Department of Environmental Conservation

Division of Environmental Remediation

Site Investigation Report

South Niagara Street Quarry Site, City of Lockport, Niagara County, New York

January 2008

New York State Department of Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo, New York 14203

Site Investigation Report

South Niagara Street Quarry Site,
City of Lockport,
Niagara County, New York

Prepared by:

New York State Department of Environmental Conservation
Division of Environmental Remediation
270 Michigan Ave
Buffalo, New York 14203

Glenn M. May, CPG
Engineering Geologist II

TABLE OF CONTENTS

SECTION **PAGE**

TABLE OF CONTENTS (CONTINUED)

SECTION **PAGE**

LIST OF FIGURES
(Following Text)

LIST OF TABLES
(Following Text)

APPENDICES

1.0 EXECUTIVE SUMMARY

The South Niagara Street Quarry Site consists of a single parcel owned by the City of Lockport at 456 South Niagara Street in the City of Lockport, Niagara County, New York (Figure 1-1). The total area of the site is approximately 1.6 acres in a commercial neighborhood. The site is bounded on the north by South Niagara Street, on the east and south by heavily vegetated, mostly vacant property and on the west by the Somerset Railroad (Figure 1-1). Further west is a ravine approximately eighty feet deep known as the Gulf (Figure 1-1).

The surface topography of the site is relatively flat, with elevations ranging from approximately 587 to 595 feet above mean sea level (amsl). The site slopes gently to the west before sloping steeply down a small embankment to the Somerset Railroad property. The surface of the South Niagara Street Quarry Site is covered with either asphalt millings or clean soil.

The South Niagara Street Quarry Site was reportedly first operated as a quarry. A rock cut is clearly visible along the southwest corner of the property. It appears that the site was brought back to original grade through the landfilling of municipal debris. Landfilling operations likely occurred between 1921 to 1976, but the exact period of use is unknown.

On November 5, 1997 New York State Department of Environmental Conservation (NYSDEC) staff conducted a sampling event at the site. One surface water, one sediment and three soil/waste samples were collected from a swale at the foot of the embankment, immediately west of the site. Comparatively few compounds were detected in these samples: bis(2 ethylhexyl)phthalate and iron were the only compounds detected in the surface water sample at concentrations that exceeded the NY State Class A surface water standards, while methylene chloride (1 sample) and benzo(a)pyrene (3 samples) were the only organic compounds detected in the sediment and soil/waste samples at concentrations that exceeded the NYSDEC TAGM 4046 soil cleanup objectives. Eight metals, however, were detected in the sediment and soil/waste samples at concentrations that exceeded NYSDEC TAGM 4046 soil cleanup objectives. Of these metals, iron, nickel and zinc exceeded the soil cleanup objectives in all four of the sediment and soil/waste samples, while arsenic and beryllium exceeded the soil cleanup objectives in three of the samples. Cadmium, chromium and selenium exceeded the NYSDEC TAGM 4046 soil cleanup objectives in two samples.

Between June and October 2007 the NYSDEC conducted a Site Investigation at the site to obtain information sufficient to determine if the South Niagara Street Quarry Site should be included in the Registry of Inactive Hazardous Waste Sites, and if so, what the appropriate site classification should be. The specific

objectives of this investigation were to (1) evaluate the site to determine if hazardous wastes or substances were present, and if present, to determine if there was a consequential amount; and (2) determine the degree to which historical waste disposal has contaminated environmental media at and near the site. These objectives were determined through the analysis of waste and sediment samples collected during the Site Investigation.

The stratigraphy of the site was evaluated by examining the stratigraphic logs completed during the Site Investigation. With increasing depth, the geologic units encountered include clean fill, waste and glaciolacustrine silty clays and clayey silts. Clean fill at the site consists predominantly of milled asphalt and imported native soil, while the waste material consists predominantly of multi-colored, layered ash. The bedrock underlying the site is the Guelph Dolostone of the Lockport Group.

Saturated soil/waste was not encountered at thicknesses sufficient to justify the installation of micro-wells. As a result, micro-wells were not installed during the Site Investigation, so site hydrogeology could not be evaluated. Based upon a regional groundwater flow map for the area, it is suspected that groundwater under the South Niagara Street Quarry Site flows to the west towards the Gulf.

Surface water, known to historically discharge from the embankment along the western portion of the site, was not observed during the Site Investigation field activities. As a result, surface water samples were not collected during the investigation.

The results of the Site Investigation indicate that waste at the South Niagara Street Quarry Site contains numerous semivolatile organic compounds, pesticides, polychlorinated biphenyls and metals. The concentrations of benzo(a)anthracene (2 samples), benzo(a)pyrene (2 samples), benzo(b)fluoranthene (3 samples), chrysene (2 samples), dibenzo(a,h)anthracene (1 sample), indeno(1,2,3-cd)pyrene (2 samples), bis(2-ethylhexyl)phthalate (1 sample) and the USEPA priority pollutant metals arsenic (2 samples), cadmium (4 samples), chromium (2 samples), copper (4 samples), lead (6 samples), mercury (3 samples), nickel (1 sample) and zinc (1 sample) exceeded the NYSDEC Part 375 soil cleanup objectives, or if not available, the TAGM 4046 soil cleanup objectives. Of these contaminants, the concentrations of bis(2-ethylhexyl)phthalate (1 sample), cadmium (1 sample), copper (2 samples), lead (2 samples) and mercury (3 samples) significantly exceeded (by a factor of four or more) the soil cleanup objectives. In addition, the waste at the South Niagara Street Quarry Site is not a characteristic hazardous waste, although some lead can leach from this waste at low concentrations.

Sediment adjacent to the South Niagara Street Quarry Site contains numerous semivolatile organic compounds, pesticides and metals. The concentrations of benzo(a)anthracene (1 sample), benzo(a)pyrene (1 sample), benzo(b)fluoranthene (1 sample), benzo(k)fluoranthene (1 sample), chrysene (1 sample), indeno(1,2,3-cd)pyrene (1 sample), chlordane (1 sample), DDD (1 sample), DDE (1 sample) and the USEPA priority pollutant metals arsenic (1 sample), cadmium (1 sample), copper (1 sample), lead (1 sample), mercury (1 sample), nickel (1 sample) and zinc (1 sample) exceeded the NYSDEC sediment criteria. Of these contaminants, the concentrations of benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, indeno(1,2,3-cd)pyrene, cadmium, copper, nickel and zinc exceeded the sediment criteria by a factor of four or more.

The results of the Site Investigation suggest that waste at the South Niagara Street Quarry Site has impacted sediment adjacent to the site. Since surface water in this ditch is intermittent, and the ditch does not harbor an aquatic environment, the presence of contaminated sediment adjacent to the South Niagara Street Quarry Site does not appear to represent a major environmental concern. The presence of exposed ash along the embankment, however, may pose a slight public health risk.

The analytical results obtained during the Site Investigation suggest that consequential amounts of hazardous wastes are not present at the South Niagara Street Quarry Site. As a result, it is recommended that this site not be listed in the NYSDEC Registry of Inactive Hazardous Waste Disposal Sites in New York State. It is further recommended, based upon the number of exceedances of the NYSDEC residential soil cleanup objectives, that the property continue to be utilized for commercial purposes.

2.0 INTRODUCTION

Between June and October 2007 the New York State Department of Environmental Conservation (NYSDEC) conducted a Site Investigation at the South Niagara Street Quarry Site in the City of Lockport, Niagara County, New York (Figure 1-1). The South Niagara Street Quarry Site, located at 456 South Niagara Street, occupies an area of approximately 1.6 acres in a commercial neighborhood (Figure 1-1). Although the site is not listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State (Registry), it is included in the NYSDEC's Hazardous Substance Site study. As a result, the Division of Environmental Remediation (DER) conducted a Site Investigation at the site to determine if hazardous wastes or substances were present, and if present, to determine if there was a consequential amount. The Site Investigation was also conducted to determine the degree to which historical waste disposal has contaminated environmental media at and near the site. The study results will be utilized to determine whether the South Niagara Street Quarry Site should be included in the Registry, and if so, what classification the site should be assigned.

This report summarizes the findings of the Site Investigation. The remaining sections of this report are organized as follows:

- **Section 3.0, Site History and Background:** Section 3.0 describes the site, and discusses the disposal history and previous investigations completed at the site;

- **Section 4.0, Study Objectives and Scope of Work:** Section 4.0 describes the objectives of the Site Investigation and the activities that were completed during the Site Investigation;

- **Section 5.0, Geology and Hydrogeology:** Section 5.0 describes the regional and site geology and hydrogeology. The characteristics, areal extent and hydrogeologic properties of the strata are discussed;

- **Section 6.0, Investigation Results:** Section 6.0 describes the findings of the Site Investigation, including general observations and a summary of the analytical results obtained from various environmental media (i.e., waste and sediment);

- **Section 7.0, Discussion and Recommendation:** Section 7.0 summarizes the findings of the Site Investigation as they relate to the objectives presented in Section 4.0. Recommendations for future activities regarding the site are also discussed; and

- **Section 8.0, References:** Section 8.0 contains a list of references utilized or cited in the report.

Figures, tables and appendices, in that order, follow Section 8.0.

3.0 SITE HISTORY AND BACKGROUND

3.1 Site Description

The South Niagara Street Quarry Site consists of a single parcel owned by the City of Lockport at 456 South Niagara Street in the City of Lockport, Niagara County, New York (Figure 1-1). The site occupies an area of approximately 1.6 acres in a commercial neighborhood. The site is bounded on the north by South Niagara Street, on the east and south by heavily vegetated, mostly vacant property and on the west by the Somerset Railroad (Figure 1-1). Further west is a ravine approximately eighty feet deep known as the Gulf (Figure 1-1). A narrow stream flows along the bottom of the ravine and forms one of the headwaters of the East Branch of Gulf Creek. Gulf Creek flows in a northerly direction and eventually discharges into Eighteenmile Creek approximately one mile to the north.

The surface topography of the site is relatively flat, with elevations ranging from approximately 587 to 595 feet above mean sea level (amsl) based upon USGS topographic mapping of the area. The site slopes gently to the west before sloping steeply down a small embankment to the Somerset Railroad property. Evidence of disposal at the South Niagara Street Quarry Site, such as ash and glass, was observed on this embankment during a site reconnaissance in June 2007.

3.2 Site History

3.2.1 *Site Discovery*

The Site was initially discovered in 1993 during a routine inspection of the Lockport City Landfill (NYSDEC Site No. 932010) located north of the Old Upper Mountain Road Site (Figure 1-1). Evidence of ash and glass was noted along the western embankment. A leachate stain was observed in an adjacent ditch at the base of the embankment. Surface water in this ditch drains under the railroad tracks before discharging into Gulf Creek to the west.

3.2.2 *Operation History*

The South Niagara Street Quarry Site was reportedly first operated as a quarry. A rock cut is clearly visible along the southwest corner of the property. It appears that the site was brought back to original grade through the landfilling of municipal debris. The period of operation at this landfill is unknown, but could range from the 1921, when landfilling operations began at the nearby Old Upper Mountain Road Site landfill (NYSDEC Site No. 932112), to 1976, when landfilling operations ended at the Lockport City Landfill to the north. Industrial use at the landfill is unknown.

3.2.3 *Previous Investigations*

On November 5, 1997 NYSDEC Central Office Division of Hazardous Site Control staff conducted a sampling event at the South Niagara Street Quarry Site. The purpose of this field sampling was to determine the level of overall chemical contamination at the site. One surface water, one sediment and three soil/waste samples were collected from the ditch at the base of the embankment along the Somerset Railroad.

Comparatively few compounds were detected in these samples: bis(2 ethylhexyl)phthalate and iron were the only compounds detected in the surface water sample at concentrations that exceeded the NY State Class A surface water standards, while methylene chloride (1 sample) and benzo(a)pyrene (3 samples) were the only organic compounds detected in the sediment and soil/waste samples at concentrations that exceeded the NYSDEC TAGM 4046 soil cleanup objectives. Twenty-two metals, however, were detected in the sediment and soil/waste samples with eight of these metals detected at concentrations that exceeded the NYSDEC TAGM 4046 soil cleanup objectives. Iron, nickel and zinc exceeded the soil cleanup objectives in all four of the sediment and soil/waste samples, while arsenic and beryllium exceeded the soil cleanup objectives in three of the samples. Cadmium, chromium and selenium exceeded the NYSDEC TAGM 4046 soil cleanup objectives in two samples. Unfortunately, the analytical results from this sampling event are not contained in NYSDEC or Niagara County Health Department program files so the exact concentrations of the detected contaminants are not known.

4.0 STUDY OBJECTIVES AND SCOPE OF WORK

4.1 Objectives

The overall objective of the Site Investigation was to obtain information sufficient to determine if the South Niagara Street Quarry Site should be included in the Registry of Inactive Hazardous Waste Sites, and if so, what the appropriate site classification should be. The specific objectives of this investigation were to:

- evaluate the site to determine if hazardous wastes or substances were present, and if present, to determine if there was a consequential amount; and

- determine the degree to which historical waste disposal has contaminated environmental media at and near the site.

These objectives were determined through the analysis of waste and sediment samples collected during the Site Investigation.

4.2 Scope of Work

To meet the study objectives, the following activities were completed during the Site Investigation: (1) a soil boring program, (2) an exposed waste sampling program, (3) collection of environmental samples for chemical analysis, and (4) preparation of a site map. These activities are briefly described in the following sections. All field work was conducted in level D personal protective equipment, while air monitoring for organic vapors was completed during intrusive activities by NYSDEC personnel. The direct push vehicle and sampling equipment were deconed prior to the implementation of field activities, with the sampling equipment decontaminated between samples.

4.2.1 *Soil Boring Program*

During the Site Investigation, eleven soil borings (SB-1 thru SB-11) were completed throughout the site to evaluate the historical disposal area and to facilitate the collection of subsurface waste samples. The locations of these borings are shown on Figure 4-1. Continuous macro core samples were collected at each location with discrete samples collected for chemical analysis (see Section 4.2.4 below).

4.2.2 *Exposed Waste Sampling Program*

Prior to the start of the soil boring program, two waste samples were collected from the embankment adjacent to the Somerset Railroad property. The locations of these samples are shown on Figure 4-2. This

waste was exposed by woodchucks burrowing into the embankment.

4.2.3 *Micro-Wells*

It was originally planned to convert four soil borings (SB-1 thru SB-4) into micro-wells to evaluate groundwater flow patterns across the site and to determine whether contamination is migrating from the former disposal area. During implementation of the soil boring program, however, saturated soil/waste was not encountered at thicknesses sufficient to justify the installation of micro-wells. As a result, micro-wells were not installed during the Site Investigation.

4.2.4 *Sample Collection and Analysis*

With the exception of the macro core samples collected during the soil boring program, all samples were collected by NYSDEC personnel. During the Site Investigation one sediment sample and thirteen waste samples (Figure 4-2) were collected and submitted to Severn Trent Laboratories, Inc. (STL) in Amherst, New York for chemical analysis. Information concerning sample collection and analysis is given in Table 4-1. Groundwater samples were not collected during the Site Investigation because micro-wells were not installed. In addition, surface water that was known to historically discharge from the embankment adjacent to the Somerset Railroad property was not observed during the Site Investigation, so samples could not be collected. Furthermore, the surface of the site is covered with either asphalt millings or imported clean soil. As a result, surface soil samples were not collected during the Site Investigation as originally planned.

4.2.5 *Surveying and Mapping*

A map of the South Niagara Street Quarry Site was prepared by the NYSDEC as part of the Site Investigation. This map was prepared by digitizing and overlaying Niagara County tax maps, USGS topographic maps and aerial photographs. The final map includes the site boundaries; property boundaries; the ravine; tributaries and streams near the site; nearby roadways; all soil boring locations; and the locations of all samples collected as part of the Site Investigation. In addition, the latitude, longitude and ground surface elevation at each boring location was surveyed using a handheld Magellan Meridian GPS unit. The coordinates for each boring are given in Appendix B, while the ground surface elevations are given in Table 5-2 and Appendix A.

4.2.6 *Report Preparation*

This report was prepared to describe the activities completed during the Site Investigation of the South Niagara Street Quarry Site; present the analytical results of the samples collected during the investigation; discuss the results as they relate to the objectives of the investigation; and present

recommendations for future activities at the site.

5.0 GEOLOGY AND HYDROGEOLOGY

Site Investigation activities were undertaken, in part, to determine the characteristics, areal extent and hydrogeologic properties of the geologic strata underlying the South Niagara Street Quarry Site. This is important as these attributes of the geologic strata govern the occurrence and flow of groundwater across the site. These attributes also govern the potential for contaminant migration from the site, and determine the rate and extent of this migration. As a result, a detailed evaluation of the geology at the South Niagara Street Quarry Site is essential. Before completing such a detailed evaluation, however, it is important to first describe the regional geologic history of the western New York area as a general knowledge of this history is critical to a complete understanding of the complex interrelationships between the various geologic strata and their hydrogeologic properties.

5.1 Regional Geology

5.1.1 *Surficial Geology*

Geologic evidence suggests that at least four major glacial episodes covered parts of North America during the Pleistocene Epoch (Buehler and Tesmer, 1963). In western New York, however, there is evidence of only two such episodes. The last glacial event in the area, the Wisconsin, eroded and modified the earlier glacial deposits to such an extent that little evidence of their existence remains. These glacial events widened the preexisting valleys and basins, and led to the development of the present day drainage system in western New York (La Sala, 1968).

A complex sequence of proglacial lakes that formed during the final retreat of the Wisconsin ice sheet inundated an extensive area of western New York. This succession originated in the Erie-Huron Basin prior to 14,000 years ago as the ice sheet retreated from the basin. Further retreat produced Lake Arkona about 13,600 years ago (Hough, 1958); a readvance of the ice sheet followed about 13,000 years ago and resulted in a water level increase to the Lake Whittlesey stage. A series of advances and retreats over the next 300 years produced, from latest to earliest, lakes Warren, Wayne, Lowest Warren, Grassmere, Lundy and Tonawanda, the last forming about 9,800 years ago (Calkins and Brett, 1978). To the north, Lake Iroquois occupied the Ontario Basin at this time. This lake sequence was responsible for the deposition of stratified lacustrine clays, silts, sands and gravels that now cover much of western New York.

The Pleistocene Epoch presented a variety of environments that resulted in the deposition of unconsolidated deposits. In the Lockport area these deposits include the following (GZA, 1987; Smith, 1990; Ecology and Environment, 1991):

- Glacial till, consisting of a non-sorted, non-stratified mixture of sand, silt, clay, gravel and rock fragments deposited directly from glacial ice;

- Glaciolacustrine deposits, consisting primarily of silt, sand and clay deposited in lakes that formed during melting of the ice sheets; and

- Glaciofluvial deposits, consisting of sand and gravel deposited either by glacial meltwater streams or by the reworking of till and other glacial deposits along the shore of former glacial lakes.

The thickness of these deposits in the Lockport Area varies considerably, ranging from less than 2 feet near the Niagara Escarpment to approximately 45 feet at the Frontier Pendleton Quarry Site approximately 5 miles southwest of the South Niagara Street Quarry Site (Golder, 1989).

5.1.2 *Bedrock Geology*

The bedrock underlying western New York is characterized as a thick sequence of shales, sandstones, limestones and dolostones deposited in ancient seas during the Silurian and Devonian Periods (Buehler and Tesmer, 1963). This stratigraphic sequence is summarized in Table 5-1. Bedrock bedding generally strikes in an east-west direction, approximately paralleling the Niagara and Onondaga Escarpments, and dips to the south at approximately 30 to 40 feet per mile (Johnson, 1964; La Sala, 1968; Yager and Kappel, 1987). Erosion and weathering, however, have produced local differences in the bedrock surface configuration (Snyder Engineering, 1987).

The uppermost bedrock formation underlying the South Niagara Street Quarry Site is the Guelph Dolostone of the Lockport Group (Table 5-1), which was deposited in a shallow sea environment during the Middle Silurian Period (439-408 million years ago) (Brett et al., 1995). The Lockport Group varies in thickness from 20 to 175 feet (Johnson, 1964; Brett et al., 1995); in the vicinity of the South Niagara Street Quarry Site the thickness of the Lockport Group ranges from 35 to 62 feet. Brett et al (1995, page 45) describe the Lockport Group as a "massive- to medium-bedded, argillaceous dolomite with minor amounts of dolomite and shale." The upper 10 to 25 feet of the Lockport Group contains abundant bedding planes and vertical fractures enlarged by dissolution and glacial scour (Miller and Kappel, 1987).

5.2 Site Geology

Eleven soil borings (Figure 4-1) were completed during the Site Investigation to evaluate the

stratigraphy of the South Niagara Street Quarry Site. All borings were completed to refusal. The stratigraphic logs for these borings are given in Appendix A, while a stratigraphic summary of these logs is given in Table 5-2.

5.2.1 *Non-Native Deposits*

Subsurface soil and waste samples were collected continuously from the ground surface to refusal at all soil boring locations completed during the Site Investigation. These samples indicate that two non-native deposits underlie the South Niagara Street Quarry Site. These units consist of clean fill (milled asphalt, crushed stone and imported native soils) and waste material. Clean fill was encountered in all eleven borings completed at the site, and ranged in thickness from 0.7 to 4.4 feet (Table 5-2).

Waste material was encountered in nine of the eleven borings, and consisted predominantly of multi-colored, layered ash containing glass, rock, ceramic, coal, brick and/or coke, with layers of foundry sand encountered in several borings. Where completely penetrated, the waste material ranged in thickness from 4.6 to 8.5 feet (Table 5-2).

5.2.2 *Glaciolacustrine Deposit*

A relatively thin, glaciolacustrine deposit was encountered in eight of the eleven borings completed during the Site Investigation, and underlies either the clean fill or waste (Table 5-2). This deposit consisted primarily of gray to brown silty clays and clayey silts containing numerous rock fragments, and ranged in thickness from 0.7 to 8.4 feet (Table 5-2). The glaciolacustrine deposit directly overlies a thin veneer of sapprolitic (weathered) bedrock.

5.2.3 *Guelph Dolostone*

The uppermost bedrock formation underlying the South Niagara Street Quarry Site is the Guelph Dolostone of the Lockport Group. Bedrock was encountered with certainty in seven borings completed during the Site Investigation, with macro core refusal (presumed to be bedrock) occurring at two additional boring locations. None of these borings, however, penetrated the formation to any significant depth. As a result, the best description of the Lockport Dolostone for this area of Niagara County comes from stratigraphic logs for monitoring wells completed at the nearby Delphi Thermal Site. At this site, the Lockport Dolostone was described as a grey dolomitic limestone that is typically hard and fine grained, and contains vertical and horizontal bedding plane fractures. The thickness of this formation beneath the Delphi Thermal Site is approximately 40 to 45 feet, but does not have a sharp contact with the underlying Rochester Shale. Depth to bedrock at the South Niagara Street Quarry Site ranged from 6.2 to 11.7 feet (Table 5-2).

5.3 Regional Hydrogeology

Water bearing zones in the Lockport area include unconsolidated glacial deposits and bedrock of the Lockport Group and Rochester Shale (Johnson, 1964; GZA, 1981; EHC, 1989). Most of the unconsolidated deposits in the area consist of fine grained glacial deposits with hydraulic conductivities roughly 10^{-7} cm/s or less (Earth Dimensions, 1980). These deposits, however, often contain horizontal laminations and sand lenses that can produce perched water table conditions, or if areally extensive, can be utilized as sources of water (La Sala, 1968). Because the unconsolidated deposits in the southwestern Lockport area are relatively thin, and horizontal laminations and sand lenses are not common, groundwater yields from these deposits would be too low for domestic or industrial purposes. Overburden groundwater flow in the area, therefore, is expected to be highly localized and discontinuous, with an overall flow toward the Gulf and Eighteenmile Creek.

The Lockport Group consists predominantly of dolostone; however, thin beds of limestone and shaly dolostone, and small irregularly shaped masses of gypsum are common. These thin beds and masses are subject to dissolution by groundwater, resulting in the enlargement of fractures and the formation of migration pathways that can transmit large quantities of groundwater. Groundwater wells completed in the Lockport Group have yields commonly ranging from 10 to 100 gpm (Miller and Kappel, 1987), with yields up to 950 gpm reported (Yager and Kappel, 1987). Groundwater in the Lockport Group is typically either a calcium-sulfate or calcium-bicarbonate water, is very hard, and is highly mineralized; calcium, bicarbonate, magnesium, sulfate and chloride are present in significant concentrations (Johnson, 1964; La Sala, 1968; NYSDEC, 1997). Due to this poor water quality and the nearby presence of the Niagara River, an important source of municipal drinking water throughout Western New York, bedrock groundwater is not extensively utilized as a domestic water source in the Lockport area. Because of the significant well yields, however, groundwater is commonly utilized for industrial purposes (i.e., non-contact cooling; quarry washing operations).

Most recharge to the Lockport Group results from infiltration of rainfall, snowmelt, and surface water through the overburden deposits; subsurface flow of groundwater from areas of higher elevation (e.g., the Niagara Escarpment) also recharges the bedrock aquifer (Johnson, 1964; La Sala, 1968; Miller and Kappel, 1987; Yager and Kappel, 1987). The blocky structure of the native glacial deposits in the southwestern Lockport area likely permits rapid recharge of the upper bedrock aquifer by infiltration. Recharge of deeper bedrock aquifers by infiltration through the floor of the nearby quarry and Erie Barge Canal is also expected to be rapid.

Groundwater occurs primarily within the Lockport Group in the following types of openings: (1) weathered surface fractures, (2) bedding joints, (3) vertical joints, and (4) small cavities and vugs. The principal control on bedrock groundwater flow, however, is the vertical and horizontal bedding plane fractures. The latter are expected to be the primary groundwater flow pathways in the Lockport Group, especially in the upper unit, which is extensively fractured. Johnson (1964) identified seven such zones in the Niagara Falls area. Similar zones are likely to be found in the Lockport area but have not been extensively studied, nor correlated with those in Niagara Falls. Some horizontal groundwater flow, however, could also occur through small cavities and vugs (Woodward-Clyde and Conestoga-Rovers & Associates, 1992). Vertical movement of groundwater also occurs, especially in the upper 10 to 25 feet of rock where vertical fractures, created by stress relief from tectonic events, glacial rebound (Gross and Engelder, 1991), and quarrying operations (GZA, 1981) have been enlarged by dissolution and/or glacial scour. The extent of vertical groundwater movement within the Lockport Group in the Lockport area, however, is unknown. Where horizontal and vertical fractures intersect, the water bearing capacity of the bedrock is substantially increased. Although such areas have been identified in the Niagara Falls area, little investigation has been conducted to identify such areas in the Lockport area.

5.3.1 *Regional Groundwater Flow*

There are several natural features and man-made structures that greatly influence bedrock groundwater flow in the southwestern Lockport area, including the Niagara Escarpment and Gulf, the former Frontier Stone Products quarry, and the Erie Barge Canal (Figure 5-1). Prior to the initiation of quarrying operations, little information regarding regional groundwater flow in the upper Lockport Group bedrock is available. It is suspected, however, that historic regional groundwater flow in the southwestern portion of Lockport was largely toward the Gulf, with more localized flow toward the Erie Barge Canal. The initiation of quarrying operations, however, has altered this flow. Water levels measured in area wells indicate that upper bedrock groundwater flows from a roughly north-south trending groundwater divide centered over the Guterl Specialty Steel Corporation Landfill (Figure 5-2). From this divide, groundwater flows west toward the former Frontier Stone Products quarry, while groundwater under the Diamond Shamrock Site and Guterl Excised Area flows east toward the Erie Barge Canal (Figure 5-2). To the north, groundwater under the Delphi Thermal facility flows east toward the Gulf, while groundwater under the Lockport City Landfill flow west toward the Gulf (Figure 5-2).

5.4 Site Hydrogeology

As stated in Section 4.2.3, saturated soil/waste was not encountered at thicknesses sufficient to justify the installation of micro-wells. As a result, the hydrogeology of the South Niagara Street Quarry Site cannot

be evaluated. Based upon the regional groundwater flow in the area (Figure 5-2), however, it is suspected that site groundwater flows to the west towards the Gulf.

6.0 INVESTIGATION RESULTS

A brief description of the activities completed during the Site Investigation of the South Niagara Street Quarry Site was presented in Section 4.0. In this section, a detailed evaluation of the observations made during the investigation and the analytical results obtained from the samples are presented. Analytical results are summarized by environmental media (e.g., surface soil, waste, surface water, sediment and groundwater).

6.1 General Observations

The surface topography of the South Niagara Street Quarry Site is relatively flat, although the western portion of the site slopes steeply down a small embankment to the Somerset Railroad property. A large portion of the site is covered with asphalt millings, with a large pile of millings observed in the central portion of the site (Figures 6-1 thru 6-3). Large logs and pieces of equipment are scattered throughout the site. Ash containing bottles was observed along the embankment.

The southern and eastern portions of the site, along with the embankment to the west, are heavily vegetated with weeds and small brush (Figures 6-4 and 6-5). No buildings were observed on site, although the City of Lockport Highway garage is located to the north.

6.2 Surface Soil

The surface of the South Niagara Street Quarry Site is covered with either asphalt millings or imported soil. As a result, surface soil samples were not collected during the Site Investigation.

6.3 Waste

Thirteen waste samples from the South Niagara Street Quarry Site were collected during the Site Investigation. Eleven samples were collected from the borings, while two additional samples were collected from the exposed ash along the embankment. The locations of these samples are shown on Figure 4-2. All samples were submitted to Severn Trent Laboratories for chemical analysis; eleven of these samples were analyzed for Target Analyte List (TAL) metals, with eight of these samples also analyzed for Target Compound List (TCL) semivolatile organic compounds, TCL pesticides and TCL PCBs. Two additional samples were analyzed for TCL volatile organic compounds only. Following a review of the TAL metal results, three waste samples were further analyzed for hazardous waste characteristics using the Toxicity Characteristic Leaching Procedure (TCLP). These samples were also re-analyzed for total lead for comparison to the initial lead results. Based upon a large discrepancy between the initial and re-analyzed total lead results, two of the samples were again re-analyzed for total and TCLP lead. The analytical results

for all samples are summarized in Tables 6-1 and 6-2, while information concerning sample collection and analysis is given in Table 4-1.

Analytical results were evaluated against the restricted residential soil cleanup objectives of Table 375-6.8(b) contained in the December 2006 NYSDEC publication entitled "*6NYCRR Part 375: Environmental Remediation Programs*". For contaminants not included in Part 375, the soil cleanup objectives identified in the October 1995 NYSDEC publication entitled "*Technical and Administrative Guidance Memorandum (TAGM) 4046: Determination of Soil Cleanup Objectives and Cleanup Levels*" were utilized. When utilized, the soil cleanup objectives for individual semivolatile organic compounds were taken directly from Table 2 of the TAGM, while the soil cleanup objective for pesticides were taken directly from Table 3. For metals, TAGM 4046 allows the use of background concentrations so long as the background samples are collected from areas not impacted by the site and any other source of contaminants. Background samples, however, were not collected during the Site Investigation of the South Niagara Street Quarry Site. As a result, the background metals concentrations determined during the Site Investigation of the Former Flintkote Plant Site in the City of Lockport, Niagara County, New York (TVGA, 2005) were utilized in this report. This site is located approximately 2.0 miles northeast of the South Niagara Street Quarry Site. The site background metals values are given in Table 6-1. The regulatory limits for the hazardous waste characteristics were obtained from the January 1995 NYSDEC publication entitled "*6 NYCRR Part 371: Identification and Listing of Hazardous Wastes*".

The results of the organic analyses reveal that five volatile organic compounds were detected in the waste samples collected from the South Niagara Street Quarry Site (Table 6-1). None of the concentrations, however, exceeded the NYSDEC Part 375 or TAGM 4046 soil cleanup objectives (Table 6-1).

Twenty-three semivolatile organic compounds were also detected in the waste samples collected from the South Niagara Street Quarry Site (Table 6-1) with seventeen of these constituents being polycyclic aromatic hydrocarbons (PAHs). PAHs are a group of over 100 different chemicals that are ubiquitous in the environment. Sources of PAHs include incomplete combustion of coal, oil, gasoline, garbage, wood from stoves, automobiles and incinerators. PAHs are also found in coal tar, crude oil, creosote, roofing tar, medicines, dyes, plastics and pesticides. The presence of PAHs in waste at the South Niagara Street Quarry Site was not unexpected due to the large quantities of ash found throughout the site. Of these compounds, only benzo(a)anthracene (2 samples), benzo(a)pyrene (2 samples), benzo(b)fluoranthene (3 samples), chrysene (2 samples), dibenzo(a,h)anthracene (1 sample) and indeno(1,2,3-cd)pyrene (2 samples) were detected at concentrations that exceeded the NYSDEC Part 375 residential soil cleanup objectives (Table 6-

1). The concentration of benzo(a)pyrene (2 samples) also exceeded the NYSDEC Part 375 commercial soil cleanup objective for this contaminant (Table 6-1).

Phthalates [bis(2-ethylhexyl)phthalate and di-n-butylphthalate] were also detected in the waste samples collected from the site (Table 6-1). Only the concentration of bis(2-ethylhexyl)phthalate in one sample, however, exceeded the NYSDEC TAGM 4046 soil cleanup objective for this contaminant (Table 6-1). There is no NYSDEC Part 375 soil cleanup objective for bis(2-ethylhexyl)phthalate. Biphenyl (1 sample), carbazole (4 samples), dibenzofuran (4 samples) and n-nitrosodiphenylamine (1 sample) were also detected in the waste samples collected from the South Niagara Street Quarry Site. The concentrations of dibenzofuran did not exceed the NYSDEC Part 375 soil cleanup objective for this contaminant (Table 6-1); there are no soil cleanup objectives for biphenyl, carbazole and n-nitrosodiphenylamine.

The waste samples collected from the South Niagara Street Quarry Site were also analyzed for PCBs and pesticides (Table 6-1). PCBs were detected in five samples, but at concentrations well below the NYSDEC Part 375 soil cleanup objective. Ten pesticides were also detected in the waste samples (Table 6-1). None of the concentrations, however, exceeded the NYSDEC Part 375 or TAGM 4046 soil cleanup objectives (Table 6-1).

Sixteen metals were detected in the waste samples collected from the South Niagara Street Quarry Site (Table 6-1). Of these compounds, eleven were detected at concentrations that exceeded the NYSDEC residential soil cleanup objectives, with eight of these metals being USEPA priority pollutant metals. USEPA priority pollutant metals are toxic metals for which technology-based effluent limitations and guidelines are required by Federal law. The priority pollutant metals exceeding the residential soil cleanup objectives (with the number of exceedances and maximum concentrations) included arsenic (2 samples; 27.9 mg/kg), cadmium (4 samples; 26.5 mg/kg), chromium (2 samples; 104.0 mg/kg), copper (4 samples; 1,830 mg/kg), lead (6 samples; 8,740 mg/kg), mercury (3 samples; 17.7 mg/kg), nickel (1 sample; 174.0 mg/kg) and zinc (1 sample; 2,500 mg/kg). The concentrations of arsenic (2 samples), cadmium (1 sample), copper (4 samples), lead (2 samples) and mercury (3 samples) also exceeded the NYSDEC Part 375 commercial soil cleanup objectives (Table 6-1).

The results of the duplicate analyses for total lead are summarized in Table 6-1. This table reveals that total lead concentrations were significantly lower (by a factor of 4 or more) in two of the three samples re-analyzed (Table 6-1). As a result of this discrepancy, the two samples were again re-analyzed for total lead. The results for the 3rd analysis are relatively consistent with the results from the 2nd analysis (Table 6-1).

The reason for the large difference between the initial and re-analyzed results is unknown, but may be related to the variable nature of the waste, rather than to field and/or laboratory handling procedures.

Following a review of the TAL metal results, three waste samples were further analyzed for hazardous waste characteristics using the Toxicity Characteristic Leaching Procedure (TCLP). The results for these samples, summarized in Table 6-2, indicate that the waste at the South Niagara Street Quarry Site is not a characteristic hazardous waste, although some lead can leach from this waste at low concentrations.

6.4 Surface Water

Surface water, historically known to discharge from the embankment along the western portion of the site, was not observed during the Site Investigation field activities. As a result, surface water samples were not collected during the investigation.

6.5 Sediment

One sediment sample was collected during the Site Investigation from the ditch adjacent to the South Niagara Street Quarry Site. The location of this sample is shown on Figure 4-2. This sample was collected to evaluate the nature of sediment contamination at the site, and was submitted to Severn Trent Laboratories for chemical analysis of TCL semivolatile organic compounds, TCL pesticides, TCL PCBs and TAL metals. The analytical results for these samples are summarized in Table 6-3, while information concerning sample collection and analysis is given in Table 4-1.

Sediment criteria were developed from the January 1999 NYSDEC publication entitled *"Technical Guidance for Screening Contaminated Sediments"*. This document contains guidance values for several levels of protection including: (1) human health bioaccumulation, (2) wildlife bioaccumulation, (3) acute toxicity to benthic aquatic life, and (4) chronic toxicity to benthic aquatic life. These guidance values are derived using equilibrium partitioning methodology and are calculated as a function of the organic carbon content of the sediment being evaluated. The sediment analytical results evaluated during the Site Investigation, however, did not include total organic carbon. As a result, the mean total organic carbon content of 3.14% that was determined during the Remedial Investigation of the Eighteenmile Creek Corridor Site in the City of Lockport, Niagara County, New York (NYSDEC, 2006) was utilized in this report. This site is located approximately 2.0 miles northeast of the South Niagara Street Quarry Site. The calculated sediment criteria are given in Table 6-3.

For screening purposes, the sediment criteria to protect benthic aquatic life from chronic toxicity were utilized. When these criteria were not available for a particular contaminant, the sediment criteria for human health bioaccumulation were utilized, and if these criteria were not available, the NYSDEC Part 375 soil cleanup objectives for the protection of ecological resources were used. For metals, the lowest effect levels from Table 2 of the *Technical Guidance for Screening Contaminated Sediments"* were utilized. When these criteria were not available for a particular metal, the NYSDEC Part 375 soil cleanup objectives for the protection of ecological resources were utilized, and if these criteria were not available, the NYSDEC TAGM 4046 soil cleanup objectives were utilized, which include the site background values obtained during the Flintkote Site Investigation.

The results of the organic analysis reveal that seventeen semivolatile organic compounds were detected in the sediment sample with fifteen of these constituents being polycyclic aromatic hydrocarbons. Of these compounds, only benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene were detected at concentrations that exceeded the NYSDEC sediment criteria (Table 6-3).

The sediment sample collected from the South Niagara Street Quarry Site was also analyzed for PCBs and pesticides (Table 6-3). PCBs were not detected in the sample. Five pesticides, however, were detected in the sediment sample collected from the site with the concentrations of chlordane, DDD and DDE exceeding the NYSDEC sediment criteria (Table 6-3).

Fourteen metals were detected in the sediment sample collected from the South Niagara Street Quarry Site (Table 6-3). Of these compounds, nine were detected at concentrations that exceeded the NYSDEC sediment criteria. Seven of these metals are USEPA priority pollutant metals. The priority pollutant metals exceeding the sediment criteria (with concentrations) included arsenic (19.2 mg/kg), cadmium (3.0 mg/kg), copper (145 mg/kg), lead (109 mg/kg), mercury (0.331 mg/kg), nickel (84.4 mg/kg) and zinc (1,600 mg/kg).

6.6 Groundwater

Saturated soil/waste was not encountered at thicknesses sufficient to justify the installation of micro-wells. As a result, groundwater samples were not collected during the Site Investigation.

7.0 DISCUSSION AND RECOMMENDATION

7.1 Discussion

The overall objective of the Site Investigation was to obtain information sufficient to determine if the South Niagara Street Quarry Site should be included in the Registry of Inactive Hazardous Waste Sites, and if so, what the appropriate site classification should be. The specific objectives of this investigation were to: (1) evaluate the site to determine if hazardous wastes or substances were present, and if present, to determine if there was a consequential amount, and (2) to determine the degree to which historical waste disposal has contaminated environmental media at and near the site. These objectives were evaluated through the analysis of waste and sediment samples obtained during the Site Investigation. This section discusses the analytical results presented in Section 6.0 as they relate to these objectives.

7.1.1 *Hazardous Waste Presence*

The results of the Site Investigation indicate that hazardous wastes are not present at the South Niagara Street Quarry Site, although some lead can leach from this waste at low concentrations.

7.1.2 *Volatile Organic Compounds (VOCs)*

Two waste samples were analyzed for volatile organic compounds based upon PID readings detected during the soil boring program. Five volatile organic compounds were detected in these samples, but not at concentrations that exceeded the NYSDEC Part 375 or TAGM 4046 soil cleanup objectives (Table 6-1). The presence of VOCs in waste at the South Niagara Street Quarry Site, therefore, does not pose a major environmental concern or a public health risk.

7.1.3 *Semivolatile Organic Compounds (SVOCs)*

Twenty-three semivolatile organic compounds were detected in the waste samples collected from the South Niagara Street Quarry Site. The majority of the these contaminants were polycyclic aromatic hydrocarbons. Benzo(a)anthracene (2 samples), benzo(a)pyrene (2 samples), benzo(b)fluoranthene (3 samples), chrysene (2 samples), dibenzo(a,h)anthracene (1 sample) and indeno(1,2,3-cd)pyrene (2 samples) were the only PAHs detected in these samples at concentrations that exceeded the NYSDEC Part 375 residential soil cleanup objectives (Table 6-1). The concentration of benzo(a)pyrene (2 samples) also exceeded the NYSDEC Part 375 commercial soil cleanup objective for this contaminant (Table 6-1).

Bis(2-ethylhexyl)phthalate (4 samples), di-n-butylphthalate (1 sample), biphenyl (1 sample), carbazole (4 samples), dibenzofuran (4 samples) and n-nitrosodiphenylamine (1 sample) were also detected in the waste samples collected from the South Niagara Street Quarry Site (Table 6-1). Only the concentration

of bis(2-ethylhexyl)phthalate in one sample, however, exceeded the NYSDEC TAGM 4046 soil cleanup objectives (Table 6-1). There is no NYSDEC Part 375 soil cleanup objective for this contaminant.

Seventeen semivolatile organic compounds were detected in the sediment sample collected during the Site Investigation with fifteen of these constituents being polycyclic aromatic hydrocarbons. Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene were the only SVOCs detected at concentrations that exceeded the NYSDEC sediment criteria (Table 6-3). Of these compounds, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene exceeded the sediment criteria by a factor of four or more.

In conclusion, semivolatile organic compounds were detected in waste samples collected from the South Niagara Street Quarry Site at concentrations that exceeded standards, criteria and guidance values (SCGs), suggesting that the waste has the potential to adversely impact other environmental media at and near the site. This potential appears to be borne out by the results obtained on the sediment sample collected from the site; the individual semivolatile organic compounds that exceed the sediment criteria are the same contaminants that exceeded the soil cleanup objectives in waste samples collected from the site. Since surface water in the ditch adjacent to the site is intermittent (there was no water in this ditch during any of the field activities associated with the Site Investigation), and the ditch does not harbor an aquatic environment, the presence of semivolatile organic compounds in sediment adjacent to the South Niagara Street Quarry Site does not appear to represent a major environmental concern. The presence of exposed ash along the embankment, however, may pose a slight public health risk due to the high concentrations of semivolatile organic compounds in this waste.

7.1.4 *Pesticides*

Ten pesticides were detected in the waste samples collected during the Site Investigation (Table 6-1). None of the concentrations, however, exceeded the NYSDEC Part 375 or TAGM 4046 soil cleanup objectives (Table 6-1). These results indicate that pesticides in waste at the South Niagara Street Quarry Site is not a major environmental concern or a public health risk.

Five pesticides were detected in the sediment sample collected from the South Niagara Street Quarry Site (Table 6-3). Of these compounds, chlordane, DDD and DDE were detected at concentrations that exceeded the NYSDEC sediment criteria (Table 6-3). Since surface water in the ditch adjacent to the site is intermittent, and the ditch does not harbor an aquatic environment, the presence of pesticides in sediment

adjacent to the South Niagara Street Quarry Site does not appear to represent a major environmental concern. In addition, none of the concentrations exceed the NYSDEC residential soil cleanup objectives. As a result, contaminated sediment does not appear to pose a public health risk.

7.1.5 *Polychlorinated Biphenyls (PCBs)*

PCBs were detected in five waste samples collected during the Site Investigation (Table 6-1). None of the concentrations, however, exceeded the NYSDEC Part 375 soil cleanup objective (Table 6-1). PCBs were not detected in the sediment sample collected from the site. As a result, PCBs at the South Niagara Street Quarry Site do not pose an environmental concern or a public health risk.

7.1.6 *Metals*

Sixteen metals were detected in the waste samples collected during the Site Investigation at the South Niagara Street Quarry Site (Table 6-1). Of these compounds, eleven were detected at concentrations that exceeded the NYSDEC residential soil cleanup objectives, with eight of these metals being USEPA priority pollutant metals (Table 6-1). The priority pollutant metals exceeding the residential soil cleanup objectives included arsenic (2 samples), cadmium (4 samples), chromium (2 samples), copper (4 samples), lead (6 samples), mercury (3 samples), nickel (1 sample) and zinc (1 sample). The concentrations of arsenic (2 samples), cadmium (1 sample), copper (4 samples), lead (2 samples) and mercury (3 samples) also exceeded the NYSDEC Part 375 commercial soil cleanup objectives (Table 6-1).

Fourteen metals were detected in the sediment sample collected from the South Niagara Street Quarry Site (Table 6-3). Of these compounds, nine were detected at concentrations that exceeded the NYSDEC sediment criteria, with seven of these metals being USEPA priority pollutant metals. The priority pollutant metals exceeding the sediment criteria included arsenic, cadmium, copper, lead, mercury, nickel and zinc. The concentrations of cadmium, copper, nickel and zinc exceeded the sediment criteria by a factor of four or more.

In conclusion, metals were detected in the waste samples collected from the South Niagara Street Quarry Site at concentrations that exceeded SCGs, suggesting that the waste has the potential to adversely impact other environmental media at and near the site. This potential appears to be borne out by the results obtained on the sediment sample collected from the site; the individual metals that exceed the sediment criteria are the same metals that exceed the soil cleanup objectives in waste samples collected from the site. Since surface water in the ditch adjacent to the site is intermittent, and the ditch does not harbor an aquatic environment, the presence of metals in sediment adjacent to the South Niagara Street Quarry Site does not

appear to represent a major environmental concern. The presence of exposed ash along the embankment, however, may pose a slight public health risk due to the high concentrations of metals in this waste.

7.2 Recommendation

The information obtained during the Site Investigation of the South Niagara Street Quarry Site revealed the presence of ash throughout the site. Several exceedances of the NYSDEC residential (18 contaminants) and commercial (6 contaminants) soil cleanup objectives were documented in this waste during the Site Investigation. This waste, however, is not a characteristic hazardous waste, although some lead can leach from it at low concentrations.

The results of the Site Investigation suggest that waste at the South Niagara Street Quarry Site has impacted sediment adjacent to the site. Since surface water in this ditch is intermittent, and the ditch does not harbor an aquatic environment, the presence of contaminated sediment adjacent to the South Niagara Street Quarry Site does not appear to represent a major environmental concern. The presence of exposed ash along the embankment, however, may pose a slight public health risk.

The analytical results obtained during the Site Investigation suggest that consequential amounts of hazardous wastes are not present at the South Niagara Street Quarry Site. As a result, it is recommended that this site not be listed in the NYSDEC Registry of Inactive Hazardous Waste Disposal Sites in New York State. It is further recommended, based upon the number of exceedances of the NYSDEC residential soil cleanup objectives, that the property continue to be utilized for commercial purposes.

8.0 REFERENCES

Brett, C.E., Tepper, D.H., Goodman, W.M., LoDuca, S.T., and Eckert, B.Y, 1995, Revised Stratigraphy and Correlations of the Niagaran Provincial Series (Medina, Clinton, and Lockport Groups) in the Type Area of Western New York: U.S. Geological Survey Bulletin 2086, 66p.

Buehler, E.J., and Tesmer, I.H., 1963, Geology of Erie County, New York: Buffalo Society of Natural Sciences Bulletin, v. 21, no. 3, 118p.

Calkins, P.E., and Brett, C.E., 1978, Ancestral Niagara River Drainage: Stratigraphic and Paleontologic Setting: Geological Society of America Bulletin, v. 89, p. 1140-1154.

Earth Dimensions, 1980, Soils Report, Guterl Special Steel, Lockport, N.Y.: Earth Dimensions, Inc., East Aurora, New York.

Ecology and Environment, 1991, Engineering Investigations at Inactive Hazardous Waste Sites in the State of New York, Preliminary Site Assessment, Diamond Shamrock Site, Site Number 932071, Town of Lockport, Niagara County: Ecology and Environment Engineering, P.C., Lancaster, New York.

EHC, 1989, Environmental Site assessment, Former Niagara Materials Site, NYSDEC Inactive Hazardous Waste Disposal Site No. 932073, Frontier Stone, Lockport, New York: Environmental Hydrogeology Corporation, Clifton Park, New York.

Golder, 1989, Hydrogeologic Investigation, Pendleton Quarry Lake, Pendleton, New York: Golder Associates, Mississauga, Ontario, Canada.

Gross, M.R., and Engelder, T., 1991, a Case for Neotectonic Joints along the Niagara Escarpment: Tectonics, v. 10, no. 3, p 631-641.

GZA, 1981, Hydrogeologic Studies at the Niagara County Landfill: Goldberg-Zoino Associates of New York, Buffalo, New York.

GZA, 1987, Hydrogeologic Studies at the NCRDD Sanitary Landfill, Lockport, New York: Goldberg-Zoino Associates of New York, Buffalo, New York.

Hough, J., 1958, Geology of the Great Lakes: Illinois University Press, Urbana, Illinois, 313p.

Johnson, R.H., 1964, Ground Water in the Niagara Falls Area, New York: State of New York Water Resources Commission Bulletin GW 53, 93p.

La Sala, A.M., Jr., 1968, Ground-Water Resources of the Erie-Niagara Basin, New York: Water Resources Commission, Basin Planning Report ENB-3, New York State Conservation Department, Albany, New York, 114p.

Miller, T.S., and Kappel, W.M., 1987, Effect of Niagara Power Plant Project on Ground-Water Flow in the Upper Part of the Lockport Dolomite, Niagara Falls Area, New York: U.S. Geological Survey Water-Resources Investigation Report 86-4130, 31p.

NYSDEC, 1995, Determination of Soil Cleanup Objectives and Cleanup Levels: New York State Department of Environmental Conservation, Division of Environmental Remediation Technical and Administrative Guidance Memorandum # HWR-95-4046, Albany, New York.

NYSDEC, 1995, Identification and Listing of Hazardous Wastes, New York State Codes, Rules and Regulations Title 6, Part 371: New York State Department of Environmental Conservation, Division of Hazardous Substances Regulation, Albany, New York.

NYSDEC, 1997, Immediate Investigative Work Assignment, Vanadium Corporation of America Site, Town of Niagara, Niagara County, Site Number 9-32-001: New York State Department of Environmental Conservation, Division of Environmental Remediation, Buffalo, New York.

NYSDEC, 1997, Eighteenmile Creek Remedial Action Plan: New York State Department of Environmental Conservation, Division of Water, Albany, New York.

NYSDEC, 1998, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations: New York State Department of Environmental Conservation, Division of Water Technical and Operational Guidance Series (1.1.1), Albany, New York.

NYSDEC, 1999, Technical Guidance for Screening Contaminated Sediments: New York State Department of Environmental Conservation, Division of Fish, Wildlife and Marine Resources, Albany, New York.

NYSDEC, 2006, 6 NYCRR Part 375: Environmental Remediation Programs, Restricted Residential Soil Cleanup Objectives: New York State Department of Environmental Conservation, Division of Environmental Remediation, Albany, New York.

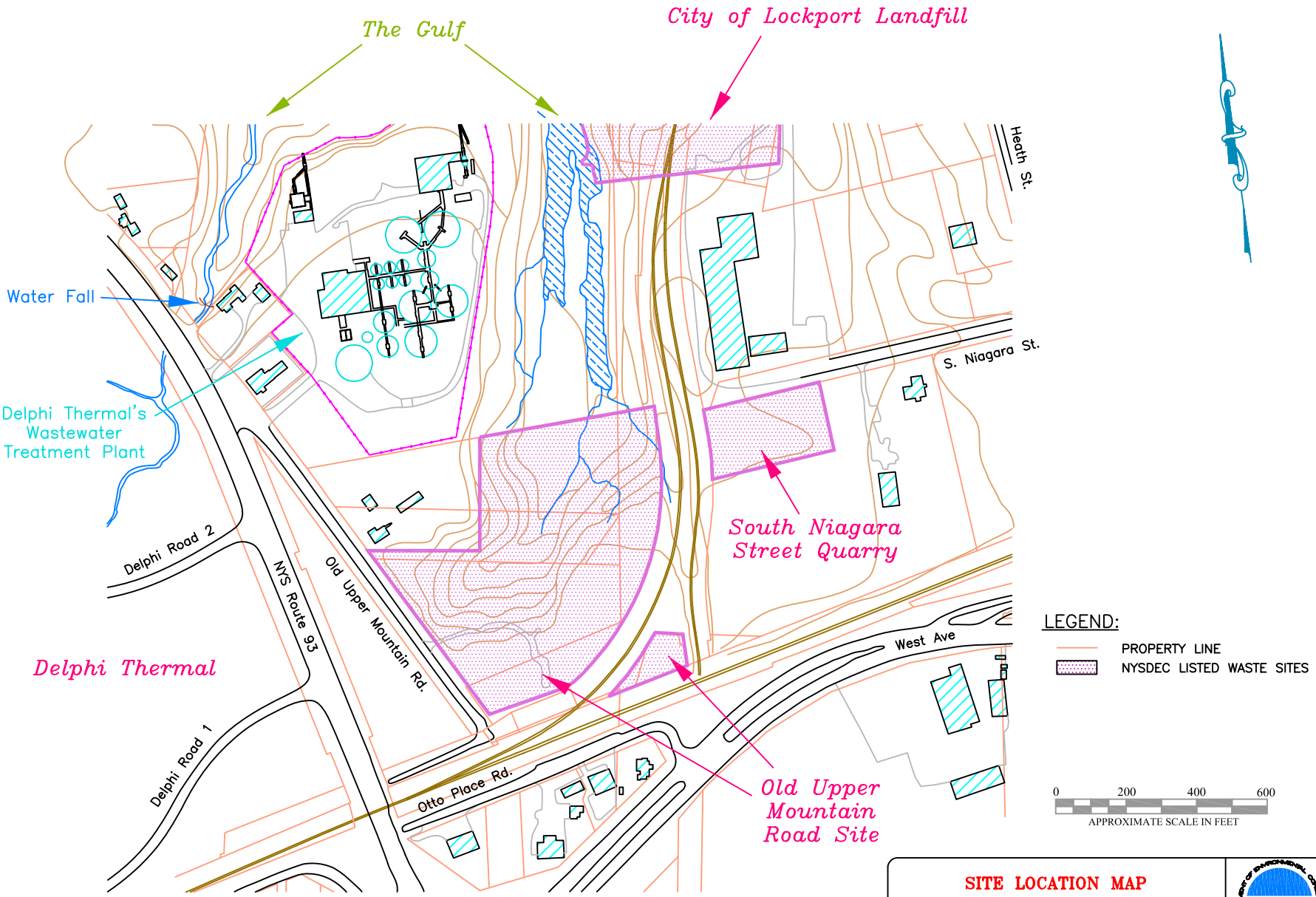
Smith, A., 1990, Glacial Stratigraphy of Niagara County, New York: Master's Thesis, State University of New York at Buffalo, 159p.

Snyder Engineering, 1987, Support Documentation for an Application to Construct and Operate Cell Number Three at the SKW Alloys, Inc. Witmer Road Solid Waste Management Facility: Snyder Engineering, Grand Island, New York.

Woodward-Clyde Consultants and Conestoga Rovers and Associates, 1992, Niagara Falls Regional Ground-Water Assessment: Conestoga Rovers and Associates, Niagara Falls, New York, 126 p. plus appendices.

Yager, R.M., and Kappel, W.M., 1987, Characterization of Fractures in the Lockport Dolomite, Niagara County, New York, in Khanbilvardi, R.M., and Fillos, J., (eds.), Pollution, Risk Assessment and Remediation in Groundwater Systems: Washington, D.C., Scientific Publications Co., p. 149-195.

FIGURES

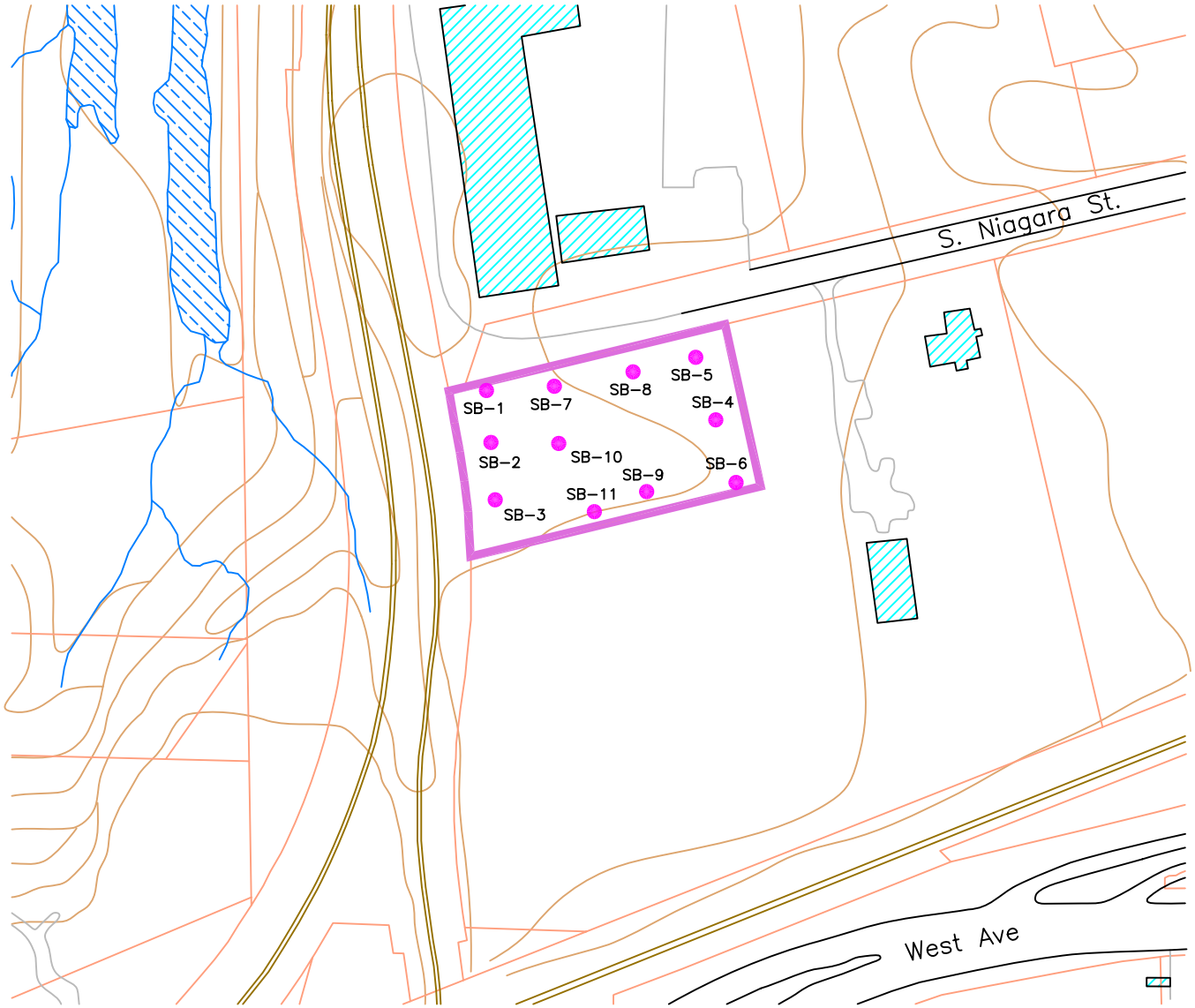


SITE LOCATION MAP

DIVISION OF ENVIRONMENTAL REMEDIATION

DATE: 04/03/07 DRAWING: Upper Mtn Road.dwg

PROJECT: SOUTH NIAGARA ST. QUARRY FIGURE 1-1



LEGEND:

● SOIL BORING

0 100 200 300

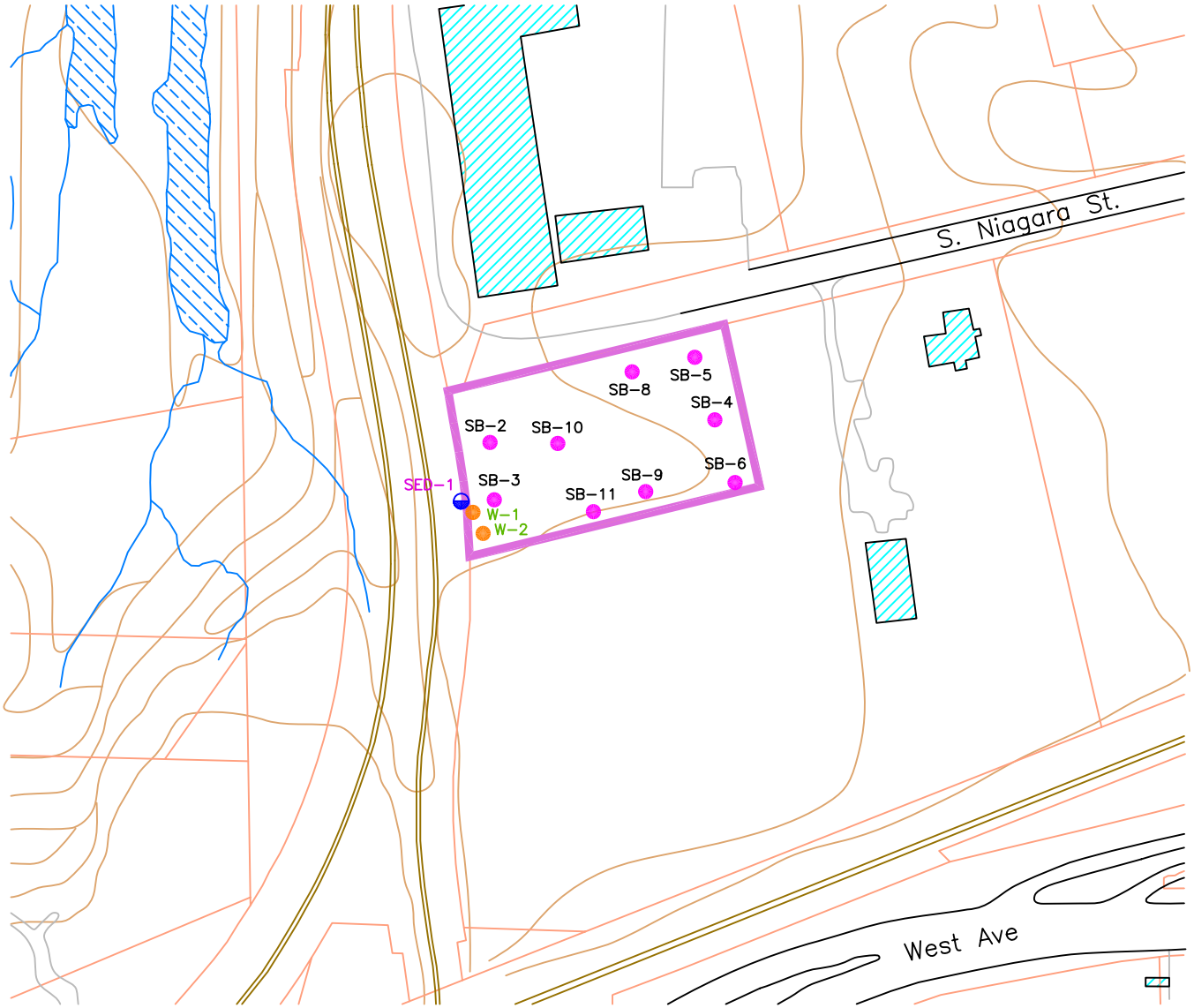
APPROXIMATE SCALE IN FEET

SOIL BORING LOCATION MAP

DIVISION OF ENVIRONMENTAL REMEDIATION

DATE: 04/03/07 DRAWING: S Niagara St Quarry.dwg

PROJECT: SOUTH NIAGARA ST. QUARRY FIGURE 4–1



0 100 200 300

APPROXIMATE SCALE IN FEET

LEGEND:

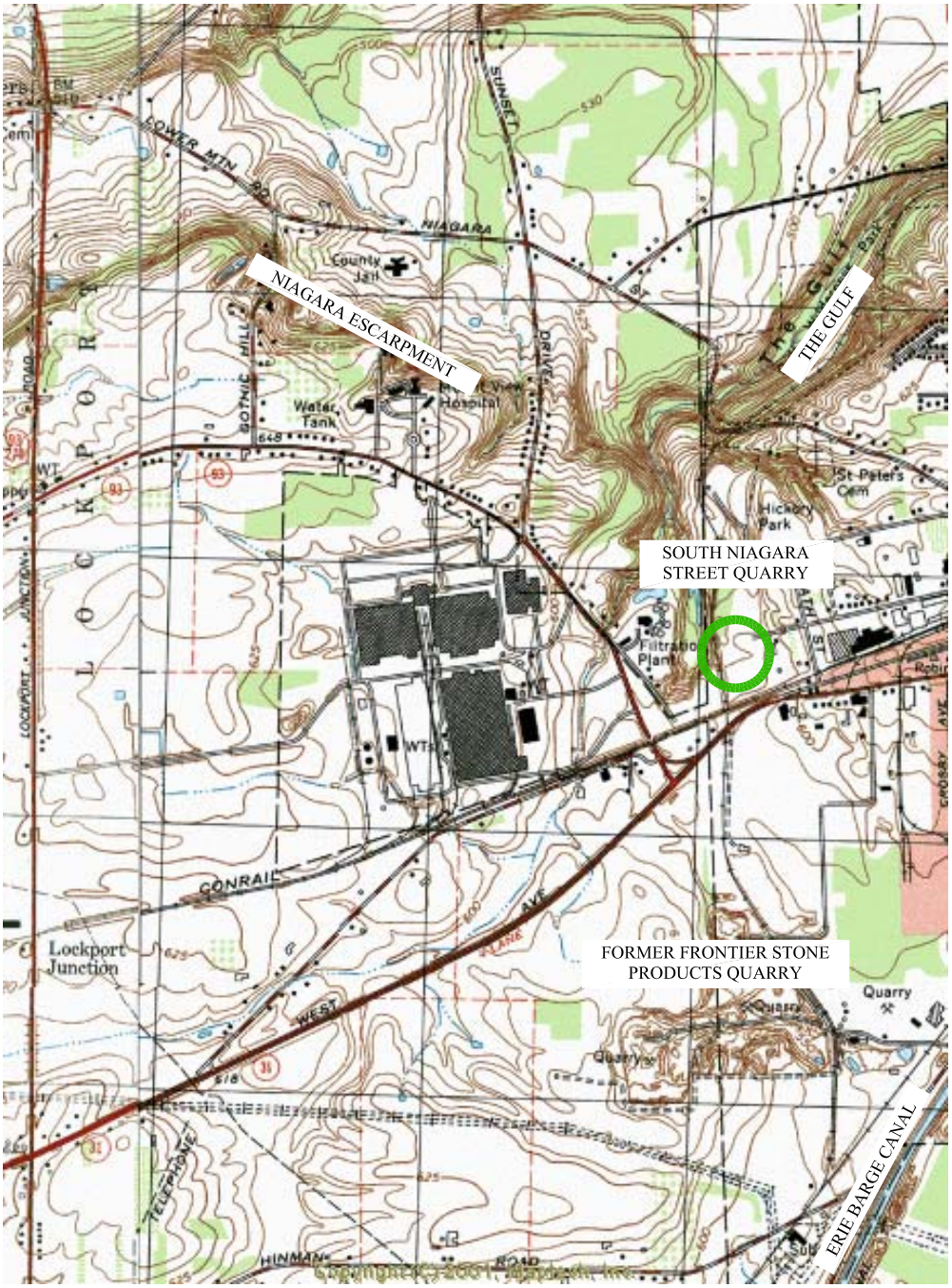
- WASTE SAMPLE FROM EMBANKMENT
- WASTE SAMPLE FROM SOIL BORING
- SEDIMENT SAMPLE

SAMPLE LOCATION MAP

DIVISION OF ENVIRONMENTAL REMEDIATION

DATE: 04/03/07 DRAWING: S Niagara St Quarry.dwg

PROJECT: SOUTH NIAGARA ST. QUARRY FIGURE 4–2



Cambria & Lockport Quadrangles

Scale Depends on Final Plotted Size

LOCKPORT AREA MAP

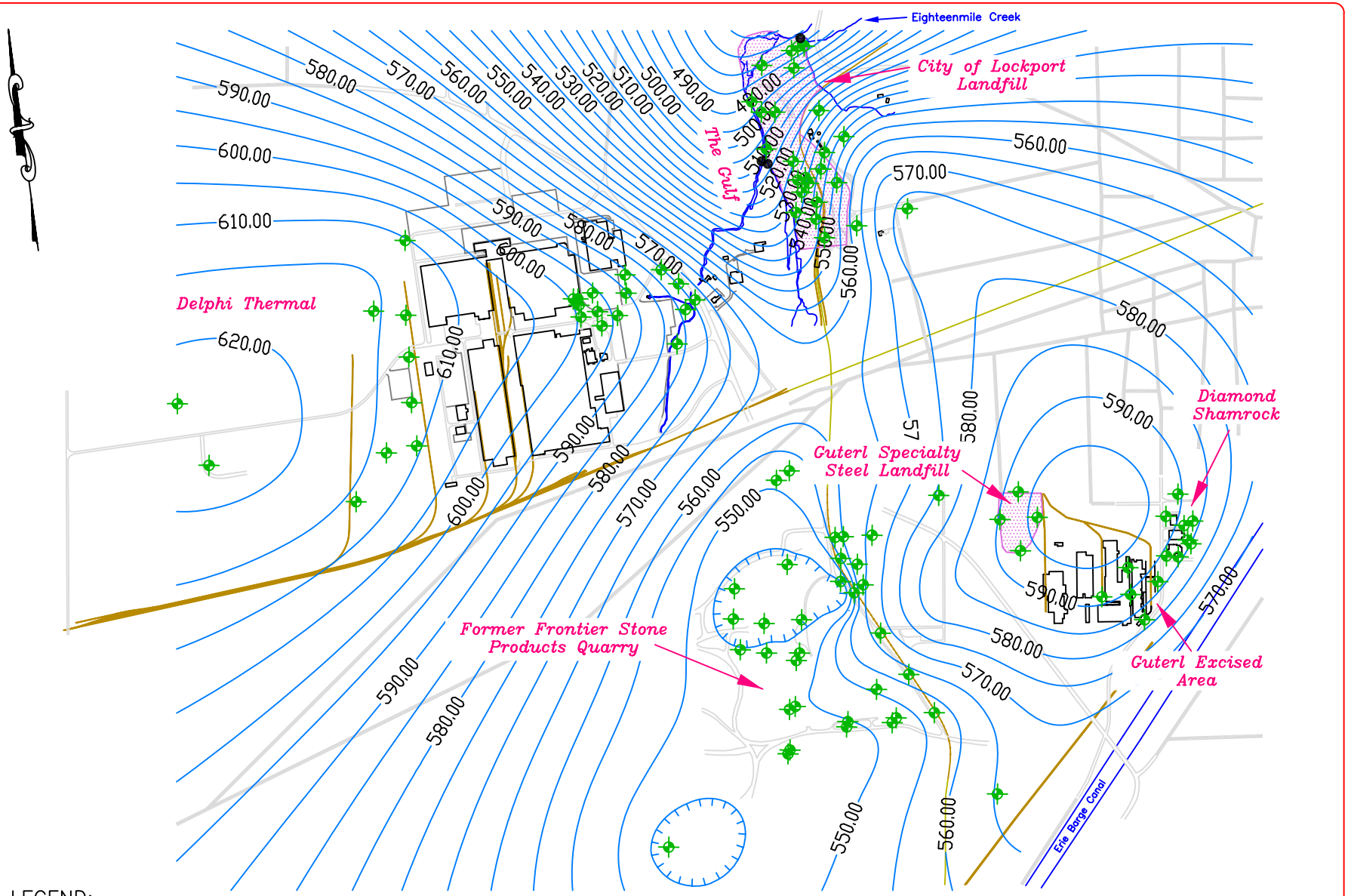
DIVISION OF ENVIRONMENTAL REMEDIATION

DATE: 10/15/07

DRAWING: Lockport Area Map.dwg

SITE: SOUTH NIAGARA STREET QUARRY SITE

FIGURE 5-1



REGIONAL GROUNDWATER FLOW CONTOUR MAP

DIVISION OF ENVIRONMENTAL REMEDIATION

DATE: 10/15/07 DRAWING: GW Flow Map.dwg

PROJECT: SOUTH NIAGARA ST. QUARRY FIGURE 5-2

Figure 6-1. Photograph of the asphalt millings across the western portion of the South Niagara Street Quarry Site. View looking southwest. Photograph taken by Glenn May on October 1, 2007.

Figure 6-2. Photograph of the asphalt millings across the northern portion of the South Niagara Street Quarry Site. View looking east. Photograph taken by Glenn May on October 1, 2007.

Figure 6-3. Photograph of the asphalt millings pile across the central portion of the South Niagara Street Quarry Site. View looking south. Photograph taken by Glenn May on October 1, 2007.

Figure 6-4. Photograph of the vegetation across the eastern portion of the South Niagara Street Quarry Site. View looking south. Photograph taken by Glenn May on October 1, 2007.

Figure 6-5. Photograph of the vegetation across the southern portion of the South Niagara Street Quarry Site. View looking west. Photograph taken by Glenn May on October 1, 2007.

TABLES

Table 4-1.
Summary Key for Samples Collected During the Site Investigation of the South Niagara Street Quarry Site.

Lab ID	Sample ID	Date Sampled	Time Sampled	Interval Sampled*	Analytical Parameters	Comments	Table Reference
Waste Samples							
WS-1	WS-1	06/14/07	1120	0.0' - 0.17'	SVOCs, PCBs, Pesticides, Metals	Ash sample collected from the western embankment	Table 6-1
WS-2	WS-2	06/14/07	1155	0.0' - 0.17'	SVOCs, PCBs, Pesticides, Metals	Ash sample collected from the western embankment	Table 6-1
SB-2	SB-2	09/28/07	1435	4.0' - 8.7'	SVOCs, PCBs, Pesticides, Metals	Ash sample from boring SB-2	Table 6-1
SB-3	SB-3	09/28/07	1500	4.0' - 8.8'	SVOCs, PCBs, Pesticides, Metals	Ash sample from boring SB-3	Table 6-1
SB-4A	SB-4A	10/01/07	0950	4.0' - 10.3'	SVOCs, PCBs, Pesticides, Metals	Ash sample from boring SB-4	Table 6-1
SB-4B	SB-4B	10/01/07	0950	8.0' - 10.3'	VOCs	Ash sample from boring SB-4	Table 6-1
SB-5	SB-5	10/01/07	0920	1.3' - 8.0'	SVOCs, PCBs, Pesticides, Metals, TCLP lead	Ash sample from boring SB-5	Table 6-1 & Table 6-2
SB-6	SB-6	10/01/07	1015	4.0' - 9.0'	SVOCs, PCBs, Pesticides, Metals, TCLP lead	Ash sample from boring SB-6	Table 6-1 & Table 6-2
SB-8	SB-8	10/01/07	0850	0.0' - 3.6'	Metals	Ash sample from boring SB-8	Table 6-1
SB-9	SB-9	10/01/07	1045	4.0' - 8.9'	SVOCs, PCBs, Pesticides, Metals, TCLP lead	Ash sample from boring SB-9	Table 6-1 & Table 6-2
SB-10	SB-10	10/01/07	0840	4.0' - 8.6'	Metals	Ash sample from boring SB-10	Table 6-1
SB-11A	SB-11A	10/01/07	1110	4.0' - 8.0'	Metals	Ash sample from boring SB-11	Table 6-1
SB-11B	SB-11B	10/01/07	1120	8.0' - 11.7'	VOCs	Black organic matter from boring SB-11	Table 6-1
Sediment Samples							
SED-1	SED-1	06/14/07	1125	0.0' - 0.33'	SVOCs, PCBs, Pesticides, Metals	Sediment collected from ditch at base of embankment	Table 6-3

Table 5-1.
Stratigraphic Sequence of the Western New York Area.
Compiled from Buehler and Tesmer (1963) and Brett et al. (1995).

Epoch	Group	Formation	Member
Middle Devonian	Hamilton	Moscow Shale	Windom Shale Kashong Shale
		Ludlowville Formation	Tichenor Limestone Wanakah Shale Ledyard Shale Centerfield Limestone
		Skaneateles Formation	Levanna Shale Stafford Limestone
		Marcellus Shale	Oatka Creek Shale
		Onondaga Limestone	Seneca Limestone Morehouse Limestone Nedrow Limestone Clarence Limestone Edgecliff Limestone
Late Silurian	Salina	Akron Dolostone	
		Bertie Dolostone	Williamsville Dolostone Scajaquada Dolostone Falkirk Dolostone Oatka Dolostone
		Camillus Shale Syracuse Formation Vernon Shale	
Middle Silurian	Lockport	Guelph Dolostone Eramosa Dolostone	
		Goat Island Dolostone	Vinemount Dolostone Ancaster Dolostone Niagara Falls Dolostone
		Gasport Limestone	Pekin Dolostone Gothic Hill Limestone
	Clinton	Decew Dolostone	
		Rochester Shale	Burleigh Hill Shale Lewiston Shale
		Irondequoit Limestone Rockway Dolostone Williamson Shale Merritton Limestone	
		Reynales Limestone	Hickory Corners Limestone
		Neahga Shale	
Early Silurian	Medina	Kodak Sandstone Cambria Shale Thorold Sandstone Grimsby Formation Devils Hole Shale Power Glen Shale Whirlpool Sandstone	
Late Ordovician	Richmond	Queenston Shale Oswego Sandstone	

Table 5-2.
Stratigraphic Summary of Borings Completed During the Site Investigation of the South Niagara Street Quarry Site.
All Depths and Elevations are Measured in Feet.

Boring Number	Ground Surface Elevation	Clean Fill			Waste			Native Silty Clay			Bedrock	
		Depth	Surface Elevation	Thickness	Depth	Surface Elevation	Thickness	Depth	Surface Elevation	Thickness	Depth	Surface Elevation
SB-1	580.0	0.0	580.0	1.6				1.6	578.4	8.4	10.0	570.0
SB-2	585.0	0.0	585.0	3.1	3.1	581.9	5.6	8.7	576.3	2.6	11.3	573.7
SB-3	585.0	0.0	585.0	0.8	0.8	584.2	> 8.0					585.0
SB-4	593.0	0.0	593.0	1.3	1.3	591.7	8.3	9.6	583.4	0.9	10.5	582.5
SB-5	588.0	0.0	588.0	1.3	1.3	586.7	8.0	9.3	578.7	1.2	10.5	577.5
SB-6	593.0	0.0	593.0	4.4	4.4	588.6	4.6	9.0	584.0	0.7	9.7	583.3
SB-7	585.0	0.0	585.0	1.7				1.7	583.4	4.6	6.2	578.8
SB-8	590.0	0.0	590.0	1.2	1.2	588.8	> 2.4					
SB-9	585.0	0.0	585.0	3.2	3.2	581.8	8.5				11.7	573.3
SB-10	585.0	0.0	585.0	4.0	4.0	581.0	4.8	8.8	576.2	1.9	10.7	574.3
SB-11	583.0	0.0	583.0	0.7	0.7	582.3	7.8	8.5	574.6	3.3	11.7	571.3

Table 6-1.
Analytical Results for Waste Samples Collected from the South Niagara Street Quarry Site.

Sample Number Date Sampled Sample Depth Sample Type	Part 375 Residential Soil Cleanup Objective *	Part 375 Commercial Soil Cleanup Objective *	WS-1 06/14/07 0.0' -0.17' Ash	WS-2 06/14/07 0.0' -0.17' Ash	SB-2 09/28/07 4.0' - 8.7' Ash	SB-3 09/28/07 4.0' - 8.8' Ash	SB-4A 10/01/07 4.0' - 10.3' Ash	SB-4B 10/01/07 8.0' - 10.3' Ash
Volatile Organic Compounds (µg/kg or ppb)								
Acetone	100,000	500,000	NA	NA	NA	NA	NA	
2-Butanone	100,000	500,000	″	″	″	″	″	
Carbon Disulfide	2,700 +	NS	″	″	″	″	″	1 J
Cyclohexane	NS	NS	″	″	″	″	″	1 J
Methylene Chloride	51,000	500,000	″	″	″	″	″	11 B
Semivolatile Organic Compounds (µg/kg or ppb)								
Acenaphthene	100,000	500,000		32 J		38 J	73 J	NA
Acenaphthylene	100,000	500,000	18 J	33 J		120 J	250 J	″
Anthracene	100,000	500,000	10 J	78 J		190 J	440 J	″
Benzo(a)anthracene	1,000	5,600	41 J	150 J		640 J	**1,500**	″
Benzo(a)pyrene	1,000	1,000	42 J	160 J		640 J	**1,400**	″
Benzo(b)fluoranthene	1,000	5,600	52 J	220.0		**1,000**	**1,800**	″
Benzo(g,h,i)perylene	100,000	500,000	38 J	100 J		640 J	970 J	″
Benzo(k)fluoranthene	1,000	56,000	16 J	71 J			510 J	″
Biphenyl	NS	NS		13 J				″
Bis(2-ethylhexyl)phthalate	50,000 +	NS	75 BJ	75 BJ	**1,200,000**			″
Carbazole	NS	NS		38 J		71 J	240 J	″
Chrysene	1,000	56,000	44 J	160 J		540 J	**1,200**	″
Dibenzo(a,h)anthracene	330.0	560.0	9 J	31 J		140 J	270 J	″

Table 6-1 (Continued).
Analytical Results for Waste Samples Collected from the South Niagara Street Quarry Site.

Sample Number Date Sampled Sample Depth Sample Type	Part 375 Residential Soil Cleanup Objective *	Part 375 Commercial Soil Cleanup Objective *	WS-1 06/14/07 0.0' -0.17' Ash	WS-2 06/14/07 0.0' -0.17' Ash	SB-2 09/28/07 4.0' - 8.7' Ash	SB-3 09/28/07 4.0' - 8.8' Ash	SB-4A 10/01/07 4.0' - 10.3' Ash	SB-4B 10/01/07 8.0' - 10.3' Ash
Semivolatile Organic Compounds (Continued)								
Dibenzofuran	14,000	350,000		21 J		34 J	86 J	NA
Di-n-butylphthalate	8,100 +	NS						″
Fluoranthene	100,000	500,000	80 J	390.0		1,100	3,600	″
Fluorene	100,000	500,000		29 J		75 J		″
Indeno(1,2,3-cd)pyrene	500.0	5,600	37 J	88 J		450 J	**920 J**	″
2-Methylnaphthalene	36,400 +	NS		13 J			50 J	″
N-nitrosodiphenylamine	NS	NS		44 J				″
Naphthalene	100,000	500,000				35 J	62 J	″
Phenanthrene	100,000	500,000	52 J	300.0		550 J	2,200	″
Pyrene	100,000	500,000	64 J	260.0		930.0	2,500	″
Pesticides (µg/kg or ppb)								
4,4-DDD	2,600	92,000	0.40 J	5.4 J		7.5 J	7.6 J	NA
4,4-DDE	1,800	62,000	1.2 J	20.0		5.8 J		″
4,4'-DDT	1,700	47,000	3.5	59.0	22.0	12.0	8.2 J	″
delta-BHC	100,000	500,000	0.52 J					″
Dieldrin	39.0	1,400				4.8 J		″
Endosulfan I	4,800	200,000			2.7 J			″
Endosulfan II	4,800	200,000			7.5 J			″
Endrin	2,200	89,000	0.88 J					″

Table 6-1 (Continued).
Analytical Results for Waste Samples Collected from the South Niagara Street Quarry Site.

Sample Number Date Sampled Sample Depth Sample Type	Part 375 Residential Soil Cleanup Objective *	Part 375 Commercial Soil Cleanup Objective *	WS-1 06/14/07 0.0' -0.17' Ash	WS-2 06/14/07 0.0' -0.17' Ash	SB-2 09/28/07 4.0' - 8.7' Ash	SB-3 09/28/07 4.0' - 8.8' Ash	SB-4A 10/01/07 4.0' - 10.3' Ash	SB-4B 10/01/07 8.0' - 10.3' Ash
Pesticides (Continued)								
gamma-Chlordane	540.0 +	NS		4.0 J				NA
Heptachlor Epoxide	20.0 +	NS				6.6 J		″
PCBs (µg/kg or ppb)								
Aroclor-1254	-----	-----			130.0			NA
Aroclor-1260	-----	-----		7.6 J		74.0		″
Total PCBs	1,000	1,000		7.6 J	130.0	74.0		″
Inorganic Compounds (mg/kg or ppm)								
Aluminum	SB (11,670)	NS	6,510	6,030	7,250	**13,300**	5,020	NA
Antimony	SB (1.8)	NS						″
Arsenic	16.0	16.0	9.1	8.8	12.9	6.3	9.6	″
Barium	350.0	400.0	142.0	236.0	**374.0**	**574.0**	154.0	″
Beryllium	14.0	590.0	0.56	0.52	0.72	1.1	0.42	″
Cadmium	2.5	9.3	0.45	0.37	2.4	0.90	0.69	″
Chromium	36.0	1,500	13.4	16.1	25.9	20.8	13.2	″
Cobalt	30.0 +	NS	8.5	8.5	12.3	4.4	8.7	″
Copper	270.0	270.0	72.6	76.5	**271.0**	158.0	165.0	″
Iron	SB (17,300)	NS	**18,700**	**37,100**	**39,000**	17,000	**39,200**	″
Lead	400.0	1,000	136.0	179.0	**428.0**	237.0	215.0	″
Manganese	2,000	10,000	489.0	505.0	377.0	318.0	580.0	″

Table 6-1 (Continued).
Analytical Results for Waste Samples Collected from the South Niagara Street Quarry Site.

Sample Number Date Sampled Sample Depth Sample Type	Part 375 Residential Soil Cleanup Objective *	Part 375 Commercial Soil Cleanup Objective *	WS-1 06/14/07 0.0' -0.17' Ash	WS-2 06/14/07 0.0' -0.17' Ash	SB-2 09/28/07 4.0' - 8.7' Ash	SB-3 09/28/07 4.0' - 8.8' Ash	SB-4A 10/01/07 4.0' - 10.3' Ash	SB-4B 10/01/07 8.0' - 10.3' Ash
Inorganic Compounds (Continued)								
Mercury	0.81	2.8	0.057	0.284	**3.9**	0.170	**17.7**	NA
Nickel	140.0	310.0	31.6	52.0	76.8	19.3	20.6	″
Selenium	36.0	1,500						″
Silver	36.0	1,500	0.75		0.91			″
Thallium	SB (2.6)	NS						″
Vanadium	150.0 +	NS	23.1	16.5	33.1	26.0	17.3	″
Zinc	2,200	10,000	190.0	259.0	1,870	729.0	327.0	″

Table 6-1 (Continued).
Analytical Results for Waste Samples Collected from the South Niagara Street Quarry Site.

Sample Number Date Sampled Sample Depth Sample Type	Part 375 Residential Soil Cleanup Objective *	Part 375 Commercial Soil Cleanup Objective *	SB-5 10/01/07 1.3' - 8.0' Ash	SB-6 10/01/07 4.0' - 9.0' Ash	SB-8 10/01/07 0.0' - 3.6' Ash	SB-9 10/01/07 4.0' - 8.9' Ash	SB-10 10/01/07 4.0' - 8.6' Ash	SB-11 10/01/07 4.0' - 11.7' Ash
Volatile Organic Compounds (µg/kg or ppb)								
Acetone	100,000	500,000	NA	NA	NA	NA	NA	38 J
2-Butanone	100,000	500,000	″	″	″	″	″	10 J
Carbon Disulfide	2,700 +	NS	″	″	″	″	″	5 J
Cyclohexane	NS	NS	″	″	″	″	″	
Methylene Chloride	51,000	500,000	″	″	″	″	″	16 B
Semivolatile Organic Compounds (µg/kg or ppb)								
Acenaphthene	100,000	500,000			NA	110 J	NA	NA
Acenaphthylene	100,000	500,000	100 J		″	320 J	″	″
Anthracene	100,000	500,000	80 J	53 J	″	660 J	″	″
Benzo(a)anthracene	1,000	5,600	360 J	210 J	″	**2,100**	″	″
Benzo(a)pyrene	1,000	1,000	310 J	180 J	″	**1,900**	″	″
Benzo(b)fluoranthene	1,000	5,600	390 J	240 J	″	**3,400**	″	″
Benzo(g,h,i)perylene	100,000	500,000		140 J	″	1,200	″	″
Benzo(k)fluoranthene	1,000	56,000	120 J	78 J	″		″	″
Biphenyl	NS	NS			″		″	″
Bis(2-ethylhexyl)phthalate	50,000 +	NS		440 J	″		″	″
Carbazole	NS	NS			″	150 J	″	″
Chrysene	1,000	56,000	310 J	160 J	″	**2,000**	″	″
Dibenzo(a,h)anthracene	330.0	560.0	84 J	47 J	″	**370 J**	″	″

Table 6-1 (Continued).
Analytical Results for Waste Samples Collected from the South Niagara Street Quarry Site.

Sample Number Date Sampled Sample Depth Sample Type	Part 375 Residential Soil Cleanup Objective *	Part 375 Commercial Soil Cleanup Objective *	SB-5 10/01/07 1.3' - 8.0' Ash	SB-6 10/01/07 4.0' - 9.0' Ash	SB-8 10/01/07 0.0' - 3.6' Ash	SB-9 10/01/07 4.0' - 8.9' Ash	SB-10 10/01/07 4.0' - 8.6' Ash	SB-11 10/01/07 4.0' - 11.7' Ash
Semivolatile Organic Compounds (Continued)								
Dibenzofuran	14,000	350,000			NA	79 J	NA	NA
Di-n-butylphthalate	8,100 +	NS			″	400 J	″	″
Fluoranthene	100,000	500,000	730 J	410 J	″	4,000	″	″
Fluorene	100,000	500,000			″	180 J	″	″
Indeno(1,2,3-cd)pyrene	500.0	5,600	190 J	140 J	″	**1,200**	″	″
2-Methylnaphthalene	36,400 +	NS			″		″	″
N-nitrosodiphenylamine	NS	NS			″		″	″
Naphthalene	100,000	500,000			″	79 J	″	″
Phenanthrene	100,000	500,000	460 J	290 J	″	1,700	″	″
Pyrene	100,000	500,000	530 J	330 J	″	3,100	″	″
Pesticides (µg/kg or ppb)								
4,4-DDD	2,600	92,000	9.4 J	7.2 J	NA	11.0	NA	NA
4,4-DDE	1,800	62,000	6.2 J	6.5 J	″	7.2 J	″	″
4,4'-DDT	1,700	47,000	14.0	7.6 J	″	11.0	″	″
delta-BHC	100,000	500,000			″		″	″
Dieldrin	39.0	1,400			″	6.6 J	″	″
Endosulfan I	4,800	200,000			″		″	″
Endosulfan II	4,800	200,000			″		″	″
Endrin	2,200	89,000			″		″	″

Table 6-1 (Continued).
Analytical Results for Waste Samples Collected from the South Niagara Street Quarry Site.

Sample Number Date Sampled Sample Depth Sample Type	Part 375 Residential Soil Cleanup Objective *	Part 375 Commercial Soil Cleanup Objective *	SB-5 10/01/07 1.3' - 8.0' Ash	SB-6 10/01/07 4.0' - 9.0' Ash	SB-8 10/01/07 0.0' - 3.6' Ash	SB-9 10/01/07 4.0' - 8.9' Ash	SB-10 10/01/07 4.0' - 8.6' Ash	SB-11 10/01/07 4.0' - 11.7' Ash
Pesticides (Continued)								
gamma-Chlordane	540.0 +	NS			NA		NA	NA
Heptachlor Epoxide	20.0 +	NS			″	5.7 J	″	″
PCBs (µg/kg or ppb)								
Aroclor-1254	-----	-----			NA		NA	NA
Aroclor-1260	-----	-----	6.5 J	12 J	″		″	″
Total PCBs	1,000	1,000	6.5 J	12 J	″		″	″
Inorganic Compounds (mg/kg or ppm)								
Aluminum	SB (11,670)	NS	8,890	10,000	7,970	4,760	8,160	8,170
Antimony	SB (1.8)	NS						
Arsenic	16.0	16.0	9.6	15.0	7.1	**17.1**	12.3	**27.9**
Barium	350.0	400.0	**636.0**	**934.0**	120.0	**662.0**	**465.0**	**410.0**
Beryllium	14.0	590.0	0.50	0.61	0.59	0.41	0.43	0.53
Cadmium	2.5	9.3	1.9	**3.0**		**5.3**	**5.7**	**26.5**
Chromium	36.0	1,500	21.4	**64.4**	8.1	25.4	**104.0**	27.5
Cobalt	30.0 +	NS	7.6	16.3	3.0	6.5	17.4	11.6
Copper	270.0	270.0	**306.0**	**1,830**	37.2	246.0	**1,550**	252.0
Iron	SB (17,300)	NS	**24,000**	**96,200**	7,950	**49,200**	**125,000**	**62,400**
Lead	400.0	1,000	**6,270 (604.0) (975.0)**	**1,180 (956.0)**	308.0	**8,740 (2,150) (1,750)**	**787.0**	**890.0**
Manganese	2,000	10,000	300.0	919.0	244.0	959.0	916.0	420.0

Table 6-1 (Continued).
Analytical Results for Waste Samples Collected from the South Niagara Street Quarry Site.

Sample Number Date Sampled Sample Depth Sample Type	Part 375 Residential Soil Cleanup Objective *	Part 375 Commercial Soil Cleanup Objective *	SB-5 10/01/07 1.3' - 8.0' Ash	SB-6 10/01/07 4.0' - 9.0' Ash	SB-8 10/01/07 0.0' - 3.6' Ash	SB-9 10/01/07 4.0' - 8.9' Ash	SB-10 10/01/07 4.0' - 8.6' Ash	SB-11 10/01/07 4.0' - 11.7' Ash
Inorganic Compounds (Continued)								
Mercury	0.81	2.8	0.226	0.310	0.071	**3.5**	0.880	0.511
Nickel	140.0	310.0	34.0	69.3	7.0	28.8	**174.0**	76.7
Selenium	36.0	1,500						
Silver	36.0	1,500	1.8	4.9		1.7	5.0	0.84
Thallium	SB (2.6)	NS						
Vanadium	150.0 +	NS	30.9	31.5	11.3	17.9	14.7	40.5
Zinc	2,200	10,000	913.0	1,590	136.0	**2,500**	1,390	1,400

***** **6 NYCRR Part 375: Environmental Remediation Programs, Restricted Use Soil Cleanup Objectives, NYSDEC, 2006.**
+ **NYSDEC Technical and Guidance Memorandum (TAGM) 4046: Determination of Soil Cleanup Objectives and Cleanup Levels, 1995.**
B **Analyte detected in the associated blank, as well as in the sample (organics).**
J **Compound reported at an estimated concentration below the sample quantitation limit.**
NA **Not analyzed.**
NS **No standard or guidance value available.**
SB **Site background concentration as determined during the Site Investigation of the Former Flintkote Plant Site (TVGA, 2005).**
( ) **Results of a duplicate analysis.**
Blanks indicate that the sample was analyzed for the associated compound but it was not detected.
Shaded values equal or exceed the Part 375 residential or TAGM 4046 soil cleanup objectives.
Hachured values equal or exceed both the Part 375 residential and commercial soil cleanup objectives.

Table 6-2.
TCLP Results for Samples Collected from the South Niagara Street Quarry Site.

Sample Number Date Sampled Sample Depth Sample Type	Regulatory Level *	SB-5 10/01/07 1.3' - 8.0' Ash	SB-6 10/01/07 4.0' - 9.0' Ash	SB-9 10/01/07 4.0' - 8.9' Ash
Inorganic Compounds (mg/L or ppm)				
Arsenic	5.0	NA	NA	NA
Barium	100.0	″	″	″
Cadmium	1.0	″	″	″
Chromium	5.0	″	″	″
Lead	5.0	1.1 (1.5)	0.77	1.6 (1.9)
Mercury	0.2	NA	NA	NA
Selenium	1.0	″	″	″
Silver	5.0	″	″	″

***** **6 NYCRR Part 371: Identification and Listing of Hazardous Wastes, NYSDEC, 1995.**
NA **Not analyzed.**
( ) **Results of a duplicate analysis.**
Exceedances are shaded.

Table 6-3.
Analytical Results for Sediment Samples Collected from the South Niagara Street Quarry Site.

Sample Number **Date Sampled** **Sample Depth** **Sample Type**	**NYSDEC Sediment Criteria ***	**SED-1** **06/14/07** **0.0' - 0.33'** **Sediment**	
Semivolatile Organic Compounds (µg/kg or ppb)			
Acenaphthene	4,396	23 J	
Acenaphthylene	NS	110 J	
Anthracene	3,363	180 J	
Benzo(a)pyrene	41.3 ●	**540 J**	
Benzo(a)anthracene	383.8	**470 J**	
Benzo(b)fluoranthene	41.3 ●	**720.0**	
Benzo(g,h,i)perylene	NS	280 J	
Benzo(k)fluoranthene	41.3 ●	**300 J**	
Bis(2-ethylhexyl)phthalate	3,759	280 BJ	
Carbazole	NS	120 J	
Chrysene	41.3 ●	**600.0**	
Dibenzo(a,h)anthracene	NS	100 J	
Fluoranthene	32,028	1,400	
Fluorene	256.6	44 J	
Indeno(1,2,3-cd)pyrene	41.3 ●	**280 J**	
Phenanthrene	3,768	460 J	
Pyrene	30,178	930.0	
Pesticides (µg/kg or ppb)			
4,4-DDD	0.3 ●	**2.5 J**	
4,4-DDE	0.3 ●	**2.4 J**	
4,4'-DDT	31.4	6.3	
Aldrin	3.1 ●	1.4 J	
gamma-Chlordane	0.8	**2.4 J**	
Inorganic Compounds (mg/kg or ppm)			
Aluminum	SB (11,670) ++	2,860	
Antimony	2.0		
Arsenic	6.0	**19.2**	

Table 6-3 (Continued).
Analytical Results for Sediment Samples Collected from the South Niagara Street Quarry Site.

Sample Number Date Sampled Sample Depth Sample Type	NYSDEC Sediment Criteria *	SED-1 06/11/07 0.0' - 0.17' Sediment	SED-2 06/13/07 0.0' - 0.17' Sediment
Inorganic Compounds (Continued)			
Barium	433 **	262.0	
Beryllium	10 **		
Cadmium	0.6	**3.0**	
Chromium	26.0	9.3	
Cobalt	30.0 ++	9.6	
Copper	16.0	**145.0**	
Iron	20,000	**227,000**	
Lead	31.0	**109.0**	
Manganese	460.0	**631.0**	
Mercury	0.15	**0.331**	
Nickel	16.0	**84.4**	
Selenium	3.9 **		
Silver	1.0		
Thallium	SB (2.6) ++		
Vanadium	150.0 ++	8.6	
Zinc	120.0	**1,600**	

***** NYSDEC Technical Guidance for Screening Contaminated Sediments, January 1999. Sediment criteria calculated using a total organic carbon content of 3.14%. Sediment criteria given are for the protection of benthic aquatic life from chronic toxicity (organics) and the lowest effect level (metals) unless otherwise noted.

● Sediment criteria for the protection of human health bioaccumulation.

****** 6 NYCRR Part 375: Environmental Remediation Programs, Soil Cleanup Objectives for the Protection of Ecological Resources, NYSDEC, 2006.

++ NYSDEC Technical and Guidance Memorandum (TAGM) 4046: Determination of Soil Cleanup Objectives and Cleanup Levels, 1995.

B Analyte detected in the associated blank, as well as in the sample (organics) or the value is greater than or equal to the instrument detection limit, but less than the contract required detection limit (inorganics).

J Compound reported at an estimated concentration below the sample quantitation limit.

N Spike sample recovery or spike analysis is not within quality control limits (inorganics).

NS No standard or guidance value available.

SB Site background concentration as determined during the Site Investigation of the Former Flintkote Plant Site (TVGA, 2005).

Blanks indicate that the sample was analyzed for the associated compound but it was not detected.

Shaded values equal or exceed the NYSDEC sediment criteria, Part 375 soil cleanup objectives, or TAGM 4046 soil cleanup objectives.

APPENDICES

APPENDIX A

STRATIGRAPHIC LOGS

NYSDEC - Region 9 - Division of Environmental Remediation
Stratigraphic Log (Overburden)

Project Name:	South Niagara Street Quarry	**Hole Designation:**	SB-1
Site Number:	932111	**Date Completed:**	09/28/07
Location:	Lockport, New York	**Drilling Company:**	SJB Services, Inc.
Logged By:	Glenn M. May	**Drilling Method:**	Direct Push
Total Depth:	10.0 feet	**Sampling Method:**	Macro Core

Depth (ft bgs)	Stratigraphic Description & Remarks	Elevation (ft amsl)	Sample			
			NUMBER	COUNT	N VALUE	HNU
	Ground Surface	**580.0**				
0.0	2.8' recovery		1			0.0
	0.0'-1.6': Brown silty clay with many rock fragments. Moist.	580.0				
	1.6'-4.0': Brown silty clay with yellow mottling and some pebbles. Moist. NATIVE.	578.4				
4.0	2.8' recovery with 0.7' of fall-in		2			0.0
	4.0'-8.0': Brown silty clay with yellow mottling, plastic, higher silt content in some portions of sample, few pebbles. Very moist. NATIVE.	576.0				
8.0	1.6' recovery		3			0.0
	8.0'-8.4': Sample same as above. NATIVE.					
	8.4'-9.0': Brown silty clay with rust colored staining, many small pebbles. Moist. NATIVE.	571.6				
	9.0'-10.0': Gray brown silty clay with dolostone rock fragments, plastic. Moist. NATIVE	571.0				
	10.0': Refusal. BEDROCK.	570.0				
10.0	BOH=10.0' bgs.					

Notes: Measuring Point Elevations May Change: Refer to Current Elevation Table

Grain Size ◯ Water Found ▽ Static Level ▼

NYSDEC - Region 9 - Division of Environmental Remediation
Stratigraphic Log (Overburden)

Project Name:	South Niagara Street Quarry	**Hole Designation:**	SB-2
Site Number:	932111	**Date Completed:**	09/28/07
Location:	Lockport, New York	**Drilling Company:**	SJB Services, Inc.
Logged By:	Glenn M. May	**Drilling Method:**	Direct Push
Total Depth:	11.3 feet	**Sampling Method:**	Macro Core

Depth (ft bgs)	Stratigraphic Description & Remarks	Elevation (ft amsl)	Sample			
			NUMBER	COUNT	N VALUE	HNU
	Ground Surface	**585.0**				
0.0	3.4' recovery		1			0.0
	0.0'-0.15': Topsoil with many rootlets and a few rock fragments.	585.0				
	0.15'-0.7': Crushed stone with a trace of glass. FILL.	584.85				
	0.7'-2.4': Reddish brown clayey silt with rock fragments. Dry. FILL.	584.3				
	2.4'-3.1': Dolostone rock fragments. FILL.	582.6				
	3.1'-4.0': Whitish gray and rust colored ash. FILL.	581.9				
4.0	2.1' recovery with 0.5' of fall-in		2			0.0
	4.0'-8.0': Multi-colored, layered ash with glass, coal and rock. Moist. FILL.					
8.0	2.5' recovery		3			0.0
	8.0'-8.7': Sample same as above. FILL.					
	8.7'-11.3': Brown clayey silt with yellow mottling and dolostone rock fragments. Moist. NATIVE.	576.3				
	11.3': Refusal. BEDROCK.	573.7				
11.3	BOH=11.3' bgs.					

Notes: Measuring Point Elevations May Change: Refer to Current Elevation Table

Grain Size ◯ Water Found ▽ Static Level ▼

NYSDEC - Region 9 - Division of Environmental Remediation
Stratigraphic Log (Overburden)

Project Name:	South Niagara Street Quarry	**Hole Designation:**	SB-3
Site Number:	932111	**Date Completed:**	09/28/07
Location:	Lockport, New York	**Drilling Company:**	SJB Services, Inc.
Logged By:	Glenn M. May	**Drilling Method:**	Direct Push
Total Depth:	8.8 feet	**Sampling Method:**	Macro Core

Depth (ft bgs)	Stratigraphic Description & Remarks	Elevation (ft amsl)	Sample			
			NUMBER	COUNT	N VALUE	HNU
	Ground Surface	**585.0**				
0.0	0.9' recovery		1			0.0
	0.0'-0.8': Brown clayey silt with rocks and rootlets in the upper 0.1'. Dry.	585.0				
	0.8'-4.0': Brown and rust colored ash with coal. Dry. FILL.	584.2				
4.0	1.6' recovery		2			0.0
	4.0'-8.0': Multi-colored, layered ash with brick, glass and coal. The upper 0.4' is powdery. Dry. FILL.	581.0				
8.0	1.1' recovery with 0.3' of fall-in		3			0.0
	8.0'-8.6': Powdery, gray ash with glass, slag and paper. Dry. FILL.	577.0				
	8.6'-8.8': Rust colored, granular ash with a high clay content. Moist. FILL.	576.4				
8.8	BOH=8.8' bgs.					

Notes: Measuring Point Elevations May Change: Refer to Current Elevation Table

Grain Size ◯ Water Found ▽ Static Level ▼

NYSDEC - Region 9 - Division of Environmental Remediation
Stratigraphic Log (Overburden)

Project Name:	South Niagara Street Quarry	**Hole Designation:**	SB-4
Site Number:	932111	**Date Completed:**	10/01/07
Location:	Lockport, New York	**Drilling Company:**	SJB Services, Inc.
Logged By:	Glenn M. May	**Drilling Method:**	Direct Push
Total Depth:	10.5 feet	**Sampling Method:**	Macro Core

Depth (ft bgs)	Stratigraphic Description & Remarks	Elevation (ft amsl)	Sample			
			NUMBER	COUNT	N VALUE	HNU
	Ground Surface	**593.0**				
0.0	2.8' recovery		1			0.0
	0.0'-0.2': Topsoil with rootlets and a few rock fragments.	593.0				
	0.2'-0.6': Crushed stone. FILL.	592.8				
	0.6'-1.3': Brown clayey silt with rock fragments. Dry. FILL.	592.4				
	1.3'-4.0': Layered foundry sand, clayey silt, rock and silt containing slag. Dry. FILL.	591.7				
4.0	1.9' recovery		2			0.0
	4.0'-8.0': Multi-colored, layered ash with coal and a trace of glass and coke. Moist. FILL.	589.0				
8.0	1.8' recovery		3			1.9
	8.0'-9.6': Sample same as above. The bottom 0.5' is saturated. FILL.					
	9.6'-10.5': Light gray clayey silt with dolostone rock fragments. Saturated. NATIVE.	583.4				
	10.5': Refusal. BEDROCK.	582.5				
10.5	BOH=10.5' bgs.					

Notes: Measuring Point Elevations May Change: Refer to Current Elevation Table

Grain Size ◯ Water Found ▽ Static Level ▼

NYSDEC - Region 9 - Division of Environmental Remediation
Stratigraphic Log (Overburden)

Project Name:	South Niagara Street Quarry	**Hole Designation:**	SB-5
Site Number:	932111	**Date Completed:**	10/01/07
Location:	Lockport, New York	**Drilling Company:**	SJB Services, Inc.
Logged By:	Glenn M. May	**Drilling Method:**	Direct Push
Total Depth:	10.5 feet	**Sampling Method:**	Macro Core

Depth (ft bgs)	Stratigraphic Description & Remarks	Elevation (ft amsl)	Sample			
			NUMBER	COUNT	N VALUE	HNU
	Ground Surface	**588.0**				
0.0	2.6' recovery		1			0.0
	0.0'-1.3': Asphalt millings, rock fragments and crushed stone. Moist.	588.0				
	1.3'-4.0': Multi-colored, layered ash with glass, coal, fibrous material and ceramic. Moist. FILL.	586.7				
4.0	2.0' recovery		2			0.0
	4.0'-8.0': Sample same as above, but glass is not as prevalent. Moist. FILL.					
8.0	1.6' recovery		3			0.0
	8.0'-9.3': Sample same as above with glass and coal. The bottom 0.8' is more powdery (less granular) and saturated. FILL.					
	9.3'-10.5': Gray clayey silt with dolostone rock fragments and a trace of brown mottling. Saturated. NATIVE.	578.7				
	10.5': Refusal. BEDROCK.	577.5				
10.5	BOH=10.5' bgs.					

Notes: Measuring Point Elevations May Change: Refer to Current Elevation Table

Grain Size ◯ Water Found ▽ Static Level ▼

NYSDEC - Region 9 - Division of Environmental Remediation
Stratigraphic Log (Overburden)

Project Name:	South Niagara Street Quarry	**Hole Designation:**	SB-6
Site Number:	932111	**Date Completed:**	10/01/07
Location:	Lockport, New York	**Drilling Company:**	SJB Services, Inc.
Logged By:	Glenn M. May	**Drilling Method:**	Direct Push
Total Depth:	9.7 feet	**Sampling Method:**	Macro Core

Depth (ft bgs)	Stratigraphic Description & Remarks	Elevation (ft amsl)	Sample			
			NUMBER	COUNT	N VALUE	HNU
	Ground Surface	**593.0**				
0.0	3.4' recovery		1			NM
	0.0'-0.15': Topsoil with many rootlets and a few rock fragments.	593.0				
	0.15'-1.85': Brown to reddish brown clayey silt with a trace of glass and pebbles, mottled. Dry to moist. FILL.	592.85				
	1.85'-4.0': Crushed stone with some soil. FILL.	591.15				
4.0	1.9' recovery		2			0.0
	4.0'-4.4': Sample same as above. FILL.					
	4.4'-8.0': Multi-colored, layered ash with glass and coal. Moist. FILL.	588.6				
8.0	1.6' recovery		3			0.0
	8.0'-9.0': Sample same as above with glass, rock and rags. Moist to saturated. FILL.					
	9.0'-9.7': Brown clayey silt with dolostone rock fragments. Moist to saturated. NATIVE.	584.0				
	9.7': Refusal. BEDROCK.	583.3				
9.7	BOH=9.7' bgs.					

Notes: Measuring Point Elevations May Change: Refer to Current Elevation Table

Grain Size ◯ Water Found ▽ Static Level ▼

NYSDEC - Region 9 - Division of Environmental Remediation
Stratigraphic Log (Overburden)

Project Name:	South Niagara Street Quarry	**Hole Designation:**	SB-7
Site Number:	932111	**Date Completed:**	09/28/07
Location:	Lockport, New York	**Drilling Company:**	SJB Services, Inc.
Logged By:	Glenn M. May	**Drilling Method:**	Direct Push
Total Depth:	6.2 feet	**Sampling Method:**	Macro Core

Depth (ft bgs)	Stratigraphic Description & Remarks	Elevation (ft amsl)	Sample			
			NUMBER	COUNT	N VALUE	HNU
	Ground Surface	**585.0**				
0.0	2.8' recovery		1			0.0
	0.0'-0.9': Asphalt millings and crushed stone. Moist.	585.0				
	0.9'-1.65': Brown silty clay with glass, rock, brick and slag. Moist. FILL.	584.1				
	1.65'-4.0': Brown clayey silt with dolostone rock fragments and yellow mottling. Moist. NATIVE.	583.35				
4.0	2.6' recovery with 0.4' of fall-in		2			0.0
	4.0'-6.2': Sample same as above with dolostone rock fragments, yellow mottling, a few black blebs and some red mottling. Moist. NATIVE.					
	6.2': Refusal. BEDROCK.	578.8				
6.2	BOH=6.2' bgs.					

Notes: Measuring Point Elevations May Change: Refer to Current Elevation Table

Grain Size ◯ Water Found ▽ Static Level ▼

NYSDEC - Region 9 - Division of Environmental Remediation
Stratigraphic Log (Overburden)

Project Name:	South Niagara Street Quarry	**Hole Designation:**	SB-8
Site Number:	932111	**Date Completed:**	10/01/07
Location:	Lockport, New York	**Drilling Company:**	SJB Services, Inc.
Logged By:	Glenn M. May	**Drilling Method:**	Direct Push
Total Depth:	3.6 feet	**Sampling Method:**	Macro Core

Depth (ft bgs)	Stratigraphic Description & Remarks	Elevation (ft amsl)	Sample			
			NUMBER	COUNT	N VALUE	HNU
	Ground Surface	**590.0**				
0.0	2.6' recovery		1			0.0
	0.0'-1.2': Asphalt millings and crushed stone. Moist.	590.0				
	1.2'-1.5': Whitish gray ash with glass, coal and brick. Moist. FILL.	588.8				
	1.5'-1.7': Rock fragments.	588.5				
	1.7'-3.6': Light brown ash with coke and rock. Moist. FILL.	588.3				
	BOH=3.6' bgs.					

Notes: Measuring Point Elevations May Change: Refer to Current Elevation Table

Grain Size ◯ Water Found ▽ Static Level ▼

NYSDEC - Region 9 - Division of Environmental Remediation
Stratigraphic Log (Overburden)

Project Name:	South Niagara Street Quarry	**Hole Designation:**	SB-9
Site Number:	932111	**Date Completed:**	10/01/07
Location:	Lockport, New York	**Drilling Company:**	SJB Services, Inc.
Logged By:	Glenn M. May	**Drilling Method:**	Direct Push
Total Depth:	11.7 feet	**Sampling Method:**	Macro Core

Depth (ft bgs)	Stratigraphic Description & Remarks	Elevation (ft amsl)	Sample			
			NUMBER	COUNT	N VALUE	HNU
	Ground Surface	**585.0**				
0.0	3.4' recovery		1			0.0
	0.0'-0.3': Topsoil with rootlets, brick and rock.	585.0				
	0.3'-3.2': Brown to reddish brown silt and clayey silt with pebbles, rock and brick. Dry. FILL.	584.7				
	3.2'-4.0': White and black layered ash with trace glass and coal. Dry. FILL.	581.8				
4.0	1.8' recovery		2			0.0
	4.0'-8.0': Multi-colored, layered ash with glass, coal and ceramic. Black powdery waste is shoe. Dry. FILL.					
8.0	1.6' recovery		3			0.0
	8.0'-8.9': Sample same as above with glass, rubber, coke and ceramic. Moist. FILL.					
	8.9'-11.7': Black, fine grained ash with rock and a slight septic odor. Saturated. FILL.	576.1				
	11.7': Refusal. BEDROCK?	573.3				
	BOH=11.7' bgs.					

Notes: Measuring Point Elevations May Change: Refer to Current Elevation Table

Grain Size ◯ Water Found ▽ Static Level ▼

NYSDEC - Region 9 - Division of Environmental Remediation
Stratigraphic Log (Overburden)

Project Name:	South Niagara Street Quarry	**Hole Designation:**	SB-10
Site Number:	932111	**Date Completed:**	10/01/07
Location:	Lockport, New York	**Drilling Company:**	SJB Services, Inc.
Logged By:	Glenn M. May	**Drilling Method:**	Direct Push
Total Depth:	10.7 feet	**Sampling Method:**	Macro Core

Depth (ft bgs)	Stratigraphic Description & Remarks	Elevation (ft amsl)	Sample			
			NUMBER	COUNT	N VALUE	HNU
	Ground Surface	**585.0**				
0.0	3.1' recovery		1			0.0
	0.0'-1.3': Asphalt millings and crushed stone. Moist.	585.0				
	1.3'-2.5': Brown clayey silt with rock and a trace of brick and plastic. Moist. FILL.	583.7				
	2.5'-4.0': Black, fine grained silt with a trace of plastic, leaves and wood. Moist. FILL.	582.5				
4.0	1.0' recovery with 0.4' of fall-in		2			0.0
	4.0'-8.0': Rust colored, granular ash with glass, coal and rock. Moist to saturated. FILL.	581.0				
8.0	0.8' recovery		3			0.0
	8.0'-8.6': Sample same as above. Saturated. FILL.					
	8.6'-8.8': Brown clayey silt with glass, copper, plastic and rootlets. Saturated. Sample contains FILL but has the appearance of wetland sediment.	576.4				
	8.8'-10.7': No recovery. NATIVE?	576.2				
	10.7': Refusal. BEDROCK?	574.3				
	BOH=10.7' bgs.					

Notes: Measuring Point Elevations May Change: Refer to Current Elevation Table

Grain Size ◯ Water Found ▽ Static Level ▼

NYSDEC - Region 9 - Division of Environmental Remediation
Stratigraphic Log (Overburden)

Project Name:	South Niagara Street Quarry	**Hole Designation:**	SB-11
Site Number:	932111	**Date Completed:**	10/01/07
Location:	Lockport, New York	**Drilling Company:**	SJB Services, Inc.
Logged By:	Glenn M. May	**Drilling Method:**	Direct Push
Total Depth:	11.7 feet	**Sampling Method:**	Macro Core

Depth (ft bgs)	Stratigraphic Description & Remarks	Elevation (ft amsl)	Sample			
			NUMBER	COUNT	N VALUE	HNU
	Ground Surface	**583.0**				
0.0	2.5' recovery		1			0.0
	0.0'-0.7': Brown clayey silt with rock. Moist. FILL.	583.0				
	0.7'-0.8': Black, powdery foundry sand with a trace of rocks. Moist. FILL.	582.3				
	0.8'-1.6': Brown, powdery silt with pebbles. Dry. FILL.	582.2				
	1.6'-1.9': Rock fragments. FILL.	581.4				
	1.9'-4.0': Black foundry sand with white ash in bottom of shoe. Dry. FILL.	581.1				
4.0	2.0' recovery with 0.5' of fall-in		2			1.9
	4.0'-8.0': Multi-colored, layered ash with glass and coal. Dry. FILL.	579.0				
8.0	2.1' recovery with 0.4' of fall-in		3			2.9
	8.0'-8.3': Sample same as above. FILL.					
	8.3'-8.45': Reddish brown clayey silt with rock. Moist. FILL.	574.7				
	8'45'-9.45': Black, organic matter with rock. Natural wetland-type of sediment with a sheen observed in upper 0.3' of zone. Septic odor. Saturated. NATIVE.	574.55				
	9.45'-11.7': Gray clayey silt with dolostone rock fragments. Moist. NATIVE.	573.55				
	11.7': Refusal. BEDROCK BOH=11.7' bgs.	571.3				

Notes: Measuring Point Elevations May Change: Refer to Current Elevation Table

Grain Size ◯ Water Found ▽ Static Level ▼

APPENDIX B

SOIL BORING COMPLETION SUMMARY

Table B-1.
Summary of Borings Completed at the South Niagara Street Quarry Site.

Soil Boring/ Well Number	Date Completed	Total Boring Depth	NAD 83 Coordinates	
			Latitude	Longitude
SB-1	09/28/07	10.0	43º 10.055 N	78º 43.360 W
SB-2	09/28/07	11.3	43º 10.044 N	78º 43.358 W
SB-3	09/28/07	8.8	43º 10.032 N	78º 43.357 W
SB-4	10/01/07	10.5	43º 10.050 N	78º 43.298 W
SB-5	10/01/07	10.5	43º 10.062 N	78º 43.303 W
SB-6	10/01/07	9.7	43º 10.037 N	78º 43.292 W
SB-7	09/28/07	6.2	43º 10.056 N	78º 43.341 W
SB-8	10/01/07	3.6	43º 10.059 N	78º 43.320 W
SB-9	10/01/07	11.7	43º 10.034 N	78º 43.315 W
SB-10	10/01/07	10.7	43º 10.044 N	78º 43.340 W
SB-11	10/01/07	11.7	43º 10.030 N	78º 43.330 W

APPENDIX C

ANALYTICAL DATA

WASTE

Sample ID: WS-1
Lab Sample ID: A7667001
Date Collected: 06/14/2007
Time Collected: 11:20

Date Received: 06/14/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
2,2'-Oxybis(1-Chloropropane)	ND		200	UG/KG	8270	06/20/2007 15:07	MD
2,4,5-Trichlorophenol	ND		200	UG/KG	8270	06/20/2007 15:07	MD
2,4,6-Trichlorophenol	ND		200	UG/KG	8270	06/20/2007 15:07	MD
2,4-Dichlorophenol	ND		200	UG/KG	8270	06/20/2007 15:07	MD
2,4-Dimethylphenol	ND		200	UG/KG	8270	06/20/2007 15:07	MD
2,4-Dinitrophenol	ND		390	UG/KG	8270	06/20/2007 15:07	MD
2,4-Dinitrotoluene	ND		200	UG/KG	8270	06/20/2007 15:07	MD
2,6-Dinitrotoluene	ND		200	UG/KG	8270	06/20/2007 15:07	MD
2-Chloronaphthalene	ND		200	UG/KG	8270	06/20/2007 15:07	MD
2-Chlorophenol	ND		200	UG/KG	8270	06/20/2007 15:07	MD
2-Methylnaphthalene	ND		200	UG/KG	8270	06/20/2007 15:07	MD
2-Methylphenol	ND		200	UG/KG	8270	06/20/2007 15:07	MD
2-Nitroaniline	ND		390	UG/KG	8270	06/20/2007 15:07	MD
2-Nitrophenol	ND		200	UG/KG	8270	06/20/2007 15:07	MD
3,3'-Dichlorobenzidine	ND		200	UG/KG	8270	06/20/2007 15:07	MD
3-Nitroaniline	ND		390	UG/KG	8270	06/20/2007 15:07	MD
4,6-Dinitro-2-methylphenol	ND		390	UG/KG	8270	06/20/2007 15:07	MD
4-Bromophenyl phenyl ether	ND		200	UG/KG	8270	06/20/2007 15:07	MD
4-Chloro-3-methylphenol	ND		200	UG/KG	8270	06/20/2007 15:07	MD
4-Chloroaniline	ND		200	UG/KG	8270	06/20/2007 15:07	MD
4-Chlorophenyl phenyl ether	ND		200	UG/KG	8270	06/20/2007 15:07	MD
4-Methylphenol	ND		200	UG/KG	8270	06/20/2007 15:07	MD
4-Nitroaniline	ND		390	UG/KG	8270	06/20/2007 15:07	MD
4-Nitrophenol	ND		390	UG/KG	8270	06/20/2007 15:07	MD
Acenaphthene	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Acenaphthylene	18	J	200	UG/KG	8270	06/20/2007 15:07	MD
Acetophenone	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Anthracene	10	J	200	UG/KG	8270	06/20/2007 15:07	MD
Atrazine	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Benzaldehyde	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Benzo(a)anthracene	41	J	200	UG/KG	8270	06/20/2007 15:07	MD
Benzo(a)pyrene	42	J	200	UG/KG	8270	06/20/2007 15:07	MD
Benzo(b)fluoranthene	52	J	200	UG/KG	8270	06/20/2007 15:07	MD
Benzo(ghi)perylene	38	J	200	UG/KG	8270	06/20/2007 15:07	MD
Benzo(k)fluoranthene	16	J	200	UG/KG	8270	06/20/2007 15:07	MD
Biphenyl	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Bis(2-chloroethoxy) methane	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Bis(2-chloroethyl) ether	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Bis(2-ethylhexyl) phthalate	75	BJ	200	UG/KG	8270	06/20/2007 15:07	MD
Butyl benzyl phthalate	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Caprolactam	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Carbazole	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Chrysene	44	J	200	UG/KG	8270	06/20/2007 15:07	MD
Di-n-butyl phthalate	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Di-n-octyl phthalate	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Dibenzo(a,h)anthracene	9	J	200	UG/KG	8270	06/20/2007 15:07	MD
Dibenzofuran	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Diethyl phthalate	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Dimethyl phthalate	ND		200	UG/KG	8270	06/20/2007 15:07	MD

Sample ID: WS-1
Lab Sample ID: A7667001
Date Collected: 06/14/2007
Time Collected: 11:20

Date Received: 06/14/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
Fluoranthene	80	J	200	UG/KG	8270	06/20/2007 15:07	MD
Fluorene	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Hexachlorobenzene	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Hexachlorobutadiene	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Hexachlorocyclopentadiene	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Hexachloroethane	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Indeno(1,2,3-cd)pyrene	37	J	200	UG/KG	8270	06/20/2007 15:07	MD
Isophorone	ND		200	UG/KG	8270	06/20/2007 15:07	MD
N-Nitroso-Di-n-propylamine	ND		200	UG/KG	8270	06/20/2007 15:07	MD
N-nitrosodiphenylamine	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Naphthalene	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Nitrobenzene	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Pentachlorophenol	ND		390	UG/KG	8270	06/20/2007 15:07	MD
Phenanthrene	52	J	200	UG/KG	8270	06/20/2007 15:07	MD
Phenol	ND		200	UG/KG	8270	06/20/2007 15:07	MD
Pyrene	64	J	200	UG/KG	8270	06/20/2007 15:07	MD
NYS DEC-SOIL-SW8463 8081 - TCL PESTICIDES(SOM							
4,4'-DDD	0.40	J	2.0	UG/KG	8081	06/26/2007 15:15	TCH
4,4'-DDE	1.2	J	2.0	UG/KG	8081	06/26/2007 15:15	TCH
4,4'-DDT	3.5		2.0	UG/KG	8081	06/26/2007 15:15	TCH
Aldrin	ND		2.0	UG/KG	8081	06/26/2007 15:15	TCH
alpha-BHC	ND		2.0	UG/KG	8081	06/26/2007 15:15	TCH
alpha-Chlordane	ND		2.0	UG/KG	8081	06/26/2007 15:15	TCH
beta-BHC	ND		2.0	UG/KG	8081	06/26/2007 15:15	TCH
delta-BHC	0.52	J	2.0	UG/KG	8081	06/26/2007 15:15	TCH
Dieldrin	ND		2.0	UG/KG	8081	06/26/2007 15:15	TCH
Endosulfan I	ND		2.0	UG/KG	8081	06/26/2007 15:15	TCH
Endosulfan II	ND		2.0	UG/KG	8081	06/26/2007 15:15	TCH
Endosulfan Sulfate	ND		2.0	UG/KG	8081	06/26/2007 15:15	TCH
Endrin	0.88	J	2.0	UG/KG	8081	06/26/2007 15:15	TCH
Endrin aldehyde	ND		2.0	UG/KG	8081	06/26/2007 15:15	TCH
Endrin ketone	ND		2.0	UG/KG	8081	06/26/2007 15:15	TCH
gamma-BHC (Lindane)	ND		2.0	UG/KG	8081	06/26/2007 15:15	TCH
gamma-Chlordane	ND		2.0	UG/KG	8081	06/26/2007 15:15	TCH
Heptachlor	ND		2.0	UG/KG	8081	06/26/2007 15:15	TCH
Heptachlor epoxide	ND		2.0	UG/KG	8081	06/26/2007 15:15	TCH
Methoxychlor	ND		2.0	UG/KG	8081	06/26/2007 15:15	TCH
Toxaphene	ND		39	UG/KG	8081	06/26/2007 15:15	TCH
NYSDEC-SPILLS - SOIL-SW8463 8082 - PCBS							
Aroclor 1016	ND		20	UG/KG	8082	06/17/2007 16:37	AJ
Aroclor 1221	ND		20	UG/KG	8082	06/17/2007 16:37	AJ
Aroclor 1232	ND		20	UG/KG	8082	06/17/2007 16:37	AJ
Aroclor 1242	ND		20	UG/KG	8082	06/17/2007 16:37	AJ
Aroclor 1248	ND		20	UG/KG	8082	06/17/2007 16:37	AJ
Aroclor 1254	ND		20	UG/KG	8082	06/17/2007 16:37	AJ
Aroclor 1260	ND		20	UG/KG	8082	06/17/2007 16:37	AJ

Sample ID: WS-1
Lab Sample ID: A7667001
Date Collected: 06/14/2007
Time Collected: 11:20

Date Received: 06/14/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Aluminum - Total	6510		11.2	MG/KG	6010	06/20/2007 13:24	
Antimony - Total	ND		16.8	MG/KG	6010	06/20/2007 13:24	
Arsenic - Total	9.1		2.2	MG/KG	6010	06/20/2007 13:24	
Barium - Total	142		0.56	MG/KG	6010	06/20/2007 13:24	
Beryllium - Total	0.56		0.22	MG/KG	6010	06/20/2007 13:24	
Cadmium - Total	0.45		0.22	MG/KG	6010	06/20/2007 13:24	
Calcium - Total	45900		56.0	MG/KG	6010	06/20/2007 13:24	
Chromium - Total	13.4		0.56	MG/KG	6010	06/20/2007 13:24	
Cobalt - Total	8.5		0.56	MG/KG	6010	06/20/2007 13:24	
Copper - Total	72.6		1.1	MG/KG	6010	06/20/2007 13:24	
Iron - Total	18700		11.2	MG/KG	6010	06/20/2007 13:24	
Lead - Total	136		1.1	MG/KG	6010	06/20/2007 13:24	
Magnesium - Total	3990		22.4	MG/KG	6010	06/20/2007 13:24	
Manganese - Total	489		0.22	MG/KG	6010	06/20/2007 13:24	
Mercury - Total	0.057		0.020	MG/KG	7471	06/20/2007 13:26	
Nickel - Total	31.6		0.56	MG/KG	6010	06/20/2007 13:24	
Potassium - Total	1360		33.6	MG/KG	6010	06/20/2007 13:24	
Selenium - Total	ND		4.5	MG/KG	6010	06/20/2007 13:24	
Silver - Total	0.75		0.56	MG/KG	6010	06/20/2007 13:24	
Sodium - Total	ND		157	MG/KG	6010	06/20/2007 13:24	
Thallium - Total	ND		6.7	MG/KG	6010	06/20/2007 13:24	
Vanadium - Total	23.1		0.56	MG/KG	6010	06/20/2007 13:24	
Zinc - Total	190		2.2	MG/KG	6010	06/20/2007 13:24	

Sample ID: WS-2
Lab Sample ID: A7667002
Date Collected: 06/14/2007
Time Collected: 11:55

Date Received: 06/14/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
2,2'-Oxybis(1-Chloropropane)	ND		210	UG/KG	8270	06/20/2007 15:32	MD
2,4,5-Trichlorophenol	ND		210	UG/KG	8270	06/20/2007 15:32	MD
2,4,6-Trichlorophenol	ND		210	UG/KG	8270	06/20/2007 15:32	MD
2,4-Dichlorophenol	ND		210	UG/KG	8270	06/20/2007 15:32	MD
2,4-Dimethylphenol	ND		210	UG/KG	8270	06/20/2007 15:32	MD
2,4-Dinitrophenol	ND		410	UG/KG	8270	06/20/2007 15:32	MD
2,4-Dinitrotoluene	ND		210	UG/KG	8270	06/20/2007 15:32	MD
2,6-Dinitrotoluene	ND		210	UG/KG	8270	06/20/2007 15:32	MD
2-Chloronaphthalene	ND		210	UG/KG	8270	06/20/2007 15:32	MD
2-Chlorophenol	ND		210	UG/KG	8270	06/20/2007 15:32	MD
2-Methylnaphthalene	13	J	210	UG/KG	8270	06/20/2007 15:32	MD
2-Methylphenol	ND		210	UG/KG	8270	06/20/2007 15:32	MD
2-Nitroaniline	ND		410	UG/KG	8270	06/20/2007 15:32	MD
2-Nitrophenol	ND		210	UG/KG	8270	06/20/2007 15:32	MD
3,3'-Dichlorobenzidine	ND		210	UG/KG	8270	06/20/2007 15:32	MD
3-Nitroaniline	ND		410	UG/KG	8270	06/20/2007 15:32	MD
4,6-Dinitro-2-methylphenol	ND		410	UG/KG	8270	06/20/2007 15:32	MD
4-Bromophenyl phenyl ether	ND		210	UG/KG	8270	06/20/2007 15:32	MD
4-Chloro-3-methylphenol	ND		210	UG/KG	8270	06/20/2007 15:32	MD
4-Chloroaniline	ND		210	UG/KG	8270	06/20/2007 15:32	MD
4-Chlorophenyl phenyl ether	ND		210	UG/KG	8270	06/20/2007 15:32	MD
4-Methylphenol	ND		210	UG/KG	8270	06/20/2007 15:32	MD
4-Nitroaniline	ND		410	UG/KG	8270	06/20/2007 15:32	MD
4-Nitrophenol	ND		410	UG/KG	8270	06/20/2007 15:32	MD
Acenaphthene	32	J	210	UG/KG	8270	06/20/2007 15:32	MD
Acenaphthylene	33	J	210	UG/KG	8270	06/20/2007 15:32	MD
Acetophenone	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Anthracene	78	J	210	UG/KG	8270	06/20/2007 15:32	MD
Atrazine	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Benzaldehyde	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Benzo(a)anthracene	150	J	210	UG/KG	8270	06/20/2007 15:32	MD
Benzo(a)pyrene	160	J	210	UG/KG	8270	06/20/2007 15:32	MD
Benzo(b)fluoranthene	220		210	UG/KG	8270	06/20/2007 15:32	MD
Benzo(ghi)perylene	100	J	210	UG/KG	8270	06/20/2007 15:32	MD
Benzo(k)fluoranthene	71	J	210	UG/KG	8270	06/20/2007 15:32	MD
Biphenyl	13	J	210	UG/KG	8270	06/20/2007 15:32	MD
Bis(2-chloroethoxy) methane	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Bis(2-chloroethyl) ether	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Bis(2-ethylhexyl) phthalate	75	BJ	210	UG/KG	8270	06/20/2007 15:32	MD
Butyl benzyl phthalate	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Caprolactam	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Carbazole	38	J	210	UG/KG	8270	06/20/2007 15:32	MD
Chrysene	160	J	210	UG/KG	8270	06/20/2007 15:32	MD
Di-n-butyl phthalate	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Di-n-octyl phthalate	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Dibenzo(a,h)anthracene	31	J	210	UG/KG	8270	06/20/2007 15:32	MD
Dibenzofuran	21	J	210	UG/KG	8270	06/20/2007 15:32	MD
Diethyl phthalate	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Dimethyl phthalate	ND		210	UG/KG	8270	06/20/2007 15:32	MD

Sample ID: WS-2
Lab Sample ID: A7667002
Date Collected: 06/14/2007
Time Collected: 11:55

Date Received: 06/14/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
Fluoranthene	390		210	UG/KG	8270	06/20/2007 15:32	MD
Fluorene	29	J	210	UG/KG	8270	06/20/2007 15:32	MD
Hexachlorobenzene	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Hexachlorobutadiene	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Hexachlorocyclopentadiene	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Hexachloroethane	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Indeno(1,2,3-cd)pyrene	88	J	210	UG/KG	8270	06/20/2007 15:32	MD
Isophorone	ND		210	UG/KG	8270	06/20/2007 15:32	MD
N-Nitroso-Di-n-propylamine	ND		210	UG/KG	8270	06/20/2007 15:32	MD
N-nitrosodiphenylamine	44	J	210	UG/KG	8270	06/20/2007 15:32	MD
Naphthalene	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Nitrobenzene	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Pentachlorophenol	ND		410	UG/KG	8270	06/20/2007 15:32	MD
Phenanthrene	300		210	UG/KG	8270	06/20/2007 15:32	MD
Phenol	ND		210	UG/KG	8270	06/20/2007 15:32	MD
Pyrene	260		210	UG/KG	8270	06/20/2007 15:32	MD
NYS DEC-SOIL-SW8463 8081 - TCL PESTICIDES(SOM							
4,4'-DDD	5.4	J	10	UG/KG	8081	06/25/2007 17:38	TCH
4,4'-DDE	20		10	UG/KG	8081	06/25/2007 17:38	TCH
4,4'-DDT	59		10	UG/KG	8081	06/25/2007 17:38	TCH
Aldrin	ND		10	UG/KG	8081	06/25/2007 17:38	TCH
alpha-BHC	ND		10	UG/KG	8081	06/25/2007 17:38	TCH
alpha-Chlordane	ND		10	UG/KG	8081	06/25/2007 17:38	TCH
beta-BHC	ND		10	UG/KG	8081	06/25/2007 17:38	TCH
delta-BHC	ND		10	UG/KG	8081	06/25/2007 17:38	TCH
Dieldrin	ND		10	UG/KG	8081	06/25/2007 17:38	TCH
Endosulfan I	ND		10	UG/KG	8081	06/25/2007 17:38	TCH
Endosulfan II	ND		10	UG/KG	8081	06/25/2007 17:38	TCH
Endosulfan Sulfate	ND		10	UG/KG	8081	06/25/2007 17:38	TCH
Endrin	ND		10	UG/KG	8081	06/25/2007 17:38	TCH
Endrin aldehyde	ND		10	UG/KG	8081	06/25/2007 17:38	TCH
Endrin ketone	ND		10	UG/KG	8081	06/25/2007 17:38	TCH
gamma-BHC (Lindane)	ND		10	UG/KG	8081	06/25/2007 17:38	TCH
gamma-Chlordane	4.0	J	10	UG/KG	8081	06/25/2007 17:38	TCH
Heptachlor	ND		10	UG/KG	8081	06/25/2007 17:38	TCH
Heptachlor epoxide	ND		10	UG/KG	8081	06/25/2007 17:38	TCH
Methoxychlor	ND		10	UG/KG	8081	06/25/2007 17:38	TCH
Toxaphene	ND		200	UG/KG	8081	06/25/2007 17:38	TCH
NYSDEC-SPILLS - SOIL-SW8463 8082 - PCBS							
Aroclor 1016	ND		21	UG/KG	8082	06/17/2007 16:51	AJ
Aroclor 1221	ND		21	UG/KG	8082	06/17/2007 16:51	AJ
Aroclor 1232	ND		21	UG/KG	8082	06/17/2007 16:51	AJ
Aroclor 1242	ND		21	UG/KG	8082	06/17/2007 16:51	AJ
Aroclor 1248	ND		21	UG/KG	8082	06/17/2007 16:51	AJ
Aroclor 1254	ND		21	UG/KG	8082	06/17/2007 16:51	AJ
Aroclor 1260	7.6	J	21	UG/KG	8082	06/17/2007 16:51	AJ

Sample ID: WS-2
Lab Sample ID: A7667002
Date Collected: 06/14/2007
Time Collected: 11:55

Date Received: 06/14/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Aluminum - Total	6030		12.2	MG/KG	6010	06/20/2007 13:29	
Antimony - Total	ND		18.2	MG/KG	6010	06/20/2007 13:29	
Arsenic - Total	8.8		2.4	MG/KG	6010	06/20/2007 13:29	
Barium - Total	236		0.61	MG/KG	6010	06/20/2007 13:29	
Beryllium - Total	0.52		0.24	MG/KG	6010	06/20/2007 13:29	
Cadmium - Total	0.37		0.24	MG/KG	6010	06/20/2007 13:29	
Calcium - Total	42200		60.8	MG/KG	6010	06/20/2007 13:29	
Chromium - Total	16.1		0.61	MG/KG	6010	06/20/2007 13:29	
Cobalt - Total	8.5		0.61	MG/KG	6010	06/20/2007 13:29	
Copper - Total	76.5		1.2	MG/KG	6010	06/20/2007 13:29	
Iron - Total	37100		12.2	MG/KG	6010	06/20/2007 13:29	
Lead - Total	179		1.2	MG/KG	6010	06/20/2007 13:29	
Magnesium - Total	3970		24.3	MG/KG	6010	06/20/2007 13:29	
Manganese - Total	505		0.24	MG/KG	6010	06/20/2007 13:29	
Mercury - Total	0.284		0.021	MG/KG	7471	06/20/2007 13:27	
Nickel - Total	52.0		0.61	MG/KG	6010	06/20/2007 13:29	
Potassium - Total	1770		36.5	MG/KG	6010	06/20/2007 13:29	
Selenium - Total	ND		4.9	MG/KG	6010	06/20/2007 13:29	
Silver - Total	ND		0.61	MG/KG	6010	06/20/2007 13:29	
Sodium - Total	ND		170	MG/KG	6010	06/20/2007 13:29	
Thallium - Total	ND		7.3	MG/KG	6010	06/20/2007 13:29	
Vanadium - Total	16.5		0.61	MG/KG	6010	06/20/2007 13:29	
Zinc - Total	259		2.4	MG/KG	6010	06/20/2007 13:29	

Chain of Custody Record

SEVERN TRENT **STL**

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client	Project Manager	Date	Chain of Custody Number
NYSDEC	Glenn May	6-14-07	324915
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
270 Michigan Ave	716-851-7220	—	
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Buffalo / NY / 14203	G. May	B. Fischer	
Project Name and Location (State)	**Carrier/Waybill Number**		
South Niagara St. Quarry, 932111	—		
Contract/Purchase Order/Quote No.			
—			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Analysis: 8270	8081	8082	TAL metals	TCLP lead	Special Instructions/ Conditions of Receipt
WS-1	6/14/07	1120				X	X						X	X	X	X	X	Hold 2nd 4oz bottle for possible TCLP analysis
WS-2	"	1155				X	X						X	X	X	X	X	
SED-1	"	1125			X		X						X	X	X	X		

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal

☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 10 day

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Glenn M May	6-14-07	1355	1. Received By: Andrew Symmendes	6.14.07	1400
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: 2.0°C

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Sample ID: SB-2 4'-8.7'
Lab Sample ID: A7B12101
Date Collected: 09/28/2007
Time Collected: 14:35

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
2,2'-Oxybis(1-Chloropropane)	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
2,4,5-Trichlorophenol	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
2,4,6-Trichlorophenol	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
2,4-Dichlorophenol	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
2,4-Dimethylphenol	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
2,4-Dinitrophenol	ND		22000	UG/KG	8270	10/04/2007 21:31	SL
2,4-Dinitrotoluene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
2,6-Dinitrotoluene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
2-Chloronaphthalene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
2-Chlorophenol	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
2-Methylnaphthalene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
2-Methylphenol	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
2-Nitroaniline	ND		22000	UG/KG	8270	10/04/2007 21:31	SL
2-Nitrophenol	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
3,3'-Dichlorobenzidine	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
3-Nitroaniline	ND		22000	UG/KG	8270	10/04/2007 21:31	SL
4,6-Dinitro-2-methylphenol	ND		22000	UG/KG	8270	10/04/2007 21:31	SL
4-Bromophenyl phenyl ether	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
4-Chloro-3-methylphenol	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
4-Chloroaniline	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
4-Chlorophenyl phenyl ether	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
4-Methylphenol	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
4-Nitroaniline	ND		22000	UG/KG	8270	10/04/2007 21:31	SL
4-Nitrophenol	ND		22000	UG/KG	8270	10/04/2007 21:31	SL
Acenaphthene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Acenaphthylene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Acetophenone	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Anthracene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Atrazine	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Benzaldehyde	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Benzo(a)anthracene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Benzo(a)pyrene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Benzo(b)fluoranthene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Benzo(ghi)perylene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Benzo(k)fluoranthene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Biphenyl	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Bis(2-chloroethoxy) methane	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Bis(2-chloroethyl) ether	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Bis(2-ethylhexyl) phthalate	1400000	E	12000	UG/KG	8270	10/04/2007 21:31	SL
Butyl benzyl phthalate	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Caprolactam	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Carbazole	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Chrysene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Di-n-butyl phthalate	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Di-n-octyl phthalate	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Dibenzo(a,h)anthracene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Dibenzofuran	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Diethyl phthalate	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Dimethyl phthalate	ND		12000	UG/KG	8270	10/04/2007 21:31	SL

Sample ID: SB-2 4'-8.7'
Lab Sample ID: A7B12101
Date Collected: 09/28/2007
Time Collected: 14:35

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
Fluoranthene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Fluorene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Hexachlorobenzene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Hexachlorobutadiene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Hexachlorocyclopentadiene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Hexachloroethane	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Indeno(1,2,3-cd)pyrene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Isophorone	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
N-Nitroso-Di-n-propylamine	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
N-nitrosodiphenylamine	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Naphthalene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Nitrobenzene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Pentachlorophenol	ND		22000	UG/KG	8270	10/04/2007 21:31	SL
Phenanthrene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Phenol	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
Pyrene	ND		12000	UG/KG	8270	10/04/2007 21:31	SL
NYS DEC-SOIL-SW8463 8081 - TCL PESTICIDES(SOM							
4,4'-DDD	ND		11	UG/KG	8081	10/04/2007 16:31	TCH
4,4'-DDE	ND		11	UG/KG	8081	10/04/2007 16:31	TCH
4,4'-DDT	22		11	UG/KG	8081	10/04/2007 16:31	TCH
Aldrin	ND		11	UG/KG	8081	10/04/2007 16:31	TCH
alpha-BHC	ND		11	UG/KG	8081	10/04/2007 16:31	TCH
alpha-Chlordane	ND		11	UG/KG	8081	10/04/2007 16:31	TCH
beta-BHC	ND		6.9	UG/KG	8081	10/04/2007 16:31	TCH
delta-BHC	ND		11	UG/KG	8081	10/04/2007 16:31	TCH
Dieldrin	ND		11	UG/KG	8081	10/04/2007 16:31	TCH
Endosulfan I	2.7	J	11	UG/KG	8081	10/04/2007 16:31	TCH
Endosulfan II	7.5	J	11	UG/KG	8081	10/04/2007 16:31	TCH
Endosulfan Sulfate	ND		11	UG/KG	8081	10/04/2007 16:31	TCH
Endrin	ND		11	UG/KG	8081	10/04/2007 16:31	TCH
Endrin aldehyde	ND		11	UG/KG	8081	10/04/2007 16:31	TCH
Endrin ketone	ND		11	UG/KG	8081	10/04/2007 16:31	TCH
gamma-BHC (Lindane)	ND		11	UG/KG	8081	10/04/2007 16:31	TCH
gamma-Chlordane	ND		11	UG/KG	8081	10/04/2007 16:31	TCH
Heptachlor	ND		11	UG/KG	8081	10/04/2007 16:31	TCH
Heptachlor epoxide	ND		11	UG/KG	8081	10/04/2007 16:31	TCH
Methoxychlor	ND		11	UG/KG	8081	10/04/2007 16:31	TCH
Toxaphene	ND		230	UG/KG	8081	10/04/2007 16:31	TCH
NYSDEC-SPILLS - SOIL-SW8463 8082 - PCBS							
Aroclor 1016	ND		23	UG/KG	8082	10/03/2007 10:00	GFD
Aroclor 1221	ND		23	UG/KG	8082	10/03/2007 10:00	GFD
Aroclor 1232	ND		23	UG/KG	8082	10/03/2007 10:00	GFD
Aroclor 1242	ND		23	UG/KG	8082	10/03/2007 10:00	GFD
Aroclor 1248	ND		23	UG/KG	8082	10/03/2007 10:00	GFD
Aroclor 1254	130		23	UG/KG	8082	10/03/2007 10:00	GFD
Aroclor 1260	ND		23	UG/KG	8082	10/03/2007 10:00	GFD

Sample ID: SB-2 4'-8.7'
Lab Sample ID: A7B12101
Date Collected: 09/28/2007
Time Collected: 14:35

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Aluminum - Total	7250		15.1	MG/KG	6010	10/10/2007 13:23	
Antimony - Total	ND		22.7	MG/KG	6010	10/10/2007 13:23	
Arsenic - Total	12.9		3.0	MG/KG	6010	10/10/2007 13:23	
Barium - Total	374		0.76	MG/KG	6010	10/10/2007 13:23	
Beryllium - Total	0.72		0.30	MG/KG	6010	10/10/2007 13:23	
Cadmium - Total	2.4		0.30	MG/KG	6010	10/10/2007 13:23	
Calcium - Total	12600		75.5	MG/KG	6010	10/10/2007 13:23	
Chromium - Total	25.9		0.76	MG/KG	6010	10/10/2007 13:23	
Cobalt - Total	12.3		0.76	MG/KG	6010	10/10/2007 13:23	
Copper - Total	271		1.5	MG/KG	6010	10/10/2007 13:23	
Iron - Total	39000		15.1	MG/KG	6010	10/10/2007 13:23	
Lead - Total	428		1.5	MG/KG	6010	10/10/2007 13:23	
Magnesium - Total	2000		30.2	MG/KG	6010	10/10/2007 13:23	
Manganese - Total	377		0.30	MG/KG	6010	10/10/2007 13:23	
Mercury - Total	3.9		0.213	MG/KG	7471	10/10/2007 14:42	
Nickel - Total	76.8		0.76	MG/KG	6010	10/10/2007 13:23	
Potassium - Total	883		45.3	MG/KG	6010	10/10/2007 13:23	
Selenium - Total	ND		6.0	MG/KG	6010	10/10/2007 13:23	
Silver - Total	0.91		0.76	MG/KG	6010	10/10/2007 13:23	
Sodium - Total	338		211	MG/KG	6010	10/10/2007 13:23	
Thallium - Total	ND		9.1	MG/KG	6010	10/10/2007 13:23	
Vanadium - Total	33.1		0.76	MG/KG	6010	10/10/2007 13:23	
Zinc - Total	1870		15.1	MG/KG	6010	10/11/2007 06:32	

Sample ID: SB-2 4'-8.7'Dl
Lab Sample ID: A7B12101DL
Date Collected: 09/28/2007
Time Collected: 14:35

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
2,2'-Oxybis(1-Chloropropane)	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
2,4,5-Trichlorophenol	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
2,4,6-Trichlorophenol	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
2,4-Dichlorophenol	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
2,4-Dimethylphenol	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
2,4-Dinitrophenol	ND		220000	UG/KG	8270	10/11/2007 20:32	SL
2,4-Dinitrotoluene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
2,6-Dinitrotoluene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
2-Chloronaphthalene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
2-Chlorophenol	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
2-Methylnaphthalene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
2-Methylphenol	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
2-Nitroaniline	ND		220000	UG/KG	8270	10/11/2007 20:32	SL
2-Nitrophenol	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
3,3'-Dichlorobenzidine	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
3-Nitroaniline	ND		220000	UG/KG	8270	10/11/2007 20:32	SL
4,6-Dinitro-2-methylphenol	ND		220000	UG/KG	8270	10/11/2007 20:32	SL
4-Bromophenyl phenyl ether	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
4-Chloro-3-methylphenol	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
4-Chloroaniline	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
4-Chlorophenyl phenyl ether	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
4-Methylphenol	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
4-Nitroaniline	ND		220000	UG/KG	8270	10/11/2007 20:32	SL
4-Nitrophenol	ND		220000	UG/KG	8270	10/11/2007 20:32	SL
Acenaphthene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Acenaphthylene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Acetophenone	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Anthracene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Atrazine	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Benzaldehyde	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Benzo(a)anthracene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Benzo(a)pyrene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Benzo(b)fluoranthene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Benzo(ghi)perylene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Benzo(k)fluoranthene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Biphenyl	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Bis(2-chloroethoxy) methane	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Bis(2-chloroethyl) ether	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Bis(2-ethylhexyl) phthalate	1200000	D	120000	UG/KG	8270	10/11/2007 20:32	SL
Butyl benzyl phthalate	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Caprolactam	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Carbazole	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Chrysene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Di-n-butyl phthalate	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Di-n-octyl phthalate	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Dibenzo(a,h)anthracene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Dibenzofuran	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Diethyl phthalate	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Dimethyl phthalate	ND		120000	UG/KG	8270	10/11/2007 20:32	SL

Sample ID: SB-2 4'-8.7'Dl
Lab Sample ID: A7B12101DL
Date Collected: 09/28/2007
Time Collected: 14:35

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
Fluoranthene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Fluorene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Hexachlorobenzene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Hexachlorobutadiene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Hexachlorocyclopentadiene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Hexachloroethane	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Indeno(1,2,3-cd)pyrene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Isophorone	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
N-Nitroso-Di-n-propylamine	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
N-nitrosodiphenylamine	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Naphthalene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Nitrobenzene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Pentachlorophenol	ND		220000	UG/KG	8270	10/11/2007 20:32	SL
Phenanthrene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Phenol	ND		120000	UG/KG	8270	10/11/2007 20:32	SL
Pyrene	ND		120000	UG/KG	8270	10/11/2007 20:32	SL

Sample ID: SB-3 4'-8.8'
Lab Sample ID: A7B12102
Date Collected: 09/28/2007
Time Collected: 15:00

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
2,2'-Oxybis(1-Chloropropane)	ND		850	UG/KG	8270	10/12/2007 23:30	RM
2,4,5-Trichlorophenol	ND		850	UG/KG	8270	10/12/2007 23:30	RM
2,4,6-Trichlorophenol	ND		850	UG/KG	8270	10/12/2007 23:30	RM
2,4-Dichlorophenol	ND		850	UG/KG	8270	10/12/2007 23:30	RM
2,4-Dimethylphenol	ND		850	UG/KG	8270	10/12/2007 23:30	RM
2,4-Dinitrophenol	ND		1600	UG/KG	8270	10/12/2007 23:30	RM
2,4-Dinitrotoluene	ND		850	UG/KG	8270	10/12/2007 23:30	RM
2,6-Dinitrotoluene	ND		850	UG/KG	8270	10/12/2007 23:30	RM
2-Chloronaphthalene	ND		850	UG/KG	8270	10/12/2007 23:30	RM
2-Chlorophenol	ND		850	UG/KG	8270	10/12/2007 23:30	RM
2-Methylnaphthalene	ND		850	UG/KG	8270	10/12/2007 23:30	RM
2-Methylphenol	ND		850	UG/KG	8270	10/12/2007 23:30	RM
2-Nitroaniline	ND		1600	UG/KG	8270	10/12/2007 23:30	RM
2-Nitrophenol	ND		850	UG/KG	8270	10/12/2007 23:30	RM
3,3'-Dichlorobenzidine	ND		850	UG/KG	8270	10/12/2007 23:30	RM
3-Nitroaniline	ND		1600	UG/KG	8270	10/12/2007 23:30	RM
4,6-Dinitro-2-methylphenol	ND		1600	UG/KG	8270	10/12/2007 23:30	RM
4-Bromophenyl phenyl ether	ND		850	UG/KG	8270	10/12/2007 23:30	RM
4-Chloro-3-methylphenol	ND		850	UG/KG	8270	10/12/2007 23:30	RM
4-Chloroaniline	ND		850	UG/KG	8270	10/12/2007 23:30	RM
4-Chlorophenyl phenyl ether	ND		850	UG/KG	8270	10/12/2007 23:30	RM
4-Methylphenol	ND		850	UG/KG	8270	10/12/2007 23:30	RM
4-Nitroaniline	ND		1600	UG/KG	8270	10/12/2007 23:30	RM
4-Nitrophenol	ND		1600	UG/KG	8270	10/12/2007 23:30	RM
Acenaphthene	38	J	850	UG/KG	8270	10/12/2007 23:30	RM
Acenaphthylene	120	J	850	UG/KG	8270	10/12/2007 23:30	RM
Acetophenone	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Anthracene	190	J	850	UG/KG	8270	10/12/2007 23:30	RM
Atrazine	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Benzaldehyde	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Benzo(a)anthracene	640	J	850	UG/KG	8270	10/12/2007 23:30	RM
Benzo(a)pyrene	640	J	850	UG/KG	8270	10/12/2007 23:30	RM
Benzo(b)fluoranthene	1000		850	UG/KG	8270	10/12/2007 23:30	RM
Benzo(ghi)perylene	640	J	850	UG/KG	8270	10/12/2007 23:30	RM
Benzo(k)fluoranthene	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Biphenyl	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Bis(2-chloroethoxy) methane	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Bis(2-chloroethyl) ether	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Bis(2-ethylhexyl) phthalate	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Butyl benzyl phthalate	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Caprolactam	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Carbazole	71	J	850	UG/KG	8270	10/12/2007 23:30	RM
Chrysene	540	J	850	UG/KG	8270	10/12/2007 23:30	RM
Di-n-butyl phthalate	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Di-n-octyl phthalate	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Dibenzo(a,h)anthracene	140	J	850	UG/KG	8270	10/12/2007 23:30	RM
Dibenzofuran	34	J	850	UG/KG	8270	10/12/2007 23:30	RM
Diethyl phthalate	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Dimethyl phthalate	ND		850	UG/KG	8270	10/12/2007 23:30	RM

Sample ID: SB-3 4'-8.8'
Lab Sample ID: A7B12102
Date Collected: 09/28/2007
Time Collected: 15:00

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
Fluoranthene	1100		850	UG/KG	8270	10/12/2007 23:30	RM
Fluorene	75	J	850	UG/KG	8270	10/12/2007 23:30	RM
Hexachlorobenzene	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Hexachlorobutadiene	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Hexachlorocyclopentadiene	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Hexachloroethane	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Indeno(1,2,3-cd)pyrene	450	J	850	UG/KG	8270	10/12/2007 23:30	RM
Isophorone	ND		850	UG/KG	8270	10/12/2007 23:30	RM
N-Nitroso-Di-n-propylamine	ND		850	UG/KG	8270	10/12/2007 23:30	RM
N-nitrosodiphenylamine	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Naphthalene	35	J	850	UG/KG	8270	10/12/2007 23:30	RM
Nitrobenzene	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Pentachlorophenol	ND		1600	UG/KG	8270	10/12/2007 23:30	RM
Phenanthrene	550	J	850	UG/KG	8270	10/12/2007 23:30	RM
Phenol	ND		850	UG/KG	8270	10/12/2007 23:30	RM
Pyrene	930		850	UG/KG	8270	10/12/2007 23:30	RM
NYS DEC-SOIL-SW8463 8081 - TCL PESTICIDES(SOM							
4,4'-DDD	7.5	J	10	UG/KG	8081	10/04/2007 18:20	TCH
4,4'-DDE	5.8	J	10	UG/KG	8081	10/04/2007 18:20	TCH
4,4'-DDT	12		10	UG/KG	8081	10/04/2007 18:20	TCH
Aldrin	ND		10	UG/KG	8081	10/04/2007 18:20	TCH
alpha-BHC	ND		10	UG/KG	8081	10/04/2007 18:20	TCH
alpha-Chlordane	ND		10	UG/KG	8081	10/04/2007 18:20	TCH
beta-BHC	ND		6.2	UG/KG	8081	10/04/2007 18:20	TCH
delta-BHC	ND		10	UG/KG	8081	10/04/2007 18:20	TCH
Dieldrin	4.8	J	10	UG/KG	8081	10/04/2007 18:20	TCH
Endosulfan I	ND		10	UG/KG	8081	10/04/2007 18:20	TCH
Endosulfan II	ND		10	UG/KG	8081	10/04/2007 18:20	TCH
Endosulfan Sulfate	ND		10	UG/KG	8081	10/04/2007 18:20	TCH
Endrin	ND		10	UG/KG	8081	10/04/2007 18:20	TCH
Endrin aldehyde	ND		10	UG/KG	8081	10/04/2007 18:20	TCH
Endrin ketone	ND		10	UG/KG	8081	10/04/2007 18:20	TCH
gamma-BHC (Lindane)	ND		10	UG/KG	8081	10/04/2007 18:20	TCH
gamma-Chlordane	ND		10	UG/KG	8081	10/04/2007 18:20	TCH
Heptachlor	ND		10	UG/KG	8081	10/04/2007 18:20	TCH
Heptachlor epoxide	6.6	J	10	UG/KG	8081	10/04/2007 18:20	TCH
Methoxychlor	ND		10	UG/KG	8081	10/04/2007 18:20	TCH
Toxaphene	ND		200	UG/KG	8081	10/04/2007 18:20	TCH
NYSDEC-SPILLS - SOIL-SW8463 8082 - PCBS							
Aroclor 1016	ND		21	UG/KG	8082	10/03/2007 10:28	GFD
Aroclor 1221	ND		21	UG/KG	8082	10/03/2007 10:28	GFD
Aroclor 1232	ND		21	UG/KG	8082	10/03/2007 10:28	GFD
Aroclor 1242	ND		21	UG/KG	8082	10/03/2007 10:28	GFD
Aroclor 1248	ND		21	UG/KG	8082	10/03/2007 10:28	GFD
Aroclor 1254	ND		21	UG/KG	8082	10/03/2007 10:28	GFD
Aroclor 1260	74		21	UG/KG	8082	10/03/2007 10:28	GFD

Sample ID: SB-3 4'-8.8'
Lab Sample ID: A7B12102
Date Collected: 09/28/2007
Time Collected: 15:00

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Aluminum - Total	13300		12.9	MG/KG	6010	10/10/2007 13:28	
Antimony - Total	ND		19.4	MG/KG	6010	10/10/2007 13:28	
Arsenic - Total	6.3		2.6	MG/KG	6010	10/10/2007 13:28	
Barium - Total	574		0.65	MG/KG	6010	10/10/2007 13:28	
Beryllium - Total	1.1		0.26	MG/KG	6010	10/10/2007 13:28	
Cadmium - Total	0.90		0.26	MG/KG	6010	10/10/2007 13:28	
Calcium - Total	34600		64.6	MG/KG	6010	10/10/2007 13:28	
Chromium - Total	20.8		0.65	MG/KG	6010	10/10/2007 13:28	
Cobalt - Total	4.4		0.65	MG/KG	6010	10/10/2007 13:28	
Copper - Total	158		1.3	MG/KG	6010	10/10/2007 13:28	
Iron - Total	17000		12.9	MG/KG	6010	10/10/2007 13:28	
Lead - Total	237		1.3	MG/KG	6010	10/10/2007 13:28	
Magnesium - Total	2840		25.8	MG/KG	6010	10/10/2007 13:28	
Manganese - Total	318		0.26	MG/KG	6010	10/10/2007 13:28	
Mercury - Total	0.170		0.022	MG/KG	7471	10/10/2007 13:58	
Nickel - Total	19.3		0.65	MG/KG	6010	10/10/2007 13:28	
Potassium - Total	6100		38.8	MG/KG	6010	10/10/2007 13:28	
Selenium - Total	ND		5.2	MG/KG	6010	10/10/2007 13:28	
Silver - Total	ND		0.65	MG/KG	6010	10/10/2007 13:28	
Sodium - Total	1270		181	MG/KG	6010	10/10/2007 13:28	
Thallium - Total	ND		7.8	MG/KG	6010	10/10/2007 13:28	
Vanadium - Total	26.0		0.65	MG/KG	6010	10/10/2007 13:28	
Zinc - Total	729		2.6	MG/KG	6010	10/10/2007 13:28	

Sample ID: SB-4A 4'-10.3'
Lab Sample ID: A7B12103
Date Collected: 10/01/2007
Time Collected: 09:50

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
2,2'-Oxybis(1-Chloropropane)	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
2,4,5-Trichlorophenol	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
2,4,6-Trichlorophenol	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
2,4-Dichlorophenol	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
2,4-Dimethylphenol	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
2,4-Dinitrophenol	ND		2000	UG/KG	8270	10/12/2007 23:53	RM
2,4-Dinitrotoluene	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
2,6-Dinitrotoluene	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
2-Chloronaphthalene	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
2-Chlorophenol	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
2-Methylnaphthalene	50	J	1000	UG/KG	8270	10/12/2007 23:53	RM
2-Methylphenol	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
2-Nitroaniline	ND		2000	UG/KG	8270	10/12/2007 23:53	RM
2-Nitrophenol	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
3,3'-Dichlorobenzidine	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
3-Nitroaniline	ND		2000	UG/KG	8270	10/12/2007 23:53	RM
4,6-Dinitro-2-methylphenol	ND		2000	UG/KG	8270	10/12/2007 23:53	RM
4-Bromophenyl phenyl ether	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
4-Chloro-3-methylphenol	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
4-Chloroaniline	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
4-Chlorophenyl phenyl ether	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
4-Methylphenol	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
4-Nitroaniline	ND		2000	UG/KG	8270	10/12/2007 23:53	RM
4-Nitrophenol	ND		2000	UG/KG	8270	10/12/2007 23:53	RM
Acenaphthene	73	J	1000	UG/KG	8270	10/12/2007 23:53	RM
Acenaphthylene	250	J	1000	UG/KG	8270	10/12/2007 23:53	RM
Acetophenone	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Anthracene	440	J	1000	UG/KG	8270	10/12/2007 23:53	RM
Atrazine	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Benzaldehyde	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Benzo(a)anthracene	1500		1000	UG/KG	8270	10/12/2007 23:53	RM
Benzo(a)pyrene	1400		1000	UG/KG	8270	10/12/2007 23:53	RM
Benzo(b)fluoranthene	1800		1000	UG/KG	8270	10/12/2007 23:53	RM
Benzo(ghi)perylene	970	J	1000	UG/KG	8270	10/12/2007 23:53	RM
Benzo(k)fluoranthene	510	J	1000	UG/KG	8270	10/12/2007 23:53	RM
Biphenyl	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Bis(2-chloroethoxy) methane	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Bis(2-chloroethyl) ether	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Bis(2-ethylhexyl) phthalate	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Butyl benzyl phthalate	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Caprolactam	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Carbazole	240	J	1000	UG/KG	8270	10/12/2007 23:53	RM
Chrysene	1200		1000	UG/KG	8270	10/12/2007 23:53	RM
Di-n-butyl phthalate	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Di-n-octyl phthalate	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Dibenzo(a,h)anthracene	270	J	1000	UG/KG	8270	10/12/2007 23:53	RM
Dibenzofuran	86	J	1000	UG/KG	8270	10/12/2007 23:53	RM
Diethyl phthalate	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Dimethyl phthalate	ND		1000	UG/KG	8270	10/12/2007 23:53	RM

Sample ID: SB-4A 4'-10.3'
Lab Sample ID: A7B12103
Date Collected: 10/01/2007
Time Collected: 09:50

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
Fluoranthene	3600		1000	UG/KG	8270	10/12/2007 23:53	RM
Fluorene	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Hexachlorobenzene	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Hexachlorobutadiene	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Hexachlorocyclopentadiene	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Hexachloroethane	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Indeno(1,2,3-cd)pyrene	920	J	1000	UG/KG	8270	10/12/2007 23:53	RM
Isophorone	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
N-Nitroso-Di-n-propylamine	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
N-nitrosodiphenylamine	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Naphthalene	62	J	1000	UG/KG	8270	10/12/2007 23:53	RM
Nitrobenzene	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Pentachlorophenol	ND		2000	UG/KG	8270	10/12/2007 23:53	RM
Phenanthrene	2200		1000	UG/KG	8270	10/12/2007 23:53	RM
Phenol	ND		1000	UG/KG	8270	10/12/2007 23:53	RM
Pyrene	2500		1000	UG/KG	8270	10/12/2007 23:53	RM
NYS DEC-SOIL-SW8463 8081 - TCL PESTICIDES(SOM							
4,4'-DDD	7.6	J	10	UG/KG	8081	10/04/2007 18:56	TCH
4,4'-DDE	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
4,4'-DDT	8.2	J	10	UG/KG	8081	10/04/2007 18:56	TCH
Aldrin	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
alpha-BHC	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
alpha-Chlordane	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
beta-BHC	ND		6.2	UG/KG	8081	10/04/2007 18:56	TCH
delta-BHC	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
Dieldrin	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
Endosulfan I	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
Endosulfan II	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
Endosulfan Sulfate	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
Endrin	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
Endrin aldehyde	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
Endrin ketone	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
gamma-BHC (Lindane)	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
gamma-Chlordane	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
Heptachlor	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
Heptachlor epoxide	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
Methoxychlor	ND		10	UG/KG	8081	10/04/2007 18:56	TCH
Toxaphene	ND		200	UG/KG	8081	10/04/2007 18:56	TCH
NYSDEC-SPILLS - SOIL-SW8463 8082 - PCBS							
Aroclor 1016	ND		20	UG/KG	8082	10/03/2007 12:33	GFD
Aroclor 1221	ND		20	UG/KG	8082	10/03/2007 12:33	GFD
Aroclor 1232	ND		20	UG/KG	8082	10/03/2007 12:33	GFD
Aroclor 1242	ND		20	UG/KG	8082	10/03/2007 12:33	GFD
Aroclor 1248	ND		20	UG/KG	8082	10/03/2007 12:33	GFD
Aroclor 1254	ND		20	UG/KG	8082	10/03/2007 12:33	GFD
Aroclor 1260	ND		20	UG/KG	8082	10/03/2007 12:33	GFD

Sample ID: SB-4A 4'-10.3'
Lab Sample ID: A7B12103
Date Collected: 10/01/2007
Time Collected: 09:50

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Aluminum - Total	5020		12.8	MG/KG	6010	10/10/2007 13:33	
Antimony - Total	ND		19.3	MG/KG	6010	10/10/2007 13:33	
Arsenic - Total	9.6		2.6	MG/KG	6010	10/10/2007 13:33	
Barium - Total	154		0.64	MG/KG	6010	10/10/2007 13:33	
Beryllium - Total	0.42		0.26	MG/KG	6010	10/10/2007 13:33	
Cadmium - Total	0.69		0.26	MG/KG	6010	10/10/2007 13:33	
Calcium - Total	56300		64.2	MG/KG	6010	10/10/2007 13:33	
Chromium - Total	13.2		0.64	MG/KG	6010	10/10/2007 13:33	
Cobalt - Total	8.7		0.64	MG/KG	6010	10/10/2007 13:33	
Copper - Total	165		1.3	MG/KG	6010	10/10/2007 13:33	
Iron - Total	39200		12.8	MG/KG	6010	10/10/2007 13:33	
Lead - Total	215		1.3	MG/KG	6010	10/10/2007 13:33	
Magnesium - Total	21000		25.7	MG/KG	6010	10/10/2007 13:33	
Manganese - Total	580		0.26	MG/KG	6010	10/10/2007 13:33	
Mercury - Total	17.7		0.441	MG/KG	7471	10/10/2007 14:44	
Nickel - Total	20.6		0.64	MG/KG	6010	10/10/2007 13:33	
Potassium - Total	754		38.5	MG/KG	6010	10/10/2007 13:33	
Selenium - Total	ND		5.1	MG/KG	6010	10/10/2007 13:33	
Silver - Total	ND		0.64	MG/KG	6010	10/10/2007 13:33	
Sodium - Total	242		180	MG/KG	6010	10/10/2007 13:33	
Thallium - Total	ND		7.7	MG/KG	6010	10/10/2007 13:33	
Vanadium - Total	17.3		0.64	MG/KG	6010	10/10/2007 13:33	
Zinc - Total	327		2.6	MG/KG	6010	10/10/2007 13:33	

Sample ID: SB-4B 8'-10.3'
Lab Sample ID: A7B12104
Date Collected: 10/01/2007
Time Collected: 09:50

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC - SOIL-SW8463 8260 - TCL VOLATILES							
1,1,1-Trichloroethane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
1,1,2,2-Tetrachloroethane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
1,1,2-Trichloroethane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
1,1-Dichloroethane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
1,1-Dichloroethene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
1,2,4-Trichlorobenzene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
1,2-Dibromo-3-chloropropane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
1,2-Dibromoethane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
1,2-Dichlorobenzene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
1,2-Dichloroethane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
1,2-Dichloropropane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
1,3-Dichlorobenzene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
1,4-Dichlorobenzene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
2-Butanone	ND		33	UG/KG	8260	10/06/2007 15:52	TRB
2-Hexanone	ND		33	UG/KG	8260	10/06/2007 15:52	TRB
4-Methyl-2-pentanone	ND		33	UG/KG	8260	10/06/2007 15:52	TRB
Acetone	ND		33	UG/KG	8260	10/06/2007 15:52	TRB
Benzene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Bromodichloromethane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Bromoform	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Bromomethane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Carbon Disulfide	1	J	6	UG/KG	8260	10/06/2007 15:52	TRB
Carbon Tetrachloride	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Chlorobenzene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Chloroethane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Chloroform	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Chloromethane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
cis-1,2-Dichloroethene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
cis-1,3-Dichloropropene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Cyclohexane	1	J	6	UG/KG	8260	10/06/2007 15:52	TRB
Dibromochloromethane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Dichlorodifluoromethane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Ethylbenzene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Isopropylbenzene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Methyl acetate	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Methyl-t-Butyl Ether (MTBE)	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Methylcyclohexane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Methylene chloride	11	B	6	UG/KG	8260	10/06/2007 15:52	TRB
Styrene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Tetrachloroethene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Toluene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Total Xylenes	ND		20	UG/KG	8260	10/06/2007 15:52	TRB
trans-1,2-Dichloroethene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
trans-1,3-Dichloropropene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Trichloroethene	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Trichlorofluoromethane	ND		6	UG/KG	8260	10/06/2007 15:52	TRB
Vinyl chloride	ND		13	UG/KG	8260	10/06/2007 15:52	TRB

Sample ID: SB-5 1.3'-8'
Lab Sample ID: A7B12109
Date Collected: 10/01/2007
Time Collected: 09:20

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
2,2'-Oxybis(1-Chloropropane)	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
2,4,5-Trichlorophenol	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
2,4,6-Trichlorophenol	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
2,4-Dichlorophenol	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
2,4-Dimethylphenol	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
2,4-Dinitrophenol	ND		2200	UG/KG	8270	10/13/2007 00:15	RM
2,4-Dinitrotoluene	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
2,6-Dinitrotoluene	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
2-Chloronaphthalene	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
2-Chlorophenol	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
2-Methylnaphthalene	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
2-Methylphenol	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
2-Nitroaniline	ND		2200	UG/KG	8270	10/13/2007 00:15	RM
2-Nitrophenol	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
3,3'-Dichlorobenzidine	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
3-Nitroaniline	ND		2200	UG/KG	8270	10/13/2007 00:15	RM
4,6-Dinitro-2-methylphenol	ND		2200	UG/KG	8270	10/13/2007 00:15	RM
4-Bromophenyl phenyl ether	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
4-Chloro-3-methylphenol	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
4-Chloroaniline	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
4-Chlorophenyl phenyl ether	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
4-Methylphenol	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
4-Nitroaniline	ND		2200	UG/KG	8270	10/13/2007 00:15	RM
4-Nitrophenol	ND		2200	UG/KG	8270	10/13/2007 00:15	RM
Acenaphthene	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Acenaphthylene	100	J	1100	UG/KG	8270	10/13/2007 00:15	RM
Acetophenone	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Anthracene	80	J	1100	UG/KG	8270	10/13/2007 00:15	RM
Atrazine	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Benzaldehyde	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Benzo(a)anthracene	360	J	1100	UG/KG	8270	10/13/2007 00:15	RM
Benzo(a)pyrene	310	J	1100	UG/KG	8270	10/13/2007 00:15	RM
Benzo(b)fluoranthene	390	J	1100	UG/KG	8270	10/13/2007 00:15	RM
Benzo(ghi)perylene	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Benzo(k)fluoranthene	120	J	1100	UG/KG	8270	10/13/2007 00:15	RM
Biphenyl	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Bis(2-chloroethoxy) methane	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Bis(2-chloroethyl) ether	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Bis(2-ethylhexyl) phthalate	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Butyl benzyl phthalate	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Caprolactam	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Carbazole	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Chrysene	310	J	1100	UG/KG	8270	10/13/2007 00:15	RM
Di-n-butyl phthalate	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Di-n-octyl phthalate	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Dibenzo(a,h)anthracene	84	J	1100	UG/KG	8270	10/13/2007 00:15	RM
Dibenzofuran	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Diethyl phthalate	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Dimethyl phthalate	ND		1100	UG/KG	8270	10/13/2007 00:15	RM

Sample ID: SB-5 1.3'-8'
Lab Sample ID: A7B12109
Date Collected: 10/01/2007
Time Collected: 09:20

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
Fluoranthene	730	J	1100	UG/KG	8270	10/13/2007 00:15	RM
Fluorene	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Hexachlorobenzene	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Hexachlorobutadiene	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Hexachlorocyclopentadiene	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Hexachloroethane	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Indeno(1,2,3-cd)pyrene	190	J	1100	UG/KG	8270	10/13/2007 00:15	RM
Isophorone	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
N-Nitroso-Di-n-propylamine	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
N-nitrosodiphenylamine	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Naphthalene	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Nitrobenzene	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Pentachlorophenol	ND		2200	UG/KG	8270	10/13/2007 00:15	RM
Phenanthrene	460	J	1100	UG/KG	8270	10/13/2007 00:15	RM
Phenol	ND		1100	UG/KG	8270	10/13/2007 00:15	RM
Pyrene	530	J	1100	UG/KG	8270	10/13/2007 00:15	RM
NYS DEC-SOIL-SW8463 8081 - TCL PESTICIDES(SOM							
4,4'-DDD	9.4	J	11	UG/KG	8081	10/04/2007 19:33	TCH
4,4'-DDE	6.2	J	11	UG/KG	8081	10/04/2007 19:33	TCH
4,4'-DDT	14		11	UG/KG	8081	10/04/2007 19:33	TCH
Aldrin	ND		11	UG/KG	8081	10/04/2007 19:33	TCH
alpha-BHC	ND		11	UG/KG	8081	10/04/2007 19:33	TCH
alpha-Chlordane	ND		11	UG/KG	8081	10/04/2007 19:33	TCH
beta-BHC	ND		6.7	UG/KG	8081	10/04/2007 19:33	TCH
delta-BHC	ND		11	UG/KG	8081	10/04/2007 19:33	TCH
Dieldrin	ND		11	UG/KG	8081	10/04/2007 19:33	TCH
Endosulfan I	ND		11	UG/KG	8081	10/04/2007 19:33	TCH
Endosulfan II	ND		11	UG/KG	8081	10/04/2007 19:33	TCH
Endosulfan Sulfate	ND		11	UG/KG	8081	10/04/2007 19:33	TCH
Endrin	ND		11	UG/KG	8081	10/04/2007 19:33	TCH
Endrin aldehyde	ND		11	UG/KG	8081	10/04/2007 19:33	TCH
Endrin ketone	ND		11	UG/KG	8081	10/04/2007 19:33	TCH
gamma-BHC (Lindane)	ND		11	UG/KG	8081	10/04/2007 19:33	TCH
gamma-Chlordane	ND		11	UG/KG	8081	10/04/2007 19:33	TCH
Heptachlor	ND		11	UG/KG	8081	10/04/2007 19:33	TCH
Heptachlor epoxide	ND		11	UG/KG	8081	10/04/2007 19:33	TCH
Methoxychlor	ND		11	UG/KG	8081	10/04/2007 19:33	TCH
Toxaphene	ND		220	UG/KG	8081	10/04/2007 19:33	TCH
NYSDEC-SPILLS - SOIL-SW8463 8082 - PCBS							
Aroclor 1016	ND		22	UG/KG	8082	10/03/2007 13:01	GFD
Aroclor 1221	ND		22	UG/KG	8082	10/03/2007 13:01	GFD
Aroclor 1232	ND		22	UG/KG	8082	10/03/2007 13:01	GFD
Aroclor 1242	ND		22	UG/KG	8082	10/03/2007 13:01	GFD
Aroclor 1248	ND		22	UG/KG	8082	10/03/2007 13:01	GFD
Aroclor 1254	ND		22	UG/KG	8082	10/03/2007 13:01	GFD
Aroclor 1260	6.5	J	22	UG/KG	8082	10/03/2007 13:01	GFD

Sample ID: SB-5 1.3'-8'
Lab Sample ID: A7B12109
Date Collected: 10/01/2007
Time Collected: 09:20

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Aluminum - Total	8890		14.6	MG/KG	6010	10/10/2007 14:07	
Antimony - Total	ND		21.8	MG/KG	6010	10/10/2007 14:07	
Arsenic - Total	9.6		2.9	MG/KG	6010	10/10/2007 14:07	
Barium - Total	636		0.73	MG/KG	6010	10/10/2007 14:07	
Beryllium - Total	0.50		0.29	MG/KG	6010	10/10/2007 14:07	
Cadmium - Total	1.9		0.29	MG/KG	6010	10/10/2007 14:07	
Calcium - Total	17400		72.8	MG/KG	6010	10/10/2007 14:07	
Chromium - Total	21.4		0.73	MG/KG	6010	10/10/2007 14:07	
Cobalt - Total	7.6		0.73	MG/KG	6010	10/10/2007 14:07	
Copper - Total	306		1.5	MG/KG	6010	10/10/2007 14:07	
Iron - Total	24000		14.6	MG/KG	6010	10/10/2007 14:07	
Lead - Total	6270		1.5	MG/KG	6010	10/10/2007 14:07	
Magnesium - Total	2310		29.1	MG/KG	6010	10/10/2007 14:07	
Manganese - Total	300		0.29	MG/KG	6010	10/10/2007 14:07	
Mercury - Total	0.226		0.023	MG/KG	7471	10/10/2007 14:08	
Nickel - Total	34.0		0.73	MG/KG	6010	10/10/2007 14:07	
Potassium - Total	1280		43.7	MG/KG	6010	10/10/2007 14:07	
Selenium - Total	ND		5.8	MG/KG	6010	10/10/2007 14:07	
Silver - Total	1.8		0.73	MG/KG	6010	10/10/2007 14:07	
Sodium - Total	1080		204	MG/KG	6010	10/10/2007 14:07	
Thallium - Total	ND		8.7	MG/KG	6010	10/10/2007 14:07	
Vanadium - Total	30.9		0.73	MG/KG	6010	10/10/2007 14:07	
Zinc - Total	913		2.9	MG/KG	6010	10/10/2007 14:07	

Sample ID: SB-5 1.3'-8'
Lab Sample ID: A7B12109
Date Collected: 10/01/2007
Time Collected: 09:20

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Lead - Total	604		1.3	MG/KG	6010	10/23/2007 16:09	AH
TCLP Metals Analysis							
Lead - Total	1.1		0.0050	MG/L	6010	10/25/2007 20:03	AH

Sample ID: SB-5 1.3'-8'
Lab Sample ID: A7C64501
Date Collected: 10/01/2007
Time Collected: 09:20

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Lead - Total	975		1.5	MG/KG	6010	11/07/2007 01:19	AH
TCLP Metals Analysis							
Lead - Total	1.5		0.0050	MG/L	6010	11/06/2007 16:50	TWS

Sample ID: SB-6 4'-9'
Lab Sample ID: A7B12110
Date Collected: 10/01/2007
Time Collected: 10:15

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
2,2'-Oxybis(1-Chloropropane)	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
2,4,5-Trichlorophenol	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
2,4,6-Trichlorophenol	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
2,4-Dichlorophenol	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
2,4-Dimethylphenol	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
2,4-Dinitrophenol	ND		2200	UG/KG	8270	10/13/2007 00:38	RM
2,4-Dinitrotoluene	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
2,6-Dinitrotoluene	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
2-Chloronaphthalene	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
2-Chlorophenol	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
2-Methylnaphthalene	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
2-Methylphenol	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
2-Nitroaniline	ND		2200	UG/KG	8270	10/13/2007 00:38	RM
2-Nitrophenol	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
3,3'-Dichlorobenzidine	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
3-Nitroaniline	ND		2200	UG/KG	8270	10/13/2007 00:38	RM
4,6-Dinitro-2-methylphenol	ND		2200	UG/KG	8270	10/13/2007 00:38	RM
4-Bromophenyl phenyl ether	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
4-Chloro-3-methylphenol	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
4-Chloroaniline	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
4-Chlorophenyl phenyl ether	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
4-Methylphenol	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
4-Nitroaniline	ND		2200	UG/KG	8270	10/13/2007 00:38	RM
4-Nitrophenol	ND		2200	UG/KG	8270	10/13/2007 00:38	RM
Acenaphthene	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Acenaphthylene	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Acetophenone	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Anthracene	53	J	1100	UG/KG	8270	10/13/2007 00:38	RM
Atrazine	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Benzaldehyde	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Benzo(a)anthracene	210	J	1100	UG/KG	8270	10/13/2007 00:38	RM
Benzo(a)pyrene	180	J	1100	UG/KG	8270	10/13/2007 00:38	RM
Benzo(b)fluoranthene	240	J	1100	UG/KG	8270	10/13/2007 00:38	RM
Benzo(ghi)perylene	140	J	1100	UG/KG	8270	10/13/2007 00:38	RM
Benzo(k)fluoranthene	78	J	1100	UG/KG	8270	10/13/2007 00:38	RM
Biphenyl	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Bis(2-chloroethoxy) methane	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Bis(2-chloroethyl) ether	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Bis(2-ethylhexyl) phthalate	440	J	1100	UG/KG	8270	10/13/2007 00:38	RM
Butyl benzyl phthalate	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Caprolactam	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Carbazole	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Chrysene	160	J	1100	UG/KG	8270	10/13/2007 00:38	RM
Di-n-butyl phthalate	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Di-n-octyl phthalate	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Dibenzo(a,h)anthracene	47	J	1100	UG/KG	8270	10/13/2007 00:38	RM
Dibenzofuran	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Diethyl phthalate	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Dimethyl phthalate	ND		1100	UG/KG	8270	10/13/2007 00:38	RM

Sample ID: SB-6 4'-9'
Lab Sample ID: A7B12110
Date Collected: 10/01/2007
Time Collected: 10:15

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
Fluoranthene	410	J	1100	UG/KG	8270	10/13/2007 00:38	RM
Fluorene	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Hexachlorobenzene	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Hexachlorobutadiene	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Hexachlorocyclopentadiene	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Hexachloroethane	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Indeno(1,2,3-cd)pyrene	140	J	1100	UG/KG	8270	10/13/2007 00:38	RM
Isophorone	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
N-Nitroso-Di-n-propylamine	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
N-nitrosodiphenylamine	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Naphthalene	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Nitrobenzene	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Pentachlorophenol	ND		2200	UG/KG	8270	10/13/2007 00:38	RM
Phenanthrene	290	J	1100	UG/KG	8270	10/13/2007 00:38	RM
Phenol	ND		1100	UG/KG	8270	10/13/2007 00:38	RM
Pyrene	330	J	1100	UG/KG	8270	10/13/2007 00:38	RM
NYS DEC-SOIL-SW8463 8081 - TCL PESTICIDES(SOM							
4,4'-DDD	7.2	J	11	UG/KG	8081	10/04/2007 20:09	TCH
4,4'-DDE	6.5	J	11	UG/KG	8081	10/04/2007 20:09	TCH
4,4'-DDT	7.6	J	11	UG/KG	8081	10/04/2007 20:09	TCH
Aldrin	ND		11	UG/KG	8081	10/04/2007 20:09	TCH
alpha-BHC	ND		11	UG/KG	8081	10/04/2007 20:09	TCH
alpha-Chlordane	ND		11	UG/KG	8081	10/04/2007 20:09	TCH
beta-BHC	ND		6.5	UG/KG	8081	10/04/2007 20:09	TCH
delta-BHC	ND		11	UG/KG	8081	10/04/2007 20:09	TCH
Dieldrin	ND		11	UG/KG	8081	10/04/2007 20:09	TCH
Endosulfan I	ND		11	UG/KG	8081	10/04/2007 20:09	TCH
Endosulfan II	ND		11	UG/KG	8081	10/04/2007 20:09	TCH
Endosulfan Sulfate	ND		11	UG/KG	8081	10/04/2007 20:09	TCH
Endrin	ND		11	UG/KG	8081	10/04/2007 20:09	TCH
Endrin aldehyde	ND		11	UG/KG	8081	10/04/2007 20:09	TCH
Endrin ketone	ND		11	UG/KG	8081	10/04/2007 20:09	TCH
gamma-BHC (Lindane)	ND		11	UG/KG	8081	10/04/2007 20:09	TCH
gamma-Chlordane	ND		11	UG/KG	8081	10/04/2007 20:09	TCH
Heptachlor	ND		11	UG/KG	8081	10/04/2007 20:09	TCH
Heptachlor epoxide	ND		11	UG/KG	8081	10/04/2007 20:09	TCH
Methoxychlor	ND		11	UG/KG	8081	10/04/2007 20:09	TCH
Toxaphene	ND		210	UG/KG	8081	10/04/2007 20:09	TCH
NYSDEC-SPILLS - SOIL-SW8463 8082 - PCBS							
Aroclor 1016	ND		22	UG/KG	8082	10/03/2007 13:28	GFD
Aroclor 1221	ND		22	UG/KG	8082	10/03/2007 13:28	GFD
Aroclor 1232	ND		22	UG/KG	8082	10/03/2007 13:28	GFD
Aroclor 1242	ND		22	UG/KG	8082	10/03/2007 13:28	GFD
Aroclor 1248	ND		22	UG/KG	8082	10/03/2007 13:28	GFD
Aroclor 1254	ND		22	UG/KG	8082	10/03/2007 13:28	GFD
Aroclor 1260	12	J	22	UG/KG	8082	10/03/2007 13:28	GFD

Sample ID: SB-6 4'-9'
Lab Sample ID: A7B12110
Date Collected: 10/01/2007
Time Collected: 10:15

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Aluminum - Total	10000		14.2	MG/KG	6010	10/10/2007 14:12	
Antimony - Total	ND		21.4	MG/KG	6010	10/10/2007 14:12	
Arsenic - Total	15.0		2.8	MG/KG	6010	10/10/2007 14:12	
Barium - Total	934		0.71	MG/KG	6010	10/10/2007 14:12	
Beryllium - Total	0.61		0.28	MG/KG	6010	10/10/2007 14:12	
Cadmium - Total	3.0		0.28	MG/KG	6010	10/10/2007 14:12	
Calcium - Total	58800		71.2	MG/KG	6010	10/10/2007 14:12	
Chromium - Total	64.4		0.71	MG/KG	6010	10/10/2007 14:12	
Cobalt - Total	16.3		0.71	MG/KG	6010	10/10/2007 14:12	
Copper - Total	1830		1.4	MG/KG	6010	10/10/2007 14:12	
Iron - Total	96200		14.2	MG/KG	6010	10/10/2007 14:12	
Lead - Total	1180		1.4	MG/KG	6010	10/10/2007 14:12	
Magnesium - Total	14400		28.5	MG/KG	6010	10/10/2007 14:12	
Manganese - Total	919		0.28	MG/KG	6010	10/10/2007 14:12	
Mercury - Total	0.310		0.020	MG/KG	7471	10/10/2007 14:09	
Nickel - Total	69.3		0.71	MG/KG	6010	10/10/2007 14:12	
Potassium - Total	2080		42.7	MG/KG	6010	10/10/2007 14:12	
Selenium - Total	ND		5.7	MG/KG	6010	10/10/2007 14:12	
Silver - Total	4.9		0.71	MG/KG	6010	10/10/2007 14:12	
Sodium - Total	1770		199	MG/KG	6010	10/10/2007 14:12	
Thallium - Total	ND		8.5	MG/KG	6010	10/10/2007 14:12	
Vanadium - Total	31.5		0.71	MG/KG	6010	10/10/2007 14:12	
Zinc - Total	1590		14.2	MG/KG	6010	10/11/2007 06:53	

Sample ID: SB-6 4'-9'
Lab Sample ID: A7B12110
Date Collected: 10/01/2007
Time Collected: 10:15

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Lead - Total	956		1.3	MG/KG	6010	10/23/2007 16:14	AH
TCLP Metals Analysis							
Lead - Total	0.77		0.0050	MG/L	6010	10/25/2007 20:09	AH

Sample ID: SB-8 0'-3.6'
Lab Sample ID: A7B12107
Date Collected: 10/01/2007
Time Collected: 08:50

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Aluminum - Total	7970		11.2	MG/KG	6010	10/10/2007 13:57	
Antimony - Total	ND		16.8	MG/KG	6010	10/10/2007 13:57	
Arsenic - Total	7.1		2.2	MG/KG	6010	10/10/2007 13:57	
Barium - Total	120		0.56	MG/KG	6010	10/10/2007 13:57	
Beryllium - Total	0.59		0.22	MG/KG	6010	10/10/2007 13:57	
Cadmium - Total	ND		0.22	MG/KG	6010	10/10/2007 13:57	
Calcium - Total	98900		281	MG/KG	6010	10/11/2007 06:42	
Chromium - Total	8.1		0.56	MG/KG	6010	10/10/2007 13:57	
Cobalt - Total	3.0		0.56	MG/KG	6010	10/10/2007 13:57	
Copper - Total	37.2		1.1	MG/KG	6010	10/10/2007 13:57	
Iron - Total	7950		11.2	MG/KG	6010	10/10/2007 13:57	
Lead - Total	308		1.1	MG/KG	6010	10/10/2007 13:57	
Magnesium - Total	13100		22.5	MG/KG	6010	10/10/2007 13:57	
Manganese - Total	244		0.22	MG/KG	6010	10/10/2007 13:57	
Mercury - Total	0.071		0.019	MG/KG	7471	10/10/2007 14:02	
Nickel - Total	7.0		0.56	MG/KG	6010	10/10/2007 13:57	
Potassium - Total	722		33.7	MG/KG	6010	10/10/2007 13:57	
Selenium - Total	ND		4.5	MG/KG	6010	10/10/2007 13:57	
Silver - Total	ND		0.56	MG/KG	6010	10/10/2007 13:57	
Sodium - Total	400		157	MG/KG	6010	10/10/2007 13:57	
Thallium - Total	ND		6.7	MG/KG	6010	10/10/2007 13:57	
Vanadium - Total	11.3		0.56	MG/KG	6010	10/10/2007 13:57	
Zinc - Total	136		2.2	MG/KG	6010	10/10/2007 13:57	

Sample ID: SB-9 4'-8.9'
Lab Sample ID: A7B12111
Date Collected: 10/01/2007
Time Collected: 10:45

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
2,2'-Oxybis(1-Chloropropane)	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
2,4,5-Trichlorophenol	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
2,4,6-Trichlorophenol	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
2,4-Dichlorophenol	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
2,4-Dimethylphenol	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
2,4-Dinitrophenol	ND		2100	UG/KG	8270	10/13/2007 01:00	RM
2,4-Dinitrotoluene	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
2,6-Dinitrotoluene	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
2-Chloronaphthalene	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
2-Chlorophenol	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
2-Methylnaphthalene	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
2-Methylphenol	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
2-Nitroaniline	ND		2100	UG/KG	8270	10/13/2007 01:00	RM
2-Nitrophenol	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
3,3'-Dichlorobenzidine	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
3-Nitroaniline	ND		2100	UG/KG	8270	10/13/2007 01:00	RM
4,6-Dinitro-2-methylphenol	ND		2100	UG/KG	8270	10/13/2007 01:00	RM
4-Bromophenyl phenyl ether	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
4-Chloro-3-methylphenol	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
4-Chloroaniline	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
4-Chlorophenyl phenyl ether	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
4-Methylphenol	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
4-Nitroaniline	ND		2100	UG/KG	8270	10/13/2007 01:00	RM
4-Nitrophenol	ND		2100	UG/KG	8270	10/13/2007 01:00	RM
Acenaphthene	110	J	1100	UG/KG	8270	10/13/2007 01:00	RM
Acenaphthylene	320	J	1100	UG/KG	8270	10/13/2007 01:00	RM
Acetophenone	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Anthracene	660	J	1100	UG/KG	8270	10/13/2007 01:00	RM
Atrazine	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Benzaldehyde	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Benzo(a)anthracene	2100		1100	UG/KG	8270	10/13/2007 01:00	RM
Benzo(a)pyrene	1900		1100	UG/KG	8270	10/13/2007 01:00	RM
Benzo(b)fluoranthene	3400		1100	UG/KG	8270	10/13/2007 01:00	RM
Benzo(ghi)perylene	1200		1100	UG/KG	8270	10/13/2007 01:00	RM
Benzo(k)fluoranthene	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Biphenyl	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Bis(2-chloroethoxy) methane	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Bis(2-chloroethyl) ether	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Bis(2-ethylhexyl) phthalate	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Butyl benzyl phthalate	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Caprolactam	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Carbazole	150	J	1100	UG/KG	8270	10/13/2007 01:00	RM
Chrysene	2000		1100	UG/KG	8270	10/13/2007 01:00	RM
Di-n-butyl phthalate	400	J	1100	UG/KG	8270	10/13/2007 01:00	RM
Di-n-octyl phthalate	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Dibenzo(a,h)anthracene	370	J	1100	UG/KG	8270	10/13/2007 01:00	RM
Dibenzofuran	79	J	1100	UG/KG	8270	10/13/2007 01:00	RM
Diethyl phthalate	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Dimethyl phthalate	ND		1100	UG/KG	8270	10/13/2007 01:00	RM

Sample ID: SB-9 4'-8.9'
Lab Sample ID: A7B12111
Date Collected: 10/01/2007
Time Collected: 10:45

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
Fluoranthene	4000		1100	UG/KG	8270	10/13/2007 01:00	RM
Fluorene	180	J	1100	UG/KG	8270	10/13/2007 01:00	RM
Hexachlorobenzene	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Hexachlorobutadiene	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Hexachlorocyclopentadiene	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Hexachloroethane	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Indeno(1,2,3-cd)pyrene	1200		1100	UG/KG	8270	10/13/2007 01:00	RM
Isophorone	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
N-Nitroso-Di-n-propylamine	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
N-nitrosodiphenylamine	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Naphthalene	79	J	1100	UG/KG	8270	10/13/2007 01:00	RM
Nitrobenzene	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Pentachlorophenol	ND		2100	UG/KG	8270	10/13/2007 01:00	RM
Phenanthrene	1700		1100	UG/KG	8270	10/13/2007 01:00	RM
Phenol	ND		1100	UG/KG	8270	10/13/2007 01:00	RM
Pyrene	3100		1100	UG/KG	8270	10/13/2007 01:00	RM
NYS DEC-SOIL-SW8463 8081 - TCL PESTICIDES(SOM							
4,4'-DDD	11		11	UG/KG	8081	10/04/2007 20:45	TCH
4,4'-DDE	7.2	J	11	UG/KG	8081	10/04/2007 20:45	TCH
4,4'-DDT	11		11	UG/KG	8081	10/04/2007 20:45	TCH
Aldrin	ND		11	UG/KG	8081	10/04/2007 20:45	TCH
alpha-BHC	ND		11	UG/KG	8081	10/04/2007 20:45	TCH
alpha-Chlordane	ND		11	UG/KG	8081	10/04/2007 20:45	TCH
beta-BHC	ND		6.4	UG/KG	8081	10/04/2007 20:45	TCH
delta-BHC	ND		11	UG/KG	8081	10/04/2007 20:45	TCH
Dieldrin	6.6	J	11	UG/KG	8081	10/04/2007 20:45	TCH
Endosulfan I	ND		11	UG/KG	8081	10/04/2007 20:45	TCH
Endosulfan II	ND		11	UG/KG	8081	10/04/2007 20:45	TCH
Endosulfan Sulfate	ND		11	UG/KG	8081	10/04/2007 20:45	TCH
Endrin	ND		11	UG/KG	8081	10/04/2007 20:45	TCH
Endrin aldehyde	ND		11	UG/KG	8081	10/04/2007 20:45	TCH
Endrin ketone	ND		11	UG/KG	8081	10/04/2007 20:45	TCH
gamma-BHC (Lindane)	ND		11	UG/KG	8081	10/04/2007 20:45	TCH
gamma-Chlordane	ND		11	UG/KG	8081	10/04/2007 20:45	TCH
Heptachlor	ND		11	UG/KG	8081	10/04/2007 20:45	TCH
Heptachlor epoxide	5.7	J	11	UG/KG	8081	10/04/2007 20:45	TCH
Methoxychlor	ND		11	UG/KG	8081	10/04/2007 20:45	TCH
Toxaphene	ND		210	UG/KG	8081	10/04/2007 20:45	TCH
NYSDEC-SPILLS - SOIL-SW8463 8082 - PCBS							
Aroclor 1016	ND		21	UG/KG	8082	10/03/2007 13:42	GFD
Aroclor 1221	ND		21	UG/KG	8082	10/03/2007 13:42	GFD
Aroclor 1232	ND		21	UG/KG	8082	10/03/2007 13:42	GFD
Aroclor 1242	ND		21	UG/KG	8082	10/03/2007 13:42	GFD
Aroclor 1248	ND		21	UG/KG	8082	10/03/2007 13:42	GFD
Aroclor 1254	ND		21	UG/KG	8082	10/03/2007 13:42	GFD
Aroclor 1260	ND		21	UG/KG	8082	10/03/2007 13:42	GFD

Sample ID: SB-9 4'-8.9'
Lab Sample ID: A7B12111
Date Collected: 10/01/2007
Time Collected: 10:45

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Aluminum - Total	4760		12.5	MG/KG	6010	10/10/2007 14:17	
Antimony - Total	ND		18.7	MG/KG	6010	10/10/2007 14:17	
Arsenic - Total	17.1		2.5	MG/KG	6010	10/10/2007 14:17	
Barium - Total	662		0.62	MG/KG	6010	10/10/2007 14:17	
Beryllium - Total	0.41		0.25	MG/KG	6010	10/10/2007 14:17	
Cadmium - Total	5.3		0.25	MG/KG	6010	10/10/2007 14:17	
Calcium - Total	125000		312	MG/KG	6010	10/11/2007 06:59	
Chromium - Total	25.4		0.62	MG/KG	6010	10/10/2007 14:17	
Cobalt - Total	6.5		0.62	MG/KG	6010	10/10/2007 14:17	
Copper - Total	246		1.2	MG/KG	6010	10/10/2007 14:17	
Iron - Total	49200		12.5	MG/KG	6010	10/10/2007 14:17	
Lead - Total	8740		1.2	MG/KG	6010	10/10/2007 14:17	
Magnesium - Total	34900		25.0	MG/KG	6010	10/10/2007 14:17	
Manganese - Total	959		0.25	MG/KG	6010	10/10/2007 14:17	
Mercury - Total	3.5		0.222	MG/KG	7471	10/10/2007 14:45	
Nickel - Total	28.8		0.62	MG/KG	6010	10/10/2007 14:17	
Potassium - Total	1280		37.4	MG/KG	6010	10/10/2007 14:17	
Selenium - Total	ND		5.0	MG/KG	6010	10/10/2007 14:17	
Silver - Total	1.7		0.62	MG/KG	6010	10/10/2007 14:17	
Sodium - Total	562		175	MG/KG	6010	10/10/2007 14:17	
Thallium - Total	ND		7.5	MG/KG	6010	10/10/2007 14:17	
Vanadium - Total	17.9		0.62	MG/KG	6010	10/10/2007 14:17	
Zinc - Total	2500		12.5	MG/KG	6010	10/11/2007 06:59	

Sample ID: SB-9 4'-8.9'
Lab Sample ID: A7B12111
Date Collected: 10/01/2007
Time Collected: 10:45

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Lead - Total	2150		1.3	MG/KG	6010	10/23/2007 16:20	AH
TCLP Metals Analysis							
Lead - Total	1.6		0.0050	MG/L	6010	10/25/2007 20:14	AH

Sample ID: SB-9 4'-8.9'
Lab Sample ID: A7C64502
Date Collected: 10/01/2007
Time Collected: 10:45

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Lead - Total	1750		1.3	MG/KG	6010	11/07/2007 01:24	AH
TCLP Metals Analysis							
Lead - Total	1.9		0.0050	MG/L	6010	11/06/2007 16:55	TWS

Sample ID: SB-10 4'-8.6'
Lab Sample ID: A7B12108
Date Collected: 10/01/2007
Time Collected: 08:40

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Aluminum - Total	8160		12.0	MG/KG	6010	10/10/2007 14:02	
Antimony - Total	ND		18.0	MG/KG	6010	10/10/2007 14:02	
Arsenic - Total	12.3		2.4	MG/KG	6010	10/10/2007 14:02	
Barium - Total	465		0.60	MG/KG	6010	10/10/2007 14:02	
Beryllium - Total	0.43		0.24	MG/KG	6010	10/10/2007 14:02	
Cadmium - Total	5.7		0.24	MG/KG	6010	10/10/2007 14:02	
Calcium - Total	31800		59.9	MG/KG	6010	10/10/2007 14:02	
Chromium - Total	104		0.60	MG/KG	6010	10/10/2007 14:02	
Cobalt - Total	17.4		0.60	MG/KG	6010	10/10/2007 14:02	
Copper - Total	1550		1.2	MG/KG	6010	10/10/2007 14:02	
Iron - Total	125000		59.9	MG/KG	6010	10/11/2007 06:48	
Lead - Total	787		1.2	MG/KG	6010	10/10/2007 14:02	
Magnesium - Total	7860		24.0	MG/KG	6010	10/10/2007 14:02	
Manganese - Total	916		0.24	MG/KG	6010	10/10/2007 14:02	
Mercury - Total	0.880		0.022	MG/KG	7471	10/10/2007 14:06	
Nickel - Total	174		0.60	MG/KG	6010	10/10/2007 14:02	
Potassium - Total	600		35.9	MG/KG	6010	10/10/2007 14:02	
Selenium - Total	ND		4.8	MG/KG	6010	10/10/2007 14:02	
Silver - Total	5.0		0.60	MG/KG	6010	10/10/2007 14:02	
Sodium - Total	371		168	MG/KG	6010	10/10/2007 14:02	
Thallium - Total	ND		7.2	MG/KG	6010	10/10/2007 14:02	
Vanadium - Total	14.7		0.60	MG/KG	6010	10/10/2007 14:02	
Zinc - Total	1390		12.0	MG/KG	6010	10/11/2007 06:48	

Sample ID: SB-11A 4'-8'
Lab Sample ID: A7B12106
Date Collected: 10/01/2007
Time Collected: 11:10

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Aluminum - Total	8170		12.8	MG/KG	6010	10/10/2007 13:52	
Antimony - Total	ND		19.2	MG/KG	6010	10/10/2007 13:52	
Arsenic - Total	27.9		2.6	MG/KG	6010	10/10/2007 13:52	
Barium - Total	410		0.64	MG/KG	6010	10/10/2007 13:52	
Beryllium - Total	0.53		0.26	MG/KG	6010	10/10/2007 13:52	
Cadmium - Total	26.5		0.26	MG/KG	6010	10/10/2007 13:52	
Calcium - Total	8470		64.1	MG/KG	6010	10/10/2007 13:52	
Chromium - Total	27.5		0.64	MG/KG	6010	10/10/2007 13:52	
Cobalt - Total	11.6		0.64	MG/KG	6010	10/10/2007 13:52	
Copper - Total	252		1.3	MG/KG	6010	10/10/2007 13:52	
Iron - Total	62400		12.8	MG/KG	6010	10/10/2007 13:52	
Lead - Total	890		1.3	MG/KG	6010	10/10/2007 13:52	
Magnesium - Total	612		25.6	MG/KG	6010	10/10/2007 13:52	
Manganese - Total	420		0.26	MG/KG	6010	10/10/2007 13:52	
Mercury - Total	0.511		0.021	MG/KG	7471	10/10/2007 14:01	
Nickel - Total	76.7		0.64	MG/KG	6010	10/10/2007 13:52	
Potassium - Total	652		38.4	MG/KG	6010	10/10/2007 13:52	
Selenium - Total	ND		5.1	MG/KG	6010	10/10/2007 13:52	
Silver - Total	0.84		0.64	MG/KG	6010	10/10/2007 13:52	
Sodium - Total	376		179	MG/KG	6010	10/10/2007 13:52	
Thallium - Total	ND		7.7	MG/KG	6010	10/10/2007 13:52	
Vanadium - Total	40.5		0.64	MG/KG	6010	10/10/2007 13:52	
Zinc - Total	1400		12.8	MG/KG	6010	10/11/2007 06:37	

Sample ID: SB-11B 8'-11.7'
Lab Sample ID: A7B12105
Date Collected: 10/01/2007
Time Collected: 11:20

Date Received: 10/02/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC - SOIL-SW8463 8260 - TCL VOLATILES							
1,1,1-Trichloroethane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
1,1,2,2-Tetrachloroethane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
1,1,2-Trichloroethane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
1,1-Dichloroethane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
1,1-Dichloroethene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
1,2,4-Trichlorobenzene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
1,2-Dibromo-3-chloropropane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
1,2-Dibromoethane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
1,2-Dichlorobenzene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
1,2-Dichloroethane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
1,2-Dichloropropane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
1,3-Dichlorobenzene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
1,4-Dichlorobenzene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
2-Butanone	10	J	41	UG/KG	8260	10/06/2007 16:23	TRB
2-Hexanone	ND		41	UG/KG	8260	10/06/2007 16:23	TRB
4-Methyl-2-pentanone	ND		41	UG/KG	8260	10/06/2007 16:23	TRB
Acetone	38	J	41	UG/KG	8260	10/06/2007 16:23	TRB
Benzene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Bromodichloromethane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Bromoform	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Bromomethane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Carbon Disulfide	5	J	8	UG/KG	8260	10/06/2007 16:23	TRB
Carbon Tetrachloride	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Chlorobenzene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Chloroethane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Chloroform	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Chloromethane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
cis-1,2-Dichloroethene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
cis-1,3-Dichloropropene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Cyclohexane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Dibromochloromethane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Dichlorodifluoromethane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Ethylbenzene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Isopropylbenzene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Methyl acetate	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Methyl-t-Butyl Ether (MTBE)	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Methylcyclohexane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Methylene chloride	16	B	8	UG/KG	8260	10/06/2007 16:23	TRB
Styrene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Tetrachloroethene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Toluene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Total Xylenes	ND		25	UG/KG	8260	10/06/2007 16:23	TRB
trans-1,2-Dichloroethene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
trans-1,3-Dichloropropene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Trichloroethene	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Trichlorofluoromethane	ND		8	UG/KG	8260	10/06/2007 16:23	TRB
Vinyl chloride	ND		16	UG/KG	8260	10/06/2007 16:23	TRB

Chain of Custody Record

SEVERN TRENT **STL**

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client	Project Manager	Date	Chain of Custody Number
NYSDEC	Glenn May	10-1-07	324916
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
270 Michigan Ave	716-851-7220	—	
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Buffalo / NY / 14203	G. May	B. Fischer	
Project Name and Location (State)	**Carrier/Waybill Number**		
Niagara Street Quarry, 932111	—		
Contract/Purchase Order/Quote No.			
—			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8270	8081	8082	TAL Metals	TCLP Metals	8260	Special Instructions/ Conditions of Receipt
SB-2 4'-8.7'	9/28/07	1435				X	X						X	X	X	X	X		Hold TCLP metals
SB-3 4'-8.8'	"	1500				X	X						X	X	X	X	X		bottle pending
SB-4A 4'-10.3'	10/1/07	0950				X	X						X	X	X	X	X		Total metals
SB-4B 8'-10.3'	"	0950				X	X											X	analysis
SB-11B 8'-11.7'	"	1120				X	X											X	
SB-11A 4'-8'	"	1110				X	X									X	X		
SB-8 0'-3.6'	"	0850				X	X									X	X		
SB-10 4'-8.6'	"	0840				X	X									X	X		
SB-5 1.3'-8'	"	0920				X	X						X	X	X	X	X		
SB-6 4'-9'	"	1015				X	X						X	X	X	X	X		
SB-9 4'-8.9'	"	1045				X	X						X	X	X	X	X		

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal

☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 10 day

QC Requirements (Specify)

ASP Cat B.

1. Relinquished By	Date	Time	1. Received By	Date	Time
Glenn M May	10/2/07	0730	TAL Buffalo	10/2/07	0730
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

2.0°C

Chain of Custody Record

SEVERN TRENT STL
Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client	Project Manager	Date	Chain of Custody Number
NYSDEC	Glenn May	10-1-07	324916
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
270 Michigan Ave	716-851-7220	—	
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Buffalo / NY / 14203	G. May	B. Fischer	
Project Name and Location (State)	**Carrier/Waybill Number**		
Niagara Street Quarry, 932111	—		
Contract/Purchase Order/Quote No.			
—			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8270	8081	8082	TAL Metals	TCLP Metals	8260	TOTAL & TCLP Pb	Special Instructions/ Conditions of Receipt
SB-2 4'-8.7'	9/28/07	1435				X	X						X	X	X	X	X			Hold TCLP metals
SB-3 4'-8.8'	"	1500				X	X						X	X	X	X	X			bottle pending
SB-4A 4'-10.3'	10/1/07	0950				X	X						X	X	X	X	X			total metals
SB-4B 8'-10.3'	"	0950				X	X											X		analysis
SB-11B 8'-11.7'	"	1120				X	X											X		
SB-11A 4'-8'	"	1110				X	X									X	X			
SB-8 0'-3.6'	"	0850				X	X									X	X			
SB-10 4'-8.6'	"	0840				X	X									X	X			
SB-5 1.3'-8'	"	0920				X	X						X	X	X	X	X		*	* TOTAL & TCLP Pb
SB-6 4'-9'	"	1015				X	X						X	X	X	X	X		*	PER COM
SB-9 4'-8.9'	"	1045				X	X						X	X	X	X	X		*	10/8/07

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 10 day

QC Requirements (Specify)
ASP Cat B.

1. Relinquished By	Date	Time	1. Received By	Date	Time
Glenn M May	10/2/07	0730	TAL Buffalo	10/2/07	0730
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

2.0°C

11/11

Chain of Custody Record

STL
Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client	Project Manager	Date	Chain of Custody Number
NYSDEC	Glenn May	10-1-07	324916
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
270 Michigan Ave	716-851-7220	—	
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Buffalo / NY / 14203	G. May	B. Fischer	
Project Name and Location (State)	**Carrier/Waybill Number**		
Niagara Street Quarry, 932111	—		
Contract/Purchase Order/Quote No.			
—			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8270	8081	8082	TAL Metals	TCLP Metals	8260	TOTAL & TCLP Pb	Special Instructions/ Conditions of Receipt
SB-2 4'-8.7'	9/28/07	1435				X	X						X	X	X	X	X			Hold TCLP metals
SB-3 4'-8.8'	"	1500				X	X						X	X	X	X	X			bottle pending
SB-4A 4'-10.3'	10/1/07	0950				X	X						X	X	X	X	X			total metals
SB-4B 8'-10.3'	"	0950				X	X											X		analysis
SB-11B 8'-11.7'	"	1120				X	X											X		
SB-11A 4'-8'	"	1110				X	X									X	X			
SB-8 0'-3.6'	"	0850				X	X									X	X			
SB-10 4'-8.6'	"	0840				X	X									X	X			
SB-5 1.3'-8'	"	0920				X	X						X	X	X	X	X		(X)	* TOTAL & TCLP Pb
SB-6 4'-9'	"	1015				X	X						X	X	X	X	X		X	PER GVM 11/1/07
SB-9 4'-8.9'	"	1045				X	X						X	X	X	X	X		(X)	② RERUN PER GVM 11/1/07 10/8/07

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 10 day

QC Requirements (Specify)
ASP Cat B.

1. Relinquished By	Date	Time	1. Received By	Date	Time
Glenn M May	10/2/07	0730	UPS TAL Buffalo	10/2/07	0750
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

2.0°C

10/10

SEDIMENT

Sample ID: SED-1
Lab Sample ID: A7667101
Date Collected: 06/14/2007
Time Collected: 11:25

Date Received: 06/14/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
2,2'-Oxybis(1-Chloropropane)	ND		580	UG/KG	8270	06/20/2007 15:56	MD
2,4,5-Trichlorophenol	ND		580	UG/KG	8270	06/20/2007 15:56	MD
2,4,6-Trichlorophenol	ND		580	UG/KG	8270	06/20/2007 15:56	MD
2,4-Dichlorophenol	ND		580	UG/KG	8270	06/20/2007 15:56	MD
2,4-Dimethylphenol	ND		580	UG/KG	8270	06/20/2007 15:56	MD
2,4-Dinitrophenol	ND		1100	UG/KG	8270	06/20/2007 15:56	MD
2,4-Dinitrotoluene	ND		580	UG/KG	8270	06/20/2007 15:56	MD
2,6-Dinitrotoluene	ND		580	UG/KG	8270	06/20/2007 15:56	MD
2-Chloronaphthalene	ND		580	UG/KG	8270	06/20/2007 15:56	MD
2-Chlorophenol	ND		580	UG/KG	8270	06/20/2007 15:56	MD
2-Methylnaphthalene	ND		580	UG/KG	8270	06/20/2007 15:56	MD
2-Methylphenol	ND		580	UG/KG	8270	06/20/2007 15:56	MD
2-Nitroaniline	ND		1100	UG/KG	8270	06/20/2007 15:56	MD
2-Nitrophenol	ND		580	UG/KG	8270	06/20/2007 15:56	MD
3,3'-Dichlorobenzidine	ND		580	UG/KG	8270	06/20/2007 15:56	MD
3-Nitroaniline	ND		1100	UG/KG	8270	06/20/2007 15:56	MD
4,6-Dinitro-2-methylphenol	ND		1100	UG/KG	8270	06/20/2007 15:56	MD
4-Bromophenyl phenyl ether	ND		580	UG/KG	8270	06/20/2007 15:56	MD
4-Chloro-3-methylphenol	ND		580	UG/KG	8270	06/20/2007 15:56	MD
4-Chloroaniline	ND		580	UG/KG	8270	06/20/2007 15:56	MD
4-Chlorophenyl phenyl ether	ND		580	UG/KG	8270	06/20/2007 15:56	MD
4-Methylphenol	ND		580	UG/KG	8270	06/20/2007 15:56	MD
4-Nitroaniline	ND		1100	UG/KG	8270	06/20/2007 15:56	MD
4-Nitrophenol	ND		1100	UG/KG	8270	06/20/2007 15:56	MD
Acenaphthene	23	J	580	UG/KG	8270	06/20/2007 15:56	MD
Acenaphthylene	110	J	580	UG/KG	8270	06/20/2007 15:56	MD
Acetophenone	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Anthracene	180	J	580	UG/KG	8270	06/20/2007 15:56	MD
Atrazine	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Benzaldehyde	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Benzo(a)anthracene	540	J	580	UG/KG	8270	06/20/2007 15:56	MD
Benzo(a)pyrene	470	J	580	UG/KG	8270	06/20/2007 15:56	MD
Benzo(b)fluoranthene	720		580	UG/KG	8270	06/20/2007 15:56	MD
Benzo(ghi)perylene	280	J	580	UG/KG	8270	06/20/2007 15:56	MD
Benzo(k)fluoranthene	300	J	580	UG/KG	8270	06/20/2007 15:56	MD
Biphenyl	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Bis(2-chloroethoxy) methane	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Bis(2-chloroethyl) ether	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Bis(2-ethylhexyl) phthalate	280	BJ	580	UG/KG	8270	06/20/2007 15:56	MD
Butyl benzyl phthalate	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Caprolactam	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Carbazole	120	J	580	UG/KG	8270	06/20/2007 15:56	MD
Chrysene	600		580	UG/KG	8270	06/20/2007 15:56	MD
Di-n-butyl phthalate	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Di-n-octyl phthalate	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Dibenzo(a,h)anthracene	100	J	580	UG/KG	8270	06/20/2007 15:56	MD
Dibenzofuran	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Diethyl phthalate	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Dimethyl phthalate	ND		580	UG/KG	8270	06/20/2007 15:56	MD

Sample ID: SED-1
Lab Sample ID: A7667101
Date Collected: 06/14/2007
Time Collected: 11:25

Date Received: 06/14/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
NYSDEC -S-SW8463 8270 - TCL SVOA ORGANICS							
Fluoranthene	1400		580	UG/KG	8270	06/20/2007 15:56	MD
Fluorene	44	J	580	UG/KG	8270	06/20/2007 15:56	MD
Hexachlorobenzene	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Hexachlorobutadiene	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Hexachlorocyclopentadiene	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Hexachloroethane	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Indeno(1,2,3-cd)pyrene	280	J	580	UG/KG	8270	06/20/2007 15:56	MD
Isophorone	ND		580	UG/KG	8270	06/20/2007 15:56	MD
N-Nitroso-Di-n-propylamine	ND		580	UG/KG	8270	06/20/2007 15:56	MD
N-nitrosodiphenylamine	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Naphthalene	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Nitrobenzene	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Pentachlorophenol	ND		1100	UG/KG	8270	06/20/2007 15:56	MD
Phenanthrene	460	J	580	UG/KG	8270	06/20/2007 15:56	MD
Phenol	ND		580	UG/KG	8270	06/20/2007 15:56	MD
Pyrene	930		580	UG/KG	8270	06/20/2007 15:56	MD
NYS DEC-SOIL-SW8463 8081 - TCL PESTICIDES(SOM							
4,4'-DDD	2.5	J	5.7	UG/KG	8081	06/25/2007 20:03	TCH
4,4'-DDE	2.4	J	5.7	UG/KG	8081	06/25/2007 20:03	TCH
4,4'-DDT	6.3		5.7	UG/KG	8081	06/25/2007 20:03	TCH
Aldrin	1.4	J	5.7	UG/KG	8081	06/25/2007 20:03	TCH
alpha-BHC	ND		5.7	UG/KG	8081	06/25/2007 20:03	TCH
alpha-Chlordane	ND		5.7	UG/KG	8081	06/25/2007 20:03	TCH
beta-BHC	ND		5.7	UG/KG	8081	06/25/2007 20:03	TCH
delta-BHC	ND		5.7	UG/KG	8081	06/25/2007 20:03	TCH
Dieldrin	ND		5.7	UG/KG	8081	06/25/2007 20:03	TCH
Endosulfan I	ND		5.7	UG/KG	8081	06/25/2007 20:03	TCH
Endosulfan II	ND		5.7	UG/KG	8081	06/25/2007 20:03	TCH
Endosulfan Sulfate	ND		5.7	UG/KG	8081	06/25/2007 20:03	TCH
Endrin	ND		5.7	UG/KG	8081	06/25/2007 20:03	TCH
Endrin aldehyde	ND		5.7	UG/KG	8081	06/25/2007 20:03	TCH
Endrin ketone	ND		5.7	UG/KG	8081	06/25/2007 20:03	TCH
gamma-BHC (Lindane)	ND		5.7	UG/KG	8081	06/25/2007 20:03	TCH
gamma-Chlordane	2.4	J	5.7	UG/KG	8081	06/25/2007 20:03	TCH
Heptachlor	ND		5.7	UG/KG	8081	06/25/2007 20:03	TCH
Heptachlor epoxide	ND		5.7	UG/KG	8081	06/25/2007 20:03	TCH
Methoxychlor	ND		5.7	UG/KG	8081	06/25/2007 20:03	TCH
Toxaphene	ND		110	UG/KG	8081	06/25/2007 20:03	TCH
NYSDEC-SPILLS - SOIL-SW8463 8082 - PCBS							
Aroclor 1016	ND		57	UG/KG	8082	06/17/2007 18:16	GFD
Aroclor 1221	ND		57	UG/KG	8082	06/17/2007 18:16	GFD
Aroclor 1232	ND		57	UG/KG	8082	06/17/2007 18:16	GFD
Aroclor 1242	ND		57	UG/KG	8082	06/17/2007 18:16	GFD
Aroclor 1248	ND		57	UG/KG	8082	06/17/2007 18:16	GFD
Aroclor 1254	ND		57	UG/KG	8082	06/17/2007 18:16	GFD
Aroclor 1260	ND		57	UG/KG	8082	06/17/2007 18:16	GFD

Sample ID: SED-1
Lab Sample ID: A7667101
Date Collected: 06/14/2007
Time Collected: 11:25

Date Received: 06/14/2007
Project No: NY5A946109
Client No: L10190
Site No:

Parameter	Result	Flag	Detection Limit	Units	Method	Date/Time Analyzed	Analyst
Metals Analysis							
Aluminum - Total	2860		33.8	MG/KG	6010	06/20/2007 13:35	
Antimony - Total	ND		50.7	MG/KG	6010	06/20/2007 13:35	
Arsenic - Total	19.2		6.8	MG/KG	6010	06/20/2007 13:35	
Barium - Total	262		1.7	MG/KG	6010	06/20/2007 13:35	
Beryllium - Total	ND		0.68	MG/KG	6010	06/20/2007 13:35	
Cadmium - Total	3.0		0.68	MG/KG	6010	06/20/2007 13:35	
Calcium - Total	49600		169	MG/KG	6010	06/20/2007 13:35	
Chromium - Total	9.3		1.7	MG/KG	6010	06/20/2007 13:35	
Cobalt - Total	9.6		1.7	MG/KG	6010	06/20/2007 13:35	
Copper - Total	145		3.4	MG/KG	6010	06/20/2007 13:35	
Iron - Total	227000		33.8	MG/KG	6010	06/20/2007 13:35	
Lead - Total	109		3.4	MG/KG	6010	06/20/2007 13:35	
Magnesium - Total	11200		67.6	MG/KG	6010	06/20/2007 13:35	
Manganese - Total	631		0.68	MG/KG	6010	06/20/2007 13:35	
Mercury - Total	0.331		0.062	MG/KG	7471	06/21/2007 13:49	
Nickel - Total	84.4		1.7	MG/KG	6010	06/20/2007 13:35	
Potassium - Total	891		101	MG/KG	6010	06/20/2007 13:35	
Selenium - Total	ND		13.5	MG/KG	6010	06/20/2007 13:35	
Silver - Total	ND		1.7	MG/KG	6010	06/20/2007 13:35	
Sodium - Total	ND		473	MG/KG	6010	06/20/2007 13:35	
Thallium - Total	ND		20.3	MG/KG	6010	06/20/2007 13:35	
Vanadium - Total	8.6		1.7	MG/KG	6010	06/20/2007 13:35	
Zinc - Total	1600		6.8	MG/KG	6010	06/20/2007 13:35	

Chain of Custody Record

SEVERN TRENT **STL**

Severn Trent Laboratories, Inc.

STL-4124 (0901)

Client	Project Manager	Date	Chain of Custody Number
NYSDEC	Glenn May	6-14-07	324915
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
270 Michigan Ave	716-851-7220	—	
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Buffalo / NY / 14203	G. May	B. Fischer	
Project Name and Location (State)	**Carrier/Waybill Number**		
South Niagara St. Quarry, 932111	—		
Contract/Purchase Order/Quote No.			
—			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Analysis: 8270	8081	8082	TAL metals	TCLP lead	Special Instructions/ Conditions of Receipt
WS-1	6/14/07	1120				X	X						X	X	X	X	X	Hold 2nd 4oz bottle for possible TCLP analysis
WS-2	"	1155				X	X						X	X	X	X	X	
SED-1	"	1125			X		X						X	X	X	X		

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal

☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other 10 day

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Glenn M May	6-14-07	1355	1. Received By: Andrew Symmendes	6.14.07	1400
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: 2.0°C

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy