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**SUPPLEMENTAL REMEDIAL INVESTIGATION AND  
SECOND SUPPLEMENTAL REMEDIAL INVESTIGATION  
REPORT**

**202-218 MORGAN AVENUE  
BROOKLYN, NEW YORK  
NEW YORK STATE BROWNFIELD CLEANUP PROGRAM  
SITE NUMBER C224133**

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**PROJECT #47743**

**April 2011**



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**NEW YORK STATE PROFESSIONAL ENGINEER'S CERTIFICATION**

"I certify that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with applicable guidance for site investigation and remediation, and that all activities were performed in full accordance with the DER approved work plan and any DER approved modifications."

_____	<u>4/13/2011</u>	<u>059115-1</u>
Vincent Frisina, P.E. (Seal and Signature)	Date	Registration No:
Gannett Fleming Engineers, P.C.		State of New York



## **EXECUTIVE SUMMARY**

Gannett Fleming Engineer, P.C. (GF) was retained by Frito-Lay to implement a Supplemental Remedial Investigation (SRI) Work Plan and Second Supplemental Remedial Investigation (SSRI) Work Plan to further assess environmental conditions at the 202-218 Morgan Avenue site (Site) located in Brooklyn, New York (Figure 1-1). The SRI Work Plan was prepared and submitted to New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER) for review and acceptance. On August 2, 2010, NYSDEC accepted the SRI Work Plan for the Site and field sampling activities were performed on August 4 through 10, 2010. A SSRI Work Plan was prepared in response to meetings and discussions with the United States Environmental Protection Agency (EPA) regarding Toxic Substances Control Act (TSCA) requirements and submitted to NYSDEC DER for informational purposes. On September 21, 2010, NYSDEC stated that they did not have comments to the SSRI Work Plan for the Site and field sampling activities were performed on October 4 through 14, 2010. A Phase II Environmental Site Assessment (ESA) was conducted on the Site in December 2007 and January 2008 and the RI was conducted in November 2009 in response to NYSDEC's May 5, 2009 comment letter requesting the collection of additional Site data. NYSDEC has assigned site number C224133 to the Site within the Brownfields Clean-up Program. This document presents the findings of both the SRI and SSRI.

Previous soil and groundwater investigations, including the Phase II ESA, have been conducted at the Site since 2003. Soil and groundwater samples have been collected to evaluate the presence of contaminants above NYSDEC Technical and Administrative Guidance Memorandum (TAGM) Recommended Soil Cleanup Objectives (RSCOs), 6 NYCRR Part 375-6 - Soil Cleanup Objectives (SCOs), and the Technical and Operational Guidance (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Standards (TOGS standards). The results of these investigations have concluded that both the soil and groundwater quality at the Site have likely been impacted by on-site and possibly by off-site sources.

The results of previous environmental investigation conducted in December 2007 and January 2008 indicate that volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), target analyte list (TAL) Metals, and polychlorinated biphenyls (PCBs) are present in the soil at concentrations exceeding the NYSDEC TAGM RSCOs and/or 6 NYCRR Part 375-6 - Unrestricted Use SCOs.

The results of RI conducted in November 2009 indicate that VOCs, SVOCs, TAL Metals, and PCBs are present in the soil at concentrations exceeding the 6 NYCRR Part 375-6 - Unrestricted and Restricted Use SCOs and were present throughout a majority of the Site. VOC concentrations were detected at concentrations exceeding the Unrestricted Use SCOs, but did not exceed the Restricted Use SCOs. SVOC (carcinogenic polycyclic aromatic hydrocarbons [PAHs]) concentrations were detected at concentrations exceeding the Unrestricted and Restricted Use SCOs throughout a majority of the Site.

The SRI sampling program included the collection of: soil samples from twenty-seven (27) soil borings advanced at various on site locations across the Site to complete a 50' x 50' sampling grid, as well as to further delineate arsenic concentrations exceeding the Unrestricted Use and Restricted Use - Protection of Groundwater SCOs, and lead, mercury, and PCB concentrations exceeding the Unrestricted Use SCOs.

The soil sample results collected during the SRI indicated that arsenic concentrations exceeding the Unrestricted Use and Restricted Use - Protection of Groundwater SCOs, and barium, cadmium, chromium, copper, lead, mercury, nickel, zinc, and PCB concentrations exceeding the Unrestricted Use were detected in surface and subsurface soils in most soil borings completed. The soil contamination is located throughout the Site to depths of 10 to 11 feet below ground surface (ft-bgs), which is the approximate depth of groundwater beneath the Site. Potentially hazardous levels or concentrations of lead were detected in several soil sample locations collected during the SRI sampling program. Potentially hazardous levels or concentrations of PCBs were not detected at any of the soil samples collected during the SRI.

The results of the TCLP analysis indicated that arsenic concentrations exceeding the Resource Conservation and Recovery Act (RCRA) Hazardous Waste Regulatory Level of 5 mg/L were not present in any of the six (6) samples collected for analysis. The analytical data demonstrated that arsenic contaminated soil at concentrations at or below 140 mg/kg have recorded no detection for TCLP analyses in all concurrent sampling pairs.

Prior to conducting the SSRI sampling program, a meeting was held with United States Environmental Protection Agency (EPA) (Region 2) representatives on August 26, 2010 and on September 23, 2010. The purpose of these meetings was to discuss the PCB soil contamination at the Site, to determine Toxic Substance Control Act (TSCA) requirements for disposal of PCB contaminated soil exceeding 50 mg/kg, to determine EPA's PCB soil delineation requirements, and to discuss EPA's High Occupancy Area (HOA) criteria of 10 milligrams per kilogram (mg/kg) and the Low Occupancy Area (LOA) criteria of 25 mg/kg in relation to the proposed remedial alternatives for the Site. In addition, EPA representatives provided guidance for the preparation of the "Notification for Self-Implementing on-site cleanup and disposal of PCB remediation waste" which must be approved prior to excavation and disposal of PCB contaminated soil with concentrations exceeding the TSCA criteria of 50 mg/kg. The EPA representatives did not have comments to the proposed PCB soil delineation sampling plan that was proposed in the SSRI sampling program.

The SSRI sampling program included the collection of: soil samples from thirty-eight (38) soil borings advanced at various on site locations to further delineate PCBs concentrations exceeding either the EPA's HOA criteria of 10 mg/kg or the EPA's LOA criteria of 25 mg/kg within individual 50' x 50' sampling grids by subdividing the sampling grid into four (4) 25' x 25' sampling grids for the collection of delineation samples. The purpose of this sampling program was to assess whether PCBs have impacted the entire 50' x 50' sampling grid or individual 25' x 25' sampling grids to adequately assess the quantity of soil requiring excavation and disposal. Additional soil samples were collected for arsenic and lead to further evaluate the leaching potential of these compounds in relation to their total concentrations.

The soil sample results collected during the SSRI indicated that arsenic concentrations exceeding the Unrestricted Use and Restricted Use - Protection of Groundwater SCOs, and lead, mercury, and PCB concentrations exceeding the Unrestricted Use were detected in most soil borings completed. The soil contamination is at various locations at the Site to depths of 10 to 11 feet below ground surface (ft-bgs), which is the approximate depth of groundwater beneath the Site. Potentially hazardous levels or concentrations of lead were detected at one (1) soil sample location collected during the SSRI sampling program. Potentially hazardous levels or concentrations of PCBs were detected at one (1) soil sample location collected during the SSRI.

Potentially hazardous levels of lead were detected at one (1) soil sample location collected during the SSRI. Potentially hazardous levels or concentrations of PCBs exceeding the Industrial SCOs were detected at one (1) soil sample location collected during the SSRI.

The results of the TCLP analysis indicated that arsenic concentrations exceeding the RCRA Hazardous Waste Regulatory Level of 5 mg/L were not present in any of the 10 samples collected for analysis. The analytical data demonstrated that arsenic contaminated soil at concentrations at or below 140 mg/kg have recorded no detection for TCLP analyses in all concurrent sampling pairs.

The results of the TCLP analysis indicated that lead concentrations exceeding the RCRA Hazardous Waste Regulatory Level of 5 mg/L were present in one (1) of the 11 samples collected for analysis.

The soil contaminants of concern (COCs) identified during the RI, SRI, and SSRI sampling programs are arsenic, lead, mercury, PCBs, and SVOCs (carcinogenic PAHs) were selected due to their potential for mobility to other environmental media and subsequent adverse effects to human health and the environment, if left in-place without proper management (e.g., remediation, disposal, capping, etc.).

The remedial cleanup objectives of the BCP are to remove or eliminate significant threats to public health and the environment, as well as implementing soil cleanup levels that are consistent with current and intended Site use. A remedial work plan (RWP) will be developed to assess applicable remedial alternatives for the Site to address contaminated soil, groundwater, and soil gas conditions.





## **1.0 INTRODUCTION**

Gannett Fleming Engineers, P.E. (GF) was retained by Frito-Lay to prepare a Supplemental Remedial Investigation (SRI) Work Plan to further assess environmental conditions at the 202-218 Morgan Avenue site (Site) located in Brooklyn, New York (Figures 1-1 and 1-2). The SRI Work Plan was prepared and submitted to New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation (DER) for review and acceptance. On August 2, 2010, NYSDEC accepted the SRI Work Plan for the Site and field sampling activities were performed on August 4 through 10, 2010. A Second Supplemental Remedial Investigation (SSRI) Work Plan was prepared in response to meetings and discussions with the United States Environmental Protection Agency (EPA) regarding Toxic Substances Control Act (TSCA) requirements and submitted to NYSDEC DER for informational purposes. On September 21, 2010, NYSDEC stated that they did not have comments to the SSRI Work Plan for the Site and field sampling activities were performed on October 4 through 14, 2010. A Phase II Environmental Site Assessment (ESA) was conducted on the Site in December 2007 and January 2008 and the 2009 RI was conducted in response to NYSDEC's May 5, 2009 comment letter requesting the collection of additional Site data.

All work was performed in accordance with NYSDEC Brownfield Cleanup Program (BCP), DER-10 Technical Guidance for Site Investigation and Remediation, the signed BCP Agreement with Frito-Lay dated August 21, 2009, and the NYSDEC Approved RI Work Plan dated September 2009. NYSDEC has assigned site number C224133 to the Site.

Previous soil and groundwater investigations, including the Phase II ESA, have been conducted at the Site since 2003. Soil and groundwater samples have been collected to evaluate the presence of contaminants above NYSDEC Technical and Administrative Guidance Memorandum (TAGM) Recommended Soil Cleanup Objectives (RSCOs), 6 NYCRR Part 375-6 - Soil Cleanup Objectives (SCOs), and the Technical and Operational Guidance (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Standards

(TOGS standards). The results of these investigations have concluded that both the soil and groundwater quality at the Site have likely been impacted by on-site and possibly by off-site sources, as well as potentially impacting off-site receptors.

The results of Phase II ESA conducted in December 2007 and January 2008 indicate that volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, and polychlorinated biphenyls (PCBs) are present in the soil at concentrations exceeding the NYSDEC TAGM RSCOs and/or 6 NYCRR Part 375-6 - Unrestricted and Restricted Use SCOs.

The results of the RI conducted in November 2009 indicate that VOCs, SVOCs (carcinogenic polycyclic aromatic hydrocarbons [PAHs]), target analyte list (TAL) Metals, and PCBs are present in the soil at concentrations exceeding the 6 NYCRR Part 375-6 - Unrestricted Use SCOs. The RI results indicated that TAL Metals and PCB soil concentrations exceeding the Unrestricted Use SCOs are present throughout a majority of the Site. VOC concentrations were detected at concentrations exceeding the Unrestricted Use SCOs, but these concentrations did not exceed the Restricted Use SCOs. SVOC concentrations were also detected at concentrations exceeding the Unrestricted and Restricted Use SCOs are present throughout a majority of the Site.

### **1.1 Supplemental Remedial Investigation Sampling Program**

The SRI sampling program was prepared based on the results of GF's Phase II ESA Soils and Groundwater sampling program conducted in December 2007 and January 2008 which was submitted to NYSDEC for review and comment in March 2008 and the RI sampling program conducted in November 2009. On May 5, 2009, NYSDEC provided a comment letter to Frito-Lay concerning the proposed RIWP. NYSDEC requested the drilling and sampling of several additional soil borings, as well the collection of surface water and sediment samples from the English Kills, and the installation of soil gas probes to assess surface and subsurface soil contamination at the Site.

The RI sampling program was implemented from November 4 through 6, 2009 and on November 20, 2009. The RI sampling program was conducted to assess surface and subsurface soil concentrations related to VOCs, SVOCs (PAHs), PCBs, and metals. The RI sampling program also assessed the presence of sediment and surface water contamination and the presence of soil gas vapors along the northern and western property boundaries of the Site in the vicinity of Morgan Avenue.

The SRI sampling program was prepared to determine the nature and extent of contamination and to further quantify and delineate surface and subsurface impacted soil identified during the December 2007 and January 2008 and November 2009 sampling programs. The SRI sampling program included the collection of an additional 27 soil borings. The onsite soil boring locations are proposed throughout the Site to complete a 50' x 50' sampling grid. Each boring was advanced using a track mounted hollow stem auger drill rig to the approximate depth of groundwater or approximately 10 to 11 feet below ground surface (ft-bgs). The actual locations of the proposed soil borings were biased towards areas of concern identified during the December 2007/January 2008 sampling program, the results of the November 2009 RI, discussion with NYSDEC representatives on July 27, 2010, discussions with EPA representatives on July 31, 2010, and in accordance with NYSDEC recommendations to sample in 50' x 50' grid pattern across the site.

## **1.2 Purpose and Objectives of the Supplemental RI Sampling Program**

The purpose of the SRI was to determine the nature and extent of contamination and to further quantify and delineate surface and subsurface impacted soil identified during the December 2007 and January 2008, and the November 2009 soil sampling activities.

The scope of work as presented in the SRI WP included the following:

- Twenty-seven (27) soil borings advanced at various on site locations across the to complete the 50' x 50' sampling grid;

- The first soil sample was to be collected from equal portions of the soil boring from 0 to 2 ft-bgs and the other half from 2 to 4 ft-bgs. The second soil sample was to be collected from the most contaminated depth below 4 ft-bgs determined visually by staining and/or by the highest photoionization detector (PID) reading or if the second soil sample depth could not be determined visually or using the PID, the default sample collection depth will be just above the water table; and,
- All soil samples were to be analyzed for PCBs by EPA Method 8082 and Target Analyte List (TAL) metals by EPA Method 6010/7471 in conformance with Analytical Services Protocol (ASP) Category B protocol. In addition, six (6) soil samples were to be analyzed for Toxicity Characteristics Leaching Potential (TCLP) by EPA Method 1311.

The objectives of the SRI sampling program were to:

- further characterize the nature and extent of contamination and to delineate surface and subsurface soil impacts related to arsenic, lead, mercury, and PCB contaminated soil;
- provide data for development of the SRI Report; and,
- provide site-specific information for the development and selection of remedial alternative to reduce and/or eliminate the toxicity, volume, or mobility of site-specific contaminants.

### **1.3 Second Supplemental Remedial Investigation Sampling Program**

The SSRI sampling program was prepared based on the results of GF's SRI Sampling Program conducted in August 2010, the need to further delineate PCB contamination at the Site, and for PCB disposal purposes, in accordance with discussions with EPA (Region 2) representatives. The SSRI sampling program was performed to further delineate PCB contamination at the Site to meet TSCA requirements for disposal in accordance with our meeting with the United States EPA (Region 2) representatives on August 26, 2010 and further discussions on September 23, 2010.

The SSRI Work Plan was prepared and submitted to NYSDEC DER for informational purposes. On September 21, 2010, NYSDEC stated that they did not have comments to the SSRI Work Plan for the Site and field sampling activities were performed on October 4 through 14, 2010.

The SSRI sampling program was also designed to further delineate PCB concentrations exceeding either the EPA's High Occupancy Area (HOA) criteria of 10 milligrams per kilogram (mg/kg) or EPA's Low Occupancy Area (LOA) criteria of 25 mg/kg within individual 50' x 50' sampling grids by subdividing the sampling grid into four (4) 25' x 25' sampling grids for the collection of delineation samples. The purpose of this sampling program is to assess whether PCBs have impacted the entire 50' x 50' sampling grid or individual 25' x 25' sampling grids to adequately assess the quantity of soil requiring excavation and disposal.

The SSRI sampling program included the installation of an additional 38 soil borings. The soil boring locations were proposed throughout the Site to further delineate PCB concentrations exceeding either the HOA criteria of 10 mg/kg or the LOA criteria of 25 mg/kg within specific 50' x 50' sampling grids. PCB concentrations exceeding the HOA criteria of 10 mg/kg will be further delineated in areas where expansion of the adjacent warehouse could occur in the future to satisfy EPA high occupancy area requirements. The actual locations of the proposed soil borings were biased towards soil sample locations which contain PCB concentrations exceeding either the HOA criteria of 10 mg/kg or the LOA criteria of 25 mg/kg identified during the December 2007/January 2008 and November 2009 sampling programs, discussions with EPA on August 26, 2010 and September 23, 2010, and discussions with NYSDEC representatives on July 27, 2010, August 27, 2010, and September 9, 2010. Each boring was proposed to be advanced using a track mounted hollow stem auger drill rig to the approximate depth of groundwater which is approximately 12 to 15 feet below ground surface (ft-bgs) consistent with the initial RI and SRI sampling programs.

#### **1.4 Purpose and Objectives of the Second Supplemental RI Sampling Program**

The purpose of the SSRI was to further delineate PCBs concentrations exceeding either the HOA criteria of 10 mg/kg or the LOA criteria of 25 mg/kg within individual 50' x 50' sampling grids by subdividing the sampling grid into four (4) 25' x 25' sampling grids for the collection of delineation samples. The SSRI sampling program was also performed to further delineate PCB contamination at the Site to meet TSCA requirements for disposal.

The scope of work as presented in the SSRI WP included the following:

- Thirty-eight (38) soil borings advanced within individual 50' x 50' sampling grids by subdividing the sampling grid into four (4) 25' x 25' sampling grids;
- The first soil sample was to be collected from equal portions of the soil boring from 0 to 2 ft-bgs and the other half from 2 to 4 ft-bgs. The second soil sample was to be collected from the most contaminated depth below 4 ft-bgs determined visually by staining and/or by the highest PID reading or if the second soil sample depth could not be determined visually or using the PID, the default sample collection depth will be just above the water table; and,
- All soil samples were to be analyzed for PCBs by EPA Method 8082 and select soil samples were analyzed for arsenic or lead by EPA Method 6010B in conformance with ASP Category B protocol. In addition, twenty (20) soil samples were to be analyzed for TCLP by EPA Method 1311.

The objectives of the SSRI sampling program were to:

- further characterize the nature and extent of contamination and to delineate surface and subsurface soil impacts related to PCB contaminated soil;
- provide data for development of the SRI and SSRI Report; and,
- provide site-specific information for the development and selection of remedial alternative to reduce and/or eliminate the toxicity, volume, or mobility of site-specific contaminants.

## **1.5 Scope of Work for the Supplemental RI and Second Supplemental RI Sampling Programs**

The SRI and SSRI Sampling Programs were implemented to collect surface and subsurface soil samples to further characterize the nature and extent of contamination and to delineate lead, mercury, and PCB soil concentrations which exceed the Part 375 Unrestricted Use SCOs and to further characterize the nature and extent of contamination and to delineate arsenic concentrations which exceed Restricted Use - Protection of Groundwater SCOs since it has been determined that arsenic is a site-specific source of groundwater contamination.

Project-specific Health and Safety Plan (HASP) and Quality Assurance Project Plan (QAPP) were prepared and followed to provide safe procedures, practices, and quality assurance criteria for GF employees and their subcontractor personnel engaged in performing RI and RD activities at the Site. The HASP and QAPP were included in Appendix A and in Section 5.0, respectively, in the NYSDEC Approved RI Work Plan dated September 2009. A Community Air Monitoring Program (CAMP) was prepared and followed to provide air quality monitoring procedures to be followed to protect the downwind community (i.e., off-site receptors, including residents and off-site outside workers) from potential airborne contaminant releases that may be as a direct result of the sampling activities.

The soil samples were collected for constituents of concern that have established NYSDEC standards, criteria, and guidance (SCGs) to evaluate potential impacts on human health, and/or the environment.

## **1.6 Organization of the Supplemental RI and Second Supplemental RI Report**

The SRI and SSRI Report discusses the following topics:

- Introduction: Background and objectives of the project and sampling programs;
- Soil sampling procedures and analytical results;

- SRI and SSRI Sampling Plans: Scope of work for the investigation of surface and subsurface soils;
- Soil results assessment; and,
- Conclusions and Recommendations.



## **2.0 SCOPE OF WORK – SUPPLEMENTAL AND SECOND SUPPLEMENTAL RI**

The scope of work as presented in the SRI Work Plan included the following:

- Twenty-seven (27) soil borings were advanced at various on site locations across the to complete the 50' x 50' sampling grid;
- The first soil sample was collected from equal portions of the soil boring from 0 to 2 ft-bgs and the other half from 2 to 4 ft-bgs. The second soil sample was collected from 4 ft-bgs to just above the water table; and,
- All soil samples were analyzed for PCBs by EPA Method 8082 and TAL metals by EPA Method 6010/7471 in conformance with ASP Category B protocol. In addition, six (6) soil samples were collected for arsenic to be analyzed for TCLP by EPA Method 1311.

The scope of work as presented in the SSRI Work Plan included the following:

- Thirty-eight (38) soil borings advanced within individual 50' x 50' sampling grids by subdividing the sampling grid into four (4) 25' x 25' sampling grids;
- The first soil sample was to be collected from equal portions of the soil boring from 0 to 2 ft-bgs and the other half from 2 to 4 ft-bgs. The second soil sample was to be collected from the most contaminated depth below 4 ft-bgs determined visually by staining and/or by the highest photoionization detector (PID) reading or if the second soil sample depth could not be determined visually or using the PID, the default sample collection depth will be just above the water table; and,
- All soil samples were to be analyzed for PCBs by EPA Method 8082 and select soil samples were analyzed for arsenic or lead by EPA Method 6010B in conformance with ASP Category B protocol. In addition, twenty (20) soil samples were collected for arsenic and lead to be analyzed for TCLP by EPA Method 1311.

## **2.1 Utilities Clearance**

The geophysical survey performed by Naeva Geophysics, Inc. in January 2008 was reviewed to identify any potential underground obstructions prior to on-site drilling activities. The drilling contractor (Aquifer Drilling) contacted New York One-Call to perform public property utility markouts for the off-site well installation.

## **2.2 Supplemental RI Soil Boring Drilling and Sampling**

The SRI included the drilling and sampling of 27 additional soil borings based on discussions with the NYSDEC representatives. The on-site boring locations were proposed throughout the Site to complete a 50' x 50' sampling grid. Each boring was advanced using a track mounted hollow stem auger (HSA) drill rig to groundwater, approximately 10 to 11 ft-bgs. The actual locations of borings were biased towards areas of concern identified by the Phase I and II ESAs, geophysical survey, historical investigation results, the November 2009 RI soil sample results, and in accordance with NYSDEC recommendations to complete sampling from a 50' x 50' grid pattern across the Site.

On August 4 through 10, 2010, 27 borings were advanced as shown on Figure 3-1. Twelve (12) borings were advanced along the east side (SB-31, SB-34, SB-35, SB-36, SB-38, SB-39, SB-43, SB-44, SB-47, SB-48, SB-52, and SB-54) and fifteen (15) borings on the west side (SB-29, SB-30, SB-32, SB-33, SB-37, SB-40, SB-41, SB-42, SB-45, SB-46, SB-49, SB-50, SB-51, SB-53, and SB-55) of the Site. HSA services were provided by Aquifer Drilling and Testing (New Hyde Park, New York).

There were two (2) sample deviations from the NYSDEC-approved August 2010 SRI Work Plan that resulted during implementing the SRI sampling program. Soil boring SB-55 was added to the program to complete the 50' x 50' grid pattern along the southwestern portion of the Site. In addition, soil samples SB-32 (0-4), SB-38 (0-4), SB-42 (0-4), SB-42 (4-10), SB-43 (4-8), and SB-53 (4-10) were also collected for TCLP analysis (arsenic only) using EPA Method 1311.

The purpose of the TCLP analysis was to assess the concentration arsenic begins to leach to the subsurface (and/or groundwater) at the Site. There were no other sampling deviations during the RI sampling program.

The first soil sample was collected from equal portions of the soil boring from 0 to 2 ft-bgs and the other half from 2 to 4 ft-bgs. The second soil sample was collected from the most contaminated depth below 4 ft-bgs determined visually by staining and/or by the highest PID reading. If the second soil sample depth could not be determined visually or using the PID, the default sample collection depth was just above the water table. Soil samples were collected continuously from the surface to the groundwater table using stainless steel spilt spoons. All drill cuttings were drummed and temporarily stored on site pending results of waste characterization analysis.

GF personnel documented soil lithology and field screen soil vapor headspace in sealable plastic bags using a PID calibrated to a 100 parts per million (ppm) isobutylene standard. Sample depths were altered, when necessary, due to field limitations and the actual depth of groundwater at the time of sampling. Soil samples were placed into laboratory-supplied glassware, immediately stored in an ice-filled cooler, and shipped with chain-of-custody documentation to Test America, Edison, New Jersey, a NYSDOH-certified laboratory. All soil samples were analyzed for TAL metals by EPA Method 6010/7471 and PCBs by EPA Method 8082, and in conformance with Category B protocol. Six (6) soil samples were analyzed for TCLP (arsenic only) by EPA Method 1311.

### **2.3 Second Supplemental RI Soil Boring Drilling and Sampling**

The SSRI included the drilling and sampling of 38 additional soil borings based on discussions with the EPA representatives. The SSRI sampling program was designed to further delineate PCB concentrations exceeding either the EPA's HOA criteria of 10 mg/kg or EPA's LOA criteria of 25 mg/kg within individual 50' x 50' sampling grids by subdividing the sampling grid into four (4) 25' x 25' sampling grids for the collection of delineation samples. The purpose of

this sampling program is to assess whether PCBs have impacted the entire 50' x 50' sampling grid or individual 25' x 25' sampling grids to adequately assess the quantity of soil requiring excavation and disposal. The SSRI sampling program was also performed to further delineate PCB contamination at the Site to meet TSCA requirements for disposal.

Each boring was advanced using a track mounted HSA drill rig to the approximate depth of groundwater which is approximately 10 to 11 ft-bgs. The actual locations of borings were biased towards areas of concern identified by the Phase I and II ESAs, geophysical survey, historical investigation results, the November 2009 RI soil sample results, the SRI results, and to further delineate PCB concentrations exceeding either the HOA criteria or LOA criteria within individual 50' x 50' sampling grids by subdividing the sampling grid into four (4) 25' x 25' sampling grids f.

On October 4 through 14, 2010, 38 borings were advanced as shown on Figure 4-1. Thirteen (13) borings were advanced along the east side (SB-16-1, SB-16-2, SB-16-3, SB-17-1, SB-17-2, SB-20-1, SB-20-2, SB-20-3, SB-22-1, SB-22-2, SB-22-3, SB-56, and SB-57) and twenty-five (25) borings on the west side (SB-2-1, SB-2-2, SB-2-3, SB-6-1, SB-6-2, SB-6-3, SB-7-1, SB-7-2, SB-8-1, SB-8-2, SB-9-1, SB-9-2, SB-9-3, SB-23-1, SB-23-2, SB-23-3, SB-23-4, SB-24-1, SB-24-2, SB-24-3, SB-27-1, SB-27-2, SB-27-3, SB-27-4, and SB-27-5) of the Site. HSA services were provided by Aquifer Drilling and Testing (New Hyde Park, New York).

There were several sample deviations from the September 2010 SSRI WP that resulted during implementing the sampling program. Soil boring SB-23-4, SB-27-4, and SB-27-5 were added to the program to assess potential contamination in the vicinity of the 50' 50' grid boundaries along the southwestern portion of the Site. Since SB-27 registered the highest reported PCB concentration on the Site, several additional soil borings were installed to further assess PCB contamination in this section of the Site. In addition, SB-6-1, SB-6-3, SB-24-1, and SB-24-2 could not be advanced below either 2 or 4 ft-bgs due to the shallow groundwater depth encountered in this portion of the Site.

The first soil sample was collected from equal portions of the soil boring from 0 to 2 ft-bgs and the other half from 2 to 4 ft-bgs. The second soil sample was collected from the most contaminated depth below 4 ft-bgs determined visually by staining and/or by the highest PID reading. If the second soil sample depth could not be determined visually or using the PID, the default sample collection depth was just above the water table. Soil samples were collected continuously from the surface to the groundwater table using stainless steel spilt spoons. All drill cuttings were drummed and temporarily stored on site pending results of waste characterization analysis.

GF personnel documented soil lithology and field screen soil vapor headspace in sealable plastic bags using a PID calibrated to a 100 ppm isobutylene standard. Sample depths were altered, when necessary, due to field limitations and the actual depth of groundwater at the time of sampling. Soil samples were placed into laboratory-supplied glassware, immediately stored in an ice-filled cooler, and shipped with chain-of-custody documentation to Test America, Edison, New Jersey, a NYSDOH-certified laboratory. Select soil samples were analyzed for TAL metals by EPA Method 6010/7471, for arsenic and lead by EPA Method 6010B, and PCBs by EPA Method 8082, and in conformance with Category B protocol. Ten (10) soil samples were analyzed for TCLP (arsenic only) by EPA Method 1311.

## **2.4 Surveying**

On August 4, 2010 and October 7, 2010, Naik Consulting Group, P.C. (Naik) performed a location and elevation survey for the proposed soil borings locations at the Site. The drawing provided by the surveyor is depicted on Figures 3-2 and 4-2.

## **2.5 Analytical Services**

Analytical services were provided by Test America of Edison, New Jersey. Laboratory data reports were provided in the NYSDEC Full ASP Category B Deliverables reporting format. The laboratory data reports are provided in Appendix B.

## **2.6 Quality Assurance / Quality Control**

The integrity, representativeness and usability of the data generated by the SRI and SSRI sampling programs were evaluated, maintained and controlled through the use of various quality assurance and quality control QA/QC procedures in the field, including equipment calibration checks, decontamination of non-dedicated sampling equipment, and collection of field duplicates, and field and trip blank samples.

Disposable sampling equipment was used to the extent practicable to minimize the need for field decontamination. When non-dedicated equipment was necessary, the decontamination process consisted of a potable water rinse followed by scrubbing in a solution of potable water and laboratory-grade detergent. The equipment was then rinsed again with potable water followed by distilled water. Soil sampling equipment used for PCB sample collection were decontaminated in the field following the procedures outlined in 40 CFR 761.79 (PCB Decontamination Standards and Procedures).

Field blanks, trip blanks, field duplicates and MS/MSD samples were collected to provide additional QA/QC support. Field blanks were used to document the adequacy of the field decontamination process. The blanks were collected by pouring analyte-free water provided by the laboratory over cleaned field equipment, capturing the rinsate in sample containers and submitting the samples to the laboratory for analysis. The field blanks were analyzed for the same suite of parameters as the field samples collected that day. The blanks were prepared by the laboratory, shipped to the Site with the sample containers then returned to the laboratory unopened with the field samples. MS/MSD samples were used to document sample matrix effects on the analytical process. The MS/MSD samples consisted of a three volume sample set from one sample location.

## **2.7 Community Air Monitoring Program**

A Community Air Monitoring program (CAMP) was implemented during the SRI and SSRI sampling programs. Specifically, this CAMP outlines the air quality monitoring procedures followed to protect the downwind community (i.e., off-site receptors, including residents and off-site outside workers) from potential airborne contaminant releases that may be as a direct result of the sampling activities. This CAMP is consistent with the NYSDOH Generic CAMP.

The following sections describe the specific CAMP monitoring procedures for both VOCs and particulates.

### **2.7.1 Particulate Monitoring**

The air was monitored in real-time during the SRI and SSRI sampling programs. Air monitoring for particulates (i.e., dust) was performed continuously during sampling using both air monitoring equipment and visual observations. Monitoring equipment capable of measuring particulate matter smaller than 10 microns (PM-10) and capable of integrating (averaging) over periods of 15 minutes or less, at a minimum, were set up at one upwind (background) and one downwind location, at heights approximately 4 feet to 5 feet above land surface (i.e., the breathing zone). This equipment logged the 15-minute average concentrations for subsequent downloading and reporting. An audible alarm on the downwind particulate monitoring device was set at 100 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) above the background level (i.e., the upwind location).

Upwind concentrations were measured at the start of each workday and periodically throughout the day thereafter to establish background conditions. The CAMP coordinator recorded the wind direction and speed as described below. These readings allowed the CAMP coordinator to ensure that CAMP equipment was located appropriately based upon the wind direction. The particulate monitoring equipment was calibrated at the start of each day and as necessary throughout the day.

The monitoring results were compared to the following:

- If the downwind PM-10 particulate level was  $100 \mu\text{g}/\text{m}^3$  greater than background (upwind perimeter) for the 15-minute period or if airborne dust was observed leaving the work area, then dust suppression techniques (e.g., soil wetting) were employed. Work may continue with dust suppression techniques, provided that downwind PM-10 particulate levels do not exceed  $150 \mu\text{g}/\text{m}^3$  above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels were greater than  $150 \mu\text{g}/\text{m}^3$  above the upwind level, work was reevaluated and changes initiated to reduce particulate levels to less than  $150 \mu\text{g}/\text{m}^3$  above background conditions and to prevent visible dust migration, including work stoppage if necessary.

Meteorological Data - Meteorological data consisting of wind speed, wind direction, temperature, and barometric pressure were recorded at a minimum of three times each day. These results were utilized to position the particulate monitoring equipment in appropriate upwind and downwind locations. A Davis Corporation wireless instrument station (or equivalent) was used to collect all meteorological monitoring data.

Potential Suppression Techniques - If the integrated particulate level at the downwind location exceeds the upwind level by more than  $100 \mu\text{g}/\text{m}^3$  at any time during sampling activities, then dust suppression techniques were to be employed.

Work may continue with dust suppression techniques, provided that downwind PM-10 levels are not more than  $150 \mu\text{g}/\text{m}^3$  greater than the upwind levels; all measures necessary to ensure PM-10 levels of less than  $150 \mu\text{g}/\text{m}^3$  above background were utilized. There may also be situations where visible dust was generated by sampling activities and migrates to downwind locations but was not detected by the monitoring equipment at or above the action levels. Therefore, if visible dust was observed leaving the working area, dust suppression techniques was to be employed. If dust suppression techniques did not lower particulates to below  $150 \mu\text{g}/\text{m}^3$  or visible dust



persists, additional measures, including work suspension if necessary, was to be implemented to remedy the situation.

### 2.7.2 Volatile Organic Compound Monitoring

VOCs were monitored at the downwind perimeter of the immediate work area on a continuous basis. Upwind concentrations were measured at the start of each workday and periodically thereafter (not less than three times per day) to establish background conditions. The monitoring work was performed using equipment appropriate to measure the types of contaminants known or suspected to be present (MiniRAE 2000 PID or equivalent). The equipment was calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment was capable of calculating 15-minute running average concentrations, which was compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area exceeds 5 ppm above background for the 15-minute average, work activities must be temporarily halted in the area of concern and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities at the Site must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level at the downwind perimeter of the work area is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is more than 25 ppm above background at the downwind perimeter of the work area, activities must be halted in the area of concern until corrective measures are identified and implemented to reduce emissions as described above.

All air monitoring data and the locations of monitoring equipment were recorded in the on-site files and are available for review.

## **2.8 PID Readings during Supplemental RI Activities**

The following table lists the PID results for each soil sample, and rationale for collecting each sample that was laboratory analyzed.

<b>Sample Location</b>	<b>Sample Depth (feet)</b>	<b>PID Reading (ppm)</b>	<b>Reason for Sample Collection</b>	<b>Description</b>
SB-29	0-4	0.0	Initial Sampling Depth	No odor
SB-29	4-10	8.2	Deeper Sampling Depth	Petroleum odor
SB-30	0-4	6.2	Initial Sampling Depth	Slight petroleum odor
SB-30	4-10	0.0	Deeper Sampling Depth	Petroleum odor
SB-31	0-4	0.5	Initial Sampling Depth	No odor
SB-31	4-10	2.3	Deeper Sampling Depth	Petroleum odor
SB-32	0-4	0.4	Initial Sampling Depth	No odor
SB-32	4-10	4.0	Deeper Sampling Depth	Petroleum odor
SB-33	0-4	4.0	Initial Sampling Depth	Petroleum odor
SB-33	4-10	3.0	Deeper Sampling Depth	Petroleum odor
SB-34	0-4	14.0	Initial Sampling Depth	Strong petroleum odor
SB-34	4-10	10.0	Deeper Sampling Depth	Strong petroleum odor
SB-35	0-4	5.0	Initial Sampling Depth	Slight petroleum odor
SB-35	4-10	0.8	Deeper Sampling Depth	Organic odor
SB-36	0-4	0.0	Initial Sampling Depth	No odor
SB-36	6-10	0.8	Deeper Sampling Depth	Petroleum odor
SB-37	0-4	0.3	Initial Sampling Depth	Organic odor
SB-37	4-10	1.3	Deeper Sampling Depth	Petroleum odor
SB-38	0-4	4.0	Initial Sampling Depth	Petroleum odor
SB-38	4-10	3.0	Deeper Sampling Depth	Petroleum odor
SB-39	0-4	0.7	Initial Sampling Depth	No odor
SB-39	4-10	4.0	Deeper Sampling Depth	Petroleum odor
SB-40	0-4	2.3	Initial Sampling Depth	Organic odor
SB-40	4-10	2.0	Deeper Sampling Depth	No odor
SB-41	0-4	0.0	Initial Sampling Depth	Slight petroleum odor
SB-41	4-11	1.6	Deeper Sampling Depth	No odor
SB-42	0-4	30.1	Initial Sampling Depth	No odor
SB-42	4-10	1.5	Deeper Sampling Depth	Slight petroleum odor

Sample Location	Sample Depth (feet)	PID Reading (ppm)	Reason for Sample Collection	Description
SB-43	0-4	14.8	Initial Sampling Depth	Organic odor
SB-43	4-8	4.1	Deeper Sampling Depth	No odor
SB-44	0-4	0.7	Initial Sampling Depth	Petroleum odor
SB-44	4-10	2.1	Deeper Sampling Depth	Petroleum odor
SB-45	0-4	0.2	Initial Sampling Depth	No odor
SB-45	4-10	1.0	Deeper Sampling Depth	No odor
SB-46	0-4	37.8	Initial Sampling Depth	Petroleum odor
SB-46	4-10	20.0	Deeper Sampling Depth	Petroleum odor
SB-47	0-4	5.7	Initial Sampling Depth	No odor
SB-47	4-10	10.0	Deeper Sampling Depth	Petroleum odor
SB-48	0-4	5.9	Initial Sampling Depth	No odor
SB-48	4-6	11.0	Deeper Sampling Depth	No odor
SB-49	0-4	0.0	Initial Sampling Depth	No odor
SB-49	4-10	0.1	Deeper Sampling Depth	No odor
SB-50	0-4	0.2	Initial Sampling Depth	No odor
SB-50	4-10	4.3	Deeper Sampling Depth	Slight petroleum odor
SB-51	0-4	0.5	Initial Sampling Depth	No odor
SB-51	4-8	0.2	Deeper Sampling Depth	Petroleum odor
SB-52	0-4	0.0	Initial Sampling Depth	No odor
SB-52	4-10	3.0	Deeper Sampling Depth	Petroleum odor
SB-53	0-4	23.7	Initial Sampling Depth	Slight petroleum odor
SB-53	4-10	12.6	Deeper Sampling Depth	Slight petroleum odor
SB-54	0-4	57.0	Initial Sampling Depth	Organic odor
SB-54	4-10	2.0	Deeper Sampling Depth	Slight petroleum odor
SB-55	0-4	0.9	Initial Sampling Depth	No odor
SB-55	4-10	1.2	Deeper Sampling Depth	No odor

Organic vapors were detected with the PID at most of the soil boring locations. PID readings ranged from 0.0 to 57 ppm. The highest reading was reported from the shallow SB-54 soil sample. The boring logs are presented in Appendix A and were prepared for each soil boring indicating the depth interval, lithologic description, and headspace PID measurements for each sample.

## **2.9 PID Readings during Second Supplemental RI Activities**

The following table lists the PID results for each soil sample, and rationale for collecting each sample that was laboratory analyzed.

<b>Sample Location</b>	<b>Sample Depth (feet)</b>	<b>PID Reading (ppm)</b>	<b>Reason for Sample Collection</b>	<b>Description</b>
SB-27-1	0-4	0.2	Initial Sampling Depth	Slight petroleum odor
SB-27-1	4-6	1.0	Deeper Sampling Depth	Slight petroleum odor
SB-27-2	0-4	0.0	Initial Sampling Depth	Organic odor
SB-27-2	9-10	0.0	Deeper Sampling Depth	No odor
SB-27-3	0-4	0.0	Initial Sampling Depth	No odor
SB-27-3	4-6	0.0	Deeper Sampling Depth	Slight petroleum odor
SB-23-4	0-4	0.1	Initial Sampling Depth	Petroleum odor
SB-23-4	4-6	0.8	Deeper Sampling Depth	Petroleum odor
SB-2-3	0-4	23.8	Initial Sampling Depth	Slight petroleum odor
SB-2-3	10-11	2.6	Deeper Sampling Depth	No odor
SB-2-2	1-4	0.6	Initial Sampling Depth	No odor
SB-2-2	6-8	40.1	Deeper Sampling Depth	No odor
SB-2-1	0-4	27.0	Initial Sampling Depth	Petroleum odor
SB-2-1	6-8	38.0	Deeper Sampling Depth	Petroleum odor
SB-24-1	0-4	29.0	Initial Sampling Depth	No odor
SB-24-2	0-2	0.1	Initial Sampling Depth	Slight petroleum odor
SB-24-3	0-4	2.9	Initial Sampling Depth	Strong petroleum odor
SB-24-3	4-6	7.1	Deeper Sampling Depth	Strong petroleum odor
SB-7-2	0-4	1.7	Initial Sampling Depth	Strong petroleum odor
SB-7-2	4-6	68.0	Deeper Sampling Depth	Strong petroleum odor
SB-7-1	0-4	0.5	Initial Sampling Depth	Slight organic odor
SB-7-1	4-6	0.0	Deeper Sampling Depth	Slight organic odor
SB-6-1	0-2	0.0	Initial Sampling Depth	No odor
SB-6-2	0-4	260.0	Initial Sampling Depth	Strong petroleum odor
SB-6-2	6-8	41.6	Deeper Sampling Depth	Strong petroleum odor
SB-6-3	0-4	1.8	Initial Sampling Depth	Petroleum odor
SB-9-1	0-4	29.6	Initial Sampling Depth	Petroleum odor
SB-9-1	10-11	20.0	Deeper Sampling Depth	Petroleum odor
SB-9-3	0-4	31.2	Initial Sampling Depth	Strong petroleum odor
SB-9-3	4-6	45.0	Deeper Sampling Depth	Strong petroleum odor
SB-9-2	0-4	33.0	Initial Sampling Depth	Strong petroleum odor
SB-9-2	8-10	10.9	Deeper Sampling Depth	Strong petroleum odor

Sample Location	Sample Depth (feet)	PID Reading (ppm)	Reason for Sample Collection	Description
SB-20-2	0-4	6.1	Initial Sampling Depth	Strong organic odor
SB-20-2	4-6	3.8	Deeper Sampling Depth	Strong organic odor
SB-20-3	0-4	1.5	Initial Sampling Depth	Sweet organic odor
SB-20-3	6-8	1.3	Deeper Sampling Depth	Sweet organic odor
SB-20-1	0-4	366.0	Initial Sampling Depth	Strong petroleum odor
SB-20-1	6-8	21.6	Deeper Sampling Depth	Strong organic odor
SB-17-2	0-4	16.0	Initial Sampling Depth	Strong organic odor
SB-17-2	4-6	31.0	Deeper Sampling Depth	Strong organic odor
SB-17-1	0-4	0.4	Initial Sampling Depth	Organic odor
SB-17-1	4-6	1.7	Deeper Sampling Depth	Strong organic odor
SB-16-1	0-4	7.0	Initial Sampling Depth	Petroleum odor
SB-16-1	6-8	63.0	Deeper Sampling Depth	Petroleum odor
SB-16-3	0-4	6.1	Initial Sampling Depth	Petroleum odor
SB-16-3	4-6	31.0	Deeper Sampling Depth	Petroleum odor
SB-16-2	0-4	0.0	Initial Sampling Depth	Petroleum odor
SB-16-2	6-8	0.0	Deeper Sampling Depth	Petroleum odor
SB-56	0-4	0.0	Initial Sampling Depth	No odor
SB-56	6-8	130.0	Deeper Sampling Depth	Strong petroleum odor
SB-57	0-4	0.0	Initial Sampling Depth	No odor
SB-57	6-8	0.2	Deeper Sampling Depth	No odor
SB-22-1	0-4	3.6	Initial Sampling Depth	Strong organic odor
SB-22-1	4-6	11.2	Deeper Sampling Depth	Petroleum odor
SB-22-3	0-4	5.1	Initial Sampling Depth	Organic odor
SB-22-3	6-8	43.0	Deeper Sampling Depth	Strong organic odor
SB-22-2	0-4	5.1	Initial Sampling Depth	Strong organic odor
SB-22-2	4-6	15.4	Deeper Sampling Depth	Strong organic odor
SB-8-1	0-4	211.0	Initial Sampling Depth	Strong organic odor
SB-8-1	4-6	43.0	Deeper Sampling Depth	Petroleum odor
SB-8-2	0-4	13.3	Initial Sampling Depth	Light petroleum odor
SB-8-2	4-6	28.0	Deeper Sampling Depth	Strong petroleum odor
SB-23-2	0-4	211.0	Initial Sampling Depth	Strong petroleum odor
SB-23-2	6-8	36.0	Deeper Sampling Depth	Petroleum odor
SB-23-3	0-4	19.2	Initial Sampling Depth	Petroleum odor
SB-23-3	4-6	93.0	Deeper Sampling Depth	Strong petroleum odor
SB-23-1	0-4	11.6	Initial Sampling Depth	Strong petroleum odor
SB-23-1	4-6	23.6	Deeper Sampling Depth	Strong petroleum odor
SB-27-4	0-4	0.0	Initial Sampling Depth	Slight petroleum odor
SB-27-4	6-8	1.2	Deeper Sampling Depth	No odor
SB-27-5	0-4	0.0	Initial Sampling Depth	No odor

Sample Location	Sample Depth (feet)	PID Reading (ppm)	Reason for Sample Collection	Description
SB-27-5	8-10	11.1	Deeper Sampling Depth	Organic odor

Organic vapors were detected with the PID at most of the soil boring locations. PID readings ranged from 0.0 to 366 ppm. The highest reading was reported from the shallow SB-20-1 soil sample. The boring logs are presented in Appendix A and were prepared for each soil boring indicating the depth interval, lithologic description, and headspace PID measurements for each sample.

## **2.10 Laboratory Analysis**

Soil samples were analyzed by a laboratory certified by the NYSDOH ELAP. Sample analysis were performed primarily using methodology contained in *Test Methods for Evaluating Solid Waste, SW-846, Third Edition, Office of Solid Waste, EPA (with latest updates)*. Additional methodology is contained in *Methods for the Evaluation of Water and Waste, EPA 600/4-79-02, revised March 1983 (with latest updates)*. The laboratory methods for the selected comprehensive analysis and recommended holding times for soil and water matrices are presented in the following table.

Sample Parameters, Analytical Methods, Containers, Holding Times			
Parameter	Analytical Method	Containers/ Preservation	Holding Time
Matrix: Soil/Sediment			
PCB	8082 <sub>1</sub>	1-8oz glass, Teflon lined cap Cool to 4°C	14 days
TAL Metals	6010/7471 <sub>1</sub>	1-8oz glass, Teflon lined cap Cool to 4°C	6 months
TCLP Metals	1311 <sub>1</sub>	1-8oz plastic Cool to 4°C	180 days to extraction and analysis

Notes: 1. Test Methods for Evaluating Solid Waste, SW-846, Office of Solid Waste, USEPA (latest update)

A review of the laboratory data packages, as well as confirmation with Test America, indicated that all holding times were met for TAL Metals samples collected for soil (EPA Method 6010/7471), PCB samples collected for soil (EPA Methods 8081A/8082), and TCLP (arsenic only) collected for soil (EPA Method 1311) in accordance with the New York State Analytical Service Protocol.





### **3.0 SUPPLEMENTAL RI ANALYTICAL RESULTS**

The SRI soil sample results were compared to NYSDEC Part 375 Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR Part 375) Brownfield Cleanup Program for Unrestricted Use SCOs. The arsenic soil samples results were compared to the Restricted Use - Protection of Groundwater SCOs since it has been determined that arsenic is a site-specific source of groundwater contamination.

#### **3.1 Supplemental RI Soil Sample Results**

The SRI soil sampling locations, sample designations, sample depth intervals, and analytical parameters are presented in Table 3-1. The soil sample analytical results are presented in Tables 3-2 through 3-4 and Figures 3-3 through 3-8. In accordance with the BCP Agreement and the intended future use of the Site as industrial, the TAL Metal and PCB sample results were compared to the Unrestricted Use SCOs and arsenic soil sample results were compared to the Restricted Use - Protection of Groundwater SCOs which is further discussed in this section and all exceedances to these SCOs have been listed within the following tables.

##### **3.1.1 Soil Boring SB-29**

###### **TAL Metals**

Arsenic was detected at SB-29 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

<b>COMPOUND</b>	<b>CLEANUP OBJECTIVES</b>	<b>ANALYTICAL RESULTS (mg/kg)</b>
Arsenic	BCO Protection of GW=16 mg/kg	1,160
Barium	BCO Unrestricted=350 mg/kg	427
Cadmium	BCO Unrestricted=2.5 mg/kg	18.4
Chromium	BCO Unrestricted=1/30 mg/kg	71.3

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Copper	BCO Unrestricted=50 mg/kg	7,060 B
Lead	BCO Unrestricted=63 mg/kg	3,830
Mercury	BCO Unrestricted=0.18 mg/kg	10
Nickel	BCO Unrestricted=30 mg/kg	120
Selenium	BCO Unrestricted=3.9 mg/kg	8.4
Silver	BCO Unrestricted=2 mg/kg	5.9
Zinc	BCO Unrestricted=109 mg/kg	2,960

Arsenic was detected at SB-29 (4-10) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	1,140
Barium	BCO Unrestricted=350 mg/kg	1,190
Cadmium	BCO Unrestricted=2.5 mg/kg	13.5
Chromium	BCO Unrestricted=1/30 mg/kg	101
Copper	BCO Unrestricted=50 mg/kg	5,480 B
Lead	BCO Unrestricted=63 mg/kg	2,050
Mercury	BCO Unrestricted=0.18 mg/kg	4.2
Nickel	BCO Unrestricted=30 mg/kg	150
Selenium	BCO Unrestricted=3.9 mg/kg	6.3
Silver	BCO Unrestricted=2 mg/kg	4.3
Zinc	BCO Unrestricted=109 mg/kg	5,310

#### PCBs

PCBs (total) were not detected at SB-29 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4.

PCBs (total) were detected at SB-29 (4-10) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.24

### 3.1.2 Soil Boring SB-30

#### TAL Metals

Arsenic was detected at SB-30 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	23.9
Barium	BCO Unrestricted=350 mg/kg	808
Cadmium	BCO Unrestricted=2.5 mg/kg	15.6
Chromium	BCO Unrestricted=1/30 mg/kg	120
Copper	BCO Unrestricted=50 mg/kg	860
Lead	BCO Unrestricted=63 mg/kg	5,410
Mercury	BCO Unrestricted=0.18 mg/kg	4.9
Nickel	BCO Unrestricted=30 mg/kg	82.9
Zinc	BCO Unrestricted=109 mg/kg	3,080

Arsenic was detected at SB-30 (4-10) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	27.6
Barium	BCO Unrestricted=350 mg/kg	455
Cadmium	BCO Unrestricted=2.5 mg/kg	9.1
Chromium	BCO Unrestricted=1/30 mg/kg	76.5
Copper	BCO Unrestricted=50 mg/kg	765
Lead	BCO Unrestricted=63 mg/kg	1,630
Mercury	BCO Unrestricted=0.18 mg/kg	1.7
Nickel	BCO Unrestricted=30 mg/kg	140
Zinc	BCO Unrestricted=109 mg/kg	2,410

#### PCBs

PCBs (total) were detected at SB-30 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	0.45
Aroclor-1260		0.49

PCBs (total) were detected at SB-30 (4-10) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	0.31
Aroclor-1260		0.21

### 3.1.3 Soil Boring SB-31

#### TAL Metals

TAL Metals were detected at SB-31 (0-4) with concentrations exceeding the Unrestricted Use SCOs and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	794
Cadmium	BCO Unrestricted=2.5 mg/kg	32.8
Chromium	BCO Unrestricted=1/30 mg/kg	483
Copper	BCO Unrestricted=50 mg/kg	19,800 B
Lead	BCO Unrestricted=63 mg/kg	2,060
Mercury	BCO Unrestricted=0.18 mg/kg	9.8
Nickel	BCO Unrestricted=30 mg/kg	331
Silver	BCO Unrestricted=2 mg/kg	7.9 J
Zinc	BCO Unrestricted=109 mg/kg	14,200

TAL Metals were detected at SB-31 (4-10) with concentrations exceeding the Unrestricted Use SCOs and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCOs. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	444
Cadmium	BCO Unrestricted=2.5 mg/kg	9.9
Chromium	BCO Unrestricted=1/30 mg/kg	142
Copper	BCO Unrestricted=50 mg/kg	1,100 B
Lead	BCO Unrestricted=63 mg/kg	1,220
Mercury	BCO Unrestricted=0.18 mg/kg	6.0
Nickel	BCO Unrestricted=30 mg/kg	90.7
Silver	BCO Unrestricted=2 mg/kg	2.0 J
Zinc	BCO Unrestricted=109 mg/kg	6,240

### PCBs

PCBs (total) were detected at SB-31 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	4.2
Aroclor-1254		1.7

PCBs (total) were detected at SB-31 (4-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	0.32

### 3.1.4 Soil Boring SB-32

#### TAL Metals

Arsenic was detected at SB-32 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	144
Barium	BCO Unrestricted=350 mg/kg	3,900
Cadmium	BCO Unrestricted=2.5 mg/kg	14
Chromium	BCO Unrestricted=1/30 mg/kg	222
Copper	BCO Unrestricted=50 mg/kg	1,170
Lead	BCO Unrestricted=63 mg/kg	17,000
Mercury	BCO Unrestricted=0.18 mg/kg	14.2
Nickel	BCO Unrestricted=30 mg/kg	142
Selenium	BCO Unrestricted=3.9 mg/kg	16.4
Silver	BCO Unrestricted=2 mg/kg	2.1 J
Zinc	BCO Unrestricted=109 mg/kg	11,600

Arsenic was detected at SB-32 (4-10) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	26.6
Barium	BCO Unrestricted=350 mg/kg	1,090
Cadmium	BCO Unrestricted=2.5 mg/kg	6.4
Chromium	BCO Unrestricted=1/30 mg/kg	90.2
Copper	BCO Unrestricted=50 mg/kg	643
Lead	BCO Unrestricted=63 mg/kg	6,580
Mercury	BCO Unrestricted=0.18 mg/kg	4.5
Nickel	BCO Unrestricted=30 mg/kg	76.3
Zinc	BCO Unrestricted=109 mg/kg	2,740

#### PCBs

PCBs (total) were detected at SB-32 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	14.0

PCBs (total) were detected at SB-32 (4-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	1.7

### 3.1.5 Soil Boring SB-33

#### TAL Metals

Arsenic was detected at SB-33 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	26.7
Barium	BCO Unrestricted=350 mg/kg	1,200
Cadmium	BCO Unrestricted=2.5 mg/kg	13
Chromium	BCO Unrestricted=1/30 mg/kg	177
Copper	BCO Unrestricted=50 mg/kg	607
Lead	BCO Unrestricted=63 mg/kg	3,510
Mercury	BCO Unrestricted=0.18 mg/kg	3.2
Nickel	BCO Unrestricted=30 mg/kg	179
Zinc	BCO Unrestricted=109 mg/kg	3,060

Arsenic was detected at SB-33 (4-10) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	21.3
Barium	BCO Unrestricted=350 mg/kg	819
Cadmium	BCO Unrestricted=2.5 mg/kg	11.7
Chromium	BCO Unrestricted=1/30 mg/kg	138
Copper	BCO Unrestricted=50 mg/kg	1,480
Lead	BCO Unrestricted=63 mg/kg	6,070
Mercury	BCO Unrestricted=0.18 mg/kg	3.7

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Nickel	BCO Unrestricted=30 mg/kg	254
Zinc	BCO Unrestricted=109 mg/kg	12,400

### PCBs

PCBs (total) were detected at SB-33 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	0.58
Aroclor-1254		0.86
Aroclor-1260		0.33

PCBs (total) were detected at SB-33 (4-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.93 J
Aroclor-1260		0.76 J

### 3.1.6 Soil Boring SB-34

#### TAL Metals

Arsenic was detected at SB-34 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	16.3
Barium	BCO Unrestricted=350 mg/kg	675
Cadmium	BCO Unrestricted=2.5 mg/kg	18.3
Chromium	BCO Unrestricted=1/30 mg/kg	486
Copper	BCO Unrestricted=50 mg/kg	4,460



COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Lead	BCO Unrestricted=63 mg/kg	1,740
Mercury	BCO Unrestricted=0.18 mg/kg	12.6
Nickel	BCO Unrestricted=30 mg/kg	330
Silver	BCO Unrestricted=2 mg/kg	2.5 J
Zinc	BCO Unrestricted=109 mg/kg	4,570

Arsenic was detected at SB-34 (4-10) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	24.7
Barium	BCO Unrestricted=350 mg/kg	599
Cadmium	BCO Unrestricted=2.5 mg/kg	19.7
Chromium	BCO Unrestricted=1/30 mg/kg	304
Copper	BCO Unrestricted=50 mg/kg	923
Lead	BCO Unrestricted=63 mg/kg	2,350
Mercury	BCO Unrestricted=0.18 mg/kg	4.9
Nickel	BCO Unrestricted=30 mg/kg	245
Selenium	BCO Unrestricted=3.9 mg/kg	28.4
Silver	BCO Unrestricted=2 mg/kg	2.3 J
Zinc	BCO Unrestricted=109 mg/kg	3,430

### PCBs

PCBs (total) were detected at SB-34 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	4.1
Aroclor-1254		1.2 J
Aroclor-1260		0.33 J

PCBs (total) were detected at SB-34 (4-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	2.0 J
Aroclor-1254		2.6
Aroclor-1260		0.56

### 3.1.7 Soil Boring SB-35

#### TAL Metals

Arsenic was detected at SB-35 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	16.2
Barium	BCO Unrestricted=350 mg/kg	439
Cadmium	BCO Unrestricted=2.5 mg/kg	25
Chromium	BCO Unrestricted=1/30 mg/kg	257
Copper	BCO Unrestricted=50 mg/kg	4,210 B
Lead	BCO Unrestricted=63 mg/kg	1,580
Mercury	BCO Unrestricted=0.18 mg/kg	5.8
Nickel	BCO Unrestricted=30 mg/kg	124
Selenium	BCO Unrestricted=3.9 mg/kg	19.5
Silver	BCO Unrestricted=2 mg/kg	2.5
Zinc	BCO Unrestricted=109 mg/kg	8,290

Arsenic was detected at SB-35 (4-10) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	22.5
Barium	BCO Unrestricted=350 mg/kg	807
Cadmium	BCO Unrestricted=2.5 mg/kg	29
Chromium	BCO Unrestricted=1/30 mg/kg	155
Copper	BCO Unrestricted=50 mg/kg	1,520 B
Lead	BCO Unrestricted=63 mg/kg	5,120
Mercury	BCO Unrestricted=0.18 mg/kg	4.7
Nickel	BCO Unrestricted=30 mg/kg	332

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Selenium	BCO Unrestricted=3.9 mg/kg	9.2
Zinc	BCO Unrestricted=109 mg/kg	15,400

### PCBs

PCBs (total) were detected at SB-35 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	3.2
Aroclor-1254		1.8

PCBs (total) were detected at SB-35 (4-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	0.92

### 3.1.8 Soil Boring SB-36

#### TAL Metals

Arsenic was detected at SB-36 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	16.4
Barium	BCO Unrestricted=350 mg/kg	1,090
Cadmium	BCO Unrestricted=2.5 mg/kg	41.2
Chromium	BCO Unrestricted=1/30 mg/kg	142
Copper	BCO Unrestricted=50 mg/kg	10,000
Lead	BCO Unrestricted=63 mg/kg	1,580
Mercury	BCO Unrestricted=0.18 mg/kg	7.1

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Nickel	BCO Unrestricted=30 mg/kg	189
Silver	BCO Unrestricted=2 mg/kg	3.7 J
Zinc	BCO Unrestricted=109 mg/kg	11,700

TAL Metals were detected at SB-36 (6-10) with concentrations exceeding the Unrestricted Use SCOs and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	817
Cadmium	BCO Unrestricted=2.5 mg/kg	18
Chromium	BCO Unrestricted=1/30 mg/kg	184
Copper	BCO Unrestricted=50 mg/kg	2,340
Lead	BCO Unrestricted=63 mg/kg	4,490
Mercury	BCO Unrestricted=0.18 mg/kg	9.1
Nickel	BCO Unrestricted=30 mg/kg	204
Silver	BCO Unrestricted=2 mg/kg	2.6 J
Zinc	BCO Unrestricted=109 mg/kg	5,550

### PCBs

PCBs (total) were detected at SB-36 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	14 J
Aroclor-1254		3.9
Aroclor-1260		0.71 J

PCBs (total) were detected at SB-36 (6-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	4.0 J
Aroclor-1254		1.9

### 3.1.9 Soil Boring SB-37

#### TAL Metals

TAL Metals were detected at SB-37 (0-4) with concentrations exceeding the Unrestricted Use SCO and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCO, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	656
Cadmium	BCO Unrestricted=2.5 mg/kg	8.5
Chromium	BCO Unrestricted=1/30 mg/kg	198
Copper	BCO Unrestricted=50 mg/kg	635
Lead	BCO Unrestricted=63 mg/kg	3,840
Mercury	BCO Unrestricted=0.18 mg/kg	5.3
Nickel	BCO Unrestricted=30 mg/kg	93.4
Zinc	BCO Unrestricted=109 mg/kg	3,650

TAL Metals were detected at SB-37 (4-10) with concentrations exceeding the Unrestricted Use SCO and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCO. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	355
Cadmium	BCO Unrestricted=2.5 mg/kg	2.6 J
Chromium	BCO Unrestricted=1/30 mg/kg	52.5
Copper	BCO Unrestricted=50 mg/kg	304
Lead	BCO Unrestricted=63 mg/kg	993
Mercury	BCO Unrestricted=0.18 mg/kg	2.0
Nickel	BCO Unrestricted=30 mg/kg	42.4 J
Zinc	BCO Unrestricted=109 mg/kg	762

#### PCBs

PCBs (total) were detected at SB-37 (0-4) with concentrations exceeding the Unrestricted Use SCO, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.25

PCBs (total) were detected at SB-37 (4-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.56
Aroclor-1260		0.29

### 3.1.10 Soil Boring SB-38

#### TAL Metals

Arsenic was detected at SB-38 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	45.9
Barium	BCO Unrestricted=350 mg/kg	1,080
Cadmium	BCO Unrestricted=2.5 mg/kg	17
Chromium	BCO Unrestricted=1/30 mg/kg	406
Copper	BCO Unrestricted=50 mg/kg	2,800 B
Lead	BCO Unrestricted=63 mg/kg	1,450
Mercury	BCO Unrestricted=0.18 mg/kg	4.1
Nickel	BCO Unrestricted=30 mg/kg	101
Selenium	BCO Unrestricted=3.9 mg/kg	4.8
Silver	BCO Unrestricted=2 mg/kg	3.0
Zinc	BCO Unrestricted=109 mg/kg	6,430

#### TAL Metals

Arsenic was detected at SB-38 (4-10) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	25.8
Barium	BCO Unrestricted=350 mg/kg	482
Cadmium	BCO Unrestricted=2.5 mg/kg	28
Chromium	BCO Unrestricted=1/30 mg/kg	198
Copper	BCO Unrestricted=50 mg/kg	864 B
Lead	BCO Unrestricted=63 mg/kg	2,870
Mercury	BCO Unrestricted=0.18 mg/kg	6.9
Nickel	BCO Unrestricted=30 mg/kg	410
Selenium	BCO Unrestricted=3.9 mg/kg	9.9
Silver	BCO Unrestricted=2 mg/kg	2.2 J
Zinc	BCO Unrestricted=109 mg/kg	9,040

### PCBs

PCBs (total) were detected at SB-38 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	1.3

PCBs (total) were detected at SB-38 (4-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	0.49

### 3.1.11 Soil Boring SB-39

#### TAL Metals

TAL Metals were detected at SB-39 (0-4) with concentrations exceeding the Unrestricted Use SCOs and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	961
Cadmium	BCO Unrestricted=2.5 mg/kg	50.7
Chromium	BCO Unrestricted=1/30 mg/kg	305
Copper	BCO Unrestricted=50 mg/kg	12,800 B
Lead	BCO Unrestricted=63 mg/kg	2,180
Mercury	BCO Unrestricted=0.18 mg/kg	9.9
Nickel	BCO Unrestricted=30 mg/kg	327
Silver	BCO Unrestricted=2 mg/kg	24.8
Zinc	BCO Unrestricted=109 mg/kg	18,700

Arsenic was detected at SB-39 (4-10) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	20.2
Barium	BCO Unrestricted=350 mg/kg	1,090
Cadmium	BCO Unrestricted=2.5 mg/kg	30.5
Chromium	BCO Unrestricted=1/30 mg/kg	201
Copper	BCO Unrestricted=50 mg/kg	1,470 B
Lead	BCO Unrestricted=63 mg/kg	4,850
Mercury	BCO Unrestricted=0.18 mg/kg	14.3
Nickel	BCO Unrestricted=30 mg/kg	168
Selenium	BCO Unrestricted=3.9 mg/kg	15.3
Silver	BCO Unrestricted=2 mg/kg	3.3 J
Zinc	BCO Unrestricted=109 mg/kg	6,150

#### PCBs

PCBs (total) were detected at SB-39 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	1.1

PCBs (total) were detected at SB-39 (4-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:



COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	0.73

### 3.1.12 Soil Boring SB-40

#### TAL Metals

TAL Metals were detected at SB-40 (0-4) with concentrations exceeding the Unrestricted Use SCO and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCO, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	376
Cadmium	BCO Unrestricted=2.5 mg/kg	6
Chromium	BCO Unrestricted=1/30 mg/kg	54
Copper	BCO Unrestricted=50 mg/kg	1,490
Lead	BCO Unrestricted=63 mg/kg	1,000
Nickel	BCO Unrestricted=30 mg/kg	91.3
Zinc	BCO Unrestricted=109 mg/kg	1,700

TAL Metals were detected at SB-40 (4-10) with concentrations exceeding the Unrestricted Use SCO and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCO. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	371
Cadmium	BCO Unrestricted=2.5 mg/kg	3 J
Chromium	BCO Unrestricted=1/30 mg/kg	66.7
Copper	BCO Unrestricted=50 mg/kg	562
Lead	BCO Unrestricted=63 mg/kg	857
Mercury	BCO Unrestricted=0.18 mg/kg	1.2
Nickel	BCO Unrestricted=30 mg/kg	53.5
Zinc	BCO Unrestricted=109 mg/kg	857

### PCBs

PCBs (total) were detected at SB-40 (0-4) with concentrations exceeding the Unrestricted Use SCO, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.41 J
Aroclor-1260		0.21 J

PCBs (total) were detected at SB-40 (4-10) with concentrations exceeding the Unrestricted Use SCO. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.41 J
Aroclor-1260		0.24 J

### 3.1.13 Soil Boring SB-41

#### TAL Metals

TAL Metals were detected at SB-41 (0-4) with concentrations exceeding the Unrestricted Use SCO and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCO, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Chromium	BCO Unrestricted=1/30 mg/kg	24.6
Copper	BCO Unrestricted=50 mg/kg	152
Lead	BCO Unrestricted=63 mg/kg	388
Mercury	BCO Unrestricted=0.18 mg/kg	1.0
Zinc	BCO Unrestricted=109 mg/kg	735

TAL Metals were detected at SB-41 (4-11) with concentrations exceeding the Unrestricted Use SCO and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCO. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Chromium	BCO Unrestricted=1/30 mg/kg	36.2
Copper	BCO Unrestricted=50 mg/kg	137
Lead	BCO Unrestricted=63 mg/kg	521
Mercury	BCO Unrestricted=0.18 mg/kg	1.4
Zinc	BCO Unrestricted=109 mg/kg	394

### PCBs

PCBs (total) were detected at SB-41 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.24
Aroclor-1260		0.14 J

PCBs (total) were detected at SB-41 (4-11) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.11

### 3.1.14 Soil Boring SB-42

#### TAL Metals

Arsenic was detected at SB-42 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	67.4
Barium	BCO Unrestricted=350 mg/kg	785
Cadmium	BCO Unrestricted=2.5 mg/kg	29.5

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Chromium	BCO Unrestricted=1/30 mg/kg	823
Copper	BCO Unrestricted=50 mg/kg	1,150
Lead	BCO Unrestricted=63 mg/kg	6,240
Nickel	BCO Unrestricted=30 mg/kg	796
Selenium	BCO Unrestricted=3.9 mg/kg	17.3
Silver	BCO Unrestricted=2 mg/kg	5.3 J
Zinc	BCO Unrestricted=109 mg/kg	7,350

Arsenic was detected at SB-42 (4-10) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	35.8
Cadmium	BCO Unrestricted=2.5 mg/kg	3.7
Chromium	BCO Unrestricted=1/30 mg/kg	163
Copper	BCO Unrestricted=50 mg/kg	221
Lead	BCO Unrestricted=63 mg/kg	768
Mercury	BCO Unrestricted=0.18 mg/kg	0.93
Nickel	BCO Unrestricted=30 mg/kg	182
Zinc	BCO Unrestricted=109 mg/kg	1,650

#### PCBs

PCBs (total) were detected at SB-42 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	0.86
Aroclor-1254		0.58
Aroclor-1260		0.14

PCBs (total) were detected at SB-42 (4-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	0.32
Aroclor-1254		0.17

### 3.1.15 Soil Boring SB-43

#### TAL Metals

Arsenic was detected at SB-43 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	21
Barium	BCO Unrestricted=350 mg/kg	767
Cadmium	BCO Unrestricted=2.5 mg/kg	27.2
Chromium	BCO Unrestricted=1/30 mg/kg	174
Copper	BCO Unrestricted=50 mg/kg	11,700
Lead	BCO Unrestricted=63 mg/kg	2,230
Mercury	BCO Unrestricted=0.18 mg/kg	5.7
Nickel	BCO Unrestricted=30 mg/kg	328
Silver	BCO Unrestricted=2 mg/kg	3.3 J
Zinc	BCO Unrestricted=109 mg/kg	9,850

Arsenic was detected at SB-43 (4-8) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	29.5
Barium	BCO Unrestricted=350 mg/kg	853
Cadmium	BCO Unrestricted=2.5 mg/kg	24.8
Chromium	BCO Unrestricted=1/30 mg/kg	260
Copper	BCO Unrestricted=50 mg/kg	1,290
Lead	BCO Unrestricted=63 mg/kg	4,080
Mercury	BCO Unrestricted=0.18 mg/kg	6.0
Nickel	BCO Unrestricted=30 mg/kg	257
Selenium	BCO Unrestricted=3.9 mg/kg	11.7
Silver	BCO Unrestricted=2 mg/kg	3.4 J

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Zinc	BCO Unrestricted=109 mg/kg	6,030

### PCBs

PCBs (total) were detected at SB-43 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	5.1
Aroclor-1254		1.0
Aroclor-1260		0.27 J

PCBs (total) were detected at SB-43 (4-8) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	1.9
Aroclor-1254		1.2
Aroclor-1260		0.31

### 3.1.16 Soil Boring SB-44

#### TAL Metals

TAL Metals were detected at SB-44 (0-4) with concentrations exceeding the Unrestricted Use SCOs and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	693
Cadmium	BCO Unrestricted=2.5 mg/kg	39.2
Chromium	BCO Unrestricted=1/30 mg/kg	173
Copper	BCO Unrestricted=50 mg/kg	4,540 B
Lead	BCO Unrestricted=63 mg/kg	2,950

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Mercury	BCO Unrestricted=0.18 mg/kg	11.6
Nickel	BCO Unrestricted=30 mg/kg	153
Silver	BCO Unrestricted=2 mg/kg	3.6 J
Zinc	BCO Unrestricted=109 mg/kg	8,150

Arsenic was detected at SB-44 (4-10) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	32.5
Barium	BCO Unrestricted=350 mg/kg	950
Cadmium	BCO Unrestricted=2.5 mg/kg	37
Chromium	BCO Unrestricted=1/30 mg/kg	335
Copper	BCO Unrestricted=50 mg/kg	3,690 B
Lead	BCO Unrestricted=63 mg/kg	5,050
Mercury	BCO Unrestricted=0.18 mg/kg	11.7
Nickel	BCO Unrestricted=30 mg/kg	287
Selenium	BCO Unrestricted=3.9 mg/kg	12 J
Silver	BCO Unrestricted=2 mg/kg	5.8 J
Zinc	BCO Unrestricted=109 mg/kg	7,590

### PCBs

PCBs (total) were detected at SB-44 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	2.9
Aroclor-1254		1.4

PCBs (total) were detected at SB-44 (4-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	1.4

### 3.1.17 Soil Boring SB-45

#### TAL Metals

TAL Metals were detected at SB-45 (0-4) with concentrations exceeding the Unrestricted Use SCOs and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Cadmium	BCO Unrestricted=2.5 mg/kg	3.3
Chromium	BCO Unrestricted=1/30 mg/kg	61.3
Copper	BCO Unrestricted=50 mg/kg	225
Lead	BCO Unrestricted=63 mg/kg	1,240
Mercury	BCO Unrestricted=0.18 mg/kg	4.9
Nickel	BCO Unrestricted=30 mg/kg	50.1
Zinc	BCO Unrestricted=109 mg/kg	757

TAL Metals were detected at SB-45 (4-10) with concentrations exceeding the Unrestricted Use SCOs and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Chromium	BCO Unrestricted=1/30 mg/kg	30.1
Copper	BCO Unrestricted=50 mg/kg	77
Lead	BCO Unrestricted=63 mg/kg	316
Mercury	BCO Unrestricted=0.18 mg/kg	1.0
Zinc	BCO Unrestricted=109 mg/kg	257

#### PCBs

PCBs (total) were detected at SB-45 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:



COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.52
Aroclor-1260		0.34

PCBs (total) were detected at SB-45 (4-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.17

### 3.1.18 Soil Boring SB-46

#### TAL Metals

TAL Metals were detected at SB-46 (0-4) with concentrations exceeding the Unrestricted Use SCOs and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	1,020
Cadmium	BCO Unrestricted=2.5 mg/kg	38.3
Chromium	BCO Unrestricted=1/30 mg/kg	450
Copper	BCO Unrestricted=50 mg/kg	1,150
Lead	BCO Unrestricted=63 mg/kg	5,110
Mercury	BCO Unrestricted=0.18 mg/kg	9.2
Nickel	BCO Unrestricted=30 mg/kg	353
Silver	BCO Unrestricted=2 mg/kg	8.5 J
Zinc	BCO Unrestricted=109 mg/kg	9,910

Arsenic was detected at SB-46 (4-10) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	20.1
Barium	BCO Unrestricted=350 mg/kg	1,380

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Cadmium	BCO Unrestricted=2.5 mg/kg	50.5
Chromium	BCO Unrestricted=1/30 mg/kg	327
Copper	BCO Unrestricted=50 mg/kg	1,100
Lead	BCO Unrestricted=63 mg/kg	8,760
Mercury	BCO Unrestricted=0.18 mg/kg	9.7
Nickel	BCO Unrestricted=30 mg/kg	273
Silver	BCO Unrestricted=2 mg/kg	4.4 J
Zinc	BCO Unrestricted=109 mg/kg	16,400

### PCBs

PCBs were detected at SB-46 (0-4) with concentrations exceeding the Unrestricted Use SCO, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	2.7
Aroclor-1260		0.5

PCBs were detected at SB-46 (4-10) with concentrations exceeding the Unrestricted Use SCO. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	6.7
Aroclor-1254		6.2
Aroclor-1260		1.7

### 3.1.19 Soil Boring SB-47

#### TAL Metals

Arsenic was detected at SB-47 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCO and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCO, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	69.6
Barium	BCO Unrestricted=350 mg/kg	849
Cadmium	BCO Unrestricted=2.5 mg/kg	20.5
Chromium	BCO Unrestricted=1/30 mg/kg	276
Copper	BCO Unrestricted=50 mg/kg	1,260
Lead	BCO Unrestricted=63 mg/kg	5,810
Mercury	BCO Unrestricted=0.18 mg/kg	9.6
Nickel	BCO Unrestricted=30 mg/kg	201
Silver	BCO Unrestricted=2 mg/kg	4.3 J
Zinc	BCO Unrestricted=109 mg/kg	7,800

Arsenic was detected at SB-47 (4-10) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	18.5
Barium	BCO Unrestricted=350 mg/kg	1,090
Cadmium	BCO Unrestricted=2.5 mg/kg	32.8
Chromium	BCO Unrestricted=1/30 mg/kg	297
Copper	BCO Unrestricted=50 mg/kg	1,440
Lead	BCO Unrestricted=63 mg/kg	6,080
Mercury	BCO Unrestricted=0.18 mg/kg	6.0
Nickel	BCO Unrestricted=30 mg/kg	168
Selenium	BCO Unrestricted=3.9 mg/kg	11.5
Silver	BCO Unrestricted=2 mg/kg	3.3 J
Zinc	BCO Unrestricted=109 mg/kg	6,130

### PCBs

PCBs were detected at SB-47 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	1.4
Aroclor-1254		0.83
Aroclor-1260		0.19

PCBs were detected at SB-47 (4-10) with concentrations exceeding the Unrestricted Use SCO. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	3.3
Aroclor-1254		2.5
Aroclor-1260		0.95

### 3.1.20 Soil Boring SB-48

#### TAL Metals

Arsenic was detected at SB-48 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCO and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCO, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	17.2
Barium	BCO Unrestricted=350 mg/kg	773
Cadmium	BCO Unrestricted=2.5 mg/kg	38.2
Chromium	BCO Unrestricted=1/30 mg/kg	278
Copper	BCO Unrestricted=50 mg/kg	11,200 B
Lead	BCO Unrestricted=63 mg/kg	2,330
Mercury	BCO Unrestricted=0.18 mg/kg	9.1
Nickel	BCO Unrestricted=30 mg/kg	292
Selenium	BCO Unrestricted=3.9 mg/kg	14.9
Silver	BCO Unrestricted=2 mg/kg	4.8 J
Zinc	BCO Unrestricted=109 mg/kg	12,800

Arsenic was detected at SB-48 (4-6) with concentrations exceeding the Restricted Use - Protection of Groundwater SCO and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCO. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	18.3
Barium	BCO Unrestricted=350 mg/kg	970
Cadmium	BCO Unrestricted=2.5 mg/kg	41.5

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Chromium	BCO Unrestricted=1/30 mg/kg	301
Copper	BCO Unrestricted=50 mg/kg	3,980 B
Lead	BCO Unrestricted=63 mg/kg	4,220
Mercury	BCO Unrestricted=0.18 mg/kg	13.5
Nickel	BCO Unrestricted=30 mg/kg	350
Silver	BCO Unrestricted=2 mg/kg	5.2 J
Zinc	BCO Unrestricted=109 mg/kg	10,600

### PCBs

PCBs (total) were detected at SB-48 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	0.83

PCBs (total) were detected at SB-48 (4-6) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	2.6
Aroclor-1254		1.2

### 3.1.21 Soil Boring SB-49

#### TAL Metals

TAL Metals were detected at SB-49 (0-4) with concentrations exceeding the Unrestricted Use SCOs and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Chromium	BCO Unrestricted=1/30 mg/kg	51.1
Copper	BCO Unrestricted=50 mg/kg	153

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Lead	BCO Unrestricted=63 mg/kg	232
Mercury	BCO Unrestricted=0.18 mg/kg	0.72
Nickel	BCO Unrestricted=30 mg/kg	51.8
Zinc	BCO Unrestricted=109 mg/kg	408

TAL Metals were detected at SB-49 (4-10) with concentrations exceeding the Unrestricted Use SCOs and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Chromium	BCO Unrestricted=1/30 mg/kg	27
Copper	BCO Unrestricted=50 mg/kg	145
Lead	BCO Unrestricted=63 mg/kg	212
Mercury	BCO Unrestricted=0.18 mg/kg	1.0
Zinc	BCO Unrestricted=109 mg/kg	331

### PCBs

PCBs (total) were not detected at SB-49 (0-4) and SB-49 (4-10) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4.

### 3.1.22 Soil Boring SB-50

#### TAL Metals

Arsenic was detected at SB-50 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	23.2
Barium	BCO Unrestricted=350 mg/kg	714
Cadmium	BCO Unrestricted=2.5 mg/kg	21.4
Chromium	BCO Unrestricted=1/30 mg/kg	118
Copper	BCO Unrestricted=50 mg/kg	1,140
Lead	BCO Unrestricted=63 mg/kg	1,720
Mercury	BCO Unrestricted=0.18 mg/kg	4.5

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Nickel	BCO Unrestricted=30 mg/kg	92.6
Selenium	BCO Unrestricted=3.9 mg/kg	194
Zinc	BCO Unrestricted=109 mg/kg	3,330

Arsenic was detected at SB-50 (4-10) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	39.8
Cadmium	BCO Unrestricted=2.5 mg/kg	5 J
Chromium	BCO Unrestricted=1/30 mg/kg	112
Copper	BCO Unrestricted=50 mg/kg	688
Lead	BCO Unrestricted=63 mg/kg	662
Mercury	BCO Unrestricted=0.18 mg/kg	2.1
Nickel	BCO Unrestricted=30 mg/kg	42.2 J
Zinc	BCO Unrestricted=109 mg/kg	1,520

### PCBs

PCBs (total) were detected at SB-50 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	0.31
Aroclor-1260		0.18

PCBs (total) were detected at SB-50 (4-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	0.59 J

### 3.1.23 Soil Boring SB-51

#### TAL Metals

TAL Metals were detected at SB-51 (0-4) with concentrations exceeding the Unrestricted Use SCOs and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCOs, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	563
Cadmium	BCO Unrestricted=2.5 mg/kg	3.9 J
Chromium	BCO Unrestricted=1/30 mg/kg	82.8
Copper	BCO Unrestricted=50 mg/kg	1,910
Lead	BCO Unrestricted=63 mg/kg	1,730
Mercury	BCO Unrestricted=0.18 mg/kg	1.0
Nickel	BCO Unrestricted=30 mg/kg	69.2
Zinc	BCO Unrestricted=109 mg/kg	1,930

TAL Metals were detected at SB-51 (4-8) with concentrations exceeding the Unrestricted Use SCOs and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	437
Chromium	BCO Unrestricted=1/30 mg/kg	26.6
Copper	BCO Unrestricted=50 mg/kg	179
Lead	BCO Unrestricted=63 mg/kg	752
Mercury	BCO Unrestricted=0.18 mg/kg	0.95
Zinc	BCO Unrestricted=109 mg/kg	746

#### PCBs

PCBs (total) were not detected at SB-51 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4.

PCBs (total) were detected at SB-51 (4-8) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:



COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	0.21

### 3.1.24 Soil Boring SB-52

#### TAL Metals

TAL Metals were detected at SB-52 (0-4) with concentrations exceeding the Unrestricted Use SCO and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCO, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	1,150
Cadmium	BCO Unrestricted=2.5 mg/kg	24.7
Chromium	BCO Unrestricted=1/30 mg/kg	834
Copper	BCO Unrestricted=50 mg/kg	1,910 B
Lead	BCO Unrestricted=63 mg/kg	2,200
Mercury	BCO Unrestricted=0.18 mg/kg	13.6
Nickel	BCO Unrestricted=30 mg/kg	280
Selenium	BCO Unrestricted=3.9 mg/kg	7.2
Silver	BCO Unrestricted=2 mg/kg	3.8
Zinc	BCO Unrestricted=109 mg/kg	11,300

TAL Metals were detected at SB-52 (4-10) with concentrations exceeding the Unrestricted Use SCO and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCO. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	498
Cadmium	BCO Unrestricted=2.5 mg/kg	8.3
Chromium	BCO Unrestricted=1/30 mg/kg	149
Copper	BCO Unrestricted=50 mg/kg	2,900 B
Lead	BCO Unrestricted=63 mg/kg	898
Mercury	BCO Unrestricted=0.18 mg/kg	2.9
Nickel	BCO Unrestricted=30 mg/kg	90.4
Selenium	BCO Unrestricted=3.9 mg/kg	64.7
Zinc	BCO Unrestricted=109 mg/kg	4,120

### PCBs

PCBs (total) were detected at SB-52 (0-4) with concentrations exceeding the Unrestricted Use SCO, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	1.0

PCBs (total) were detected at SB-52 (4-10) with concentrations exceeding the Unrestricted Use SCO. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	0.55 J

### 3.1.25 Soil Boring SB-53

#### TAL Metals

Arsenic was detected at SB-53 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCO and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCO, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	13.9
Barium	BCO Unrestricted=350 mg/kg	907
Cadmium	BCO Unrestricted=2.5 mg/kg	32.3
Chromium	BCO Unrestricted=1/30 mg/kg	231
Copper	BCO Unrestricted=50 mg/kg	2,820
Lead	BCO Unrestricted=63 mg/kg	2,680
Mercury	BCO Unrestricted=0.18 mg/kg	4.3
Nickel	BCO Unrestricted=30 mg/kg	190
Selenium	BCO Unrestricted=3.9 mg/kg	7.1 J
Silver	BCO Unrestricted=2 mg/kg	4.8 J
Zinc	BCO Unrestricted=109 mg/kg	9,110

Arsenic was detected at SB-53 (4-10) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	25.1
Barium	BCO Unrestricted=350 mg/kg	652
Cadmium	BCO Unrestricted=2.5 mg/kg	26.7
Chromium	BCO Unrestricted=1/30 mg/kg	249
Copper	BCO Unrestricted=50 mg/kg	789
Lead	BCO Unrestricted=63 mg/kg	2,330
Mercury	BCO Unrestricted=0.18 mg/kg	7.9
Nickel	BCO Unrestricted=30 mg/kg	162
Silver	BCO Unrestricted=2 mg/kg	2.9 J
Zinc	BCO Unrestricted=109 mg/kg	3,120

#### PCBs

PCBs (total) were detected at SB-53 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	5.5
Aroclor-1254		1.0

PCBs (total) were detected at SB-53 (4-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	1.6
Aroclor-1260		5.1

### 3.1.26 Soil Boring SB-54

#### TAL Metals

TAL Metals were detected at SB-54 (0-4) with concentrations exceeding the Unrestricted Use SCO and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCO, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	1,920
Cadmium	BCO Unrestricted=2.5 mg/kg	21.8
Chromium	BCO Unrestricted=1/30 mg/kg	214
Copper	BCO Unrestricted=50 mg/kg	1,560
Lead	BCO Unrestricted=63 mg/kg	1,760
Mercury	BCO Unrestricted=0.18 mg/kg	12.6
Nickel	BCO Unrestricted=30 mg/kg	205
Silver	BCO Unrestricted=2 mg/kg	3 J
Zinc	BCO Unrestricted=109 mg/kg	6,250

Arsenic was detected at SB-54 (4-10) with concentrations exceeding the Restricted Use - Protection of Groundwater SCO and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCO. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	27.1
Barium	BCO Unrestricted=350 mg/kg	985
Cadmium	BCO Unrestricted=2.5 mg/kg	29.4
Chromium	BCO Unrestricted=1/30 mg/kg	794
Copper	BCO Unrestricted=50 mg/kg	1,860
Lead	BCO Unrestricted=63 mg/kg	4,530
Mercury	BCO Unrestricted=0.18 mg/kg	8.5
Nickel	BCO Unrestricted=30 mg/kg	800
Selenium	BCO Unrestricted=3.9 mg/kg	5.4 J
Silver	BCO Unrestricted=2 mg/kg	4 J
Zinc	BCO Unrestricted=109 mg/kg	7,430

### PCBs

PCBs (total) were detected at SB-54 (0-4) with concentrations exceeding the Unrestricted Use SCO, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	5.6
Aroclor-1254		1.4 J

PCBs (total) were not detected at SB-54 (4-10) with concentrations exceeding the Unrestricted Use SCO. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	5.0
Aroclor-1254		2.9
Aroclor-1260		0.6

### 3.1.27 Soil Boring SB-55

#### TAL Metals

TAL Metals were detected at SB-55 (0-4) with concentrations exceeding the Unrestricted Use SCO and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCO, as presented in Tables 3-2 and 3-3, and Figures 3-3 through 3-6. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	713
Cadmium	BCO Unrestricted=2.5 mg/kg	8.4
Chromium	BCO Unrestricted=1/30 mg/kg	206
Copper	BCO Unrestricted=50 mg/kg	741
Lead	BCO Unrestricted=63 mg/kg	3,470
Mercury	BCO Unrestricted=0.18 mg/kg	5.4
Nickel	BCO Unrestricted=30 mg/kg	290
Silver	BCO Unrestricted=2 mg/kg	2.6 J
Zinc	BCO Unrestricted=109 mg/kg	3,240

TAL Metals were detected at SB-55 (4-10) with concentrations exceeding the Unrestricted Use SCOs and arsenic concentrations were not detected exceeding the Restricted Use - Protection of Groundwater SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Barium	BCO Unrestricted=350 mg/kg	392
Cadmium	BCO Unrestricted=2.5 mg/kg	3.9 J
Chromium	BCO Unrestricted=1/30 mg/kg	59.3
Copper	BCO Unrestricted=50 mg/kg	458
Lead	BCO Unrestricted=63 mg/kg	864
Mercury	BCO Unrestricted=0.18 mg/kg	1.5
Nickel	BCO Unrestricted=30 mg/kg	40.2 J
Selenium	BCO Unrestricted=3.9 mg/kg	19.7
Zinc	BCO Unrestricted=109 mg/kg	905

### PCBs

PCBs (total) were detected at SB-55 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 3-4 and Figures 3-7 and 3-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	1.7
Aroclor-1260		1.7

PCBs (total) were not detected at SB-55 (4-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.34 J
Aroclor-1260		0.24 J

### 3.1.28 TCLP Soil Samples for Arsenic

Soil samples were analyzed from select SRI sample locations to assess whether specific arsenic concentrations that exceed the Restricted Use - Protection of Groundwater SCO of 16 mg/kg also exceed the RCRA Hazardous Waste Regulatory Level of 5 mg/L. These samples were collected

to assess whether there was a correlation between the total arsenic concentrations (dry weight) and the leachability of this contaminant in the subsurface environment at the Site. The results of this data will likely show the approximate arsenic concentration that has the potential to leach into or impact groundwater quality beneath the Site. Once this data is evaluated, a site-specific cleanup level for arsenic can be presented to NYSDEC for consideration as a possible alternative SCO for this contaminant.

Six (6) soil samples collected on August 5, 6, and 9, 2010 were analyzed to assess the leaching potential for soil samples SB-32 (0-4) (144 mg/kg), SB-38 (0-4) (45.9 mg/kg), SB-42 (0-4) (67.4 mg/kg), SB-42 (4-10) (35.8 mg/kg), SB-43 (4-8) (29.5 mg/kg), and SB-53 (4-10) (25.1 mg/kg). A total of six (6) soil samples were analyzed from sample depth intervals of 0 to 4 ft-bgs and 4 to 10 ft-bgs to compare arsenic concentrations in relation to TCLP concentrations. Arsenic was detected at concentrations exceeding the Restricted Use - Protection of Groundwater SCO of 16 mg/kg at all six (6) sample locations which were also analyzed to assess the corresponding TCLP concentrations. The following table lists the arsenic and TCLP analytical results:

<b>Sample Location</b>	<b>Sample Depth</b>	<b>Restricted Use Protection of GW SCOs</b>	<b>Analytical Results (mg/kg)</b>	<b>RCRA Level (mg/L)</b>	<b>TCLP Results (mg/L)</b>
SB-32 (0-4)	0-4 ft-bgs	16	144	5	0.025 U
SB-38 (0-4)	0-4 ft-bgs	16	45.9	5	0.025 U
SB-42 (0-4)	0-4 ft-bgs	16	67.4	5	0.025 U
SB-42 (4-10)	4-10 ft-bgs	16	35.8	5	0.025 U
SB-43 (4-8)	4-8 ft-bgs	16	29.5	5	0.025 U
SB-53 (4-10)	4-10 ft-bgs	16	25.1	5	0.025 U

Note: U = The analyte was analyzed for, but not detected above the sample reporting limits.

Arsenic was detected at concentrations ranging from 25.1 mg/kg to 144 mg/kg which exceed the Restricted Use - Protection of Groundwater SCO of 16 mg/kg at all six (6) sample locations. The corresponding TCLP concentrations of 0.025 mg/L for all of the six (6) samples indicate that these arsenic concentrations are not leaching and are significantly below the RCRA Hazardous Waste Regulatory Level of 5 mg/L, as presented in Table 3-5 and Figure 3-9.

### 3.1.29 Duplicate Soil Samples

Three (3) duplicate soil samples were collected as part of the SRI sampling program. DUP-1 (SB-42 0-4), DUP-2 (SB-36 6-10), and DUP-3 (SB-32 0-4) were collected during the SRI sampling program on August 5, 9, and 10, 2010. A review of the analytical results compared to the duplicate samples indicates that the duplicate samples are generally consistent with the results collected from the original soils samples.

A summary of the laboratory results for each soil sample are included on Tables 3-2, 3-3, and 3-4. Laboratory analytical data and chain-of-custody are included in Appendix B.

## 3.2 Community Air Monitoring Results

Air monitoring was conducted in accordance with the NYSDOH CAMP provided in the RI Work Plan dated September 2009. VOCs and particulates were monitored continuously during all intrusive investigation activities. Action levels described in the CAMP were utilized to monitor site activities. Monitors were set upgradient and downgradient of the intrusive investigation areas. A particulate monitor capable of measuring particulate matter less than 10 micrometers ( $\mu\text{m}$ ) in size and capable of integrating over a period of 15 minutes (or less) was used for comparison to the airborne particulate action levels.

The particulate monitor used during the SRI was equipped with data logging capabilities. However, it appears that the datalog file from the previous day was overwritten either by an equipment malfunction or by accidental resetting the monitor. The only datalog file from the dust monitor was for the last day of work at the Site on November 6, 2009. The alarms for the dust monitor were set daily at the threshold values assigned in the CAMP. If the alarm sounded, work would have immediately been stopped to allow for the air particulate to disperse. Periodic checks were made to make sure the alarms and particulate monitor were working properly. High dust levels were not observed during work performed at the site. The results of the daily monitoring conducted as part of the CAMP did not exceed applicable action levels established in



Section 2-6. The results of the daily monitoring conducted as part of the CAMP are provided in Table 3-6.

Future intrusive activities at the Site will require daily datalog downloads to prevent the overwriting of the previous day's results or a comparable particulate monitor without a datalog overwrite feature will be used to ensure that daily records are maintained to provide the necessary records to conform with the CAMP requirements.

### **3.3 Data Usability Summary Report**

To conform to NYSDEC requirements as specified in DER-10 (2002), data validation was performed on the analytical samples collected during the SRI conducted in August 2010 at the Site. Data validation services were provided by Environmental Data Services (EDS), Inc. located at 1156 Jamestown Road, Suite A in Williamsburg, VA. The complete SDGs from the laboratory which were validated by EDS included:

- J15947
- J16006
- J16056
- J16132
- J16171

The analytical data generated during the SRI was subjected to validation and usability review to verify that the data satisfy project objectives. The data usability summary report (DUSR) for the August 2010 SRI sampling program is presented in Appendix C.

#### **3.3.1 Usability of Remedial Investigation Data**

There are five (5) SDGs that were analyzed by Test America. The media include soil analyzed for PCBs and metals. There were no rejections of the data collected during the August 2010 sampling event. The analytical data was acceptable for their intended use. As a result of the data validation for the August 2010 sampling program, the following deficiencies were noted:

- Aroclor 1260 was qualified as estimated in three samples due to high %D values between columns (J15947).
- Antimony was qualified as estimated in all samples due to low matrix spike recovery (J15947).
- Sodium was qualified as non-detect in all samples due to low matrix spike recovery (J15947).
- Aroclor 1254 was qualified as estimated in one samples due to high %D values between columns (J16006).
- Several analytes were qualified as estimated in all samples due to low matrix spike recoveries or high duplicate RPDs (J16006).
- Mercury was qualified as estimated in the field duplicate pair due to poor duplicate precision (J16006).
- Aroclor 1248 was qualified as estimated in one samples due to high %D values between columns (J16056).
- Six metal compounds were qualified as estimated in all samples due to low/high matrix spike recoveries or high duplicate RPDs (J16056).
- Sodium was qualified as non-detect in thirteen samples due to field blank contamination (J16056).
- Several PCB compounds were qualified as estimated in several samples due to low/high matrix spike recoveries or high duplicate RPDs (J16132).
- Nine metal compounds were qualified as estimated in all samples due to low/high matrix spike recoveries or high duplicate RPDs (J16132).
- Potassium was qualified as non-detect in ten samples due to method blank contamination (J16132).
- Cadmium and silver were qualified as estimated in the field duplicate pair due to poor duplicate precision (J16132).
- Aroclor 1254 and aroclor 1260 were qualified as estimated in three samples due to high surrogate recoveries (J16171).

- Vanadium was qualified as estimated in all samples due to low matrix spike recovery (J16171).
- Arsenic was qualified as estimated in the field duplicate samples due to poor duplicate precision (J16171).



## **4.0 SECOND SUPPLEMENTAL RI ANALYTICAL RESULTS**

The SSRI soil sample results were compared to Part 375 Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR Part 375) Brownfield Cleanup Program for Unrestricted Use SCOs. The arsenic soil samples results were compared to the Restricted Use - Protection of Groundwater SCOs since it has been determined that arsenic is a site-specific source of groundwater contamination. The soil sample locations that were completed during the SSRI are presented on Figures 4-1 and 4-2.

### **4.1 Second Supplemental RI Soil Sample Results**

The SSRI soil sampling locations, sample designations, sample depth intervals, and analytical parameters are presented in Table 4-1. The soil sample analytical results are presented in Tables 4-2, 4-3, and 4-4 and Figures 4-3 through 4-8. TAL Metal and PCB sample results were compared to the Unrestricted Use SCOs and arsenic soil sample results were compared to the Restricted Use - Protection of Groundwater SCOs which is further discussed in this section and all exceedances to these SCOs have been listed within the following tables.

#### **4.1.1 Soil Boring SB-2-1**

##### **PCBs**

PCBs (total) were detected at SB-2-1 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedances:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.48
Aroclor-1260		0.55

PCBs (total) were detected at SB-2-1 (6-8) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1260	BCO Unrestricted=0.1 mg/kg	0.13

#### 4.1.2 Soil Boring SB-2-2

##### PCBs

PCBs (total) were detected at SB-2-2 (1-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.40

PCBs (total) were not detected at SB-2-2 (6-8) with concentrations exceeding the Unrestricted Use SCOs.

#### 4.1.3 Soil Boring SB-2-3

##### PCBs

PCBs (total) were detected at SB-2-3 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.47

PCBs (total) were detected at SB-2-3 (10-11) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1260	BCO Unrestricted=0.1 mg/kg	0.15

#### 4.1.4 Soil Boring SB-6-1

##### PCBs

PCBs (total) were detected at SB-6-1 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	12

#### 4.1.5 Soil Boring SB-6-2

##### PCBs

PCBs (total) were detected at SB-6-2 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	1.6

PCBs (total) were detected at SB-6-2 (6-8) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	6.1 J

#### 4.1.6 Soil Boring SB-6-3

##### PCBs

PCBs (total) were detected at SB-6-3 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.69

#### 4.1.7 Soil Boring SB-7-1

##### PCBs

PCBs (total) were detected at SB-7-1 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	0.76
Aroclor-1254		0.67
Aroclor-1260		0.16

PCBs (total) were detected at SB-7-1 (4-6) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	2.1
Aroclor-1254		4.4
Aroclor-1260		1.5



#### 4.1.8 Soil Boring SB-7-2

##### PCBs

PCBs (total) were detected at SB-7-2 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	1.3
Aroclor-1254		1.2
Aroclor-1260		0.39

PCBs (total) were detected at SB-7-2 (4-6) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	2.1
Aroclor-1254		3.2
Aroclor-1260		3.0

#### 4.1.9 Soil Boring SB-8-1

##### Arsenic and Lead

Arsenic was detected at SB-8-1 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and lead was detected with concentrations exceeding the Unrestricted Use SCOs, as presented in Tables 4-3 and 4-4, and Figures 4-5 through 4-8. No other TAL Metals were analyzed from this sampling location during the SSRI sampling program. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	30.9 J
Lead	BCO Unrestricted=63 mg/kg	5,470 J

Arsenic was detected at SB-8-1 (4-6) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and lead was detected with concentrations exceeding the

Unrestricted Use SCOs. No other TAL Metals were analyzed from this sampling location during the SSRI sampling program. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	33.7 J
Lead	BCO Unrestricted=63 mg/kg	10,700 J

#### PCBs

PCBs (total) were detected at SB-8-1 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	2.4
Aroclor-1260		0.56

PCBs (total) were detected at SB-8-1 (4-6) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	13
Aroclor-1260		4.1

#### 4.1.10 Soil Boring SB-8-2

##### Arsenic and Lead

Arsenic was detected at SB-8-2 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and lead was detected with concentrations exceeding the Unrestricted Use SCOs, as presented in Tables 4-3 and 4-4, and Figures 4-5 through 4-8. No other TAL Metals were analyzed from this sampling location during the SSRI sampling program. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	23.2 J
Lead	BCO Unrestricted=63 mg/kg	21,700 J

Arsenic was detected at SB-8-2 (4-6) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and lead was detected with concentrations exceeding the Unrestricted Use SCOs. No other TAL Metals were analyzed from this sampling location during the SSRI sampling program. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	47.5 J
Lead	BCO Unrestricted=63 mg/kg	10,600 J

#### PCBs

PCBs (total) were detected at SB-8-2 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	14.0
Aroclor-1260		12.0

PCBs (total) were detected at SB-8-2 (4-6) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	6.0
Aroclor-1260		2.4

#### 4.1.11 Soil Boring SB-9-1

##### PCBs

PCBs (total) were detected at SB-9-1 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	6.7 J

PCBs (total) were detected at SB-9-1 (10-11) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.49
Aroclor-1260		0.26

#### 4.1.12 Soil Boring SB-9-2

##### PCBs

PCBs (total) were detected at SB-9-2 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	7.8

PCBs (total) were detected at SB-9-2 (8-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	2.1
Aroclor-1260		0.59

#### 4.1.13 Soil Boring SB-9-3

##### PCBs

PCBs (total) were detected at SB-9-3 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	11 J

PCBs (total) were detected at SB-9-3 (4-6) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	5.9 J

#### 4.1.14 Soil Boring SB-16-1

##### Lead

Lead was detected at SB-16-1 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-4 and Figures 4-7 and 4-8. No other TAL Metals were analyzed from this sampling location during the SSRI sampling program. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Lead	BCO Unrestricted=63 mg/kg	11,600 J

##### PCBs

PCBs (total) were detected at SB-16-1 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	9.3 J
Aroclor-1260		0.89

PCBs (total) were detected at SB-16-1 (6-8) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	2.8
Aroclor-1260		1.2

#### 4.1.15 Soil Boring SB-16-2

##### PCBs

PCBs (total) were detected at SB-16-2 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	7.0 J
Aroclor-1260		0.57

PCBs (total) were detected at SB-16-2 (6-8) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	0.43
Aroclor-1260		0.26

#### 4.1.16 Soil Boring SB-16-3

##### PCBs

PCBs (total) were detected at SB-16-3 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	12.0
Aroclor-1260		0.92 J

PCBs (total) were detected at SB-16-3 (4-6) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	15.0
Aroclor-1260		2.6

#### 4.1.17 Soil Boring SB-17-1

##### PCBs

PCBs (total) were detected at SB-17-1 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	31.0
Aroclor-1260		8.3

PCBs (total) were detected at SB-17-1 (4-6) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	0.29 J

#### 4.1.18 Soil Boring SB-17-2

##### PCBs

PCBs (total) were detected at SB-17-2 (0-4) with concentrations exceeding the Unrestricted Use SCO, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	16.0
Aroclor-1260		1.9

PCBs (total) were detected at SB-17-2 (4-6) with concentrations exceeding the Unrestricted Use SCO. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	27.0
Aroclor-1260		3.0

#### 4.1.19 Soil Boring SB-20-1

##### PCBs

PCBs (total) were detected at SB-20-1 (0-4) with concentrations exceeding the Unrestricted Use SCO, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	13.0 J
Aroclor-1260		1.4 J

PCBs (total) were detected at SB-20-1 (6-8) with concentrations exceeding the Unrestricted Use SCO. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	1.7



COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1260		0.89

#### 4.1.20 Soil Boring SB-20-2

##### PCBs

PCBs (total) were detected at SB-20-2 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	7.4
Aroclor-1260		0.83

PCBs (total) were detected at SB-20-2 (4-6) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	16.0
Aroclor-1260		1.5

#### 4.1.21 Soil Boring SB-20-3

##### PCBs

PCBs (total) were detected at SB-20-3 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	11.0 J
Aroclor-1260		0.89 J

PCBs (total) were detected at SB-20-3 (6-8) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	0.96
Aroclor-1260		0.33

#### 4.1.22 Soil Boring SB-22-1

##### Arsenic and Lead

Arsenic was detected at SB-22-1 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and lead was detected with concentrations exceeding the Unrestricted Use SCOs, as presented in Tables 4-3 and 4-4, and Figures 4-5 through 4-8. No other TAL Metals were analyzed from this sampling location during the SSRI sampling program. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	25.6 J
Lead	BCO Unrestricted=63 mg/kg	1,830 J

Arsenic was detected at SB-22-1 (4-6) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and lead was detected with concentrations exceeding the Unrestricted Use SCOs. No other TAL Metals were analyzed from this sampling location during the SSRI sampling program. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	16.3 J
Lead	BCO Unrestricted=63 mg/kg	4,970 J

##### PCBs

PCBs (total) were detected at SB-22-1 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	6.2
Aroclor-1260		0.61

PCBs (total) were detected at SB-22-1 (4-6) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	11.0
Aroclor-1260		2.1

#### 4.1.23 Soil Boring SB-22-2

##### Lead

Lead was detected at SB-22-2 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-4 and Figures 4-7 and 4-8. No other TAL Metals were analyzed from this sampling location during the SSRI sampling program. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Lead	BCO Unrestricted=63 mg/kg	3,910 J

Lead was detected at SB-22-2 (4-6) with concentrations exceeding the Unrestricted Use SCOs. No other TAL Metals were analyzed from this sampling location during the SSRI sampling program. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Lead	BCO Unrestricted=63 mg/kg	6,660 J

#### PCBs

PCBs (total) were detected at SB-22-2 (0-4) with concentrations exceeding the Unrestricted Use SCO, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	4.5
Aroclor-1260		0.84

PCBs (total) were detected at SB-22-2 (4-6) with concentrations exceeding the Unrestricted Use SCO. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	2.6
Aroclor-1260		0.92

#### 4.1.24 Soil Boring SB-22-3

#### PCBs

PCBs (total) were detected at SB-22-3 (0-4) with concentrations exceeding the Unrestricted Use SCO, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	9.5
Aroclor-1260		1.4

PCBs (total) were detected at SB-22-3 (6-8) with concentrations exceeding the Unrestricted Use SCO. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	4.4
Aroclor-1260		0.78

#### 4.1.25 Soil Boring SB-23-1

##### Arsenic and Lead

Arsenic was detected at SB-23-1 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and lead was detected with concentrations exceeding the Unrestricted Use SCOs, as presented in Tables 4-3 and 4-4, and Figures 4-5 through 4-8. No other TAL Metals were analyzed from this sampling location during the SSRI sampling program. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	23.1
Lead	BCO Unrestricted=63 mg/kg	7,330

Arsenic was detected at SB-23-1 (4-6) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and lead was not detected with concentrations exceeding the Unrestricted Use SCOs. No other TAL Metals were analyzed from this sampling location during the SSRI sampling program. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	17.5

##### PCBs

PCBs (total) were detected at SB-23-1 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	3.5
Aroclor-1260		1.1 J

PCBs (total) were detected at SB-23-1 (4-6) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	3.1
Aroclor-1260		0.83

#### 4.1.26 Soil Boring SB-23-2

##### Arsenic

Arsenic was detected at SB-23-2 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs, as presented in Table 4-3 and Figures 4-5 and 4-6. No other TAL Metals were analyzed from this sampling location during the SSRI sampling program. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	17.5

Arsenic was not detected at SB-23-2 (6-8) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs. No other TAL Metals were analyzed from this sampling location during the SSRI sampling program.

##### PCBs

PCBs (total) were detected at SB-23-2 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	1.0
Aroclor-1260		0.23

PCBs (total) were detected at SB-23-2 (6-8) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	14.0
Aroclor-1260		0.67 J

#### 4.1.27 Soil Boring SB-23-3

##### PCBs

PCBs (total) were detected at SB-23-3 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	7.5
Aroclor-1260		1.7

PCBs (total) were detected at SB-23-3 (4-6) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	7.0 J
Aroclor-1260		1.2

#### 4.1.28 Soil Boring SB-23-4

##### PCBs

PCBs (total) were detected at SB-23-4 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	1.6 J

PCBs (total) were detected at SB-23-4 (4-6) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	55.0

#### 4.1.29 Soil Boring SB-24-1

##### PCBs

PCBs (total) were detected at SB-24-1 (0-4) with concentrations exceeding the Unrestricted Use SCO, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	4.2
Aroclor-1254		2.1

#### 4.1.30 Soil Boring SB-24-2

##### PCBs

PCBs (total) were detected at SB-24-2 (0-4) with concentrations exceeding the Unrestricted Use SCO, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	2.8 J
Aroclor-1254		1.1 J
Aroclor-1260		0.22

#### 4.1.31 Soil Boring SB-24-3

##### PCBs

PCBs (total) were detected at SB-24-3 (0-4) with concentrations exceeding the Unrestricted Use SCO, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:



COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	1.9 J
Aroclor-1254		0.72 J
Aroclor-1260		0.78

PCBs (total) were detected at SB-24-3 (4-6) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	1.0 J
Aroclor-1242		0.9 J
Aroclor-1260		0.46

#### 4.1.32 Soil Boring SB-27-1

##### PCBs

PCBs (total) were detected at SB-27-1 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	2.8

PCBs (total) were detected at SB-27-1 (9-10) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	0.60

#### 4.1.33 Soil Boring SB-27-2

##### PCBs

PCBs (total) were detected at SB-27-2 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	2.8

PCBs (total) were detected at SB-27-2 (4-8) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	4.2
Aroclor-1260		0.41

#### 4.1.34 Soil Boring SB-27-3

##### PCBs

PCBs (total) were detected at SB-27-3 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	1.6
Aroclor-1260		2.0 J

PCBs (total) were not detected at SB-27-3 (9-10) with concentrations exceeding the Unrestricted Use SCOs.

#### 4.1.35 Soil Boring SB-27-4

##### PCBs

PCBs (total) were detected at SB-27-4 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1254	BCO Unrestricted=0.1 mg/kg	0.38
Aroclor-1260		0.31

PCBs (total) were not detected at SB-27-4 (6-8) with concentrations exceeding the Unrestricted Use SCO.

#### 4.1.36 Soil Boring SB-27-5

##### PCBs

PCBs (total) were detected at SB-27-5 (0-4) with concentrations exceeding the Unrestricted Use SCO, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	0.85
Aroclor-1260		0.21

PCBs (total) were not detected at SB-27-5 (8-10) with concentrations exceeding the Unrestricted Use SCO.

#### 4.1.37 Soil Boring SB-56

##### TAL Metals

Arsenic was detected at SB-56 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCO and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCO, as presented in Tables 4-3 and 4-4, and Figures 4-5 through 4-8. The following table lists the reported exceedence:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	16.7
Barium	BCO Unrestricted=350 mg/kg	538 J
Cadmium	BCO Unrestricted=2.5 mg/kg	19.2
Chromium	BCO Unrestricted=1/30 mg/kg	99.9

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Copper	BCO Unrestricted=50 mg/kg	3,530
Lead	BCO Unrestricted=63 mg/kg	931 J
Mercury	BCO Unrestricted=0.18 mg/kg	2.9
Nickel	BCO Unrestricted=30 mg/kg	128
Silver	BCO Unrestricted=2 mg/kg	2.1 J
Zinc	BCO Unrestricted=109 mg/kg	7,080

Arsenic was detected at SB-56 (6-8) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	23 J
Barium	BCO Unrestricted=350 mg/kg	893 J
Cadmium	BCO Unrestricted=2.5 mg/kg	30.7
Chromium	BCO Unrestricted=1/30 mg/kg	237
Copper	BCO Unrestricted=50 mg/kg	1,570
Lead	BCO Unrestricted=63 mg/kg	4,090 J
Mercury	BCO Unrestricted=0.18 mg/kg	8.6
Nickel	BCO Unrestricted=30 mg/kg	232
Selenium	BCO Unrestricted=3.9 mg/kg	14.3
Silver	BCO Unrestricted=2 mg/kg	5.1
Zinc	BCO Unrestricted=109 mg/kg	8,110

### PCBs

PCBs (total) were detected at SB-56 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	5.5
Aroclor-1254		0.45
Aroclor-1260		0.43 J

PCBs (total) were detected at SB-56 (6-8) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1248	BCO Unrestricted=0.1 mg/kg	1.1
Aroclor-1262		0.77 J

#### 4.1.38 Soil Boring SB-57

##### TAL Metals

Arsenic was detected at SB-57 (0-4) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs, as presented in Tables 4-3 and 4-4, and Figures 4-5 through 4-8. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	17.5
Barium	BCO Unrestricted=350 mg/kg	897 J
Cadmium	BCO Unrestricted=2.5 mg/kg	26.3
Chromium	BCO Unrestricted=1/30 mg/kg	327
Copper	BCO Unrestricted=50 mg/kg	1,870
Lead	BCO Unrestricted=63 mg/kg	4,890 J
Mercury	BCO Unrestricted=0.18 mg/kg	5.3
Nickel	BCO Unrestricted=30 mg/kg	201
Selenium	BCO Unrestricted=3.9 mg/kg	6.7
Silver	BCO Unrestricted=2 mg/kg	5.2
Zinc	BCO Unrestricted=109 mg/kg	9,160

Arsenic was detected at SB-57 (4-10) with concentrations exceeding the Restricted Use - Protection of Groundwater SCOs and TAL Metals were detected with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Arsenic	BCO Protection of GW=16 mg/kg	19.1
Barium	BCO Unrestricted=350 mg/kg	839 J
Cadmium	BCO Unrestricted=2.5 mg/kg	24.2
Chromium	BCO Unrestricted=1/30 mg/kg	152
Copper	BCO Unrestricted=50 mg/kg	8,510
Lead	BCO Unrestricted=63 mg/kg	2,960 J
Mercury	BCO Unrestricted=0.18 mg/kg	5.8
Nickel	BCO Unrestricted=30 mg/kg	333

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Selenium	BCO Unrestricted=3.9 mg/kg	7
Silver	BCO Unrestricted=2 mg/kg	3.2
Zinc	BCO Unrestricted=109 mg/kg	8,570

#### PCBs

PCBs (total) were detected at SB-57 (0-4) with concentrations exceeding the Unrestricted Use SCOs, as presented in Table 4-2 and Figures 4-3 and 4-4. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	5.6
Aroclor-1260		1.0

PCBs (total) were detected at SB-57 (6-8) with concentrations exceeding the Unrestricted Use SCOs. The following table lists the reported exceedences:

COMPOUND	CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
Aroclor-1242	BCO Unrestricted=0.1 mg/kg	2.5
Aroclor-1260		0.51

#### 4.1.39 TCLP Soil Samples for Arsenic

Soil samples were analyzed from select SSRI sample locations to assess whether specific arsenic concentrations that exceed the Restricted Use - Protection of Groundwater SCO of 16 mg/kg also exceed the RCRA Hazardous Waste Regulatory Level of 5 mg/L. These samples were collected to assess whether there was a correlation between the total arsenic concentrations (dry weight) and the leachability of this contaminant in the subsurface environment at the Site. The results of this data will likely show the approximate arsenic concentration that has the potential to leach into or impact groundwater quality beneath the Site. Once this data is evaluated, a site-specific cleanup level for arsenic can be presented to NYSDEC for consideration as a possible alternative SCO for this contaminant.

Ten (10) soil samples collected on October 13 and 14, 2010 were analyzed to assess the leaching potential of arsenic for soil samples SB-8-1 (0-4) (30.9 mg/kg), SB-8-1 (4-6) (33.7 mg/kg), SB-8-2 (0-4) (23.2 mg/kg), SB-8-2 (4-10) (47.5 mg/kg), SB-22-1 (0-4) (25.6 mg/kg), SB-22-1 (4-6) (16.3 mg/kg), SB-23-1 (0-4) (23.1 mg/kg), and SB-23-1 (4-6) (17.5 mg/kg) which contained arsenic concentration exceeding the Restricted Use - Protection of Groundwater SCO of 16 mg/kg. However, SB-23-2 (0-4) (14.1 mg/kg) and SB-23-2 (6-8) (8.3 mg/kg) did not exceed the Restricted Use - Protection of Groundwater SCO of 16 mg/kg for arsenic.

A total of ten (10) soil samples were analyzed from sample depth intervals of 0 to 4 ft-bgs and 4 to 10 ft-bgs to compare arsenic concentrations in relation to TCLP concentrations. Arsenic was detected at concentrations exceeding the Restricted Use - Protection of Groundwater SCO of 16 mg/kg in 8 of the 10 sample locations which were also analyzed to assess the corresponding TCLP concentrations. The following table lists the arsenic and TCLP analytical results:

Sample Location	Sample Depth	Restricted Use Protection of GW SCO	Analytical Results (mg/kg)	RCRA Level (mg/L)	TCLP Results (mg/L)
SB-8-1 (0-4)	0-4 ft-bgs	16	30.9	5	0.025 U
SB-8-1 (4-6)	4-6 ft-bgs	16	33.7	5	0.025 U
SB-8-2 (0-4)	0-4 ft-bgs	16	23.2	5	0.025 U
SB-8-2 (4-10)	4-10 ft-bgs	16	47.5	5	0.025 U
SB-22-1 (0-4)	0-4 ft-bgs	16	25.6	5	0.025 U
SB-22-1 (4-6)	4-6 ft-bgs	16	16.3	5	0.025 U
SB-23-1 (0-4)	0-4 ft-bgs	16	23.1	5	0.025 U
SB-23-1 (4-6)	4-6 ft-bgs	16	17.5	5	0.025 U

Note: U = The analyte was analyzed for, but not detected above the sample reporting limits.

Arsenic was detected at concentrations ranging from 16.3 mg/kg to 47.5 mg/kg which exceed the Restricted Use - Protection of Groundwater SCO of 16 mg/kg at eight (8) sample locations. The corresponding TCLP concentrations of 0.025 mg/L for all of the eight (8) samples indicate that these arsenic concentrations are not leaching and are reported as “non detected” which is significantly below the RCRA Hazardous Waste Regulatory Level of 5 mg/L, as presented in Table 4-5 and Figure 4-9.

#### 4.1.40 TCLP Soil Samples for Lead

Soil samples were analyzed from select SSRI sample locations to assess whether specific lead concentrations that exceed the Unrestricted Use SCO of 63 mg/kg also exceed the RCRA Hazardous Waste Regulatory Level of 5 mg/L. These samples were collected to assess whether there was a correlation between the total lead concentrations (dry weight) and the leachability of this contaminant in the subsurface environment at the Site. The results of this data will likely show the approximate lead concentration that has the potential to leach into or impact groundwater quality beneath the Site. Once this data is evaluated, a site-specific cleanup for lead can be presented to NYSDEC for consideration as a possible alternative SCO for this contaminant.

Eleven (11) soil samples collected on August 10, 2010, October 13, 2010, and October 14, 2010 were analyzed to assess the leaching potential of lead for soil samples SB-8-1 (0-4) (5,470 mg/kg), SB-8-1 (4-6) (10,700 mg/kg), SB-8-2 (0-4) (21,700 mg/kg), SB-8-2 (4-10) (10,600 mg/kg), SB-16-1 (0-4) (11,600 mg/kg), SB-22-1 (0-4) (1,830 mg/kg), SB-22-1 (4-6) (4,970 mg/kg), SB-22-2 (0-4) (3,910 mg/kg), SB-22-2 (4-6) (6,660 mg/kg), SB-23-1 (0-4) (7,330 mg/kg), and SB-32 (0-4) (17,000 mg/kg) which contained lead concentration exceeding the Unrestricted Use SCO.

A total of eleven (11) soil samples were analyzed from sample depth intervals of 0 to 4 ft-bgs and 4 to 8 ft-bgs to compare lead concentrations in relation to TCLP concentrations. Lead was detected at concentrations exceeding the Unrestricted Use SCO of 63 mg/kg in all 11 sample locations which were also analyzed to assess the corresponding TCLP concentrations. An additional sample (SB-32 0-4) was collected during the SRI which was also analyzed for TCLP (lead). The following table lists the lead and TCLP analytical results:

<b>Sample Location</b>	<b>Sample Depth</b>	<b>Unrestricted Use SCO</b>	<b>Analytical Results (mg/kg)</b>	<b>RCRA Level (mg/L)</b>	<b>TCLP Results (mg/L)</b>
SB-8-1 (0-4)	0-4 ft-bgs	63	5,470	5	0.292
SB-8-1 (4-6)	4-6 ft-bgs	63	10,700	5	3.99
SB-8-2 (0-4)	0-4 ft-bgs	63	21,700	5	5.37
SB-8-2 (4-10)	4-10 ft-bgs	63	10,600	5	2.81
SB-16-1 (0-4)	0-4 ft-bgs	63	11,600	5	1.14



Sample Location	Sample Depth	Unrestricted Use SCO	Analytical Results (mg/kg)	RCRA Level (mg/L)	TCLP Results (mg/L)
SB-22-1 (0-4)	0-4 ft-bgs	63	1,830	5	0.855
SB-22-1 (4-6)	4-6 ft-bgs	63	4,790	5	0.353
SB-22-2 (0-4)	0-4 ft-bgs	63	3,910	5	0.025 U
SB-22-2 (4-6)	4-6 ft-bgs	63	6,660	5	0.963
SB-23-1 (0-4)	0-4 ft-bgs	63	7,330	5	0.271
SB-32 (0-4)	0-4 ft-bgs	63	17,000	5	2.87

Note: U = The analyte was analyzed for, but not detected above the sample reporting limits.

Lead was detected at concentrations ranging from 1,830 mg/kg to 21,700 mg/kg which exceed the Unrestricted Use SCO of 63 mg/kg at ten (10) sample locations. The corresponding TCLP concentrations for all eleven (11) samples indicate that one (1) lead concentration detected at SB-8-2 (0-4) exceeded the RCRA Hazardous Waste Regulatory Level of 5 mg/L, as presented in Table 4-5 and Figure 4-9.

## **4.2 Community Air Monitoring Results**

Air monitoring was conducted in accordance with the NYSDOH CAMP provided in the RI Work Plan dated September 2009 for both the SRI and the SSRI sampling programs. VOCs and particulates were monitored continuously during all intrusive investigation activities. Action levels described in the CAMP were utilized to monitor site activities. Monitors were set upgradient and downgradient of the intrusive investigation areas. A particulate monitor capable of measuring particulate matter less than 10 micrometers ( $\mu\text{m}$ ) in size and capable of integrating over a period of 15 minutes (or less) was used for comparison to the airborne particulate action levels.

The particulate monitor used during the SSRI was equipped with data logging capabilities. The dust monitoring results from October 4, 2010 indicated that highest average concentration during the sampling program was  $13 \mu\text{g}/\text{m}^3$  from the downwind dust monitor during periods of heavy rain, as presented in Table 4-6. There were two (2) exceedance above the  $100 \mu\text{g}/\text{m}^3$  action level from the downwind dust monitor with a recorded concentration of  $1,109 \mu\text{g}/\text{m}^3$  and from the upwind dust monitor of  $24,678 \mu\text{g}/\text{m}^3$ . These exceedances were caused by the dust monitors

being blown over onto the ground during windy conditions. Several other exceedances were recorded above the 100  $\mu\text{g}/\text{m}^3$  action level from both the upwind and downwind monitors. The recorded dust concentration exceedances dissipated within a few minutes well below the 100  $\mu\text{g}/\text{m}^3$  action level. The results of the daily monitoring conducted as part of the CAMP are provided in Table 4-6.

### **4.3 Data Usability Summary Report**

To conform to NYSDEC requirements as specified in DER-10, data validation was performed on the analytical samples collected during the SRI conducted in August 2010 at the Site. Data validation services were provided by EDS. The complete SDGs from the laboratory which were validated by EDS included:

- 460-18182
- 460-18223
- 460-18281
- 460-18326
- 460-18409
- 460-18510
- 460-18562
- 460-18599
- 460-18631

The analytical data generated during the SSRI was subjected to validation and usability review to verify that the data satisfy project objectives. The DUSR for the October 2010 SSRI sampling program is presented in Appendix C.

#### **4.3.1 Usability of Remedial Investigation Data**

There are nine (9) SDGs that were analyzed by Test America. The media include soil analyzed for PCBs and metals. There were no rejections of the data collected during the October 2010

sampling event. The analytical data was acceptable for their intended use. As a result of the data validation for the October 2010 sampling program, the following deficiencies were noted:

- One Aroclor was qualified as estimated in two samples due to high %D values between reporting columns (460-18182).
- One Aroclor was qualified as estimated in one sample due to a high %D value between reporting columns (460-18223).
- One Aroclor was qualified as estimated in two samples due to high %D values between reporting columns (460-18281).
- Several Aroclor's were qualified as estimated in three samples due to high %D values between reporting columns (460-18326).
- One Aroclor was qualified as estimated in two samples due to high surrogate recoveries (460-18409).
- One Aroclor was qualified as estimated in two samples due to high %D values between reporting columns (460-18409).
- Two Aroclor's were qualified as estimated in one sample due to high surrogate recoveries (460-18510).
- Two Aroclor's were qualified as estimated in the field duplicate sample due to poor duplicate precision (460-18510).
- One Aroclor was qualified as estimated in two samples due to high %D values between reporting columns (460-18510).
- One aroclor was qualified as estimated in two samples due to high %D values between reporting columns (460-18562).
- Three metals compounds were qualified as estimated in several samples due to low/high matrix spike recoveries (460-18562).
- Arsenic and lead were qualified as estimated in several samples due to high matrix duplicate RPD values (460-18599).
- One aroclor was qualified as estimated in two samples due to high %D values between reporting columns (460-18631).



## **5.0 SOIL SAMPLE RESULTS ASSESSMENT**

The soil analytical results collected as part of the SRI and SSRI sampling programs were compared to NYSDEC the Unrestricted Use SCOs. The arsenic soil samples results were compared to the Restricted Use - Protection of Groundwater SCOs since it has been determined that arsenic is a site-specific source of groundwater contamination. This section discusses the results of the sampling program and provides the conclusions and recommendations associated with the soil samples collected during the SRI and SSRI sampling programs.

### **5.1 Soil Sample Results – Results Assessment**

The results of the SRI and SSRI soil sampling programs indicate that there is contamination on-site and remedial actions will be required for several areas investigated during the December 2007, November 2009, August 2010, and October 2010 sampling programs conducted at the Site. Section 5.2 discusses the extent of soil contamination associated with TAL Metals and PCBs.

The following section discusses the sample location, sample depth, compound, Unrestricted Use SCOs, Restricted Use - Protection of Groundwater SCOs for arsenic, and sample results.

#### **5.1.1 TAL Metals**

The results of the SRI and SSRI soil sampling programs indicated the presence of TAL Metal (barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc) concentrations in soil exceeding the Unrestricted Use SCOs and arsenic concentrations in soil exceeding the Restricted Use - Protection of Groundwater SCOs.

The following table lists the reported arsenic concentrations that exceed the Restricted Use - Protection of Groundwater SCOs:

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-8-1 (0-4) SB-8-1 (4-6)	Arsenic	BCO Protection of GW=16 mg/kg	30.9 33.7
SB-8-2 (0-4) SB-8-2 (4-6)	Arsenic	BCO Protection of GW=16 mg/kg	23.2 47.5
SB-22-1 (0-4) SB-22-1 (4-6)	Arsenic	BCO Protection of GW=16 mg/kg	25.6 16.3
SB-23-1 (0-4) SB-23-1 (4-6)	Arsenic	BCO Protection of GW=16 mg/kg	23.1 17.5
SB-29 (0-4) SB-29 (4-10)	Arsenic	BCO Protection of GW=16 mg/kg	1,160 1,140
SB-30 (0-4) SB-30 (4-10)	Arsenic	BCO Protection of GW=16 mg/kg	23.9 27.6
SB-32 (0-4) SB-32 (4-10)	Arsenic	BCO Protection of GW=16 mg/kg	144 26.6
SB-33 (0-4) SB-33 (4-10)	Arsenic	BCO Protection of GW=16 mg/kg	26.7 21.3
SB-34 (0-4) SB-34 (4-10)	Arsenic	BCO Protection of GW=16 mg/kg	16.3 24.7
SB-35 (0-4) SB-35 (4-10)	Arsenic	BCO Protection of GW=16 mg/kg	16.2 22.5
SB-36 (0-4)	Arsenic	BCO Protection of GW=16 mg/kg	16.4
SB-38 (0-4) SB-38 (4-10)	Arsenic	BCO Protection of GW=16 mg/kg	45.9 25.8
SB-39 (4-10)	Arsenic	BCO Protection of GW=16 mg/kg	20.2
SB-42 (0-4) SB-42 (4-10)	Arsenic	BCO Protection of GW=16 mg/kg	67.4 35.8
SB-43 (0-4) SB-43 (4-8)	Arsenic	BCO Protection of GW=16 mg/kg	21 29.5
SB-44 (4-10)	Arsenic	BCO Protection of GW=16 mg/kg	32.5
SB-46 (4-10)	Arsenic	BCO Protection of GW=16 mg/kg	20.1
SB-47 (0-4) SB-47 (4-10)	Arsenic	BCO Protection of GW=16 mg/kg	69.6 18.5
SB-48 (0-4) SB-48 (4-6)	Arsenic	BCO Protection of GW=16 mg/kg	17.2 18.3
SB-50 (0-4) SB-50 (4-10)	Arsenic	BCO Protection of GW=16 mg/kg	23.2 39.8
SB-53 (4-10)	Arsenic	BCO Protection of GW=16 mg/kg	25.1
SB-54 (4-10)	Arsenic	BCO Protection of GW=16 mg/kg	27.1
SB-56 (0-4) SB-56 (6-8)	Arsenic	BCO Protection of GW=16 mg/kg	16.7 23 J
SB-57 (0-4) SB-57 (6-8)	Arsenic	BCO Protection of GW=16 mg/kg	17.5 19.1

The following table lists the reported barium concentrations that exceed the Unrestricted Use SCOs:

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-29 (0-4) SB-29 (4-10)	Barium	BCO Unrestricted=350 mg/kg	427 1,190
SB-30 (0-4) SB-30 (4-10)	Barium	BCO Unrestricted=350 mg/kg	808 455
SB-31 (0-4) SB-31 (4-10)	Barium	BCO Unrestricted=350 mg/kg	794 444
SB-32 (0-4) SB-32 (4-10)	Barium	BCO Unrestricted=350 mg/kg	3,900 1,090
SB-33 (0-4) SB-33 (4-10)	Barium	BCO Unrestricted=350 mg/kg	1,200 819
SB-34 (0-4) SB-34 (4-10)	Barium	BCO Unrestricted=350 mg/kg	675 599
SB-35 (0-4) SB-35 (4-10)	Barium	BCO Unrestricted=350 mg/kg	439 807
SB-36 (0-4) SB-36 (6-10)	Barium	BCO Unrestricted=350 mg/kg	1,090 817
SB-37 (0-4) SB-37 (4-10)	Barium	BCO Unrestricted=350 mg/kg	656 355
SB-38 (0-4) SB-38 (4-10)	Barium	BCO Unrestricted=350 mg/kg	1,080 482
SB-39 (0-4) SB-39 (4-10)	Barium	BCO Unrestricted=350 mg/kg	961 1,090
SB-40 (0-4) SB-40 (4-10)	Barium	BCO Unrestricted=350 mg/kg	376 371
SB-42 (0-4)	Barium	BCO Unrestricted=350 mg/kg	785
SB-43 (0-4) SB-43 (4-8)	Barium	BCO Unrestricted=350 mg/kg	767 853
SB-44 (0-4) SB-44 (4-10)	Barium	BCO Unrestricted=350 mg/kg	693 950
SB-46 (0-4) SB-46 (4-10)	Barium	BCO Unrestricted=350 mg/kg	1,020 1,380
SB-47 (0-4) SB-47 (4-10)	Barium	BCO Unrestricted=350 mg/kg	849 1,090
SB-48 (0-4) SB-48 (4-6)	Barium	BCO Unrestricted=350 mg/kg	773 970
SB-50 (0-4)	Barium	BCO Unrestricted=350 mg/kg	714
SB-51 (0-4) SB-51 (4-10)	Barium	BCO Unrestricted=350 mg/kg	563 437
SB-52 (0-4) SB-52 (4-10)	Barium	BCO Unrestricted=350 mg/kg	1,150 498

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-53 (0-4) SB-53 (4-10)	Barium	BCO Unrestricted=350 mg/kg	907 652
SB-54 (0-4) SB-54 (4-10)	Barium	BCO Unrestricted=350 mg/kg	1,920 985
SB-55 (0-4) SB-55 (4-10)	Barium	BCO Unrestricted=350 mg/kg	713 392
SB-56 (0-4) SB-56 (6-8)	Barium	BCO Unrestricted=350 mg/kg	583 J 893 J
SB-57 (0-4) SB-57 (6-8)	Barium	BCO Unrestricted=350 mg/kg	897 J 839 J

The following table lists the reported cadmium concentrations that exceed the Unrestricted Use SCOs:

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-29 (0-4) SB-29 (4-10)	Cadmium	BCO Unrestricted=2.5 mg/kg	18.4 13.5
SB-30 (0-4) SB-30 (4-10)	Cadmium	BCO Unrestricted=2.5 mg/kg	15.6 9.1
SB-31 (0-4) SB-31 (4-10)	Cadmium	BCO Unrestricted=2.5 mg/kg	32.8 9.9
SB-32 (0-4) SB-32 (4-10)	Cadmium	BCO Unrestricted=2.5 mg/kg	14 6.4
SB-33 (0-4) SB-33 (4-10)	Cadmium	BCO Unrestricted=2.5 mg/kg	13 11.7
SB-34 (0-4) SB-34 (4-10)	Cadmium	BCO Unrestricted=2.5 mg/kg	18.3 19.7
SB-35 (0-4) SB-35 (4-10)	Cadmium	BCO Unrestricted=2.5 mg/kg	25 29
SB-36 (0-4) SB-36 (6-10)	Cadmium	BCO Unrestricted=2.5 mg/kg	41.2 18
SB-37 (0-4) SB-37 (4-10)	Cadmium	BCO Unrestricted=2.5 mg/kg	8.5 2.6 J
SB-38 (0-4) SB-38 (4-10)	Cadmium	BCO Unrestricted=2.5 mg/kg	17 28
SB-39 (0-4) SB-39 (4-10)	Cadmium	BCO Unrestricted=2.5 mg/kg	50.7 30.5
SB-40 (0-4) SB-40 (4-10)	Cadmium	BCO Unrestricted=2.5 mg/kg	6 3 J
SB-42 (0-4) SB-42 (4-10)	Cadmium	BCO Unrestricted=2.5 mg/kg	29.5 3.7



SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-43 (0-4)	Cadmium	BCO Unrestricted=2.5 mg/kg	27.2
SB-43 (4-8)			24.8
SB-44 (0-4)	Cadmium	BCO Unrestricted=2.5 mg/kg	39.2
SB-44 (4-10)			37
SB-45 (0-4)	Cadmium	BCO Unrestricted=2.5 mg/kg	3.3
SB-46 (0-4)	Cadmium	BCO Unrestricted=2.5 mg/kg	38.3
SB-46 (4-10)			50.5
SB-47 (0-4)	Cadmium	BCO Unrestricted=2.5 mg/kg	20.5
SB-47 (4-10)			32.8
SB-48 (0-4)	Cadmium	BCO Unrestricted=2.5 mg/kg	38.2
SB-48 (4-6)			41.5
SB-50 (0-4)	Cadmium	BCO Unrestricted=2.5 mg/kg	21.4
SB-50 (4-10)			5 J
SB-51 (0-4)	Cadmium	BCO Unrestricted=2.5 mg/kg	3.9 J
SB-52 (0-4)	Cadmium	BCO Unrestricted=2.5 mg/kg	24.7
SB-52 (4-10)			8.3
SB-53 (0-4)	Cadmium	BCO Unrestricted=2.5 mg/kg	32.3
SB-53 (4-10)			26.7
SB-54 (0-4)	Cadmium	BCO Unrestricted=2.5 mg/kg	21.8
SB-54 (4-10)			29.4
SB-55 (0-4)	Cadmium	BCO Unrestricted=2.5 mg/kg	8.4
SB-55 (4-10)			3.9 J
SB-56 (0-4)	Cadmium	BCO Unrestricted=2.5 mg/kg	19.2
SB-56 (6-8)			30.7
SB-57 (0-4)	Cadmium	BCO Unrestricted=2.5 mg/kg	26.3
SB-57 (6-8)			24.2

The following table lists the reported chromium concentrations that exceed the Unrestricted Use SCOs:

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-29 (0-4)	Chromium	BCO Unrestricted=1/30 mg/kg	71.3
SB-29 (4-10)			101
SB-30 (0-4)	Chromium	BCO Unrestricted=1/30 mg/kg	120
SB-30 (4-10)			76.5
SB-31 (0-4)	Chromium	BCO Unrestricted=1/30 mg/kg	483
SB-31 (4-10)			142
SB-32 (0-4)	Chromium	BCO Unrestricted=1/30 mg/kg	222
SB-32 (4-10)			90.2
SB-33 (0-4)	Chromium	BCO Unrestricted=1/30 mg/kg	177
SB-33 (4-10)			138

<b>SAMPLE LOCATION</b>	<b>COMPOUND</b>	<b>PART 375 SOIL CLEANUP OBJECTIVES</b>	<b>ANALYTICAL RESULTS (mg/kg)</b>
SB-34 (0-4) SB-34 (4-10)	Chromium	BCO Unrestricted=1/30 mg/kg	486 304
SB-35 (0-4) SB-35 (4-10)	Chromium	BCO Unrestricted=1/30 mg/kg	257 155
SB-36 (0-4) SB-36 (6-10)	Chromium	BCO Unrestricted=1/30 mg/kg	142 184
SB-37 (0-4) SB-37 (4-10)	Chromium	BCO Unrestricted=1/30 mg/kg	198 52.5
SB-38 (0-4) SB-38 (4-10)	Chromium	BCO Unrestricted=1/30 mg/kg	406 198
SB-39 (0-4) SB-39 (4-10)	Chromium	BCO Unrestricted=1/30 mg/kg	305 201
SB-40 (0-4) SB-40 (4-10)	Chromium	BCO Unrestricted=1/30 mg/kg	54 66.7
SB-41 (0-4) SB-41 (4-11)	Chromium	BCO Unrestricted=1/30 mg/kg	24.6 36.2
SB-42 (0-4) SB-42 (4-10)	Chromium	BCO Unrestricted=1/30 mg/kg	823 163
SB-43 (0-4) SB-43 (4-8)	Chromium	BCO Unrestricted=1/30 mg/kg	174 260
SB-44 (0-4) SB-44 (4-10)	Chromium	BCO Unrestricted=1/30 mg/kg	173 335
SB-45 (0-4) SB-45 (4-10)	Chromium	BCO Unrestricted=1/30 mg/kg	61.3 30.1
SB-46 (0-4) SB-46 (4-10)	Chromium	BCO Unrestricted=1/30 mg/kg	450 327
SB-47 (0-4) SB-47 (4-10)	Chromium	BCO Unrestricted=1/30 mg/kg	276 297
SB-48 (0-4) SB-48 (4-6)	Chromium	BCO Unrestricted=1/30 mg/kg	278 301
SB-49 (0-4) SB-49 (4-6)	Chromium	BCO Unrestricted=1/30 mg/kg	51.1 27
SB-50 (0-4) SB-50 (4-10)	Chromium	BCO Unrestricted=1/30 mg/kg	118 112
SB-51 (0-4) SB-51 (4-8)	Chromium	BCO Unrestricted=1/30 mg/kg	82.8 26.6
SB-52 (0-4) SB-52 (4-10)	Chromium	BCO Unrestricted=1/30 mg/kg	834 149
SB-53 (0-4) SB-53 (4-10)	Chromium	BCO Unrestricted=1/30 mg/kg	231 249
SB-54 (0-4) SB-54 (4-10)	Chromium	BCO Unrestricted=1/30 mg/kg	214 794
SB-55 (0-4) SB-55 (4-10)	Chromium	BCO Unrestricted=1/30 mg/kg	206 59.3

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-56 (0-4) SB-56 (6-8)	Chromium	BCO Unrestricted=1/30 mg/kg	99.9 237
SB-57 (0-4) SB-57 (6-8)	Chromium	BCO Unrestricted=1/30 mg/kg	327 152

The following table lists the reported copper concentrations that exceed the Unrestricted Use SCOs:

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-29 (0-4) SB-29 (4-10)	Copper	BCO Unrestricted=50 mg/kg	7,060 B 5,480 B
SB-30 (0-4) SB-30 (4-10)	Copper	BCO Unrestricted=50 mg/kg	860 765
SB-31 (0-4) SB-31 (4-10)	Copper	BCO Unrestricted=50 mg/kg	19,800 B 1,100 B
SB-32 (0-4) SB-32 (4-10)	Copper	BCO Unrestricted=50 mg/kg	1,170 643
SB-33 (0-4) SB-33 (4-10)	Copper	BCO Unrestricted=50 mg/kg	607 1,480
SB-34 (0-4) SB-34 (4-10)	Copper	BCO Unrestricted=50 mg/kg	4,460 923
SB-35 (0-4) SB-35 (4-10)	Copper	BCO Unrestricted=50 mg/kg	4,210 B 1,520 B
SB-36 (0-4) SB-36 (6-10)	Copper	BCO Unrestricted=50 mg/kg	10,000 2,340
SB-37 (0-4) SB-37 (4-10)	Copper	BCO Unrestricted=50 mg/kg	635 304
SB-38 (0-4) SB-38 (4-10)	Copper	BCO Unrestricted=50 mg/kg	2,800 B 864 B
SB-39 (0-4) SB-39 (4-10)	Copper	BCO Unrestricted=50 mg/kg	12,800 B 1,470 B
SB-40 (0-4) SB-40 (4-10)	Copper	BCO Unrestricted=50 mg/kg	1,490 562
SB-41 (0-4) SB-41 (4-11)	Copper	BCO Unrestricted=50 mg/kg	152 137
SB-42 (0-4) SB-42 (4-10)	Copper	BCO Unrestricted=50 mg/kg	1,150 221
SB-43 (0-4) SB-43 (4-8)	Copper	BCO Unrestricted=50 mg/kg	11,700 1,290
SB-44 (0-4) SB-44 (4-10)	Copper	BCO Unrestricted=50 mg/kg	4,540 B 3,690 B

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-45 (0-4) SB-45 (4-10)	Copper	BCO Unrestricted=50 mg/kg	225 77
SB-46 (0-4) SB-46 (4-10)	Copper	BCO Unrestricted=50 mg/kg	1,150 1,100
SB-47 (0-4) SB-47 (4-10)	Copper	BCO Unrestricted=50 mg/kg	1,260 1,440
SB-48 (0-4) SB-48 (4-6)	Copper	BCO Unrestricted=50 mg/kg	11,200 B 3,980 B
SB-49 (0-4) SB-49 (4-6)	Copper	BCO Unrestricted=50 mg/kg	153 145
SB-50 (0-4) SB-50 (4-10)	Copper	BCO Unrestricted=50 mg/kg	1,140 688
SB-51 (0-4) SB-51 (4-8)	Copper	BCO Unrestricted=50 mg/kg	1,910 179
SB-52 (0-4) SB-52 (4-10)	Copper	BCO Unrestricted=50 mg/kg	1,910 B 2,900 B
SB-53 (0-4) SB-53 (4-10)	Copper	BCO Unrestricted=50 mg/kg	2,820 789
SB-54 (0-4) SB-54 (4-10)	Copper	BCO Unrestricted=50 mg/kg	1,560 1,860
SB-55 (0-4) SB-55 (4-10)	Copper	BCO Unrestricted=50 mg/kg	741 458
SB-56 (0-4) SB-56 (6-8)	Copper	BCO Unrestricted=50 mg/kg	3,530 1,570
SB-57 (0-4) SB-57 (6-8)	Copper	BCO Unrestricted=50 mg/kg	1,870 8,510

The following table lists the reported lead concentrations that exceed the Unrestricted Use SCOs:

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-8-1 (0-4) SB-8-1 (4-6)	Lead	BCO Unrestricted=63 mg/kg	5,470 J 10,700 J
SB-8-2 (0-4) SB-8-2 (4-6)	Lead	BCO Unrestricted=63 mg/kg	21,700 J 10,600 J
SB-16-1 (0-4)	Lead	BCO Unrestricted=63 mg/kg	11,600 J
SB-22-1 (0-4) SB-22-1 (4-6)	Lead	BCO Unrestricted=63 mg/kg	1,830 J 4,970 J
SB-22-2 (0-4) SB-22-2 (4-6)	Lead	BCO Unrestricted=63 mg/kg	3,910 J 6,660 J
SB-23-1 (0-4)	Lead	BCO Unrestricted=63 mg/kg	7,330

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-29 (0-4) SB-29 (4-10)	Lead	BCO Unrestricted=63 mg/kg	3,830 2,050
SB-30 (0-4) SB-30 (4-10)	Lead	BCO Unrestricted=63 mg/kg	5,410 1,630
SB-31 (0-4) SB-31 (4-10)	Lead	BCO Unrestricted=63 mg/kg	2,060 1,220
SB-32 (0-4) SB-32 (4-10)	Lead	BCO Unrestricted=63 mg/kg	17,000 6,580
SB-33 (0-4) SB-33 (4-10)	Lead	BCO Unrestricted=63 mg/kg	3,510 6,070
SB-34 (0-4) SB-34 (4-10)	Lead	BCO Unrestricted=63 mg/kg	1,740 2,350
SB-35 (0-4) SB-35 (4-10)	Lead	BCO Unrestricted=63 mg/kg	1,580 5,120
SB-36 (0-4) SB-36 (6-10)	Lead	BCO Unrestricted=63 mg/kg	1,580 4,490
SB-37 (0-4) SB-37 (4-10)	Lead	BCO Unrestricted=63 mg/kg	3,840 993
SB-38 (0-4) SB-38 (4-10)	Lead	BCO Unrestricted=63 mg/kg	1,450 2,870
SB-39 (0-4) SB-39 (4-10)	Lead	BCO Unrestricted=63 mg/kg	2,180 4,850
SB-40 (0-4) SB-40 (4-10)	Lead	BCO Unrestricted=63 mg/kg	1,000 857
SB-41 (0-4) SB-41 (4-11)	Lead	BCO Unrestricted=63 mg/kg	388 521
SB-42 (0-4) SB-42 (4-10)	Lead	BCO Unrestricted=63 mg/kg	6,240 768
SB-43 (0-4) SB-43 (4-8)	Lead	BCO Unrestricted=63 mg/kg	2,230 4,080
SB-44 (0-4) SB-44 (4-10)	Lead	BCO Unrestricted=63 mg/kg	2,950 5,050
SB-45 (0-4) SB-45 (4-10)	Lead	BCO Unrestricted=63 mg/kg	1,240 316
SB-46 (0-4) SB-46 (4-10)	Lead	BCO Unrestricted=63 mg/kg	5,110 8,760
SB-47 (0-4) SB-47 (4-10)	Lead	BCO Unrestricted=63 mg/kg	5,810 6,080
SB-48 (0-4) SB-48 (4-6)	Lead	BCO Unrestricted=63 mg/kg	2,330 4,220
SB-49 (0-4) SB-49 (4-6)	Lead	BCO Unrestricted=63 mg/kg	232 212
SB-50 (0-4) SB-50 (4-10)	Lead	BCO Unrestricted=63 mg/kg	1,720 662
SB-51 (0-4)	Lead	BCO Unrestricted=63 mg/kg	1,730

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-51 (4-8)			752
SB-52 (0-4) SB-52 (4-10)	Lead	BCO Unrestricted=63 mg/kg	2,200 898
SB-53 (0-4) SB-53 (4-10)	Lead	BCO Unrestricted=63 mg/kg	2,630 2,330
SB-54 (0-4) SB-54 (4-10)	Lead	BCO Unrestricted=63 mg/kg	1,760 4,530
SB-55 (0-4) SB-55 (4-10)	Lead	BCO Unrestricted=63 mg/kg	3,470 864
SB-56 (0-4) SB-56 (6-8)	Lead	BCO Unrestricted=63 mg/kg	931 J 4,090 J
SB-57 (0-4) SB-57 (6-8)	Lead	BCO Unrestricted=63 mg/kg	4,890 J 2,960 J

The following table lists the reported mercury concentrations that exceed the Unrestricted Use SCOs:

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-29 (0-4) SB-29 (4-10)	Mercury	BCO Unrestricted=0.18 mg/kg	10 4.2
SB-30 (0-4) SB-30 (4-10)	Mercury	BCO Unrestricted=0.18 mg/kg	4.9 1.7
SB-31 (0-4) SB-31 (4-10)	Mercury	BCO Unrestricted=0.18 mg/kg	9.8 6
SB-32 (0-4) SB-32 (4-10)	Mercury	BCO Unrestricted=0.18 mg/kg	14.2 4.5
SB-33 (0-4) SB-33 (4-10)	Mercury	BCO Unrestricted=0.18 mg/kg	3.2 3.7
SB-34 (0-4) SB-34 (4-10)	Mercury	BCO Unrestricted=0.18 mg/kg	12.6 4.9
SB-35 (0-4) SB-35 (4-10)	Mercury	BCO Unrestricted=0.18 mg/kg	5.8 4.7
SB-36 (0-4) SB-36 (6-10)	Mercury	BCO Unrestricted=0.18 mg/kg	7.1 9.1
SB-37 (0-4) SB-37 (4-10)	Mercury	BCO Unrestricted=0.18 mg/kg	5.3 2
SB-38 (0-4) SB-38 (4-10)	Mercury	BCO Unrestricted=0.18 mg/kg	4.1 6.9
SB-39 (0-4) SB-39 (4-10)	Mercury	BCO Unrestricted=0.18 mg/kg	9.9 14.3
SB-40 (4-10)	Mercury	BCO Unrestricted=0.18 mg/kg	1.2

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-41 (0-4)	Mercury	BCO Unrestricted=0.18 mg/kg	1
SB-41 (4-11)			1.4
SB-42 (4-10)	Mercury	BCO Unrestricted=0.18 mg/kg	0.93
SB-43 (0-4)	Mercury	BCO Unrestricted=0.18 mg/kg	5.7
SB-43 (4-8)			6
SB-44 (0-4)	Mercury	BCO Unrestricted=0.18 mg/kg	11.6
SB-44 (4-10)			11.7
SB-45 (0-4)	Mercury	BCO Unrestricted=0.18 mg/kg	4.9
SB-45 (4-10)			1
SB-46 (0-4)	Mercury	BCO Unrestricted=0.18 mg/kg	9.2
SB-46 (4-10)			9.7
SB-47 (0-4)	Mercury	BCO Unrestricted=0.18 mg/kg	9.6
SB-47 (4-10)			6
SB-48 (0-4)	Mercury	BCO Unrestricted=0.18 mg/kg	9.1
SB-48 (4-6)			13.5
SB-49 (0-4)	Mercury	BCO Unrestricted=0.18 mg/kg	0.72
SB-49 (4-6)			1
SB-50 (0-4)	Mercury	BCO Unrestricted=0.18 mg/kg	4.5
SB-50 (4-10)			2.1
SB-51 (0-4)	Mercury	BCO Unrestricted=0.18 mg/kg	1
SB-51 (4-8)			0.95
SB-52 (0-4)	Mercury	BCO Unrestricted=0.18 mg/kg	13.6
SB-52 (4-10)			2.9
SB-53 (0-4)	Mercury	BCO Unrestricted=0.18 mg/kg	4.3
SB-53 (4-10)			7.9
SB-54 (0-4)	Mercury	BCO Unrestricted=0.18 mg/kg	12.6
SB-54 (4-10)			8.5
SB-55 (0-4)	Mercury	BCO Unrestricted=0.18 mg/kg	5.4
SB-55 (4-10)			1.52
SB-56 (0-4)	Mercury	BCO Unrestricted=0.18 mg/kg	2.9
SB-56 (6-8)			8.6
SB-57 (0-4)	Mercury	BCO Unrestricted=0.18 mg/kg	5.3
SB-57 (6-8)			5.8

The following table lists the reported nickel concentrations that exceed the Unrestricted Use SCOs:

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-29 (0-4)	Nickel	BCO Unrestricted=30 mg/kg	120
SB-29 (4-10)			150



SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-30 (0-4) SB-30 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	82.9 140
SB-31 (0-4) SB-31 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	331 90.7
SB-32 (0-4) SB-32 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	142 76.3
SB-33 (0-4) SB-33 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	179 254
SB-34 (0-4) SB-34 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	330 245
SB-35 (0-4) SB-35 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	124 332
SB-36 (0-4) SB-36 (6-10)	Nickel	BCO Unrestricted=30 mg/kg	189 204
SB-37 (0-4) SB-37 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	93.4 42.4 J
SB-38 (0-4) SB-38 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	101 410
SB-39 (0-4) SB-39 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	327 168
SB-40 (0-4) SB-40 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	91.3 53.5
SB-42 (0-4) SB-42 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	796 182
SB-43 (0-4) SB-43 (4-8)	Nickel	BCO Unrestricted=30 mg/kg	328 257
SB-44 (0-4) SB-44 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	153 287
SB-45 (0-4)	Nickel	BCO Unrestricted=30 mg/kg	50.1
SB-46 (0-4) SB-46 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	353 273
SB-47 (0-4) SB-47 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	201 168
SB-48 (0-4) SB-48 (4-6)	Nickel	BCO Unrestricted=30 mg/kg	292 350
SB-49 (0-4)	Nickel	BCO Unrestricted=30 mg/kg	51.8
SB-50 (0-4) SB-50 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	92.6 42.2 J
SB-51 (0-4)	Nickel	BCO Unrestricted=30 mg/kg	69.2
SB-52 (0-4) SB-52 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	280 90.4
SB-53 (0-4) SB-53 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	190 162
SB-54 (0-4) SB-54 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	205 800



SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-55 (0-4) SB-55 (4-10)	Nickel	BCO Unrestricted=30 mg/kg	290 40.2 J
SB-56 (0-4) SB-56 (6-8)	Nickel	BCO Unrestricted=30 mg/kg	128 232
SB-57 (0-4) SB-57 (6-8)	Nickel	BCO Unrestricted=30 mg/kg	201 333

The following table lists the reported selenium concentrations that exceed the Unrestricted Use SCOs:

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-29 (0-4) SB-29 (4-10)	Selenium	BCO Unrestricted=3.9 mg/kg	8.4 6.3
SB-32 (0-4)	Selenium	BCO Unrestricted=3.9 mg/kg	16.4
SB-34 (4-10)	Selenium	BCO Unrestricted=3.9 mg/kg	28.4
SB-35 (0-4) SB-35 (4-10)	Selenium	BCO Unrestricted=3.9 mg/kg	19.5 9.2
SB-38 (0-4) SB-38 (4-10)	Selenium	BCO Unrestricted=3.9 mg/kg	4.8 9.9
SB-39 (4-10)	Selenium	BCO Unrestricted=3.9 mg/kg	15.3
SB-42 (0-4)	Selenium	BCO Unrestricted=3.9 mg/kg	17.3
SB-43 (4-8)	Selenium	BCO Unrestricted=3.9 mg/kg	11.7
SB-44 (4-10)	Selenium	BCO Unrestricted=3.9 mg/kg	12 J
SB-47 (4-10)	Selenium	BCO Unrestricted=3.9 mg/kg	11.5
SB-48 (0-4)	Selenium	BCO Unrestricted=3.9 mg/kg	14.9
SB-50 (0-4)	Selenium	BCO Unrestricted=3.9 mg/kg	194
SB-52 (0-4) SB-52 (4-10)	Selenium	BCO Unrestricted=3.9 mg/kg	7.2 64.7
SB-53 (0-4)	Selenium	BCO Unrestricted=3.9 mg/kg	7.1 J
SB-54 (4-10)	Selenium	BCO Unrestricted=3.9 mg/kg	5.4 J
SB-55 (4-10)	Selenium	BCO Unrestricted=3.9 mg/kg	19.7
SB-56 (6-8)	Selenium	BCO Unrestricted=3.9 mg/kg	14.3
SB-57 (0-4) SB-57 (6-8)	Selenium	BCO Unrestricted=3.9 mg/kg	6.7 7

The following table lists the reported silver concentrations that exceed the Unrestricted Use SCOs:

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-29 (0-4)	Silver	BCO Unrestricted=2 mg/kg	5.9
SB-29 (4-10)			4.3
SB-31 (0-4)	Silver	BCO Unrestricted=2 mg/kg	7.9 J
SB-32 (0-4)	Silver	BCO Unrestricted=2 mg/kg	2.1 J
SB-34 (0-4)	Silver	BCO Unrestricted=2 mg/kg	2.5 J
SB-34 (4-10)			2.3 J
SB-35 (0-4)	Silver	BCO Unrestricted=2 mg/kg	2.5
SB-36 (0-4)	Silver	BCO Unrestricted=2 mg/kg	3.7 J
SB-36 (6-10)			2.6 J
SB-38 (0-4)	Silver	BCO Unrestricted=2 mg/kg	3
SB-38 (4-10)			2.2 J
SB-39 (0-4)	Silver	BCO Unrestricted=2 mg/kg	24.8
SB-39 (4-10)			3.3 J
SB-42 (0-4)	Silver	BCO Unrestricted=2 mg/kg	5.3 J
SB-43 (0-4)	Silver	BCO Unrestricted=2 mg/kg	3.3 J
SB-43 (4-8)			3.4 J
SB-44 (0-4)	Silver	BCO Unrestricted=2 mg/kg	3.6 J
SB-44 (4-10)			5.8 J
SB-46 (0-4)	Silver	BCO Unrestricted=2 mg/kg	8.5 J
SB-46 (4-10)			4.4 J
SB-47 (0-4)	Silver	BCO Unrestricted=2 mg/kg	4.3 J
SB-47 (4-10)			3.3 J
SB-48 (0-4)	Silver	BCO Unrestricted=2 mg/kg	4.8 J
SB-48 (4-6)			5.2 J
SB-52 (0-4)	Silver	BCO Unrestricted=2 mg/kg	3.8
SB-53 (0-4)	Silver	BCO Unrestricted=2 mg/kg	4.8 J
SB-53 (4-10)			2.9 J
SB-54 (0-4)	Silver	BCO Unrestricted=2 mg/kg	3 J
SB-54 (4-10)			4 J
SB-55 (0-4)	Silver	BCO Unrestricted=2 mg/kg	2.6 J
SB-56 (0-4)	Silver	BCO Unrestricted=2 mg/kg	2.1 J
SB-56 (6-8)			5.1
SB-57 (0-4)	Silver	BCO Unrestricted=2 mg/kg	5.2
SB-57 (6-8)			3.2

The following table lists the reported zinc concentrations that exceed the Unrestricted Use SCOs:

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-29 (0-4) SB-29 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	2,960 5,310
SB-30 (0-4) SB-30 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	3,080 2,410
SB-31 (0-4) SB-31 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	14,200 6,240
SB-32 (0-4) SB-32 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	11,600 2,740
SB-33 (0-4) SB-33 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	3,060 12,400
SB-34 (0-4) SB-34 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	4,570 3,430
SB-35 (0-4) SB-35 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	8,290 15,400
SB-36 (0-4) SB-36 (6-10)	Zinc	BCO Unrestricted=109 mg/kg	11,700 5,550
SB-37 (0-4) SB-37 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	3,650 762
SB-38 (0-4) SB-38 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	6,430 9,040
SB-39 (0-4) SB-39 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	18,700 6,150
SB-40 (0-4) SB-40 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	1,700 857
SB-41 (0-4) SB-41 (4-11)	Zinc	BCO Unrestricted=109 mg/kg	735 394
SB-42 (0-4) SB-42 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	7,350 1,650
SB-43 (0-4) SB-43 (4-8)	Zinc	BCO Unrestricted=109 mg/kg	9,850 6,030
SB-44 (0-4) SB-44 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	8,150 7,590
SB-45 (0-4) SB-45 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	757 257
SB-46 (0-4) SB-46 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	9,910 16,400
SB-47 (0-4) SB-47 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	7,800 6,130
SB-48 (0-4) SB-48 (4-6)	Zinc	BCO Unrestricted=109 mg/kg	12,800 10,600
SB-49 (0-4) SB-49 (4-6)	Zinc	BCO Unrestricted=109 mg/kg	408 331
SB-50 (0-4) SB-50 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	3,330 1,520

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-51 (0-4) SB-51 (4-8)	Zinc	BCO Unrestricted=109 mg/kg	1,930 746
SB-52 (0-4) SB-52 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	11,300 4,120
SB-53 (0-4) SB-53 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	9,110 3,120
SB-54 (0-4) SB-54 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	6,250 7,430
SB-55 (0-4) SB-55 (4-10)	Zinc	BCO Unrestricted=109 mg/kg	3,240 905
SB-56 (0-4) SB-56 (6-8)	Zinc	BCO Unrestricted=109 mg/kg	7,080 8,110
SB-57 (0-4) SB-57 (6-8)	Zinc	BCO Unrestricted=109 mg/kg	9,160 8,570

### 5.1.2 Polychlorinated Biphenyls

The results of the SRI and SSRI soil sampling programs indicated the presence of PCB concentrations in soil that exceed the Unrestricted Use SCOs.

The following table provides the sample location, sample depth, compound and corresponding analytical results which exceed the Unrestricted Use SCOs.

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-2-1 (0-4)	Aroclor 1254 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	0.48 0.55
SB-2-1 (6-8)	Aroclor 1260	BCO Unrestricted=0.1 mg/kg	0.13
SB-2-2 (1-4)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	0.40
SB-2-3 (0-4)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	0.47
SB-2-3 (10-11)	Aroclor 1260	BCO Unrestricted=0.1 mg/kg	0.15
SB-6-1 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	12
SB-6-2 (0-4)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	1.6
SB-6-2 (6-8)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	6.1 J
SB-6-3 (0-4)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	0.69
SB-7-1 (0-4)	Aroclor 1248 Aroclor 1254 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	0.76 0.67 0.16
SB-7-1 (4-6)	Aroclor 1242 Aroclor 1254 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	2.1 4.4 1.5

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-7-2 (0-4)	Aroclor 1248 Aroclor 1254 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	1.3 1.2 0.39
SB-7-2 (4-6)	Aroclor 1248 Aroclor 1254 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	2.1 3.2 3
SB-8-1 (0-4)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	2.4 0.56
SB-8-1 (4-6)	Aroclor 1248 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	13 4.1
SB-8-2 (0-4)	Aroclor 1248 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	14 12
SB-8-2 (4-6)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	6 2.4
SB-9-1 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	6.7 J
SB-9-1 (10-11)	Aroclor 1254 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	0.49 0.26
SB-9-2 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	7.8
SB-9-2 (8-10)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	2.1 0.59
SB-9-3 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	11 J
SB-9-3 (4-6)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	5.9 J
SB-16-1 (0-4)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	9.3 J 0.89
SB-16-1 (6-8)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	2.8 1.2
SB-16-2 (0-4)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	7 J 0.57
SB-16-2 (6-8)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	0.43 0.26
SB-16-3 (0-4)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	12 0.92 J
SB-16-3 (4-6)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	15 2.6
SB-17-1 (0-4)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	31 8.3
SB-17-1 (4-6)	Aroclor 1242	BCO Unrestricted=0.1 mg/kg	0.29 J
SB-17-2 (0-4)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	16 1.9
SB-17-2 (4-6)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	27 3
SB-20-1 (0-4)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	13 J 1.4 J
SB-20-1 (6-8)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	1.7 0.89

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-20-2 (0-4)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	7.4 0.83
SB-20-2 (6-8)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	16 1.5
SB-20-3 (0-4)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	11 J 0.89 J
SB-20-3 (6-8)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	0.96 0.33
SB-22-1 (0-4)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	6.2 0.61
SB-22-1 (4-6)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	11 2.1
SB-22-2 (0-4)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	4.5 0.84
SB-22-2 (4-6)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	2.6 0.92
SB-22-3 (0-4)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	9.5 1.4
SB-22-3 (4-6)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	4.4 0.78
SB-23-1 (0-4)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	3.5 1.1 J
SB-23-1 (4-6)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	3.1 0.83
SB-23-2 (0-4)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	1 0.23
SB-23-2 (6-8)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	14 0.67 J
SB-23-3 (0-4)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	7.5 1.7
SB-23-3 (4-6)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	7 J 1.2
SB-23-4 (0-4)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	1.6 J
SB-23-4 (4-6)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	55
SB-24-1 (0-4)	Aroclor 1242 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	4.2 2.1
SB-24-2 (0-4)	Aroclor 1242 Aroclor 1254 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	2.8 J 1.1 J 0.22
SB-24-3 (0-4)	Aroclor 1242 Aroclor 1254 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	1.9 J 0.72 J 0.78
SB-24-3 (4-6)	Aroclor 1248 Aroclor 1254 Aroclor 1260	BCO Unrestricted=0.1 mg/kg	1 J 0.9 0.46

SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-27-1 (0-4)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	2.8
SB-27-1 (9-10)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	0.6
SB-27-2 (0-4)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	2.8
SB-27-2 (4-8)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	4.2
	Aroclor 1260		0.41
SB-27-3 (0-4)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	1.6
	Aroclor 1260		2 J
SB-27-4 (0-4)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	0.38
	Aroclor 1260		0.31
SB-27-5 (0-4)	Aroclor 1242	BCO Unrestricted=0.1 mg/kg	0.85
	Aroclor 1260		0.21
SB-29 (4-10)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	0.24
SB-30 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	0.45
	Aroclor 1260		0.49
SB-30 (4-10)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	0.31
	Aroclor 1260		0.21
SB-31 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	4.2
	Aroclor 1254		1.7
SB-31 (4-10)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	0.32
SB-32 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	14
SB-32 (4-10)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	1.7
SB-33 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	0.58
	Aroclor 1254		0.86
	Aroclor 1260		0.33
SB-33 (4-10)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	0.93 J
	Aroclor 1260		0.76 J
SB-34 (0-4)	Aroclor 1242	BCO Unrestricted=0.1 mg/kg	4.1
	Aroclor 1254		1.2 J
	Aroclor 1260		0.33 J
SB-34 (4-10)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	2 J
	Aroclor 1254		2.6
	Aroclor 1260		0.56
SB-35 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	3.2
	Aroclor 1254		1.8
SB-35 (4-10)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	0.92
SB-36 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	14 J
	Aroclor 1254		3.9
	Aroclor 1260		0.71 J
SB-36 (6-10)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	4 J
	Aroclor 1254		1.9
SB-37 (0-4)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	0.25
SB-37 (4-10)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	0.56
	Aroclor 1260		0.29
SB-38 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	1.3
SB-38 (4-10)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	0.49



SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-39 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	1.1
SB-39 (4-10)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	0.73
SB-40 (0-4)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	0.41 J
	Aroclor 1260		0.21 J
SB-40 (4-10)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	0.41 J
	Aroclor 1260		0.26 J
SB-41 (0-4)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	0.24
	Aroclor 1260		0.14 J
SB-41 (4-11)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	0.11
SB-42 (0-4)	Aroclor 1242	BCO Unrestricted=0.1 mg/kg	0.86
	Aroclor 1254		0.58
	Aroclor 1260		0.14
SB-42 (4-10)	Aroclor 1242	BCO Unrestricted=0.1 mg/kg	0.32
	Aroclor 1260		0.17
SB-43 (0-4)	Aroclor 1242	BCO Unrestricted=0.1 mg/kg	5.1
	Aroclor 1254		1
	Aroclor 1260		0.27 J
SB-43 (4-8)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	1.9
	Aroclor 1254		1.2
	Aroclor 1260		0.31
SB-44 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	2.9
	Aroclor 1254		1.4
SB-44 (4-10)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	1.4
SB-45 (0-4)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	0.52
	Aroclor 1260		0.34
SB-45 (4-10)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	0.17
	Aroclor 1260		1 J
SB-46 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	2.7
	Aroclor 1260		0.5
SB-46 (4-10)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	6.7
	Aroclor 1254		6.2
	Aroclor 1260		1.7
SB-47 (0-4)	Aroclor 1242	BCO Unrestricted=0.1 mg/kg	1.4
	Aroclor 1254		0.83
	Aroclor 1260		0.19
SB-47 (4-10)	Aroclor 1242	BCO Unrestricted=0.1 mg/kg	3.3
	Aroclor 1254		2.5
	Aroclor 1260		0.95
SB-48 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	0.83
SB-48 (4-6)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	2.6
	Aroclor 1254		1.2
SB-50 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	0.31
	Aroclor 1260		0.18
SB-50 (4-10)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	0.59 J
SB-51 (4-8)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	0.21



SAMPLE LOCATION	COMPOUND	PART 375 SOIL CLEANUP OBJECTIVES	ANALYTICAL RESULTS (mg/kg)
SB-52 (0-4)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	1.0
SB-52 (4-10)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	0.55 J
SB-53 (0-4)	Aroclor 1242	BCO Unrestricted=0.1 mg/kg	5.5
	Aroclor 1254		1.0
SB-53 (4-10)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	1.6
	Aroclor 1260		5.1
SB-54 (0-4)	Aroclor 1242	BCO Unrestricted=0.1 mg/kg	5.6
	Aroclor 1254		1.4 J
SB-54 (4-10)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	5
	Aroclor 1254		2.9
	Aroclor 1260		0.6
SB-55 (0-4)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	1.7
	Aroclor 1260		1.7
SB-55 (4-10)	Aroclor 1254	BCO Unrestricted=0.1 mg/kg	0.34 J
	Aroclor 1260		0.24 J
SB-56 (0-4)	Aroclor 1242	BCO Unrestricted=0.1 mg/kg	5.5
	Aroclor 1254		0.45
	Aroclor 1260		0.43 J
SB-56 (6-8)	Aroclor 1248	BCO Unrestricted=0.1 mg/kg	1.1
	Aroclor 1262		0.77 J
SB-57 (0-4)	Aroclor 1242	BCO Unrestricted=0.1 mg/kg	5.6
	Aroclor 1260		1
SB-57 (6-8)	Aroclor 1242	BCO Unrestricted=0.1 mg/kg	2.5
	Aroclor 1260		0.51

## **5.2 Supplemental Remedial Investigation and Second Supplemental Remedial Investigation Results**

The results of the SRI and SSRI sampling programs have indicated that the on-site surface and subsurface soil concentrations exceed the Part 375 the Unrestricted Use SCOs for TAL Metals and PCBs, and the Restricted Use - Protection of Groundwater SCOs for arsenic. The following section describes the extent of TAL Metal and PCB soil contamination that was detected during the SRI and SSRI sampling program.

### **5.2.1 Soil**

The results of the SRI and SSRI indicate the presence of TAL Metals and PCBs in soil with concentrations exceeding Part 375 Unrestricted Use SCOs and the presence of arsenic in soil with concentrations exceeding Part 375 Restricted Use - Protection of Groundwater SCOs at the

Site. TAL Metals (including arsenic) and PCB contaminated soils are present in the surface and subsurface soil throughout the Site. Barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, and zinc concentrations exceeding the Unrestricted Use SCOs were detected during the SRI and SSRI sampling programs. Arsenic concentrations exceeding the Restricted Use - Protection of Groundwater SCOs were also detected during the SRI and SSRI sampling programs

Arsenic concentrations exceeding the Restricted Use - Protection of Groundwater SCOs are present from the ground surface to an approximate depth of 0 to 11 ft-bgs in several locations at the Site. Of the 27 soil samples collected, during SRI, from the 0 to 4 ft-bgs depth interval, 13 soil samples exceeded 16 mg/kg (Restricted Use - Protection of Groundwater SCOs) with the highest concentrations reported at SB-29 (1,160 mg/kg), SB-32 (144 mg/kg), SB-47 (69.6 mg/kg), and SB-42 (67.4 mg/kg). The average concentration of arsenic, which exceeds the Restricted Use - Protection of Groundwater SCOs, detected from the 0 to 4 ft-bgs depth interval is 100.0 mg/kg. Of the 7 soil samples collected, during SSRI, from the 0 to 4 ft-bgs depth interval, 6 soil samples exceeded 16 mg/kg (Restricted Use - Protection of Groundwater SCOs) with the highest concentrations reported at SB-8-1 (30.9 mg/kg) and SB-22-1 (25.6 mg/kg). The average concentration of arsenic, which exceeds the Unrestricted Use SCOs and the Restricted Use - Protection of Groundwater SCOs, detected from the 0 to 4 ft-bgs depth interval is 22.8 mg/kg. Of the 27 soil samples collected, during SRI, from the 4 to 11 ft-bgs depth interval, 17 soil samples exceeded 16 mg/kg (Restricted Use - Protection of Groundwater SCOs) with the highest concentrations reported at SB-29 (1,140 mg/kg), SB-34 (35.8 mg/kg), SB-36 (32.5 mg/kg), and SB-43 (29.5 mg/kg). The average concentration of arsenic, which exceeds the Unrestricted Use SCOs and the Restricted Use - Protection of Groundwater SCOs, detected from the 4 to 11 ft-bgs depth interval is 82.0 mg/kg. Of the 7 soil samples collected, during SSRI, from the 4 to 11 ft-bgs depth interval, 6 soil samples exceeded 16 mg/kg (Restricted Use - Protection of Groundwater SCOs) with the highest concentrations reported at SB-8-2 (47.5 mg/kg). The average concentration of arsenic, which exceeds the Unrestricted Use SCOs and the Restricted Use - Protection of Groundwater SCOs, detected from the 4 to 11 ft-bgs depth interval is 26.2 mg/kg.

The highest arsenic concentrations exceeding the Restricted Use - Protection of Groundwater SCOs are present along the northwestern portion of the Site in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals in SB-29, SB-32, and SB-50. Arsenic concentrations are also present within the central interior portion of the Site with several additional exceedances in the 4 to 11 ft-bgs sampling interval as compared to the 0 to 4 ft-bgs sampling interval. Figures 3-3, 3-4, 4-5, and 4-6 depict the sampling locations which exceed the Restricted Use - Protection of Groundwater SCOs for arsenic in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals, respectively.

Barium concentrations exceeding the Unrestricted Use SCOs are present from the ground surface to an approximate depth of 0 to 11 ft-bgs in several locations at the Site. Of the 27 soil samples collected, during SRI, from the 0 to 4 ft-bgs depth interval, 24 soil samples exceeded 350 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-32 (3,900 mg/kg), SB-54 (1,920 mg/kg), SB-33 (1,200 mg/kg), and SB-52 (1,150 mg/kg). The average concentration of barium, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 1,100 mg/kg. Of the 2 soil samples collected, during SSRI, from the 0 to 4 ft-bgs depth interval, 2 soil samples exceeded 350 mg/kg (Unrestricted Use SCOs) with the highest concentration reported at SB-57 (897 mg/kg). The average concentration of barium, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 717.5 mg/kg. Of the 27 soil samples collected, during SRI, from the 4 to 11 ft-bgs depth interval, 22 soil samples exceeded 350 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-46 (1,380 mg/kg), SB-29 (1,190 mg/kg), SB-32 (1,090 mg/kg), and SB-39 (1,090 mg/kg). The average concentration of barium, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 775.5 mg/kg. Of the 2 soil samples collected, during SSRI, from the 4 to 11 ft-bgs depth interval, 2 soil samples exceeded 350 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-56 (893 mg/kg). The average concentration of barium, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 866 mg/kg.

The highest barium concentrations exceeding the Unrestricted Use SCOs are present along the northwestern, central and southeastern portions of the Site in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals in SB-32, SB-33, SB-36, SB-38, SB-39, SB-46, SB-47, and SB-54. Figures 3-5, 3-6, 4-7, and 4-8 depict the sampling locations which exceed the Unrestricted Use SCOs for barium in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals, respectively.

Cadmium concentrations exceeding the Unrestricted Use SCOs are present from the ground surface to an approximate depth of 0 to 11 ft-bgs in several locations at the Site. Of the 27 soil samples collected, during SRI, from the 0 to 4 ft-bgs depth interval, 25 soil samples exceeded 2.5 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-39 (50.7 mg/kg), SB-36 (41.2 mg/kg), SB-44 (39.2 mg/kg), and SB-46 (38.2 mg/kg). The average concentration of cadmium, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 22.9 mg/kg. Of the 2 soil samples collected, during SSRI, from the 0 to 4 ft-bgs depth interval, 2 soil samples exceeded 2.5 mg/kg (Unrestricted Use SCOs) with the highest concentration reported at SB-57 (26.3 mg/kg). The average concentration of cadmium, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 22.7 mg/kg. Of the 27 soil samples collected, during SRI, from the 4 to 11 ft-bgs depth interval, 22 soil samples exceeded 2.5 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-46 (50.5 mg/kg), SB-48 (41.5 mg/kg), SB-47 (32.8 mg/kg), and SB-39 (30.5 mg/kg). The average concentration of cadmium, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 23.1 mg/kg. Of the 2 soil samples collected, during SSRI, from the 4 to 11 ft-bgs depth interval, 2 soil samples exceeded 2.5 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-56 (30.7 mg/kg). The average concentration of cadmium, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 27.5 mg/kg.

The highest cadmium concentrations exceeding the Unrestricted Use SCOs are present along the eastern and southeastern portions of the Site in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals in SB-31, SB-36, SB-39, SB-43, SB-44, SB-46, and SB-53. Figures 3-5, 3-6, 4-7, and

4-8 depict the sampling locations which exceed the Unrestricted Use SCOs for cadmium in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals, respectively.

Chromium concentrations exceeding the Unrestricted Use SCOs are present from the ground surface to an approximate depth of 0 to 11 ft-bgs in several locations at the Site. Of the 27 soil samples collected, during SRI, from the 0 to 4 ft-bgs depth interval, 27 soil samples exceeded 30 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-52 (834 mg/kg), SB-34 (486 mg/kg), SB-31 (483 mg/kg), and SB-46 (450 mg/kg). The average concentration of chromium, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 271.2 mg/kg. Of the 2 soil samples collected, during SSRI, from the 0 to 4 ft-bgs depth interval, 2 soil samples exceeded 30 mg/kg (Unrestricted Use SCOs) with the highest concentration reported at SB-57 (327 mg/kg). The average concentration of chromium, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 213 mg/kg. Of the 27 soil samples collected, during SRI, from the 4 to 11 ft-bgs depth interval, 25 soil samples exceeded 30 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-54 (794 mg/kg), SB-46 (327 mg/kg), SB-34 (304 mg/kg), and SB-38 (301 mg/kg). The average concentration of chromium, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 186.6 mg/kg. Of the 2 soil samples collected, during SSRI, from the 4 to 11 ft-bgs depth interval, 2 soil samples exceeded 30 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-56 (237 mg/kg). The average concentration of chromium, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 194.5 mg/kg.

The highest chromium concentrations exceeding the Unrestricted Use SCOs are present along the eastern and south-central portions of the Site in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals in SB-31, SB-34, SB-38, SB-39, SB-42, SB-46, SB-52, and SB-55. Figures 3-5, 3-6, 4-7, and 4-8 depict the sampling locations which exceed the Unrestricted Use SCOs for chromium in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals, respectively.

Copper concentrations exceeding the Unrestricted Use SCOs are present from the ground surface to an approximate depth of 0 to 11 ft-bgs in several locations at the Site. Of the 27 soil samples collected, during SRI, from the 0 to 4 ft-bgs depth interval, 27 soil samples exceeded 50 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-31 (19,800 mg/kg), SB-39 (12,800 mg/kg), SB-43 (11,700 mg/kg), and SB-48 (11,200 mg/kg). The average concentration of copper, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 3,740 mg/kg. Of the 2 soil samples collected, during SSRI, from the 0 to 4 ft-bgs depth interval, 2 soil samples exceeded 50 mg/kg (Unrestricted Use SCOs) with the highest concentration reported at SB-56 (3,580 mg/kg). The average concentration of copper, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 2,700 mg/kg. Of the 27 soil samples collected, during SRI, from the 4 to 11 ft-bgs depth interval, 27 soil samples exceeded 50 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-29 (5,480 mg/kg), SB-48 (3,980 mg/kg), SB-44 (3,690 mg/kg), and SB-52 (2,900 mg/kg). The average concentration of copper, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 1,338.1 mg/kg. Of the 2 soil samples collected, during SSRI, from the 4 to 11 ft-bgs depth interval, 2 soil samples exceeded 50 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-57 (8,510 mg/kg). The average concentration of copper, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 5,040 mg/kg.

The highest copper concentrations exceeding the Unrestricted Use SCOs are present along the northeastern, eastern, and southeastern portions of the Site in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals in SB-29, SB-31, SB-36, SB-39, SB-43, SB-44, and SB-48. Figures 3-3, 3-4, 4-5, and 4-6 depict the sampling locations which exceed the Unrestricted Use SCOs for copper in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals, respectively.

Lead concentrations exceeding the Unrestricted Use SCOs are present from the ground surface to an approximate depth of 0 to 11 ft-bgs in several locations at the Site. Of the 27 soil samples collected, during the SRI, from the 0 to 4 ft-bgs depth interval, 27 soil samples exceeded 63 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-32 (17,000

mg/kg), SB-47 (5,810 mg/kg), SB-30 (5,410 mg/kg), and SB-46 (5,110 mg/kg). The average concentration of lead, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 3,672.6 mg/kg. Of the 8 soil samples collected, during the SSRI, from the 0 to 4 ft-bgs depth interval, 8 soil samples exceeded 63 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-8-2 (21,700 mg/kg), SB-16-1 (11,600 mg/kg), SB-23-1 (7,330 mg/kg), and SB-8-1 (5,470 mg/kg). The average concentration of lead, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 7,208 mg/kg. Of the 27 soil samples collected, during the SRI, from the 4 to 11 ft-bgs depth interval, 27 soil samples exceeded 63 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-46 (8,760 mg/kg), SB-32 (6,580 mg/kg), SB-33 (6,070 mg/kg), and SB-39 (4,850 mg/kg). The average concentration of lead, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 2,882.1 mg/kg. Of the 8 soil samples collected, during the SSRI, from the 4 to 11 ft-bgs depth interval, 8 soil samples exceeded 63 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-8-1 (10,700 mg/kg), SB-8-2 (10,600 mg/kg), SB-22-2 (6,660 mg/kg), and SB-22-1 (4,970 mg/kg). The average concentration of lead, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 6,663 mg/kg.

The highest lead concentrations exceeding the Unrestricted Use SCOs, that was detected the SRI, are present at one (1) location along the northwestern portion of the Site in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals in SB-32. Lead concentrations are also present within the central interior portion of the Site in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals in SB-33, SB-39, SB-46, SB-47, and SB-54. In addition, the lead concentrations exceeding the Unrestricted Use SCOs in the 0 to 4 ft-bgs are predominately present in the western portion of the Site while lead concentrations exceeding the Unrestricted Use SCOs in the 4 to 11 ft-bgs are predominately present in the eastern portion of the Site. Figures 3-5 and 3-6 depict the sampling locations which exceed the Unrestricted Use SCOs for lead in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals, respectively.



The highest lead concentrations exceeding the Unrestricted Use SCOs, that was detected the SSRI, are present at one (1) location in the south-central portion of the Site in the 0 to 4 ft-bgs sampling intervals in SB-8-2. Lead concentrations are also present within the central portion of the Site in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals in SB-8-1, SB-8-2, SB-16-1, SB-22-1, and SB-22-2. Figures 4-7 and 4-8 depict the sampling locations which exceed the Unrestricted Use SCOs for lead in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals, respectively.

Mercury concentrations exceeding the Unrestricted Use SCOs, that was detected the SRI, are present from the ground surface to an approximate depth of 0 to 11 ft-bgs at several locations at the Site. Of the 27 soil samples collected from the 0 to 4 ft-bgs depth interval, 26 soil samples exceeded 0.18 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-32 (14.2 mg/kg), SB-52 (13.6 mg/kg), SB-54 (12.6 mg/kg), and SB-29 (10 mg/kg). The average concentration of mercury, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 7.5 mg/kg. Of the 2 soil samples collected, during SRI, from the 0 to 4 ft-bgs depth interval, 2 soil samples exceeded 0.18 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-57 (5.3 mg/kg). The average concentration of mercury, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 4.1 mg/kg. Of the 27 soil samples collected from the 4 to 11 ft-bgs depth interval, 27 soil samples exceeded 0.18 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-39 (14.3 mg/kg), SB-48 (13.5 mg/kg), SB-44 (11.7 mg/kg), and SB-46 (9.7 mg/kg). The average concentration of mercury, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 5.4 mg/kg. Of the 2 soil samples collected, during SSRI, from the 6 to 8 ft-bgs depth interval, 2 soil samples exceeded 0.18 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-56 (8.6 mg/kg). The average concentration of mercury, which exceeds the Unrestricted Use SCOs, detected from the 6 to 8 ft-bgs depth interval is 7.2 mg/kg.

Mercury concentrations are present within the central interior portion of the Site in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals in SB-31, SB-34, SB-35, SB-36, SB-38, SB-39,



SB-43, SB-44, SB-46, SB-48, SB-53, and SB-54. Figures 3-5, 3-6, 4-7, and 4-8 depict the sampling locations which exceed the Unrestricted Use SCOs for mercury in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals, respectively.

Nickel concentrations exceeding the Unrestricted Use SCOs are present from the ground surface to an approximate depth of 0 to 11 ft-bgs in several locations at the Site. Of the 27 soil samples collected, during SRI, from the 0 to 4 ft-bgs depth interval, 26 soil samples exceeded 30 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-42 (796 mg/kg), SB-46 (353 mg/kg), SB-31 (331 mg/kg), and SB-34 (330 mg/kg). The average concentration of nickel, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 250.1 mg/kg. Of the 2 soil samples collected, during SSRI, from the 0 to 4 ft-bgs depth interval, 2 soil samples exceeded 30 mg/kg (Unrestricted Use SCOs) with the highest concentration reported at SB-57 (201 mg/kg). The average concentration of nickel, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 164.5 mg/kg. Of the 27 soil samples collected, during SRI, from the 4 to 11 ft-bgs depth interval, 23 soil samples exceeded 30 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-54 (800 mg/kg), SB-38 (410 mg/kg), SB-48 (350 mg/kg), and SB-35 (332 mg/kg). The average concentration of nickel, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 210.8 mg/kg. Of the 2 soil samples collected, during SSRI, from the 4 to 11 ft-bgs depth interval, 2 soil samples exceeded 30 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-57 (333 mg/kg). The average concentration of nickel, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 282.5 mg/kg.

The highest nickel concentrations exceeding the Unrestricted Use SCOs are present along the eastern and southeastern portions of the Site in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals in SB-34, SB-38, SB-39, SB-42, SB-43, SB-46, SB-48, and SB-54. Figures 3-5, 3-6, 4-7, and 4-8 depict the sampling locations which exceed the Unrestricted Use SCOs for nickel in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals, respectively.

Selenium concentrations exceeding the Unrestricted Use SCOs are present from the ground surface to an approximate depth of 0 to 11 ft-bgs in several locations at the Site. Of the 27 soil samples collected, during SRI, from the 0 to 4 ft-bgs depth interval, 10 soil samples exceeded 3.9 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-50 (194 mg/kg), SB-35 (19.5 mg/kg), SB-42 (17.3 mg/kg), and SB-32 (16.4 mg/kg). The average concentration of selenium, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 10.1 mg/kg. Of the 2 soil samples collected, during SSRI, from the 0 to 4 ft-bgs depth interval, 1 soil samples exceeded 3.9 mg/kg (Unrestricted Use SCOs) with a concentration reported at SB-57 (6.7 mg/kg). Of the 27 soil samples collected, during SRI, from the 4 to 11 ft-bgs depth interval, 10 soil samples exceeded 3.9 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-52 (64.7 mg/kg), SB-34 (28.4mg/kg), SB-55 (19.7 mg/kg), and SB-35 (15.3 mg/kg). The average concentration of selenium, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 18.2 mg/kg. Of the 2 soil samples collected, during SSRI, from the 4 to 11 ft-bgs depth interval, 2 soil samples exceeded 3.9 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-56 (14.3 mg/kg). The average concentration of selenium, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 5.65 mg/kg.

The highest selenium concentrations exceeding the Unrestricted Use SCOs are present along the northeast, central, and eastern portions of the Site in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals in SB-32, SB-34, SB-35, SB-39, SB-42, SB-50, SB-52, and SB-55. Figures 3-5, 3-6, 4-7, and 4-8 depict the sampling locations which exceed the Unrestricted Use SCOs for selenium in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals, respectively.

Silver concentrations exceeding the Unrestricted Use SCOs are present from the ground surface to an approximate depth of 0 to 11 ft-bgs in several locations at the Site. Of the 27 soil samples collected, during SRI, from the 0 to 4 ft-bgs depth interval, 19 soil samples exceeded 2 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-39 (24.8 mg/kg), SB-46 (8.5 mg/kg), SB-31 (7.9 mg/kg), and SB-34 (5.9 mg/kg). The average concentration of silver, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 5.5

mg/kg. Of the 2 soil samples collected, during SSRI, from the 0 to 4 ft-bgs depth interval, 2 soil samples exceeded 2 mg/kg (Unrestricted Use SCOs) with the highest concentration reported at SB-57 (5.2 mg/kg). The average concentration of silver, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 3.65 mg/kg. Of the 27 soil samples collected, during SRI, from the 4 to 11 ft-bgs depth interval, 13 soil samples exceeded 2 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-44 (5.8 mg/kg), SB-48 (5.2 mg/kg), SB-46 (4.4 mg/kg), and SB-29 (4.3 mg/kg). The average concentration of silver, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 5.1 mg/kg. Of the 2 soil samples collected, during SSRI, from the 4 to 11 ft-bgs depth interval, 2 soil samples exceeded 2 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-57 (5.1 mg/kg). The average concentration of silver, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 4.15 mg/kg.

The highest silver concentrations exceeding the Unrestricted Use SCOs are present along the eastern and southeastern portions of the Site in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals in SB-29, SB-31, SB-39, SB-44, SB-46, and SB-48. Figures 3-5, 3-6, 4-7, and 4-8 depict the sampling locations which exceed the Unrestricted Use SCOs for silver in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals, respectively.

Zinc concentrations exceeding the Unrestricted Use SCOs are present from the ground surface to an approximate depth of 0 to 11 ft-bgs in several locations at the Site. Of the 27 soil samples collected, during SRI, from the 0 to 4 ft-bgs depth interval, 27 soil samples exceeded 109 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-39 (18,700 mg/kg), SB-31 (14,200 mg/kg), SB-48 (12,800 mg/kg), SB-36 (11,700 mg/kg), and SB-32 (11,600 mg/kg). The average concentration of zinc, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 7,031.8 mg/kg. Of the 2 soil samples collected, during SSRI, from the 0 to 4 ft-bgs depth interval, 2 soil samples exceeded 109 mg/kg (Unrestricted Use SCOs) with the highest concentration reported at SB-57 (9,160 mg/kg). The average concentration of zinc, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 8,120 mg/kg. Of the 27 soil samples collected, during SRI, from the 4 to 11 ft-bgs depth

interval, 27 soil samples exceeded 109 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-46 (16,400 mg/kg), SB-35 (15,400 mg/kg), SB-33 (12,400 mg/kg), SB-48 (10,600 mg/kg), and SB-38 (9,040 mg/kg). The average concentration of zinc, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 5,168.2 mg/kg. Of the 2 soil samples collected, during SSRI, from the 4 to 11 ft-bgs depth interval, 2 soil samples exceeded 109 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-57 (8,570 mg/kg). The average concentration of zinc, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 8,340 mg/kg.

The highest zinc concentrations exceeding the Unrestricted Use SCOs are present along the northern, eastern and southeastern portions of the Site in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals in SB-31, SB-32, SB-33, SB-35, SB-36, SB-39, SB-46, SB-48, and SB-52. Figures 3-5, 3-6, 4-7, and 4-8 depict the sampling locations which exceed the Unrestricted Use SCOs for zinc in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals, respectively.

PCB concentrations exceeding the Unrestricted Use SCOs are present from the ground surface to an approximate depth of 0 to 11 ft-bgs in several locations at the Site. Of the 27 soil samples collected, during SRI, from the 0 to 4 ft-bgs depth interval, 25 soil samples exceeded 0.1 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-36 (18.6 mg/kg), SB-32 (14 mg/kg), SB-54 (7 mg/kg), SB-43 (6.47 mg/kg), and SB-31 (5.9 mg/kg). The average concentration of PCBs, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 2.12 mg/kg. Of the 38 soil samples collected, during SSRI, from the 0 to 4 ft-bgs depth interval, 38 soil samples exceeded 0.1 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-17-1 (39.3 mg/kg), SB-8-2 (26 mg/kg), SB-17-2 (17.9 mg/kg), SB-20-1 (14.4 mg/kg), SB-16-3 (12.92 mg/kg), and SB-6-1 (12 mg/kg). The average concentration of PCBs, which exceeds the Unrestricted Use SCOs, detected from the 0 to 4 ft-bgs depth interval is 3.27 mg/kg. Of the 28 soil samples collected, during SRI, from the 4 to 11 ft-bgs depth interval, 27 soil samples exceeded 0.1 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-23-4 (55 mg/kg), SB-17-2 (30 mg/kg), SB-16-3 (17.6 mg/kg), SB-20-2 (17.5 mg/kg), and SB-8-1 (17.1 mg/kg). The average concentration of PCBs,

which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 1.55 mg/kg. Of the 34 soil samples collected, during SSRI, from the 4 to 11 ft-bgs depth interval, 32 soil samples exceeded 0.1 mg/kg (Unrestricted Use SCOs) with the highest concentrations reported at SB-46 (14.6 mg/kg), SB-54 (8.5 mg/kg), SB-53 (6.7 mg/kg), SB-36 (5.9 mg/kg), and SB-47 (5.9 mg/kg). The average concentration of PCBs, which exceeds the Unrestricted Use SCOs, detected from the 4 to 11 ft-bgs depth interval is 4.56 mg/kg.

The highest PCB concentrations exceeding the Unrestricted Use SCOs are present along the northern, eastern, south, and southeastern portions of the Site in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals in SB-6-1, SB-8-1, SB-9-3, SB-16-3, SB-17-1, SB-17-2, SB-20-2, SB-23-2, SB-23-4, SB-36, and SB-46. Figures 3-7, 3-8, 4-3, and 4-4 depict the sampling locations which exceed the Unrestricted Use SCOs for PCBs in the 0 to 4 ft-bgs and in the 4 to 11 ft-bgs sampling intervals, respectively.

### **5.3 Supplemental RI and Second Supplemental RI Conclusions**

The results of the SRI and SSRI indicate the continued presence of soil concentrations in excess of the Part 375 Unrestricted Use SCOs for TAL Metals and PCBs, and the Restricted Use - Protection of Groundwater SCOs for arsenic at the Site, which further verifies the results of the RI completed in August 2009. Arsenic, barium, cadmium, chromium, copper, lead, nickel, mercury, selenium, silver, and zinc were detected in the 0 to 4 ft-bgs and 4 to 11 ft-bgs sampling intervals in a majority of the 27 soil borings completed during the SRI sampling program and in 2 soil borings completed during the SSRI sampling program. Lead concentrations were detected exceeding the Unrestricted Use SCOs in 8 of the 9 soil borings and arsenic concentrations were detected exceeding the Restricted Use - Protection of Groundwater SCOs in 6 of the 9 soil borings completed during the SSRI.

The primary contaminants of concern (COCs) detected during the RI, SRI, and SSRI sampling programs were identified as arsenic, lead, mercury, PCBs, and SVOCs (carcinogenic PAHs) and were selected due to their potential for mobility to other environmental media and subsequent

adverse effects to human health and the environment, if left in-place without proper management (e.g., remediation, disposal, capping, etc.).

Arsenic concentrations exceeding the Unrestricted Use SCOs and the Restricted Use - Protection of Groundwater SCOs were detected throughout a majority of the Site in both the 0 to 4 ft-bgs and 4 to 11 ft-bgs sampling intervals, with the highest concentrations located along the western property boundary. Lead concentrations exceeding the Unrestricted Use SCOs were detected throughout a majority of the Site in both the 0 to 4 ft-bgs and 4 to 11 ft-bgs sampling intervals. Mercury concentrations exceeding the Unrestricted Use SCOs were detected throughout a majority of the Site in both the 0 to 4 ft-bgs and 4 to 11 ft-bgs sampling intervals. PCB concentrations exceeding the Unrestricted Use SCOs were detected predominately in the 0 to 4 ft-bgs and 4 to 11 ft-bgs sampling intervals in the northern, eastern, southern, and southeastern portions of the Site. SVOC concentrations exceeding the Unrestricted Use SCOs were detected predominately in the 0 to 4 ft-bgs and 4 to 11 ft-bgs sampling intervals in the northern, southern, eastern, and western portions of the Site.

#### **5.4 Insignificant and Significant Soil Contaminants Identified at the Site**

The results of the RI, SRI, and SSRI sampling programs have identified the presence of insignificant and significant soil contaminants at the Site. Insignificant soil contaminants are identified as contaminated soil, if left in-place without proper management (e.g., remediation, disposal, engineered cover system, etc.), will have insignificant impact to human health and the environment. Significant soil contaminants are identified as contaminated soil, if left in-place without proper management (e.g., remediation, disposal, engineered cover system, etc.), has the potential to have a significant impact human health and the environment.

Insignificant soil contaminants that has been identified at the Site includes barium, cadmium, chromium, copper, nickel, selenium, silver, zinc, and VOCs. If exposure (dermal contact, investigation, and inhalation) occurs to these contaminants at their current concentrations, they are not considered a significant threat to human health and the environment. VOC soil

concentrations exceeding the Unrestricted Use SCOs were detected at several sampling locations with a majority of the VOC contamination associated with acetone (a common laboratory contaminant). Several sampling locations where VOC concentrations exceeded the Unrestricted Use SCOs will be likely be managed for off-site disposal as part of the proposed remedial alternatives associated with significant COCs detected at the same sampling locations. The overall remedial strategy for the entire Site will likely include the placement of an engineered cover system which would effectively eliminate potential exposure (physical contact, inhalation, or ingestion) pathways to the insignificant soil contaminants.

Significant soil contaminants (COCs) that has been identified at the Site includes arsenic, lead, mercury, PCBs, and SVOCs (PAHs). Arsenic soil contaminants have likely impacted on-site groundwater quality due to the presence of arsenic concentrations in groundwater which exceed the TOGS standards and will be further addressed in the remedial work plan (RWP). To eliminate potential future contributions of arsenic soil contaminants to the Site's groundwater quality, the highest lead concentrations (greater than 100 mg/kg) will be further addressed in the RWP.

Lead concentrations detected in the on-site monitoring wells do not contain dissolved lead concentrations above the TOGS standard and are likely the result of lead containing soil particles being collected as part of the groundwater sample and/or the results of impacts identified in the upgradient monitoring well. Lead groundwater concentrations detected at the upgradient and off-site groundwater monitoring wells are higher in concentration than the downgradient and on-site and groundwater monitoring wells. To eliminate potential future contributions of lead soil contaminants to the Site's groundwater quality, the highest lead concentrations (greater than 10,000 mg/kg) will be further addressed in the RWP.

Mercury groundwater concentrations detected from the on-site monitoring wells do not contain dissolved mercury concentrations above the TOGS standard and are likely the result of mercury containing soil particles collected as part of the groundwater sample and/or the results of impacts identified in the upgradient monitoring wells. To eliminate potential future contributions of



mercury to the Site's groundwater quality, the highest mercury concentrations (greater than 15 mg/kg) will be addressed in the RWP.

SVOCs (PAHs) are present at concentrations exceeding the Unrestricted Use SCOs in a majority of the sampling locations at the Site. SVOCs were not detected at concentrations exceeding the TOGS standards in any of the groundwater samples collected since 2003. SVOCs are the least mobile of the COCs at the Site and will not pose a significant threat to human health and the environment, if left in-place covered by an engineered cover system. If exposure (dermal contact, investigation, and inhalation) occurs to these contaminants at their current concentrations, SVOCs are not considered a significant threat to human health and the environment. To eliminate potential future exposure (dermal contact, inhalation, or ingestion), SVOC soil contamination will be likely be managed for off-site disposal as part of the proposed remedial alternatives associated with significant COCs detected at the same sampling locations. The overall remedial strategy for the entire Site will also likely include the placement of an engineered cover system which would effectively eliminate potential exposure (physical contact, inhalation, or ingestion) pathways to the remaining SVOC soil contamination. The engineered cover system would also provide protection to human health exposure from carcinogenic PAHs in surface soil.



## **6.0 CONCLUSIONS AND RECOMMENDATIONS**

GF was retained by Frito-Lay to prepare SRI and SSRI Work Plans to determine the nature and extent of contamination and to further quantify and delineate surface and subsurface impacted soil identified at the Site. A Phase II ESA was conducted on the Site in December 2007 and January 2008 and the RI was conducted on the Site in November 2009 in response to NYSDEC's May 5, 2009 comment letter requesting the collection of additional Site data.

The SRI and SSRI Work Plans were prepared and submitted to NYSDEC DER for review and approval. On August 2, 2010, NYSDEC approved the SRI Work Plan for the Site and field sampling activities were performed on August 4 through 10, 2010. On September 21, 2010, NYSDEC did not have any further comments to the SSRI Work Plan for the Site and field sampling activities were performed on October 4 through 14, 2010. All work conducted as part of the SRI and SSRI was performed in accordance with NYSDEC BCP and DER-10 Technical Guidance for Site Investigation and Remediation.

### **6.1 Results of Previous Environmental Investigations**

The results of Phase II ESA sampling program which was performed in December 2007 and January 2008 and the RI sampling program which was performed in November 2009 indicated that VOCs, SVOCs (carcinogenic PAHs), metals, and PCBs are present in the soil at concentrations exceeding the 6 NYCRR Part 375-6 Unrestricted Use SCOs. The results of the RI sampling program indicated the presence of COC's which included arsenic, lead, mercury, PCBs, and SVOCs (carcinogenic PAHs) with concentrations exceeding the Unrestricted Use SCOs.

## **6.2 Purpose of Supplemental Remedial Investigation**

The purpose of the SRI was to determine the nature and extent of contamination and to further quantify and delineate surface and subsurface impacted soil identified during the December 2007 and January 2008, and the November 2009 soil sampling activities.

The scope of work as presented in the SRI and SSRI included the following:

- Twenty-seven (27) soil borings advanced at various on site locations across the to complete the 50' x 50' sampling grid;
- The first soil sample was to be collected from equal portions of the soil boring from 0 to 2 ft-bgs and the other half from 2 to 4 ft-bgs. The second soil sample was to be collected from the most contaminated depth below 4 ft-bgs determined visually by staining and/or by the highest PID reading or if the second soil sample depth could not be determined visually or using the PID, the default sample collection depth will be just above the water table; and,
- All soil samples were to be analyzed for PCBs by EPA Method 8082 and TAL metals by EPA Method 6010/7471 in conformance with ASP Category B protocol. In addition, soil samples were also collected and analyzed for TCLP by EPA Method 1311.

The objectives of the SRI sampling program were to:

- further characterize and delineate surface subsurface soil impacts related to arsenic, lead, mercury, and PCB contaminated soil;
- provide data for development of the SRI Report;
- provide site-specific information for the development and selection of remedial alternative to reduce and/or eliminate the toxicity, volume, or mobility of site-specific contaminants.

### **6.3 Supplemental Remedial Investigation Work Plan**

The SRI sampling program included the collection of: twenty-seven (27) soil borings advanced at various on site locations across the to complete the 50' x 50' sampling grid; the first soil sample was collected from equal portions of the soil boring from 0 to 2 ft-bgs and the other half from 2 to 4 ft-bgs and the second soil sample was collected from the most contaminated depth below 4 ft-bgs determined visually by staining and/or by the highest PID reading or if the second soil sample depth could not be determined visually or using the PID, the default sample collection depth will be just above the water table. All soil samples were analyzed for PCBs and TAL Metals in conformance with ASP Category B protocol. In addition, six (6) soil samples were also collected for TCLP analyses (arsenic only).

#### **6.3.1 Soil Sample Results**

The soil sample results indicate that TAL Metal and PCB soil concentrations are present in surface and subsurface soils at concentrations exceeding the Unrestricted Use SCOs are present in surface and subsurface soils in most soil borings completed during the SRI. The detected soil contamination is located throughout the Site to depths of 11 ft-bgs or greater, which is the approximate depth of groundwater beneath the Site. Several soil borings containing lead concentrations exceeding the Unrestricted Use SCOs may fail TCLP analysis and will require proper disposal to an appropriate disposal facility. Potentially hazardous levels of PCBs were not detected during the performance of the SRI sampling program.

The results of the arsenic TCLP analysis indicated that concentrations exceeding the RCRA Hazardous Waste Regulatory Level of 5 mg/L were not present in any of the six (6) samples collected for analysis. The analytical data demonstrated that arsenic contaminated soil at concentrations at or below 140 mg/kg have recorded no detection for TCLP analyses in all concurrent sampling pairs.

## **6.4 Purpose of the Second Supplemental RI**

The purpose of the SSRI sampling program was to further delineate PCB contamination at the Site to meet TSCA requirements for disposal purposes, in accordance with discussions with EPA representatives. The SSRI was also conducted to further delineate PCBs concentrations exceeding either the HOA criteria of 10 mg/kg or the LOA criteria of 25 mg/kg within individual 50' x 50' sampling grids by subdividing the sampling grid into four (4) 25' x 25' sampling grids for the collection of delineation samples.

The scope of work as presented in the SSRI WP included the following:

- Thirty-eight (38) soil borings advanced within individual 50' x 50' sampling grids by subdividing the sampling grid into four (4) 25' x 25' sampling grids;
- The first soil sample was to be collected from equal portions of the soil boring from 0 to 2 ft-bgs and the other half from 2 to 4 ft-bgs. The second soil sample was to be collected from the most contaminated depth below 4 ft-bgs determined visually by staining and/or by the highest PID reading or if the second soil sample depth could not be determined visually or using the PID, the default sample collection depth will be just above the water table; and,
- All soil samples were to be analyzed for PCBs by EPA Method 8082 and select soil samples were analyzed for arsenic or lead by EPA Method 6010B in conformance with ASP Category B protocol. In addition, twenty (20) soil samples were to be analyzed for TCLP by EPA Method 1311.

The objectives of the SSRI sampling program were to:

- further characterize the nature and extent of contamination and to delineate surface and subsurface soil impacts related to PCB contaminated soil;
- provide data for development of the SRI and SSRI Report; and,
- provide site-specific information for the development and selection of remedial alternative to reduce and/or eliminate the toxicity, volume, or mobility of site-specific contaminants.

## **6.5 Second Supplemental Remedial Investigation Work Plan**

The SSRI sampling program included the collection of: thirty-eight (38) soil borings advanced at various on site locations across the to complete the 50' x 50' sampling grid; the first soil sample was collected from equal portions of the soil boring from 0 to 2 ft-bgs and the other half from 2 to 4 ft-bgs and the second soil sample was collected from the most contaminated depth below 4 ft-bgs determined visually by staining and/or by the highest PID reading or if the second soil sample depth could not be determined visually or using the PID, the default sample collection depth will be just above the water table. All soil samples were analyzed for PCBs and select soil samples were analyzed for TAL metals in conformance with ASP Category B protocol. In addition, selected soil samples were also collected for TCLP analyses (arsenic and lead only).

### **6.5.1 Soil Sample Results**

The soil sample results indicate that TAL Metal and PCB soil concentrations are present at concentrations exceeding the Unrestricted Use SCOs and arsenic concentrations are present at concentrations exceeding the Restricted Use - Protection of Groundwater SCOs in surface and subsurface soils in most soil borings completed during the SSRI. The detected soil contamination is located throughout the Site to depths 11 ft-bgs or greater, which is the approximate depth of groundwater beneath the Site.

Potentially hazardous levels of lead were detected at one (1) soil sample location collected during the SSRI. Potentially hazardous levels or concentrations of PCBs exceeding the Industrial SCOs were detected at one (1) soil sample location collected during the SSRI.

The results of the TCLP analysis indicated that arsenic concentrations exceeding the RCRA Hazardous Waste Regulatory Level of 5 mg/L were not present in any of the 10 samples collected for analysis. The analytical data demonstrated that arsenic contaminated soil at concentrations at or below 140 mg/kg have recorded no detection for TCLP analyses in all concurrent sampling pairs.

The results of the TCLP analysis indicated that lead concentrations exceeding the RCRA Hazardous Waste Regulatory Level of 5 mg/L were present at one (1) of the 11 samples collected for analysis. Soil sample SB-8-2 (0-4) recorded a concentration of 21,700 mg/kg which resulted in a TCLP concentration of 5.37 mg/L which exceeds the RCRA Hazardous Waste Regulatory Level of 5 mg/L. This sample location was the only sample collected from the Site which recorded a TCLP concentration exceeding the RCRA Hazardous Waste Regulatory Level of 5 mg/L.

Although, lead contamination in soil appears to be leaching, the results of the dissolved groundwater analysis indicated non-detect for lead. Evidence does suggest that residual contamination levels of lead could migrate to groundwater but does not appear to pose a significant threat to public health or the environment, as documented in the dissolved groundwater analytical results.

## **6.6 Remedial Work Plan**

The remedial cleanup objectives of the BCP are to remove or eliminate significant threats to public health and the environment, as well as implementing soil cleanup levels that are consistent with current and intended Site use. A RWP will be developed to assess applicable remedial alternatives for the Site to address COCs in soil, groundwater, and soil gas.

The environmental investigations conducted at the Site since 2003 have identified COCs in the soil, soil gas, and groundwater. In soil, arsenic, lead, mercury, PCBs, and SVOCs (carcinogenic PAHs) have been detected at concentrations exceeding 6 NYCRR 375 Unrestricted and Restricted Use SCOs predominantly in the surface and in the subsurface soils.

Where concentrations of contaminants in soil exceed the Restricted Use - Protection of Groundwater SCOs for arsenic and the Restricted Use SCOs for lead, mercury, PCBs, and SVOCs (carcinogenic PAHs), a combination of soil removal and an “engineered cover system” will be evaluated to prevent exposures in accordance with restricted use, as well as being

protective of human health and the environment. The COCs expected to remain on-site as are arsenic, lead, mercury, and SVOCs (carcinogenic PAHs) which will be further evaluated in the RWP to determine their potential to migrate to other environmental media and the appropriate remedial strategy to prevent exposures in accordance with restricted use.

Arsenic, lead (total analysis only), and VOCs have been detected at concentrations exceeding the TOGS standards in groundwater, and VOC concentrations have been detected in soil gas but below the NYSDOH's Soil Vapor/Indoor Air Matrix (Guidance for Evaluating Soil Vapor Intrusion in the State of New York, 2006).

Where concentrations of contaminants in groundwater exceed the TOGS standards, groundwater treatment and monitored natural attenuation (MNA) will be evaluated in the RWP to develop an appropriate remedial strategy for groundwater. For soil gas concentrations exceeding the Air guideline values derived by the NYSDOH, soil gas extraction and mitigation will be evaluated in the RWP to develop an appropriate remedial strategy for soil gas.

## **TABLES**



TABLE 3-1



**SUPPLEMENTAL REMEDIAL INVESTIGATION SAMPLING PROGRAM**  
**SAMPLING DESIGNATION AND LABORATORY SAMPLING AND ANALYSIS**

**FRITO-LAY**  
**202-218 MORGAN AVENUE - C224133**  
**BROOKLYN, NEW YORK**

Sample Designation	Sample Designation	Proposed Sampling Depths*		Soil Sample Analysis		
				PCBs	TAL Metals	TCLP - Arsenic
SB-29	SB-29 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-29 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-30	SB-30 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-30 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-31	SB-31 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-31 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-32	SB-32 (0-4)	0 to 2 feet	2 to 4 feet	x	x	x
	SB-32 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-33	SB-33 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-33 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-34	SB-34 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-34 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-35	SB-35 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-35 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-36	SB-36 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-36 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-37	SB-37 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-37 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-38	SB-38 (0-4)	0 to 2 feet	2 to 4 feet	x	x	x
	SB-38 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-39	SB-39 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-39 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-40	SB-40 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-40 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-41	SB-41 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-41 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-42	SB-42 (0-4)	0 to 2 feet	2 to 4 feet	x	x	x
	SB-42 (4-11)	4 to 1 foot agw	N/A	x	x	x
SB-43	SB-43 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-43 (4-11)	4 to 1 foot agw	N/A	x	x	x
SB-44	SB-44 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-44 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-45	SB-45 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-45 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-46	SB-46 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-46 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-47	SB-47 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-47 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-48	SB-48 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-48 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-49	SB-49 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-49 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-50	SB-50 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-50 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-51	SB-51 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-51 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-52	SB-52 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-52 (4-11)	4 to 1 foot agw	N/A	x	x	
SB-53	SB-53 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-53 (4-11)	4 to 1 foot agw	N/A	x	x	x
SB-54	SB-54 (0-4)	0 to 2 feet	2 to 4 feet	x	x	
	SB-54 (4-11)	4 to 1 foot agw	N/A	x	x	

**Notes:**

- \* The first soil sample at each location was composed of equal portions from the 0 to 2 foot and 2 to 4 foot sample intervals.  
The second soil sample was collected from 4 ft-bgs to 1 foot above the groundwater table.

TABLE 3-2  
SOIL ANALYTICAL RESULTS - TAL METALS  
Restricted Use - Groundwater Comparison

SUPPLEMENTAL REMEDIAL INVESTIGATION  
FRITO-LAY  
202-218 MORGAN AVENUE - C224133  
BROOKLYN, NY

Compound	NYSDEC Brownfields Restricted Use Protection of Groundwater Soil Cleanup Objective	SB-29		SB-30		SB-31		SB-32		SB-33		SB-34		SB-35		SB-36	
		SB-29 (0-4)	SB-29 (4-10)	SB-30 (0-4)	SB-30 (4-10)	SB-31 (0-4)	SB-31 (4-10)	SB-32 (0-4)	SB-32 (4-10)	SB-33 (0-4)	SB-33 (4-10)	SB-34 (0-4)	SB-34 (4-10)	SB-35 (0-4)	SB-35 (4-10)	SB-36 (0-4)	SB-36 (6-10)
Date		8/6/2010		8/9/2010		8/6/2010		8/10/2010		8/9/2010		8/9/2010		8/6/2010		8/9/2010	
TAL Metals (mg/kg) Method 6010/7471																	
Aluminum	---	5360	6570	8690	7530	17800	7920	9060	6800	8490	6940	10800	13600	8840	7750	10900	12600
Antimony	---	52	57	11.6	11.3 U	19.2	10.4	20.6	8 J	6 J	10.2 J	11.3 U	11 U	8.3	34.3	32.4	8.9 J
Arsenic	16	1160	1140	23.9	27.6	10.9	6.7	144	26.6	26.7	21.3	16.3	24.7	16.2	22.5	16.4	12.3
Barium	820	427	1190	808	455	794	444	3900	1090	1200	819	675	599	439	807	1090	817
Beryllium	47	0.43	0.42 J	2.2 U	2.3 U	2.2 U	0.3 J	2.1 U	2.3 U	2.1 U	2.2 U	2.3 U	2.2 U	0.33 J	0.32 J	2.4 U	2.5 U
Cadmium	7.5	18.4	13.5	15.6	9.1	32.8	9.9	14	6.4	13	11.7	18.3	19.7	25	29	41.2	18
Calcium	---	38900 B	48500 B	49900	37500	35600 B	48700 B	48200	36000	50700	29200	55000	50800	59600 B	27500 B	67700	63100
Chromium*	19	71.3	101	120	76.5	483	142	222	90.2	177	138	486	304	257	155	142	184
Cobalt	---	11.8	11.8	14 J	11.4 J	28 J	10.2 J	19.9 J	13.8 J	17.3 J	14.5 J	16.2 J	16.1 J	17.1	18.2	37.9 J	20.6 J
Copper	1720	7060 B	5480 B	860	765	19800 B	1100 B	1170	643	607	1480	4460	923	4210 B	1520 B	10000	2340
Iron	---	71700	40700	82800 B	58900 B	75800	35200	134000	82400	94000 B	88400 B	74500 B	109000 B	91900	132000	104000 B	82900 B
Lead	450	3830	2050	5410	1630	2060	1220	17000	6580	3510	6070	1740	2350	1580	5120	1580	4490
Magnesium	---	3870	5180	6560	4580 J	6060	5500	4480 J	3380 J	9020	7640	6610	6730	5090	3980	8130	6230 J
Manganese	2000	610	418	756	645	673	486	815	684	599	592	640	784	694	810	706	672
Mercury	0.73	10	4.2	4.9	1.7	9.8	6	14.2	4.5	3.2	3.7	12.6	4.9	5.8	4.7	7.1	9.1
Nickel	130	120	150	82.9	140	331	90.7	142	76.3	179	254	330	245	124	332	189	204
Potassium	---	545 J	843 J	1030 J	1040 J	622 J	781 J	1570 J	903 J	2180 J	1060 J	1140 J B	882 J B	504 J	594 J	916 J B	785 J B
Selenium	4	8.4	6.3	10.9 U	11.3 U	10.9 U	2.3 U	16.4	11.3 U	10.5 U	10.8 U	11.3 U	28.4	19.5	9.2	12.1 U	12.7 U
Silver	8.3	5.9	4.3	10.9 U	11.3 U	7.9 J	2 J	2.1 J	11.3 U	0.8 J	1.9 J	2.5 J	2.3 J	2.5	1.9 J	3.7 J	2.6 J
Sodium	---	324 J	1210	505 J	5640 U	5450 U	383 J	3540 J	795 J	5270 U	5400 U	605 J	531 J	381 J	367 J	799 J	742 J
Thallium	---	5.4 U	2.2 U	10.9 U	11.3 U	10.9 U	2.3 U	10.6 U	11.3 U	10.5 U	10.8 U	11.3 U	11 U	6.2 U	2.3 U	12.1 U	12.7 U
Vanadium	---	468	54.9	75	53.5 J	31 J	26.8	202	67.7	67.5	64.6	36.1 J	42.4 J	35.2	51.8	29 J	67.4
Zinc	2480	2960	5310	3080	2410	14200	6240	11600	2740	3060	12400	4570	3430	8290	15400	11700	5550

Compound	NYSDEC Brownfields Restricted Use Protection of Groundwater Soil Cleanup Objective	SB-37		SB-38		SB-39		SB-40		SB-41		SB-42		SB-43		SB-44	
		SB-37 (0-4)	SB-37 (4-10)	SB-38 (0-4)	SB-38 (4-10)	SB-39 (0-4)	SB-39 (4-10)	SB-40 (0-4)	SB-40 (4-10)	SB-41 (0-4)	SB-41 (4-11)	SB-42 (0-4)	SB-42 (4-10)	SB-43 (0-4)	SB-43 (4-8)	SB-44 (0-4)	SB-44 (4-10)
Date		8/10/2010		8/6/2010		8/6/2010		8/10/2010		8/4/2010		8/5/2010		8/5/2010		8/6/2010	
TAL Metals (mg/kg) Method 6010/7471																	
Aluminum	---	6550	8940	8730	6620	19800	9180	7680	8310	4010	5,760	14000	5190	12400	12300	12200	13300
Antimony	---	11.7 U	11.3 U	11.2	11.3	33.2	36.3	11.6 U	11.5 U	2 U	1 J	6.6 J	1.2 J	24.9	47.8	187	24.8
Arsenic	16	9.5	11.4	45.9	25.8	11.6	20.2	12.6	14.8	3.7	8.8	67.4	35.8	21	29.5	10.2 J	32.5
Barium	820	656	355	1080	482	961	1090	376	371	109	145	785	218	767	853	693	950
Beryllium	47	2.3 U	2.3 U	0.22 J	0.28 J	2.3 U	0.98 J	2.3 U	2.3 U	0.4 U	0.45 U	2.4 U	0.42 U	2.4 U	2.2 U	5.6 U	2.5 U
Cadmium	7.5	8.5	2.6 J	17	28	50.7	30.5	6	3 J	1.8	1.3	29.5	3.7	27.2	24.8	39.2	37
Calcium	---	42100	29300	64700 B	63200 B	51700 B	55700 B	30900	46500	44,900	28,600	49700	75100	57800	46000	34400 B	34200 B
Chromium*	19	198	52.5	406	198	305	201	54	66.7	24.6	36.2	823	163	174	260	173	335
Cobalt	---	11 J	8.4 J	14.2	17.4	38.6 J	30.3 J	9.8	9.2 J	7.9 J	9.9 J	82.3	11	21.3 J	22.6 J	19 J	26.7 J
Copper	1720	635	304	2800 B	864 B	12800 B	1470 B	1490	562	152	137	1150	221	11700	1290	4540 B	3690 B
Iron	---	79700	35500	57200	119000	67500	136000	44400	39800	35,800	20,100	111000	30800	70700	127000	62800	155000
Lead	450	3840	993	1450	2870	2180	4850	1000	857	388	521	6240	768	2230	4080	2950	5050
Magnesium	---	4480 J	4200 J	7690	7690	5540 J	6760	4140 J	6820	21,200	6,660	6320	18800	6660	8340	3370 J	6790
Manganese	2000	595	349	475	871	767	942	481	537	263	229	945	312	594	983	491	1210
Mercury	0.73	5.3	2	4.1	6.9	9.9	14.3	0.17	1.2	1	1.4	0.12	0.93	5.7	6	11.6	11.7
Nickel	130	93.4	42.4 J	101	410	327	168	91.3	53.5	29	27	796	182	328	257	153	287
Potassium	---	569 J	1190 J	932 J	476 J	547 J	1340 J	937 J	1140 J	656 J	906 J	769 J	789 J	825 J	5410 U	13900 U	533 J
Selenium	4	11.7 U	11.3 U	4.8	9.9	11.6 U	15.3	11.6 U	11.5 U	1.4 J	2.2 U	17.3	2.1 U	11.8 U	11.7	27.8 U	12 J
Silver	8.3	11.7 U	0.91 J	3	24.8	3.3 J	3.3 J	1.2 J	11.5 U	0.34 J	0.52 J	5.3 J	1.1 J	3.3 J	3.4 J	3.6 J	5.8 J
Sodium	---	5830 U	5630 U	341 J	514 J	425 J	3190 J	5810 U	380 J	273 J	564 J	656 J	305 J	2600 J	1720 J	13900 U	573 J
Thallium	---	11.7 U	11.3 U	2.2 U	2.3 U	11.6 U	11.1 U	11.6 U	11.5 U	2 U	2.2 U	12.1 U	2.1 U	11.8 U	10.8 U	27.8 U	12.5 U
Vanadium	---	104	55.4 J	25.3	64.5	25.2 J	65.6	156	86.8	65.5	31.4	110	55.9	38 J	51.6 J	29 J	141
Zinc	2480	3650	762	6430	9040	18700	6150	1700	857	735	394	7350	1650	9850	6030	8150	7590

NOTES:  
NYSDEC - New York State Department of Environmental Conservation  
Sample analysis by Test America of Edison, NJ  
All units are in milligrams per kilogram(mg/kg) - parts per million (ppm)  
Values in **bold** exceed the NYSDEC Brownfields Soil Cleanup Objective for Protection of Groundwater  
U = Analyte not detected  
B = Compound was found in the blank and sample.  
J = The reported value was obtained from a reading that was less than the Contract Required Detection Limit, but greater than or equal to the Instrument Detection Limit  
D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range  
... - No standard available  
\*Chromium standard is for Hexavalent/Trivalent Chromium  
UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate

TABLE 3-2  
SOIL ANALYTICAL RESULTS - TAL METALS  
Restricted Use - Groundwater Comparison

SUPPLEMENTAL REMEDIAL INVESTIGATION  
FRITO-LAY  
202-218 MORGAN AVENUE - C224133  
BROOKLYN, NY

Compound	NYSDEC Brownfields Restricted Use Protection of Groundwater Soil Cleanup Objective	SB-45		SB-46		SB-47		SB-48		SB-49		SB-50		SB-51		SB-52	
		SB-45 (0-4)	SB-45 (4-10)	SB-46 (0-4)	SB-46 (4-10)	SB-47 (0-4)	SB-47 (4-10)	SB-48 (0-4)	SB-48 (4-6)	SB-49 (0-4)	SB-49 (4-10)	SB-50 (0-4)	SB-50 (4-10)	SB-51 (0-4)	SB-51 (4-8)	SB-52 (0-4)	SB-52 (4-10)
Date		8/4/2010		8/9/2010		8/5/2010				8/4/2010		8/9/2010		8/9/2010		8/6/2010	
TAL Metals (mg/kg) Method 6010/7471																	
Aluminum	---	7,200	6,280	12100	14800	15100	9750	12000	11500	6,350	6,970	13900	6430	5890	8630	12800	6740
Antimony	---	1.3 J	1.3 J	13.6	11.4	21.7	5.6 J	14.4	13.7	2.1 U	2.1 U	10.4 U	10.7 U	7.4 J	10.6 U	21.7	4.5
Arsenic	16	10.1	8.8	12.3	20.1	69.6	18.5	17.2	18.3	7.3	6.2	23.2	39.8	12.7	7.8	15.4	9.9
Barium	820	272	92.6	1020	1380	849	1090	773	970	191	114	714	311	563	437	1150	498
Beryllium	47	0.26 J	0.3 J	2.4 U	2.2 U	1.3 J	2.2 U	2.1 U	2.3 U	0.27 J	0.38 J	2.1 U	2.1 U	2 U	2.1 U	0.37 J	0.23 J
Cadmium	7.5	3.3	0.84 J	38.3	50.5	20.5	32.8	38.2	41.5	0.81 J	0.8 J	21.4	5 J	3.9 J	2 J	24.7	8.3
Calcium	---	26,400	109,000	49200	39100	41600	52400	39100 B	30200 B	62,800	26,500	59700	29500	74600	40900	72200 B	65100 B
Chromium*	19	61.3	30.1	450	327	276	297	278	301	51.1	27	118	112	82.8	26.6	834	149
Cobalt	---	26.4	8.6 J	24.6 J	25.3 J	17.2 J	20.6 J	45.5 J	32.3 J	5.6 J	6.1 J	10.9 J	7 J	10.9 J	6.9 J	21.8	9.6 J
Copper	1720	225	77	1150	1100	1260	1440	11200 B	3980 B	153	145	1140	688	1910	179	1910 B	2900 B
Iron	---	28,700	15,100	96900 B	120000 B	90300	101000	188000	182000	28,400	24,200	69300 B	34000 B	28100 B	23900 B	65300	37800
Lead	450	1,240	316	5110	8760	5810	6080	2330	4220	232	212	1720	662	1730	752	2200	898
Magnesium	---	6,310	17,000	8660	8400	5540 J	7250	4470 J	4180 J	22,000	9,650	6710	3110 J	14400	6240	6840	5470
Manganese	2000	297	176	994	905	741	912	1070	1140	349	344	544	397	230	301	527	338
Mercury	0.73	4.9	1	9.2	9.7	9.6	6	9.1	13.5	0.72	1	4.5	2.1	1	0.95	13.6	2.9
Nickel	130	50.1	19.3	353	273	201	168	292	350	51.8	19.9	92.6	42.2 J	69.2	24.8 J	280	90.4
Potassium	---	748 J	1,100	801 J B	988 J B	1260 J	509 J	488 J	437 J	896 J	935 J	2040 J	759 J	1360 J B	1240 J B	657 J	672 J
Selenium	4	1.1 J	2.2 U	12 U	11 U	11.7 U	11.5	14.9	11.5 U	2.1 U	2.1 U	194	10.7 U	9.9 U	10.6 U	7.2	64.7
Silver	8.3	0.73 J	0.48 J	8.5 J	4.4 J	4.3 J	3.3 J	4.8 J	5.2 J	0.77 J	0.49 J	1.6 J	1 J	9.9 U	0.94 J	3.8	1.5 J
Sodium	---	225 J	302 J	616 J	1250 J	1840 J	448 J	389 J	811 J	163 J	181 J	346 J	5360 U	906 J	5320 U	684 J	278 J
Thallium	---	2.2 U	2.2 U	12 U	11 U	11.7 U	11.1 U	10.7 U	11.5 U	2.1 U	2.1 U	10.4 U	10.7 U	9.9 U	10.6 U	2.2 U	2.2 U
Vanadium	---	56.8	26.6	66.2	70.5	98.6	85.1	35.5 J	68.9	35.6	35.4	58.6	25.6 J	15.2 J	23.8 J	36.4	32
Zinc	2480	757	257	9910	16400	7800	6130	12800	10600	408	331	3330	1520	1930	746	11300	4120

Compound	NYSDEC Brownfields Restricted Use Protection of Groundwater Soil Cleanup Objective	SB-53		SB-54		SB-55		DUP-1 (SB-42 0-4)	DUP-2 (SB-36 6-10)	DUP-3 (SB-32 0-4)								
		SB-53 (0-4)	SB-53 (4-10)	SB-54 (0-4)	SB-54 (4-10)	SB-55 (0-4)	SB-55 (4-10)	DUP-1 8/5/2010	DUP-2 8/9/2010	DUP-3 8/10/2010								
Date		8/5/2010		8/5/2010		8/10/2010		8/5/2010	8/9/2010	8/10/2010								
TAL Metals (mg/kg) Method 6010/7471																		
Aluminum	---	9430	9320	10500	14200	9100	8050	9240	21400	14700								
Antimony	---	7.4 J	11.3 U	5.4 J	47.1	11.3 U	10.8 U	7 J	12.2	47.1								
Arsenic	16	13.9	25.1	12.8	27.1	12.4	13.9	68.7	13.9	40.3								
Barium	820	907	652	1920	985	713	392	548	1230	4660								
Beryllium	47	2.3 U	2.3 U	1.3 U	2.3 U	2.3 U	2.2 U	2.4 U	2.4 U	2.4 U								
Cadmium	7.5	32.3	26.7	21.8	29.4	8.4	3.9 J	30.7	103	15.4								
Calcium	---	43000	63100	58100	63000	74000	38200	48000	39600	48400								
Chromium*	19	231	249	214	794	206	59.3	732	219	171								
Cobalt	---	75	18.4 J	21.1 J	47 J	12.3	8.6 J	66.1	23 J	19.9 J								
Copper	1720	2820	789	1560	1860	741	458	981	1900	1340								
Iron	---	96100	71300	81400	100000	84500	36000	109000	93300 B	129000								
Lead	450	2680	2330	1760	4530	3470	864	4220	2900	16700								
Magnesium	---	6160	9810	18800	5780	5530 J	3780 J	6500	7350	4990 J								
Manganese	2000	781	633	668	886	639	464	1020	718	871								
Mercury	0.73	4.3	7.9	12.6	8.5	5.4	1.5	7.9	10.2	15.5								
Nickel	130	190	162	205	800	290	40.2 J	1100	192	161								
Potassium	---	846 J	363 J	906 J	451 J	792 J	965 J	538 J	707 J B	2520 J								
Selenium	4	7.1 J	11.3 U	6.3 U	5.4 J	11.3 U	19.7	5.9 J	12.1 U	13.2								
Silver	8.3	4.8 J	2.9 J	3 J	4 J	2.6 J	10.8 U	4.1 J	22.6	2.3 J								
Sodium	---	702 J	1530 J	723 J	573 J	414 J	5420 U	514 J	761 J	6950								
Thallium	---	11.6 U	11.3 U	6.3 U	11.4 U	11.3 U	10.8 U	11.9 U	12.1 U	11.8 U								
Vanadium	---	47.5 J	71.3	29.5 J	55.3 J	105	46.2 J	92.9	48.9 J	217								
Zinc	2480	9110	3120	6250	7430	3240	905	5760	9920	14400								

NOTES:  
NYSDEC - New York State Department of Env  
Sample analysis by Test America of Edisor  
All units are in milligrams per kilogram(mg/kg)  
Values in **bold** exceed the NYSDEC Brownfiel  
U = Analyte not detected  
B = Compound was found in the blank and san  
J = The reported value was obtained from a rea  
but greater than or equal to the Instrument Dete  
D = The reported value is from a secondary ana  
... - No standard available  
\*Chromium standard is for Hexavalent/Trivaler  
UJ = The analyte was not detected above th

TABLE 3-3  
SOIL ANALYTICAL RESULTS - TAL METALS  
Unrestricted Use SCOs

SUPPLEMENTAL REMEDIAL INVESTIGATION  
FRITO-LAY  
202-218 MORGAN AVENUE - C224133  
BROOKLYN, NY

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objective	SB-29		SB-30		SB-31		SB-32		SB-33		SB-34		SB-35		SB-36	
		SB-29 (0-4)	SB-29 (4-10)	SB-30 (0-4)	SB-30 (4-10)	SB-31 (0-4)	SB-31 (4-10)	SB-32 (0-4)	SB-32 (4-10)	SB-33 (0-4)	SB-33 (4-10)	SB-34 (0-4)	SB-34 (4-10)	SB-35 (0-4)	SB-35 (4-10)	SB-36 (0-4)	SB-36 (6-10)
Date		8/6/2010		8/9/2010		8/6/2010		8/10/2010		8/9/2010		8/9/2010		8/6/2010		8/9/2010	
TAL Metals (mg/kg) Method 6010/7471																	
Aluminum	---	5360	6570	8690	7530	17800	7920	9060	6800	8490	6940	10800	13600	8840	7750	10900	12600
Antimony	---	52	57	11.6	11.3 U	19.2	10.4	20.6	8 J	6 J	10.2 J	11.3 U	11 U	8.3	34.3	32.4	8.9 J
Arsenic	13	1160	1140	23.9	27.6	10.9	6.7	144	26.6	26.7	21.3	16.3	24.7	16.2	22.5	16.4	12.3
Barium	350	427	1190	808	455	794	444	3900	1090	1200	819	675	599	439	807	1090	817
Beryllium	7.2	0.43	0.42 J	2.2 U	2.3 U	2.2 U	0.3 J	2.1 U	2.3 U	2.1 U	2.2 U	2.3 U	2.2 U	0.33 J	0.32 J	2.4 U	2.5 U
Cadmium	2.5	18.4	13.5	15.6	9.1	32.8	9.9	14	6.4	13	11.7	18.3	19.7	25	29	41.2	18
Calcium	---	38900 B	48500 B	49900	37500	35600 B	48700 B	48200	36000	50700	29200	55000	50800	59600 B	27500 B	67700	63100
Chromium*	1 / 30*	71.3	101	120	76.5	483	142	222	90.2	177	138	486	304	257	155	142	184
Cobalt	---	11.8	11.8	14 J	11.4 J	28 J	10.2 J	19.9 J	13.8 J	17.3 J	14.5 J	16.2 J	16.1 J	17.1	18.2	37.9 J	20.6 J
Copper	50	7060 B	5480 B	860	765	19800 B	1100 B	1170	643	607	1480	4460	923	4210 B	1520 B	10000	2340
Iron	---	71700	40700	82800 B	58900 B	75800	35200	134000	82400	94000 B	88400 B	74500 B	109000 B	91900	132000	104000 B	82900 B
Lead	63	3830	2050	5410	1630	2060	1220	17000	6580	3510	6070	1740	2350	1580	5120	1580	4490
Magnesium	---	3870	5180	6560	4580 J	6060	5500	4480 J	3380 J	9020	7640	6610	6730	5090	3980	8130	6230 J
Manganese	1600	610	418	756	645	673	486	815	684	599	592	640	784	694	810	706	672
Mercury	0.18	10	4.2	4.9	1.7	9.8	6	14.2	4.5	3.2	3.7	12.6	4.9	5.8	4.7	7.1	9.1
Nickel	30	120	150	82.9	140	331	90.7	142	76.3	179	254	330	245	124	332	189	204
Potassium	---	545 J	843 J	1030 J	1040 J	622 J	781 J	1570 J	903 J	2180 J	1060 J	1140 J B	882 J B	504 J	594 J	916 J B	785 J B
Selenium	3.9	8.4	6.3	10.9 U	11.3 U	10.9 U	2.3 U	16.4	11.3 U	10.5 U	10.8 U	11.3 U	28.4	19.5	9.2	12.1 U	12.7 U
Silver	2	5.9	4.3	10.9 U	11.3 U	7.9 J	2 J	2.1 J	11.3 U	0.8 J	1.9 J	2.5 J	2.3 J	2.5	1.9 J	3.7 J	2.6 J
Sodium	---	324 J	1210	505 J	5640 U	5450 U	383 J	3540 J	795 J	5270 U	5400 U	605 J	531 J	381 J	367 J	799 J	742 J
Thallium	---	5.4 U	2.2 U	10.9 U	11.3 U	10.9 U	2.3 U	10.6 U	11.3 U	10.5 U	10.8 U	11.3 U	11 U	6.2 U	2.3 U	12.1 U	12.7 U
Vanadium	---	468	54.9	75	53.5 J	31 J	26.8	202	67.7	67.5	64.6	36.1 J	42.4 J	35.2	51.8	29 J	67.4
Zinc	109	2960	5310	3080	2410	14200	6240	11600	2740	3060	12400	4570	3430	8290	15400	11700	5550

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objective	SB-37		SB-38		SB-39		SB-40		SB-41		SB-42		SB-43		SB-44	
		SB-37 (0-4)	SB-37 (4-10)	SB-38 (0-4)	SB-38 (4-10)	SB-39 (0-4)	SB-39 (4-10)	SB-40 (0-4)	SB-40 (4-10)	SB-41 (0-4)	SB-41 (4-11)	SB-42 (0-4)	SB-42 (4-10)	SB-43 (0-4)	SB-43 (4-8)	SB-44 (0-4)	SB-44 (4-10)
Date		8/10/2010		8/6/2010		8/6/2010		8/10/2010		8/4/2010		8/5/2010		8/5/2010		8/6/2010	
TAL Metals (mg/kg) Method 6010/7471																	
Aluminum	---	6550	8940	8730	6620	19800	9180	7680	8310	4010	5,760	14000	5190	12400	12300	12200	13300
Antimony	---	11.7 U	11.3 U	11.2	11.3	33.2	36.3	11.6 U	11.5 U	2 U	1 J	6.6 J	1.2 J	24.9	47.8	187	24.8
Arsenic	13	9.5	11.4	45.9	25.8	11.6	20.2	12.6	14.8	3.7	8.8	67.4	35.8	21	29.5	10.2 J	32.5
Barium	350	656	355	1080	482	961	1090	376	371	109	145	785	218	767	853	693	950
Beryllium	7.2	2.3 U	2.3 U	0.22 J	0.28 J	2.3 U	0.98 J	2.3 U	2.3 U	0.4 U	0.45 U	2.4 U	0.42 U	2.4 U	2.2 U	5.6 U	2.5 U
Cadmium	2.5	8.5	2.6 J	17	28	50.7	30.5	6	3 J	1.8	1.3	29.5	3.7	27.2	24.8	39.2	37
Calcium	---	42100	29300	64700 B	63200 B	51700 B	55700 B	30900	46500	44,900	28,600	49700	75100	57800	46000	34400 B	34200 B
Chromium*	1 / 30*	198	52.5	406	198	305	201	54	66.7	24.6	36.2	823	163	174	260	173	335
Cobalt	---	11 J	8.4 J	14.2	17.4	38.6 J	30.3 J	9.8	9.2 J	7.9 J	9.9 J	82.3	11	21.3 J	22.6 J	19 J	26.7 J
Copper	50	635	304	2800 B	864 B	12800 B	1470 B	1490	562	152	137	1150	221	11700	1290	4540 B	3690 B
Iron	---	79700	35500	57200	119000	67500	136000	44400	39800	35,800	20,100	111000	30800	70700	127000	62800	155000
Lead	63	3840	993	1450	2870	2180	4850	1000	857	388	521	6240	768	2230	4080	2950	5050
Magnesium	---	4480 J	4200 J	7690	7690	5540 J	6760	4140 J	6820	21,200	6,660	6320	18800	6660	8340	3370 J	6790
Manganese	1600	595	349	475	871	767	942	481	537	263	229	945	312	594	983	491	1210
Mercury	0.18	5.3	2	4.1	6.9	9.9	14.3	0.17	1.2	1	1.4	0.12	0.93	5.7	6	11.6	11.7
Nickel	30	93.4	42.4 J	101	410	327	168	91.3	53.5	29	27	796	182	328	257	153	287
Potassium	---	569 J	1190 J	932 J	476 J	547 J	1340 J	937 J	1140 J	656 J	906 J	769 J	789 J	825 J	5410 U	13900 U	533 J
Selenium	3.9	11.7 U	11.3 U	4.8	9.9	11.6 U	15.3	11.6 U	11.5 U	1.4 J	2.2 U	17.3	2.1 U	11.8 U	11.7	27.8 U	12 J
Silver	2	11.7 U	0.91 J	3	2.2 J	24.8	3.3 J	1.2 J	11.5 U	0.34 J	0.52 J	5.3 J	1.1 J	3.3 J	3.4 J	3.6 J	5.8 J
Sodium	---	5830 U	5630 U	341 J	514 J	425 J	3190 J	5810 U	380 J	273 J	564 J	656 J	305 J	2600 J	1720 J	13900 U	573 J
Thallium	---	11.7 U	11.3 U	2.2 U	2.3 U	11.6 U	11.1 U	11.6 U	11.5 U	2 U	2.2 U	12.1 U	2.1 U	11.8 U	10.8 U	27.8 U	12.5 U
Vanadium	---	104	55.4 J	25.3	64.5	25.2 J	65.6	156	86.8	65.5	31.4	110	55.9	38 J	51.6 J	29 J	141
Zinc	109	3650	762	6430	9040	18700	6150	1700	857	735	394	7350	1650	9850	6030	8150	7590

NOTES:  
NYSDEC - New York State Department of Environmental Conservation  
Sample analysis by Test America of Edison, NJ  
All units are in milligrams per kilogram(mg/kg) - parts per million (ppm)  
Values in **bold** exceed the NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives  
U = Analyte not detected  
B = Compound was found in the blank and sample.  
J = The reported value was obtained from a reading that was less than the Contract Required Detection Limit, but greater than or equal to the Instrument Detection Limit  
D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range  
... - No standard available  
\*Chromium standard is for Hexavalent/Trivalent Chromium  
UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate

TABLE 3-3  
SOIL ANALYTICAL RESULTS - TAL METALS  
Unrestricted Use SCOs

SUPPLEMENTAL REMEDIAL INVESTIGATION  
FRITO-LAY  
202-218 MORGAN AVENUE - C224133  
BROOKLYN, NY

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objective	SB-45		SB-46		SB-47		SB-48		SB-49		SB-50		SB-51		SB-52	
		SB-45 (0-4)	SB-45 (4-10)	SB-46 (0-4)	SB-46 (4-10)	SB-47 (0-4)	SB-47 (4-10)	SB-48 (0-4)	SB-48 (4-6)	SB-49 (0-4)	SB-49 (4-10)	SB-50 (0-4)	SB-50 (4-10)	SB-51 (0-4)	SB-51 (4-8)	SB-52 (0-4)	SB-52 (4-10)
Date		8/4/2010		8/9/2010		8/5/2010				8/4/2010		8/9/2010		8/9/2010		8/6/2010	
TAL Metals (mg/kg) Method 6010/7471																	
Aluminum	---	7,200	6,280	12100	14800	15100	9750	12000	11500	6,350	6,970	13900	6430	5890	8630	12800	6740
Antimony	---	1.3 J	1.3 J	13.6	11.4	21.7	5.6 J	14.4	13.7	2.1 U	2.1 U	10.4 U	10.7 U	7.4 J	10.6 U	21.7	4.5
Arsenic	13	10.1	8.8	12.3	20.1	69.6	18.5	17.2	18.3	7.3	6.2	23.2	39.8	12.7	7.8	15.4	9.9
Barium	350	272	92.6	1020	1380	849	1090	773	970	191	114	714	311	563	437	1150	498
Beryllium	7.2	0.26 J	0.3 J	2.4 U	2.2 U	1.3 J	2.2 U	2.1 U	2.3 U	0.27 J	0.38 J	2.1 U	2.1 U	2 U	2.1 U	0.37 J	0.23 J
Cadmium	2.5	3.3	0.84 J	38.3	50.5	20.5	32.8	38.2	41.5	0.81 J	0.8 J	21.4	5 J	3.9 J	2 J	24.7	8.3
Calcium	---	26,400	109,000	49200	39100	41600	52400	39100 B	30200 B	62,800	26,500	59700	29500	74600	40900	72200 B	65100 B
Chromium*	1 / 30*	61.3	30.1	450	327	276	297	278	301	51.1	27	118	112	82.8	26.6	834	149
Cobalt	---	26.4	8.6 J	24.6 J	25.3 J	17.2 J	20.6 J	45.5 J	32.3 J	5.6 J	6.1 J	10.9 J	7 J	10.9 J	6.9 J	21.8	9.6 J
Copper	50	225	77	1150	1100	1260	1440	11200 B	3980 B	153	145	1140	688	1910	179	1910 B	2900 B
Iron	---	28,700	15,100	96900 B	120000 B	90300	101000	188000	182000	28,400	24,200	69300 B	34000 B	28100 B	23900 B	65300	37800
Lead	63	1,240	316	5110	8760	5810	6080	2330	4220	232	212	1720	662	1730	752	2200	898
Magnesium	---	6,310	17,000	8660	8400	5540 J	7250	4470 J	4180 J	22,000	9,650	6710	3110 J	14400	6240	6840	5470
Manganese	1600	297	176	994	905	741	912	1070	1140	349	344	544	397	230	301	527	338
Mercury	0.18	4.9	1	9.2	9.7	9.6	6	9.1	13.5	0.72	1	4.5	2.1	1	0.95	13.6	2.9
Nickel	30	50.1	19.3	353	273	201	168	292	350	51.8	19.9	92.6	42.2 J	69.2	24.8 J	280	90.4
Potassium	---	748 J	1,100	801 J B	988 J B	1260 J	509 J	488 J	437 J	896 J	935 J	2040 J	759 J	1360 J B	1240 J B	657 J	672 J
Selenium	3.9	1.1 J	2.2 U	12 U	11 U	11.7 U	11.5	14.9	11.5 U	2.1 U	2.1 U	194	10.7 U	9.9 U	10.6 U	7.2	64.7
Silver	2	0.73 J	0.48 J	8.5 J	4.4 J	4.3 J	3.3 J	4.8 J	5.2 J	0.77 J	0.49 J	1.6 J	1 J	9.9 U	0.94 J	3.8	1.5 J
Sodium	---	225 J	302 J	616 J	1250 J	1840 J	448 J	389 J	811 J	163 J	181 J	346 J	5360 U	906 J	5320 U	684 J	278 J
Thallium	---	2.2 U	2.2 U	12 U	11 U	11.7 U	11.1 U	10.7 U	11.5 U	2.1 U	2.1 U	10.4 U	10.7 U	9.9 U	10.6 U	2.2 U	2.2 U
Vanadium	---	56.8	26.6	66.2	70.5	98.6	85.1	35.5 J	68.9	35.6	35.4	58.6	25.6 J	15.2 J	23.8 J	36.4	32
Zinc	109	757	257	9910	16400	7800	6130	12800	10600	408	331	3330	1520	1930	746	11300	4120

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objective	SB-53		SB-54		SB-55		DUP-1 (SB-42 0-4)	DUP-2 (SB-36 6-10)	DUP-3 (SB-32 0-4)								
		SB-53 (0-4)	SB-53 (4-10)	SB-54 (0-4)	SB-54 (4-10)	SB-55 (0-4)	SB-55 (4-10)	DUP-1 8/5/2010	DUP-2 8/9/2010	DUP-3 8/10/2010								
Date		8/5/2010		8/5/2010		8/10/2010		8/5/2010	8/9/2010	8/10/2010								
TAL Metals (mg/kg) Method 6010/7471																		
Aluminum	---	9430	9320	10500	14200	9100	8050	9240	21400	14700								
Antimony	---	7.4 J	11.3 U	5.4 J	47.1	11.3 U	10.8 U	7 J	12.2	47.1								
Arsenic	13	13.9	25.1	12.8	27.1	12.4	13.9	68.7	13.9	40.3								
Barium	350	907	652	1920	985	713	392	548	1230	4660								
Beryllium	7.2	2.3 U	2.3 U	1.3 U	2.3 U	2.3 U	2.2 U	2.4 U	2.4 U	2.4 U								
Cadmium	2.5	32.3	26.7	21.8	29.4	8.4	3.9 J	30.7	103	15.4								
Calcium	---	43000	63100	58100	63000	74000	38200	48000	39600	48400								
Chromium*	1 / 30*	231	249	214	794	206	59.3	732	219	171								
Cobalt	---	75	18.4 J	21.1 J	47 J	12.3	8.6 J	66.1	23 J	19.9 J								
Copper	50	2820	789	1560	1860	741	458	981	1900	1340								
Iron	---	96100	71300	81400	100000	84500	36000	109000	93300 B	129000								
Lead	63	2680	2330	1760	4530	3470	864	4220	2900	16700								
Magnesium	---	6160	9810	18800	5780	5530 J	3780 J	6500	7350	4990 J								
Manganese	1600	781	633	668	886	639	464	1020	718	871								
Mercury	0.18	4.3	7.9	12.6	8.5	5.4	1.5	7.9	10.2	15.5								
Nickel	30	190	162	205	800	290	40.2 J	1100	192	161								
Potassium	---	846 J	363 J	906 J	451 J	792 J	965 J	538 J	707 J B	2520 J								
Selenium	3.9	7.1 J	11.3 U	6.3 U	5.4 J	11.3 U	19.7	5.9 J	12.1 U	13.2								
Silver	2	4.8 J	2.9 J	3 J	4 J	2.6 J	10.8 U	4.1 J	22.6	2.3 J								
Sodium	---	702 J	1530 J	723 J	573 J	414 J	5420 U	514 J	761 J	6950								
Thallium	---	11.6 U	11.3 U	6.3 U	11.4 U	11.3 U	10.8 U	11.9 U	12.1 U	11.8 U								
Vanadium	---	47.5 J	71.3	29.5 J	55.3 J	105	46.2 J	92.9	48.9 J	217								
Zinc	109	9110	3120	6250	7430	3240	905	5760	9920	14400								

NOTES:  
NYSDEC - New York State Department of Env  
Sample analysis by Test America of Edisor  
All units are in milligrams per kilogram(mg/kg)  
Values in **bold** exceed the NYSDEC Brownfiel  
U = Analyte not detected  
B = Compound was found in the blank and san  
J = The reported value was obtained from a rea  
but greater than or equal to the Instrument Dete  
D = The reported value is from a secondary ana  
... - No standard available  
\*Chromium standard is for Hexavalent/Trivaler  
UJ = The analyte was not detected above th

TABLE 3-4  
SOIL ANALYTICAL RESULTS - POLYCHLORINATED BIPHENYLS (PCBs)  
Unrestricted Use SCOs

SUPPLEMENTAL RI

FRITO-LAY  
202-218 MORGAN AVENUE - C224133  
BROOKLYN, NEW YORK

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives	SB-29		SB-30		SB-31		SB-32		SB-33		SB-34	
		SB-29 (0-4)	SB-29 (4-10)	SB-30 (0-4)	SB-30 (4-10)	SB-31 (0-4)	SB-31 (4-10)	SB-32 (0-4)	SB-32 (4-10)	SB-33 (0-4)	SB-33 (4-10)	SB-34 (0-4)	SB-34 (4-10)
Date		8/6/2010		8/9/2010		8/6/2010		8/9/2010		8/9/2010		8/9/2010	
PCBs (mg/kg) - Method 8082													
Aroclor 1016	0.1*	0.076 U	0.077 U	0.076 U	0.08 U	0.38 U	0.083 U	0.75 U	0.077 U	0.073 U	0.077 U	0.39 U	0.15 U
Aroclor 1221	0.1*	0.076 U	0.077 U	0.076 U	0.08 U	0.38 U	0.083 U	0.75 U	0.077 U	0.073 U	0.077 U	0.39 U	0.15 U
Aroclor 1232	0.1*	0.076 U	0.077 U	0.076 U	0.08 U	0.38 U	0.083 U	0.75 U	0.077 U	0.073 U	0.077 U	0.39 U	0.15 U
Aroclor 1242	0.1*	0.076 U	0.077 U	0.076 U	0.08 U	0.38 U	0.083 U	0.75 U	0.077 U	0.073 U	0.077 U	4.10	0.15 U
Aroclor 1248	0.1*	0.076 U	0.077 U	0.45	0.31	4.2	0.32	14.00	1.700	0.580	0.077 U	0.39 U	2.00 J
Aroclor 1254	0.1*	0.045 J	0.24	0.076 U	0.08 U	1.7	0.083 U	0.75 U	0.077 U	0.860	0.930 J	1.20 J	2.60
Aroclor 1260	0.1*	0.076 U	0.077 U	0.49	0.21	0.38 U	0.083 U	0.75 U	0.077 U	0.330	0.760 J	0.33 J	0.56
Aroclor 1262	0.1*	0.076 U	0.077 U	0.076 U	0.08 U	0.38 U	0.083 U	0.75 U	0.077 U	0.073 U	0.077 U	0.39 U	0.15 U
Aroclor 1268	0.1*	0.076 U	0.077 U	0.076 U	0.08 U	0.38 U	0.083 U	0.75 U	0.077 U	0.073 U	0.077 U	0.39 U	0.15 U
Total Arochlors	0.1*	0.045 J	0.24	0.94	0.52	5.9	0.32	14	1.7	1.77	1.69	5.63	5.16

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives	SB-35		SB-36		SB-37		SB-38		SB-39		SB-40	
		SB-35 (0-4)	SB-35 (4-10)	SB-36 (0-4)	SB-36 (6-10)	SB-37 (0-4)	SB-37 (4-10)	SB-38 (0-4)	SB-38 (4-10)	SB-39 (0-4)	SB-39 (4-10)	SB-40 (0-4)	SB-40 (4-10)
Date		8/6/2010		8/9/2010		8/9/2010		8/6/2010		8/6/2010		8/9/2010	
PCBs (µg/kg) - Method 8082													
Aroclor 1016	0.1*	0.41 U	0.08 U	0.82 U	0.44 U	0.078 U	0.076 U	0.077 U	0.078 U	0.081 U	0.082 U	0.083 U	0.078 U
Aroclor 1221	0.1*	0.41 U	0.08 U	0.82 U	0.44 U	0.078 U	0.076 U	0.077 U	0.078 U	0.081 U	0.082 U	0.083 U	0.078 U
Aroclor 1232	0.1*	0.41 U	0.08 U	0.82 U	0.44 U	0.078 U	0.076 U	0.077 U	0.078 U	0.081 U	0.082 U	0.083 U	0.078 U
Aroclor 1242	0.1*	0.41 U	0.08 U	0.82 U	0.44 U	0.078 U	0.076 U	0.077 U	0.078 U	0.081 U	0.082 U	0.083 U	0.078 U
Aroclor 1248	0.1*	3.2	0.92	14.00 J	4.00 J	0.078 U	0.076 U	1.3	0.49	1.1	0.73	0.083 U	0.078 U
Aroclor 1254	0.1*	1.8	0.08 U	3.90	1.90	0.250	0.560	0.077 U	0.078 U	0.081 U	0.082 U	0.410 J	0.410 J
Aroclor 1260	0.1*	0.41 U	0.08 U	0.71 J	0.44 U	0.078 U	0.076 U	0.290	0.078 U	0.081 U	0.082 U	0.210 J	0.240 J
Aroclor 1262	0.1*	0.41 U	0.08 U	0.82 U	0.44 U	0.078 U	0.076 U	0.077 U	0.078 U	0.081 U	0.082 U	0.083 U	0.078 U
Aroclor 1268	0.1*	0.41 U	0.08 U	0.82 U	0.44 U	0.078 U	0.076 U	0.077 U	0.078 U	0.081 U	0.082 U	0.083 U	0.078 U
Total Arochlors	0.1*	5	0.92	17.9	5.9	0.25	0.85	1.3	0.49	1.1	0.73	0.62	0.65

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives	SB-41		SB-42		SB-43		SB-44		SB-45		SB-46	
		SB-41 (0-4)	SB-41 (4-11)	SB-42 (0-4)	SB-42 (4-10)	SB-43 (0-4)	SB-43 (4-8)	SB-44 (0-4)	SB-44 (4-10)	SB-45 (0-4)	SB-45 (4-10)	SB-46 (0-4)	SB-46 (4-10)
Date		8/4/2010		8/5/2010		8/5/2010		8/6/2010		8/4/2010		8/9/2010	
PCBs (mg/kg) - Method 8082													
Aroclor 1016	0.1*	0.072 U	0.078 U	0.081 U	0.074 U	0.42 U	0.15 U	0.40 U	0.087 U	0.076 U	0.075 U	0.16 U	0.78 U
Aroclor 1221	0.1*	0.072 U	0.078 U	0.081 U	0.074 U	0.42 U	0.15 U	0.40 U	0.087 U	0.076 U	0.075 U	0.16 U	0.78 U
Aroclor 1232	0.1*	0.072 U	0.078 U	0.081 U	0.074 U	0.42 U	0.15 U	0.40 U	0.087 U	0.076 U	0.075 U	0.16 U	0.78 U
Aroclor 1242	0.1*	0.072 U	0.078 U	0.86	0.32	5.1	0.15 U	0.40 U	0.087 U	0.076 U	0.075 U	0.16 U	0.78 U
Aroclor 1248	0.1*	0.072 U	0.078 U	0.081 U	0.074 U	0.42 U	1.9	2.9	1.4	0.076 U	0.075 U	2.70	6.70
Aroclor 1254	0.1*	0.24	0.11	0.58	0.17	1	1.2	1.4	0.087 U	0.52	0.17	0.16 U	6.20
Aroclor 1260	0.1*	0.14 J	0.034 J	0.14	0.074 U	0.27 J	0.31	0.40 U	0.087 U	0.34	0.1 J	0.50	1.70
Aroclor 1262	0.1*	0.072 U	0.078 U	0.081 U	0.074 U	0.42 U	0.15 U	0.40 U	0.087 U	0.076 U	0.075 U	0.16 U	0.78 U
Aroclor 1268	0.1*	0.072 U	0.078 U	0.081 U	0.074 U	0.42 U	0.15 U	0.40 U	0.087 U	0.076 U	0.075 U	0.16 U	0.78 U
Total Arochlors	0.1*	0.38	0.11	1.58	0.49	6.1	3.41	4.3	1.4	0.86	0.27	3.2	14.6

NOTES  
Sample analysis by Test America of Edison, NJ  
\* Standard applies to total arochlors  
All units are milligrams per kilogram (mg/kg) - parts per billion (ppm)  
U = Not Detected  
D = Diluted Sample  
J = Estimated Value  
Values in **bold** exceed the NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives

TABLE 3-4  
SOIL ANALYTICAL RESULTS - POLYCHLORINATED BIPHENYLS (PCBs)  
Unrestricted Use SCOs

SUPPLEMENTAL RI

FRITO-LAY  
202-218 MORGAN AVENUE - C224133  
BROOKLYN, NEW YORK

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives	SB-47		SB-48		SB-49		SB-50		SB-51		SB-52	
		SB-47 (0-4)	SB-47 (4-10)	SB-48 (0-4)	SB-48 (4-6)	SB-49 (0-4)	SB-49 (4-10)	SB-50 (0-4)	SB-50 (4-10)	SB-51 (0-4)	SB-51 (4-8)	SB-52 (0-4)	SB-52 (4-10)
Date		8/5/2010		8/6/2010		8/4/2010		8/9/2010		8/9/2010		8/6/2010	
PCBs (mg/kg) - Method 8082													
Aroclor 1016	0.1*	0.16 U	0.38 U	0.072 U	0.16 U	0.074 U	0.075 U	0.072 U	0.073 U	0.07 U	0.075 U	0.074 U	0.075 U
Aroclor 1221	0.1*	0.16 U	0.38 U	0.072 U	0.16 U	0.074 U	0.075 U	0.072 U	0.073 U	0.07 U	0.075 U	0.074 U	0.075 U
Aroclor 1232	0.1*	0.16 U	0.38 U	0.072 U	0.16 U	0.074 U	0.075 U	0.072 U	0.073 U	0.07 U	0.075 U	0.074 U	0.075 U
Aroclor 1242	0.1*	1.4	3.3	0.072 U	0.16 U	0.074 U	0.075 U	0.072 U	0.073 U	0.07 U	0.075 U	0.074 U	0.075 U
Aroclor 1248	0.1*	0.16 U	0.38 U	0.83	2.6	0.074 U	0.075 U	0.31	0.59 J	0.078	0.21	1.0	0.55 J
Aroclor 1254	0.1*	0.83	2.5	0.07 U	1.2	0.074 U	0.075 U	0.072 U	0.073 U	0.07 U	0.075 U	0.074 U	0.075 U
Aroclor 1260	0.1*	0.19	0.95	0.07 U	0.16 U	0.019 J	0.032 J	0.18	0.073 U	0.097	0.066 J	0.074 U	0.075 U
Aroclor 1262	0.1*	0.16 U	0.38 U	0.07 U	0.16 U	0.074 U	0.075 U	0.072 U	0.073 U	0.07 U	0.075 U	0.074 U	0.075 U
Aroclor 1268	0.1*	0.16 U	0.38 U	0.07 U	0.16 U	0.074 U	0.075 U	0.072 U	0.073 U	0.07 U	0.075 U	0.074 U	0.075 U
Total Arochlors	0.1*	2.42	6.75	0.83	3.8	0.019 J	0.032 J	0.49	0.59	0.175	0.21	1.0	0.55

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives	SB-53		SB-54		SB-55		DUP-1 (SB-42 0-4)	DUP-2 (SB-36 6-10)	DUP-3 (SB-32 0-4)			
		SB-53 (0-4)	SB-53 (4-10)	SB-54 (0-4)	SB-54 (4-10)	SB-55 (0-40)	SB-55 (4-10)	DUP-1 8/5/2010	DUP-2 8/9/2010	DUP-3 8/10/2010			
Date		8/5/2010		8/5/2010		8/9/2010		8/5/2010	8/9/2010	8/10/2010			
PCBs (µg/kg) - Method 8082													
Aroclor 1016	0.1*	0.4 U	0.39 U	0.43 U	0.39 U	0.078 U	0.76 U	0.081 U	0.16 U	0.84 U			
Aroclor 1221	0.1*	0.4 U	0.39 U	0.43 U	0.39 U	0.078 U	0.76 U	0.081 U	0.16 U	0.84 U			
Aroclor 1232	0.1*	0.4 U	0.39 U	0.43 U	0.39 U	0.078 U	0.76 U	0.081 U	0.16 U	0.84 U			
Aroclor 1242	0.1*	5.5	0.39 U	5.6	0.39 U	0.078 U	0.76 U	1.400	0.16 U	0.84 U			
Aroclor 1248	0.1*	0.4 U	1.6	0.43 U	5	0.078 U	0.76 U	0.081 U	3.50	16			
Aroclor 1254	0.1*	1	0.39 U	1.4 J	2.9	1.7	0.34 J	1.0	2.40 J	0.84 U			
Aroclor 1260	0.1*	0.4 U	5.1	0.43 U	0.6	1.7	0.24 J	0.280	0.16 U	0.84 U			
Aroclor 1262	0.1*	0.4 U	0.39 U	0.43 U	0.39 U	0.078 U	0.76 U	0.081 U	0.16 U	0.84 U			
Aroclor 1268	0.1*	0.4 U	0.39 U	0.43 U	0.39 U	0.078 U	0.76 U	0.081 U	0.16 U	0.84 U			
Total Arochlors	0.1*	6.5	6.7	7.0	7.9	3.4	0.58	2.68	5.9	16			

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives
Date	
PCBs (mg/kg) - Method 8082	
Aroclor 1016	0.1*
Aroclor 1221	0.1*
Aroclor 1232	0.1*
Aroclor 1242	0.1*
Aroclor 1248	0.1*
Aroclor 1254	0.1*
Aroclor 1260	0.1*
Aroclor 1262	0.1*
Aroclor 1268	0.1*
Total Arochlors	0.1*

NOTES  
Sample analysis by Test America of Edison, NJ  
\* Standard applies to total arochlors  
All units are milligrams per kilogram (mg/kg) - parts per billion (ppm)  
U = Not Detected  
D = Diluted Sample  
J = Estimated Value  
Values in **bold** exceed the NYSDEC Brownfields Unrestricted Use Sc

**TABLE 3-5**  
**SOIL ANALYTICAL RESULTS - TCLP ARSENIC**  
**SUPPLEMENTAL REMEDIAL INVESTIGATION**

**FRITO-LAY**  
**202-218 MORGAN AVENUE - C224133**  
**BROOKLYN, NEW YORK**

Compound	RCRA Hazardous Waste Regulatory Level	NYSDEC Hazardous Waste Regulatory Level	SB-32	SB-38	SB-42	SB-42	SB-43	SB-53
			0 - 4 ft	0 - 4 ft	0 - 4 ft	4 - 10 ft	4 - 8 ft	4 - 10 ft
Date			8/9/2010	8/6/2010	8/5/2010	8/5/2010	8/5/2010	8/5/2010
<i>TCLP Metals (mg/L) Method 1311</i>								
Arsenic	5	5	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U

**NOTES**

Resource Conservation and Recovery Act (RCRA)

NYSDEC - New York State Department of Environmental Conservation

Sample analysis by Test America in Edison, New Jersey.

All units are milligrams per liter (mg/L) - parts per million (ppm).

Values in **bold** exceed the RCRA/NYSDEC Hazardous Waste Regulatory Levels.

U = The analyte was analyzed for, but not detected above the sample reporting limits.



**TABLE 3-6**  
**COMMUNITY AIR MONITORING SUMMARY**  
**SUPPLEMENTAL REMEDIAL INVESTIGATION**

**FRITO-LAY**  
**202-218 MORGAN AVENUE - C224133**  
**BROOKLYN, NEW YORK**

Date	Model No.	Location	Start Time	Stop Time	Elapsed Time	Max Display Conc	Max STEL Conc	Overall Average Conc	Comments
8/4/2010	6144	SW Corner-Upwind	7:56:53	15:27:53	07:31:00	3.181	0.067	0.026	Humid day
8/4/2010	6147	NE Corner- Downwind	8:00:42	15:30:42	7:30:00	0.56	0.103	0.059	Humid day
8/5/2010	6144	NE Corner- Downwind	7:29:19	13:56:19	6:27:00	1.25	0.008	0.000	Humid day
8/5/2010	6147	SW Corner-Upwind	7:33:48	13:52:48	06:19:00	1.973	0.096	0.064	Humid day
8/6/10	6144	N side Centrally located	7:29:11	13:15:11	5:46:00	0.468	0.005	0.000	Humid day
8/6/10	6147	S side Centrally located	7:32:42	13:17:42	5:45:00	0.235	0.021	0.005	Humid day
8/9/10	6147	SE Corner-Upwind	---	---	---	---	---	---	Equipment Error, No Data was logged (Humid Day)
8/9/10	6144	NW Corner-Downwind	7:33:18	15:08:18	07:35:00	0.779	0.006	0.000	Humid day
8/10/10	6147	NW Corner-Downwind	7:36:31	10:02:31	2:26:00	5.805	0.138	0.013	Humid day
8/10/10	6144	SE Corner- Upwind	7:27:00	10:15:00	2:48:00	2.075	0.039	0.000	Humid day

TABLE 4-1



## SECOND SUPPLEMENTAL REMEDIAL INVESTIGATION SAMPLING PROGRAM

## SAMPLING DESIGNATION AND LABORATORY SAMPLING AND ANALYSIS

**FRITO-LAY**  
**202-218 MORGAN AVENUE - C224133**  
**BROOKLYN, NEW YORK**

Sample Designation	Sample Depth Intervals	Proposed Sampling Depths*		Soil Sample Analysis					
				PCBs	TAL Metals	Total Arsenic	Total Lead	TCLP Arsenic	TCLP Lead
SB-2-1	SB-2-1 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-2-1 (4-11)	4 to 1 foot agw	N/A	x					
SB-2-2	SB-2-2 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-2-2 (4-11)	4 to 1 foot agw	N/A	x					
SB-2-3	SB-2-3 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-2-3 (4-11)	4 to 1 foot agw	N/A	x					
SB-6-1	SB-6-1 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-6-1 (4-11)	4 to 1 foot agw	N/A	x					
SB-6-2	SB-6-2 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-6-2 (4-11)	4 to 1 foot agw	N/A	x					
SB-6-3	SB-6-3 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-6-3 (4-11)	4 to 1 foot agw	N/A	x					
SB-7-1	SB-7-1 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-7-1 (4-11)	4 to 1 foot agw	N/A	x					
SB-7-2	SB-7-2 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-7-2 (4-11)	4 to 1 foot agw	N/A	x					
SB-8-1	SB-8-1 (0-4)	0 to 2 feet	2 to 4 feet	x		x	x	x	x
	SB-8-1 (4-11)	4 to 1 foot agw	N/A	x		x	x	x	x
SB-8-2	SB-8-2 (0-4)	0 to 2 feet	2 to 4 feet	x		x	x	x	x
	SB-8-2 (4-11)	4 to 1 foot agw	N/A	x		x	x	x	x
SB-9-1	SB-9-1 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-9-1 (4-11)	4 to 1 foot agw	N/A	x					
SB-9-2	SB-9-2 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-9-2 (4-11)	4 to 1 foot agw	N/A	x					
SB-9-3	SB-9-3 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-9-3 (4-11)	4 to 1 foot agw	N/A	x					
SB-16-1	SB-16-1 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-16-1 (4-11)	4 to 1 foot agw	N/A	x			x		x
SB-16-2	SB-16-2 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-16-2 (4-11)	4 to 1 foot agw	N/A	x					
SB-16-3	SB-16-3 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-16-3 (4-11)	4 to 1 foot agw	N/A	x					
SB-17-1	SB-17-1 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-17-1 (4-11)	4 to 1 foot agw	N/A	x					
SB-17-2	SB-17-2 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-17-2 (4-11)	4 to 1 foot agw	N/A	x					
SB-20-1	SB-20-1 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-20-1 (4-11)	4 to 1 foot agw	N/A	x					
SB-20-2	SB-20-2 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-20-2 (4-11)	4 to 1 foot agw	N/A	x					
SB-20-3	SB-20-3 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-20-3 (4-11)	4 to 1 foot agw	N/A	x					
SB-22-1	SB-22-1 (0-4)	0 to 2 feet	2 to 4 feet	x		x	x	x	x
	SB-22-1 (4-11)	4 to 1 foot agw	N/A	x		x	x	x	x
SB-22-2	SB-22-2 (0-4)	0 to 2 feet	2 to 4 feet	x			x		x
	SB-22-2 (4-11)	4 to 1 foot agw	N/A	x			x		x
SB-22-3	SB-22-3 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-22-3 (4-11)	4 to 1 foot agw	N/A	x					
SB-23-1	SB-23-1 (0-4)	0 to 2 feet	2 to 4 feet	x		x	x	x	x
	SB-23-1 (4-11)	4 to 1 foot agw	N/A	x		x		x	
SB-23-2	SB-23-2 (0-4)	0 to 2 feet	2 to 4 feet	x		x		x	
	SB-23-2 (4-11)	4 to 1 foot agw	N/A	x		x		x	
SB-23-3	SB-23-3 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-23-3 (4-11)	4 to 1 foot agw	N/A	x					

TABLE 4-1



## SECOND SUPPLEMENTAL REMEDIAL INVESTIGATION SAMPLING PROGRAM

## SAMPLING DESIGNATION AND LABORATORY SAMPLING AND ANALYSIS

**FRITO-LAY**  
**202-218 MORGAN AVENUE - C224133**  
**BROOKLYN, NEW YORK**

Sample Designation	Sample Depth Intervals	Proposed Sampling Depths*		Soil Sample Analysis					
				PCBs	TAL Metals	Total Arsenic	Total Lead	TCLP Arsenic	TCLP Lead
SB-24-1	SB-24-1 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-24-1 (4-11)	4 to 1 foot agw	N/A	x					
SB-24-2	SB-24-2 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-24-2 (4-11)	4 to 1 foot agw	N/A	x					
SB-24-3	SB-24-3 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-24-3 (4-11)	4 to 1 foot agw	N/A	x					
SB-27-1	SB-27-1 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-27-1 (4-11)	4 to 1 foot agw	N/A	x					
SB-27-2	SB-27-2 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-27-2 (4-11)	4 to 1 foot agw	N/A	x					
SB-27-3	SB-27-3 (0-4)	0 to 2 feet	2 to 4 feet	x					
	SB-27-3 (4-11)	4 to 1 foot agw	N/A	x					
SB-56	SB-56 (0-4)	0 to 2 feet	2 to 4 feet	x	x				
	SB-56 (4-11)	4 to 1 foot agw	N/A	x	x				
SB-57	SB-57 (0-4)	0 to 2 feet	2 to 4 feet	x	x				
	SB-57 (4-11)	4 to 1 foot agw	N/A	x	x				

**Notes:**

- \* The first soil sample at each location was composed of equal portions from the 0 to 2 foot and 2 to 4 foot sample intervals. The second soil sample will be collected from the most contaminated depth below 4 ft-bgs determined visually by staining and/or by the highest photoionization detector (PID) reading.

TABLE 4-2

SOIL ANALYTICAL RESULTS - PCBs  
Unrestricted Use SCOs

SECOND SUPPLEMENTAL RI

FRITO-LAY  
202-218 MORGAN AVENUE - C224133  
BROOKLYN, NEW YORK

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives	SB-2-1		SB-2-2		SB-2-3		SB-6-1	SB-6-2		SB-6-3	SB-7-1	
		SB-2-1 (0-4)	SB-2-1 (6-8)	SB-2-2 (1-4)	SB-2-2 (6-8)	SB-2-3 (0-4)	SB-2-3 (10-11)	SB-6-1 (0-4)	SB-6-2 (0-4)	SB-6-2 (6-8)	SB-6-3 (0-4)	SB-7-1 (0-4)	SB-7-1 (4-6)
Date		10/6/2010		10/6/2010		10/6/2010		10/8/2010	10/8/2010		10/8/2010	10/7/2010	
PCBs (mg/kg) - Method 8082													
Aroclor 1016	0.1*	0.079 U	0.078 U	0.076 U	0.076 U	0.077 U	0.078 U	0.94 U	0.084 U	0.43 U	0.079 U	0.077 U	0.42 U
Aroclor 1221	0.1*	0.079 U	0.078 U	0.076 U	0.076 U	0.077 U	0.078 U	0.94 U	0.084 U	0.43 U	0.079 U	0.077 U	0.42 U
Aroclor 1232	0.1*	0.079 U	0.078 U	0.076 U	0.076 U	0.077 U	0.078 U	0.94 U	0.084 U	0.43 U	0.079 U	0.077 U	0.42 U
Aroclor 1242	0.1*	0.079 U	0.078 U	0.076 U	0.076 U	0.077 U	0.078 U	0.94 U	0.084 U	0.43 U	0.079 U	0.077 U	2.1
Aroclor 1248	0.1*	0.079 U	0.078 U	0.076 U	0.076 U	0.077 U	0.078 U	12.0	0.084 U	6.1 J	0.079 U	0.76	0.42 U
Aroclor 1254	0.1*	0.48	0.078 U	0.40	0.076 U	0.47	0.078 U	0.94 U	1.6	0.43 U	0.69	0.67	4.4
Aroclor 1260	0.1*	0.55	0.13	0.076 U	0.076 U	0.077 U	0.15	0.94 U	0.084 U	0.43 U	0.079 U	0.16	1.5
Aroclor 1262	0.1*	0.079 U	0.078 U	0.076 U	0.076 U	0.077 U	0.078 U	0.94 U	0.084 U	0.43 U	0.079 U	0.077 U	0.42 U
Aroclor 1268	0.1*	0.079 U	0.078 U	0.076 U	0.076 U	0.077 U	0.078 U	0.94 U	0.084 U	0.43 U	0.079 U	0.077 U	0.42 U
Total Arochlors	0.1*	1.03	0.13	0.40	0.076 U	0.47	0.15	12.0	1.6	6.1 J	0.69	1.59	8.0

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives	SB-7-2		SB-8-1		SB-8-2		SB-9-1		SB-9-2		SB-9-3	
		SB-7-2 (0-4)	SB-7-2 (4-6)	SB-8-1 (0-4)	SB-8-1 (4-6)	SB-8-2 (0-4)	SB-8-2 (4-6)	SB-9-1 (0-4)	SB-9-1 (10-11)	SB-9-2 (0-4)	SB-9-2 (8-10)	SB-9-3 (0-4)	SB-9-3 (4-6)
Date		10/7/2010		10/13/2010		10/13/2010		10/8/2010		10/8/2010	10/11/2010	10/8/2010	
PCBs (µg/kg) - Method 8082													
Aroclor 1016	0.1*	0.078 U	0.16 U	0.16 U	0.79 U	0.84 U	0.4 U	0.80 U	0.078 U	0.84 U	0.16 U	0.80 U	0.41 U
Aroclor 1221	0.1*	0.078 U	0.16 U	0.16 U	0.79 U	0.84 U	0.4 U	0.80 U	0.078 U	0.84 U	0.16 U	0.80 U	0.41 U
Aroclor 1232	0.1*	0.078 U	0.16 U	0.16 U	0.79 U	0.84 U	0.4 U	0.80 U	0.078 U	0.94 U	0.16 U	0.80 U	0.41 U
Aroclor 1242	0.1*	0.078 U	0.16 U	2.4	0.79 U	0.84 U	6	0.80 U	0.078 U	0.84 U	2.1	0.80 U	0.41 U
Aroclor 1248	0.1*	1.3	2.1	0.16 U	13	14	0.4 U	6.7 J	0.078 U	7.8	0.16 U	11 J	5.9 J
Aroclor 1254	0.1*	1.2	3.2	0.16 U	0.79 U	0.84 U	0.4 U	0.80 U	0.49	0.84 U	0.16 U	0.80 U	0.41 U
Aroclor 1260	0.1*	0.39	3.0	0.56	4.1	12	2.4	0.80 U	0.26	0.84 U	0.59	0.80 U	0.41 U
Aroclor 1262	0.1*	0.078 U	0.16 U	0.16 U	0.79 U	0.84 U	0.4 U	0.80 U	0.078 U	0.84 U	0.16 U	0.80 U	0.41 U
Aroclor 1268	0.1*	0.078 U	0.16 U	0.16 U	0.79 U	0.84 U	0.4 U	0.80 U	0.078 U	0.84 U	0.16 U	0.80 U	0.41 U
Total Arochlors	0.1*	2.89	8.3	2.96	17.1	26	8.4	6.7 J	0.75	7.80	2.69	11 J	5.9 J

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives	SB-16-1		SB-16-2		SB-16-3		SB-17-1		SB-17-2		SB-20-1	
		SB-16-1 (0-4)	SB-16-1 (6-8)	SB-16-2 (0-4)	SB-16-2 (6-8)	SB-16-3 (0-4)	SB-16-3 (4-6)	SB-17-1 (0-4)	SB-17-1 (4-6)	SB-17-2 (0-4)	SB-17-2 (4-6)	SB-20-1 (0-4)	SB-20-1 (6-8)
Date		10/12/2010		10/12/2010		10/12/2010		10/11/2010		10/11/2010		10/11/2010	
PCBs (mg/kg) - Method 8082													
Aroclor 1016	0.1*	0.89 U	0.16 U	0.46 U	0.078 U	0.94 U	0.78 U	2.4 U	0.088 U	0.85 U	1.7 U	0.81 U	0.16 U
Aroclor 1221	0.1*	0.89 U	0.16 U	0.46 U	0.078 U	0.94 U	0.78 U	2.4 U	0.088 U	0.85 U	1.7 U	0.81 U	0.16 U
Aroclor 1232	0.1*	0.89 U	0.16 U	0.46 U	0.078 U	0.94 U	0.78 U	2.4 U	0.088 U	0.85 U	1.7 U	0.81 U	0.16 U
Aroclor 1242	0.1*	9.3 J	2.8	7 J	0.43	12.0	15	31	0.29 J	16	27	13 J	1.7
Aroclor 1248	0.1*	0.89 U	0.16 U	0.46 U	0.078 U	0.94 U	0.78 U	2.4 U	0.088 U	0.85 U	1.7 U	0.81 U	0.16 U
Aroclor 1254	0.1*	0.89 U	0.16 U	0.46 U	0.078 U	0.94 U	0.78 U	2.4 U	0.088 U	0.85 U	1.7 U	0.81 U	0.16 U
Aroclor 1260	0.1*	0.89	1.2	0.57	0.26	0.92 J	2.6	8.3	0.053 J	1.9	3	1.4 J	0.89
Aroclor 1262	0.1*	0.89 U	0.16 U	0.46 U	0.078 U	0.94 U	0.78 U	2.4 U	0.088 U	0.85 U	1.7 U	0.81 U	0.16 U
Aroclor 1268	0.1*	0.89 U	0.16 U	0.46 U	0.078 U	0.94 U	0.78 U	2.4 U	0.088 U	0.85 U	1.7 U	0.81 U	0.16 U
Total Arochlors	0.1*	10.19 J	4.0	7.57 J	0.69	12.92	17.6	39.3	0.290	17.9	30	14.4 J	2.56

NOTES

Sample analysis by Test America of Edison, NJ  
\* Standard applies to total arochlors  
All units are milligrams per kilogram (mg/kg) - parts per billion (ppm)  
U = Not Detected  
D = Diluted Sample  
J = Estimated Value  
Values in **bold** exceed the NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives

TABLE 4-2

SOIL ANALYTICAL RESULTS - PCBs

Unrestricted Use SCOs

SECOND SUPPLEMENTAL RI

FRITO-LAY

202-218 MORGAN AVENUE - C224133

BROOKLYN, NEW YORK

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives	SB-20-2		SB-20-3		SB-22-1		SB-22-2		SB-22-3		SB-23-1	
		SB-20-2 (0-4)	SB-20-2 (4-6)	SB-20-3 (0-4)	SB-20-3 (6-8)	SB-22-1 (0-4)	SB-22-1 (4-6)	SB-22-2 (0-4)	SB-22-2 (4-6)	SB-22-3 (0-4)	SB-22-3 (6-8)	SB-23-1 (0-4)	SB-23-1 (4-6)
Date		10/11/2010		10/11/2010		10/13/2010		10/13/2010		10/13/2010		10/14/2010	
PCBs (mg/kg) - Method 8082													
Aroclor 1016	0.1*	0.48 U	0.79 U	0.52 U	0.082 U	0.42 U	0.82 U	0.43 U	0.17 U	0.9 U	0.38 U	0.41 U	0.41 U
Aroclor 1221	0.1*	0.48 U	0.79 U	0.52 U	0.082 U	0.42 U	0.82 U	0.43 U	0.17 U	0.9 U	0.38 U	0.41 U	0.41 U
Aroclor 1232	0.1*	0.48 U	0.79 U	0.52 U	0.082 U	0.42 U	0.82 U	0.43 U	0.17 U	0.9 U	0.38 U	0.41 U	0.41 U
Aroclor 1242	0.1*	7.4	16.0	11 J	0.96	6.2	11	4.5	2.6	9.5	4.4	3.5	3.1
Aroclor 1248	0.1*	0.48 U	0.79 U	0.52 U	0.082 U	0.42 U	0.82 U	0.43 U	0.17 U	0.9 U	0.38 U	0.41 U	0.41 U
Aroclor 1254	0.1*	0.48 U	0.79 U	0.52 U	0.082 U	0.42 U	0.82 U	0.43 U	0.17 U	0.9 U	0.38 U	0.41 U	0.41 U
Aroclor 1260	0.1*	0.83	1.5	0.89 J	0.33	0.61	2.1	0.84	0.92	1.4	0.78	1.1 J	0.83
Aroclor 1262	0.1*	0.48 U	0.79 U	0.52 U	0.082 U	0.42 U	0.82 U	0.43 U	0.17 U	0.9 U	0.38 U	0.41 U	0.41 U
Aroclor 1268	0.1*	0.48 U	0.79 U	0.52 U	0.082 U	0.42 U	0.82 U	0.43 U	0.17 U	0.9 U	0.38 U	0.41 U	0.41 U
Total Arochlors	0.1*	8.23	17.5	11.89 J	1.29	6.81	13.1	5.34	3.52	10.9	5.18	4.6 J	3.93

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives	SB-23-2		SB-23-3		SB-23-4		SB-24-1	SB-24-2	SB-24-3		SB-27-1	
		SB-23-2 (0-4)	SB-23-2 (6-8)	SB-23-3 (0-4)	SB-23-3 (4-6)	SB-23-4 (0-4)	SB-23-4 (4-6)	SB-24-1 (0-4)	SB-24-2 (0-2)	SB-24-3 (0-4)	SB-24-3 (4-6)	SB-27-1 (0-4)	SB-27-1 (9-10)
Date		10/14/2010		10/14/2010		10/4/2010		10/7/2010	10/7/2010	10/7/2010		10/4/2010	
PCBs (µg/kg) - Method 8082													
Aroclor 1016	0.1*	0.08 U	0.78	0.41 U	0.47 U	0.084 U	4.1 U	0.43 U	0.17 U	0.16 U	0.077 U	0.17 U	0.078 U
Aroclor 1221	0.1*	0.08 U	0.78	0.41 U	0.47 U	0.084 U	4.1 U	0.43 U	0.17 U	0.16 U	0.077 U	0.17 U	0.078 U
Aroclor 1232	0.1*	0.08 U	0.78	0.41 U	0.47 U	0.084 U	4.1 U	0.43 U	0.17 U	0.16 U	0.077 U	0.17 U	0.078 U
Aroclor 1242	0.1*	1	14	7.5	7 J	0.084 U	4.1 U	4.2	2.8 J	1.9 J	0.077 U	0.17 U	0.078 U
Aroclor 1248	0.1*	0.08 U	0.78 U	0.41 U	0.47 U	0.084 U	4.1 U	0.43 U	0.17 U	0.16 U	1.0 J	0.17 U	0.60
Aroclor 1254	0.1*	0.08 U	0.78 U	0.41 U	0.47 U	1.6 J	55	2.1	1.1 J	0.72 J	0.9	2.8	0.078 U
Aroclor 1260	0.1*	0.23	0.67 J	1.7	1.2	1.1 U	4.1 U	0.42 J	0.22	0.78	0.46	0.17 U	0.078 U
Aroclor 1262	0.1*	0.08 U	0.78 U	0.41 U	0.47 U	0.084 U	4.1 U	0.43 U	0.17 U	0.16 U	0.077 U	0.17 U	0.078 U
Aroclor 1268	0.1*	0.08 U	0.78 U	0.41 U	0.47 U	0.084 U	4.1 U	0.43 U	0.17 U	0.16 U	0.077 U	0.17 U	0.078 U
Total Arochlors	0.1*	1.23	14.7	9.2	8.2 J	2.7	55	6.3	4.12	3.4	2.36	2.8	0.60

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives	SB-27-2		SB-27-3		SB-27-4		SB-27-5		SB-56		SB-57	
		SB-27-2 (0-4)	SB-27-2 (4-8)	SB-27-3 (0-4)	SB-27-3 (9-10)	SB-27-4 (0-4)	SB-27-4 (6-8)	SB-27-5 (0-4)	SB-27-5 (8-10)	SB-56 (0-4)	SB-56 (6-8)	SB-57 (0-4)	SB-57 (6-8)
Date		10/4/2010		10/4/2010		10/14/2010		10/14/2010		10/12/2010		10/12/2010	
PCBs (mg/kg) - Method 8082													
Aroclor 1016	0.1*	0.16 U	0.41 U	0.066 U	0.081 U	0.076 U	0.08 U	0.074 U	0.078 U	0.45 U	0.080 U	0.49 U	0.19 U
Aroclor 1221	0.1*	0.16 U	0.41 U	0.066 U	0.081 U	0.076 U	0.08 U	0.074 U	0.078 U	0.45 U	0.080 U	0.49 U	0.19 U
Aroclor 1232	0.1*	0.16 U	0.41 U	0.066 U	0.081 U	0.076 U	0.08 U	0.074 U	0.078 U	0.45 U	0.080 U	0.49 U	0.19 U
Aroclor 1242	0.1*	0.16 U	0.41 U	0.066 U	0.081 U	0.076 U	0.08 U	0.85	0.078 U	5.5	0.080 U	5.6	2.5
Aroclor 1248	0.1*	0.16 U	0.41 U	0.066 U	0.081 U	0.076 U	0.08 U	0.074 U	0.078 U	0.45 U	1.1	0.49 U	0.19 U
Aroclor 1254	0.1*	2.8	4.2	1.6	0.079 J	0.38	0.08 U	0.074 U	0.078 U	0.45 U	0.080 U	0.49 U	0.19 U
Aroclor 1260	0.1*	0.16 U	0.41 U	2 J	0.081 U	0.31	0.08 U	0.21	0.078 U	0.43 J	0.080 U	1.0	0.51
Aroclor 1262	0.1*	0.16 U	0.41 U	0.066 U	0.081 U	0.076 U	0.08 U	0.074 U	0.078 U	0.45 U	0.77 J	0.49 U	0.19 U
Aroclor 1268	0.1*	0.16 U	0.41 U	0.066 U	0.081 U	0.076 U	0.08 U	0.074 U	0.078 U	0.45 U	0.080 U	0.49 U	0.19 U
Total Arochlors	0.1*	2.8	4.2	3.6	0.079 J	0.69	0.08 U	1.06	0.078 U	5.93	1.87 J	6.6	3.01

NOTES

Sample analysis by Test America of Edison, NJ

\* Standard applies to total arochlors

All units are milligrams per kilogram (mg/kg) - parts per billion (ppm)

U = Not Detected

D = Diluted Sample

J = Estimated Value

Values in **bold** exceed the NYSDEC Brownfields Unrestricted Use Sc

TABLE 4-2  
SOIL ANALYTICAL RESULTS - PCBs  
Unrestricted Use SCOs  
SECOND SUPPLEMENTAL RI  
FRITO-LAY  
202-218 MORGAN AVENUE - C224133  
BROOKLYN, NEW YORK

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives												
		DUP-1 (SB-7-1 0-4)	DUP-2 (SB-20-1 0-4)	DUP-3 (SB-22-3 6-8)	DUP-4 (SB-23-4 0-4)								
Date		10/7/2010	10/11/2010	10/13/2010	10/14/2010								
PCBs (mg/kg) - Method 8082													
Aroclor 1016	0.1*	0.075 U	0.16 U	1.6 U	0.43 U								
Aroclor 1221	0.1*	0.075 U	0.16 U	1.6 U	0.43 U								
Aroclor 1232	0.1*	0.075 U	0.16 U	1.6 U	0.43 U								
Aroclor 1242	0.1*	0.075 U	1.8 J	14	6.1								
Aroclor 1248	0.1*	0.84	0.16 U	1.6 U	0.43 U								
Aroclor 1254	0.1*	0.71	0.16 U	1.6 U	0.43 U								
Aroclor 1260	0.1*	0.22	0.21 J	2.6	1.4								
Aroclor 1262	0.1*	0.075 U	0.16 U	1.6 U	0.43 U								
Aroclor 1268	0.1*	0.075 U	0.16 U	1.6 U	0.43 U								
Total Arochlors	0.1*	1.77	2.01 J	16.6	7.5								

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives
Date	
PCBs (µg/kg) - Method 8082	
Aroclor 1016	0.1*
Aroclor 1221	0.1*
Aroclor 1232	0.1*
Aroclor 1242	0.1*
Aroclor 1248	0.1*
Aroclor 1254	0.1*
Aroclor 1260	0.1*
Aroclor 1262	0.1*
Aroclor 1268	0.1*
Total Arochlors	0.1*

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives
Date	
PCBs (mg/kg) - Method 8082	
Aroclor 1016	0.1*
Aroclor 1221	0.1*
Aroclor 1232	0.1*
Aroclor 1242	0.1*
Aroclor 1248	0.1*
Aroclor 1254	0.1*
Aroclor 1260	0.1*
Aroclor 1262	0.1*
Aroclor 1268	0.1*
Total Arochlors	0.1*

NOTES  
Sample analysis by Test America of Edison, NJ  
\* Standard applies to total arochlors  
All units are milligrams per kilogram (mg/kg) - parts per billion (ppm)  
U = Not Detected  
D = Diluted Sample  
J = Estimated Value  
Values in **bold** exceed the NYSDEC Brownfields Unrestricted Use Sc

TABLE 4-3  
SOIL ANALYTICAL RESULTS - TAL METALS  
Unrestricted Use SCOs  
SECOND SUPPLEMENTAL RI  
FRITO-LAY  
202-218 MORGAN AVENUE - C224133  
BROOKLYN, NY

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objective	SB-8-1		SB-8-2		SB-16-1	SB-22-1		SB-22-2		SB-23-1		SB-23-2		SB-56	
		SB-8-1 (0-4)	SB-8-1 (4-6)	SB-8-2 (0-4)	SB-8-2 (4-6)	SB-16-1 (0-4)	SB-22-1 (0-4)	SB-22-1 (4-6)	SB-22-2 (0-4)	SB-22-2 (4-6)	SB-23-1 (0-4)	SB-23-1 (4-6)	SB-23-2 (0-4)	SB-23-2 (6-8)	SB-56 (0-4)	SB-56 (6-8)
Date		10/13/2010		10/13/2010		10/12/2010	10/13/2010		10/13/2010		10/14/2010		10/14/2010		10/12/2010	
TAL Metals (mg/kg) Method 6010/7471																
Aluminum	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8,400	11,000	
Antimony	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.9 J	13.9 J	
Arsenic	13	30.9 J	33.7 J	23.2 J	47.5 J	NA	25.6 J	16.3 J	NA	NA	23.1	17.5	14.1	8.3	16.7	23 J
Barium	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	538 J	893 J	
Beryllium	7.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.34 J	0.44 J	
Cadmium	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.2	30.7	
Calcium	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93,000	35,200	
Chromium*	1 / 309*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.9	237	
Cobalt	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.2	20.1	
Copper	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,530	1,570	
Iron	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	63,700	129,000	
Lead	63	5,470 J	10,700 J	21,700 J	10,600 J	11,600 J	1,830 J	4,970 J	3,910 J	6,660 J	7,330	NA	NA	931 J	4,090 J	
Magnesium	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23,600	6,430	
Manganese	1600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	503	959	
Mercury	0.18	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9	8.6	
Nickel	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	128	232	
Potassium	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	814 J	949 J	
Selenium	3.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9	14.3	
Silver	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 J	5.1	
Sodium	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	402 J	473 J	
Thallium	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 U	2.3 U	
Vanadium	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	24	104	
Zinc	109	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7,080	8,110	

Compound	NYSDEC Brownfields Unrestricted Use Soil Cleanup Objective	SB-57															
		SB-57 (0-4)	SB-57 (6-8)														
Date		10/12/2010															
TAL Metals (mg/kg) Method 6010/7471																	
Aluminum	---	11,500	11,500														
Antimony	---	23.5 J	15.9 J														
Arsenic	13	17.5	19.1														
Barium	350	897 J	839 J														
Beryllium	7.2	0.55 J	0.43 J														
Cadmium	2.5	26.3	24.2														
Calcium	---	45,000	42,400														
Chromium*	1 / 30*	327	152														
Cobalt	---	25.1	23.5														
Copper	50	1,870	8,510														
Iron	---	92,400	99,300														
Lead	63	4,890 J	2,960 J														
Magnesium	---	5,300	4,980														
Manganese	1600	769	724														
Mercury	0.18	5.3	5.8														
Nickel	30	201	333														
Potassium	---	1,160 J	1,310 J														
Selenium	3.9	6.7	7														
Silver	2	5.2	3.2														
Sodium	---	415 J	583 J														
Thallium	---	2.8 U	2.7 U														
Vanadium	---	57.1	50.5														
Zinc	109	9,160	8,570														

NOTES:  
NYSDEC - New York State Department of Environmental Conservation  
Sample analysis by Test America of Edison, NJ  
All units are in milligrams per kilogram(mg/kg) - parts per million (ppm)  
Values in **bold** exceed the NYSDEC Brownfields Unrestricted Use Soil Cleanup Objectives  
U = Analyte not detected  
B = Compound was found in the blank and sample.  
J = The reported value was obtained from a reading that was less than the Contract Required Detection Limit, but greater than or equal to the Instrument Detection Limit  
D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range  
... - No standard available  
\*Chromium standard is for Hexavalent/Trivalent Chromium  
UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate  
NA = Not analyzed.

TABLE 4-4

SOIL ANALYTICAL RESULTS - TAL METALS  
Restricted Use - Protection of Groundwater SCOs

SECOND SUPPLEMENTAL RI

FRITO-LAY  
202-218 MORGAN AVENUE - C224133  
BROOKLYN, NY

Compound	NYSDEC Brownfields Restricted Use Protection of Groundwater Soil Cleanup Objective	SB-8-1		SB-8-2		SB-16-1	SB-22-1		SB-22-2		SB-23-1		SB-23-2		SB-56	
		SB-8-1 (0-4)	SB-8-1 (4-6)	SB-8-2 (0-4)	SB-8-2 (4-6)	SB-16-1 (0-4)	SB-22-1 (0-4)	SB-22-1 (4-6)	SB-22-2 (0-4)	SB-22-2 (4-6)	SB-23-1 (0-4)	SB-23-1 (4-6)	SB-23-2 (0-4)	SB-23-2 (6-8)	SB-56 (0-4)	SB-56 (6-8)
Date		10/13/2010		10/13/2010		10/12/2010	10/13/2010		10/13/2010		10/14/2010		10/14/2010		10/12/2010	
TAL Metals (mg/kg) Method 6010/7471																
Aluminum	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8,400	11,000	
Antimony	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.9 J	13.9 J	
Arsenic	16	30.9 J	33.7 J	23.2 J	47.5 J	NA	25.6 J	16.3 J	NA	NA	23.1	17.5	14.1	8.3	16.7	23 J
Barium	820	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	538 J	893 J	
Beryllium	47	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.34 J	0.44 J	
Cadmium	7.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.2	30.7	
Calcium	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93,000	35,200	
Chromium*	19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.9	237	
Cobalt	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.2	20.1	
Copper	1720	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,530	1,570	
Iron	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	63,700	129,000	
Lead	450	5,470 J	10,700 J	21,700 J	10,600 J	11,600 J	1,830 J	4,970 J	3,910 J	6,660 J	7,330	NA	NA	931 J	4,090 J	
Magnesium	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	23,600	6,430	
Manganese	2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	503	959	
Mercury	0.73	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.9	8.6	
Nickel	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	128	232	
Potassium	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	814 J	949 J	
Selenium	4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.9	14.3	
Silver	8.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.1 J	5.1	
Sodium	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	402 J	473 J	
Thallium	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.6 U	2.3 U	
Vanadium	---	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	24	104	
Zinc	2480	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7,080	8,110	

Compound	NYSDEC Brownfields Restricted Use Protection of Groundwater Soil Cleanup Objective	SB-57															
		SB-57 (0-4)	SB-57 (6-8)														
Date		10/12/2010															
TAL Metals (mg/kg) Method 6010/7471																	
Aluminum	---	11,500	11,500														
Antimony	---	23.5 J	15.9 J														
Arsenic	16	17.5	19.1														
Barium	820	897 J	839 J														
Beryllium	47	0.55 J	0.43 J														
Cadmium	7.5	26.3	24.2														
Calcium	---	45,000	42,400														
Chromium*	19	327	152														
Cobalt	---	25.1	23.5														
Copper	1720	1,870	8,510														
Iron	---	92,400	99,300														
Lead	450	4,890 J	2,960 J														
Magnesium	---	5,300	4,980														
Manganese	2000	769	724														
Mercury	0.73	5.3	5.8														
Nickel	130	201	333														
Potassium	---	1,160 J	1,310 J														
Selenium	4	6.7	7														
Silver	8.3	5.2	3.2														
Sodium	---	415 J	583 J														
Thallium	---	2.8 U	2.7 U														
Vanadium	---	57.1	50.5														
Zinc	2480	9,160	8,570														

NOTES:  
NYSDEC - New York State Department of Environmental Conservation  
Sample analysis by Test America of Edison, NJ  
All units are in milligrams per kilogram(mg/kg) - parts per million (ppm)  
Values in **bold** exceed the NYSDEC Brownfields Restricted Use Soil Cleanup Objective for Protection of Groundwater  
U = Analyte not detected  
B = Compound was found in the blank and sample.  
J = The reported value was obtained from a reading that was less than the Contract Required Detection Limit, but greater than or equal to the Instrument Detection Limit  
D = The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range  
... - No standard available  
\*Chromium standard is for Hexavalent/Trivalent Chromium  
UJ = The analyte was not detected above the sample reporting limit; and the reporting limit is approximate  
NA = Not analyzed.



TABLE 4-5

SOIL ANALYTICAL RESULTS - TCLP METALS

SECOND SUPPLEMENTAL REMEDIAL INVESTIGATION

FRITO-LAY  
202-218 MORGAN AVENUE - C224133  
BROOKLYN, NY

Compound	RCRA Hazardous Waste Regulatory Level	SB-8-1		SB-8-2		SB-16-1	SB-22-1		SB-22-2		SB-23-1		SB-23-2	
		SB-8-1 (0-4)	SB-8-1 (4-6)	SB-8-2 (0-4)	SB-8-2 (4-10)	SB-16-1 (0-4)	SB-22-1 (0-4)	SB-22-1 (4-6)	SB-22-2 (0-4)	SB-22-2 (4-6)	SB-23-1 (0-4)	SB-23-1 (4-6)	SB-23-2 (0-4)	SB-23-2 (0-4)
Date		10/13/2010		10/13/2010		10/12/2010	10/13/2010		10/13/2010		10/14/2010		10/14/2010	
TCLP Metals (Mg/L) Method 1311														
Arsenic	5	0.025 U	0.025 U	0.025 U	0.025 U	NA	0.025 U	0.025 U	NA	NA	0.025 U	0.025 U	0.025 U	0.025 U
Lead	5	0.292	3.99	5.37	2.81	1.14	0.885	0.353	0.025 U	0.963	0.271	NA	NA	NA

NOTES:  
Sample analysis by Test America of Edison, NJ  
All units are in milligrams per liter (mg/L) - parts per million (ppm)  
Values in **bold** exceed the RCRA Hazardous Waste Regulatory Level  
U = Analyte not detected  
B = Compound was found in the blank and sample.  
J = The reported value was obtained from a reading that was less than the Contract Required Detection Limit, but greater than or equal to the Instrument Detection Limit  
NA = Not analyzed.

TABLE 4-6

## COMMUNITY AIR MONITORING SUMMARY TABLE

## SECOND SUPPLEMENTAL RI

## FRITO-LAY

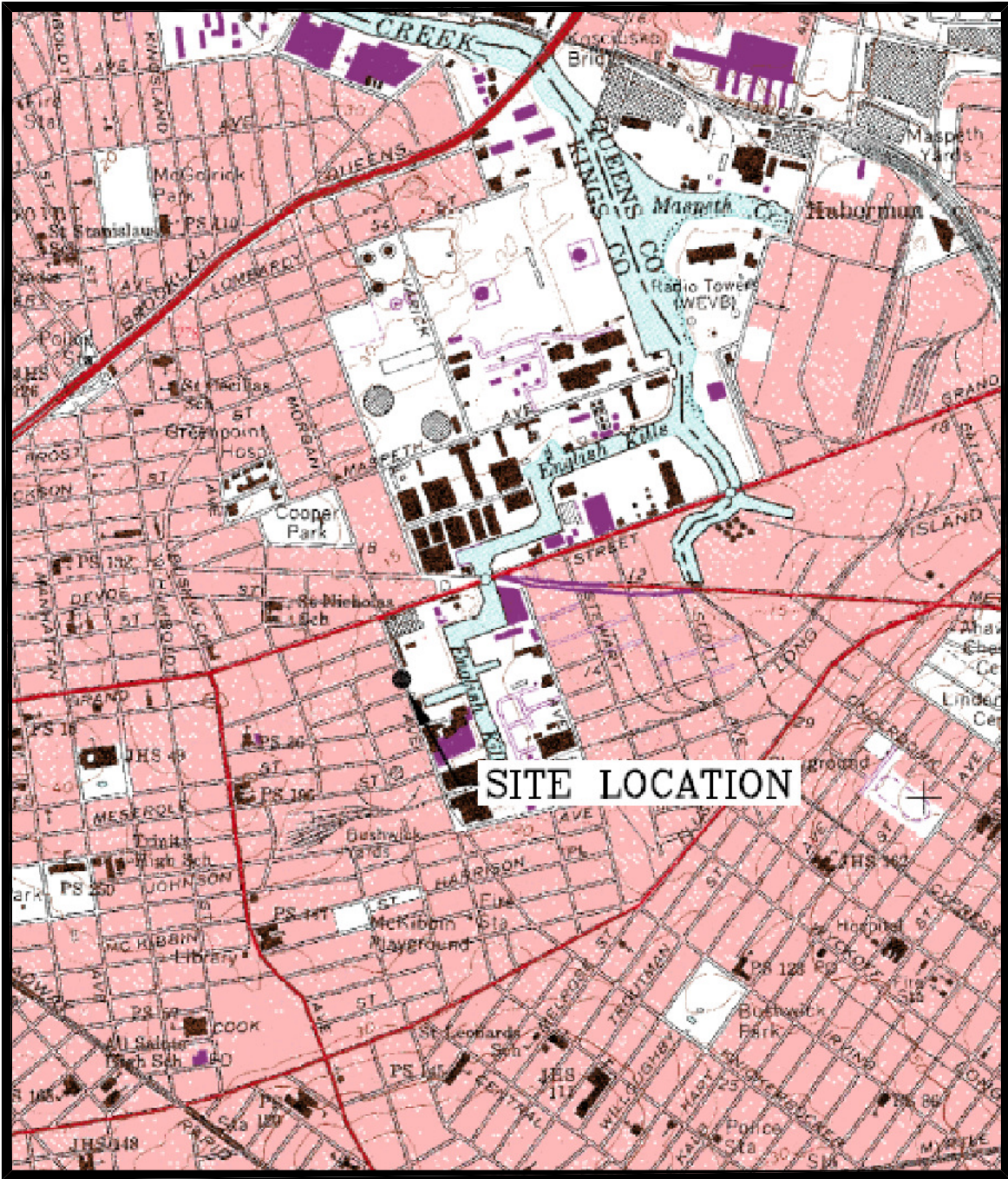
202-218 MORGAN AVENUE - C224133

BROOKLYN, NEW YORK

Date	Model No.	Location	Start Time	Stop Time	Elapsed Time	Max Display Conc	Max STEL Conc	Overall Average Conc	Comments/Weather
10/4/2010	6144	SE Corner - Downgradient	9:35:23	11:09:23	1:34:00	0.048	0.020	0.013	Heavy Rain
10/4/2010	6147	NW Corner - Upgradient	9:40:11	11:14:11	1:34:00	0.046	0.007	0.000	Heavy Rain
10/5/2010	6144	SE Corner - Downgradient	8:37:48	15:13:48	6:36:00	0.055	0.012	0.000	Cloudy, periods of rain
10/5/2010	6147	NW Corner - Upgradient	8:41:20	15:16:20	06:35:00	0.154	0.003	0.000	Cloudy, periods of rain
10/6/2010	6144	SE Corner - Downgradient	8:24:27	15:12:27	6:48:00	0.000	0.000	0.000	Cloudy, no rain
10/6/2010	6147	NW Corner - Upgradient	8:28:31	15:25:31	6:57:00	0.420	0.000	0.000	Cloudy, no rain
10/7/2010	6144	Central East - Downgradient	9:36:42	14:57:42	5:21:00	0.023	0.000	0.000	Cloudy, periods of rain
10/7/2010	6147	Central West - Upgradient	9:41:06	15:00:06	5:19:00	0.253	0.017	0.002	Cloudy, periods of rain
10/8/2010	6144	Central East - Downgradient	7:53:11	15:03:11	7:10:00	1.109	0.002	0.000	Clear skies
10/8/2010	6147	Central West - Upgradient	7:52:48	15:07:48	7:15:00	0.138	0.011	0.004	Clear skies
10/11/2010	6144	SE Corner - Downgradient	8:11:11	14:55:11	6:44:00	0.075	0.000	0.000	Cloudy, no rain
10/11/2010	6147	NW Corner - Upgradient	8:16:25	15:00:25	6:44:00	24.678	0.293	0.000	Cloudy, no rain
10/12/2010	6144	SE Corner - Downgradient	7:46:25	14:44:25	6:58:00	0.132	0.004	0.000	Cloudy, no rain
10/12/2010	6147	NW Corner - Upgradient	8:11:00	14:49:00	6:38:00	0.078	0.008	0.000	Cloudy, no rain
10/13/2010	6144	SE Corner - Downgradient	8:03:57	15:05:57	7:02:00	0.199	0.000	0.000	Cloudy, periods of rain
10/13/2010	6147	NW Corner - Upgradient	8:05:10	15:10:10	7:05:00	0.515	0.000	0.000	Cloudy, periods of rain
10/14/2010	6144	NW Corner - Downgradient	8:14:51	14:15:51	6:01:00	0.443	0.002	0.000	Cloudy, no rain
10/14/2010	6147	Not operational	--	--	--	--	--	--	Equipment Error, No Data was logged

## FIGURES

202-218 MORGAN AVENUE  
BROOKLYN, NEW YORK



SCALE 1"=2000'


U.S.G.S. 7.5 MINUTE QUADRANGLE  
ELMIRA, NEW YORK

**LOCATION MAP**



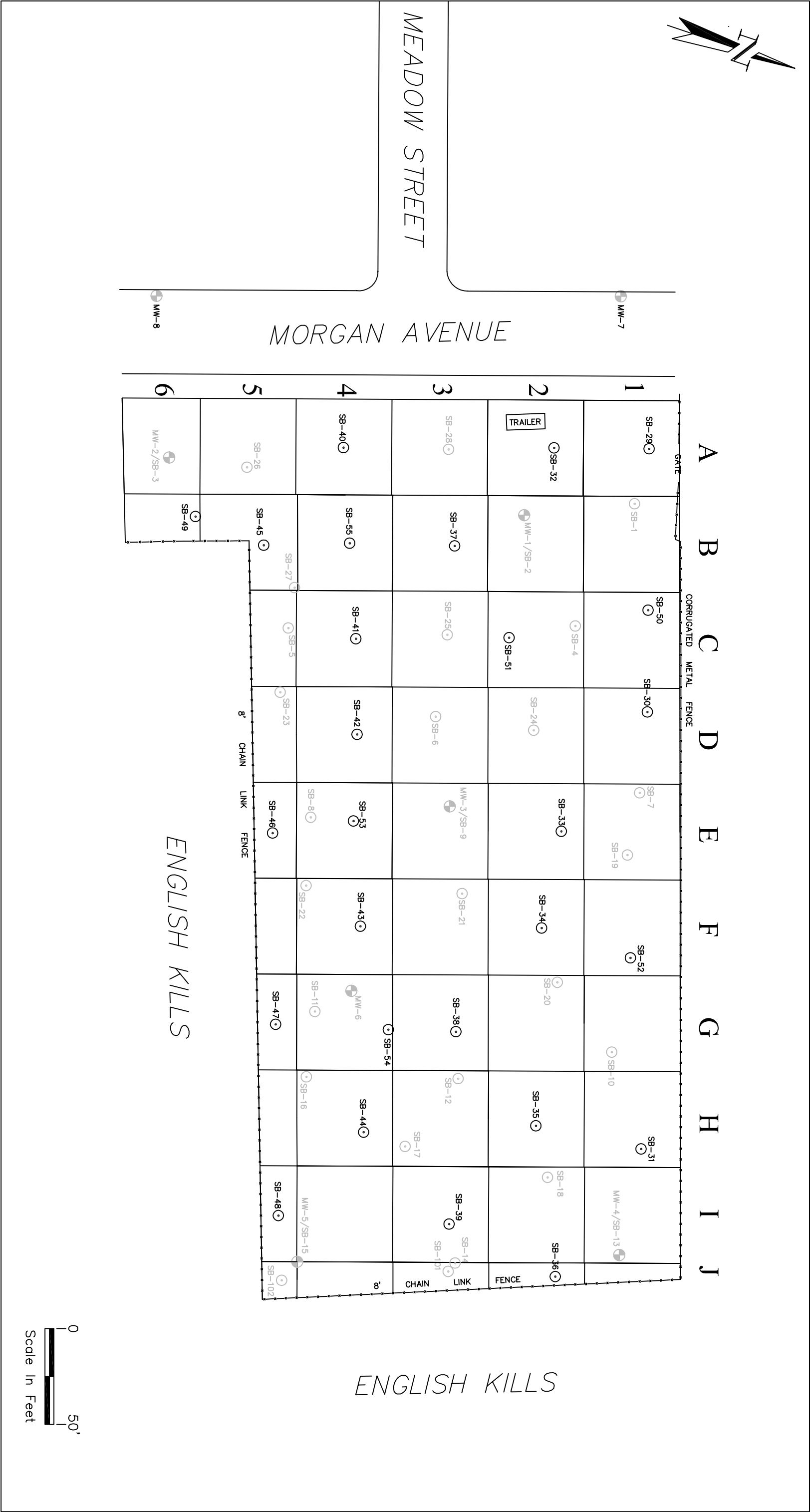


LEGEND

 SITE LOCATION

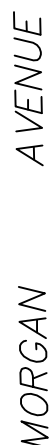
AERIAL LOCATION MAP

FRITO LAY, INC.  
202-218 MORGAN AVENUE  
BROOKLYN, NEW YORK

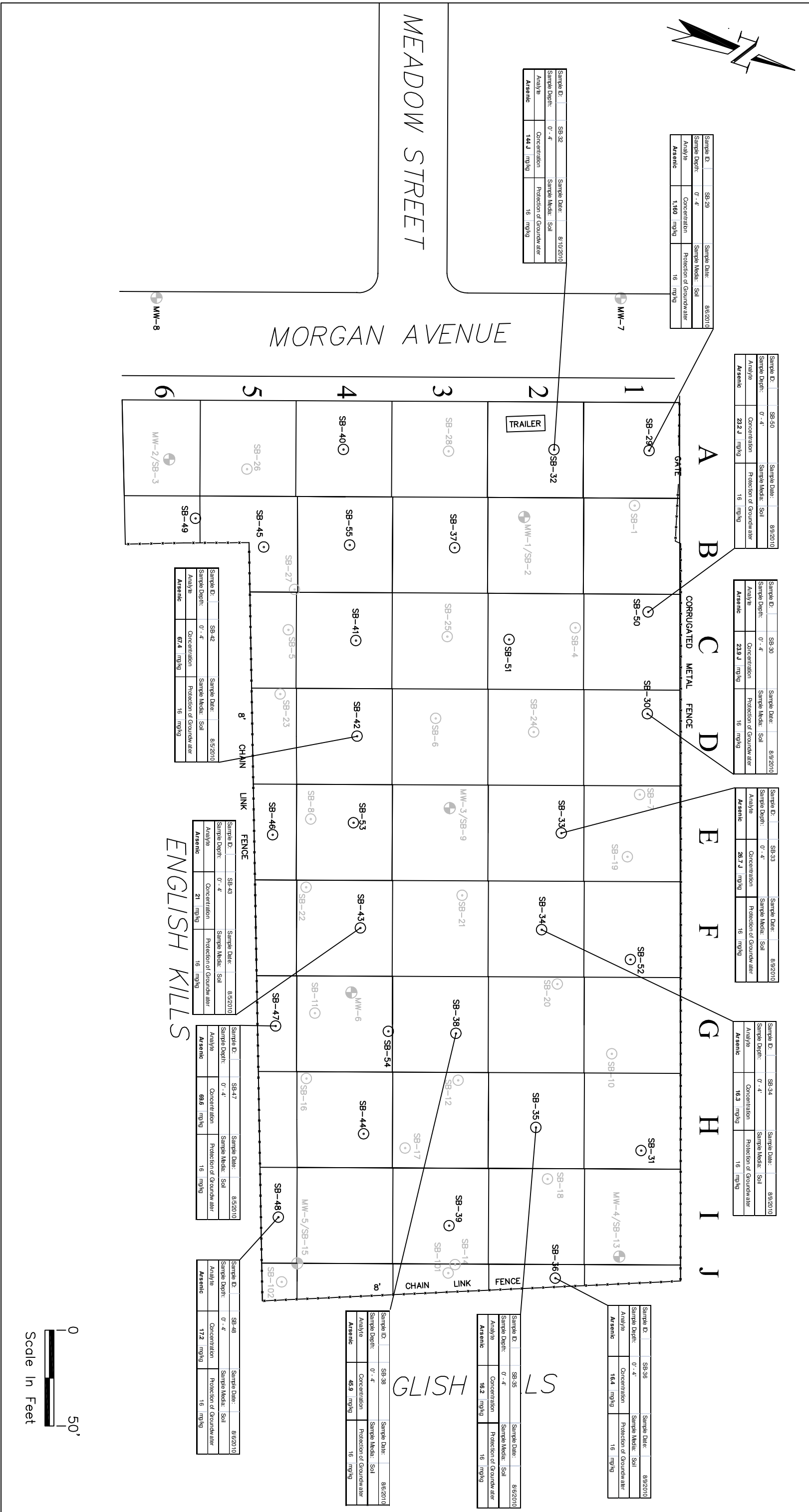


SUPPLEMENTAL RI SOIL SAMPLE LOCATIONS

FRITO LAY, INC.  
202-218 MORGAN AVENUE, BROOKLYN, NEW YORK



**3-2**

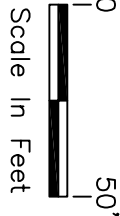


ARSENIC SOIL RESULTS (0'-4') - PROTECTION OF GROUNDWATER SCOS

202-218 MORGAN AVENUE, BROOKLYN, NEW YORK



202-218 MORGAN AVENUE, BROOKLYN, NEW YORK



Scale In Feet

## MONITORING WELL

© 2007 AND 2009 SOIL BORING LOCATIONS

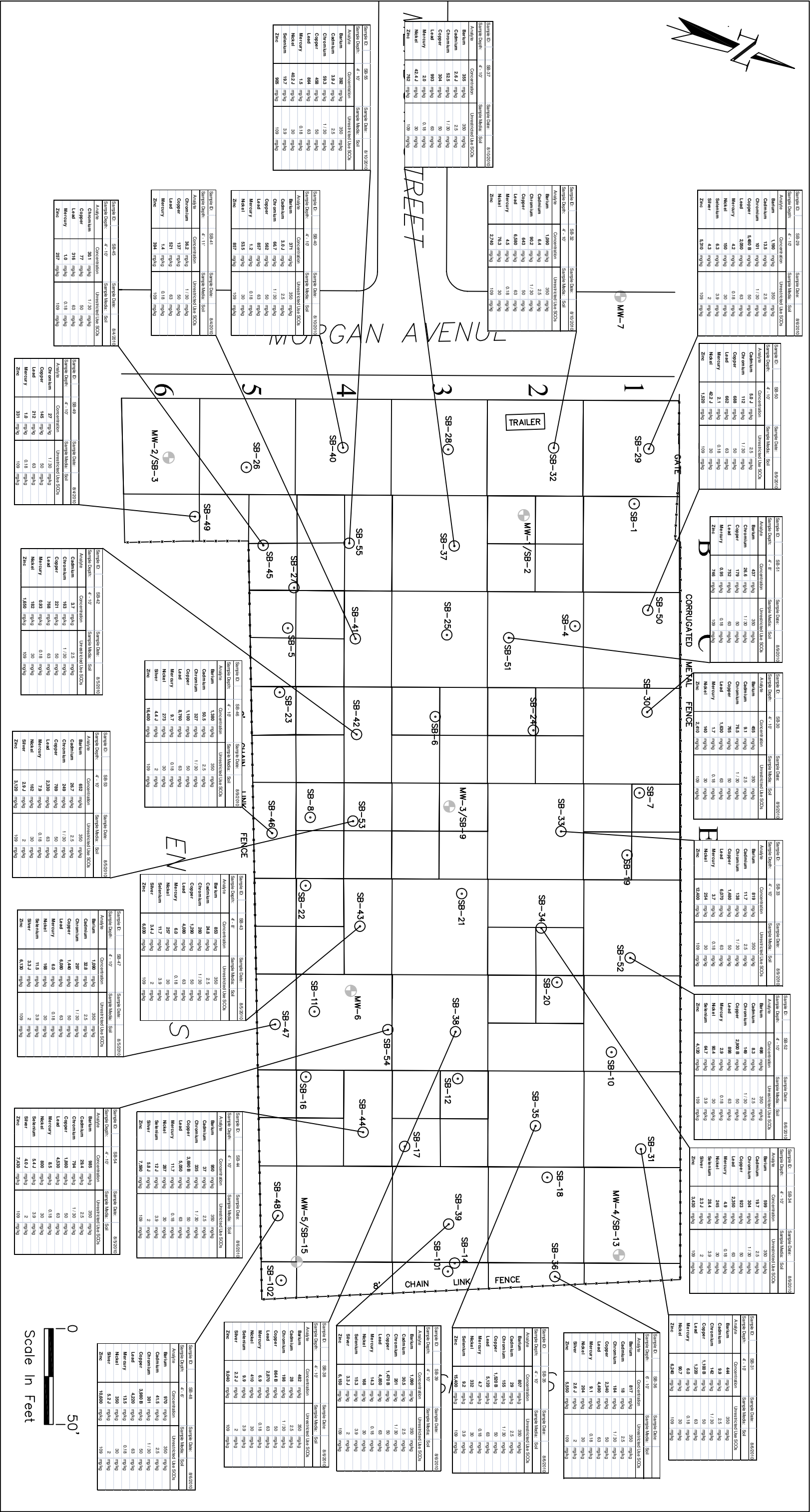
- 2010 SECOND SUPPLEMENTAL REMEDIAL DELINEATION SOIL BORING LOCATIONS

NOTE: BOLD ANALYTES AND CONCENTRATIONS EXCEED THE BROWNFIELDS UNRESTRICTED

FRIO LAY, INC.

202-218 MORGAN AVENUE, BROOKLYN, NEW YORK

## TOTAL METALS SOILS RESULTS (0'-4') - UNRESTRICTED USE SCORES



**LEGEND**

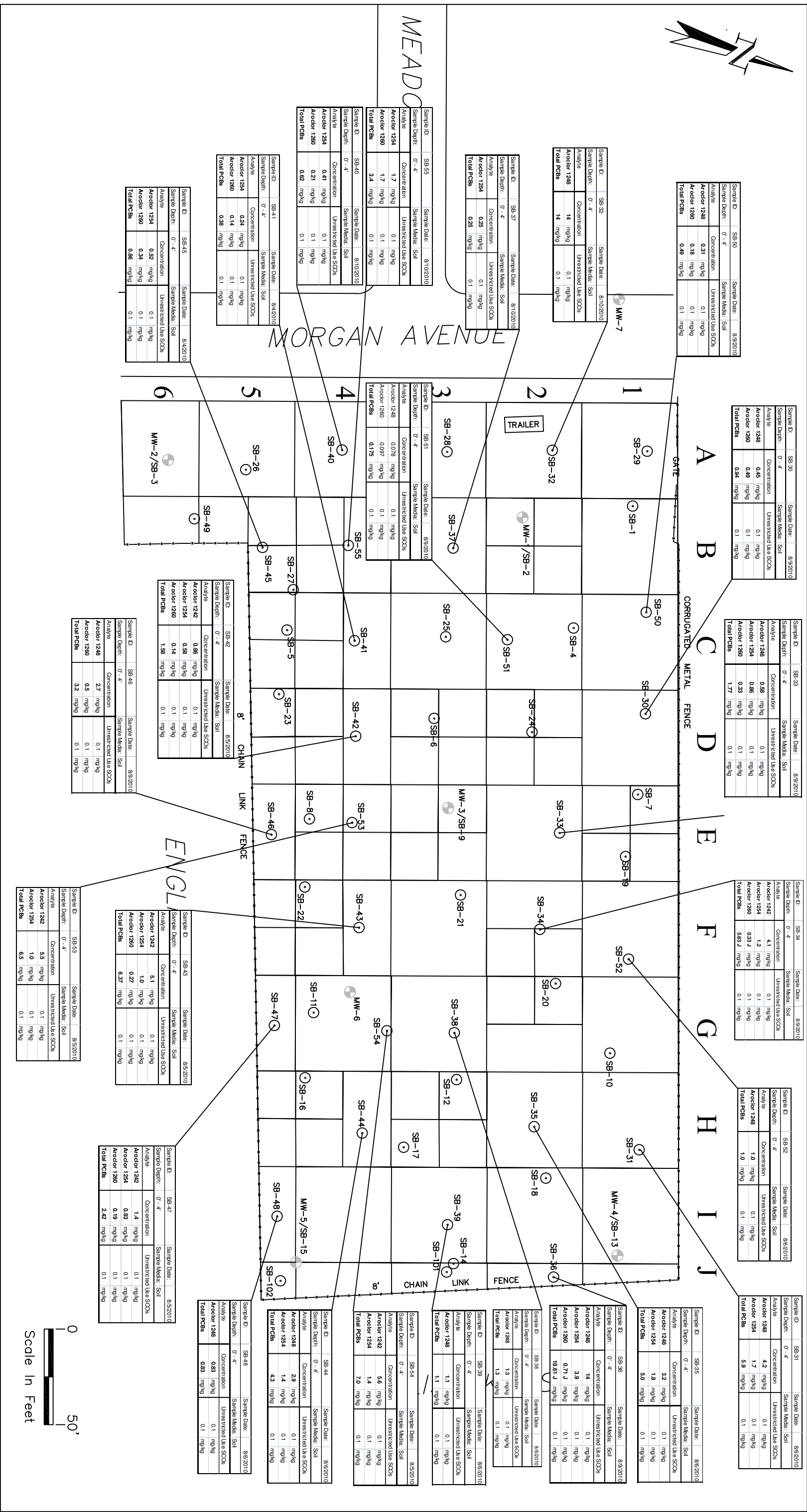
- MONITORING WELL
- ⊙ 2007 AND 2009 SOIL BORING LOCATIONS
- 2010 SECOND SUPPLEMENTAL REMEDIAL DELINEATION SOIL BORING LOCATIONS

NOTE: BOLD ANALYTES AND CONCENTRATIONS EXCEED THE BROWNFIELDS UNRESTRICTED USE SOIL CLEANUP OBJECTIVES

FRITO LAY, INC.  
202-218 MORGAN AVENUE, BROOKLYN, NEW YORK

202-218 MORGAN AVENUE, BROOKLYN, NEW YORK





## LEGEND

## MONITORING WELL

### 2007 AND 2009 SOIL BORING LOCATIONS

- 2010 SECOND SUPPLEMENTAL REMEDIAL DELINEATION SOIL BORING LOCATIONS

NOTE: BOLD ANALYTES AND CONCENTRATIONS EXCEED THE BROWNFIELDS UNRESTRICTED

## USE SOIL CLEANUP OBJECTIVES

PCB SOIL RESULTS (0'-4') - UNRESTRICTED USE SCOS

FRITO LAY, INC.

202-218 MORGAN AVENUE, BROOKLYN, NEW YORK

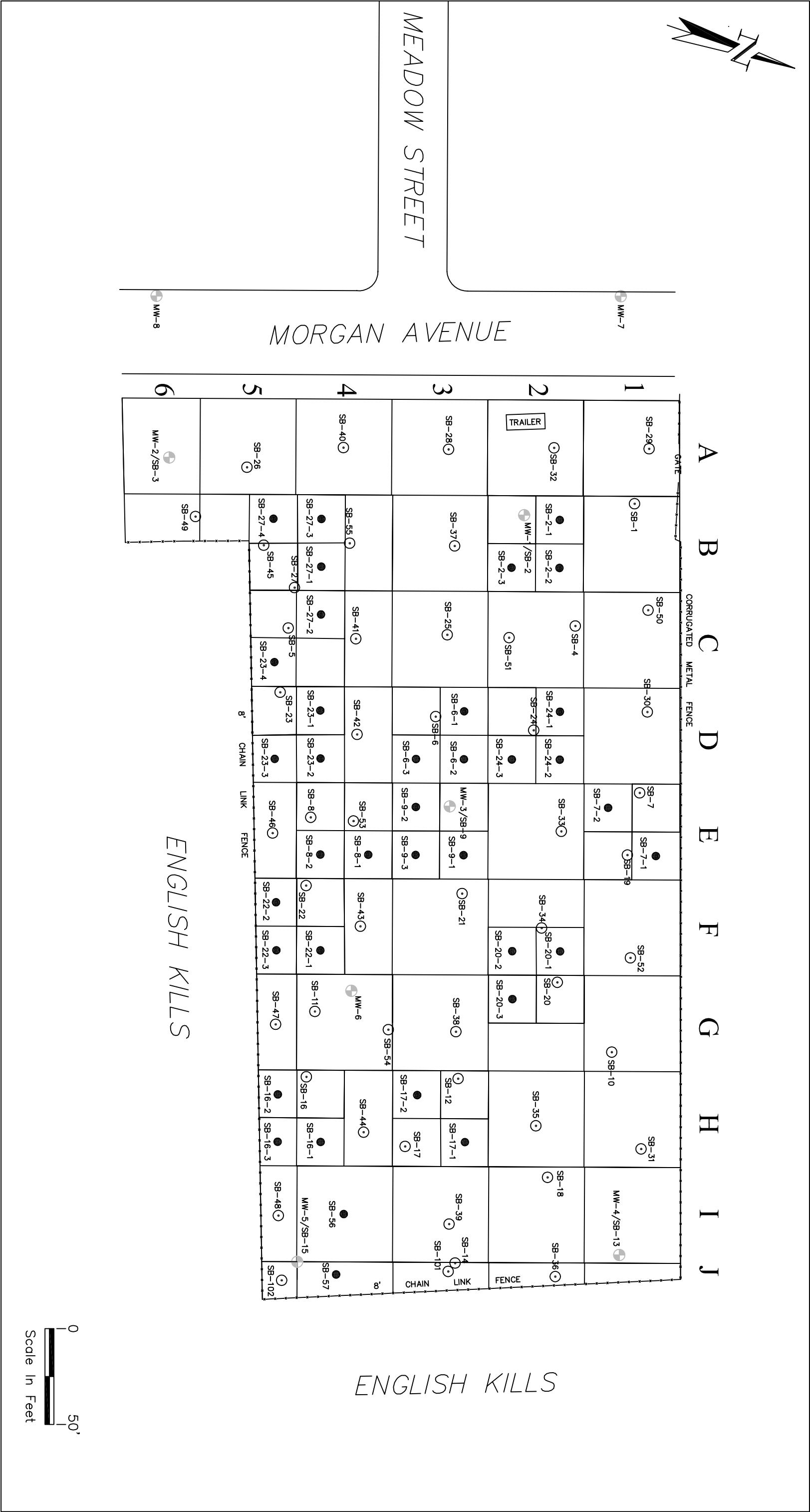




- TOTAL ARSENIC, TOTAL LEAD, AND TCLP SOIL RESULTS

202-218 MORGAN AVENUE, BROOKLYN, NEW YORK

-TAL ARSENIC IS COMPARED TO THE RESTRICTED USE PROTECTION OF GROUNDWATER SOIL CLEANUP OBJECTIVES



SECOND SUPPLEMENTAL RI SAMPLING LOCATIONS

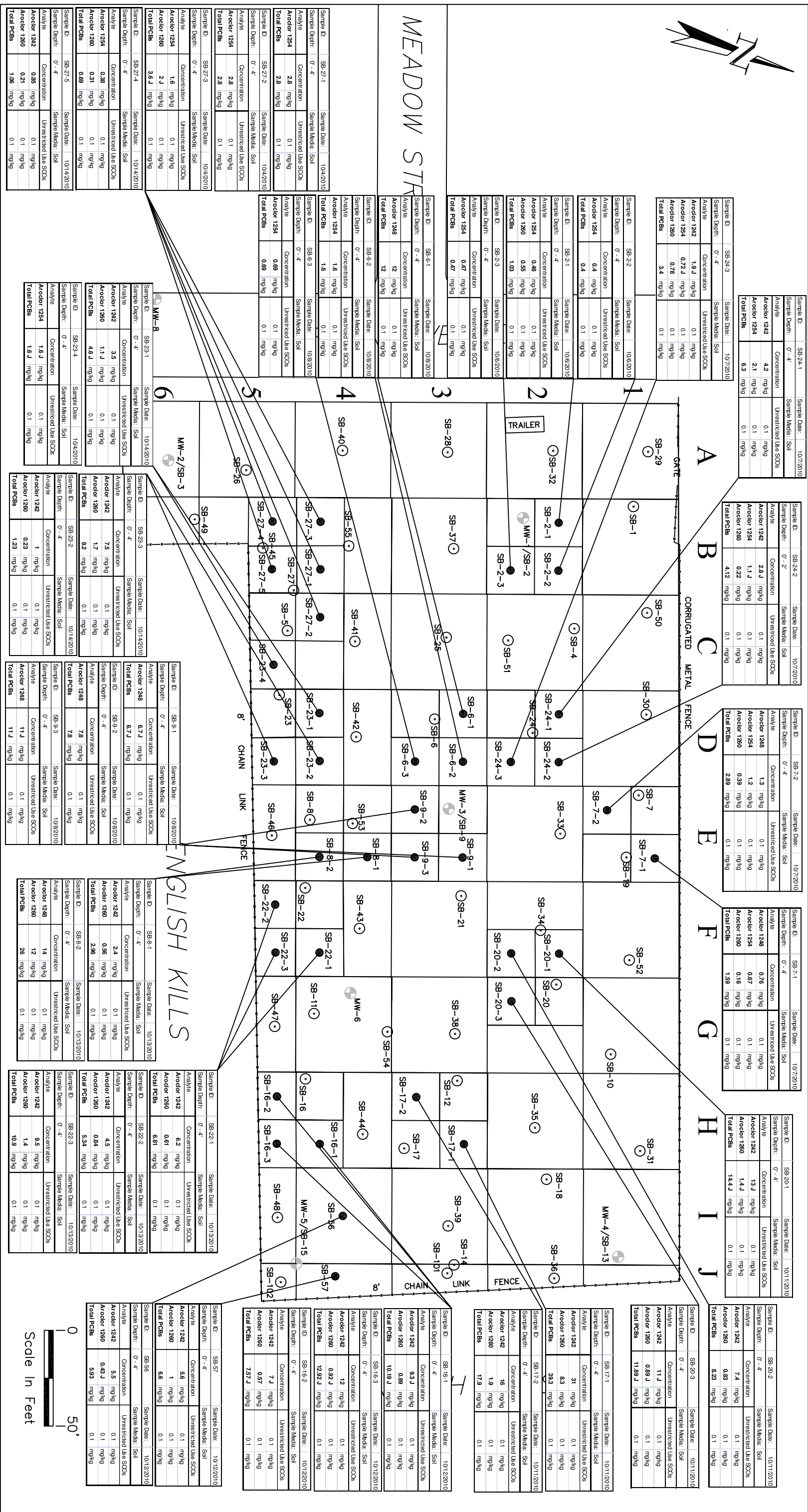
FRITO LAY, INC.  
202-218 MORGAN AVENUE, BROOKLYN, NEW YORK



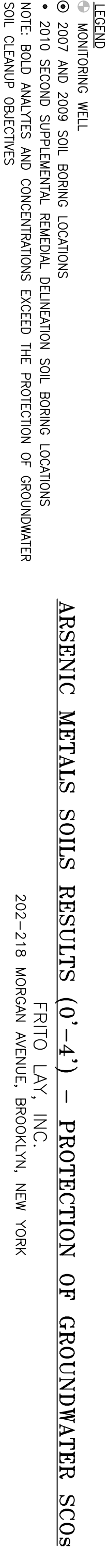




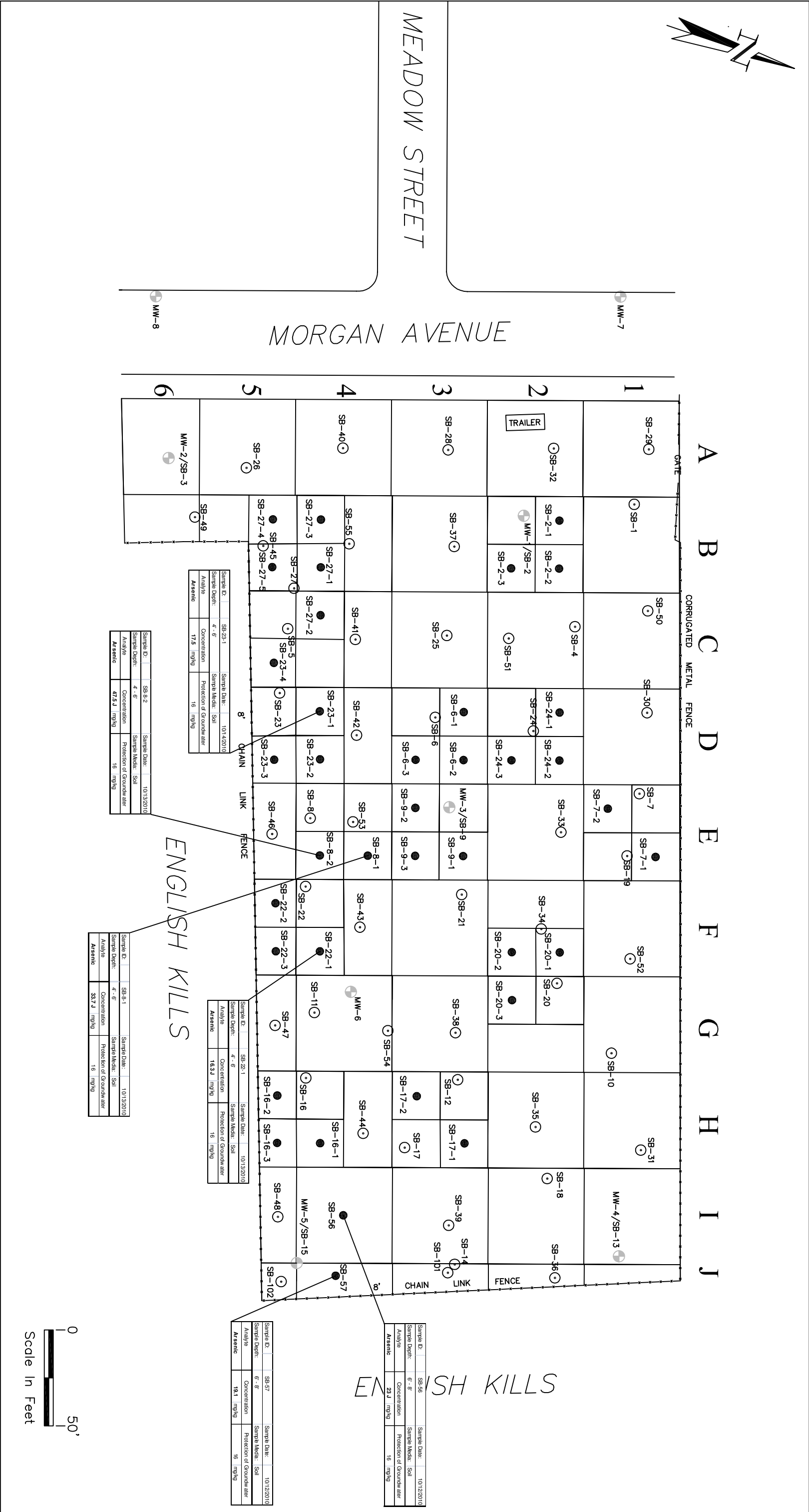
FIGURE 4-3

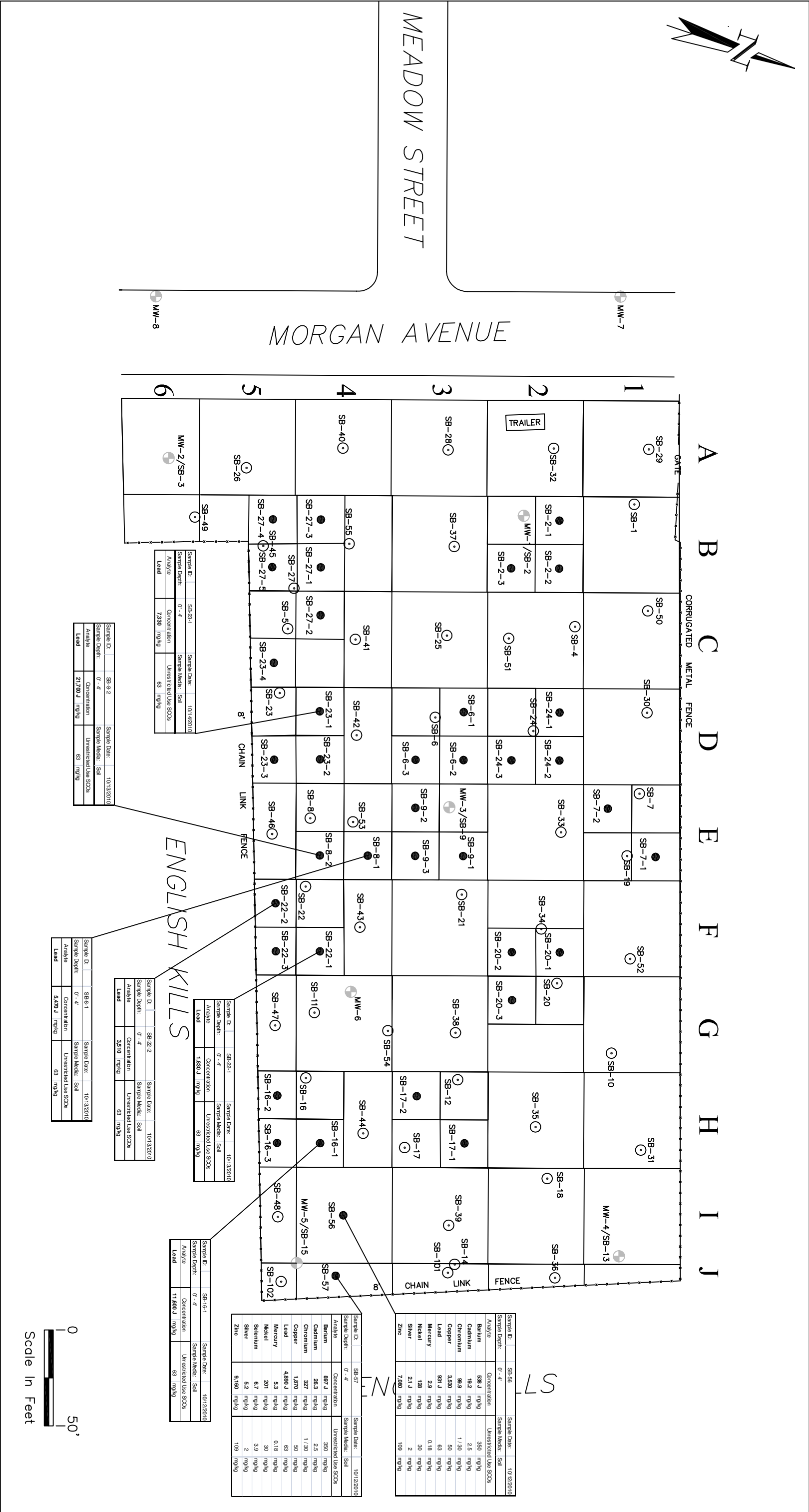


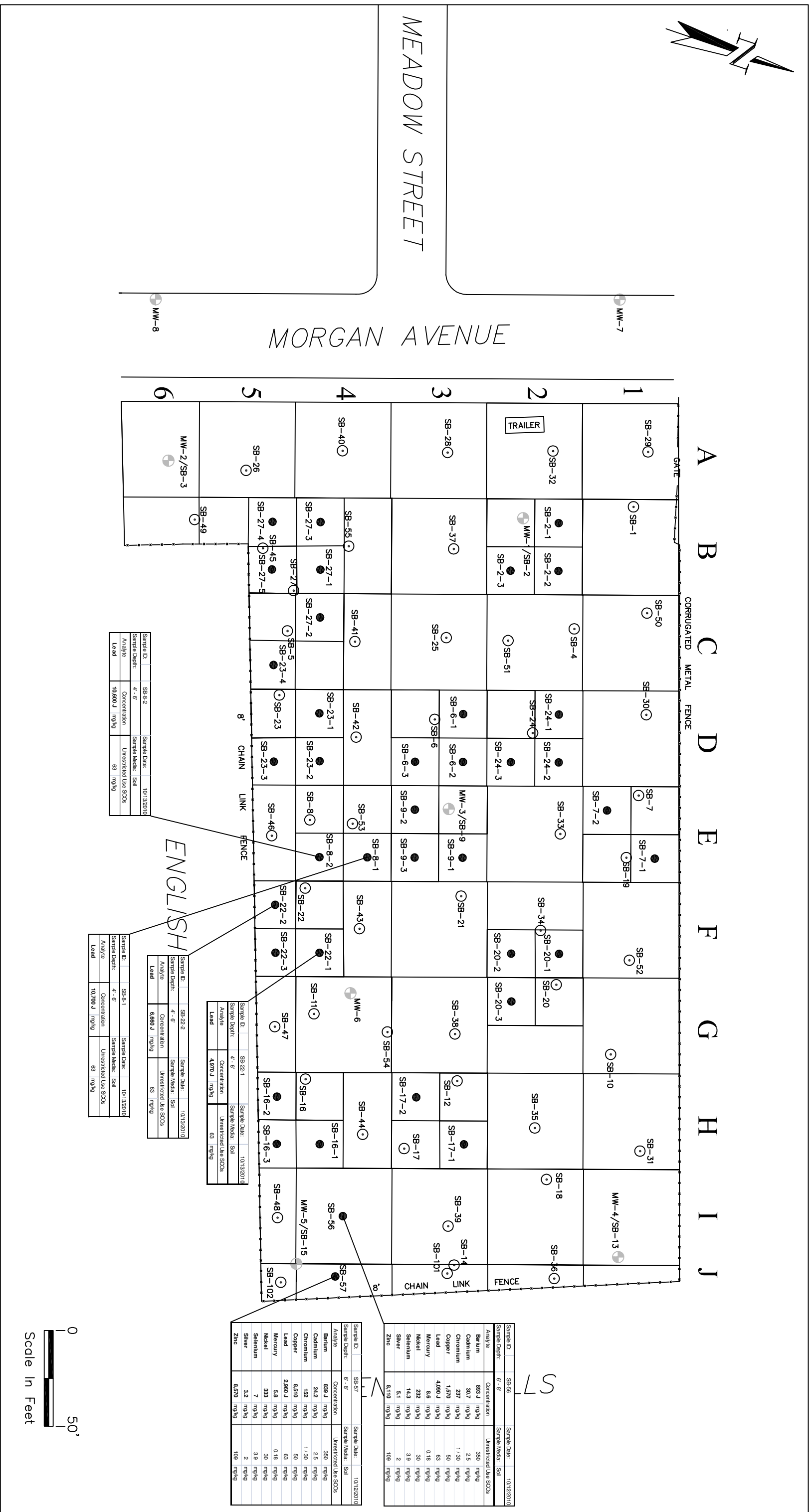














**APPENDIX A**  
**SOIL BORING LOGS**



# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-2-1		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743.034							Sheet 7 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/6/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)											
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, D. Carter (ADT)											
Total Depth: 12                      Depth to Water: 10											
depth (feet)		PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks	
1		0.4	6 15	SB-2-1 (0-4)	0-2'	Dry	10/24"	Black F-C SAND and SILT, some F-M Gravel, little Red Brick		Slight Petro odor Some black staining	
2			15 41								
3		27.0	8 11		2-4'	Moist	13/24"	5" F-C SAND and SILT, some Red Brick		Heavy petro. odor, black staining	
4			11 14			Dry		8" Brown F-C SAND, little Silt		Light petro. odor, light staining	
5		0.0	16 17		4-6'	Dry	13.5/24"	Red-Brown F-C SANDY SILT, some F-M Gravel, trace Red Brick, trace White Plastic		No odor No staining	
6			11 16								
7		38.0	23 19	SB-2-1 (6-8)	6-8'	Dry	8.5/24"	Dk Brown F-C Sandy SILT, some F-M Gravel, trace Red Brick		Petro odor Black staining	
8			18 15								
9		N/A	8 7		8-10'	N/A	0/24"	No Recovery			
10			4 4								
11		N/A	4 5		10-12'	Saturated		Saturated - No sample		Groundwater at 10'	
12			9 8								
13											
14											
15											
16											
17											
18											
19											
20											

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-2-2		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743.034							Sheet 6 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/6/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)											
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, D. Carter (ADT)											
Total Depth: 12' Depth to Water: 10'											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks		
1			SB-2-2 (1-4)	0-1'	N/A	0/24"	1' Gray CONCRETE		Drilled down to 1' Concrete not in sample		
2	0.3	17 50/5		1-2'	Dry	12/24"	Black F-C SAND, some F-M Gravel, trace Red Brick, trace Wood, trace Glass		No odor, some staining		
3	0.6	14 31		2-4'		20/24"	2" Black F-C SAND, some F-M Gravel, trace Red Brick, trace Wood, trace Glass		No odor, dark staining throughout		
4	0.7 0.3	26 35					14" Dark Brown F-M SAND, some Silt 4" Red BRICK				
5	2.1	11 11		4-6'	Dry	22/24"	4" Dark Brown F-M SANDY SILT, trace F Gravel		No odor, light black staining		
6		12 8					18" Red-Brown F-M SANDY SILT, little F-M Gravel		No odor, no staining		
7	40.1	11 11	SB-2-2 (6-8)	6-8'	Dry	13/24"	3" Red BRICK, some F-C Sand, trace Wood		No odor, no staining		
8		12 9					7" Brown F-C SAND and SILT, little F-M Gravel, trace Red Brick		No odor, no staining		
9	4.7	4 6		8-10'	Moist	16/24"	3" Brown F-M SAND, some F-M Gravel 10.5" Brown F SANDY SILT		No odor, no staining		
10		8 5					5.5" Dk Brown F SANDY SILT, little F Gravel, trace Glass		Black staining, slight petroleum odor		
11	N/A	3 3		10-12'	Saturated	17/24"	Brown F SANDY SILT		Groundwater at 10'		
12		2 3									
13											
14											
15											
16											
17											
18											
19											
20											

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-2-3		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743.034							Sheet 5 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/6/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)											
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, D. Carter (ADT)											
Total Depth: 12'                      Depth to Water: 12'											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks		
1	1.7	20	SB-2-3 (0-4)	0-2'	Dry	16.5/24"	11" Brown F-M SILTY SAND and GRAVEL, trace Red Brick, trace Glass		No odor, no staining		
	23.8	42								5.5" Red BRICK, some F-M Sand	
2	3.9	42		2-4'	Dry	18.5/24"	8.5" Dk Brown F-M SILTY SAND, some F-M Gravel, little Red Brick, trace Plastic, trace Metal		No odor, no staining		
		32								10" Red BRICK	
3	3.3	60		4-6'	Dry	7/24"	F-M Sandy SILT, some F-M Gravel, trace Red Brick		No odor, no staining		
		56									
4	0.0	6		6-8'	Dry	8/24"	4" Dark Brown F-M SANDY SILT, some F-M Gravel		No odor, no staining		
		11								4" Dark Brown F-M SANDY SILT, some F-M Gravel, trace Red Brick	
5		13		8-10'	Dry	10/24"	Dark Brown M-C SAND and GRAVEL		No odor, no staining		
		16									
6	0.2	10		10-12'	Moist	23/24"	12" Dark Brown F-M SANDY SILT, some F-M Gravel		No odor, no staining		
		10								11" Dark Brown F-M SANDY SILT, some F-M Gravel, trace Red Brick	
7		11			Saturated						
		7									
8	2.0	5									
		4									
9		3									
		5									
10	2.6	4	SB-2-3 (10-11)								
		5									
11	N/A	3									
		3									
12											
13											
14											
15											
16											
17											
18											
19											
20											

SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-6-1		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743.034				Sheet 13 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 10/8/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, C. Fodice (ADT)								
Total Depth: 4'                      Depth to Water: 2'								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
—	0.0	6	SB-6-1	0-2'	Moist	6/24"	Brown F-M SANDY SILT, little F Gravel	No odor, no staining
1		8	(0-2)					
—		12						
2		6						
—	N/A	13		2-4'	Saturated	10/24"	Black F-M SANDY SILT, little F Gravel	Groundwater at 2'
3		10						Strong petro. odor,
—		14						black staining
4		10						
—								
5								
—								
6								
—								
7								
—								
8								
—								
9								
—								
10								
—								
11								
—								
12								
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13								
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14								
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15								
—								
16								
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17								
—								
18								
—								
19								
—								
20								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-6-2		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743.034							Sheet 14 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/8/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)											
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, C. Fodice (ADT)											
Total Depth: 8'                      Depth to Water: N/A											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks		
1	1.4	5 35	SB-6-2 (0-4)	0-2'	Dry	21/24"	Brown F-C SANDY SILT, some F-M Gravel, trace Red Brick, Glass, Wood		No odor, no staining		
2		14 27					6" Black F-C SANDY SILT, some F-M Gravel, trace Glass 18" Black F-M SANDY SILT, some F Gravel		Strong petro. odor, black staining		
3	82.0	9 11		2-4'	Wet	24/24"					
4	260.0	13 12			Moist		Brown F-C SAND, some Silt, trace F-M Gravel, trace Concrete, trace Wood		No odor, no staining		
5	2.5	35 15		4-6'	Dry	7/24"					
6		50/3					Black F-M SAND, some Silt, few Wood Fibers, trace Red Brick		Strong petro. odor, black staining 6-8' spoon refusal, collected sample off of auger		
7	41.6	N/A	SB-6-2 (6-8)	6-8'	Moist	24/24"					
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

# SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-6-3		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743.034				Sheet 15 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 10/8/2010				
Drilling Co: <u>Aquifer Drilling and Testing (ADT)</u>								
Method: <u>Hollow Stem Auger</u>								
Personnel: <u>B. Tiskowitz, M. Borruso (GF); C. Migliore, C. Fodice (ADT)</u>								
Total Depth: <u>6'</u> Depth to Water: <u>4'</u>								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
—	0.3	20	SB-6-3 (0-4)	0-2'	Dry	14/24"	10" Brown F-C SAND and SILT, some F-M Gravel, little Concrete, trace Red Brick	No odor, no staining
1	1.8	4			Saturated		4" Black F-M GRAVEL, some F-C Sand	Slight petro. odor, black staining
2		3						
—	9.0	19		2-4'	Wet	13/24"	4" Black F-M GRAVEL, some F-C Sand	Petro. odor, black staining
3		4						
—		5					9" CONCRETE and F-C SAND, some F-M gravel	Slight petro. odor, black staining
4	N/A	4		4-6'	Saturated		Black F-M GRAVEL, some F-C Sand	Slight petro. odor, black staining
—		5						
5		10						Groundwater at 4'
—		14						
6								
—								
7								
—								
8								
—								
9								
—								
10								
—								
11								
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18								
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19								
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# SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-7-1		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743.034				Sheet 12 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 10/7/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. Campbell (ADT)								
Total Depth: 8'      Depth to Water: 6'								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	0.5	9 29	SB-7-1 (0-4)	0-2'	Slightly moist	13/24"	Brown F-C SAND and SILT	Slight organic odor, no staining
2		11 14	Dup-1					
3	0.0	9 4		2-4'	Slightly moist	10/24"	Brown F-C SAND and SILT	Slight organic odor, no staining
4		5 6						
5	0.0	8 8	SB-7-1 (4-6)	4-6'	Moist	12/24"	Black F-M SANDY SILT, some Red Brick, trace Paper	Slight organic odor, black staining
6		12 13						
7	N/A	5 8		6-8'	Saturated	14/24"	Black F-M SANDY SILT, some Red Brick, trace Paper	Groundwater at 6' No odor, black staining
8		13 14						
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-7-2	Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743.034							Sheet 11 of 38	
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/7/2010	
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. Campbell (ADT)								
Total Depth: 10' Depth to Water: 9.5'								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	0.9	2 4	SB-7-2 (0-4)	0-2'	Dry	11/24"	Brown F-M SANDY SILT, little F Gravel, trace White Plastic, trace Red Brick	No odor, black staining
2		8 12						
3	1.7	13 14		2-4'	Dry	20/24"	Dark Brown F-C SILTY SAND, some F-M Gravel, little Red Brick, trace Paper	Strong petro. odor, black staining
4		26 29						
5	68.0	19 50/2	SB-7-2 (4-6)	4-6'	Dry	10/24"	Black F-M SAND and SILT, some F-M Gravel, little Red Brick, trace Wood, trace Glass	Strong petro. odor, black staining
6								
7	1.4	5 11		6-8'	Dry	11/24"	Dark Brown F-M SAND, some Silt, little Red Brick	Organic odor, no staining
8		13 18						
9	0.1	9 10		8-9.5'	Moist	17/24"	Dark Brown F-M SAND and SILT, little Red Brick	No odor, some black staining
10	N/A	12 18		9.5-10'	Saturated	8/24"	Dark Brown F-M SAND and SILT, little Red Brick	Groundwater at 9.5'
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								



# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-8-1	Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743.034							Sheet 32 of 38	
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/13/2010	
Drilling Co: <u>Aquifer Drilling and Testing (ADT)</u>								
Method: <u>Hollow Stem Auger</u>								
Personnel: <u>B. Tiskowitz, M. Borruso (GF); C. Migliore, J. McGill (ADT)</u>								
Total Depth: <u>11.5'</u> Depth to Water: <u>N/A</u>								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	5.1	28 33 50/1	SB-8-1 (0-4)	0-2'	Slightly moist	17/24"	F-M SAND, some Silt, little Metal, trace Glass, trace Red Brick	Light organic odor, black staining
2	211.0	N/A		2-4'	Dry	24/24"	Black F SANDY SILT, little F-M Gravel, trace Wood	Strong organic odor, black staining
3								
4	43.0	22 26 37 24	SB-8-1 (4-6)	4-6'	Dry	17/24"	F-M SAND and SILT, some F-M Gravel, little Concrete, trace Glass	Petro. odor, black staining
5								
6	17.0	31 35 29 32		6-8'	Dry	23/24"	Dk Brown F-M SAND and SILT, some F-M Gravel , trace Red Brick	Light organic odor, black staining
7								
8	6.1	31 30 32 30		8-10'	Dry	16/24"	Black F-M SAND and SILT, some F-M Gravel , trace Red Brick	Light petro. odor, black staining
9								
10	13.1	38 49 50/3		10-11.5'	Moist	13/24"	Dark Brown F-M SAND and SILT, some F-M Gravel , trace Red Brick, trace Metal	Light petro. odor, black staining
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-8-2		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743.034							Sheet 33 of 38		
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/13/2010		
Drilling Co: Aquifer Drilling and Testing (ADT)									
Method: Hollow Stem Auger									
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. McGill (ADT)									
Total Depth: 10'                      Depth to Water: _____									
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks
1	0.1	22 25	SB-8-2 (0-4)	0-2'	Moist	14/24"	Brown F-M SAND and SILT, little F-M Gravel, trace Red Brick, trace Ceramic Tile, trace Wood		No odor, light black staining
2		27 22					Black F-C SAND, some Silt, little F-M Gravel, trace Red Brick, trace Glass		Light petro. odor, black staining
3	13.3	28 28		2-4'	Slightly moist	10/24"			
4		32 30							
5	28.0	23 24	SB-8-2 (4-6)	4-6'	Dry	22/24"	Black F-C SAND, some Silt, little F-M Gravel, trace Red Brick, trace Glass		Light petro. odor, black staining
6		28 30					Black F-C SAND, some Silt, little F-M Gravel, trace Red Brick, trace Wood		Strong petro. odor, black staining
7	0.5	42 39		6-8'	Dry	14/24"			
8		46 51							
9	11.0	N/A		8-10'	Dry	24/24"	Black F-C SAND, some Silt, little F Gravel, trace Wood		Light organic odor, black staining
10							Black F-C SAND, some Silt, little F Gravel, trace Wood		Spoon refusal at 8', sample collected off of auger
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-9-1	Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743.034							Sheet 16 of 38	
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/8/2010	
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, C. Fodice (ADT)								
Total Depth: 12'                      Depth to Water: 12'								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	1.6	33	SB-9-1 (0-4)	0-2'	Dry	14/24"	3" Brown F-M GRAVEL, some F-C Sand 11" Brown F-M SANDY SILT, some F-M Gravel, little Red Brick, trace Paper	No odor, no staining Petro. odor, black staining
		35						
2	29.6	49						
		46						
3	3.1	35		2-4'	Dry	18/24"	Dark Brown F-M SAND and SILT, some Red Brick, little F-M Gravel, trace Wood	Slight petro. odor, black staining
		38						
4		22						
		27						
5	1.7	38		4-6'	Dry	17/24"	Black F SANDY SILT, little F-M Gravel, trace Sticks/Wood Fibers, trace Plastic	Petro. odor, black staining
		50/2						
6								
7	1.5	10		6-8'	Dry	19/24"	Black F SANDY SILT, little F-M Gravel, trace Wood Fibers, trace Plastic	Slight petro. odor, black staining
		6						
8		8						
		24						
9	9.6	5		8-10'	Dry	15/24"	F-M Sandy SILT, some M Gravel, little Red Brick	Slight petro. odor, black staining
		4						
10		8						
		9						
11	20.0	54	SB-9-1 (10-11)	10-12'	Moist	16/24"	12" Black F-M SAND, some Silt, few M Gravel, little Red Brick, trace Wood 4" Black F-M SAND, some Silt, few M Gravel, little Red Brick, trace Wood	Petro. odor, black staining
		75						
12	N/A	50/5			Saturated			Groundwater at 12'
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-9-2	Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743.034							Sheet 18 of 38	
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/8/2010	
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, C. Fodice (ADT)								
Total Depth: 14' Depth to Water: 13'								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	33.0	9 12	SB-9-2 (0-4)	0-2'	Dry	21/24"	F-M SANDY SILT, some F-M Gravel, trace Wood, trace Paper, trace Plastic, trace Glass	Strong petro. odor, black staining
2		15 24						
3	25.0	10 11		2-4'	Dry	20/24"	F-M SANDY SILT, some F-M Gravel, trace Wood, trace Paper, trace Plastic, trace Glass	Strong petro. odor, black staining
4		31 25						
5	6.1	25 35		4-6'	Dry	11/24"	Black F SANDY Silt, some Red Brick, little Plastic, trace Wood	Strong petro. odor, black staining
6		15 10						
7	2.2	11 10		6-8'	Dry	19/24"	Black F-M SANDY SILT, some Red Brick, little Plastic, trace Wood	Strong petro. odor, black staining
8		10 7						
9	10.9	17 31	SB-9-2 (8-10)	8-10'	Dry	18/24"	Black F-M SANDY SILT, some F-M Gravel trace Red Brick, trace Wood, trace Metal	Strong petro. odor, black staining
10		35 21						
11	2.5	16 9		10-12'	Dry	8/24"	F-M SANDY SILT, little F Gravel, trace Glass, trace Wood	Slight petro. odor, black staining
12		7 4						
13	0.4	4 4		12-14'	Saturated	6/24"	F-M SANDY SILT, litte Red Brick, trace Glass, trace Wood	No odor, black staining
14		2 1						Groundwater at 13'
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-9-3		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743.034				Sheet 17 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 10/8/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, C. Fodice (ADT)								
Total Depth: 8      Depth to Water: N/A								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	0.0	8	SB-9-3 (0-4)	0-2'	Wet	12/24"	5" F SANDY SILT, some F-M gravel, trace Glass, trace Plastic, trace Red Brick	No odor, no staining
2	10.1	16			Dry		7" Black F-C SAND, some F-M Gravel, trace Wood, trace Red Brick	Petro. odor, black staining
3	31.2	24		2-4'	Moist	11.5/24"	F-M SANDY SILT, little F-M Gravel, trace Red Brick, trace Wood	Strong petro. odor, black staining
4		18						
5	45.0	N/A	SB-9-3 (4-6)	4-6'	Moist	48/48"	F-M SANDY SILT, some F-M Gravel, little Wood, trace Metal Rods	Strong petro. odor, black staining
6								
7	21.2	N/A		6-8'	Moist	19/24"	F-M SANDY SILT, trace F Gravel, trace Wood	Petro. odor, black staining
8								
9	N/A	N/A		8-10'	N/A		No Recovery	Spoon and auger refusal at 10'
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-16-1		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743.034							Sheet 24 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/12/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)											
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. Kamenicek (ADT)											
Total Depth: 10'                      Depth to Water: N/A											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks		
1	0.0	11 15	SB-16-1 (0-4)	0-2'	Moist	16/24"	11" Brown F-M SANDY SILT, some Wood, trace Plastic, M Gravel		No odor, no staining		
2	7.0	13 10			Moist		5" Black F-M SANDY SILT, some Wood, trace Plastic, M Gravel		Petro odor, black staining		
3	1.1	38 30		2-4'	Moist	12/24"	F-C SANDY SILT, some F-M Gravel, little Wood, trace Plastic, trace Red Brick		Petro odor, black staining		
4		13 17									
5	18.1	13 15		4-6'	Moist	14/24"	F-C SANDY SILT, little Wood, trace Red Brick		Petro odor, black staining		
6		21 30									
7	63.0	N/A	SB-16-1 (6-8)	6-8'	Moist	24/24"	F-M SANDY SILT, some F-M Gravel, little Wood, trace Metal		Petro odor, black staining		
8											
9	11.0	7.5/5		8-10'	Moist	10/24"	F-M SAND, some Silt, little Red Brick, trace Concrete, trace Metal, trace Wood		Petro odor, black staining		
10									Spoon refusal at 10'		
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-16-2		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743.034							Sheet 26 of 38		
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/12/2010		
Drilling Co: Aquifer Drilling and Testing (ADT)									
Method: Hollow Stem Auger									
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. Kamenicek (ADT)									
Total Depth: 10'                      Depth to Water: 8'									
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks
1	0.0	6 8	SB-16-2 (0-4)	0-2'	Moist	10/24"	Dark Brown F-C SAND, some Silt, little F-M Gravel, trace Plastic, Metal, Red Brick		No odor, black staining
2		9 9							
3	0.0	8 5		2-4'	Wet	9/24"	Dark Brown F-C SAND, some Silt, little F-M Gravel, trace Plastic, trace Metal, trace Red Brick, trace Steel Bolt		Petro. odor, black staining
4		5 8							
5	0.0	4 12		4-6'	Saturated	14/24"	7" Black F-M SAND, some Silt, trace Paper, trace M Gravel		Strong petro. odor, black staining
6	3.6	20 33			Slightly moist		7" F-M SAND, some Silt, little Red Brick, trace Concrete, trace Metal, trace Wood		Petro. odor, black staining
7				6-8'	Saturated	12/24"	7" F-M SANDY SILT, some F Gravel		Petro. odor, black staining
8	0.0	22 23	SB-16-2 (6-8)		Dry		5" CONCRETE and BRICK, some F-C Sand, trace Metal (copper)		Slight petro. odor, some staining
9	N/A	31 37		8-10'	Saturated	24/24"	F-M SANDY SILT, some M Gravel, trace Red Brick		Petro. odor, black staining
10		29 35							Groundwater at 8'
11		55 67							
12									
13									
14									
15									
16									
17									
18									
19									
20									

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-16-3	Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743.034							Sheet 25 of 38	
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/12/2010	
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. Kamenicek (ADT)								
Total Depth: 12' Depth to Water: 11.5'								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	0.0	7	SB-16-3 (0-4)	0-2'	Slightly moist	20/24"	16" Brown-Red F-M SAND, some Silt, little Wood, trace Concrete, trace Paper	No odor, no staining
	0.1	10				Slightly		4" Brown/Red F-M SAND, some Silt, little Wood, trace Red Brick, trace Metal, trace Concrete, trace Paper
2		7			moist			
	6.1	13		2-4'	Slightly moist	14/24"	F-M SANDY SILT, some F-M Gravel, trace Green Plastic , trace Circuit Board Fragments	Petro. odor, black staining
3		10						
		16						
4		25						
	31.0	N/A	SB-16-3 (4-6)	4-6'	Dry	24/24"	Black F-M SANDY SILT, little M Gravel, trace Wood	Petro. odor, black staining
5								
6								
	8.3	7		6-8'	Dry	8.5/24"	Dark Brown F-C SAND, some Silt, little Red Brick, trace Concrete, trace M Gravel	Petro. odor, black staining
7		6						
		8						
8		8						
	7.2	5		8-10'	Dry	11/24"	Dark Brown F-C SAND, some Silt, little Red Brick, trace Concrete, trace M Gravel, trace Metal	Petro. odor, black staining
9		6						
		7						
10		6						
	4.9	2		10-12'	Moist	12/24"	9" F-M SANDY SILT, few F-M Gravel, trace Wood, trace Red Brick	Slight petro. odor, black staining
11		3						
	1.4	2			Saturated		3" F-M SANDY SILT, few F-M Gravel	
12		2						
13								
14								
15								
16								
17								
18								
19								
20								



# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-17-1		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743.034							Sheet 23 of 38		
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/11/2010		
Drilling Co: Aquifer Drilling and Testing (ADT)									
Method: Hollow Stem Auger									
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. Kamenicek (ADT)									
Total Depth: 8'                      Depth to Water: 8'									
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks
1	0.1	2 3	SB-17-1 (0-4)	0-2'	Dry	7/24"	Brown F SANDY SILT, little F Gravel, trace Metal, trace Wood, trace Plastic		Slight organic odor, no staining
2		3 2							
3	N/A	23 11		2-4'	Saturated	10/24"	3" Brown F SANDY SILT, trace F Gravel, trace Wood 7" Black F-C SAND, some Silt, little Wood trace Rubber, trace Concrete		Organic odor, no staining Organic odor, black staining
4	0.4	10 10			Dry				
5	1.7	9 10	SB-17-1 (4-6)	4-6'	Dry	14/24"	Black F-C SAND and SILT, little F-M Gravel, trace Red Brick, trace Wood, trace Concrete, trace Plastic, trace Glass		Strong organic odor, black staining
6		11 17							
7	0.0	33 55		6-8'	Saturated	3/24"	F-M GRAVEL, some F-M Sand		Organic odor, black staining
8		61 75							
9									Groundwater at 8'
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-17-2		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project #: 47743.034							Sheet 22 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/11/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)											
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. Kamenicek (ADT)											
Total Depth: 8'      Depth to Water: 8'											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks			
1	16.0	N/A	SB-17-2 (0-4)	0-4'	Dry	48/48"	F-M SANDY SILT, little Wood, trace F Gravel, trace Concrete, trace Red Brick, trace Metal	Strong organic odor, black staining Spoon refusal, sample collected off of auger			
2											
3											
4	31.0		SB-17-2 (4-6)	4-6'	Moist	24/24"	Black F-M SANDY SILT, little Metal Wire, trace Wood	Strong organic odor, black staining			
5											
6	0.6			6-8'	Saturated	24/24"	Dark Brown F SANDY SILT, little F Gravel, trace Wood				
7											
8								Groundwater at 8'			
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-20-1	Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743.034							Sheet 21 of 38	
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/11/2010	
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. Kamenicek (ADT)								
Total Depth: 12'                      Depth to Water: N/A								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	0.2	25 35	SB-20-1 (0-4)	0-2'	Dry	18/24"	12" F-M SILTY SAND, little Black Plastic, little Red Brick, trace Wood, trace Glass 6" Stained Red BRICK	No odor, no staining
	0.3	38 44	Dup-2					Slight petro. odor, black staining
2	366.0	25		2-4'	Dry	14/24"	F-C SILTY SAND, little Red Brick, trace Copper, trace Green Plastic Bag	Strong petro. odor, black staining
		27						
3		23						
		21						
4	0.8	25		4-6'	Wet	15/24"	5" Black F-M SAND and SILT, some Wood, trace Red Brick	Strong organic odor, black staining
		27						
5	12.0	20			Moist		10" Red BRICK and F-M SAND, trace Wood	
		50/5						
6	21.6	N/A	Sb-20-1 (6-8)	6-8'	Dry	24/24"	Black F SANDY SILT, some F-M Gravel, few Wood Fibers	Strong organic odor, black staining
7								
8	0.2	25		8-10'	Dry	23/24"	F-C SAND, some Silt, little Cement, little Pumice Stone	No odor, black staining
		29						
9		31						
		32						
10	0.0	29		10-12'		12/24"	Red BRICK, some F-C Sand	No odor, black staining
		41						
11		37						
		39						
12								
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-20-2		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project #: 47743.034				Sheet 19 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 10/11/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. Kamenicek (ADT)								
Total Depth: 6'      Depth to Water: N/A								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
— 1 —	0.0	10	SB-20-2 (0-4)	0-2'	Dry	17/24"	5" Brown F-M SAND and SILT, some F-M Gravel	No odor, no staining
— 2 —	2.4	24					12" F-C SAND, some Silt, little Red Brick, trace Concrete, trace Wood	Light petro. odor, black staining
— 3 —	6.1	N/A		2-4'	Dry	24/24"	Black F-M SANDY SILT, few Wood pieces, trace M Gravel	Strong organic odor, black staining
— 4 —								Spoon refusal 2-4'
— 5 —	3.8	30	SB-20-2 (4-6)	4-6'	Dry	13/24"	Black F-M SANDY SILT, few Wood pieces, trace M Gravel, trace Plastic, trace Red Brick	Strong organic odor, black staining
— 6 —		25						
— 7 —		66						
— 8 —								
— 9 —								
— 10 —								
— 11 —								
— 12 —								
— 13 —								
— 14 —								
— 15 —								
— 16 —								
— 17 —								
— 18 —								
— 19 —								
— 20 —								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-20-3		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743.034							Sheet 20 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/11/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)											
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. Kamenicek (ADT)											
Total Depth: 10'                      Depth to Water: N/A											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks		
1	1.5	N/A	SB-20-3 (0-4)	0-4'	Dry	48/48"	Black F-M SANDY SILT, some Red Brick, little Wood, trace Metal, trace Plastic		No odor, black staining Spoon refusal, collect sample off of auger		
2			SB-20-3 (0-4) MS								
3			SB-20-3 (0-4) MSD								
4							Black F-M SANDY SILT, some Red Brick, little Wood, trace Metal, trace Plastic		Sweet organic odor, black staining		
5	0.6	12		4-6'	Dry	23/24"					
6		17									
7		19					Black F-M SANDY SILT, some Red Brick, little Wood, trace Metal, trace Plastic		Sweet organic odor, black staining		
8	1.3	N/A	SB-20-3 (6-8)	6-8'	Dry	24/24"					
9		22									
10	0.0	19		8-10'	Dry	10/24"	3" CONCRETE and F-C SAND		No odor, no staining		
11	0.2	41									
12		53									
13							7" Black F-C SAND, some F-M Gravel, trace Red Brick, trace Wood, trace Plastic		Slight organic odor, black staining  Spoon refusal at 10'		
14											
15											
16											
17											
18											
19											
20											

# SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-22-1		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743.034				Sheet 29 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 10/13/2010				
Drilling Co: <u>Aquifer Drilling and Testing (ADT)</u>								
Method: <u>Hollow Stem Auger</u>								
Personnel: <u>B. Tiskowitz, M. Borruso (GF); C. Migliore, J. McGill (ADT)</u>								
Total Depth: <u>6'</u> Depth to Water: <u>N/A</u>								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
— 0 —	0.0	18	SB-22-1	0-2'	Dry	16/24"	10" Brown F SANDY SILT, some Wood, trace Yellow Plastic, trace Tile	No odor, no staining
— 1 —	2.9	27	(0-4)				6" F-C SAND, some Silt, little F Gravel, trace Glass, trace Green Plastic, trace Wood	Strong organic odor, black staining
— 2 —	3.6	25		2-4'	Dry	11/24"	5" F-M SAND, some Silt, little F Gravel, trace Metal, trace Glass	Organic odor, black staining
— 3 —	1.7	44					6" Red BRICK, little F-M Sand, trace Metal, trace Wood	Slight petro. odor, light staining
— 4 —	11.2	20	SB-22-1	4-6'		8/24"	Black F-C SAND, some Silt, little F-M Gravel, trace Red Brick, trace Metal	Petro. odor, black staining
— 5 —		24	(4-6)					
— 6 —		50/4						
— 7 —								
— 8 —								
— 9 —								
— 10 —								
— 11 —								
— 12 —								
— 13 —								
— 14 —								
— 15 —								
— 16 —								
— 17 —								
— 18 —								
— 19 —								
— 20 —								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-22-2	Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743.034							Sheet 31 of 38	
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/13/2010	
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. McGill (ADT)								
Total Depth: 12' Depth to Water: 11.5'								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	2.1	N/A	SB-22-2 (0-4)	0-2'	Slightly moist	24/24"	Dk Brown F-C SANDY SILT, some Metal, little Wood, trace Plastic	Light organic odor, black staining
2	5.1	N/A		2-4'	Moist	24/24"	Black F SANDY SILT, some Metal, little Wood, trace Paper	Strong organic odor, black staining
4	15.4	N/A	SB-22-2 (4-6)	4-6'	Moist	24/24"	F-C SANDY SILT, some Metal, little F-M Gravel, trace Wood	Strong organic odor, black staining
6	11.1	N/A		6-8'	Slightly moist	24/24"	F-C SANDY SILT, some Metal, little F-M Gravel, trace Wood	Strong organic odor, black staining
9	0.3	23 24		8-10'	Dry	22/24"	F-M SAND And SILT, some Red Brick, little Metal, trace Wood, trace Rubber	Strong organic odor, black staining
10	0.3	27 31		10'12'	Wet	23/24"	18" Black F SANDY SILT, some F-M Gravel, trace Wood	Strong organic odor, black staining
11	0.0	4					5" Dark Gray F SANDY CLAY, trace Wood	Light organic odor, black staining
12		4						Groundwater at 11.5'
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-22-3		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743.034							Sheet 30 of 38		
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/13/2010		
Drilling Co: Aquifer Drilling and Testing (ADT)									
Method: Hollow Stem Auger									
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. McGill (ADT)									
Total Depth: 14' Depth to Water: 12'									
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks
1	2.1	N/A	SB-22-3 (0-4)	0-2'	Slightly moist	24/24"	Black F-M SANDY SILT, some Metal, little F Gravel, trace Wood		Organic odor, black staining
2							Black F-M SANDY SILT, some Metal, little F Gravel, trace Wood		Organic odor, black staining
3	5.1	N/A		2-4'	Slightly moist	24/24"			
4							Black F SANDY SILT, some Metal, little F Gravel, trace Glass, Wood		Strong organic odor, black staining
5	31.0	N/A		4-6'	Slightly moist	24/24"			
6							Black F-M SANDY SILT, some Metal, little Wood, trace F Gravel, trace Glass		Strong organic odor, black staining
7	43.0	N/A	SB-22-3 (6-8)	6-8'	Slightly moist	24/24"			
8			Dup-3				Black F-C SAND and SILT, some Metal, little Brick, trace Wood, trace Paper, trace F-M Gravel		Strong organic odor, black staining
9	4.1	25 21		8-10'	Dry	23/24"			
10		20 12					Black F-C SAND and SILT, little Brick, trace Wood, trace Paper, trace F-M Gravel		Strong organic odor, black staining
11	12.4	18 17		10-12'	Dry	7/24"			
12		14 12					Black F-C SAND and SILT, little Brick, trace Wood, trace Paper, trace F-M Gravel		Strong organic odor, black staining Groundwater at 12'
13	0.0	5 5		12-14'	Dry	3/24"			
14		4 4							
15									
16									
17									
18									
19									
20									



# SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-23-1		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project #: 47743.034				Sheet 36 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 10/14/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, B. Cruz (ADT)								
Total Depth: 10'      Depth to Water: _____								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	11.6	N/A	SB-23-1 (0-4)	0-4'	Slightly moist	48/48"	Black F-M SAND and SILT, some Metal, trace Concrete, trace Brick	Strong petro. odor, black staining
2								
3								
4								
5	23.6	11 15	SB-23-1 (4-6)	4-6'	Slightly moist	16/24"	Black F-M SAND and SILT, some F Gravel, trace Wood	Strong petro. odor, black staining
6		21 19						
7	4.6	14 23		6-8'	Moist	13/24"	Black F-M SAND And SILT, few Metal, trace Red Brick	Strong organic odor, black staining
8		26 40						
9	10.1	38 44		8-10'	Moist	8/24"	Black F-M SAND and SILT, some Metal, trace Red Brick, trace Concrete	Strong organic odor, black staining
10		50/0						
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-23-2		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project #: 47743.034							Sheet 34 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/14/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)											
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, B. Cruz (ADT)											
Total Depth: 10'      Depth to Water: N/A											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks			
1	211.0	10 25	SB-23-2 (0-4)	0-2'	Dry	11/24"	Black F-C SAND, some F-M Gravel, little Silt, trace Concrete	Strong petro. odor, black staining			
2		19 16									
3	25.1	N/A		2-4'	Dry	24/24"	Black F-M SAND, some Silt, little Wood, trace F Gravel, trace Glass	Light petro. odor, black staining			
4											
5	0.0	19 27		4-6'	Dry	20/24"	Black F-M SAND and SILT, some F-M Gravel, trace Wood, trace Red Brick	Light petro. odor, black staining			
6		28 30									
7	36.0	9 18	SB-23-2 (6-8)	6-8'	Slightly moist	17/24"	Black F-M SAND, some Silt, little F-M Gravel, trace Concrete, trace Red Brick	Petro. odor, black staining			
8		19 19									
9	13.6	17 14		8-10'	Slightly moist	11/24"	Black F-M SAND, some Silt, little Concrete, trace Metal, trace Wood	Light petro. odor, black staining			
10		20 50/1									
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-23-3	Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743.034							Sheet 35 of 38	
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/14/2010	
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, B. Cruz (ADT)								
Total Depth: 10'                      Depth to Water: _____								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	1.8	7 10	SB-23-3 (0-4)	0-2'	Slightly moist	23/24"	12" Red-Brown F-M SAND and SILT, some F Gravel, trace Wood, trace Red Brick	No odor, no staining
	19.2	17 22	Dup-4				11" F-M SAND, some F-M Gravel, little silt, trace Wood, trace Paper	Petro. odor, black staining
2	6.1	26		2-4'	Slightly moist	7/24"	Black F-C SAND, some Red Brick, little Wood, trace Metal	Light petro. odor, black staining
3		50/3						
4								
5	93.0	29	SB-23-3 (4-6)	4-6'	moist	17/24"	F-M SAND and SILT, little Wood, trace Red Brick, trace Metal	Strong petro. odor, black staining
		43						
6	37.0	48		6-8'	Moist	11/24"	F-M SAND and SILT, little Wood, trace Red Brick, trace Metal	Petro. odor, black staining
7		24						
8		26						
		29						
9	19.0	39		8-10'	Moist	18/24"	F-M SAND and SILT, little Wood, trace Red Brick, trace Metal, trace Paper, trace Glass	Petro. odor, black staining
		39						
10		47						Spoon and auger refusal at 10'
		50/4						
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-23-4		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743.034							Sheet 4 of 38		
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/5/2010		
Drilling Co: Aquifer Drilling and Testing (ADT)									
Method: Hollow Stem Auger									
Personnel: B. Tiskowitz, M. Borruso (GF); C. Stratton, D. Moon (ADT)									
Total Depth: 12' Depth to Water: 11'									
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks
1	0.0	12 14	SB-23-4 (0-4)	0-2'	Moist	17/24"	11" Red-brown F-M SANDY SILT, some F Gravel, trace Wood, trace Red Brick		No odor, no staining
2		14 50					6" Gray F-C SAND and CONCRETE, little F-M Gravel		No odor, no staining
3	0.1	50/2		2-4'	Moist	6/24"	Black stained WOOD		Petro. odor, black staining Refusal due to wood
4									
5	0.8	15 15	SB-23-4 (4-6)	4-6'	Moist	22/24"	Black F-M SANDY SILT, some Wood, little Red Brick, trace Glass		Petro. odor, black staining
6		12 15							
7	0.5	50/4		6-8'	Moist	12/24"	Black F-M SANDY SILT, some Wood, little Red Brick, trace Glass		Light petro. odor, black staining
8									
9	0.6	5 7		8-10'		6.52/24"	Black WOOD, some F-M Sand		No odor, black staining on Wood
10		8 12							
11	0.1	5 6		10-12'		17/24"	Brown F-M SANDY SILT and F-M Gravel		No odor, some staining Groundwater at 11'
12		5 6							
13									
14									
15									
16									
17									
18									
19									
20									

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-24-1		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743.034							Sheet 8 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/7/2010				
Drilling Co: <u>Aquifer Drilling and Testing (ADT)</u>											
Method: <u>Hollow Stem Auger</u>											
Personnel: <u>B. Tiskowitz, M. Borruso (GF); C. Migliore, J. Campbell (ADT)</u>											
Total Depth: <u>8'</u> Depth to Water: <u>4'</u>											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks			
1	29.0	N/A	SB-24-1 (0-4)	0-4'	Moist	48/48"	Brown F-M SANDY SILT, little F Gravel, trace Ceramic Tile, trace Glass, trace Wood, trace White Plastic, trace Thread	Refusal, collected sample off of auger No odor, no staining			
2			SB-24-1 (0-4) MS								
3			SB-24-1 (0-4) MSD								
4	N/A	6		4-6'	Saturated	8/24"	Brown F-M GRAVEL, some F-C Sand, little Concrete, trace Red Brick	Perched Water Table No odor, no staining			
5		8									
6		12									
7	N/A	4		6-8'	Saturated	6/24"	Black SAND and SILT, some F-M Gravel	No odor, black staining			
8		9									
9		8									
10		9									
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-24-2		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project #: 47743.034				Sheet 9 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 10/7/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. Campbell (ADT)								
Total Depth: 4'      Depth to Water: 2'								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	0.1	5 8	SB-24-2 (0-2)	0-2'	Dry	7/24"	Dark Brown F-C SAND, some Silt, few M Gravel, trace Paper, trace Glass	Slight petro odor Slight black staining
2	N/A	7 12		2-4'	Saturated	8/24"	Dark Brown F-C SAND, some Silt, few M Gravel, trace Paper, trace Glass, trace Wood	Groundwater at 2'
3		9						
4		7						
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-24-3		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project #: 47743.034				Sheet 10 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 10/7/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. Campbell (ADT)								
Total Depth: 8'      Depth to Water: N/A								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	1.5	2 4	SB-24-3 (0-4)	0-2'	Dry	9/24"	Brown F-C SAND, some Silt, few F-M Gravel, trace Wood, trace Metal, trace Black Plastic, trace Concrete	No odor, no staining
2	2.9	21 37		2-4'	Dry	12.5/24"	Dark Brown F-C SAND and SILT, some F-M Gravel, little Red Brick, trace White Plastic	Strong petro odor, staining
3	7.1	24 23	SB-24-3 (4-6)	4-6'	Dry	12/24"	10' Black F-C SAND, some Silt, little Red Brick, trace White Plastic, trace Paper, trace Leaves/Organic Matter	Strong petro odor, black staining
4	0.0	27 31		6-8'	N/A	0/24"	2" CONCRETE No Recovery	No odor, no staining Spoon Refusal 6-8'
5		50/5						
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-27-1		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140				
Project # : 47743.034				Sheet 1 of 38						
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 10/4/2010						
Drilling Co: Aquifer Drilling and Testing (ADT)										
Method: Hollow Stem Auger										
Personnel: B. Tiskowitz, M. Borruso (GF); C. Stratton, D. Moon (ADT)										
Total Depth: 6'      Depth to Water: N/A										
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks		
1	0.2	8	SB-27-1 (0-4)	0-2'	Dry	23.5/24"	10" Brown F-C SAND, some M-F Gravel, little Red Brick, trace Glass 13.5" Black F-C SAND, some F-M Gravel, some Red Brick, trace White Plastic, trace Wood	No odor, no staining		
		10			Dry			Light petroleum odor, some staining		
		12								
2	0.1	6		2-4'	Dry	15/24"	5" Brown F-C SAND, some F Gravel, little Concrete, trace Plastic 5" Gray CONCRETE 5" Brown F-C SAND, some F Gravel, little Concrete, trace Plastic	No odor, no staining		
		8								No odor, no staining
		20								No odor, no staining
3		17								
4	1.0	15	SB-27-1 (4-6)	4-6'	Dry	13/24"	Black F-C SAND, some Silt, some F Gravel, little Red Brick, trace Wood	Light petroleum odor, some staining.		
		50/3								
5										
6								Spoon and auger refusal at 6' depth.		
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										



# SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-27-2		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743.034				Sheet 2 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 10/4/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Stratton, D. Moon (ADT)								
Total Depth: 10'      Depth to Water: 10'								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
— 1 —	0.0	N/A	SB-27-2 (0-4)	0-4'	Moist	48/48"	Brown F-M SANDY SILT, some F-M Gravel, some Wood, trace Metal, trace Glass	Spoon refusal, sample collected off of auger Organic odor, some staining
— 2 —								
— 3 —								
— 4 —								
— 5 —	0.0	17 20		4-6'	Moist	15.5/24"	Black F-C SAND and SILT, some F-M Gravel, tract Plastic	Light petroleum odor, some staining
— 6 —		37 20						
— 7 —	0.0	50 5		6-8'	Dry	23/24"	Brown F-C SAND and F-M Gravel	No odor, no staining
— 8 —		5 4						
— 9 —	0.0	5 4	SB-27-2 (9-10)	8-9'	Moist		Brown F-C SAND and F-M Gravel	No odor, no staining
— 10 —		3 3		9-10'	Moist		Brown F-C SAND and F-M Gravel	No odor, no staining
— 11 —								Groundwater at 10'
— 12 —								
— 13 —								
— 14 —								
— 15 —								
— 16 —								
— 17 —								
— 18 —								
— 19 —								
— 20 —								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-27-3		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743.034							Sheet 3 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/5/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)											
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borruso (GF); C. Stratton, D. Moon (ADT)											
Total Depth: 10'                      Depth to Water: 10'											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks		
1	0.0	N/A	SB-27-3 (0-4)	0-4'	Dry	48/48"	4" Gray CONCRETE 44" Dark Brown F-C SANDY SILT, some F-M Gravel, little Red Brick, trace Wood		Spoon refusal, collect sample off of auger No odor, no staining		
2											
3											
4	0.0	12	SB-27-3 (4-6)	4-6'	Dry	16/24"	Brown F-C SAND and F-M GRAVEL, some Red Brick, little Wood, trace Glass, trace Plastic		Light petro. odor, some staining		
5		20									
6	0.0	17		6-8'	Saturated	48/48"	Brown F-C SAND and F-M GRAVEL, some Red Brick, little Wood, trace Glass, trace Plastic		Spoon refusal, collect sample off of auger Light petro. odor, some staining		
7		12									
8	0.0	25		8-10'	Saturated	8.5/24"	Brown F-C SAND and F-M GRAVEL, some Red Brick, little Wood, trace Glass, trace Plastic		Light petro. odor, some staining		
9		5									
10		2									
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-27-4	Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743.034							Sheet 38 of 38	
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/14/2010	
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, B. Cruz (ADT)								
Total Depth: 12'                      Depth to Water: 11'								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1		N/A	SB-27-4 (0-4)	0-2'	Dry	3/24"	Gray CONCRETE	
2								
3	0.0	6		2-4'	Dry	14/24"	Dark Brown F-C SAND, some Silt, little Red Brick	Slight petro. odor, black staining
4		9						
5		8						
6	0.0	8		4-6'	Dry	16/24"	6" Gray CONCRETE	No odor, no staining
7		9					10" Dark Brown F-C SAND And SILT, some F Gravel	Light petro. odor, black staining
8		10						
9	1.2	6	SB-27-4 (6-8)	6-8'	Dry	11/24"	3" Gray CONCRETE	No odor, no staining
10		5					8" Brown F-M GRAVEL, little Red Brick, trace Glass	Light petro. odor, black staining
11		6						
12	0.2	6						
13		3		8-10'		14/24"	3" Gray CONCRETE	No odor, no staining
14		4					11" Brown F-C SAND and SILT, some F-M Gravel, trace Concrete	No odor, black staining
15		4			Moist			
16		2		10-12'	Saturated	12/24"	Gray F-M SAND and SILT, trace F Gravel	No odor, no staining
17		2						Groundwater at 11'
18		3						
19		3						
20								

# SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-27-5		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project #: 47743.034				Sheet 37 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 10/14/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)								
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, B. Cruz (ADT)								
Total Depth: 10'      Depth to Water: _____								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	0.0	7 8	SB-27-5 (0-4)	0-2'	Dry	8/24"	F-M SAND, some Silt, little Red Brick, trace Wood	No odor, no staining
2		14 11						
3	0.0	23 50/4		2-4'	Dry	9/24"	F-M SAND, some Silt, little Red Brick, trace Wood	No odor, no staining
4								
5	0.0	11 10		4-6'	Dry	10/24"	7" Dark Brown F-C SAND and F-M GRAVEL trace Concrete, trace Red Brick	No odor, no staining
6	0.0	39 17					3" Gray CONCRETE	No odor, no staining
7	0.0	18 21		6-8'	Dry	6/24"	Dark Brown F-M SAND, some Silt, trace F Gravel, trace Red Brick, trace Wood	No odor, no staining
8		27 28						
9	0.0	21 10	SB-27-5 (8-10)	8-10'	Moist	12/24"	9" Dark Brown F-M SAND, some Silt, trace F Gravel, trace Red Brick, trace Wood	No odor, no staining
10	11.1	7 6					3" F-C SAND, some F-M Gravel, little Red Brick, trace Concrete	Organic odor, black staining Spoon and auger refusal at 10'
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-29		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743				Sheet 1 of 1				
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 8/6/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)				Location of boring (not to scale)  Soil Boring 29:				
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)								
Total Depth: 10'      Depth to Water: N/A								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	0.0	11 12	SB-29 (0-4)	0-2'	Dry	16/24"	8" Brown SANDY SILT, some F-M Gravel, trace Red Brick	No odor, no staining
2		15 20			Dry		8" Dark Brown F-M SANDY SILT, some F-M Gravel, little Red Brick	No odor, no staining
3	0.0	15 4		2-4'	Dry	9/24"	5" Brown SILT and F-M Gravel, trace Red Brick	No odor, no staining
4		3 4					4" Brown F SANDY SILT, some Red Brick	No odor, no staining
5	8.2	40 17	SB-29 (4-10)	4-6'	Dry	18/24"	3" Brown SILT and F-M Gravel, trace White Plastic	No odor, no staining
6		9 9			Dry Dry		6" Black F-M SILTY SAND and F-M Gravel 9" Gray F-M SANDY SILT and F-M Gravel	Petro. odor, staining No odor, no staining
7	0.0	44 50/2		6-8'	Dry	8/24"	Brown F SANDY SILT, some F Gravel, trace White Plastic, trace Red Brick	No odor, no staining
8								
9	0.8	17 10		8-10'	Dry	11/24"	Brown F-M SILTY SAND, some F Gravel, trace White Plastic	No odor, no staining
10		4 3						
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-30		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project #: 47743				Sheet 1 of 1				
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 8/9/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)				Location of boring (not to scale)  Soil Boring 30:				
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)								
Total Depth: 10'      Depth to Water: N/A								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	0.7	11 14	SB-30 (0-4)	0-2'	Dry Dry	20/24"	4" CONCRETE and F-M Gravel 16" Black F-C SAND, some Red Brick, little Concrete	No odor, no staining Slight Petro. odor, black staining
2		21 28						
3	6.2	35 48		2-4'	Dry	17/24"	9" Brown F-M SILTY SAND, little Red Brick 8" Black F-C SAND and F-M Gravel, little Wood, trace Red Brick	No odor, no staining Petro. odor, black staining
4		50/2						
5	0.0	27 11	SB-30 (4-10)	4-6'	Dry	12/24"	Black F-C SILTY SAND and F-M Gravel, little Wood, trace Glass	Petro. odor, black staining
6		9 10						
7	0.0	28 15		6-8'	Dry Moist	15/24"	6" Gray F-C SAND, some F Gravel 9" F SANDY SILT and F-M Gravel, trace Red Brick, trace Glass	No odor, no staining Petro. odor, black staining
8		15 18						
9	0.0	5 2		8-10'	Moist	8/24"	Black F-M SANDY SILT, some White Resin trace Plastic, trace Paper	No odor, black staining
10		3 3						
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-31		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project #: 47743							Sheet 1 of 1				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 8/6/2010				
Drilling Co: <u>Aquifer Drilling and Testing (ADT)</u>							Location of boring (not to scale)  Soil Boring 31:				
Method: <u>Hollow Stem Auger</u>											
Personnel: <u>B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)</u>											
Total Depth: <u>10'</u> Depth to Water: <u>N/A</u>											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks		
1	0.0	10 12	SB-31 (0-4)	0-2'	Dry	8/24"	Brown F-M SANDY SILT, trace Wood, trace Rope, trace Plastic Bag, trace Yellow Plastic		No odor, no staining		
2		6 11									
3	0.5	9 15		2-4'	Dry	10/24"	Dark Brown F SANDY SILT, little M Gravel, trace Plastic, trace Wood, trace Steel Wool, trace Paper		No odor, no staining		
4		13 12									
5	0.8	10 11	SB-31 (4-10)	4-6'	Dry	10.25/24"	7.25" Brown F-M SANDY SILT, some F Gravel little Red Brick, trace Rope, trace Wood		No odor, no staining		
6	2.3	11 9			Dry						
7	0.2	7 27		6-8'	Dry	21/24"	3" Dark Brown M Gravel, trace Paper, trace Plastic		Petro. odor, no staining		
8		32 30			Dry						
9	0.3	59 50/0		8-10'	Dry	12/24"	3" Dark Brown F SANDY SILT, little F Gravel, trace Duct Tape		No odor, no staining		
10											
11							18" Black F-M SAND, some Silt, trace M Gravel		Petro. odor, black staining		
12											
13							Dark Brown F-M SAND, little Silt, trace rope, trace Red Brick, trace Glass		No odor, no staining		
14											
15											
16											
17											
18											
19											
20											

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-32		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743							Sheet 1 of 1				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 8/10/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)							Location of boring (not to scale)  Soil Boring 32:				
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)											
Total Depth: 10'      Depth to Water: N/A											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks		
1	0.4	N/A	SB-32 (0-4) DUP-3	0-2'	Dry	24/24"	Brown F-M SAND and Silt, some F-M Gravel, little Concrete, trace Wood, trace Red Brick		Spoon refusal 0-2' Sample collected from 0-4' cuttings No staining No staining		
2	0.4	N/A		2-4'	Dry	24/24"					
3							Brown F-M SAND and Silt, some F-M Gravel, little Concrete, trace Wood, trace Red Brick				
4	1.2	29	SB-32 (4-10)	4-6'	Dry	17/24"					
5		32					Dark Brown F-M SAND and Silt, little F-M Gravel, little Concrete, trace Wood, trace Red Brick		No odor, no staining		
6		22									
7	1.0	14		6-8'	Dry	24/24"	10" Black F-M SAND, some Silt, little F-M Gravel, trace Plastic, trace Red Brick, trace Wood 14" Dark Brown F-M SAND and F-M Gravel, little Red Brick, trace Concrete		Petro. odor, black staining		
8	4.0	21									
9		11					Dark Brown F-C SAND, some Silt, little M Gravel, trace Red Brick, trace Wood		No odor, no staining		
10	0.4	6		8-10'	Moist	11/24"					
11		8									
12		4									
13		5									
14											
15											
16											
17											
18											
19											



# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-33	Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743							Sheet 1 of 1	
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 8/9/2010	
Drilling Co: Aquifer Drilling and Testing (ADT)							Location of boring (not to scale)  Soil Boring 33:	
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)								
Total Depth: 10'      Depth to Water: N/A								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	0.0	2 10 50/4	SB-33 (0-4)	0-2'	Dry	8/24"	Gray F-C SAND, some Silt, some F-M Gravel, trace Wood	No odor, no staining
2	1.1	11 12		2-4'	Dry	12/24"	3.5" Black F-M SAND, some Silt, trace Wood, trace Paper	Petro. odor, black staining
3	4.0	13 17					4.5" Gray F-M SAND, some silt, little Concrete, trace Tile, trace Wood	No odor, no staining
							4" Black F-C SAND and F-M Gravel, trace White Plastic	No odor, some black staining
4	1.3	9 15	SB-33 (4-10)	4-6'	Dry	16/24"	6" Gray F-M SAND and F Gravel, trace White Plastic	No odor some black staining
5	3.0	39 31			Dry		10" Black F-C GRAVEL, some Red Brick, trace Metal	Petro. odor, black staining
6	0.0	23 5		6-8'	Dry	10/24"	7" Black F-C SAND, little Silt, trace F Gravel, trace Red Brick	No odor, black staining
7	0.1	10 9					3" Brown WOOD	No odor, black staining
8	0.0	8 10		8-10'	Dry	16/24"	4" Black F-M SILTY SAND, some F Gravel, trace Red Brick	No odor, black staining
9	0.0	7			Dry		2" Red crushed BRICK, trace F-M Sand	No odor, no staining
10	0.6	5					10" Black F-M SAND and F-M Gravel	Slight Petro. odor, black staining
11								
12								
13								
14								
15								
16								
17								
18								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-34	Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project #: 47743							Sheet 1 of 1	
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 8/9/2010	
Drilling Co: Aquifer Drilling and Testing (ADT)							Location of boring (not to scale)  Soil Boring 34:	
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)								
Total Depth: 10'      Depth to Water: N/A								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
0	0.5	10	SB-34 (0-4)	0-2'	Dry	18/24"	8" Brown SILTY F SAND and F-M Gravel,	No odor, no staining
1		15					trace Wood, trace Gray Plastic	
2	14.0	26			Dry		10" Black F-M SILTY SAND, some F-M	Strong Petro. odor,
3		15					Gravel, trace Wood, trace Red Brick	black staining
4	5.6	17		2-4'	Dry	12/24"	Black F SANDY SILT, some F-M Gravel,	Strong Petro. odor,
5		50/4					little Wood, trace Red Brick	black staining
6								
7	2.4	14	SB-34 (4-10)	4-6'	Dry	11.5/24"	4" Brown SILTY F SAND and F Gravel,	No odor, no staining
8		12					little Wood, trace Plastic	
9		19			Moist		7.5" Black F-M SAND, some Silt, little	No odor,
10		18					M Gravel, trace Wood	black staining
11	10.0	11		6-8'	Dry	11/24"	8" Brown F-C SAND and F Gravel, some	No odor, no staining
12		12					M Gravel, trace Wood, trace Red Brick	
13		7			Dry		3" Black F-M SILTY SAND, some Wood,	Strong Petro. odor,
14		9					trace Red Brick	black staining
15	6.7	29		8-10'	Dry	9/24"	7" Brown F-C SAND and F-M Gravel,	No odor, no staining
16		50/3					little Red Brick, trace Gray Plastic	
17							2" Black F-M SAND, some Red Brick,	No odor,
18							trace Wood	black staining
19								
20								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-35		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743							Sheet 1 of 1				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 8/6/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)							Location of boring (not to scale)  Soil Boring 35:				
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)											
Total Depth: 10'      Depth to Water: N/A											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks			
1	0.3	6 8	SB-35 (0-4)	0-2'	Dry	16/24"	12" Brown F SILTY SAND, little M Gravel trace Plastic, trace Rope	No odor, no staining			
2	5.0	14 15			Dry		4" Black F SANDY SILT, some Red Brick, trace M Gravel	Slight Petro. odor, black staining			
3	1.8	19 15		2-4'	Dry	8.75/24"	Black F-M SILTY SAND, little Green Plastic, trace Cloth	Slight Petro. odor, black staining			
4		50/3									
5	0.0	33 39	SB-35 (4-10)	4-6'	Dry	6/24"	Dark Brown F SANDY SILT, some Wood, trace F Gravel	No odor, no staining			
6		26 13									
7	0.8	20 35		6-8'	Dry	12.5/24"	Black SILTY F-M SAND, little F Gravel, trace Plastic, trace Metal	Organic odor, black staining			
8		44 14									
9	0.8	58 50/0		8-10'	Dry	19/24"	Dark Brown F-M SANDY SILT, some Red Brick, little Metal, trace Thread	No odor, some black staining			
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

# SOIL BORING LOG

Client: Frito-Lay					Boring No.: SB-36		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140	
Project #: 47743					Sheet 1 of 1			
Site Location: 202-218 Morgan Ave, Brooklyn NY					Date: 8/9/2010			
Drilling Co: Aquifer Drilling and Testing (ADT)					Location of boring (not to scale)  Soil Boring 36:			
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)								
Total Depth: 10'      Depth to Water: N/A								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	0.0	N/A	SB-36 (0-4) SB-36 (0-4)MS SB-36 (0-4)MSD	0-2'	Dry	24/24"	Dark Brown F-M SANDY SILT and F-M Gravel, some Wood, trace Glass, trace Paper, trace Plastic Bag, trace Red Brick	Spoon refusal 0-2', Sample collected from 0-4' cuttings No odor, no staining
2	0.0	N/A		2-4'	Dry	24/24"	Dark Brown F-M SANDY SILT and F-M Gravel, some Wood, trace Glass, trace Paper, trace Plastic Bag, trace Red Brick	No odor, no staining
3								
4	N/A	27		4-6'	N/A	None		No recovery 4-6'
5		35						
6		24						
7	0.8	21	SB-36 (6-10) DUP-2	6-8'	Moist	9/24"	Dark Brown F-M SAND, some F Gravel, trace Red Brick, trace Wood	Petro. Odor, black staining
8		41						
9		19						
10	0.5	50/3		8-10'	Moist	7.5/24"	Dark Brown F-M SAND and F Gravel, trace Red Brick	Light Petro. odor, black staining
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-37		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project #: 47743							Sheet 1 of 1				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 8/10/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)							Location of boring (not to scale)  Soil Boring 37:				
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)											
Total Depth: 10'      Depth to Water: N/A											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks			
1	0.3	N/A	SB-37 (0-4) SB-37 (0-4)MS	0-2'	Dry	24/24"	Dark Brown F SANDY SILT, and some F-M Gravel, little Paper, trace Wood, trace White Plastic, trace Red Brick	Spoon refusal 0-2', Sample collected from 0-4' cuttings Organic odor, no staining			
2			SB-37 (0-4)MSD								
3	0.3	N/A		2-4'	Dry	24/24"	Dark Brown F SANDY SILT, and some F-M Gravel, little Paper, trace Wood, trace White Plastic, trace Red Brick	Organic odor, no staining			
4											
5	1.2	11	SB-37 (4-10)	4-6'	Dry	19/24"	10" Black F-M SANDY SILT and F-M Gravel, some Red Brick, trace Wood	Organic odor, black staining			
6		14									
7		9					9" Gray F-C SANDY SILT, some F-M Gravel, little Concrete, trace Red Brick, Wood, Glass	No odor, no staining			
8		10									
9	1.3	6		6-8'	Moist	7/24"	Brown F-C SANDY SILT and F Gravel, trace Wood	Petro. odor, black staining			
10		7									
11		9					Brown F-C SANDY SILT and F Gravel, trace Wood	Petro. odor, black staining			
12		3									
13	0.3	4		8-10'	Dry	7.5/24"					
14		6									
15		2									
16		4									
17											
18											
19											
20											

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-38	Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743							Sheet 1 of 1	
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 8/6/2010	
Drilling Co: Aquifer Drilling and Testing (ADT)							Location of boring (not to scale)  Soil Boring 38:	
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)								
Total Depth: 10'      Depth to Water: N/A								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	3.2	7 12	SB-38 (0-4)	0-2'	Dry	9.5/24"	Brown F SANDY SILT, some F Gravel, some Wood, trace Plastic, trace Paper	No odor, no staining
2		4 50/1						
3	4.0	11 11		2-4'	Dry	16/24"	3" Brown F SANDY SILT, some F Gravel, some Wood, trace String	No odor, no staining
		11 50/4			Dry Dry		9" Gray CONCRETE 4" Black F-M GRAVEL and Wood, trace Red Brick	Petro. odor, black staining
4	3.0	30 41	SB-38 (4-10)	4-6'	Dry	10/24"	2" F SANDY SILT and M Gravel, trace Plastic	No odor, no staining
5		5 50					8" Gray CONCRETE	No odor, no staining
6	1.4	25 46		6-8'	Dry	14/24"	Black F-M SAND, some Silt, trace Metal, M Gravel, trace Wood, trace Plastic	Petro. odor, black staining
7		50/1						
8	2.1	20 17		8-10'	Dry	11/24"	Dark Brown F-M SAND, some Silt, little M Gravel, trace Glass, trace Paper	No odor, no staining
9		50/1						
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								

# SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-39		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project #: 47743				Sheet 1 of 1				
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 8/6/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)				Location of boring (not to scale)  Soil Boring 39:				
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)								
Total Depth: 10'      Depth to Water: N/A								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	0.0	8 10	SB-39 (0-4)	0-2'	Dry	15/24"	10" Brown F-M SILTY SAND, little M Gravel, trace Plastic, trace Duct Tape	No odor, no staining
2		7 9			Dry		5" Dark Brown F-M SILTY SAND, little M Gravel, trace Plastic, trace Wood	No odor, no staining
3	0.7	8 50/2		2-4'	Dry	7/24"	Brown F-M SILTY SAND, little M Gravel, trace Plastic, trace Duct Tape, trace Tile	No odor, no staining
4								
5	4.0	4 6	SB-39 (4-10)	4-6'	Dry	3/24"	Brown F SILTY SAND, little F Gravel, trace Rope	No odor, no staining
6		14 10						
7	1.3	7 11		6-8'	Dry	23.5/24"	Black F SANDY SILT and F-M Gravel, little Paper, trace Glass, trace Red Brick	Petro. odor, black staining
8		14 19						
9	0.6	66 100/3		8-10'	Dry	8/24"	Black F SANDY SILT and F-M Gravel	Petro. odor, black staining
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-40		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project #: 47743							Sheet 1 of 1				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 8/10/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)							Location of boring (not to scale)  Soil Boring 40:				
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borroso (GF); S. Miller, G. Torres (ADT)											
Total Depth: 10'      Depth to Water: N/A											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks			
1	2.3	N/A	SB-40 (0-4)	0-2'	Dry	24/24"	Black F-M SANDY SILT and F-M Gravel, little Wood, trace Tile, trace Red Brick, trace Blue Plastic	Spoon refusal 0-2', Sample collected from 0-4' cuttings			
2								Organic odor, black staining			
3	2.3	N/A		2-4'	Dry	24/24"	Black F-M SANDY SILT and F-M Gravel, little Wood, trace Tile, trace Red Brick, trace Blue Plastic	Organic odor, black staining			
4											
5	0.5	29	SB-40 (4-10)	4-6'	Dry	15/24"	Black F SANDY SILT, little F Gravel, trace Wood, trace Red Brick, trace Concrete	No odor, black staining			
6		11									
7	2.0	8		6-8'	Dry	8/24"	Gray F SAND, little Silt, some F Gravel, trace Red Brick, trace Glass, trace Metal, trace Concrete	No odor, no staining			
8		4									
9	0.5	6		8-10'	Dry	6/24"	Brown F-M SAND, some Silt, little F Gravel, trace Red Brick	No odor, no staining			
10		4									
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											



# SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-41		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743				Sheet 1 of 1				
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 8/4/2010				
Drilling Co: <u>Aquifer Drilling and Testing (ADT)</u>				Location of boring (not to scale)  Soil Boring 41:				
Method: <u>Hollow Stem Auger</u>								
Personnel: <u>B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)</u>								
Total Depth: <u>12'</u> Depth to Water: <u>12'</u>								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
— 1 —	0.0	16 5	SB-41 (0-4)	0-2'	Dry	9/24"	Black F-M SAND, some Gravel	Slight Petro. odor Black staining
— 2 —		6 11						
— 3 —	0.0	22 50/2		2-4'	Dry	10.5/24"	Black F-M SAND, some Gravel	Slight Petro. odor Black staining
— 4 —								
— 5 —	0.0	13 30	SB-41 (4-11)	4-6'	Dry	11.5/24"	1.5" Brown SILTY F-M SAND and F Gravel, trace Asphalt, trace Wood	No odor, no staining
— 6 —		50/4			Dry		6" Dark Brown SILTY F-M SAND and F Gravel, trace Wood	No odor, no staining
— 7 —	1.6	16 25		6-8'	Dry Dry	20/24"	9" Brown F-M SAND, some F Gravel 2.5" Black stained WOOD	No odor, no staining Petro odor, staining
— 8 —		11 10			Dry Dry		4" crushed Red BRICK 5.5" Black SILTY F-M SAND and F Gravel, trace M Gravel	No odor, no staining Petro odor, staining
— 9 —	0.3	8 7		8-10'	Dry	4.25/24"	Brown F-M SAND and F Gravel, trace M Gravel, trace Red Brick	No odor, no staining
— 10 —		7 4						
— 11 —	0.0	6 5		10-12'	Dry Dry	17.5/24"	5" Dark Brown F SILTY SAND, some M Gravel	No odor, no staining
— 12 —		5 4			Dry Wet		2.5" Brown F SILTY SAND, some M Gravel 4.5" Brown F-M SAND, some F Gravel	No odor, no staining No odor, no staining
— 13 —							5" Black F-M SAND, some Dark Brown F-M Sand	Slight Petro. odor Black staining Groundwater at 12'
— 14 —								
— 15 —								
— 16 —								
— 17 —								
— 18 —								
— 19 —								
— 20 —								

# SOIL BORING LOG

Client: Frito-Lay					Boring No.: SB-42		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140	
Project #: 47743					Sheet 1 of 1			
Site Location: 202-218 Morgan Ave, Brooklyn NY					Date: 8/5/2010			
Drilling Co: Aquifer Drilling and Testing (ADT)					Location of boring (not to scale)  Soil Boring 42:			
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)								
Total Depth: 10'      Depth to Water: N/A								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	30.1	N/A	SB-42 (0-4) SB-42 (0-4) MS	0-2'	Dry	24/24"	Black F SANDY SILT and F Gravel, some Wood	Spoon refusal 0-2' Sample collected from 0-4' cuttings
2			SB-42 (0-4) MSD DUP-1					No odor, black staining
3	30.1	N/A		2-4'	Dry	24/24"	Black F SANDY SILT and F Gravel, some Wood	No odor, black staining
4								
5	1.5	15	SB-42 (4-10)	4-6'	Dry	17/24"	7" Black F-M GRAVEL, some F-M Sand	No odor, black staining
6		15			Dry		7" Black F-M GRAVEL, some F-M Sand,	No odor, black staining
7		22					trace Red Brick, trace Glass	
8	0.3	20		6-8'	Dry	9/24"	3" Black WOOD, little Silty F-M Sand	Slight Petro. odor
9		35					Black F-M GRAVEL and F-C Sand,	Slight Petro. odor,
10		23					little Orange painted Rock	black staining
11		48						
12	0.4	15		8-10'	Dry	3/24"	Black F-M GRAVEL and F-C Sand,	Slight Petro. odor,
13		20					little Orange painted Rock	black staining
14		25						
15		38						
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-43		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743							Sheet 1 of 1				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 8/5/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)							Location of boring (not to scale)  Soil Boring 43:				
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)											
Total Depth: 8'      Depth to Water: N/A											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks		
1	14.8	N/A	SB-43 (0-4)	0-2'	Dry	24/24"	Black F SANDY SILT, some Wood, trace Metal		Spoon refusal 0-2', Sample collected from 0-4' cuttings Organic odor, no staining		
2											
3	14.8	N/A		2-4'	Dry	24/24"	Black F SANDY SILT, some Wood, trace Metal		Organic odor, no staining		
4											
5	1.0	50	SB-43 (4-8)	4-6'	Dry	19/24"	7.5" Brown F SILTY SAND, little F Gravel, trace Circuit Board Material, trace Glass		No odor, no staining		
6		33			Dry						
7	4.1	17		6-8'	Dry	11/24"	11" Black F SILTY SAND, trace M Gravel, trace Wood, trace Glass		No odor, no staining		
8		18									
9	N/A	50/1			Dry		7" Brown F SILTY SAND, some F-M Gravel, trace Wood, trace Glass		Refusal at 8', no recovery		
10											
11							4" Dark Brown F SILTY SAND, some F Gravel, trace Wood, trace Glass				
12											
13											
14											
15											
16											
17											
18											
19											
20											

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-44		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140																																																																																																																																																																																													
Project # : 47743							Sheet 1 of 1																																																																																																																																																																																															
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 8/6/2010																																																																																																																																																																																															
Drilling Co: Aquifer Drilling and Testing (ADT)							Location of boring (not to scale)  Soil Boring 44:																																																																																																																																																																																															
Method: Hollow Stem Auger																																																																																																																																																																																																						
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)																																																																																																																																																																																																						
Total Depth: 10'                      Depth to Water: N/A																																																																																																																																																																																																						
<table><thead><tr><th>depth (feet)</th><th>PID (ppm)</th><th>Blow Counts</th><th>Sample ID</th><th>Depth (From-To)</th><th>Moisture Content</th><th>Recovery</th><th>Soil Classification</th><th>Remarks</th></tr></thead><tbody><tr><td>1</td><td>1.0</td><td>11 7</td><td>SB-44 (0-4)</td><td>0-2'</td><td>Dry</td><td>17/24"</td><td>8.5" Brown F SILTY SAND, little F-M Gravel, trace White Plastic, trace Wood, trace Glass</td><td>No odor, no staining</td></tr><tr><td>2</td><td></td><td>6 5</td><td></td><td></td><td>Dry</td><td></td><td>8.5" Black F-M SILTY SAND, some F Gravel, trace Wood</td><td>Petro. odor, black staining</td></tr><tr><td>3</td><td>0.4</td><td>10 13</td><td></td><td>2-4'</td><td>Dry</td><td>13/24"</td><td>5" Brown F SANDY SILT and F-M Gravel, trace White Plastic, trace Wire, trace Wood</td><td>No odor, no staining</td></tr><tr><td>4</td><td>0.7</td><td>11 7</td><td></td><td></td><td>Dry</td><td></td><td>8" Black F-M GRAVEL and F-M Sand, some Steel Wool, trace Red Brick</td><td>Petro. odor, black staining</td></tr><tr><td>5</td><td>2.1</td><td>4 7</td><td>SB-44 (4-10)</td><td>4-6'</td><td>Dry</td><td>13/24"</td><td>7" Dark Brown SILTY F-M SAND and F Gravel, trace Wood, trace Paper</td><td>No odor, no staining</td></tr><tr><td>6</td><td></td><td>9 21</td><td></td><td></td><td>Dry</td><td></td><td>6" Black F-M SILTY SAND and F Gravel, trace Wood, trace Paper</td><td>Petro. odor, black staining</td></tr><tr><td>7</td><td>1.1</td><td>22 20</td><td></td><td>6-8'</td><td>Dry</td><td>22/24"</td><td>11"Brown F-M SILTY SAND, trace Plastic, trace Wood, trace Paper, trace Glass</td><td>No odor, no staining</td></tr><tr><td>8</td><td></td><td>10 55</td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td>1.1</td><td>48 50/1</td><td></td><td>8-10'</td><td>Dry</td><td>8.25/24"</td><td>3.5" Brown F-M SILTY SAND, some F Gravel, trace Metal, trace Rope, trace White Plastic</td><td>No odor, no staining</td></tr><tr><td>10</td><td></td><td></td><td></td><td></td><td>Dry</td><td></td><td>5" Dark Brown F-M SAND, some F Gravel, trace Metal, trace Rope, trace White Plastic, trace Plastic Bag</td><td>Black staining No odor</td></tr><tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>12</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>13</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>14</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>15</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>16</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>17</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>18</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>19</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>20</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>										depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks	1	1.0	11 7	SB-44 (0-4)	0-2'	Dry	17/24"	8.5" Brown F SILTY SAND, little F-M Gravel, trace White Plastic, trace Wood, trace Glass	No odor, no staining	2		6 5			Dry		8.5" Black F-M SILTY SAND, some F Gravel, trace Wood	Petro. odor, black staining	3	0.4	10 13		2-4'	Dry	13/24"	5" Brown F SANDY SILT and F-M Gravel, trace White Plastic, trace Wire, trace Wood	No odor, no staining	4	0.7	11 7			Dry		8" Black F-M GRAVEL and F-M Sand, some Steel Wool, trace Red Brick	Petro. odor, black staining	5	2.1	4 7	SB-44 (4-10)	4-6'	Dry	13/24"	7" Dark Brown SILTY F-M SAND and F Gravel, trace Wood, trace Paper	No odor, no staining	6		9 21			Dry		6" Black F-M SILTY SAND and F Gravel, trace Wood, trace Paper	Petro. odor, black staining	7	1.1	22 20		6-8'	Dry	22/24"	11"Brown F-M SILTY SAND, trace Plastic, trace Wood, trace Paper, trace Glass	No odor, no staining	8		10 55							9	1.1	48 50/1		8-10'	Dry	8.25/24"	3.5" Brown F-M SILTY SAND, some F Gravel, trace Metal, trace Rope, trace White Plastic	No odor, no staining	10					Dry		5" Dark Brown F-M SAND, some F Gravel, trace Metal, trace Rope, trace White Plastic, trace Plastic Bag	Black staining No odor	11									12									13									14									15									16									17									18									19									20								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks																																																																																																																																																																																														
1	1.0	11 7	SB-44 (0-4)	0-2'	Dry	17/24"	8.5" Brown F SILTY SAND, little F-M Gravel, trace White Plastic, trace Wood, trace Glass	No odor, no staining																																																																																																																																																																																														
2		6 5			Dry		8.5" Black F-M SILTY SAND, some F Gravel, trace Wood	Petro. odor, black staining																																																																																																																																																																																														
3	0.4	10 13		2-4'	Dry	13/24"	5" Brown F SANDY SILT and F-M Gravel, trace White Plastic, trace Wire, trace Wood	No odor, no staining																																																																																																																																																																																														
4	0.7	11 7			Dry		8" Black F-M GRAVEL and F-M Sand, some Steel Wool, trace Red Brick	Petro. odor, black staining																																																																																																																																																																																														
5	2.1	4 7	SB-44 (4-10)	4-6'	Dry	13/24"	7" Dark Brown SILTY F-M SAND and F Gravel, trace Wood, trace Paper	No odor, no staining																																																																																																																																																																																														
6		9 21			Dry		6" Black F-M SILTY SAND and F Gravel, trace Wood, trace Paper	Petro. odor, black staining																																																																																																																																																																																														
7	1.1	22 20		6-8'	Dry	22/24"	11"Brown F-M SILTY SAND, trace Plastic, trace Wood, trace Paper, trace Glass	No odor, no staining																																																																																																																																																																																														
8		10 55																																																																																																																																																																																																				
9	1.1	48 50/1		8-10'	Dry	8.25/24"	3.5" Brown F-M SILTY SAND, some F Gravel, trace Metal, trace Rope, trace White Plastic	No odor, no staining																																																																																																																																																																																														
10					Dry		5" Dark Brown F-M SAND, some F Gravel, trace Metal, trace Rope, trace White Plastic, trace Plastic Bag	Black staining No odor																																																																																																																																																																																														
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# SOIL BORING LOG

Client: Frito-Lay					Boring No.: SB-45		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140	
Project #: 47743					Sheet 1 of 1			
Site Location: 202-218 Morgan Ave, Brooklyn NY					Date: 8/4/2010			
Drilling Co: <u>Aquifer Drilling and Testing (ADT)</u>					Location of boring (not to scale)  Soil Boring 45:			
Method: <u>Hollow Stem Auger</u>								
Personnel: <u>B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)</u>								
Total Depth: <u>10'</u> Depth to Water: <u>10'</u>								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
—	0.0	8	SB-45 (0-4)	0-2'	Dry	12/24"	2" CONCRETE, 2" Brown SAND, some F Gravel, trace Red Brick	No odor
1		11			Dry		8" Dark Brown SILTY SAND, some F Gravel, trace Red Brick	No staining
2		10						No odor, no staining
—	0.2	15		2-4'	Dry	17/24"	8" Gray CONCRETE	
3		30			Dry		9" Dark Brown F SAND and Silt, trace M Gravel	
—		13						
4		15						
—	0.6	9	SB-45 (4-10)	4-6'	Dry	7/24"	Gray CONCRETE	No odor
5		5						No staining
—		4						
6		5						
—	1.0	2		6-8'	Dry	6.5/24"	Gray CONCRETE	No odor
7		5						No staining
—		4						
8		4						
—	0.0	27		8-10'	Dry	10/24"	8.75" Dark Brown F SANDY SILT, trace F Gravel, trace Red Brick	No odor
9		8						No staining
—		3			Wet		1.25" Dark Brown F SANDY SILT, trace F Gravel, trace Red Brick	No odor
10		1						No staining
—								Groundwater at 10'
11								
—								
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# SOIL BORING LOG

Client: Frito-Lay					Boring No.: SB-46		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140	
Project # : 47743					Sheet 1 of 1			
Site Location: 202-218 Morgan Ave, Brooklyn NY					Date: 8/9/2010			
Drilling Co: <u>Aquifer Drilling and Testing (ADT)</u> Method: <u>Hollow Stem Auger</u> Personnel: <u>B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)</u> Total Depth: <u>10'</u> Depth to Water: <u>N/A</u>					Location of boring (not to scale)  Soil Boring 46:			
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	34.8	N/A	SB-46 (0-4)	0-2'	Dry	24/24"	Black F SANDY SILT, some F-M Gravel, little Wood, trace Glass, trace Plastic, trace Metal, trace Paper	Spoon refusal 0-2', Sample collected from 0-4' cuttings Petro. odor, black staining
2	37.8	N/A		2-4'	Dry	24/24"	Black F SANDY SILT, some F-M Gravel, little Wood, trace Glass, trace Plastic, trace Metal, trace Paper	Petro. odor, black staining
3								
4	20.0	20	SB-46 (4-10)	4-6'	Dry	10/24"	4" Brown F SANDY SILT, little F Gravel, trace Gray Plastic	No odor, no staining
5		10			Dry		6" Black F SANDY SILT and F-M Gravel, little Concrete, trace Paper, trace Glass, trace Green Plastic	Petro. odor, black staining
6		9						
7	8.4	18		6-8'	Dry	22/24"	Black F-M SANDY SILT and F-M Gravel, some Wood, trace Glass, trace Plastic, trace Red Brick	Petro. odor, black staining
8		21						
9	8.0	18		8-10'	Dry	15/24"	Black F-C SAND and Silt, some F-M Gravel, little Wood, trace Plastic, trace Paper, trace Glass	Petro. odor, black staining
10		21						
11		37						
12		17						
13								
14								
15								
16								
17								
18								
19								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-47	Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project #: 47743							Sheet 1 of 1	
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 8/5/2010	
Drilling Co: Aquifer Drilling and Testing (ADT)							Location of boring (not to scale)  Soil Boring 47:	
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)								
Total Depth: 10'      Depth to Water: N/A								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	5.7	N/A	SB-47 (0-4)	0-2'	Dry	24/24"	Black F-M SILTY SAND, little M Gravel, trace Glass, trace Plastic, trace Paper, trace Wood	Spoon refusal 0-2' Sample collected from 0-4' cuttings No odor, no staining
2	5.7	N/A		2-4'	Dry	24/24"	Black F-M SILTY SAND, little M Gravel, trace Glass, trace Plastic, trace Paper, trace Wood	No odor, no staining
3								
4	10.0	8	SB-47 (4-10)	4-6'	Dry	6.5/24"	Black F-M SILTY SAND, some Wood, trace Paper, trace Metal, trace Blue Plastic	No odor, black staining
5		17						
6		12						
7	5.0	21		6-8'	Dry	20/24"	4" Brown F SILTY SAND, some F-M Gravel, little Wood, trace Green Glass	Petro. odor, no staining
8		29					16" Black F-C SILTY SAND and F-M Gravel, some Red Brick, trace Black Plastic, trace Metal, trace Wire	No odor, black staining
9		54						
10		61						
11	6.3	60		8-10'	Dry	7/24"	Dark Brown F-M SILTY SAND, some F Gravel, trace Paper, trace White Plastic	No odor, no staining
12		50/2						
13								
14								
15								
16								
17								
18								
19								

# SOIL BORING LOG

Client: Frito-Lay					Boring No.: SB-48		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140	
Project #: 47743					Sheet 1 of 1			
Site Location: 202-218 Morgan Ave, Brooklyn NY					Date: 8/6/2010			
Drilling Co: <u>Aquifer Drilling and Testing (ADT)</u>					Location of boring (not to scale)  Soil Boring 48:			
Method: <u>Hollow Stem Auger</u>								
Personnel: <u>B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)</u>								
Total Depth: <u>6'</u> Depth to Water: <u>N/A</u>								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	0.8	50 50/0	SB-48 (0-4)	0-2'	Dry	5/24"	Brown SILT and F Sand, trace M Gravel, trace Wood	No odor, no staining
2	5.9	17 16		2-4'	Dry	8.5/24"	F-M SAND and Metal, trace Wire, trace Wood	No odor, no staining
3		29 42						
4	11.0	20 11	SB-48 (4-6)	4-6'	Dry	11/24"	10" Brown F SILTY SAND, some F-M Gravel, trace Wood, trace Glass, trace Metal	No odor, no staining
5		35 50/1			Dry		1" M GRAVEL, trace Metal, trace Rock,	No odor, no staining
6	N/A	N/A	N/A	6-10'	N/A	None		Refusal at 6', no recovery
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								



# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-49	Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140	
Project # : 47743							Sheet 1 of 1		
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 8/4/2010		
Drilling Co: Aquifer Drilling and Testing (ADT)							Location of boring (not to scale)  Soil Boring 49:		
Method: Hollow Stem Auger									
Personnel: J. Ferngren, B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)									
Total Depth: 12'      Depth to Water: 12'									
depth (feet)	PID	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks	
	N/A	N/A		0-2'	N/A	N/A	6" ASPHALT 2.5" C GRAVEL, some F-M Dark Brown Sand 1.5" Brown M GRAVEL Brown M GRAVEL, some F-M Dark Brown Sand, trace Wood  Brown M GRAVEL, some F-M Dark Brown Sand, trace Wood, trace Red Brick  Brown M GRAVEL, some F-M Dark Brown Sand, trace Wood, trace Red Brick	Refusal 0-2', no recovery	
1									No odor, no staining
2	0.0	3 15	SB-49 (0-4)	2-4'	Dry Dry	10/24"			
3		6							
4	0.1	3 7	SB-49 (4-10)	4-6'	Dry	8/24"			
5		7							
6		6							
7	0.0	4 3		6-8'	Dry	4/24"			
8		6 2							
9	0.0	5 5		8-10'	Dry	13/24"			
10		3 6							
11	N/A	5 2	N/A	10-12'	N/A	None			
12		3 2							
13									
14									
15									
16									
17									
18									
19									
20									

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-50	Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743							Sheet 1 of 1	
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 8/9/2010	
Drilling Co: Aquifer Drilling and Testing (ADT)							Location of boring (not to scale)  Soil Boring 50:	
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)								
Total Depth: 10'      Depth to Water: N/A								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	0.2	10 11	SB-50 (0-4)	0-2'	Dry	13/24"	Brown F SANDY SILT, some F-M Gravel, trace White Plastic, trace Red Brick	No odor, no staining
2	0.0	14 40						
3	0.0	28 50/3		2-4'	Dry	12.5/24"	Brown F SANDY SILT, some F-M Gravel, trace White Plastic, trace Red Brick, trace Glass	No odor, no staining
4	0.1	9	SB-50 (4-10)	4-6'	Dry	18/24"	Black F-M SAND and F-M Gravel, trace Glass, trace White Plastic	Slight Petro. odor, black staining
5		24 29						
6	4.3	15 19		6-8'	Dry	9.5/24"	7.5" Brown F-M SANDY SILT, some F-M Gravel, trace Tile, trace Green Plastic, 2" Red BRICK, little F-M Brown Sand	No odor, no staining
7		20 14			Dry			No odor, no staining
8	0.5	10 7		8-10'	Dry	5.5/24"	Brown F-M SANDY SILT, some F-M Gravel, trace Tile	No odor, no staining
9		5 3						
10		9						
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-51	Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743							Sheet 1 of 1	
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 8/9/2010	
Drilling Co: <u>Aquifer Drilling and Testing (ADT)</u>							Location of boring (not to scale)  Soil Boring 51:	
Method: <u>Hollow Stem Auger</u>								
Personnel: <u>B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)</u>								
Total Depth: <u>10'</u> Depth to Water: <u>N/A</u>								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	0.5	N/A	SB-51 (0-4)	0-2'	Dry	24/24"	Brown F SILTY SAND and Concrete, some F-M Gravel	Spoon refusal 0-2' Sample collected from 0-4' cuttings No staining, no odor No staining, no odor
2								
3	0.5	N/A		2-4'	Dry	24/24"	Brown F SILTY SAND and Concrete, some F-M Gravel	
4								
5	0.0	40	SB-51 (4-8)	4-6'	Dry	23.5/24"	3" Brown F-M SANDY SILT and F-M Gravel, some Red Brick, trace Wood 14" CONCRETE 6.5" Black F SANDY SILT, some Red Brick, trace Wood	No odor, no staining  No odor, no staining Petro. odor, black staining
6		37						
7		18						
8		15					7" Gray F-M SANDY SILT and F-M Gravel little Red Brick, trace Black Plastic, trace Paper 16" Black F-M SANDY SILT and F-M Gravel, trace Red Brick	No odor, no staining  Slight Petro. odor, black staining
9	0.2	30		6-8'	Dry	23/24"		
10		19						
11		12					8-10'	Refusal at 8', no recovery
12		16						
13	N/A	12			N/A	None		
14		10						
15		15						
16		8						
17								
18								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-52		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743							Sheet 1 of 1				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 8/6/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)							Location of boring (not to scale)  Soil Boring 52:				
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)											
Total Depth: 10'      Depth to Water: N/A											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks			
1	0.0	9 7	SB-52 (0-4)	0-2'	Dry	9/24"	Brown F SILTY SAND and F-M Gravel, little Plastic, trace Wood, trace Glass	No odor, no staining			
2	0.0	17 50/1		2-4'	Dry	10/24"	Brown F SANDY SILT and F-M Gravel, little Rope, trace Paper	No odor, no staining			
4	3.0	20 17	SB-52 (4-10)	4-6'	Dry	12/24"	8" Brown F SANDY SILT and F-M Gravel, trace Plastic Bag, trace Wire, trace Wood	No odor, no staining			
5		6 4			Dry		4" Black F-M Gravel and F Sand, some Red Brick, trace White Plastic	Petro. odor, black staining			
6	2.4	23 50/2		6-8'	Dry	13/24"	3" Brown F SANDY SILT, some M Gravel, trace Plastic	No odor, no staining			
7					Dry		10" Black F-M SAND and Red Brick, some M Gravel	Petro. odor, black staining			
8	1.0	51 50/3		8-10'	Dry	7/24"	Brown F SANDY SILT and F Gravel, some White Plastic, trace Thread	No odor, no staining			
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

# SOIL BORING LOG

Client: Frito-Lay				Boring No.: SB-53		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project #: 47743				Sheet 1 of 1				
Site Location: 202-218 Morgan Ave, Brooklyn NY				Date: 8/5/2010				
Drilling Co: <u>Aquifer Drilling and Testing (ADT)</u>				Location of boring (not to scale)  Soil Boring 53:				
Method: <u>Hollow Stem Auger</u>								
Personnel: <u>B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)</u>								
Total Depth: <u>10'</u> Depth to Water: <u>N/A</u>								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	9.2	N/A	SB-53 (0-4)	0-1.5'	Dry	24/24"	Brown F-C SAND and F Gravel	
2	23.7	N/A		1.5-4'	Dry		Black F-M SANDY SILT, some F-M Gravel, some Wood, trace Glass	Slight Petro. odor, black staining
3								
4	1.6	15	SB-53 (4-10)	4-6"	Dry	12/24"	Black F-M SAND and F-M Gravel, trace White Plastic	No odor, no staining
5		29						
6		10						
7	1.1	66		6-8'	Dry	20/24"	5" Black F-M SAND and F-M Gravel, trace Wood	Slight Petro. odor, staining
	12.6	50/1			Dry		5.5" Brown F-M GRAVEL and F-M Sand, little Wood	No odor, no staining
	11.1				Moist		9.5" Black F-M SAND, some Wood, trace Glass	No odor, black staining
8	10.0	50		8-10'	Moist	5.25/24"	Black F-M SAND, some F Gravel, trace Red Brick	No odor, black staining
9		12						
10		20						
		50/2						
11								
12								
13								
14								
15								
16								
17								
18								
19								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-54		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project #: 47743							Sheet 1 of 1				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 8/5/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)							Location of boring (not to scale)  Soil Boring 54:				
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)											
Total Depth: 10'      Depth to Water: N/A											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks			
1	57.0	N/A	SB-54 (0-4)	0-2'	Dry	24/24"	Black F SILTY SAND, some F-M Gravel, trace Wood, trace Plastic, trace Rubber, trace Glass, trace Tile	Spoon refusal 0-2', Sample collected from 0-4' cuttings Organic odor, black staining			
2	57.0	N/A		2-4'	Dry	24/24"	Black F SILTY SAND, some F-M Gravel, trace Wood, trace Plastic, trace Rubber, trace Glass, trace Tile	Organic odor, black staining			
3											
4	0.1	10	SB-54 (4-10)	4-6'	Dry	7.25/24"	Brown F-M SAND, little F Gravel, trace Paper, trace Plastic	No odor, no staining			
5		11									
6		25									
7	2.0	29		6-8'	Dry	11.5/24"	8.5" Black F SILTY SAND, some F Gravel, trace Paper, trace Wood, trace Glass	Slight Petro. odor, black staining			
8		16			Dry		3" Black stained WOOD	No odor, black staining			
9	0.9	15		8-10'	Dry	6.75/24"	5" Brown F SILTY SAND and F-M Gravel, trace Paper, trace Blue and White Plastic				
10		10			Dry		1.75" Black M GRAVEL, some F Silty Sand, trace Paper	No odor black staining			
11		22									
12		18									
13											
14											
15											
16											
17											
18											
19											
20											

# SOIL BORING LOG

Client: Frito-Lay					Boring No.: SB-55		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140	
Project # : 47743					Sheet 1 of 1			
Site Location: 202-218 Morgan Ave, Brooklyn NY					Date: 8/10/2010			
Drilling Co: Aquifer Drilling and Testing (ADT)					Location of boring (not to scale)  Soil Boring 55:			
Method: Hollow Stem Auger								
Personnel: B. Tiskowitz, M. Borruso (GF); S. Miller, G. Torres (ADT)								
Total Depth: 10'      Depth to Water: N/A								
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification	Remarks
1	0.9	N/A	SB-55 (0-4)	0-2'	Dry	24/24"	Dark Brown F-M SAND, some Silt, little F Gravel, trace Red Brick, trace Wood, trace White Plastic	Spoon refusal 0-2' Sample collected from 0-4' cuttings No odor, no staining
2	0.9	N/A		2-4'	Dry	24/24"		
3							Dark Brown F-M SAND, some Silt, little F Gravel, trace Red Brick, trace Wood, trace White Plastic	No odor, no staining
4	1.2	24	SB-55 (4-10)	4-6'	Dry	22/24"		
5		36					Brown F-M SAND, some Silt, little F-M Gravel, trace Red Brick, trace Wood, trace Paper, trace White Plastic	No odor, no staining
6		23						
7	0.8	5		6-8'	Dry	23/24"	16" Brown F-M SAND, some F Gravel, little Red Brick, trace Wood	No odor, no staining
8	0.2	4			Moist			
9	0.4	3		8-10'	Dry	9/24'	7" Brown F SANDY SILT, little paper, trace Wood	No odor, no staining
10		3						
11		3					Brown F SANDY SILT, little F-M Gravel, trace White Plastic, trace Wood, trace Glass	No odor, no staining
12		6						
13								
14								
15								
16								
17								
18								
19								
20								

# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-56		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140
Project # : 47743.034							Sheet 27 of 38		
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/12/2010		
Drilling Co: Aquifer Drilling and Testing (ADT)									
Method: Hollow Stem Auger									
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. Kamenicek (ADT)									
Total Depth: 14' Depth to Water: 12'									
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks
1	0.0	N/A	SB-56 (0-4)	0-4'	Dry	48/48"	Brown F-M SANDY SILT, some Metal, little Concrete, trace Wood, trace M Gravel		No odor, no staining
2							Black F-M SANDY SILT, some Metal, little Wood, trace F-M Gravel		Spoon refusal, sample collected off of auger
3									
4									
5	54.0	N/A		4-6'	Dry	24/24"			
6							Black F-M SANDY SILT, some Metal, little Wood, trace F-M Gravel		Strong petro. odor, black staining
7	130.0	N/A	SB-56 (6-8)	6-8'	Dry	24/24"			
8							F-M GRAVEL, some Red Brick, few F-M Sand, trace Metal, trace Concrete		Strong petro. odor, black staining
9	0.0	37 37		8-10'	Moist	16/24"			
10		27 10					Dark Brown F-M SANDY SILT, little F-M Gravel, trace Metal		Slight organic odor, light black staining
11	0.1	11 13		10-12'	Moist	24/24"			
12		11 7					Dark Brown F-M SANDY SILT, little F-M Gravel, trace Metal		Slight petro. odor, some staining
13		5 5		12-14'	Saturated				
14		5 5							
15									
16									Petro. odor, black staining
17									
18									
19									
20									



# SOIL BORING LOG

Client: Frito-Lay							Boring No.: SB-57		Gannett Fleming Engineers, P.C. 100 Crossways Park Dr. W. Ste 300 Woodbury, NY 11797 (516) 364-4140		
Project # : 47743.034							Sheet 28 of 38				
Site Location: 202-218 Morgan Ave, Brooklyn NY							Date: 10/12/2010				
Drilling Co: Aquifer Drilling and Testing (ADT)											
Method: Hollow Stem Auger											
Personnel: B. Tiskowitz, M. Borruso (GF); C. Migliore, J. Kamenicek (ADT)											
Total Depth: 10' Depth to Water: 9'											
depth (feet)	PID (ppm)	Blow Counts	Sample ID	Depth (From-To)	Moisture Content	Recovery	Soil Classification		Remarks		
1	0.0	N/A	SB-57 (0-4)	0-4'	Moist	48/48"	F-M SANDY SILT, some Metal, little Wood, trace F-M Gravel		No odor, no staining		
2											
3											
4	0.0	5		4-6'	Moist	6/24"	Brown F-C SAND and SILT, trace F-M Gravel		No odor, no staining		
5		2									
6		3									
7	0.2	4	SB-57 (6-8)	6-8'	Moist	9/24"	F-C SANDY SILT, some F-M Gravel, little Red Brick, trace Metal, trace Wood, trace Plastic		No odor, no staining		
8		2									
9	N/A	1		8-10'	Saturated	8/24"	F-C SANDY SILT, some F-M Gravel, little Red Brick, trace Metal, trace Wood, trace Plastic		No odor, no staining		
10		5									
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

**APPENDIX B**  
**LABORATORY DATA REPORTS (2010) (PROVIDED ON CD)**

**APPENDIX C**  
**DATA USABILITY SUMMARY REPORT (2010) (PROVIDED ON CD)**