connecticut
06611
203-268-0808
FAX 203-268-4772

Re: Petroleum Contamination Site Investigation
and Feasibility Study
123 Main Street
White Plains, New York

Dear Mr. Holman,

In accordance with our contract dated January 19, 1993, GZA GeoEnvironmental, Inc. (GZA) is pleased to provide this report for the Petroleum Contamination Site Investigation of 123 Main Street and 279 Hamilton Avenue in White Plains, New York.

The report describes our investigations, results and our recommended approach to soil, groundwater and sump water contamination found during our investigation.

We trust this report meets your current needs. We would be pleased to discuss the report findings with you at your convenience, should you so desire.


Thank you for the opportunity to work with you on this project.

A Subsidiary of GZA
GeoEnvironmental
Technologies, Inc.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.


George Ferley
Senior Project Manager


(for) Kevin J. O'Reilly
Consultant/Reviewer



Kathleen A. Cyr
Associate Principal

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FIGURES

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1.00 INTRODUCTION

In accordance with our January 19, 1993 proposal, GZA GeoEnvironmental, Inc. (GZA) conducted a Petroleum Contamination Site Investigation and Feasibility Study on behalf of the New York Power Authority (NYPA). The objectives of this study were to assess the extent and degree to which gasoline contamination from the adjacent City owned property (former Police Station) at 279 Hamilton Avenue has migrated onto the NYPA owned property at 123 Main Street, and to develop a remedial action strategy for both properties.



GZA was granted access to 123 Main Street, 279 Hamilton Avenue and the public thoroughfare (the proposed Court Street Extension) between these properties. The scope of services conducted at these locations as a part of this investigation included:

- Developing project specific health and safety plans for field activities to protect workers and nearby pedestrians.
- Performing site reconnaissances of both properties which included a monitor well inventory, development of a Site Survey Plan, photographic record of seepage within the parking garage, water sampling of sumps and catch basins, and an air quality assessment within the parking garage.
- Reviewing available documents regarding environmental conditions at the properties as obtained from the New York Power Authority, the City of White Plains and the New York State Department of Environmental Conservation (NYSDEC).
- Drilling three soil borings completed as monitor wells and five additional soil borings at the 279 Hamilton Avenue property. Soil samples were collected from these borings.
- Performing three geoprobe soil borings completed as piezometers and two additional geoprobe soil borings. Two of the piezometers were on the 123 Main Street property. The remainder were at 279 Hamilton Avenue. Soil samples were collected from some of these borings.
- Field-screening soil samples for volatile organic compounds (VOCs) using a photoionization detector (PID). Selected soil samples were also analyzed for VOCs and extractable metals (TCLP) by a New York State Department of Health (NYSDOH) certified laboratory.
- Collecting groundwater samples from accessible existing and newly installed groundwater monitor wells at the Site. The samples were field-screened for pH

and specific conductance and were analyzed for VOCs by a NYSDOH certified laboratories.

- Sampling soil cuttings and purge water for metals, VOCs, PCBs, and flashpoint for disposal characterization. Soils were first extracted by TCLP protocols prior to metals and VOC analyses.
- Contracting a licensed waste transporter to dispose of soils/purge water.
- Preparing this draft Preliminary Assessment/Site Investigation Report (PA/SI) including remedial recommendations.
- A final PA/SI report will be prepared after review by the New York Power Authority.

This report presents the results and conclusions obtained during this study and is subject to the Terms and Conditions of our contract and the Limitations discussed in the text and presented in Appendix A.

2.00 BACKGROUND

2.10 SITE DESCRIPTION

The study Site is defined as the properties located at 123 Main Street, 279 Hamilton Avenue and the public access road between these properties in White Plains, New York, as shown on Figure 1. The property at 123 Main Street contains a 17-story building and parking garage (2½ stories are below grade). The property at 279 Hamilton Avenue is the former location of the White Plains Police Department and currently is used as a City of White Plains parking lot. An underground gasoline storage tank was located to the rear (west) of the Police Department building in an area currently used as a public thoroughfare, (known as the Future Court Street Extension). The study Site is bounded by Hamilton Avenue on the north, commercial buildings on the east and west, and Main Street and commercial building on the south. Figure 2 presents a Site Plan.

The overall Site topography slopes from approximately 210 feet above mean sea level (MSL) at the eastern end of the Site to approximately 190 feet above MSL at the western end of the Site, based upon the U.S. Geological Survey White Plains, New York 7.5-Minute Topographic Quadrangle Map dated 1967 and photorevised in 1979. The Bronx River is located approximately 1,500 feet west of the Site. Based upon a relative elevation survey of the monitor wells and depth to water measurements (discussed in Section 4.30), the inferred direction of regional groundwater flow is westerly toward the Bronx River. Regional groundwater flow patterns are subject to some variability as a result of subsurface structures including utilities, and drainage systems.



2.20 PREVIOUS ENVIRONMENTAL ACTIVITIES

Numerous documents were provided to GZA for this study, a list of which is included in Appendix B. The following background information was derived from these documents.

In January 1987, Emergency Environmental Services (EES) removed tar deposits from the interior wall and floor at the eastern end of the parking garage basement at 123 Main Street. EES determined the tar deposits were caused by gasoline seepage through the wall of the parking garage. In addition, EES installed a monitor well adjacent to the exterior wall, east of the parking garage. During the monitor well installation, soil samples were collected using a split-spoon at depths of 13.5 feet below ground (fbg) surface and 29 fbg. Based on odor and visual indicators, the presence of gasoline was reported in the soil samples. Neither soil nor groundwater samples were analyzed.

A February 1987 Spill Response Form filed with the New York State Department of Environmental Conservation (NYSDEC) indicated that an underground gasoline tank at the White Plains Police Department, 279 Hamilton Avenue had failed a tightness test.

In March 1987, EES installed four additional monitor wells east of the 123 Main Street parking garage in the driveway of the White Plains Police Department. During the monitor well installation, gasoline contamination was reported at two locations based on odor and visual indicators. EES concluded the underground tank located in the driveway of the White Plains Police Department appeared to have been the source of a release causing gasoline contamination in the soils surrounding the tank and gasoline seepage through the walls of the underground parking structure. Soil and groundwater analyses were not performed.

In June 1987, Malcolm Pirnie, Inc. conducted a Phase I Site Investigation and assessment of the gasoline spill from the underground tank behind the Police Department building for the City of White Plains. Free floating gasoline product was found in the monitor well located adjacent to the exterior of the eastern parking garage wall, a sheen of gasoline was reported in the garage footing drain sump, and organic vapors were detected in the storm sewer which receives the sump effluent. No analytical data were included in the report.

In December 1987, Malcolm Pirnie conducted a Field Investigation at the White Plains Police Station by drilling 21 borings in the driveway near the gasoline tank and eastern parking garage wall. Monitor wells were installed in four of the borings. Free floating gasoline product was measured at thicknesses greater than two feet in monitor wells both east and west of the underground storage tank. An area of gasoline contamination was determined by screening split-spoon samples from the soil borings with a photoionization detector (PID) and by laboratory analysis of select soil samples for total petroleum hydrocarbons. The area of contamination was determined to extend south to Williams Street, west to the parking garage wall, north along the parking garage wall, and for an



unknown distance east, possibly beneath the Police Department building. Malcolm Pirnie estimated the volume of contaminated soil at 200 cubic yards.

In September 1988, Malcolm Pirnie observed the removal of an underground gasoline storage tank and a nearby underground heating oil storage tank at the White Plains Police Department, 279 Hamilton Avenue. Twelve drums of gasoline wastes from the gasoline tank were reportedly removed for disposal. Soils surrounding the gasoline tank were removed during the tank pull and then were temporarily returned to the tank excavation which had been lined with plastic sheeting. According to correspondence by Malcolm Pirnie, the City of White Plains later contacted HAZCO to remove and dispose of the contaminated backfilled soils; soil volumes were not reported.

In March 1991, Malcolm Pirnie conducted a Phase I Environmental Assessment of 123 Main Street for the New York Power Authority (NYPA). During the investigation, two feet of gasoline was measured in the monitor well located adjacent to the exterior of the eastern parking garage wall, and an oily sheen was observed in the water collection troughs in the lower levels of the garage. In addition, a tar-like material was observed on the eastern wall of the parking garage level B2. Malcolm Pirnie concluded that the parking garage footing drain had lowered the groundwater level along the eastern wall of the parking garage causing the gasoline contamination to collect along the parking garage wall. When groundwater levels are above the footing drain level, during higher rainfall periods, gasoline was presumed to seep through the wall. At the time of the Phase I, groundwater levels were thought to be below the level of the footing drain, eliminating the seepage through the wall. During drought periods, Malcolm Pirnie felt product may become trapped beneath the parking garage due to a lowered water table. Malcolm Pirnie also concluded that the footing drain system was "recovering product and containing the contamination to a local area".

2.30 NEW YORK POWER AUTHORITY BUILDING PLANS

GZA reviewed available building plans for 123 Main Street with regard to below grade construction and drainage. In particular, we reviewed plans titled "Site Plan" and "Plan @ Levels E1. 178'-6"/183'-3", P1", both of the Centroplex Building, White Plains, New York, Stanley I. Horowitz, A.I.A., Architect.

Based on these plans, the ground surface elevation on the east side of the parking garage building is sloping to the north from about elevation 210 to elevation 204. The finished floor elevation inside the parking garage on the lowest level (adjacent to the east wall) is about elevation 183 or ± 25 feet below ground surface. The garage floor slopes downward toward the east. A footing drain system apparently surrounds and underlies the parking garage parameter. While exact elevations along the footing drain could not be ascertained, it appears that the elevation along the eastern garage wall is approximately elevation 180. The footing drain system discharges by gravity flow to a sump pit located on the southern side of the parking garage. The inlet elevation at the sump pit is noted on the Plan @



Levels El. 178'-6"/183'-3" as about elevation 168. Groundwater from the sump (and stormwater from the garage) is pumped (by 150-gallon per minute duplex pumps) to a catch basin (CB-2 on Figure 2) located outside and south of the building.

The presence of the building wall below the groundwater table and the presence of the footing drain system are expected to locally affect groundwater flow patterns, discussed in Section 4.30.

3.00 AIR QUALITY EVALUATION

GZA conducted an air monitoring study to preliminarily assess of human health risks from parking garage ambient air. On-site air monitoring was conducted to provide preliminary estimates of concentrations and to attempt to identify hot-spots. A representative air sample was then collected for more quantitative laboratory analysis. Concentrations of gasoline constituents measured were compared to OSHA Permissible Exposure Limits (PELs) for occupational exposure. Potential health risks were also assessed quantitatively using EPA human health risk assessment procedures. These activities are discussed in further detail below.

3.10 ON-SITE AIR MONITORING

On April 1, 1993, Valerie Roe, a GZA chemist, conducted on-site air monitoring in the lower level (B2) of the parking garage. The area evaluated is shown on Figure 3. Weather prior to and during the visit was rainy.

A walk-through was conducted to observe conditions in the lowest level of the parking garage and provide an overall assessment of VOC concentrations and distribution in the ambient air. During the walkthrough, photographs were obtained of the ceiling, wall, and floor of the B2 level of the garage. Those photographs are provided in Appendix C and document the existing leakage along the ceiling of the B2 level; some locations of photos are noted on Figure 3. The walk-through was conducted with a ThermoEnvironmental model OVM 580B photoionization meter and an MSA oxygen/combustible gas meter. The 580B provides a continual display of total organic vapors in air. This instrument cannot identify individual compounds, but provides an indication of total VOC levels. The MSA meter provides continual display of percent oxygen and percent of the lower explosive limit (LEL).

Total VOC concentrations were highest along the eastern wall on level B2. Readings were 3 parts per million (ppm) on level B1, 8 ppm on the ramp down to level B2, and 11 ppm at and within 20 feet of the eastern wall of level B2. Monitoring was conducted near several areas of seepage through the wall, but no particular "hotspots"/source areas of elevated concentrations were noted along the wall.



Oxygen levels were normal, between 20 and 21 %, on both levels B1 and B2. No readings above 0% LEL were observed, indicating an explosion hazard did not exist in the area assessed.

3.20 ON-SITE GAS CHROMATOGRAPHY

A Century Systems model OVA 128 portable gas chromatograph was used for on-site analysis of individual compounds in air samples. In addition to the samples, air standards containing benzene, toluene, ethylbenzene and xylenes were run. This allowed identification as well as quantitation for those compounds.

Samples were collected in a gas-tight syringe from discreet locations, then were immediately injected into the gas chromatograph. Sample locations are shown on Figure 3; results are summarized on Table 1. Nine air samples were collected from level B2 inside the garage, mostly near the eastern wall. Four air samples were collected from storm drains on the southern side of the garage, where the footing sump is believed to discharge.

The only compounds specifically identified in the samples were benzene and toluene, which are constituents of gasoline. Most of the samples also contained a number of compounds which appeared in a pattern consistent with gasoline. Benzene was estimated to be present at approximately 1 mg/m³; toluene was present in concentrations ranging from not detected (<3) to 5 mg/m³. No obvious distribution pattern or hotspots were observed.

Benzene and toluene results were compared to OSHA Permissible Exposure Limits (PELs) which are included on Table 1. PELs are enforceable limits for the concentration of particular constituents which workers may be exposed to, expressed as a time-weighted 8-hour average. As indicated, concentrations of benzene and toluene were within PEL limits. A PEL for gasoline as a whole has been established at 300 ppm (890 mg/m³). Based on OVM 580B readings, total VOC concentrations in the garage are also likely well below this limit.

3.30 LABORATORY AIR ANALYSES

One sample of ambient air from the southeastern corner of level B2 was collected on a charcoal tube for laboratory analysis as a confirmatory supplement to field analyses. The sample was collected using an SKC air sampling pump calibrated at a low flow rate (0.88 liters/minute) pumping a known period of time (40 minutes). The sample location corresponds approximately to field sample location A-1 (Figure 3). A blank sample was also prepared and submitted for analysis. Preparation of the blank involved breaking both ends off of a glass sample tube, then capping the ends and treating it as a sample without drawing any air through it.



CIGNA Environmental Health Laboratory analyzed the samples using a gas chromatography/mass spectroscopy (GC/MS) method. Results are summarized on Table 2; the laboratory report is attached in Appendix D. No compounds were detected in the blank, indicating there was no field or laboratory contamination. Benzene, toluene, ethylbenzene and xylenes were detected in the tube sample. Additional, tentatively identified compounds included alcohol, ethyl and methyl benzenes, and straight chain hydrocarbons. The laboratory indicated the pattern observed was similar to gasoline, which is consistent with site history.

Benzene was identified at 0.031 mg/m³ (laboratory) and 1 mg/m³ (field); toluene was reported at 1.2 mg/m³ (laboratory) and <3 to 5 mg/m³ (field). Portable gas chromatographic methods often yield overestimates for gasoline constituents due to the large number of components present and lower resolving power compared to laboratory instrumentation. Ethylbenzene and xylenes were reported by the laboratory at levels below detection limits for the field analysis. The laboratory test data suggest field GC data are conservative in assessing air quality in the impacted area.

3.40 PRELIMINARY RISK ASSESSMENT

While PEL limits (as described in Section 3.20) are the appropriate standards for the typical worker exposure concerns, they are not typically considered by regulatory authorities to be sufficiently conservative for exposures to the general public or to workers whose exposures to chemicals were to not be expected as part of their normal work. For this reason, GZA performed a preliminary risk assessment to more conservatively assess potential risks to the general public or Site workers. Risk assessments combine assumptions about exposure (such as frequency, duration, concentration, weight of individual) with chemical dose-response data to quantitatively assess risks. Dose-response data is information on toxicological effects of varying doses of individual chemicals.

The exposure assumptions used for this risk assessment were based on the probable most exposed individual, an adult worker in the garage (see Table 3). The exposure pathway is inhalation of air containing gasoline constituents. The worker was assumed to spend 4 hours per day in the B2 level, every work day for 30 years. These exposure assumptions are conservative; they tend to overestimate risks and should therefore be protective of public health.

Exposure factors from Table 3 were combined with VOC concentrations from laboratory analyses and dose-response data to calculate risks (Table 4). Risks were calculated for two types of effects: noncarcinogenic effects (such as skin rash or liver degeneration) and carcinogenic effects. Benzene was the only carcinogenic compound identified, therefore, carcinogenic risks are considered entirely due to benzene.

Noncarcinogenic risks are expressed as a Hazard Index. This is a general indicator of whether exposures are likely to result in adverse health effects. Hazard indices for



individual compounds are additive. EPA considers a total Hazard Index of 1.0 or above to be of concern. The Hazard Index conservatively calculated for chronic worker exposure in level B2 is 0.75 indicating that non-carcinogenic risks are below EPA levels of concern.

Carcinogenic risks are expressed as probabilities corresponding to the estimated incremental risk. EPA's target incremental cancer risk range is 10^{-4} to 10^{-6} . These numbers represent a range of 1 in 10,000 to 1 in 1,000,000 that cancer will develop in an exposed individual. EPA guidance suggests comparing cumulative site risks to a 10^{-5} limit. The carcinogenic risk calculated for inhalation of level B2 air was 1.2×10^{-5} , slightly above the target risk range. Again this risk would be for an adult worker spending four hours per day, every work day for 30 years in the B2 level of the garage.

The carcinogenic and noncarcinogenic risk estimates for worker exposure are both borderline (close to EPA limits). Due to the conservative assumptions used (4 hours per day in the B2 area every work day for 30 years) we believe actual risks are much lower.

3.50 DISCUSSION

Based on field and laboratory analyses, concentrations of gasoline-related VOCs in the garage were below OSHA PELs. Note however, that ambient air conditions in the garage are dependent on a number of factors, such as air temperature, the amount of precipitation, and the groundwater level. No obvious hotspots or source areas were noted in level B2. Total VOC concentrations were the same at the eastern well and 20 feet from the wall. It is possible that off-gassing from vehicles parked in the area contributed to the VOCs measured.

A human health risk assessment was conducted for the probable most exposed individual, a worker in the garage. Carcinogenic and noncarcinogenic risks were close to EPA's acceptable limits, even using conservative assumptions. Actual risks are likely much lower. Risks to individuals in the garage briefly to park and retrieve vehicles would be well below these estimated risks.

3.60 RECOMMENDATIONS

Based upon the results of both field screening and laboratory analysis which indicated 1) concentrations of gasoline-related VOCs in level B2 of the parking garage to be below OSHA permissible exposure limits, 2) oxygen levels to be normal throughout the area of investigation, and 3) no readings above zero percent of the lower explosive limit were present, GZA does not recommend any remedial action relating to the breathable air or explosive limits in the garage interior. However, monthly monitoring of air for volatile organic compounds using portable gas chromatograph techniques in the B2 level would be prudent and is recommended. In addition, on a weekly basis, garage staff should monitor air quality using an explosimeter to verify vapor levels and approaching explosive limits.

When further testing is done in this area to monitor conditions over time and/or to attempt to identify the source of VOCs, we would suggest testing be conducted in the absence of vehicles in the B2 level. In addition, we recommend air monitoring in the sump pump room, an area to which we were not provided access.



4.00 SUBSURFACE CONDITIONS

4.10 FIELD METHODS

Subsurface data was collected using field auger borings and geoprobes. Techniques are described in Sections 4.11 and 4.12. Exploration logs are included in Appendix E. Exploration locations are shown on Figure 2.

4.11 Auger Boring and Monitor Well Installations

On April 5 through 9, 1993, General Borings of Prospect, Connecticut completed eight borings at the study Site using auger techniques at locations selected by GZA. Monitor wells (shown on Figure 2) were designated as PA-1, PA-3, and PA-9 were installed in three of the eight borings. Borings labelled PA-2, PA-4, PA-5, PA-7 and PA-8 were not completed as monitor wells and were backfilled with auger spoils after the completion of the soil sampling.¹

Monitor well borings were advanced using 4¼-inch hollow stem augers to depths ranging from 24 to 25.8 feet below ground surface (fbg). The soil borings were advanced using either 3¼ or 2¼-inch hollow stem augers (in order to reduce the volume of auger, spoils). The drillers arrived each day with sufficient clean augers to complete each days drilling. Augers were steam cleaned off-Site before reuse. Soil borings were advanced to depths ranging from 12 to 30.4 fbg.

Soil samples were collected from each of the borings with a 1½-inch inside diameter, 24-inch long, split-spoon sampler at five foot intervals. In borings PA-8 and PA-9, split-spoon samples were obtained at 0.5-2.5 and 5-7 feet below grade and in continuous two-foot depth increments from 10 feet below ground surface to the base of the borings to further characterize changes in contaminant levels with depth.

¹ A boring PA-6 was planned but not drilled since our experience at PA-7 indicated gasoline vapor emissions were likely to resulting in potentially hazardous drilling conditions and air quality concerns for pedestrian and vehicular traffic. In addition, borings with monitor wells were originally planned for installation within the B2 level of the garage, however we were subsequently informed that a steel plate underlies the garage floor. Since the plate was installed in response to groundwater inflow during construction, drilling through the garage floor was abandoned in consultation with the NYPA. Instead, piezometers were installed west of the building as described in Section 4.12.



GZA personnel observed the boring and monitor well installations, logged soils and collected soil samples. Each soil sample was described according to the Burmister soil classification system. Soil samples were screened in the field for VOCs with a portable 10.2 eV HNu Model PI-10-1 photoionization detector (PID) or 10.0 eV ThermoEnvironmental Instruments Model 580B PID and then placed on ice for additional laboratory analysis. In general, soils encountered consisted of fine to medium sand to a depth of approximately 20 fbg, and dense to very dense sand with variable amounts of gravel below 20 feet.

Monitor wells PA-1, PA-3 and PA-9 consist of 15-foot long, 2-inch diameter (I.D.), 10 slot (0.01-inch), schedule 40 PVC well screen set at base depths of 24 to 26.5 fbg. The wells were completed to ground surface with 2-inch (I.D.), threaded, flush-joint, schedule 40, PVC riser pipe. The annulus around each well was backfilled with filter sand to two feet above the top of the well screen where a two foot thick bentonite seal was installed. The remaining annulus was backfilled with grout. Monitor well screens were set to span the groundwater table such that at least six feet of well screen was above the groundwater table encountered during drilling.

All monitor wells were capped with curb boxes cemented two inches above grade, as specified by the City of White Plains Public Works Department. Each monitor well was developed by over pumping until the development water was clear. No solvents or glues were used in the monitor well construction. Auger spoils and development waters from the monitor wells were containerized in drums for later disposal.

4.12 Geoprobe Borings and Piezometer Installations

On April 24, 1993, Zebra Environmental Corporation of Cedarhurst, New York, completed three geoprobe borings (PA-11, PA-12 and PA-13) on the former Police Station garage property located at 279 Hamilton Avenue and two borings (PA-14 and PA-15) on the west side of the property located at 123 Main Street². Geoprobe piezometers were installed in borings PA-13, PA-14, and PA-15 and were constructed of 5/8-inch ID PVC. Geoprobe borings and piezometers were chosen in lieu of auger borings/monitor wells due to Site access constraints (west side) and to mitigate potential exposures to highly contaminated soil/soil vapors (former Police Garage area; Figure 2).

The geoprobe borings were completed using a van mounted, hydraulically powered Geoprobe Model 8-M soil probe unit. The unit uses hydraulic percussion to drive small diameter (1" to 1.4" O.D.) steel probing tools into unconsolidated soils. In contrast to traditional drilling techniques, hydraulically driven probing tools do not result in cuttings from the borehole and do not disturb the ground surface. The soil probe unit provides ease of mobilization and speed of sample collection.

² Designation PA-10 was not used for any boring, monitor well or piezometer.



GZA personnel observed the geoprobe boring and piezometer installations, logged soils and collected soil samples. Soil samples were collected from borings with a 1½-inch inside diameter, 24-inch long Probe-Drive Sampler with acetate liner attached to the leading end of the probe rod. As noted on the geoprobe logs, soil samples were taken at ten feet below ground surface and at 5-foot intervals thereafter at locations PA-11, PA-12 and PA-13. No soil samples were collected at locations PA-14 and PA-15 as these locations were downgradient of the building and unsaturated soil contamination was not suspected. Each soil sample was described according to the Burmister Soil Classification System and was field-screened for VOCs with a 10 eV portable ThermoEnvironmental Instruments Model 580B PID. The PID results are presented on the boring logs in Appendix E.

Test borings were terminated when refusal on the probe-drive sampler at 20 to 26 fbg occurred at locations PA-11, PA-12 and PA-13 (east side of the Site at 279 Hamilton Avenue). Boreholes PA-14 and PA-15 were driven to 13 and 18 fbg, respectively for piezometer installation purposes. Test borings completed at the former garage area (east side of Site) indicated the presence of fine to medium sand in samples from 10 and 15 fbg. Samples from below 20 feet consisted of dense sand with variable amounts of gravel. Piezometer PA-13 consists of 9 feet of 60-micron polyurethane filter protected in ¾-inch perforated PVC casing, set at approximately 9 to 17 feet below the ground surface. Piezometers PA-14 and PA-15 (west side of Site near Grove Street) consist of 4 feet of 60-micron polyurethane filter in ¾-inch PVC protective casing, set approximately 9 to 13 and 14 to 18 feet, respectively, below the ground surface.

4.20 GEOLOGY

Unconsolidated deposits in the Site area were mapped by Cadwell (1989)³ as a variable mantle of rock debris and glacial till deposits. In general, observed overburden materials from the borings completed at the Site by GZA consisted of dense fine to medium sand with trace amounts of gravel overlying very dense⁴ fine to medium and fine to coarse sand which generally occurred at depths of eighteen feet or more below ground. At depths between 20 and 30 feet below ground, soils became extremely dense (with standard test blow counts >100/6-inches). Extremely dense soils were encountered at boring PA-1,

³ Cadwell, K. H. 1989. Surficial Geological map of New York. The University of the State of New York, Lower Hudson Sheet.

⁴ Relative density of soil is determined by blows per 12-inches on a 1½ inch I.D. sampler driven into the ground with a 140 pound hammer falling 30-inches. This procedure constitutes a standard penetration test. Medium dense soils are defined to have blow counts between 10 and 30 per 12-inches; dense soils are 31-50 per 12-inches; very dense soils have blow counts >50 per 12-inches.



PA-2, PA-4, PA-5 and PA-8 as well as at several borings by others.⁵ Typically such high blow counts would suggest that the bedrock surface had been encountered, however drill augers penetrate the material and little indication of bedrock was observed in drill cuttings or soil samples. Figure 4 presents a cross-section through the area east of the parking garage. The section location is shown on Figure 2.

Bedrock in the White Plains area is comprised of intensely folded and faulted Cambrian-Ordovician sedimentary (shale, graywacke, limestone) and metamorphic (phyllite, schist, quartzite and marble) formations⁶. No bedrock outcrops were observed at the Site and bedrock was not encountered during the drilling activities by GZA or others.

4.30 HYDROGEOLOGY

On April 29, 1993, Diversified Technologies surveyed the elevations of the tops of the Site monitor wells relative to a benchmark of arbitrary elevation, the top of the southeast corner of the parking garage retaining wall. The surveyed elevations were then corrected to represent mean sea level elevations, based upon the known elevation of the top of the southeast corner of the retaining wall. Table 5 presents corrected water table elevation data at each well based on the survey. Groundwater table elevations at each well were used to construct an inferred groundwater contour map, as shown in Figure 2. Based upon the inferred groundwater contour map, groundwater beneath the Site generally appears to flow west from the former Police Station garage toward the NYPA garage. The 123 Main Street garage footing drain (and active pumping from the footing drain to a nearby stormwater system) has locally depressed the groundwater table immediately around the building causing a steep flow gradient on the easterly side of the NYPA parking garage.

4.40 SOIL AND GROUNDWATER SAMPLING AND ANALYTICAL RESULTS

4.41 Soil Sample Results

- Volatile Organic Compounds

GZA field-screened the soil samples for VOCs using either a 10.2 eV HNu Model PI-101 photoionization detector (PID) or 10.0 eV ThermoEnvironmental Instruments Model 580B PID, which respond to most organic vapors and some inorganic materials, but not the natural components of air. Meter responses of tested soil samples ranged from none detected to 1777 units of measurements. High concentrations of VOCs

⁵ Including B-2, B-5, B-6, B-7, B-8, W-5, B-10, B-12, B-13, B-14, W-6, B-16, B-17, W-8, and B-21 on Figure 4.

⁶ Fisher, D.N., et al 1976. Landforms and Bedrock Geology of New York, The University of the State of New York.

(> 10 meter unit response) were detected by the PID in soil samples⁷ collected from all of the borings except PA-1, PA-2, PA-4, PA-5, PA-11 and PA-12. High PID response in unsaturated (above water table) soil samples were recorded for soils from borings PA-3 (at 10 feet and below), PA-7 (at 5 feet and below), and PA-13 (10 feet and below). Other boring soils with high PID response were obtained from below the groundwater table. The PID field-screening results are presented on the boring logs in Appendix E.



At least one sample from each boring (except PA-14 and PA-15 where no soil samples were obtained) was sent to GZA's Environmental Chemistry Laboratory (ECL) in Newton, Massachusetts to be analyzed for VOCs by EPA Method 8021. EPA Method 8021 is used to determine volatile halogenated and aromatic compounds. This method is applicable to nearly all types of samples, regardless of water content. In addition, one soil sample from borings PA-3, PA-7, PA-8, and PA-9 each were analyzed for selected extractable metals⁸ by Toxicity Characteristic Leaching Procedure methodology. The metals samples were selected to include those with high PID response relative to other samples to provide "worst case" metals data in gasoline impacted areas. The VOC and metals results are presented on Tables 6 and 7, respectively. Laboratory data are presented in Appendix F.

No VOCs were detected in soil samples from borings PA-1 and PA-5; only low levels (less than 6 parts per billion [ppb]) of one or more aromatic (gasoline related) VOCs (including toluene, ethylbenzene, xylenes, and trimethylbenzenes) were detected in soil samples from borings PA-2, PA-4, PA-11 and PA-12 and unsaturated soils from PA-8 and PA-9. These analytical results are consistent with PID meter responses.

Elevated levels of up to ten VOCs were detected in soil samples from borings PA-3, PA-7, PA-8, PA-9 and PA-13. All detected VOCs were constituents of gasoline; up to 3,657,400 ppb of VOCs (total) were detected (PA-7, 5-7 feet below ground). The VOC analytical results are summarized on Table 6.

VOC concentrations in tested soil samples from borings PA-3, PA-7, PA-8, PA-9, and PA-13 exceed the New York State Department of Environmental Conservation (NYSDEC) TCLP Alternative Guidance Value⁹ for petroleum-contaminated soil. The TCLP Extraction Guidance Values are equal to the NYSDEC groundwater standards, or the NYSDOH drinking water standards, whichever is more stringent. TCLP Alternative Guidance Values are used when contaminant concentrations in soil have been determined by EPA Method 8021, and are equal to 20 times TCLP Extraction Guidance Values.

⁷ Soil samples were not collected at geoprobe locations PA-14 and PA-15 due to their location relative to the contaminant source area.

⁸ Arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver.

⁹ STARS memo #1, Petroleum-Contaminated Soil Guidance Policy, NYSDEC, August, 1992.



According to DEC guidance policy for petroleum contaminated soils,⁶ soils containing constituents in excess of TCLP Extraction Guidance Values require ex-situ or in-situ remediation. Soils containing constituents above TCLP Alternative Guidance Values may require remediation. Given that Site soils were as much as 7,400 times the Alternative Guidance Value (toluene at PA-7), we believe remediation should be performed. Figures 4 and 5 indicates the estimated extent of unsaturated (above water table) soils containing VOCs above Guidance Values based on data developed by GZA and review of available boring logs by others. We estimate that about 1,000 cubic yards of unsaturated soil within a 2,000 square foot area requires remediation.

- Metals

Leachable barium and lead were detected in soil samples from borings PA-3, PA-7, PA-8 and PA-9. Leachable silver was detected in soil samples from boring PA-8 and PA-9. Leachable metals concentrations were well below toxicity criteria for hazardous waste characterization. A summary of the metals analytical results are presented on Table 7. Laboratory data is provided in Appendix F.

4.42 Groundwater, Sump and Catch Basin Sampling and Results

On May 1, 1993, GZA personnel measured for floating product and collected groundwater samples from five of seven previously installed monitor wells (W-1, W-2, W-3, W-7, W-8), from the three newly installed monitor wells (PA-1, PA-3, PA-9) and from two of the three piezometers installed (PA-14, PA-15). Due to slow recharge, groundwater from piezometer PA-13 was sampled on May 12, 1993.

Prior to sampling, depth to product and depth to water was measured at each location and monitor wells were either bailed dry and allowed to recharge (W-1, W-2, W-3 and PA-1 only), or three to five times the volume of standing water within the well was evacuated with a dedicated pre-cleaned stainless steel bailer. Piezometers PA-13, PA-14 and PA-15 were purged dry using dedicated tubing and a Geotech Environmental peristaltic pump. Groundwater samples were collected with the same stainless steel bailer or the same tubing used to evacuate the well. After sampling, groundwater samples were stored on ice and shipped to GZA's Environmental Chemistry Laboratory (ECL) for VOC analyses by EPA Method 8021.

A floating product layer was detected in only one monitor well (W-8), where it was 4.05 feet thick. In addition to collecting a groundwater sample from monitor well W-8, a sample of the floating product in this well was collected for hydrocarbon fingerprinting since it appeared darker and more viscous than is typical for gasoline.

East of the parking garage, depth to groundwater was found to range from 12.64 feet below the ground surface at monitor well W-3 to approximately 26.7 feet below ground surface (under a 4 foot floating product layer) at monitor well W-8. West of the



parking garage (near Grove Street) depth to water ranged from 9.8 (PA-14) to 11.8 (PA-15) feet below ground surface.

In addition to groundwater sampling, water samples were obtained from a sump located at the northeast corner of the B2 level in the parking garage at 123 Main Street (labelled Sump Northeast on Figure 2) and from the two street catch basins along the north side of Williams Street adjacent to the south side of the parking garage (labelled Catch Basins East and South on Figure 2). One additional water sample was collected by Mr. William Slade of New York Power Authority on May 3, 1993 from the central sump (labelled Sump south) located on the south side of the lowest level of the parking garage.

The water samples were field-screened for pH and specific conductance, and sent to GZA's ECL for VOC analysis by EPA Method 8021. Screening results are summarized on Table 8. Laboratory results are summarized on Table 9 (Groundwater) and 10 (Sump and Catch Basins). Laboratory reports are provided in Appendices G and H.

4.42.1 Groundwater Results

pH values of groundwater samples (Table 8) ranged from 6.5 (W-2) to 7.4 (W-3) standard units (s.u.) for the east side of the Site (former Police Department garage area, 279 Hamilton Avenue). pH of groundwater samples were 7.3 (PA-14) and 7.4 (PA-15) s.u. along the west side of the Site near Grove Street. These values are within the range normally anticipated in groundwater.

Specific conductance values (Table 8) ranged from 1,300 $\mu\text{mhos/cm}$ (PA-3) to 6,500 $\mu\text{mhos/cm}$ (W-7) for groundwater samples collected on the east side of the Site and from 1,800 $\mu\text{mhos/cm}$ (PA-15) to 2,050 $\mu\text{mhos/cm}$ (PA-14) for groundwater samples collected on the west side of the Site. No particular locational pattern or correlation to VOCs in groundwater is observable with specific conductance values. However, these values are high relative to those typically observed in groundwater.

Table 9 shows no detectable (sample W-3) to low levels (15 ppb or less) of up to ten VOCs were detected in groundwater samples from monitor wells PA-1, PA-14, PA-15, W-2 and W-3 and W-7. High concentrations (greater than 10,000 ppb) were detected in remaining groundwater samples (PA-3, PA-9, PA-13, W-1 and W-8). The majority of detected VOCs are aromatic constituents typical of gasolines. Hydrocarbon fingerprinting of the floating product from monitor well W-8 indicated the product was gasoline.

Low levels (less than 1 ppb) and below State and Federal drinking water standards of halogenated VOCs including chloroethane, 1,1-dichloroethene, 1,1-dichloroethane, 1,2-dichloroethane, and trichloroethene were detected in monitor well samples PA-14, PA-15, and W-7. Detected halogenated VOCs are frequently used as

solvents or degreasers or are degradation products of these materials and are not normal constituents of gasoline.

Groundwater samples from PA-3, PA-9, PA-13, W-1 and W-8 contain VOCs substantially above New York State Water Quality Standards (NYS WQS: 6NYCRR X703.5) for nine to ten separate compounds¹⁰. The area of observed impact to groundwater is shown on Figure 5. This area of impact is consistent with the source of contamination being the documented release from the former underground gasoline tank.

Sample PA-15, obtained west of the 123 Main Street building contained benzene (0.72 ppb) and toluene (6.3 ppb) only slightly in excess of NYS WQS (0.7 ppb and 5 ppb, respectively); this area is not considered to be a primary impact area.

It appears that a portion of the gasoline contaminated groundwater is currently captured and removed by the garage footing drain. In addition, since the base of the gasoline floater was found to exist more than three feet above the garage footing drains, the floating product layer is likely confined to an area east of the footing drain unless the regional groundwater table decreases to below the elevation of the footing drain. Given the concentrations of detected contaminants, remedial efforts for floating product recovery and groundwater within the identified impact area would be prudent.

Contaminated groundwater may also be present beneath the 123 Main Street building garage floor. However as demonstrated by water quality at monitor wells PA-14 and PA-15, the concentration of gasoline constituents in groundwater west (downgradient) of the 123 Main Street building is low.

A summary of the analytical results for VOCs in groundwater samples is presented in Table 9. Laboratory data is presented in Appendix G.

4.42.2 Catch Basins and Sump Results

pH values for water samples from sumps and catch basins ranged from 7.2 (sump south) to 7.9 s.u. (sump northeast). These values are within the range normally anticipated.

Specific conductance values for water samples collected at the two sumps ranged from 2,300 μ mhos/cm (catch sump south) to 2,400 μ mhos/cm (sump northeast), while the catch basin specific conductance values ranged from a low value of 420 μ mhos/cm (CB-1 on Figure 2) to 2,200 μ mhos/cm (CB-2 on Figure 2). Results are similar to groundwater data, discussed in Section 4.42.1.

¹⁰ Including benzene; toluene; ethyl benzene; (M,O&P) xylenes; n-propylbenzene; 1,3,5- and 1,2,4-trimethylbenzenes; and n-butyl benzene.



VOCs were detected in water samples collected from both sump locations and both catch basins as shown on Table 10. Chlorinated VOCs, were detected in the northeast sump (sump NE) sample (at the B-2 level of the garage) and both catch basin samples; all other detected VOCs were aromatic VOCs typical of gasoline constituents. The catch basin east sample contained only 0.41 ppb of cis 1,2-dichloroethene (which is below NYS WQS), while the other sump and catch basin samples contained (above NYS WQS) levels of up to twelve VOCs. It is our understanding that the northeastern sump and footing drains discharge to the south sump by pumping. While no information was provided regarding actual pumping frequency and discharge rates, building plans indicate two 150-gallon per minute pumps. From the south sump, water is pumped to the so called south catch basin (CB-2 on Figure 2). Water in CB-1 discharges toward CB-2 which in turn discharges to the stormwater system flowing to the west.

A summary of the analytical results for VOCs in the sump and catch basin samples is presented in Table 10. Laboratory data is presented in Appendix H.

5.00 WASTE CHARACTERIZATION SAMPLING AND ANALYTICAL RESULTS

On May 12, 1993, GZA obtained composite samples of the auger spoils and purge water generated from the Site investigation for characterization purposes. The soil sample was analyzed for VOCs by EPA Method 1311/8240 (TCLP), flashpoint, TCLP Metals and for PCBs by EPA Method 8080. The water sample was analyzed for VOCs by EPA Method 8021, flashpoint, 8 RCRA Metals and PCBs by EPA Method 8080. Analytical results are attached in Appendix I.

No extractable VOCs or PCBs were detected in the auger spoil composite sample. The sample flashpoint was above 220 degrees fahrenheit indicating the drum spoils are not ignitable. Extractable metals analyses indicated that barium and lead were contained in the sample at concentrations at or below water quality standards. These analytical data indicate that the auger spoil samples (7 drums) are contaminated but are not hazardous wastes.

The purge water composite sample contained gasoline related VOCs¹¹ (48,480 ppb, total) and relatively low concentrations of barium, cadmium, chromium, and lead. No PCBs were detected. The sample flashpoint was 54 degrees fahrenheit, likely as a result of a gasoline floater as part of the sample. Based on the sample flashpoint, the purge water (3 drums) likely requires disposal as a hazardous waste.

¹¹ Including benzene, toluene, ethyl benzene, xylenes, and other related benzene products (i.e., n-propyl-, 1,3,5-trimethyl-, 1,2,4-trimethyl and n-butyl-benzene).

New composite samples of soils and wastewater will be obtained the week of August 9, 1993. The two samples will be submitted to Chemical Waste Management (CWM) for characterization as a precondition of disposal approval. Drum disposal is anticipated to occur, under appropriate manifests when approval is received from CWM.

6.00 CONCEPTUAL REMEDIAL OPTIONS



Conceptual recommendations for remedial actions are provided below. After NYPA has reviewed this report, we recommend that the report be transmitted to the DEC and a meeting be scheduled with DEC to discuss and obtain DEC concurrence prior to design and implementation.

Our recommendations fall into four main issues:

- 1) Monitoring of air and water quality;
- 2) Recovery of floating product;
- 3) In-situ remediation of contaminated soil/groundwater in the vicinity of the former tank; and
- 4) Contaminated stormwater discharges.

The recommendations provided below should not be viewed necessarily as recommended actions for NYPA to implement, but as those actions which should be implemented by the responsible party to address site issues. Costs provided below are preliminary and approximate. They are subject to change pending final design, regulatory review and approvals, and results of recommended pilot tests.

6.10 MONITORING

A monitoring program should be implemented to assess long term trends in garage vapors and footing drain water quality. We recommend a monthly program to monitor for gasoline related volatile organic compounds (e.g., benzene, toluene, ethylbenzene, xylenes). Recommended monitoring includes 1) air quality in the eastern portion of the B2 garage level and 2) water quality discharged from the catch basin CB-2. Air monitoring should be done using the portable gas chromatograph technique described in Section 3.00. In addition, on a weekly basis, garage staff should monitor air quality using an explosimeter to verify vapor levels and approaching explosive limits. CB-2 water should be analyzed for VOCs by EPA Method 8020. Costs for the monthly monitoring are estimated to be around \$1,000 per month.

6.20 FLOATING PRODUCT RECOVERY

In general, recovery of floating product incorporates both groundwater depression, to direct floating product to a collection point, and a floating product collection/recovery system. In the case of this Site, the garage footing drains serve as a groundwater depression system and create a groundwater elevation gradient towards the east foundation wall of the parking garage. Thus, it appears that floating product is collecting along the east foundation wall, as evidenced by significant floating product thickness at monitor well W-8.



To collect and remove floating product, we recommend that recovery from this well be initiated by manual bailing. Product should be bailed on a weekly basis for approximately one month and rates of product flow back into the well should be recorded. Manual bailing should serve as a pilot test to assess feasibility of and, if appropriate, design an automated recovery system. A 55-gallon product collection drum or small tank which can be disposed of or emptied when full should be used to store collected product and should be secured near the collection well. Based on our knowledge of the gasoline/water mixture, it must be disposed of as a hazardous waste. Costs associated with weekly manual bailing of monitor well W-8 for 4 weeks and disposal of one drum of gasoline wastes are estimated to cost about \$4,300 with waste characterization and transportation as part of a "milk-run".

Based on available data, we believe an automated system for recovery product will prove feasible and cost effective. Subject to results of manual bailing and final design, we anticipate product recovery would be performed in 4 to 6, 4-inch diameter wells drilled along the eastern edge of the parking garage. There are a variety of recovery systems on the market.

Such systems utilize a pumping system where the intake of the pump is maintained in the floating product layer, usually by a specific buoyancy float which will float on water but sink in petroleum products. The system pumps product either continuously or intermittently to a collection tank, from which product can be withdrawn as needed. A standard 275-gallon fuel oil tank is typically used. The pumping systems are generally either electrical or pneumatic. The systems are capable of unattended operation, employ explosion proof electrical components, and would employ a product collection tank level sensor to prevent overfilling. A suggested location for the collection area is shown on Figure 6.

Typical costs for the design, installation and start-up of such systems should be on the order of \$50,000. Operation and maintenance (O&M) costs should range between \$10,000 to \$15,000 per year. Disposal costs will vary depending on the amount of product recovered but should be on the order of about \$6,000-8,000 assuming 550 gallons of gasoline is recovered. Based on available data, system operation is anticipated to require two-years or less.

6.30 IN-SITU SOIL/GROUNDWATER REMEDIATION



Site data indicate high levels of gasoline constituents are present in site soil and groundwater. Even if product is effectively recovered as discussed in Section 6.20, this contamination would continue to impact the NYPA parking garage for an indefinite period of time. We, therefore, recommend that active remedial actions be taken to remove the source of this impact. We believe the cost-effective feasible remedial technology is a soil venting system, with the add on capability of groundwater remediation by air sparging.

Soil venting is in-situ air stripping of volatile compounds from soils. Volatilization of contaminants is induced by moving air through the contaminated zone and extracting it using low vacuum for subsequent treatment of the contaminated air. Airflow rates for a 70-foot by 100-foot area (slightly larger than the impact area shown on Figure 5; see Figure 6) would typically be 200 to 1,000 cubic feet per minute (cfm), depending on soil properties.

A conceptual soil venting system for this Site would include a system of air inlet and extraction wells, a vacuum blower, and a vapor phase VOC control such as an activated carbon canister or catalytic incineration device. Figure 6 shows the recommended area to be remediated by soil venting and provides a suggested location for above ground structures.

A soil venting system typically requires treatment of the air discharge, which would likely require either an air discharge permit, or a determination by NYSDEC that no permit was required. The air treatment choice between carbon adsorption and incineration (catalytic or otherwise) is primarily determined by the concentration of volatile hydrocarbons in the extracted air stream. A pilot test is used to determine the type of air emission controls necessary. The pilot system involves installing an extraction well and vacuum probes, and use a trailer mounted vacuum blower with activated carbon for air emission control. Usually, no air discharge permit is required as the pilot trial typically lasts about one week. The pilot trial and associated subsurface installations can usually be performed in the same time period. Based on the results of the pilot test the numbers and locations of air inlet and extraction wells can be defined.

An air sparging system performs "in-situ" air stripping of volatile compounds in the groundwater by introducing air below the groundwater table. The air is pressurized just sufficiently to overcome the hydraulic head. As air bubbles rise through the saturated zone, the soil particles act as the packing does in a packed tower air stripper, serving to break up air bubbles and promote contact between air and water phases. The volatilized compounds in the air stream are collected using the soil venting system described above.

In addition to the air sparging inlet wells, a source of low pressure air is required, normally provided by an air compressor. Thus adding an air sparging component to a soil venting system is cost effective.



A concern with air sparging is control of the volatile contaminated air flow. It is important, especially when operating in areas near buildings, to carefully design the system so that contaminated air is collected by the extraction/vacuum blower. Otherwise contaminated air streams containing volatiles may escape and travel through permeable zones to basements, catch basins and the like.

A soil venting system, consisting of approximately 20 inlet and extraction wells, manifolded to a vacuum blower and carbon canisters, and housed in a simple utility shed on concrete slab foundation, is anticipated to cost \$150,000 to \$200,000 to pilot test, permit, design, install and operate for approximately one year.

The soil venting system alone is anticipated to reach the point of diminishing returns, with respect to efficient removal of volatiles, within six to twelve months. At that time, the air sparging system (preliminarily estimated to include about 15 sparge points) can be installed and operated for an additional 12 months at an estimated (additional) cost of \$40,000 to \$60,000 including monthly air discharge monitoring.

If the soil venting/air sparging system is still efficiently and effectively removing volatiles from the subsurface at the end of the second year, an additional year's operations should cost \$25,000 to \$35,000 depending primarily on granular activated carbon consumption rates.

At the end of the system's useful life, the major component of the shutdown cost would be disposal (as hazardous) of any remaining contaminated activated carbon. Costs are estimated at approximately \$30,000-\$40,000. The utility building and equipment, along with any above ground piping, would be removed, and inlet and extraction wells filled with grout.

Activation of the sparging system in areas of floating product is not recommended until floating product recovery (Section 6.20) is completed. Final design of the venting/sparging system should be performed after conducting a pilot test on the site to assess field conditions.

6.40 STORMWATER DISCHARGES

Contaminated waters are currently being discharged to the city stormwater system, which ultimately discharge to the Bronx River. Detected concentrations in a sample from catch basin CB-2 exceeded NYSDEC Water Quality Standards for several constituents as well as EPA Maximum Contaminant Levels for benzene. As discussed in Section 6.10, we recommend monthly monitoring of the water quality during the period where the remedial actions discussed above are implemented. The remedial actions described in Sections 6.20 and 6.30 should ultimately prove effective in reducing stormwater discharges to acceptable levels.



Alternately, a treatment system could be installed to reduce VOC concentrations of the discharge. A granular activated carbon (GAC) filter unit capable of handling a 150 gpm discharge could likely be designed and installed for approximately \$25,000 to \$50,000. Minimum O&M costs of about \$20,000 should be anticipated. However, significantly higher O&M costs could result depending on carbon utilization rates which cannot be reasonably predicted without VOC concentration data over time. (Used GAC filters are assumed to require management as a hazardous waste until regenerated.) Monthly water quality monitoring costs of about \$7,000 to \$9,000 per year could also be anticipated.

7.00 SUMMARY AND RECOMMENDATIONS

GZA GeoEnvironmental, Inc. (GZA) conducted a Petroleum Contamination Site Investigation and Feasibility Study at 123 Main Street and 279 Hamilton Avenue in White Plains, New York. The Site Investigation included preparing a photographic record of seepage in the interior of the 123 Main Street parking garage; performing an air quality assessment for gasoline constituents in the B2 level of the parking garage; drilling eight soil borings (three were completed as monitoring wells); performing five geoprobe soil borings (three were completed as piezometers) and sampling and analyzing soil and water.

Soil samples were field-screened for volatile organic compounds (VOCs) with a photoionization detector, and selected soil samples were analyzed for VOCs and extractable metals (TCLP). Groundwater samples were collected from accessible existing and newly installed monitor wells, field-screened for pH, and specific conductance, and analyzed for VOCs. Water samples were also collected from two sumps within the parking garage and two catch basins adjacent to the garage and were analyzed for VOCs. Samples of soil cuttings and purge water for metals, VOCs, PCBs and flashpoint for disposal characterization were also obtained.

Based upon the studies performed as part of this Site Investigation and Feasibility Study, we offer the following conclusions related to environmental conditions and provided our recommendations for corrective action for 123 Main Street and 279 Hamilton Avenue. The recommendations should not necessarily be viewed as actions for NYPA to implement, but as those actions which should be implemented by the party assuming responsibility for gasoline contamination noted herein.

- Gasoline related VOCs were detected in ambient air in the B2 level of the 123 Main Street parking garage but at concentrations below OSHA permissible exposure limits. A human health risk assessment, conducted for the probable most exposed individual, a worker in the garage, indicated carcinogenic and noncarcinogenic risks were close to EPA's acceptable limits, even using conservative assumptions. Actual risks are likely lower for workers and are well below EPA acceptable risk limits for the general public. No remedial additional actions are currently recommended for this area. However, monthly monitoring



for gasoline related volatile organic compounds (e.g., benzene, toluene, xylene, ethylbenzene) is recommended until remedial actions related to source reduction of gasoline in soil/groundwater is completed.

- A four foot thick layer of gasoline was measured at a monitor well located within a few feet of a footing drain surrounding the 123 Main Street parking garage. The presence of this floating layer (which was not detected elsewhere) suggests gasoline is ponding likely against the building wall. GZA recommends that the floating product layer be removed. This recovered free product will be a hazardous waste, and will require disposal to an approved recycling or incineration facility. Initially, we recommend weekly manual bailing from monitor well W-8 for a period of one month. As product is removed, the product removal rate and inflow to the well should be measured to evaluate design parameters for an automated gasoline recovery system.

Based on our current understanding of Site conditions we believe intermittent automated recovery through 4 to 6 recovery wells as shown in Figure 6, along the footing drain will effectively remove this floating layer.

- Unsaturated soil contamination and saturated soil and groundwater contamination were identified in the vicinity of a former gasoline tank and east of the NYPA parking garage at levels significantly above New York State Department of Environmental Conservation Petroleum-Contaminated Soil Cleanup Standards and New York State's Standards for Groundwater Quality. This contamination will continue to impact NYPA's parking garage for an indefinite period of time unless remediated. We, therefore, recommend active remediation to remove the contamination's source. We recommend pilot testing to design and install a soil vapor extraction system with the add on capability of groundwater remediation by air sparging.

Soil venting and air sparging systems have been successfully utilized in a variety of geologic settings. The efficiency of systems increase as soil grain size increases and the gradation variability of soils decrease. While the density of soils recommended for remediation is of concern, soils generally consist of fine to medium sands with only trace amounts of silts. These soils should therefore, be amenable to the recommended treatment systems. Pilot testing will be utilized to verify that recommended remedial methods will perform as intended and will provide necessary information for system design.

- Levels of VOCs were identified in two parking garage sumps and both catch basins adjacent to the south side of the parking garage. One catch basin is apparently impacted by an unrelated VOC source area. The second catch basin receives discharge from the garage sumps which contain gasoline related VOCs. We recommend that monthly water quality monitoring of the discharge to the catch

basin be implemented during the period where remedial actions discussed above are implemented. The remedial actions should result in improved sump water quality over time. Alternately, a granulated activated carbon filter (GAC) treatment system could be installed on the sump discharge prior to pumpage to the storm sewer system.



- Low levels of VOCs were identified in both monitor wells on the west side of the Site. Some of the detected VOCs may have originated from a source other than the Police Department's gasoline tank failure and release. While groundwater from one monitor well slightly exceeded water quality standards, remediation beyond that recommended above does not appear to be warranted.

8.00 LIMITATIONS

GZA's Petroleum Contamination Site Investigation and Feasibility Study was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area. GZA's findings and conclusions must be considered not as scientific certainties, but rather as our professional opinion concerning the significance of the limited data gathered during the course of the preliminary environmental site assessment. No other warrant, express or implied, is made. Specifically, GZA does not and cannot represent that the Site does not contain hazardous materials or oil beyond that observed by GZA during its site evaluation. This Report is also subject to the specific limitations contained in Appendix A.

This study and Report have been prepared on behalf of and for the exclusive use of New York Power Authority solely for use in an environmental evaluation of the Site.



TABLES

TABLE 1

RESULTS OF ON-SITE AIR SCREENING
 NEW YORK POWER AUTHORITY
 WHITE PLAINS, NEW YORK

SAMPLE NO.	LOCATION DESCRIPTION	ESTIMATED CONCENTRATIONS (mg/m ³)	
		BENZENE	TOLUENE
A-1	5' height, SE corner	1.4	ND
A-2	ceiling, near column 2	0.95	3.3
A-3	1" above water in drain trench, near column 3	0.95	ND
A-4	1" above water in drain trench, near column 4	1.4	5
A-5	5' height, near seepage between columns 3 and 4	0.95	ND
A-6	5.5' height, below drip spout, wall near column 5	1.9	ND
A-7	NE corner, near dripping crack in ceiling	0.95	ND
A-8	1" above water in drain trench, near column 5	1.4	ND
A-9	5' height, background sample, half level up ramp, 150 feet west of impacted wall	ND	ND
SD-1	Southeastern storm drain	ND	ND
SD-2 (15:00)	Southwestern storm drain; no odor noted; low/no water flow occurring	ND	ND
SD-2 (15:20)	Southwestern storm drain; strong odor; no discharge from garage occurring	ND	ND
SD-2 (15:35)	Southwestern storm drain; weak odor; discharge from garage occurring	ND	ND
OSHA PEL		3.2	750

Notes:

1. Samples collected and analyzed by GZA on April 1, 1993. Screened on-site using an OVA 128 gas chromatograph. Only compounds detected are reported on this table. Detection limits are approximately 0.9 mg/m³ for benzene, 3 mg/m³ for toluene, 8 mg/m³ for ethylbenzene, and 10 mg/m³ for xylenes.
2. OSHA PEL is the enforceable OSHA Permissible Exposure Limit for an eight-hour daily exposure.

TABLE 2

RESULTS OF LABORATORY ANALYSES (AIR SAMPLES)
 NEW YORK POWER AUTHORITY
 WHITE PLAINS, NEW YORK

SAMPLE NO.	COMPOUND	CONCENTRATION (mg/m ³)	OSHA PEL (mg/m ³)
1	Benzene	0.031	3.2
	Toluene	1.2	750
	Ethylbenzene	0.37	434
	Xylenes	1.6	434
2 (blank)	None Detected	--	--

Notes:

1. Samples collected on charcoal tubes on April 1, 1993 by GZA. Analyzed by CIGNA Environmental Health Laboratory of Cromwell, Connecticut.
2. Sample No. 1 was also reported to contain alcohol, ethyl and methyl benzenes, and straight chain hydrocarbons, in a pattern which the laboratory indicated appeared similar to gasoline.
3. OSHA PEL is the enforceable OSHA Permissible Exposure Limit for an eight-hour daily exposure.

TABLE 3
ESTIMATION OF EXPOSURE FACTORS
INHALATION EXPOSURES - ADULT WORKER
NEW YORK POWER AUTHORITY
WHITE PLAINS, NEW YORK

VARIABLE	VALUE	NOTES
Age	18 to 65 years	1
Average body weight	70 kilograms	2
Duration of exposure	4 hours/day	3
	250 days/year	3
	30 years/lifetime	3
Lifetime averaging factor for carcinogenic risks	30 years/70 years	4
Inhalation rate	0.8 m ³ /hour	5
Exposure point concentration	measured mg/m ³	6
ESTIMATION OF AVERAGE DAILY DOSES FOR INHALATION PATHWAY:		
Non-carcinogenic effects:		
Dose (mg/kg/day)	- concentration in air (mg/m ³) x 1/bodyweight (1/kg) x days/year x 1 year/365 days x hours exposed/day x inhalation rate (m ³ /hr)	
	- concentration (mg/m ³) x 3.1E-02 (m ³ /kg/day)	
Carcinogenic effects:		
Dose (mg/kg/day)	- concentration in air (mg/m ³) x 1/bodyweight (1/kg) x days/year x 1 year/365 days x hours exposed/day x inhalation rate (m ³ /hr) x averaging factor (years/years)	
	- concentration (mg/m ³) x 1.3E-02 (m ³ /kg/day)	
NOTES:		
1. Adults aged 18 to 65 were selected to represent the potential occupational receptor population working in the parking garage.		
2. Body weight from US EPA "Exposure Factors Handbook", July 1988. Value is the mean body weight for adult men and women.		
3. Duration of exposure based on 4 hours per day, 250 days per year of work in the level B2 area.		
4. Lifetime averaging factor based on 30 years of exposure over a 70 year lifetime. 30 years represents the 80th percentile for the number of years lived at one residence.		
5. Inhalation rate for adult performing light work from "Exposure Factors Handbook", EPA, March 1988, Table 3-1.		
6. For preliminary estimates, the exposure point concentrations used will be the results of air sample No. 1 collected April 8, 1983.		

TABLE 4
CALCULATION OF AVERAGE DAILY DOSES AND RISK ESTIMATES
INHALATION EXPOSURES - ADULT WORKER
NEW YORK POWER AUTHORITY
WHITE PLAINS, NEW YORK

NONCARCINOGENIC RISK

PARAMETER	EPC ($\mu\text{g}/\text{m}^3$)	EXPOSURE FACTOR ($\text{hr}/\text{kg}\cdot\text{day}$)	AVERAGE DAILY DOSE ($\mu\text{g}/\text{kg}\cdot\text{day}$)	CHRONIC RfD ($\mu\text{g}/\text{kg}\cdot\text{day}$)	HAZARD INDEX
Benzene	3.10E-02	3.1E-02	9.0E-04	2.8E-03	3.7E-01
Toluene	1.20E+00	3.1E-02	3.7E-02	1.1E-01	3.4E-01
Ethylbenzene	3.70E-01	3.1E-02	1.1E-02	2.8E-01	4.0E-02
Xylenes	1.80E+00	3.1E-02	5.0E-02	NA	NA
				SUBTOTAL	7.5E-01

CARCINOGENIC RISK

PARAMETER	EPC ($\mu\text{g}/\text{m}^3$)	EXPOSURE FACTOR ($\text{hr}/\text{kg}\cdot\text{day}$)	AVERAGE DAILY DOSE ($\mu\text{g}/\text{kg}\cdot\text{day}$)	CSF ($\mu\text{g}/\text{kg}\cdot\text{day}$)	INHERITAL CANCER RISK
Benzene	3.10E-02	1.3E-02	4.0E-04	2.9E-02	1.2E-05
Toluene	1.20E+00	1.3E-02	1.6E-02	NA	NA
Ethylbenzene	3.70E-01	1.3E-02	4.8E-03	NA	NA
Xylenes	1.80E+00	1.3E-02	2.1E-02	NA	NA
				SUBTOTAL	1.2E-05

NOTES:

1. EPC - Exposure point concentration; concentrations used are laboratory results for tube sample collected 4/8/93.
2. Determination of exposure factors is shown on Table 2.
3. RfD - Reference Dose; values obtained from US EPA Integrated Risk Information System and, for benzene, back-calculation from the Lowest Observed Adverse Effects Level of 32 mg/m^3 . Inhalation reference concentrations were converted to Reference Doses using the following equation:

$$\text{RfD}(\text{inh}) = \text{RfC}(\text{mg}/\text{m}^3) \times 20 \text{ m}^3 \text{ air inhaled/day} \times 1/70 \text{ kg bodyweight}$$
 NA indicates not available or not applicable.
4. CSF - cancer slope factor for inhalation; value obtained from US EPA Health Effects Assessment Summary Tables, 1992.

TABLE 5

WATER TABLE ELEVATION DATA
NEW YORK POWER AUTHORITY
WHITE PLAINS, NEW YORK

WELL	REFERENCE ELEVATION ¹ (ft)	CORRECTED ELEVATION ²	DEPTH TO WATER ³ (5/1/93)	WATER TABLE ELEVATION
PA-1	95.51	207.68	14.56	193.12
PA-3	97.44	209.61	15.25	194.36
PA-9	97.48	209.65	17.09	192.56
PA-13	97.27	209.44	15.18	194.26
PA-14	83.10	195.27	9.8	185.47
PA-15	82.95	195.12	11.8	183.32
W-1	97.88	210.05	17.53	192.52
W-2	98.02	210.19	18.78	191.41
W-3	92.53	204.70	12.64	192.06
W-7	96.91	209.08	19.84	189.24
W-8	97.81	209.98	26.71 ⁴	183.27

Notes:

1. Reference elevations are located at the top monitor well curb boxes/steel casing and are based on the difference in elevation relative to an arbitrary (assumed 100.00 feet) benchmark established at the top of the southeast corner of the garage retaining wall.
2. Corrected elevation based upon difference (112.17') between benchmark of arbitrary elevation, top of southeast corner of retaining wall and known elevation of top of southeast corner of retaining wall (212.17').
3. Depth to water in feet below the reference elevation at each well as measured on May 1, 1993.
4. Corrected depth to water based upon specific gravity of gasoline equal to .68. Height of floating product in W-8 = 4.05'.

TABLE 6

SUMMARY OF VOC ANALYTICAL RESULTS OF SOIL SAMPLES
 NEW YORK POWER AUTHORITY
 WHITE PLAINS, NEW YORK
 Page 2 of 2

Sample (Depth below grade)	EPA 8021 (ppb)										
	Benzene	Toluene	Ethyl Benzene	m,p Xylenes	o- Xylenes	Isopropyl- benzene	n-Propyl- benzene	1,3,5- Trimethylbenzene	1,2,4- Trimethylbenzene	sec- Butylbenzene	n- Butylbenzene
PA-9 (18-20')	ND	1.100	33,000	85,000	49,000	4,000	26,000	89,000	75,000	ND	3,500
PA-11 (15-17')	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
PA-12 (15-17')	ND	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
PA-13 (10-12')	ND	4.700	7,700	15,000	14,000	2,000	8,200	26,000	24,000	ND	15,000
PA-13 (19-21')	ND	8,000	13,000	26,000	22,000	4,700	18,000	59,000	69,000	ND	27,000
TCLP Alternative Guidance Value (ppb)	14	100	100	100 ²	100	100	100	100	100	100	100

Notes:

BMQL = Below Method Quantitation Limit; ND = Non-detect; ppb = Parts per billion; NS = No Standard; 1) Samples analyzed for volatile organic compounds by GZA Environmental Chemistry Laboratory, Newton, Massachusetts; Shaded boxes indicate results that exceed either the Federal or State standards. 2) Value for M or O xylenes.

TABLE 8

pH AND SPECIFIC CONDUCTANCE FIELD SCREENING DATA¹
 NEW YORK POWER AUTHORITY
 WHITE PLAINS, NEW YORK

SAMPLE	pH (standard units)	SPECIFIC CONDUCTANCE (μ mhos/cm)
PA-1	7.0	6,000
PA-3	7.0	1,300
PA-9	6.7	3,300
PA-13 ²	--	--
PA-14	7.3	2,050
PA-15	7.4	1,800
W-1	6.8	3,500
W-2	6.5	2,500
W-3	7.4	2,700
W-7	6.8	6,500
W-8	7.1	3,100
Sump Northeast	7.9	2,400
Sump South	7.2	2,300
Catch Basin East	7.8	420
Catch Basin South	7.2	2,200

Notes:

1. Groundwater samples were collected by GZA on May 1, 1993 and field-screened for pH using a Beckman portable pH meter Model $\text{O}11$ and specific conductance using a YSI S-C-T meter Model 33.
2. Monitor well PA-13 was purged dry and did not recharge during the sampling event.

TABLE 9

SUMMARY OF VOC ANALYTICAL RESULTS OF GROUNDWATER SAMPLES
 NEW YORK POWER AUTHORITY
 WHITE PLAINS, NEW YORK

PARAMETERS (ppb)	PA-1	PA-3	PA-9	PA-13	PA-14	PA-15	W-1	W-2	W-3	W-7	W-8	NYSDEC'S WATER QUALITY STANDARDS	US EPA MAXIMUM CONTAMINANT LEVEL
HALOGENATED VOCs													
Chloroethane	ND	ND	ND	ND	0.97	ND	ND	ND	ND	ND	ND	5	NS
1,1-Dichloroethane	ND	ND	ND	ND	ND	1.2	ND	ND	ND	ND	ND	5	7
1,1-Dichloroethane	ND	ND	ND	ND	0.36	ND	ND	ND	ND	ND	ND	5	NS
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.67	ND	0.8	5
AROMATIC VOCs													
Benzene	0.39	2,500	ND	50,000	0.020	0.72	ND	0.22	ND	ND	120,000	5	5
Trichloroethane	ND	ND	ND	ND	ND	0.22	ND	ND	ND	ND	ND	5	5
Toluene	0.57	20,000	12,000	180,000	2.1	6.3	2,000	0.38	ND	2.1	180,000	5	1,000
Ethyl Benzene	ND	3,500	1,900	3,700	0.29	0.81	3,000	ND	ND	1.6	49,000	5	700
m&p Xylenes	0.82	13,000	6,000	200,000	2.3	2.4	8,800	0.29	ND	3.9	140,000	5	10,000*
o-Xylene	0.74	5,000	2,100	17,000	1.2	1.3	790	ND	ND	1.2	53,000	5	10,000*
n-Propylbenzene	ND	450	300	4,900	ND	0.23	330	2.3	ND	ND	7,900	5	NS
1,3,5-Trimethylbenzene	1.4	1,300	760	5,700	0.40	1.0	950	1.4	ND	0.95	39,000	5	NS
1,2,4-Trimethylbenzene	3.4	3,200	1,500	5,400	0.32	0.29	2,100	2.0	ND	1.4	45,000	5	NS
n-Butylbenzene	0.33	140	150	1,300	1.2	0.92	140	1.4	ND	2.1	27,000	5	NS
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.48	ND	5	5

Notes:

ppb = Parts per billion; ND = Non-detect; NS = No Standard; 1) Samples analyzed by EPA Method 8021 for VOCs by GZA's Environmental Chemistry Laboratory, Newton, Massachusetts; Shear boxes indicate concentrations which meet or exceed State or Federal water quality standards. 2) A sample of floating product from monitor well W-8 was fingerprinted by ASTM Method D3328 confirm the nature of the float; 560,000 ppm of petroleum hydrocarbon identified as gasoline was reported. 3) According to Title 6, Chapter X, parts 700-705 (Water Quality Regulations), standards for principal organic contaminants is 5 ppb absent any other criteria. 4) MCL based on total (m, p & o) xylenes.

TABLE 10

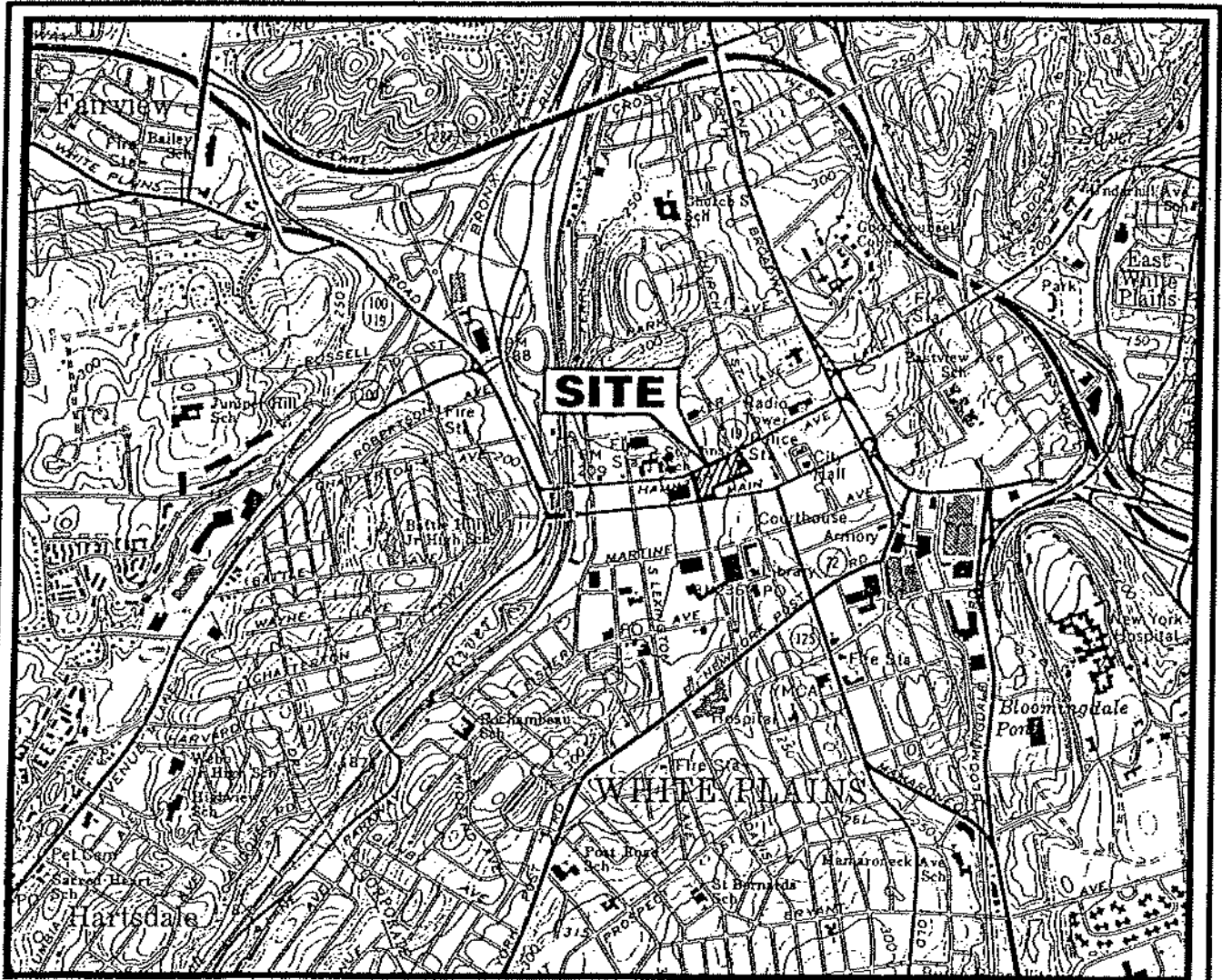
SUMMARY OF VOC ANALYTICAL RESULTS OF SUMP AND CATCH BASIN SAMPLES¹
 NEW YORK POWER AUTHORITY
 WHITE PLAINS, NEW YORK

PARAMETER (ppb)	SUMP NE	SUMP SOUTH	CATCH BASIN EAST (CB-1)	CATCH BASIN SOUTH (CB-2)	NYS WATER QUALITY STANDARDS (ppb)
HALOGENATED VOCs					
1,1-dichloroethane	ND	ND	ND	0.21	5
1,1-dichloroethane	6.8	ND	ND	1.0	5
Cis-1,2-dichloroethane	ND	ND	0.41	ND	5
1,1,1-trichloroethane	47	ND	ND	2.0	5
AROMATIC VOCs					
Benzene	ND	170	ND	130	0.7
Toluene	1.4	5.3	ND	ND	5
Ethyl benzene	1.5	36	ND	27	5
m&p xylenes	2.4	1.6	ND	0.86	5
o-xylenes	1.0	1.5	ND	1.0	5
Isopropylbenzene	ND	ND	ND	5.4	5
n-propylbenzene	0.40	23	ND	17	5
1,3,5-trimethylbenzene	ND	ND	ND	1.9	5
1,2,4-trimethylbenzene	0.82	25	ND	23	5
n-butylbenzene	0.39	5.3	ND	21	5

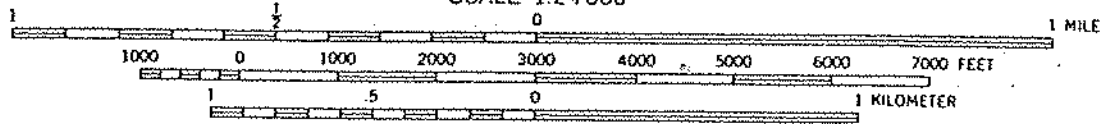
Notes:

ppb = Parts per billion; ND = Non-detect; 1) Samples analyzed by EPA Method 8021 for VOCs by GZA's Environmental Chemistry Laboratory in Newton, Massachusetts. Shaded boxes indicate concentrations which exceed State effluent standards. 2) NYS DEC water quality standards for surface waters; shown for informational purposes. According to 6 NYCRRX703.5, a 5 ppb value is assigned to each principle organic contaminant, except for those that are individually listed (e.g., benzene).

FIGURES



SCALE 1:24 000



WHITE PLAINS, N. Y.

N4100—W7345/7.5

1967
 PHOTOREVISED 1979
 AMS 6266 III SE—SERIES V821

Mapped, edited, and published by the Geological Survey
 Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs
 taken 1965. Field checked 1967
 Supersedes map dated 1957



QUADRANGLE LOCATION



N.Y. POWER AUTHORITY
 WHITE PLAINS, NEW YORK

DESIGNED BY: G.B.F. DRAWN BY: K.U.
 CHECKED BY: G.J.C. SCALE: 1"=2000'
 REVIEWED BY: K.A.C. DATE: MAY, 1993

PROJECT No.
50726

SITE LOCUS

GZA GeoEnvironmental, Inc.

FIGURE No.
1

GZA

APPENDIX A
LIMITATIONS

LIMITATIONS

1. The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by Client. The work described in this report was carried out in accordance with the Terms and Conditions of our contract.
2. In preparing this report, GZA GeoEnvironmental, Inc. has relied on certain information provided by state and local officials and other parties referenced therein, and on information contained in the files of state and/or local agencies available to GZA GeoEnvironmental at the time of the site assessment. Although there may have been some degree of overlap in the information provided by these various sources, GZA GeoEnvironmental did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this site assessment.
3. In the event that Client obtains information on environmental or hazardous waste issues at the site not contained in this report, such information shall be brought to GZA GeoEnvironmental's attention forthwith. GZA GeoEnvironmental will evaluate such information and, on the basis of this evaluation, may modify the conclusions stated in this report.
4. Observations were made of the site and of structures on the site as indicated within the report. Where access to portions of the site or to structures on the site was unavailable or limited, GZA GeoEnvironmental renders no opinion as to the presence of hazardous material or oil, or to the presence of indirect evidence relating to hazardous material or oil, in that portion of the site or structure. In addition, GZA GeoEnvironmental renders no opinion as to the presence of hazardous material or oil, or to the presence of indirect evidence relating to hazardous material or oil, where direct observation of the interior walls, floor, or ceiling of a structure on a site was obstructed by objects or coverings on or over these surfaces.
5. The purpose of this report was to assess the physical characteristics of the subject site with respect to the presence in the environment of tested chemical constituents. It should be noted that additional chemical constituents not searched for during the current study may be present in soil and/or groundwater at the site. No specific attempt was made to check on the compliance of present or past owners or operators of the site with federal, state, or local laws and regulations, environmental or otherwise.
6. The conclusions and recommendations contained in this report are based in part upon the data obtained from a limited number of soil and/or groundwater samples obtained from widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.
7. Water level readings have been made in the test pits, borings, and/or observation wells at the times and under the conditions stated on the test pit or boring logs. However, it must be noted that fluctuations in the level of groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.
8. The conclusions and recommendations contained in this report are based in part upon various types of chemical data and are contingent upon their validity. These data have been reviewed and interpretations made in the report. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, these data should be reviewed by GZA GeoEnvironmental, and the conclusions and recommendations presented herein modified accordingly.

9. The costs on which the preliminary remediation estimate is based are limited to those conditions which were discovered in carrying out the assessment of subsurface contamination identified in this report. Actual quantities and unit costs will vary. While the preliminary estimate represents our best professional judgment in this matter, it does not represent an absolute worst-case remedial cost estimate. The preliminary estimate includes only those cost items identified, and should not be assumed to include other costs such as legal, administrative or permitting costs.
10. The preliminary estimate is based on limited data which may not be sufficient to identify each and every condition existing at the site which may constitute noncompliance with applicable governmental statutes, rules, and regulations or constitute a release of oil or hazardous materials. The preliminary estimate does not include any element with respect to third-party claims, fines, penalties, or other charges which may be assessed against any responsible party because of either the existence of present conditions or the future existence or discovery of any such conditions.
11. Governmental agencies' interpretations, requirements, and enforcement policies vary from district office to district office, from state to state, and between federal and state agencies. In addition, statutes, rules, standards, and regulations may be legislatively changed and inter-agency and intra-agency policies may be changed from present practices. GZA GeoEnvironmental, Inc. has used its experience and judgment in making assumptions as to how anticipated changes in enforcement policies may affect remediation costs.
12. This report contains approximate cost estimates for purposes of evaluating alternative remedial programs. These estimates involve approximate quantity evaluations. A preliminary estimate of this nature is likely to vary substantially from Contractors' Bid Prices and is not to be considered the equivalent of nor as reliable as Contractors' Bid Prices. Prices for similar work undertaken in the future will be subject to general and sometimes erratic price increases. The costs of future environmental, technical, and engineering services which may be required to implement any corrective action or remediation or installation of any systems cannot be accurately estimated.
13. It is recommended that GZA GeoEnvironmental be retained to provide engineering services during final design, construction and/or implementation of any remedial measures recommended in this report. This is to allow GZA GeoEnvironmental to observe compliance with the concepts and recommendations contained herein, and to allow the development of design changes in the event that subsurface conditions differ from those anticipated.



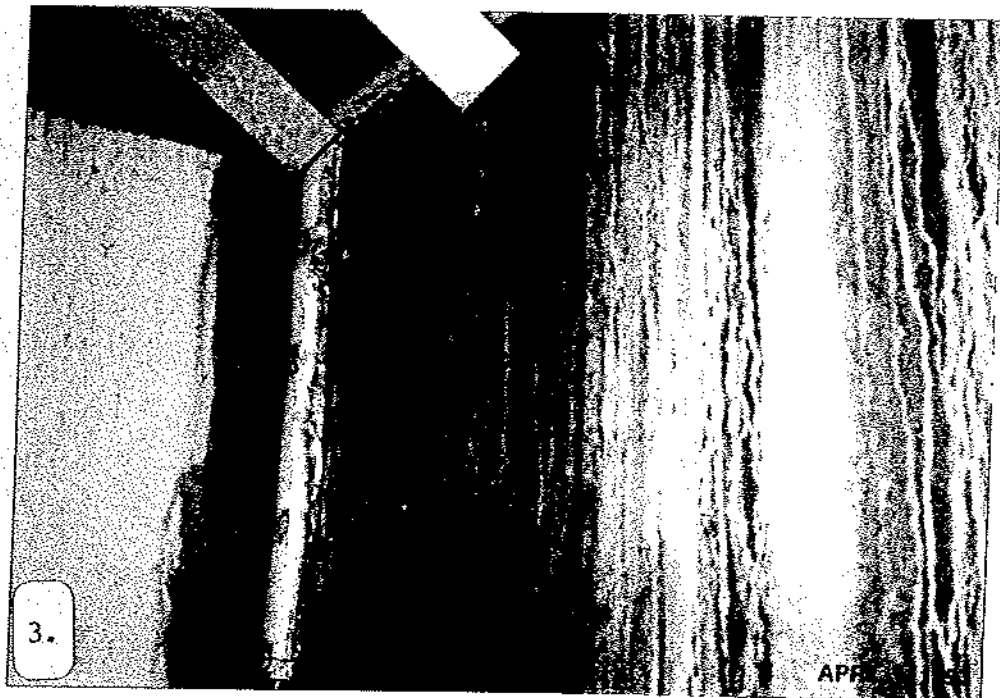
APPENDIX B

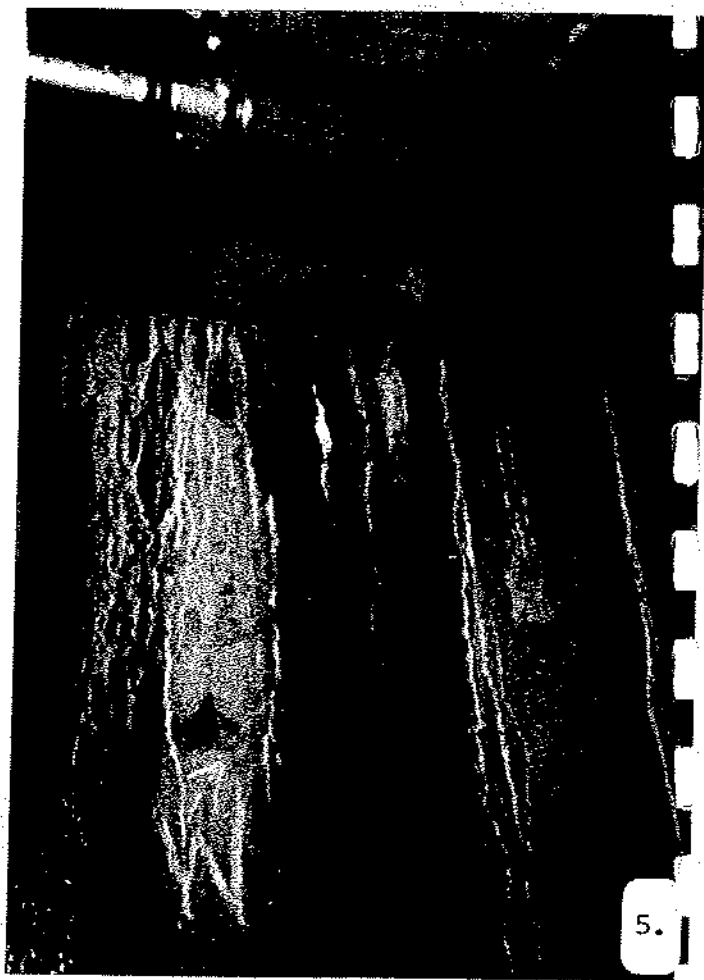
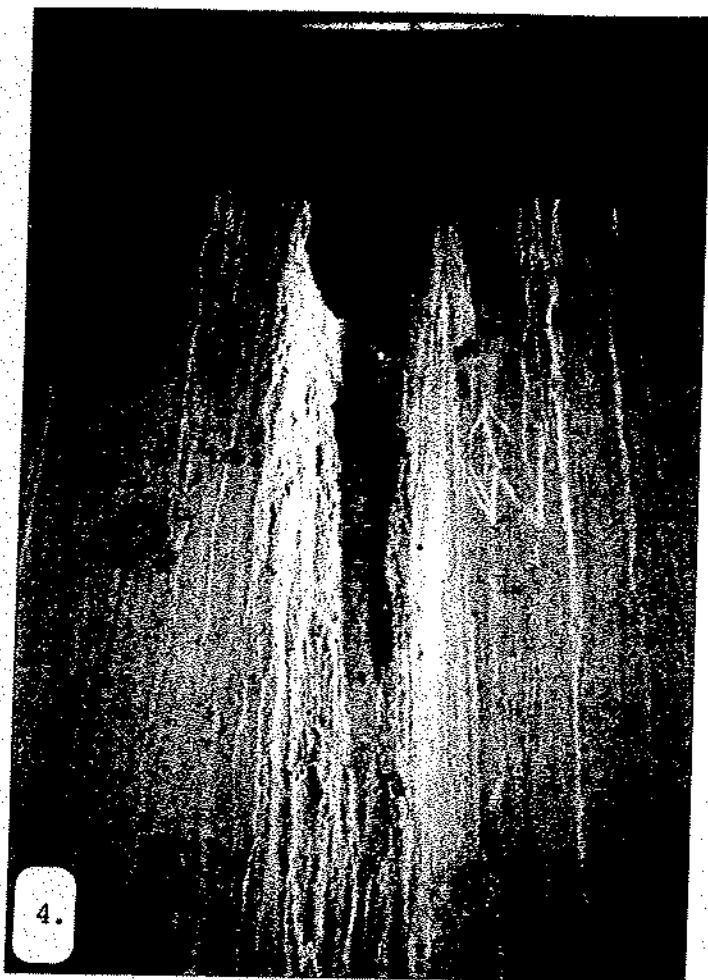
DOCUMENTS PROVIDED TO GZA

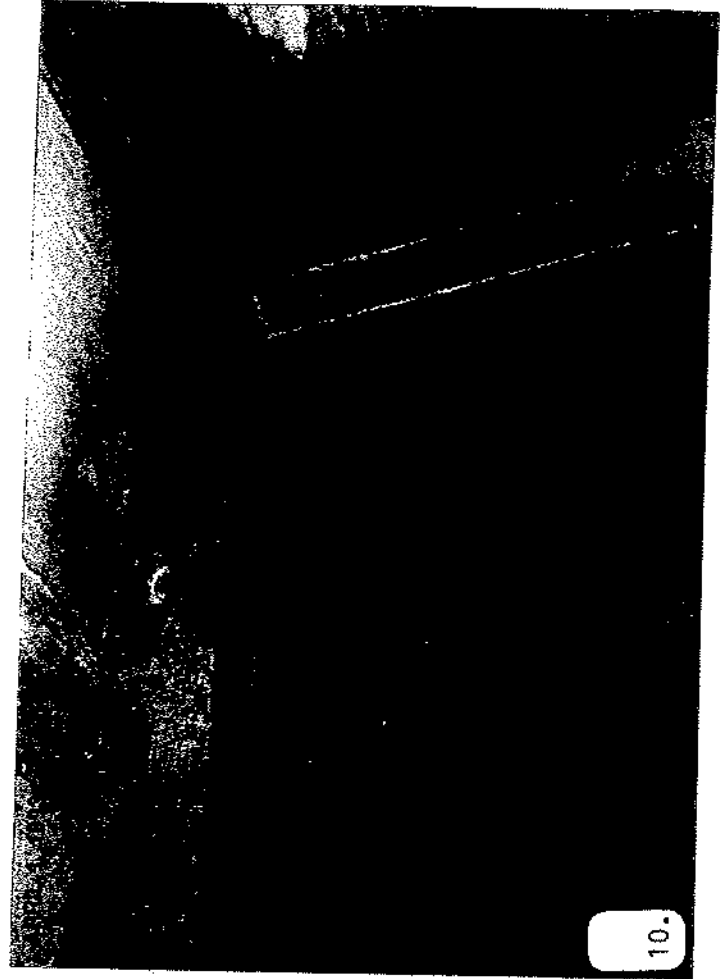
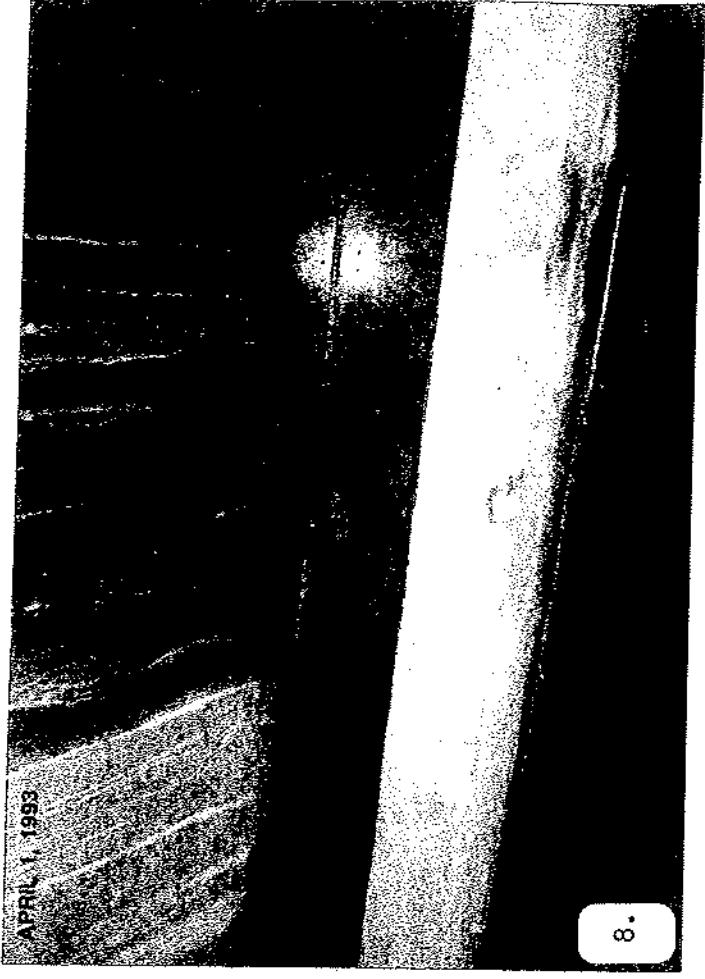
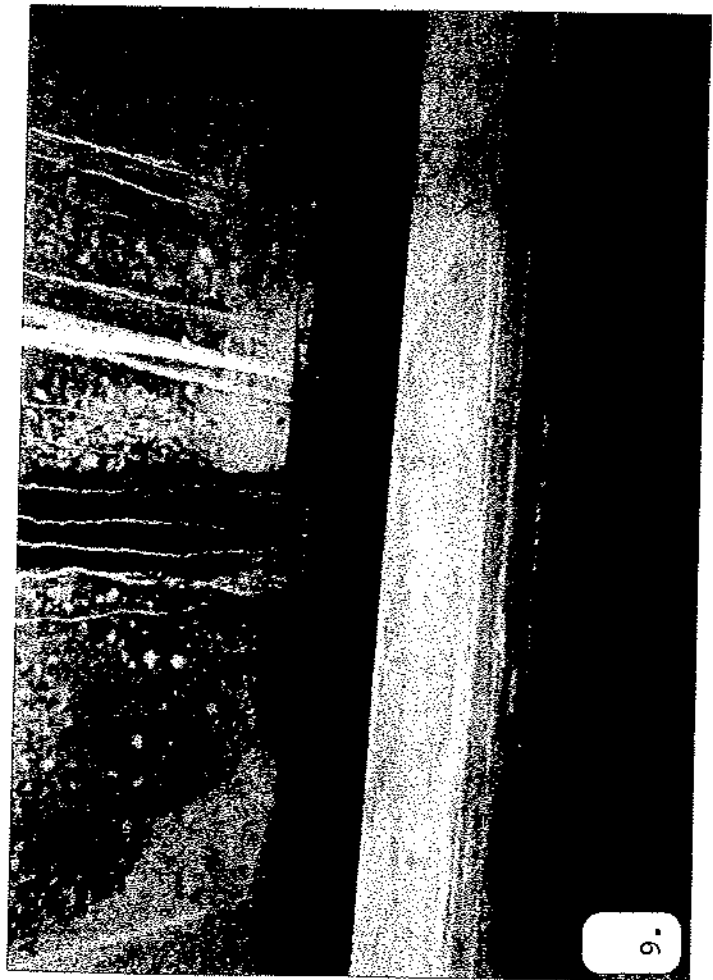
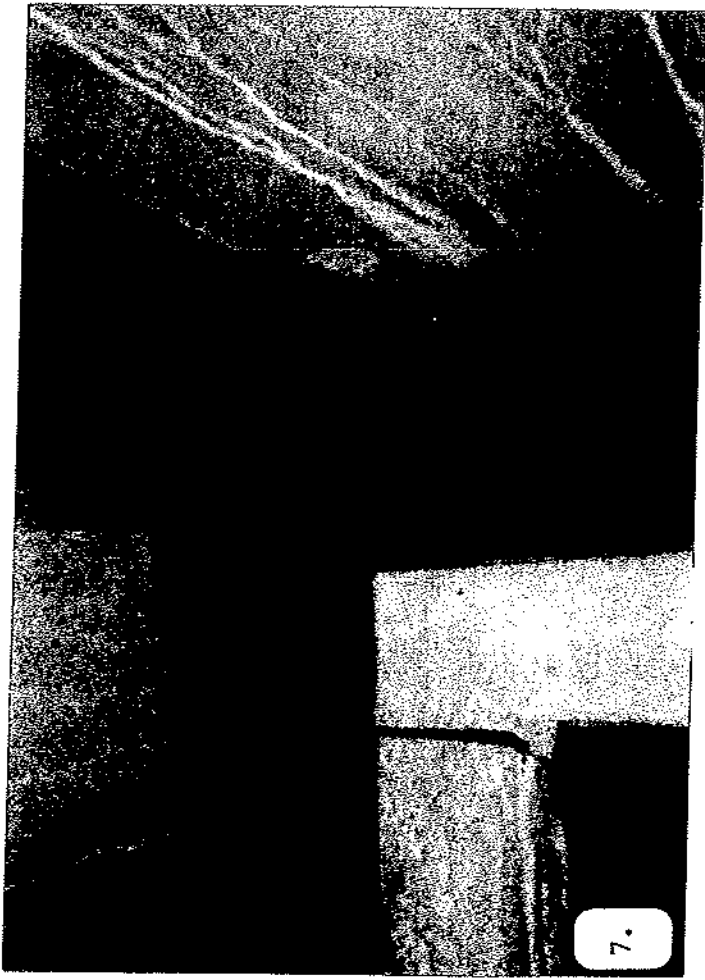
APPENDIX B

- A. Undated report of project findings and recommendations from EES.
- B. April 10, 1987 letter of Joe Macellaro (EES) to Paul Patel (NY DEC).
- C. April 27, 1987 letter of EES to Joseph Nicoletti (City of White Plains).
- D. June 26, 1987 letter from John Henningson (Malcolm Pirnie) to Joseph Nicoletti (City of White Plains).
- E. December 16, 1987 letter from Gregory Burchette (Malcolm Pirnie) to Tom Maloney (City of White Plains).
- F. January 21, 1988 letter from John Henningson (Malcolm Pirnie) to Joseph Nicoletti (City of White Plains).
- G. February 9, 1988 letter from John Henningson (Malcolm Pirnie) to Joseph Nicoletti (City of White Plains).
- H. October 31, 1988 letter from Gregory Burchette (Malcolm Pirnie) to Joseph Nicoletti (City of White Plains).
- I. March 4, 1991 Malcolm Pirnie Phase I Environmental Assessment on 123 Main Street.
- J. April 5, 1991 FOIA DEC Spill Report of a February 4, 1987 Police Department UST Spill.

APPENDIX C
PHOTOGRAPHS OF EAST GARAGE WALL







GLA

APPENDIX D

AIR SAMPLE ANALYTICAL REPORT

LABORATORY ANALYSIS REPORT

a division of CIGNA Loss Control Services, Inc.

94 Murphy Road
Hartford, CT 06114
(800) 243-4903
In CT (203) 522-3814

CIGNA

Laboratories in Macon, GA and Hartford, CT

To: Valerie Roe
GZA GeoEnvironmental, Inc.
27 Naek Road
Vernon, CT 06066

Report No.: 93D1059

P.O. No.: 2985

Date Received: 4/09/93

Date Reported: 4/14/93

Analysis: Volatile Organic Compounds
Analytical Method: GC/MS; CS₂ Desorption of Charcoal Tubes

<u>Sample Number</u>	<u>*mg</u>	<u>Peak Identification</u>	<u>CAS #</u>
Sample 1	0.0011	Benzene	71-43-2
	0.041	Toluene	108-88-3
	0.013	Ethyl Benzene	100-41-4
	0.056	Xylenes	108-38-3
	0.066	**Ethyl and Methyl Benzenes	----
	0.0040	**Alcohol	----
	0.082	Straight Chained Hydrocarbons	----
Sample 2	<0.0010	Benzene	71-43-2
	<0.0010	Toluene	108-88-3
	<0.0010	Ethyl Benzene	100-41-4
	<0.0010	Xylenes	108-38-3

*Quantitation for benzene, toluene, ethyl benzene and xylenes was performed using known standards for each of these components. All other components were quantitated using the response factor obtained for toluene.

**Due to the low levels of these chemicals, a definite identification was not possible.

Straight chained hydrocarbons appear to be similar in nature to a gasoline or mineral spirits type mixture.

Analyst

Pat Dunn

Pat Dunn

Date: 4/14/93

< = Less than.

RECEIVED
MAY - 4 1993

MAY - 4 1993

111



APPENDIX E
BORING LOGS

Boring Co. General Borings, Inc. Type Split Spoon
 Foreman J. Muccino I.D./O.D. 1 3/8" / 2"
 GZA Rep. C. Walsh Hammer Wt. 140 lbs.
 Date Start 4/6/93 End 4/6/93 Hammer Fall 30 in.
 GS.Elev. Datum Other 4 1/4" HSA

GROUNDWATER READINGS

Date	Time	Depth	Casing	Stab. Time
4/6/93	1600	14.0'	15.0'	3 hrs.
5/1/93		14.56'	out	26 dys

Location _____

DEPTH	C B A L S O N W G S	Sample Information					SAMPLE DESCRIPTION & CLASSIFICATION	Stratum Description	REMARKS	Equipment Installed	
		No.	Pen./Rec.	Depth (Ft.)	Blows/6"	Field Testing (ppm)				Curb Box	
5		S-1	24/4	0.5-2.5	9-35-11-18	ND	Dense, brown, fine to medium SAND, trace fine Gravel.	ASPHALT	1	Grout	Riser
								0.3'			
10		S-2	24/4	5.0-7.0	4-4-4-4	ND	Loose, brown, fine to medium SAND, trace fine Gravel.	FINE TO MEDIUM SAND	2	Screen	Sand
15		S-3	24/8	10.0-12.0	7-10-20-16	ND*	Dense, brown, fine to medium SAND.				
20		S-4	24/9	15.0-17.0	8-12-13-14	ND	Medium dense, brown, fine SAND, trace fine Gravel.				
25		S-5	24/10	20.0-22.0	13-15-15-17	ND	Medium dense, brown, fine to coarse SAND, trace fine Gravel.				
		S-6	9/7	25.0-25.8	48-100/3"	ND	Very dense, brown, fine to coarse SAND, some white, fine to medium Gravel, grey rock in tip of spoon.	25.8' E.O.B.	3		

- REMARKS
- Soil samples field screened for volatile organic compounds with a 10.2 eV HNU Model PI-101 photoionization detector. * Sample sent to laboratory for additional analysis. ND = None Detected. ppm = parts per million.
 - Sample wet at approximately 15 feet below grade.
 - 15 feet of 2-inch, schedule 40, threaded, flush-joint, 10-slot, PVC well screen set at approximately 25 feet below grade. Well completed to ground surface with 2-inch, schedule 40, threaded, flush-joint, PVC riser pipe. Filter sand placed in annulus around well screen from 8 to 25 feet below grade. Bentonite seal placed from 6 to 8 feet below grade. Annulus around well backfilled with grout to 1 foot below grade. Well capped with curb box cemented flush with grade. Well developed until water was clear. E.O.B. = End of Boring.

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.

Boring Co.	<u>General Borings, Inc.</u>	Type	<u>Split Spoon</u>	GROUNDWATER READINGS				
Foreman	<u>J. Muccino</u>	I.D./O.D.	<u>1 3/8" / 2"</u>	Date	Time	Depth	Casing	Stab. Time
GZA Rep.	<u>C. Walsh</u>	Hammer Wt.	<u>140 lbs.</u>	<u>4/7/93</u>	<u>1000</u>	<u>15.0'</u>	<u>15.0'</u>	<u>0 hrs.</u>
Date Start	<u>4/7/93</u> End <u>4/7/93</u>	Hammer Fall	<u>30 in.</u>					
GS.Elev.	<u>Datum</u>	Other	<u>3 1/4" HSA</u>					
Location								

DEPTH	C B A L S O N W G S	Sample Information					SAMPLE DESCRIPTION & CLASSIFICATION	Stratum Description	REMARKS	Equipment installed
		No.	Pen./ Rec.	Depth (Ft.)	Blows/6"	Field Testing (ppm)				None
5		S-1	24/12	0.5-2.5	12-6-6-10	ND	Medium dense, brown, fine to medium SAND.	ASPHALT 0.2'	1	
		S-2	24/10	5.0-7.0	13-15-12-13	ND	Medium dense, brown, fine to medium SAND, trace fine Gravel.	FINE TO MEDIUM SAND		
10		S-3	24/14	10.0-12.0	17-20-18-12	ND*	Dense, brown, fine to medium SAND trace fine Gravel.		2	
		S-4	24/13	17.0-19.0	47-36-38-46	ND	Very dense, grey-brown, fine to coarse SAND, trace fine Gravel.	15.0' BOULDERS 16.5'		
20		S-5	17/16	20.0-21.4	40-57-100/5"	ND	Very dense, grey-brown, fine to coarse SAND, trace fine Gravel.	FINE TO COARSE SAND	3	
		S-6	5/5	25.0-25.4	100/5"	ND	Very dense, grey-black, fine to medium SAND, trace fine Gravel.	22.0'		
30		S-7	4/4	30.0-30.3	100/4"	ND	Very dense, grey-brown, fine to medium SAND, trace fine Gravel.	30.3' E.O.B.		

REMARKS

- Soil samples field screened for volatile organic compounds with a 10.2 eV HNU Model PI-101 photoionization detector. * Sample sent to laboratory for additional analysis. ND = None Detected. ppm = Parts per million.
- Sample wet at approximately 15 feet below grade.
- Boring ended at approximately 30.3 feet below grade. E.O.B. = End of Boring.

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.

Boring Co. General Borings, Inc. Type Split Spoon
 Foreman J. Muccino I.D./O.D. 1 3/8"/ 2"
 GZA Rep. C. Walsh Hammer Wt. 140 lbs.
 Date Start 4/5/93 End 4/5/93 Hammer Fall 30 in.
 GS.Elev. Datum Other 4 1/4" HSA

GROUNDWATER READINGS

Date	Time	Depth	Casing	Stab. Tim
4/5/93	1725	14.6'	15.0'	0 hrs.
5/1/93		15.25'	out	27 days

Location _____

DEPTH	C B A L S O N W G S	Sample Information				FIELD TESTING (ppm)	SAMPLE DESCRIPTION & CLASSIFICATION	Stratum Description	REMARKS	Equipment Installed	
		No.	Pen./ Rec.	Depth (Ft.)	Blows/6"					Curb Box	
5		S-1	24/4	0-2.0	6-6-8-17	ND	Top 1": ASPHALT Bottom 3": Brown, fine to coarse SAND.	ASPHALT 0.2'	1	Grout	
10		S-2	24/12	5.0-7.0	10-30-28-30	0.8	Very dense, brown, fine to coarse SAND, little silt, trace fine Gravel.	FINE TO COARSE SAND	2	Bentonite Seal	
15		S-3	24/8	10.0-12.0	20-31-30-37	170*	Very dense, brown, fine to medium SAND, trace fine Gravel.			Screen	
20		S-4	24/6	15.0-17.0	12-21-39-61	250*	Very dense, brown, fine to medium SAND, trace fine Gravel.				
25		S-5	24/12	20.0-22.0	18-22-24-28	25	Dense, brown, fine to coarse SAND. Running Sands.	24.0' E.O.B.	3	Sand	

- REMARKS
- Soil samples field screened for volatile organic compounds with a 10.2 eV HNU Model PI-101 photoionization detector. * Sample sent to laboratory for additional analysis. ND = None Detected.
 - Sample wet at approximately 14 feet below grade.
 - Fifteen feet of 2-inch, schedule 40, threaded, flush-joint, 10-slot, PVC well screen set at approximately 24 feet below grade. Well completed to ground surface with 2-inch, schedule 40, threaded, flush-joint, PVC riser pipe. Filter sand placed in annulus around well screen from 7 to 24 feet below grade. Bentonite seal placed from 5 to 7 feet below grade. Annulus around well backfilled with auger spoils to 1 foot below grade. Well capped with curb box cemented flush with grade. E.O.B. = End of Boring.

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.

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White Plains, New York

PAGE 1 OF 1
FILE NO. 30726
CHKD. BY: JMB

Boring Co.	<u>General Borings, Inc.</u>	Type	<u>Split Spoon</u>	GROUNDWATER READINGS				
Foreman	<u>J. Muccino</u>	I.D./O.D.	<u>1 3/8" / 2"</u>	Date	Time	Depth	Casing	Stab. Time
GZA Rep.	<u>C. Walsh</u>	Hammer Wt.	<u>140 lbs.</u>	<u>4/5/93</u>		<u>19.0'</u>	<u>20.0'</u>	<u>0 hrs.</u>
Date Start	<u>4/5/93</u> End <u>4/5/93</u>	Hammer Fall	<u>30 in.</u>					
GS.Elev.	<u>Datum</u>	Other	<u>3 1/4" HSA</u>					
Location								

DEPTH	C.B.A.L.S.O.N.W.G.S.	Sample Information					SAMPLE DESCRIPTION & CLASSIFICATION	Stratum Description	REMARKS	Equipment Installed
		No.	Pen./Rec.	Depth (Ft.)	Blows/6"	Field Testing (ppm)				
		S-1	24/8	0-2.0	6-17-22-24	ND	Top 1": ASPHALT. Bottom 7": Brown, fine to medium SAND, trace fine Gravel.	ASPHALT 0.2'	1	None
5		S-2	24/14	5.0-7.0	19-20-25-27	ND	Very dense, brown, fine to medium SAND, trace fine Gravel.	FINE TO MEDIUM SAND	2	
10		S-3	24/18	10.0-12.0	30-33-43-43	ND*	Very dense, brown, fine to medium SAND, trace fine Gravel.			
15		S-4	24/18	15.0-17.0	40-51-46-50	ND	Very dense, brown, fine to coarse SAND, trace Gravel.			
20		S-5	3/.5	20.0-20.3	100/3"	ND	Very dense, brown, fine to medium SAND.	FINE SAND		
25		S-6	11/15	25.0-25.9	35-100/5"	ND	Very dense, mottled, grey-white, fine SAND.			
30		S-7	4/4	30.0-30.3	100/4"	ND	Very dense, grey-brown, fine SAND, trace Gravel. Weathered rock in tip of spoon.	30.3' E.O.B.	3	

- REMARKS
- Soil samples field screened for volatile organic compounds with a 10.2 eV HNU Model PI-101 photoionization detector. * Sample sent to laboratory for additional analysis. ND = None Detected.
 - Sample wet at approximately 19 feet below grade.
 - Boring ended at approximately 30.0 feet below grade. E.O.B. = End of Boring.

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.

Boring Co.	<u>General Borings, Inc.</u>	Type	<u>Split Spoon</u>	GROUNDWATER READINGS				
Foreman	<u>J. Muccino</u>	I.D./O.D.	<u>1 3/8" / 2"</u>	Date	Time	Depth	Casing	Stab. Time
GZA Rep.	<u>C. Walsh</u>	Hammer Wt.	<u>140 lbs.</u>	<u>4/6/93</u>	<u>1525</u>	<u>23.0'</u>	<u>30.0'</u>	<u>0 hrs.</u>
Date Start	<u>4/6/93</u> End <u>4/6/93</u>	Hammer Fall	<u>30 in.</u>					
GS.Elev.	<u>Datum</u>	Other	<u>3 1/4" HSA</u>					
Location								

DEPTH	C B A L S O N W G S	Sample Information					SAMPLE DESCRIPTION & CLASSIFICATION	Stratum Description	REMARKS	Equipment Installed
		No.	Pen./ Rec.	Depth (Ft.)	Blows/6"	Field Testing (ppm)				None
5		S-1	24/14	0.5-2.5	7-8-7-14	ND	Top 4": ASPHALT and ROADSTONE. Bottom 10": Medium dense, brown, fine to medium SAND, trace fine Gravel.	ASPHALT 0.2'	1	
		S-2	24/12	5.0-7.0	8-13-17-23	ND	Dense, brown, fine to medium SAND, trace fine Gravel.			
10		S-3	9/9	10.0-10.8	51-100/3"	ND*	Very dense, brown, fine to medium SAND, trace fine Gravel.	FINE TO MEDIUM SAND	2	
		S-4	24/6	15.0-17.0	19-24-48-46	ND	Very dense, brown, fine to medium SAND, trace fine Gravel.			
20		S-5	24/7	20.0-22.0	29-37-63-69	ND	Very dense, grey, fine to medium SAND, trace fine Gravel.	3		
		S-6	24/10	25.0-27.0	21-27-19-35	2	Dense, grey, fine to medium SAND.			
30		S-7	5/2	30.0-30.4	100/5"	0.5	Very dense, grey, fine SAND, trace silt.	30.4' E.O.B.	3	

- REMARKS
1. Soil samples field screened for volatile organic compounds with a 10.2 eV HNU Model PI-101 photoionization detector. * Sample sent to laboratory for additional analysis. ND = None Detected. ppm = parts per million.
 2. Sample wet at approximately 23 feet below grade.
 3. Boring ended at approximately 30.4 feet below grade. E.O.B. = End of Boring.

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.

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White Plains, New York

PAGE 1 OF 1
FILE NO. 50726
CHKD. BY: JMB

Boring Co.	<u>General Borings, Inc.</u>	Type	<u>CASING</u>	<u>SAMPLER</u>	GROUNDWATER READINGS				
Foreman	<u>J. Muccino</u>	I.D./O.D.		<u>Split Spoon</u>	Date	Time	Depth	Casing	Stab. Time
GZA Rep.	<u>C. Walsh</u>	Hammer Wt.		<u>1 3/8" / 2"</u>					
Date Start	<u>4/8/93</u> End <u>4/8/93</u>	Hammer Fall		<u>140 lbs.</u>					
GS.Elev.	<u>Datum</u>	Other		<u>30 in.</u>					
Location				<u>2 1/4" HSA</u>					

DEPTH	C.B.A.L.S.O.N.W.H.G.S.	Sample Information					SAMPLE DESCRIPTION & CLASSIFICATION	Stratum Description	REMARKS	Equipment Installed
		No.	Pen./ Rec.	Depth (Ft.)	Blows/6"	Field Testing (ppm)				
5		S-1	24/6	0.5-2.5	10-23-19-16	ND	Dense, dark brown, fine to medium SAND, little fine to medium Gravel.	ASPHALT	1	None
								0.5'		
10		S-2	24/16	5.0-7.0	15-18-20-16	891*	Medium dense, brown, fine to medium SAND, little fine to medium Gravel.	FINE TO MEDIUM SAND	2	None
15		S-3	24/18	10.0-12.0	14-19-25-29	1777*	Medium dense, brown, fine to medium SAND, trace fine Gravel.	12.0' E.O.B.		
20										
25										

REMARKS

- Soil samples field screened for volatile organic compounds with 10.0 eV Thermo Environmental Instruments, Inc. Model 580B organic vapor meter. * = Sample sent to laboratory for additional analysis. ND = None Detected. ppm = parts per million.
- Boring ended at approximately 12 feet below grade. E.O.B. = End of Boring.

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.

Boring Co. General Borings, Inc. Type Split Spoon
 Foreman J. Muccino I.D./O.D. 1 3/8" / 2"
 GZA Rep. C. Walsh Hammer Wt. 140 lbs.
 Date Start 4/8/93 End 4/8/93 Hammer Fall 30 in.
 GS.Elev. Datum Other 2 1/4" HSA

GROUNDWATER READINGS

Date	Time	Depth	Casing	Stab. Time
4/8/93	1330	19.5'	15.0'	0 hrs.

DEPTH	C B A L S O N W G S	Sample Information					SAMPLE DESCRIPTION & CLASSIFICATION	Stratum Description	REMARKS	Equipment Installed
		No.	Pen./ Rec.	Depth (Ft.)	Blows/6"	Field Testing (ppm)				
5		S-1	24/12	0.5-2.5	8-10-13-18	1.5	Medium dense, brown, fine to medium SAND, trace fine Gravel.	ASPHALT 0.5'	1	None
		S-2	24/0	5.0-7.0	7-9-9-14		No recovery.			
10		S-3	24/20	10.0-12.0	19-27-25-33	2.2*	Very dense, brown, fine to medium SAND, some fine to medium Gravel.	FINE TO MEDIUM SAND		
		S-4	24/8	12.0-14.0	21-27-36-42	1.5	Very dense, brown, fine to medium SAND, trace Silt.			
15		S-5	24/10	14.0-16.0	16-23-31-15	1.7	Very dense, rust-brown, fine to medium SAND, trace fine Gravel.			
		S-6	24/16	16.0-18.0	13-17-27-29	2.2	Dense, brown, fine to medium SAND, trace fine Gravel.			
20		S-7	24/20	18.0-20.0	21-27-36-43	780*	Very dense, grey-brown, fine to medium SAND, trace fine Gravel.		2	
		S-8	24/18	20.0-22.0	23-27-100-6	868	Very dense, grey-brown, fine to medium SAND, trace fine Gravel.			
25								22.0' E.O.B.	3	

- R E M A R K S
- Soil samples field screened for volatile organic compounds with 10.0 eV Thermo Environmental Instruments, Inc. Model 5808 organic vapor meter. * Sample sent to laboratory for additional analysis. ND = None Detected. ppm = parts per million.
 - Sample wet at approximately 19.5 feet below grade.
 - Boring ended at approximately 22 feet below grade. E.O.B. = End of Boring.

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.

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FILE NO. 50726
CHKD. BY: JMB

Boring Co.	<u>General Borings, Inc.</u>	Type	<u>CASING</u>	<u>SAMPLER</u>	GROUNDWATER READINGS				
Foreman	<u>J. Muccino</u>	I.D./O.D.		<u>Split Spoon</u>	Date	Time	Depth	Casing	Stab. Time
GZA Rep.	<u>C. Walsh</u>	Hammer Wt.		<u>1 3/8" / 2"</u>	4/7/93	1630	16.8'	out	0 hrs.
Date Start	<u>4/7/93</u> End <u>4/7/93</u>	Hammer Fall		<u>140 lbs.</u>	5/1/93		17.09'	out	25 days
GS.Elev.	<u>Datum</u>	Other		<u>30 in.</u>					
				<u>4 1/4" HSA</u>					
Location									

DEPTH	C B A L S O N W G S	Sample Information					SAMPLE DESCRIPTION & CLASSIFICATION	Stratum Description	REMARKS	Equipment Installed	
		No.	Pen./Rec.	Depth (Ft.)	Blows/6"	Field Testing (ppm)				Curb Box	
5		S-1	24/2	0.5-2.5	7-9-10-13	ND	Medium dense, brown, fine to medium SAND, trace fine Gravel.	ASPHALT	1		Grout
								0.2'			
10		S-2	24/8	5.0-7.0	9-7-7-8	ND	Medium dense, brown, fine to medium SAND, trace fine Gravel.	FINE TO MEDIUM SAND			Bentonite Seal
15		S-3	24/9	10.0-12.0	17-16-18-14	1	Dense, black, fine to medium SAND.	FINE TO MEDIUM SAND			Screen
								10.0'			
20		S-4	24/7	12.0-14.0	26-24-29-28	1	Very dense, black-brown, fine to medium SAND.	FINE TO MEDIUM SAND			
25		S-5	24/19	14.0-16.0	19-24-27-23	3*	Very dense, grey-brown, fine to medium SAND, trace fine Gravel.	FINE TO MEDIUM SAND			
		S-6	24/6	16.0-18.0	14-9-11-16	3	Medium dense, grey-brown, fine to medium SAND, trace fine Gravel.	FINE TO MEDIUM SAND			
		S-7	24/12	18.0-20.0	21-19-25-17	150*	Dense, grey-brown, fine to coarse SAND, trace fine Gravel.	FINE TO MEDIUM SAND			
		S-8	24/10	20.0-22.0	9-7-8-13	190	Medium dense, grey-brown, fine to coarse SAND, trace fine Gravel.	FINE TO MEDIUM SAND			
		S-9	24/20	22.0-24.0	11-13-12-15	170	Medium dense, grey-brown, fine to medium SAND, trace Silt.	FINE TO MEDIUM SAND			
		S-10	24/18	24.0-26.0	13-11-16-14	170	Medium dense, grey-black, fine to medium SAND.	FINE TO MEDIUM SAND			
									26.5'		Sand
									E.O.B.		
										3	

REMARKS

- Soil samples field screened for volatile organic compounds using 10.2 eV HNU photoionization detector.
- * Sample sent to laboratory for additional analysis. ND = None Detected. ppm = parts per million.
- Sample wet at approximately 16.8 feet below grade.
- Fifteen feet of 2-inch, schedule 40, threaded, flush-joint, 10-slot PVC well screen set at approximately 26.5 feet below grade. Well completed to ground surface with 2-inch, schedule 40, threaded, flush-joint, PVC riser. Filter sand placed in annulus around well from 9.5 to 26.5 feet below grade. Bentonite seal placed around well from 7.5 to 9.5 feet below grade. Remaining annulus backfilled with grout to 1 foot below grade. Well capped with curb box cemented in place. Well developed until water was clear. E.O.B. = End of Boring.

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.

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PAGE 1 OF 1
FILE NO. 50726
CHKD. BY: JMB

Boring Co. Zebra Environmental Corp. Type NA Geoprobe
Foreman R. Taylor I.D./O.D. 1 1/2" / 1 1/2"
GZA Rep. J. Stanesco Hammer Wt. _____
Date Start 4/24/93 End 4/24/93 Hammer Fall _____
GS.Elev. _____ Datum _____ Other _____
Location Parking area, 20 feet east of PA-3.

GROUNDWATER READINGS

Date	Time	Depth	Casing	Stab. Time
4/24/93		15.0'	15.0'	0 hrs.

DEPTH	C B A L S O N W G S	Sample Information					SAMPLE DESCRIPTION & CLASSIFICATION	Stratum Description	REMARKS	Equipment Installed
		No.	Pen./ Rec.	Depth (Ft.)	Blows/6"	Field Testing (ppm)				
5							No soil samples were taken to 10 feet.		1	None
10		S-1	24/18	10.0-12.0	NA	3.8	Brown-yellow, fine to medium SAND, trace Gravel.	10.0' SAND		
15		S-2	24/24	15.0-17.0	NA	8.4*	Brown-yellow, fine SAND.	15.0' FINE SAND	2	
20							No sample taken.	17.0'		
25								20.0' E.O.B.	3	

- REMARKS
- Soil samples field screened for volatile organic compounds with a 10 eV portable Thermo Environmental Instruments Model 5808 photoionization detector (PID). PID values represent meter response in parts per million (ppm) above background for each sample. "*" sample sent to laboratory for additional analysis.
 - Sample wet at approximately 15 feet below grade.
 - Refusal on probe-drive sampler at 20 feet.
E.O.B. = End of Boring
NA = Not Applicable

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.

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FILE NO. 50726
CHKD. BY: JMB

Boring Co. Zebra Environmental Corp. Type NA Geoprobe
Foreman R. Taylor I.D./O.D. 1 1/4" / 1 1/2"
GZA Rep. J. Stanesco Hammer Wt. _____
Date Start 4/24/93 End 4/24/93 Hammer Fall _____
GS.Elev. _____ Datum _____ Other _____
Location 25 feet north from monitor well W-5

GROUNDWATER READINGS

Date	Time	Depth	Casing	Stab. Time
4/24/93		15.0'	15.0'	0 hrs.

DEPTH	C B A L S O N W G S	Sample Information					SAMPLE DESCRIPTION & CLASSIFICATION	Stratum Description	R E M K S	Equipment Installed
		No.	Pen./ Rec.	Depth (Ft.)	Blows/6"	Field Testing (ppm)				None
5							No soil samples were taken to 10 feet.		1	
10		S-1	24/22	10.0-12.0	NA	ND	Brown-yellow, fine to medium SAND, trace Gravel.	10.0'		
15		S-2	24/23	15.0-17.0	NA	1.5*	Brown-yellow, fine to medium SAND, trace Gravel.	SAND	2	
20		S-3	24/22	20.0-22.0	NA	1.2	Brown-yellow, fine to medium SAND, trace Silt, Gravel.			
25		S-4	24/15	24.0-26.0	NA	0.8	Brown, fine to medium SAND, little Gravel, trace Silt.	24.0' GRAVELLY SAND	3	
								26.0' E.O.B.		

REMARKS

- Soil samples field screened for volatile organic compounds with a 10 eV portable Thermo Environmental Instruments Model 580B photoionization detector (PID). PID values represent meter response in parts per million (ppm) above background for each sample. "*" sample sent to laboratory for additional analysis.
- Sample wet at approximately 15 feet below grade.
- Refusal on probe-drive sampler at 26 feet.
E.O.B. = End of Boring
NA = Not Applicable

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.

Boring Co.	Zebra Environmental Corp.	Type	CASING	SAMPLER	GROUNDWATER READINGS					
			NA	Geoprobe	Date	Time	Depth	Casing	Stab. Time	
Foreman	R. Taylor	I.D./O.D.		1 1/4" / 1 1/2"	4/24/93			15.5'	out	1 hr.
GZA Rep.	J. Stanesco	Hammer Wt.			5/1/93			15.18'	out	7 Days
Date Start	4/24/93	End	4/24/93	Hammer Fall						
GS.Elev.	Datum	Other								
Location	9 feet west from monitor well PA-3									

DEPTH (Feet)	C.B.S. No.	Pen./Rec.	Depth (Ft.)	Blows/6"	Field Testing (ppm)	SAMPLE DESCRIPTION & CLASSIFICATION	Stratum Description	Equipment Installed	
								RISER	SCREEN
0-5						No soil samples were taken to 10 feet.		1	Riser
10	S-1	24/24	10.0-12.0	NA	1,400*	Brown, fine to medium SAND, trace Gravel.	10.0'		
15	S-2	24/23	15.0-17.0	NA	1,040	Brown, fine to medium SAND.		2	Screen
20	S-3	24/20	19.0-21.0	NA	815	Brown, fine to medium SAND, little Gravel, trace Silt.	19.0' GRAVELLY SAND		
21.0'							E.O.B.		

- REMARKS
- Soil samples field screened for volatile organic compounds with a 10 eV portable Thermo Environmental Instruments Model 580B photoionization detector (PID). PID values represent meter response in parts per million (ppm) above background for each sample. "NA" sample sent to laboratory for additional analysis.
 - Sample wet at approximately 15 feet below grade.
 - Piezometer installed with 9 feet of 60-micron polyurethane filter protected in 5/8-inch PVC casing, set at approximately 17 feet below grade. Well completed to ground surface with a 5/8-inch PVC riser. Well capped with metal curb box cemented in place.
- E.O.B. = End of Boring
 NA = Not Applicable

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.

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Boring Co.	<u>Zebra Environmental Corp.</u>	Type	<u>NA</u>	GROUNDWATER READINGS				
Foreman	<u>R. Taylor</u>	I.D./O.D.		Date	Time	Depth	Casing	Stab. Time
GZA Rep.	<u>J. Stanesco</u>	Hammer Wt.		<u>4/24/93</u>		<u>10.0'</u>	<u>out</u>	<u>1 Hour</u>
Date Start	<u>4/24/93</u> End <u>4/24/93</u>	Hammer Fall		<u>5/1/93</u>		<u>9.8'</u>	<u>out</u>	<u>7 Days</u>
GS.Elev.	Datum	Other						
Location	<u>20 feet west from the southwest corner of NYPA building</u>							

DEPTH	C B A L S O N W G S	Sample Information					SAMPLE DESCRIPTION & CLASSIFICATION	Stratum Description	REMARKS	Equipment Installed
		No.	Pen./ Rec.	Depth (Ft.)	Blows/6"	Field Testing (ppm)				
5						No soil samples were taken at this location.				
10										
15										
20										
25										
							13' EOB	1		

REMARKS
1. Piezometer installed with 4 feet of 60-micron polyurethane filter protected in 5/8-inch casing, set at approximately 13 feet below grade. Well completed to ground surface with 5/8-inch PVC riser. Well capped with 2-inch I.D. PVC cap.
EOB = End of Boring.
NA = Not Applicable.

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.

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FILE NO. 50726
CHKD. BY: JMB

Boring Co.	Zebra Environmental Corp.	Type	CASING	SAMPLER	GROUNDWATER READINGS				
Foreman	R. Taylor	I.D./O.D.	NA		Date	Time	Depth	Casing	Stab. Time
GZA Rep.	J. Stanescu	Hammer Wt.			4/24/93		16.0'	out	1 hr.
Date Start	4/24/93	End	4/24/93	Hammer Fall	5/1/93		11.8'	out	7 Days
GS.Elev.	Datum	Other							
Location	15' W and 60' S from the NW corner of the NYPA building.								

DEPTH	Sample Information					SAMPLE DESCRIPTION & CLASSIFICATION	Stratum Description	REMARKS	Equipment Installed
	No.	Pen./ Rec.	Depth (Ft.)	Blows/6"	Field Testing (ppm)				
5						No soil samples were taken at this location.	18.0' EOB	1	<p>Riser</p> <p>Screen</p>

REMARKS
1. Piezometer installed with 4 feet of 60-micron polyurethane filter protected in 5/8-inch casing, set at approximately 13 feet below grade. Well completed to ground surface with 5/8-inch PVC riser. Well capped with 2-inch I.D. PVC cap.
EOB = End of Boring.
NA = Not Applicable.

Stratification lines represent approximate boundaries between soil types, transitions may be gradual. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to factors other than those present at the time measurements were made.

GZA

APPENDIX F
SOIL ANALYTICAL DATA

GZA GEOENVIRONMENTAL, INC.
 ENVIRONMENTAL CHEMISTRY LABORATORY
 320 NEEDHAM STREET, NEWTON UPPER FALLS, MA 02164
 MASSACHUSETTS LABORATORY I.D. NO.: MA092

EPA METHOD 8021 ANALYSIS FOR VOLATILE ORGANICS BY GC/PID/EICD
 CONCENTRATION (PPB-ug/kg - Solid)

PROJECT:	NEW YORK POWER AUTHORITY - WHITE PLAINS, NY	PROJECT MGR.:	K. CYR
FILE NO.:	50726	DATE SAMPLED:	4/6/93
SAMPLE ID:	PA-1, S-3 (10-12')	DATE TESTED:	4/14/93
MATRIX:	SOLID	DILUTION FACTOR:	1
LABORATORY #:	05277-21S		

TARGET COMPOUND LIST 8021 COMPOUNDS	CONC.	QUANT. LIMIT	TARGET COMPOUND LIST 8021 COMPOUNDS:	CONC.	QUANT. LIMIT
DICHLORODIFLUOROMETHANE	ND	2.5	1,2-DIBROMOETHANE (EDB)	ND	1.0
CHLOROMETHANE	ND	2.5	CHLOROBENZENE	ND	1.0
VINYL CHLORIDE	ND	2.5	1,1,1,2-TETRACHLOROETHANE	ND	1.0
BROMOMETHANE	ND	2.5	ETHYL BENZENE	ND	1.0
CHLOROETHANE	ND	2.5	m&p-XYLENES	ND	1.0
TRICHLOROFLUOROMETHANE	ND	2.5	o-XYLENE	ND	1.0
1,1-DICHLOROETHENE	ND	1.0	STYRENE	ND	1.0
METHYLENE CHLORIDE	ND	1.0	BROMOFORM	ND	2.5
trans-1,2-DICHLOROETHENE	ND	1.0	ISOPROPYLBENZENE	ND	1.0
1,1-DICHLOROETHANE	ND	1.0	1,1,2,2-TETRACHLOROETHANE	ND	1.0
METHYL tert-BUTYL ETHER (MTBE)	ND	5.0	1,2,3-TRICHLOROPROPANE	ND	1.0
2,2-DICHLOROPROPANE	ND	1.0	BROMOBENZENE	ND	1.0
cis-1,2-DICHLOROETHENE	ND	1.0	n-PROPYLBENZENE	ND	1.0
CHLOROFORM	ND	1.0	2-CHLOROTOLUENE	ND	1.0
BROMOCHLOROMETHANE	ND	1.0	1,3,5-TRIMETHYLBENZENE	ND	1.0
1,1,1-TRICHLOROETHANE	ND	1.0	4-CHLOROTOLUENE	ND	1.0
1,1-DICHLOROPROPENE	ND	1.0	tert-BUTYLBENZENE	ND	1.0
CARBON TETRACHLORIDE	ND	1.0	1,2,4-TRIMETHYLBENZENE	ND	1.0
1,2-DICHLOROETHANE	ND	1.0	sec-BUTYLBENZENE	ND	1.0
BENZENE	ND	1.0	p-ISOPROPYLTOLUENE	ND	1.0
TRICHLOROETHENE	ND	1.0	1,3-DICHLOROBENZENE	ND	1.0
1,2-DICHLOROPROPANE	ND	1.0	1,4-DICHLOROBENZENE	ND	1.0
BROMODICHLOROMETHANE	ND	1.0	n-BUTYLBENZENE	ND	1.0
DIBROMOMETHANE	ND	1.0	1,2-DICHLOROBENZENE	ND	1.0
TOLUENE	ND	1.0	1,2-DIBROMO-3-CHLOROPROPANE	ND	2.5
1,1,2-TRICHLOROETHANE	ND	1.0	1,2,4-TRICHLOROBENZENE	ND	2.5
1,3-DICHLOROPROPANE	ND	1.0	HEXACHLOROBUTADIENE	ND	2.5
TETRACHLOROETHENE	ND	1.0	NAPHTHALENE	ND	2.5
DIBROMOCHLOROMETHANE	ND	1.0	1,2,3-TRICHLOROBENZENE	ND	2.5
SURROGATES	% RECOV.			% RECOV.	
FLUOROBENZENE	81.8		1-CHLORO-2-BROMOPROPANE	96.5	

ANALYZED BY:

J. Faulstich

REVIEWED BY:

Lubell

GZA GEOENVIRONMENTAL, INC.
 ENVIRONMENTAL CHEMISTRY LABORATORY
 320 NEEDHAM STREET, NEWTON UPPER FALLS, MA 02164
 MASSACHUSETTS LABORATORY I.D. NO.: MA092

EPA METHOD 8021 ANALYSIS FOR VOLATILE ORGANICS BY GC/PID/EICD
 CONCENTRATION (PPB-ug/kg - Solid)

PROJECT: NEW YORK POWER AUTHORITY - WHITE PLAINS, NY
 FILE NO.: 50726 PROJECT MGR.: K. CYR
 SAMPLE ID: PA-7, S-2 (5-7') DATE SAMPLED: 4/8/93
 MATRIX: SOLID DATE TESTED: 4/21/93
 LABORATORY #: 05299-21S DILUTION FACTOR: 5,000

TARGET COMPOUND LIST 8021 COMPOUNDS	CONC.	QUANT. LIMIT	TARGET COMPOUND LIST 8021 COMPOUNDS:	CONC	QUANT. LIMIT
DICHLORODIFLUOROMETHANE	ND	12,500	1,2-DIBROMOETHANE (EDB)	ND	5,000
CHLOROMETHANE	ND	12,500	CHLOROBENZENE	ND	5,000
VINYL CHLORIDE	ND	12,500	1,1,1,2-TETRACHLOROETHANE	ND	5,000
BROMOMETHANE	ND	12,500	ETHYL BENZENE	--140,000--	5,000
CHLOROETHANE	ND	12,500	m&p-XYLENES	--570,000--	5,000
TRICHLOROFLUOROMETHANE	ND	12,500	o-XYLENE	--470,000--	5,000
1,1-DICHLOROETHENE	ND	5,000	STYRENE	ND	5,000
METHYLENE CHLORIDE	ND	5,000	BROMOFORM	ND	12,500
trans-1,2-DICHLOROETHENE	ND	5,000	ISOPROPYLBENZENE	--BMQL--	5,000
1,1-DICHLOROETHANE	ND	5,000	1,1,2,2-TETRACHLOROETHANE	ND	5,000
METHYL tert-BUTYL ETHER (MTBE)	ND	25,000	1,2,3-TRICHLOROPROPANE	ND	5,000
2,2-DICHLOROPROPANE	ND	5,000	BROMOBENZENE	ND	5,000
cis-1,2-DICHLOROETHENE	ND	5,000	n-PROPYLBENZENE	--140,000--	5,000
CHLOROFORM	ND	5,000	2-CHLOROTOLUENE	ND	5,000
BROMOCHLOROMETHANE	ND	5,000	1,3,5-TRIMETHYLBENZENE	--730,000--	5,000
1,1,1-TRICHLOROETHANE	ND	5,000	4-CHLOROTOLUENE	ND	5,000
1,1-DICHLOROPROPENE	ND	5,000	tert-BUTYLBENZENE	ND	5,000
CARBON TETRACHLORIDE	ND	5,000	1,2,4-TRIMETHYLBENZENE	--670,000--	5,000
1,2-DICHLOROETHANE	ND	5,000	sec-BUTYLBENZENE	ND	5,000
BENZENE	--7,400--	5,000	p-ISOPROPYLTOLUENE	ND	5,000
TRICHLOROETHENE	ND	5,000	1,3-DICHLOROENZENE	ND	5,000
1,2-DICHLOROPROPANE	ND	5,000	1,4-DICHLOROENZENE	ND	5,000
BROMODICHLOROMETHANE	ND	5,000	n-BUTYLBENZENE	--190,000--	5,000
DIBROMOMETHANE	ND	5,000	1,2-DICHLOROENZENE	ND	5,000
TOLUENE	--740,000--	5,000	1,2-DIBROMO-3-CHLOROPROPANE	ND	12,500
1,1,2-TRICHLOROETHANE	ND	5,000	1,2,4-TRICHLOROENZENE	ND	12,500
1,3-DICHLOROPROPANE	ND	5,000	HEXACHLOROBUTADIENE	ND	12,500
TETRACHLOROETHENE	ND	5,000	NAPHTHALENE	ND	12,500
DIBROMOCHLOROMETHANE	ND	5,000	1,2,3-TRICHLOROENZENE	ND	12,500
SURROGATES	% RECOV.			% RECOV.	
FLUOROBENZENE	104		1-CHLORO-2-BROMOPROPANE	108	

ANALYZED BY: *J. Faulkner*

REVIEWED BY: *K. Cyr*

GZA GEOENVIRONMENTAL, INC.
 ENVIRONMENTAL CHEMISTRY LABORATORY
 320 NEEDHAM STREET, NEWTON UPPER FALLS, MA 02164
 MASSACHUSETTS LABORATORY I.D. NO.: MA092

EPA METHOD 8021 ANALYSIS FOR VOLATILE ORGANICS BY GC/PID/EICD
 CONCENTRATION (PPB-ug/kg - Solid)

PROJECT:	NEW YORK POWER AUTHORITY - WHITE PLAINS, NY	PROJECT MGR.:	K. CYR
FILE NO.:	50726	DATE SAMPLED:	4/8/93
SAMPLE ID:	PA-7, S-3 (10-12')	DATE TESTED:	4/21/93
MATRIX:	SOLID	DILUTION FACTOR:	5,000
LABORATORY #:	05301-21S		

TARGET COMPOUND LIST 8021 COMPOUNDS	CONC.	QUANT LIMIT	TARGET COMPOUND LIST 8021 COMPOUNDS:	CONC.	QUANT. LIMIT
DICHLORODIFLUOROMETHANE	ND	12,500	1,2-DIBROMOETHANE (EDB)	ND	5,000
CHLOROMETHANE	ND	12,500	CHLOROBENZENE	ND	5,000
VINYL CHLORIDE	ND	12,500	1,1,1,2-TETRACHLOROETHANE	ND	5,000
BROMOMETHANE	ND	12,500	ETHYL BENZENE	--140,000--	5,000
CHLOROETHANE	ND	12,500	m&p-XYLENES	--620,000--	5,000
TRICHLOROFLUOROMETHANE	ND	12,500	o-XYLENE	--230,000--	5,000
1,1-DICHLOROETHENE	ND	5,000	STYRENE	ND	5,000
METHYLENE CHLORIDE	ND	5,000	BROMOFORM	ND	12,500
trans-1,2-DICHLOROETHENE	ND	5,000	ISOPROPYLBENZENE	--BMQL--	5,000
1,1-DICHLOROETHANE	ND	5,000	1,1,2,2-TETRACHLOROETHANE	ND	5,000
METHYL tert-BUTYL ETHER (MTBE)	ND	25,000	1,2,3-TRICHLOROPROPANE	ND	5,000
2,2-DICHLOROPROPANE	ND	5,000	BROMOBENZENE	ND	5,000
cis-1,2-DICHLOROETHENE	ND	5,000	n-PROPYLBENZENE	--94,000--	5,000
CHLOROFORM	ND	5,000	2-CHLOROTOLUENE	ND	5,000
BROMOCHLOROMETHANE	ND	5,000	1,3,5-TRIMETHYLBENZENE	--490,000--	5,000
1,1,1-TRICHLOROETHANE	ND	5,000	4-CHLOROTOLUENE	ND	5,000
1,1-DICHLOROPROPENE	ND	5,000	tert-BUTYLBENZENE	ND	5,000
CARBON TETRACHLORIDE	ND	5,000	1,2,4-TRIMETHYLBENZENE	--600,000--	5,000
1,2-DICHLOROETHANE	ND	5,000	sec-BUTYLBENZENE	ND	5,000
BENZENE	--15,000--	5,000	p-ISOPROPYLTOLUENE	ND	5,000
TRICHLOROETHENE	ND	5,000	1,3-DICHLOROBENZENE	ND	5,000
1,2-DICHLOROPROPANE	ND	5,000	1,4-DICHLOROBENZENE	ND	5,000
BROMODICHLOROMETHANE	ND	5,000	n-BUTYLBENZENE	--300,000--	5,000
DIBROMOMETHANE	ND	5,000	1,2-DICHLOROBENZENE	ND	5,000
TOLUENE	--700,000--	5,000	1,2-DIBROMO-3-CHLOROPROPANE	ND	12,500
1,1,2-TRICHLOROETHANE	ND	5,000	1,2,4-TRICHLOROBENZENE	ND	12,500
1,3-DICHLOROPROPANE	ND	5,000	HEXACHLOROBUTADIENE	ND	12,500
TETRACHLOROETHENE	ND	5,000	NAPHTHALENE	ND	12,500
DIBROMOCHLOROMETHANE	ND	5,000	1,2,3-TRICHLOROBENZENE	ND	12,500
SURROGATES	% RECOV.			% RECOV.	
FLUROBENZENE	86.0		1-CHLORO-2-BROMOPROPANE	98.6	

ANALYZED BY: *J. Faulkner*

REVIEWED BY: *K. Cyr*

GZA GEOENVIRONMENTAL, INC.
 ENVIRONMENTAL CHEMISTRY LABORATORY
 320 NEEDHAM STREET, NEWTON UPPER FALLS, MA 02164
 MASSACHUSETTS LABORATORY I.D. NO.: MA092

EPA METHOD 8021 ANALYSIS FOR VOLATILE ORGANICS BY GC/PID/EICD
 CONCENTRATION (PPB-ug/kg - Solid)

PROJECT:	NEW YORK POWER AUTHORITY - WHITE PLAINS, NY	PROJECT MGR.:	K. CYR
FILE NO.:	50726	DATE SAMPLED:	4/8/93
SAMPLE ID:	PA-8B, S-3 (10-12')	DATE TESTED:	4/21/93
MATRIX:	SOLID	DILUTION FACTOR:	1
LABORATORY #:	05300B-21S		

TARGET COMPOUND LIST 8021 COMPOUNDS	CONC.	QUANT. LIMIT	TARGET COMPOUND LIST 8021 COMPOUNDS	CONC.	QUANT. LIMIT
DICHLORODIFLUOROMETHANE	ND	2.5	1,2-DIBROMOETHANE (EDB)	ND	1.0
CHLOROMETHANE	ND	2.5	CHLOROBENZENE	ND	1.0
VINYL CHLORIDE	ND	2.5	1,1,1,2-TETRACHLOROETHANE	ND	1.0
BROMOMETHANE	ND	2.5	ETHYL BENZENE	ND	1.0
CHLOROETHANE	ND	2.5	m&p-XYLENES	ND	1.0
TRICHLOROFLUOROMETHANE	ND	2.5	o-XYLENE	ND	1.0
1,1-DICHLOROETHENE	ND	1.0	STYRENE	ND	1.0
METHYLENE CHLORIDE	ND	1.0	BROMOFORM	ND	2.5
trans-1,2-DICHLOROETHENE	ND	1.0	ISOPROPYLBENZENE	ND	1.0
1,1-DICHLOROETHANE	ND	1.0	1,1,2,2-TETRACHLOROETHANE	ND	1.0
METHYL tert-BUTYL ETHER (MTBE)	ND	5.0	1,2,3-TRICHLOROPROPANE	ND	1.0
2,2-DICHLOROPROPANE	ND	1.0	BROMOBENZENE	ND	1.0
cis-1,2-DICHLOROETHENE	ND	1.0	n-PROPYLBENZENE	ND	1.0
CHLOROFORM	ND	1.0	2-CHLOROTOLUENE	ND	1.0
BROMOCHLOROMETHANE	ND	1.0	1,3,5-TRIMETHYLBENZENE	ND	1.0
1,1,1-TRICHLOROETHANE	ND	1.0	4-CHLOROTOLUENE	ND	1.0
1,1-DICHLOROPROPENE	ND	1.0	tert-BUTYLBENZENE	ND	1.0
CARBON TETRACHLORIDE	ND	1.0	1,2,4-TRIMETHYLBENZENE	ND	1.0
1,2-DICHLOROETHANE	ND	1.0	sec-BUTYLBENZENE	ND	1.0
BENZENE	ND	1.0	p-ISOPROPYLTOLUENE	ND	1.0
TRICHLOROETHENE	ND	1.0	1,3-DICHLOROENZENE	ND	1.0
1,2-DICHLOROPROPANE	ND	1.0	1,4-DICHLOROENZENE	ND	1.0
BROMODICHLOROMETHANE	ND	1.0	n-BUTYLBENZENE	ND	1.0
DIBROMOMETHANE	ND	1.0	1,2-DICHLOROENZENE	ND	1.0
TOLUENE	ND	1.0	1,2-DIBROMO-3-CHLOROPROPANE	ND	2.5
1,1,2-TRICHLOROETHANE	ND	1.0	1,2,4-TRICHLOROENZENE	ND	2.5
1,3-DICHLOROPROPANE	ND	1.0	HEXACHLOROBUTADIENE	ND	2.5
TETRACHLOROETHENE	ND	1.0	NAPHTHALENE	ND	2.5
DIBROMOCHLOROMETHANE	ND	1.0	1,2,3-TRICHLOROENZENE	ND	2.5
SURROGATES	% RECOV.			% RECOV.	
FLUOROBENZENE	99.0		1-CHLORO-2-BROMOPROPANE	106	

ANALYZED BY: *J. Faulkner*

REVIEWED BY: *K. Cyr*

GZA GEOENVIRONMENTAL, INC.
 ENVIRONMENTAL CHEMISTRY LABORATORY
 320 NEEDHAM STREET, NEWTON UPPER FALLS, MA 02164
 MASSACHUSETTS LABORATORY I.D. NO.: MA092

EPA METHOD 8021 ANALYSIS FOR VOLATILE ORGANICS BY GC/PID/EICD
 CONCENTRATION (PPB-ug/kg - Solid)

PROJECT: NEW YORK POWER AUTHORITY - WHITE PLAINS, NY
 FILE NO.: 50726 PROJECT MGR.: K. CYR
 SAMPLE ID: PA-8, S-7 (18-20') DATE SAMPLED: 4/8/93
 MATRIX: SOLID DATE TESTED: 4/21/93
 LABORATORY #: 05302-21S DILUTION FACTOR: 5,000

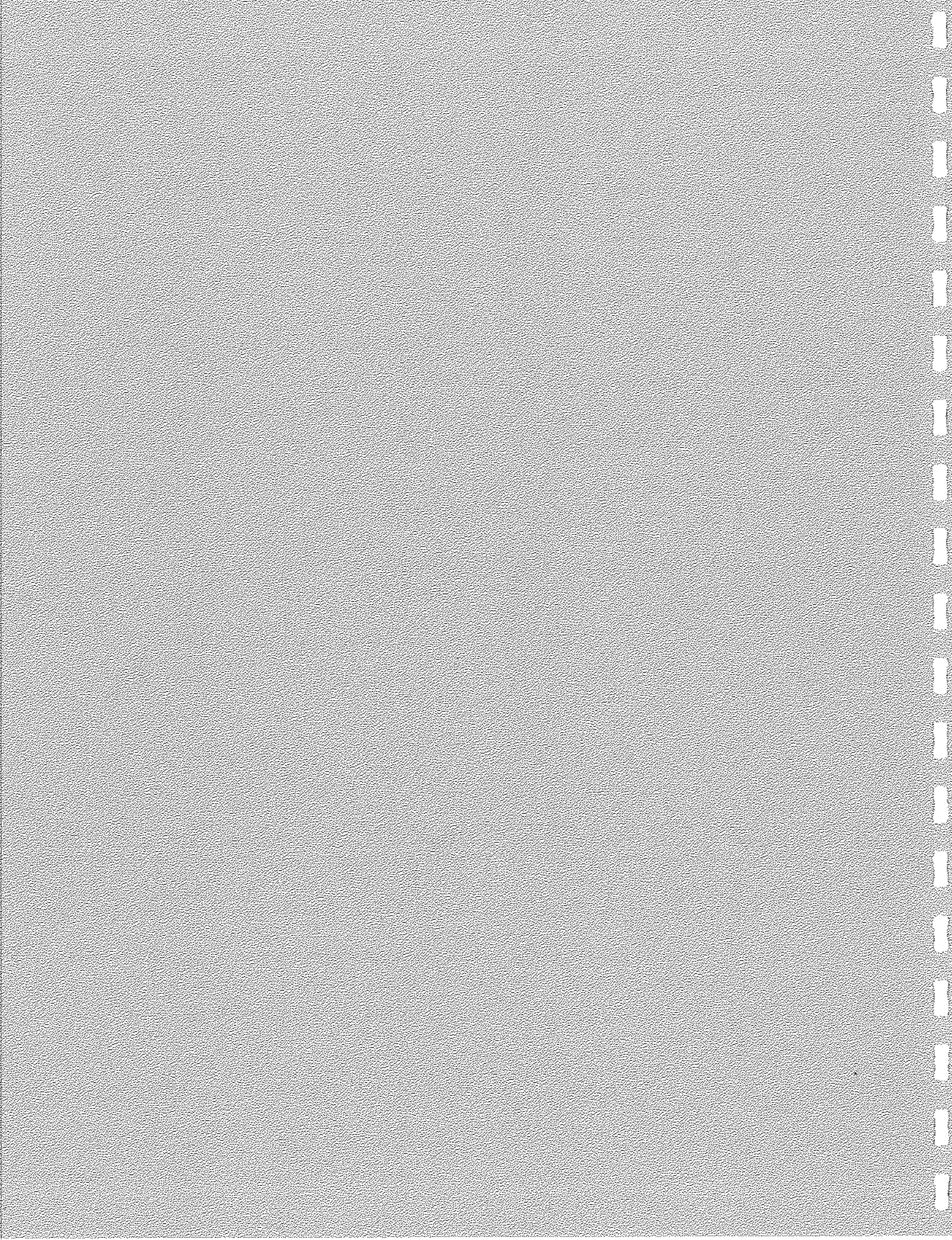
TARGET COMPOUND LIST 8021 COMPOUNDS	CONC	QUANT. LIMIT	TARGET COMPOUND LIST 8021 COMPOUNDS:	CONC	QUANT. LIMIT
DICHLORODIFLUOROMETHANE	ND	12,500	1,2-DIBROMOETHANE (EDB)	ND	5,000
CHLOROMETHANE	ND	12,500	CHLOROENZENE	ND	5,000
VINYL CHLORIDE	ND	12,500	1,1,1,2-TETRACHLOROETHANE	ND	5,000
BROMOMETHANE	ND	12,500	ETHYL BENZENE	--50,000--	5,000
CHLOROETHANE	ND	12,500	m&p-XYLENES	--200,000--	5,000
TRICHLOROFLUOROMETHANE	ND	12,500	o-XYLENE	--86,000--	5,000
1,1-DICHLOROETHENE	ND	5,000	STYRENE	ND	5,000
METHYLENE CHLORIDE	ND	5,000	BROMOFORM	ND	12,500
trans-1,2-DICHLOROETHENE	ND	5,000	ISOPROPYL BENZENE	--15,000--	5,000
1,1-DICHLOROETHANE	ND	5,000	1,1,2,2-TETRACHLOROETHANE	ND	5,000
METHYL tert-BUTYL ETHER (MTBE)	ND	25,000	1,2,3-TRICHLOROPROPANE	ND	5,000
2,2-DICHLOROPROPANE	ND	5,000	BROMOBENZENE	ND	5,000
cis-1,2-DICHLOROETHENE	ND	5,000	n-PROPYLBENZENE	--81,000--	5,000
CHLOROFORM	ND	5,000	2-CHLOROTOLUENE	ND	5,000
BROMOCHLOROMETHANE	ND	5,000	1,3,5-TRIMETHYLBENZENE	--400,000--	5,000
1,1,1-TRICHLOROETHANE	ND	5,000	4-CHLOROTOLUENE	ND	5,000
1,1-DICHLOROPROPENE	ND	5,000	tert-BUTYLBENZENE	ND	5,000
CARBON TETRACHLORIDE	ND	5,000	1,2,4-TRIMETHYLBENZENE	--230,000--	5,000
1,2-DICHLOROETHANE	ND	5,000	sec-BUTYLBENZENE	ND	5,000
BENZENE	ND	5,000	p-ISOPROPYLTOLUENE	ND	5,000
TRICHLOROETHENE	ND	5,000	1,3-DICHLOROENZENE	ND	5,000
1,2-DICHLOROPROPANE	ND	5,000	1,4-DICHLOROENZENE	ND	5,000
BROMODICHLOROMETHANE	ND	5,000	n-BUTYLBENZENE	--65,000--	5,000
DIBROMOMETHANE	ND	5,000	1,2-DICHLOROENZENE	ND	5,000
TOLUENE	--22,000--	5,000	1,2-DIBROMO-3-CHLOROPROPANE	ND	12,500
1,1,2-TRICHLOROETHANE	ND	5,000	1,2,4-TRICHLOROENZENE	ND	12,500
1,3-DICHLOROPROPANE	ND	5,000	HEXACHLOROBUTADIENE	ND	12,500
TETRACHLOROETHENE	ND	5,000	NAPHTHALENE	ND	12,500
DIBROMOCHLOROMETHANE	ND	5,000	1,2,3-TRICHLOROENZENE	ND	12,500
SURROGATES	% RECOV			% RECOV	
FLUOROENZENE	86.0		1-CHLORO-2-BROMOPROPANE	99.8	

ANALYZED BY: *J. Gaultner*

REVIEWED BY: *K. Cyr*

APPENDIX A-3

Sampling Letter Reports
JM Associates



JM ASSOCIATES, INC.

225 Railroad Avenue

Bedford Hills, New York 10507

MEMORANDUM**•On-Site Environmental Services•**

To: Louis Cappelli Fax: 747-2743
Bruce Berg Fax: 747-9187

Re: ~~Halpern and City~~ Parking Lots, White Plains

From John J. Manfredi

Phone # (914) 241-3795
Fax # (914) 241-4499

Date 1-7-03

Pages 3

As requested soil borings and groundwater sampling has been performed in the Halpern Parking Lot (behind 221 Main Street Buildings) and the City Owned parking lot (256 Hamilton Ave). The borings and sampling for the Halpern Parking lot were performed on December 10, 2002. Soil samples were taken at each 5-foot interval and groundwater was encountered at a depth of 20 feet below the surface. We had the boring advanced an additional 10 feet into the groundwater. Our field-testing of each 5-foot interval soil sample indicated that no contaminated soil was encountered at each of the three boring locations. Boring Numbers 1, 2 and 3 on the attached sketch are on the Halpern parking lot area. After the installation of the three 2-inch monitoring wells the wells were activated after purging. Groundwater samples were taken at each well and both the soil and groundwater samples were forwarded to a NY State certified laboratory for analysis by EPA Method 8021 (VOCs) and 8270 Semi-VOCs for the soil and Method 8021 for the groundwater. The laboratory results all came back, verifying our field-testing, that both the soil and the groundwater are not contaminated with any petroleum product.

Borings and sampling was performed on the city parking lot of January 6, 2003. Only two borings were made with the installation of two 2-inch groundwater-monitoring wells. Two additional previously installed monitoring wells were located on the west property line of the city parking lot. Others previously installed these wells. These wells are labeled MW #6 & MW #7 on the attached sketch. The two wells installed by JMA are labeled as MW #4 and MW #5. Same as described above the soil was sampled at each 5-foot interval. Groundwater was encountered at 15 feet below the surface and again the borings were advanced an additional 10 feet into the groundwater. Our field-testing of the soil has indicated that at MW #4 no contamination was encountered. However at MW #5 heavy gas contaminated soil was encountered at between 8 feet

and 12.5 feet below the surface. The material encountered was hard packed and sandy with low porosity. Again groundwater was encountered 15 feet below the surface elevation. The monitoring well was advanced an additional 10 feet into the groundwater. The wells were purged and left to recharge prior to sampling. The previously installed MWs (#6 & #7) were opened, purged and sampled on January 6, 2003. MW #6 had a strong concentration of gasoline contamination even after purging. MW #6 did not show any signs of heavy contamination. After sampling both MW #4 and #5 on January 7, 2003 neither of the samples showed any signs of contamination. The samples were forwarded to the laboratory today and it is anticipated that the results will not be received until Friday January 10. However our field-testing definitely shows a 5-foot band of gasoline contaminated soil in the area of MW #5 and heavy gasoline groundwater contamination in the area of MW #6. However MW #6 is on the west side of the Court Street Extension and the proposed plans do not show this area being disturbed. All of the building construction is planned on the east side of the Court Street Extension.

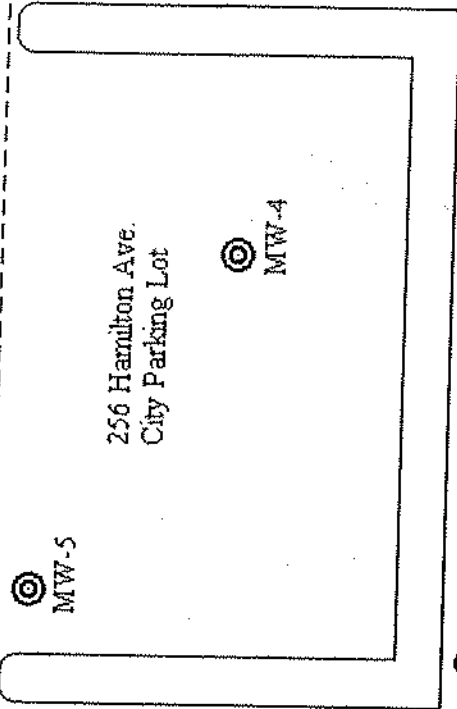
A summary of our testing shows that the Halpern parking lot area is free of both soil and groundwater petroleum contamination. The city parking lot has gasoline contaminated soil in the location where there previously was the old Public Works Building apparently from a leaking underground gas storage tank. Because the porosity of the soil encountered is low the contamination did not percolate down into the groundwater in this area. It migrated westward toward MW #6 and because a concrete retaining wall is directly west of MW #6 the flow of contaminated groundwater is restricted and is retained in the area of MW #6. If necessary, this well can be pumped out and the gasoline contaminated groundwater removed and disposed. It may require several pump outs to remove all of the contaminated groundwater in this area.



MW-7 (Pre-Existing) MW-6 (Pre-Existing)

Existing Municipal Lot
Proposed New Court Street Delineated by Hash Marks
Court Street Extension

Hamilton Avenue



256 Hamilton Ave.
City Parking Lot

MW-5

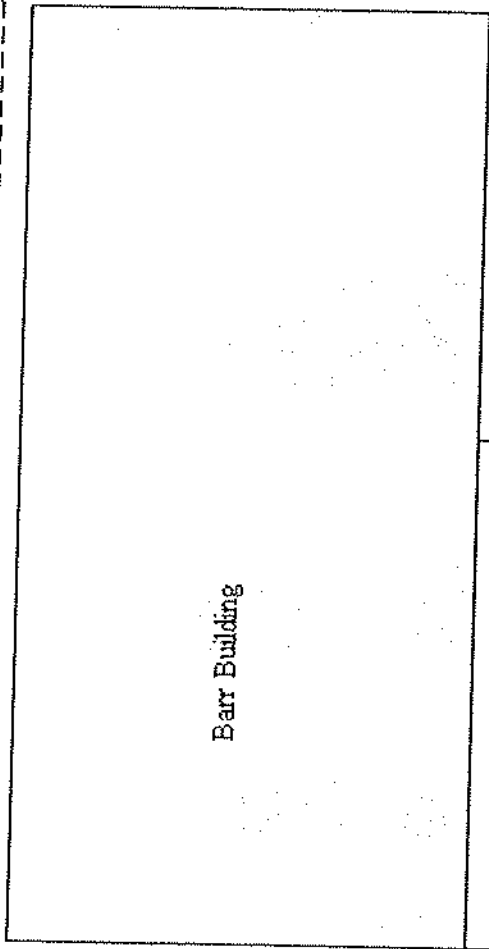
MW-4

MW-3

MW-2

MW-1

221 Main Street
Halpern Lot



Barr Building

221 Main Street Building

Not To Scale

MW = Monitoring Well

JM Associates, Inc.
Site: 221 Main St Halpern Lot/
256 Hamilton Ave City Lot
Boring / Well Locations

YORK
ANALYTICAL LABORATORIES, INC.

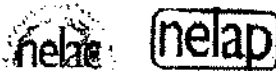
Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 12/18/2002
Re: Client Project ID: 221 Main Street
York Project No.: 02120296

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ONE RESEARCH DRIVE STAMFORD, CT 06906 (203) 325-1371 FAX (203) 357-0166

Page 1 of 7

Report Date: 12/18/2002
 Client Project ID: 221 Main Street
 York Project No.: 02120296

JM Associates, Inc.
 225 Railroad Ave.
 Bedford Hills, NY 10507
 Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 12/11/02. The project was identified as your project "221 Main Street".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			JMA-01/B-1 0-2'Sinches		JMA 02/B-1 2'Sinches-4'Sinches	
York Sample ID			02120296-01		02120296-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 SFARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			23	5.0	Not detected	5.0

YORK

Client Sample ID			JMA-01/B-1 0-2'5inches		JMA-02/B-1 2'5inches-4'5inches	
York Sample ID			02120296-01		02120296-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

Client Sample ID			JMA-03/B-1 5'-7'		JMA 04/B-1 7'-10'	
York Sample ID			02120296-03		02120296-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p & m Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			7	5.0	Not detected	5.0
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330

YORK

Client Sample ID			JMA-03/B-1 5'-7'		JMA-04/B-1 7'-10'	
York Sample ID			02120296-03		02120296-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Indenof 1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

Client Sample ID			JMA-05/B-1 15'-17'		JMA-06/B-1 17'-20'	
York Sample ID			02120296-05		02120296-06	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	5	5.0
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-S270	ug/kg	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Indenof 1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

YORK

Client Sample ID			JMA-07/B-2 0.5'-2.5'		JMA-08/B-2 2.5'-4.5'	
York Sample ID			02120296-07		02120296-08	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/Kg	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

Client Sample ID			JMA-09/B-2 5'-7'		JMA-10/B-2 10'-12'	
York Sample ID			02120296-09		02120296-10	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10

YORK

Client Sample ID	York Sample ID		JMA-09/B-2 5'-7'		JMA-10/B-2 10'-12'
Matrix			02120296-09		02120296-10
Parameter	Method	Units	SOIL	MDL	SOIL
			Results	MDL	Results
p-Isopropyltoluene			Not detected	5.0	Not detected
sec-Butylbenzene			Not detected	5.0	Not detected
tert-Butylbenzene			Not detected	5.0	Not detected
Toluene			Not detected	5.0	Not detected
Total Xylenes			Not detected	5.0	Not detected
STARS Target Semi-Volatiles	SW846-8270	ug/kg	Not detected	10	Not detected
Acenaphthene			---	---	---
Anthracene			Not detected	330	Not detected
Benzo[a]anthracene			Not detected	330	Not detected
Benzo[a]pyrene			Not detected	330	Not detected
Benzo[b]fluoranthene			Not detected	330	Not detected
Benzo[g,h,i]perylene			Not detected	330	Not detected
Benzo[k]fluoranthene			Not detected	330	Not detected
Chrysene			Not detected	330	Not detected
Dibenz[a,h]anthracene			Not detected	330	Not detected
Fluoranthene			Not detected	330	Not detected
Fluorene			Not detected	330	Not detected
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected
Naphthalene			Not detected	330	Not detected
Phenanthrene			Not detected	330	Not detected
Pyrene			Not detected	330	Not detected

Client Sample ID	York Sample ID		JMA-11/B-2 15'-17'		JMA-12/B-2 20'-22'
Matrix			02120296-11		02120296-12
Parameter	Method	Units	SOIL	MDL	SOIL
			Results	MDL	Results
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected
Benzene			Not detected	5.0	Not detected
Ethylbenzene			Not detected	5.0	Not detected
Isopropylbenzene			Not detected	5.0	Not detected
Naphthalene			Not detected	5.0	Not detected
n-Butylbenzene			Not detected	5.0	Not detected
n-Propylbenzene			Not detected	5.0	Not detected
o-Xylene			Not detected	5.0	Not detected
p- & m-Xylenes			Not detected	10	Not detected
p-Isopropyltoluene			Not detected	10	Not detected
sec-Butylbenzene			Not detected	5.0	Not detected
tert-Butylbenzene			Not detected	5.0	Not detected
Toluene			Not detected	5.0	Not detected
Total Xylenes			Not detected	5.0	6
STARS Target Semi-Volatiles	SW846-8270	ug/kg	Not detected	10	Not detected
Acenaphthene			---	---	---
Anthracene			Not detected	330	Not detected
Benzo[a]anthracene			Not detected	330	Not detected
Benzo[a]pyrene			Not detected	330	Not detected
Benzo[b]fluoranthene			Not detected	330	Not detected
Benzo[g,h,i]perylene			Not detected	330	Not detected

YORK

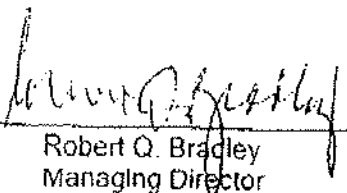
Client Sample ID			JMA-11/B-2 15'-17'		JMA-12/B 2 20'-22'	
York Sample ID			02120296-11		02120296-13	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Benzo(k)fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz(a,h)anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Indeno(1,2,3-cd)pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

Units Key: For Waters/Liquids: mg/L = ppm, ug/L = ppb For Soils/Solids: mg/kg = ppm, ug/kg = ppb

Notes for York Project No. 02120296

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:


Robert O. Bradley
Managing Director

Date: 12/18/2002

YORK

YORK

ANALYTICAL LABORATORIES, INC.
 ONE RESEARCH DRIVE
 STAMFORD, CT 06906
 (203) 325-1371 FAX (203) 357-0166

Company Name

JM ASSOCIATES, INC.

JM ASSOCIATES

221 Main Street/Halpern
 Parking
 lot.

Project ID/NO.

Clay J. J...

Samples Collected By (Signature)

J. MANFREDI / *Johns Key*

Name (Printed)

Field Chain-of-Custody Record

Sample No.	Location ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
JMA-01	B-1 0'-2.5'	12/10/02		X		8021 + 8270 as per STARS Table #2	402 PMSA
JMA-02	B-1 2.5'-4.5'	12/10/02		X			402
JMA-03	B-1 5'-7'	12/10/02		X			402
JMA-04	B-1 7'-10'	12/10/02		X			402
JMA-05	B-1 13'-17'	12/10/02		X			402
JMA-06	B-1 17'-20'	12/10/02		X			402
JMA-07	B-2 0.5'-2.5'	12/10/02		X			402
JMA-08	B-2 2.5'-4.5'	12/10/02		X			402
JMA-09	B-2 5'-7'	12/10/02		X			402
JMA-10	B-2 10'-12'	12/10/02		X			402

Chain-of-Custody Record

Bottles Relinquished From Lab by _____ Date/Time _____

Bottles Received in Field by _____ Date/Time _____

Comments/Special Instructions _____

Sample Relinquished by *CAJ/S/10* Date/Time *12/10/02*

Sample Received by _____ Date/Time _____

Sample Relinquished in LAB by _____ Date/Time _____

Turn-Around Time Standard RUSH(define)

YORK

ANALYTICAL LABORATORIES, INC.
 ONE RESEARCH DRIVE
 STAMFORD, CT 06906
 (203) 325-1371 FAX (203) 357-0166

Field Chain-of-Custody Record

Company Name: JM ASSOCIATES, INC. Report To: JM ASSOCIATES, INC. Invoice To: JW ASSOCIATES
 Project ID/No.: 221 Main Street
 Samples Collected By (Signature): [Signature]
 Name (Printed): J. MANFREDI

Sample No.	Location ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Sol	Air		
JMA-11	15'-17'	12/10/02	X				4 CE
JMA-12	20'-22'	12/10/02	X			8021 + 8270 as per STARS Table #2	4 CE

Chain-of-Custody Record

Bottles Requisitioned From Lab by: [Signature] Date/Time: 12/10/02
 Bottles Received in Field by: [Signature] Date/Time: 12/10/02
 Sample Requisitioned by: [Signature] Date/Time: 12/10/02
 Sample Received by: [Signature] Date/Time: 12/11/02
 Sample Requisitioned in Lab by: [Signature] Date/Time: 12/11/02
 Sample Received in Lab by: [Signature] Date/Time: 12/11/02
 Trip-Around Time: Standard Rush: (define)

YORK

ANALYTICAL LABORATORIES, INC.

Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 12/19/2002
Re: Client Project ID: 221 Main Street
York Project No.: 02120349

CT License No. PH-0723 New York License No. 10854 Mass License No. M/CT106 Rhode Island License No. 03 EPA I.D. No. CT00106



ONE RESEARCH DRIVE STAMFORD, CT 06906 (203) 325-1371 FAX (203) 357-0166

Report Date: 12/19/2002
 Client Project ID: 221 Main Street
 York Project No.: 02120349

JM Associates, Inc.
 225 Railroad Ave.
 Redford Hills, NY 10507
 Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 12/12/02. The project was identified as your project "221 Main Street".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			JMA-01		JMA-02	
York Sample ID			02120349-01		02120349-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			11	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			82	5.0	67	5.0
Total Xylenes			11	10	Not detected	10

YORK

Client Sample ID			JMA-01		JMA-02	
York Sample ID			02120349-01		02120349-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			Not detected	330	870	330
Anthracene			Not detected	330	1200	330
Benzo[a]anthracene			Not detected	330	1700	330
Benzo[a]pyrene			Not detected	330	990	330
Benzo[b]fluoranthene			Not detected	330	840	330
Benzo[g,h,i]perylene			Not detected	330	510	330
Benzo[k]fluoranthene			Not detected	330	2200	330
Chrysene			Not detected	330	1700	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	3900	330
Fluorene			Not detected	330	540	330
Indeno[1,2,3-cd]pyrene			Not detected	330	570	330
Naphthalene			Not detected	330	420	330
Phenanthrene			Not detected	330	3900	330
Pyrene			Not detected	330	3300	330

Client Sample ID			JMA-03		JMA-04	
York Sample ID			02120349-03		02120349-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	6	5.0
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330

YORK

Client Sample ID			JMA-03		JMA-04	
York Sample ID			02120349-03		02120349-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

Client Sample ID			JMA-05	
York Sample ID			02120349-05	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---
1,2,4-Trimethylbenzene			Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0
Benzene			Not detected	5.0
Ethylbenzene			Not detected	5.0
Isopropylbenzene			Not detected	5.0
Naphthalene			Not detected	5.0
n-Butylbenzene			Not detected	5.0
n-Propylbenzene			Not detected	5.0
o-Xylene			Not detected	10
p- & m-Xylenes			Not detected	10
p-Isopropyltoluene			Not detected	5.0
sec-Butylbenzene			Not detected	5.0
tert-Butylbenzene			Not detected	5.0
Toluene			Not detected	5.0
Total Xylenes			Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/KG	---	---
Acenaphthene			Not detected	330
Anthracene			Not detected	330
Benzo[a]anthracene			Not detected	330
Benzo[a]pyrene			Not detected	330
Benzo[h]fluoranthene			Not detected	330
Benzo[ghi]perylene			Not detected	330
Benzo[k]fluoranthene			Not detected	330
Chrysene			Not detected	330
Dibenz[a,h]anthracene			Not detected	330
Fluoranthene			Not detected	330
Fluorene			Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330
Naphthalene			Not detected	330
Phenanthrene			Not detected	330
Pyrene			Not detected	330

YORK

Client Sample ID			JMA-06		JMA-07	
York Sample ID			02120349-06		02120349-07	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/L	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	1	2	1
1,3,5-Trimethylbenzene			Not detected	1	Not detected	1
Benzene			Not detected	1	Not detected	1
Ethylbenzene			Not detected	1	Not detected	1
Isopropylbenzene			Not detected	1	Not detected	1
Naphthalene			Not detected	1	Not detected	1
n-Butylbenzene			Not detected	1	2	1
n-Propylbenzene			Not detected	1	Not detected	1
o-Xylene			Not detected	2	Not detected	2
p- & m- Xylenes			Not detected	2	2	2
p-Isopropyltoluene			Not detected	1	Not detected	1
sec-Butylbenzene			Not detected	1	Not detected	1
tert-Butylbenzene			Not detected	1	Not detected	1
Toluene			Not detected	1	Not detected	1
Total Xylenes			Not detected	2	2	2

Client Sample ID			JMA-08	
York Sample ID			02120349-08	
Matrix			WATER	
Parameter	Method	Units	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/L	---	---
1,2,4-Trimethylbenzene			2	1
1,3,5-Trimethylbenzene			Not detected	1
Benzene			Not detected	1
Ethylbenzene			Not detected	1
Isopropylbenzene			Not detected	1
Naphthalene			Not detected	1
n-Butylbenzene			1	1
n-Propylbenzene			Not detected	1
o-Xylene			Not detected	2
p- & m- Xylenes			Not detected	2
p-Isopropyltoluene			Not detected	1
sec-Butylbenzene			Not detected	1
tert-Butylbenzene			Not detected	1
Toluene			Not detected	1
Total Xylenes			Not detected	2

Units Key:

For Waters/Liquids: mg/L = ppm; ug/L = ppb

For Soils/Solids: mg/kg = ppm; ug/kg = ppb

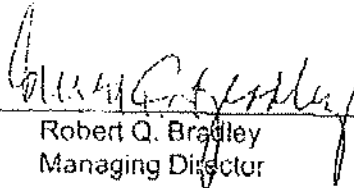
YORK

Report Date: 12/19/2002
Client Project ID: 221 Main Street
York Project No.: 02120349

Notes for York Project No. 02120349

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:


Robert Q. Bradley
Managing Director

Date: 12/19/2002

YORK

YORK

ANALYTICAL LABORATORIES, INC.
 ONE RESEARCH DRIVE
 STAMFORD, CT 06904
 (203) 325-1377 FAX (203) 327-0166

Field Chain-of-Custody Record

Page 1 of 1

DUW349

Company Name JMA Associates, Inc.	Report To: JMA Associates, Inc.	Invoice To: JMA Associates, Inc.	Project ID/No. 221 Main Street Midtown Parking Lot 2
Company Name JMA Associates, Inc.	Report To: JMA Associates, Inc.	Invoice To: JMA Associates, Inc.	Project ID/No. 221 Main Street Midtown Parking Lot 2
		Samples Collected By (Signature): <i>Chris Eagle / John Newcomb</i>	

Sample No.	Location/ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
JMA-01	B-3 0'-2.5'	12/11/02	X				4.6Z
JMA-02	B-3 3'-5'	12/11/02	X				4.6Z
JMA-03	B-3 10'-15'	12/11/02	X				4.6Z
JMA-04	B-3 15'-20'	12/11/02	X				4.6Z
JMA-05	B-3 20'-30'	12/11/02	X				4.6Z
JMA-06	Monitoring Well 1 (B-1)	12/11/02	X				4.6Z
JMA-07	Monitoring Well 2 (B-2)	12/11/02	X				4.6Z
JMA-08	Monitoring Well 3 (B-3)	12/11/02	X				4.6Z

Chain-of-Custody Record	Sample Relinquished by: <i>Chris Eagle</i>	Date/Time: 12/11/02	Sample Received by: <i>John Newcomb</i>	Date/Time: 12/12/02
Comments/Special Instructions	Standard: 4.3.6	RUSH(define): RUSH	Turn-Around Time: 10:45	Date/Time: 12-12-12/12:30

YORK
ANALYTICAL LABORATORIES, INC.

Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 1/10/2003
Re: Client Project ID: 256 Hamilton City Lot
York Project No.: 03010126

CT License No. H10-0723 New York License No. 10854 Mass. License No. M-CT106 Rhode Island License No. 92 CPA ID. No. C100106



Report Date: 1/10/2003
 Client Project ID: 256 Hamilton City Lot
 York Project No.: 03010126

JM Associates, Inc.
 225 Railroad Ave.
 Bedford Hills, NY 10507
 Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 01/07/03. The project was identified as your project "256 Hamilton City Lot".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			JMA-01		JMA-02	
York Sample ID			03010126-01		03010126-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles- STARS List	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
Total Xylenes			Not detected	10	Not detected	10

YORK

Client Sample ID			JMA-01		JMA-02	
York Sample ID			03010126-01		03010126-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

Client Sample ID			JMA-03		JMA-04	
York Sample ID			03010126-03		03010126-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles- STARS List	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330

YORK

Client Sample ID			JMA-03		
York Sample ID			03010126-03		
Matrix			SOIL		
Parameter	Method	Units	Results	MDL	MDL
Fluorene			Not detected	330	330
Indeno[1,2,3-cd]pyrene			Not detected	330	330
Naphthalene			Not detected	330	330
Phenanthrene			Not detected	330	330
Pyrene			Not detected	330	330

Client Sample ID			JMA-05		
York Sample ID			03010126-05		
Matrix			SOIL		
Parameter	Method	Units	Results	MDL	MDL
Volatiles- STARS List	SW846-8260	ug/Kg	---	---	---
1,2,4-Trimethylbenzene			Not detected	3.0	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	5.0
Benzene			Not detected	5.0	5.0
Ethylbenzene			Not detected	5.0	5.0
Isopropylbenzene			Not detected	5.0	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0	5.0
Naphthalene			Not detected	5.0	5.0
n-Butylbenzene			Not detected	5.0	5.0
n-Propylbenzene			Not detected	5.0	5.0
o-Xylene			Not detected	10	10
p- & m-Xylenes			Not detected	10	10
p-Isopropyltoluene			Not detected	5.0	5.0
sec Butylbenzene			Not detected	5.0	5.0
tert-Butylbenzene			Not detected	5.0	5.0
Toluene			Not detected	5.0	5.0
Total Xylenes			Not detected	10	10
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---
Acenaphthene			Not detected	330	330
Anthracene			Not detected	330	330
Benzo[a]anthracene			Not detected	330	330
Benzo[a]pyrene			Not detected	330	330
Benzo[b]fluoranthene			Not detected	330	330
Benzo[g,h,i]perylene			Not detected	330	330
Benzo[k]fluoranthene			Not detected	330	330
Chrysene			Not detected	330	330
Dibenz[a,h]anthracene			Not detected	330	330
Fluoranthene			Not detected	330	330
Fluorene			Not detected	330	330
Indeno[1,2,3-cd]pyrene			Not detected	330	330
Naphthalene			Not detected	330	330
Phenanthrene			Not detected	330	330
Pyrene			Not detected	330	330

YORK

Client Sample ID			JMA-07		JMA-08	
York Sample ID			03010126-07		03010126-08	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles- STARS List	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-3270	ug/kg	---	---	---	---
Acenaphthene			Not detected	330	Not detected	330
Anthracene			Not detected	330	Not detected	330
Benzo[a]anthracene			Not detected	330	Not detected	330
Benzo[a]pyrene			Not detected	330	Not detected	330
Benzo[b]fluoranthene			Not detected	330	Not detected	330
Benzo[g,h,i]perylene			Not detected	330	Not detected	330
Benzo[k]fluoranthene			Not detected	330	Not detected	330
Chrysene			Not detected	330	Not detected	330
Dibenz[a,h]anthracene			Not detected	330	Not detected	330
Fluoranthene			Not detected	330	Not detected	330
Fluorene			Not detected	330	Not detected	330
Indeno[1,2,3-cd]pyrene			Not detected	330	Not detected	330
Naphthalene			Not detected	330	Not detected	330
Phenanthrene			Not detected	330	Not detected	330
Pyrene			Not detected	330	Not detected	330

Client Sample ID			JMA-09		JMA-10	
York Sample ID			03010126-09		03010126-10	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles- STARS List	SW846-3260	ug/L	---	---	---	---
1,2,4-Trimethylbenzene			7200000	10000	2500	50
1,3,5-Trimethylbenzene			1800000	10000	590	50
Benzene			410000	10000	Not detected	50
Ethylbenzene			1200000	10000	2300	50
Isopropylbenzene			120000	10000	81	50
Methyl-tert-butyl ether			Not detected	10000	Not detected	50
Naphthalene			1300000	10000	52	50
n-Butylbenzene			290000	10000	Not detected	50
n-Propylbenzene			420000	10000	250	50

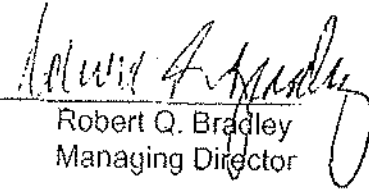
YORK

Client Sample ID			JMA-09		JMA-10	
York Sample ID			03010126-09		03010126-10	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
o-Xylene			3500000	20000	1300	100
p- & m- Xylenes			9100000	20000	6700	100
p-Isopropyltoluene			200000	10000	Not detected	50
sec-Butylbenzene			Not detected	10000	Not detected	50
tert Butylbenzene			33000	10000	290	50
Toluene			4100000	10000	190	50
Total Xylenes			12600000	20000	8000	100

Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 03010126

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By: 
 Robert Q. Bradley
 Managing Director

Date: 1/10/2003

YORK

03010126

YORK

ANALYTICAL LABORATORIES, INC.
ONE RESEARCH DRIVE
STAMFORD, CT 06916
(203) 325-1371 FAX (203) : 57-0166

Field Chain-of-Custody Record

Page 1 of 1

Sample No.	Location /ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED - Description(s)	Container
			Water	Soil	Air		
MA-01	B-4 5'-7'	1/6/03		X			B-02
MA-02	B-4 10'-12'	1/6/03		X			B-02
MA-03	B-4 15'-17'	1/6/03		X			B-02
MA-04	B-4 20'-26 1/2'	1/6/03		X			B-02
MA-05	B-5 5'-7'	1/6/03		X			B-02
MA-06	B-5 10'-12'	1/6/03		X			B-02
MA-07	B-5 1'-16'	1/6/03		X			B-02
MA-08	B-5 20'-22'	1/6/03		X			B-02
MA-09	Gravelly	1/6/03	X				B-02
MA-10	Gravelly	1/6/03	X				B-02

Project ID No. 256 HAMILTON
 Invoice To: JM ASSOCIATES
 Name (Printed): Chris Slagic
 Signature: [Signature]
 ANALYSES REQUESTED: 8021 + 8270 as per STAGS Table B-02
 Container Description(s): B-02
 Name (Printed): Chris Slagic

Sample Relinquished by: [Signature] Date/Time: 1/6/03
 Sample Relinquished by: [Signature] Date/Time: 1/6/03
 Sample Received in LAB by: R. Van Dorem Date/Time: 4:24

YORK

ANALYTICAL LABORATORIES, INC.

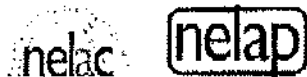
Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 1/9/2003
Re: Client Project ID: 256-Hamilton City Lot
York Project No.: 03010125

CT License No. BH 0723 New York License No. 10854 Mass. License No. M-CT106 Rhode Island License No. 93 EPA I.D. No. CT00106



Report Date: 1/9/2003
 Client Project ID: 256-Hamilton City Lot
 York Project No.: 03010125

JM Associates, Inc.
 225 Railroad Ave.
 Bedford Hills, NY 10507
 Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 01/07/03. The project was identified as your project "256-Hamilton City Lot".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			JMA-01		JMA-02	
York Sample ID			03010125-01		03010125-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-STARS List	SW846-8260	ug/L	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	1	45	1
1,3,5-Trimethylbenzene			Not detected	1	14	1
Benzene			Not detected	1	3	1
Ethylbenzene			Not detected	1	11	1
Isopropylbenzene			Not detected	1	1	1
Methyl-tert-butyl ether			Not detected	1	Not detected	1
Naphthalene			Not detected	1	Not detected	1
n-Butylbenzene			Not detected	1	1	1
n-Propylbenzene			Not detected	1	5	1
o-Xylene			Not detected	2	8	2
p- & m- Xylenes			Not detected	2	30	2
p-Isopropyltoluene			Not detected	1	1	1
sec-Butylbenzene			Not detected	1	2	1
tert-Butylbenzene			Not detected	1	5	1
Toluene			Not detected	1	5	1
Total Xylenes			Not detected	2	38	2

Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

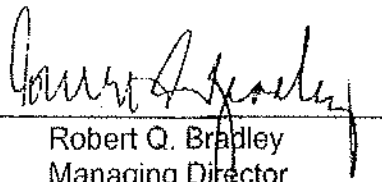
YORK

Report Date: 1/9/2003
Client Project ID: 256-Hamilton City Lot
York Project No.: 03010125

Notes for York Project No. 03010125

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By: _____


Robert Q. Bradley
Managing Director

Date: 1/9/2003

YORK

JM ASSOCIATES, INC.

• *On-Site Environmental Services* •

225 Railroad Avenue

Bedford Hills, New York 10507

(914) 241-3795

Fax (914) 241-4499

May 26, 2004

Mr. Bruce Berg
Cappelli Enterprises, Inc.
115 Stevens Avenue
Valhalla, NY 10595

Re: Borings at Lot 15E White Plains City Center

Dear Mr. Berg:

At your request, JM Associates, Inc. (JMA) provided subsurface investigation services at the Municipal Parking Lot (Lot 15E) located adjacent to the 221 Main Street Annex in White Plains. The work was performed on May 19, 2004. The project entailed drilling 2 borings on the subject site in addition to previous subsoil investigation performed in the Halpern Parking Lot in December of 2002 and the adjacent municipal lot located at the Hamilton Avenue side of the Court Street Extension in January of 2003. The depths of the borings were both 21 feet below grade. Groundwater was encountered at 15 feet. Soil samples were collected at regular intervals within each boring to determine the physical and environmental characteristics of the soil. A monitoring well was then installed in each boring. Groundwater samples were collected in both wells following the well installations and purging to determine the environmental characteristics of the groundwater.

The environmental characteristics of the soils recovered from the borings are based on site observations and field instrumentation results. Following field-testing the samples were forwarded to a NYS certified laboratory for analysis.

Physical and Environmental Soil and Groundwater Characteristics:

Boring number B-1 was drilled near the north east corner of Lot 15E approximately 5-10 feet off the asphalt walk leading to the back portion of the Annex near parking meter # 06-9-03. B-1 consisted of primarily unnatural fill with C & D material from the surface layer (just under the asphalt) to the maximum depth of about 21 feet below grade. Groundwater was encountered at about 15 feet below grade. The groundwater had a heavy petroleum odor and sheen. From 17-21 feet below grade the soil had heavy petroleum odors. According to field instrumentation, field screening of the soils at this depth indicated elevated levels of petroleum related contaminants. The laboratory sample results confirm that both the soil and the groundwater in the immediate area have been impacted. Bedrock refusal was encountered at 21 feet at the boring location. Contaminated soils and groundwater recovered from boring B-1 (monitoring well MW-1) may be do the presence of an improperly abandoned 1,000 gallon UST located near the boring. The UST vent line is shown in the attached photograph. It was not known at the time of out subsurface investigation that the UST was removed or improperly abandoned. Soil and groundwater contamination in the vicinity of the tanks assumed

location (based on the location of the vent line) indicates that the tank may have been leaking. Therefore, the contamination discovered in B-1 drilled in Lot 15E is most likely not related to the gasoline plume located on the west side of the municipal lot at the Court Street Extension near Hamilton Avenue. Also the backfill soils in this location are Construction and Demolition Debris that is a regulated waste and will have to be disposed properly.

Boring number B-2 was drilled near the south west corner of the Lot 15E approximately 10 feet of the center divider near parking meter 06-7-06. B-2 consisted of primarily clean sandy fill material becoming hard packed sand (natural hard pan) at 20-21 feet. Groundwater was encountered again at approximately 15 feet below grade. According to field observations and field instrumentation both the soil and groundwater recovered from B-2 did not show signs of contamination. The laboratory results attached confirm that the soil and groundwater from this boring has not been impacted.

Conclusions and Recommendations:

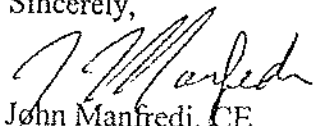
Based on the subsurface physical characteristics and field environmental analyses of the soil and groundwater at the site, miscellaneous or uncontrolled fill layers consisting of primarily C & D debris will have to be excavated and removed from the northeastern portion of Lot 15E where B-1 is located. This will also involve removing the improperly abandon 1,000 UST, if it still remains in place, and excavating petroleum contaminated soils from this section of the site. Petroleum contaminated groundwater should also be pumped out of the excavated area following the soil removals. No remediation plan is necessary in the vicinity of B-2 because the field observations, field testing and laboratory results indicated that no contamination was present.

Attached for your review:

- Site Specific Sketch and Photographs
- Test Boring Logs

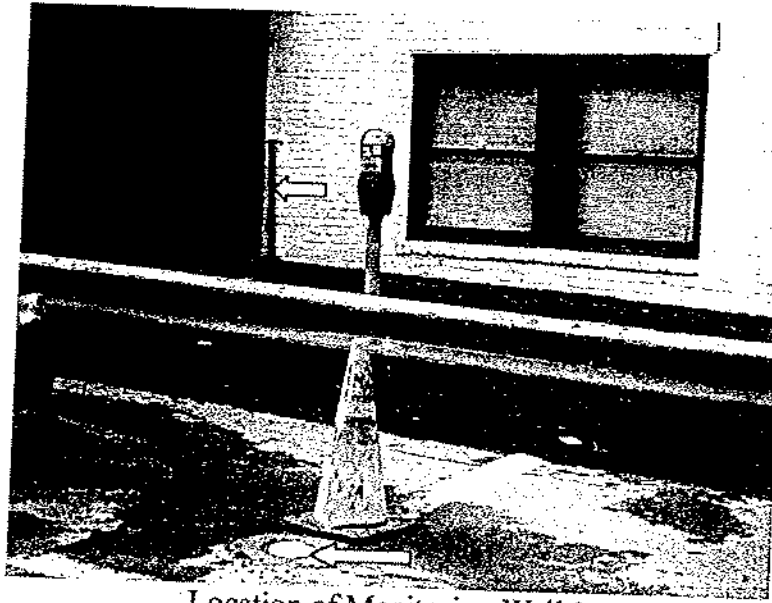
As always, if you have any questions, please feel free to contact our office.

Sincerely,

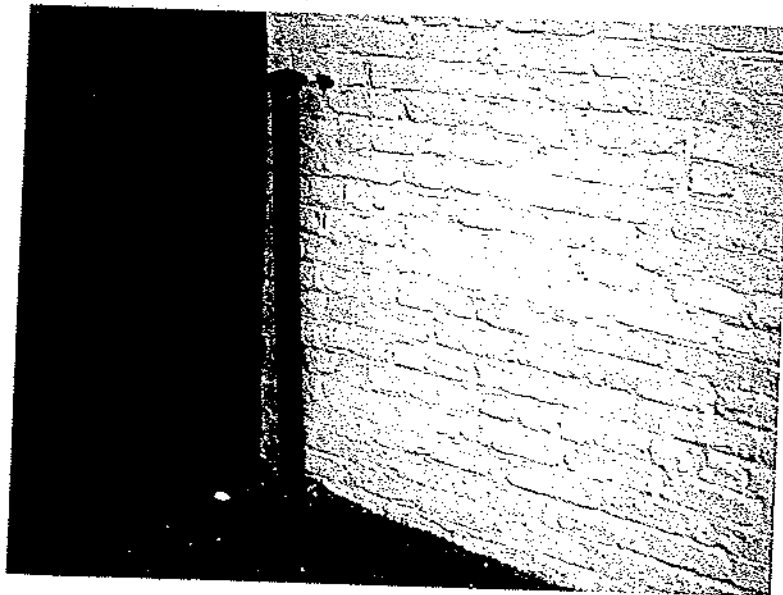

John Manfredi, CE

Attachments

White Plains City Center
Lot 15E West of Annex off
221 Main Street

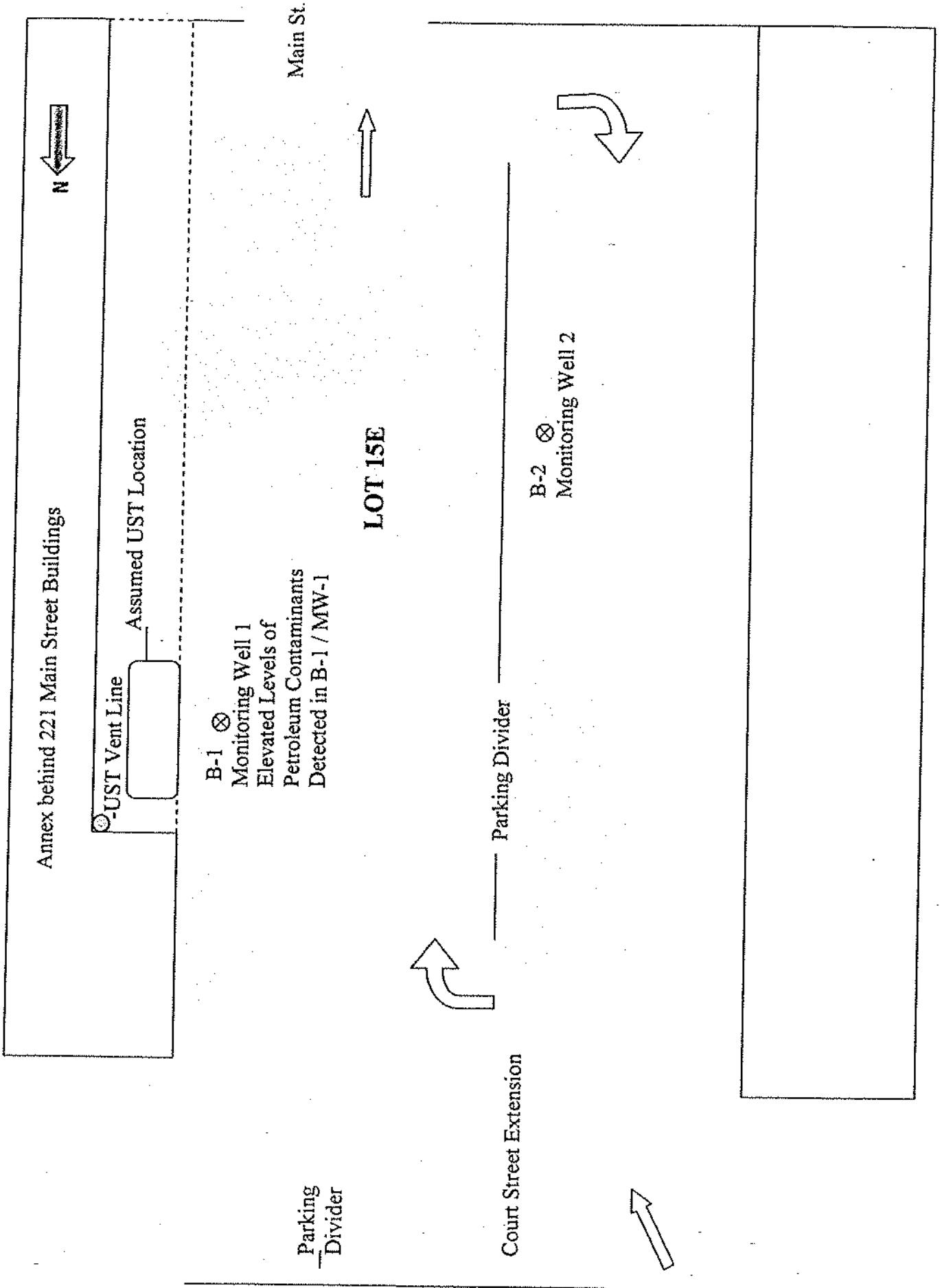


Location of Monitoring Well 1
Notice Proximity to Fuel Oil
Underground Storage Tank Vent Line



Close-up of Fuel Oil
Underground Storage Tank Vent Line

White Plains City Center Parking Lot 15E



JM Associates, Inc.

Test Boring Log Information Sheet

225 Railroad Ave.

Project: W.P.C.C Lot 15 E

Boring # / Location: B-1 Near Meter 06-9-03

Bedford Hills, NY 10507

Date: 5/19/04

Time: 9 am - 11 am

Field Personnel: CS, JM

Weather Conditions: Overcast

Temperature: ~ 65 -70°F

Log and Observations

Depth: 0-2'

Black-Dark Brown Unnatural Fill mixed with brick, cobblestone, glass debris (C & D Material)

PID = 37.0 ppm Slight Metallic and Petroleum Odors

Depth: 5-7'

Brown Sandy Loam mixed with rocks and wood (C & D Material)

PID = 30.0 ppm Slight Petroleum Odors

Depth: 10-12'

Dark Brown Unnatural Sandy Fill mixed with asphalt, brick, glass and wood (C & D Material)

PID = 30.00 ppm Slight Petroleum Odors / Asphalt Odors

Depth: 15-17'

Black Muddy Fill with C & D Material

PID = 30.0 ppm Petroleum Odors Present

GROUNDWATER AT 15'

Depth: 20-22'

Black Muddy Material progressing to natural sands - Refusal at 21'

PID = 150.0 ppm Heavy Petroleum Odors

JM Associates, Inc.	Test Boring Log Information Sheet	
225 Railroad Ave.	Project: W.P.C.C Lot 15 E	Boring # / Location: B-2 Near Meter 06-7-06
Bedford Hills, NY 10507	Date: 5/19/04	Time: 11 am - 1 pm
Field Personnel: CS, JM	Weather Conditions: Overcast - Rain	
	Temperature: ~ 65 -70°F	
Log and Observations		
Depth: 1-3'		
Brown Sandy Loam some quartz and other rocky materials		
PID = 0 ppm No Odors		
Depth: 5-7'		
Brown Sandy Loam very small amounts of brick		
PID = 0 ppm No Odors		
Depth: 10-12'		
Brown Sandy Loam mixed with grey silty sand		
PID = 0 ppm No Odors		
Depth: 15-17'		
Light Brown to grey compact Natural Sand (hard pan)		
PID = 0 ppm No Odors		
GROUNDWATER AT 15-16'		
Depth: 20-22'		
Light grey compact Natural Sand (hard pan)		
PID = 0-10 ppm No Odors		
Refusal (Bedrock) at 21'		

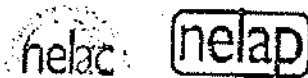
Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 5/26/2004
Re: Client Project ID: *White Plains-City Center/Lot 15E (West of Annex)*
York Project No.: 04050549

CT License No. P11-0721 New York License No. 10854 Mass License No. M-CT105 Rhode Island License No. 93 NJ License No. CT401



120 RESEARCH DRIVE STRATFORD, CT 06615 (203) 325-1371 FAX (203) 357-0166

JM Associates, Inc.
 225 Railroad Ave.
 Bedford Hills, NY 10507
 Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 05/21/04. The project was identified as your project "White Plains-City Center/Lot 15E (West of Annex)."

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			JMA-01		JMA-02	
York Sample ID			04050549-01		04050549-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	99	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	6	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
Total Xylenes			Not detected	10	Not detected	10

YORK

7-1-07 7-1-10-17

Client Sample ID			JMA-01		JMA-02	
York Sample ID			04050549-01		04050549-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
STARS Target Semi-Volatiles	SW846-8270	ug/Kg	---	---	---	---
Acenaphthene			Not detected	96	3100	96
Anthracene			120	64	4500	64
Benzo[a]anthracene			460	92	7400 ✓	92
Benzo[a]pyrene			400	96	6200 ✓	96
Benzo[b]fluoranthene			320	76	7300 ✓	76
Benzo[g,h,i]perylene			Not detected	110	1300 ✓	110
Benzo[k]fluoranthene			370	180	6400 ✓	180
Chrysene			450	90	5800 ✓	90
Dibenz[a,h]anthracene			Not detected	94	530	94
Fluoranthene			730	82	9300	82
Fluorene			Not detected	120	3200	120
Indeno[1,2,3-cd]pyrene			Not detected	110	1300	110
Naphthalene			Not detected	76	1900	76
Phenanthrene			240	90	9700	90
Pyrene			780	110	8300	110
Total RCRA Metals	SW846	mg/Kg	---	---	---	---
Arsenic, total			7.77 ✓	1.00	3.75	1.00
Barium, total			221	0.50	3000 ✓	0.50
Cadmium, total			1.14 ✓	0.50	1.82 ✓	0.50
Chromium, total			40.2 ✓	0.50	63.1 ✓	0.50
Lead, total			111	0.50	818 ✓	0.50
Selenium, total			1.12	1.00	2.13 ✓	1.00
Silver, total			Not detected	0.50	Not detected	0.50
Mercury	SW846-7471	mg/Kg	0.12 ✓	0.10	0.17 ✓	0.10

7-1-07 7-0-07

Client Sample ID			JMA-03		JMA-04	
York Sample ID			04050549-03		04050549-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	10	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	10	Not detected	5.0
Benzene			Not detected	10	Not detected	5.0
Ethylbenzene			Not detected	10	Not detected	5.0
Isopropylbenzene			10	10	Not detected	5.0
Naphthalene			78	10	Not detected	5.0
n-Butylbenzene			Not detected	10	Not detected	5.0
n-Propylbenzene			Not detected	10	Not detected	5.0
o-Xylene			Not detected	20	Not detected	10
p- & m-Xylenes			Not detected	20	Not detected	10
p-Isopropyltoluene			Not detected	10	Not detected	5.0
sec-Butylbenzene			10	10	Not detected	5.0
tert-Butylbenzene			Not detected	10	Not detected	5.0
Toluene			Not detected	10	Not detected	5.0
Total Xylenes			Not detected	20	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/Kg	---	---	---	---
Acenaphthene			410	48	Not detected	48
Anthracene			590	32	Not detected	32

YORK

B-1 20-21 3-2

Client Sample ID			JMA-03		JMA-04	
York Sample ID			04050549-03		04050549-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Benzo[a]anthracene		X	770	46	91	46
Benzo[a]pyrene		X	430	48	64	48
Benzo[h]fluoranthene		✓	450	38	57	38
Benzo[g,h,i]perylene			Not detected	55	Not detected	55
Benzo[k]fluoranthene			490	91	68	91
Chrysene			600	45	80	45
Dibenz[a,h]anthracene			Not detected	47	Not detected	47
Fluoranthene			1400	41	160	41
Fluorene			460	60	Not detected	60
Indeno[1,2,3-cd]pyrene			96	54	Not detected	54
Naphthalene			250	38	Not detected	38
Phenanthrene			1500	45	80	45
Pyrene			1300	56	150	56
Total RCRA Metals	SW846	mg/kg	---	---	---	---
Arsenic, total			1.62	1.00	2.74	1.00
Barium, total			74.3	0.50	84.2	0.50
Cadmium, total			Not detected	0.50	Not detected	0.50
Chromium, total			14.3	0.50	19.7	0.50
Lead, total			11.7	0.50	29.2	0.50
Selenium, total			Not detected	1.00	1.42	1.00
Silver, total			Not detected	0.50	Not detected	0.50
Mercury	SW846-7471	mg/kg	Not detected	0.10	Not detected	0.10

B-2 3-2

Client Sample ID			JMA-05		JMA-06	
York Sample ID			04050549-05		04050549-06	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
Total Xylenes			Not detected	10	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			Not detected	48	Not detected	48
Anthracene			Not detected	32	Not detected	32
Benzo[a]anthracene			Not detected	46	Not detected	46
Benzo[a]pyrene			Not detected	48	Not detected	48
Benzo[b]fluoranthene			Not detected	38	Not detected	38

YORK

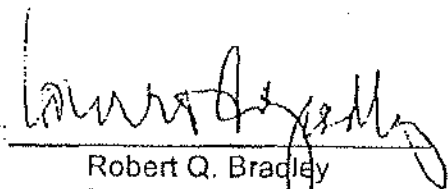
B-2 B-2

Client Sample ID			JMA-05		JMA-06	
York Sample ID			04050549-05		04050549-06	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Benzo(g,h,i)perylene			Not detected	55	Not detected	55
Benzo(k)fluoranthene			Not detected	91	Not detected	91
Chrysene			Not detected	45	Not detected	45
Dibenz(a,h)anthracene			Not detected	47	Not detected	47
Fluoranthene			Not detected	41	55	41
Fluorene			Not detected	60	Not detected	60
Indeno(1,2,3-cd)pyrene			Not detected	54	Not detected	54
Naphthalene			Not detected	38	Not detected	38
Phenanthrene			Not detected	45	50	45
Pyrene			Not detected	56	53	56
Total RCRA Metals	SW846	mg/kg	---	---	---	---
Arsenic, total			1.51	1.00	2.95	1.00
Barium, total			38.5	0.50	111	0.50
Cadmium, total			Not detected	0.50	Not detected	0.50
Chromium, total			9.82	0.50	21.7	0.50
Lead, total			2.13	0.50	7.18	0.50
Selenium, total			1.27	1.00	Not detected	1.00
Silver, total			Not detected	0.50	Not detected	0.50
Mercury	SW846-7471	mg/kg	Not detected	0.10	Not detected	0.10

Units Key: For Waters/Liquids: mg/L = ppm ; ug/l. = ppb For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 04050549

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By: 
 Robert Q. Bradley
 Managing Director

Date: 5/26/2004

YORK

YORK

ANALYTICAL LABORATORIES, INC.
 ONE RESEARCH DRIVE
 STAMFORD, CT 06906
 (203) 325-1371 FAX (203) 357-0166

Field Chain-of-Custody Record

04050549

Company Name JM Associates, Inc.	Report To: JM Associates, Inc.	Invoice To: JM Associates, Inc.	Project ID/No. White Plains - City center Lot 15E (West of Annex)	Samples Collected By (Signature) <i>Chris Stagle</i>
			Name (Printed) Chris Stagle	

Sample No.	Location/ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
JMA-01	B-1 0'-7'	5/19/04		X		B-2-PA MCHS AND 8021-8270 as per STMS Table 112	B 02
JMA-02	B-1 10'-17'	5/19/04		X			B 02
JMA-03	B-1 20'-21'	5/19/04		X			B 02
JMA-04	B-2 1'-7'	5/19/04		X			B 02
JMA-05	B-2 10'-17'	5/19/04		X			B 02
JMA-06	B-2 20'-21'	5/19/04		X			B 02

Chain-of-Custody Record	Sample Relinquished by <i>Chris Stagle</i>	Date/Time 5/19/04
Bottles Relinquished from Lab by	Sample Relinquished by	Date/Time
Bottles Received in Field by	Sample Relinquished by	Date/Time
Comments/Special Instructions	Sample Received by <i>Chris Stagle</i>	Date/Time 5/21/04
	Sample Received in LAB by	Date/Time
	Turn-Around Time	

YORK

ANALYTICAL LABORATORIES, INC.

Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 5/26/2004
Re: Client Project ID: White Plains City Center Lot 15A
York Project No.: 04050550

CT License No. PFI-0723 New York License No. 10834 Mass. License No. M-CT106 Rhode Island License No. 93 NJ License No. CT401



120 RESEARCH DRIVE

STRATFORD, CT 06615

(203) 325-1371

FAX (203) 357-0166

Report Date: 5/26/2004
 Client Project ID: White Plains City Center Lot 15A
 York Project No.: 04050550

JM Associates, Inc.
 225 Railroad Ave.
 Bedford Hills, NY 10507
 Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 05/21/04. The project was identified as your project "White Plains City Center Lot 15A".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			JMA-01		JMA-02	
York Sample ID			04050550-01		04050550-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/L	---	---	---	---
1,2,4-Trimethylbenzene			21	10	Not detected	1
1,3,5-Trimethylbenzene			Not detected	10	Not detected	1
Benzene			Not detected	10	Not detected	1
Ethylbenzene			Not detected	10	Not detected	1
Isopropylbenzene			Not detected	10	Not detected	1
Naphthalene			110	10	Not detected	1
n-Butylbenzene			Not detected	10	Not detected	1
n-Propylbenzene			12	10	Not detected	1
o-Xylene			Not detected	20	Not detected	2
p- & m- Xylenes			Not detected	20	Not detected	2
p-Isopropyltoluene			Not detected	10	Not detected	1
sec-Butylbenzene			Not detected	10	Not detected	1
tert-Butylbenzene			Not detected	10	Not detected	1
Toluene			Not detected	10	Not detected	1
Total Xylenes			Not detected	20	Not detected	2

YORK

Client Sample ID			JMA-01		JMA-02	
York Sample ID			04050550-01		04050550-02	
Matrix			WATER		WATER	
Parameter	Method	Units	Results	MDL	Results	MDL
Total RCRA Metals	SW846-6010B	mg/L	---	---	---	---
Arsenic, total			Not detected	0.004	Not detected	0.004
Barium, total			0.117	0.005	0.366	0.005
Cadmium, total			Not detected	0.005	Not detected	0.005
Chromium, total			Not detected	0.005	0.076	0.005
Lead, total			0.037	0.003	0.124	0.003
Selenium, total			Not detected	0.005	Not detected	0.005
Silver, total			Not detected	0.005	Not detected	0.005
Mercury	SW846-7470	mg/L	Not detected	0.0002	0.0004	0.0002

Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 04050550

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By: _____

Robert Q. Bradley
Managing Director

Date: 5/26/2004

YORK

YORK

ANALYTICAL LABORATORIES, INC.
 ONE RESEARCH DRIVE
 STAMFORD, CT 06906
 (203) 325-1371 FAX (203) 327-0166

Field Chain-of-Custody Record

04050550

Company Name <u>JM Associates, Inc.</u>	Report To: <u>JM Associates, Inc.</u>	Invoice To: <u>JM Associates, Inc.</u>	Project ID/No. <u>Whisk Plains City center Lot 15B (West of Barnard)</u>	Sample Collected By (Signature) <u>Chris Slagle</u>
				Name Printed <u>Chris Slagle</u>

Sample No.	Location/ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
<u>JM-01</u>	<u>MW-1 @ B-1</u>	<u>5/19/04</u>	<input checked="" type="checkbox"/>			<u>8 ACCA METALS</u>	<u>250 ml W/PLMIL</u>
<u>JM-02</u>	<u>MW-2 @ B-2</u>	<u>5/19/04</u>	<input checked="" type="checkbox"/>			<u>8 ACCA METALS</u> <u>8 ACCA METALS</u> <u>8021 oz per STARS TABLET</u>	<u>250 ml W/PLMIL</u> <u>250 ml W/PLMIL</u>

Chain-of-Custody Record

Bottles Relinquished from Lab by _____ Date/Time _____

Bottles Received in Field by _____ Date/Time _____

Sample Relinquished by Chris Slagle Date/Time 5/19/04

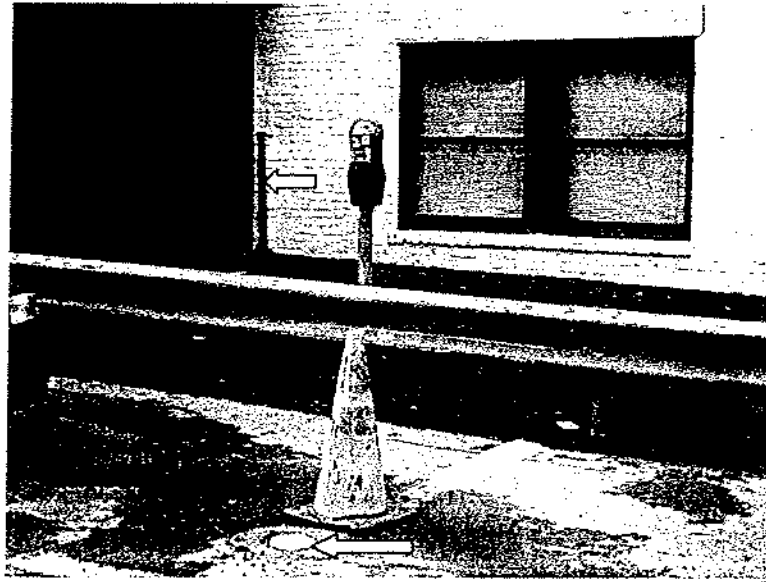
Sample Relinquished by _____ Date/Time _____

Sample Received in Lab by Chris Slagle Date/Time 5/19/04

Sample Received in Lab by _____ Date/Time _____

Comments/Special Instructions
Turn-Around Time

White Plains City Center
Lot 15E West of Annex off
221 Main Street



Location of Monitoring Well 1
Notice Proximity to Fuel Oil
Underground Storage Tank Vent Line



Close-up of Fuel Oil
Underground Storage Tank Vent Line

APPENDIX A-4

Engineering Report
SESI Consulting Engineers
May 1990

May 14, 1990
N-3255-90

Halpern Building Corporation
580 White Plains Road
Tarrytown, New York 10591

Attention: Mr. Paul Crisalli

Re: Subsurface Investigation and Report
221 Main/301 Hamilton Ave.
White Plains, N.Y.

Gentlemen:

In accordance with our proposal dated January 29, 1990, we have completed our engineering evaluation of the subsurface soil and groundwater conditions for the two proposed multi-storied structures to be constructed at the subject site.

This report summarizes the data obtained, and provides an analysis and presents our recommendations for the foundation design criteria and building area preparation procedures. At the time of this writing, at least one additional boring remains to be performed. Those results will be reported on under a separate cover.

If you have any questions regarding this report, please do not hesitate to contact our office.

Very truly yours,

P.C.

Kenneth J. Quazza, P.E.

William J. St. Pierre, P.E.

DESCRIPTION OF SITE AND PROPOSED CONSTRUCTION

The proposed development will be situated on a 2.8± acre site within the city of White Plains, New York. The site is bounded by Hamilton Avenue along the northern property line; existing commercial buildings and the Grace Episcopal Church along the eastern property line; Main Street along the southern property line; and existing commercial buildings and the proposed Court Street Extension along the western property line. The proposed development site is comprised of two lots, one is presently utilized as an on grade parking lot and the other lot is the former police headquarters building for the City of White Plains (demolition of the building is required for the proposed office development).

The proposed development will consist of two multi-storied office buildings interconnected to a parking structure. The proposed structure, at 301 Hamilton Avenue, will consist of a ten (10) story office building with seven levels of parking deck below the tower portion of the building. Three (3) of the seven levels of the proposed parking deck will be constructed below grade. The proposed structure at 221 Main Street will consist of a fourteen (14) story office building with a basement. The two office buildings will be interconnected to the parking structure at each above-grade parking level.

The two office structures and parking structure will be steel frame construction. At the

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time of this writing, typical column spacings for the various structures were unavailable. At the northeast corner of 221 Main Street the proposed structure will span over the existing Parish House of the Grace Episcopal Church. A transfer girder spanning the existing building will be founded on deep foundations. Additionally, the existing four and five storied brick buildings to the west of 221 Main Street will require underpinning.

FIELD AND LABORATORY INVESTIGATION

Our investigation consisted of a review of six (6) boring logs done previously by General Borings, Inc., advancing five (5) new soil borings using auger/rotary drilling methods and excavating three (3) test pits using a rubber-tired backhoe. The locations of the soil borings and test pit excavations are illustrated in Figure 1. Three generalized geologic cross-sections were prepared and are presented in Figures 2 through 4. The soil borings were advanced to a maximum depth of $59\pm$ feet below existing grade, while the test pit excavations varied in depth from 5.5 to $6.0\pm$ feet below existing grade. Individual soil boring and test pit logs, which describe the materials encountered are presented in Figures 5 through 17, respectively. In addition, copies of the boring logs performed previously by General Borings, Inc. are presented in the Appendix.

Laboratory classification testing consisting of five (5) grain-size analysis and one (1) minus 200 determinations were performed on representative samples obtained during our field investigation. The results of our testing program are presented in graphical form in Figures 18 through 22 and on the respective boring logs.

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within the limits of the mass excavation that is required for the below grade parking structure.

The natural dense to very dense granular materials encountered below the existing fill are suitable for support of the anticipated building loads.

The building area preparation procedures, in general, should consist of the installation of the various perimeter lateral support systems prior to commencing with the mass excavation. These lateral support systems include the underpinning of the eastern and northern building wall lines of the existing four and five story brick buildings along the western property line and the installation of temporary sheeting along the northern, eastern, and western property lines, where needed, to the required elevations. Once the perimeter lateral support systems are in-place the excavation within the proposed building area may begin.

After the mass excavation within the proposed building areas has been completed to proposed grades, conventional spread/strip foundations may be constructed within the natural granular soils. The footings may be designed for a maximum allowable bearing pressure of 6 TSF (12000 PSF). The City of White Plains Building Code permits a presumptive bearing value of 6 TSF on "gravel and sand-gravel mixtures". Regardless of the loads, the minimum plan dimension of isolated footings should be 36 inches and the minimum width of continuous footings should be 24 inches.

The exterior and interior frost-exposed footings should be placed at least 3.5 feet below the adjacent finished grade. Interior footings within heated building areas may be founded at conventional depths below the floor slab.

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DEEP FOUNDATIONS

As indicated previously, a portion of the eastern building line of 221 Main Street, as presently designed, will span over the existing Parish House of the Grace Episcopal Church. A transfer girder will be used to span the distance and will be founded on deep foundations. It is envisioned that the girder will be supported on on drilled caissons ranging from 4.5 to 5 feet in diameter with an assumed bearing pressure of 40 TSF on the underlying rock formation. Caissons of this size equate to column loads ranging from approximately 1270 to 1570 kips. Due to the size and number of the caissons required, the scheme while technically feasible, may prove to be uneconomical due to the limited availability of specialty contractors capable of constructing the shafts. Therefore, as an alternate, we recommend three variations of the existing concept which may be performed by readily available contractors. The ultimate choice of deep foundation alternate, therefore, becomes solely economical.

The three alternates we propose consist of: smaller diameter drilled caissons with rock socket; drilled and grouted in-place, concrete filled pipe piles; and small diameter mini-piles. Each of the alternates will be addressed individually.

A. Small Diameter Caissons

This alternate consists of using a smaller diameter shell (approximately 20 to 24 inches), designed in accordance with ACI 336.3R "Suggested Design and Construction Procedures for Pier Foundations", utilizing a bored, undersized rock socket, and internally reinforced. The rock socket may be designed with a frictional value of 120-psi between the rock socket and the concrete in the bore. Bearing capacity of 40 tons per square foot may be

Halpern Building Corp

-7-

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used for bearing on sound rock on the bottom of the caisson

The preliminary design criteria for this alternate should be the caisson casing material shall be a steel pipe shell of the required diameter and the area of steel provided may be included in the required area of steel for the reinforcement of the caisson. The casing should be installed open ended and seated into the rock surface. The casing should be washed out and all fractured rock cuttings removed by airlift. The casing should be gauged to determine that the following deviation tolerance criteria is attained:

maximum deviation from location--6 inches aggregate dimension

maximum eccentricity from tip to cut off--2 percent of installed length

When necessary, the rock socket may be bored utilizing down the hole hammers. Prior to the placement of the core reinforcement, the bore hole should be blown out with air.

B. Drilled in Pipe Piles

This alternate generally would consist of drilling a smaller diameter shaft through the existing site soils into the bedrock. Once the bedrock is encountered, a socket in the rock should be created and the pile installed within the socket and grouted into place. All deep foundations supporting the transfer girder should be designed structurally as piles based on the following conditions:

-Nominal Axial working capacity of 100-tons. The pile should be proportioned based on 35-percent of F_y and 25-percent of F'_c , except that the pile casing should be minimum nominal 12-3/4-inch in diameter and weigh at least 30-pounds per foot;

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The deep foundation should be analyzed as a column fixed at both ends;

The deep foundation shall be installed with a maximum deviation from location--6 inches, and maximum eccentricity from tip to cut off--2 percent of installed length.

The depth of rock socket may be designed with a frictional value of 120-psi between the rock socket and the concrete in the bore.

Bearing capacity of 40-tons per square foot may be used for bearing on sound bedrock on the bottom of the pile.

C. Mini-Piles

This alternate consists of installing a pile which is less than 12 inches in diameter and is formed in a hole advanced by rotary or rotary percussive drilling methods (with or without a temporary casing), by a hollow-stem auger, or by driving a temporary casing. Once the hole is created, the reinforcing is placed and the entire drilled hole is tremie grouted. Generally, these piles are designed as friction piles to carry axial loads less than the maximum load on a pile before load testing is required. In this particular case, the City of White Plains Building Code requires a load test for piles designed in excess of 40 tons. While the number of piles per column required increases over the number required for the two other alternates, the advantages this system has over the previous two systems are that the overall length of each pile is reduced and formal load testing in accordance with ASTM D 1143 is not required for pile loads up to 40 tons, however proof load testing against frictional pull-out resistance will be required to confirm capacity.

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LATERAL PRESSURES FOR DESIGN OF PERMANENT WALLS

We recommend that for the design of the basement walls, it should be assumed that the walls will be acted on by a lateral soil pressure equivalent to that due to a fluid having a unit weight of 40 PCF plus an areal surcharge of 150 PSF for pedestrian/vehicular traffic. This design pressure is based on the assumption that surcharges from adjacent existing structures do not impose additional loads on the proposed foundation. Should an existing structure impose additional loadings on the proposed foundation, underpinning or other suitable method of load transfer will be required in order to eliminate this additional loading. If the basement walls are designed to help resist lateral loads due to wind, etc., we recommend a passive soil pressure equivalent to that due to a fluid having a unit weight of 100 PCF.

FLOOR SLAB SUPPORT

Floor slabs can be founded on the natural granular materials encountered at the proposed bottom of the mass excavation and should be designed as a slab-on-grade. Any soil that is to support a floor slab and which becomes disturbed during construction should be compacted to at least 92% of the maximum dry density as determined by ASTM D-1557. A hand-operated vibratory roller would be suitable for such purposes.

DEWATERING CONSIDERATIONS

A. Temporary Unwatering During Construction

As indicated previously, the groundwater level has been measured at approximately elevation 190±. Based on these water level readings, the lowest parking level (elevation 189)

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should be slightly below the measured groundwater levels. As a result, unwatering during foundation construction should be anticipated. This unwatering system should consist of pumping from within sump pits connected to perimeter drainage ditches. If deeper excavations are required in localized areas, such as elevator pits, additional sumps may be prudent in the immediate area of the excavation. In general, the groundwater levels should be maintained at least 2± feet below the bottom of the proposed excavation. To confirm this criteria, during construction, observation wells consisting of PVC standpipes should be installed within test pits in those areas where unwatering operations are required during construction.

B. Permanent Unwatering System

As indicated, the groundwater level was found to be above the lowest finished floor elevation within small area of the parking structure. Additionally, it is likely that the water table would rise during periods of prolonged precipitation. To prevent a potential wet floor, we recommend that a permanent sub-floor drainage system be provided under all slabs-on-grade below elevation 194±. A permanent unwatering system should consist of perimeter and lateral drains encased in pervious material and connected to sumps. Typical underdrain systems consist of 6-inch diameter perforated pipe, surrounded by a minimum of 6 inches of clean 3/4 inch stone. Due to the silt content of the natural site soils, a non-woven geotextile should envelope the stone to minimize the intrusion of the "fines" and clogging the voids within the stone which would reduce the efficiency of the drainage system. For preliminary design of the sump and pumping system, a maximum flow of 200 gallons/minute

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may be assumed. Pipes should be spaced no further than 30 feet apart. Once the excavation is down to design grade, the rate of groundwater inflow (if any) and soil conditions can be observed, and modifications to the underdrain system design requirements can be made, if necessary.

EXCAVATION CONSIDERATIONS

A. Slopes

Temporary soil excavations above the natural groundwater level can have cut slopes as steep as 1:1. Temporary soil excavations below the groundwater level should not be steeper than 2H:1V. Some sloughing of the slopes may occur requiring periodic maintenance.

Soil excavations between adjacent footings should be no steeper than 2H:1V above the groundwater table. There should be a minimum of 1.5 feet lateral distance between the edge of the footing and the top of the slope. If the bearing soils become disturbed, the loosened soil should be removed, as required, and either the footing lowered or the area backfilled with lean concrete or 3/4 inch clean stone.

B. Temporary Support of Excavation Walls

In areas where there is insufficient lateral space to slope back the soil, one feasible approach for supporting the soil would involve the use of soldier beams and wood lagging. The soldier piles could be placed in predrilled holes and embedded in lean concrete below the level of the bottom of the excavation. If the soldier piles are driven, unacceptable noise and vibrations might develop from hard driving through the fill and natural granular soils.

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The use of continuous steel sheet piling is not appropriate at this site because of the potential difficulties associated with driving sheets into soils containing rubble, cobbles, boulders, and other obstructions and costs.

The temporary retaining structures that will be required to support any vertical sides of the excavation should be designed to resist the active earth pressures developed as the excavation proceeds and all perimeter surcharges created by construction activities or existing buildings within the proximity of the excavation. Hydrostatic pressures should not be included within the design of the sheeting system as it is assumed that the excavation will be fully drained to the bottom of the cut and positive drainage will be provided. The design of the temporary retaining structures should be the responsibility of the foundation contractor. If desired, we can provide you with the design from which the foundation contractor may bid or propose an alternate. Should you elect to have your foundation contractor design the temporary sheeting or should he propose an alternate, his design (soil loads) should be reviewed by the soils engineer prior to construction of the retaining structure.

C. Underpinning

Underpinning will be required at locations where the adjacent foundations of existing structures will be above the proposed excavation levels. Based on the results of Test Pit No. 3, the four and five storied brick structures to the west of 221 Main Street will require underpinning in order to advance the excavation in this area to the proposed finished floor elevation. Caution should be exercised during the underpinning of these walls as the existing foundation wall is constructed of boulders and mortar laid level within the soil subgrade

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without a footing. In addition, as stated previously, the former theater foundation wall and slab we encountered during our test pit excavations, and their removal is required in order to underpin the existing wall. Pargeting and repointing of the existing rubble wall, once exposed, should be anticipated.

One feasible underpinning scheme would involve concrete filled pits extending from the bottom of the existing foundations to a predescribed depth below the general excavation level. The soil at the bottom of the underpinning piers should be inspected for suitable bearing prior to placement of concrete. The underpinning piers should be designed with weep holes through the piers to prevent the build-up of hydrostatic pressures behind the pier. Soil anchors or struts may be required for lateral support of the underpinning piers if the piers exceed 8 feet in height. One method of reducing the amount of underpinning required would be to raise the proposed finished grade within that region or reduce the footprint of the structure in that area by "pulling" the proposed foundation wall into the site such that an imaginary line struck from the existing footing down on a 2V:1H does not intersect the proposed foundation wall.

D. Compacted Fill

The excavated on-site soils (excluding any deleterious materials such as wood, metal, etc.) can be used as compacted fill. Structural fill should be placed in layers with a maximum loose thickness of 12 inches. The fill should be compacted using a vibratory compactor to a minimum dry density of 95 percent of Modified Proctor density (ASTM D 1557) for fill placed under foundations. Fill placed under slabs, sidewalks, and paved areas should be

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compacted to a dry density of 92 percent Modified Proctor density.

Backfilling of foundation walls should not commence until the foundation wall has been restrained at the top of the wall by the floor slab above or by internal braces propping the wall to resist the wall deflection due to the backfill. The backfill soil should be placed in 12 inch thick lifts and compacted using a hand operated vibratory roller. Large, self-propelled vibratory rollers should not be used for wall backfilling as the dynamic loading created by these rollers generally exceed the capacity of the foundation walls.

PRE-CONSTRUCTION SURVEY/MONITORING

A pre-construction survey of all buildings and utilities in the nearby surrounding areas should be performed. On the basis of this survey, an observational and instrumentation program should be designed for checking the performances and evaluating the current construction procedures.

If piles for the temporary sheeting are driven, vibrations should be monitored inside of the adjacent structures by a seismologist. Peak particle velocities should not exceed 2 in./sec. If higher vibration levels are measured, pre-drilling may be required to limit vibration levels during pile installation.

It has been our experience that cosmetic (architectural) types of damage can occur in existing buildings due to adjacent construction activities (i.e., installation of sheeting, underpinning, etc.). The cosmetic types of damage include cracks in paint, plaster, and/or brick facades. The owner and/or contractor may want to consider establishing a contingency

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fund for repairs.

ADDITIONAL INFORMATION REQUIRED

As mentioned previously, at least one additional boring is to be performed adjacent to the existing church in the region of the deep foundations. Additional rock cores will be obtained from this boring, once permission has been obtained to enter the site. The results of this additional boring will be reported at a later date.

The building code for the City of White Plains also stipulates that one boring shall be performed for every 2500 square feet of built-over area. Based on the building footprint area proposed, thirty-three borings are required for this development, there are currently a total of eleven borings in satisfaction of this requirement.

KIQ:WSP

K3255RPT

APPENDIX

PROJECT NO. P-6058

INSPECTED BY:

MM

BORING NO.

B-1

LOCATION

SEE FIGURE 1

APPROX. ELEV.

DATE

12/10/2002

DEPTH FEET	SAMPLES	RESISTANCE PLI NG CE	DEPTH FEET	DESCRIPTION
0				3" ASPHALT
		105		Brown coarse to fine SAND, little Gravel, little Silt
		110		
5		97		Brown coarse to fine SAND, little Silt, trace Gravel
		100/5"		
		53/6"		
		100/2"		
20		113		Gray/Brown medium to fine SAND, little Silt
		55/6"		
		100/5"		Gray coarse to fine SAND, little Silt
30		100/3"		... with Rock
				BORING COMPLETE AT 30.25 FEET
35				

SAMPLER: 2-INCH O.D. SPLIT BARREL
140 LB. HAMMER 30 INCH DROP * Blows/Ft.

DEPTH TO WATER: 20'± DATE: 12/10/2002
REMARKS: AT COMPLETION OF BORING

Fig. 2 SESI CONSULTING ENGINEERS

PROJECT NO. P-6058 INSPECTED BY: MM BORING NO. B-2
 LOCATION SEE FIGURE 1 APPROX. ELEV. _____ DATE 12/10/2002

DEPTH FEET	SAMPLES	RESAMPLING DISTANCE	DEPTH FEET	DESCRIPTION
0				3" ASPHALT
		57		Brown coarse to fine SAND, little Gravel, trace Silt
		100		
5		43		Brown coarse to fine SAND, little Silt, little Gravel with Quartz with Quartz
		58		
		40/6"		
		50/3"		
15		52/6"		Gray medium to fine SAND, little Silt BORING COMPLETE AT 31.5 FEET
		50/4"		
20		35/6"		
		50/4"		
25				
30				
35				

SAMPLER: 2-INCH O.D. SPLIT BARREL
 140 LB. HAMMER 30 INCH DROP * Blows/Ft.

DEPTH TO WATER: 20'± DATE: 12/10/2002
 REMARKS: AT COMPLETION OF BORING

Fig. 3 SESI CONSULTING ENGINEERS

PROJECT NO. P-6058

INSPECTED BY:

MM

BORING NO.

B-3

LOCATION

SEE FIGURE 1

APPROX. ELEV.

DATE

12/11/2002

DEPTH FEET	SAMPLES	RESAMPLING IN G C E	DEPTH FEET	DESCRIPTION
0				3" ASPHALT
	35/6" 50/2"			FILL: Brown coarse to fine SAND, little Gravel, little Silt with Brick
5	67			FILL: CONCRETE/BRICK/STEEL
	50/0"			
10		102		Brown coarse to fine SAND, little Silt, trace Gravel
15		120		
20		120		Brown coarse to fine SAND, little Silt, little Gravel
25				
30	50/3"			Gray coarse to fine SAND, some Silt, trace Gravel
35				BORING COMPLETE AT 30.25 FEET

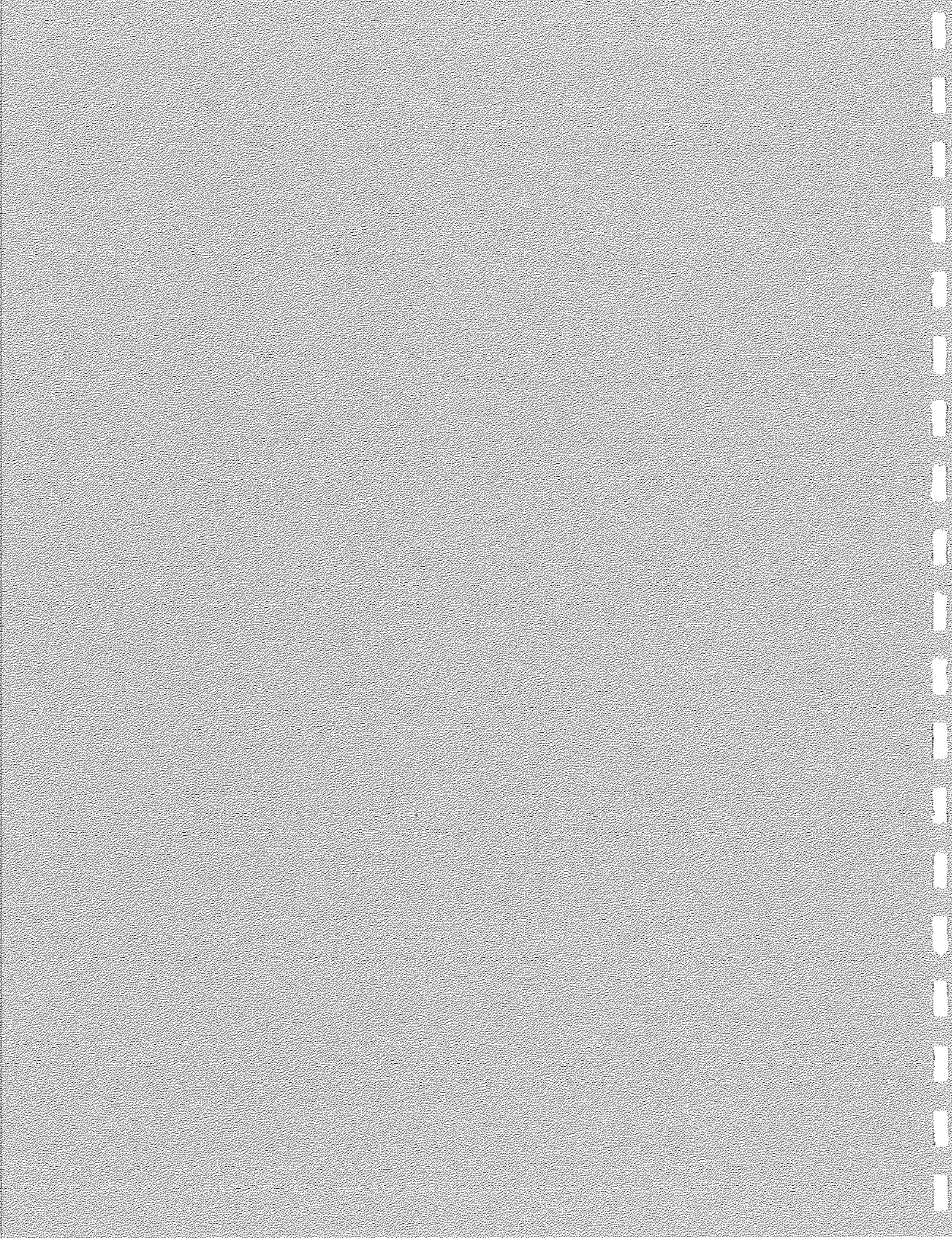
SAMPLER: 2-INCH O.D. SPLIT BARREL
140 LB. HAMMER 30 INCH DROP * Blows/Ft.

DEPTH TO WATER: 20± DATE: 12/10/2002
REMARKS: AT COMPLETION OF BORING

Fig. 4 SESI CONSULTING ENGINEERS

RI WORK PLAN
APPENDIX B

QUALITY ASSURANCE PROJECT PLAN



**REMEDIAL INVESTIGATION (RI)
QUALITY ASSURANCE
PROJECT PLAN**

221 MAIN STREET SITE

221 Main Street
White Plains, NY 10601

Rev January 2006

Prepared for:

**LC Main, LLC
115 Stevens Ave
Valhalla, NY 10595**

Prepared By:

**JM Associates, Inc.
225 Railroad Ave
Bedford Hills, NY 10507**

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APPENDICES

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1.0 INTRODUCTION

JM Associates has prepared a Quality Assurance Project Plan (QAPP) for the Remedial Investigation (RI) that will be conducted at the 221 Main Street Site located at 221 Main Street, White Plains, New York ("the Site") under the New York State Brownfield Cleanup Program (BCP). The QAPP presents the project description, project organization, data quality objectives, and data management procedures for implementing investigation activities at the site. The QAPP also identifies the specific quality control (QC) checks and quality assurance (QA) auditing processes to be undertaken during field operations at the site.

1.1 Project Description and Objective

Site background information is discussed in the Remedial Investigation (RI) Work Plan. The project consists of remediating the site for the development of the site into a hotel/condominium/retail space complex interconnected to a parking structure. A new street, known as Court Street Extension, will also be constructed as part of the project. A separate interim remedial measure (IRM) is also being undertaken at the site. The objective of the IRM activities is to excavate contaminated soils and remaining underground storage tanks (USTs) at the site in order to remove contaminated soil. The objective of the RI is to determine if soil gas is migrating from the site and affecting adjacent buildings and to determine the extent of groundwater contamination. Once the extent of groundwater contamination is known, remedial alternatives can be evaluated, if necessary. The RI and the IRM Work Plans have been prepared as two independent documents.

1.2 Site Description

The Site is located at 221 Main Street in the City of White Plains, New York and occupies the majority of one City block. The site consists of three main areas. The first area is the building along Main St (203-227 Main St) and the Annex building. The second area of the site is this parking area located behind (north of) the Main St building. This parking lot is known as the Halpern Lot and is privately owned and operated. The third area is the City Lot, which is a municipal parking lot located directly west of the Halpern Lot. The City Lot extends south to Main Street, just west of the Annex.

1.3 Data Quality Objectives

The data collected during the RI and IRM will be utilized to provide information to satisfy the following Data Quality Objectives (DQO):

- Determine the extent of soil contamination at the site and excavate contaminated areas to levels that are below NYSDEC Recommended Soil Cleanup Objectives (RSCO) as defined by NYSDEC Technical and Administrative Guidance Memorandum #4046 (TAGM 4046).

- Determine if contamination is migrating from the site in the form of soil vapor and affecting nearby buildings.
- Determine the extent of groundwater contamination based on NYSDEC Groundwater Quality Standards as per New York State Codes, Rules and Regulations (NYCRR) Part 703.

DQOs are specified based on the intent of the data use and are defined with respect to the type, number and location of samples that will be collected, and the quality assurance levels associated with the respective analysis. Table 1 summarized specific samples to be collected as part of the RI and the IRM.

2.0 PROJECT ORGANIZATION

This section describes the project organization and the project team that has been assigned to complete the RI and IRM. The responsibilities of each of the project positions are outlined below. Multiple project duties may be assigned to one team member.

2.1 Environmental Project Manager (Project Manager)

The Environmental Project Manager (PM) is responsible for the overall technical and logistical aspects of the project and for implementation of separate RI and the IRM Work Plan. The PM is responsible for assuring that project staff completes their objectives in accordance with the work plan and the project schedule. In addition, the PM is responsible for reviewing and assessing the performance of subcontractors. The PM serves as the main point of contact for the Volunteer's Project Manager and the project team. The PM is responsible for maintaining project files and for project budget and schedule tracking. The PM is also responsible for contact with government agencies. The PM for this project is Mr. John Manfredi, of JM Associates, Inc.

2.2 Project Quality Assurance Officer

The Quality Assurance Officer (QAO) is responsible for conducting periodic field and sampling audits, interfacing with the analytical laboratory to make requests and resolve problems, interfacing with the data validator and for reviewing or developing a project specific data usability summary report (DUSR). The QAO will be responsible for ongoing surveillance of project activities, for ensuring conformance to this Quality Assurance Project Plan (QAPP), and for evaluating the effectiveness of its requirements. The QAO has access to any personnel or subcontractors, as necessary, to resolve technical problems and take corrective action as appropriate and has the authority to recommend that work be stopped when that work appears to jeopardize quality. The QAO will be available to respond to immediate QA/QC problems. The QAO reports directly to the PM. The QAO for this project is John Manfredi of JM Associates.

2.3 Health and Safety Officer

The Health and Safety Officer (HSO) is responsible for implementation of site-specific health and safety requirements and emergency contingency response as presented in the Health and Safety Plan (HASP). They are responsible for hazard communication information, oversight of training employees in safe operating procedures and advising the PM on any matters which involve the health and safety of personnel completing the investigation field work. The HSO for this project is John McCarthy of ProSafety.

2.4 Subcontractors

Several subcontractors will be used throughout the course of the RI and IRM. The subcontractors anticipated to be used are as follows:

Soil Boring Advancement and Well Installation:	General Borings, CT
Site Surveying: Laboratory Analysis:	York Laboratory, CT
Data Usability Review:	Carole A. Corrado-Tomlins, NY.

2.5 Volunteer's Project Manager

The Volunteer's Project Manager will interface directly with the PM to ensure compliance with the Work Plan and overall regulatory compliance. They will inform the PM of the schedule for the overall development project and coordinate with the PM as necessary. The Volunteer's Project Manager is Jim Bruno of LC Main, LLC. The Volunteer's Project Manager is ultimately responsible for compliance with the Work Plan and timely completion of work and compliance with submittal requirements.

2.6 NYSDEC Project Manager

The NYSDEC Project Manager will interface directly with the Volunteer's Project Manager and the PM. The NYSDEC Project Manager is the central contact for all regulatory agencies involved in the project, including the New York State Department of Health (NYSDOH). The NYSDEC's Project Manager will monitor the project and ensure that it is being implemented to the NYSDEC's satisfaction. All submittals and correspondence from the EPM or the Volunteer's Project Manager will be directed to the NYSDEC Project Manager.

3.0 QUALITY ASSURANCE OBJECTIVES

The QA objective is to develop and implement procedures for sampling and analytical testing that will provide data of known quality that is consistent with the intended use of the information. This section identifies the objectives by describing the use of the data, specifying the applicable field checks, and defining the acceptable criteria for data quality.

3.1 Data Requirements

The laboratory quantitation limits to be used are in accordance with NYSDEC Analytical Services Protocols (ASP). A list of the compounds being analyzed for and their respective quantitation limits is provided in Table 2. In certain instances, the laboratory cannot achieve the quantitation limits. Often this occurs because there are high concentrations of the target analyte, or an interfering compound are present, necessitating sample dilution, or often, resulting in an interference that requires an elevated quantitation limit. The laboratory indicates these instances with footnotes.

3.2 Level of Quality Control

The field sampling team will use different types of QA/QC samples to ensure and document the integrity of the sampling procedures and laboratory handling procedures. A summary of quality assurance mechanisms is provided in Table 3. The measured data will also be evaluated through a Data Usability Summary Report (DUSR). In order to achieve the project DQOs, specific data quality requirements such as Precision, Accuracy, Representativeness, Completeness, Comparability and Sensitivity are required. These requirements are discussed below.

3.2.1 Precision

Precision is defined as the measure of agreement among repeated measurements of the same property under identical or substantially similar conditions. Sampling precision will be measured by the collection of duplicate samples taken during the sampling to demonstrate reproducible analytical data. Precision is reported as the relative percent difference (RPD) between two samples. The RPD is calculated as follows:

$$RPD = \frac{(x_1 - x_2)}{\left[\frac{(x_1 + x_2)}{2} \right]} \times 100$$

where:

RPD = relative percent difference

x_1 = first sample value

x_2 = second sample value (duplicate)

Laboratory duplicates and field duplicates will be used to evaluate precision. The laboratory duplicate RPDs provide an indication of analytical precision while field duplicate RPDs provide an indication of overall field precision. Frequency limits for laboratory precision are included in the associated analytical methods. Field duplicate samples will be collected at a frequency of one per twenty samples collected per matrix. Laboratory precision will be evaluated using Matrix Spike and Matrix Spike Duplicates.

3.2.2 Accuracy

Accuracy is defined as a measure of bias or of the overall agreement of a measurement to a known value. The difference is usually expressed as either a percent recovery or as a percent bias. Accuracy includes both precision and recovery and is expressed as percent recovery (% REC). The Matrix Spike (MS) sample is used to determine the percent recovery (% REC) which is calculated as follows:

$$\%REC = \frac{(SSR - SR)}{SA} \times 100$$

where:

SSR = spiked sample results

SR = sample results

SA = amount of spike added

The quality control areas that generate accuracy information include system monitoring (surrogate compound) recovery, matrix spike and matrix spike duplicates and matrix spike blanks and laboratory control samples.

Sampling accuracy is assessed by the use of a field blank. The field blank will help in quantifying the possibility of the introduction of a contaminant by either problems in the collection or handling of the samples. One field blank will be collected per sampling event.

3.2.3 Representativeness

Representativeness is the degree to which data accurately and precisely represents selected characteristics of the environmental area from which it was obtained. The representativeness of samples is assured by adherence to sampling procedures described both the RI and the separate IRM Work Plan. The objectives for representativeness are to minimize the effects of bias from improper sampling and handling. Equipment blanks and rinsate blanks will be collected as a measure of representativeness.

3.2.4 Completeness

Completeness is a measure of the amount of valid data needed to be obtained from a measurement system as compared to the amount of data expected from the measurement

system. Completeness is defined as the percentage of all results that are not affected by failing QC qualifiers, and should be between 70 and 100% of all analyses performed. Sufficient duplicates and backup samples will be collected to assure a high return of valid data for the samples collected.

The objective of completeness in laboratory reporting is to provide a thorough data support package. The laboratory data package provides documentation of sample analysis and results in the form of summaries, QC data, and raw analytical data. The laboratory will be required to submit data packages that follow NYSDEC ASP reporting format.

3.2.5 Comparability

Comparability is a qualitative term that expresses the measure of confidence that one data set can be compared to another data set from a different phase or program. The methodologies used for the collection and analysis of samples as documented in the QAPP are expected to provide comparable data. Standardized methods of sample collection, holding times and preservation will be used as per NYSDEC ASP protocols.

3.2.6 Sensitivity

The sensitivity objectives for this plan require that data generated by the analytical laboratory achieve quantitation levels low enough to meet the required detection limits specified by NYSDEC ASP and to meet all site-specific standards, criteria and guidance values (SGCs) established for this project. All the appropriate quantitation limits and SGCs are presented in Table 2.

3.3 Quality Control Samples

Quality Control samples are collected to meet the QC objective of providing data of known and acceptable quality. QC check samples to be analyzed and evaluated include field blank samples, spike samples and duplicate samples. QC samples are summarized in Table 3.

4.0 SAMPLING PROCEDURES

Samples will be collected in accordance with the appropriate sampling method. Samples will be collected in the appropriate containers and in accordance with the appropriate preservation, storage and holding times as outlined in Table 4.

4.1 Sample Collection

When collecting samples, a new jar will be used for each sample. Disposable sampling equipment will be used for each sample or equipment will be decontaminated between sampling locations. Each sample will be collected in the appropriate sample jar as provided by the laboratory. Containers will be inspected prior to use to ensure their integrity. When using instruments to measure field parameters, the meter will be calibrated each day prior to use. Proper personal protective equipment (PPE) will be used for sampling. Gloves used for sample collection will be disposable and a new pair used for collection of each sample.

4.2 Sample Custody

Proper chain-of-custody procedures will be followed. Custody procedures involve proper sample identification, chain-of-custody forms, proper sample storage, and proper packaging and shipping procedures.

Sample containers will be labeled with the following information:

1. Project name and address
2. Sample identification (sample number and ID)
3. Name of person collecting sample
4. Date and time of collection
5. Preservation, if applicable
6. Type of sample and analyses to be performed
7. Initials of sampler, or signature

At the time of sampling, the person sampling will properly fill out the chain-of-custody form. Once sampling is complete, the sampler will properly package the samples for shipping, or deliver the samples directly to the laboratory. In either case, all samples will be received by the laboratory within 24 hours of sample collection. Laboratory personnel will then assume custody of the samples.

Once the laboratory assumes custody of the samples, they will be checked for label identification and accuracy of chain-of-custody forms. The laboratory is NYSDOH-certified and will follow proper sample custody procedures.

4.3 Equipment Decontamination

Before sampling activities begin, a decontamination area will be established, if necessary. If dedicated, disposable sampling equipment is used, a decontamination area will not be necessary. If decontamination is necessary, sampling equipment will be decontaminated by a wash and scrub with low phosphate detergent, a tap water rinse followed by a methanol rinse, a thorough rinse with de-ionized water, and then allowed to air dry. Disposable equipment, including PPE, will be collected in plastic bags and placed in a designated storage area in preparation for proper disposal.

4.4 Documentation

Field personnel will document all necessary information in field notebooks. The date and time of field activities will be clearly marked and observations as to the activities performed that day will be made. Each entry will be signed and dated by the person making the entry. Information to be documented at the time of sampling includes:

- Name of project and site address
- Date and time
- Weather
- Name and contact information of sampler
- Names of other personnel on site
- Sample ID and sample matrix
- Sample location (mark on site map with proper sample ID)
- Type of sample (composite, grab, duplicate, blank)
- Depth of sample
- Field observations
- Field measurements
- Purge information (for groundwater sampling)
- Calibration of field instrumentation
- Method of sample shipping or delivery
- Circumstances or observations pertinent to the sampling

4.5 Calibration

Calibration procedures performed by the laboratory will be in accordance with the particular sampling method being performed and in accordance with standard laboratory procedures. Field calibration will be performed each day in the field in accordance with the manufacturer's instructions regarding the specific field instrument being used. Calibration information will be documented in the field notebook at the time of calibration. Information to be documented includes the calibrator's name, the standards used for calibration and the source of the standard (manufacturer's instructions), the date and time of calibration, the name of the instrument and model number, and any corrective actions taken.

5.0 ANALYTICAL PROCEDURES

Analytical procedures to be used are from the United States Environmental Protection Agency's SW-846 Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods. The Specific methods to be used are outlined in Table 1.

6.0 DATA REDUCTION, REVIEW AND REPORTING

The process of data reduction, review and reporting ensures that the final data accurately reflects site conditions. Data reduction performed by the laboratory will adhere to ASP data reduction procedures. The laboratory to be used for this project is York Laboratories of Stratford, CT. The qualifications of York Laboratory are attached as Appendix A. All data is reviewed prior to use in the reports. Field data is reviewed to ensure accuracy of sampling procedures including sample collection, instrument calibration, and proper chain-of-custody procedures. Sampling is also reviewed to ensure that proper QC samples were collected at the proper frequency. Laboratory data is reviewed by the lab to ensure compliance with sampling protocol including proper holding times, sample preservation, proper detection limits, etc.

Reporting in the field is completed in bound field notebooks. Laboratory reports will conform to NYSDEC ASP Category A data deliverable packages. A Data Usability Summary Report (DUSR) will be prepared in accordance with NYSDEC "Guidance for Developing a Data Usability Summary Report". The DUSR will be prepared by a qualified third party and will be submitted with the final report. The DUSR will determine whether the final results can be used as reported, with limitations or cannot be used at all.

The DUSR will be prepared by Carole A. Corrado-Tomlins of The Data Quality Indicator & Associates, Inc. Her resume is attached as Appendix B.

7.0 INTERNAL QUALITY CONTROL

Internal quality control procedures detect potential problems at the source and, if necessary, trace the pathways to identify potential locations for introduction of contamination. QC checks are used to monitor project activities to determine whether QA objectives are being met.

7.1 Laboratory Quality Control

All analytical procedures and QA/QC protocols will be followed as per EPA methods and the Laboratory's Internal Procedures. The QC criteria are specific to each approved analytical methods and will be followed accordingly.

7.2 Field Quality Control

Field QC procedures monitor the data quality as it is affected by field procedures. Field QC samples consist of blanks and duplicates. The sample types and frequency are summarized below.

7.2.1 Trip Blank

A trip blank consists of reagent water prepared by the laboratory and sealed in the appropriate sampling container. Trip blanks are placed in the sample cooler prior to sample collection and remain unopened until the samples are returned to the laboratory for analysis. This sample focuses on external sources of contamination and sampling container quality. For each trip to the laboratory, one trip blank will be completed. Trip blanks will be included as part of each sampling event for VOCs and will be analyzed on an as needed basis.

7.2.2 Rinsate Blank (Equipment Blank)

Rinsate blanks, or equipment blanks, may be collected for each type of equipment used each day a decontamination event is carried out. The rinsate blank is collected by pouring de-ionized water over the decontaminated sampling equipment to determine the possibility of cross-contaminations. Rinsate blanks will be collected when decontamination occurs and will be analyzed on an as needed basis.

7.2.3 Field Blank

Some of the required blanks will consist of routine field blanks, which are collected by pouring the de-ionized water directly from the source into the sample container.

7.2.4 Temperature Blank

Each cooler will contain a temperature blank, which the laboratory will use to confirm that the samples are chilled to 4°C. Temperature blanks will be included with each cooler of samples shipped or delivered to the laboratory.

7.2.5 Duplicates

Blind duplicates are grab samples collected to monitor overall precision. One duplicate will be collected and submitted per twenty (20) samples collected, or one (1) sample per sampling event, whichever is greater.

7.3 Data Assessment Procedures

The field and laboratory data will be assessed for precision, accuracy, representativeness, comparability and completeness using the field and lab QC samples.

8.0 PERFORMANCE AND SYSTEM AUDITS

Performance and system audits will be performed on a periodic basis to ensure that the field activities are implemented in accordance with the approved RI/IRM Work Plan and in accordance with good work practices.

Internal laboratory audits are carried out periodically. Results of internal audits will be reviewed by the QAO. The laboratory is also audited as part of the various certification programs in which it participates. The laboratory will maintain proper certifications for all sub-categories of solid and hazardous waste.

Field audits are conducted periodically by the PM. The PM monitors subcontractors and field personnel to ensure appropriate procedures are being utilized.

9.0 PREVENTATIVE MAINTENANCE

J.M. Associates personnel will check all field equipment to make sure that it is in good working order prior to field sampling activities (cleaned, charged, calibrated correctly). The calibration and documentation procedures discussed in previous sections will also be followed. The maintenance of equipment is tracked and routine maintenance procedures are followed. J.M. Associates will ensure that subcontractors inspect their equipment and ensure it is in proper working order.

10.0 CORRECTIVE ACTION

The QA/QC program enables problems with the data or field procedures to be identified, controlled, and corrected. Any person identifying an unacceptable condition will bring the problem to the attention of the QAO and PM. The occurrence will be documented in the field log as well as any corrective action taken.

Deviations or problems identified by the laboratory will be documented in the data package. Corrective action may be taken and will also be documented. Corrective actions may include re-sampling, reanalysis of samples, or modifying the project procedures.

11.0 QA/QC REPORTS

Communication is an important aspect of a QA/QC Program and is integral to implementation of this QAPP. Reports will be prepared as needed by the QAO for submittal to the PM and the Volunteer's Project Manager. These reports will include a periodic assessment of the precision, accuracy and completeness of the sampling, results of audits, corrective actions taken, QA/QC problems noted and resolutions to problems encountered and recommendations to outstanding issues.

Laboratory noncompliance reports will be filed with the laboratory project manager. The reports will include accuracy and precision data, quality problems and the status of corrective actions implemented. QA/QC problems encountered will be discussed between laboratory management and QA personnel and appropriate corrective action measures will be implemented.

Table 1
Data Quality Objectives
Samples to be Collected

Media	Location	Type	Frequency	Analysis	Analysis Method	Other Sampling Method	Objective
Soil	Sidewall of excavation	Grab	1 per 30 linear feet	VOCs	EPA 8021	PID, visual inspection	To confirm excavation of petroleum contaminated soil
				SVOCs	EPA 8270		
	Bottom of excavation	Grab	1 per 900 square feet	VOCs	EPA 8021	PID, visual inspection	To confirm excavation of petroleum contaminated soil
				SVOCs	EPA 8270		
Soil Gas	Adjacent buildings	Continuous	5 samples	VOCs	EPA 8021		To determine if contamination has migrated off-site
Groundwater	Throughout Site	Grab		VOCs	EPA 8021		To determine extent of groundwater contamination
				SVOCs	EPA 8270		

Table 2
Quantitation Limits and SCGs

Parameter	Soil Quantitation Limit ppb	Groundwater Quantitation Limit ppb	SCGs* Soil (ppm) / Groundwater (ppb)
1,2,4-Trimethylbenzene	5	1	10 / 5
1,3,5-Trimethylbenzene	5	1	3.3 / 5
Benzene	5	1	0.06 / 1
Ethylbenzene	5	1	5.5 / 5
Isopropylbenzene	5	1	2.3 / 5
Naphthalene	5	1	13 / 10
n-Butylbenzene	5	1	10 / 5
n-Propylbenzene	5	1	3.7 / 5
o-Xylene	10	2	2.3 / 5
p & m Xylenes	10	2	2.3 / 5
p-Isopropyltoluene	5	1	10 / 5
sec-Butylbenzene	5	1	10 / 5
tert-Butylbenzene	5	1	10 / 5
Toluene	5	1	1.2 / 5
Total Xylenes	10	2	2.3 / 5
Acenaphthene	330	1	50 / 20
Anthracene	330	1	50 / 50
Benzo(a)anthracene	330	1	0.224 / 0.002
Benzo(a)pyrene	330	1	0.061 / ND
Benzo(b)fluoranthene	330	1	0.220 / 0.002
Benzo(g,h,i)perylene	330	1	50 / --
Benzo(k)fluoranthene	330	1	0.220 / 0.002
Chrysene	330	1	0.4 / 0.002
Dibenz(a,h)anthracene	330	1	0.0143 / --

Fluoranthene	330	1	50 / 50
Fluorene	330	1	50 / 50
Indeno(1,2,3-cd)pyrene	330	1	3.2 / 0.002
Naphthalene	330	1	13 / 10
Phenanthrene	330	1	50 / 50
Pyrene	330	1	50 / 50

*SCGs for soil are in accordance with NYSDEC TAGM 4046 and for groundwater are in accordance with NYCRR Part 703

Table 3
Quality Control Samples

Media	Field QC Sample				Laboratory QC Samples			
	Field Duplicate	Field Blank	Trip Blank	Rinsate Blank	Reagent Blank	Matrix Spike	Matrix Spike Duplicate	
Soil	5% (1 per 20 samples)	5% (1 per 20 samples)	1/day or shipment (whichever greater)	As necessary	1 per analysis batch	1 per analysis batch	5% or 1 per analysis batch	
Groundwater	5% (1 per 20 samples)	5% (1 per 20 samples)	1/day or shipment (whichever greater)	As necessary	1 per analysis batch	1 per analysis batch	5% or 1 per analysis batch	

Table 4
Sample Preservation, Storage and Holding Times

Media	Parameter	Container	Preservative	Maximum Holding Time
Soil	VOCs	Glass, Teflon lined septum cap	4 deg C	7 days
	SVOCs	4 oz glass jar with Teflon lined cap	4 deg C	10 days after VTSR to extraction; 40 days for analysis
Soil Gas	VOCs	Tedlar Bag or SUMMA Canister	--	24 hours
Groundwater	VOCs	(2) 40 ml vials with teflon lined septum cap	4 deg C	7 days
	SVOCs	1-liter glass amber jar with Teflon lined cap	4 deg C	5 days after VTSR to extraction; 40 days for analysis

APPENDIX A

York Laboratory Qualifications

YORK
ANALYTICAL LABORATORIES, INC.

YORK
ANALYTICAL LABORATORIES, INC.

***Statement
of
Qualifications***

I. Introduction

YORK

ANALYTICAL LABORATORIES, INC.

I. Introduction

York's charter is to provide superior service for a wide range of analysis needs to consulting engineers, industry and government, in support of regulated activities under the applicable environmental regulations



York Analytical Laboratories, Inc. is a full service independent analytical laboratory providing analyses of water, wastewater, soil, solid waste, hazardous waste and air in support of environmental needs.

A. Background of the Firm

York Analytical Laboratories, Inc. (YORK), is an independent, privately owned analytical laboratory. Our charter is to provide superior service for a wide range of analysis needs in support of regulated activities under the applicable environmental regulations including Underground Storage Tank programs, Resource Conservation and Recovery Act, The Clean Water Act, CERCLA/SARA, TSCA, Clean Air Act, and specific Land Transfer requirements (ECRA, Super Lien, etc.). As one of the pioneers in the air pollution measurement field, our former sister company, York Services Corporation (YSC) was one of the first full service air quality firms in the country. During the late 1960's and early 1970's YSC developed numerous methodologies for the sampling and analysis of air and emissions from a number of different industrial sources. Additionally, we were one of first commercial laboratories to be involved in groundwater, solid waste, hazardous waste, soils, and air. These environmental laboratory analysis operations, which were an outgrowth of our air quality monitoring studies, were incorporated as York Analytical Laboratories, Inc. in 1990.

B. Staffing and Facilities

York's key management personnel each have over twenty years of experience in environmental analysis. This extensive experience includes all aspects of sampling and analysis. All of our staff have earned graduate and/or undergraduate degrees in various related disciplines including chemistry, biology, engineering and environmental sciences. This team of experienced professionals is equipped with the multi-disciplinary expertise, to provide a high level of support to our clients. Our staff provides technical support to assist clients with Quality Assurance Project Plans, definition of proper methodologies and data quality objectives, and data interpretation. These value-added services are a point of differentiation from other analytical laboratories, we routinely offer as an investment in our client relationships.

Our new Stratford, Connecticut laboratory and offices, includes 8,500 sq. ft. of working laboratory area with an additional 3,500 sq. ft. available for future expansion. The laboratory facilities are equipped with modern state-of-the-art instrumentation and equipment to address the analysis of all environmental matrices. Our laboratory facility is designed to reduce the potential for cross contamination. Separate laboratory environments are provided for volatiles, sample preparation, and sample control to minimize cross-contamination potential. The instrumentation laboratories are segregated by discipline (organics analysis, sample preparation, wet chemistry and atomic spectroscopy)

YORK

York's expert staff provides technical support to assist our clients with Quality Assurance Project Plans, definition of proper methodologies and data quality objectives, and data interpretation. These value-added services are a point of differentiation, from other laboratories, that we routinely offer as an investment in our relationships with our clients.

and are provided with separate recirculating air conditioning systems to reduce cross-contamination from common laboratory solvents (methylene chloride, acetone, hexane and toluene) used in sample extractions. The laboratory maintains comprehensive licenses in various states including New York, Connecticut, New Jersey, Pennsylvania and Rhode Island.

C. Services

York provides analysis for all environmental matrices in support of the environmental regulations under the following guidelines or regulations:

- Resource Conservation and Recovery Act (RCRA)
- Clean Water Act (CWA)
- CERCLA/SARA (Superfund)
- Clean Air Act (CAA)
- OSHA/NIOSH
- Land Transfer Regulations
- NYSDEC STARS/UST and T.A.G.M. programs

Key instrumentation and equipment in support of the methods to address analyses for these regulations include:

- Gas Chromatography/Mass Spectrometry
- Gas Chromatography
- Furnace and Flame Atomic Absorption
- Inductively Coupled Plasma
- Infrared Spectrophotometry
- Ion Chromatography
- Full wet chemistry and microbiology laboratories

The foundation for the quality of information and data generated by our laboratory is the company's Quality Assurance Program which is implemented through comprehensive Standard Operating Procedures. These procedures ensure that the client's data quality objectives are both fully understood and delivered, on a timely basis.

Data Validation and Technical Support Services

York, also provides independent data validation and technical support services. These services which are independent from York's traditional laboratory services focus on performing professional services in the areas of analytical data validation and review and interpretation of analytical data related to environmental investigations (i.e. Site and/or Remedial investigations).

YORK

We define service as "providing quality data within the time frame committed with superior technical support at a fair price."

Data validation and QA/QC issues associated with technical support are performed by highly qualified personnel certified by the USEPA for data validation. Additionally, members of our staff have had experience in both laboratory analysis and field sampling which provides in depth understanding of work plan development including:

- Analytical requirements
- Project Specific data quality objectives
- State and Federal Data Validation Guidelines

D. Key Clients

York serves engineering consulting firms, major municipalities, utilities and industry, without geographical limitations, including:

Consulting Engineers/Remediation Firms

- IT Corporation/PMS Construction/NYCDDC
- Lro-Kassner/NYCDDC
- Eder Associates/Gannett-Fleming
- Clean Harbors
- Lehrer, McGovern, Bovis
- Malcolm Pirnie, Inc.
- Metcalf & Eddy, Inc.
- Ira D. Conklin
- Fleet Environmental
- Roy F. Weston
- Lenard Engineering
- Leggette Brashears and Graham
- Conestoga-Rovers
- Handex Environmental
- Fanning Phillips & Molnar
- TRC Environmental
- Waste Management

Municipalities

- New York City Department of Environmental Protection
- Connecticut Department of Environmental Protection
- Connecticut Department of Transportation
- Hartford Metropolitan District, Connecticut
- New York City Department of Design and Construction

YORK

Utilities

- Central Hudson Gas and Electric Company
- Consolidated Edison, New York
- Niagra Mohawk Power Corporation, New York

Industry

- Connecticut-American Water Company
- Clairol, Inc.
- Cytec, Inc.
- Crompton Manufacturing Corp. (Uniroyal Chemical)
- General Motors
- IBM
- Metro- North Railroad
- Long Island Railroad

E. Summary

We pride ourselves on our level of service to our client. We define service as "providing quality data within the time frame committed with superior technical support at a fair price."

The balance of this document provides brief insight into our ability to provide superior service by describing our capabilities, specific project experience, staff equipment and quality assurance practices.

II. Services, Facilities and Experience

YORK

ANALYTICAL LABORATORIES, INC.

II. Services, Facilities and Experience

With over 30 years of dedicated service to the environmental consulting industry, YAL can provide unparalleled experience to meet your analytical needs.

York Analytical Laboratories, Inc. (YORK), is an independent, privately owned analytical laboratory which provides superior service for a wide range of analysis needs in support of regulated activities under the applicable environmental regulations.

A. Services

York's combination of extensive experience and modern instrumentation provides the ability to support a wide range of analyses. Our in-house capabilities address all the analyses in support of programs under the following guidelines or regulations:

- Resource Conservation and Recovery Act
- Clean Water Act
- CERCLA/SARA (Superfund)
- Clean Air Act
- OSHA/NIOSH
- Land Transfer Regulations
- NYSDEC STARS/UST/TAGM programs

1. Resource Conservation and Recovery Act (RCRA)

York provides analysis of groundwater, soils, solid waste and hazardous waste and air in support of RCRA requirements. These analyses most often include determination of potential contaminants in the categories of target volatile organics, semi-volatile (Base/Neutral/Acid extractable) organics, pesticides, PCBs, herbicides, metals, cyanide, sulfide, ignitability, corrosivity, reactivity, and total petroleum hydrocarbons.

Analyses are conducted in accordance with EPA mandated procedures described in the methods manual designated as "SW-846." York maintains these procedures on our computer database through ChemSoft, Inc. Who provides automatic updating of methods as changes are released by EPA.

The analytical methods most commonly employed in our laboratory include direct analysis of the sample or TCLP extraction followed by methods 601/602, 8021 or 8260 for volatiles using Gas Chromatography and Gas Chromatography/Mass Spectrometry (GC/MS); methods 625 or 8270 for base/neutral/acid extractables (GC/MS); methods 8081 and 8082 for pesticides/PCB (GC); method 8151 for herbicides (GC) and the 6000 and 7000 series for metals (ICP and/or Furnace/Flame Atomic Absorption).

YORK

2. Clean Water Act (CWA)

Under the CWA York provides analyses supporting the effluent guidelines of the National Pollutant Discharge Elimination System (NPDES or SPDES) and the Safe Drinking Water Act (SDWA). Analyses offered include Volatiles, BNAs, Pesticides, PCBs, Trace Metals and conventional parameters such as BOD₅, COD and other wet chemistry parameters. Analyses are performed in accordance with the EPA methods described in the Federal Register (EPA 600 Series, 500 series and others) and Standard Methods for the Examination of Water and Wastewater, 19th edition.

Under the NPDES programs (40 CFR122), Volatiles are determined by GC/MS according to EPA method 624; BNAs are determined by GC/MS using method 625, Pesticides/PCBs are determined by method 608, and other parameters are determined in accordance with the EPA Chemical Analysis of Water and Wastes or Standard Methods.

For SDWA support, York provides routine analyses of water quality parameters including microbiological analyses (coliforms), Certificate of Occupancy parameters and determination of other regulated parameters in accordance with the EPA methodologies.

3. CERCLA/SARA (Superfund)

York can provide analysis in support of projects under these programs. We are fully versed with current EPA Contract Laboratory Program protocols for organics and inorganics. We are staffed to provide the hard copy deliverables on an as-required basis for the Target Compound List (TCL) and Target Analyte List (TAL) organics and inorganics respectively.

4. Clean Air Act (CAA)

York's long history of providing air quality monitoring services allows us to offer a significant expertise in this area. Analysis in support of the CAA and ambient air monitoring programs include full capabilities for sampling and analysis for:

- Velocity, moisture, particulates, CO, CO₂, Sox, Nox, volatile organics, semivolatiles, heavy metals, total hydrocarbons and HCL using EPA Methods 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 (and related continuous emissions monitoring methods) 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23 (sampling), 24, 25, 25A, 26 & 29
- Sampling and analysis for organics and inorganics in support of BIF regulations for the burning of hazardous wastes in industrial furnaces and boilers

YORK

ANALYTICAL LABORATORIES, INC.

- Sampling and analysis of ambient and process air for organics using VOST sampling methodology with GC/MS analysis
- Sampling and analysis for ambient air target and non-target volatile organics utilizing EPA Methods TO-14A and TO-15 SUMMA passivated canisters with analysis by GC/MS techniques
- Odor studies utilizing multi-disciplinary approaches

In addition to regulated airborne contaminants, York also provides the following services:

- Odor identification using GC/MS techniques
- Indoor Air Quality studies in commercial and residential facilities

An area of specialization at York involves characterization and quantitation of target and non-target volatile organics employing SUMMA passivated canisters using critical orifice sampling techniques. York can provide sampling of ambient air for parts per trillion levels of volatiles using GC/MS/SIM techniques. In addition, for ambient air, York can provide volatiles determination in land-fill gas, geoprobe samples, and process gas for volatile constituents.

5. OSHA/NIOSH

York provides sampling and analysis for workplace atmospheres for most common organics and inorganics used in industrial environments. Sampling is conducted routinely using personal sampling pumps and analysis of sampling media using gravimetric, GC, AA and spectrophotometric techniques with NIOSH methods.

6. Land Transfer Regulations

York provides full analytical support to meet our client's needs for the various state regulations governing commercial land transfers such as Super Lien (CT), and ECRA (NJ), etc. Analysis of groundwater, soil, building materials, storage tanks (USTs and ASTs) and air are performed in accordance with EPA SW-846 protocols where applicable. Typical analyses provided include Volatiles, PCB, Metals, and TPH can be customized to meet the history of a particular site as determined by Phase I investigations.

York is thoroughly versed in the data deliverable requirements for the various states under their particular programs.

7. NYSDEC STARS/SPOTS Program

York has extensive experience with the NYSDEC Petroleum Contamination Guidance Documents known as the STARS Memorandum and SPOTS Memorandum. York routinely conducts analyses to determine whether groundwater or soil under these guidance documents are hazardous and/or petroleum contaminated. York applies state-of-the-art GC/MS instrumentation to achieve the lower detection limit required for the target compounds listed in these memoranda. York also provides related data packages for NYSDEC ASP A and ASP B formats to support these data.

B. Facilities

York is a full service laboratory, located at 120 Research Drive, Stratford, CT. This highly accessible location is within a two hour drive from most points of service to effectively service our clients in the northern New Jersey, New York, Connecticut, Massachusetts and Rhode Island areas.

York maintains a 12,000 sq. ft. Office and laboratory facility at its Stratford, CT location. Of this total, 8,500 sq. ft. is dedicated to laboratory activities. The layout of the laboratory is shown at the end of this Section as Figure 2.1. Separate recirculating air conditioning systems are in place in the various laboratories to minimize cross-contamination between the various analysis disciplines.

York also maintains its own machine shop for various applications and to expedite fabrication of specialized sampling equipment.

1. Analytical Equipment

York maintains all of the analytical instrumentation and support equipment to provide analysis in support of our client's needs. A substantial inventory of stock chemicals, gases, commercially purchased standards, glassware and the like is also available.

York utilizes a Windows 2000 Server network with a Microsoft SQL Server 7.0-based Laboratory Information Management System (LIMS) to provide for sample log-in, sample tracking, data and results entry, and final laboratory report generation.

Our instrumentation laboratories are equipped with state-of-the-art analysis systems including the most prominent equipment as follows:

- Gas Chromatography/Mass Spectrometry/Data Systems
Hewlett Packard 5790, 5971, 5972 Systems-Windows Chemstations
- Gas Chromatographs
Hewlett Packard 5890-Chemstation Systems
Perkin Elmer Auto System GC with TURBOCHROM
- Atomic Absorption Spectrophotometers
Perkin Elmer 1100, 4100ZL Systems
- Inductively Coupled Plasma Spectrometers
Perkin Elmer Optima 3000XL (Axial)
- Ion Chromatograph
Dionex 120 with AS40 autosampler
- Infrared Spectrophotometer
- Total Organic Carbon Analyzer
- Computerized gas mass flow controller dilution systems

In addition to instrumentation, our laboratories maintain numerous ancillary sample preparation equipment including TCLP extraction systems, including zero-head space extractors, fume hoods and analytical balances. Table 2.1 at the end of this Section contains a detailed listing of instrumentation and ancillary equipment.

2. Certifications/Licenses

York is currently certified to perform analyses in support of environmental programs in the following states:

- State of Connecticut License No. PH-0723
- State of New York NELAP/ELAP No. 10854
- State of New Jersey No. CT-401
- State of Rhode Island No. 93
- State of Pennsylvania No. 68-3123

Also, by virtue of the January 24, 2001 initiation of the NELAP (National Environmental Laboratory Approval Program), York is also reciprocally licensed in 8 other NELAC accrediting authority states (CA, FL, NH, IL, KS, LA, OR, UT).

Our licenses support analysis of air, water, wastewater, and solid and hazardous waste for:

- Volatiles
- Semi-volatiles (BNA)
- Pesticides/PCBs/Herbicides
- Metals
- Conventional parameters (including Biological)

YORK

3. Quality Assurance Program

York provides analytical laboratory services that conform to the needs of our clients and satisfies regulatory requirements.

To meet this standard of service, York has developed a Quality Assurance Program which defines our day to day operations in the Laboratory through the execution of comprehensive Standard Operating Procedures. This program is fully documented, endorsed by company management, and available for review.

Analytical data is used for many purposes including: compliance with regulatory requirements, determination of the presence, concentration and movement of potentially hazardous materials in the environment, potential effects on determination of protection required for individuals, and possible actions necessary for the disposal or treatment of hazardous materials. In all cases, data for any application must be of known quality.

It is the purpose of the York Quality Assurance Program to provide data of known quality which conforms to the requirements of specific protocols. To achieve this objective, a QA program is in place which controls procedures for:

- Preservation of samples
- Receipt and handling of samples
- Preparation and analysis of samples
- Analytical equipment maintenance
- Data rejection/acceptance/verification
- Data reporting

The broad objectives of the York QA Program are achieved by implementation of the following key program elements:

1. Maintain an effective, ongoing quality control program which measures and verifies laboratory performance.
2. Meet data requirements for accuracy, precision, recovery and completeness through strict adherence to SOPs which reflect approved methodologies.
3. Recognize and provide corrective actions for any factor that affect data quality.
4. Maintain complete records of sample submittal, client communications, laboratory performance, and completed analyses and support data to provide data quality verification.

The specific related actions are detailed in the York QA Manual and related Standard Operating Procedures.

Other related Quality Assurance practices at York include participation in various state laboratory performance evaluation sample analyses and site inspections, various client site inspections, the use of external controls where available, and participation in the EPA WP and WS performance evaluation audits.



C. Experience

As stated previously, York has had significant experience in all aspects of environmental analysis. Our experience has developed a successful client mix comprised of industry, remediation firms, consulting engineers, and governmental agencies.

Listed below is a cross section of our client base, noting some recent projects, which illustrates our capabilities to handle multi-discipline projects dealing with simple to complex matrices.

1. **Metro North Commuter Railroad** - Full analytical support for SPDES permits, groundwater remediation systems, RIFS programs, and emergency response support.
2. **Marin Environmental** - Full support analyses for Brownfields Redevelopment projects for Stop & Shop and Rite-Aid
3. **New York City DEP/Associated Engineers** - Multi-year ambient air study involving sampling and analysis of approx. 1,000 samples for airborne particulate (PM10), metals, sulfate, and volatile organics using SUMMA canisters-TO-14
4. **Cytec Industries** - Developed a direct aqueous injection GC/MS/SIM Method for the determination of methyl carbamate in river water to determine plume of contamination down to a 5 ppb lower limit detection.
5. **Black & Veatch/IBM** - In conduction with Black & Veatch, York performed analyses of groundwater and industrial effluents throughout a major manufacturing facility. Analyses included volatiles, semi-volatiles, metals and TOC.
6. **SEA Consultants/U.S. Postal Service** - Project involved analytical support for major U.S. Postal Service waste characterization program in the northeastern part of the country. Program involved numerous TCLP analyses for volatiles, semi-volatiles, pesticides/herbicides and metals along with physical characteristics.
7. **Lehrer McGovern Bovis/Thacker Engineering J.V./New York City Department of General Services** - Project involves analytical support for a major underground storage tank decommissioning program in the five boroughs of NYC. Analysis includes volatiles, semi-volatiles, metals, TCLP parameters, and geoprobe gas analysis. All analytical work done with NYSDEC ASP Category A and B deliverables.
8. **IT Corp./PMS Construction-New York City Dept. Of Design and Construction** - Conducted numerous analyses in support of multi-

YORK

year/ multi-New York City borough petroleum-impacted sites. Required ASP-B deliverables.

9. **Environmental Concepts, Inc./Consolidated Edison** - Analytical support for comprehensive facility UST program in all New York City locations.
10. **Rockland County, New York** - Conducted odor study involving compound identification using GC/MS techniques.
11. **BMS/Clairol, Inc.** - Weekly analysis of wastewater treatment plant effluent for conventional parameters.
12. **Roy F. Weston Corp.** - Analysis of numerous Summa Canister whole air samples in the environs of a remediation project for TO-14 constituents. Project involved NYSDEC ASP B-like deliverables packages.
13. **Edgeboro Disposal, Inc., New Jersey** - Comprehensive sampling and analysis program to characterize raw landfill gas for volatiles, semi-volatiles, pesticides and PCB's. PCB methods involved EPA M680 (SIM).
14. **State of Connecticut DEP** - Master Services Agreement to provide on-call laboratory services for State facilities and agencies.
15. **State of Connecticut DOT** - Master Services Agreement to provide on-call laboratory support services for DOT
16. **Malcolm-Pirnie, Inc.** - Analysis of ground water, soil and building materials for volatiles, PCBs and metals at a major Bridgeport, CT chemical facility. Project required EPA Level III deliverables.
17. **General Motors Delco Chassis Div.** - Routine analysis of wastewater, waste oil and storm water for 1.2 million S.F. facility.
18. **Fort Drum, NY/Malcolm Pirnie** - Task order contract for analysis support for U.S Army facility. Project involved analysis of wastes, soil and groundwater with ASP B deliverables.
19. **Metcalf & Eddy/Swiss Bank** - York provided hundreds of analyses of soil and water in support of major land transfer project. Analyses involved 4 hour turn-around for QA/QC deliverables.
20. **Numerous Consulting/Engineering Firms** - Analysis of landfill monitoring wells samples and surface waters for regulated parameters in support of Superfund activities as well as routine state requirements (i.e. NYCRR Part 360)

SCALE 1" = 10'

YORK ANALYTICAL LABS
120 RESEARCH DRIVE STRATFORD, CT 02/2004

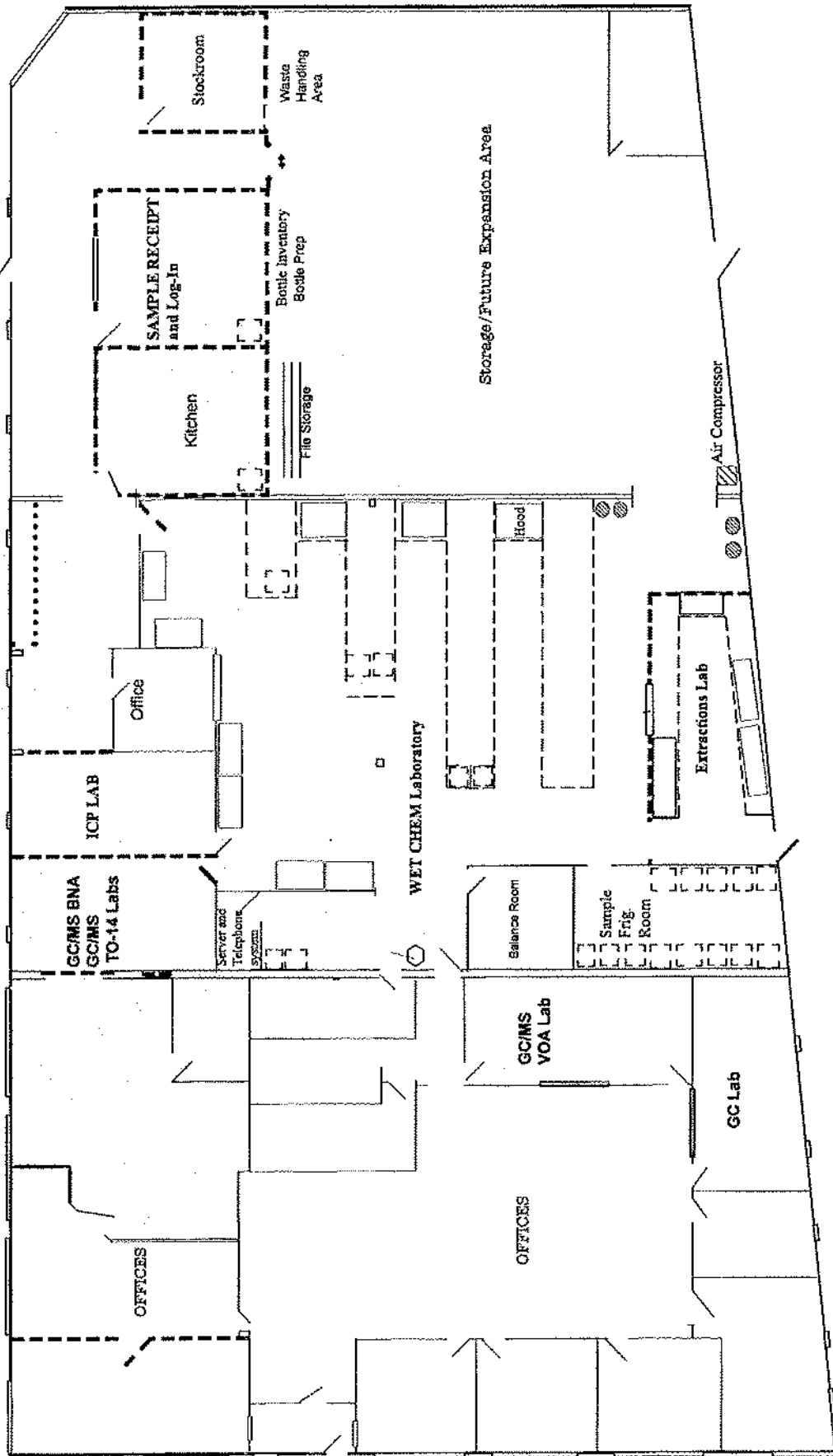


Figure 2-1

Table 2-1

Equipment & Instrumentation	Quantity
Atomic Absorption Hollow Cathode Lamps (Buck & PE)	29
Atomic Absorption System (Perkin Elmer PE 1100, B AAS)	1
Atomic Absorption System (Perkin Elmer PE 1100)	1
Atomic Absorption System, FAA (Perkin Elmer PE 4100, Zeeman GFAA)	1
Autoclave (National Autoclave)	1
Autoclave (National Steril-Quik 1975)	1
Autoclave, 1 CF (Sybron/Barnstead, C-2260)	1
Autosampler for O.I. System (MPM-16)	1
Autosampler Heater System for O.I. System (MHC-16)	1
Autosampler for VOCs Tekmar LSC2000/2016 ALS	2
Autosampler for VOCs ARCHON/Tekmar LSC-3000	1
Balances, Analytical (Mettlers AE100 H45), Balance (Mettler AT 200)	3
Balance, Analytical (Mettler H-51)	1
Balance, Analytical (S/P 120, ASP, Inc.)	1
Balance, Analytical, Air Pollution (Mettler H-15)	1
Balance, Top Loading (ASP Z-3000, ASP, Inc.)	1
Balance, Top Loading (Mettler PM-4600)	1
Balance, Triple Beam (Ohaus)	1
Barometer (Airguide Model 211B)	1
Centrifuge, Clinical (IEC)	1
Chart Recorder, 10" (Linear 1200)	1
Class S Weights, 10 mg to 100 g (Troemner, Inc.)	1
Clean-up System-Florisil/Alumina- 12 Position (Supelco, Inc.)	1
Cold Vapor Mercury/Hydride System (Buck Scientific, Inc.)	1
Computer (Digital 2001 Computer, Monitor, Keyboard)	1
Computer (Digital Dec Station 3IGSX Computer, Monitor and Keyboard)	3
Computers (Pentium systems)	25
Conductance Meter, Field/Laboratory Model (YSI)	1
Conductivity Meter (YSI)	1

Equipment & Instrumentation	Quantity
Coolers, 2 qt. (Rubbermaid)	10
Coolers, 5 qt. (Igloo)	20
Coolers, 30 qt. (Coleman)	50
Data Station System (Varian CDS 401 #CDS402-1341)	1
Dec Station (Digital 316 SX)	1
Dessicator, Stainless Steel, 1 CF (Boekel)	2
Dessicator, Stainless Steel, 3 CF (Boekel)	1
Diazomethane generator, Wheaton/Aldrich DIAZALD KIT	1
Dispensing Pipet, 1.0 mL (Eppendorf, Inc.)	1
Dispensing Pipet, 5 L-100 L (Eppendorf, Inc.)	1
Distillation System, Ammonia (Wheaton)	2
Draeger Bellows Pump	1
Extraction Apparatus, Liquid-Liquid (Supelco, Inc.)	1
Extractors, Zero Headspace	8
Eye Wash Station, Portable (Bel-Art, Inc.)	1
Eyewash System (Speakman Company)	1
Flash Point Apparatus (Pensky-Martin, Closed Cup)	1
Funnel Rack, Wooden, 12 Position (MacAlaster Bicknell)	2
Furnace (Thermolyne Type 1500)	1
Furnace, Muffle Furnace, 1.5 CF (Gardsmen)	1
Gas Chromatograph (HP 5890 ECD,FID ALS7673,HP ChemSta.)	1
Gas Chromatograph (HP 5890 dual ECD dual ALS7673,HP ChemSta.)	1
Gas Chromatograph (HP 5890II,G.S.V.FPD,TCD)	1
Gas Chromatograph (Perkin Elmer PE 1000 HallPID Detectors)	1
Gas Chromatograph (Perkin Elmer PE 8410 FID,GP100 Printer)	1
Gas Chromatograph (Perkin Elmer PE 8500 GC SN 041426006068)	1
Gas Chromatograph, Portable (AID621,FID)	1
Gas Chromatograph/Mass Spectrometer/Data System (HP 5890 II/5971 &5972/ Chem Station)	4
Gas Chromatograph/Mass Spectrometer/Data System (HP 5890 II/5970/w/ ALS 7673)	2
Gas Concentration System/Interface TO-14/15-ENTECH 7000	1
Gas Dilution System (Enviroincs Model 2000)	1
Gas Leak Detector (GM 21-250)-Helium detector	1
Gas Regulators, Brass (Airco, Inc.)	10
Gas Regulators, SS (Airco,Inc.)	7
Gel Permeation Chromatograph -OI AP-1000 18 sample autosystem-GPC	1
Glass Desiccator	4
Heater (Lab-Line Multi Boil Heater No. 2090)	1
Hot Plate (Corning PC-100 1 SF)	6
Hot Plate (Thermolyne Type 2200)	1
Hot Plate/Stirrer (Cimarec 3, Thermolyne)	1

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Equipment & Instrumentation	Quantity
Hot Plate/Stirrer (Corning PC-351)	1
Hot Plate/Stirrer (Nuova II, Sybron/Nalge)	1
Hot Plate/Stirrer (Thermolyne Cimarec 2)	1
Hot Plate/Stirrer (Thermolyne Cimarec 3)	1
Incubator (Lab-line No. 3554-17)	2
Incubator, 20C, BOD (VWR 2005)	1
Incubator, Electric (Hotpack 28912)	1
Incubator, Low Temp., 2 CF (Blue M)	1
Inductively Coupled Plasma (OES-PE-Optima 3000XL-Axial)	1
Ion Chromatograph Dionex 120 with AS40 ALS-PeakNet 6 software	1
Laboratory Hoods (Labconco, others)	9
LIMS System (Labworks Windows NT/98/2000 LIMS 25 User NT Server	1
Microbial Air Sampler, 2 Stage (Anderson, Inc.)	1
Microscope (Olympus CH-2)	1
Microscope, Stereoscope (STEREOZOOM-3, B & L)	1
Oven, 1 CF (Blue M)	1
Oven, 3 CF (Baxter S/P Tempcon)	1
Oven, 5 CF (Blue M)	1
Oven, CEM Microwave (MDS-2000)	1
Oven, Radiant Heat (Lab-Line Imperial II)	1
Oxygen Meter/BOD Probe (VWR 122372)	1
pH/ISE Meter, Portable (Orion Serial)	1
pH Meter (Corning Model 10)	1
pH Meter (Orion EA 940)	1
pH Meter/Specific Ion Meter (Orion SA-720)	1
Photocopier (Cannon NP4835S)	2
Printer (HP Laserjet 2100, 2 MB RAM)	4
Printer (HP Laserjet IV, 2 MB RAM)	4
Printer (HP LaserJet 4000N)	4
Printer (Okidata Microline 320)	1
Printer, Color Inkjet (Epson Stylus 900)	1
Printer, Laser 1200 dpi Resolution (Lexmark Optra R+)	1
Pump, Liquid, Peristaltic, 4 gpm (Cole-Parmer)	1
Pump, Vacuum (GE)	1
Pump, Vacuum (GE)	1
Pumps, Personal Sampling (SKC & Gilian)	6
Purge & Trap (Tekmar ALS 2016)	1
Purge & Trap (Tekmar LCS 2000)	1
Purge & Trap autosampler systems-Archon 51 position samplers	3
Purge & Trap systems-Tekmar 3000	3
Reflux/Distillation System	5

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Equipment & Instrumentation	Quantity
Refrigeration Freezer (Kenmore)	1
Refrigerator (Sanyo)	1
Refrigerator (Summit)	1
Refrigerator (VWR Scientific)	1
Refrigerator (Welbilt 1.5 C.F.)	3
Refrigerator (Westinghouse)	1
Refrigerator, 10 CF (Sears)	1
Refrigerator, 14 CF (Gibson)	2
Refrigerator, Flammable Materials Storage (GCA Corp. Precision 813)	1
Refrigerator(Sanyo,1.5 C.F.)	2
Sample Concentrator (Nutech Model 8533-TO-14/VOST)	1
Sample Concentrator (O.I 4460A)	1
Sample Concentrator (Supelco, Inc. Mini-VAP-6)	1
Sample Concentrator (Zymak Turbo VAP II ZW8001)	1
Sample Concentrator (Zymark Tubro VAP II ZW8001)	1
Sample Concentrator (Zymark Turbo VAP II SN 04051)	1
Sonic Cleaning System (Branson 1200)	1

Equipment & Instrumentation	Quantity
Sonic Disruptor (Tekmar)	3
Sonic Disruptor & Sound Enclosure (Heat Systems, Inc.)	3
Sonic Disruptor Sound Chamber	3
Soxhlet Extraction Apparatus, 3 Bay w/Setups (Electro, Inc.)	1
Specific Ion Electrode, Chloride (Orion)	1
Specific Ion Electrode, Chlorine (Orion)	1
Specific Ion Electrode, Fluoride (Orion)	1
Spectrophotometer (Bausch & Lomb Spectronic 20)	1
Spectrophotometer, Visible (Milton-Roy, SPEC-20)	1
Steam Bath (Boekel)	1
Steam Washer (Labconco)	1
Stirrer, Gang, 6 Position (Phipps & Bird)	1
Storage Cabinet (Se-Cur-All)	2
Storage Cabinet, Solvent, Safety (Justrite, Inc.)	2
TCLP Extraction Pressure Filtration System (Millipore)	2
TCLP Extraction System (Millipore, Inc.)	4
TCLP Rotator, 12 Position (Assoc. Design & Mfg 12)	1
TCLP Spinner (Millipore)	2
TCLP-ZHE Volatile Extraction System	12
Thermometers, NBS(NIST)Traceable (ASP, Inc.)	2
Thermometers, Various Ranges (ASP, Inc.)	10
Total Organic Carbon Analyzer (ALS- Shimadzu)	1
TPH-Oil-in-Water Analyzer (Buck Scientific HC-404)	1
Turbidity Meter (Lamotte Model 2008)	1
Vortex - Genie SI)	1
Water Bath (25-100C, ASP, Inc.)	1
Water Bath for Incubator (Millipore)	1
Water Purification System (MILLI-Q, Millipore, Inc.)	1
Water Sampling System, Automatic/Compositing (ISCO, Inc.)	1

III. Key Personnel Resumes

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ANALYTICAL LABORATORIES, INC.

III. Key Personnel Resumes

Robert Q. Bradley

Managing Director

Mr. Bradley has over 25 years experience as an analytical chemist, and in the management of laboratory operations. He is fully versed with all current methods of analysis of water, wastewater, solid and hazardous waste and air using classical as well as instrumental techniques.

As Managing Director of York Analytical Laboratories, Inc., Mr Bradley is responsible for all operations of the lab. His extensive experience as both an analytical chemist, and in the management of laboratory facilities provides a combination of technical knowledge and managerial insight that is unequaled in the industry. His specialized expertise includes:

- Laboratory Management
- Analytical Chemistry
- Data Evaluation and Validation
- Environmental Chemistry
- Air Analysis

Mr. Bradley is fully versed with all current methods of analysis of water, wastewater, solid and hazardous waste and air using classical as well as instrumental techniques. He has extensive instrumental experience in the areas of Gas Chromatography, Gas Chromatography/Mass Spectrometry, Infrared Spectrophotometry, Atomic Spectroscopy and wet chemistry techniques.

Mr. Bradley also has had extensive experience involving hazardous waste assessments according to RCRA and CERCLA guidelines. He has spearheaded mobile laboratory programs at major New England landfills where hundreds of drums of hazardous waste were assessed.

He has had extensive experience in the sampling and analysis of airborne emissions from municipal and hazardous waste landfills. This experience is centered around sampling and analysis for target and non-target volatile and semi-volatile organics, as well as target trace metals.

He has had extensive experience in the analysis techniques related to industrial hygiene and ambient air studies including NIOSH, EPA, APHA, and other methods. He also has had significant experience in the sampling and analysis of water, wastewater, and particulate and gaseous emissions employing ASME, EPA, NYSDEC, EPA CLP and other methodologies.

Mr. Bradley has also been instrumental in the development of gas chromatographic/mass spectrometry methods for the evaluation of organic contaminants in the process waste streams of various industries. These developments include rapid screening methods, methods for removal of circumvention of potential interferences, and novel approaches to the quantification and identification of organic compounds. His other developments include gas chromatographic techniques for the sample analysis of sulfur gases from refineries, Kraft paper mills, and coke oven gas systems; procedure for sampling and analysis in the fiber glass industry; development of ion-specific filter medium determining the character of ambient particulate in proximity with stationary sources; development of gas chromatography procedures for quantifying gasoline contamination of surface waters; development of qualitative procedures for the determination of gasoline brand and fuel oil types when found in well supplies and aquifers.

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He has had experience in the evaluation of many products including hazardous waste adsorbents; water purification devices; air filtration media and plastics.

Mr. Bradley is experienced in the supervision of technical and sales staff providing the analytical services required for environmental analyses. He has analyzed and interpreted data and prepared reports for various industrial and government clients. He is experienced in the evaluation, selection, and cost control of analytical procedures developed and used in the laboratory, the establishment and maintenance of quality control/quality assurance programs for analytical methods and the training of personnel in the performance of analytical procedures. He has also developed, specified and implemented various LIMS products for analysis and process control laboratories.

Education

- B.S. Chemistry Georgetown University, Washington, D.C.
- M.S. Chemistry (additional course work) Georgetown University, Washington, D.C.
- Additional Course Work

Professional Affiliations

- American Chemical Society
- American Water Works Association
- Association of Official Analytical Chemists
- American Management Association
- American Society for Testing and Materials
- Association of Consulting Chemists
- Environmental Assessment Association
- Spill Control Association of America

Selected Publications

New Approach to the Synthesis of 2-aryl Substituted Aziridinium Salts and Reactivity Studies, given at the American Chemical Society Meeting, 1972, New York by D.R. Crist, Georgetown University, Washington, D.C.

R.Q. Bradley, The Chemistry of Nitrogen and Sulfur Oxides, 1977, York Research Corporation, In-house paper.

R.Q. Bradley, A Routine Gas Chromatographic Method for the Determination of Gasoline in Water in the parts per billion (ppb) Range, York Research Corporation, In-house paper.

R.Q. Bradley, R.S. Kearton, Oil and Gas Spill Source Identification, The Petroleum Marketer Magazine, September-October, 1977.

R.Q. Bradley, Dynamic Headspace Hydrocarbon Concentration versus "Real" Gasoline Concentration in Water, York Research/Exxon Co., U.S.A. proprietary report, 1976.

R.Q. Bradley, D.A. Sommerer, Magnesia FGD Process Testing on a Coal-fired Power Plant, Environmental Protection Technology Series, EPA-600/2-77-165, August 1977.

R.Q. Bradley, Analytical Techniques for the Characterization of Raw and Treated Coke Oven Gas, In-house manual, January, 1979.

R. Q. Bradley, Strategies for the Sampling & Analysis of Volatile Organics in Air, Connecticut's Environment, March 1995

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III. Key Personnel Resumes

Philip A, Murphy, III

Laboratory Operations Manager / QA/QC Officer

Mr. Murphy has over 15 years experience in environmental analysis. He has extensive experience in the analysis of wastewater for microbiological, metals and general wet chemistry parameters.

As Operations Manager at York, Mr. Murphy is responsible for the day-to-day operations of the laboratory. His specialized expertise includes:

- Laboratory Operations Management
- Drinking Water Analysis
- Inorganics Analysis (Metals, Classic Chemistry)
- Microbiological Analysis
- Air Analysis using applicable Protocols
- Indoor Air Quality Studies
- QA/QC Implementation

Mr. Murphy has over fifteen years experience in environmental analysis. He has extensive experience in the analysis of wastewater for microbiological, metals and general wet chemistry parameters. He has conducted numerous indoor air quality evaluations, sampling and analyzing for fungi and molds, volatile organic compounds and inorganic parameters in industrial, commercial and residential environments.

Mr. Murphy also has extensive experience with USEPA Standard Method analyses in support of NPDES, SPDES, RCRA, CWA, SWDA and CAA Programs. His experience includes wet chemistry, physical and microbiological procedures, as well as graphite furnace, flame atomic absorption and gas chromatography.

Mr. Murphy is also a certified Laboratory Director for public health applications in the State of Connecticut, and has expertise in sample handling and chain-of-custody procedures.

Education

- B.S./Aquatic Biology University of Connecticut
- M.S./Environmental Biology University of Bridgeport, Connecticut

Professional Affiliations

- American Microbiological Society
- American Chemical Society
- Trout Unlimited, Mianus, C (Served as President, Secretary, Stream Action Committee Chair and on the Board of Directors)

YORK

III. Key Personnel Resumes

Richard H. August

Senior Chemist/Manager - Client Services

Mr. August has over 18 years of environmental laboratory experience with all current methods of analysis for water, wastewater, solid, hazardous waste and air, as well as experience as a Laboratory Manager with large Massachusetts based company. He has extensive experience with methods development and documentation in the areas of Gas Chromatography, Gas Chromatography/Mass Spectrometry, infrared, Spectrophotometry and wet chemistry techniques.

Mr. August has over eighteen years of environmental laboratory experience. He has extensive experience with all current methods of analysis for water, wastewater, solid, hazardous waste and air. Having had five years of experience as a Laboratory Manager with large Massachusetts based company, Mr. August has extensive experience with methods development and documentation in the areas of Gas Chromatography, Gas Chromatography/Mass Spectrometry, infrared, Spectrophotometry and wet chemistry techniques. He also has had experience in analytical methods (NIOSH, OSHA, EPA) associated with Indoor Air Quality and Industrial Hygiene studies. His areas of specialization include:

- Environmental Regulations (EPA, RCRA, STARS, SPOTS, UST)
- Client Service and Laboratory Analysis for Volatiles and Semi-Volatiles
- OSHA/NIOSH Analysis
- QA/QC Programs

Mr. August has also been involved with the development, implementation and maintenance of laboratory Quality Assurance/Quality control programs.

Mr. August has had extensive experience in Hazardous Waste Assessments in accordance with RCRA and CERCLA, and has been involved with analysis and classification of hundreds of drums of unknown waste.

At YAL, Mr. August is responsible for client services. His responsibilities include sales and marketing of laboratory services as well as business development. He provides technical support to clients for specific compliance purposes, specific analysis strategies, guidance on appropriate analytical methods and helps to ensure that all data quality objectives are met. He is also involved with the organics analysis, analysis and interpretation of data as well as the preparation of technical reports for various industrial and governmental clients.

Education

- B.S./Biology, Southern Connecticut State University
- Continuing Graduate Studies, Environmental Science Program, University of New Haven, New Haven, CT

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III. Key Personnel Resumes

Johanna Pozzi-Woodfield

Group Leader - Gas Chromatography

Ms. Pozzi has over 15 years experience in environmental laboratory analysis with a specialized expertise in Organics Analysis, Gas Chromatography/Mass Spectrometry and Gas Chromatography Methods

Ms. Pozzi has over fifteen years of experience in environmental laboratory analysis. Previously, she was Manager of Organics Analyses for an environmental laboratory. Her responsibilities included the overall supervision of the Organics Department for the analysis of water, wastewater, soil, sediment and oil. In addition, she held full responsibility for the in-house Quality Control Program.

Ms. Pozzi has extensive experience in the analyses of organics in accordance with SW-846 Methods, 8010/8015/8020/8021, 8240, 8260, 8270, 8151, 8015M and 8081. She is also familiar with troubleshooting analytical systems.

Prior to her environmental laboratory experience, she was a Quality Control Supervisor in the Specialty Chemical and Plating industries.

At York, Ms. Pozzi is responsible for all organics analyses with special emphasis on Gas Chromatography methods. These methods are applied to all environmental matrices, including air.

Her instrumental experience includes use of gas chromatography utilizing many detectors including: electron capture, flame photometric, nitrogen/phosphorous, flame ionization and thermal conductivity.

Education

- B.S./Chemistry, University of New Haven

YORK

III. Key Personnel Resumes

John R. Gale

Assistant Laboratory Operations Manager /
Safety & Health Officer

Mr. Gale has over 20 years experience in the analysis of water, wastewater, solid and hazardous waste and specialized expertise in volatiles analysis (water, soil, air) by GC/MS, wet chemistry analysis and OSHA regulations.

Mr. Gale has had over 20 years of experience in the analysis of water, wastewater, solid and hazardous waste for conventional pollutants in accordance with Standard Methods, EPA Methods and SW-846 Methods.

He is also highly versed in all OSHA and laboratory safety guidelines.

He has an extensive background in the preparation and analysis of varied matrices for inorganic species and purgeable organic compounds, extractable base-neutral and acid organic compounds, pesticides and PCB's according to EPA Methods. He is thoroughly versed in the clean-up of pesticide/PCB extracts utilizing column chromatography methods. Mr. Gale also has extensive experience in extraction techniques - liquid/liquid continuous extractions and sonic disruption extractions. Mr. Gale is also experienced with analyses of samples for volatiles and semi-volatiles by GC/MS using USEPA Contract Lab Program Protocols and is involved with routine maintenance and troubleshooting of the GC/MS systems and Gas Chromatographs.

His experience also includes the analysis of petroleum products and fossil fuels by ASTM and ASME methods including bomb calorimetry and elemental analysis.

At York Mr. Gale is responsible for all inorganics analysis and sample preparation and extraction staff in the laboratory.

Education

- A.S./Chemistry Sacred Heart University, Bridgeport, CT

Occupational Certifications

- 40 Hour HAZMAT OSHA Certified

YORK

III. Key Personnel Resumes

Michael Woodfield

Group Leader, Metals Preparation and Analysis

Mr. Woodfield has over 10 years experience in laboratory analysis with specialized expertise in Zeeman Atomic Absorption, Inductively Coupled Plasma (Axial & Radial), Flame Atomic Absorption and Organics Analysis.

Mr. Woodfield has over ten years of experience in environmental laboratory analysis. Previously, Mr. Woodfield was involved in inorganics analysis using common spectroscopic methods. He also has performed organics analyses including Gas Chromatography and Gas Chromatography/Mass Spectrometry. He is fully versed in all the related SW-846 analysis.

Mr. Woodfield also has extensive experience in metals analysis utilizing flame atomic absorption(AA), Zeeman graphite furnace AA and Inductively Coupled Plasma (ICP).

He also has extensive experience in sampling of groundwater and effluents relative to CTDEP requirements. Mr. Woodfield is also experienced with all wet chemistry procedures typically utilized in the industry.

At York Mr. Woodfield is currently responsible for all analyses of trace metals utilizing ICP, GFAA, FAA and Mercury. He has extensive experience in all related QA/QC procedures. In addition, he is responsible for QA/QC and client interface as a secondary role.

Education

- B.S./Chemistry, Paul Smith's College, Paul Smith's, NY

YORK

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CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. ROBERT Q. BRADLEY
YORK ANALYTICAL LABORATORIES INC
120 RESEARCH DRIVE
STRATFORD CT 06615 United States

NY Lab Id No: 10854
EPA Lab Code: CT00106

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards for the category
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Characteristic Testing

Corrosivity	SW-846 1110
E.P. Toxicity	SW-846 1310
Ignitability	SW-846 1010
Reactivity	SW-846 Ch7, Sec. 7.3
TCLP	SW-846 1311

Chlorinated Hydrocarbon Pesticides

4,4 -DDE	SW-846 8081A
4,4 -DDT	SW-846 8081A
4,4-DDD	SW-846 8081A
Aldrin	SW-846 8081A
alpha-BHC	SW-846 8081A
beta-BHC	SW-846 8081A
Chlordane Total	SW-846 8081A
delta-BHC	SW-846 8081A
Dieldrin	SW-846 8081A
Endosulfan I	SW-846 8081A
Endosulfan II	SW-846 8081A
Endosulfan sulfate	SW-846 8081A
Endrin	SW-846 8081A
Endrin aldehyde	SW-846 8081A
Heptachlor	SW-846 8081A
Heptachlor epoxide	SW-846 8081A
Lindane	SW-846 8081A

Chlorinated Hydrocarbon Pesticides

Methoxychlor SW-846 8081A

Chlorinated Hydrocarbons

1,2,4-Trichlorobenzene	SW-846 8270C
2-Chloronaphthalene	SW-846 8270C
Hexachlorobenzene	SW-846 8270C
Hexachlorobutadiene	SW-846 8270C
Hexachlorocyclopentadiene	SW-846 8270C
Hexachloroethane	SW-846 8270C

Chlorophenoxy Acid Pesticides

2,4,5-T	SW-846 8151A
2,4,5-TP (Silvex)	SW-846 8151A
2,4-D	SW-846 8151A
Dicamba	SW-846 8151A

Haloethers

Bis (2-chloroisopropyl) ether	SW-846 8270C
Bis(2-chloroethoxy)methane	SW-846 8270C

Metals I

Barium, Total	SW-846 6010B
Cadmium, Total	SW-846 6010B
Chromium, Total	SW-846 6010B
Lead, Total	SW-846 6010B

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Metals I		Polychlorinated Biphenyls	
Nickel, Total	SW-846 6010B	PCB-1016	SW-846 8082
Silver, Total	SW-846 6010B		SW-846 8270C
Metals II		PCB-1221	SW-846 8082
Antimony, Total	SW-846 6010B	PCB-1232	SW-846 8082
Arsenic, Total	SW-846 6010B		SW-846 8270C
Selenium, Total	SW-846 6010B	PCB-1242	SW-846 8082
Miscellaneous			SW-846 8270C
Hydrogen Ion (pH)	SW-846 9040B	PCB-1248	SW-846 8082
	SW-846 9045C		SW-846 8270C
Nitroaromatics and Isophorone		PCB-1254	SW-846 8082
2,4-Dinitrotoluene	SW-846 8270C		SW-846 8270C
2,6-Dinitrotoluene	SW-846 8270C	PCB-1260	SW-846 8082
Isophorone	SW-846 8270C		SW-846 8270C
Nitrobenzene	SW-846 8270C	Polynuclear Aromatic Hydrocarbons	
Phthalate Esters		Acenaphthene	SW-846 8270C
Benzyl butyl phthalate	SW-846 8270C	Acenaphthylene	SW-846 8270C
Bis(2-ethylhexyl) phthalate	SW-846 8270C	Anthracene	SW-846 8270C
Diethyl phthalate	SW-846 8270C	Benzo(a)anthracene	SW-846 8270C
Di-n-butyl phthalate	SW-846 8270C	Benzo(a)pyrene	SW-846 8270C
Di-n-octyl phthalate	SW-846 8270C	Benzo(b)fluoranthene	SW-846 8270C
		Benzo(ghi)perylene	SW-846 8270C
		Chrysene	SW-846 8270C
		Dibenzo(a,h)anthracene	SW-846 8270C

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Polynuclear Aromatic Hydrocarbons

Fluoranthene	SW-846 8270C
Fluorene	SW-846 8270C
Indeno(1,2,3-cd)pyrene	SW-846 8270C
Naphthalene	SW-846 8270C
Phenanthrene	SW-846 8270C
Pyrene	SW-846 8270C

Priority Pollutant Phenols

2,4,6-Trichlorophenol	SW-846 8270C
2,4-Dichlorophenol	SW-846 8270C
2,4-Dimethylphenol	SW-846 8270C
2,4-Dinitrophenol	SW-846 8270C
2-Chlorophenol	SW-846 8270C
2-Methyl-4,6-dinitrophenol	SW-846 8270C
2-Nitrophenol	SW-846 8270C
4-Chloro-3-methylphenol	SW-846 8270C
4-Nitrophenol	SW-846 8270C
Pentachlorophenol	SW-846 8270C
Phenol	SW-846 8270C

Purgeable Aromatics

1,2-Dichlorobenzene	SW-846 8021B
	SW-846 8260B
1,3-Dichlorobenzene	SW-846 8021B

Purgeable Aromatics

1,3-Dichlorobenzene	SW-846 8260B
1,4-Dichlorobenzene	SW-846 8021B
	SW-846 8260B
Benzene	SW-846 8021B
	SW-846 8260B
Chlorobenzene	SW-846 8021B
	SW-846 8260B
Ethyl benzene	SW-846 8021B
	SW-846 8260B
Toluene	SW-846 8021B
	SW-846 8260B

Purgeable Halocarbons

1,1,1-Trichloroethane	SW-846 8021B
	SW-846 8260B
1,1,2,2-Tetrachloroethane	SW-846 8021B
	SW-846 8260B
1,1,2-Trichloroethane	SW-846 8021B
	SW-846 8260B
1,1-Dichloroethane	SW-846 8021B
	SW-846 8260B
1,1-Dichloroethene	SW-846 8021B
	SW-846 8260B
1,2-Dichloroethane	SW-846 8021B

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ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analytes are listed below:

Purgeable Halocarbons

1,2-Dichloroethane	SW-846 8260B
1,2-Dichloropropane	SW-846 8021B
	SW-846 8260B
2-Chloroethylvinyl ether	SW-846 8021B
	SW-846 8260B
Bromodichloromethane	SW-846 8021B
	SW-846 8260B
Bromoform	SW-846 8021B
	SW-846 8260B
Bromomethane	SW-846 8021B
	SW-846 8260B
Carbon tetrachloride	SW-846 8021B
	SW-846 8260B
Chloroethane	SW-846 8021B
	SW-846 8260B
Chloroform	SW-846 8021B
	SW-846 8260B
Chloromethane	SW-846 8021B
	SW-846 8260B
cis-1,3-Dichloropropene	SW-846 8021B
	SW-846 8260B
Dibromochloromethane	SW-846 8021B
	SW-846 8260B

Purgeable Halocarbons

Dichlorodifluoromethane	SW-846 8021B
	SW-846 8260B
Methylene chloride	SW-846 8021B
	SW-846 8260B
Tetrachloroethene	SW-846 8021B
	SW-846 8260B
trans-1,3-Dichloropropene	SW-846 8021B
	SW-846 8260B
Trichloroethene	SW-846 8021B
	SW-846 8260B
Trichlorofluoromethane	SW-846 8021B
	SW-846 8260B
Vinyl chloride	SW-846 8021B
	SW-846 8260B

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ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved subcategories and/or analytes are listed below:*

Chlorinated Hydrocarbon Pesticides

Toxaphene SW-846 8081A

Metals II

Chromium VI SW-846 7196A

Mercury, Total SW-846 7471A

Miscellaneous

Cyanide, Total SW-846 9010B

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ENVIRONMENTAL ANALYSES AIR AND EMISSIONS
All approved analytes are listed below:

Chlorinated Hydrocarbons		Polychlorinated Biphenyls	
1,2,4-Trichlorobenzene	40 CFR PART 60 1984 METH 18	PCB-1016	EPA, 1980
Hexachlorobutadiene	40 CFR PART 60 1984 METH 18		NYS DOH 311-1
Hexachloroethane	40 CFR PART 60 1984 METH 18	PCB-1221	EPA, 1980
			NYS DOH 311-1
Metals I			
Lead, Total	ASTM D3559-90A	PCB-1232	EPA, 1980
	ASTM D3559-90B		NYS DOH 311-1
	EPA 239.1	PCB-1242	EPA, 1980
	SM 15 303B		NYS DOH 311-1
		PCB-1248	EPA, 1980
Metals II			NYS DOH 311-1
Beryllium, Total	40 CFR 61 1984 METH 104	PCB-1254	EPA, 1980
Mercury, Total	40 CFR 61 METH. 101		NYS DOH 311-1
	EPA 245.1	PCB-1260	EPA, 1980
	EPA 245.2		NYS DOH 311-1
	NYS DOH APC-16		
	SM 16 303F	Polynuclear Aromatics	
Miscellaneous Air		Benzo(a)pyrene	40 CFR PART 50 1984 APP B
Nitrogen Oxide	40 CFR 60 METH 7	Naphthalene	40 CFR PART 60 1984 METH 18
	40 CFR 60 METH 7A	Purgeable Aromatics	
Particulates	40 CFR 60 APP A METH 5	1,2-Dichlorobenzene	40 CFR PART 60 1984 METH 18
	40 CFR PART 50 1985 APP. B	1,4-Dichlorobenzene	40 CFR PART 60 1984 METH 18
Sulfur Dioxide	40 CFR 60 METH 6	Benzene	40 CFR PART 60 1984 METH 18
			EPA TO-14A

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Purgeable Aromatics

Chlorobenzene	40 CFR PART 60 1984 METH 18
Ethyl benzene	40 CFR PART 60 1984 METH 18
	EPA TO-14A
Toluene	40 CFR PART 60 1984 METH 18
Total Xylenes	EPA TO-14A

Purgeable Halocarbons

1,1,2,2-Tetrachloroethane	40 CFR PART 60 1984 METH 18
1,1-Dichloroethane	40 CFR PART 60 1984 METH 18
1,1-Dichloroethene	40 CFR PART 60 1984 METH 18
1,2-Dichloroethane	40 CFR PART 60 1984 METH 18
1,2-Dichloropropane	40 CFR PART 60 1984 METH 18
Carbon tetrachloride	40 CFR PART 60 1984 METH 18
	EPA TO-14A
Chloroform	40 CFR PART 60 1984 METH 18
	EPA TO-14A
Methylene chloride	40 CFR PART 60 1984 METH 18
Tetrachloroethene	40 CFR PART 60 1984 METH 18
	EPA TO-14A
Vinyl chloride	40 CFR, PART 61 1984 APP. B METH 1

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APPENDIX B

Resume for DUSR

AREAS OF EXPERIENCE/EXPERTISE

Interpretation of laboratory analytical data, analytical method design/evaluation, sampling techniques and design, project quality assurance/quality control, laboratory auditing, data validation/integrity/usability, and laboratory program management.

EDUCATION

BS (Biology/Ecology) 1986; State University of New York at Plattsburgh
AA (Chemistry) 1986; State University of New York at Plattsburgh
AA (Environmental Science) 1986; State University of New York at Plattsburgh
AA (Coral Reef Productivity); 1985/1986 State University of New York, Overseas Program in Oceanography -- San Salvador, Bahamas

CERTIFICATIONS/REGISTRATIONS

USEPA Data Quality Objectives (February 1997)
USEPA Integrating Quality Assurance into Project Development (March 1998)
USEPA Orientation to Quality Assurance (February 1997)
EPA Region II Inorganic Data Validation (March 1995)
EPA Region II Organic Data Validation (October 1994)
OSHA 40-Hour Hazardous Waste Operations Safety Training
OSHA 8-Hour Supervisor Training
New York State Emergency Medical Technician (#137223)
Standard First Aid and CPR
PADI Open Water Diver (#87233839)
Hewlett Packard GC/MS Training (July 1993)
Restek's Capillary Chromatography Seminar (September 1992)
Hewlett Packard GC/MS and other hyphenated techniques (January 1991)

MEMBERSHIPS/POSITIONS

Poughkeepsie Area Chamber of Commerce
Dutchess County Legislature: Board of Directors - Resource Recovery Agency Board

PROFESSIONAL SOCIETIES

American Society for Quality (member)

Courses Completed:

Basic Skills Used in Auditing
Internal Auditing Basics
Auditing Fundamentals I
Auditing Fundamentals II
Process Auditing Techniques

CONFERENCES

“Fecal Coliform Collection and Data Interpretation”: Presented at the Mississippi Water Environment Association, Jackson, MS (June 2002).

PUBLICATIONS

“How to Hire an Environmental Testing Laboratory”: Featured in *The Environmental Manager's Compliance Advisor* (Issue EM 559, January 21, 2002).

“Drinking Water Labs Face Stricter Regs- Recommendations to Improve Operations and QA/QC”: Featured in *The Environmental Manager's Compliance Advisor* (Issue EM 566, May 6, 2002).

GENERAL EXPERIENCE

Environmental Laboratory

Performed laboratory analyses in Inorganic and Organic parameters, including classical chemistry, metals, volatiles, semivolatiles, pesticides, herbicides, and PCB analyses. Additionally, served in management and Quality Assurance Officer roles within laboratories.

A/E Engineering-Consulting

Performed the following: data validation and usability reports for State and Federal Programs, expert reports for purposes of litigation, on-site project specific laboratory audits, field sampling collection, and project design to meet discharge permit requirements, quality assurance manager, and company Data Quality Assurance expert.

DETAILED EXPERIENCE

2002 to Date

The Data Quality Indicator & Associates, Inc.

- **Hudson River PCBs Site.** Assisted in the preparation of the Quality Assurance Project Plan for the Design Support Sediment Sampling and Analysis Oversight. Assisted MPI, EPA, and USACE with the following: document review of laboratory specific extraction/analysis SOPs for PCB homolog analysis; performed three separate on-site audits of the government oversight laboratory; and performed data validation of over 250 split sediment samples analyzed via EPA Method 680 using data validation guidelines developed by General Electric.
- **Mississippi Department of Environmental Quality.** Contracted to evaluate Bacteriological data generated from sampling conducted at Targeted Pathogen TMDL Locations in the Pearl River and South Independent Stream Basins (Non-Contact Recreational Season – Nov-Dec 2000). Data assessment consisted of precision measurements and statistical examination of fecal coliform data.
- **Mississippi Department of Environmental Quality.** Contracted to evaluate Bacteriological data generated from sampling conducted at Targeted Pathogen TMDL Locations in the Pearl River and South Independent

DETAILED EXPERIENCE (Continued)

- Stream Basins (Contact Recreational Season – Sept-Oct 2001). Data assessment consisted of precision measurements and statistical examination of fecal coliform data.
- **Mississippi Department of Environmental Quality.** Contracted to evaluate Bacteriological data generated from sampling conducted at Targeted Pathogen TMDL Locations in the Yazoo River Basin (Contact Recreational Season – Sept-Oct 2001). Data assessment consisted of precision measurements and statistical examination of fecal coliform data.
- **Mississippi Department of Environmental Quality.** Contracted to evaluate Bacteriological data generated from sampling conducted at Targeted Pathogen TMDL Locations in the Pearl River and South Independent Stream Basins (Non-Contact Recreational Season – Nov-Dec 2001). Data assessment consisted of precision measurements and statistical examination of fecal coliform data.
- **Mississippi Department of Environmental Quality.** Contracted to evaluate Bacteriological data generated from sampling conducted at Targeted Pathogen TMDL Locations in the Yazoo River Basin (Non-Contact Recreational Season – Nov-Dec 2001). Data assessment consisted of precision measurements and statistical examination of fecal coliform data.
- **Mississippi Department of Environmental Quality.** Contracted to evaluate Bacteriological data generated from sampling conducted at Targeted Pathogen TMDL Locations in the Pascagoula, Pearl, Tombigbee, Big Black, Tennessee and Northern Independent Stream Basins (Non-Contact Recreational Season – Nov 2001-Feb 2002). Data assessment consisted of precision measurements and statistical examination of fecal coliform data.
- **Philips Lighting Company:** Contracted by Hampton-Clarke to review approximately 250 arsenic, lead, and mercury data to determine the health risk evaluation and environmental impacts. Data validation performed in accordance with EPA Region III - Innovative Approaches to Data Validation finalized June 1995.
- **Former Metal Finishing Corporation Site (Toa Baja, Puerto Rico):** Contracted to review total metals data in soil and groundwater to determine the health risk evaluation and environmental impacts.
- **Quality Electroplating Corporation Site (Toa Baja, Puerto Rico):** Contracted to review total metals, semivolatiles, and pesticide/PCB data in soil and groundwater samples to determine the health risk evaluation and environmental impacts.
- **City of Sacramento:** Contracted to assist in the preparation of a technical memorandum to investigate potential sources of cyanide contamination at WWTP within the City of Sacramento County, Ca.
- **New Rochelle:** Contracted to review classical chemistry and organic analysis on a quarterly basis to monitor environmental conditions in groundwater samples due to contaminated from Underground Storage Tanks.

DETAILED EXPERIENCE

1995 to 2002

Malcolm Pirnie, Inc.

- **Former Olathe Naval Air Station (NAS) Site Investigation (FUDS):** Responsible for data validation of more than 60,000 data records resulting from a site investigation of 32 areas of concern. Matrices sampled included soil, water (surface and groundwater), concrete, and sediment; analyses included volatiles, semivolatiles, metals, pesticides, PCBs, herbicides, total recoverable petroleum hydrocarbons, and water quality parameters. Duties included coordinating efforts of other data validators and writing/compiling final data validation reports for submittal to the client. Also developed a separate Quality Control Summary Report (QCSR) as part of data validation efforts. Validation was performed in accordance with National Functional Guidelines and qualifiers applied were those established by EPA Region VII.
- **Data Validation on Services at Aberdeen Proving Ground MD:** Responsible for technical review of third-party Contract Laboratory Protocol (CLP) data validation of analytical data from remedial investigations. Results from soil, sediment, surface water, and groundwater sampling were analyzed for metals, phosphorus, volatiles, semivolatiles, pesticides, PCBs, explosives, sulfur compounds, thiodiglycol, radiologicals, and IMPA/MPA. The validation was performed according to the U.S. EPA National Functional Guidelines with Region III modifications. More than 200 samples from four areas of concern were validated.
- **Quality Assurance Program Plan (QAPP) for Environmental Investigations at Fort Drum NY:** Task manager responsible for preparation and implementation of an installation-wide QAPP for all investigations expected to be performed at the Fort Drum military installation by all architect-engineers working at the site. The QAPP covers sampling of soil, sediment, surface water, groundwater, air, and dust, and analysis for metals, phosphorus, petroleum hydrocarbons, volatiles, semivolatiles, pesticides, herbicides, and dioxins.
- **Sampling and Analysis Services at Fort Drum NY:** Responsible for data validation of analytical data from sampling of soil, groundwater, sediment, pure product, dust, and paint chips. Data validation performed in accordance with U.S. EPA National Functional Guidelines with Region II modifications and adapted to New York State analytical protocols and SW-846 methodologies.
- **Laboratory Audits:** Responsible for auditing the technical capabilities and regulatory status of numerous Corps-validated analytical laboratories used for projects with the Kansas City, Baltimore, Philadelphia, and New York Districts of the Corps.
- **Quality Assurance Program Plan (QAPP) for Environmental Investigations at the Defense Personnel Support Center, Philadelphia PA:** Site Chemist responsible for preparation and implementation of a facility-wide QAPP for all investigations expected to be performed at the facility by all architect-engineers working at the site. The QAPP covers sampling of soil, sediment, surface water, groundwater, air, and dust/bulk for DDX analysis.
- **Merritt Smith Consulting:** Served as on-site consultant to evaluate laboratory facilities located in San Francisco Wastewater Treatment Plants; prepared a technical set of QA guidelines for labs to follow.

DETAILED EXPERIENCE (Continued)

- **Envirosource:** Performed a number of litigation support services for a hazardous waste landfill's lawsuit with the local government. Activities included review of laboratory files for accuracy of reporting and analysis, performing field studies on groundwater collected on-site to demonstrate that the presence of radiological parameters was associated with sediments and not the aqueous fraction of the sample, assisted in preparing and reviewing expert reports for the defendant, reviewed and commented on reports prepared by the plaintiff.
- **Naval Facilities Engineering Command, Northern Division:** Performed an Environmental Baseline Survey for the Prison Complex, which included data validation and evaluation of data associated with sampling events conducted to evaluate potential storage, release, or disposal of hazardous substances or petroleum products in or around the subject property.
- **Naval Facilities Engineering Command, Northern Division:** Performed an Environmental Baseline Survey for the Prison Complex, which included a survey covering all buildings associated with activities related to the prison complex area.
- **North East Ohio Regional Sewer District – Southerly WWTP:** As part of a long-term cyanide monitoring protocol of the plant influent and effluent, served as site chemist to evaluate and address cyanide analytical methods and concentrations. Developed and oversaw standard operating procedures for two different cyanide methods (EPA 1677 and SM 4500).
- **Quality Assurance Project Plan (QAPjP) for Fried Industries Superfund Site, New Jersey:** Site Chemist responsible for preparation and implementation of an work plans, which covered sampling of soil, sediment, surface water, groundwater, air, and dust/bulk.
- **Puerto Rico Aqueduct and Sewer Authority – Ocean Outfall for the Ponce Regional Wastewater Treatment Plant:** Quality Assurance Manager for all activities conducted as part of the 301(h) waiver decision developed to monitor the impact of the approved discharge on the marine biota. Responsible for the following: field and laboratory audits, oversight of field sample collection techniques, data validation, evaluation, and usability of biological and laboratory analytical data, review of subcontract agreements for all laboratory subcontractors on this project, and monitoring of overall quality of the project activities.
- **USACE, Baltimore District: Fort Drum RCRA Closure Building T-4819:** Served as site chemist for a RCRA plan closure of interim-permitted hazardous waste storage building. Performed data validation on floor rinsate, surface soil, and wipe samples (volatiles, semivolatiles, pesticides, PCBs, and metals) and provided usability summary of the data for the building closure.
- **New York City Department of Environmental Protection: Odor Control Design Evaluation for the Manhattan & Bronx Grit Chambers of the Wards Island Water Pollution Control Plant / Bronx NY.** Performed data validation, evaluation, and usability analysis of laboratory-generated data analyses submitted from sample collection of hydrogen sulfide (H₂S) emissions study for off-site grit chamber facilities serving the plant. The data were used to develop H₂S emissions estimates from various unit processes for use in developing building ventilation/odor control scenarios, and to evaluate potential off-site impacts using ambient air modeling. In addition, performed an on-site visit to laboratory facility to resolve laboratory data issues.

DETAILED EXPERIENCE (Continued)

- **New York City Department of Environmental Protection: VOC & Odor Emissions Studies at Dewatering Facilities / New York NY.** Performed data validation, evaluation, and usability analysis of laboratory-generated data analyses submitted from sample collection of odor control systems at Wards Island, Tallman Island, and Jamaica Water Pollution Control Plants. Building and process air entering and exiting the wet scrubbers and activated carbon vessels were analyzed for hydrogen sulfide, odorous organic compounds, VOCs, and ammonia. The efficiency and performance of the odor control systems were evaluated on the basis of the analytical data. In addition, performed an on-site visit to laboratory facility to resolve laboratory data issues.
- **New York City Department of Environmental Protection: Engine Emissions Studies / New York NY.** Performed data validation, evaluation, and usability analysis of on-site and off-site laboratory-generated data analyses submitted from sample collection of engine testing program at the Tallman Island and Coney Island Water Pollution Control Plants. Data analyses consisted of methods performed to determine the emissions of criteria pollutants and VOCs from internal combustion engines burning digester gas, natural gas, and diesel fuels. Testing results were used in Title V permitting development.
- **New York City Department of Environmental Protection: Kensico Flow Control Modifications – Aerator No. 2 (Delaware Aerator) / Town of Mt. Pleasant NY.** Prepared a Sampling and Analytical Plan (SAP) describing field tasks required to complete the Supply and Discharge Conduit assessment located at Aerator No. 2, Kensico, New York. The SAP outlined field activities, laboratory analyses, and control and disposal of contaminated materials.
- **NYC Transit Authority: Kingsbridge – Phase II.** Conducted a Phase II investigation of a vehicle storage lot to be acquired by NYC Transit. Prepared a Field Work Plan, over-sighted the direct push contractor, collected subsurface soil and groundwater samples, and validated analytical data. Assisted with preparation of findings report that summarized field observations and compared detected contaminant concentrations to state regulatory standards.
- **Puerto Rico Aqueduct and Sewer Authority: Title V Services for 14 Facilities / PR.** Performed data validation, evaluation, and usability analysis of laboratory generated data analyses submitted from sample collection of 12 wastewater treatment plants, 2 water treatment plants, and 2 maintenance facilities owned by the Authority. The data were used to evaluate the applicability of Title V regulations to each facility (major and nonmajor source status). In addition, performed an on-site visit to laboratory facility in San Juan, PR to resolve laboratory data issues.
- **Mississippi Department of Environmental Quality.** Responsible for evaluating Bacteriological data generated from sampling conducted at Targeted Pathogen TMDL Locations in the Pearl River and South Independent Stream Basins. Data assessment consisted of precision measurements and statistical examination of fecal coliform data.
- **USACE, Baltimore District: Remedial Investigation at the Skaneateles Weekend Training Site for the 77th Regional Support Command:** Served as site chemist performing laboratory coordination, site sampling, and data validation for activities related to historical release from gasoline underground storage tanks.

DETAILED EXPERIENCE (Continued)

- **USACE, Baltimore District: Remedial Investigation/Remedial Design, Hancock Field Army Complex:** Coordinated and assisted with soil, surface water, and groundwater field investigations. Performed data validation and data usability reports, and, prepared final investigation reports.
- **USACE, Baltimore District: Sampling and Analysis at Fort Drum:** Responsible for data validation of analytical data from sampling of soil, groundwater, sediment, pure product, dust, and paint chips. Data validation was performed in accordance with USEPA National Functional Guidelines with Region II modifications and adapted to NYS analytical protocols and SW-846 methodologies.
- **USACE, Fort Worth District: Fort Wingate Depot: Soil Background Investigation:** Served as site chemist for an investigation of background concentrations of 30 constituents in the surface soil at a 22,000-acre former munitions storage facility. Prepared Chemical Data Acquisition Plan, performed data validation of over 100 samples (total metals, total phosphorus, nitrate/nitrite, total kjeldahl nitrogen, ammonia-nitrogen, sulfate, and pH), and prepared the Quality Control Summary Report of that investigation. In addition, provided support regarding usability of the data to the USACE statistician.
- **USACE, Fort Worth District: Lone Star Army Ammunition Plant, G and O Pond Units – Affected Property Assessment:** Served as site chemist for a RCRA facility investigation to further characterize the G and O Pond Units. Prepared Chemical Data Acquisition Plan, performed data validation of over 200 samples (total recoverable metals, total metals, SPLP metals, cyanide, hexavalent chromium, TOC, TOX, phenols, explosives, volatiles, semivolatiles, nitrate, nitrite, sulfate, and chloride), and prepared the Quality Control Summary Report of that investigation.
- **USACE, Kansas City District: Brewster Wellfield Superfund Site: Groundwater Treatment and Design:** Performed a bench-scale study of viable treatability technology for groundwater softening. The study included the use of raw groundwater from the site in order to set up the bench-scale process. Rigorous sampling was conducted and field kits were used to assess design parameters.
- **USACE, Kansas City District: Sampling and Analysis at Fort Drum:** Project leader for a responsive sampling and analysis services project. The work consisted of: Proposal preparation for numerous sampling assignments; Coordination of field sampling personnel and analytical laboratory; Collection of samples for evaluation under RCRA and New York State guidelines for hazardous waste; and Analysis of chemical data and report preparation.
- **USACE, Omaha District: Former Glasgow Air Force Base: Remedial Investigation:** Evaluated analytical data collected during remedial activities at 16 former tank sites to evaluate the aerial and vertical extent of contaminated soils and groundwater, resulting from past use of the underground and aboveground storage tanks at the former tank locations. Performed data validation and usability summaries and prepared a Quality Control Summary Report for the USACE.
- **USEPA, Region 2: Franklin Burns Superfund Site:** During the RI/FS, evaluated dioxin-furan groundwater data.

DETAILED EXPERIENCE (Continued)

- **USEPA, Region 2: White Chemical Corporation Superfund Site:** During the RI/FS, evaluated dioxin-furan data.
- **USEPA, Region 2: ARCS Preremedial Program:** Compilation of the information/data gathered into a site inspection prioritization (SIP) report for submittal to the USEPA. A recommendation was provided based on existing data stating whether the site needed further investigation.
- **USEPA, Region 2: ARCS Preremedial Program:** Performance of sampling activities which included the collection of surface soil samples to determine the absence or presence of contamination on-site.
- **USEPA, Syosset Landfill TMA Investigation:** On this controversial project, evaluated data to identify whether trimellitic anhydride (TMA) was being emitted from the Syosset Landfill, a former Superfund Site, and poisoning local residents. Worked with the EPA and OSHA to develop a modified protocol which could detect TMA at low levels. Assisted in the report preparation process.
- **City Of White Plains: Drum Investigation Activities:** Responsible for the following: define data quality objectives, procurement of certified laboratory, drum sampling, data validation and usability of analytical data, and preparation of final Report of Findings including recommendations to the NYSDEC.
- **City Of White Plains: Drum Removal Activities:** Removal of over 45 hazardous and non-hazardous drums. As task leader, responsible for the following: define data quality objectives, procurement of certified laboratory, prepared specifications for drum removal and soil removal activities, provided oversight of all field activities, pre and post excavation sampling, data validation and usability of analytical data, and preparation of final Report of Findings to the NYSDEC.
- **Central Contra Costa Sanitary District (CCCSD): Cyanide Assessment:** Served as chemist to evaluate and address cyanide analytical methods and concentrations within CCCSD's WWTP.
- **Cytec Industries: NPDES Permit Issues:** Evaluated usability of analytical laboratory data in accordance with the methods performed.
- **Stone & Webster Environmental Technology and Services: FUSRAP Maywood Superfund Site, PDI Work Plan: Preliminary Design Investigation Work Plan:** Twenty-four commercial and government properties, which potentially contained deposits of radioactive residues and/or hazardous chemicals in surface and subsurface soil. The PDI plan was developed to identify all data gaps and summarize the field activities necessary to acquire the additional information necessary to complete the remedial design action for each property. Site-specific information, including civil/property surveys, foundation designs, underground utilities, safety and logistical issues were examined. Radiological, chemical, geotechnical, and design gaps were identified. Properties were grouped into clusters and maps were prepared. To fill data gaps, specific methods and quantities of predesign data collection activities were developed for each cluster. Performed an RPD comparison study measuring reproducibility between the on-site and offsite laboratory data.
- **New York City Department of Environmental Protection: Newtown Creek Water Pollution Control Plant Upgrade: Aquifer Pumping Tests:** Evaluated data collected from a series of aquifer pumping tests which were conducted at the former Exxon, Mobil, and Williamburg Steel sites.

DETAILED EXPERIENCE (Continued)

- **USACE, Kansas City District: Fried Industries Superfund Site – Remedial Design Investigation and Conceptual Design:** Evaluated soil and groundwater data collected from areas of concern.

1994

EA Engineering, Science, and Technology

As Scientist II:

- **USACE, Baltimore District, Fort Drum NY (Gasoline Alley):** Responsible for preparation of Chemical Data Acquisition Plan in accordance with the USCOE's technical guidelines.
- **USACE, Kansas City District, Ellsworth Air Force Base NE:** Responsible for validating organic, inorganic, and miscellaneous analyses using the National Functional Guidelines for Organic and Inorganic Data Review.
- **USACE, Baltimore District, Fort Drum NY:** As field chemist, provided support during on-site investigation. Responsible for on-site laboratory setup, maintenance and troubleshooting, sample analysis, sample reporting, and data review and interpretation.
- **Idaho National Environmental Laboratory:** Responsible for preparing in-house data validation guidelines for polychlorinated dibenzo-p-dioxin (PCDD) and dibenzofuran (PCDF) analyses.

1990-1993

Pace, Inc.

- **As Gas Chromatography/Mass Spectrometry (GC/MS) Supervisor:** Provided technical training and support in areas of troubleshooting, data review, and spectral interpretation.
- **As GC/MS Volatile/Semivolatile Analyst:** Performed a wide spectrum of volatile and semivolatile analyses using state-of-the-art analytical instrumentation.

November 1987-March 1990

Nanco Environmental Services, Inc.

- **As Metals Analyst:** Performed analysis of heavy metals for diverse sample types including drinking water, groundwater, core samples, and soil samples.

June-November 1987

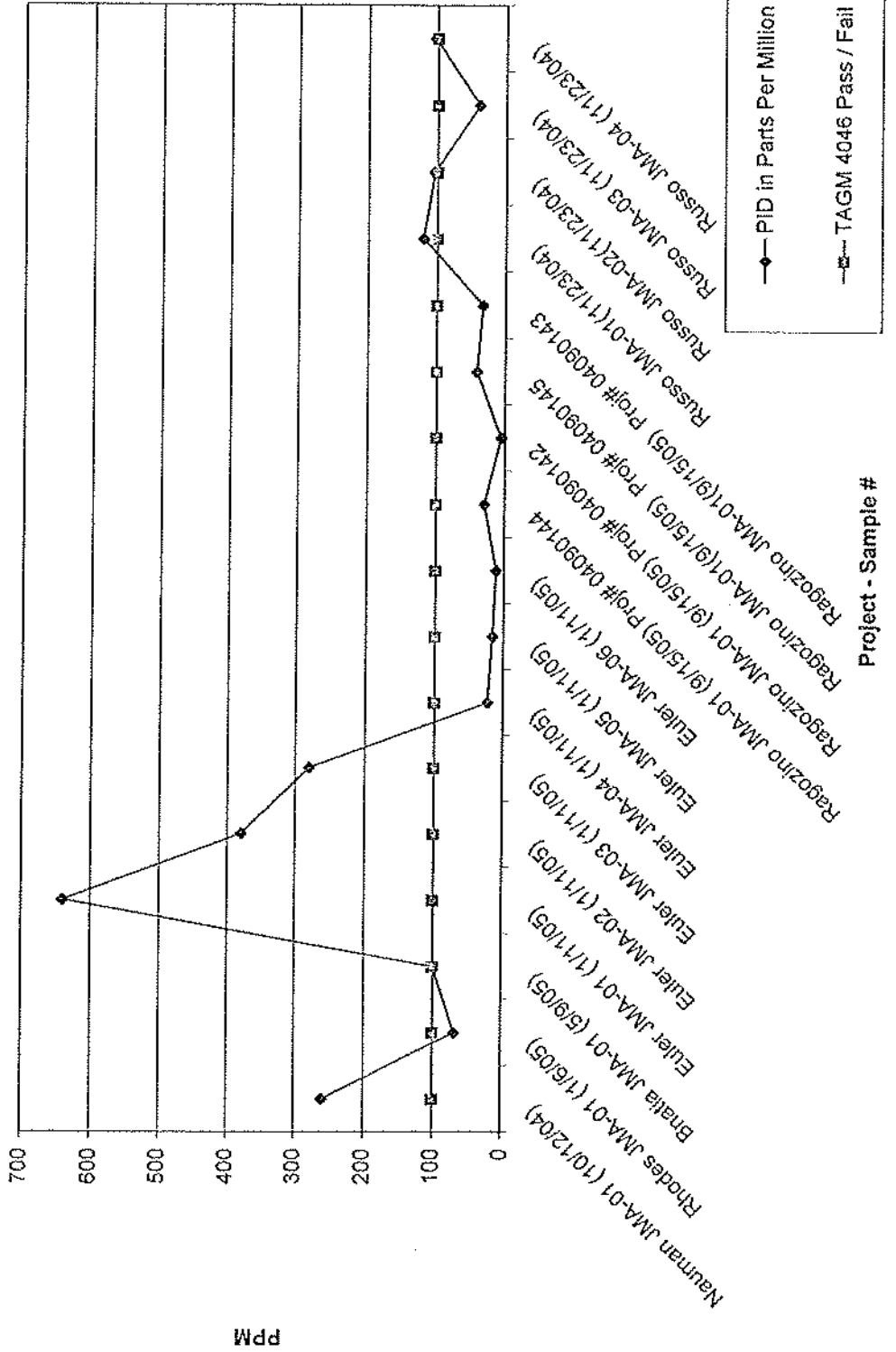
Institute of Ecosystem Studies
The New York Botanical Garden

- **As Research Assistant I:** Responsible for inorganic analysis of on-going acid rain study conducted on the Hubbard Brook Ecosystem samples using a wide range of analytical equipment.

APPENDIX C

PID Calibration Data

PID - TAGM 4046
Comparison Graph



JM Associates, Inc.
 225 Railroad Avenue
 Bedford Hills, NY 10507

PID Levels - TAGM 4046
 Comparison Chart
 (Various Sites)

<i>Project ID</i>	<i>Sample # (Date)</i>	<i>PID</i>	<i>TAGM 4046 Pass/Fail</i>
Nauman	JMA-01 (10/12/04)	260 ppm	Fail
Rhodes	JMA-01 (1/6/05)	70 ppm	Pass
Bnalia	JMA-01 (5/9/05)	101 ppm	Fail
Euler	JMA-01 (1/11/05)	640 ppm	Fail
Euler	JMA-02 (1/11/05)	380 ppm	Fail
Euler	JMA-03 (1/11/05)	280 ppm	Fail
Euler	JMA-04 (1/11/05)	23 ppm	Pass
Euler	JMA-05 (1/11/05)	16 ppm	Pass
Euler	JMA-06 (1/11/05)	11.5 ppm	Pass
Ragozino	JMA-01 (9/15/05) Proj# 04090144	1-30 ppm	Pass
Ragozino	JMA-01 (9/15/05) Proj# 04090142	1-5.6 ppm	Pass
Ragozino	JMA-01(9/15/05) Proj# 04090145	1-42 ppm	Pass
Ragozino	JMA-01(9/15/05) Proj# 04090143	34 ppm	Pass
Russo	JMA-01(11/23/04)	120 ppm	Fail
Russo	JMA-02(11/23/04)	105 ppm	Fail
Russo	JMA-03 (11/23/04)	40 ppm	Pass
Russo	JMA-04 (11/23/04)	104 ppm	Pass

Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 10/12/2004
Re: Client Project ID: Naumann
York Project No.: 04100094

CT License No. PH-0723 New York License No. 10854 Mass. License No. M-CT106 Rhode Island License No. 93 NJ License No. CT401



120 RESEARCH DRIVE STRATFORD, CT 06615 (203) 325-1371 FAX (203) 357-0166

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 10/05/04. The project was identified as your project "Naumann".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			JMA-01	
York Sample ID			04100094-01	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---
1,2,4-Trimethylbenzene			11000	100
1,3,5-Trimethylbenzene			290	100
Benzene			Not detected	100
Ethylbenzene			660	100
Isopropylbenzene			590	100
Naphthalene			13000	100
n-Butylbenzene			1900	100
n-Propylbenzene			810	100
o-Xylene			2100	200
p- & m-Xylenes			3300	200
p-Isopropyltoluene			720	100
sec-Butylbenzene			590	100
tert-Butylbenzene			Not detected	100
Toluene			340	100
Total Xylenes			5400	200

YORK

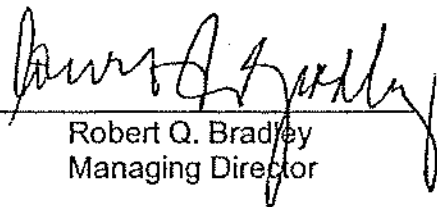
Client Sample ID			JMA-01	
York Sample ID			04100094-01	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---
Acenaphthene			1500	480
Anthracene			Not detected	320
Benzo[a]anthracene			Not detected	460
Benzo[a]pyrene			Not detected	480
Benzo[b]fluoranthene			Not detected	380
Benzo[g,h,i]perylene			Not detected	550
Benzo[k]fluoranthene			Not detected	910
Chrysene			Not detected	450
Dibenz[a,h]anthracene			Not detected	470
Fluoranthene			Not detected	410
Fluorene			2600	600
Indeno[1,2,3-cd]pyrene			Not detected	540
Naphthalene			6100	380
Phenanthrene			6000	450
Pyrene			880	560

Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 04100094

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:


Robert Q. Bradley
Managing Director

Date: 10/12/2004

YORK

Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 1/6/2005
Re: Client Project ID: Rhodes
York Project No.: 05010037

CT License No. PH-0723 New York License No. 10854 Mass. License No. M-CT106 Rhode Island License No. 93 NJ License No. CT401



120 RESEARCH DRIVE STRATFORD, CT 06615 (203) 325-1371 FAX (203) 357-0166

JM Associates, Inc.
 225 Railroad Ave.
 Bedford Hills, NY 10507
 Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 01/04/05. The project was identified as your project "Rhodes".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			JMA1		JMA2	
York Sample ID			05010037-01		05010037-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
Total Xylenes			Not detected	10	Not detected	10

YORK

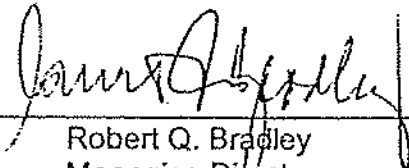
Client Sample ID			JMA1		JMA2	
York Sample ID			05010037-01		05010037-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			Not detected	48	Not detected	48
Anthracene			32	32	Not detected	32
Benzo[a]anthracene			Not detected	46	Not detected	46
Benzo[a]pyrene			Not detected	48	Not detected	48
Benzo[b]fluoranthene			Not detected	38	Not detected	38
Benzo[g,h,i]perylene			Not detected	55	Not detected	55
Benzo[k]fluoranthene			Not detected	91	Not detected	91
Chrysene			Not detected	45	Not detected	45
Dibenz[a,h]anthracene			Not detected	47	Not detected	47
Fluoranthene			Not detected	41	Not detected	41
Fluorene			Not detected	60	Not detected	60
Indeno[1,2,3-cd]pyrene			Not detected	54	Not detected	54
Naphthalene			61	38	Not detected	38
Phenanthrene			180	45	Not detected	45
Pyrene			Not detected	56	Not detected	56

Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 05010037

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:



Robert Q. Bradley
Managing Director

Date: 1/6/2005

YORK

Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 5/9/2005
Re: Client Project ID: Bnatia
York Project No.: 05050153

CT License No. PH-0723

New York License No. 10854



JM Associates, Inc.
 225 Railroad Ave.
 Bedford Hills, NY 10507
 Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 05/04/05. The project was identified as your project "Bnatia".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			N/W Corner-Near Ledge (101 on		Southwall Near Base	
York Sample ID			05050153-01		05050153-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			2400	1	Not detected	5.0
1,3,5-Trimethylbenzene			570	1	Not detected	5.0
Benzene			Not detected	1	Not detected	5.0
Ethylbenzene			43	1	Not detected	5.0
Isopropylbenzene			170	1	Not detected	5.0
Naphthalene			7300	1	Not detected	5.0
n-Butylbenzene			800	1	Not detected	5.0
n-Propylbenzene			300	1	Not detected	5.0
o-Xylene			170	2	Not detected	10
p- & m-Xylenes			170	2	Not detected	10
p-Isopropyltoluene			460	1	Not detected	5.0
sec-Butylbenzene			700	1	Not detected	5.0
tert-Butylbenzene			Not detected	1	Not detected	5.0
Toluene			Not detected	1	Not detected	5.0

YORK

Client Sample ID			N/W Corner-Near Ledge (101 on		Southwall Near Base	
York Sample ID			05050153-01		05050153-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Total Xylenes			340	2	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/kG	---	---	---	---
Acenaphthene			1300	240	Not detected	48
Anthracene			750	160	40	32
Benzo[a]anthracene			Not detected	230	120	46
Benzo[a]pyrene			Not detected	240	61	48
Benzo[b]fluoranthene			Not detected	190	59	38
Benzo[g,h,i]perylene			Not detected	280	Not detected	55
Benzo[k]fluoranthene			Not detected	460	92	91
Chrysene			Not detected	230	85	45
Dibenz[a,h]anthracene			Not detected	240	Not detected	47
Fluoranthene			360	210	240	41
Fluorene			2300	300	Not detected	60
Indeno[1,2,3-cd]pyrene			Not detected	270	Not detected	54
Naphthalene			4400	190	Not detected	38
Phenanthrene			5400	230	190	45
Pyrene			1500	280	200	56

Client Sample ID			S/W Wall Comp. Near Base	
York Sample ID			05050153-03	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---
1,2,4-Trimethylbenzene			Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0
Benzene			Not detected	5.0
Ethylbenzene			Not detected	5.0
Isopropylbenzene			Not detected	5.0
Naphthalene			Not detected	5.0
n-Butylbenzene			Not detected	5.0
n-Propylbenzene			Not detected	5.0
o-Xylene			Not detected	10
p- & m-Xylenes			Not detected	10
p-Isopropyltoluene			Not detected	5.0
sec-Butylbenzene			Not detected	5.0
tert-Butylbenzene			Not detected	5.0
Toluene			Not detected	5.0
Total Xylenes			Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/kG	---	---
Acenaphthene			Not detected	48
Anthracene			Not detected	32
Benzo[a]anthracene			Not detected	46
Benzo[a]pyrene			Not detected	48
Benzo[b]fluoranthene			Not detected	38
Benzo[g,h,i]perylene			Not detected	55
Benzo[k]fluoranthene			Not detected	91
Chrysene			Not detected	45
Dibenz[a,h]anthracene			Not detected	47

YORK

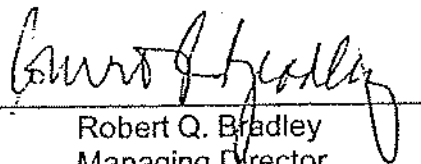
Client Sample ID			S/W Wall Comp. Near Base	
York Sample ID			05050153-03	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Fluoranthene			Not detected	41
Fluorene			Not detected	60
Indeno[1,2,3-cd]pyrene			Not detected	54
Naphthalene			Not detected	38
Phenanthrene			Not detected	45
Pyrene			Not detected	56

Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 05050153

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:


 Robert Q. Bradley
 Managing Director

Date: 5/9/2005

YORK

YORK

ANALYTICAL LABORATORIES, INC.

Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 1/11/2005
Re: Client Project ID: Euler
York Project No.: 05010036

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120 RESEARCH DRIVE BRATFORD, CT 06615 (203) 325-1371 FAX (203) 357-0166

JM Associates, Inc.
 225 Railroad Ave.
 Bedford Hills, NY 10507
 Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 01/04/05. The project was identified as your project "Euler".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			JMA1		JMA2	
York Sample ID			05010036-01		05010036-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			290000	1000	130000	200
1,3,5-Trimethylbenzene			81000	1000	38000	200
Benzene			3400	1000	840	200
Ethylbenzene			56000	1000	21000	200
Isopropylbenzene			15000	1000	6500	200
Naphthalene			330000	1000	140000	200
n-Butylbenzene			68000	1000	23000	200
n-Propylbenzene			41000	1000	16000	200
o-Xylene			110000	2000	44000	400
p- & m-Xylenes			230000	2000	94000	400
p-Isopropyltoluene			20000	1000	8900	200
sec-Butylbenzene			23000	1000	9100	200
tert-Butylbenzene			Not detected	1000	Not detected	200
Toluene			88000	1000	29000	200
Total Xylenes			340000	2000	138000	400

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Client Sample ID			JMA1		JMA2	
York Sample ID			05010036-01		05010036-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			70000	24000	34000	6000
Anthracene			48000	16000	16000	4000
Benzo[a]anthracene			Not detected	23000	Not detected	5800
Benzo[a]pyrene			Not detected	24000	Not detected	6000
Benzo[b]fluoranthene			Not detected	19000	Not detected	4800
Benzo[g,h,i]perylene			Not detected	28000	Not detected	6900
Benzo[k]fluoranthene			Not detected	46000	Not detected	11000
Chrysene			Not detected	23000	Not detected	5600
Dibenz[a,h]anthracene			Not detected	24000	Not detected	5900
Fluoranthene			Not detected	21000	6700	5100
Fluorene			120000	30000	52000	7500
Indeno[1,2,3-cd]pyrene			Not detected	27000	Not detected	6800
Naphthalene			370000	19000	150000	4800
Phenanthrene			300000	23000	110000	5600
Pyrene			54000	28000	29000	7000

280

22

Client Sample ID			JMA3		JMA4	
York Sample ID			05010036-03		05010036-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			6000	25	Not detected	5.0
1,3,5-Trimethylbenzene			2300	25	Not detected	5.0
Benzene			Not detected	25	Not detected	5.0
Ethylbenzene			470	25	Not detected	5.0
Isopropylbenzene			250	25	Not detected	5.0
Naphthalene			13000	25	Not detected	5.0
n-Butylbenzene			1500	25	Not detected	5.0
n-Propylbenzene			620	25	Not detected	5.0
o-Xylene			(1500)	50	Not detected	10
p- & m-Xylenes			(1900)	50	Not detected	10
p-Isopropyltoluene			610	25	Not detected	5.0
sec-Butylbenzene			540	25	Not detected	5.0
tert-Butylbenzene			Not detected	25	Not detected	5.0
Toluene			74	25	Not detected	5.0
Total Xylenes			(3400)	50	Not detected	10
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			660	240	Not detected	48
Anthracene			390	160	Not detected	32
Benzo[a]anthracene			Not detected	230	Not detected	46
Benzo[a]pyrene			Not detected	240	Not detected	48
Benzo[b]fluoranthene			Not detected	190	Not detected	38
Benzo[g,h,i]perylene			Not detected	280	Not detected	55
Benzo[k]fluoranthene			Not detected	460	Not detected	91
Chrysene			Not detected	230	Not detected	45
Dibenz[a,h]anthracene			Not detected	240	Not detected	47
Fluoranthene			Not detected	210	Not detected	41
Fluorene			1100	300	Not detected	60

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ANALYTICAL LABORATORIES, INC.
 ONE RESEARCH DRIVE
 STAMFORD, CT 06906
 (203) 325-1371 FAX (203) 357-0166

Field Chain-of-Custody Record

05010036

Company Name JM Associates, Inc.	Report To:	Invoice To:	Project ID/No. Euler	Samples Collected By (Signature) <i>Emile Garcia</i>	Name (Printed) Emile Garcia
--	------------	-------------	--------------------------------	---	---------------------------------------

Sample No.	Location/ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
JMA 1	X1: PID = 640 ppm	1/3/05		X		8001 & 8070 as per STARS tbl #2	Boz glass
JMA 2	X2: PID = 380 ppm	1/3/05		X			
JMA 3	X3: PID = 280 ppm						
JMA 4	X4: PID = 23 ppm						
JMA 5	X7: PID = 16 ppm						
JMA 6	X9: PID = 11.5 ppm						

Chain-of-Custody Record		1/3/05 11:30pm	
Bottles Relinquished from Lab by <i>Emile Garcia</i>	Sample Relinquished by <i>Emile Garcia</i>	Date/Time 1/3/05 11:30pm	Date/Time
Bottles Received in Field by	Sample Relinquished by	Date/Time	Date/Time
Comments/Special Instructions		Turn-Around Time	

Standard RUSH(define)

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ANALYTICAL LABORATORIES, INC.

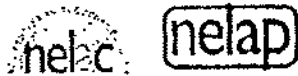
Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 9/15/2004
Re: Client Project ID: Ragozino
York Project No.: 04090144

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120 RESEARCH DRIVE STRATFORD, CT 06615 (203) 325-1371 FAX (203) 357-0166

JM Associates, Inc.
 225 Railroad Ave.
 Bedford Hills, NY 10507
 Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 09/07/04. The project was identified as your project "Ragozino".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			1-30PPM	
York Sample ID			04090144-01	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---
1,2,4-Trimethylbenzene			Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0
Benzene			Not detected	5.0
Ethylbenzene			Not detected	5.0
Isopropylbenzene			Not detected	5.0
Naphthalene			Not detected	5.0
n-Butylbenzene			Not detected	5.0
n-Propylbenzene			Not detected	5.0
o-Xylene			Not detected	10
p- & m-Xylenes			Not detected	10
p-Isopropyltoluene			Not detected	5.0
sec-Butylbenzene			Not detected	5.0
tert-Butylbenzene			Not detected	5.0
Toluene			Not detected	5.0
Total Xylenes			Not detected	10

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Client Sample ID			1-30PEM	
York Sample ID			04090144-01	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---
Acenaphthene			Not detected	96
Anthracene			Not detected	64
Benzo[a]anthracene			Not detected	92
Benzo[a]pyrene			Not detected	96
Benzo[b]fluoranthene			Not detected	76
Benzo[g,h,i]perylene			Not detected	110
Benzo[k]fluoranthene			Not detected	180
Chrysene			Not detected	90
Dibenz[a,h]anthracene			Not detected	94
Fluoranthene			Not detected	82
Fluorene			Not detected	120
Indeno[1,2,3-cd]pyrene			Not detected	110
Naphthalene			Not detected	76
Phenanthrene			Not detected	90
Pyrene			140	110

Units Key:

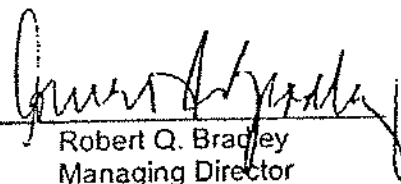
For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 04090144

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:


Robert Q. Bradley
Managing Director

Date: 9/15/2004

YORK

Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 9/15/2004
Re: Client Project ID: Ragozino
York Project No.: 04090145

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120 RESEARCH DRIVE STRATFORD, CT 06615 (203) 325-1371 FAX (203) 357-0166

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 09/07/04. The project was identified as your project "Ragozino".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			1-42PPM	
York Sample ID			04090145-01	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---
1,2,4-Trimethylbenzene			Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0
Benzene			Not detected	5.0
Ethylbenzene			Not detected	5.0
Isopropylbenzene			Not detected	5.0
Naphthalene			Not detected	5.0
n-Butylbenzene			Not detected	5.0
n-Propylbenzene			Not detected	5.0
o-Xylene			Not detected	10
p- & m-Xylenes			Not detected	10
p-Isopropyltoluene			Not detected	5.0
sec-Butylbenzene			Not detected	5.0
tert-Butylbenzene			Not detected	5.0
Toluene			Not detected	5.0
Total Xylenes			Not detected	10

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Client Sample ID			1-42PPM	
York Sample ID			04090145-01	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---
Acenaphthene			Not detected	240
Anthracene			Not detected	160
Benzo[a]anthracene			Not detected	230
Benzo[a]pyrene			Not detected	240
Benzo[b]fluoranthene			Not detected	190
Benzo[g,h,i]perylene			Not detected	280
Benzo[k]fluoranthene			Not detected	460
Chrysene			Not detected	230
Dibenz[a,h]anthracene			Not detected	240
Fluoranthene			Not detected	210
Fluorene			Not detected	300
Indeno[1,2,3-cd]pyrene			Not detected	270
Naphthalene			Not detected	190
Phenanthrene			Not detected	230
Pyrene			Not detected	280

Units Key:

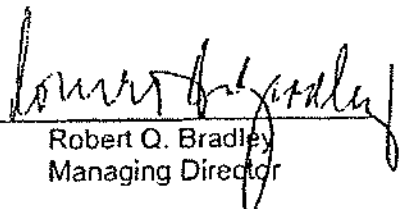
For Waters/Liquids: mg/L = ppm ; ug/L = ppb

For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 04090145

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:


Robert Q. Bradley
Managing Director

Date: 9/15/2004

YORK

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ANALYTICAL LABORATORIES, INC.

Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 9/15/2004
Re: Client Project ID: Ragozino
York Project No.: 04090143

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120 RESEARCH DRIVE STRATFORD, CT 06615 (203) 325-1371 FAX (203) 357-0166

JM Associates, Inc.
 225 Railroad Ave.
 Bedford Hills, NY 10507
 Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 09/07/04. The project was identified as your project "Ragozino".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			1-34-22PPM	
York Sample ID			04090143-01	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Volatiles-8021 STARS Table 2	SW846-8260	ug/Kg	---	---
1,2,4-Trimethylbenzene			Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0
Benzene			Not detected	5.0
Ethylbenzene			Not detected	5.0
Isopropylbenzene			Not detected	5.0
Naphthalene			23	5.0
n-Butylbenzene			18	5.0
n-Propylbenzene			Not detected	5.0
o-Xylene			Not detected	10
p- & m-Xylenes			Not detected	10
p-Isopropyltoluene			Not detected	5.0
sec-Butylbenzene			Not detected	5.0
tert-Butylbenzene			Not detected	5.0
Toluene			Not detected	5.0
Total Xylenes			Not detected	10

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Client Sample ID			1-34-22PPM	
York Sample ID			04090143-01	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
STARS Target Semi-Volatiles	SW846-8270	ug/kg	--	---
Acenaphthene			Not detected	240
Anthracene			Not detected	160
Benzo[a]anthracene			Not detected	230
Benzo[a]pyrene			Not detected	240
Benzo[b]fluoranthene			Not detected	190
Benzo[g,h,i]perylene			Not detected	280
Benzo[k]fluoranthene			Not detected	460
Chrysene			Not detected	230
Dibenz[a,h]anthracene			Not detected	240
Fluoranthene			Not detected	210
Fluorene			Not detected	300
Indeno[1,2,3-cd]pyrene			Not detected	270
Naphthalene			Not detected	190
Phenanthrene			Not detected	230
Pyrene			1100	280

Units Key: For Waters/Liquids: mg/L = ppm; ug/l. = ppb For Soils/Solids: mg/kg = ppm; ug/kg = ppb

Notes for York Project No. 04090143

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By: _____

Robert Q. Bradley
Managing Director

Date: 9/15/2004

YORK

Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 11/23/2004
Re: Client Project ID: Russo
York Project No.: 04110466

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JM Associates, Inc.
 225 Railroad Ave.
 Bedford Hills, NY 10507
 Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 11/17/04. The project was identified as your project "Russo".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			Water Side of Dike	
York Sample ID			04110466-01	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
Volatiles- STARS List	SW846-8260	ug/Kg	---	--
1,2,4-Trimethylbenzene			Not detected	5.0
1,3,5-Trimethylbenzene			Not detected	5.0
Benzene			Not detected	5.0
Ethylbenzene			Not detected	5.0
Isopropylbenzene			Not detected	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0
Naphthalene			Not detected	5.0
n-Butylbenzene			Not detected	5.0
n-Propylbenzene			Not detected	10
o-Xylene			Not detected	10
p- & m-Xylenes			Not detected	5.0
p-Isopropyltoluene			Not detected	5.0
sec-Butylbenzene			Not detected	5.0
tert-Butylbenzene			Not detected	5.0
Toluene			Not detected	5.0
Total Xylenes			Not detected	10

YORK

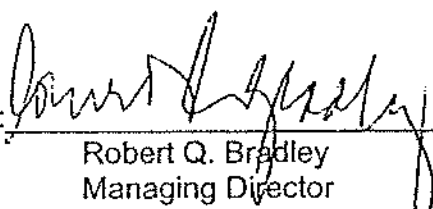
Client Sample ID			Water Side of Dike	
York Sample ID			04110466-01	
Matrix			SOIL	
Parameter	Method	Units	Results	MDL
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---
Acenaphthene			Not detected	240
Anthracene			630	160
Benzo[a]anthracene			1800	230
Benzo[a]pyrene			2100	240
Benzo[b]fluoranthene			1900	190
Benzo[g,h,i]perylene			Not detected	280
Benzo[k]fluoranthene			2700	460
Chrysene			1700	230
Dibenz[a,h]anthracene			Not detected	240
Fluoranthene			4600	210
Fluorene			340	300
Indeno[1,2,3-cd]pyrene			Not detected	270
Naphthalene			Not detected	190
Phenanthrene			2700	230
Pyrene			4500	280

Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 04110466

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:


Robert Q. Bradley
Managing Director

Date: 11/23/2004

YORK

YORK

ANALYTICAL LABORATORIES, INC.

Technical Report

prepared for

JM Associates, Inc.
225 Railroad Ave.
Bedford Hills, NY 10507
Attention: Mr. John Manfredi

Report Date: 11/23/2004
Re: Client Project ID: Russo
York Project No.: 04110467

CT License No. PH-0723 New York License No. 10854 Mass. License No. M-CT106 Rhode Island License No. 93 NJ License No. CT401



120 RESEARCH DRIVE

STRATFORD, CT 06615

(203) 325-1371

FAX (203) 357-0166

JM Associates, Inc.
 225 Railroad Ave.
 Bedford Hills, NY 10507
 Attention: Mr. John Manfredi

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on 11/17/04. The project was identified as your project "Russo".

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the NELAC acceptance requirements for environmental samples except those indicated under the Notes section of this report.

All the analyses met the method and laboratory standard operating procedure requirements except as indicated under the Notes section of this report, or as indicated by any data flags, the meaning of which is explained in the attachment to this report, if applicable.

The results of the analyses, which are all reported on an as-received basis unless otherwise noted, are summarized in the following table(s).

Analysis Results

Client Sample ID			JMA-01		JMA-02	
York Sample ID			04110467-01		04110467-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles- STARS List	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			6	5.0	5	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	Not detected	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
Naphthalene			9	5.0	Not detected	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	Not detected	10
p- & m-Xylenes			Not detected	10	Not detected	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
Total Xylenes			Not detected	10	Not detected	10

YORK

Client Sample ID			JMA-01		JMA-02	
York Sample ID			04110467-01		04110467-02	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			Not detected	96	Not detected	240
Anthracene			210	64	Not detected	160
Benzo[a]anthracene			330	92	Not detected	230
Benzo[a]pyrene			640	96	390	240
Benzo[b]fluoranthene			410	76	230	190
Benzo[g,h,i]perylene			170	110	Not detected	280
Benzo[k]fluoranthene			780	180	480	460
Chrysene			770	90	440	230
Dibenz[a,h]anthracene			82	94	Not detected	240
Fluoranthene			1100	82	600	210
Fluorene			130	120	Not detected	300
Indeno[1,2,3-cd]pyrene			180	110	Not detected	270
Naphthalene			Not detected	76	Not detected	190
Phenanthrene			900	90	360	230
Pyrene			970	110	570	280

Client Sample ID			JMA-03		JMA-04	
York Sample ID			04110467-03		04110467-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Volatiles- STARS List	SW846-8260	ug/Kg	---	---	---	---
1,2,4-Trimethylbenzene			Not detected	5.0	22	5.0
1,3,5-Trimethylbenzene			Not detected	5.0	5	5.0
Benzene			Not detected	5.0	Not detected	5.0
Ethylbenzene			Not detected	5.0	Not detected	5.0
Isopropylbenzene			Not detected	5.0	Not detected	5.0
Methyl-tert-butyl ether (MTBE)			Not detected	5.0	Not detected	5.0
Naphthalene			Not detected	5.0	9	5.0
n-Butylbenzene			Not detected	5.0	Not detected	5.0
n-Propylbenzene			Not detected	5.0	Not detected	5.0
o-Xylene			Not detected	10	11	10
p- & m-Xylenes			Not detected	10	19	10
p-Isopropyltoluene			Not detected	5.0	Not detected	5.0
sec-Butylbenzene			Not detected	5.0	Not detected	5.0
tert-Butylbenzene			Not detected	5.0	Not detected	5.0
Toluene			Not detected	5.0	Not detected	5.0
Total Xylenes			Not detected	10	30	10
STARS Target Semi-Volatiles	SW846-8270	ug/kg	---	---	---	---
Acenaphthene			Not detected	48	Not detected	48
Anthracene			Not detected	32	Not detected	32
Benzo[a]anthracene			Not detected	46	51	46
Benzo[a]pyrene			Not detected	48	85	48
Benzo[b]fluoranthene			Not detected	38	62	38
Benzo[g,h,i]perylene			Not detected	55	Not detected	55
Benzo[k]fluoranthene			Not detected	91	110	91
Chrysene			Not detected	45	130	45
Dibenz[a,h]anthracene			Not detected	47	Not detected	47
Fluoranthene			Not detected	41	160	41

YORK

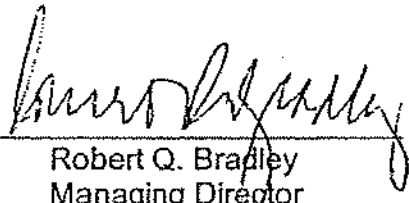
Client Sample ID			JMA-03		JMA-04	
York Sample ID			04110467-03		04110467-04	
Matrix			SOIL		SOIL	
Parameter	Method	Units	Results	MDL	Results	MDL
Fluorene			Not detected	60	Not detected	60
Indeno[1,2,3-cd]pyrene			Not detected	54	Not detected	54
Naphthalene			Not detected	38	Not detected	38
Phenanthrene			Not detected	45	91	45
Pyrene			Not detected	56	150	56

Units Key: For Waters/Liquids: mg/L = ppm ; ug/L = ppb For Soils/Solids: mg/kg = ppm ; ug/kg = ppb

Notes for York Project No. 04110467

1. The MDL (Minimum Detectable Limit) reported is adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All samples were received in proper condition for analysis with proper documentation.
6. All analyses conducted met method or Laboratory SOP requirements.
7. It is noted that no analyses reported herein were subcontracted to another laboratory.

Approved By:


Robert Q. Bradley
Managing Director

Date: 11/23/2004

YORK

Field Chain-of-Custody Record

Company Name

JM ASSOCIATES, INC.

Report To:

JM ASSOCIATES, INC.

Invoice To:

JM ASSOCIATES

Project ID/No.

BUSSO

Signature: *J. Manfredi*

Name (Printed): J. Manfredi

Sample No.	Location /ID	Date Sampled	Sample Matrix			ANALYSES REQUESTED	Container Description(s)
			Water	Soil	Air		
MA-01	E WALL PID 120 PM	11/15/04		X			8021 + 8270 as per STARS
02	BASE (1) PID 105 PM						
03	Base PID 40 PM						
04	WALL PID 104 PM COMPOSITE						
11							

Chain-of-Custody Record

Bottles Relinquished From Lab by _____ Date/Time _____

Bottles Received in Field by _____ Date/Time _____

Comments/Special Instructions _____

Sample Relinquished by: *J. MANFREDI* Date/Time: 11/16/04 13:30

Sample Relinquished by: _____ Date/Time: _____

Sample Received by: _____ Date/Time: 11/17/04 11:04

Sample Received in Lab by: _____ Date/Time: 11-17-04/1530

Turn-Around Time: 1.40c

X Standard 5 days RUSH (define)

RI WORK PLAN
APPENDIX C

HEALTH AND SAFETY PLAN

HEALTH AND SAFETY PLAN

**221 MAIN STREET SITE
221 Main Street
White Plains, NY 10601**

OCTOBER 2004

Prepared for:

**LC Main, LLC
115 Stevens Ave
Valhalla, NY 10595**

Prepared By:

**JM Associates, Inc.
225 Railroad Ave
Bedford Hills, NY 10507**

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FIGURES

Figure 1	Site Location Map
Figure 2	Areas of Concern
Figure 3	Work Zones

APPENDICES

Appendix A	Incident Report Form
Appendix B	Air Monitoring Log
Appendix C	Acknowledgement of HASP

1.0 INTRODUCTION

JM Associates has prepared this Site-Specific Health & Safety Plan (HASP) for the Remedial Investigation (RI) and Interim Remedial Measures (IRM) that will be conducted at the 221 Main Street Site located at 221 Main Street, White Plains, New York ("the Site") under the New York State Brownfield Cleanup Program (BCP). This HASP has been prepared in accordance with the industry standards of the Federal Occupational Safety and Health Administration (OSHA) as outlined in Title 20 of the Code of Federal Regulations, Parts 1910 and 1926 (20 CFR 1910 and 20 CFR 1926). The HASP is designed to establish site-specific health and safety procedures that will be followed during Site activities in order to minimize exposure of site workers and the community to physical and chemical hazards that may be present at the Site. The HASP will be adhered to by all personnel involved in the investigation. Procedures followed in this HASP are implemented to ensure that workers on the Site as well as people working near the site and the surrounding community are protected from exposures to site contaminants.

2.0 SITE DESCRIPTION

Site background information is discussed in the RI/IRM Work Plan. The site is located in the City of White Plains, Westchester County, New York as shown on Figure 1, and is occupied by commercial establishments and parking lots. The three main areas of the site include the Main Street Building (203-227 Main St) and the Annex building, the parking area located behind (north of) the Main Street Building (the Halpern Lot), and the City Lot, which is a municipal parking lot located west of the Halpern Lot and Annex. The three areas of the Site are shown on Figure 2.

Soil and groundwater at the Site are impacted by petroleum products due to leaking underground storage tanks (USTs). There are four suspected areas of concern (AOC) at the Site. The first area (AOC-1) is under the 221 Main Street Building, where USTs may remain. The second area of concern (AOC-2) is a UST located adjacent to the Annex building. AOC-3 is on the west side of the Halpern Lot, which could be related to the past use of the Lot as a filling station. The final area of concern (AOC-4) is the former location of a police department tank on the western side of the City Lot. Groundwater in AOC-4 is known to be contaminated. The general areas of the four AOCs are shown on Figure 2.

The Site comprises the majority of one city block. A Church and office building are located to the east of the site within the block, and are not considered part of the Site. A building known as the Bar Building is located within the Site, on the south side, between the Main St Building and the Annex Building. The Bar Building is not part of the Site and will remain intact. The surrounding area of the Site is comprised of commercial and office establishments. The New York State Power Authority Parking Garage is located adjacent to the Site, to the West.

The Site is fairly flat and contains no surface water bodies. The nearest surface water is the Bronx River, located approximately 1500 feet west of the Site. Groundwater is approximately 15 – 20 feet below ground surface (bgs) and flows west.

3.0 WORK OBJECTIVE

The objective of the work being performed at the Site is to remove contaminated soil and to evaluate the extent of contamination in soil gas and groundwater. The objectives of the work will be completed in two phases. The first phase is an IRM to remove contaminated soil at the site and any remaining USTs. The second phase is a RI to determine if soil vapor has migrated from the site and to determine the extent of groundwater contamination.

3.1 Work Activities

Specific work activities to be performed include:

- Excavation of contaminated soil;
- Confirmatory soil sampling;
- Monitoring well installation;
- Groundwater sampling;
- Soil gas sampling.

Safety procedures required for each of the activities to be performed are described in subsequent sections of this HASP.

4.0 PERSONNEL

Personnel at the Site include a project manager, a Health and Safety Officer (HSO), and subcontractors. Visitors may also be on the Site at various times.

4.1 Health and Safety Officer (HSO)

The Health and Safety Officer (HSO) is responsible for coordination of health and safety procedures and is responsible for compliance with the HASP. The HSO will ensure that all site personnel and visitors read and sign the HASP. All safety concerns should be referred to the HSO. The HSO will make any necessary modifications to the HASP should site conditions change. The HSO will communicate daily with the Project Manager. The HSO for this project is John McCarthy of ProSafety.

4.2 Project Manager

The Project Manager (PM) is responsible for the overall coordination of work at the Site. All subcontractors and other personnel report to the Project Manager. The Project Manager is required to read and sign the HASP and to adhere to HASP procedures. The

Project Manager communicates daily with the HSO. The Project Manager for this project is John Manfredi of JM Associates.

4.3 Subcontractors

J.M. Associates requires that all site contractors work under their own site-specific health and safety plans. J.M. Associates is not responsible for the health and safety of the site contractors. The site contractors will, however, be required to read and sign this site-specific HASP and agree to comply with the procedures outlined in this HASP.

4.4 Visitors

All visitors will be required to sign and read this HASP and agree to follow the procedures outlined in this HASP. Site visitors will not be allowed in designated areas of the Site where work in contaminated areas is being performed as outlined in this HASP.

4.5 Training

Training is required of all employees working in the exclusion and contamination reduction zones. The training requirements are as follows:

- 8 hour awareness class
- Three days of supervised field experience
- HASP training

Documentation of the required training for workers is kept in company files in the J.M. Associates main office.

5.0 SITE CONTROL

Prior to the start of field activities, the HSO will be responsible for the designation of the exclusion zone, contamination reduction zone and support zone.

The exclusion zone will be defined as the immediate work area and the area within ten feet of the work area. The exclusion zone is the area where the greatest potential hazard exists. **Only authorized workers with the required training are allowed in this zone.**

A contamination reduction zone will be defined by the HSO daily. This zone will be located outside of the exclusion zone, and upwind of the exclusion zone whenever possible. The contamination reduction zone will be used for the storage of equipment and personnel decontamination.

The support zone will be defined as an outermost area outside the contamination reduction zone. The support zone is a clean area where administrative and support employees remain and where communications are held. Normal work clothes are

allowed in this zone. The support zone will be located upwind from high hazard areas as appropriate.

6.0 EMERGENCY INFORMATION

A map of the Site and designated work zones is included as Figure 3.

Site Address: 221 Main Street
White Plains, NY 10601

Health and Safety Officer (HSO):

General Emergency: 911

Police Department: Non-emergency: (914) 422-6111
Emergency 911

Fire Department: Non-emergency: (914) 422-6322
Emergency 911

Ambulance: Non-emergency: (914) 422-6111
Emergency 911

Hospital: New York Hospital
21 Bloomingdale Rd
White Plains, NY
(914) 682-9100

Directions to Hospital (see attached Map):

Start out by going Northeast on MAIN ST/NY-119 E toward CHURCH ST.
Turn RIGHT onto S BROADWAY/NY-22 S/NY-119 E.
Turn LEFT onto ARMORY PL/MITCHELL PL/NY-119 E.
Continue to follow NY-119 E.
Turn RIGHT onto BLOOMINGDALE RD.
End at 21 Bloomingdale Rd White Plains

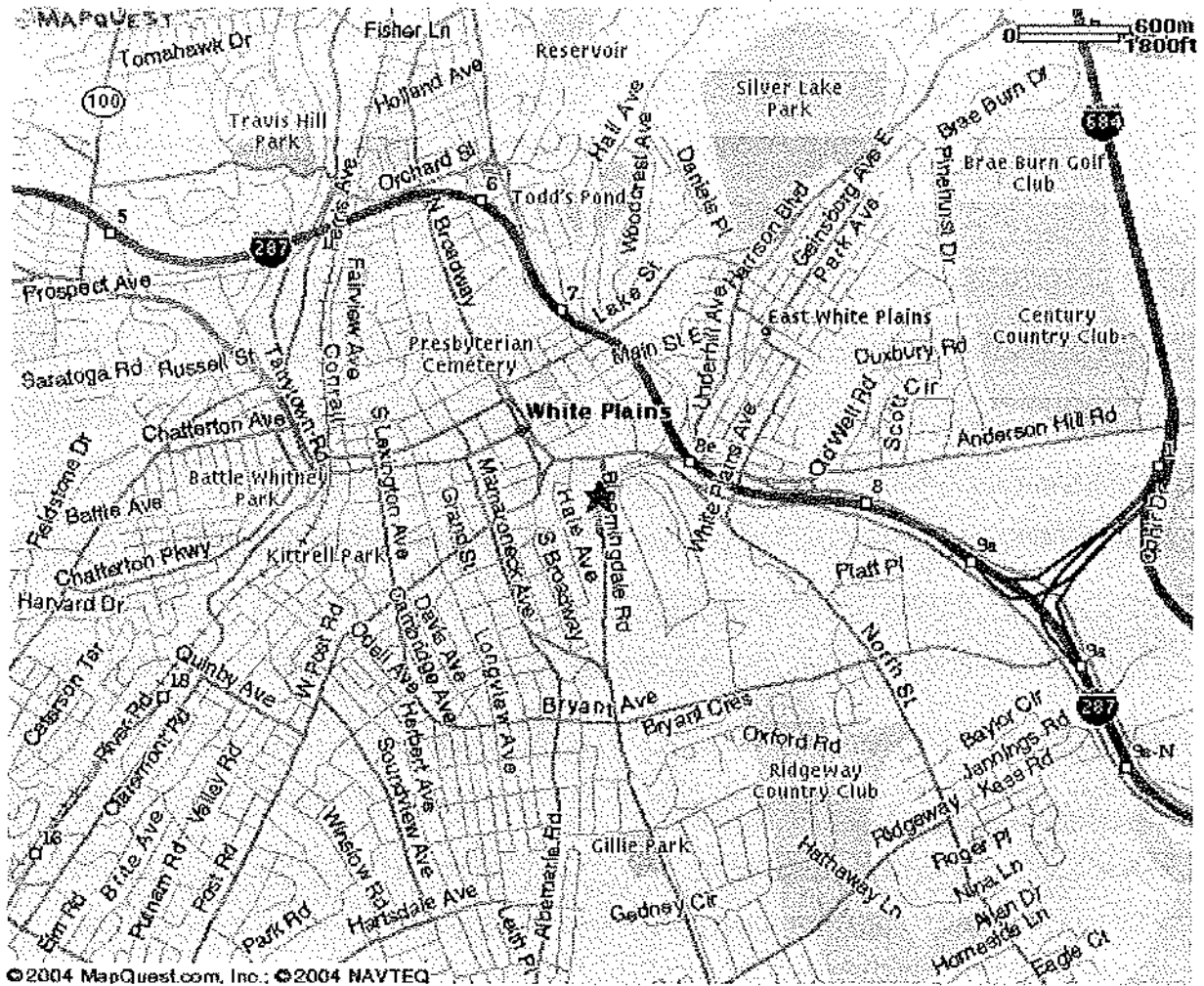
Poison Control Center: (914) 366-3030

J.M. Associates Information: 225 Railroad Ave
Bedford Hills, NY 10507
(914) 241-3795

Signal for Emergency: Warning Shout

HOSPITAL LOCATION

New York Hospital
21 Bloomingdale Rd



Point of Meeting for Emergency: J.M. Associates Project Vehicle

Communication: Cell Phones, Verbal Communication

7.0 HAZARD EVALUATION

The potential physical and chemical hazards for this project have been evaluated. Existing information including past experience and past sampling results were used in the evaluation process.

7.1 Physical Hazards

Physical hazards for this project include electrical exposure, mechanical exposure, fire/explosion, noise exposure and heat or cold stress. Precautions will be taken to avoid physical hazards and include general safe working practices and proper personal protective equipment. Heat stress and cold stress can be avoided by dressing appropriately and taking necessary work breaks.

7.2 Chemical Hazards

The chemical hazards for this site include contact with contaminated soil and groundwater and possibly with soil vapor. The chemicals known to be associated with the site are petroleum products. Chemicals to be introduced to the site include those from sampling activities, including sample preservatives, and from fuel and oil associated with on-site vehicles. Possible exposures to chemical hazards include dermal contact, inhalation and ingestion.

7.3 Health Risk Analysis

OSHA Permissible Exposure Limits (PELs) for the main contaminants of concern at the Site are outlined in Table 1 below. Specific Material and Safety Data Sheets (MSDSs) for these chemicals are included in Appendix B.

Compound	NIOSH PEL (ppm)	OSHA PEL (ppm)	NIOSH PEL (STEL) (ppm)
Toluene	100	200	150
Xylene	100	100	150

7.4 Task Risk Analysis

A summary of the tasks planned for this project and their associated potential hazards are listed in table 2 below. The protective measures anticipated for each hazard are also outlined.

Task	Hazard	Preventative Measure
Excavation, drilling, installation of monitoring wells	<ul style="list-style-type: none"> • Heavy equipment • Dermal and inhalation exposure to contaminants • Contact with underground utilities • Excavations 	Level D with Levels C upgrade if ambient air VOC concentrations measured with a PID exceed 100 ppm. Do not enter excavations.
Soil and groundwater sampling	<ul style="list-style-type: none"> • Exposure to contaminants 	Level D

7.5 Traffic Hazards

Traffic at the Site will be limited to necessary construction vehicles. Designated parking areas will be established and personal vehicles will be limited to the designated parking areas. Traffic will be monitored and additional safety measures and traffic control measures will be implemented as needed.

8.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

Personal Protective Equipment (PPE) will be utilized by on-site personnel. It is anticipated that Level D will be sufficient at all times during construction. The levels of PPE are outlined in Table 3 below, along with the conditions under which they will be utilized.

Level of PPE	Application
Level D Work uniform: <ul style="list-style-type: none"> • Long sleeve shirt and pants or coveralls • Hard Hat • Safety Glasses • Steel-toe work boots • Hearing protection (as required) 	PID \leq 100 ppm over 15 minute duration PID \leq 200 ppm under 15 minute duration (Levels monitored above background levels)
Level C Respirator: <ul style="list-style-type: none"> • Full-face air purifying respirator with VOC cartridges and dust pre-filters Work Uniform: <ul style="list-style-type: none"> • Chemical resistant suit – Tyvek or equivalent • Hard Hat 	PID $>$ 100 ppm (or 250 ppm as above) PID $<$ 750 ppm over 15 minute duration (Levels monitored above background levels)

<ul style="list-style-type: none"> • Safety Glasses • Steel-toe work boots with chemical resistant boot covers • Chemical resistant gloves • Hearing protection (as required) <p>Procedures:</p> <ul style="list-style-type: none"> • Buddy System • Two-way radios 	
---	--

If conditions exceed Level C, work is stopped and emergency evacuation procedures followed.

9.0 AIR MONITORING

The RI and IRM activities will be completed outdoors, and will therefore be well-ventilated. Air monitoring will be completed in the exclusion zones to establish action levels for worker respiratory protection and to determine when upgraded PPE is necessary. Direct reading instruments will be used for initial and periodic air monitoring. All air monitoring equipment will be calibrated each day and will be inspected to ensure they are in good working condition. Table 4 below summarizes the air monitoring to be performed at the Site. Additional air monitoring is outlined in Section 13.1.

Instrument	Frequency	Action Level	Action
Photoionization Detector (PID)	When readings are detected	150 ppm (above background)	Upgrade PPE as indicated in Table 3 above.

10.0 DECONTAMINATION

It is not expected that PPE will require decontamination. Disposable gloves and sampling equipment will be used and containerized in drums for proper disposal. If Level C PPE is required, disposal boot covers, Tyvek suits, safety glasses, gloves and duct tape will be used. To decontaminate, the disposable materials will be drummed for proper testing and disposal. If necessary, heavy construction equipment will be decontaminated by steam-cleaning and washing with water spray prior to leaving the contamination reduction zone. All waste water would be containerized, tested and properly disposed of.

11.0 INCIDENT REPORTING

All injuries and incidences must be reported to the HSO. The HSO will take appropriate action to prevent further exposure or injury. Following an incident, an incident report will be completed. An example of the incident report is included in Appendix A. The HSO will investigate the event and take corrective action as needed. In the event of a

hazardous material spill or reportable release, the appropriate regulatory agencies will be notified by the HSO.

12.0 EMERGENCY RESPONSE

Hospital and emergency contact information is included in Section 6.0. For non-emergencies, a first-aid kit will be located on site in the J.M. Associates project vehicle.

If an upgrade to Level C PPE is necessary, verbal hazard communication may become difficult. Under those circumstances, a universal set of hand signals will be used as follows:

Hand gripping throat	Can't breathe
Grip partner's wrist	Leave work area immediately
Hand on top of head	Need assistance
Thumbs up	Okay, I'm alright, I understand
Thumbs down	No, negative, I do not understand

If Level C PPE is used, the buddy system will be put in place. The buddy system ensures that no employee works alone in the exclusion zone. When working under the buddy system, employees are paired and must always be in close proximity of each other. If one employee needs to leave the exclusion zone, both employees must leave,

12.1 Evacuation and Emergency Response

In the even of an emergency, notify the HSO immediately. The signal to evacuate is a warning shout. All personnel will evacuate to the J.M Associates project vehicle unless otherwise defined by the HSO at the start of the work day.

12.2 Spills

All spills and leaks must be reported to the HSO. If the spill is a threat to human health or the environment, the area should be evacuated and the HSP immediately notified.

13.0 COMMUNITY HEALTH AND SAFETY PLAN (CHASP)

Safe working procedures will be adhered to in accordance with this HASP to ensure protection of the surrounding community. There are several establishments in close proximity to the work area. Construction fencing will be erected around the work areas to ensure confinement of contaminated work areas. Signs will be posted to warn the public to stay out of designated areas.

APPENDIX A
Incident Report Form

REMEDATION INCIDENT REPORTING FORM

ROOT CAUSE ANALYSIS

Human Performance

Equipment Duifficulty

Natural Phenomenon/Sabatoge

Other

Body Part Injured

Injury Type / Illness

Type of Incident

Physical Agent

First Aid Received? Where?

Employee Comments and Description if Incident

I have reviewed this form with _____ Representative

Employee/Contractor/3rd Party Signature Date

I have reviewd this form with above person _____

Representative Signature Date

Initial Summary Information (cont.)

2. State what individual(s) was doing when injured (be specific).

3. Facts of How Incident Occurred? As known as of date of this report. (Describe fully)

4. Damage control measures/response actions taken. What is being done to minimize or contain the incident?

5. Effect on Company operations.

6. Was alcohol/drug use suspected? Yes No If yes, summarize actions/testing where legally permissible.

7. Name of employee and/or contractors involved (if more than 1 individual or personal injury). Extent of injuries.

Name	Employee/Contractor?	Company	Extent of injuries
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____

8. Had individual(s) been instructed in the Safe Work Procedure for this job? Yes No

9. Were third-party individuals/property involved? Yes No If yes, complete below.

Name of Third-Party Personnel Involved	Extent of Injuries to Third Party Personnel	Extent of Damages to Third Party Property
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____

10. Facilities or equipment damage:

Company-Owned/Operated Contractor-Owned/Operated Extent of damage: <\$50k ≥ \$50k

11. Authorities/Agencies involved or notified; extent and nature of their actual or anticipated involvement.

Authority/Agency Involved	Type (State/Federal/Local)	When Notified	Extent & Nature of Their Actual or Anticipated Involvement
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____

12. Extent and nature of media coverage, actual or expected. (For boxes checked, describe coverage)

None TV Radio Newspaper Other

13. Equipment and/or Product Checks Performed:

Equipment _____ Product _____
(Equipment name) (Product name)

Quality Check(s) Performed? Yes No If yes, by Who? _____ When? _____

GO TO NEXT PAGE →

Initial Investigation Findings & Follow-up Action Items

17. Investigation Initiated? Yes No *If yes, by Who?* _____ *When?* _____

18. Preliminary investigation findings and conclusions regarding the cause of the incident.

19. Corrective action measures being implemented. (See following outline on requirements for reporting Personnel injury)

20. Recommendations to Prevent Future

Recommendation	Person Responsible for Implementation	Due Date
_____	_____	_____
_____	_____	_____
_____	_____	_____

21. OIMS System Relationship (Check all that apply i.e. 3a or 6c, etc.) *Indicate the specific System the incident relates to based on the root cause analysis.
- System 1 Management Leadership, Commitment and Accountability
 - System 2 Risk Assessment and Management
 - System 3a Design Practices and Standards
 - System 3b Project Management / Quality Control
 - System 4a Drawings and Other Documentation
 - System 4b Hazard Communication
 - System 4c Maintaining Operating Permits & Communicating SHE Regs
 - System 4d Data Integrity
 - System 5a Selection, Placement & Assessment of Employees
 - System 5b Initial, Ongoing & Refresher Training
 - System 5c Personnel Safety & Occupational Health
 - System 6a Facility Operation, Inspection & Maintenance Procedures
 - System 6b Work Permit Procedures
 - System 6c Critical Safety Devices
 - System 6d Hazardous Emissions / Waste Tracking & Compliance
 - System 6e Facility Abandonment / Temporary Shutdown
 - System 7 Management of Changes
 - System 8 Third-Party Services
 - System 9 Incident Reporting, Investigation and Analysis
 - System 10a Community Awareness
 - System 10b Emergency Response
 - System 1j Operations Integrity Assessment and Improvement

I have reviewed this form with ExxonMobil Representative.

Employee/Contractor/3rd Party Signature Date

I have reviewed this form with above person.

ExxonMobil Representative Signature Date

PRELIMINARY CONCLUSIONS

Initial incident reports may need to be submitted based on incomplete information. Affiliates should ensure the following:

- Initial reports should be clearly marked as being an "Initial Report."
- The initial report should be as factual as possible. Avoid speculation and note when information or conclusions are tentative.

The initial report should indicate that it will be supplemented or corrected as necessary to accurately reflect the cause of the incident as more complete information becomes available.

(Global Remediation Incident Report Form.doc Updated: 4/12/02)

APPENDIX B

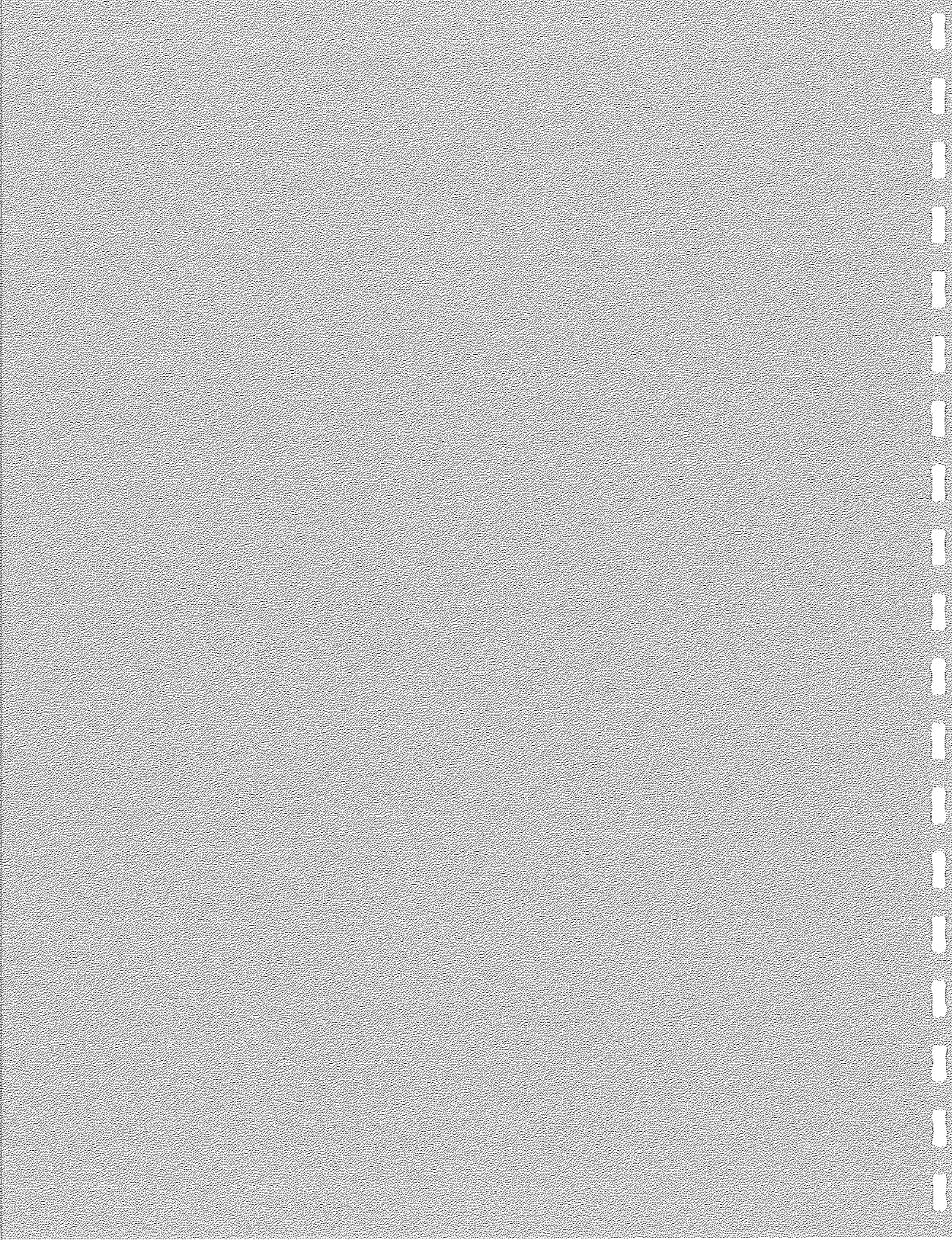
Air Monitoring Log

APPENDIX C

Acknowledgement of HASP

RI WORK PLAN
APPENDIX D

COMMUNITY AIR MONITORING PLAN



13.1 Community Air Monitoring Plan (CAMP)

Expanded air monitoring will be completed at the downwind perimeter of each designated work area when intrusive activities are being completed in the AOCs. The CAMP is designed to provide a measure of protection for the downwind community, not directly involved with the work, from potential airborne contaminant releases as a direct result of RI and IRM activities.

13.1.1 VOC Monitoring

VOCs will be monitored at the downwind perimeter of the exclusion zone or work zone during on-site work. Monitoring will be completed using a PID capable of calculating 15 minute averages. The meter will be calibrated daily and inspected to ensure it is in good working order. Upwind concentrations will be measured at the start of the work day and periodically to establish background conditions. Continuous air monitoring will be completed during intrusive work activities, including excavation and installation of monitoring wells. Continuous air monitoring will also be completed during the collection of soil gas samples, since the samples will be collected from inside occupied buildings. Periodic monitoring will be conducted during groundwater sampling activities.

All 5 minute readings will be recorded on the logs included in Appendix B. Instantaneous levels used for decision making purposes, if any, will also be recorded. Appropriate conditions will be taken if any of the action levels described below are met during monitoring. Upon completion of the appropriate steps, the HSO must be notified of the conditions that occurred and the steps that were taken.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

13.1.2 Particulate Monitoring

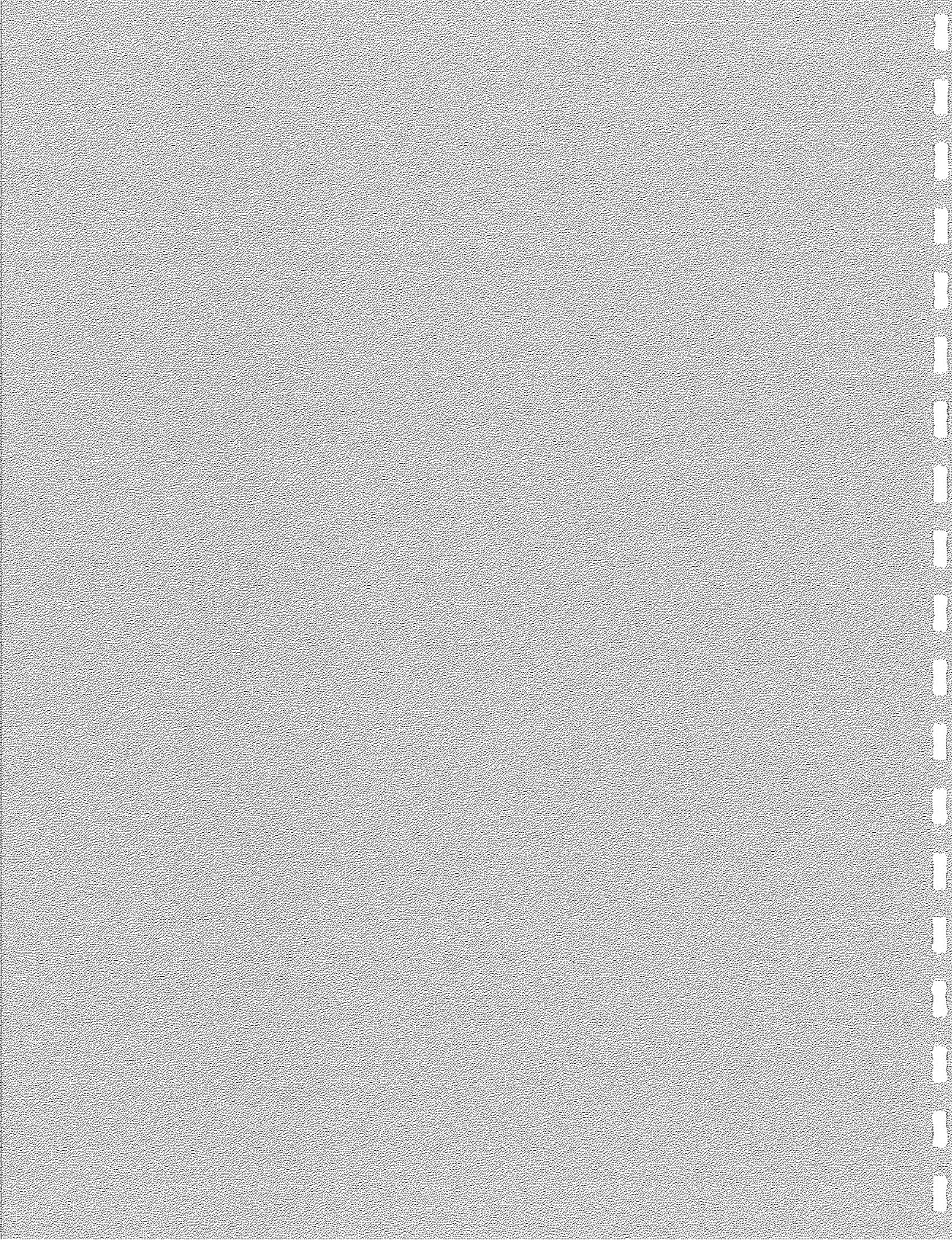
During the intrusive activities, continuous particulate monitoring will be conducted at the downwind perimeters of the exclusion zone. Monitoring will be completed with a meter capable of measuring particulate matter less than 10 micrometers in size (PM-10) and that is capable of calculating a 15 minute running average concentration. The meter will have an audible alarm to indicate exceedance of the action level. The meter will be calibrated daily and inspected to ensure it is in good working order. Upwind concentrations will be measured at the start of the work day and periodically to establish background conditions.

All 5 minute readings will be recorded on the logs included in Appendix B. Instantaneous levels used for decision making purposes, if any, will also be recorded. Appropriate conditions will be taken if any of the action levels outlined below are met during monitoring. Upon completion of the appropriate steps, the HSO must be notified of the conditions that occurred and the steps that were taken. Fugitive dust migration will be visually assessed during all work activities. Water will be used to suppress excessive fugitive dust as needed and for general dust suppression.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m³) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m³ above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m³ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m³ of the upwind level and in preventing visible dust migration.

RI WORK PLAN
APPENDIX E

CITIZEN PARTICIPATION PLAN



CITIZEN PARTICIPATION PLAN

**221 Main Street Site #C360073
221 Main St
White Plains, New York**

**October 2004
Revised January 2005**

Prepared for:

**LC Main, LLC
115 Stevens Ave
Valhalla, NY 10595**

Prepared By:

**JM Associates, Inc.
225 Railroad Ave
Bedford Hills, NY 10507**

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- 2 Site Plan

APPENDICES

- A Glossary and Acronyms
- B Fact Sheet
- C Environmental Notice Bulletin (ENB) Publication

1.0 INTRODUCTION

The New York State Department of Environmental Conservation (NYSDEC), the New York State Department of Health (NYSDOH), and LC Main, LLC (“the Applicant”) are committed to informing and involving the public during the remedial process at the 221 Main Street Site under the New York State Brownfield Cleanup Program (BCP). Citizen participation promotes public understanding of the responsibilities and remedial activities associated with this process. Citizen participation provides the Applicant and the NYSDEC with an opportunity to gain public input to support a comprehensive remedial program which is protective of both public health and the environment.

The Remedial Investigation (RI) of a site is a detailed study to determine how much hazardous waste contamination there is at the Site, how far it extends, and potential threats to public health and the environment. An Interim Remedial Measure (IRM) is a discrete action which can be conducted at a site relatively quickly to reduce the risk to people’s health and the environment from a well-defined hazardous waste problem. A Remedial Action (RA) takes place to remediate contamination delineated during an RI that was not addressed as part of an IRM.

The CPP describes activities to be conducted throughout the project. The CP activities are designed to achieve the following objectives:

- Help the interested and affected public to understand the contamination problems at the 221 Main Street Site, and the nature and progress to investigate and clean up the site;
- Ensure open communication between the public and project staff throughout the remedial process;
- Create opportunities for the public to contribute information, opinions and perspectives that have potential to influence decisions about the site’s investigation and cleanup.

The Applicant is conducting a remedial program NYSDEC oversight. NYSDEC will implement the CP activities described in this CPP. NYSDOH will participate in many of these activities.

2.0 SITE BACKGROUND

The site is part of a larger project area located at 221 Main Street in downtown White Plains, Westchester County, New York as shown on Figure 1. The overall project occupies the majority of one City block and is surrounded by commercial properties with a mix of retail and office space. The overall project is bound by Hamilton Ave to the North, Church St to the East, Main St to the South and by other commercial establishments and the New York State Power Authority (NYSPA) Building and associated parking garage to the West. A Church is located on the block, at the southeast corner at the intersection of Main St and Church St. The Church is not considered part of the project and will remain after the development. Behind (north of) the Church is an office building at the intersection of Hamilton Ave and Church St. This building is

also not part of the project and will remain. A building known as the Bar Building is located at the South side of the site at the intersection of Court St and Main St. Behind the Bar Building is a building known as the Annex. The Annex is part of the project and will be demolished. The Bar Building is not considered part of the project and will remain intact.

After the original application was submitted the site boundaries were re-defined as a result of the application review process. The site, as re-defined, is limited to only the 279 Hamilton Street property, which includes the area designated in the RI/IRM work plan as "AOC 4". The site, which is about 0.9 acre in size, is located at 279 Hamilton Street in the City of White Plains, New York. The site is currently used as a municipal parking lot by the City of White Plains and is surrounded by commercial properties with a mix of retail and office space. The site is bounded by Hamilton Avenue to the north, and parking lots to the east and south. On the west, the site is bounded by other commercial establishments and the NYPA building with its associated parking garage.

Several areas of concern (AOCs) are mentioned in the RI/IRM work plan. The general areas of the four AOCs are shown on figure 2. Of these, the area designated as AOC-4 is known to have a significant contamination problem impacting soil and groundwater on and off site due to gasoline which was released from a former underground storage tank (UST) belonging to the City of White Plains. This tank was removed in 1988. IRMs to remove floating free product and contaminated soil, and to pump and treat contaminated groundwater, will be conducted according to the approved RI/IRM work plan. If additional areas of contamination are identified at the site, further IRMs will be undertaken to address the contamination.

3.0 PROJECT DESCRIPTION

The planned development for the project consists of the construction of two multi-storied buildings interconnected to a parking structure. The buildings will contain a total of approximately 890,000 square feet of gross floor area. The buildings will contain approximately 420,000 to 440,000 square feet of office space, 10,000 to 30,000 square feet of retail space, a minimum of 180 hotel rooms and approximately 200 condominiums for residential use.

A new street, known as Court Street Extension, will be constructed on the west side of the project area, and will connect Hamilton Ave and Main St. This is the portion of the project area which falls within the re-defined site boundaries and this is where the contamination caused by a leaking UST will be remediated. The parking structure for the new buildings will extend under Court Street Extension.

In order to construct the buildings, the Site will be excavated to a depth of approximately 40 feet. This work will require the removal of existing fill material at the Site, and will extend to bedrock throughout most of the Site.

The impacted fill at the Site will be removed as an Interim Remedial Measure (IRM). The objective of the IRM will be to remove any remaining USTs and dispose of all impacted fill material underlying the Site. Based on sampling data, the impacted fill will be removed as petroleum-contaminated fill and as non-hazardous waste. The material will be disposed of off-

site at a licensed disposal facility. This IRM will provide for removal of all contaminated fill at the site. Confirmatory samples will be collected to ensure the contaminated material is removed.

Preliminary sampling has indicated that groundwater at the site has been impacted by the petroleum contamination. A Remedial Investigation (RI) at the Site will be completed after the IRM to fully characterize groundwater conditions, and to collect additional data necessary to evaluate remedial alternatives for groundwater. Soil gas samples will be collected in adjacent buildings as part of the RI to determine if soil vapor has migrated off-site.

A RI/IRM Work Plan dated July 2004 and revised in October of 2004 has been submitted to the NYSDEC and is under review. . The Work Plan, which outlines the activities to be completed, is available at the Document Repositories listed in Section 6.0 of this CPP.

4.0 CITIZEN PARTICIPATION ACTIVITIES

This section describes the CP activities to be conducted for this Brownfield Cleanup Project. Project staff will perform these activities to inform and involve the affected and interested community in the activities for the 221 Main Street Site. Publication of a notice in the Environmental Notice Bulletin (ENB) and in local newspapers announcing the submission of the Brownfield Cleanup Program Application and the 30-day comment period has also been completed. (see Appendix C).

A Fact Sheet will be distributed to the project mailing list (see Section 7.0) announcing the submission of the BCP Application, the availability of the RI/IRM Work Plan at the document repositories and a 45-day comment period on the Work Plan. (See Appendix B.)

When the comment period is over, and the Work Plan is approved by the NYSDEC and NYSDOH, a Fact Sheet will be mailed to announce the start of the field work.

Once the field work is complete, the findings of the RI and IRM and a description of the activities completed will be submitted to the NYSDEC in a RI/IRM Report. At the time of the Report submission, a Fact Sheet will be mailed that presents the findings of the RI and IRM and that outlines the next steps to be taken at the Site based on the findings.

CP activities for this site include:

- Establishment of Document Repositories.
- Creation of a mailing list for the Potentially Affected/Interested Public. Individuals and groups included in the Contact List (see Section 7.0 of this CPP) will receive all mailings. The list will be updated as needed.
- Identification of the NYSDEC and NYSDOH Project Managers for the project and the ways for the public to contact them. Interested persons are encouraged to contact staff at any time with additional issues or information needs.

- Publication of a notice in the Environmental Notice Bulletin (ENB) and in local newspapers announcing the submission of the Brownfield Cleanup Program Application and the 30-day comment period (see Appendix C).
- Mailing a Fact Sheet announcing the availability of the RI/IRM Work Plan and a 45-day public comment period on the Work Plan to the Public Contact List. (See Appendix B)
- Mailing a Fact Sheet prior to the commencement of field activities notifying the public when the construction activities will begin. A copy of the approved RI/IRM Work Plan will be placed in the document repositories.
- Mailing an RI and IRM Complete Fact Sheet and announcing the availability of the RI/IRM Report to the Public Contact List. If no further action is required as a result of the work, a 45-day public comment period will be announced. If further remediation is necessary, a Remedial Work Plan will be submitted that outlines the proposed remediation.
- If a Remedial Work Plan is developed, at the time of the Work Plan submission, a Fact Sheet will be mailed and a 45-day public comment period on the Work Plan will be announced. A Fact Sheet would be mailed prior to commencement of construction activities related to the additional remediation outlined in the Remedial Work Plan. After completion of the work, a Final Engineer's Report, also called a Remedial Action Report, will be prepared summarizing the work performed. A Fact Sheet will be mailed describing the Engineer's Report.
- A Fact Sheet will be mailed to the Public Contact list after the remediation has been deemed complete and a Certificate of Completion (COC) is issued by the NYSDEC.

5.0 PROJECT CONTACTS

For additional information about the program to investigate and remediate the 221 Main Street Site, the public is encouraged to contact any of the following project staff:

New York State Department of Environmental Conservation (NYSDEC):

Steven Parisio
NYSDEC Region 3 Office
21 S Putt Corners Rd
New Paltz, NY 12561
(845) 256-3153

New York State Department of Health (NYSDOH):

Ian Ushe
NYSDOH
Flannigan Square
547 River Street
Troy, NY 12180
(800) 458-1158 x27880

6.0 DOCUMENT REPOSITORIES AND LIST OF AVAILABLE DOCUMENTS

Two document repositories have been established to provide the public with convenient access to important project documents and other information. This information will include reports, data and other information gathered and developed during the course of the BCP Project. The Document Repositories are established at the following locations:

White Plains City Library
Reference Desk
100 Martine Ave
White Plains, NY 10601
(914) 422-1400
Hours of Operation:
Monday to Wednesday 10:00 am – 9:00 pm
Thursday, Friday 10:00 am – 6:00 pm
Saturday 1:00 pm – 5:00 pm
Sunday Closed

NYSDEC
Region 3 Office
21 South Putt Corners Rd
New Paltz, NY 12561
(845) 256-3154
Hours of Operation:
Monday to Friday 9:00 am - 4:45 pm

Available Documents

The documents available in the repositories are:

- Brownfield Cleanup Program Application, July 2004
- Brownfield Cleanup Program Application Public Comment Period Announcement July 2004
- Citizen Participation Plan for 221 Main Street Site, J.M. Associates
- Remedial Investigation and Interim Remedial Measure Work Plan, J.M. Associates, October 2004
- Brownfield Cleanup Program Fact Sheet, Work Plan Availability and Comment Period Announcement, December 2004

As new documents are generated during the remedial process, they will be placed in the repositories.

7.0 PROJECT MAILING LIST

The following mailing list has been developed to help NYSDEC keep the community informed about and involved in the remedial process for the 221 Main Street Site. The list includes adjacent property owners, local officials, environmental groups, and local media. This list will be reviewed periodically and updated as appropriate.

Note: The adjacent/affected property owner and resident portion of the list is maintained confidentially in project files at the NYSDEC Region 3 Office.

Federal Elected Officials

Senator Hillary R. Clinton
United States Senate

Washington, D.C. 20510

Senator Charles Schumer
United States Senate

Washington, D.C. 20510

Congresswoman Nita Lowey
222 Mamaroneck Avenue
Suite 310
White Plains, NY 10605

State Officials

Marc Moran, Regional Director
NYSDEC – Region 3 Office
21 South Putt Corners Road
New Paltz, New York 12561

Wendy Rosenbach, Public Affairs Officer
NYSDEC – Region 3 Office
21 South Putt Corners Road
New Paltz, New York 12561

Ram Pergadia
NYSDEC – Region 3 Office
21 South Putt Corners Road
New Paltz, New York 12561

Michael J. Knipfing
NYSDEC – Region 3 Office
21 South Putt Corners Road
New Paltz, New York 12561

Denise D'Ambrosio, Esq.
NYSDEC DEE
200 White Plains Road, 5th Floor
Tarrytown, NY 10591-5805

Gary Litwin
NYSDOH
Flannigan Square
547 River Street
Troy, NY 12180

State Elected Officials

State Senator Suzi Oppenheimer
515 Legislative Office Building
Albany, NY 12247

Adam T. Bradley
New York State Assembly
4 New King St
White Plains, NY 10604

Amy Paulin
New York State Assembly
700 White Plains Rd
Suite 252
Scarsdale, NY 10583

County and City Officials

Andrew J. Spano
County Executive
900 Michaelian Office Building
148 Martine Avenue
White Plains, NY 10601

Leonard N. Spano
Westchester County Clerk
110 Dr. Martin Luther King Boulevard
White Plains, NY 10601

Hon. William J. Ryan
District #5
800 Michaelian Office Building
148 Martine Ave
White Plains, NY 10601

Lois T. Bronz
 District 8
 800 Michelian Bldg
 148 Martine Avenue
 White Plains NY 10601

Hon. Thomas M. Roach,
 Common Council President
 City of White Plains
 255 Main Street
 White Plains, NY 10601

Gerard Mulligan, AICP
 Commissioner
 Westchester County Department of Planning
 Michaelian Office Building
 148 Martine Avenue
 White Plains, NY 10601

Media

City Editor
 El Clarin
 48 Broadway
 Haverstraw, NY 10927

Francis B. McKenna, Chair
 Westchester County Planning Board
 148 Martine Avenue, Room 432
 White Plains, NY 10601

City Editor
 New Rochelle Standard -Star
 1 Gannett Drive
 White Plains, NY 10604

Dr. Joshua Lipsman, MD, MPH
 Commissioner,
 Westchester County Department of Health
 145 Huguenot Street
 New Rochelle, NY 10801

City Editor
 Associated Press
 148 Martine Ave, CB Press
 White Plains, NY 10601

Mayor Joseph Delfino
 City of White Plains
 255 Main St
 White Plains, NY 10601

City Editor
 Eastchester Record
 40 Larkin Plaza
 Yonkers, NY 10701

Mary Cavallero
 Planning Board Chairwoman
 City of White Plains
 255 Main St - Annex
 White Plains, NY 10601

City Editor
 Gannett Suburban Newspapers
 1 Gannett Drive
 White Plains, NY 10604

Joseph J. Nicoletti, Jr., P.E.
 Commissioner of Public Works
 City of White Plains
 255 Main Street
 White Plains, NY 10601

City Editor
 Harrison Independent
 40 Larkin Plaza
 Yonkers, NY 10701

City Clerk
 City of White Plains
 255 Main Street
 White Plains, NY 10601

City Editor
 Mamaroneck Daily Times
 1 Gannett Drive
 White Plains, NY 10604

City Editor
Martinelli Publications
40 Larkin Plaza
Yonkers, NY 10701

City Editor
Mount Vernon Daily Argus
1 Gannett Drive
White Plains, NY 10604

City Editor
North County News
1520 Front Street
Yorktown Heights, NY 10598

City Editor
North Castle News
40 Larkin Plaza
Yonkers, NY 10701

City Editor
Pelham Sun
40 Larkin Plaza
Yonkers, NY 10701

City Editor
Rye Chronicle
40 Larkin Plaza
Yonkers, NY 10701

City Editor
Scarsdale Inquirer
P.O.Box 18,
Scarsdale, NY 10583

City Editor
Sound View News
40 Larkin Plaza
Yonkers, NY 10701

City Editor
Suburban Street News
199 Main Street
White Plains, NY 10601

City Editor
Tarrytown Daily News
1 Gannett Drive
White Plains, NY 10604

City Editor
The Citizen Register
1 Gannett Drive
White Plains, NY 10604

City Editor
The Enterprise
P.O.Box 278
Hastings on Hudson, NY 10706

City Editor, The New York Times (White
Plains Bureau)
235 Main Street
White Plains, NY 10601

City Editor
The Business Journal
3 Gannett Drive
White Plains, NY 10604

City Editor
Patent Trader-Journal News
185 Kisco Avenue
Mount Kisco, NY 10549-1409

City Editor
Westchester County Weekly
229 W. 43rd Street
NY, NY 10036

City Editor
Westchester County Press
P O .Box 152
White Plains, NY 10602

City Editor
White Plains Reporter Dispatch
1 Gannett Drive
White Plains, NY 10604

City Editor
Yonkers Home News & Times
40 Larkin Plaza
Yonkers, NY 10701

News Director
LMC TV
1 Library Lane
Mamaroneck, NY 10543

City Editor
Yonkers Jewish Chronicle
584 North Broadway
Yonkers, NY 10701

News Director
MediaOne Public Access Studio
1053 Park Street
Peekskill, NY 10566

City Editor
Yonkers Herald Statesman
1 Gannett Drive
White Plains, NY 10604

News Director
News 12
6 Executive Plaza
Yonkers, NY 10701

News Director
Westchester Commuter Central
244 Westchester Avenue
White Plains, NY 10604

News Director
Paragon Cable
701-717 N. MacQuestein
Mount Vernon, NY 10552

News Director
WHUD/WLNA
P.O. Box 310
Beacon, NY 12508

News Director
WRNN TV
721 Broadway
Kingston, NY 12401

News Director
WRTN/WVOX
1 Broadcast Forum
New Rochelle, NY 10801

Lisa Phillips, Bureau Chief
WAMC
44 Main Street
Kingston, NY 12401

News Director
Cablevision of Westchester
2013 Crompond Road
Yorktown Heights, NY 10598

Hank Gross
Mid-Hudson News Network
42 Marcy Lane
Middletown, NY 10941

News Director
Cablevision of Westchester
116 N. Main St.
Port Chester, NY 10573

City Editor
Westmore News, Inc.
33 Broad Street
Port Chester, NY 10573

News Director, Channel 18
Mt. Vernon High School
100 California Road
Mt. Vernon, NY 10552

City Editor
America Latina
33 Broad Street
Port Chester, NY 10573

City Editor
Sound Shore Review
27 White Oak Street
New Rochelle, NY 10801

City Editor
The Daily Item
92 North Avenue
New Rochelle, NY 10801

News Director
women's e news
395 Hudson Street
New York, NY 10014

News Director
WFAS-AM
P.O. Box 551, 365 Secor Road
Hartsdale, NY 10530

Environmental Groups

Scenic Hudson
1 Civic Center Plaza
Poughkeepsie, NY 12601

Clearwater, Inc.
112 Market Street
Poughkeepsie, NY 12601

Greenway Conservancy
Capitol Building
Capitol Station, Rm 254
Albany, NY 12224

The Nature Conservancy
Eastern NY Chapter
19 North Moger Avenue
Mt. Kisco, NY 10549

Westchester Environmental Coalition
P.O. Box 488
White Plains, NY 10602

Hudson River Pilots Assoc.
75 Alexander Street
Yonkers, NY 10701

Federated Conservationists of Westchester
78 N. Broadway
White Plains, NY 10603

Karl Coplan, Esq.
Pace/Riverkeeper
78 N. Broadway
White Plains, NY 10603

Beczak Environmental Center
21 Alexander Street
Yonkers, NY 10701

Environmental Citizens Coalition
33 Central Avenue
Albany, NY 12210

Laura Haight
NYPIRG
107 Washington Ave.
Albany, NY 12210

Westchester County EMC
414 Michaelian Office Building
White Plains, NY 10601

Robert Funicello
Director of Environmental Projects
Dept. of Environmental Facilities
270 North Avenue
New Rochelle, NY 10801

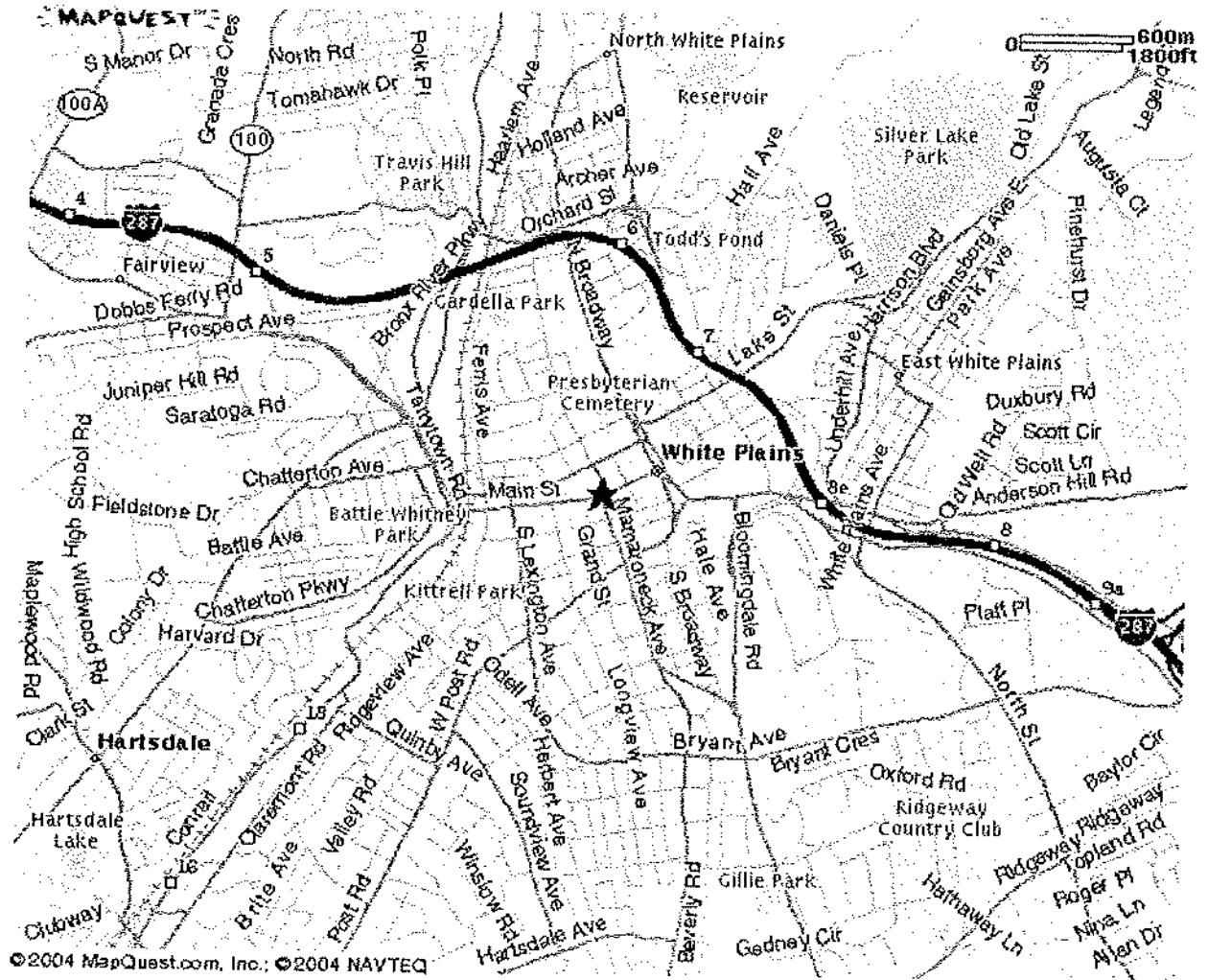
Other Interested Parties

White Plains Child Day Care
199 Main St
White Plains, NY 10601

Grace Church Community Day Care
33 Church St
White Plains, NY 10601

White Plains City Library
Reference Desk
100 Martine Ave
White Plains, New York 10601

Figure 1
Site Location Map



APPENDIX A

Hazardous Waste Site Program Glossary and Acronyms

Hazardous Waste Site Program Glossary and Acronyms

GLOSSARY

This glossary defines terms associated with New York's hazardous waste site citizen participation program, and important elements of the hazardous waste site remedial program. Words in **bold** in the definitions are defined elsewhere in the glossary. A list of acronyms often used in the remedial program begins on page D-7.

Administrative Record	Part of a site's Record of Decision which lists and defines documents used in the development of NYSDEC's decision about selection of a remedial action.
Availability Session	A scheduled gathering of program staff and members of the public in a casual setting, without a formal presentation or agenda but usually focusing on a specific aspect of a site's remedial process.
Citizen Participation	A program of planning and activities to encourage communication among people affected by or interested in hazardous waste sites and the government agencies responsible for investigating and remediating them.
Citizen Participation Plan	A document which must be developed at a site's Remedial Investigation stage. A CP Plan describes the citizen participation activities that will be conducted during a site's remedial process.
Citizen Participation Record	A document prepared at a major remedial stage which describes the citizen participation activities required at that stage. A CP Record also directs a scoping process to determine if additional citizen participation activities are appropriate and feasible.

3 Hazardous Waste Site Program Glossary and Acronyms

Citizen Participation Specialist

A staff member from an NYSDEC central office or regional office who has specialized training and experience to assist a **project manager** and other staff to plan, conduct and evaluate a site-specific citizen participation program.

Classification

A process to place a hazardous waste site within a category which defines its hazardous waste status and its threat or potential threat to public health and the environment. Sites are listed along with their classifications in the **Registry of Inactive Hazardous Waste Disposal Sites**.

Class 1 - causing or representing an imminent danger of causing irreversible or irreparable damage to public health or environment -- immediate action required.

Class 2 - significant threat to public health or environment -- action required.

Class 2a - temporary classification assigned to a site for which there is inadequate or insufficient data for inclusion in any other classification.

Class 3 - does not present a significant threat to public health or environment -- action may be deferred.

Class 4 - site properly closed -- requires continued management.

Class 5 - site properly closed -- no further action required.

Delisted - site no longer considered an inactive hazardous waste disposal site.

Comment Period

A time period for the public to review and comment about various documents and DER actions. For example, a 30-day comment period is provided when DER issues a **Proposed Remedial Action Plan (PRAP)**, and when DER proposes to **Delist** a site from the **Registry of Inactive Hazardous Waste Disposal Sites**.

4 Hazardous Waste Site Program Glossary and Acronyms

Consent Order

A legal and enforceable agreement negotiated between NYSDEC and a **responsible party**. The order sets forth agreed upon terms by which a responsible party will undertake site investigation and/or cleanup, or pay for the costs of those activities. The order includes a description of the remedial actions to be taken by the responsible party with NYSDEC oversight, and a schedule for implementation.

Contact List

Names, addresses and/or telephone numbers of individuals, groups, organizations, government officials and media affected by or interested in a particular hazardous waste site. The size of a contact list and the categories included are influenced by population density, degree of interest in a site, the stage of the remedial process and other factors. It is an important tool needed to conduct outreach activities.

Delist

Action by which DER removes a hazardous waste site from the **Registry of Inactive Hazardous Waste Disposal Sites** upon determination that: the site contains inconsequential amounts of hazardous waste; or that a remediated site no longer requires **Operation and Maintenance**; or that a remediated site does not require Operation and Maintenance. A proposal to delist a site triggers a public notification and **comment period** process.

Division of Environmental Enforcement (DEE)

A unit within the New York State Department of Environmental Conservation which works with the **Division of Environmental Remediation** and others to negotiate with **responsible parties** to achieve agreements for the investigation and remediation of hazardous waste sites. A negotiated agreement is contained in a **consent order**.

Division of Environmental Remediation

Formerly the **Division of Hazardous Waste Remediation**, a major program unit within the New York State Department of Environmental Conservation created to manage the hazardous waste site remedial program from site discovery through **Operation and Maintenance** activities. Staff include: engineers, geologists, chemists, attorneys, citizen participation specialists, environmental program specialists and support staff.

5 **Hazardous Waste Site Program Glossary and Acronyms**
Division of (See **Division of Environmental Remediation.**)
Hazardous
Waste Remediation

Document Repository A file of documents pertaining to a site's remedial and citizen participation programs which is made available for public review. The file generally is maintained in a public building near the hazardous waste site to provide access at times and a location convenient to the public.

Enforcement NYSDEC's efforts, through legal action if necessary, to compel a **responsible party** to perform or pay for site remedial activities. NYSDEC may perform this effort by itself or in concert with other agencies.

Environmental Quality Bond Act (EQBA) The 1986 Environmental Quality Bond Act which gives New York State bonding authority of up to \$1.2 billion to fund the State's share of the total cost of remediating hazardous waste sites in New York State.

Fact Sheet A written discussion about part or all of a site's remedial process, prepared and provided by DER to the public. A fact sheet may focus on: a particular element of the site's remedial program; opportunities for public involvement; availability of a report or other information, or announcement of a **public meeting or comment period**. A fact sheet may be mailed to all or part of a site's **contact list**, distributed at meetings, placed in a **document repository** and/or sent on an "as requested" basis.

Interim Remedial Measure (IRM) A discrete action which can be conducted at a site relatively quickly to reduce the risk to people's health and the environment from a well-defined hazardous waste problem. An IRM can involve removing contaminated soil and drums, providing alternative water supplies or securing a site to prevent access.

National Priorities List The U.S. Environmental Protection Agency's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial response using money from a special trust fund.

6 Hazardous Waste Site Program Glossary and Acronyms

New York State Department of Health of Agency within the executive branch of New York State government which: performs health-related inspections at suspected hazardous waste sites; conducts health assessments to determine potential risk from environmental exposure; reviews Risk Assessments prepared during the **Remedial Investigation and Feasibility Study**; conducts health-related community outreach around sites; and reviews remedial actions to assure that public health concerns are adequately addressed.

New York State Department of Law Agency within the executive branch of New York State government which takes the lead on hazardous waste sites requiring civil enforcement through court action. Litigation can involve negotiations and court action with **responsible parties** to clean up sites; natural resource damage claims, and recovery of remedial costs.

New York State Registry of Inactive Hazardous Waste Disposal Sites The "Registry." A document which NYSDEC is directed by law to maintain and which lists and provides information about every hazardous waste site in New York State which meets criteria established through a definition of hazardous waste and a **classification** system.

Operable Unit A discrete part of an entire site that produces a release, threat of release, or pathway of exposure. An Operable Unit can receive specific investigation, and a particular remedy may be proposed. A **Record of Decision** is prepared for each Operable Unit.

Operation and Maintenance A period in which remedial action may be conducted following construction at a site (for example, operation of a "pump and treat" system), or which is performed after a remedial action to assure its continued effectiveness and protection of people's health and the environment. Activities can include site inspections, well monitoring and other sampling.

Preliminary Site Assessment (PSA) A PSA is DER's first investigation of a site. A PSA is performed to determine if a site meets New York State's definition of an inactive hazardous waste disposal site by confirming the presence of hazardous waste and determining if the site poses a significant threat to public health or the environment.

Project Manager

An NYSDEC staff member within the **Division of Environmental Remediation** (usually an engineer, geologist or hydro geologist) responsible for the day-to-day administration of remedial activities at, and ultimate disposition of, a hazardous waste site. The Project Manager works with legal, health, **citizen participation** and other staff to accomplish site-related goals and objectives.

Proposed Remedial Action Plan (PRAP)

An analysis by DER of each alternative considered for the remediation of a hazardous waste site and a rationale for selection of the alternative it recommends. The PRAP is created based on information developed during the site's **Remedial Investigation and Feasibility Study**. The PRAP is reviewed by the public and other state agencies.

Public Meeting

A scheduled gathering of **Division of Environmental Remediation** staff with the affected/interested public to give and receive information, ask questions and discuss concerns about a site's remedial program. Staff from other NYSDEC divisions, legal and health staff, and staff from consultants and a responsible party often also attend. A public meeting, unlike an **availability session**, generally features a formal presentation and a detailed agenda.

Reclassification

A process by which DER redefines the threat posed by a hazardous waste site to public health and the environment by developing and assessing site information and, based on findings and conclusions, assigning a new **classification code**.

Record of Decision (ROD)

A document which provides definitive record of the cleanup alternative that will be used to remediate a hazardous waste site. The ROD is based on information and analyses developed during the **Remedial Investigation/Feasibility Study** and public comment.

8 Hazardous Waste Site Program Glossary and Acronyms

Remedial Alternatives Report (RAR)	A report that contains an evaluation of options for the remediation of any contamination in, on, or under, or emanating from, a property that includes an analysis of data and other information concerning the nature and extent of that property's contamination and is generally performed concurrently, and in an interactive fashion, with the site investigation.
Remedial Construction	The physical development, assembly and implementation of the remedial alternative selected to remediate a site. Construction follows the Remedial Design stage of a site's remedial program.
Remedial Design	The process following finalization of a Record of Decision in which plans and specifications are developed for the Remedial Construction of the alternative selected to remediate a site.
Remedial Investigation/ Feasibility Study (RI/FS)	The RI fully defines and characterizes the type and extent of hazardous waste contamination at the site. The FS, which may be conducted during or after the RI, uses information developed during the RI to develop alternative remedial actions to eliminate or reduce the threat of hazardous waste contamination to public health and the environment.
Responsible Party	An individual or business who: currently owns or operates a hazardous waste site; or historically owned or operated a site when hazardous waste was disposed; or generated hazardous waste at a site; or transported hazardous waste to a site.
Responsiveness Summary	A written summary of major oral and written comments received by DER during a comment period about key elements of a site's remedial program, such as a Proposed Remedial Action Plan , and DER's response to those comments.
Site Investigation (SI)	A process undertaken to determine the nature and extent of contamination in, on, and under, and emanating from a property. The SI includes the gathering of sufficient information to determine the necessity for, and the selection of the appropriate method of, remediation of contamination in, on, or under, or emanating from a property.

9 Hazardous Waste Site Program Glossary and Acronyms

Site Issues and Community Profile Scoping Sheet

A document prepared to support each **Citizen Participation Record**. Each Scoping Sheet identifies issues and information important to DER and the community and information that needs to be exchanged at a particular remedial stage. The Scoping Sheet also summarizes information about the surrounding community, including demographics, special needs, etc.

Superfund

The common name for the Federal program established by the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended in 1986. The Superfund law authorizes the U.S. Environmental Protection Agency to investigate and clean up sites nominated to the **National Priorities List**.

Title 3 Project

Remediation of a municipally owned site through the State Superfund Title 3 Program whereby New York State pays 75 percent of eligible costs for remediation and the municipality pays 25 percent.

Toll-Free "800" Number

An information line maintained by the **Division of Environmental Remediation** to provide convenient access for people who have questions, concerns or information about hazardous waste sites and their remedial programs.

ACRONYMS

AG	--	New York State Attorney General's Office
ARAR	--	Applicable, Relevant and Appropriate Requirement
C & D	--	Construction and Debris
CERCLA	--	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CO	--	Consent Order
CP	--	Citizen Participation
CPP	--	Citizen Participation Plan
CPS	--	Citizen Participation Specialist
CQC/CQA	--	Construction Quality Control/Construction Quality Assurance
DEE	--	Division of Environmental Enforcement
DER	--	Division of Environmental Remediation, formerly the Division of Hazardous Waste Remediation
DHWR	--	Division of Hazardous Waste Remediation, now the Division of Environmental Remediation
DOD	--	Department of Defense
DOL	--	Department of Law
DOW	--	Division of Water
ENB	--	Environmental Notice Bulletin
EQBA	--	1986 Environmental Quality Bond Act
EPA	--	Environmental Protection Agency
F & W	--	Division of Fish and Wildlife
FDA	--	Food and Drug Administration
FSF	--	Federal Superfund
FOIL	--	Freedom of Information Law

10 Hazardous Waste Site Program Glossary and Acronyms

FS	--	Feasibility Study
FY	--	Fiscal Year
GPM	--	Gallons Per Minute
HeLP	--	Health Liaison Program
IRM	--	Interim Remedial Measure
mg/kg	--	milligrams per kilogram
NAPL	--	Non-Aqueous Phase Liquid
NPL	--	National Priorities List
NYSDEC	--	New York State Department of Environmental Conservation
NYSDOH	--	New York State Department of Health
O & M	--	Operation and Maintenance
OSHA	--	Occupational Safety and Health Administration
OU	--	Operable Unit
PAH	--	Poly-Aromatic Hydrocarbon
PCB	--	Poly-Chlorinated Biphenyl
PM	--	Project Manager
ppm/ppb/ppt	--	parts per million/parts per billion/parts per trillion
PRAP	--	Proposed Remedial Action Plan
PRP	--	Potentially Responsible Party
PRS	--	Priority Ranking System
PSA	--	Preliminary Site Assessment
QA/QC	--	Quality Assurance/Quality Control
RA	--	Remedial Action
RCRA	--	Resource Conservation and Recovery Act
RD	--	Remedial Design
RFP	--	Request for Proposals
RHWRE	--	Regional Hazardous Waste Remediation Engineer
RI	--	Remedial Investigation
RI/FS	--	Remedial Investigation/Feasibility Study
ROD	--	Record of Decision
RP	--	Responsible Party
SSF	--	State Superfund
TAGM	--	Technical and Administrative Guidance Memorandum
TCLP	--	Toxicity Characteristic Leaching Procedure
TSDF	--	Treatment, Storage and Disposal Facility
ug/l	--	micrograms per liter
USGS	--	U.S. Geological Service
VCP	--	Voluntary Cleanup Program
VOC	--	Volatile Organic Compound

APPENDIX B

Fact Sheet



FACT SHEET

Brownfield Cleanup Program

221 Main Street

Site Number: C360073

White Plains, NY

October 12, 2004

Draft Remedial Investigation Work Plan Available for Public Comment

The New York State Department of Environmental Conservation (NYSDEC) requests public comments as it reviews a draft work plan to investigate the 221 Main Street site located at 221 Main Street in the City of White Plains, Westchester County. See map for the location of the site. The draft "Remedial Investigation and Interim Remedial Measures (RI/IRM) Work Plan" was submitted by LC Main, LLC under New York's Brownfield Cleanup Program (BCP).

NYSDEC previously accepted an application submitted by LC Main, LLC to participate in the BCP. The application proposes that the site will be used for commercial and residential purposes.

Public Comments About the Draft RI/IRM Work Plan

NYSDEC is accepting written public comments about the draft RI/IRM Work Plan for 45 days, from **October 12, 2004 through November 26, 2004**. The draft /IRM Work Plan is available for public review at the document repository identified in this fact sheet.

Written comments should be submitted to:

Ramanand Pergadia
New York State Department of Environmental Conservation
21 South Putt Corners Road
New Paltz, New York 1261

Highlights of the Proposed Remedial Investigation

The remedial investigation has several goals:

- 1) define the nature and extent of contamination in soil, surface water, groundwater and any other impacted media;
 - 2) identify the source(s) of the contamination;
 - 3) assess the impact of the contamination on public health and/or the environment; and
 - 4) provide information to support the development of a Remedial Work Plan to address the contamination.
- The investigation will be performed by LC Main, LLC with oversight by NYSDEC and the New York State Department of Health (NYSDOH).

Brownfield Cleanup Program: New York's Brownfield Cleanup Program (BCP) encourages the voluntary cleanup of contaminated properties known as "brownfields" so that they can be reused and redeveloped. These uses include recreation, housing and business.

A **brownfield** is any real property that is difficult to reuse or redevelop because of the presence or potential presence of contamination.

For more information about the BCP, visit:
www.dec.state.ny.us/website/der/bcp

Site contaminants of concern are petroleum products due to historically leaking underground storage tanks (USTs). Soil and groundwater at the Site have been affected by petroleum contamination. The RI/IRM Work Plan outlines the following activities to be completed.

- Petroleum impacted fill at the Site will be removed as an Interim Remedial Measure (IRM). The objective of the IRM will be to remove and dispose of all impacted fill material underlying the Site and any remaining USTs. Based on sampling data, the impacted fill will be removed and disposed of off-site at a licensed disposal facility. Confirmatory samples will be collected to ensure the contaminated material is removed.
- Preliminary sampling has indicated that groundwater at the site has been impacted by the petroleum contamination on the western portion of the site and on the NY Power Authority (NYPA) property. A Remedial Investigation (RI) at the Site will be completed to fully characterize groundwater conditions, and to collect additional data necessary to evaluate remedial alternatives for groundwater.
- Soil and groundwater sampling will be completed off-site under the NYPA parking garage to determine if soil and groundwater have been impacted under the garage.
- Soil gas samples and indoor air samples will be collected in adjacent buildings as part of the RI to determine if soil vapor has migrated off-site.

Next Steps

NYSDEC will consider public comments when it completes its review, has any necessary revisions made, and approves the RI/IRM Work Plan. NYSDOH must concur in the approval of the RI/IRM Work Plan. The approved Work Plan will be placed in the document repository (see below). After the RI/IRM Work Plan is approved, LC Main, LLC may proceed with the remedial investigation of the site. It is estimated that the remedial investigation will take about 1 year.

The applicant will develop a Remedial Investigation and Interim Remedial Measure Report that summarizes the results of the remedial investigation and IRM.

NYSDEC will keep the public informed during the investigation and remediation of the 221 Main Street Site.

Background

The Site is located on Main Street in the City of White Plains, New York. The Site is partially occupied by multi-story commercial buildings, which will be demolished. The Site occupies the majority of one City block and is surrounded by commercial properties with a mix of retail and office space. The Site is bound by Hamilton Ave to the North, Church St to the East, Main St to the South and by other commercial establishments and the New York State Power Authority (NYSPA) Building and associated parking garage to the West.

The site consists of three main areas. The first area is the building along Main St (203-227 Main St) and the Annex building. The second area of the site is this parking area known as the Halpern Lot located behind (north of) the Main St building. The third area is the City Lot, which is a municipal parking lot located directly west of the Halpern Lot and behind the Bar building. The City Lot extends south to Main Street, just west of the Annex.

The BCP Application was submitted by LC Main, LLC in July 2004 and was deemed to be complete by the DEC on July 28, 2004. The 30-day comment period on the Application ended on September 3, 2004. The Site was accepted in the BCP on September 29, 2004.

FOR MORE INFORMATION

Document Repository

A local document repository has been established at the following location to help the public to review important project documents. These documents include the draft RI Work Plan and the application to participate in the BCP accepted by NYSDEC:

White Plains City Library
110 Martine Avenue
White Plains, New York 10601
(914) 422-1400

Who to Contact

Comments and questions are always welcome and should be directed as follows:

Project Related Questions

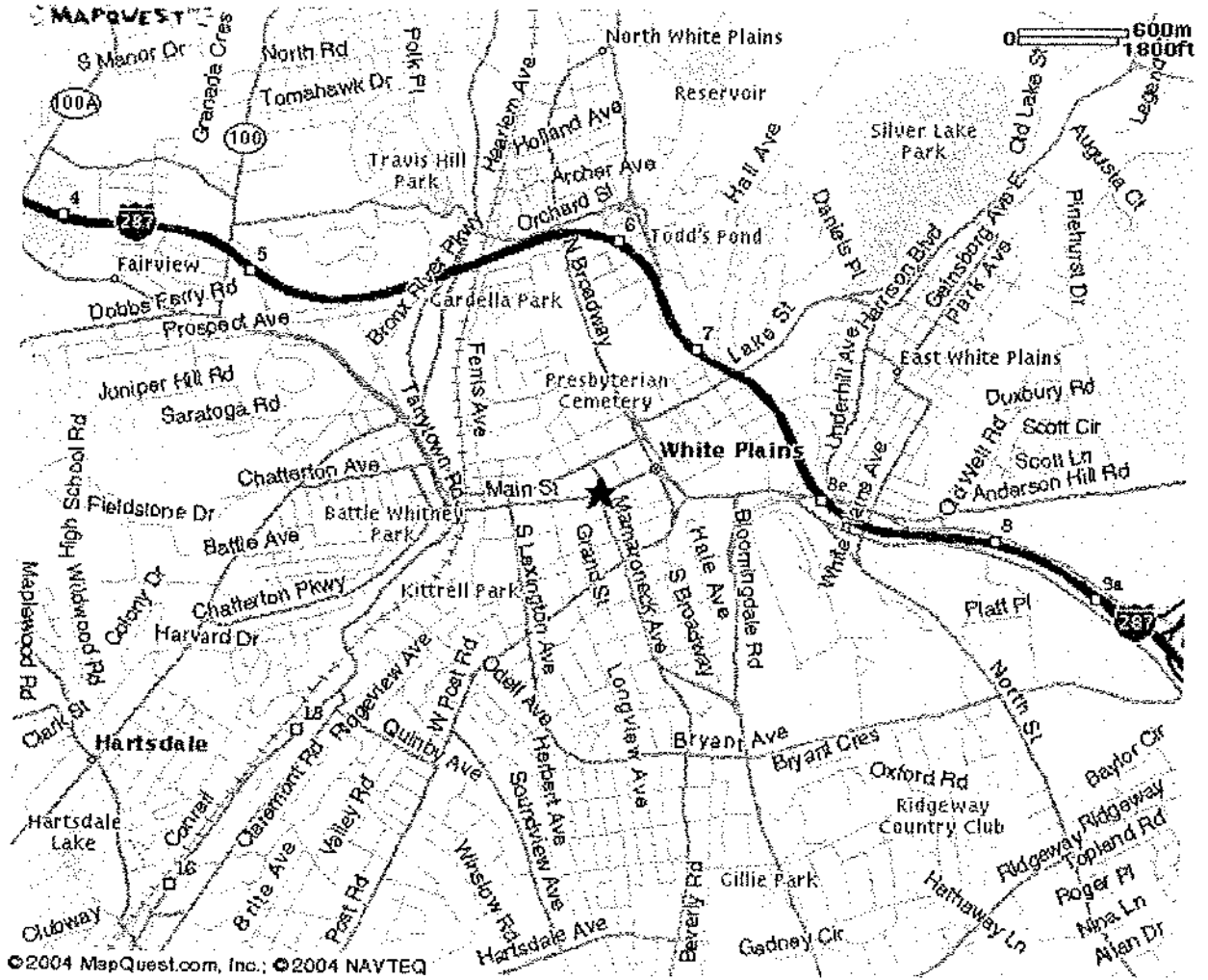
Ramanand Pergadia
New York State Department of Environmental
Conservation
21 South Putt Corners Road
New Paltz, New York 12561
Tel: (845) 256-3146
e-mail: rpergad@gw.dec.state.ny.us

Health Related Questions

Ian Ushe
New York State Department of Health
547 River Street
Troy, New York 12180
Tel: (518) 402-7850
Email: ziu01@health.state.ny.us

If you know someone who would like to be added to the project mailing list, have them contact the NYSDEC project manager above. We encourage you to share this fact sheet with neighbors and tenants, and/or post this fact sheet in a prominent area of your building for others to see.

Figure 1
Site Location Map



APPENDIX C

**Environmental Notice Bulletin
Publication**

Brownfield Cleanup Program

221 Main Street, White Plains, New York 10601
City of White Plains, Westchester County
State of New York

NOTICE Pursuant to ECL 27-1407 and 1417

The New York State Department of Environmental Conservation (Department) administers the Brownfield Cleanup Program pursuant to ECL 27-1400 et seq. The Brownfield Cleanup Program is designed to encourage the remediation of contaminated properties known as brownfields for reuse and redevelopment. LC Main, LLC c/o Cappelli Enterprises, Inc. has submitted an application to participate in the Brownfield Cleanup Program. The application was determined to be complete by the Department on July 28, 2004. The property described in the application is located at 221 Main Street, White Plains, New York 10601. The application proposes that the applicant will conduct investigation and/or remedial activities at the site. The application proposes that the site will be used for commercial and residential purposes.

The Department will receive public comments concerning the application for thirty days from August 4, 2004 through September 3, 2004. After review of the application and any public comments received, the Department will determine whether to accept the Applicant's request to participate in the Brownfield Cleanup Program. If the Department accepts the Applicant's request to participate, it will execute a Brownfield Cleanup Agreement (BCA) with the Applicant. By executing a BCA, the Applicant would commit to undertake certain remedial activities under the Department's oversight. A copy of the application as well as other related attached documents which includes a Phase I Environmental Assessment Report are available in the document repository for this site located at the White Plains City Library, 100 Martine Avenue, White Plains, New York 10601.

The referenced documents are draft and have not been reviewed by the Department staff prior to their release for public comment. The Department, in conjunction with the New York State Department of Health will review these documents during the public comment period.

All citizens are encouraged to offer comments in writing to and refer questions to:

New York State Department of Environmental Conservation
Region 3 Office
21 South Platt Corners Road
New Paltz, New York 12561
ATTN: Ramanand Pergadia