Phase II Sampling and Analysis Plan
Subsurface Investigation and Survey

Former Photech Imaging System, Inc. Site
Site Investigation and Remedial Alternatives Project
City of Rochester
Title V Environmental Quality Bond Act

Prepared for:

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Introduction

Brownfield Restoration Group, LLC (BRG), subcontractor to IT Corporation (IT), is currently serving as a consultant to the City of Rochester, providing technical and project management support in performing the Site Investigation and Remedial Alternatives (SI/RA) project at the former Photech Imaging Systems, Inc. (Photech) property, located at 1000 Driving Park Avenue, Rochester, New York. The Photech SI/RA project includes a subsurface investigation and survey task. The subsurface survey involves a two phased approach to characterizing surface and subsurface soils and groundwater in order to identify, assess, and delineate environmental conditions at the Photech property. This document presents the Phase II Sampling and Analysis Plan for the Subsurface Investigation and Survey task, submitted as required by the New York State Department of Environmental Conservation (NYSDEC) in the approved project Work Plan (IT Corporation, November 1998).

Objective and Scope of Subsurface Investigation

The objective of the subsurface investigation and survey is to determine the nature and extent of soil, sediment and groundwater contamination at the Photech property. In order to meet this objective, the scope of the subsurface investigation and survey was developed in the approved project Work Plan, and involved a two phase approach to performing this task, as follows:

- Phase I- collection of surface and subsurface soil samples
- Phase II- installation of groundwater wells and additional sample collection

The purpose of Phase I of the survey is to gather information from samples collected from known or suspected chemical/waste handling areas, and from samples downgradient from manufacturing buildings and at the perimeter of the site. The first phase consists of collecting continuous soil samples from ground surface to bedrock using direct push methods. Shallow or surface soil samples are also to be collected. Results from Phase I sampling activities will allow the assessment of potential problem areas and identification of possible risk and exposure pathways. From this step, a preliminary understanding of the surface and subsurface conditions at the Photech site will be possible.

Phase II of the subsurface investigation will involve the characterization and measurement of water quality parameters at the Photech site, including for hydrogeological and chemical identification purposes Using the sample analytical results from data collected as part of the Phase I subsurface task, groundwater wells will be located to adequately define hydrogeological conditions, and to distribute wells at the up gradient and down gradient (perimeter) areas of the site. Phase II soil sampling activities will address each of the areas of concern identified in Phase I, and will include a targeted approach to collect additional surface and subsurface soil samples, as appropriate, from these areas to further quantify potential environmental contamination at the Photech site.

Phase II Scope of Activities

BRG personnel have completed Phase I of the Subsurface Investigation survey task. During Phase I activities, a total of 35 direct push subsurface soil samples and 18 shallow or surface soil samples were collected, following the procedures outlined in the approved Project Work Plan. Laboratory analytical results from Phase I activities are summarized in Table I (attached).

After completing sample collection and data review activities for Phase I, the Phase II scope of activities includes three tasks designed to define site hydrogeological conditions and evaluate potential groundwater contamination, provide groundwater quality information at upgradient and down gradient locations, and further assess soil conditions at the Photech site. These tasks are as follows:

Task 1
Complete installation of nine (9) groundwater wells on the Photech property, locating wells generally in areas of concern identified from Phase I soil sampling, and at locations up gradient and down gradient at the property.

- Task2
  Conduct groundwater monitoring and sample collection activities at each of the nine (9) well locations, following field procedures outlined in the approved Project Work Plan. Complete required hydrogeological testing at each well, including rising head test and water level measurements.

- Task3
  Collect additional subsurface and surface soil samples, as necessary, to further define the nature and extent of environmental contamination from areas of concern identified from Phase I activities. These areas are those portions of the facility where chemical contamination has been detected in Phase I samples and is potentially significant.

Additional detail on the proposed Phase II sampling activities is presented in the sections below.

Phase I Investigation and Survey Summary

The following section presents an overview of the basic information collected as part of the Phase I activities of this task. For reference, Phase I sample locations and types are identified and labeled according to the Site Map, attached as Figure 1. Locations where buildings, tanks, containers1drums, and debris etc. are present are also denoted in Figure 1. Please note that sample identification numbers were assigned to Phase I samples as indicated by sample locations in the approved Project Work Plan. These identification numbers display the discontinuity found in the original Work Plan numbering of sample locations and are not representative of samples that were either not collected or missing from the Phase I laboratory results summarized in this document.

Phase I subsurface samples were collected via direct push methods to the top of bedrock. Surface soil samples were collected to a minimum depth of four inches. Laboratory analyses completed for each of the Phase I samples are indicated. Constituent concentrations reported above NYS ASP Contract Required Detection Limits (CRDLs) are presented for each sample location. All other results are considered non-detect. Where applicable, Tentatively Identified Compounds (TICs) are also presented.

Subsurface Soil Samples

Sample Location #1- Former Open Burn Pit area

Direct push sample collected to a depth of 10 feet. Laboratory analysis for VOCs, SVOCs, Metals, and Total Petroleum Hydrocarbons (TPH) indicated low levels of trichloroethene, 1-propanol, and bis(2-ethylhexyl) phthalate, all below guidance levels established in NYSDEC TAGM 4046. Elevated levels of cadmium, chromium, copper, iron, lead, nickel, selenium, silver, and zinc were detected at levels above TAGM 4046 levels.

Sample Location #2- Former Retention Pond area

Direct push sample collected to a depth of 8.3 feet. Laboratory analysis for VOCs, SVOCs, and Metals indicated low levels of trichloroethene, 1-propanol, and bis(2-ethylhexyl) phthalate, all below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron were detected at levels above TAGM 4046 levels.

Sample Location #3- Former Retention Pond area

Direct push sample collected to a depth of 8 feet. Laboratory analysis for VOCs, SVOCs, and Metals indicated low levels of trichloroethene, tetrachloroethene, I-propanol, and bis(2-ethylhexyl) phthalate, all below guidance levels established in NYSDEC TAGM 4046. Elevated levels of cadmium, chromium, copper, iron, lead, nickel, selenium, silver, and zinc were detected at levels above TAGM 4046 levels.

Sample Location #4- Retention Pond- Low Lying area

Direct push sample collected to a depth of 8.75 feet. Laboratory analysis for VOCs, SVOCs, and Metals indicated low levels of 1-propanol and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron, selenium, and zinc were detected at levels above TAGM 4046 levels.

Sample Location #5- Retention Pond- Low Lying area

Direct push sample collected to a depth of 8.75 feet. Laboratory analysis for VOCs, SVOCs, and Metals indicated low levels of trichloroethene and 1-propanol below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #6- Existing Fuel Oil Storage Tank area

Direct push sample collected to a depth of 11.6 feet. Laboratory analysis for VOCs, SVOCs, and TPH indicated low levels of 1,2-dichloroethene, trichloroethene, and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046.

Sample Location #7- Former Fuel Oil UST area

Direct push sample collected to a depth of 8 feet. Laboratory analysis for VOCs, SVOCs, and TPH indicated low levels of trichloroethene, tetrachloroethene, and several polyaromatic hydrocarbons (PAHs) such as anthracene, benzo(a)anthracene, chrysene, fluoranthene, phenanthrene, and pyrene, all below

guidance levels established in NYSDEC TAGM 4046. The results for benzo(a)pyrene exceeded TAGM 4046 guidance levels.

Sample Location #9- Asphalt Lot in NW portion of Property

Direct push sample collected to a depth of 9 feet. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of acetone, ether, and bis(2-ethylhexyl) phthalate, all below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #10- Asphalt Lot in NW portion of Property

Direct push sample collected to a depth of 9.25 feet. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of acetone, di-n-butyl phthalate, and bis(2-ethylhexyl) phthalate, all below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #11- Corner of Tank Farm Containment area

Direct push sample collected to a depth of 9.25 feet. Laboratory analysis for VOCs and SVOCs indicated low levels of trichloroethene and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046.

Sample Location #12- Corner of Tank Farm Containment area

Direct push sample collected to a depth of 8.75 feet. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of trichloroethene and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #13- Suspected Waste Chemical UST area

Direct push sample collected to a depth of 8 feet. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of trichloroethene below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 values.

Sample Location #14- Building 12 North Perimeter Location

Direct push sample collected to a depth of 8.25 feet. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of acetone, 1,1-dichloroethane, 1,1,1-trichloroethane and bis(2-ethylhexyl) phthalate, all below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron, mercury, and zinc were detected at levels above TAGM 4046 values.

Sample Location #15- South of Silver Recovery Underground Storage Vault

Direct push sample collected to a depth of 9.2 feet. Laboratory analysis for Metals indicated elevated levels of iron, selenium, and zinc, detected at levels above TAGM 4046 values.

Sample Location #16- West of Silver Recovery Underqround Storase Vault

Direct push sample collected to a depth of 9.75 feet. Laboratory analysis for VOCs, SVOCs, Metals, TPH, and Alcohols indicated low levels of acetone, 2-butanone, bis(2-ethylhexyl) phthalate, and several polyaromatic hydrocarbons (PAHs) such as anthracene, benzo(a)anthracene, chrysene, fluoranthene, phenanthrene, and pyrene, all below guidance levels established in NYSDEC TAGM 4046. The results for benzo(a)pyrene exceeded TAGM 4046 guidance levels. Elevated levels of cadmium, iron, mercury, and zinc were detected at levels above TAGM 4046 levels.

Sample Location #17- North of Silver Recovery Underground Storage Vault

Direct push sample collected to a depth of 8.8 feet. Laboratory analysis for VOCs, SVOCs, Metals, and TPH indicated low levels of acetone, 2-butanone, ethylbenzene, toluene, xylene (total), bis(2-ethylhexyl) phthalate, and several polyaromatic hydrocarbons (PAHs) such as anthracene, benzo(a)anthracene, chrysene, fluoranthene, phenanthrene, and pyrene, all below guidance levels established in NYSDEC TAGM 4046. Elevated levels of beryllium, cadmium, chromium, copper, iron, mercury, nickel, selenium, silver, and zinc were detected at levels above TAGM 4046 levels.

Sample Location #18- East of Silver Recovery Underground Storage Vault

Direct push sample collected to a depth of 9.8 feet. Laboratory analysis for Metals indicated elevated levels of cadmium, chromium, iron, and zinc detected at levels above TAGM 4046 values.

Sample Location #19- Building 1 South Perimeter Location

Direct push sample collected to a depth of 9.75 feet. Laboratory analysis for Metals indicated elevated levels of iron, selenium, and zinc detected at levels above TAGM 4046 values.

Sample Location #20- Silver Recovery Wastewater AST area

Direct push sample collected to a depth of 9.7 feet. Laboratory analysis for Metals indicated elevated levels of iron and zinc detected at levels above TAGM 4046 values.

Sample Location #23- Building 2 Former Loading Dock area

Direct push sample collected to a depth of 15.2 feet. Laboratory analysis for Metals indicated elevated levels of arsenic, chromium, iron, nickel, and zinc detected at levels above TAGM 4046 values.

Sample Location #24- Suspected Acid Crock area

Direct push sample collected to a depth of 9.5 feet. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of di-n-butyl phthalate and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #25- Building 11 East Perimeter Location

Direct push sample collected to a depth of 12.6 feet. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of trichloroethene and bis(2-ethylhexyl) phthalate below guidance levels

established in NYSDEC TAGM 4046. Elevated levels of iron, selenium, and zinc were detected at levels above TAGM 4046 levels.

Sample Location #27- Suspected Underground Concrete Chemical Storage Vault

Direct push sample collected to a depth of 12.8 feet. Laboratory analysis for VOCs, SVOCs, Metals, TPH, and Alcohols indicated low levels of di-n-butyl phthalate and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Results of the alcohol analysis indicated levels of 2-propanol above the Practicable Quantitation Limit (PQL). Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #32- Building 12 NE Perimeter Location

Direct push sample collected to a depth of 8 feet. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of acetone, 2-butanone, trichloroethene, tetrachloroethene, 1-propanol, di-n-butyl-phthalate, and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Results of the alcohol analysis indicated levels of 2-propanol above the PQL. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #32- Building 12 NE Perimeter- Former Incinerator area

Direct push sample collected to a depth of 8 feet. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of acetone, 2-butanone, trichloroethene, tetrachloroethene, 1-propanol, di-n-butyl-phthalate, and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Results of the alcohol analysis indicated levels of 2-propanol above the PQL. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #33- Building 17 East Perimeter Location

Direct push sample collected to a depth of 9 feet. Laboratory analysis for VOCs, SVOCs, Metals, TPH, and Alcohols indicated low levels of 1-propanol below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #34- Building 7 East Perimeter Location

Direct push sample collected to a depth of 8 feet. Laboratory analysis for VOCs, SVOCs, Metals, TPH, and Alcohols indicated low levels of 1-propanol and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron, selenium, and zinc were detected at levels above TAGM 4046 levels.

Sample Location #35- West Property Boundary Perimeter Location

Direct push sample collected to a depth of 10.3 feet. Laboratory analysis for VOCs, SVOCs, Metals, TPH, and Alcohols indicated low levels of bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron, selenium, and zinc were detected at levels above TAGM 4046 levels.

Sample Location #36- South West Property Boundary Perimeter Location

Direct push sample collected to a depth of 9.5 feet. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of acetone, 2-butanone, I-propanol, fluoranthene, and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and selenium were detected at levels above TAGM 4046 levels.

Sample Location #37- South Property Boundary Perimeter Location

Direct push sample collected to a depth of 8 feet. Laboratory analysis for VOCs, SVOCs, Metals, TPH, and Alcohols indicated low levels of acetone, 2-butanone, and 1-propanol below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #38- East Property Boundary Perimeter Location

Direct push sample collected to a depth of 13.2 feet. Laboratory analysis for VOCs, SVOCs, Metals, TPH, and Alcohols indicated low levels of acetone, fluoranthene, and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #39- East Boundary of Former Open Burn Pit

Direct push sample collected to a depth of 10 feet. Laboratory analysis for VOCs, SVOCs, Metals, TPH, and Alcohols indicated low levels of trichloroethene, 1-propanol, bis(2-ethylhexyl) phthalate, and several polyaromatic hydrocarbons (PAHs) such as anthracene, benzo(a)anthracene, chrysene, fluoranthene, phenanthrene, and pyrene below guidance levels established in NYSDEC TAGM 4046. Elevated levels of arsenic, cadmium, chromium, copper, iron, lead, nickel, silver, and zinc were detected at levels above TAGM 4046 levels.

Sample Location #40- North Property Boundary Perimeter Location

Direct push sample collected to a depth of 8 feet. Laboratory analysis for VOCs, SVOCs, Metals, TPH, and Alcohols indicated low levels of 1-propanol and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #42- Silver Recovery Underground Wastewater Tank area

Direct push sample collected to a depth of 11 feet. Laboratory analysis for VOCs, SVOCs, Metals, TPH, and Alcohols indicated low levels of acetone, di-n-butyl phthalate, and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron were detected at levels above TAGM 4046 levels.

Sample Location #43- Suspected Additional Asphalt area in NW Asphalt Lot

Direct push sample collected to a depth of 8.75 feet. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of acetone, 2-butanone, and bis(2-ethylhexyl) phthalate below guidance

levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #44- Exterior Sump/Sewer Manhole in between Bldgs. 12, 16, & 17
Direct push sample collected to a depth of 10 feet. Laboratory analysis for VOCs, SVOCs, Metals, TPH, and Alcohols indicated low levels of di-n-butyl phthalate and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Surface Soil Samples

Sample Location #8- Rear of Chemical Storage Shed
Surface soil sample collected to a depth of 4 inches. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of di-n-butyl phthaiate, fluoranthrene, pyrene, and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron, selenium, and zinc were detected at levels above TAGM 4046 levels.

Sample Location #9A- NW Asphalt Lot- East of Chemical Storage Shed
Surface soil sample collected to a depth of 4 inches. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of acetone, 1-propanol, di-n-butyl phthalate, and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #9B- NW Asphalt Lot- Further East of Chemical Storage Shed
Surface soil sample collected to a depth of 4.5 inches. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of acetone, di-n-butyl phthalate, and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #9C- NW Asphalt Lot- South End Adiacent Building 13 Loading Dock
Surface soil sample collected to a depth of 7 inches. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of trichloroethene, di-n-butyl phthalate, bis(2-ethylhexyl) phthalate, and several polyaromatic hydrocarbons (PAHs) such as anthracene, benzo(a)anthracene, chrysene, fluoranthene, phenanthrene, and pyrene, all below guidance levels established in NYSDEC TAGM 4046 Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #9D- NW Asphalt Lot- South End Adiacent to Building 12 Loading Dock
Surface soil sample collected to a depth of 9 inches. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of trichloroethene, di-n-butyl phthalate, and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #10A- NW Asphalt Lot- Northeast from Chemical Storage Shed
Surface soil sample collected to a depth of 7.5 inches. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of acetone, di-n-butyl phthalate, and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron were detected at levels above TAGM 4046 levels.

Sample Location #10B- NW Asphalt Lot- East Side of Lot in Area of Suspected Previous Drum Storage
Surface soil sample collected to a depth of 8 inches. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of di-n-butyl phthalate, fluoranthene, pyrene, and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron were detected at levels above TAGM 4046 levels.

Sample Location #10C- NW Asphalt Lot- North End of Lot in Patched Asphalt Area
Surface soil sample collected to a depth of 6 inches. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of di-n-butyl phthalate and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #10D- NW Asphalt Lot- North End of Lot
Surface soil sample collected to a depth of 7 inches. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of di-n-butyl phthalate and bis(2-ethylhexyl) phthalate below guidance levels established in NYSDEC TAGM 4046. Elevated levels of iron and zinc were detected at levels above TAGM 4046 levels.

Sample Location #21- Silver Recovery Wastewater Tank Underneath Containment Berm
Surface soil sample collected to a depth of 4 inches. Laboratory analysis for Metals indicated elevated levels of cadmium, chromium, iron, nickel, and zinc at levels above TAGM 4046 values.

Sample Location #26A- East Side of Building 11- 10 Feet North of SE Corner of Building 11
Surface soil sample collected to a depth of 4 inches. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of trichloroethene, tetrahydrofuran, acenaphthene, dibenzofuran, fluorene, naphthalene, 2-methylnaphthalene, di-n-butyl phthalate, bis(2-ethylhexyl) phthalate, and several polyaromatic hydrocarbons (PAHs) such as anthracene, benzo(a)anthracene, chrysene, fluoranthene, phenanthrene, and pyrene, all below guidance levels established in NYSDEC TAGM 4046. The results for benzo(a)pyrene exceeded TAGM 4046 guidance levels. Elevated levels of cadmium, chromium, iron, lead, mercury, nickel, selenium, silver, and zinc were detected at levels above TAGM 4046 levels.

Sample Location #26B- East Side of Building 11- 25 Feet North of SE Corner of Building 11
Surface soil sample collected to a depth of 6 inches. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of trichloroethene, tetrahydrofuran, acenaphthene, fluorene, di-n-butyl phthalate, bis(2-ethylhexyl) phthalate, and several polyaromatic hydrocarbons (PAHs) such as

anthracene, benzo(a)anthracene, chrysene, fluoranthene, phenanthrene, and pyrene, all below guidance levels established in NYSDEC TAGM 4046. The results for benzo(a)pyrene exceeded TAGM 4046 guidance levels. Elevated levels of chromium, iron, lead, mercury, and zinc were detected at levels above TAGM 4046 levels.

Sample Location #26C- East Side of Building 11- 40 Feet North of SE Corner of Building 11

Surface soil sample collected to a depth of 6 inches. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of acenaphthene, dibenzofuran, fluorene, di-n-butyl phthalate, bis(2-ethylhexyl) phthalate, and several polyaromatic hydrocarbons (PAHs) such as anthracene, benzo(a)anthracene, chrysene, fluoranthene, phenanthrene, and pyrene, all below guidance levels established in NYSDEC TAGM 4046. The results for benzo(a)pyrene exceeded TAGM 4046 guidance levels. Elevated levels of chromium, iron, lead, mercury, and zinc were detected at levels above TAGM 4046 levels.

Sample Location #26D- East Side of Building 11- 60 Feet North of SE Corner of Building 11

Surface soil sample collected to a depth of 7 inches. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of trichloroethene, acenaphthene, dibenzofuran, di-n-butyl phthalate, bis(2-ethylhexyl) phthalate, and several polyaromatic hydrocarbons (PAHs) such as anthracene, benzo(a)anthracene, chrysene, fluoranthene, phenanthrene, and pyrene, all below guidance levels established in NYSDEC TAGM 4046. The results for benzo(a)pyrene exceeded TAGM 4046 guidance levels. Elevated levels of chromium, iron, mercury, and zinc were detected at levels above TAGM 4046 levels.

Sample Location #26E- East Side of Building 11- 26 Feet South of South Wall of Building 16

Surface soil sample collected to a depth of 5 inches. Laboratory analysis for VOCs, SVOCs, Metals, and Alcohols indicated low levels of trichloroethene, acenaphthene, di-n-butyl phthalate, bis(2-ethylhexyl) phthalate, and several polyaromatic hydrocarbons (PAHs) such as anthracene, benzo(a)anthracene, chrysene, fluoranthene, phenanthrene, and pyrene, all below guidance levels established in NYSDEC TAGM 4046. The results for benzo(a)pyrene exceeded TAGM 4046 guidance levels. Elevated levels of chromium, iron, lead, mercury, selenium, and zinc were detected at levels above TAGM 4046 levels.

Sample Location #28- Old Transformer Area

Surface soil sample collected to a depth of 6 inches. Laboratory analysis for SVOCs and PCBs indicated low levels of acenaphthene, dibenzofuran, fluorene, naphthalene, 2-methylnaphthalene, di-n-butyl phthalate, bis(2-ethylhexyl) phthalate, and several polyaromatic hydrocarbons (PAHs), all below guidance levels established in NYSDEC TAGM 4046. The results for benzo(a)pyrene, benzo(a)anthracene, chrysene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and benzo(k)fluoranthene exceeded TAGM 4046 guidance levels. Results from the PCB analysis were all below TAGM 4046 levels.

Sample Location #29- New Transformer Area/Former Film Base Incinerator Area

Surface soil sample collected to a depth of 5 inches. Laboratory analysis for Metals and PCBs indicated elevated levels of cadmium, chromium, copper, iron, lead, silver, and zinc were detected at levels above TAGM 4046 levels. Results from the PCB analysis were all below TAGM 4046 levels.

Sample Location #30- Retention Pond Drainage Culvert/Ditch

Surface soil sample collected to a depth of 7 inches. Laboratory analysis for VOCs, SVOCs, Metals, TPH, and Alcohols indicated low levels of di-n-butyl phthalate, bis(2-ethylhexyl) phthalate, and several polyaromatic hydrocarbons (PAHs) all below guidance levels established in NYSDEC TAGM 4046. The results for benzo(a)pyrene, benzo(a)anthracene, chrysene, and dibenz(a,h)anthracene exceeded TAGM 4046 guidance levels. Elevated levels of cadmium, iron, silver, and zinc were detected at levels above TAGM 4046 levels.

Phase II Sampling and Analysis Program

BRG will install a total of nine (9) groundwater monitoring wells at locations across the Photech property, and collect groundwater and soil samples in order to:

- further identify areas of contamination
- evaluate the nature and extent of known or potential environmental contamination; and,
- collect information on subsurface physical and hydrogeological characteristics.

The results of the Phase II sampling will provide the necessary information to assist the City in determining potential soil and groundwater contamination areas of concern at the Photech property. The results will assist BRG in the design and implementation, if required, of any remedial action in the next phase of work at the Photech property.

Soil and groundwater samples, as well as groundwater well installation activities, will be completed following the specifications outlined in the approved project Work Plan (dated November 1998) and the Field Sampling and Analysis Plan (Appendix B) of the Work Plan. Hydrogeological testing will be completed according to the provisions of the Field Sampling and Analysis Plan.

For Phase II drilling, standard rotary drilling methods will be used to install the nine planned groundwater monitoring wells. The wells will be constructed of two (2)- inch O.D. Schedule 40 PVC, interfaced between the overburden and bedrock layers, and capped with a lockable, secure cap. All nine wells will be installed as "stick-ups" above ground. Soil and bedrock samples will be collected from each groundwater well location and will be tested for groundwater elevations and hydraulic conductivity upon completion. After an appropriate time for recharge and development, each well will be sampled as indicated below.

The laboratory analysis of both the soil and groundwater samples collected during this phase will include the necessary sample analyses as specified in the approved Work Plan. These analyses include:

Analyte List	*Analytical Methods*
TAL Metals	1311/6010/7000
TCL Volatiles	ASP 95-1
TCL Semivolatiles	ASP 95-2
PCBs	ASP 95-3/8082
Total Petroleum Hydrocarbons (TPH)	418.1/1664
Alcohols	SW-846 8015

The type(s) of analyses selected for a particular well or boring location will be dependent on where the sample is located and Phase I soil sample results. For example, not all samples collected will be submitted for TPH analysis, only those in areas where fuels, oils, or other petroleum products are suspected. All groundwater samples collected from the nine wells will be submitted for the entire list of analyses above. All analyses will be completed by the approved New York State ELAP CLP certified laboratory for this project.

Based on an evaluation of Phase I activities and sampling results, the Subsurface Investigation and Survey Phase II sampling scope will include the following:

- Collection of nine (9) groundwater samples from nine groundwater monitoring well locations;
- Measurement of hydrogeological parameters from all nine groundwater monitoring well locations;
- Collection of nine (9) soil boring samples from the groundwater monitoring well locations;
- Recommendation to collect an additional six (6) subsurface soil boring samples at several locations (see below).

Phase II Sample Locations

Proposed groundwater well installation and boring locations are presented below. The specific locations are shown in Figure 2. Placement of these locations are proposed based on Phase I sample analytical results, historical facility information, and known geological and hydrogeological data for the area. Based on available information from the Monroe County Environmental Council and previous investigation work at the facility, groundwater well locations have been placed anticipating that groundwater flows generally in the northeast direction.

Well #1- Original location of well #1 is at the perimeter fenceline directly south of Building 1. BRG proposes to relocate this well to a position between the 12,000-gallon silver recovery underground vault and the south wall of Building 1 in order to characterize conditions in this area of concern. Analytical results from Phase I sample location #17 indicate potential chemical contamination in the nearby soils, possibly from release(s) from the underground vault.

Well #2- Original location of well #2 is at the perimeter fenceline near the main gate. BRG proposes to install well #2 in the same general location, near to the main facility effluent sewer line. This well location will serve as a background or upgradient well for the investigation.

Well #3- Original location of well #3 is at the perimeter of the Photech property directly west of Building 11. BRG proposes to install well #3 in the same general location, primarily to provide an upgradient well location.

Well #4- Original location of well #4 is in the center of the northwest asphalt lot of the Photech property, adjacent to Buildings 12 and 13. BRG proposes to locate this well in the same general area, located specifically to account for the historical drum storage area and the previous location of the chemical storage shed. Analytical results from Phase I samples in this area suggest potential low level contamination in the soils below the asphalt lot. The actual location of this well may depend on the findings from the tank closure and removal task. This well may be re-located closer to the chemical storage shed if contamination is found during removal of the drum from the rear of the building.

Well #5- Original location of well #5 is east of the tank farm and north of Building 12. This well has been located to capture downgradient groundwater flow from the drum storage area, tank farm and Building 12. BRG proposes to move this well further to the east and northeast to better assess groundwater from these areas and see potential groundwater contamination adjacent to Phase I sample location #32. The actual location of this well may depend on the findings from the tank closure and removal task. This well may be re-located closer to the tank farm area if contamination is found during the removal of the virgin and waste methanol tanks. Another option to consider is the possibility that an additional well (designated Well#10) may be installed in this area because of the multiple areas of concern present in this area of the facility.

Well #6- Original location of well #6 is directly east of Building 11. Phase I sample results in this area (sample locations #25 and surface soil location #26 in series) indicate potential environmental contamination. BRG proposes to locate this well as originally indicated, in place close to the location of the former external concrete chemical storage pad adjacent to Building 11. Please note that one of the facility's underground tunnels is located directly in this area and may influence groundwater flow in the overburden. As an option, BRG could place this well further north (other side of tunnel) to put it generally downgradient from this area; BRG will determine the exact tunnel location while in the field and place the well accordingly.

Well #7- Original location of well #7 is at the facility perimeter on the eastern border of the former retention pond area. BRG proposes to move this well location to a position northwest of its present location. Phase I sample results for sample locations #4 and #5, as well as surface soil sample location #30 show elevated levels of various chemicals. This new location will position the well generally downgradient from the area of concern at the former retention pond.

Well #8- Original location of well #8 is adjacent to the former open burn pit area and north of the existing fuel oil tank. BRG proposes to keep this well in the same proposed location.

Well #9- Original location of well #9 is at the facility perimeter east of Building 2. BRG proposes to move this well location in a northwest direction, placing it between Buildings 3 and 4 and Phase I sample location #27. Phase I results at sample locations #23 and #27, as well as potential concerns with the 12,000-gallon silver recovery wastewater tank and containment (see results of Phase I surface soil sample #21) suggest that this proposed location will serve to better capture groundwater flow from these areas.

Recommended Additional Soil Borings

In addition to the well installation activities, BRG is proposing to complete six (6) additional subsurface soil borings at the locations indicated below. These borings will fill existing data gaps and provide valuable information as to the extent of possible environmental contamination in specific areas of the Photech property. The additional soil borings proposed herein will be completed following the procedures outlined in the approved project Work Plan and Field Sampling and Analysis Plan (Appendix B). Locations for the soil borings were determined based on available Phase I sample analysis results summarized above.

Boring #45- Add subsurface soil boring at location adjacent to old Building 13 loading dock at southeast corner of Building 13. This location was indicated as a potential area where chemicals were handled at one time during historical facility operations (as per BRG interviews with the former plant engineer) and has not fully been investigated at this point.

Boring #46- Add additional soil boring at location along east side of the former retention pond area. This boring location will assist in determining the extent of chemical contamination identified from the results of Phase I sample locations #3, #5, #39, and surface soil sample #30. It also will serve as an additional perimeter sample at the property.

Boring #47- Add additional soil boring at location along east side of the former open burn pit area. This boring location will assist in determining the extent of chemical contamination identified from the results of Phase I sample locations #3, #7, # 38, #39, and surface soil samples #27 and #28. It also will serve as an additional perimeter sample at the property.

Boring #48- Add additional soil boring at location specified in original scope as sample location #41. Phase I sample location #41 was not completed during Phase I drilling activities because of the difficulty in finding the sewer line landmark. This boring location will be located directly adjacent to the main effluent sewer line for the Photech facility and will assist in determining the extent of any chemical contamination associated with potential releases from the sewer line.

Boring #49- Add additional soil boring at location along west side of Building 11. This boring location will be located adjacent to the catch basin (acid crock) indicated on available facility maps. The previous attempt (Phase I sample location #24) to locate this structure and sample subsurface soil in the general area resulted in a relatively "clean" sample. BRG believes that this location will be able to clarify if any releases from the crock have occurred in the surrounding soils.

Boring #50- Add additional soil boring at location to the north and east of the old film incinerator locations. This boring location will be placed adjacent to the two sites where previously film incinerators were operated at the Photech site (as per BRG interviews with the former plant engineer). The location will assist in determining the extent of chemical contamination identified from the results of Phase I surface soil sample locations #28 and #29.

Phase II Sampling and Analysis Results

Based on the results of the well and boring installation activities and Phase II sampling results, BRG will evaluate and delineate areas of concern, if any, of potential environmental contamination, and develop recommendations on the status and scope of remediation actions for environmental contamination at the Photech site. The recommendations and findings from the Subsurface Investigation and Survey will be incorporated into the Photech SI/RA Final Report document.

Summary of Phase I Sample Data- Subsurface Soil Samples

Sample ID	VOC	SVOC	Metals	Alcohols	TPH	PCBs
PHO-GS-01	Trichlorethene 8J	bis(2-ethylhexyl)phthalate 430	Cadmium 7.97 Chromium 18.1 Iron 17400 Lead 79.9 Nickel 18.1 Selenium 5.66 Silver 355 Zinc 245	NA	None	NA
PHO-GS-02	Trichlorethene 1J	bis(2-ethylhexyl)phthalate 51J	Iron 9510	NA	NA	NA
PHO-GS-03	Trichlorethene 3J Tetrachloroethene 1J	bis(2-ethylhexyl)phthalate 260J	Cadmium 3.5 Chromium 69.2 Iron 138000 Lead 44.2 Nickel 38.9 Selenium 2.09 Silver 43.8 Zinc 450	NA	NA	NA
PHO-GS-04	None	bis(2-ethylhexyl)phthalate 460	Iron 9280 Selenium 2.18 Zinc 23	NA	NA	NA
PHO-GS-05	Trichlorethene 1J	None	Iron 9740 Zinc 56.7	NA	NA	NA
PHO-GS-06	1,2-Dichloroethene 30 Trichloroethene 7J	bis(2-ethylhexyl)phthalate 49JB	NA	NA	None	NA
PHO-GS-07	Trichloroethene 18 Tetrachloroethene 2J	Low levels of various PAHs Benzo(a)pyrene 120J	NA	NA	None	NA
PHO-GS-09	Acetone 6JB	bis(2-ethylhexyl)phthalate 42J	Iron 15700 Zinc 45.9	None	NA	NA
PHO-GS-10	Acetone 5JB	di-n-butyl phthalate 54J bis(2-ethylhexyl)phthalate 42J	Iron 9380 Zinc 27.4	None	NA	NA
PHO-GS-11	Trichlorethene 2J	bis(2-ethylhexyl)phthalate 60J	NA	NA	NA	NA
PHO-GS-12	Trichlorethene 17	bis(2-ethylhexyl)phthalate 42J	Iron 9110 Zinc 54.5	None	NA	NA
PHO-GS-13	Trichlorethene 2J	None	Iron 8880 Zinc 28	None	NA	NA
PHO-GS-14	Acetone 5JB 1,2-Dichloroethane 1J 1,1,1-Trichloroethane 2J	bis(2-ethylhexyl)phthalate 76J	Iron 11100 Mercury 0.221 Zinc 35.4	None	NA	NA
PHO-GS-15	NA	NA	Iron 12100 Selenium 2.24 Zinc 37.1	NA	NA	NA
PHO-GS-16	Acetone 21B 2-Butanone 6J	Low levels of various PAHs Benzo(a)pyrene 130J	Cadmium 1.16 Iron 10900 Zinc 45.2	None	None	NA
PHO-GS-17	Acetone 280B 2-Butanone 75 Toluene 3J Ethylbenzene 3J Xylene (total) 3J	Low levels of various PAHs	Cadmium 6320 Chromium 30.5 Copper 109 Iron 6010 Mercury 0.220 Nickel 23.9 Selenium 3.20 Silver 846 Zinc 51.4	NA	None	NA

Summary of Phase I Sample Data- Subsurface Soil Samples

Sample ID	VOC	SVOC	Metals	Alcohols	TPH	PCBs
PHO-GS-18	NA		Cadmium 3.81 Chromlum 11 4 Iron 12300 Zinc 61 4	NA	NA	NA
PHO-GS-19	NA		Iron 15000 Selenlum 3 06 Zinc 55 5	NA	NA	NA
PHO-GS-20	NA	NA	Iron 8700 Zinc 25	NA	NA	NA
PHO-GS-23	NA		Arsenic 7 88 Chromlum 11 1 Iron 16200 Nickel 13 9 Zinc 44 7	NA	NA	NA
PHO-GS-24	None	di-n-butyl phthalate 57J bis(2-ethylhexyl)phthalate 110J	Iron 11600 Zinc 24 8	None	NA	NA
PHO-GS-25	Trichlorethene 1J	bis(2-ethylhexyl)phthalate 71J	Iron 12900 Selenlum 2 34 Zinc 79 2	None	NA	
PHO-GS-26	NA	NA		NA	NA	NA
PHO-GS-27	/None	di-n-butyl phthalate 41J bis(2-ethylhexyl)phthalate 76JB	Iron 8580 Zinc 27 4	2-Propano1 670	None	NA
PHO-GS-32	Acetone 70 2-Butanone 21 Tnchloroethene 2J Tetrachloroethene 2J	di-n-butyl phthalate 58J bis(2-ethylhexyl)phthalate 52J	iron 9080 Zinc 54	2-Propanol 1100	NA	NA
PHO-GS-33	None	None	Iron 9470 Zinc 24.3	None	None	NA
PHO-GS-34	None	bis(2-ethylhexyl)phthalate 41J	Iron 10700 Selenium 2.57 Zinc 34.6	None	None	NA
PHO-GS-35	None	bis(2-ethylhexyl)phthalate 61J	Iron 10500 Selenium 2 12 Zinc 35.3	None	None	NA
PHO-GS-36	Acetone 34 2-Butanone 11J	fluoranthene 45J bis(2-ethylhexyl)phthalate 120JB	Iron 11900 Selenium 2.13	None	NA	NA
PHO-GS-37	Acetone 94 2-Butanone 30	None	Iron 11000 Zinc 39.1	None	None	NA
PHO-GS-38	Acetone 5JB	fluoranthene 55J bis(2-ethylhexyl)phthalate 150JB	Iron 7820 Zinc 26.3	None	None	NA
PHO-GS-39	Trichlorethene 1J	Low levels of various PAHs bis(2-ethylhexyl)phthalate 160J	Arsenic 7 61 Cadmium 4.13 Chromium 12.5 Copper 57.8 Iron 84900 Lead 1300 Nickel 34.4 Silver 67.2 Zinc 276	None	None	NA
PHO-GS-40	None	bis(2-ethylhexyl)phthalate 180J	Iron 11700 Zinc 34	None	None	NA
PHO-GS-42	Acetone 7JB	fluoranthene 61J bis(2-ethylhexyl)phthalate 64JB	Iron 9030	None	None	NA
PHO-GS-43	Acetone 218 12-Butanone 4J	bis(2-ethylhexyl)phthalate 56J	Iron 10100 Zinc 55.2	None	NA	NA
PHO-GS-44	None	fluoranthene 42J bis(2-ethylhexyl)phthalate 130J	Iron 7990 Zinc 23	None	None	NA

Summary of Phase I Sample Data- Subsurface Soil Samples

Sample ID	VOC	SVOC	Metals	Alcohols	TPH	PCBs

1. Samples analyzed via NYS ASP protocols: 95-1 for VOCs, 95-2 for SVOCs; 95-3 for PCBs. SW-846 method 6010 for Metals, SW-846 method 8015 for Alcohols, and SW-846 method 418.1 for TPH.
2. Sample results reported using ASP CRDLs for each method.
3. Sample results compared to NYS TAGM 4046 soil cleanup guidance values.
4. Sample results reported in ug/kg.

Summary of Phase I Sample Data- Surface Soil Samples

Sample ID	VOC	SVOC	Metals	Alcohols	TPH	PCBs
PHO-SS-08	None	dl-n-butyl phthalate 87J bis(2-ethylhexyl)phthalate 1100 Fluoranthene 57J Pyrene 52J	Iron 13600 Selenium 2 47 Zinc 141	None	NA	NA
PHO-SS-09A	/Acetone 6J	di-n-butyl phthalate 38J bis(2-ethylhexyl)phthalate 37J	Iron 6450 Zinc 23 7	None	NA	NA
PHO-SS-09B	]Acetone 6J	di-n-butyl phthalate 35J bis(2-ethylhexyl)phthalate 53J	Iron 8020 Zinc 36 3	None	NA	NA
PHO-SS-09C	Trichloroethene 1J	Low levels of various PAHs di-n-butyl phthalate 55J bis(2-ethylhexyl)phthalate 77J	Iron 6550 Zinc 24 6	None	NA	NA
PHO-SS-09D	Trichloroethene 2J	di-n-butyl phthalate 83J bis(2-ethylhexyl)phthalate 150J	Iron 7150 Zinc 20.1	None	NA	NA
PHO-SS-10A	Acetone 4J	di-n-butyl phthalate 76J bis(2-ethylhexyl)phthalate 1100	Iron 7500	None	NA	NA
PHO-SS-10B	None	di-n-butyl phthalate 70J bis(2-ethylhexyl)phthalate 57J Fluoranthene 39J Pyrene 40J	Iron 8080	2-Propanol 610	NA	NA
PHO-SS-10C	None	di-n-butyl phthalate 57J bis(2-ethylhexyl)phthalate 40J	Iron 8350 Zinc 46 6	None	NA	NA
PHO-SS-10D	None	di-n-butyl phthalate 98J bis(2-ethylhexyl)phthalate 48J	Iron 8700 Zinc 20 8	None	NA	NA
PHO-SS-21	NA	NA	Cadmium 3 94 Chromium 10 3 Iron 14000 Nickel 13 1 Zinc 55 1	NA	NA	NA
PHO-SS-26A	Trichloroethene 3J	Low levels of various PAHs Naphthalene 160J 2-Methylnaphthalene 55J Benzo(a)anthracene 1400 Chrysene 1500 Benzo(k)fluoranthene 1200 Benzo(a)pyrene 1400 Dibenz(a,h)anthracene 490 di-n-butyl phthalate 70J bis(2-ethylhexyl)phthalate 220J	Cadmium 17 9 Chromium 18 2 Iron 12600 Lead 103 Mercury 0 297 Nickel 13 5 Selenium 3 18 Silver 113 Zinc 255	None	NA	NA
PHO-SS-26B	Trichloroethene 1J	Low levels of various PAHs Benzo(a)anthracene 470 Chrysene 580 Benzo(a)pyrene 470 Dibenz(a,h)anthracene 140J di-n-butyl phthalate 44J bis(2-ethylhexyl)phthalate 130J	Chromium 11 8 Iron 9920 Lead 31 6 Mercury 0 622 Zinc 65 9	None	NA	NA
PHO-SS-26C	Trichloroethene 1J	Low levels of various PAHs Benzo(a)anthracene 1000 Chrysene 1000 Benzo(a)pyrene 900 Dibenz(a,h)anthracene 230J di-n-butyl phthalate 65J bis(2-ethylhexyl)phthalate 74J	Chromium 22 6 Iron 12100 Lead 71 7 Mercury 0 403 Zinc 70	None	NA	NA

ary of Phase I Sample Data- Surface Soil Samples

Sample ID	VOC	SVOC	Metals	Alcohols	TPH	PCBs
PHO-SS-26D	Trichloroethene 1J	Low levels of various PAHs Benzo(a)anthracene 730 Chrysene 750 Benzo(a)pyrene 590 di-n-butyl phthalate 130J bis(2-ethylhexyl)phthalate 76J	Chromium 12.3 Iron 11200 Mercury 0.457 Zinc 59.3	None	NA	NA
PHO-SS-26E	Trichloroethene 2J	Low levels of various PAHs Benzo(a)anthracene 500 Chrysene 540 Benzo(a)pyrene 460 di-n-butyl phthalate 51J bis(2-ethylhexyl)phthalate 630	Chromium 17.1 Iron 11800 Lead 375 Mercury 0.351 Selenium 4.12 Zinc 95.5	None	NA	NA
PHO-SS-28	NA	Low levels of various PAHs Naphthalene 210J 2-Methylnaphthalene 98J Benzo(a)anthracene 2400 Chrysene 2500 Benzo(b)fluoranthene 1700 Benzo(k)fluoranthene 2100 Benzo(a)pyrene 2300 Dibenz(a,h)anthracene 680 di-n-butyl phthalate 60J bis(2-ethylhexyl)phthalate 53J	NA	NA	NA	None
PHO-SS-29	NA	NA	Cadmium 3.01 Chromium 12.2 Copper 99 Iron 8140 Lead 36.9 Silver 462 Zinc 97	NA	NA	None
PHO-SS-30	None	Low levels of various PAHs Benzo(a)anthracene 410J Chrysene 470J Benzo(a)pyrene 400J Dibenz(a,h)anthracene 75J di-n-butyl phthalate 59J bis(2-ethylhexyl)phthalate 120J	Cadmium 1.95 Iron 12600 Selenium 2.58 Silver 10.7 Zinc 106	None	None	NA

1. Samples analyzed via NYS ASP protocols: 95-1 for VOCs, 95-2 for SVOCs; 95-3 for PCBs, SW-846 method 6010 for Metals, SW-846 method 8015 for Alcohols, and SW-846 method 418.1 for TPH.
2. Sample results reported using ASP CRDLs for each method.
3. Sample results compared to NYS TAGM 4046 soil cleanup guidance values.
4. Sample results reported in ug/kg.