

# Paetec Park Soil and Water Management Plan

## Location:

Lots #2 and #3 of the Erie Canal Industrial Park  
Oak Street  
Rochester, New York

## Prepared for:

Rochester Rhinos Stadium, LLC  
116 Business Park Drive  
Utica, New York 13502

February 2004  
Revised: August 2004

LaBella Project No's. 203174.02 & 203174.06

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**Paetec Park  
Soil and Water Management Plan  
Lots #2 and #3 of the Erie Canal Industrial Park  
Rochester, New York  
LaBella Associates Project No. 203174.06**

**1.0 Introduction**

The location for the Rochester Rhinos' stadium has been designed to occupy Blocks 2 and 3 of the Erie Canal Industrial Park (ECIP) (approximately 16 acres) owned by the City of Rochester, located in the northwest quadrant of the City. Block 2 is bounded by Oak Street on the east, Broad Street on the west, Smith Street to the south, and an abandoned railroad right-of-way to the north. Block 3 is bounded by Oak Street to the west, Smith Street to the south, Lind Street to the north, and the rear property lines of residential properties to the east.

Blocks 2 and 3 of the ECIP have a long history of commercial and industrial use dating from the late 1800s until the mid 1980s when the property was foreclosed on by the City of Rochester. Since the mid 1980s the remaining existing buildings were demolished and the Site has remained vacant to date.

The City of Rochester began conducting environmental investigations on the property in the late 1980s. Approximately 15 various environmental and geotechnical investigations have been completed at the property since that time. The various environmental studies performed at the Site culminated in the performance of a New York State Department of Environmental Conservation (NYSDEC) Voluntary Clean up of the Site in 1998. Impacted soil excavation and off site disposal conducted as part of the voluntary clean up from the Site is as follows:

- PCB Impacted Soil Removal From Block 2 (7.76 tons)
- Lead Impacted Soil Removal From Block 2 (1,121 tons)
- Petroleum Impacted Soil Removal From Block 3 (5,096 tons)

An additional 1,200 tons of soil were removed from Block 3 and transported to the northern portion of Block 2. The soil was then placed in a controlled 1.5-foot lift, as a means of bio-remediating the soil.

The Rochester Rhinos intend to develop the Erie Canal Industrial Park into a soccer stadium complex. The design of the stadium envisions an at grade playing field and seating arrangement. To construct this facility excavation of the playing field will be required to a depth of approximately 1-2 feet below grade. Excavations will also be required for building foundations, and possibly for caissons.

In addition, excavation will be required across the concourse areas of the stadium to depths of 18"-2'.

If undesirable fill materials are identified at these depths, additional fill and solid waste may need to be removed to facilitate sound buildable surfaces.

Figure 1 details the location of the Site. Figure #2 depicts the general configuration of the proposed stadium Complex.

## **2.0 Objective**

This Soil and Water Management Plan (SWMP) is intended to provide guidance in the management of soil, fill materials, and water that will be disturbed during the development of the ECIP as a soccer stadium complex. This SWMP is also intended to satisfy the Operation and Maintenance requirements established by the City of Rochester during the Voluntary Cleanup of the site.

The Rochester Rhinos intend to manage the excavated non-hazardous soil and fill material on Site. This plan follows the intent 6 NYCRR Part 360-1.7(b) (9) that allows for fill materials to be placed into other similarly filled areas within a contiguous property.

This SWMP and the environmentally related construction methods associated with this plan will be detailed to the construction manager and contractors working on the stadium project at a pre-construction meeting. LaBella Associates environmental staff will be responsible to direct the implementation of the SWMP during all phases of earthwork construction and site grading activities.

## **3.0 Supporting Analytical Data**

This SWMP utilizes the vast amounts of previously gathered subsurface analytical data that exists for the Site, as well as recently gathered subsurface analytical data, in order to develop a management plan for the large amounts of fill and soil and to a lesser degree water that will be generated during mass excavation for the playing field and during general excavation associated with site work. The utilization of this data is discussed herein.

### **3.1 Existing Analytical Data-Soil:**

Figure 3 details Subsurface Analytical Data that was compiled at the Site during investigations spanning from 1986 – 1998. Figure 3 also details locations of remedial excavations and limited use areas implemented by Haley and Aldrich of New York as a part of the voluntary clean up of the Site performed by the City of Rochester. This data indicates that site Chemicals of Concern (COCs) are generally limited to low levels of petroleum related Volatile Organic Compounds (VOCs), Semi Volatile Organic Compounds (SVOCs), and Metals across much of the Site. These levels of VOCs, SVOCs, and Metals generally fall within NYSDEC TAGM #4046 Soil Clean Up Objectives.

### **3.2 Current Analytical Data-Soil:**

Ten soil borings and thirteen test pits were advanced across the foot print of the planned mass excavation area for the subgrade playing field during Phase I of the Geotechnical Study performed as a part of the stadium complex design process. Both test pits and soil borings were observed for evidence of impairment. The locations of these test pits and soil borings are detailed on Figure 4.

Areas of fill materials (e.g. brick, concrete, lumber, ash, cinders) were consistently observed across the mass excavation area to depths of 8 feet below existing grade.

Several of the test pits exhibited slight staining, low-level Photo Ionization Detector (PID) readings, and odor typically associated with aged low levels of petroleum products. One of the test pits exhibited moderate petroleum odors, more elevated PID readings, and dark stained soils. Soil samples were selected from the test pits based on evidence of impairment and were analyzed for site COCs. This analysis was conducted to establish a site-specific rationale to compare PID readings with detected COC levels, to allow for development of a solid waste stream classification system, and to promote efficient screening of soils and solid wastes during the upcoming earthwork. Analytical methods were chosen based on the COCs identified during previous studies.

Table 1 summarizes the observations and sampling from test pits that exhibited evidence of impairment:

**Table 1: Evidence of Soil Impairment**

Test Pit Number	Location	Observation/Evidence of Impairment/Depth of Highest PID Reading	Sample and Analytical Method
TP-03-1	SW corner of playing field mass excavation area within canal bed	Slight petroleum odor in shot rock to 17' BGS  PID=Background	VOCs by USEPA 8260TCL+STARS  SVOCs by USEPA 8270 STARS
TP-03-4	Western center of playing field mass excavation area	Aged petroleum odor in fill to 8'-9' BGS  PID=Background	Not Sampled/Analyzed
TP-03-4A	Western center of playing field mass excavation area	Moderate petroleum odor in fill at 2'-3' BGS  PID=85 ppm	VOCs by USEPA 8260TCL+STARS  SVOCs by USEPAD 8270 STARS  TPH by NYSDOH 310.13
TP-03-4C	Western center of playing field mass excavation area	Aged Petroleum odor in fill at 2'-3' BGS  PID=Background	VOCs by USEPA 8260TCL+STARS  SVOCs by USEPA 8270 STARS  8 RCRA by USEPA 6010
TP-03-6	NW area of playing field mass excavation area	Slight aged petroleum odor in fill at 2' BGS  PID=20-25 ppm	VOCs by USEPA 8260TCL+STARS  SVOCs by USEPA 8270 STARS  8 RCRA by USEPA 6010  TPH by NYSDOH 310.13
TP-03-7	Northern center of playing field mass excavation area	Very low petroleum odor in fill at 2'-4' BGS  PID=Background	Not Sampled/Analyzed
TP-03-9	NW corner of playing field mass excavation area	Slight petroleum odor in fill at 2'-3' BGS  PID=Background	Not Sampled/Analyzed

Test pit locations are detailed on Figure 2.

The Results of analysis for the selected soil samples detailed above, is summarized in Table 2 below. The results of analysis are presented in full in Appendix 1.

**Table 2: Analytical Data Summary**

Soil Sample Number	Description of soil or solid waste	Evidence of Impairment/High PID Reading	Analytical Summary Comparison to TAGM #4046	Analytical Summary Comparison to NYSDEC PSSI
TP-03-1 @ 17' BGS	Shot Rock Fill	Slight Petroleum odor PID=Background	VOCs<TAGM #4046 Rec. Soil Clean up Objectives;  SVOCs>TAGM #4046 Rec. Soil Clean up Objectives.	VOCs <PSSI,  SVOCs < PSSI
TP-03-4A @ 2'-3' BGS	Fill	Moderate Petroleum Odor PID=85 PPM	VOCs >TAGM #4046 Rec. Soil Clean up Objectives;  SVOCs> TAGM #4046 Rec. Soil Clean up Objectives.	VOCs <PSSI,  SVOCs < PSSI
TP-03-4C @ 2'-3' BGS	Fill, brick, grey silt /clay, cinders	Aged petroleum odor PID=Background	VOCs <TAGM #4046 Rec. Soil Clean up Objectives;  SVOCs< TAGM #4046 Rec. Soil Clean up Objectives;  8 RCRA< TAGM #4046 Rec. Soil Clean up Objectives.	VOCs <PSSI,  SVOCs < PSSI
TP-03-6 @ 2' BGS	Fill, brick, glass, metal, ash	Slight aged petroleum odor PID= Background	VOCs <TAGM #4046 Rec. Soil Clean up Objectives;  SVOCs> TAGM #4046 Rec. Soil Clean up Objectives;  8 RCRA< TAGM #4046 Rec. Soil Clean up Objectives.	VOCs <PSSI,  SVOCs < PSSI
TP-03-6 @ 7'-8' BGS	Black silt lense	Moderate petroleum odor PID=20-25 ppm	VOCs <TAGM #4046 Rec. Soil Clean up Objectives;  SVOCs< TAGM #4046 Rec. Soil Clean up Objectives.	VOCs <PSSI,  SVOCs < PSSI

#### **4.0 Approach**

This section of the SWMP details the approach and the classification system that will be used to field screen and segregate excavated soil and solid waste during construction. The method to screen and segregate soil and solid waste will rely on PID readings, visual evidence of impairment, and olfactory evidence of impairment that have been correlated to recent analytical data presented in Section 3.0 and Appendix 2.

#### 4.1 Development of Screening Procedures for Excavated Soil and Fill

Six classes of soil and solid waste are expected at the site. Each of these six classes of material will be managed and handled in a manner dictated by evidence of environmental impairment. These six classes of material are described in Table 3 below.

**Table 3: Material Classifications**

Class of Material	Physical Description	Screening Parameter	Management/ Re-use of Material
Class 1 Material	Soil, fill materials, and visually identifiable non-contaminated solid waste (e.g. Brick, concrete, rock).	No Discernable Odor; No Elevated PID Readings; No Staining.	Unrestricted use anywhere on the Site; Unrestricted off Site disposal if required; Use on Site to cover Class 2 and Class 3 Materials.
Class 2 Material	Soil and fill materials with low-level petroleum impacts.	Light to Moderate Petroleum odor; Light to moderate Staining; PID Readings less than 50 PPM.	Use on Site as buried under 2' of Class 1 Materials; Use on Site under parking lots and under paved areas.
Class 3 Material	Soil and Fills with moderate petroleum impacts that may exceed TAGM clean up objectives.	Moderate Petroleum Odor; Moderate Staining PID Readings Greater than 50 PPM and less than 1,000 PPM. Colorimetric tubes consistent with site COCs may be used for screening.	Limited use on Site only in restricted use areas or under paved parking lots and Covered with Class 1 Material; Limited use as landscaped bio-cell berms and covered with Class 1 Materials.
Class 4 Material	Solid waste physically unacceptable for re-use (e.g. lumber, refuse, metal scrap, rail road ties).	May contain evidence of Impairment.	Off Site disposal per 6 NYCRR Part 360 requirements.
Class 5 Material	Significantly impacted soils either solid waste impacted with petroleum or possibly solid waste impacted by other chemicals.	Strong petroleum or other odor; Significant staining or presence of free phase liquids; PID readings of 1000 PPM or greater; Colorimetric tubes consistent with site COC's will be used to guide laboratory analysis; Laboratory analysis required for characterization.	Off Site disposal to be determined based on waste stream characterization.
Class 6 Material	Soil and solid waste from the portion of the Site where the Northern and Southern restricted use areas exist.	May contain evidence of impairment. Note: If any class 6 materials exhibit evidence of impairment consistent with the guidance for Class 5 Materials above, the materials will be treated as Class 5 Materials and will be characterized for off site disposal.	Limited use on site in the respective footprint of the restricted use area as deep fill covered with 2' of Class 1 Materials. See Figure 5.

The on site management and use of Class 2 and Class 3 Materials is supported by the site specific screening of materials with a PID and the corresponding analytical data gathered for fill materials at the Site.

## 4.2 Development of the Management Plan for Excavated Soil and Fill

Based on review of the numerous environmental and geotechnical reports, prepared by the City of Rochester, and the observations conducted recently during the geotechnical study, it appears that the majority of the soil and fill at the Site that contain low level and residual levels of petroleum products (Class 2 and Class 3 Material) across the excavation area are located above a depth of 8 feet below existing grade. At depths greater than 8 feet most soil appeared to be native or non-impacted soils.

An exception to these observations appears to exist in the former canal bed where low-level petroleum odors were observed at deeper depths.

Currently available Site grading plans and balance sheets dictate that several areas of the Site (including most of the Block 3 parking lot area) will need to be filled to raise the elevation of the site. The portion of the Site surrounding the playing field may also need to be filled.

Because most of the Class 2 and Class 3 Materials appear to be located at shallow depths and because of the significant need for filling portions of the site, excavation of the playing field area will be conducted in a layered fashion.

Generally the topsoil will be stripped from the mass excavation area and transported and staged to the northern portion of the site for later use as cover. Soil and fill from depths of 1 foot to 2-foot BGS will be excavated and screened in accordance with the procedures described in Table 3.

All soil and solid waste (Class 6 Material) that is excavated from the area of the pre-established restricted use areas will only be used as deep fill within the footprint of the respective pre-established restricted use area. This material will be covered with a minimum of 2 feet of Class 1 material or other clean cover. See Figure 5.

**Class 1 Materials:** Will be staged with topsoil in the northern portion of the site for later use as cover material.

**Class 2 Materials:** Will be transported directly to the areas of the site that require filling (Parking lot areas on Block 3 and the areas surrounding the playing field). All Class 2 fill materials will be covered with Class 1 Material, or directly capped with asphalt pavement, concrete pavers, etc.

**Class 3 Materials:** In general will be excavated and staged on and covered with polyethylene sheeting in the northern limited use area at the Site. Direct filling or use of the Class 3 Material will be permitted under paved parking areas but will be subject to covering requirements detailed in Section 4.2.1 below. Class 3 materials will primarily be either used as fill in the existing limited use areas or will be constructed as bio-pile berms on the Site. All Class 3 fill materials will be covered with Class 1 Material. Class 3 Material will not be capped with asphalt or concrete pavers without first being covered with Class 1 Material. In accordance with NSYDEC solid waste regulations, Class 3 Materials will be either placed as fill or constructed into landscaping bio-berms within 60 days of stockpiling.



**Class 4 Materials:** Will be either directly loaded onto trucks for off site transport and disposal, or will be stockpiled for later off site disposal. The determination to direct load and transport vs. stockpile and transport at a later date will be determined by the construction manager. Visibly non-contaminated C&D will be allowed to be transported to a non Part 360 permitted construction and demolition debris disposal site if one is available. Any municipal waste, wood, railroad ties, refuse, metal scrap, or Class 4 Materials that exhibit evidence of impairment will be transported on Part 364 permitted vehicles to a Part 360 permitted landfill.

**Class 5 Materials:** Will be either directly loaded onto Part 364 permitted trucks for off site transport and disposal, or will be stockpiled for later off site disposal at a Part 360 permitted landfill. A generic waste characterization for known Class 5 Materials at the Site will be completed for landfill approval prior to initiating earthwork at the Site. The determination to direct load and transport vs. stockpile and transport at a later date will be determined by the construction manager. Any stockpiled Class 5 Material will be on and covered with polyethylene sheeting. If certain Class 5 Materials do not appear to be consistent with Class 5 Materials pre-excavation waste stream characterization, then stockpiling and additional waste stream characterization may be required. Any stockpiled Class 5 Material will be transported off site for disposal within 60 days.

**Class 6 Materials:** Will be used as deep fill within the footprint of the pre-established respective restricted use areas. This material will covered with a minimum of 2 feet of Class 1 material or other clean cover.

A General Fill Placement Plan is included as Figure 5. Please note that this plan is preliminary. Detailed grading plans and excavated material usage plans will be developed as the project design is completed.

**4.2.1 Cover Thickness and Procedures for Class 2, Class 3, and Class 6 Materials**

All Class 2, 3, & 6 Materials will be covered upon completion of the earthwork portion of the site development. Table 4 below details the final requirements for covering Class 2, 3, & 6 Materials during the earthwork Phase of Site development:

**Table #4: Excavated Material Cover Requirements**

<b>Action</b>	<b>Class 2 Material</b>	<b>Class 3 &amp; Class 6 Material</b>
Daily Cover Requirement and Details	None	Cover with 6-inch Class 1 Material, polyethylene sheeting, foam vapor suppressant, or hydro seed mulch if fill area is within 100 feet of residential property line
Final Cover Requirement and Details	Covered with a minimum of 2 feet of Class 1 Material and hydroseed if area is not to be paved No cover requirement if area is to be paved or covered with other impervious building materials	Covered with 2 feet of Class 1 Material and hydro seed if fill area is not to be paved. Covered with a minimum of 6 inches of Class 1 Material or clean imported sub-base if area is to be paved or covered with other impervious building materials

**TABLE #4 (continued)**

Action	Class 2 Material	Class 3 & Class 6 Material
Community Air Monitoring Plan (CAMP) or Health and Safety Plan (HASP) situational Cover Requirement and Details	If routine air monitoring conducted as a part of the CAMP or HASP indicates elevated levels of VOCs at property lines; or if neighbors complain of objectionable odors filling activities will be stopped immediately, and the filled area will be either treated with a foam suppressant, hydroseed mulch, or will be covered with either Polyethylene Sheeting, a minimum of 6 inches of Class 1 Material, or 6 inches of clean imported sub-base material. The decision of how to cover the material will depend on the size of the area that needs to be covered and the levels of VOCs and odors detected.	If routine air monitoring conducted as a part of the CAMP or HASP indicates elevated levels of VOCs at property lines; or if neighbors complain of objectionable odors filling activities will be stopped immediately and the filled area will be either treated with a foam suppressant, hydro seed mulch, or will be covered with either Polyethylene Sheeting, a minimum of 6 inches of Class 1 Material or 6 inches of clean imported subbase. The decision of how to cover the material will depend on the size of the area that needs to be covered and the levels of VOCs and odors detected.

Figure 5 contains a simple cross section that illustrates final soil cover requirements for areas of the site that will not be paved.

**4.2.2 Design and Construction of bio-pile Landscape Berms**

The most desirable option to re-use Class 3 Materials on Site will be to utilize the Class 3 Materials as fill in the limited use areas of the Site. These areas are depicted on Figure Nos. 2 and 3. In areas that will be paved for use as parking lots Class 3 Materials will be able to be used as deeper fills with a cover of Class 2 Material.

Given the nature of the Site it is possible that an excess of Class 3 Material may remain after filling in the limited use areas and underneath parking lots.

As the design of the stadium progresses there will likely be the need for landscaping berms in the northern and eastern portions of the Site. This desired physical site feature presents an opportunity to passively treat and reuse Class 3 Materials on site, through the use of pre-designed bio-pile landscape berms. The pre-designed landscaped bio-pile berms have been designed in accordance with NYSDEC Spill Technology and Remediation Series (STARS) Memo 2, and will allow for relatively un-delayed bio-pile landscape berm treatment of soils during construction.

As detailed in Section 3 Table 2 the test pits and soil borings that were advanced for Phase I of the geotechnical study were observed by an Environmental Analyst and screened with a PID for evidence of impairment. During this study select samples deemed to be the most representative of site-wide conditions were retained for laboratory analysis.

The two soil samples, that exhibited the most evidence of impairment during Phase I of the geotechnical study, were analyzed for Total Petroleum Hydrocarbons (TPH) by NYSDOH Method 310.13. By analyzing the two soil samples for TPH, the worst-case levels of petroleum-impaired soils encountered at the Site can be used for determining nutrient requirements for bio-pile landscape berms.

The results of the TPH Analysis are presented in Table #5 below:

**Table 5: TPH Analysis**

Soil Sample #	Medium PHC as Kerosene in mg/kg	Heavy PHC as Lube oil in mg/kg
TP-03-4A@ 2'-3' BGS	599	36,600
TP-03-6@ 7'-8' BGS	90.5	7,360

The average level of TPH in the samples is 22,720 mg/kg. NYSDEC Spill Technology and Remediation Series (STARS) Memo 2 recommends that petroleum impacted soils containing 20,000 mg/kg of TPH be blended with a 6:1 Nitrogen Phosphate ratio fertilizer at a rate of 3,941 pounds of fertilizer per 100 cubic yards of impacted soil.

Bio-pile landscape berms will be constructed in general accordance with the following design criteria:

- Bio-pile landscape berms will not be constructed along the eastern property line closest to residential properties. Bio-Pile landscape berms may be desired along the south edge of the eastern parking lot, and along the northwestern parking lot. See Figure 5.
- Bio-pile landscape berms will be constructed on and covered with a 6-inch layer of Class 1 Material or topsoil, and will be seeded to prevent erosion.
- The Bio-pile will be surrounded with a 2-foot high by 2-foot wide berm of Class 1 Material, and will be covered with a minimum of 6 inches of Class 1 Material upon completion.
- Class 3 Material will be placed into the Bio-pile in non-compacted controlled 12-inch lifts.
- A 6:1 Nitrogen/Phosphate (19:3:3) Nitrogen: Phosphorus: Potassium commercial fertilizer will be roto-tilled into each lift at a rate of approximately 40 lbs. of fertilizer per cubic yard of soil.
- Fabric wrapped, 4-inch diameter septic piping will be placed across the pile at 10-foot length intervals in every other lift (24-inch elevation), in a vertical saw tooth pattern. The ends of the pipe should extend approximately 1 inch – 2 inches beyond to outer edge of the Landscape berm to allow air to enter the septic piping.
- The fabric wrap on the septic pipe end will be gathered and bound to prevent soil from entering the pipes; the pipes will then be capped with a PVC end cap with air holes or slots. The end cap shall be cemented/glued in place.
- During construction of any bio-pile landscape berms, the active portion of the bio-pile construction will be covered with polyethylene sheeting at the end of each workday to prevent objectionable odors during non-working hours. As detailed above, upon completion of the bio-pile landscaped berm, the berm will be covered with a minimum of 6 inches of Class 1 Materials or topsoil and hydro seeded to prevent erosion.
- Confirmatory sampling and analysis of the bio-pile landscape berms is not planned as the landscape berms are intended to be a permanent site feature.
- Upon completion of the earthwork portions of the project, LaBella will develop a soils management plan that will outline procedures to be followed if the bio-pile landscape berms are disturbed or require maintenance in the future.
- Diagrams depicting the proposed locations of the bio-pile landscape berms will be developed and supplied to the NYSDEC and NYSDOH as soon as Final Site grading plans and Final facility designs are completed for the project.

Figure 6 depicts a cross section of the bio-pile landscape berm design.

## **5.0 Excavation Derived Water Management Plan**

### **5.1 Excavation Derived Water Management Plan Objective**

The objective of developing an excavation derived water management plan is to develop a plan that will allow for both groundwater and rainwater that accumulates in the excavation areas (not general grading areas) to be managed without delaying earthwork schedules. This matter becomes more complex when working at a Site where soil and low level groundwater contamination is known to exist.

### **5.2 Excavation Derived Water Management Plan Approach**

Because groundwater at the site is known to have been adversely impacted with Site COCs direct pumping and sewer disposal of groundwater and rainwater that accumulates in the excavations (not general grading areas) will not be feasible. Monroe County Pure Waters (MCPW) owns and operates the municipal sewer system in the vicinity of the Site. In order to discharge potentially contaminated groundwater to the sewer a temporary discharge permit will need to be obtained. In addition if the total levels of VOCs in the wastewater from the excavation exceed 2.1 ppm (parts per million), then the wastewater will have to be treated prior to discharge to the sewer system to remove the VOCs.

The excavation derived water management plan is based on recently gathered groundwater analytical and hydrologic data that was gathered from three existing monitoring wells at the Site by LaBella Associates and three recently installed groundwater monitoring wells completed at the Site by Haley and Aldrich of New York as a part of Phase I of the Geotechnical study recently completed at the Site.

### **5.3 Hydrologic Data**

A Hydraulic Conductivity Analysis utilizing rising head tests at five of the existing wells at the Site was also recently completed by Haley and Aldrich of New York. The hydraulic conductivity testing results indicate hydraulic conductivity values for the wells with a median value of  $2 \times 10^{-3}$  cm/second. One exception was noted in the hydraulic conductivity value for a well that was installed into the shot rock fill of the former canal bed. This well had a hydraulic conductivity value of  $2 \times 10^{-1}$  cm/second.

These hydraulic conductivity values, coupled with observations made during the geotechnical test pitting study, appear to indicate that quantities of excavation derived wastewater will likely be manageable during construction with a simple pump/batch/test/treat/batch/test/discharge work plan.

### **5.4 Analytical Data for site COC's**

During Phase I of the geotechnical study, LaBella Associates sampled and analyzed groundwater for site COCs and MCPW discharge criteria chemicals from three existing monitoring wells that are present at the Site from previous investigations.

Haley and Aldrich of New York installed three additional groundwater-monitoring wells in the vicinity of the mass excavation area footprint as part of Phase I of the geotechnical study. These three wells were also sampled and analyzed for site COCs and MCPW discharge criteria chemicals.

These three wells are generally located across the mass excavation area footprint and are depicted in Figure 3. The results of analysis for the groundwater from these six groundwater-monitoring wells are summarized in Table 6 below.

**Table 6: Groundwater Analytical Data**

<b>Monitoring Well ID Number</b>	<b>Total VOC Analytical Result in mg/L or ppm</b>
TB-90-3	0.152
TB-90-4	0.345
TB-90-5	0.012
HA-03-106	non detect
HA-03-113	0.010
HA-03-121	0.007

The MCPW discharge limit for VOCs is 2.1 ppm. As noted in the table above all of the wells, which are located geographically across the footprint of the mass excavation area exhibited VOC concentrations well below the MCPW limit of 2.1 ppm total VOCs.

Levels of iron were detected in the water samples generally at levels above MCPW discharge criteria. This may represent a pre-treatment requirement for post construction long-term sewer discharge, but likely will not represent an issue with short term dewatering during the construction phase.

A full copy of the analytical results is included in Appendix 2.

### **5.5 Excavation Derived Water Management Plan**

Implementation of the excavation derived water management plan is as follows:

- 5.5.1 LaBella will meet with MCPW prior to the start of construction to present the existing analytical data and obtain a temporary waste water discharge permit;
- 5.5.2 A minimum of two 20,000-gallon tractor-trailer type frac tanks will be staged at a location close to the excavation and the sewer laterals at the site by the contractor. The contractor will need to supply the appropriate number and size of trash pumps to dewater the excavation. The pumps will need to be able to generate enough head to pump the water to the frac tanks, or a water truck could be utilized to transport the water from the excavation to the frac tanks. Site conditions may warrant the need for additional frac tanks at the site.
- 5.5.3 Based on the existing analytical data, it appears that the majority of the earthwork-derived water may not need to be pre-treated for VOCs prior to discharge. The water will be batched into the frac tanks. When each frac tank becomes full, one sample of the water from the tank will be obtained for VOC analysis by Method 602 as required by MCPW. If the sample contains VOCs at a level less than the 2.1-ppm discharge limit for VOCs, then the water can be directly discharged to the sewer at the rate specified in the permit. If the sample contains VOCs above the MCPW discharge permit, then the water will need to be treated with a carbon filtration unit or a portable air stripper, re batched into a frac tank, tested and analyzed to ensure MCPW compliance, and discharged to the sewer. The contractor will be responsible to provide suitable treatment equipment (e.g. carbon system or air stripper).

## **6.0 SWMP Implementation and Environmental Monitoring**

During the earthwork phases, a LaBella Environmental Analyst or Environmental Geologist will be assigned to the project on a full time basis. The on-site environmental personnel will be supported by a LaBella Project Manager, and the LaBella Safety Director will be assigned to the project. Depending on the size and pace of the mass excavation contractor crew, it may be necessary to assign an additional Environmental Analyst to conduct the Community Air Monitoring program at the Site. Together this group of personnel is referred to as the environmental team.

The responsibilities of the environmental team with regard to implementation of the SWMP are as follows:

- Working with the construction manager to pre determine off site disposal locations;
- Preparation of a waste stream profiles using existing information for Class 4 and Class 5 Materials that may be encountered during excavation;
- Work closely with the contractor monitor excavations for evidence of environmental impairment;
- Make determinations with regard to the classification of materials as detailed in Section 4.1;
- Direct the construction manager as to the proper placement and covering of Class 2, 3, & 6 Materials at the Site;
- Direct the construction manager as to the proper staging and covering of Class 4 and Class 5 Materials during any disposal waste stream characterization activities;
- Sampling, analysis, and any additional waste stream profiling for Class 4 and Class 5 Materials as required by the receiving part 360 landfill, or the NYSDEC;
- Implementation of the LaBella Health and Safety Plan (HASP), for LaBella and Rochester Rhino personnel at the Site. The construction manager and contractor area responsible for their own health and safety plan.
- Implementation of the Community Air Monitoring Plan (CAMP) for the Site.

## **7.0 Decontamination of Equipment**

All equipment used on the work site and that comes in contact with soil and/or groundwater will require decontamination using clean water to wash off soil and water residue from construction activities. The contractor will need to construct a decontamination pad to collect rinse water. The rinse water will need to be placed in an appropriate container or can be pumped into the Frac tanks that are being used for site dewatering. Sampling of the rinse water may be performed by the Environmental Monitor and follow the above procedures detailed in Sections 6.0.

Personal decontamination procedures shall follow the procedures set forth in LaBella's Health and Safety Plan and the contractor shall supply a suitable container for disposing of personal protective equipment, such as a steel drum. Disposal of PPE is the responsibility of the contractor.

## **8.0 Health and Safety Plan**

LaBella has developed a Site Specific Health and Safety Plan (HASP) for the project. This HASP is attached as Appendix 3.

Contractors disturbing subsurface soil and water will need to have a HASP to manage health and safety issues associated with potential exposure to site COCs. LaBella will adhere to its HASP. Contractors working at the site may refer to the LaBella HASP, but are required to develop their own HASP.

## **9.0 Community Air Monitoring Plan**

LaBella has developed a Community Air Monitoring Plan (CAMP) for the earthwork portions of the Site development. This CAMP is attached as Appendix 4.

The LaBella Environmental Team will be responsible to implement the CAMP and will direct the Contractor's disturbing subsurface soil and water when measures required to mitigate particulate or VOC emissions need to be implemented. The contractor will be required to implement these measures as directed by LaBella. The contractor will also be required to have water trucks, polyethylene sheeting, and other mitigative supplies staged and readily available at the site.

## **10.0 Environmental Considerations and Site Design Requirements**

The voluntary cleanup of the Site conducted by the City of Rochester in 1998 established two limited use areas at the Site. These limited use areas are depicted on Figure 3.

The northeastern corner of the playing field, seating area, and one building will infringe upon the eastern corner of the northern limited use area. The seating infrastructure will be completely open to the air, and will be constructed of a poured concrete base with steel and aluminum bleacher type seating. The playing field and seating arrangement will be open to the air. Conversations with the NYSDEC have indicated that because this part of the stadium will be open to the air, sub slab vapor barriers will not be required.

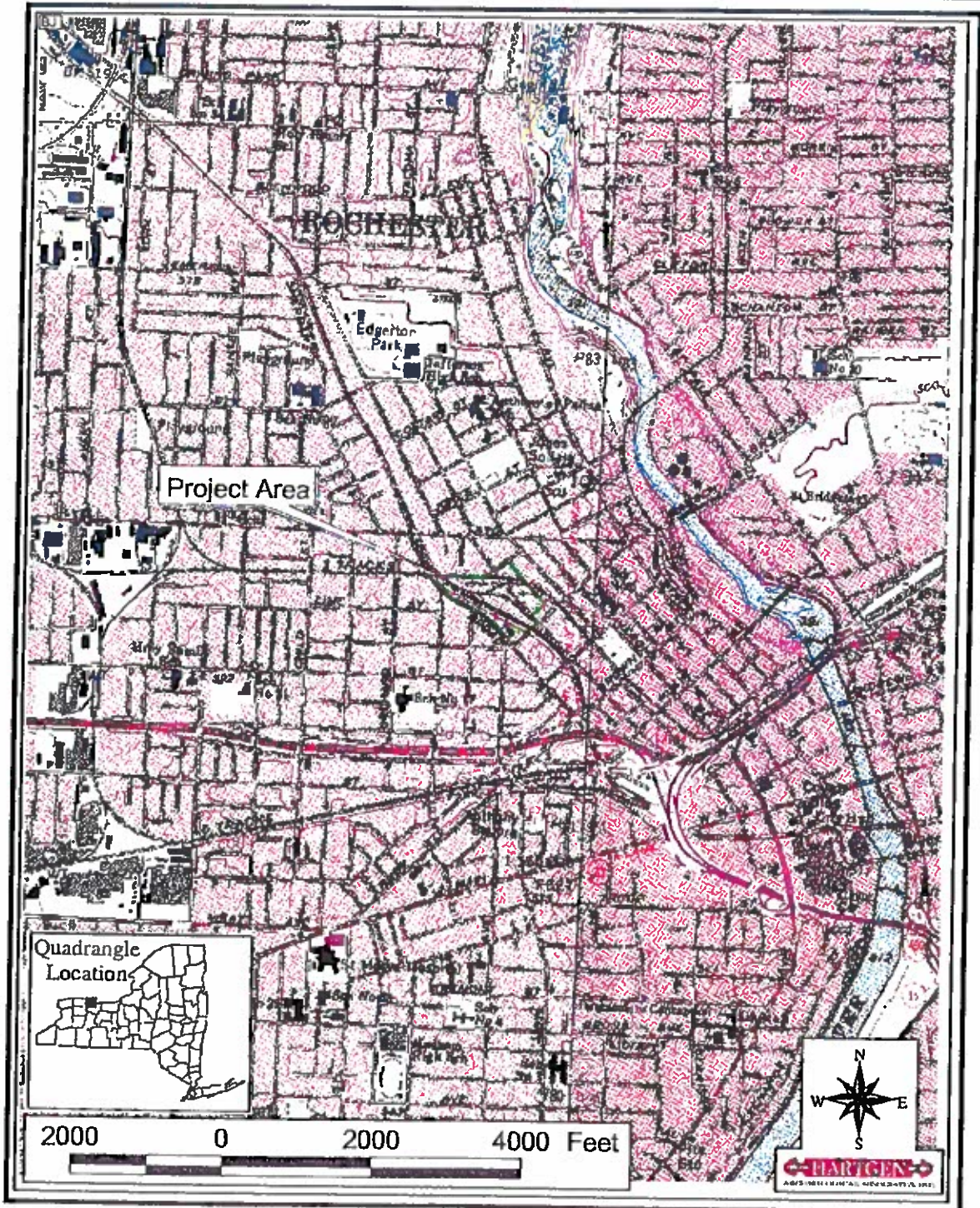
One enclosed building structure will be completed within the existing footprint of the north pre-established limited use area. This building structure will be equipped with a sub-slab vapor barrier and ventilation system. This sub slab vapor barrier and ventilation system will be designed and submitted to the NYSDEC and the NYSDOH for approval, prior to construction of the building at the Site.

All Class 6 Material that is excavated from this portion of the site will be used as deep fill within the existing footprint of the pre-established limited use area. This material will be covered with a minimum of 2' of Class 1 material or other clean cover. See Figure 5.

N:\ROCHESTER RHINOS, LLC\203174.06\CLERICAL\WORD\RP1\4H19GS1.DOC



*Rochester Rhinos Paetec Park Phase IA, City of Rochester, Monroe County, New York*



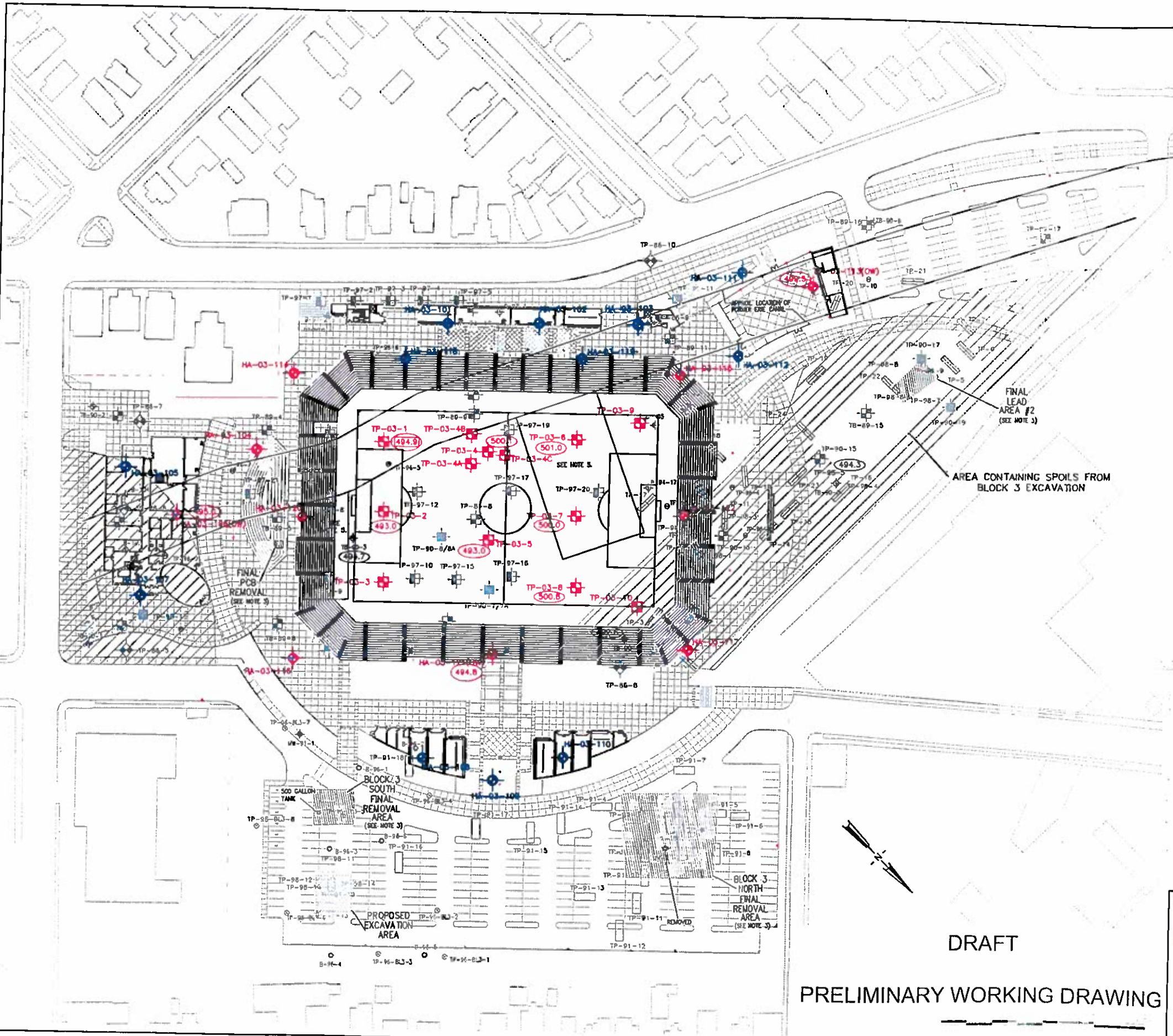
Map 1  
1978 USGS Rochester West and Rochester East 7.5' Series Topographic Quadrangles

Hartgen Archeological Associates, Inc.

August 2003



70606-202 /DWG/EXPLORATION SITE WATER.DWG



- LEGEND:**
- HA-03-113 [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS, PHASE I, PERFORMED BY HALEY & ALDRICH OF NEW YORK
  - TP-03-1 [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF PROPOSED TEST PITS, PHASE I PERFORMED BY HALEY & ALDRICH OF NEW YORK
  - HA-03-101 [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF PROPOSED TEST BORINGS, PHASE II
  - (493.0) [Symbol] APPROXIMATE GROUNDWATER ELEVATIONS IN FEET OBTAINED ON 11-12 JUNE 2003. ELEVATIONS REFERENCED FROM LABELLA ASSOCIATES TOPOGRAPHIC SURVEY (RED = NEW EXPLORATIONS, BLACK = EXISTING WELLS)
  - TP-86-10 [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF TEST PITS PERFORMED BY FOUNDATION DESIGN, P.C.-1986
  - TP-89-p [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF TEST PITS PERFORMED BY ECCO, INC.-1989
  - B-10 [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS PERFORMED BY FOUNDATION DESIGN, P.C.-1986
  - B-87-1 [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS PERFORMED BY FOUNDATION DESIGN, P.C.-1997
  - TP-50-1 [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF TEST PITS PERFORMED BY HALEY & ALDRICH OF NEW YORK-1988
  - TP-1 [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF TEST PITS PERFORMED BY DAY HAMPTON ASSOCIATES-1994
  - TB-80-1 [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS PERFORMED BY HALEY & ALDRICH OF NEW YORK-1986
  - TP-90-1 [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS PERFORMED BY ECCO, INC.-1990
  - TP-97-1 [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF TEST PITS PERFORMED BY ECCO, INC.-1990
  - TP-96-1 [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF TEST PITS PERFORMED BY FOUNDATION DESIGN, P.C.-1997
  - B-86-1 [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS PERFORMED BY HALEY & ALDRICH OF NEW YORK-1986
  - TP-91-1 [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF TEST PITS PERFORMED BY DAY ENGINEERING - 1991
  - W-81-1 [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF MONITORING WELLS PERFORMED BY DAY ENGINEERING - 1991
  - TP-86-BJ-1 [Symbol] DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS PERFORMED BY HALEY & ALDRICH OF NEW YORK-1986 BLOCK 3
  - [Symbol] REMEDIATION EXCAVATIONS - 1988
  - [Symbol] APPROXIMATE EXTENT OF LIMITED USE AREA

PLAN ADAPTED FROM DRAWING PREPARED BY HDK ARCHITECTS.

LOCATION OF REMEDIATION EXCAVATIONS BASED UPON INVESTIGATIONS COMPLETED PRIOR TO NOVEMBER 1988.

EXTENT OF REMEDIATION EXCAVATIONS WERE BASED UPON TEST PITS COMPLETED 4 DECEMBER 1986, FIELD SCREENING, AND CONFIRMATION SAMPLING DURING EXCAVATION.

- FOR THE PCB AREA, SOIL WAS REMOVED TO A DEPTH OF APPROX. 2.5 FT.
- FOR THE LEAD AREA #1, SOIL WAS REMOVED TO A DEPTH OF APPROX. 4 FT.
- FOR LEAD AREA #2, SOIL WAS REMOVED TO A DEPTH OF APPROX. 3.0 FT.

ALL FINAL REMOVAL LOCATIONS SHOWN BASED ON FIELD SWING-TAPE MEASUREMENTS FROM SEVERAL EXISTING STAGNARY FEATURES (FENCES, WELL STICK-UPS, TREES, ETC.) PER LOCATION.

ALL REMEDIATION EXCAVATION BACKFILL CONSISTED OF "RECYCLED CONCRETE STONE" SUPPLIED BY GOLDMITE PRODUCTS, INC. PLACED IN 1 FT. LIFTS AND COMPACTED WITH VIBRATING ROLLER.

APPROXIMATE LOCATION OF TURNING BASIN OF ABANDONED ERE CANAL SOURCE: MAP IN ROCHESTER CITY HALL DATED 1876-1908.

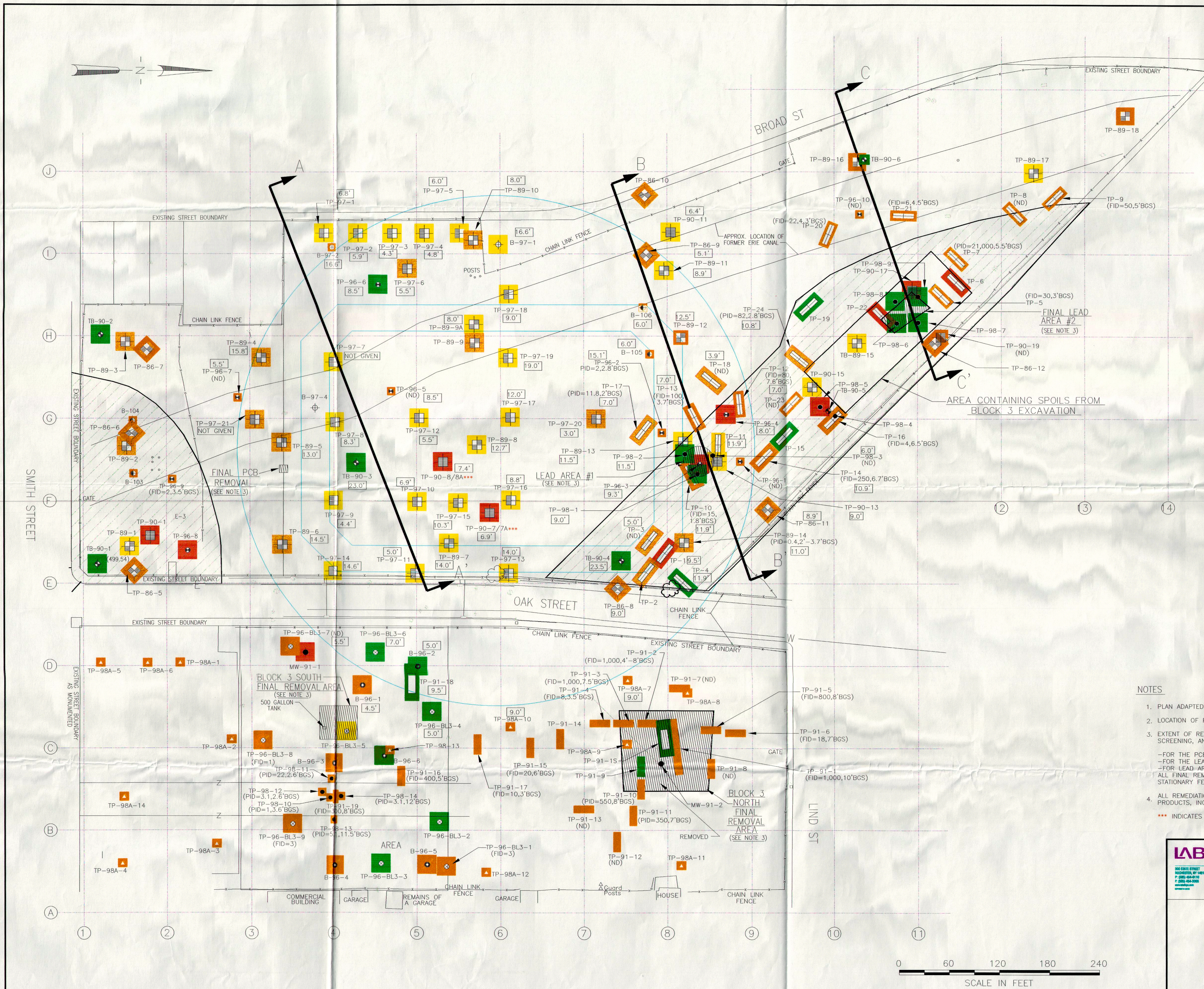
THE PROPOSED PAETEC PARK STADIUM OVERLAY WAS OBTAINED BY LABELLA ASSOCIATES, P.C. FROM AN ELECTRONIC FILE NAMED MAIN.DWG DATED 5 MAY 2003. THE LOCATION AND SCALE OF THE PROPOSED STADIUM IS ONLY APPROXIMATE AND SHOULD NOT BE USED FOR SURVEYING BORING LOCATIONS.

WATER LEVEL READING WHERE OBTAINED ON 11-12 JUNE 2003. WATER LEVELS AT THE SITE SHOULD BE EXPECTED TO VARY WITH PRECIPITATION, SEASON, AND CONSTRUCTION ACTIVITY IN THE AREA.

DRAFT  
PRELIMINARY WORKING DRAWING

	PROPOSED PAETEC PARK STADIUM LABELLA ASSOCIATES, P.C. ROCHESTER, NEW YORK
	<b>GEOTECHNICAL PHASE I SUBSURFACE INVESTIGATION WATER ELEVATIONS</b>
UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS	SCALE: AS SHOWN JUNE 2003





**LEGEND:**

- TP-86-10 DESIGNATION AND APPROXIMATE LOCATION OF TEST PITS PERFORMED BY FOUNDATION DESIGN, P.C.-1986
- TP-89-9 DESIGNATION AND APPROXIMATE LOCATION OF TEST PITS PERFORMED BY ECCO, INC.-1989
- B-103 DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS PERFORMED BY FOUNDATION DESIGN, P.C.-1986
- B-97-1 DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS PERFORMED BY FOUNDATION DESIGN, P.C.-1997
- TP-98-1 DESIGNATION AND APPROXIMATE LOCATION OF TEST PITS PERFORMED BY HALEY & ALDRICH OF NEW YORK-1998
- TP-1 DESIGNATION AND APPROXIMATE LOCATION OF TEST PITS PERFORMED BY DAY HAMPTON ASSOCIATES-1994
- TB-90-1 DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS PERFORMED ECCO, INC.-1990
- TP-90-1 DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS PERFORMED BY ECCO, INC.-1990
- TP-97-1 DESIGNATION AND APPROXIMATE LOCATION OF TEST PITS PERFORMED BY SEAR-BROWN 1997/FOUNDATION DESIGN.
- TP-96-1 DESIGNATION AND APPROXIMATE LOCATION OF TEST PITS PERFORMED BY HALEY & ALDRICH OF NEW YORK.
- B-96-1 DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS PERFORMED BY HALEY & ALDRICH OF NEW YORK-1996
- TP-91-1 DESIGNATION AND APPROXIMATE LOCATION OF TEST PITS PERFORMED BY DAY ENGINEERING - 1991
- MW-91-1 DESIGNATION AND APPROXIMATE LOCATION OF MONITORING WELLS PERFORMED BY DAY ENGINEERING - 1991
- TP-96-BL3-1 DESIGNATION AND APPROXIMATE LOCATION OF TEST BORINGS PERFORMED BY HALEY & ALDRICH OF NEW YORK-1996 BLOCK 3
- TP-98A-1 DESIGNATION AND APPROXIMATE LOCATION OF TEST PITS PERFORMED BY DAY ENGINEERING-1998.
- REMEDIATION EXCAVATIONS - 1998
- APPROXIMATE EXTENT OF LIMITED USE AREA

**Color Key:**

- = AT LEAST ONE ANALYTE EXCEEDS TAGM CLEAN UP OBJECTIVES, SEE TABLE I.
- = AT LEAST ONE ANALYTE PRODUCED TEST RESULTS GREATER THAN DETECTION THRESHOLD, BUT LESS THAN TAGM CLEAN UP OBJECTIVES, SEE TABLE I.
- = NO ANALYTES EXCEED DETECTION THRESHOLD VALUE, SEE TABLE I.
- = NO ANALYTES DATA FOR TEST BORING OR TEST PIT.

- NOTES**
1. PLAN ADAPTED FROM DRAWING PREPARED BY HALEY & ALDRICH, ROCHESTER, NEW YORK, DATED 9/2002.
  2. LOCATION OF REMEDIATION EXCAVATIONS BASED UPON INVESTIGATIONS COMPLETED PRIOR TO NOVEMBER 1988.
  3. EXTENT OF REMEDIATION EXCAVATIONS WERE BASED UPON TEST PITS COMPLETED 4 DECEMBER 1998, FIELD SCREENING, AND CONFIRMATION SAMPLING DURING EXCAVATION.
    - FOR THE PCB AREA, SOIL WAS REMOVED TO A DEPTH OF APPROX. 2.5 FT.
    - FOR THE LEAD AREA #1, SOIL WAS REMOVED TO A DEPTH OF APPROX. 4 FT.
    - FOR LEAD AREA #2, SOIL WAS REMOVED TO A DEPTH OF APPROX. 5.0 FT.
    - ALL FINAL REMOVAL LOCATIONS SHOWN BASED ON FIELD SWING-TAPE MEASUREMENTS FROM SEVERAL EXISTING STATIONARY FEATURES (FENCES, WELL STICK-UPS, TREES, ETC.) PER LOCATION.
  4. ALL REMEDIATION EXCAVATION BACKFILL CONSISTED OF "RECYCLED CONCRETE STONE" SUPPLIED BY DOLOMITE PRODUCTS, INC. PLACED IN 1 FT. LIFTS AND COMPACTED WITH VIBRATING ROLLER.
    - \*\*\* INDICATES EXCEEDANCE OF TAGM AT LEAST PARTIALLY ATTRIBUTABLE TO LAB CONTAMINATION.



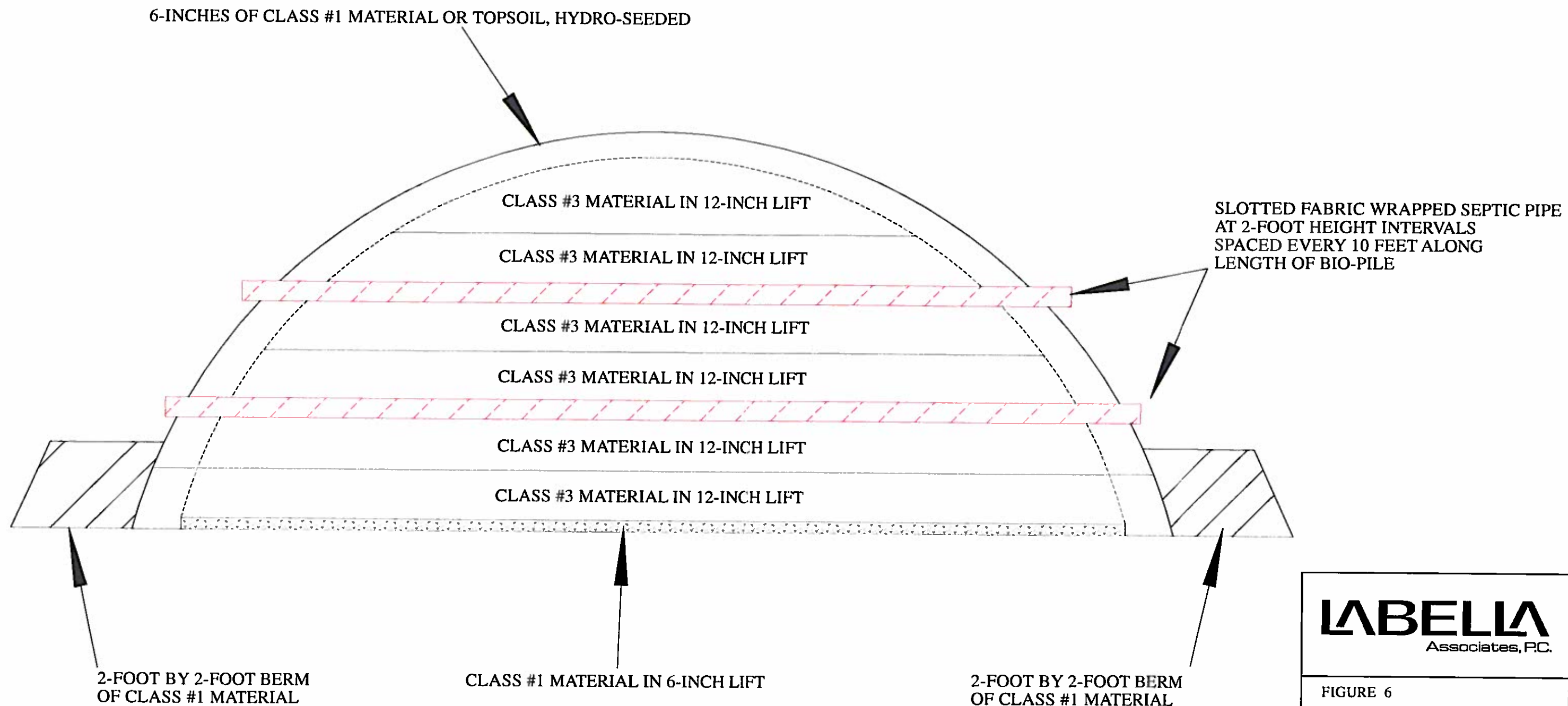
ERIE CANAL INDUSTRIAL PARK-BLOCK 2 & 3  
CITY OF ROCHESTER DEPT. OF ENVIRONMENTAL SERVICES  
ROCHESTER, NEW YORK

ROCHESTER RHINOS STADIUM, LLC  
EXISTING SUB-SURFACE  
ENVIRONMENTAL INFORMATION  
PRELIMINARY SOIL MANAGEMENT PLAN  
EXCAVATION AND ON SITE  
FILL MANAGEMENT PLAN MAP

SCALE: AS SHOWN SEPTEMBER 2003







**LABELLA**  
Associates, P.C.

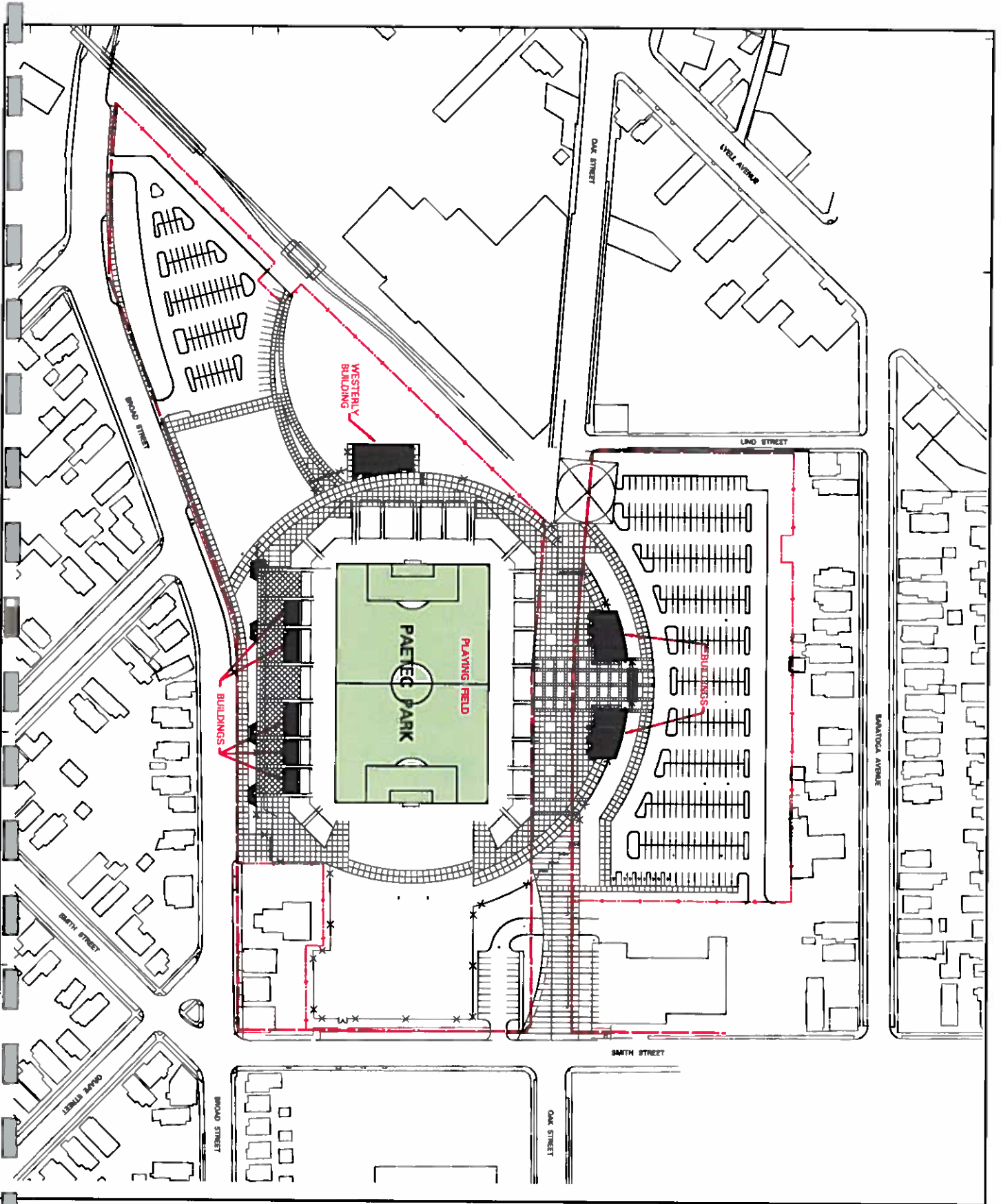
FIGURE 6  
BIO-PILE SCHEMATIC /  
CROSS SECTION  
  
PAETEC PARK -  
SOIL MANAGEMENT PLAN  
LOTS #2 AND #3  
ROCHESTER, NEW YORK 14608

DATE: SEPTEMBER 2003

LABELLA PROJECT NO. 203174

NOTE: NOT TO SCALE





PROJECT NORTH

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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FIGURE 1  
SITE PLAN

**ROCHESTER RHINOS**  
**PAETEC PARK**  
 ROCHESTER, NEW YORK

**RHINOS**

ARCHITECT

ENGINEER

DATE

SCALE

PROJECT NO.

CLIENT

LOCATION

DESCRIPTION

**Volatile Analysis Report for Soils/Solids/Sludges**

Client: **LaBella**

Client Job Site: Paetec  
Client Job Number: 203174.02  
Field Location: TP-03-1 @ 17' BGS  
Field ID Number: N/A  
Sample Type: Soil

Lab Project Number: 03-1539  
Lab Sample Number: 5599  
Date Sampled: 06/11/2003  
Date Received: 06/13/2003  
Date Analyzed: 06/17/2003

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 10.9
Bromomethane	ND< 10.9
Bromoform	ND< 10.9
Carbon tetrachloride	ND< 10.9
Chloroethane	ND< 10.9
Chloromethane	ND< 10.9
2-Chloroethyl vinyl ether	ND< 10.9
Chloroform	ND< 10.9
Dibromochloromethane	ND< 10.9
1,1-Dichloroethane	ND< 10.9
1,2-Dichloroethane	ND< 10.9
1,1-Dichloroethene	ND< 10.9
cis-1,2-Dichloroethene	ND< 10.9
trans-1,2-Dichloroethene	ND< 10.9
1,2-Dichloropropane	ND< 10.9
cis-1,3-Dichloropropene	ND< 10.9
trans-1,3-Dichloropropene	ND< 10.9
Methylene chloride	ND< 27.3
1,1,2,2-Tetrachloroethane	ND< 10.9
Tetrachloroethene	ND< 10.9
1,1,1-Trichloroethane	ND< 10.9
1,1,2-Trichloroethane	ND< 10.9
Trichloroethene	ND< 10.9
Trichlorofluoromethane	ND< 10.9
Vinyl Chloride	ND< 10.9

Aromatics	Results in ug / Kg
Benzene	ND< 10.9
Chlorobenzene	ND< 10.9
Ethylbenzene	ND< 10.9
Toluene	ND< 10.9
m,p - Xylene	ND< 10.9
o - Xylene	ND< 10.9
Styrene	ND< 10.9
1,2-Dichlorobenzene	ND< 10.9
1,3-Dichlorobenzene	ND< 10.9
1,4-Dichlorobenzene	ND< 10.9

Ketones	Results in ug / Kg
Acetone	110
2-Butanone	ND< 27.3
2-Hexanone	ND< 27.3
4-Methyl-2-pentanone	ND< 27.3

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 27.3
Vinyl acetate	ND< 27.3

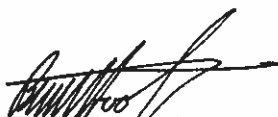
ELAP Number 10958

Method: EPA 8260B

Data File: 65782.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram

Signature: \_\_\_\_\_

  
Bruce Hoogesteger, Technical Director

**Volatile Analysis Report for Soils/Solids/Sludges (Additional STARS Compounds)**

Client: **LaBella**

Client Job Site:	Paetec	Lab Project Number:	03-1539
Client Job Number:	203174.02	Lab Sample Number:	5599
Field Location:	TP-03-01 @ 17' BGS	Date Sampled:	06/11/2003
Field ID Number:	N/A	Date Received:	06/13/2003
Sample Type:	Soil	Date Analyzed:	06/17/2003

Aromatics	Results in ug / Kg	Aromatics	Results in ug / Kg
n-Butylbenzene	ND< 10.9	1,2,4-Trimethylbenzene	ND< 10.9
sec-Butylbenzene	ND< 10.9	1,3,5-Trimethylbenzene	ND< 10.9
tert-Butylbenzene	ND< 10.9		
n-Propylbenzene	ND< 10.9	<b>Miscellaneous</b>	
Isopropylbenzene	ND< 10.9	Methyl tert-Butyl Ether	ND< 10.9
p-Isopropyltoluene	ND< 10.9		
Naphthalene	ND< 27.3		

ELAP Number 10958

Method: EPA 8260B

Data File: 65782.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram

Signature: \_\_\_\_\_

  
Bruce Hoogesteger, Technical Director

**Volatile Analysis Report for Soils/Solids/Sludges**

Client: **LaBella**

Client Job Site: Paetec

Lab Project Number: 03-1539

Lab Sample Number: 5600

Client Job Number: 203174.02

Field Location: TP-03-4A @ 2'-3' BGS

Date Sampled: 06/11/2003

Field ID Number: N/A

Date Received: 06/13/2003

Sample Type: Soil

Date Analyzed: 06/17/2003

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 21.4
Bromomethane	ND< 21.4
Bromoform	ND< 21.4
Carbon tetrachloride	ND< 21.4
Chloroethane	ND< 21.4
Chloromethane	ND< 21.4
2-Chloroethyl vinyl ether	ND< 21.4
Chloroform	ND< 21.4
Dibromochloromethane	ND< 21.4
1,1-Dichloroethane	ND< 21.4
1,2-Dichloroethane	ND< 21.4
1,1-Dichloroethene	ND< 21.4
cis-1,2-Dichloroethene	ND< 21.4
trans-1,2-Dichloroethene	ND< 21.4
1,2-Dichloropropane	ND< 21.4
cis-1,3-Dichloropropene	ND< 21.4
trans-1,3-Dichloropropene	ND< 21.4
Methylene chloride	ND< 53.6
1,1,2,2-Tetrachloroethane	ND< 21.4
Tetrachloroethene	ND< 21.4
1,1,1-Trichloroethane	ND< 21.4
1,1,2-Trichloroethane	ND< 21.4
Trichloroethene	ND< 21.4
Trichlorofluoromethane	ND< 21.4
Vinyl Chloride	ND< 21.4

Aromatics	Results in ug / Kg
Benzene	433
Chlorobenzene	ND< 21.4
Ethylbenzene	1,900
Toluene	977
m,p - Xylene	E 8,900
o - Xylene	E 5,150
Styrene	ND< 21.4
1,2-Dichlorobenzene	ND< 21.4
1,3-Dichlorobenzene	ND< 21.4
1,4-Dichlorobenzene	ND< 21.4

Ketones	Results in ug / Kg
Acetone	ND< 107
2-Butanone	ND< 53.6
2-Hexanone	ND< 53.6
4-Methyl-2-pentanone	ND< 53.6

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 53.6
Vinyl acetate	ND< 53.6

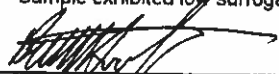
ELAP Number 10958

Method: EPA 8260B

Data File: 65784.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram  
E denotes Estimated. Concentration exceeds calibration range.  
Sample exhibited low surrogate recovery. Possible matrix interference.

Signature:

  
Bruce Hoogesteger, Technical Director



**Volatile Analysis Report for Soils/Solids/Sludges (Additional STARS Compounds)**

Client: **LaBella**

Client Job Site:	Paetec	Lab Project Number:	03-1539
Client Job Number:	203174.02	Lab Sample Number:	5600
Field Location:	TP-03-4A @ 2'-3' BGS	Date Sampled:	06/11/2003
Field ID Number:	N/A	Date Received:	06/13/2003
Sample Type:	Soil	Date Analyzed:	06/17/2003

Aromatics	Results in ug / Kg	Aromatics	Results in ug / Kg
n-Butylbenzene	ND< 21.4	1,2,4-Trimethylbenzene	E 5,270
sec-Butylbenzene	261	1,3,5-Trimethylbenzene	1,880
tert-Butylbenzene	ND< 21.4		
n-Propylbenzene	413	<b>Miscellaneous</b>	
Isopropylbenzene	246	Methyl tert-Butyl Ether	ND< 21.4
p-Isopropyltoluene	1,190		
Naphthalene	662		

ELAP Number 10958

Method: EPA 8260B

Data File: 65784.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram  
E denotes Estimated. Concentration exceeds calibration range.

Signature: \_\_\_\_\_

  
Bruce Hoogesteger, Technical Director

**Volatile Analysis Report for Soils/Solids/Sludges**

Client: **LaBella**

Client Job Site: Paetec  
Client Job Number: 203174.02  
Field Location: TP-03-6 @ 7'-8' BGS  
Field ID Number: N/A  
Sample Type: Soil

Lab Project Number: 03-1539  
Lab Sample Number: 5601  
Date Sampled: 06/11/2003  
Date Received: 06/13/2003  
Date Analyzed: 06/19/2003

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 8.77
Bromomethane	ND< 8.77
Bromoform	ND< 8.77
Carbon tetrachloride	ND< 8.77
Chloroethane	ND< 8.77
Chloromethane	ND< 8.77
2-Chloroethyl vinyl ether	ND< 8.77
Chloroform	ND< 8.77
Dibromochloromethane	ND< 8.77
1,1-Dichloroethane	ND< 8.77
1,2-Dichloroethane	ND< 8.77
1,1-Dichloroethene	ND< 8.77
cis-1,2-Dichloroethene	ND< 8.77
trans-1,2-Dichloroethene	ND< 8.77
1,2-Dichloropropane	ND< 8.77
cis-1,3-Dichloropropene	ND< 8.77
trans-1,3-Dichloropropene	ND< 8.77
Methylene chloride	ND< 21.9
1,1,2,2-Tetrachloroethane	ND< 8.77
Tetrachloroethene	ND< 8.77
1,1,1-Trichloroethane	ND< 8.77
1,1,2-Trichloroethane	ND< 8.77
Trichloroethene	ND< 8.77
Trichlorofluoromethane	ND< 8.77
Vinyl Chloride	ND< 8.77

Aromatics	Results in ug / Kg
Benzene	12.9
Chlorobenzene	ND< 8.77
Ethylbenzene	109
Toluene	ND< 8.77
m,p - Xylene	103
o - Xylene	17.3
Styrene	ND< 8.77
1,2-Dichlorobenzene	ND< 8.77
1,3-Dichlorobenzene	ND< 8.77
1,4-Dichlorobenzene	ND< 8.77

Ketones	Results in ug / Kg
Acetone	180
2-Butanone	ND< 21.9
2-Hexanone	ND< 21.9
4-Methyl-2-pentanone	ND< 21.9

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 21.9
Vinyl acetate	ND< 21.9

ELAP Number 10958

Method: EPA 8260B

Data File: 65804.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram

Signature:

  
Bruce Hoogesteger: Technical Director

**Volatile Analysis Report for Soils/Solids/Sludges (Additional STARS Compounds)**

**Client:** LaBella

<b>Client Job Site:</b>	Paetec	<b>Lab Project Number:</b>	03-1539
<b>Client Job Number:</b>	203174 02	<b>Lab Sample Number:</b>	5601
<b>Field Location:</b>	TP-03-6 @ 7'-8' BGS	<b>Date Sampled:</b>	06/11/2003
<b>Field ID Number:</b>	N/A	<b>Date Received:</b>	06/13/2003
<b>Sample Type:</b>	Soil	<b>Date Analyzed:</b>	06/19/2003

Aromatics	Results in ug / Kg	Aromatics	Results in ug / Kg
n-Butylbenzene	ND< 8.77	1,2,4-Trimethylbenzene	870
sec-Butylbenzene	115	1,3,5-Trimethylbenzene	9.63
tert-Butylbenzene	ND< 8.77		
n-Propylbenzene	157	<b>Miscellaneous</b>	
Isopropylbenzene	74.4	Methyl tert-Butyl Ether	ND< 8.77
p-Isopropyltoluene	28.8		
Naphthalene	ND< 21.9		

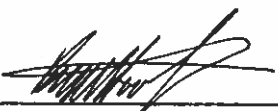
ELAP Number 10958

Method: EPA 8260B

Data File: 65804.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram

Signature:

  
\_\_\_\_\_  
Bruce Hoogesteger: Technical Director

**Volatile Analysis Report for Soils/Solids/Sludges (Additional STARS Compounds)**

Client: **LaBella**

Client Job Site:	Paetec	Lab Project Number:	03-1539
Client Job Number:	203174.02	Lab Sample Number:	5602
Field Location:	TP-03-4C @ 2'-3' BGS	Date Sampled:	06/11/2003
Field ID Number:	N/A	Date Received:	06/13/2003
Sample Type:	Soil	Date Analyzed:	06/19/2003

Aromatics	Results in ug / Kg	Aromatics	Results in ug / Kg
n-Butylbenzene	ND< 10.2	1,2,4-Trimethylbenzene	10.4
sec-Butylbenzene	ND< 10.2	1,3,5-Trimethylbenzene	ND< 10.2
tert-Butylbenzene	ND< 10.2		
n-Propylbenzene	ND< 10.2	<b>Miscellaneous</b>	
Isopropylbenzene	ND< 10.2	Methyl tert-Butyl Ether	ND< 10.2
p-Isopropyltoluene	ND< 10.2		
Naphthalene	ND< 25.6		

ELAP Number 10958

Method: EPA 8260B

Data File: 65805.D

Comments ND denotes Non Detect  
ug / Kg = microgram per Kilogram

Signature:

  
Bruce Hoogesteger, Technical Director

**Volatile Analysis Report for Soils/Solids/Sludges**

**Client:** LaBella

**Client Job Site:** Paetec  
**Client Job Number:** 203174.02  
**Field Location:** TP-03-6 @ 2' BGS  
**Field ID Number:** N/A  
**Sample Type:** Soil

**Lab Project Number:** 03-1539  
**Lab Sample Number:** 5603  
**Date Sampled:** 06/11/2003  
**Date Received:** 06/13/2003  
**Date Analyzed:** 06/19/2003

Halocarbons	Results in ug / Kg
Bromodichloromethane	ND< 9.93
Bromomethane	ND< 9.93
Bromoform	ND< 9.93
Carbon tetrachloride	ND< 9.93
Chloroethane	ND< 9.93
Chloromethane	ND< 9.93
2-Chloroethyl vinyl ether	ND< 9.93
Chloroform	ND< 9.93
Dibromochloromethane	ND< 9.93
1,1-Dichloroethane	ND< 9.93
1,2-Dichloroethane	ND< 9.93
1,1-Dichloroethene	ND< 9.93
cis-1,2-Dichloroethene	ND< 9.93
trans-1,2-Dichloroethene	ND< 9.93
1,2-Dichloropropane	ND< 9.93
cis-1,3-Dichloropropene	ND< 9.93
trans-1,3-Dichloropropene	ND< 9.93
Methylene chloride	ND< 24.8
1,1,2,2-Tetrachloroethane	ND< 9.93
Tetrachloroethene	ND< 9.93
1,1,1-Trichloroethane	ND< 9.93
1,1,2-Trichloroethane	ND< 9.93
Trichloroethene	ND< 9.93
Trichlorofluoromethane	ND< 9.93
Vinyl Chloride	ND< 9.93

Aromatics	Results in ug / Kg
Benzene	ND< 9.93
Chlorobenzene	ND< 9.93
Ethylbenzene	ND< 9.93
Toluene	ND< 9.93
m,p - Xylene	ND< 9.93
o - Xylene	ND< 9.93
Styrene	ND< 9.93
1,2-Dichlorobenzene	ND< 9.93
1,3-Dichlorobenzene	ND< 9.93
1,4-Dichlorobenzene	ND< 9.93

Ketones	Results in ug / Kg
Acetone	ND< 49.6
2-Butanone	ND< 24.8
2-Hexanone	ND< 24.8
4-Methyl-2-pentanone	ND< 24.8

Miscellaneous	Results in ug / Kg
Carbon disulfide	ND< 24.8
Vinyl acetate	ND< 24.8

ELAP Number 10958

Method: EPA 8260B

Data File: 65806.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram

Signature: \_\_\_\_\_

Bruce Hoogesteger, Technical Director

**Volatile Analysis Report for Soils/Solids/Sludges (Additional STARS Compounds)**

Client: **LaBella**

Client Job Site: Paetec

Lab Project Number: 03-1539

Client Job Number: 203174.02

Lab Sample Number: 5603

Field Location: TP-03-6 @ 2' BGS

Date Sampled: 06/11/2003

Field ID Number: N/A

Date Received: 06/13/2003

Sample Type: Soil

Date Analyzed: 06/19/2003

Aromatics	Results in ug / Kg	Aromatics	Results in ug / Kg
n-Butylbenzene	ND< 9.93	1,2,4-Trimethylbenzene	ND< 9.93
sec-Butylbenzene	ND< 9.93	1,3,5-Trimethylbenzene	ND< 9.93
tert-Butylbenzene	ND< 9.93		
n-Propylbenzene	ND< 9.93	<b>Miscellaneous</b>	
Isopropylbenzene	ND< 9.93	Methyl tert-Butyl Ether	ND< 9.93
p-Isopropyltoluene	ND< 9.93		
Naphthalene	ND< 24.8		

ELAP Number 10958

Method: EPA 8260B

Data File: 65806.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram

Signature:

  
\_\_\_\_\_  
Bruce Hoogesteger, Technical Director

**Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges**

Client: LaBella

Client Job Site:	Paetec	Lab Project Number:	03-1539
Client Job Number:	203174.02	Lab Sample Number:	5599
Field Location:	TP-03-1 @ 17' BGS	Date Sampled:	06/11/2003
Field ID Number:	N/A	Date Received:	06/13/2003
Sample Type:	Soil	Date Analyzed:	06/17/2003

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 318
Anthracene	ND< 318
Benzo (a) anthracene	ND< 318
Benzo (a) pyrene	379
Benzo (b) fluoranthene	354
Benzo (g,h,i) perylene	ND< 318
Benzo (k) fluoranthene	ND< 318
Chrysene	491
Dibenz (a,h) anthracene	ND< 318
Fluoranthene	509
Fluorene	ND< 318
Indeno (1,2,3-cd) pyrene	ND< 318
Naphthalene	ND< 318
Phenanthrene	ND< 318
Pyrene	1,320

ELAP Number 10958 Method: EPA 8270C Data File: 11433.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram

Signature:

  
Bruce Hoogesteger Technical Director

**Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges**

Client: **LaBella**

Client Job Site:	Paetec	Lab Project Number:	03-1539
Client Job Number:	203174.02	Lab Sample Number:	5600
Field Location:	TP-03-4A @ 2'-3' BGS	Date Sampled:	06/11/2003
Field ID Number:	N/A	Date Received:	06/13/2003
Sample Type:	Soil	Date Analyzed:	06/17/2003
		Date Reissued:	06/23/2003

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 1,530
Anthracene	ND< 1,530
Benzo (a) anthracene	ND< 1,530
Benzo (a) pyrene	ND< 1,530
Benzo (b) fluoranthene	ND< 1,530
Benzo (g,h,i) perylene	ND< 1,530
Benzo (k) fluoranthene	ND< 1,530
Chrysene	1,830
Dibenz (a,h) anthracene	ND< 1,530
Fluoranthene	3,440
Fluorene	ND< 1,530
Indeno (1,2,3-cd) pyrene	ND< 1,530
Naphthalene	ND< 1,530
Phenanthrene	2,090
Pyrene	3,270

ELAP Number 10958      Method: EPA 8270C      Data File: 11434.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram

Signature:

  
Bruce Hoogesteger: Technical Director



**Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges**

Client: **LaBella**


Client Job Site:	Paetec	Lab Project Number:	03-1539
Client Job Number:	203174.02	Lab Sample Number:	5601
Field Location:	TP-03-6 @ 7'-8' BGS	Date Sampled:	06/11/2003
Field ID Number:	N/A	Date Received:	06/13/2003
Sample Type:	Soil	Date Analyzed:	06/17/2003

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 406
Anthracene	ND< 406
Benzo (a) anthracene	ND< 406
Benzo (a) pyrene	ND< 406
Benzo (b) fluoranthene	ND< 406
Benzo (g,h,i) perylene	ND< 406
Benzo (k) fluoranthene	ND< 406
Chrysene	ND< 406
Dibenz (a,h) anthracene	ND< 406
Fluoranthene	547
Fluorene	ND< 406
Indeno (1,2,3-cd) pyrene	ND< 406
Naphthalene	ND< 406
Phenanthrene	580
Pyrene	671

ELAP Number 10958 Method: EPA 8270C Data File: 11435 D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram

Signature: \_\_\_\_\_

  
Bruce Hoogesteger: Technical Director

**Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges**

Client: **LaBella**


Client Job Site:	Paetec	Lab Project Number:	03-1539
Client Job Number:	203174.02	Lab Sample Number:	5602
Field Location:	TP-03-4C @ 2'-3' BGS	Date Sampled:	06/11/2003
Field ID Number:	N/A	Date Received:	06/13/2003
Sample Type:	Soil	Date Analyzed:	06/17/2003

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 396
Anthracene	ND< 396
Benzo (a) anthracene	ND< 396
Benzo (a) pyrene	ND< 396
Benzo (b) fluoranthene	ND< 396
Benzo (g,h,i) perylene	ND< 396
Benzo (k) fluoranthene	ND< 396
Chrysene	ND< 396
Dibenz (a,h) anthracene	ND< 396
Fluoranthene	ND< 396
Fluorene	ND< 396
Indeno (1,2,3-cd) pyrene	ND< 396
Naphthalene	ND< 396
Phenanthrene	ND< 396
Pyrene	ND< 396

ELAP Number 10958 Method: EPA 8270C Data File: 11436.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram

Signature:

  
Bruce Hoogesteger Technical Director

**Semi-Volatile STARS Analysis Report for Soils/Solids/Sludges**

Client: LaBella

Client Job Site:	Paetec	Lab Project Number:	03-1539
Client Job Number:	203174.02	Lab Sample Number:	5603
Field Location:	TP-03-6 @ 2' BGS	Date Sampled:	06/11/2003
Field ID Number:	N/A	Date Received:	06/13/2003
Sample Type:	Soil	Date Analyzed:	06/17/2003

Base / Neutrals	Results in ug / Kg
Acenaphthene	ND< 332
Anthracene	359
Benzo (a) anthracene	1,180
Benzo (a) pyrene	1,440
Benzo (b) fluoranthene	1,070
Benzo (g,h,i) perylene	890
Benzo (k) fluoranthene	1,040
Chrysene	1,140
Dibenz (a,h) anthracene	ND< 332
Fluoranthene	1,640
Fluorene	ND< 332
Indeno (1,2,3-cd) pyrene	1,070
Naphthalene	ND< 332
Phenanthrene	1,120
Pyrene	1,590

ELAP Number 10958 Method: EPA 8270C Data File: 11437.D

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram

Signature: \_\_\_\_\_

  
Bruce Hoogesteger, Technical Director

<b>Client:</b>	<b>LaBella Associates</b>	<b>Lab Project No.:</b>	03-1539
<b>Client Job Site:</b>	Paetec	<b>Lab Sample No.:</b>	5602
<b>Client Job No.:</b>	203174.02	<b>Sample Type:</b>	Soil
<b>Field Location:</b>	2'-3' BGS	<b>Date Sampled:</b>	06/11/2003
<b>Field ID No.:</b>	TP-03-4C	<b>Date Received:</b>	06/13/2003

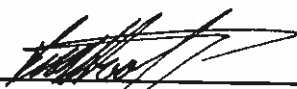
### Laboratory Report for Solid Waste Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Arsenic	06/18/2003	SW846 6010	5.47
Barium	06/18/2003	SW846 6010	75.1
Cadmium	06/18/2003	SW846 6010	<0.540
Chromium	06/18/2003	SW846 6010	9.96
Lead	06/18/2003	SW846 6010	43.2
Mercury	06/17/2003	SW846 7471	0.170
Selenium	06/18/2003	SW846 6010	<0.540
Silver	06/18/2003	SW846 6010	<1.08

ELAP ID No.:10958

Comments:

Approved By:


  
 Bruce Hoogesteger, Technical Director

<b>Client:</b>	<b>LaBella Associates</b>	<b>Lab Project No.:</b>	03-1539
<b>Client Job Site:</b>	Paetec	<b>Lab Sample No.:</b>	5603
<b>Client Job No.:</b>	203174.02	<b>Sample Type:</b>	Soil
<b>Field Location:</b>	2' BGS	<b>Date Sampled:</b>	06/11/2003
<b>Field ID No.:</b>	TP-03-6	<b>Date Received:</b>	06/13/2003

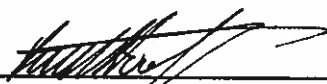
### Laboratory Report for Solid Waste Analysis

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Arsenic	06/18/2003	SW846 6010	11.1
Barium	06/18/2003	SW846 6010	52.4
Cadmium	06/18/2003	SW846 6010	0.718
Chromium	06/18/2003	SW846 6010	9.80
Lead	06/18/2003	SW846 6010	23.3
Mercury	06/17/2003	SW846 7471	0.221
Selenium	06/18/2003	SW846 6010	<0.598
Silver	06/18/2003	SW846 6010	<1.20

ELAP ID No.:10958

Comments:

Approved By:

  
 Bruce Hoogesteger, Technical Director

**PHC Analysis Report for Soils/Solids/Sludges**

Client: LaBella

Client Job Site:	Paetec	Lab Project Number:	03-1539
Client Job Number:	203174.02	Lab Sample Number:	5600
Field Location:	TP-03-4A @ 2'-3' BGS	Date Sampled:	06/11/2003
Field ID Number:	N/A	Date Received:	06/13/2003
Sample Type:	Soil	Date Analyzed:	06/20/2003

PHC Classification	Results in ug / Kg
Medium Weight PHC as: Kerosene	599,000
Heavy Weight PHC as: Lube Oil	36,600,000

ELAP Number 10958

Method: NYSDOH 310.13

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram  
PHC = Petroleum Hydrocarbon

Signature:

  
Bruce Hoogesteger: Technical Director

**PHC Analysis Report for Soils/Solids/Sludges**

**Client:** LaBella

<b>Client Job Site:</b>	Paetec	<b>Lab Project Number:</b>	03-1539
<b>Client Job Number:</b>	203174.02	<b>Lab Sample Number:</b>	5601
<b>Field Location:</b>	TP-03-6 @ 7'-8' BGS	<b>Date Sampled:</b>	06/11/2003
<b>Field ID Number:</b>	N/A	<b>Date Received:</b>	06/13/2003
<b>Sample Type:</b>	Soil	<b>Date Analyzed:</b>	06/20/2003

PHC Classification	Results in ug / Kg
Medium Weight PHC as: Kerosene	90,500
Heavy Weight PHC as: Lube Oil	7,360,000

ELAP Number 10958

Method: NYSDOH 310.13

Comments: ND denotes Non Detect  
ug / Kg = microgram per Kilogram  
PHC = Petroleum Hydrocarbon

Signature:

  
Bruce Hoogesteger, Technical Director

# PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue  
 Rochester, NY 14608  
 (585) 647-2530 • (800) 724-1997  
 FAX: (585) 647-3311

## CHAIN OF CUSTODY

REPORTING INVOICE

**COMPANY:** LaCelle  
**ADDRESS:** 300 State Street  
**CITY:** Rochester **STATE:** NY **ZIP:** 14614  
**PHONE:** 454-6110 **FAX:** 454-3066  
**ATTN:** Dennis Porter  
**COMMENTS:**

**LAB PROJECT #:** 03-1539 **CLIENT PROJECT #:** 203174.0Z  
**TURNAROUND TIME (WORKING DAYS):** 1 2 3 5 **STD OTHER:** X

PROJECT NAME/SITE NAME:

Porter

### REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRA B	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINERS	BZ70 STRS	BZ60TCL + STRS	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	6/11/03	X		TP-03-1 e 17' BGS	S	1	✓	✓	Added on DP 6/13	5599
2		Y		TP-03-4A e 2'-3' BGS	S	1	✓	✓	PHC 310.13 q	5600
3		X		TP-03-6 e 7'-8' BGS	S	1	✓	✓	PHC 310.13	5601
4		X		TP-03-4C e 2'-3' BGS	S	1	✓	✓		5602
5		X		TP-03-6 e 2' BGS	S	1	✓	✓		5603
6										
7										
8										
9										
10										

\*\*LAB USE ONLY\*\*

**SAMPLE CONDITION:** Check box if acceptable or note deviation:  PRESERVATIONS:  CONTAINER TYPE:  HOLDING TIME:  TEMPERATURE: 10°C iced

**Sampled By:** Dennis E. Porter **Date/Time:** 6/11/03  
**Relinquished By:** Michael F. Porter **Date/Time:** 6/13/03 12:30  
**Received By:** Dennis E. Porter **Date/Time:** 6/13/03 12:05  
**Relinquished By:** Michael F. Porter **Date/Time:** 6/13/03 12:30  
**Received By:** Pamela M. Blalock **Date/Time:** 6/13/03 @ 12:30  
**Relinquished By:** Michael F. Porter **Date/Time:** 6-13-2003 / 12:30  
**Received By:** Pamela M. Blalock **Date/Time:** 6/13/03 @ 13:40  
**Received @ Lab By:** Pamela M. Blalock **Date/Time:** 6/13/03 @ 13:40

P.I.F.

Total Cost:



# PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue  
Rochester, NY 14608  
(585) 647-2530 \* (800) 724-1997  
FAX: (585) 647-3311

# CHAIN OF CUSTODY

REPORT TO: INVOICE TO:

COMPANY: LaCelle ADDRESS: 300 State Street CITY: Rochester STATE: NY ZIP: 14614  
 PHONE: 454-6010 FAX: 454-3060 ATTN: Debbie Porter  
 LAB PROJECT #: 03-1539 CLIENT PROJECT #: 203174.02  
 TURNAROUND TIME (WORKING DAYS): 1 2 3 5 OTHER

PROJECT NAME/SITE NAME:

Pactec

## REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRA B	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAMINANT NUMBERS	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	6/11/03		X	TP-03-1 S 17 700		8270 STARS 8260 TCL + STARS	Added on DP 6/13	5599
2			Y	TP-03-HA @ 7.5 Bas			PHC 310.13.00	5600
3			X	TP-03-6 C 7.5 Bas			PHC 310.13	5601
4			X	TP-03-4C @ 7.5 Bas				5602
5			X	TP-03-6 C 7.5 Bas				5603
6								
7								
8								
9								
10								

\*\*LAB USE ONLY\*\*

SAMPLE CONDITION: Check box if acceptable or note deviation:  CONTAINER TYPE:  PRESERVATIONS:  HOLDING TIME:  TEMPERATURE:  100C iced

Sampled By: Debbie Porter Date/Time: 6/11/03  
 Relinquished By: Debbie Porter Date/Time: 6/13/03 4:05  
 Received By: Mark F. Pugh Date/Time: 6/13/03 @ 12:30  
 Relinquished By: Mark F. Pugh Date/Time: 6-13-2003 / 12:30  
 Received By: Patricia M. Blake Date/Time: 6/13/03 @ 12:30  
 Relinquished By: Patricia M. Blake Date/Time: 6/13/03 @ 13:40

Total Cost:

P.I.F.



179 Lake Avenue Rochester, New York 14608 (585) 847 - 2530 FAX (585) 847 - 3311

Volatile Analysis Report for Non-potable WaterClient: LaBella Associates, P.C.

Client Job Site: Paetec Park SMP

Lab Project Number: 03-1424

Lab Sample Number: 5186

Client Job Number: 203174.02

Field Location: TB-90-4

Date Sampled: 05/30/2003

Field ID Number: N/A

Date Received: 05/30/2003

Sample Type: Water

Date Analyzed: 06/05/2003

Halocarbons	Results in ug / L
Bromodichloromethane	ND< 2.00
Bromomethane	ND< 2.00
Bromoform	ND< 2.00
Carbon tetrachloride	ND< 2.00
Chloroethane	ND< 2.00
Chloromethane	ND< 2.00
2-Chloroethyl vinyl ether	ND< 2.00
Chloroform	ND< 2.00
Dibromochloromethane	ND< 2.00
1,1-Dichloroethane	3.56
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	157
trans-1,2-Dichloroethene	ND< 2.00
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropane	ND< 2.00
trans-1,3-Dichloropropane	ND< 2.00
Methylene chloride	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	ND< 2.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl Chloride	134

ELAP Number 10958

Method: EPA 8260B

Data File: 65576.D

Aromatics	Results in ug / L
Benzene	44.3
Chlorobenzene	ND< 2.00
Ethylbenzene	5.98
Toluene	ND< 2.00
m,p - Xylene	ND< 2.00
o - Xylene	ND< 2.00
Styrene	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00

Ketones	Results in ug / L
Acetone	ND< 10.0
2-Butanone	ND< 5.00
2-Hexanone	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00

Miscellaneous	Results in ug / L
Carbon disulfide	ND< 5.00
Vinyl acetate	ND< 5.00

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 031424v1.xls



ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

### Volatile Analysis Report for Non-potable Water (Additional STARS Compounds)

Client: LaBella Associates, P.C.

Client Job Site: Paetec Park SMP

Lab Project Number: 03-1424

Lab Sample Number: 5188

Client Job Number: 203174.02

Field Location: TB-9(1)-4

Date Sampled: 05/30/2003

Field ID Number: N/A

Date Received: 05/30/2003

Sample Type: Water

Date Analyzed: 06/05/2003

Aromatics	Results in ug / L	Aromatics	Results in ug / L
n-Butylbenzene	ND< 2.00	1,2,4-Trimethylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00	1,3,5-Trimethylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00		
n-Propylbenzene	ND< 2.00	<b>Miscellaneous</b>	
Isopropylbenzene	ND< 2.00	Methyl tert-Butyl Ether	ND< 2.00
p-Isopropyltoluene	ND< 2.00		
Naphthalene	ND< 5.00		

ELAP Number 10958

Method: EPA 8260B

Data File: 65578.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature:

  
 Bruce Hoogesteger, Technical Director



179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

**Volatile Analysis Report for Non-potable Water**Client: **LaBella Associates, P.C.**

Client Job Site: Paetec Park SMP

Lab Project Number: 03-1424

Lab Sample Number: 5187

Client Job Number: 203174.02

Field Location: TB-90-5

Date Sampled: 05/30/2003

Field ID Number: N/A

Date Received: 05/30/2003

Sample Type: Water

Date Analyzed: 06/05/2003

Halocarbons	Results in ug / L
Bromodichloromethane	ND< 2.00
Bromomethane	ND< 2.00
Bromoform	ND< 2.00
Carbon tetrachloride	ND< 2.00
Chloroethane	ND< 2.00
Chloromethane	ND< 2.00
2-Chloroethyl vinyl ether	ND< 2.00
Chloroform	ND< 2.00
Dibromochloromethane	ND< 2.00
1,1-Dichloroethane	6.36
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	5.54
trans-1,2-Dichloroethene	ND< 2.00
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Methylene chloride	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	ND< 2.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl Chloride	ND< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: 85577.D

Aromatics	Results in ug / L
Benzene	ND< 0.700
Chlorobenzene	ND< 2.00
Ethylbenzene	ND< 2.00
Toluene	ND< 2.00
m,p - Xylene	ND< 2.00
o - Xylene	ND< 2.00
Styrene	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00

Ketones	Results in ug / L
Acetone	ND< 10.0
2-Butanone	ND< 5.00
2-Hexanone	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00

Miscellaneous	Results in ug / L
Carbon disulfide	ND< 5.00
Vinyl acetate	ND< 5.00

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature:

Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 031424v2.xls



ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

### Volatile Analysis Report for Non-potable Water (Additional STARS Compounds)

Client: LaBella Associates, P.C.

Client Job Site:	Paetec Park SMP	Lab Project Number:	03-1424
Client Job Number:	203174.02	Lab Sample Number:	5187
Field Location:	TB-90-5	Date Sampled:	05/30/2003
Field ID Number:	N/A	Date Received:	05/30/2003
Sample Type:	Water	Date Analyzed:	08/05/2003

Aromatics	Results in ug / L	Aromatics	Results in ug / L
n-Butylbenzene	ND< 2.00	1,2,4-Trimethylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00	1,3,5-Trimethylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00		
n-Propylbenzene	ND< 2.00	<b>Miscellaneous</b>	
Isopropylbenzene	ND< 2.00	Methyl tert-Butyl Ether	ND< 2.00
p-Isopropyltoluene	ND< 2.00		
Naphthalene	ND< 5.00		

ELAP Number 10958

Method: EPA 8260B

Date File: 65577.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature:



Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information:

File ID: 031424V5.XLS



179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

### Volatile Analysis Report for Non-potable Water

Client: LaBella Associates, P.C.

Client Job Site: Paetec Park SMP

Lab Project Number: 03-1424

Client Job Number: 203174.02

Lab Sample Number: 5188

Field Location: TB-90-3

Date Sampled: 05/30/2003

Field ID Number: N/A

Date Received: 05/30/2003

Sample Type: Water

Date Analyzed: 06/05/2003

Halocarbons	Results in ug / L
Bromodichloromethane	ND< 2.00
Bromomethane	ND< 2.00
Bromoform	ND< 2.00
Carbon tetrachloride	ND< 2.00
Chloroethane	ND< 2.00
Chloromethane	ND< 2.00
2-Chloroethyl vinyl ether	ND< 2.00
Chloroform	ND< 2.00
Dibromochloromethane	ND< 2.00
1,1-Dichloroethane	ND< 2.00
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethane	28.6
trans-1,2-Dichloroethene	ND< 2.00
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Methylene chloride	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	ND< 2.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl Chloride	29.8

Aromatics	Results in ug / L
Benzene	ND< 0.700
Chlorobenzene	ND< 2.00
Ethylbenzene	ND< 2.00
Toluene	ND< 2.00
m,p - Xylene	ND< 2.00
o - Xylene	ND< 2.00
Styrene	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00

Ketones	Results in ug / L
Acetone	95.6
2-Butanone	ND< 5.00
2-Hexanone	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00

Miscellaneous	Results in ug / L
Carbon disulfide	ND< 5.00
Vinyl acetate	ND< 5.00

ELAP Number 10958

Method: EPA 8260B

Data File: 65578.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature:

  
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information

File ID: 031424v3.xls



179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

**Volatile Analysis Report for Non-potable Water (Additional STARS Compounds)**Client: **LaBella Associates, P.C.**

Client Job Site: Paetec Park SMP

Lab Project Number: 03-1424

Lab Sample Number: 5188

Client Job Number: 203174.02

Field Location: TB-9(1)-3

Date Sampled: 05/30/2003

Field ID Number: N/A

Date Received: 05/30/2003

Sample Type: Water

Date Analyzed: 06/05/2003

Aromatics	Results in ug / L	Aromatics	Results in ug / L
n-Butylbenzene	ND< 2.00	1,2,4-Trimethylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00	1,3,5-Trimethylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00		
n-Propylbenzene	ND< 2.00	<b>Miscellaneous</b>	
Isopropylbenzene	ND< 2.00	Methyl tert-Butyl Ether	ND< 2.00
p-Isopropyltoluene	ND< 2.00		
Naphthalene	ND< 5.00		

ELAP Number 10958

Method: EPA 8260B

Data File: 65578.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature:

  
Bruce Hoogesteger: Technical Director

Chain of Custody provides additional sample information

File ID: 031424V6.XLS

**PARADIGM ENVIRONMENTAL SERVICES, INC.**

179 Lake Avenue  
Rochester, NY 14608  
(585) 647-2530 • (800) 724-1997  
FAX: (585) 647-3311

**CHAIN OF CUSTODY**

**PROJECT NAME/SITE NAME:** PABTEC PARK SMP

**COMPANY:** LABEBA ASSOCIATES, P.C. **STATE:** NY **ZIP:** 14614

**ADDRESS:** 300 STATE STREET, SUITE 201 **CITY:** ROCHESTER **PHONE:** 585 454 6110 **FAX:** 454 3066

**CLIENT PROJECT #:** 03-1424 **CLIENT PROJECT #:** 203174.02

**TURNAROUND TIME (WORKING DAYS):** 1 2 3 4 5 **OTHER:**

**COMPANY:** SAME **STATE:** NY **ZIP:** 14614

**ADDRESS:** **CITY:** **PHONE:** **FAX:** **ATTN:**

**PROJECT LOCATION/FIELD ID:** MICHAEL PELYCHARTY

**COMMENTS:**

DATE	TIME	COMPOSITE	GRA B	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINERS	REMARKS	PARADIGM LAB SAMPLE NUMBER
15-30-2003	12:00			TB-90-4	WATER	2		5186
25-30-2003	12:30			TB-90-5	WATER	2		5187
35-30-2003	13:30			TB-90-3	WATER	2		5188
4								
5								
6								
7								
8								
9								
10								

**\*\*LAB USE ONLY\*\***

**SAMPLE CONDITION:** Check box if acceptable or note deviation:  PRESERVATIONS:  HOLDING TIME:  TEMPERATURE: 170C

**Container Type:**  **Relinquished By:**  **Date/Time:** 5-30-2003

**Received By:**  **Date/Time:** 5-30-2003 16:20

**Received @ Lab By:**  **Date/Time:** 5/30/03 16:30

**Total Cost:**



**LABORATORY REPORT OF ANALYSIS**

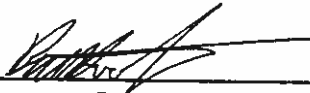
<b>Client:</b>	<u>LaBella Associates, P.C.</u>	<b>Lab Project No.:</b>	03-1544
<b>Client Job Site:</b>	Paetec Park SMP	<b>Sample Type:</b>	Water
<b>Client Job No.:</b>	203174.02	<b>Analytical Method:</b>	EPA 335.3
		<b>Date Sampled:</b>	06/12/2003
		<b>Date Received:</b>	06/13/2003
		<b>Date Analyzed:</b>	06/23/2003

Lab Sample ID.	Sample Location/Field ID	Total Cyanide (mg/l)
5625B	TB-90-3	ND<0.01
5626B	TB-90-4	ND<0.01
5627B	TB-90-5	ND<0.01

ELAP ID No. 10709

Comments: ND denotes Non-Detected.

Approved By Technical Director:



\_\_\_\_\_  
Bruce Hoogesteger



179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

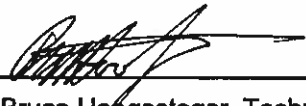
Client: **Labella Associates, P.C.** Lab Project No. 03-1544  
Lab Sample No 5625  
Client Job Site: Paetec Park SMP Sample Type: Water  
Client Job No.: 203174.02 Date Sampled: 06/04/2003  
Date Received: 06/13/2003  
Field Location: N/A  
Field ID No.: TB-90-3

Laboratory Report for Metals Analysis in Waters

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Antimony	06/18/2003	EPA 200.7	<0.060
Arsenic	06/18/2003	EPA 200.7	0.046
Barium	06/18/2003	EPA 200.7	0.130
Beryllium	06/18/2003	EPA 200.7	<0.005
Cadmium	06/18/2003	EPA 200.7	<0.005
Chromium	06/18/2003	EPA 200.7	<0.010
Copper	06/18/2003	EPA 200.7	0.032
Iron	06/18/2003	EPA 200.7	37.1
Lead	06/18/2003	EPA 200.7	<0.005
Manganese	06/18/2003	EPA 200.7	0.676
Mercury	06/17/2003	EPA 245.1	<0.0002
Nickel	06/18/2003	EPA 200.7	<0.040
Selenium	06/18/2003	EPA 200.7	<0.005
Silver	06/18/2003	EPA 200.7	<0.010
Thallium	06/18/2003	EPA 200.7	<0.006
Zinc	06/18/2003	EPA 200.7	0.109

ELAP ID No.:10958

Comments:

Approved By:   
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:031544.xls

**Client:** Labella Associates, P.C.
**Lab Project No.** 03-1544

**Lab Sample No** 5626

**Client Job Site:** Paetec Park  
SMP

**Sample Type:** Water

**Client Job No.:** 203174.02

**Date Sampled:** 06/04/2003

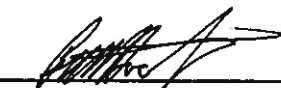
**Date Received:** 06/13/2003

**Field Location:** N/A  
**Field ID No.:** TB-90-4

**Laboratory Report for Metals Analysis in Waters**

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Antimony	06/18/2003	EPA 200.7	<0.060
Arsenic	06/18/2003	EPA 200.7	<0.005
Barium	06/18/2003	EPA 200.7	0.168
Beryllium	06/18/2003	EPA 200.7	<0.005
Cadmium	06/18/2003	EPA 200.7	<0.005
Chromium	06/18/2003	EPA 200.7	<0.010
Copper	06/18/2003	EPA 200.7	0.093
Iron	06/18/2003	EPA 200.7	6.11
Lead	06/18/2003	EPA 200.7	0.035
Manganese	06/18/2003	EPA 200.7	3.50
Mercury	06/17/2003	EPA 245.1	0.0011
Nickel	06/18/2003	EPA 200.7	<0.040
Selenium	06/18/2003	EPA 200.7	0.022
Silver	06/18/2003	EPA 200.7	<0.010
Thallium	06/18/2003	EPA 200.7	<0.006
Zinc	06/18/2003	EPA 200.7	0.111

ELAP ID No.:10958

**Comments:**
**Approved By:**


Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:031544.xls

Client: **Labella Associates, P.C.**

Lab Project No. 03-1544

Lab Sample No 5627

Client Job Site: Paetec Park

SMP

Sample Type: Water

Client Job No.: 203174.02

Date Sampled: 06/04/2003

Field Location: N/A

Date Received: 06/13/2003

Field ID No.: TB-90-5

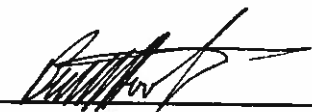
**Laboratory Report for Metals Analysis in Waters**

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Antimony	06/18/2003	EPA 200.7	<0.060
Arsenic	06/18/2003	EPA 200.7	0.016
Barium	06/18/2003	EPA 200.7	0.149
Beryllium	06/18/2003	EPA 200.7	<0.005
Cadmium	06/18/2003	EPA 200.7	<0.005
Chromium	06/18/2003	EPA 200.7	<0.010
Copper	06/18/2003	EPA 200.7	0.088
Iron	06/18/2003	EPA 200.7	19.1
Lead	06/18/2003	EPA 200.7	0.066
Manganese	06/18/2003	EPA 200.7	1.19
Mercury	06/17/2003	EPA 245.1	<0.0002
Nickel	06/18/2003	EPA 200.7	<0.040
Selenium	06/18/2003	EPA 200.7	<0.005
Silver	06/18/2003	EPA 200.7	<0.010
Thallium	06/18/2003	EPA 200.7	<0.006
Zinc	06/18/2003	EPA 200.7	0.129

ELAP ID No.:10958

Comments:

Approved By:



Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:031544.xls



179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

### Volatile Analysis Report for Non-potable Water

Client: Haly & Aldrich

Client Job Site: Pastec Park  
 Client Job Number: 70806-201  
 Field Location: Trip Blank 061203  
 Field ID Number: N/A  
 Sample Type: Water

Lab Project Number: 03-1543  
 Lab Sample Number: 5821  
 Date Sampled: 06/12/2003  
 Date Received: 06/13/2003  
 Date Analyzed: 06/20/2003

Halocarbons	Results in ug / L
Bromodichloromethane	ND< 2.00
Bromomethane	ND< 2.00
Bromoform	ND< 2.00
Carbon tetrachloride	ND< 2.00
Chloroethane	ND< 2.00
Chloromethane	ND< 2.00
2-Chloroethyl vinyl ether	ND< 2.00
Chloroform	ND< 2.00
Dibromochloromethane	ND< 2.00
1,1-Dichloroethane	ND< 2.00
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	ND< 2.00
trans-1,2-Dichloroethene	ND< 2.00
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Methylene chloride	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	ND< 2.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl Chloride	ND< 2.00

Aromatics	Results in ug / L
Benzene	ND< 0.700
Chlorobenzene	ND< 2.00
Ethylbenzene	ND< 2.00
Toluene	ND< 2.00
m,p - Xylene	ND< 2.00
o - Xylene	ND< 2.00
Styrene	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00

Ketones	Results in ug / L
Acetone	ND< 10.0
2-Butanone	ND< 5.00
2-Hexanone	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00

Miscellaneous	Results in ug / L
Carbon disulfide	ND< 5.00
Vinyl acetate	ND< 5.00

ELAP Number 10958

Method: EPA 8260B

Date File: 65834.D

Comments: ND denotes Non Detect  
 ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information



179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

### Volatile Analysis Report for Non-potable Water (Additional STARS Compounds)

Client: Haley & Aldrich

Client Job Site: Paetec Park

Lab Project Number: 03-1543

Client Job Number: 70806-201

Lab Sample Number: 5821

Field Location: Trip Blank 061203

Date Sampled: 06/12/2003

Field ID Number: N/A

Date Received: 06/13/2003

Sample Type: Water

Date Analyzed: 06/20/2003

Aromatics	Results in ug / L	Aromatics	Results in ug / L
n-Butylbenzene	ND< 2.00	1,2,4-Trimethylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00	1,3,5-Trimethylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00		
n-Propylbenzene	ND< 2.00	<u>Miscellaneous</u>	
Isopropylbenzene	ND< 2.00	Methyl tert-Butyl Ether	ND< 2.00
p-Isopropyltoluene	ND< 2.00		
Naphthalene	ND< 5.00		

ELAP Number 10956

Method: EPA 8260B

Data File: 65834.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information



179 Lake Avenue Rochester, New York 14606 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Non-potable WaterClient: Hely & Aldrich

Client Job Site: Paetec Park

Lab Project Number: 03-1543

Lab Sample Number: 5622

Client Job Number: 70606-201

Field Location: HA-03-113

Date Sampled: 08/12/2003

Date Received: 06/13/2003

Field ID Number: N/A

Date Analyzed: 06/20/2003

Sample Type: Water

Halocarbons	Results in ug / L
Bromodichloromethane	ND< 2.00
Bromomethane	ND< 2.00
Bromoform	ND< 2.00
Carbon tetrachloride	ND< 2.00
Chloroethane	ND< 2.00
Chloromethane	ND< 2.00
2-Chloroethyl vinyl ether	ND< 2.00
Chloroform	ND< 2.00
Dibromochloromethane	ND< 2.00
1,1-Dichloroethane	ND< 2.00
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethane	ND< 2.00
cis-1,2-Dichloroethane	ND< 2.00
trans-1,2-Dichloroethane	ND< 2.00
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Methylene chloride	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	ND< 2.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl Chloride	ND< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: 65835.D

Aromatics	Results in ug / L
Benzene	1.54
Chlorobenzene	ND< 2.00
Ethylbenzene	ND< 2.00
Toluene	ND< 2.00
m,p - Xylene	ND< 2.00
o - Xylene	ND< 2.00
Styrene	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00

Ketones	Results in ug / L
Acetone	ND< 10.0
2-Butanone	ND< 5.00
2-Hexanone	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00

Miscellaneous	Results in ug / L
Carbon disulfide	ND< 5.00
Vinyl acetate	ND< 5.00

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature:

  
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information



179 Lake Avenue Rochester, New York 14608 (585) 647 - 2330 FAX (585) 647 - 3311

**Volatile Analysis Report for Non-potable Water (Additional STARS Compounds)**

Client: Haley & Aldrich

Client Job Site: Paetec Park

Lab Project Number: 03-1643

Lab Sample Number: 6622

Client Job Number: 70806-201

Field Location: HA-03-113

Date Sampled: 06/12/2003

Field ID Number: N/A

Date Received: 06/13/2003

Sample Type: Water

Date Analyzed: 06/20/2003

Aromatics	Results in ug / L	Aromatics	Results in ug / L
n-Butylbenzene	ND< 2.00	1,2,4-Trimethylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00	1,3,5-Trimethylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00		
n-Propylbenzene	ND< 2.00	<b>Miscellaneous</b>	
Isopropylbenzene	ND< 2.00	Methyl tert-Butyl Ether	ND< 2.00
p-Isopropyltoluene	8.05		
Naphthalene	ND< 5.00		

ELAP Number 10958

Method: EPA 8260B

Data File: 65835.D

total VOC 9.59 ug/L  
 0.000#  
 0.010 mg/L

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature   
 Bruce Hoogseeger, Technical Director





179 Lake Avenue Rochester, New York 14606 (585) 647 - 2530 FAX (585) 647 - 3311

### Volatile Analysis Report for Non-potable Water

Client: Hely & Aldrich

Client Job Site: Paetec Park

Lab Project Number: 03-1543

Lab Sample Number: 5623

Client Job Number: 70606-201

Date Sampled: 06/12/2003

Field Location: HA-03-121

Date Received: 06/13/2003

Field ID Number: N/A

Date Analyzed: 06/20/2003

Sample Type: Water

Halocarbons	Results in ug / L
Bromodichloromethane	ND< 2.00
Bromomethane	ND< 2.00
Bromoform	ND< 2.00
Carbon tetrachloride	ND< 2.00
Chloroethane	ND< 2.00
Chloromethane	ND< 2.00
2-Chloroethyl vinyl ether	ND< 2.00
Chloroform	ND< 2.00
Dibromochloromethane	ND< 2.00
1,1-Dichloroethane	ND< 2.00
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	2.85
trans-1,2-Dichloroethene	ND< 2.00
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Methylene chloride	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethane	ND< 2.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl Chloride	4.41

ELAP Number 10958

Method: EPA 8260B

Data File: 65836.D

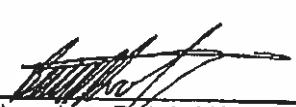
Aromatics	Results in ug / L
Benzene	ND< 0.700
Chlorobenzene	ND< 2.00
Ethylbenzene	ND< 2.00
Toluene	ND< 2.00
m,p - Xylene	ND< 2.00
o - Xylene	ND< 2.00
Styrene	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00

Ketones	Results in ug / L
Acetone	ND< 10.0
2-Butanone	ND< 5.00
2-Hexanone	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00

Miscellaneous	Results in ug / L
Carbon disulfide	ND< 5.00
Vinyl acetate	ND< 5.00

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature: \_\_\_\_\_

  
 Bruce Hoogesteger, Technical Director

Client of Custody provides additional analysis information



179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Non-potable Water (Additional STARS Compounds)

Client: Haley & Aldrich

Client Job Site: Paetec Park

Lab Project Number: 03-1543

Lab Sample Number: 5623

Client Job Number: 70606-201

Field Location: HA-03-121

Date Sampled: 06/12/2003

Field ID Number: N/A

Date Received: 06/13/2003

Sample Type: Water

Date Analyzed: 06/20/2003

Aromatics	Results in ug / L	Aromatics	Results in ug / L
n-Butylbenzene	ND< 2.00	1,2,4-Trimethylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00	1,3,5-Trimethylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00		
n-Propylbenzene	ND< 2.00	Miscellaneous	
Isopropylbenzene	ND< 2.00	Methyl tert-Butyl Ether	ND< 2.00
p-Isopropyltoluene	ND< 2.00		
Naphthalene	ND< 5.00		

ELAP Number 10958

Method: EPA 8260B

Data File: 65836.D

7.06 ug/L  
0.007 mg/L

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature:   
Bruce Hoogesteger: Technical Director



179 Lake Avenue Rochester, New York 14608 (585) 647-2530 FAX (585) 647-3311

Volatile Analysis Report for Non-potable WaterClient: Healy & Aldrich

Client Job Site: Paetec Park

Lab Project Number: 03-1543

Lab Sample Number: 5824

Client Job Number: 70606-201

Date Sampled: 06/12/2003

Field Location: HA-03-108

Date Received: 06/13/2003

Field ID Number: N/A

Date Analyzed: 06/20/2003

Sample Type: Water

Halocarbons	Results in ug / L
Bromodichloromethane	ND< 2.00
Bromomethane	ND< 2.00
Bromoform	ND< 2.00
Carbon tetrachloride	ND< 2.00
Chloroethane	ND< 2.00
Chloromethane	ND< 2.00
2-Chloroethyl vinyl ether	ND< 2.00
Chloroform	ND< 2.00
Dibromochloromethane	ND< 2.00
1,1-Dichloroethane	ND< 2.00
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	ND< 2.00
trans-1,2-Dichloroethene	ND< 2.00
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Methylene chloride	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	ND< 2.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl Chloride	ND< 2.00

Aromatics	Results in ug / L
Benzene	ND< 0.700
Chlorobenzene	ND< 2.00
Ethylbenzene	ND< 2.00
Toluene	ND< 2.00
m,p - Xylene	ND< 2.00
o - Xylene	ND< 2.00
Styrene	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00

Ketones	Results in ug / L
Acetone	ND< 10.0
2-Butanone	ND< 5.00
2-Hexanone	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00

Miscellaneous	Results in ug / L
Carbon disulfide	ND< 5.00
Vinyl acetate	ND< 5.00

ELAP Number 10958

Method: EPA 8260B

Data File: 65837.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature:

  
 Bruce Hoogesteger, Technical Director

ND



179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

**Volatile Analysis Report for Non-potable Water (Additional STARS Compounds)**

Client: **Haley & Aldrich**

Client Job Site: Paetec Park

Lab Project Number: 03-1543

Lab Sample Number: 5624

Client Job Number: 70806-201

Field Location: HA-03-106

Date Sampled: 06/12/2003

Field ID Number: N/A

Date Received: 06/13/2003

Sample Type: Water

Date Analyzed: 06/20/2003

Aromatics	Results in ug / L	Aromatics	Results in ug / L
n-Butylbenzene	ND< 2.00	1,2,4-Trimethylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00	1,3,5-Trimethylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00		
n-Propylbenzene	ND< 2.00	<b>Miscellaneous</b>	
Isopropylbenzene	ND< 2.00	Methyl tert-Butyl Ether	ND< 2.00
p-Isopropyltoluene	ND< 2.00		
Naphthalene	ND< 5.00		

ELAP Number 10958

Method: EPA 8260B

Data File: 65837.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature: \_\_\_\_\_

  
Bruce Hoogesteger: Technical Director



179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Matrix Spike Analysis Report for Non-potable WaterClient: Haley & Aldrich

Client Job Site:	Paetec Park	Lab Project Number:	03-1543
Client Job Number:	70606-201	Date Sampled:	06/12/2003
Field Location:	HA-03-106	Date Received:	06/13/2003
Field ID Number:	N/A	Date Analyzed:	08/20/2003
Sample Type:	Water		

Lab Sample Number: 5624

Matrix Spike Recovery Table

Spiked Compound	Spike Conc	% Recovery
1,1-Dichloroethene	50 ug / L	90.0
Trichloroethene	50 ug / L	100
Benzene	50 ug / L	104
Toluene	50 ug / L	102
Chlorobenzene	50 ug / L	108

Lab Sample Number: 5624

Matrix Spike Duplicate Recovery Table

Spiked Compound	Spike Conc	% Recovery
1,1-Dichloroethene	50 ug / L	96.0
Trichloroethene	50 ug / L	102
Benzene	50 ug / L	108
Toluene	50 ug / L	104
Chlorobenzene	50 ug / L	106

ELAP Number 10958

Spike	Water Advisory QC Spike Limits
1,1-Dichloroethene	34% - 121%
Trichloroethene	41% - 179%
Benzene	67% - 134%
Toluene	70% - 147%
Chlorobenzene	78% - 128%

Comments: ND denotes Not Spiked  
ug / L = microgram per Liter

Signature:

  
 Bruce Hoogesteger, Technical Director



179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

**Volatile LCS Analysis Report for Non-potable Water**Client: **Haley & Aldrich**

Client Job Site:	Paetec Park	Lab Project Number:	03-1543
Client Job Number:	70606-201	Date Sampled:	N/A
Field Location:	N/A	Date Received:	N/A
Field ID Number:	N/A	Date Analyzed:	06/19/2003
Sample Type:	Water		

Lab Sample Number: LCS

**Laboratory Control Spike Recovery Table**

Spiked Compound	Spike Conc	% Recovery
1,1-Dichloroethene	50 ug / L	98.0
Trichloroethene	50 ug / L	104
Benzene	50 ug / L	102
Toluene	50 ug / L	96.0
Chlorobenzene	50 ug / L	102

ELAP Number 10958

Spike	Water Advisory QC Spike Limits
1,1-Dichloroethene	34% - 121%
Trichloroethene	41% - 178%
Benzene	67% - 134%
Toluene	70% - 147%
Chlorobenzene	78% - 128%

Comments: ND denotes Not Spiked  
ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger, Technical Director



ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Non-potable WaterClient: Hely & Aldrich

Client Job Site: Paetec Park

Lab Project Number: 03-1543

Lab Sample Number: Method Blank

Client Job Number: 70606-201

Field Location: N/A

Date Sampled: N/A

Field ID Number: N/A

Date Received: N/A

Sample Type: Water

Date Analyzed: 06/19/2003

Halocarbons	Results in ug / L
Bromodichloromethane	ND< 2.00
Bromomethane	ND< 2.00
Bromoform	ND< 2.00
Carbon tetrachloride	ND< 2.00
Chloroethane	ND< 2.00
Chloromethane	ND< 2.00
2-Chloroethyl vinyl ether	ND< 2.00
Chloroform	ND< 2.00
Dibromochloromethane	ND< 2.00
1,1-Dichloroethane	ND< 2.00
1,2-Dichloroethane	ND< 2.00
1,1-Dichloroethene	ND< 2.00
cis-1,2-Dichloroethene	ND< 2.00
trans-1,2-Dichloroethene	ND< 2.00
1,2-Dichloropropane	ND< 2.00
cis-1,3-Dichloropropene	ND< 2.00
trans-1,3-Dichloropropene	ND< 2.00
Methylene chloride	ND< 5.00
1,1,2,2-Tetrachloroethane	ND< 2.00
Tetrachloroethene	ND< 2.00
1,1,1-Trichloroethane	ND< 2.00
1,1,2-Trichloroethane	ND< 2.00
Trichloroethene	ND< 2.00
Trichlorofluoromethane	ND< 2.00
Vinyl Chloride	ND< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: 65833.D

Aromatics	Results in ug / L
Benzene	ND< 0.700
Chlorobenzene	ND< 2.00
Ethylbenzene	ND< 2.00
Toluene	ND< 2.00
m,p - Xylene	ND< 2.00
o - Xylene	ND< 2.00
Styrene	ND< 2.00
1,2-Dichlorobenzene	ND< 2.00
1,3-Dichlorobenzene	ND< 2.00
1,4-Dichlorobenzene	ND< 2.00

Ketones	Results in ug / L
Acetone	ND< 10.0
2-Butanone	ND< 5.00
2-Hexanone	ND< 5.00
4-Methyl-2-pentanone	ND< 5.00

Miscellaneous	Results in ug / L
Carbon disulfide	ND< 5.00
Vinyl acetate	ND< 5.00

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature: \_\_\_\_\_

Bruce Hoogesteger, Technical Director



179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

**Volatile Analysis Report for Non-potable Water (Additional STARS Compounds)**Client: **Haley & Aldrich**

Client Job Site: Paetec Park

Lab Project Number: 03-1543

Lab Sample Number: Method Blank

Client Job Number: 70606-201

Field Location: N/A

Date Sampled: N/A

Field ID Number: N/A

Date Received: N/A

Sample Type: Water

Date Analyzed: 06/19/2003

Aromatics	Results in ug / L	Aromatics	Results in ug / L
n-Butylbenzene	ND< 2.00	1,2,4-Trimethylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00	1,3,6-Trimethylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00		
n-Propylbenzene	ND< 2.00	<b>Miscellaneous</b>	
Isopropylbenzene	ND< 2.00	Methyl tert-Butyl Ether	ND< 2.00
p-Isopropyltoluene	ND< 2.00		
Naphthalene	ND< 5.00		


ELAP Number 10958

Method: EPA 8260B

Data File: 85833.D

Comments: ND denotes Non Detect  
ug / L = microgram per Liter

Signature:

  
 Bruce Hoogesteger: Technical Director





179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

**Volatile Analysis Report for Non-potable Water**

Client: Haley & Aldrich

Client Job Site: Paetec Park

Lab Project Number: 03-1543

Client Job Number: 70606-201

Date Received: 06/13/2003

Sample Type: Water

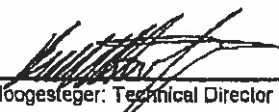
Lab Sample Number	Field Number	Field Location	1,2-DCE	Tol	4-BFB
Method Blank 6/19	N/A	N/A	105	99	93
LCS 6/19	N/A	N/A	110	98	98
5621	N/A	Trip Blank 061203	106	100	96
5622	N/A	HA-03-113	117	108	107
5623	N/A	HA-03-121	107	104	99
5624	N/A	HA-03-106	101	96	93
5624 MS	N/A	HA-03-106	111	102	99
5624 MSD	N/A	HA-03-106	108	102	98

ELAP Number 10958

Surrogate	Soil	Water
	Advisory QC Surrogate Limits	Advisory QC Surrogate Limits
1,2-Dichloroethane-d4 (1,2-DCE)	71% - 133%	78% - 129%
Toluene-d8 (Tol)	75% - 136%	79% - 122%
4-Bromofluorobenzene (4-BFB)	67% - 128%	81% - 125%

Comments:

Signature:

  
 Bruce Hoogesteger, Technical Director



178 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: **Halcy & Aldrich**

Lab Project No. 03-1543

Client Job Site: Paetec Park

Lab Sample No 5622

Client Job No.: 70606-201

Sample Type: Water

Field Location: N/A

Date Sampled: 06/12/2003

Field ID No.: HA-03-113

Date Received: 06/13/2003

Laboratory Report for Metals Analysis in Waters

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Antimony	06/18/2003	EPA 200.7	<0.060
Arsenic	06/18/2003	EPA 200.7	0.052
Barium	06/18/2003	EPA 200.7	0.452
Beryllium	06/18/2003	EPA 200.7	<0.005
Cadmium	06/18/2003	EPA 200.7	<0.005
Chromium	06/18/2003	EPA 200.7	0.091
Copper	06/18/2003	EPA 200.7	0.291
Iron	06/18/2003	EPA 200.7	124
Lead	06/18/2003	EPA 200.7	0.207
Manganese	06/18/2003	EPA 200.7	3.79
Mercury	06/17/2003	EPA 245.1	0.0009
Nickel	06/18/2003	EPA 200.7	0.106
Selenium	06/18/2003	EPA 200.7	<0.005
Silver	06/18/2003	EPA 200.7	<0.010
Thallium	06/18/2003	EPA 200.7	<0.005
Zinc	06/18/2003	EPA 200.7	0.423

ELAP ID No.:10956

Comments:

Approved By: \_\_\_\_\_

*Bruce Hoogesteger*  
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:031543.xls



179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: **Haley & Aldrich** Lab Project No. 03-1543  
 Client Job Site: Paetec Park Lab Sample No 6623  
 Client Job No.: 70806-201 Sample Type: Water  
 Field Location: N/A Date Sampled: 06/12/2003  
 Field ID No.: HA-03-121 Date Received: 06/13/2003

Laboratory Report for Metals Analysis in Waters

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Antimony	06/18/2003	EPA 200.7	<0.060
Arsenic	06/18/2003	EPA 200.7	0.091
Barium	06/18/2003	EPA 200.7	0.938
Beryllium	06/18/2003	EPA 200.7	<0.005
Cadmium	06/18/2003	EPA 200.7	<0.005
Chromium	06/18/2003	EPA 200.7	0.144
Copper	06/18/2003	EPA 200.7	0.148
Iron	06/18/2003	EPA 200.7	182
Lead	06/18/2003	EPA 200.7	0.086
Manganese	06/18/2003	EPA 200.7	5.17
Mercury	06/17/2003	EPA 245.1	0.0003
Nickel	06/18/2003	EPA 200.7	0.142
Selenium	06/18/2003	EPA 200.7	<0.005
Silver	06/18/2003	EPA 200.7	0.011
Thallium	06/18/2003	EPA 200.7	<0.006
Zinc	06/18/2003	EPA 200.7	0.455

ELAP ID No.:10958

Comments:

Approved By: \_\_\_\_\_

  
Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:031543.xls



179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: Halcy & Aldrich Lab Project No. 03-1543  
 Client Job Site: Paetec Park Lab Sample No 5824  
 Client Job No.: 70806-201 Sample Type: Water  
 Field Location: N/A Date Sampled: 06/12/2003  
 Field ID No.: HA-03-106 Date Received: 06/13/2003

Laboratory Report for Metals Analysis In Waters

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Antimony	06/18/2003	EPA 200.7	<0.060
Arsenic	06/18/2003	EPA 200.7	0.046
Barium	06/18/2003	EPA 200.7	0.295
Beryllium	06/18/2003	EPA 200.7	<0.005
Cadmium	06/18/2003	EPA 200.7	<0.005
Chromium	06/18/2003	EPA 200.7	0.046
Copper	06/18/2003	EPA 200.7	0.059
Iron	06/18/2003	EPA 200.7	66.8
Lead	06/18/2003	EPA 200.7	0.075
Manganese	06/18/2003	EPA 200.7	2.55
Mercury	06/17/2003	EPA 245.1	<0.0002
Nickel	06/18/2003	EPA 200.7	0.072
Selenium	06/18/2003	EPA 200.7	<0.005
Silver	06/18/2003	EPA 200.7	<0.010
Thallium	06/18/2003	EPA 200.7	<0.006
Zinc	06/18/2003	EPA 200.7	0.149

ELAP ID No.:10958

Comments:

Approved By: 

Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:031543.xls



179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

Client: **Halcy & Aldrich** Lab Project No. 03-1543  
 Client Job Site: Paetec Park Lab Sample No Method Blank  
 Client Job No.: 70606-201 Sample Type: Water  
 Field Location: N/A Date Sampled: N/A  
 Field ID No.: N/A Date Received: N/A

Laboratory Report for Metals Analysis in Waters

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Antimony	06/18/2003	SW846 6010	<0.060
Arsenic	06/18/2003	SW846 6010	<0.005
Barium	06/18/2003	SW846 6010	<0.020
Beryllium	06/18/2003	SW846 6010	<0.005
Cadmium	06/18/2003	SW846 6010	<0.005
Chromium	06/18/2003	SW846 6010	<0.010
Copper	06/18/2003	SW846 6010	<0.010
Iron	06/18/2003	SW846 6010	<0.100
Lead	06/18/2003	SW846 6010	<0.005
Manganese	06/18/2003	SW846 6010	<0.010
Mercury	06/17/2003	SW846 7471	<0.0002
Nickel	06/18/2003	SW846 6010	<0.040
Selenium	06/18/2003	SW846 6010	<0.005
Silver	06/18/2003	SW846 6010	<0.010
Thallium	06/18/2003	SW846 6010	<0.006
Zinc	06/18/2003	SW846 6010	<0.020

ELAP ID No.:10958

Comments:

Approved By: \_\_\_\_\_

*Bruce Hoogesteger*  
 Bruce Hoogesteger, Technical Director

Chain of Custody provides additional sample information.

File ID:031543.xls

179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311



LABORATORY QUALITY CONTROL  
Metals

Client: **Haley & Aldrich**

QC Type: Laboratory Control Sample

ANALYTE	Spike Added (mg/L)	Method Blank Amount (mg/L)	Spike Recovered (mg/L)	% Recovery
Antimony	2.50	<0.060	2.34	93.6
Arsenic	2.50	<0.005	2.36	94.4
Barium	2.50	<0.020	2.63	105
Beryllium	0.500	<0.005	0.460	92.0
Cadmium	1.00	<0.005	0.964	96.4
Chromium	2.50	<0.010	2.44	97.6
Copper	2.50	<0.010	2.43	97.2
Iron	2.50	<0.100	2.40	96.0
Lead	2.50	<0.005	2.51	100
Manganese	1.00	<0.010	0.969	96.9
Mercury	0.0050	<0.0002	0.00498	99.6
Nickel	5.00	<0.040	4.97	99.4
Selenium	2.50	<0.005	2.31	92.4
Silver	0.250	<0.010	0.242	96.8
Thallium	2.50	<0.006	2.44	97.6
Zinc	2.50	<0.020	2.40	96.0

The acceptance windows for Ics recoveries is 80-120%.



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LABORATORY QUALITY CONTROL  
Metals

Client: Haley & Aldrich

QC Type: Sample Replicate

Matrix: Water

Sample Number: Ics

Analyte	Result (mg/L)	Duplicate (mg/L)	% Difference
Antimony	2.34	2.43	3.9
Arsenic	2.36	2.44	3.0
Barium	2.63	2.68	2.1
Beryllium	0.460	0.488	1.7
Cadmium	0.964	0.988	2.3
Chromium	2.44	2.50	2.3
Copper	2.43	2.49	2.4
Iron	2.40	2.44	1.8
Lead	2.51	2.59	3.1
Manganese	0.969	0.992	2.4
Mercury	0.00498	0.00498	0
Nickel	4.97	5.09	2.3
Selenium	2.31	2.38	3.3
Silver	0.242	0.247	2.0
Thallium	2.44	2.53	3.6
Zinc	2.40	2.46	2.4

The target windows for duplicates is  $\pm 20\%$



179 Lake Avenue Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3111

LABORATORY QUALITY CONTROL  
Metals

Client: Haley & Aldrich

QC Type: Sample Replicate  
Matrix: Water  
Sample Number: Ics

Analyte	Result (mg/L)	Duplicate (mg/L)	% Difference
Antimony	<0.060	<0.060	NC
Arsenic	0.052	0.056	7.4
Barium	0.452	0.437	2.8
Beryllium	<0.005	<0.005	NC
Cadmium	<0.005	<0.005	NC
Chromium	0.091	0.091	0
Copper	0.291	0.298	2.5
Iron	124	121	2.1
Lead	0.207	0.213	2.8
Manganese	3.79	3.78	0.2
Mercury	0.0009	N/A	N/A
Nickel	0.108	0.105	0.6
Selenium	<0.005	<0.005	NC
Silver	<0.010	<0.010	NC
Thallium	<0.006	<0.006	NC
Zinc	0.423	0.422	0.2

The target windows for duplicates is  $\pm 20\%$   
N/A = This sample was not used for matrix QC.





179 Lake Avenue, Rochester, NY 14608 (585) 647-2530 FAX (585) 647-3311

### LABORATORY QUALITY CONTROL

Client: **Haley & Aldrich**

QC Type: Matrix Spike

Matrix: Water

Sample No.: 5622

ANALYTE	Spike Added (mg/L)	Sample Amount (mg/L)	Spike Recovered (mg/L)	% Recovery
Antimony	2.50	<0.060	2.02	80.8
Arsenic	2.50	0.052	2.21	88.3
Barium	2.50	0.452	2.60	85.9
Beryllium	0.500	<0.005	0.412	82.4
Cadmium	1.00	<0.005	0.784	78.4
Chromium	2.50	0.091	2.16	82.8
Copper	2.50	0.291	2.50	86.4
Iron	2.50	124	121	V
Lead	2.50	0.207	2.24	81.3
Manganese	1.00	3.79	4.47	68.0
Mercury	0.0050	0.0009	N/A	N/A
Nickel	5.00	0.106	4.11	80.1
Selenium	2.50	<0.005	2.09	83.6
Silver	0.250	<0.010	0.230	92.0
Thallium	2.50	<0.006	1.94	77.6
Zinc	2.50	0.423	2.32	75.9

The target windows for matrix spike recoveries is 75-125%.

N/A = This sample was not used for matrix QC.

V = Sample concentration is greater than ten times the value of the spike.

**PARADIGM ENVIRONMENTAL SERVICES, INC.**

179 Lake Avenue  
Rochester, NY 14608  
(585) 647-2530 • (800) 724-1997  
FAX (585) 647-3311

**CHAIN OF CUSTODY**

COMPANY: Haley & Aldrich      COMPANY: INVISIO  
 ADDRESS: 200 Town Centre Drive #2      ADDRESS: Some  
 CITY: Dochester, NY 14623      CITY:      STATE:      ZIP:      TURNAROUND TIME (WORKING DAYS): 70006-201  
 PHONE: 321-4248      PHONE:      FAX:      FAX:      STD:      OTHER:   
 ATTN: Barck Barry      ATTN:      ATT:      ATT:      1      2      3      4      5

DATE	TIME	COMPOSITE	CRAB	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINERS	NUMBERS	REMARKS	PARADIGM LAB SAMPLE NUMBER
16/12/03				Trip Black 061203	AG	1			5621
1	1245	X		TB-90-5	GU	4	X	discarded per BB 6/13	
3	1330	X		TB-90-4		4	X	discarded per BB 6/13	
4	1345	X		HA-03-113		4	X		5622
5	1425	X		HA-03-121		4	X		5623
6	1530	X		HA-03-106		4	X		5624
7	1545	X		TB-90-3		4	X	discarded per BB 6/13	
8									
9									
10									

**\*\*LAB USE ONLY\*\***

SAMPLE CONDITION: Check box if acceptable or note deviation:  PRESERVATIONS:  HOLDING TIME:  TEMPERATURE: 10°C

Metals <2 @ lab Voss <2

Relinquished By: [Signature] Date/Time: 6-12-03 1830  
 Received By: [Signature] Date/Time: 6-12-03 1830  
 Relinquished By: [Signature] Date/Time: 6-12-03 1830  
 Received By: [Signature] Date/Time: 6-12-03 1830

Total Cost: PLF.

# Appendix 3

## Site Health and Safety Plan

Location:

Paetec Park –Former Erie Canal Industrial Park  
Lots #2 and #3  
Oak Street  
Rochester, New York 14608

Prepared For:

Rochester Rhinos Stadium, LLC  
116 Business Park Drive  
Utica, New York 13502

February 2004

Revised: August 2004

LaBella Project No's. 203174.02 & 203174.06

# Appendix 3

## Site Health and Safety Plan

Location:

Paetec Park –Former Erie Canal Industrial Park  
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## **1.0 Introduction**

The purpose of this Health and Safety Plan (HASP) is to provide guidelines for responding to potential health and safety issues that may be encountered during the earthwork construction of Paetec Park. The requirements of this HASP are applicable to all LaBella Associates personnel and their authorized visitors at the work site. This document's project specifications, the Soil and Water Management Plan (SWMP), and the Community Air Monitoring Plan (CAMP), are to be consulted for guidance in preventing and quickly abating any threat to human safety or the environment. The provisions of the HASP do not replace or supersede any regulatory requirements of the USEPA, NYSDEC, OSHA or any other regulatory body.

## **2.0 Responsibilities**

The HASP presents guidelines to minimize the risk of injury, to protect personnel, and to provide rapid response in the event of injury. The LaBella Associates HASP is applicable only to activities of LaBella personnel and their authorized visitors. The LaBella Associates Project Manager shall implement the provisions of this HASP for the duration of the project. It is the responsibility of employees to follow the requirements of this HASP, and all applicable company safety procedures.

## **3.0 Activities Covered**

The activities covered under this HASP are limited to the following:

- Observation and inspection of construction activities
- Environmental Monitoring
- Collection of samples
- Assistance with the on-Site management of excavated soil and fill.

## **4.0 Work Area Access and Site Control**

The general contractor will have primary responsibility for work area access and site control.

## **5.0 Potential Health and Safety Hazards**

This section lists some potential health and safety hazards that project personnel may encounter at the project site and some actions to be implemented by LaBella Associates personnel to control and reduce the associated risk to health and safety. This is not intended to be a complete listing of any and all potential health and safety hazards. New or different hazards may be encountered as site environmental and site work conditions change. The suggested actions to be taken under this plan are not to be substituted for good judgment on the part of project personnel. At all times the Site Safety Officer has responsibility for site safety and his or her instructions must be followed.

5.1 *Hazards Due to Heavy Machinery*

**Potential Hazard:**

Heavy machinery including trucks, excavators, backhoes, etc will be in operation at the site. The presence of such equipment presents the danger of being struck or crushed. Use caution when working near heavy machinery.

**Protective Action:**

Make sure that operators are aware of your activities, and heed operator's instructions and warnings. Wear bright colored clothing and walk safe distances from heavy equipment. A safety orange vest, hard hat, and steel toe shoes are required.

5.2 *Excavation Hazards*

**Potential Hazard:**

Excavations and trenches can collapse, causing injury or death. Edges of excavation can be unstable and collapse. Toxic and asphyxiant gases can accumulate in confined spaces and trenches.

**Protective Action:**

LaBella Associates personnel are not to enter excavations over 4 feet in depth unless excavations are adequately sloped. LaBella Associates personnel must receive approval from the LaBella Project Manager to enter an excavation for any reason. Subsequently, LaBella personnel are to receive authorization for entry from the Site Safety Officer.

LaBella Associates personnel should exercise caution near all excavations at the site as it is expected that excavation sidewalls will be unstable.

5.3 *Cuts, Punctures and Other Injuries*

**Potential Hazard:**

In any excavation or construction work site there is the potential for the presence of sharp or jagged edges on rock, metal materials, and other sharp objects. Serious cuts and punctures can result in loss of blood and infection.

**Protective Action:**

The LaBella Associates Project Manager is responsible for making First Aid supplies available at the work site to treat minor injuries. The First Aid supplies will be kept in the work trailer. The Site Safety Officer is responsible for arranging the transportation of authorized on-site personnel to medical facilities when First Aid treatment is not sufficient. Do not move seriously injured workers. All injuries requiring treatment are to be reported to the LaBella Project Manager. Serious injuries are to be reported immediately (see Section 9.0 - Emergency Action Plan).

#### 5.4 *Injury Due to Exposure of Chemical Hazards*

##### **Potential Hazards:**

Volatile organic vapors from petroleum products, chlorinated solvents or other chemicals may be encountered during excavation activities at the project work site. Inhalation of high concentrations of organic vapors can cause headache, stupor, drowsiness, confusion and other health effects. Skin contact can cause irritation, chemical burn, or dermatitis.

##### **Protective Action:**

The presence of organic vapors may be detected by their odor and by monitoring instrumentation. LaBella Associates employees will not work in environments where hazardous concentrations of organic vapors are present. Air monitoring performed by LaBella Associates (see Section 8.0) of the work area will be performed at least every 120 minutes or more often using a Photoionization Detector (PID) or a Flame Ionization Detector (FID). LaBella Associates personnel are to leave the work area whenever PID or FID measurements of ambient air exceed 25 ppm consistently for a 15 minute period.

#### **6.0 Decontamination Procedures**

Upon leaving the work area, LaBella Associates personnel shall decontaminate footwear as needed. Under normal work conditions detailed personal decontamination procedures will not be necessary. Work clothing may become contaminated in the event of an unexpected splash or spill or contact with a contaminated substance. Minor splashes on clothing and footwear can be rinsed with clean water. Heavily contaminated clothing should be removed if it cannot be rinsed with water. LaBella Associates personnel should be prepared with a change of clothing whenever on site.

LaBella will use the contractor's disposal container for disposal of PPE.

#### **7.0 Personal Protective Equipment**

Conditions requiring a level of protection greater than Level D are not expected at this work site. Typical safety equipment identified in company safety and health procedures is required, i.e., hard hat, safety glasses, orange vest, rubber nitrile sampling gloves, splash resistant coveralls, construction grade boots, etc. Additional site-specific personal protective equipment is not necessary when working under the conditions of this plan.

#### **8.0 Air Monitoring**

The LaBella Associates representative/Environmental Monitor will utilize a PID to screen the ambient air in the work areas (excavation, soil staging, and soil grading areas) for total Volatile Organic Compounds (VOCs). Work area ambient air will generally be monitored downwind of the excavation or earthwork area in the general breathing zone

Air monitoring of the work areas will be performed at least every 120 minutes or more often using a photoionization Detector (PID). LaBella Associates personnel are to leave the work area whenever PID measurements of ambient air exceed 25 ppm consistently for a 5 minute period.



LaBella personnel may re-enter the work areas wearing a ½ face respirator with organic vapor cartridges for an 8-hour duration when VOC concentrations average between 25-50 ppm. Organic vapor cartridges are to be changed after each 8-hour of use. If PID readings are sustained at levels above 50 ppm for a 5 minute average, work will be stopped immediately until safe levels of VOCs are encountered.

At all times, the Site Safety Officer has authority over actions of LaBella Associates personnel and their guests at the site and his or her requests for evacuation are to be heeded without delay. Skin and clothing should be rinsed with clean water if chemical exposure has occurred as a result of splash or spill. Contaminated clothing must be removed; LaBella personnel should bring a change of clothes to the site. Water repellent suits will be provided to help prevent contamination of clothing. Medical attention should be provided if skin irritation has occurred. Please refer to Table 1 outlining chemical compounds detected in recent soil samples at the proposed Paetec Park site.

## **9.0 Emergency Action Plan**

In the event of an emergency, employees are to turn off and shut down all powered equipment and leave the work areas immediately. Employees are to walk or drive out of the Site as quickly as possible and wait at the assigned 'safe area'. Follow the instructions of the Site Safety Officer.

LaBella Associates employees are not authorized or trained to provide rescue and medical efforts. Rescue and medical efforts will be provided by local authorities.

## **10.0 Medical Surveillance**

LaBella Associates will provide medical surveillance to all LaBella employees who are injured due to overexposure from an emergency incident involving hazardous substances at this site.

## **11.0 Employee Training**

LaBella personnel who are not familiar with this site plan will receive training on its entire content and organization before working at the Site.

NAROCHESTER RHINOS, LLC\203174.06\CLERICAL\WORD\RPTR4H19GS2.DOC

## SITE HEALTH AND SAFETY PLAN

**Project Title:** Paetec Park Earthwork Construction

**Project Number:** 203174.02

**Project Location (Site):** Oak Street, Rochester, New York 14608

**Project Manager:** Dennis Porter, CHMM

**Plan Approval Date:** \_\_\_\_\_

**Plan Review Date:** \_\_\_\_\_

**Site Safety Supervisor:** Michael Pelychaty

**Site Contact** Michael Pelychaty

**LaBella Safety Director** Richard Rote, CIH

**Proposed Date(s) of Field Activities:** October through December 2003

**Site Conditions:** Generally level, encompassing approximately 5 +/- acres

**Site Environmental Information Provided By:** Prior Environmental Reports by H&A of New York, Day Environmental, Sear-Brown, etc. and LaBella Associates

**Air Monitoring Provided By:** LaBella Associates

**Site Control Provided By:** General Contractor – LeChase Construction

## EMERGENCY CONTACTS

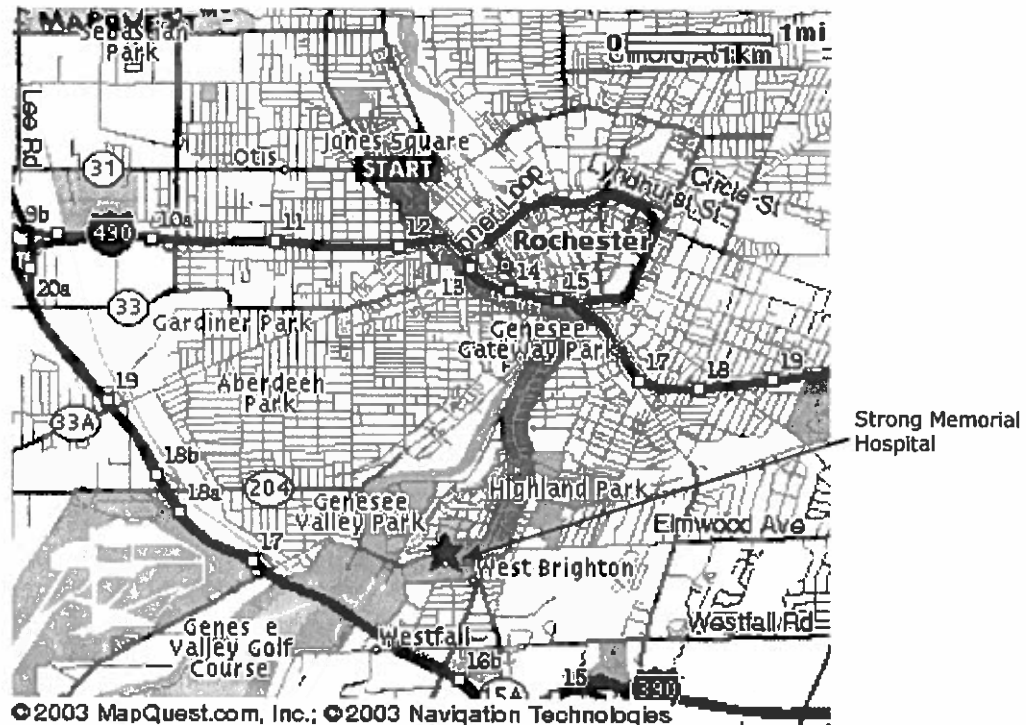
	<b>Name</b>	<b>Phone Number</b>
Ambulance:	As Per Emergency Service	911
Hospital Emergency:	Strong Memorial Hospital	585-275-4551
Poison Control Center:	Finger Lakes Poison Control	585-275-3232
Police (local, state):	City of Rochester Police Department	911
Fire Department:	City of Rochester Fire Department	911
Site Contact:	Michael Pelychaty	585-451-6225
Agency Contact	NYSDEC – Todd Caffoe MCDOH – Joseph Albert NYSDOH – Matthew Farcucci	585-226-5350 585-274-6904 716-847-4513
Project Manager	Dennis Porter, CHMM LaBella Associates, P.C.	Direct: 585-295-6245 Cell: 585-451-4854 Home: 585-289-3380
Safety Supervisor	Michael Pelychaty LaBella Associates, P.C.	Direct: 585-295-6253 Cell: 585-451-6225 Home: 585-654-7923
LaBella Associates Safety Director	Richard Rote, CIH	Direct: 585-295-6241 Home: 585-889-

## MAP AND DIRECTIONS TO THE MEDICAL FACILITY - STRONG MEMORIAL HOSPITAL

**FROM:**  
Oak St  
Rochester, NY  
14608 US

**TO:**  
601 Elmwood Ave  
Rochester, NY  
14620-2945 US

Directions	Distance
1: Start out going Southeast on OAK ST toward LIND ST.	0.21 miles
2: Turn RIGHT onto SMITH ST.	0.09 miles
3: Turn LEFT onto NY-31/W BROAD ST/BROAD ST. Continue to follow NY-31/W BROAD ST.	0.38 miles
4: Merge onto I-490 E via the ramp- on the left.	0.95 miles
5: Take the SOUTH AVE exit- exit number 15- toward RT-15.	0.17 miles
6: Stay straight to go onto SOUTH AVE.	0.04 miles
7: Turn RIGHT onto NY-15/MT HOPE AVE.	1.83 miles
8: Turn RIGHT onto ELMWOOD AVE.	0.30 miles
<b>Total Distance:</b>	3.97 miles
<b>Estimated Drive Time:</b>	8 minutes



**Table 1**  
**Exposure Limits and Recognition Qualities**

Compound	PEL-TWA (ppm)(b)(d)	TLV-TWA (ppm)(c)(d)	LEL (%)(e)	UEL (%)(f)	IDLH (ppm)(g)(d)	Odor	Odor Threshold (ppm)	Ionization Potential
Acetone	750	750	2.5	13	20,000	Sweet	13	9.69
Anthracene	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	1(1)	10	1.3	7.9	Ca	Pleasant	4.7	9.24
Benzo (a) pyrene (coal tar pitch volatiles)	0.2	0.2	NA	NA	700	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	100	100	1.0	6.7	2,000	Ether	2.3	8.76
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA
Ideno (1,2,3-cd) pyrene	NA	065	NA	NA	Ca	Na	Na	Na
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	10, Skin	10	0.9	5.9	250	Moth Balls	0.3	8.12
n-propylbenzene	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA
p-Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	100	100	0.9	9.5	2,000	Sweet	2.1	8.82
1,2,4-Trimethylbenzene	NA	25	0.9	6.4	NA	Distinct	2.4	NA
1,3,5-Trimethylbenzene	NA	25	NA	NA	NA	Distinct	2.4	NA
Xylenes (o,m,p)	100	100	NA	NA	1,000	Sweet	1.1	8.56
<i>Metals</i>								
Arsenic	0.01	0.2	NA	NA	100, Ca	Almond		NA
Barium	0.5	0.5	NA	NA	1,100			NA
Cadmium	0.2	0.5	NA	NA				NA
Chromium	1	0.5	NA	NA				NA
Lead	0.05	0.15	NA	NA	700			NA
Mercury	0.05	0.05	NA	NA	28	Odorless		NA
Selenium	0.2	0.02	NA	NA	Unknown			NA
Silver	0.01	0.01	NA	NA				NA

- (a) Skin = Skin Absorption  
(b) OSHA-PEL Permissible Exposure Limit (flame weighted average, 8-hour); NIOSH Guide, June 1990  
(c) ACGIH - 8 hour time weighted average from Threshold Limit Values and Biological Exposure Indices for 2003.  
(d) Metal compounds in mg/m<sup>3</sup>  
(e) Lower Exposure Limit (%)  
(f) Upper Exposure Limit (%)  
(g) Immediately Dangerous to Life or Health Level; NIOSH Guide, June 1990.

**Notes:**

1. All values are given in parts per million (PPM) unless otherwise indicated.
2. Ca = Possible Human Carcinogen, no IDLH information.

# Appendix 4

## Community Air Monitoring Plan For Earthwork Construction Activities

Location:

Paetec Park –Former Erie Canal Industrial Park  
Lots #2 and #3  
Oak Street  
Rochester, New York 14608

Prepared For:

Rochester Rhinos Stadium, LLC  
116 Business Park Drive  
Utica, New York 13502

February 2004  
Revised: August 2004

LaBella Project No's. 203174.02 & 203174.06

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## 1.0 Introduction

This Community Air Monitoring Plan (CAMP) has been prepared by LaBella Associates on behalf of the Rochester Rhinos, LLC. This CAMP addresses potential Volatile Organic Vapor (VOC) and particulate emissions that may occur during the earthwork portion of construction activities at the proposed Paetec Park. The new PaeTec Park Rhino's stadium is to be located at the former Erie Canal Industrial Park, Lots #2 and #3 adjacent to Oak Street, City of Rochester, Monroe County, New York 14608 (see Figure 1) herein after referred to as the "Site."

The construction tasks planned for this project that are covered by this CAMP include soil excavation, soil transportation and staging activities, utility installation, and site grading. Low levels of VOCs, semi-VOCs, and metals have been detected in the soil or groundwater at the Site. The volatilization of organic compounds through disturbance of soil and groundwater at the Site can potentially result in nuisance odors or health threats to the neighborhood in the immediate vicinity of the Site. Inorganic compounds, present in dust, could potentially be disturbed during earthwork construction activities. This CAMP describes daily air monitoring activities intended to identify and control environmental conditions presenting the potential for neighborhood exposure to ambient airborne hazards resulting from fugitive emissions during earthwork construction activities at the Site.

Pursuant to the New York State Department of Environmental Conservation (NYSDEC) Technical Administrative Guidance Manual (TAGM) #4031 – Fugitive Dust Suppression and particulate Monitoring Program at Inactive Hazardous Waste Sites, (HWR-89-4031), this CAMP addresses methods that will be utilized to monitor particulate (dust) levels at the perimeter of, and within the work areas (excavation, soil staging, and soil grading areas) of the Site. If elevated levels of particulate emissions are encountered, this CAMP identifies the procedures that will be employed to mitigate elevated particulate levels.

Perimeter air monitoring procedures for VOCs are also included in this CAMP. VOC monitoring of the work areas (excavation, soil staging, and soil grading areas) of the Site will also be conducted per the Health and Safety Plan (HASP) prepared for the earthwork portion of this construction project.

## 2.0 Methodology

This CAMP has been designed for construction activities at the proposed PaeTec Park. The CAMP pertains primarily to earthwork activities that disturb soil and groundwater at the Site. Previously completed soil investigations have indicated that soil contamination is not significant or wide spread. No significant vapor emissions are expected. However, the following procedures will be implemented to monitor and, if necessary, mitigate the potential migration of fugitive particulate and/or VOC emissions at the Site.

### 2.1 Site Perimeter Monitoring

Each day of field work during the intrusive earthwork portion of this construction project, a wind sock or flag will be used to monitor wind direction in the work areas (excavation, soil staging, and soil grading areas). Based upon daily wind conditions two temporary monitoring points, one up and one down wind of the work areas, will be identified at the perimeter of the Site or field work area.



Real time particulate monitoring will be performed utilizing DustTrak™ Model 8520 aerosol monitors. VOC monitoring will be performed with a Photovac 2020 Photoionization Detector (PID). Sufficiently wet Site conditions, such as after precipitation, may temporarily eliminate the need for particulate monitoring.

Each day, prior to the commencement of the intrusive earthwork work, background concentrations of particulate and VOCs will be measured and recorded as 5 minute averages at the identified upwind and downwind locations with the typical construction equipment engines and any other gas/diesel engines operating on Site.

Afterward, measurements will be recorded at approximate 120 minute intervals. The recorded 5 minute averages will be used to determine the difference in value between upwind and downwind particulate and VOC concentrations. Work will be temporarily halted and engineering controls, as per Section 2.3 or 2.5, will be implemented if the difference between the upwind and downwind particulate measurements exceed  $100 \mu\text{g}/\text{m}^3$ , or downwind VOC readings exceed upwind readings by 5 parts per million (ppm). It should be noted that downwind VOC readings will be adjusted for engine exhaust. If work is required to be temporarily halted, the Contractor will be required to implement dust suppression methods or other means to control dust and VOCs.

## 2.2 *Work Area Monitoring*

In addition to monitoring the perimeter of the work Site for VOCs and particulates, the immediate work areas (excavation, soil staging, and soil grading areas) will be monitored for VOCs as per the HASP developed for this project. Real time readings from the Work Area Perimeters will be observed and recorded as 5 minute averages at 60 minute intervals or twice the frequency of the perimeter measurements. If measurements exceed 25 ppm, as a 5 minute average, the requirements of Section 2.4 will be implemented.

## 2.3 *Fugitive Dust Control*

If the monitoring at the Site Perimeter, as described in Sections 2.1, indicates an upwind/downwind difference in fugitive particulate emissions greater than  $100 \mu\text{g}/\text{m}^3$ , the contractor will be required to implement dust control measures that may include the following methods:

- Apply water on haul roads.
- Wetting equipment and excavation faces.
- Restricting vehicle speeds to 10 mph.
- Hauling material in properly tarped containers.
- Spraying water in buckets during excavation and dumping.
- Reducing excavation size and/or number of excavations.

The contractor will be required to have a water truck or equivalent on site for dust suppressions methods.

#### **2.4 Minor Vapor Emission Response Plan**

If any single Work Area Perimeter ambient air reading of total VOC exceeds 25 ppm above background, as a 5 minute average, continuous Site Perimeter air monitoring shall be conducted at the downwind monitoring location.

Work activities may continue if total organic vapors are between 5 ppm and 25 ppm over background at the Work Area Perimeter, provided that the organic vapor levels measured at the Site Perimeter remain below 5 ppm over background.

Work activities may need to be modified as per the HASP if VOC measurements remain above 25 ppm at the Work Area Perimeter. See the HASP for further details.

All work activities must be halted and the Major Vapor Emission Response Plan (Section 2.5) will be implemented immediately if organic vapor levels exceed 5 ppm, as a 5 minute average, over background at the Site Perimeter.

#### **2.5 Major Vapor Emission Plan**

Engineering controls to abate the VOC emissions source will immediately be put into effect if total organic vapor levels exceed 5 ppm above background at the Site Perimeter. These engineering controls may include:

- Vapor suppression utilizing foam vapor suppressants, polyethylene sheeting, or water.
- Backfilling of excavations.
- Covering emission sources with stockpiled materials.

If the measures taken to abate the emission source are ineffective and the total organic vapor readings continue at 5 ppm or above background for more than 15 minutes at the Site Perimeter, then the following actions shall be placed into effect.

- Occupants of the residential and commercial buildings will be advised to stay inside their respective structure and to close all windows.
- All personnel listed in the Emergency Contacts section of the HASP for this project will be contacted.
- The Site Safety Supervisor will immediately contact the local authorities and advise them of the circumstances.
- Continuous air monitoring will be conducted at the Site Perimeter and 1 minute average measurements will be recorded every 15 minutes. Air monitoring may be halted or modified by the Site Safety Supervisor when two successive measurements are below 5 ppm.

If readings remain elevated above 5 ppm over background for a period of 60 minutes the Site Safety Officer will request that local authorities evacuate the occupants of the buildings.

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