

# **Supplemental Remedial Investigation**

East 173<sup>rd</sup> Street Works  
Bronx, New York

## **Data Summary Report**



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# **1. Introduction**

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The Supplemental Remedial Investigation (SRI) pre-construction fieldwork conducted for Operable Unit 1 (OU-1) at the East 173<sup>rd</sup> Street Works Former Manufactured Gas Plant (MGP) Site was completed in January 2004. The fieldwork was conducted in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Supplemental Remedial Investigation Work Plan (SRIWP) dated August 28, 2003.

This data summary report presents a brief description of the SRI draft soil and groundwater analytical results, and provides copies of the draft boring logs. Soil borings completed during the SRI included those proposed as part of the SRIWP (PB-1 through PB-21 and six contingent borings) and additional borings not specified in the SRIWP. These additional borings and many of the borings specified in the SRIWP were completed at the request of the NYSDEC, the New York City Department of Parks and Recreation (Parks Department), and/or other stakeholders. A list of the additional borings (including contingent borings) and boring location rationale is provided in Table 1. Figure 1 is a site map illustrating the locations of soil borings and monitoring wells completed during the SRI, as well as the locations of test pits, borings and monitoring wells completed during the Focused Remedial Investigation (FRI) conducted in 2002. Data collected during the FRI and SRI will be used in the design of the remedial action presented in the Draft Remedial Action Work Plan (RAWP) dated February 19, 2004, or otherwise presented in a Final RAWP to be approved by the NYSDEC. Figure 1 includes the proposed remediation excavation limits presented in the Draft RAWP. Detailed data collected during the OU-1 SRI will be presented in the final remedial design documents that will be submitted to NYSDEC for review and comment.

## **2. Analytical Data Summary**

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### **2.1 Soil Data**

As part of the SRI, 48 borings were drilled within Starlight Park. Continuous soil samples were collected from borings during drilling, using a split-spoon sampler or Shelby tube sampler. Bedrock core samples were collected, using a core barrel, from three locations. Four borings were completed as monitoring wells (MW-5S, MW-5D, MW-6S and MW-6D), three borings were completed as geotechnical test wells (TW-1, TW-2 and TW-3), and the remaining 41 borings (PB-1 through PB-31 and PB-33 through PB 42) were backfilled with cement/bentonite grout upon completion. Boring logs are presented in Appendix A.

Subsurface soil samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), target analyte list (TAL) metals, and total cyanide using standard United States Environmental Protection Agency (EPA) SW-846 methodologies. Subsurface soil analytical results were compared to the NYSDEC- established cleanup criteria of 500 parts per million (ppm) total SVOCs and 10 ppm total VOCs. The laboratory analytical results are presented in Table 2. The table presents the sample identification, sample depth, sample date, analytical result and any applicable data qualifier. The compounds listed in Table 2 were detected in one or more of the soil samples. Detections are concentrations above the method detection limit (MDL) for inorganic compounds and the reporting limit (RL) for organic compounds. Compounds detected in a sample are highlighted in blue. Analytical results that exceed the established cleanup criteria are highlighted in red.

### **2.2 Groundwater Data**

The first round of groundwater samples was collected from eight monitoring wells in 2002 (MW-1S, MW-1D, MW-2S, MW-2D, MW-3S, MW-3D, MW-4S and MW-4D). The second round of groundwater samples was collected in January 2004 from the eight above-mentioned wells and four additional monitoring wells installed as part of the SRI (MW-5S, MW-5D, MW-6S and MW-6D). Groundwater samples were analyzed for VOCs, SVOCs, TAL metals, and total cyanide using standard EPA SW-846 methodologies. The results are compared to NYS Ambient Water Quality Standards (AWQS) and Guidance Values in Table 3. Table 3 presents the sample identification, sample date, analytical result, and applicable data qualifiers. The organic and inorganic compounds listed on the table are the compounds detected in one or more groundwater sample at concentrations above the

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analytical MDL for inorganic compounds, or RL for organic compounds. Compounds detected in the sample are highlighted in blue. Analytical results that exceed the AWQS or Guidance Values are highlighted in red.

The second round groundwater sample results are similar (i.e., similar detected compounds and concentrations) to the first round results collected in 2002. The second round groundwater sample collected from monitoring well MW-2D exhibited the highest concentrations of VOCs and polycyclic aromatic hydrocarbons (PAHs), and the greatest number of detected compounds above the AWQS. Monitoring well MW-2D is located adjacent to the smallest holder foundation in an area that contains MGP residue and subsurface soils with a total SVOC concentration greater than 500 ppm. No organic compounds were detected above AWQS in groundwater samples collected from hydraulically upgradient monitoring wells MW-1S and MW-1D or recently installed monitoring wells MW-5S and MW-5D.

Monitoring wells MW-3S, MW-3D, MW-4S, MW-4D and recently installed MW-6S and MW-6D are located along the hydraulically downgradient Site and park property boundary. Second round groundwater samples collected from monitoring wells MW-3D and MW-4D contained acenaphthlene and/or benzene concentrations that exceed AWQS. Groundwater sampled from monitoring well MW-4D exhibited a benzene concentration of 940 ug/l and an acenaphthene concentration of 47 ug/l. Groundwater sampled from monitoring well MW-3D exhibited a benzene concentration of 2 ug/l. No organic compounds were detected above AWQS in groundwater samples collected from recently installed hydraulically downgradient monitoring wells MW-6S and MW-6D.

## **2.3 Data Validation**

All draft analytical data presented in this data summary report were validated in accordance with the National Functional Guidelines for Organic Data Review, EPA 540/R-99/008 dated October 1999 and the National Functional Guidelines for Inorganic Data Review, EPA 540/R-01/008, dated July 2002. Final versions of these data will be presented in the final design documents that will be submitted to NYSDEC for review and comment.

## **Tables**

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**Table 1**  
**Additional Subsurface Soil Boring Summary and Location Rationale**  
**Supplemental Remedial Investigation**  
**East 173<sup>rd</sup> Street Works**  
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Sample Identification	Location Rationale
PB-22 through PB-24	Characterize soils in area of purifier house foundation slab
PB-25	Characterize soils beneath holder slab
PB-26	Collect geotechnical data near Sheridan Expressway
PB-33, PB-34, and PB-35	Soil characterization
SB-TP-22, SB-TP-24, and SB-TP-7	Characterize soils near test pit locations
PB-28, PB-29, PB-41, and PB-42	Step-out borings to delineate impacts observed at PB-11 and PB-12
PB-36 through PB-39	Step-out borings to delineate impacts observed at PB-23
PB-27 and PB-40	Step-out borings to delineate impacts observed at PB-26
PB-31	Step-out boring to delineate impacts observed at PB-22

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	MW-05D SP-MW5D(11-12) 12/3/2003	MW-05D SP-MW5D(26-27) 12/4/2003	PB-01 SP-PB1(12-14) 12/10/2003	PB-01 SP-PB1(26-28) 12/10/2003
<b>VOCs (mg/kg)</b>				
Benzene	0.31 U	0.28 U	0.01 UJ	<b>0.0005 J</b>
Ethylbenzene	0.31 U	0.28 U	0.01 UJ	0.005 U
Toluene	0.31 U	0.28 U	0.01 UJ	0.005 U
Xylene, Total	0.31 U	0.28 U	0.01 UJ	0.005 U
Acetone	0.77 UJ	0.7 UJ	<b>0.11 J</b>	0.021 UJ
Bromodichloromethane	0.31 U	0.28 U	0.01 UJ	0.005 U
Bromoform	0.31 U	0.28 U	<b>0.001 J</b>	0.005 UJ
Bromomethane	0.31 UJ	0.28 U	0.01 UJ	0.005 UJ
Butanone,2- (MEK)	0.31 UJ	0.28 UJ	<b>0.02 J</b>	0.009 U
Carbon disulfide	0.31 U	0.28 U	<b>0.008 J</b>	<b>0.002 J</b>
Chlorobenzene	0.31 U	0.28 U	0.01 UJ	0.005 U
Chloroform	0.31 U	0.28 U	0.01 UJ	0.005 U
Chloromethane	0.31 U	0.28 U	0.01 UJ	0.005 U
Dichloroethane,1,2-	0.31 U	0.28 U	0.01 UJ	0.005 U
Dichloroethene, cis-1,2-	0.31 U	0.28 U	0.01 UJ	<b>0.0007 J</b>
Methylene chloride	0.31 U	0.28 U	0.01 UJ	0.005 U
Styrene	0.31 U	0.28 U	0.01 UJ	0.005 U
Tetrachloroethene	0.31 U	0.28 U	0.01 UJ	0.005 U
Trichloroethene	0.31 U	0.28 U	0.01 UJ	0.005 U
Vinyl chloride	0.31 U	0.28 U	0.01 UJ	0.005 U
Total VOCs	ND	ND	<b>0.139</b>	<b>0.0032</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	0.43 U	0.38 U	<b>0.12 J</b>	0.36 U
Acenaphthylene	0.43 U	0.38 U	<b>0.22 J</b>	0.36 U
Anthracene	0.43 U	0.38 U	<b>0.59 J</b>	0.36 U
Benzo[g,h,i]perylene	0.43 U	0.38 U	<b>2 J</b>	0.36 UJ
Fluoranthene	0.43 U	0.38 U	<b>1.8 J</b>	0.36 U
Fluorene	0.43 U	0.38 U	<b>0.31 J</b>	0.36 U
Methylnaphthalene,2-	0.43 U	0.38 U	<b>0.09 J</b>	0.36 U
Naphthalene	0.43 U	0.38 U	<b>0.16 J</b>	0.36 U
Phenanthrene	0.43 U	0.38 U	<b>2.2 J</b>	0.36 U
Pyrene	<b>0.029 J</b>	0.38 U	<b>3.2 J</b>	0.36 UJ
Benz[a]anthracene	0.43 U	0.38 U	<b>1.1 J</b>	0.36 U
Benzo[a]pyrene	0.43 U	0.38 U	<b>1.8 J</b>	0.36 UJ
Benzo[b]fluoranthene	0.43 U	0.38 U	<b>1.2 J</b>	0.36 UJ
Benzo[k]fluoranthene	0.43 U	0.38 U	<b>1.5 J</b>	0.36 UJ
Chrysene	0.43 U	0.38 U	<b>1.3 J</b>	0.36 U
Dibenz[a,h]anthracene	0.43 U	0.38 U	<b>0.63 J</b>	0.36 UJ
Indeno[1,2,3-cd]pyrene	0.43 U	0.38 U	<b>1.4 J</b>	0.36 UJ
Bis(2-ethylhexyl)phthalate	<b>0.073 J</b>	0.38 U	<b>0.12 J</b>	0.36 U
Butyl benzyl phthalate	0.43 U	0.38 U	0.72 UJ	0.36 U
Carbazole	0.43 U	0.38 U	<b>0.14 J</b>	0.36 U
Dibenzofuran	0.43 U	0.38 U	<b>0.23 J</b>	0.36 U
Dimethylphenol, 2,4-	0.43 U	0.38 U	0.72 UJ	0.36 UJ
Di-n-butyl phthalate	0.43 U	0.38 U	0.72 UJ	0.36 U
Di-n-octyl phthalate	0.43 UJ	0.38 UJ	0.72 UJ	0.36 UJ

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

<b>Chemical Name</b>	<b>MW-05D SP-MW5D(11-12) 12/3/2003</b>	<b>MW-05D SP-MW5D(26-27) 12/4/2003</b>	<b>PB-01 SP-PB1(12-14) 12/10/2003</b>	<b>PB-01 SP-PB1(26-28) 12/10/2003</b>
Methylphenol, 4-	0.43 U	0.38 U	0.72 UJ	0.36 U
Methylphenol,2-	0.43 U	0.38 U	0.72 UJ	0.36 U
Phenol	0.43 U	0.38 U	0.72 UJ	0.36 U
Total SVOCs	<b>0.102</b>	ND	<b>20.11</b>	ND
<b><i>Inorganics (mg/Kg)</i></b>				
Aluminum	<b>11200</b>	<b>6390</b>	<b>16500 J</b>	<b>6730</b>
Antimony	1.9 UJ	1.6 UJ	3.1 UJ	1.6 UJ
Arsenic	<b>2.5</b>	1.3 U	<b>6.4 J</b>	<b>3.1 J</b>
Barium	<b>42.1 J</b>	<b>77.3 J</b>	<b>62.5 J</b>	<b>32.3</b>
Beryllium	0.81 U	0.67 U	1.3 UJ	0.68 U
Cadmium	1.6 U	1.3 U	2.6 UJ	1.4 U
Calcium	<b>1180</b>	<b>1750</b>	<b>3460 J</b>	<b>1560</b>
Chromium	<b>27.4</b>	<b>18.1</b>	<b>39 J</b>	<b>17.3</b>
Cobalt	<b>14.9</b>	<b>7.1</b>	<b>11.4 J</b>	<b>16.1</b>
Copper	<b>13.1</b>	<b>16.9</b>	<b>17.3 J</b>	<b>184 J</b>
Iron	<b>14600</b>	<b>13000</b>	<b>25400 J</b>	<b>12600</b>
Lead	<b>10.9</b>	<b>2.3</b>	<b>34.5 J</b>	<b>4.1</b>
Magnesium	<b>4010</b>	<b>3250</b>	<b>6650 J</b>	<b>2960 J</b>
Manganese	<b>148</b>	<b>397</b>	<b>286 J</b>	<b>96.1</b>
Mercury	0.061 UJ	0.05 UJ	0.1 UJ	0.043 UJ
Nickel	<b>23.8</b>	<b>15.8</b>	<b>26.9 J</b>	<b>27</b>
Potassium	<b>920 J</b>	<b>1670 J</b>	<b>2110 J</b>	<b>1230 J</b>
Silver	0.49 U	0.4 U	0.77 UJ	0.41 U
Sodium	<b>222 J</b>	<b>150 J</b>	<b>1660 J</b>	<b>220</b>
Vanadium	<b>31.4</b>	<b>21.3</b>	<b>45 J</b>	<b>24</b>
Zinc	<b>164</b>	<b>32.6</b>	<b>91.4 J</b>	<b>27.7</b>
Cyanide, Total	R	R	R	R
<b><i>TOC (mg/Kg)</i></b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-02 SP-PB2(5-6) 12/12/2003	PB-02 SP-PB2(10-12) 12/12/2003	PB-02 SP-PB2(22-24) 12/12/2003	PB-03 SP-PB3/(4-6) 12/15/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.0007 J</b>	<b>0.018</b>	<b>0.0009 J</b>	<b>0.001 J</b>
Ethylbenzene	0.005 U	<b>0.002 J</b>	0.005 U	0.006 U
Toluene	<b>0.0006 J</b>	<b>0.005 J</b>	<b>0.0006 J</b>	<b>0.001 J</b>
Xylene, Total	0.005 U	<b>0.024</b>	0.005 U	0.006 U
Acetone	0.019 UJ	0.051 UJ	0.012 UJ	<b>0.078 J</b>
Bromodichloromethane	0.005 U	0.008 U	0.005 U	0.006 U
Bromoform	0.005 U	0.008 U	0.005 U	0.006 U
Bromomethane	R	R	R	R
Butanone,2- (MEK)	0.01 UJ	0.016 UJ	0.01 UJ	<b>0.01 J</b>
Carbon disulfide	0.005 U	<b>0.005 J</b>	0.005 U	0.006 UJ
Chlorobenzene	0.005 U	0.008 U	0.005 U	0.006 U
Chloroform	0.005 U	0.008 U	0.005 U	0.006 U
Chloromethane	0.005 U	0.008 U	0.005 U	0.006 U
Dichloroethane,1,2-	0.005 U	0.008 U	0.005 U	0.006 U
Dichloroethene, cis-1,2-	0.005 U	0.008 U	0.005 U	0.006 U
Methylene chloride	0.005 UJ	0.008 UJ	0.005 UJ	0.006 UJ
Styrene	0.005 U	0.008 U	0.005 U	0.006 U
Tetrachloroethene	0.005 U	0.008 U	0.005 U	<b>0.001 J</b>
Trichloroethene	0.005 UJ	0.008 U	0.005 UJ	0.006 UJ
Vinyl chloride	0.005 U	0.008 U	0.005 U	0.006 U
Total VOCs	<b>0.0013</b>	<b>0.054</b>	<b>0.0015</b>	<b>0.091</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	<b>2.9 J</b>	<b>8.3 J</b>	<b>0.032 J</b>	<b>0.12 J</b>
Acenaphthylene	<b>21 J</b>	<b>11 J</b>	0.36 U	<b>0.45</b>
Anthracene	<b>48 J</b>	<b>28 J</b>	<b>0.061 J</b>	<b>0.54</b>
Benzo[g,h,i]perylene	<b>53 J</b>	<b>34 J</b>	0.36 U	<b>0.35 J</b>
Fluoranthene	<b>220</b>	<b>160</b>	<b>0.15 J</b>	<b>2.1</b>
Fluorene	<b>15 J</b>	<b>11 J</b>	<b>0.11 J</b>	<b>0.16 J</b>
Methylnaphthalene,2-	59 U	45 U	0.36 U	<b>0.13 J</b>
Naphthalene	59 U	45 U	0.36 U	<b>0.2 J</b>
Phenanthrene	<b>95</b>	<b>78</b>	<b>0.11 J</b>	<b>1.3</b>
Pyrene	<b>170</b>	<b>140</b>	<b>0.16 J</b>	<b>2.4</b>
Benz[a]anthracene	<b>110</b>	<b>70</b>	<b>0.045 J</b>	<b>1.5</b>
Benzo[a]pyrene	<b>97</b>	<b>65</b>	<b>0.047 J</b>	<b>1.4</b>
Benzo[b]fluoranthene	<b>75 J</b>	<b>51 J</b>	0.36 UJ	<b>1.8</b>
Benzo[k]fluoranthene	<b>91</b>	<b>52</b>	<b>0.043 J</b>	<b>1.5</b>
Chrysene	<b>97</b>	<b>64</b>	<b>0.05 J</b>	<b>1.5</b>
Dibenz[a,h]anthracene	<b>22 J</b>	<b>12 J</b>	0.36 U	<b>0.16 J</b>
Indeno[1,2,3-cd]pyrene	<b>44 J</b>	<b>30 J</b>	0.36 U	<b>0.36 J</b>
Bis(2-ethylhexyl)phthalate	59 U	45 U	0.36 U	0.4 U
Butyl benzyl phthalate	59 U	45 U	0.36 U	0.4 U
Carbazole	59 U	<b>4.1 J</b>	<b>0.13 J</b>	<b>0.14 J</b>
Dibenzofuran	<b>6.6 J</b>	<b>4.9 J</b>	<b>0.035 J</b>	<b>0.096 J</b>
Dimethylphenol, 2,4-	59 U	45 U	0.36 U	0.4 U
Di-n-butyl phthalate	59 U	45 U	0.36 U	<b>0.083 J</b>
Di-n-octyl phthalate	59 U	45 U	0.36 U	0.4 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-02 SP-PB2(5-6) 12/12/2003	PB-02 SP-PB2(10-12) 12/12/2003	PB-02 SP-PB2(22-24) 12/12/2003	PB-03 SP-PB3/(4-6) 12/15/2003
Methylphenol, 4-	59 U	45 U	0.36 U	<b>0.034 J</b>
Methylphenol,2-	59 U	45 U	0.36 U	0.4 U
Phenol	59 U	45 U	0.36 U	0.4 U
Total SVOCs	<b>1167.5</b>	<b>823.3</b>	<b>0.973</b>	<b>16.323</b>
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>3130</b>	<b>14300</b>	<b>8630</b>	<b>3130</b>
Antimony	1.6 UJ	2.2 UJ	1.6 UJ	1.7 UJ
Arsenic	<b>5.9 J</b>	<b>4.6 J</b>	1.3 U	<b>16.1</b>
Barium	<b>80.4</b>	<b>73.4</b>	<b>42.1</b>	<b>110</b>
Beryllium	0.67 U	0.93 U	0.67 U	0.7 U
Cadmium	1.3 U	1.9 U	1.3 U	<b>3.9</b>
Calcium	<b>2770</b>	<b>2700</b>	<b>1620</b>	<b>7110 J</b>
Chromium	<b>7.2</b>	<b>33.9</b>	<b>18.7</b>	<b>10.3 J</b>
Cobalt	<b>2.6</b>	<b>8.8</b>	<b>6.4</b>	<b>5.6</b>
Copper	<b>22.2 J</b>	<b>20.8 J</b>	<b>21.5 J</b>	<b>60.1</b>
Iron	<b>12600</b>	<b>21900</b>	<b>13600</b>	<b>16100</b>
Lead	<b>92.7</b>	<b>42.4</b>	<b>4</b>	<b>411 J</b>
Magnesium	<b>977 J</b>	<b>4150 J</b>	<b>3700 J</b>	<b>2080</b>
Manganese	<b>90.2</b>	<b>161</b>	<b>117</b>	<b>124 J</b>
Mercury	<b>0.09 J</b>	0.079 UJ	0.052 UJ	<b>0.44 J</b>
Nickel	<b>7.2</b>	<b>23.4</b>	<b>16.4</b>	<b>19.6</b>
Potassium	<b>1270 J</b>	<b>1410 J</b>	<b>2320 J</b>	<b>345 J</b>
Silver	0.4 U	0.56 U	0.4 U	0.42 U
Sodium	<b>275</b>	<b>961</b>	<b>436</b>	<b>166 J</b>
Vanadium	<b>17.9</b>	<b>34.6</b>	<b>26.3</b>	<b>21.5</b>
Zinc	<b>22.4</b>	<b>87.4</b>	<b>35.7</b>	<b>234 J</b>
Cyanide, Total	<b>12.7 J</b>	<b>14.8 J</b>	R	<b>0.0805 J</b>
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-03 SP-PB3/(14-18) 12/15/2003	PB-03 SP-PB3/(22-24) 12/16/2003	PB-04 SP-PB4(6-8) 12/12/2003	PB-04 SP-PB4(10-12) 12/12/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.18 J</b>	<b>0.009</b>	<b>0.013</b>	<b>0.006 J</b>
Ethylbenzene	0.54 U	<b>0.001 J</b>	0.005 U	<b>0.011</b>
Toluene	<b>0.068 J</b>	<b>0.004 J</b>	<b>0.003 J</b>	<b>0.005 J</b>
Xylene, Total	0.54 U	<b>0.006</b>	<b>0.002 J</b>	<b>0.009</b>
Acetone	1.4 UJ	0.018 UJ	0.039 UJ	0.032 UJ
Bromodichloromethane	0.54 U	0.005 U	0.005 U	0.007 U
Bromoform	0.54 UJ	0.005 U	0.005 U	0.007 U
Bromomethane	0.54 UJ	R	R	R
Butanone,2- (MEK)	0.54 UJ	0.01 UJ	0.009 UJ	0.013 UJ
Carbon disulfide	0.54 UJ	<b>0.009</b>	<b>0.002 J</b>	<b>0.006 J</b>
Chlorobenzene	0.54 U	0.005 U	0.005 U	0.007 U
Chloroform	0.54 U	0.005 U	0.005 U	0.007 U
Chloromethane	0.54 UJ	0.005 U	<b>0.002 J</b>	0.007 U
Dichloroethane,1,2-	0.54 U	0.005 U	0.005 U	0.007 U
Dichloroethene, cis-1,2-	0.54 U	0.005 U	0.005 U	0.007 U
Methylene chloride	0.54 U	0.005 UJ	0.005 UJ	0.007 UJ
Styrene	0.54 U	0.005 U	0.005 U	0.007 U
Tetrachloroethene	0.54 U	0.005 U	<b>0.0009 J</b>	0.007 U
Trichloroethene	0.54 U	0.005 UJ	0.005 UJ	0.007 UJ
Vinyl chloride	0.54 UJ	0.005 U	0.005 U	0.007 U
Total VOCs	<b>0.248</b>	<b>0.029</b>	<b>0.0229</b>	<b>0.037</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	<b>18</b>	<b>0.075 J</b>	<b>0.21 J</b>	<b>2.5 J</b>
Acenaphthylene	<b>5.2 J</b>	<b>0.051 J</b>	<b>3.6</b>	<b>0.88 J</b>
Anthracene	<b>27</b>	<b>0.22 J</b>	<b>3.6</b>	<b>4.9</b>
Benzo[g,h,i]perylene	<b>9.5 J</b>	<b>0.11 J</b>	<b>7.5</b>	<b>4.2 J</b>
Fluoranthene	<b>58</b>	<b>0.67</b>	<b>25</b>	<b>18</b>
Fluorene	<b>24</b>	<b>0.22 J</b>	<b>0.75 J</b>	<b>2 J</b>
Methylnaphthalene,2-	<b>1.2 J</b>	0.39 U	3.5 U	<b>1.3 J</b>
Naphthalene	<b>2.1 J</b>	<b>0.085 J</b>	<b>0.71 J</b>	<b>4.2 J</b>
Phenanthrene	<b>80</b>	<b>0.39</b>	<b>10</b>	<b>15</b>
Pyrene	<b>56</b>	<b>0.68</b>	<b>21</b>	<b>18</b>
Benz[a]anthracene	<b>30</b>	<b>0.23 J</b>	<b>13</b>	<b>5.6</b>
Benzo[a]pyrene	<b>23</b>	<b>0.19 J</b>	<b>13</b>	<b>7.6</b>
Benzo[b]fluoranthene	<b>16</b>	<b>0.13 J</b>	<b>11 J</b>	<b>4.5 J</b>
Benzo[k]fluoranthene	<b>23</b>	<b>0.17 J</b>	<b>12</b>	<b>7.4</b>
Chrysene	<b>30</b>	<b>0.22 J</b>	<b>12</b>	<b>6</b>
Dibenz[a,h]anthracene	<b>4.6 J</b>	<b>0.036 J</b>	<b>3.1 J</b>	<b>1.4 J</b>
Indeno[1,2,3-cd]pyrene	<b>11</b>	<b>0.1 J</b>	<b>7</b>	<b>3.6 J</b>
Bis(2-ethylhexyl)phthalate	10 U	0.39 U	3.5 U	4.5 U
Butyl benzyl phthalate	10 U	0.39 U	3.5 U	4.5 U
Carbazole	<b>2.8 J</b>	<b>0.17 J</b>	<b>0.75 J</b>	<b>0.52 J</b>
Dibenzofuran	<b>9 J</b>	<b>0.052 J</b>	<b>0.44 J</b>	<b>0.88 J</b>
Dimethylphenol, 2,4-	10 U	0.39 U	3.5 U	4.5 U
Di-n-butyl phthalate	10 U	0.39 U	3.5 U	4.5 U
Di-n-octyl phthalate	10 U	0.39 U	3.5 U	4.5 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

<b>Chemical Name</b>	<b>PB-03 SP-PB3(14-18) 12/15/2003</b>	<b>PB-03 SP-PB3(22-24) 12/16/2003</b>	<b>PB-04 SP-PB4(6-8) 12/12/2003</b>	<b>PB-04 SP-PB4(10-12) 12/12/2003</b>
Methylphenol, 4-	10 U	0.39 U	<b>0.25 J</b>	4.5 U
Methylphenol,2-	10 U	0.39 U	3.5 U	4.5 U
Phenol	10 U	0.39 U	3.5 U	4.5 U
Total SVOCs	<b>430.4</b>	<b>3.799</b>	<b>144.91</b>	<b>108.48</b>
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>8250</b>	<b>7440</b>	<b>8090</b>	<b>14500</b>
Antimony	1.9 UJ	1.8 UJ	1.6 UJ	1.9 UJ
Arsenic	<b>4.9</b>	1.5 U	<b>6.2 J</b>	1.6 U
Barium	<b>278</b>	<b>39.2</b>	<b>201</b>	<b>61.8</b>
Beryllium	0.77 U	0.76 U	<b>0.74</b>	0.79 U
Cadmium	1.5 U	1.5 U	1.3 U	1.6 U
Calcium	<b>6580 J</b>	<b>25500 J</b>	<b>14400</b>	<b>3490</b>
Chromium	<b>27.1 J</b>	<b>20.1 J</b>	<b>25</b>	<b>32.1</b>
Cobalt	<b>8</b>	<b>4.9</b>	<b>7.8</b>	<b>10.1</b>
Copper	<b>164</b>	<b>16.9</b>	<b>51.6 J</b>	<b>22 J</b>
Iron	<b>32700</b>	<b>10100</b>	<b>20700</b>	<b>21600</b>
Lead	<b>946 J</b>	<b>15.4 J</b>	<b>218</b>	<b>5.8</b>
Magnesium	<b>7140</b>	<b>6200</b>	<b>4470 J</b>	<b>5340 J</b>
Manganese	<b>372 J</b>	<b>193 J</b>	<b>215</b>	<b>187</b>
Mercury	<b>0.19 J</b>	0.054 UJ	<b>0.74 J</b>	0.061 UJ
Nickel	<b>29.4</b>	<b>13.9</b>	<b>18.9</b>	<b>19.7</b>
Potassium	<b>3070 J</b>	<b>1100 J</b>	<b>2520 J</b>	<b>2650 J</b>
Silver	0.46 U	0.46 U	0.39 U	0.47 U
Sodium	<b>413 J</b>	<b>696 J</b>	<b>254</b>	<b>575</b>
Vanadium	<b>27.6</b>	<b>20.2</b>	<b>28.1</b>	<b>37.4</b>
Zinc	<b>553 J</b>	<b>41.2 J</b>	<b>234</b>	<b>67.1</b>
Cyanide, Total	<b>0.278 J</b>	<b>0.358 J</b>	<b>5.46 J</b>	<b>9.61 J</b>
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-04 SP-PB4/(14-16) 12/12/2003	PB-04 SP-PB4(18-20) 12/12/2003	PB-04 SP-PB4/(20-22) 12/12/2003	PB-05 SP-PB5/(6-8) 12/15/2003
<b>VOCs (mg/kg)</b>				
Benzene	NA	<b>0.083</b>	NA	<b>0.003 J</b>
Ethylbenzene	NA	<b>0.007 J</b>	NA	0.005 U
Toluene	NA	<b>0.002 J</b>	NA	<b>0.001 J</b>
Xylene, Total	NA	<b>0.075 J</b>	NA	<b>0.001 J</b>
Acetone	NA	0.024 UJ	NA	<b>0.019 J</b>
Bromodichloromethane	NA	0.006 U	NA	0.005 U
Bromoform	NA	0.006 U	NA	0.005 U
Bromomethane	NA	R	NA	R
Butanone,2- (MEK)	NA	0.013 UJ	NA	0.01 UJ
Carbon disulfide	NA	<b>0.007</b>	NA	<b>0.004 J</b>
Chlorobenzene	NA	0.006 U	NA	0.005 U
Chloroform	NA	0.006 U	NA	0.005 U
Chloromethane	NA	0.006 U	NA	0.005 U
Dichloroethane,1,2-	NA	0.006 U	NA	0.005 U
Dichloroethene, cis-1,2-	NA	0.006 U	NA	0.005 U
Methylene chloride	NA	0.006 UJ	NA	0.005 UJ
Styrene	NA	<b>0.0009 J</b>	NA	0.005 U
Tetrachloroethene	NA	0.006 U	NA	0.005 U
Trichloroethene	NA	0.006 UJ	NA	0.005 UJ
Vinyl chloride	NA	0.006 U	NA	0.005 U
Total VOCs	NA	<b>0.1749</b>	NA	<b>0.028</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	NA	<b>2.4</b>	NA	<b>0.61 J</b>
Acenaphthylene	NA	<b>0.083 J</b>	NA	<b>3.9 J</b>
Anthracene	NA	<b>0.36 J</b>	NA	<b>6.3 J</b>
Benzo[g,h,i]perylene	NA	0.46 U	NA	<b>11</b>
Fluoranthene	NA	<b>1.3</b>	NA	<b>38</b>
Fluorene	NA	<b>1.2</b>	NA	<b>1.5 J</b>
Methylnaphthalene,2-	NA	<b>0.045 J</b>	NA	7.3 U
Naphthalene	NA	<b>0.62</b>	NA	<b>1.5 J</b>
Phenanthrene	NA	<b>0.21 J</b>	NA	<b>20</b>
Pyrene	NA	<b>0.97</b>	NA	<b>43</b>
Benz[a]anthracene	NA	<b>0.045 J</b>	NA	<b>21</b>
Benzo[a]pyrene	NA	<b>0.038 J</b>	NA	<b>20</b>
Benzo[b]fluoranthene	NA	0.46 UJ	NA	<b>16</b>
Benzo[k]fluoranthene	NA	0.46 U	NA	<b>16</b>
Chrysene	NA	<b>0.043 J</b>	NA	<b>20</b>
Dibenz[a,h]anthracene	NA	0.46 U	NA	<b>3.9 J</b>
Indeno[1,2,3-cd]pyrene	NA	0.46 U	NA	<b>12</b>
Bis(2-ethylhexyl)phthalate	NA	0.46 U	NA	7.3 U
Butyl benzyl phthalate	NA	<b>0.057 J</b>	NA	7.3 U
Carbazole	NA	<b>0.54</b>	NA	<b>1.4 J</b>
Dibenzofuran	NA	<b>0.57</b>	NA	<b>0.8 J</b>
Dimethylphenol, 2,4-	NA	0.46 U	NA	7.3 U
Di-n-butyl phthalate	NA	0.46 U	NA	7.3 U
Di-n-octyl phthalate	NA	0.46 U	NA	7.3 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-04 SP-PB4/(14-16) 12/12/2003	PB-04 SP-PB4(18-20) 12/12/2003	PB-04 SP-PB4/(20-22) 12/12/2003	PB-05 SP-PB5/(6-8) 12/15/2003
Methylphenol, 4-	NA	0.46 U	NA	7.3 U
Methylphenol,2-	NA	0.46 U	NA	7.3 U
Phenol	NA	0.46 U	NA	7.3 U
Total SVOCs	NA	<b>8.481</b>	NA	<b>236.91</b>
<b>Inorganics (mg/Kg)</b>				
Aluminum	NA	<b>11100</b>	NA	<b>9760</b>
Antimony	NA	2 UJ	NA	1.6 UJ
Arsenic	NA	1.6 U	NA	<b>6</b>
Barium	NA	<b>32.2</b>	NA	<b>142</b>
Beryllium	NA	0.82 U	NA	0.67 U
Cadmium	NA	1.6 U	NA	1.3 U
Calcium	NA	<b>2330</b>	NA	<b>11000 J</b>
Chromium	NA	<b>26</b>	NA	<b>25.3 J</b>
Cobalt	NA	<b>7</b>	NA	<b>11.6</b>
Copper	NA	<b>7.8 J</b>	NA	<b>58.3</b>
Iron	NA	<b>16300</b>	NA	<b>26800</b>
Lead	NA	<b>4.5</b>	NA	<b>397 J</b>
Magnesium	NA	<b>3730 J</b>	NA	<b>5490</b>
Manganese	NA	<b>193</b>	NA	<b>284 J</b>
Mercury	NA	0.07 UJ	NA	<b>0.31 J</b>
Nickel	NA	<b>15.4</b>	NA	<b>24.7</b>
Potassium	NA	<b>483 J</b>	NA	<b>3350 J</b>
Silver	NA	0.49 U	NA	0.4 U
Sodium	NA	<b>517</b>	NA	<b>238 J</b>
Vanadium	NA	<b>27.7</b>	NA	<b>31.9</b>
Zinc	NA	<b>54.7</b>	NA	<b>117 J</b>
Cyanide, Total	NA	<b>13.2 J</b>	NA	<b>0.527 J</b>
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	<b>13000</b>	NA	<b>11000</b>	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-05 SP-PB5/(12-14) 12/15/2003	PB-06 SP-PB6/(12-13) 12/16/2003	PB-06 SP-PB6/(14-15) 12/16/2003	PB-06 SP-PB6/(20-21) 12/16/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.011 J</b>	<b>5.4</b>	<b>15 J</b>	<b>2.1</b>
Ethylbenzene	<b>0.002 J</b>	<b>0.51 J</b>	<b>0.59 J</b>	<b>0.098 J</b>
Toluene	<b>0.003 J</b>	<b>1.5</b>	<b>1.2 J</b>	<b>0.075 J</b>
Xylene, Total	<b>0.004 J</b>	<b>6.1</b>	<b>7.6 J</b>	<b>0.37 J</b>
Acetone	<b>0.095 J</b>	1.8 UJ	2.2 UJ	1.3 UJ
Bromodichloromethane	0.008 UJ	0.73 U	0.88 UJ	0.52 U
Bromoform	0.008 UJ	0.73 UJ	0.88 UJ	0.52 UJ
Bromomethane	R	0.73 UJ	0.88 UJ	0.52 UJ
Butanone,2- (MEK)	<b>0.023 J</b>	0.73 UJ	0.88 UJ	0.52 UJ
Carbon disulfide	<b>0.078 J</b>	0.73 UJ	0.88 UJ	0.52 UJ
Chlorobenzene	0.008 UJ	0.73 U	0.88 UJ	0.52 U
Chloroform	0.008 UJ	0.73 U	0.88 UJ	0.52 U
Chloromethane	0.008 UJ	0.73 UJ	0.88 UJ	0.52 UJ
Dichloroethane,1,2-	0.008 UJ	0.73 U	0.88 UJ	0.52 U
Dichloroethene, cis-1,2-	0.008 UJ	0.73 U	0.88 UJ	0.52 U
Methylene chloride	0.008 UJ	0.73 U	0.88 UJ	0.52 U
Styrene	0.008 UJ	<b>0.095 J</b>	0.88 UJ	0.52 U
Tetrachloroethene	0.008 UJ	0.73 U	0.88 UJ	0.52 U
Trichloroethene	0.008 UJ	0.73 U	0.88 UJ	0.52 U
Vinyl chloride	0.008 UJ	0.73 UJ	0.88 UJ	0.52 UJ
Total VOCs	<b>0.216</b>	<b>13.605</b>	<b>24.39</b>	<b>2.643</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	<b>0.15 J</b>	<b>1.8 J</b>	<b>0.21 J</b>	0.41 U
Acenaphthylene	<b>0.51 J</b>	<b>0.4 J</b>	<b>0.27 J</b>	0.41 U
Anthracene	<b>0.69 J</b>	<b>2.2 J</b>	<b>0.92 J</b>	0.41 U
Benzo[g,h,i]perylene	<b>0.8 J</b>	<b>0.82 J</b>	<b>0.6 J</b>	0.41 U
Fluoranthene	<b>2.5 J</b>	<b>4.4 J</b>	<b>2.2 J</b>	0.41 U
Fluorene	<b>0.34 J</b>	<b>2.4 J</b>	<b>0.58 J</b>	0.41 U
Methylnaphthalene,2-	1.3 UJ	<b>12</b>	<b>0.41 J</b>	0.41 U
Naphthalene	<b>0.22 J</b>	<b>75 J</b>	<b>10 J</b>	<b>0.2 J</b>
Phenanthrene	<b>1.9 J</b>	<b>8.8 J</b>	<b>3.1 J</b>	0.41 U
Pyrene	<b>2.3 J</b>	<b>4.6 J</b>	<b>2.1 J</b>	0.41 U
Benz[a]anthracene	<b>2.1 J</b>	<b>1.8 J</b>	<b>1.1 J</b>	0.41 U
Benzo[a]pyrene	<b>2.1 J</b>	<b>1.5 J</b>	<b>1.5 J</b>	0.41 U
Benzo[b]fluoranthene	<b>2.7 J</b>	11 U	<b>0.99 J</b>	0.41 U
Benzo[k]fluoranthene	<b>2.8 J</b>	<b>1.3 J</b>	<b>1.2 J</b>	0.41 U
Chrysene	<b>2.2 J</b>	<b>1.7 J</b>	<b>1.1 J</b>	0.41 U
Dibenz[a,h]anthracene	<b>0.33 J</b>	11 U	<b>0.25 J</b>	0.41 U
Indeno[1,2,3-cd]pyrene	<b>1.1 J</b>	<b>0.77 J</b>	<b>0.71 J</b>	0.41 U
Bis(2-ethylhexyl)phthalate	1.3 UJ	11 U	1.5 UJ	0.41 U
Butyl benzyl phthalate	1.3 UJ	11 U	1.5 UJ	0.41 U
Carbazole	<b>0.21 J</b>	<b>2 J</b>	<b>0.49 J</b>	0.41 U
Dibenzofuran	<b>0.22 J</b>	<b>3.6 J</b>	<b>0.52 J</b>	0.41 U
Dimethylphenol, 2,4-	1.3 UJ	<b>7.2 J</b>	<b>3.7 J</b>	0.41 U
Di-n-butyl phthalate	1.3 UJ	11 U	1.5 UJ	0.41 U
Di-n-octyl phthalate	1.3 UJ	11 U	1.5 UJ	0.41 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-05 SP-PB5/(12-14) 12/15/2003	PB-06 SP-PB6/(12-13) 12/16/2003	PB-06 SP-PB6/(14-15) 12/16/2003	PB-06 SP-PB6/(20-21) 12/16/2003
Methylphenol, 4-	1.3 UJ	11 U	<b>0.62 J</b>	0.41 U
Methylphenol,2-	1.3 UJ	11 U	<b>0.12 J</b>	<b>0.024 J</b>
Phenol	1.3 UJ	11 U	1.5 UJ	0.41 U
Total SVOCs	<b>23.17</b>	<b>132.29</b>	<b>32.69</b>	<b>0.224</b>
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>14500 J</b>	<b>14000</b>	<b>19600 J</b>	<b>9710</b>
Antimony	2.7 UJ	2.4 UJ	3.2 UJ	1.7 UJ
Arsenic	<b>2.7 J</b>	<b>4.3</b>	<b>5.8 J</b>	1.4 U
Barium	<b>64.3 J</b>	<b>57.1</b>	<b>64.6 J</b>	<b>33.5</b>
Beryllium	1.1 UJ	1 U	1.3 UJ	0.71 U
Cadmium	2.3 UJ	2 U	2.6 UJ	1.4 U
Calcium	<b>5110 J</b>	<b>13500 J</b>	<b>12500 J</b>	<b>866 J</b>
Chromium	<b>31.3 J</b>	<b>30.5 J</b>	<b>44.8 J</b>	<b>25 J</b>
Cobalt	<b>5.8 J</b>	<b>7</b>	<b>15.2 J</b>	<b>6.2</b>
Copper	<b>19.9 J</b>	<b>16.7</b>	<b>13.1 J</b>	<b>8</b>
Iron	<b>22200 J</b>	<b>28600</b>	<b>37300 J</b>	<b>10600</b>
Lead	<b>26.1 J</b>	<b>26.2 J</b>	<b>17.1 J</b>	<b>3.4 J</b>
Magnesium	<b>4370 J</b>	<b>4240</b>	<b>7000 J</b>	<b>4140</b>
Manganese	<b>182 J</b>	<b>178 J</b>	<b>357 J</b>	<b>139 J</b>
Mercury	0.099 UJ	<b>0.098 J</b>	0.11 UJ	0.053 UJ
Nickel	<b>17.4 J</b>	<b>18.7</b>	<b>30.9 J</b>	<b>12.7</b>
Potassium	<b>1280 J</b>	<b>1230 J</b>	<b>2420 J</b>	<b>375 J</b>
Silver	0.68 UJ	0.61 U	0.79 UJ	0.43 U
Sodium	<b>841 J</b>	<b>807 J</b>	<b>1100 J</b>	<b>398 J</b>
Vanadium	<b>36.5 J</b>	<b>38.5 J</b>	<b>51.4 J</b>	<b>26.6</b>
Zinc	<b>52 J</b>	<b>54.2</b>	<b>81.8 J</b>	<b>47.7 J</b>
Cyanide, Total	<b>67.4 J</b>	<b>1.77 J</b>	<b>1.17 J</b>	0.0652 UJ
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	<b>70000 J</b>	NA	<b>82000 J</b>	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-07 SP-PB-7/(14-15) 11/12/2003	PB-07 SP-PB-7/(21-22) 11/12/2003	PB-08 SP-PB-8(12-14) 12/1/2003	PB-08 SP-PB-8(20-22) 12/2/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>2.1 J</b>	<b>1.2</b>	<b>0.004 J</b>	<b>0.014</b>
Ethylbenzene	<b>1.4 J</b>	0.36 U	<b>0.019 J</b>	0.005 U
Toluene	<b>0.32 J</b>	0.36 U	0.01 UJ	0.005 U
Xylene, Total	<b>1.4 J</b>	0.36 U	<b>0.14 J</b>	<b>0.004 J</b>
Acetone	1.2 UJ	0.9 UJ	<b>0.07 J</b>	<b>0.011 J</b>
Bromodichloromethane	0.5 UJ	0.36 U	0.01 UJ	0.005 U
Bromoform	0.5 UJ	0.36 UJ	0.01 UJ	0.005 U
Bromomethane	0.5 UJ	0.36 UJ	0.01 UJ	0.005 UJ
Butanone,2- (MEK)	0.5 UJ	0.36 U	R	R
Carbon disulfide	<b>0.064 J</b>	0.36 UJ	<b>0.027 J</b>	<b>0.009</b>
Chlorobenzene	0.5 UJ	0.36 U	0.01 UJ	0.005 U
Chloroform	0.5 UJ	0.36 U	0.01 UJ	0.005 U
Chloromethane	0.5 UJ	0.36 UJ	0.01 UJ	0.005 U
Dichloroethane,1,2-	0.5 UJ	0.36 U	0.01 UJ	0.005 U
Dichloroethene, cis-1,2-	0.5 UJ	0.36 U	0.01 UJ	0.005 U
Methylene chloride	0.5 UJ	0.36 UJ	0.01 UJ	0.005 UJ
Styrene	0.5 UJ	0.36 U	0.01 UJ	0.005 U
Tetrachloroethene	0.5 UJ	0.36 U	0.01 UJ	0.005 U
Trichloroethene	0.5 UJ	0.36 U	0.01 UJ	0.005 U
Vinyl chloride	0.5 UJ	0.36 UJ	0.01 UJ	0.005 U
Total VOCs	<b>5.284</b>	<b>1.2</b>	<b>0.26</b>	<b>0.038</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	0.65 UJ	<b>0.96</b>	<b>5.7 J</b>	<b>0.025 J</b>
Acenaphthylene	0.65 UJ	0.44 U	<b>7.2 J</b>	0.37 U
Anthracene	0.65 UJ	<b>0.042 J</b>	<b>43 J</b>	<b>0.016 J</b>
Benzo[g,h,i]perylene	0.65 UJ	0.44 UJ	<b>23 J</b>	0.37 U
Fluoranthene	0.65 UJ	0.44 U	<b>90 J</b>	<b>0.14 J</b>
Fluorene	0.65 UJ	<b>0.35 J</b>	<b>23 J</b>	0.37 U
Methylnaphthalene,2-	0.65 UJ	<b>1.4</b>	<b>16 J</b>	0.37 U
Naphthalene	0.65 UJ	<b>0.14 J</b>	<b>58 J</b>	<b>0.063 J</b>
Phenanthrene	0.65 UJ	<b>0.35 J</b>	<b>97 J</b>	<b>0.037 J</b>
Pyrene	<b>0.068 J</b>	<b>0.064 J</b>	<b>87 J</b>	<b>0.19 J</b>
Benz[a]anthracene	0.65 UJ	<b>0.022 J</b>	<b>50 J</b>	<b>0.033 J</b>
Benzo[a]pyrene	0.65 UJ	<b>0.78</b>	<b>43 J</b>	<b>0.025 J</b>
Benzo[b]fluoranthene	0.65 UJ	0.44 U	<b>28 J</b>	0.37 U
Benzo[k]fluoranthene	0.65 UJ	0.44 U	<b>38 J</b>	0.37 U
Chrysene	0.65 UJ	<b>0.023 J</b>	<b>44 J</b>	<b>0.032 J</b>
Dibenz[a,h]anthracene	0.65 UJ	0.44 UJ	<b>8.1 J</b>	0.37 U
Indeno[1,2,3-cd]pyrene	0.65 UJ	0.44 UJ	<b>23 J</b>	0.37 U
Bis(2-ethylhexyl)phthalate	0.65 UJ	0.44 U	20 UJ	0.37 U
Butyl benzyl phthalate	0.65 UJ	0.44 U	20 UJ	0.37 U
Carbazole	0.65 UJ	<b>0.61</b>	<b>9.4 J</b>	<b>0.033 J</b>
Dibenzofuran	0.65 UJ	<b>0.46</b>	<b>19 J</b>	0.37 U
Dimethylphenol, 2,4-	<b>0.12 J</b>	0.44 U	20 UJ	0.37 U
Di-n-butyl phthalate	0.65 UJ	0.44 U	20 UJ	0.37 U
Di-n-octyl phthalate	0.65 UJ	0.44 U	20 UJ	0.37 UJ

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-07 SP-PB-7/(14-15) 11/12/2003	PB-07 SP-PB-7/(21-22) 11/12/2003	PB-08 SP-PB-8(12-14) 12/1/2003	PB-08 SP-PB-8(20-22) 12/2/2003
Methylphenol, 4-	<b>0.19 J</b>	0.44 U	20 UJ	0.37 U
Methylphenol,2-	0.65 UJ	0.44 U	20 UJ	0.37 U
Phenol	0.65 UJ	0.44 U	20 UJ	<b>0.028 J</b>
Total SVOCs	<b>0.378</b>	<b>5.201</b>	<b>712.4</b>	<b>0.622</b>
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>16600 J</b>	<b>4650</b>	<b>18500</b>	<b>4440</b>
Antimony	3 UJ	2 UJ	3.6 UJ	1.7 UJ
Arsenic	<b>9.9 J</b>	1.7 U	<b>5.7</b>	1.4 U
Barium	<b>59.1 J</b>	<b>17.7</b>	<b>69.8 J</b>	<b>33.4 J</b>
Beryllium	1.2 UJ	0.83 U	1.5 UJ	0.69 U
Cadmium	2.5 UJ	1.7 U	3 UJ	1.4 U
Calcium	<b>4070 J</b>	<b>1090</b>	<b>15100 J</b>	<b>1110</b>
Chromium	<b>39.6 J</b>	<b>17.3</b>	<b>40 J</b>	<b>16</b>
Cobalt	<b>19 J</b>	<b>6.1</b>	<b>8.8 J</b>	<b>9</b>
Copper	<b>12.2 J</b>	<b>5.9</b>	<b>13.6 J</b>	<b>14.1</b>
Iron	<b>38500 J</b>	<b>5420</b>	<b>23100 J</b>	<b>11200</b>
Lead	<b>11.5 J</b>	<b>2.3</b>	<b>17.8 J</b>	<b>2</b>
Magnesium	<b>7490 J</b>	<b>1900 J</b>	<b>6500 J</b>	<b>1850</b>
Manganese	<b>416 J</b>	<b>69.9</b>	<b>320 J</b>	<b>70.7</b>
Mercury	0.098 UJ	0.06 U	0.11 UJ	0.052 UJ
Nickel	<b>32.3 J</b>	<b>10.4</b>	<b>23.5 J</b>	<b>9.8</b>
Potassium	<b>2520 J</b>	<b>436 J</b>	<b>2290 J</b>	<b>1450 J</b>
Silver	0.75 UJ	0.5 U	0.9 UJ	0.41 U
Sodium	<b>2020 J</b>	400 UJ	<b>1930 J</b>	<b>245 J</b>
Vanadium	<b>51.7 J</b>	<b>25.8</b>	<b>52 J</b>	<b>16.3</b>
Zinc	<b>78.4 J</b>	<b>43.4 J</b>	<b>69.4 J</b>	<b>21.7</b>
Cyanide, Total	0.106 UJ	0.0734 U	<b>16.6 J</b>	R
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-09 SP-PB-9/(29-30) 11/12/2003	PB-10 SP-PB-10/(12-13) 11/10/2003	PB-10 SP-PB-10/(19-20) 11/10/2003	PB-11 SP-PB-11/7-8 11/7/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.023</b>	<b>1.8</b>	<b>0.49</b>	<b>5.4 J</b>
Ethylbenzene	<b>0.003 J</b>	<b>0.54</b>	0.35 U	<b>1.2 J</b>
Toluene	<b>0.022</b>	<b>0.13 J</b>	0.35 U	<b>9.1</b>
Xylene, Total	<b>0.041</b>	<b>3.4</b>	<b>0.3 J</b>	<b>31</b>
Acetone	R	1.2 UJ	0.86 UJ	14 UJ
Bromodichloromethane	0.006 U	0.47 U	0.35 U	5.8 U
Bromoform	0.006 UJ	0.47 UJ	0.35 UJ	5.8 UJ
Bromomethane	0.006 UJ	0.47 UJ	0.35 UJ	5.8 UJ
Butanone,2- (MEK)	R	0.47 U	0.35 U	5.8 UJ
Carbon disulfide	<b>0.002 J</b>	0.47 UJ	0.35 UJ	5.8 UJ
Chlorobenzene	0.006 U	0.47 U	0.35 U	5.8 U
Chloroform	0.006 U	0.47 U	0.35 U	5.8 U
Chloromethane	0.006 U	0.47 UJ	0.35 UJ	5.8 UJ
Dichloroethane,1,2-	0.006 U	0.47 U	0.35 U	5.8 U
Dichloroethene, cis-1,2-	0.006 U	0.47 U	0.35 U	5.8 U
Methylene chloride	0.006 UJ	0.47 U	0.35 U	5.8 UJ
Styrene	0.006 U	0.47 U	0.35 U	<b>3.1 J</b>
Tetrachloroethene	0.006 U	0.47 U	0.35 U	5.8 U
Trichloroethene	0.006 U	0.47 U	0.35 U	5.8 U
Vinyl chloride	0.006 U	0.47 UJ	0.35 UJ	5.8 UJ
Total VOCs	<b>0.091</b>	<b>5.87</b>	<b>0.79</b>	<b>49.8</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	<b>0.62 J</b>	1.3 U	0.88 U	<b>51 J</b>
Acenaphthylene	<b>1.3 J</b>	1.3 U	0.88 U	<b>250 J</b>
Anthracene	<b>2.9</b>	1.3 U	0.88 U	<b>350</b>
Benzo[g,h,i]perylene	<b>0.95 J</b>	1.3 UJ	0.88 UJ	<b>210 J</b>
Fluoranthene	<b>5.9</b>	1.3 U	0.88 U	<b>1100</b>
Fluorene	<b>2.4</b>	1.3 U	0.88 U	<b>200 J</b>
Methylnaphthalene,2-	<b>2.6</b>	1.3 U	<b>0.23 J</b>	<b>250 J</b>
Naphthalene	<b>7.3</b>	<b>7.3</b>	<b>4.3</b>	<b>710</b>
Phenanthrene	<b>8.3</b>	1.3 U	0.88 U	<b>1300</b>
Pyrene	<b>5.4</b>	<b>0.11 J</b>	0.88 U	<b>860</b>
Benz[a]anthracene	<b>2.4</b>	<b>0.066 J</b>	0.88 U	<b>440</b>
Benz[a]pyrene	<b>2</b>	1.3 U	0.88 U	<b>370</b>
Benzo[b]fluoranthene	<b>1.5 J</b>	1.3 U	0.88 U	<b>260 J</b>
Benzo[k]fluoranthene	<b>2</b>	1.3 U	0.88 U	<b>370</b>
Chrysene	<b>2</b>	1.3 U	0.88 U	<b>390</b>
Dibenz[a,h]anthracene	<b>0.31 J</b>	1.3 UJ	0.88 UJ	<b>71 J</b>
Indeno[1,2,3-cd]pyrene	<b>0.91 J</b>	1.3 UJ	0.88 UJ	<b>210 J</b>
Bis(2-ethylhexyl)phthalate	1.5 U	1.3 U	0.88 U	300 U
Butyl benzyl phthalate	1.5 U	1.3 U	0.88 U	300 U
Carbazole	<b>1.2 J</b>	1.3 U	0.88 U	<b>140 J</b>
Dibenzofuran	<b>2.1</b>	1.3 U	0.88 U	<b>230 J</b>
Dimethylphenol, 2,4-	<b>0.16 J</b>	<b>1.1 J</b>	0.88 U	300 U
Di-n-butyl phthalate	1.5 U	1.3 U	0.88 U	300 U
Di-n-octyl phthalate	1.5 U	1.3 U	0.88 U	300 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-09 SP-PB-9/(29-30) 11/12/2003	PB-10 SP-PB-10/(12-13) 11/10/2003	PB-10 SP-PB-10/(19-20) 11/10/2003	PB-11 SP-PB-11/7-8 11/7/2003
Methylphenol, 4-	<b>0.1 J</b>	1.3 U	0.88 U	300 U
Methylphenol,2-	1.5 U	1.3 U	0.88 U	300 U
Phenol	1.5 U	1.3 U	0.88 U	300 U
Total SVOCs	<b>52.35</b>	<b>8.686</b>	<b>4.53</b>	<b>7762</b>
<b><i>Inorganics (mg/Kg)</i></b>				
Aluminum	<b>4060</b>	<b>21300</b>	<b>10300</b>	<b>3580</b>
Antimony	1.6 UJ	2.8 UJ	2 UJ	1.7 UJ
Arsenic	1.3 U	<b>6.3</b>	1.7 U	<b>3.5</b>
Barium	<b>16.9</b>	<b>61</b>	<b>28.8</b>	<b>50.2</b>
Beryllium	0.65 U	1.2 U	0.83 U	0.7 U
Cadmium	1.3 U	2.4 U	1.7 U	1.4 U
Calcium	<b>1040</b>	<b>2670</b>	<b>1100</b>	<b>2000</b>
Chromium	<b>19.9</b>	<b>49.4</b>	<b>24.9</b>	<b>6</b>
Cobalt	<b>6</b>	<b>17.9</b>	<b>7.8</b>	<b>3</b>
Copper	<b>18.1</b>	<b>12.5</b>	<b>7.7</b>	<b>9.5</b>
Iron	<b>7320</b>	<b>29600</b>	<b>12300</b>	<b>8280</b>
Lead	<b>2.4</b>	<b>14.2</b>	<b>3.4</b>	<b>16.7</b>
Magnesium	<b>1630 J</b>	<b>9510 J</b>	<b>3620 J</b>	<b>867 J</b>
Manganese	<b>46.1</b>	<b>411</b>	<b>145</b>	<b>71.7</b>
Mercury	0.056 U	0.08 U	0.051 U	0.049 U
Nickel	<b>12.4</b>	<b>35.5</b>	<b>12</b>	<b>6.6 J</b>
Potassium	<b>779 J</b>	<b>3330 J</b>	<b>374 J</b>	<b>310 J</b>
Silver	0.39 U	0.71 U	0.5 U	0.42 U
Sodium	328 UJ	<b>1860 J</b>	<b>1020 J</b>	<b>117 J</b>
Vanadium	<b>17.6</b>	<b>56.4</b>	<b>25.6</b>	<b>10.1</b>
Zinc	<b>17.2 J</b>	<b>101 J</b>	<b>38.6 J</b>	<b>31.8 J</b>
Cyanide, Total	0.0608 U	0.103 U	0.0706 U	<b>1.75</b>
<b><i>TOC (mg/Kg)</i></b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-11 SP-PB-11/20.5-21 11/7/2003	PB-11 SP-PB-11/(24.5-25.5) 11/10/2003	PB-12 SP-PB 12(10-12) 11/25/2003	PB-12 SP-PB 12(20-22) 11/25/2003
<b>VOCs (mg/kg)</b>				
Benzene	74	0.018	0.037 J	0.009 U
Ethylbenzene	13	0.002 J	0.007 J	0.009 U
Toluene	72	0.009	0.034 J	0.009 U
Xylene, Total	110	0.018	0.04 J	0.009 U
Acetone	9.9 UJ	R	0.064 J	0.087 J
Bromodichloromethane	4 U	0.005 U	0.006 U	0.009 U
Bromoform	4 UJ	0.005 UJ	0.006 UJ	0.009 U
Bromomethane	4 UJ	0.005 UJ	0.006 U	0.009 U
Butanone,2- (MEK)	4 UJ	R	R	0.023 J
Carbon disulfide	0.66 J	0.002 J	0.007 J	0.005 J
Chlorobenzene	4 U	0.005 U	0.006 U	0.009 U
Chloroform	4 U	0.005 U	0.006 U	0.009 U
Chloromethane	4 UJ	0.005 U	0.006 UJ	0.009 UJ
Dichloroethane,1,2-	4 U	0.005 U	0.006 UJ	0.009 U
Dichloroethene, cis-1,2-	4 U	0.005 U	0.006 U	0.001 J
Methylene chloride	4 UJ	0.005 UJ	0.006 U	0.009 UJ
Styrene	18	0.005 U	0.006 J	0.009 U
Tetrachloroethene	4 U	0.005 U	0.006 U	0.009 U
Trichloroethene	4 U	0.005 U	0.006 U	0.009 U
Vinyl chloride	4 UJ	0.005 U	0.006 U	0.009 U
Total VOCs	287.66	0.049	0.195	0.116
<b>SVOCS (mg/kg)</b>				
Acenaphthene	99 J	0.039 J	16 J	1.3 U
Acenaphthylene	460	0.15 J	85	1.3 U
Anthracene	400 J	0.29 J	160	1.3 U
Benzo[g,h,i]perylene	130 J	0.091 J	42 J	1.3 U
Fluoranthene	850	0.65	540	1.3 U
Fluorene	350 J	0.18 J	81	1.3 U
Methylnaphthalene,2-	570	0.068 J	13 J	1.3 U
Naphthalene	2800	0.16 J	17 J	1.3 U
Phenanthrene	1400	0.96	470	1.3 U
Pyrene	730	0.54	390	1.3 U
Benz[a]anthracene	310 J	0.25 J	190	1.3 U
Benzo[a]pyrene	270 J	0.21 J	160	1.3 U
Benzo[b]fluoranthene	190 J	0.15 J	130	1.3 U
Benzo[k]fluoranthene	220 J	0.22 J	170	1.3 U
Chrysene	270 J	0.22 J	170	1.3 U
Dibenz[a,h]anthracene	41 J	0.028 J	20 J	1.3 U
Indeno[1,2,3-cd]pyrene	120 J	0.089 J	52 J	1.3 U
Bis(2-ethylhexyl)phthalate	420 U	0.044 UJ	80 U	1.3 U
Butyl benzyl phthalate	420 U	0.37 U	80 U	1.3 U
Carbazole	180 J	0.14 J	43 J	1.3 U
Dibenzofuran	340 J	0.15 J	58 J	1.3 U
Dimethylphenol, 2,4-	420 U	0.37 U	80 U	1.3 U
Di-n-butyl phthalate	420 U	0.37 U	80 U	1.3 U
Di-n-octyl phthalate	420 U	0.37 U	80 U	1.3 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-11 SP-PB-11/20.5-21 11/7/2003	PB-11 SP-PB-11/(24.5-25.5) 11/10/2003	PB-12 SP-PB 12(10-12) 11/25/2003	PB-12 SP-PB 12(20-22) 11/25/2003
Methylphenol, 4-	420 U	0.37 U	80 U	1.3 U
Methylphenol,2-	420 U	0.37 U	80 U	1.3 U
Phenol	420 U	0.37 U	80 U	1.3 U
Total SVOCs	<b>9730</b>	<b>4.585</b>	<b>2807</b>	ND
<b><i>Inorganics (mg/Kg)</i></b>				
Aluminum	<b>13400</b>	<b>6690</b>	<b>3880</b>	<b>13300</b>
Antimony	2.3 UJ	1.6 UJ	1.7 UJ	2.6 UJ
Arsenic	1.9 U	1.4 U	<b>1.7</b>	<b>8.7</b>
Barium	<b>31.1</b>	<b>31.3</b>	<b>42.9</b>	<b>65.2</b>
Beryllium	0.96 U	0.68 U	0.71 U	1.1 U
Cadmium	1.9 U	1.4 U	1.4 U	2.1 U
Calcium	<b>718</b>	<b>1410</b>	<b>7950</b>	<b>1540</b>
Chromium	<b>32</b>	<b>24</b>	<b>9.5</b>	<b>32.6</b>
Cobalt	<b>8.9</b>	<b>6.7</b>	<b>3.5</b>	<b>11.4</b>
Copper	<b>7.7</b>	<b>24.9</b>	<b>17.6 J</b>	<b>11 J</b>
Iron	<b>19100</b>	<b>11400</b>	<b>9960</b>	<b>45000</b>
Lead	<b>4.5</b>	<b>3.5</b>	<b>75.1</b>	<b>10.1 J</b>
Magnesium	<b>5170 J</b>	<b>3060 J</b>	<b>2170</b>	<b>5970</b>
Manganese	<b>239</b>	<b>105</b>	<b>74.9 J</b>	<b>290 J</b>
Mercury	0.063 U	0.053 U	0.047 U	0.091 U
Nickel	<b>18 J</b>	<b>18</b>	<b>11.1</b>	<b>24.3</b>
Potassium	<b>643 J</b>	<b>1400 J</b>	<b>772 J</b>	<b>1930 J</b>
Silver	0.58 U	0.41 U	0.43 U	0.64 U
Sodium	<b>1440 J</b>	293 UJ	<b>282 J</b>	<b>1110 J</b>
Vanadium	<b>29.3</b>	<b>24.4</b>	<b>12.6</b>	<b>36.9</b>
Zinc	<b>60.4 J</b>	<b>32 J</b>	<b>72.3</b>	<b>68.3</b>
Cyanide, Total	0.0832 U	0.0595 U	<b>11.3</b>	0.106 U
<b><i>TOC (mg/Kg)</i></b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-13 SP-PB 13(14-16) 11/25/2003	PB-13 SP-PB 13(20-22) 11/25/2003	PB-14 SP-PB 14(18-19) 11/24/2003	PB-14 SP-PB 14(22-24) 11/24/2003
<b>VOCs (mg/kg)</b>				
Benzene	0.01 UJ	0.005 U	<b>0.011 J</b>	0.006 U
Ethylbenzene	<b>0.001 J</b>	0.005 U	0.01 UJ	0.006 U
Toluene	<b>0.002 J</b>	0.005 U	0.01 UJ	0.006 U
Xylene, Total	<b>0.004 J</b>	0.005 U	0.01 UJ	0.006 U
Acetone	0.064 UJ	0.01 UJ	0.082 UJ	0.012 UJ
Bromodichloromethane	0.01 UJ	0.005 U	0.01 UJ	0.006 U
Bromoform	0.01 UJ	0.005 UJ	0.01 UJ	0.006 U
Bromomethane	0.01 UJ	0.005 U	0.01 UJ	0.006 U
Butanone,2- (MEK)	R	R	<b>0.022 J</b>	R
Carbon disulfide	<b>0.003 J</b>	<b>0.001 J</b>	<b>0.006 J</b>	<b>0.002 J</b>
Chlorobenzene	0.01 UJ	0.005 U	0.01 UJ	0.006 U
Chloroform	0.01 UJ	0.005 U	0.01 UJ	0.006 U
Chloromethane	0.01 UJ	0.005 UJ	0.01 UJ	0.006 UJ
Dichloroethane,1,2-	0.01 UJ	0.005 UJ	0.01 UJ	0.006 U
Dichloroethene, cis-1,2-	0.01 UJ	0.005 U	0.01 UJ	0.006 U
Methylene chloride	0.01 UJ	0.005 UJ	0.006 UJ	0.006 UJ
Styrene	0.01 UJ	0.005 U	0.01 UJ	0.006 U
Tetrachloroethene	0.01 UJ	0.005 U	0.01 UJ	0.006 U
Trichloroethene	0.01 UJ	0.005 U	0.01 UJ	0.006 U
Vinyl chloride	0.01 UJ	0.005 U	0.01 UJ	0.006 U
Total VOCs	<b>0.01</b>	<b>0.001</b>	<b>0.039</b>	<b>0.002</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	0.66 UJ	0.37 U	0.7 UJ	0.42 U
Acenaphthylene	0.66 UJ	0.37 U	0.7 UJ	0.42 U
Anthracene	0.66 UJ	<b>0.032 J</b>	0.7 UJ	0.42 U
Benzo[g,h,i]perylene	0.66 UJ	<b>0.023 J</b>	0.7 UJ	0.42 U
Fluoranthene	<b>0.08 J</b>	<b>0.14 J</b>	0.7 UJ	0.42 U
Fluorene	0.66 UJ	0.37 U	0.7 UJ	0.42 U
Methylnaphthalene,2-	0.66 UJ	0.37 U	0.7 UJ	0.42 U
Naphthalene	0.66 UJ	0.37 U	<b>0.068 J</b>	0.42 U
Phenanthrene	<b>0.053 J</b>	<b>0.074 J</b>	0.7 UJ	0.42 U
Pyrene	<b>0.082 J</b>	<b>0.096 J</b>	0.7 UJ	0.42 U
Benz[a]anthracene	<b>0.036 J</b>	<b>0.05 J</b>	0.7 UJ	0.42 U
Benzo[a]pyrene	0.66 UJ	<b>0.042 J</b>	0.7 UJ	0.42 U
Benzo[b]fluoranthene	0.66 UJ	0.37 U	0.7 UJ	0.42 U
Benzo[k]fluoranthene	0.66 UJ	0.37 U	0.7 UJ	0.42 U
Chrysene	<b>0.034 J</b>	<b>0.048 J</b>	0.7 UJ	0.42 U
Dibenz[a,h]anthracene	0.66 UJ	0.37 U	0.7 UJ	0.42 U
Indeno[1,2,3-cd]pyrene	0.66 UJ	<b>0.022 J</b>	0.7 UJ	0.42 U
Bis(2-ethylhexyl)phthalate	0.66 UJ	0.37 U	0.7 UJ	0.42 U
Butyl benzyl phthalate	0.66 UJ	0.37 U	0.7 UJ	0.42 U
Carbazole	0.66 UJ	0.37 U	0.7 UJ	0.42 U
Dibenzofuran	0.66 UJ	0.37 U	0.7 UJ	0.42 U
Dimethylphenol, 2,4-	0.66 UJ	0.37 U	0.7 UJ	0.42 U
Di-n-butyl phthalate	0.66 UJ	0.37 U	0.7 UJ	0.42 U
Di-n-octyl phthalate	0.66 UJ	0.37 U	0.7 UJ	0.42 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-13 SP-PB 13(14-16) 11/25/2003	PB-13 SP-PB 13(20-22) 11/25/2003	PB-14 SP-PB 14(18-19) 11/24/2003	PB-14 SP-PB 14(22-24) 11/24/2003
Methylphenol, 4-	0.66 UJ	0.37 U	0.7 UJ	0.42 U
Methylphenol,2-	0.66 UJ	0.37 U	0.7 UJ	0.42 U
Phenol	0.66 UJ	0.37 U	0.7 UJ	0.42 U
Total SVOCs	<b>0.285</b>	<b>0.527</b>	<b>0.068</b>	ND
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>16500 J</b>	<b>4280</b>	<b>18100 J</b>	<b>4710</b>
Antimony	3 UJ	1.7 UJ	2.8 UJ	2 UJ
Arsenic	<b>6 J</b>	1.4 U	<b>8.1</b>	1.6 U
Barium	<b>83.4 J</b>	<b>20.7</b>	<b>71.4</b>	<b>33.3</b>
Beryllium	1.3 UJ	0.7 U	1.2 UJ	0.82 U
Cadmium	2.5 UJ	1.4 U	2.3 UJ	1.6 U
Calcium	<b>2210 J</b>	<b>724</b>	<b>3570 J</b>	<b>960</b>
Chromium	<b>40.9 J</b>	<b>14</b>	<b>40.2 J</b>	<b>25.2</b>
Cobalt	<b>12.8 J</b>	<b>3.3</b>	<b>12.1 J</b>	<b>4.5</b>
Copper	<b>12.6 J</b>	<b>5.6 J</b>	<b>12.2 J</b>	<b>13.7 J</b>
Iron	<b>29300 J</b>	<b>6450</b>	<b>35800 J</b>	<b>10200</b>
Lead	<b>12.7 J</b>	<b>1.5</b>	<b>11.8 J</b>	<b>2.4</b>
Magnesium	<b>7940 J</b>	<b>1410</b>	<b>7360 J</b>	<b>1360</b>
Manganese	<b>371 J</b>	<b>51 J</b>	<b>427 J</b>	<b>74 J</b>
Mercury	0.093 UJ	0.048 U	0.096 UJ	0.05 U
Nickel	<b>26.8 J</b>	<b>7.6</b>	<b>29.1 J</b>	<b>15.4</b>
Potassium	<b>2530 J</b>	<b>689 J</b>	<b>2440 J</b>	<b>417 J</b>
Silver	0.75 UJ	0.42 U	0.7 UJ	0.49 U
Sodium	<b>1660 J</b>	<b>107 J</b>	<b>1190 J</b>	<b>224 J</b>
Vanadium	<b>49.4 J</b>	<b>13.7</b>	<b>51.2 J</b>	<b>23.7</b>
Zinc	<b>83.5 J</b>	<b>17.1</b>	<b>82.5 J</b>	<b>16.9</b>
Cyanide, Total	0.107 UJ	0.0615 U	0.115 UJ	0.0695 U
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-15 SP-PB 15(21-23) 11/24/2003	PB-15 SP-PB 15(27-29) 11/24/2003	PB-16 SP-PB16(4-6) 12/9/2003	Duplicate of PB-16(4-6) SP-DUP2 12/9/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.006</b>	<b>0.39</b>	<b>0.0005 J</b>	<b>0.0006 J</b>
Ethylbenzene	<b>0.0007 J</b>	<b>1.2</b>	0.005 U	0.005 U
Toluene	<b>0.002 J</b>	<b>0.53</b>	<b>0.0007 J</b>	<b>0.0006 J</b>
Xylene, Total	<b>0.002 J</b>	<b>1.8</b>	0.005 U	0.005 U
Acetone	0.018 UJ	0.73 UJ	<b>0.071 J</b>	0.046 UJ
Bromodichloromethane	<b>0.002 J</b>	0.29 U	0.005 U	0.005 U
Bromoform	0.006 U	0.29 U	0.005 UJ	0.005 UJ
Bromomethane	0.006 UJ	0.29 UJ	0.005 UJ	0.005 UJ
Butanone,2- (MEK)	R	0.29 UJ	<b>0.009 J</b>	<b>0.006 J</b>
Carbon disulfide	<b>0.062</b>	0.29 U	<b>0.003 J</b>	<b>0.002 J</b>
Chlorobenzene	0.006 U	0.29 U	0.005 U	0.005 U
Chloroform	<b>0.002 J</b>	0.29 U	0.005 U	0.005 U
Chloromethane	0.006 U	0.29 U	0.005 U	0.005 U
Dichloroethane,1,2-	0.006 U	0.29 U	0.005 U	0.005 U
Dichloroethene, cis-1,2-	0.006 U	0.29 U	0.005 U	0.005 U
Methylene chloride	0.006 UJ	0.29 U	0.005 U	0.005 U
Styrene	0.006 U	0.29 U	0.005 U	0.005 U
Tetrachloroethene	0.006 U	0.29 U	0.005 U	0.005 U
Trichloroethene	0.006 U	0.29 U	0.005 U	0.005 U
Vinyl chloride	0.006 U	0.29 U	0.005 U	0.005 U
Total VOCs	<b>0.0767</b>	<b>3.92</b>	<b>0.0842</b>	<b>0.0092</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	<b>0.094 J</b>	<b>0.6 J</b>	<b>1.2 J</b>	<b>1.8</b>
Acenaphthylene	<b>0.098 J</b>	<b>0.42 J</b>	<b>0.16 J</b>	<b>0.47 J</b>
Anthracene	<b>0.2 J</b>	<b>1.3 J</b>	<b>2.2 J</b>	<b>3</b>
Benzo[g,h,i]perylene	<b>0.13 J</b>	<b>0.58 J</b>	<b>1.7 J</b>	<b>2.5</b>
Fluoranthene	<b>0.85</b>	<b>3.6</b>	<b>6.5 J</b>	<b>11 J</b>
Fluorene	<b>0.11 J</b>	<b>0.95 J</b>	<b>1 J</b>	<b>1.4 J</b>
Methylnaphthalene,2-	0.4 U	<b>1.1 J</b>	<b>0.32 J</b>	<b>0.31 J</b>
Naphthalene	0.4 U	<b>4</b>	<b>0.84 J</b>	<b>0.77 J</b>
Phenanthrene	<b>0.66</b>	<b>4.6</b>	<b>5.6</b>	<b>9.3</b>
Pyrene	<b>0.67</b>	<b>3.2</b>	<b>9.6 J</b>	<b>11 J</b>
Benz[a]anthracene	<b>0.32 J</b>	<b>1.4 J</b>	<b>3.4</b>	<b>4.8</b>
Benzo[a]pyrene	<b>0.26 J</b>	<b>1 J</b>	<b>2.8</b>	<b>4.2</b>
Benzo[b]fluoranthene	<b>0.22 J</b>	<b>0.77 J</b>	<b>2.5 J</b>	<b>6 J</b>
Benzo[k]fluoranthene	<b>0.27 J</b>	<b>1.1 J</b>	<b>2.6 J</b>	1.6 U
Chrysene	<b>0.31 J</b>	<b>1.3 J</b>	<b>3.5</b>	<b>4.8</b>
Dibenz[a,h]anthracene	<b>0.051 J</b>	<b>0.22 J</b>	2.7 U	<b>1 J</b>
Indeno[1,2,3-cd]pyrene	<b>0.14 J</b>	<b>0.54 J</b>	<b>1.3 J</b>	<b>2.1</b>
Bis(2-ethylhexyl)phthalate	0.4 U	1.4 U	2.7 U	<b>0.27 J</b>
Butyl benzyl phthalate	0.4 U	1.4 U	2.7 U	1.6 U
Carbazole	<b>0.041 J</b>	<b>0.31 J</b>	<b>0.6 J</b>	<b>0.88 J</b>
Dibenzofuran	<b>0.062 J</b>	<b>0.65 J</b>	<b>0.75 J</b>	<b>0.77 J</b>
Dimethylphenol, 2,4-	0.4 U	1.4 U	2.7 UJ	1.6 UJ
Di-n-butyl phthalate	0.4 U	1.4 U	2.7 U	1.6 U
Di-n-octyl phthalate	0.4 U	1.4 U	2.7 U	1.6 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-15 SP-PB 15(21-23) 11/24/2003	PB-15 SP-PB 15(27-29) 11/24/2003	PB-16 SP-PB16(4-6) 12/9/2003	Duplicate of PB-16(4-6) SP-DUP2 12/9/2003
Methylphenol, 4-	0.4 U	1.4 U	2.7 U	<b>0.14 J</b>
Methylphenol,2-	0.4 U	1.4 U	2.7 U	1.6 U
Phenol	0.4 U	1.4 U	2.7 U	1.6 U
Total SVOCs	<b>4.486</b>	<b>27.64</b>	<b>46.57</b>	<b>66.51</b>
<b><i>Inorganics (mg/Kg)</i></b>				
Aluminum	<b>7140</b>	<b>7630</b>	<b>5360</b>	<b>6470</b>
Antimony	1.7 UJ	1.6 UJ	1.5 UJ	<b>1.5 J</b>
Arsenic	1.4 U	1.4 U	<b>6 J</b>	<b>7.7 J</b>
Barium	<b>94.6</b>	<b>104</b>	<b>399</b>	<b>503</b>
Beryllium	0.71 U	0.68 U	0.61 U	0.61 U
Cadmium	1.4 U	1.4 U	<b>1.7</b>	1.2 U
Calcium	<b>17200</b>	<b>17500</b>	<b>21200</b>	<b>32600</b>
Chromium	<b>17.6</b>	<b>20.9</b>	<b>20</b>	<b>28.3</b>
Cobalt	<b>6.2</b>	<b>6.6</b>	<b>5.4</b>	<b>6</b>
Copper	<b>20.1 J</b>	<b>86.5 J</b>	<b>74.5 J</b>	<b>64.4 J</b>
Iron	<b>16900</b>	<b>18000</b>	<b>17300</b>	<b>29500</b>
Lead	<b>4.6</b>	<b>14</b>	<b>1980</b>	<b>780</b>
Magnesium	<b>12800</b>	<b>12200</b>	<b>3790 J</b>	<b>7190 J</b>
Manganese	<b>186 J</b>	<b>230 J</b>	<b>184</b>	<b>287</b>
Mercury	0.052 U	0.05 U	<b>0.2 J</b>	<b>0.3 J</b>
Nickel	<b>17.9</b>	<b>14.1</b>	<b>21.9</b>	<b>28</b>
Potassium	<b>3310 J</b>	<b>4010 J</b>	<b>1250 J</b>	<b>1380 J</b>
Silver	0.43 U	0.41 U	<b>0.41</b>	0.37 U
Sodium	<b>360 J</b>	<b>413 J</b>	<b>172</b>	<b>197</b>
Vanadium	<b>40.7</b>	<b>27.6</b>	<b>38.5</b>	<b>28.5</b>
Zinc	<b>87.6</b>	<b>69</b>	<b>513</b>	<b>465</b>
Cyanide, Total	0.0667 U	<b>8.96</b>	R	R
<b><i>TOC (mg/Kg)</i></b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-16 SP-PB16(10-12) 12/10/2003	PB-16 SP-PB16(18-20) 12/10/2003	PB-16 SP-PB16(20-22) 12/10/2003	PB-17 SP-PB17(8-10) 12/9/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.003 J</b>	<b>0.35 J</b>	<b>2.8</b>	<b>0.004 J</b>
Ethylbenzene	<b>0.0008 J</b>	<b>0.04 J</b>	<b>0.62</b>	<b>0.0006 J</b>
Toluene	<b>0.001 J</b>	<b>0.008 J</b>	0.31 U	0.006 U
Xylene, Total	<b>0.006 J</b>	<b>0.079 J</b>	<b>0.63</b>	<b>0.002 J</b>
Acetone	0.055 UJ	<b>0.48 J</b>	0.77 UJ	0.036 UJ
Bromodichloromethane	0.007 U	0.007 U	0.31 U	0.006 U
Bromoform	0.007 UJ	0.007 UJ	0.31 UJ	0.006 UJ
Bromomethane	0.007 UJ	0.007 UJ	0.31 UJ	0.006 UJ
Butanone,2- (MEK)	<b>0.012 J</b>	<b>0.082 J</b>	0.31 U	<b>0.008 J</b>
Carbon disulfide	<b>0.01</b>	<b>0.1</b>	0.31 UJ	<b>0.002 J</b>
Chlorobenzene	0.007 U	0.007 UJ	0.31 U	0.006 U
Chloroform	0.007 U	0.007 U	0.31 U	0.006 U
Chloromethane	0.007 U	0.007 U	0.31 UJ	0.006 U
Dichloroethane,1,2-	0.007 U	0.007 U	0.31 U	0.006 U
Dichloroethene, cis-1,2-	0.007 U	0.007 U	0.31 U	0.006 U
Methylene chloride	0.007 U	0.009 UJ	0.31 U	0.006 U
Styrene	0.007 U	0.007 UJ	0.31 U	0.006 U
Tetrachloroethene	0.007 U	0.007 UJ	0.31 U	0.006 U
Trichloroethene	0.007 U	0.007 U	0.31 U	0.006 U
Vinyl chloride	0.007 U	0.007 U	0.31 UJ	<b>0.002 J</b>
Total VOCs	<b>0.0328</b>	<b>1.139</b>	<b>4.05</b>	<b>0.0186</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	<b>0.63 J</b>	<b>7.1</b>	<b>0.19 J</b>	0.46 U
Acenaphthylene	<b>0.34 J</b>	<b>0.88 J</b>	<b>0.14 J</b>	<b>0.038 J</b>
Anthracene	<b>0.8 J</b>	<b>2.4 J</b>	<b>0.25 J</b>	<b>0.083 J</b>
Benzo[g,h,i]perylene	<b>0.61 J</b>	<b>1.3 J</b>	<b>0.37 J</b>	<b>0.47</b>
Fluoranthene	<b>2.6</b>	<b>6.8</b>	<b>1.3 J</b>	<b>0.49</b>
Fluorene	<b>0.54 J</b>	<b>5.1</b>	<b>0.25 J</b>	0.46 U
Methylnaphthalene,2-	<b>0.33 J</b>	<b>11</b>	<b>1.1 J</b>	0.46 U
Naphthalene	<b>2.5</b>	<b>11</b>	<b>10</b>	<b>0.076 J</b>
Phenanthrene	<b>2.8</b>	<b>9.6</b>	<b>1.2 J</b>	<b>0.24 J</b>
Pyrene	<b>3.8 J</b>	<b>7 J</b>	<b>1.9 J</b>	<b>0.57 J</b>
Benz[a]anthracene	<b>1.1</b>	<b>2.4 J</b>	<b>0.59 J</b>	<b>0.26 J</b>
Benzo[a]pyrene	<b>0.99 J</b>	<b>2.1 J</b>	<b>0.59 J</b>	<b>0.43 J</b>
Benzo[b]fluoranthene	<b>0.69 J</b>	<b>1.5 J</b>	<b>0.97 J</b>	<b>0.36 J</b>
Benzo[k]fluoranthene	<b>0.81 J</b>	<b>2.2 J</b>	1.7 U	<b>0.35 J</b>
Chrysene	<b>1.4</b>	<b>2.8</b>	<b>0.8 J</b>	<b>0.3 J</b>
Dibenz[a,h]anthracene	<b>0.2 J</b>	<b>0.65 J</b>	1.7 U	<b>0.15 J</b>
Indeno[1,2,3-cd]pyrene	<b>0.44 J</b>	<b>1 J</b>	<b>0.32 J</b>	<b>0.4 J</b>
Bis(2-ethylhexyl)phthalate	1 U	2.7 U	1.7 U	<b>0.2 J</b>
Butyl benzyl phthalate	1 U	2.7 U	1.7 U	0.46 U
Carbazole	<b>0.46 J</b>	<b>2.3 J</b>	<b>0.13 J</b>	0.46 U
Dibenzofuran	<b>0.29 J</b>	<b>3.4</b>	<b>0.2 J</b>	<b>0.022 J</b>
Dimethylphenol, 2,4-	1 UJ	2.7 UJ	1.7 UJ	0.46 UJ
Di-n-butyl phthalate	1 U	2.7 U	1.7 U	0.46 UJ
Di-n-octyl phthalate	1 U	2.7 U	1.7 U	0.46 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-16 SP-PB16(10-12) 12/10/2003	PB-16 SP-PB16(18-20) 12/10/2003	PB-16 SP-PB16(20-22) 12/10/2003	PB-17 SP-PB17(8-10) 12/9/2003
Methylphenol, 4-	<b>0.085 J</b>	2.7 U	1.7 U	0.46 U
Methylphenol,2-	1 U	2.7 U	1.7 U	0.46 U
Phenol	1 U	2.7 U	1.7 U	0.46 U
Total SVOCs	<b>21.415</b>	<b>80.53</b>	<b>20.3</b>	<b>4.439</b>
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>15000</b>	<b>13800</b>	<b>16000</b>	<b>12600</b>
Antimony	2.4 UJ	2.4 UJ	1.9 UJ	2 UJ
Arsenic	<b>23.4 J</b>	<b>13.2</b>	<b>4.1 J</b>	<b>7 J</b>
Barium	<b>185</b>	<b>212</b>	<b>178</b>	<b>86.5</b>
Beryllium	1 U	0.99 U	0.79 U	0.84 U
Cadmium	2 U	2 U	1.6 U	1.7 U
Calcium	<b>3350</b>	<b>22800</b>	<b>4140</b>	<b>2940</b>
Chromium	<b>684</b>	<b>254</b>	<b>35.6</b>	<b>34.6</b>
Cobalt	<b>11.5</b>	<b>13.1</b>	<b>12.6</b>	<b>8.9</b>
Copper	<b>206 J</b>	<b>113</b>	<b>37.8 J</b>	<b>19.4 J</b>
Iron	<b>31900</b>	<b>39500</b>	<b>28600</b>	<b>23000</b>
Lead	<b>212</b>	<b>247</b>	<b>43.9</b>	<b>53.8</b>
Magnesium	<b>6470 J</b>	<b>13500</b>	<b>8420 J</b>	<b>3950 J</b>
Manganese	<b>314</b>	<b>427</b>	<b>423</b>	<b>180</b>
Mercury	<b>1.8 J</b>	<b>0.58 J</b>	<b>0.12 J</b>	<b>0.068 J</b>
Nickel	<b>28.2</b>	<b>28.9</b>	<b>29.7</b>	<b>16.4</b>
Potassium	<b>2910 J</b>	<b>2950</b>	<b>2480 J</b>	<b>1700 J</b>
Silver	<b>0.84</b>	0.6 U	0.47 U	0.5 U
Sodium	<b>1460</b>	<b>1970</b>	<b>1200</b>	<b>539</b>
Vanadium	<b>38.4</b>	<b>44.1</b>	<b>40.4</b>	<b>35.6</b>
Zinc	<b>344</b>	<b>577</b>	<b>99</b>	<b>67.7</b>
Cyanide, Total	0.223 UJ	0.171 UJ	<b>9.79 J</b>	R
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-17 SP-PB17(10-12) 12/9/2003	PB-17 SP-PB17(22-24) 12/9/2003	PB-18 SP-PB 18(16-18) 11/20/2003	PB-18 SP-PB 18(24-26) 11/20/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.002 J</b>	0.005 U	<b>1.3</b>	<b>0.003 J</b>
Ethylbenzene	0.006 U	<b>0.0008 J</b>	<b>0.13 J</b>	0.005 U
Toluene	0.006 U	0.005 U	0.47 U	0.005 U
Xylene, Total	0.006 U	0.005 U	<b>0.29 J</b>	0.005 U
Acetone	0.037 UJ	0.011 UJ	1.2 UJ	R
Bromodichloromethane	0.006 U	0.005 U	0.47 U	0.005 U
Bromoform	0.006 UJ	0.005 UJ	0.47 U	0.005 U
Bromomethane	0.006 UJ	0.005 UJ	0.47 U	0.005 U
Butanone,2- (MEK)	<b>0.006 J</b>	0.01 U	0.47 U	R
Carbon disulfide	<b>0.001 J</b>	<b>0.003 J</b>	0.47 U	0.005 U
Chlorobenzene	0.006 U	0.005 U	0.47 U	0.005 U
Chloroform	0.006 U	0.005 U	0.47 U	0.005 U
Chloromethane	0.006 U	0.005 U	0.47 U	0.005 U
Dichloroethane,1,2-	0.006 U	0.005 U	0.47 U	0.005 U
Dichloroethene, cis-1,2-	0.006 U	<b>0.002 J</b>	0.47 U	0.005 U
Methylene chloride	0.006 U	0.005 U	0.47 U	0.005 UJ
Styrene	0.006 U	<b>0.002 J</b>	0.47 U	0.005 U
Tetrachloroethene	0.006 U	0.005 U	0.47 U	0.005 U
Trichloroethene	0.006 U	<b>0.0009 J</b>	0.47 U	0.005 U
Vinyl chloride	0.006 U	0.005 U	0.47 U	0.005 U
Total VOCs	<b>0.009</b>	<b>0.0087</b>	<b>1.72</b>	<b>0.003</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	0.42 U	0.37 U	0.62 U	<b>0.092 J</b>
Acenaphthylene	0.42 U	0.37 U	<b>0.024 J</b>	<b>0.44</b>
Anthracene	0.42 U	0.37 U	<b>0.027 J</b>	<b>0.5</b>
Benzo[g,h,i]perylene	<b>0.13 J</b>	0.37 U	0.62 U	<b>0.19 J</b>
Fluoranthene	<b>0.034 J</b>	<b>0.027 J</b>	<b>0.049 J</b>	<b>1.2</b>
Fluorene	0.42 U	0.37 U	0.62 U	<b>0.43</b>
Methylnaphthalene,2-	0.42 U	0.37 U	0.62 U	<b>0.25 J</b>
Naphthalene	0.42 U	0.37 U	<b>0.79</b>	<b>0.63</b>
Phenanthrene	0.42 U	0.37 U	<b>0.088 J</b>	<b>2</b>
Pyrene	<b>0.041 J</b>	<b>0.023 J</b>	<b>0.077 J</b>	<b>1.9 J</b>
Benz[a]anthracene	<b>0.037 J</b>	0.37 U	0.62 U	<b>0.49</b>
Benzo[a]pyrene	<b>0.09 J</b>	0.37 U	0.62 U	<b>0.38</b>
Benzo[b]fluoranthene	<b>0.058 J</b>	0.37 U	0.62 U	<b>0.28 J</b>
Benzo[k]fluoranthene	<b>0.084 J</b>	0.37 U	0.62 U	<b>0.33 J</b>
Chrysene	<b>0.04 J</b>	0.37 U	0.62 U	<b>0.42</b>
Dibenz[a,h]anthracene	0.42 U	0.37 U	0.62 U	<b>0.066 J</b>
Indeno[1,2,3-cd]pyrene	<b>0.092 J</b>	0.37 U	0.62 U	<b>0.18 J</b>
Bis(2-ethylhexyl)phthalate	<b>0.092 J</b>	0.37 U	0.62 UJ	0.36 U
Butyl benzyl phthalate	0.42 U	0.37 U	0.62 U	0.36 U
Carbazole	0.42 U	0.37 U	0.62 U	<b>0.21 J</b>
Dibenzofuran	0.42 U	0.37 U	0.62 U	<b>0.25 J</b>
Dimethylphenol, 2,4-	0.42 UJ	0.37 UJ	0.62 U	0.36 U
Di-n-butyl phthalate	0.42 UJ	0.37 U	0.62 U	0.36 U
Di-n-octyl phthalate	0.42 U	0.37 U	0.62 U	<b>0.015 J</b>

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-17 SP-PB17(10-12) 12/9/2003	PB-17 SP-PB17(22-24) 12/9/2003	PB-18 SP-PB 18(16-18) 11/20/2003	PB-18 SP-PB 18(24-26) 11/20/2003
Methylphenol, 4-	0.42 U	0.37 U	0.62 U	<b>0.028 J</b>
Methylphenol,2-	0.42 U	0.37 U	0.62 U	0.36 U
Phenol	0.42 U	0.37 U	0.62 U	0.36 U
Total SVOCs	<b>0.698</b>	<b>0.05</b>	<b>1.055</b>	<b>10.281</b>
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>8130</b>	<b>14300</b>	<b>19000</b>	<b>5900</b>
Antimony	1.8 UJ	1.6 UJ	2.8 UJ	1.6 UJ
Arsenic	1.5 U	1.4 U	<b>5.3</b>	<b>2.3</b>
Barium	<b>52.3</b>	<b>116</b>	<b>63.8</b>	<b>23.7</b>
Beryllium	0.76 U	0.68 U	1.2 U	0.68 U
Cadmium	1.5 U	1.4 U	2.3 U	1.4 U
Calcium	<b>1080</b>	<b>987</b>	<b>2300</b>	<b>2680</b>
Chromium	<b>22.5</b>	<b>32.2</b>	<b>43.4</b>	<b>23.4</b>
Cobalt	<b>5.5</b>	<b>11.9</b>	<b>11.4</b>	<b>7.3</b>
Copper	<b>13.1 J</b>	<b>41.7 J</b>	<b>11.9 J</b>	<b>23.1 J</b>
Iron	<b>16400</b>	<b>27400</b>	<b>28300</b>	<b>10700</b>
Lead	<b>6.2</b>	<b>5.8</b>	<b>12.1</b>	<b>1.8</b>
Magnesium	<b>3580 J</b>	<b>5850 J</b>	<b>8390</b>	<b>2360</b>
Manganese	<b>100</b>	<b>216</b>	<b>351 J</b>	<b>67.1 J</b>
Mercury	0.065 UJ	0.046 UJ	0.081 U	0.041 U
Nickel	<b>13.9</b>	<b>28.3</b>	<b>29.3</b>	<b>13.2</b>
Potassium	<b>2350 J</b>	<b>5460 J</b>	<b>2630 J</b>	<b>918 J</b>
Silver	0.46 U	0.41 U	0.7 U	0.41 U
Sodium	<b>323</b>	<b>257</b>	<b>1850 J</b>	<b>462 J</b>
Vanadium	<b>24.4</b>	<b>41.1</b>	<b>46</b>	<b>15.7</b>
Zinc	<b>38.5</b>	<b>65.4</b>	<b>89.7</b>	<b>16.5</b>
Cyanide, Total	R	R	0.0991 U	0.0626 U
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-19 SP-PB-19(12-14) 12/3/2003	PB-19 SP-PB-19(14-16) 12/3/2003	PB-19 SP-PB-19(24-26) 12/3/2003	PB-20 SP-PB20(12-14) 12/8/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.99</b>	<b>4.8</b>	<b>0.42</b>	<b>0.002 J</b>
Ethylbenzene	<b>1.9</b>	<b>0.22 J</b>	<b>0.041 J</b>	0.01 UJ
Toluene	<b>1.1</b>	<b>4</b>	0.3 U	<b>0.001 J</b>
Xylene, Total	<b>4.8</b>	<b>2.3</b>	0.3 U	0.01 UJ
Acetone	0.85 UJ	0.96 UJ	0.74 UJ	<b>0.079 J</b>
Bromodichloromethane	0.34 U	0.38 U	0.3 U	0.01 UJ
Bromoform	0.34 U	0.38 U	0.3 U	0.01 UJ
Bromomethane	0.34 UJ	0.38 UJ	0.3 UJ	0.01 UJ
Butanone,2- (MEK)	0.34 UJ	0.38 UJ	0.3 UJ	<b>0.028 J</b>
Carbon disulfide	<b>0.079 J</b>	0.38 U	0.3 U	<b>0.036 J</b>
Chlorobenzene	0.34 U	0.38 U	0.3 U	0.01 UJ
Chloroform	0.34 U	0.38 U	0.3 U	0.01 UJ
Chloromethane	0.34 U	0.38 U	0.3 U	0.01 UJ
Dichloroethane,1,2-	0.34 U	0.38 U	0.3 U	<b>0.002 J</b>
Dichloroethene, cis-1,2-	0.34 U	0.38 U	0.3 U	0.01 UJ
Methylene chloride	0.34 UJ	0.38 UJ	0.3 UJ	0.01 UJ
Styrene	<b>0.064 J</b>	0.38 U	0.3 U	0.01 UJ
Tetrachloroethene	0.34 U	0.38 U	0.3 U	0.01 UJ
Trichloroethene	0.34 U	0.38 U	0.3 U	0.01 UJ
Vinyl chloride	0.34 U	0.38 U	0.3 U	0.01 UJ
Total VOCs	<b>8.933</b>	<b>11.32</b>	<b>0.461</b>	<b>0.148</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	<b>50 J</b>	2.5 U	<b>0.1 J</b>	<b>14 J</b>
Acenaphthylene	<b>24 J</b>	2.5 U	<b>0.032 J</b>	<b>0.82 J</b>
Anthracene	<b>220</b>	<b>0.24 J</b>	<b>0.15 J</b>	<b>24 J</b>
Benzo[g,h,i]perylene	<b>56 J</b>	2.5 U	<b>0.053 J</b>	<b>14 J</b>
Fluoranthene	<b>320</b>	<b>0.49 J</b>	<b>0.33 J</b>	<b>69 J</b>
Fluorene	<b>170 J</b>	2.5 U	<b>0.13 J</b>	<b>12 J</b>
Methylnaphthalene,2-	<b>200</b>	2.5 U	<b>0.18 J</b>	<b>3.8 J</b>
Naphthalene	<b>1200</b>	<b>1.8 J</b>	<b>0.48</b>	<b>7.5 J</b>
Phenanthrene	<b>840</b>	<b>0.8 J</b>	<b>0.57</b>	<b>97 J</b>
Pyrene	<b>280</b>	<b>0.47 J</b>	<b>0.32 J</b>	<b>81 J</b>
Benz[a]anthracene	<b>160 J</b>	<b>0.2 J</b>	<b>0.12 J</b>	<b>26 J</b>
Benzo[a]pyrene	<b>140 J</b>	2.5 U	<b>0.1 J</b>	<b>21 J</b>
Benzo[b]fluoranthene	<b>91 J</b>	2.5 U	<b>0.062 J</b>	<b>15 J</b>
Benzo[k]fluoranthene	<b>110 J</b>	2.5 U	<b>0.085 J</b>	<b>19 J</b>
Chrysene	<b>150 J</b>	<b>0.19 J</b>	<b>0.12 J</b>	<b>28 J</b>
Dibenz[a,h]anthracene	180 U	2.5 U	0.4 U	<b>4.1 J</b>
Indeno[1,2,3-cd]pyrene	<b>58 J</b>	2.5 U	<b>0.056 J</b>	<b>9.7 J</b>
Bis(2-ethylhexyl)phthalate	180 U	2.5 U	0.4 U	15 UJ
Butyl benzyl phthalate	180 U	2.5 U	0.4 U	15 UJ
Carbazole	<b>75 J</b>	2.5 U	<b>0.11 J</b>	<b>5.7 J</b>
Dibenzofuran	<b>160 J</b>	<b>0.13 J</b>	<b>0.13 J</b>	<b>7.1 J</b>
Dimethylphenol, 2,4-	180 U	<b>2.7</b>	0.4 U	15 UJ
Di-n-butyl phthalate	180 U	2.5 U	0.4 U	15 UJ
Di-n-octyl phthalate	180 U	2.5 U	0.4 UJ	15 UJ

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-19 SP-PB-19(12-14) 12/3/2003	PB-19 SP-PB-19(14-16) 12/3/2003	PB-19 SP-PB-19(24-26) 12/3/2003	PB-20 SP-PB20(12-14) 12/8/2003
Methylphenol, 4-	180 U	14	0.4 U	15 UJ
Methylphenol,2-	180 U	0.93 J	0.4 U	15 UJ
Phenol	180 U	2.5 U	0.4 U	15 UJ
Total SVOCs	<b>4304</b>	<b>21.95</b>	<b>3.128</b>	<b>458.72</b>
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>4380</b>	<b>15700</b>	<b>6980</b>	<b>23100 J</b>
Antimony	2 UJ	2.5 UJ	1.7 UJ	3.4 UJ
Arsenic	<b>9.2</b>	<b>7.3</b>	1.4 U	<b>33.6 J</b>
Barium	<b>57.5 J</b>	<b>63.5 J</b>	<b>31.8 J</b>	<b>84.5 J</b>
Beryllium	0.82 U	1.1 U	0.72 U	1.4 UJ
Cadmium	1.6 U	2.1 U	1.4 U	2.8 UJ
Calcium	<b>24200</b>	<b>2980</b>	<b>2250</b>	<b>2990 J</b>
Chromium	<b>12.3</b>	<b>36.3</b>	<b>24.9</b>	<b>452 J</b>
Cobalt	<b>6.3</b>	<b>14.5</b>	<b>5</b>	<b>20 J</b>
Copper	<b>28.8</b>	<b>10.6</b>	<b>17.9</b>	<b>80.2 J</b>
Iron	<b>24100</b>	<b>31600</b>	<b>9610</b>	<b>62200 J</b>
Lead	<b>156</b>	<b>9.9</b>	<b>2.6</b>	<b>110 J</b>
Magnesium	<b>966</b>	<b>7040</b>	<b>3190</b>	<b>11600 J</b>
Manganese	<b>136</b>	<b>319</b>	<b>96.4</b>	<b>1160 J</b>
Mercury	<b>0.3 J</b>	0.091 UJ	0.053 UJ	<b>0.69 J</b>
Nickel	<b>11.7</b>	<b>27.1</b>	<b>14.8</b>	<b>39.7 J</b>
Potassium	<b>606 J</b>	<b>2100 J</b>	<b>1710 J</b>	<b>5690 J</b>
Silver	<b>0.98</b>	0.63 U	0.43 U	0.85 UJ
Sodium	<b>773 J</b>	<b>2380 J</b>	<b>567 J</b>	<b>4840 J</b>
Vanadium	<b>21.1</b>	<b>44</b>	<b>21</b>	<b>60.8 J</b>
Zinc	<b>97.5</b>	<b>73.7</b>	<b>34.4</b>	<b>211 J</b>
Cyanide, Total	<b>98.4 J</b>	R	R	R
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-20 SP-PB20(24-26) 12/9/2003	PB-21 SP-PB21/(12-14) 12/16/2003	PB-21 SP-PB21/(16-18) 12/16/2003	PB-21 SP-PB21/(20-22) 12/16/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.01</b>	<b>0.012 J</b>	NA	<b>0.027</b>
Ethylbenzene	0.005 U	<b>0.004 J</b>	NA	0.007 U
Toluene	0.005 U	<b>0.013 J</b>	NA	<b>0.002 J</b>
Xylene, Total	0.005 U	<b>0.028 J</b>	NA	0.007 U
Acetone	0.017 UJ	<b>0.06 J</b>	NA	0.047 UJ
Bromodichloromethane	0.005 U	0.011 UJ	NA	<b>0.002 J</b>
Bromoform	0.005 UJ	0.011 UJ	NA	0.007 U
Bromomethane	0.005 UJ	R	NA	R
Butanone,2- (MEK)	0.01 U	<b>0.016 J</b>	NA	0.015 UJ
Carbon disulfide	<b>0.003 J</b>	<b>0.18 J</b>	NA	<b>0.088</b>
Chlorobenzene	0.005 U	<b>0.008 J</b>	NA	0.007 U
Chloroform	0.005 U	0.011 UJ	NA	<b>0.002 J</b>
Chloromethane	0.005 U	0.011 UJ	NA	0.007 U
Dichloroethane,1,2-	0.005 U	0.011 UJ	NA	0.007 U
Dichloroethene, cis-1,2-	0.005 U	0.011 UJ	NA	0.007 U
Methylene chloride	0.005 U	0.011 UJ	NA	0.007 UJ
Styrene	0.005 U	0.011 UJ	NA	0.007 U
Tetrachloroethene	0.005 U	0.011 UJ	NA	0.007 U
Trichloroethene	0.005 U	0.011 UJ	NA	0.007 UJ
Vinyl chloride	0.005 U	0.011 UJ	NA	0.007 U
Total VOCs	<b>0.013</b>	<b>0.321</b>	NA	<b>0.121</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	<b>0.034 J</b>	0.85 UJ	NA	0.59 U
Acenaphthylene	<b>0.017 J</b>	0.85 UJ	NA	0.59 U
Anthracene	<b>0.073 J</b>	0.85 UJ	NA	0.59 U
Benzo[g,h,i]perylene	<b>0.076 J</b>	0.85 UJ	NA	0.59 U
Fluoranthene	<b>0.17 J</b>	0.85 UJ	NA	0.59 U
Fluorene	<b>0.025 J</b>	0.85 UJ	NA	0.59 U
Methylnaphthalene,2-	0.36 U	0.85 UJ	NA	0.59 U
Naphthalene	0.36 U	<b>0.087 J</b>	NA	0.59 U
Phenanthrene	<b>0.2 J</b>	0.85 UJ	NA	0.59 U
Pyrene	<b>0.23 J</b>	0.85 UJ	NA	0.59 U
Benz[a]anthracene	<b>0.1 J</b>	0.85 UJ	NA	0.59 U
Benzo[a]pyrene	<b>0.1 J</b>	0.85 UJ	NA	0.59 U
Benzo[b]fluoranthene	<b>0.093 J</b>	0.85 UJ	NA	0.59 U
Benzo[k]fluoranthene	<b>0.079 J</b>	0.85 UJ	NA	0.59 U
Chrysene	<b>0.1 J</b>	0.85 UJ	NA	0.59 U
Dibenz[a,h]anthracene	0.36 U	0.85 UJ	NA	0.59 U
Indeno[1,2,3-cd]pyrene	<b>0.062 J</b>	0.85 UJ	NA	0.59 U
Bis(2-ethylhexyl)phthalate	<b>0.11 J</b>	0.85 UJ	NA	0.59 U
Butyl benzyl phthalate	0.36 U	0.85 UJ	NA	0.59 U
Carbazole	0.36 U	0.85 UJ	NA	0.59 U
Dibenzofuran	0.36 U	0.85 UJ	NA	0.59 U
Dimethylphenol, 2,4-	0.36 UJ	0.85 UJ	NA	0.59 U
Di-n-butyl phthalate	0.36 UJ	0.85 UJ	NA	0.59 U
Di-n-octyl phthalate	0.36 U	0.85 UJ	NA	0.59 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-20 SP-PB20(24-26) 12/9/2003	PB-21 SP-PB21/(12-14) 12/16/2003	PB-21 SP-PB21/(16-18) 12/16/2003	PB-21 SP-PB21/(20-22) 12/16/2003
Methylphenol, 4-	0.36 U	<b>0.33 J</b>	NA	0.59 U
Methylphenol,2-	0.36 U	0.85 UJ	NA	0.59 U
Phenol	0.36 U	0.85 UJ	NA	0.59 U
Total SVOCs	<b>1.469</b>	<b>0.417</b>	NA	ND
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>11100</b>	<b>21600 J</b>	NA	<b>14600</b>
Antimony	1.6 UJ	3.7 UJ	NA	2.8 UJ
Arsenic	1.3 U	<b>3.1 J</b>	NA	<b>7.6</b>
Barium	<b>61.4</b>	<b>61.4 J</b>	NA	<b>62.8</b>
Beryllium	0.65 U	1.6 UJ	NA	1.2 U
Cadmium	1.3 U	3.1 UJ	NA	2.3 U
Calcium	<b>1670</b>	<b>1360 J</b>	NA	<b>2330 J</b>
Chromium	<b>39.2</b>	<b>44.5 J</b>	NA	<b>35.3 J</b>
Cobalt	<b>8.7</b>	<b>13.2 J</b>	NA	<b>10.9</b>
Copper	<b>39.9 J</b>	<b>14.6 J</b>	NA	<b>13.9</b>
Iron	<b>15700</b>	<b>25600 J</b>	NA	<b>34200</b>
Lead	<b>16</b>	<b>9.9 J</b>	NA	<b>13.3 J</b>
Magnesium	<b>5370 J</b>	<b>6740 J</b>	NA	<b>6330</b>
Manganese	<b>130</b>	<b>191 J</b>	NA	<b>362 J</b>
Mercury	0.049 UJ	0.11 UJ	NA	0.079 UJ
Nickel	<b>21.2</b>	<b>27.3 J</b>	NA	<b>25.1</b>
Potassium	<b>3730 J</b>	<b>2210 J</b>	NA	<b>2660 J</b>
Silver	0.39 U	0.94 UJ	NA	0.7 U
Sodium	<b>665</b>	<b>4280 J</b>	NA	<b>2700 J</b>
Vanadium	<b>39</b>	<b>47.5 J</b>	NA	<b>37.1</b>
Zinc	<b>63.6</b>	<b>109 J</b>	NA	<b>75 J</b>
Cyanide, Total	R	<b>1.18 J</b>	NA	0.0958 UJ
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	<b>63000 J</b>	<b>78000 J</b>	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-21 SP-PB21/(22-24) 12/16/2003	PB-22 SP-PB22(8-10) 12/18/2003	Duplicate of PB-22(8-10) SP-DUP4 12/18/2003	PB-22 SP-PB22(10-12) 12/18/2003
<b>VOCs (mg/kg)</b>				
Benzene	NA	<b>0.015 J</b>	<b>0.007 J</b>	<b>25</b>
Ethylbenzene	NA	<b>0.018 J</b>	<b>0.25 J</b>	<b>80</b>
Toluene	NA	<b>0.005 J</b>	<b>0.008 J</b>	<b>3.3 J</b>
Xylene, Total	NA	<b>0.098 J</b>	<b>0.041 J</b>	<b>760</b>
Acetone	NA	<b>0.023 J</b>	<b>0.019 J</b>	34 UJ
Bromodichloromethane	NA	0.006 U	0.006 U	14 U
Bromoform	NA	0.006 UJ	0.006 UJ	14 U
Bromomethane	NA	R	0.58 UJ	14 UJ
Butanone,2- (MEK)	NA	0.011 UJ	0.011 UJ	14 U
Carbon disulfide	NA	<b>0.004 J</b>	<b>0.002 J</b>	<b>8.1 J</b>
Chlorobenzene	NA	0.006 UJ	0.006 UJ	14 U
Chloroform	NA	0.006 U	0.006 U	14 U
Chloromethane	NA	0.006 U	0.006 U	14 UJ
Dichloroethane,1,2-	NA	0.006 U	0.006 U	14 U
Dichloroethene, cis-1,2-	NA	0.006 U	0.006 U	14 U
Methylene chloride	NA	0.006 UJ	0.006 UJ	14 U
Styrene	NA	0.006 UJ	0.006 UJ	14 U
Tetrachloroethene	NA	0.006 UJ	0.006 UJ	14 U
Trichloroethene	NA	0.006 UJ	0.006 UJ	14 U
Vinyl chloride	NA	0.006 U	0.006 U	14 UJ
Total VOCs	NA	<b>0.163</b>	<b>0.327</b>	<b>876.4</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	NA	<b>3.2 J</b>	<b>3.9 J</b>	2100 U
Acenaphthylene	NA	<b>4.8 J</b>	<b>4.8 J</b>	<b>78 J</b>
Anthracene	NA	<b>11</b>	<b>9.9</b>	<b>310 J</b>
Benzo[g,h,i]perylene	NA	<b>37</b>	<b>37</b>	<b>220 J</b>
Fluoranthene	NA	<b>59</b>	<b>48</b>	<b>770 J</b>
Fluorene	NA	<b>5.9 J</b>	<b>6.8 J</b>	<b>280 J</b>
Methylnaphthalene,2-	NA	<b>5.4 J</b>	<b>8 J</b>	<b>1100 J</b>
Naphthalene	NA	<b>3.6 J</b>	<b>4.3 J</b>	<b>11000</b>
Phenanthrene	NA	<b>55</b>	<b>41</b>	<b>1500 J</b>
Pyrene	NA	<b>54</b>	<b>54</b>	<b>850 J</b>
Benz[a]anthracene	NA	<b>33</b>	<b>36</b>	<b>350 J</b>
Benzo[a]pyrene	NA	<b>42</b>	<b>46</b>	<b>210 J</b>
Benzo[b]fluoranthene	NA	<b>27</b>	<b>35</b>	2100 U
Benzo[k]fluoranthene	NA	<b>36</b>	<b>33</b>	2100 U
Chrysene	NA	<b>33</b>	<b>34</b>	<b>310 J</b>
Dibenz[a,h]anthracene	NA	<b>12</b>	<b>15</b>	2100 U
Indeno[1,2,3-cd]pyrene	NA	<b>34</b>	<b>37</b>	<b>210 J</b>
Bis(2-ethylhexyl)phthalate	NA	8.6 U	8.8 U	2100 UJ
Butyl benzyl phthalate	NA	8.6 U	8.8 U	2100 U
Carbazole	NA	<b>3.4 J</b>	<b>2.8 J</b>	2100 U
Dibenzofuran	NA	<b>2.3 J</b>	<b>1.3 J</b>	<b>390 J</b>
Dimethylphenol, 2,4-	NA	8.6 U	8.8 U	2100 U
Di-n-butyl phthalate	NA	8.6 U	8.8 U	2100 U
Di-n-octyl phthalate	NA	8.6 U	8.8 U	2100 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-21 SP-PB21/(22-24) 12/16/2003	PB-22 SP-PB22(8-10) 12/18/2003	Duplicate of PB-22(8-10) SP-DUP4 12/18/2003	PB-22 SP-PB22(10-12) 12/18/2003
Methylphenol, 4-	NA	8.6 U	8.8 U	2100 U
Methylphenol,2-	NA	8.6 U	8.8 U	2100 U
Phenol	NA	8.6 U	8.8 U	2100 U
Total SVOCs	NA	<b>461.6</b>	<b>457.8</b>	<b>17578</b>
<b><i>Inorganics (mg/Kg)</i></b>				
Aluminum	NA	<b>3060</b>	<b>2690</b>	<b>681</b>
Antimony	NA	1.9 UJ	2 UJ	<b>6.4 J</b>
Arsenic	NA	<b>3.6</b>	<b>5.8</b>	<b>35.4</b>
Barium	NA	<b>82.1</b>	<b>88.9</b>	<b>169</b>
Beryllium	NA	0.77 U	0.85 U	0.96 U
Cadmium	NA	1.5 U	1.7 U	<b>8.9</b>
Calcium	NA	<b>1100 J</b>	<b>1350 J</b>	<b>5900 J</b>
Chromium	NA	<b>7 J</b>	<b>8.8 J</b>	<b>12 J</b>
Cobalt	NA	<b>2.2</b>	<b>2.8</b>	<b>3.7</b>
Copper	NA	<b>27.6</b>	<b>40.5</b>	<b>474</b>
Iron	NA	<b>9200 J</b>	<b>32800 J</b>	<b>72000 J</b>
Lead	NA	<b>75.7 J</b>	<b>127 J</b>	<b>450 J</b>
Magnesium	NA	<b>670</b>	<b>576</b>	<b>336</b>
Manganese	NA	<b>58.1 J</b>	<b>122 J</b>	<b>138 J</b>
Mercury	NA	<b>0.14</b>	<b>0.27</b>	<b>2.8</b>
Nickel	NA	<b>5</b>	<b>5.1</b>	<b>8.4</b>
Potassium	NA	<b>390 J</b>	<b>355 J</b>	<b>480 J</b>
Silver	NA	0.46 U	0.51 U	<b>1.2</b>
Sodium	NA	<b>532 J</b>	<b>589 J</b>	<b>694 J</b>
Vanadium	NA	<b>12.5</b>	<b>18.1</b>	<b>31.6</b>
Zinc	NA	<b>53.5 J</b>	<b>67.4 J</b>	<b>3060 J</b>
Cyanide, Total	NA	<b>18.1 J</b>	<b>27.2 J</b>	<b>830 J</b>
<b><i>TOC (mg/Kg)</i></b>				
Total Organic Carbon	<b>58000</b>	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-22 SP-PB22(12-14) 12/18/2003	PB-23 SP-PB23(10-11) 12/18/2003	PB-23 SP-PB23(16-18) 12/18/2003	PB-23 SP-PB23(21-23) 12/19/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>8.7 J</b>	<b>0.22 J</b>	<b>0.23 J</b>	<b>0.0006 J</b>
Ethylbenzene	<b>4.6 J</b>	<b>32 J</b>	<b>1.5</b>	0.004 U
Toluene	<b>0.29 J</b>	<b>0.52 J</b>	0.54 U	0.004 U
Xylene, Total	<b>12 J</b>	<b>65 J</b>	<b>0.28 J</b>	0.004 U
Acetone	2.8 UJ	2.6 UJ	1.4 UJ	<b>0.007 J</b>
Bromodichloromethane	1.1 UJ	1.1 UJ	0.54 U	<b>0.0006 J</b>
Bromoform	1.1 UJ	1.1 UJ	0.54 U	0.004 U
Bromomethane	1.1 UJ	1.1 UJ	0.54 UJ	R
Butanone,2- (MEK)	1.1 UJ	1.1 UJ	0.54 U	0.009 UJ
Carbon disulfide	1.1 UJ	1.1 UJ	0.54 U	<b>0.003 J</b>
Chlorobenzene	1.1 UJ	1.1 UJ	0.54 U	0.004 U
Chloroform	1.1 UJ	1.1 UJ	0.54 U	<b>0.0006 J</b>
Chloromethane	1.1 UJ	1.1 UJ	0.54 U	0.004 U
Dichloroethane,1,2-	1.1 UJ	1.1 UJ	0.54 U	0.004 U
Dichloroethene, cis-1,2-	1.1 UJ	1.1 UJ	0.54 U	0.004 U
Methylene chloride	1.1 UJ	1.1 UJ	0.54 U	0.004 UJ
Styrene	1.1 UJ	1.1 UJ	0.54 U	0.004 U
Tetrachloroethene	1.1 UJ	1.1 UJ	0.54 U	0.004 U
Trichloroethene	1.1 UJ	1.1 UJ	0.54 U	0.004 UJ
Vinyl chloride	1.1 UJ	1.1 UJ	0.54 U	0.004 U
Total VOCs	<b>25.59</b>	<b>97.74</b>	<b>2.01</b>	<b>0.0118</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	8.5 UJ	<b>63 J</b>	<b>1.7 J</b>	0.36 U
Acenaphthylene	<b>0.33 J</b>	<b>15 J</b>	<b>1.3 J</b>	0.36 U
Anthracene	<b>0.43 J</b>	<b>48 J</b>	<b>4.9</b>	0.36 U
Benzo[g,h,i]perylene	<b>0.55 J</b>	<b>22 J</b>	<b>1.5 J</b>	0.36 U
Fluoranthene	<b>1.4 J</b>	<b>87 J</b>	<b>10</b>	0.36 U
Fluorene	8.5 UJ	<b>59 J</b>	<b>5.2</b>	0.36 U
Methylnaphthalene,2-	<b>2.5 J</b>	<b>410 J</b>	<b>0.88 J</b>	0.36 U
Naphthalene	<b>63 J</b>	<b>2000 J</b>	<b>7.2</b>	0.36 U
Phenanthrene	<b>2 J</b>	<b>170 J</b>	<b>16</b>	0.36 U
Pyrene	<b>1.2 J</b>	<b>74 J</b>	<b>7.4</b>	0.36 U
Benz[a]anthracene	<b>0.67 J</b>	<b>35 J</b>	<b>4.3</b>	0.36 U
Benzo[a]pyrene	<b>0.51 J</b>	<b>31 J</b>	<b>3.9</b>	0.36 U
Benzo[b]fluoranthene	8.5 UJ	330 UJ	<b>2.4 J</b>	0.36 U
Benzo[k]fluoranthene	8.5 UJ	330 UJ	<b>2.9 J</b>	0.36 U
Chrysene	<b>0.62 J</b>	<b>31 J</b>	<b>3.7</b>	0.36 U
Dibenz[a,h]anthracene	8.5 UJ	330 UJ	<b>0.58 J</b>	0.36 U
Indeno[1,2,3-cd]pyrene	8.5 UJ	<b>20 J</b>	<b>1.8 J</b>	0.36 U
Bis(2-ethylhexyl)phthalate	8.5 UJ	330 UJ	3.3 U	0.36 U
Butyl benzyl phthalate	8.5 UJ	330 UJ	3.3 U	0.36 U
Carbazole	8.5 UJ	330 UJ	3.3 U	0.36 U
Dibenzofuran	<b>0.53 J</b>	<b>76 J</b>	<b>5.7</b>	0.36 U
Dimethylphenol, 2,4-	8.5 UJ	330 UJ	3.3 U	0.36 U
Di-n-butyl phthalate	8.5 UJ	330 UJ	3.3 U	0.36 U
Di-n-octyl phthalate	8.5 UJ	330 UJ	3.3 U	0.36 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-22 SP-PB22(12-14) 12/18/2003	PB-23 SP-PB23(10-11) 12/18/2003	PB-23 SP-PB23(16-18) 12/18/2003	PB-23 SP-PB23(21-23) 12/19/2003
Methylphenol, 4-	8.5 UJ	330 UJ	3.3 U	0.36 U
Methylphenol,2-	8.5 UJ	330 UJ	3.3 U	0.36 U
Phenol	8.5 UJ	330 UJ	3.3 U	0.36 U
Total SVOCs	<b>73.74</b>	<b>3141</b>	<b>81.36</b>	ND
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>15700 J</b>	<b>16100 J</b>	<b>11800</b>	<b>7240</b>
Antimony	3.9 UJ	3.4 UJ	1.8 UJ	1.5 UJ
Arsenic	<b>6.8 J</b>	<b>6.2 J</b>	1.5 U	1.3 U
Barium	<b>57.5 J</b>	<b>101 J</b>	<b>25</b>	<b>26</b>
Beryllium	1.6 UJ	1.4 UJ	0.74 U	0.64 U
Cadmium	3.3 UJ	2.9 UJ	1.5 U	1.3 U
Calcium	<b>6040 J</b>	<b>71100 J</b>	<b>1040 J</b>	<b>1170 J</b>
Chromium	<b>39.3 J</b>	<b>37.7 J</b>	<b>26.7 J</b>	<b>22.8 J</b>
Cobalt	<b>11.2 J</b>	<b>10.6 J</b>	<b>11.6</b>	<b>4.3</b>
Copper	<b>19.3 J</b>	<b>30.8 J</b>	<b>11.1</b>	<b>17.9</b>
Iron	<b>31300 J</b>	<b>27100 J</b>	<b>14300 J</b>	<b>9970 J</b>
Lead	<b>22.6 J</b>	<b>221 J</b>	<b>4.6 J</b>	<b>3.1 J</b>
Magnesium	<b>6280 J</b>	<b>15000 J</b>	<b>4190</b>	<b>3000</b>
Manganese	<b>305 J</b>	<b>447 J</b>	<b>137 J</b>	<b>94.2 J</b>
Mercury	0.13 UJ	0.11 UJ	0.05 U	0.045 U
Nickel	<b>25 J</b>	<b>22.5 J</b>	<b>19.9</b>	<b>15.7</b>
Potassium	<b>1760 J</b>	<b>2680 J</b>	<b>537 J</b>	<b>1200 J</b>
Silver	0.98 UJ	0.86 UJ	0.44 U	0.39 U
Sodium	<b>1360 J</b>	<b>1910 J</b>	<b>442 J</b>	<b>246 J</b>
Vanadium	<b>47.3 J</b>	<b>44.9 J</b>	<b>28.5</b>	<b>21.9</b>
Zinc	<b>81.1 J</b>	<b>183 J</b>	<b>56.5 J</b>	<b>31 J</b>
Cyanide, Total	<b>56.1 J</b>	<b>1.78 J</b>	0.0696 UJ	0.0589 UJ
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-23 SP-PB23/33-34 12/21/2003	PB-24 SP-PB24(6-8) 12/19/2003	PB-24 SP-PB24(10-12) 12/19/2003	PB-24 SP-PB24(20-22) 12/19/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.002 J</b>	0.005 U	0.005 U	0.006 U
Ethylbenzene	0.005 U	0.005 U	<b>0.002 J</b>	<b>0.001 J</b>
Toluene	0.005 U	0.005 U	0.005 U	0.006 U
Xylene, Total	0.005 U	0.005 U	<b>0.006</b>	<b>0.002 J</b>
Acetone	<b>0.007 J</b>	<b>0.014 J</b>	<b>0.027 J</b>	<b>0.031 J</b>
Bromodichloromethane	0.005 U	0.005 U	<b>0.002 J</b>	0.006 U
Bromoform	0.005 U	0.005 UJ	0.005 U	0.006 U
Bromomethane	R	R	R	R
Butanone,2- (MEK)	0.01 UJ	0.011 UJ	0.01 UJ	<b>0.005 J</b>
Carbon disulfide	0.005 UJ	<b>0.002 J</b>	<b>0.033 J</b>	<b>0.004 J</b>
Chlorobenzene	0.005 U	0.005 U	0.005 U	0.006 U
Chloroform	0.005 U	0.005 U	<b>0.002 J</b>	0.006 U
Chloromethane	0.005 U	0.005 U	0.005 U	0.006 U
Dichloroethane,1,2-	0.005 U	0.005 U	0.005 UJ	0.006 UJ
Dichloroethene, cis-1,2-	0.005 U	0.005 U	0.005 UJ	0.006 UJ
Methylene chloride	0.005 UJ	0.005 UJ	0.005 UJ	0.006 UJ
Styrene	0.005 U	0.005 U	<b>0.001 J</b>	<b>0.0006 J</b>
Tetrachloroethene	0.005 U	0.005 U	0.005 U	0.006 U
Trichloroethene	0.005 UJ	0.005 UJ	0.005 UJ	0.006 UJ
Vinyl chloride	0.005 U	0.005 U	0.005 U	0.006 U
Total VOCs	<b>0.009</b>	<b>0.016</b>	<b>0.073</b>	<b>0.0436</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	0.39 U	<b>0.17 J</b>	<b>0.022 J</b>	0.47 U
Acenaphthylene	0.39 U	<b>0.028 J</b>	<b>0.034 J</b>	0.47 U
Anthracene	0.39 U	<b>0.28 J</b>	<b>0.11 J</b>	0.47 U
Benzo[g,h,i]perylene	0.39 U	<b>0.13 J</b>	<b>0.48</b>	0.47 U
Fluoranthene	0.39 U	<b>1.2</b>	<b>0.59</b>	0.47 U
Fluorene	0.39 U	<b>0.17 J</b>	<b>0.045 J</b>	0.47 U
Methylnaphthalene,2-	0.39 U	<b>0.067 J</b>	0.38 U	0.47 U
Naphthalene	<b>0.064 J</b>	<b>0.14 J</b>	<b>0.071 J</b>	0.47 U
Phenanthrene	0.39 U	<b>1.1</b>	<b>0.4</b>	0.47 U
Pyrene	0.39 U	<b>0.76 J</b>	<b>0.55</b>	0.47 U
Benz[a]anthracene	0.39 U	<b>0.48</b>	<b>0.37 J</b>	0.47 U
Benzo[a]pyrene	0.39 U	<b>0.42</b>	<b>0.48</b>	0.47 U
Benzo[b]fluoranthene	0.39 U	<b>0.35 J</b>	<b>0.3 J</b>	0.47 U
Benzo[k]fluoranthene	0.39 U	<b>0.38</b>	<b>0.45</b>	0.47 U
Chrysene	0.39 U	<b>0.49</b>	<b>0.35 J</b>	0.47 U
Dibenz[a,h]anthracene	0.39 U	<b>0.058 J</b>	<b>0.18 J</b>	0.47 U
Indeno[1,2,3-cd]pyrene	0.39 U	<b>0.14 J</b>	<b>0.42</b>	0.47 U
Bis(2-ethylhexyl)phthalate	0.39 U	0.35 U	<b>0.054 J</b>	0.47 U
Butyl benzyl phthalate	0.39 U	0.35 U	0.38 U	0.47 U
Carbazole	0.39 U	<b>0.14 J</b>	<b>0.051 J</b>	0.47 U
Dibenzofuran	0.39 U	<b>0.12 J</b>	<b>0.031 J</b>	0.47 U
Dimethylphenol, 2,4-	0.39 U	0.35 U	0.38 U	0.47 U
Di-n-butyl phthalate	0.39 U	0.35 U	0.38 U	0.47 U
Di-n-octyl phthalate	0.39 U	0.35 U	0.38 U	0.47 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

<b>Chemical Name</b>	<b>PB-23 SP-PB23/33-34 12/21/2003</b>	<b>PB-24 SP-PB24(6-8) 12/19/2003</b>	<b>PB-24 SP-PB24(10-12) 12/19/2003</b>	<b>PB-24 SP-PB24(20-22) 12/19/2003</b>
Methylphenol, 4-	0.39 U	0.35 U	0.38 U	0.47 U
Methylphenol,2-	0.39 U	0.35 U	0.38 U	0.47 U
Phenol	0.39 U	0.35 U	0.38 U	0.47 U
Total SVOCs	<b>0.064</b>	<b>6.623</b>	<b>4.988</b>	ND
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>3340</b>	<b>15700</b>	<b>8370</b>	<b>4570</b>
Antimony	1.5 UJ	1.5 UJ	1.6 UJ	2 UJ
Arsenic	1.3 U	1.3 U	<b>1.4</b>	1.7 U
Barium	<b>16.4</b>	<b>390</b>	<b>145</b>	<b>24.1</b>
Beryllium	0.64 U	0.64 U	0.65 U	0.85 U
Cadmium	1.3 U	1.3 U	1.3 U	1.7 U
Calcium	<b>932 J</b>	<b>6760 J</b>	<b>36200 J</b>	<b>1060 J</b>
Chromium	<b>9.9 J</b>	<b>54.3 J</b>	<b>25.1 J</b>	<b>15.2 J</b>
Cobalt	<b>4.2</b>	<b>11.5</b>	<b>9</b>	<b>3.9</b>
Copper	<b>11.7</b>	<b>6.9</b>	<b>35.8</b>	<b>5.4</b>
Iron	<b>6610</b>	<b>31100 J</b>	<b>17200 J</b>	<b>14700 J</b>
Lead	<b>1.6 J</b>	<b>7 J</b>	<b>6 J</b>	<b>2 J</b>
Magnesium	<b>1650</b>	<b>9620</b>	<b>19700</b>	<b>2150</b>
Manganese	<b>55.1 J</b>	<b>392 J</b>	<b>321 J</b>	<b>87.2 J</b>
Mercury	0.047 U	0.039 U	0.052 U	0.059 U
Nickel	<b>10.2</b>	<b>21.4</b>	<b>15.6</b>	<b>8.5</b>
Potassium	<b>734 J</b>	<b>14900 J</b>	<b>7470 J</b>	<b>561 J</b>
Silver	0.38 U	0.39 U	0.39 U	0.51 U
Sodium	<b>175 J</b>	<b>274 J</b>	<b>280 J</b>	<b>567 J</b>
Vanadium	<b>11</b>	<b>63.5</b>	<b>30.5</b>	<b>22.6</b>
Zinc	<b>15.6 J</b>	<b>72.8 J</b>	<b>65.6 J</b>	<b>25 J</b>
Cyanide, Total	0.0639 U	<b>0.223 J</b>	<b>1.5 J</b>	0.0739 UJ
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-25 SP-PB25/(6-8) 12/17/2003	PB-25 SP-PB25/(20-22) 12/17/2003	PB-25 SP-PB25/(26-28) 12/17/2003	PB-26 SP-PB 26(12-14) 11/21/2003
<b>VOCs (mg/kg)</b>				
Benzene	0.004 U	0.006 U	<b>0.002 J</b>	0.007 U
Ethylbenzene	0.004 U	<b>0.001 J</b>	0.005 U	0.007 UJ
Toluene	0.004 U	<b>0.006 J</b>	0.005 U	<b>0.001 J</b>
Xylene, Total	0.004 U	<b>0.004 J</b>	0.005 U	<b>0.002 J</b>
Acetone	<b>0.013 J</b>	<b>0.029 J</b>	<b>0.011 J</b>	0.024 UJ
Bromodichloromethane	0.004 U	0.006 U	0.005 U	0.007 U
Bromoform	0.004 U	0.006 U	0.005 U	0.007 UJ
Bromomethane	R	R	R	0.007 U
Butanone,2- (MEK)	0.009 UJ	0.012 UJ	0.011 UJ	R
Carbon disulfide	0.004 UJ	<b>0.008 J</b>	<b>0.003 J</b>	0.007 U
Chlorobenzene	0.004 U	0.006 U	0.005 U	0.007 UJ
Chloroform	0.004 U	0.006 U	0.005 U	0.007 U
Chloromethane	0.004 U	0.006 U	0.005 U	0.007 U
Dichloroethane,1,2-	0.004 U	0.006 U	0.005 U	0.007 U
Dichloroethene, cis-1,2-	0.004 U	0.006 U	0.005 U	0.007 U
Methylene chloride	0.004 UJ	0.006 UJ	0.005 UJ	0.007 U
Styrene	0.004 U	0.006 U	0.005 U	0.007 UJ
Tetrachloroethene	0.004 U	0.006 U	0.005 U	0.007 UJ
Trichloroethene	0.004 UJ	0.006 UJ	0.005 UJ	0.007 U
Vinyl chloride	0.004 U	0.006 U	0.005 U	0.007 U
Total VOCs	<b>0.013</b>	<b>0.048</b>	<b>0.016</b>	<b>0.003</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	0.34 U	0.41 U	0.37 U	<b>0.39 J</b>
Acenaphthylene	0.34 U	0.41 U	0.37 U	0.94 U
Anthracene	0.34 U	<b>0.022 J</b>	0.37 U	<b>0.97</b>
Benzo[g,h,i]perylene	0.34 U	<b>0.023 J</b>	0.37 U	<b>0.46 J</b>
Fluoranthene	0.34 U	<b>0.057 J</b>	0.37 U	<b>4.1</b>
Fluorene	0.34 U	0.41 U	0.37 U	<b>0.34 J</b>
Methylnaphthalene,2-	0.34 U	0.41 U	0.37 U	0.94 U
Naphthalene	0.34 U	0.41 U	0.37 U	0.94 U
Phenanthrene	0.34 U	<b>0.043 J</b>	0.37 U	<b>3.7</b>
Pyrene	0.34 U	<b>0.074 J</b>	0.37 U	<b>5.2</b>
Benz[a]anthracene	0.34 U	<b>0.033 J</b>	0.37 U	<b>2.1</b>
Benzo[a]pyrene	0.34 U	<b>0.041 J</b>	0.37 U	<b>1.7</b>
Benzo[b]fluoranthene	0.34 U	0.41 U	0.37 U	<b>1.6</b>
Benzo[k]fluoranthene	0.34 U	0.41 U	0.37 U	<b>1.7</b>
Chrysene	0.34 U	<b>0.032 J</b>	0.37 U	<b>2</b>
Dibenz[a,h]anthracene	0.34 U	0.41 U	0.37 U	<b>0.22 J</b>
Indeno[1,2,3-cd]pyrene	0.34 U	<b>0.023 J</b>	0.37 U	<b>0.53 J</b>
Bis(2-ethylhexyl)phthalate	0.34 U	0.41 U	0.37 U	0.94 UJ
Butyl benzyl phthalate	0.34 U	0.41 U	0.37 U	0.94 U
Carbazole	0.34 U	0.41 U	0.37 U	<b>0.34 J</b>
Dibenzofuran	0.34 U	0.41 U	0.37 U	<b>0.18 J</b>
Dimethylphenol, 2,4-	0.34 U	0.41 U	0.37 U	0.94 U
Di-n-butyl phthalate	0.34 U	0.41 U	0.37 U	0.94 U
Di-n-octyl phthalate	0.34 U	<b>0.023 J</b>	0.37 U	0.94 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

<b>Chemical Name</b>	<b>PB-25 SP-PB25/(6-8) 12/17/2003</b>	<b>PB-25 SP-PB25/(20-22) 12/17/2003</b>	<b>PB-25 SP-PB25/(26-28) 12/17/2003</b>	<b>PB-26 SP-PB 26(12-14) 11/21/2003</b>
Methylphenol, 4-	0.34 U	0.41 U	0.37 U	0.94 U
Methylphenol,2-	0.34 U	0.41 U	0.37 U	0.94 U
Phenol	0.34 U	0.41 U	0.37 U	0.94 U
Total SVOCs	ND	<b>0.371</b>	ND	<b>25.53</b>
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>5040</b>	<b>1800</b>	<b>7520</b>	<b>9020</b>
Antimony	1.5 UJ	1.8 UJ	1.7 UJ	2.1 UJ
Arsenic	<b>1.5</b>	1.5 U	1.4 U	<b>11.8</b>
Barium	<b>65.9</b>	<b>7.7</b>	<b>33.1</b>	<b>69.5</b>
Beryllium	0.64 U	0.75 U	0.71 U	0.89 U
Cadmium	1.3 U	1.5 U	1.4 U	1.8 U
Calcium	<b>1830 J</b>	<b>310 J</b>	<b>1230 J</b>	<b>1910</b>
Chromium	<b>10 J</b>	<b>6.2 J</b>	<b>41.1 J</b>	<b>275</b>
Cobalt	<b>3.7</b>	<b>1.9</b>	<b>6</b>	<b>15.4</b>
Copper	<b>5.6</b>	<b>2.4</b>	<b>23.6</b>	<b>83.3 J</b>
Iron	<b>9330</b>	<b>4440</b>	<b>20200</b>	<b>18700</b>
Lead	<b>5.7 J</b>	1.5 U	<b>4.7 J</b>	<b>242</b>
Magnesium	<b>2460</b>	<b>700</b>	<b>3470</b>	<b>3250</b>
Manganese	<b>128 J</b>	<b>30.8 J</b>	<b>118 J</b>	<b>183 J</b>
Mercury	0.049 UJ	0.058 UJ	0.046 UJ	<b>0.84</b>
Nickel	<b>11</b>	<b>3.7</b>	<b>15.5</b>	<b>27</b>
Potassium	<b>3520 J</b>	<b>238 J</b>	<b>2130 J</b>	<b>1960 J</b>
Silver	0.38 U	0.45 U	0.42 U	0.54 U
Sodium	<b>72.1 J</b>	<b>162 J</b>	<b>386 J</b>	<b>1580 J</b>
Vanadium	<b>20.5</b>	<b>5.3</b>	<b>54.6</b>	<b>22.2</b>
Zinc	<b>22.2 J</b>	<b>15.6 J</b>	<b>37.8 J</b>	<b>252</b>
Cyanide, Total	0.0551 UJ	0.0663 UJ	0.06 UJ	<b>4.4</b>
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-26 SP-PB 26(17-19) 11/21/2003	PB-27 SP-PB 27(6-8) 11/18/2003	PB-27 SP-PB 27(14-16) 11/18/2003	PB-27 SP-PB 27(22-24) 11/18/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.45</b>	<b>0.012 J</b>	<b>0.19 J</b>	0.006 U
Ethylbenzene	<b>0.94</b>	0.006 U	<b>0.43</b>	0.006 U
Toluene	<b>0.061 J</b>	<b>0.004 J</b>	<b>0.068 J</b>	0.006 U
Xylene, Total	<b>2.5</b>	<b>0.002 J</b>	<b>0.6</b>	0.006 U
Acetone	0.95 UJ	0.018 UJ	0.98 UJ	R
Bromodichloromethane	0.38 U	0.006 U	0.39 U	0.006 U
Bromoform	0.38 U	0.006 U	0.39 U	0.006 U
Bromomethane	0.38 U	0.006 UJ	0.39 UJ	0.006 U
Butanone,2- (MEK)	<b>0.37 J</b>	R	0.39 U	R
Carbon disulfide	0.38 U	0.006 U	0.39 U	0.006 U
Chlorobenzene	0.38 U	0.006 U	0.39 U	0.006 U
Chloroform	0.38 U	0.006 U	0.39 U	0.006 U
Chloromethane	0.38 U	0.006 U	0.39 U	0.006 U
Dichloroethane,1,2-	0.38 U	0.006 U	0.39 U	0.006 U
Dichloroethene, cis-1,2-	0.38 U	0.006 U	0.39 U	0.006 U
Methylene chloride	0.38 U	0.006 UJ	0.39 U	0.006 UJ
Styrene	0.38 U	0.006 U	0.39 U	0.006 U
Tetrachloroethene	0.38 U	0.006 U	0.39 U	0.006 U
Trichloroethene	0.38 U	0.006 U	0.39 U	0.006 U
Vinyl chloride	0.38 U	0.006 U	0.39 U	0.006 U
Total VOCs	<b>4.321</b>	<b>0.018</b>	<b>1.288</b>	ND
<b>SVOCs (mg/kg)</b>				
Acenaphthene	<b>87</b>	0.41 U	<b>2.7 J</b>	0.41 U
Acenaphthylene	<b>3.3 J</b>	<b>0.11 J</b>	<b>4.3 J</b>	0.41 U
Anthracene	<b>73</b>	<b>0.12 J</b>	<b>12</b>	0.41 U
Benzo[g,h,i]perylene	<b>31 J</b>	<b>0.42</b>	<b>7.7</b>	0.41 U
Fluoranthene	<b>170</b>	<b>0.71</b>	<b>41</b>	0.41 U
Fluorene	<b>51 J</b>	0.41 U	<b>5.3 J</b>	0.41 U
Methylnaphthalene,2-	<b>44 J</b>	<b>0.08 J</b>	<b>1.1 J</b>	0.41 U
Naphthalene	<b>190</b>	<b>0.2 J</b>	<b>13</b>	0.41 U
Phenanthrene	<b>270</b>	<b>0.33 J</b>	<b>36</b>	0.41 U
Pyrene	<b>110</b>	<b>0.69</b>	<b>30</b>	0.41 U
Benz[a]anthracene	<b>62</b>	<b>0.43</b>	<b>15</b>	0.41 U
Benzo[a]pyrene	<b>58</b>	<b>0.47</b>	<b>14</b>	0.41 U
Benzo[b]fluoranthene	<b>39 J</b>	<b>0.41 J</b>	<b>9.6</b>	0.41 U
Benzo[k]fluoranthene	<b>55 J</b>	<b>0.45</b>	<b>13</b>	0.41 U
Chrysene	<b>57</b>	<b>0.47</b>	<b>14</b>	0.41 U
Dibenz[a,h]anthracene	<b>9.6 J</b>	<b>0.17 J</b>	<b>2.8 J</b>	0.41 U
Indeno[1,2,3-cd]pyrene	<b>31 J</b>	<b>0.4 J</b>	<b>8.1</b>	0.41 U
Bis(2-ethylhexyl)phthalate	56 U	0.41 U	5.5 U	0.41 U
Butyl benzyl phthalate	56 U	<b>0.02 J</b>	5.5 U	0.41 U
Carbazole	<b>18 J</b>	<b>0.035 J</b>	<b>2.1 J</b>	0.41 U
Dibenzofuran	<b>45 J</b>	<b>0.023 J</b>	<b>3.1 J</b>	0.41 U
Dimethylphenol, 2,4-	56 U	0.41 U	5.5 U	0.41 U
Di-n-butyl phthalate	56 U	0.41 U	5.5 U	0.41 U
Di-n-octyl phthalate	56 U	0.41 U	5.5 U	0.41 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-26 SP-PB 26(17-19) 11/21/2003	PB-27 SP-PB 27(6-8) 11/18/2003	PB-27 SP-PB 27(14-16) 11/18/2003	PB-27 SP-PB 27(22-24) 11/18/2003
Methylphenol, 4-	56 U	0.41 U	5.5 U	0.41 U
Methylphenol,2-	56 U	0.41 U	5.5 U	0.41 U
Phenol	56 U	0.41 U	5.5 U	0.41 U
Total SVOCs	<b>1403.9</b>	<b>5.538</b>	<b>234.8</b>	ND
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>16400</b>	<b>11400</b>	<b>11100</b>	<b>11000</b>
Antimony	2.5 UJ	1.6 UJ	2.4 UJ	1.9 UJ
Arsenic	<b>15.2</b>	<b>8</b>	<b>4.6</b>	1.6 U
Barium	<b>86.9</b>	<b>125</b>	<b>42.8</b>	<b>101</b>
Beryllium	1 U	0.66 U	1 U	0.81 U
Cadmium	2.1 U	<b>3.2 J</b>	2 U	1.6 U
Calcium	<b>2560</b>	<b>14500</b>	<b>3310</b>	<b>1930</b>
Chromium	<b>134</b>	<b>26.4</b>	<b>25.6</b>	<b>24.3</b>
Cobalt	<b>12.5</b>	<b>8.8</b>	<b>8.4</b>	<b>8.9</b>
Copper	<b>77.4 J</b>	<b>51.8 J</b>	<b>16.5 J</b>	<b>25.8 J</b>
Iron	<b>33700</b>	<b>20800</b>	<b>19300</b>	<b>20400</b>
Lead	<b>174</b>	<b>145</b>	<b>23.9</b>	<b>3.9</b>
Magnesium	<b>6910</b>	<b>11400</b>	<b>4670</b>	<b>5000</b>
Manganese	<b>372 J</b>	<b>328 J</b>	<b>201 J</b>	<b>507 J</b>
Mercury	<b>0.69</b>	<b>0.14</b>	0.075 U	0.047 U
Nickel	<b>28.7</b>	<b>24.4</b>	<b>17.7</b>	<b>20.6</b>
Potassium	<b>3000 J</b>	<b>2730 J</b>	<b>1490 J</b>	<b>2620 J</b>
Silver	0.63 U	0.4 U	0.61 U	0.49 U
Sodium	<b>1520 J</b>	<b>216 J</b>	<b>833 J</b>	<b>235 J</b>
Vanadium	<b>43.7</b>	<b>32.8</b>	<b>29.6</b>	<b>31.4</b>
Zinc	<b>247</b>	<b>900</b>	<b>63.5</b>	<b>44.1</b>
Cyanide, Total	<b>0.135</b>	<b>0.938</b>	0.086 U	0.0685 U
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-28 SP-PB-28(8-14) 11/13/2003	PB-28 SP-PB-28(21-22) 11/13/2003	PB-29 SP-PB-29(8-10) 12/4/2003	PB-29 SP-PB-29(12-14) 12/4/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.22 J</b>	<b>0.012</b>	<b>0.037 J</b>	0.008 U
Ethylbenzene	<b>0.064 J</b>	<b>0.002 J</b>	<b>0.0009 J</b>	<b>0.002 J</b>
Toluene	<b>0.16 J</b>	0.009 U	<b>0.024</b>	0.008 U
Xylene, Total	<b>0.12 J</b>	<b>0.009 J</b>	<b>0.019 J</b>	<b>0.005 J</b>
Acetone	1.2 UJ	<b>0.16 J</b>	<b>0.021 J</b>	<b>0.07 J</b>
Bromodichloromethane	0.47 U	0.009 U	0.006 U	0.008 U
Bromoform	0.47 UJ	0.009 UJ	0.006 U	0.008 U
Bromomethane	0.47 UJ	0.009 UJ	0.006 UJ	0.008 UJ
Butanone,2- (MEK)	0.47 U	R	R	R
Carbon disulfide	0.47 UJ	<b>0.016</b>	0.006 U	<b>0.007 J</b>
Chlorobenzene	0.47 U	0.009 U	0.006 U	0.008 U
Chloroform	0.47 U	0.009 U	0.006 U	0.008 U
Chloromethane	0.47 UJ	0.009 U	0.006 U	0.008 U
Dichloroethane,1,2-	0.47 U	0.009 U	0.006 U	0.008 U
Dichloroethene, cis-1,2-	0.47 U	<b>0.009</b>	0.006 U	0.008 U
Methylene chloride	0.47 U	0.009 UJ	0.006 UJ	0.008 UJ
Styrene	0.47 U	0.009 U	0.006 U	0.008 U
Tetrachloroethene	0.47 U	0.009 U	0.006 U	0.008 U
Trichloroethene	0.47 U	0.009 U	0.006 U	0.008 U
Vinyl chloride	0.47 UJ	0.009 U	0.006 U	0.008 U
Total VOCs	<b>0.564</b>	<b>0.208</b>	<b>0.1019</b>	<b>0.084</b>
<b>SVOCS (mg/kg)</b>				
Acenaphthene	<b>79 J</b>	1.3 U	<b>33 J</b>	<b>0.15 J</b>
Acenaphthylene	<b>280</b>	1.3 U	<b>120 J</b>	<b>0.35 J</b>
Anthracene	<b>420</b>	1.3 U	<b>250</b>	<b>1.2</b>
Benzo[g,h,i]perylene	<b>120 J</b>	1.3 U	<b>270</b>	<b>0.9</b>
Fluoranthene	<b>950</b>	1.3 U	<b>920</b>	<b>3.4</b>
Fluorene	<b>330</b>	1.3 U	<b>110 J</b>	<b>0.55 J</b>
Methylnaphthalene,2-	<b>130 J</b>	1.3 U	<b>80 J</b>	<b>0.08 J</b>
Naphthalene	<b>98 J</b>	<b>0.13 J</b>	<b>110 J</b>	<b>0.24 J</b>
Phenanthrene	<b>1200</b>	1.3 U	<b>830</b>	<b>3.7</b>
Pyrene	<b>860</b>	<b>0.1 J</b>	<b>730</b>	<b>3.6 J</b>
Benz[a]anthracene	<b>410</b>	1.3 U	<b>480</b>	<b>1.7 J</b>
Benzo[a]pyrene	<b>320</b>	1.3 U	<b>410</b>	<b>1.7 J</b>
Benzo[b]fluoranthene	<b>200 J</b>	1.3 U	<b>310</b>	<b>1.1</b>
Benzo[k]fluoranthene	<b>330</b>	1.3 U	<b>390 J</b>	<b>1.4</b>
Chrysene	<b>360</b>	1.3 U	<b>430</b>	<b>1.6 J</b>
Dibenz[a,h]anthracene	<b>53 J</b>	1.3 U	<b>89 J</b>	<b>0.33 J</b>
Indeno[1,2,3-cd]pyrene	<b>140 J</b>	1.3 U	<b>270</b>	<b>0.97</b>
Bis(2-ethylhexyl)phthalate	210 U	1.3 U	160 U	0.59 UJ
Butyl benzyl phthalate	210 U	1.3 U	160 U	0.59 UJ
Carbazole	<b>120 J</b>	1.3 U	<b>51 J</b>	<b>0.26 J</b>
Dibenzofuran	<b>250</b>	1.3 U	<b>98 J</b>	<b>0.53 J</b>
Dimethylphenol, 2,4-	210 U	1.3 U	160 U	0.59 U
Di-n-butyl phthalate	210 U	1.3 U	160 U	0.59 U
Di-n-octyl phthalate	210 U	1.3 U	160 U	0.59 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

<b>Chemical Name</b>	<b>PB-28 SP-PB-28(8-14) 11/13/2003</b>	<b>PB-28 SP-PB-28(21-22) 11/13/2003</b>	<b>PB-29 SP-PB-29(8-10) 12/4/2003</b>	<b>PB-29 SP-PB-29(12-14) 12/4/2003</b>
Methylphenol, 4-	210 U	1.3 U	160 U	0.59 U
Methylphenol,2-	210 U	1.3 U	160 U	0.59 U
Phenol	210 U	1.3 U	160 U	0.59 U
Total SVOCs	<b>6650</b>	<b>0.23</b>	<b>5981</b>	<b>23.76</b>
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>4930</b>	<b>13500</b>	<b>1530</b>	<b>17400</b>
Antimony	2.2 UJ	2.8 UJ	1.7 UJ	2.5 UJ
Arsenic	<b>2.2</b>	<b>8.5</b>	<b>3.6</b>	<b>5.5</b>
Barium	<b>37.3</b>	<b>64</b>	<b>37 J</b>	<b>58.3 J</b>
Beryllium	0.93 U	1.2 U	0.72 U	1.1 U
Cadmium	1.9 U	2.3 U	1.4 U	2.1 U
Calcium	<b>36000</b>	<b>1950</b>	<b>4190</b>	<b>2860</b>
Chromium	<b>7.2</b>	<b>36.5</b>	<b>7.8</b>	<b>40.3</b>
Cobalt	<b>2.7</b>	<b>11.3</b>	<b>3</b>	<b>13</b>
Copper	<b>12.5</b>	<b>13</b>	<b>17</b>	<b>11.3</b>
Iron	<b>7220</b>	<b>39200</b>	<b>9310</b>	<b>26800</b>
Lead	<b>20.2</b>	<b>10.8</b>	<b>20.9</b>	<b>12.7</b>
Magnesium	<b>1120 J</b>	<b>6210 J</b>	<b>1020</b>	<b>8230</b>
Manganese	<b>179</b>	<b>274</b>	<b>154</b>	<b>361</b>
Mercury	0.075 U	0.086 U	<b>0.078 J</b>	<b>0.69 J</b>
Nickel	<b>8.3</b>	<b>23.3</b>	<b>8.1</b>	<b>28.4</b>
Potassium	<b>299 J</b>	<b>1810 J</b>	<b>577 J</b>	<b>2920 J</b>
Silver	0.56 U	0.7 U	0.43 U	0.64 U
Sodium	521 UJ	<b>1650 J</b>	<b>250 J</b>	<b>1970 J</b>
Vanadium	<b>11.4</b>	<b>42.9</b>	<b>13.7</b>	<b>45</b>
Zinc	<b>116 J</b>	<b>64.5 J</b>	<b>15.7</b>	<b>84.7</b>
Cyanide, Total	<b>29.1 J</b>	0.1 U	<b>96.6 J</b>	<b>5.58 J</b>
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-29 SP-PB-29(22-24) 12/4/2003	Duplicate of PB-29(22-24) SP-DUP1 12/4/2003	PB-30 SP-PB 30(12-13) 11/17/2003	PB-30 SP-PB 30(22-23) 11/17/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.076 J</b>	<b>0.15 J</b>	0.008 U	<b>0.017</b>
Ethylbenzene	<b>0.02</b>	<b>0.026</b>	0.008 U	0.006 U
Toluene	<b>0.004 J</b>	<b>0.004 J</b>	0.008 U	<b>0.0008 J</b>
Xylene, Total	<b>0.055</b>	<b>0.066</b>	<b>0.002 J</b>	<b>0.002 J</b>
Acetone	<b>0.011 J</b>	<b>0.011 J</b>	0.054 UJ	0.015 UJ
Bromodichloromethane	0.005 U	0.005 U	0.008 U	<b>0.002 J</b>
Bromoform	0.005 U	0.005 U	0.008 U	0.006 U
Bromomethane	0.005 UJ	0.005 UJ	0.008 U	0.006 U
Butanone,2- (MEK)	R	R	R	R
Carbon disulfide	<b>0.007</b>	<b>0.01</b>	<b>0.003 J</b>	0.006 U
Chlorobenzene	0.005 U	0.005 U	0.008 U	0.006 U
Chloroform	0.005 U	0.005 U	0.008 U	<b>0.002 J</b>
Chloromethane	0.005 U	0.005 U	0.008 U	0.006 U
Dichloroethane,1,2-	0.005 U	0.005 U	0.008 U	0.006 U
Dichloroethene, cis-1,2-	0.005 U	0.005 U	0.008 U	0.006 U
Methylene chloride	0.005 UJ	0.005 UJ	0.008 UJ	<b>0.002 J</b>
Styrene	0.005 U	0.005 U	0.008 U	0.006 U
Tetrachloroethene	0.005 U	0.005 U	0.008 U	0.006 U
Trichloroethene	0.005 U	0.005 U	0.008 U	0.006 U
Vinyl chloride	0.005 U	0.005 U	0.008 U	0.006 U
Total VOCs	<b>0.173</b>	<b>0.267</b>	<b>0.005</b>	<b>0.0258</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	<b>0.19 J</b>	<b>0.69 J</b>	0.55 U	<b>0.051 J</b>
Acenaphthylene	<b>0.096 J</b>	<b>0.54 J</b>	0.55 U	0.43 U
Anthracene	<b>0.36</b>	<b>1.7</b>	0.55 U	0.43 U
Benzo[g,h,i]perylene	<b>0.14 J</b>	<b>1.3 J</b>	0.55 U	0.43 U
Fluoranthene	<b>1 J</b>	<b>5</b>	0.55 U	0.43 U
Fluorene	<b>0.28 J</b>	<b>0.94 J</b>	0.55 U	<b>0.063 J</b>
Methylnaphthalene,2-	<b>0.14 J</b>	<b>0.47 J</b>	0.55 U	0.43 U
Naphthalene	<b>0.76 J</b>	<b>3.2 J</b>	0.55 U	0.43 U
Phenanthrene	<b>1.3 J</b>	<b>6 J</b>	0.55 U	<b>0.034 J</b>
Pyrene	<b>1.3 J</b>	<b>4.4 J</b>	0.55 U	<b>0.035 J</b>
Benz[a]anthracene	<b>0.35 J</b>	<b>2.3 J</b>	0.55 U	0.43 U
Benzo[a]pyrene	<b>0.26 J</b>	<b>2.1 J</b>	0.55 U	0.43 U
Benzo[b]fluoranthene	<b>0.19 J</b>	<b>1.6 J</b>	0.55 U	0.43 U
Benzo[k]fluoranthene	<b>0.21 J</b>	<b>1.7 J</b>	0.55 U	0.43 U
Chrysene	<b>0.29 J</b>	<b>2.1 J</b>	0.55 U	0.43 U
Dibenz[a,h]anthracene	<b>0.06 J</b>	1.5 U	0.55 U	0.43 U
Indeno[1,2,3-cd]pyrene	<b>0.16 J</b>	<b>1.3 J</b>	0.55 U	0.43 U
Bis(2-ethylhexyl)phthalate	0.36 U	1.5 U	0.55 U	0.43 U
Butyl benzyl phthalate	0.36 U	1.5 U	0.55 U	0.43 U
Carbazole	<b>0.29 J</b>	<b>0.93 J</b>	0.55 U	0.43 U
Dibenzofuran	<b>0.26 J</b>	<b>0.78 J</b>	0.55 U	0.43 U
Dimethylphenol, 2,4-	0.36 U	1.5 U	0.55 U	0.43 U
Di-n-butyl phthalate	0.36 U	1.5 U	0.55 U	0.43 U
Di-n-octyl phthalate	0.36 UJ	1.5 U	0.55 U	0.43 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-29 SP-PB-29(22-24) 12/4/2003	Duplicate of PB-29(22-24) SP-DUP1 12/4/2003	PB-30 SP-PB 30(12-13) 11/17/2003	PB-30 SP-PB 30(22-23) 11/17/2003
Methylphenol, 4-	0.36 U	1.5 U	0.55 U	0.43 U
Methylphenol,2-	0.36 U	1.5 U	0.55 U	0.43 U
Phenol	0.36 U	1.5 U	0.55 U	0.43 U
Total SVOCs	<b>7.636</b>	<b>37.05</b>	ND	<b>0.183</b>
<b><i>Inorganics (mg/Kg)</i></b>				
Aluminum	<b>16500</b>	<b>9330</b>	<b>16300</b>	<b>4640</b>
Antimony	1.5 UJ	1.5 UJ	2.4 UJ	1.8 UJ
Arsenic	1.3 U	1.3 U	<b>12.7</b>	1.5 U
Barium	<b>88.3 J</b>	<b>24.3 J</b>	<b>68.7</b>	<b>21.6</b>
Beryllium	0.64 U	0.63 U	0.98 U	0.76 U
Cadmium	1.3 U	1.3 U	2 U	1.5 U
Calcium	<b>4070</b>	<b>4610</b>	<b>1920</b>	<b>818</b>
Chromium	<b>48.7</b>	<b>26.7</b>	<b>35.6</b>	<b>13.1</b>
Cobalt	<b>13.9</b>	<b>7</b>	<b>10.4</b>	<b>2.4</b>
Copper	<b>102</b>	<b>45.1</b>	<b>35.6 J</b>	<b>5 J</b>
Iron	<b>30000</b>	<b>11900</b>	<b>24800</b>	<b>6600</b>
Lead	<b>4.6</b>	<b>3.3</b>	<b>69.5</b>	<b>2.7</b>
Magnesium	<b>7710</b>	<b>3570</b>	<b>6230</b>	<b>1860</b>
Manganese	<b>165</b>	<b>117</b>	<b>255 J</b>	<b>85.7 J</b>
Mercury	<b>0.2 J</b>	<b>0.12 J</b>	0.077 U	0.051 U
Nickel	<b>29.7</b>	<b>24</b>	<b>23.6</b>	<b>6.7</b>
Potassium	<b>7020 J</b>	<b>879 J</b>	<b>2100 J</b>	<b>660 J</b>
Silver	0.39 U	0.38 U	0.59 U	0.45 U
Sodium	<b>743 J</b>	<b>1090 J</b>	<b>1390 J</b>	<b>265 J</b>
Vanadium	<b>57.5</b>	<b>26.7</b>	<b>40.6</b>	<b>11</b>
Zinc	<b>77.5</b>	<b>28.8</b>	<b>70.7</b>	<b>21.8</b>
Cyanide, Total	<b>1.4 J</b>	<b>0.538 J</b>	0.089 U	0.0731 U
<b><i>TOC (mg/Kg)</i></b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-31 SP-PB31(10-12) 12/18/2003	PB-31 SP-PB31(14-16) 12/18/2003	PB-33 SP-PB33(8-10) 12/29/2003	PB-33 SP-PB33(16-18) 12/29/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.002 J</b>	0.011 UJ	0.006 U	0.008 U
Ethylbenzene	<b>0.0006 J</b>	0.011 UJ	0.006 U	0.008 U
Toluene	<b>0.002 J</b>	<b>0.002 J</b>	0.006 U	0.008 U
Xylene, Total	<b>0.003 J</b>	<b>0.006 J</b>	0.006 U	0.008 U
Acetone	<b>0.03 J</b>	<b>0.1 J</b>	<b>0.032 J</b>	<b>0.049 J</b>
Bromodichloromethane	<b>0.002 J</b>	0.011 UJ	0.006 U	0.008 U
Bromoform	0.006 UJ	0.011 UJ	0.006 U	0.008 UJ
Bromomethane	R	R	0.006 UJ	0.008 UJ
Butanone,2- (MEK)	0.012 UJ	<b>0.02 J</b>	0.012 UJ	0.015 U
Carbon disulfide	<b>0.02</b>	<b>0.007 J</b>	0.006 UJ	0.008 U
Chlorobenzene	0.006 U	0.011 UJ	0.006 U	0.008 U
Chloroform	<b>0.002 J</b>	0.011 UJ	0.006 U	0.008 U
Chloromethane	0.006 U	0.011 UJ	0.006 UJ	0.008 U
Dichloroethane,1,2-	0.006 U	0.011 UJ	0.006 U	0.008 U
Dichloroethene, cis-1,2-	0.006 U	0.011 UJ	0.006 U	0.008 U
Methylene chloride	0.006 UJ	0.011 UJ	0.006 UJ	0.008 U
Styrene	0.006 U	0.011 UJ	0.006 U	0.008 U
Tetrachloroethene	0.006 U	0.011 UJ	0.006 U	0.008 U
Trichloroethene	0.006 UJ	0.011 UJ	0.006 UJ	0.008 U
Vinyl chloride	0.006 U	0.011 UJ	0.006 U	0.008 U
Total VOCs	<b>0.0616</b>	<b>0.135</b>	<b>0.032</b>	<b>0.049</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	<b>0.29 J</b>	0.78 UJ	<b>0.3 J</b>	<b>1.9 J</b>
Acenaphthylene	<b>0.75 J</b>	0.78 UJ	0.84 U	<b>1.1 J</b>
Anthracene	<b>1.5 J</b>	0.78 UJ	<b>1.2</b>	<b>3.5</b>
Benzo[g,h,i]perylene	<b>5.3</b>	0.78 UJ	<b>0.91</b>	<b>1.6 J</b>
Fluoranthene	<b>9.6</b>	0.78 UJ	<b>5</b>	<b>9.7</b>
Fluorene	<b>0.51 J</b>	0.78 UJ	<b>0.34 J</b>	<b>1.6 J</b>
Methylnaphthalene,2-	<b>0.61 J</b>	0.78 UJ	<b>0.094 J</b>	<b>0.63 J</b>
Naphthalene	<b>1.7</b>	<b>0.34 J</b>	<b>0.15 J</b>	<b>2.7</b>
Phenanthrene	<b>5.6</b>	0.78 UJ	<b>3.8</b>	<b>8.5</b>
Pyrene	<b>8.5</b>	0.78 UJ	<b>5.2</b>	<b>9.7</b>
Benz[a]anthracene	<b>5.6</b>	0.78 UJ	<b>3</b>	<b>6.2</b>
Benzo[a]pyrene	<b>5.9</b>	0.78 UJ	<b>2.4</b>	<b>6.7</b>
Benzo[b]fluoranthene	<b>4.3</b>	0.78 UJ	<b>2.1</b>	<b>4.4</b>
Benzo[k]fluoranthene	<b>6.2</b>	0.78 UJ	<b>1.8</b>	<b>5.8</b>
Chrysene	<b>5.3</b>	0.78 UJ	<b>3.2</b>	<b>6.1</b>
Dibenz[a,h]anthracene	<b>2.2</b>	0.78 UJ	<b>0.43 J</b>	<b>0.71 J</b>
Indeno[1,2,3-cd]pyrene	<b>4.6</b>	0.78 UJ	<b>1</b>	<b>1.9 J</b>
Bis(2-ethylhexyl)phthalate	1.6 U	0.78 UJ	0.84 U	2.2 U
Butyl benzyl phthalate	1.6 U	0.78 UJ	0.84 U	2.2 U
Carbazole	<b>0.5 J</b>	0.78 UJ	<b>0.25 J</b>	<b>0.41 J</b>
Dibenzofuran	<b>0.49 J</b>	0.78 UJ	<b>0.25 J</b>	<b>0.92 J</b>
Dimethylphenol, 2,4-	1.6 U	0.78 UJ	0.84 U	2.2 U
Di-n-butyl phthalate	1.6 U	0.78 UJ	0.84 U	2.2 U
Di-n-octyl phthalate	1.6 U	<b>0.03 J</b>	0.84 U	2.2 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-31 SP-PB31(10-12) 12/18/2003	PB-31 SP-PB31(14-16) 12/18/2003	PB-33 SP-PB33(8-10) 12/29/2003	PB-33 SP-PB33(16-18) 12/29/2003
Methylphenol, 4-	<b>0.2 J</b>	0.78 UJ	0.84 U	<b>0.24 J</b>
Methylphenol,2-	<b>0.085 J</b>	0.78 UJ	0.84 U	2.2 U
Phenol	1.6 U	0.78 UJ	0.84 U	2.2 U
Total SVOCs	<b>69.735</b>	<b>0.37</b>	<b>31.424</b>	<b>74.31</b>
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>9290</b>	<b>19800 J</b>	<b>9280</b>	<b>17300</b>
Antimony	1.7 UJ	3.5 UJ	1.7 UJ	2.5 UJ
Arsenic	<b>3.5</b>	<b>8.2 J</b>	<b>2.8</b>	<b>25.7</b>
Barium	<b>81.4</b>	<b>61.2 J</b>	<b>37.6</b>	<b>213</b>
Beryllium	0.71 U	1.4 UJ	0.72 U	1 U
Cadmium	1.4 U	2.9 UJ	1.4 U	2.1 U
Calcium	<b>54200 J</b>	<b>4960 J</b>	R	R
Chromium	<b>19.5 J</b>	<b>45.4 J</b>	<b>23.4 J</b>	<b>704 J</b>
Cobalt	<b>6.3</b>	<b>13.1 J</b>	<b>4.4</b>	<b>13.4</b>
Copper	<b>18.4</b>	<b>14.7 J</b>	14.9 U	<b>220</b>
Iron	<b>16700 J</b>	<b>35300 J</b>	<b>18500</b>	<b>35200</b>
Lead	<b>35.8 J</b>	<b>12.5 J</b>	<b>11.1 J</b>	<b>270 J</b>
Magnesium	<b>12700</b>	<b>7730 J</b>	<b>3560</b>	<b>7310</b>
Manganese	<b>424 J</b>	<b>346 J</b>	<b>102 J</b>	<b>436 J</b>
Mercury	0.055 U	0.1 UJ	0.061 U	<b>1.9</b>
Nickel	<b>15.3</b>	<b>29.4 J</b>	<b>13.9</b>	<b>31.8</b>
Potassium	<b>2400 J</b>	<b>2780 J</b>	<b>1360 J</b>	<b>3180 J</b>
Silver	0.43 U	0.86 UJ	0.43 U	<b>0.93</b>
Sodium	<b>471 J</b>	<b>1410 J</b>	156 UJ	<b>570 J</b>
Vanadium	<b>27</b>	<b>55.9 J</b>	<b>27.2</b>	<b>46.3</b>
Zinc	<b>204 J</b>	<b>91.6 J</b>	<b>53.2 J</b>	<b>368 J</b>
Cyanide, Total	<b>19.6 J</b>	0.125 UJ	<b>0.329</b>	<b>6.35</b>
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-34 SP-PB34/6-7 12/22/2003	PB-34 SP-PB34/10-12 12/23/2003	PB-34 SP-PB34/20-22 12/22/2003	PB-35 SP-PB35/6-8 12/22/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.004 J</b>	<b>0.002 J</b>	0.006 U	<b>0.004 J</b>
Ethylbenzene	<b>0.0006 J</b>	<b>0.004 J</b>	0.006 U	0.006 U
Toluene	<b>0.003 J</b>	<b>0.001 J</b>	0.006 U	<b>0.003 J</b>
Xylene, Total	<b>0.006</b>	<b>0.029</b>	0.006 U	<b>0.002 J</b>
Acetone	<b>0.049 J</b>	<b>0.052 J</b>	<b>0.046 J</b>	<b>0.013 J</b>
Bromodichloromethane	0.005 U	0.008 U	0.006 U	<b>0.002 J</b>
Bromoform	0.005 U	0.008 UJ	0.006 U	0.006 U
Bromomethane	R	0.008 UJ	R	R
Butanone,2- (MEK)	<b>0.007 J</b>	0.015 U	<b>0.009 J</b>	0.012 UJ
Carbon disulfide	<b>0.004 J</b>	0.008 U	<b>0.002 J</b>	0.006 UJ
Chlorobenzene	0.005 U	0.008 U	0.006 U	0.006 U
Chloroform	0.005 U	0.008 U	0.006 U	<b>0.002 J</b>
Chloromethane	0.005 UJ	0.008 U	0.006 U	0.006 UJ
Dichloroethane,1,2-	0.005 U	0.008 U	0.006 U	0.006 U
Dichloroethene, cis-1,2-	0.005 U	0.008 U	0.006 U	0.006 U
Methylene chloride	0.005 UJ	0.008 U	<b>0.002 J</b>	0.006 UJ
Styrene	0.005 U	0.008 U	0.006 U	<b>0.002 J</b>
Tetrachloroethene	<b>0.004 J</b>	0.008 U	0.006 U	<b>0.001 J</b>
Trichloroethene	0.005 UJ	0.008 U	0.006 UJ	0.006 UJ
Vinyl chloride	0.005 U	0.008 U	0.006 U	0.006 U
Total VOCs	<b>0.0776</b>	<b>0.088</b>	<b>0.059</b>	<b>0.029</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	<b>0.11 J</b>	<b>0.52 J</b>	0.46 U	<b>0.47 J</b>
Acenaphthylene	<b>0.23 J</b>	<b>0.063 J</b>	<b>0.05 J</b>	<b>3.4 J</b>
Anthracene	<b>0.39</b>	0.54 U	0.46 U	<b>3.2 J</b>
Benzo[g,h,i]perylene	<b>0.3 J</b>	<b>0.083 J</b>	<b>0.053 J</b>	<b>25</b>
Fluoranthene	<b>2</b>	0.54 U	0.46 U	<b>20</b>
Fluorene	<b>0.18 J</b>	0.54 U	0.46 U	<b>0.52 J</b>
Methylnaphthalene,2-	<b>0.17 J</b>	0.54 U	0.46 U	<b>0.86 J</b>
Naphthalene	<b>0.91</b>	<b>0.77</b>	<b>0.07 J</b>	<b>2.5 J</b>
Phenanthrene	<b>1.3</b>	0.54 U	0.46 U	<b>7.9</b>
Pyrene	<b>2.2</b>	0.54 U	0.46 U	<b>21</b>
Benz[a]anthracene	<b>1.5</b>	0.54 U	0.46 U	<b>23</b>
Benzo[a]pyrene	<b>1.3</b>	0.54 U	0.46 U	<b>10</b>
Benzo[b]fluoranthene	<b>1.5</b>	<b>0.11 J</b>	<b>0.075 J</b>	<b>29</b>
Benzo[k]fluoranthene	<b>1.2</b>	<b>0.13 J</b>	<b>0.1 J</b>	<b>30</b>
Chrysene	<b>1.4</b>	0.54 U	0.46 U	<b>27</b>
Dibenz[a,h]anthracene	<b>0.17 J</b>	<b>0.033 J</b>	0.46 U	<b>10</b>
Indeno[1,2,3-cd]pyrene	<b>0.37</b>	<b>0.084 J</b>	<b>0.056 J</b>	<b>25</b>
Bis(2-ethylhexyl)phthalate	<b>0.17 J</b>	0.54 U	0.46 U	5.2 U
Butyl benzyl phthalate	0.37 U	0.54 U	0.46 U	5.2 U
Carbazole	<b>0.17 J</b>	0.54 U	0.46 U	<b>1.1 J</b>
Dibenzofuran	<b>0.12 J</b>	0.54 U	0.46 U	<b>1.2 J</b>
Dimethylphenol, 2,4-	0.37 U	0.54 U	0.46 U	5.2 U
Di-n-butyl phthalate	0.37 U	0.54 U	<b>0.037 J</b>	5.2 U
Di-n-octyl phthalate	0.37 U	0.54 U	0.46 U	5.2 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-34 SP-PB34/6-7 12/22/2003	PB-34 SP-PB34/10-12 12/23/2003	PB-34 SP-PB34/20-22 12/22/2003	PB-35 SP-PB35/6-8 12/22/2003
Methylphenol, 4-	0.37 U	0.54 U	0.46 U	5.2 U
Methylphenol,2-	0.37 U	0.54 U	0.46 U	5.2 U
Phenol	0.37 U	0.54 U	0.46 U	5.2 U
Total SVOCs	<b>15.69</b>	<b>1.793</b>	<b>0.441</b>	<b>241.15</b>
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>9300</b>	<b>15000</b>	<b>6420</b>	<b>2380</b>
Antimony	1.6 UJ	2.2 UJ	1.9 UJ	2.2 UJ
Arsenic	<b>16.6</b>	<b>5.6</b>	<b>1.8</b>	<b>9.6</b>
Barium	<b>333</b>	<b>68.3</b>	<b>31.6</b>	<b>257</b>
Beryllium	0.67 U	0.93 U	0.81 U	0.92 U
Cadmium	1.3 U	1.9 U	1.6 U	1.8 U
Calcium	<b>17100 J</b>	<b>2000 J</b>	<b>1410 J</b>	<b>14700 J</b>
Chromium	<b>21.3 J</b>	<b>34.4 J</b>	<b>18.2 J</b>	<b>12.9 J</b>
Cobalt	<b>10.5</b>	<b>7.8</b>	<b>6.5</b>	<b>2.1</b>
Copper	<b>117</b>	<b>37.5</b>	<b>8</b>	<b>66.8</b>
Iron	<b>26400</b>	<b>20300</b>	<b>15600</b>	<b>20700</b>
Lead	<b>598 J</b>	<b>80.4 J</b>	<b>3.9 J</b>	<b>326 J</b>
Magnesium	<b>6140</b>	<b>5880</b>	<b>3000</b>	<b>1410</b>
Manganese	<b>306 J</b>	<b>162 J</b>	<b>91.7 J</b>	<b>84.2 J</b>
Mercury	<b>0.17</b>	<b>0.085</b>	0.058 U	<b>2</b>
Nickel	<b>17.1</b>	<b>20.8</b>	<b>12.7</b>	<b>6.6</b>
Potassium	<b>2510 J</b>	<b>2060 J</b>	<b>782 J</b>	<b>1950 J</b>
Silver	0.4 U	0.56 U	0.48 U	<b>1.7</b>
Sodium	<b>526 J</b>	<b>891 J</b>	<b>1020 J</b>	<b>903 J</b>
Vanadium	<b>35.4</b>	<b>38.6</b>	<b>20.1</b>	<b>23.3</b>
Zinc	<b>355 J</b>	<b>62.6 J</b>	<b>39 J</b>	<b>380 J</b>
Cyanide, Total	<b>1.14</b>	0.0878 U	0.0732 U	<b>1720</b>
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-35 SP-PB35(10-12) 12/31/2003	PB-35 SP-PB35/20-22 12/22/2003	PB-36 SP-PB36/8-10 12/22/2003	PB-36 SP-PB36/12-13 12/23/2003
<b>VOCs (mg/kg)</b>				
Benzene	0.01 UJ	0.009 U	<b>0.006</b>	<b>0.001 J</b>
Ethylbenzene	0.01 UJ	0.009 U	0.005 U	0.006 U
Toluene	0.01 UJ	0.009 U	<b>0.004 J</b>	0.006 U
Xylene, Total	0.01 UJ	0.009 U	<b>0.003 J</b>	0.006 U
Acetone	<b>0.036 J</b>	<b>0.065 J</b>	<b>0.016 J</b>	<b>0.016 J</b>
Bromodichloromethane	0.01 UJ	0.009 U	0.005 U	<b>0.004 J</b>
Bromoform	0.01 UJ	0.009 U	0.005 U	0.006 U
Bromomethane	0.01 UJ	R	R	0.006 UJ
Butanone,2- (MEK)	<b>0.011 J</b>	<b>0.012 J</b>	0.011 UJ	0.012 UJ
Carbon disulfide	<b>0.011 J</b>	0.009 UJ	0.005 UJ	0.006 UJ
Chlorobenzene	0.01 UJ	0.009 U	0.005 U	0.006 U
Chloroform	0.01 UJ	0.009 U	0.005 U	<b>0.004 J</b>
Chloromethane	0.01 UJ	0.009 U	0.005 U	0.006 U
Dichloroethane,1,2-	0.01 UJ	0.009 U	0.005 U	0.006 U
Dichloroethene, cis-1,2-	0.01 UJ	0.009 U	0.005 U	0.006 U
Methylene chloride	0.01 UJ	0.009 UJ	0.005 UJ	0.006 UJ
Styrene	0.01 UJ	0.009 U	<b>0.0008 J</b>	0.006 U
Tetrachloroethene	0.01 UJ	0.009 U	0.005 U	0.006 U
Trichloroethene	0.01 UJ	0.009 UJ	0.005 UJ	0.006 UJ
Vinyl chloride	0.01 UJ	0.009 U	0.005 U	0.006 U
Total VOCs	<b>0.058</b>	<b>0.077</b>	<b>0.0298</b>	<b>0.025</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	0.72 UJ	0.62 U	<b>6.4 J</b>	<b>1.9 J</b>
Acenaphthylene	<b>0.03 J</b>	0.62 U	<b>47 J</b>	<b>14</b>
Anthracene	<b>0.036 J</b>	0.62 U	<b>67 J</b>	<b>16</b>
Benzo[g,h,i]perylene	<b>0.19 J</b>	0.62 U	<b>89</b>	<b>14</b>
Fluoranthene	<b>0.21 J</b>	0.62 U	<b>390</b>	<b>65</b>
Fluorene	0.72 UJ	0.62 U	<b>22 J</b>	<b>5.4 J</b>
Methylnaphthalene,2-	0.72 UJ	0.62 U	<b>9.9 J</b>	<b>3 J</b>
Naphthalene	0.72 UJ	0.62 U	<b>13 J</b>	<b>3 J</b>
Phenanthrene	<b>0.083 J</b>	0.62 U	<b>220</b>	<b>43</b>
Pyrene	<b>0.25 J</b>	0.62 U	<b>380</b>	<b>75</b>
Benz[a]anthracene	<b>0.21 J</b>	0.62 U	<b>170</b>	<b>34</b>
Benzo[a]pyrene	<b>0.14 J</b>	0.62 U	<b>130</b>	<b>28</b>
Benzo[b]fluoranthene	<b>0.27 J</b>	0.62 U	<b>110</b>	<b>24</b>
Benzo[k]fluoranthene	<b>0.33 J</b>	0.62 U	<b>110</b>	<b>24</b>
Chrysene	<b>0.25 J</b>	0.62 U	<b>150</b>	<b>34</b>
Dibenz[a,h]anthracene	0.72 UJ	0.62 U	<b>26 J</b>	<b>4.7 J</b>
Indeno[1,2,3-cd]pyrene	<b>0.22 J</b>	0.62 U	<b>78 J</b>	<b>14</b>
Bis(2-ethylhexyl)phthalate	0.72 UJ	0.62 U	83 U	12 U
Butyl benzyl phthalate	0.72 UJ	0.62 U	83 U	12 U
Carbazole	0.72 UJ	0.62 U	<b>8.2 J</b>	<b>1 J</b>
Dibenzofuran	0.72 UJ	0.62 U	<b>14 J</b>	<b>2.3 J</b>
Dimethylphenol, 2,4-	0.72 UJ	0.62 U	83 U	12 U
Di-n-butyl phthalate	<b>0.032 J</b>	0.62 U	83 U	12 U
Di-n-octyl phthalate	0.72 UJ	0.62 U	83 U	12 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-35 SP-PB35(10-12) 12/31/2003	PB-35 SP-PB35/20-22 12/22/2003	PB-36 SP-PB36/8-10 12/22/2003	PB-36 SP-PB36/12-13 12/23/2003
Methylphenol, 4-	0.72 UJ	0.62 U	83 U	12 U
Methylphenol,2-	0.72 UJ	0.62 U	83 U	12 U
Phenol	0.72 UJ	0.62 U	83 U	12 U
Total SVOCs	<b>2.251</b>	ND	<b>2040.5</b>	<b>406.3</b>
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>18300 J</b>	<b>15900</b>	<b>1340</b>	<b>2370</b>
Antimony	3.3 UJ	2.6 UJ	1.8 UJ	2.1 UJ
Arsenic	<b>5.9 J</b>	<b>6.5</b>	<b>5</b>	<b>5.8</b>
Barium	<b>71.4 J</b>	<b>65.6</b>	<b>64.8</b>	<b>47.2</b>
Beryllium	1.4 UJ	1.1 U	0.74 U	0.87 U
Cadmium	2.7 UJ	2.2 U	1.5 U	1.7 U
Calcium	R	<b>2060 J</b>	<b>1990 J</b>	<b>560 J</b>
Chromium	<b>56.3 J</b>	<b>39.7 J</b>	<b>5.7 J</b>	<b>8.1 J</b>
Cobalt	<b>10.7 J</b>	<b>12.3</b>	<b>1.6</b>	<b>1.7</b>
Copper	<b>43.6 J</b>	<b>13.4</b>	<b>19.1</b>	<b>71.1</b>
Iron	<b>25300 J</b>	<b>34600</b>	<b>19800</b>	<b>13800</b>
Lead	<b>46.2 J</b>	<b>12.2 J</b>	<b>103 J</b>	<b>163 J</b>
Magnesium	<b>5620 J</b>	<b>7680</b>	<b>673</b>	<b>250</b>
Manganese	<b>168 J</b>	<b>367 J</b>	<b>57.2 J</b>	<b>41.8 J</b>
Mercury	<b>0.38 J</b>	0.083 U	<b>0.12</b>	0.057 U
Nickel	<b>24.3 J</b>	<b>28.3</b>	<b>5.9</b>	<b>5</b>
Potassium	<b>1540 J</b>	<b>2680 J</b>	<b>917 J</b>	<b>385 J</b>
Silver	0.81 UJ	0.65 U	0.44 U	0.52 U
Sodium	<b>2500 J</b>	<b>2460 J</b>	<b>310 J</b>	<b>141 J</b>
Vanadium	<b>44.9 J</b>	<b>40.2</b>	<b>15.5</b>	<b>37.8</b>
Zinc	<b>372 J</b>	<b>87.9 J</b>	<b>145 J</b>	<b>31.3 J</b>
Cyanide, Total	<b>26.2 J</b>	<b>0.721</b>	<b>160</b>	<b>98.8</b>
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-36 SP-PB36/20-22 12/23/2003	PB-37 SP-PB37/12-14 12/23/2003	PB-37 SP-PB37/14-16 12/23/2003	PB-37 SP-PB37/20-22 12/23/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.11</b>	<b>1.5 J</b>	<b>0.19</b>	0.005 U
Ethylbenzene	<b>0.003 J</b>	<b>13 J</b>	<b>0.018</b>	0.005 U
Toluene	<b>0.002 J</b>	<b>1.7 J</b>	0.005 U	<b>0.0005 J</b>
Xylene, Total	<b>0.013</b>	<b>35 J</b>	<b>0.054</b>	0.005 U
Acetone	<b>0.021 J</b>	<b>1.9 J</b>	<b>0.02 J</b>	<b>0.018 J</b>
Bromodichloromethane	<b>0.002 J</b>	1.1 UJ	0.005 U	0.005 U
Bromoform	0.006 U	1.1 UJ	0.005 U	0.005 U
Bromomethane	R	1.1 UJ	R	R
Butanone,2- (MEK)	0.013 UJ	1.1 UJ	0.011 UJ	0.009 UJ
Carbon disulfide	<b>0.018 J</b>	1.1 UJ	<b>0.013 J</b>	<b>0.002 J</b>
Chlorobenzene	0.006 U	1.1 UJ	0.005 U	0.005 U
Chloroform	<b>0.002 J</b>	1.1 UJ	0.005 U	0.005 U
Chloromethane	0.006 UJ	1.1 UJ	0.005 U	0.005 U
Dichloroethane,1,2-	0.006 U	1.1 UJ	0.005 U	0.005 U
Dichloroethene, cis-1,2-	0.006 U	1.1 UJ	0.005 U	<b>0.004 J</b>
Methylene chloride	<b>0.002 J</b>	1.1 UJ	0.005 UJ	0.005 UJ
Styrene	0.006 U	<b>0.31 J</b>	0.005 U	0.005 U
Tetrachloroethene	0.006 U	1.1 UJ	0.005 U	0.005 U
Trichloroethene	0.006 UJ	1.1 UJ	0.005 UJ	0.005 UJ
Vinyl chloride	0.006 U	1.1 UJ	0.005 U	<b>0.0007 J</b>
Total VOCs	<b>0.173</b>	<b>53.41</b>	<b>0.295</b>	<b>0.0252</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	<b>0.046 J</b>	<b>20 J</b>	<b>0.06 J</b>	0.37 U
Acenaphthylene	<b>0.056 J</b>	<b>16 J</b>	<b>0.099 J</b>	0.37 U
Anthracene	0.48 U	<b>37 J</b>	<b>0.16 J</b>	0.37 U
Benzo[g,h,i]perylene	<b>0.063 J</b>	<b>11 J</b>	<b>0.045 J</b>	0.37 U
Fluoranthene	0.48 U	<b>55 J</b>	0.45 U	0.37 U
Fluorene	<b>0.039 J</b>	<b>34 J</b>	<b>0.08 J</b>	0.37 U
Methylnaphthalene,2-	0.48 U	<b>57 J</b>	<b>0.99</b>	0.37 U
Naphthalene	0.48 U	<b>210 J</b>	<b>2.9</b>	<b>0.057 J</b>
Phenanthrene	0.48 U	<b>120 J</b>	0.45 U	0.37 U
Pyrene	0.48 U	<b>83 J</b>	0.5 U	0.37 U
Benz[a]anthracene	0.48 U	<b>21 J</b>	0.45 U	0.37 U
Benzo[a]pyrene	0.48 U	<b>19 J</b>	0.45 U	0.37 U
Benzo[b]fluoranthene	<b>0.081 J</b>	<b>11 J</b>	<b>0.064 J</b>	0.37 U
Benzo[k]fluoranthene	<b>0.12 J</b>	<b>16 J</b>	<b>0.075 J</b>	0.37 U
Chrysene	0.48 U	<b>20 J</b>	0.45 U	0.37 U
Dibenz[a,h]anthracene	0.48 U	34 UJ	0.45 U	0.37 U
Indeno[1,2,3-cd]pyrene	<b>0.059 J</b>	<b>8.2 J</b>	<b>0.042 J</b>	0.37 U
Bis(2-ethylhexyl)phthalate	0.48 U	34 UJ	0.45 U	0.37 U
Butyl benzyl phthalate	0.48 U	34 UJ	0.45 U	0.37 U
Carbazole	0.48 U	34 UJ	0.45 U	0.37 U
Dibenzofuran	0.48 U	<b>6.8 J</b>	<b>0.027 J</b>	0.37 U
Dimethylphenol, 2,4-	0.48 U	34 UJ	0.45 U	0.37 U
Di-n-butyl phthalate	0.48 U	34 UJ	0.45 U	0.37 U
Di-n-octyl phthalate	0.48 U	34 UJ	0.45 U	0.37 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

<b>Chemical Name</b>	<b>PB-36 SP-PB36/20-22 12/23/2003</b>	<b>PB-37 SP-PB37/12-14 12/23/2003</b>	<b>PB-37 SP-PB37/14-16 12/23/2003</b>	<b>PB-37 SP-PB37/20-22 12/23/2003</b>
Methylphenol, 4-	0.48 U	34 UJ	0.45 U	0.37 U
Methylphenol,2-	0.48 U	34 UJ	0.45 U	0.37 U
Phenol	0.48 U	34 UJ	0.45 U	0.37 U
Total SVOCs	<b>0.464</b>	<b>745</b>	<b>4.542</b>	<b>0.057</b>
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>7310</b>	<b>13600 J</b>	<b>14000</b>	<b>5830</b>
Antimony	2.2 UJ	2.8 UJ	1.7 UJ	1.5 UJ
Arsenic	1.8 U	<b>4.7 J</b>	<b>2.7</b>	1.2 U
Barium	<b>22.9</b>	<b>61.3 J</b>	<b>35.4</b>	<b>17.7</b>
Beryllium	0.92 U	1.2 UJ	0.72 U	0.62 U
Cadmium	1.8 U	2.3 UJ	1.4 U	1.2 U
Calcium	<b>1490 J</b>	<b>6470 J</b>	<b>1360 J</b>	<b>3440 J</b>
Chromium	<b>17.6 J</b>	<b>36.3 J</b>	<b>27.4 J</b>	<b>10 J</b>
Cobalt	<b>4.8</b>	<b>9.7 J</b>	<b>9.7</b>	<b>6.6</b>
Copper	<b>5.4</b>	<b>25.2 J</b>	<b>10.8</b>	<b>60.5</b>
Iron	<b>10400</b>	<b>22500 J</b>	<b>15400 J</b>	<b>12000</b>
Lead	<b>4.6 J</b>	<b>40.5 J</b>	<b>7.6 J</b>	<b>2.1 J</b>
Magnesium	<b>2950</b>	<b>5170 J</b>	<b>3950</b>	<b>3390</b>
Manganese	<b>121 J</b>	<b>203 J</b>	<b>142 J</b>	<b>106 J</b>
Mercury	0.074 U	<b>0.097 J</b>	0.063 U	0.047 U
Nickel	<b>12.1</b>	<b>22.1 J</b>	<b>22.8</b>	<b>8.9</b>
Potassium	<b>880 J</b>	<b>1320 J</b>	<b>585 J</b>	<b>1150 J</b>
Silver	0.55 U	0.7 UJ	0.43 U	0.37 U
Sodium	<b>386 J</b>	<b>1230 J</b>	<b>541 J</b>	<b>476 J</b>
Vanadium	<b>19.9</b>	<b>37.1 J</b>	<b>26.9</b>	<b>23.8</b>
Zinc	<b>34.9 J</b>	<b>89.7 J</b>	<b>65.7 J</b>	<b>23 J</b>
Cyanide, Total	0.0765 U	<b>17.2 J</b>	<b>0.163</b>	0.0588 U
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-37 SP-PB37(34-36) 12/29/2003	Duplicate of PB-37 (34-36) SP-PBDUP6 12/29/2003	PB-38 SP-PB38/10-12 12/23/2003	PB-38 SP-PB38/12-14 12/23/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.0009 J</b>	0.005 U	<b>0.001 J</b>	0.01 UJ
Ethylbenzene	0.006 U	0.005 U	0.009 U	0.01 UJ
Toluene	0.006 U	0.005 U	0.009 U	<b>0.002 J</b>
Xylene, Total	0.006 U	0.005 U	<b>0.011</b>	0.01 UJ
Acetone	<b>0.013 J</b>	<b>0.023 J</b>	<b>0.041 J</b>	<b>0.22 J</b>
Bromodichloromethane	0.006 U	0.005 U	0.009 U	0.01 UJ
Bromoform	0.006 UJ	0.005 UJ	0.009 U	0.01 UJ
Bromomethane	0.006 UJ	0.005 UJ	R	<b>0.007 J</b>
Butanone,2- (MEK)	0.012 U	0.011 U	0.017 UJ	<b>0.043 J</b>
Carbon disulfide	0.006 U	0.005 U	<b>0.007 J</b>	<b>0.02 J</b>
Chlorobenzene	0.006 U	0.005 U	0.009 U	0.01 UJ
Chloroform	0.006 U	0.005 U	0.009 U	0.01 UJ
Chloromethane	0.006 U	0.005 U	0.009 U	0.01 UJ
Dichloroethane,1,2-	0.006 U	0.005 U	0.009 U	0.01 UJ
Dichloroethene, cis-1,2-	0.006 U	0.005 U	0.009 U	0.01 UJ
Methylene chloride	0.006 U	0.005 U	0.009 UJ	0.01 UJ
Styrene	0.006 U	0.005 U	0.009 U	0.01 UJ
Tetrachloroethene	0.006 U	0.005 U	0.009 U	0.01 UJ
Trichloroethene	0.006 U	0.005 U	0.009 UJ	0.01 UJ
Vinyl chloride	0.006 U	0.005 U	0.009 U	0.01 UJ
Total VOCs	<b>0.0139</b>	<b>0.023</b>	<b>0.06</b>	<b>0.292</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	0.37 U	0.37 U	<b>0.68 J</b>	0.74 UJ
Acenaphthylene	0.37 U	0.37 U	<b>1 J</b>	0.74 UJ
Anthracene	0.37 U	0.37 U	<b>2.1 J</b>	0.74 UJ
Benzo[g,h,i]perylene	0.37 U	0.37 U	<b>2.2 J</b>	0.74 UJ
Fluoranthene	0.37 U	0.37 U	<b>6.6</b>	0.74 UJ
Fluorene	0.37 U	0.37 U	<b>0.81 J</b>	0.74 UJ
Methylnaphthalene,2-	0.37 U	0.37 U	<b>0.26 J</b>	0.74 UJ
Naphthalene	0.37 U	0.37 U	<b>0.9 J</b>	0.74 UJ
Phenanthrene	0.37 U	0.37 U	<b>4</b>	0.74 UJ
Pyrene	0.37 U	0.37 U	<b>12</b>	0.74 UJ
Benz[a]anthracene	0.37 U	0.37 U	<b>5.2</b>	0.74 UJ
Benzo[a]pyrene	0.37 U	0.37 U	<b>4.2</b>	0.74 UJ
Benzo[b]fluoranthene	0.37 U	0.37 U	<b>2.2 J</b>	0.74 UJ
Benzo[k]fluoranthene	0.37 U	0.37 U	<b>3.5</b>	0.74 UJ
Chrysene	0.37 U	0.37 U	<b>5.4</b>	0.74 UJ
Dibenz[a,h]anthracene	0.37 U	0.37 U	<b>0.57 J</b>	0.74 UJ
Indeno[1,2,3-cd]pyrene	0.37 U	0.37 U	<b>1.7 J</b>	0.74 UJ
Bis(2-ethylhexyl)phthalate	0.37 U	0.37 U	2.6 U	0.74 UJ
Butyl benzyl phthalate	0.37 U	0.37 U	2.6 U	0.74 UJ
Carbazole	0.37 U	0.37 U	2.6 U	0.74 UJ
Dibenzofuran	0.37 U	0.37 U	2.6 U	0.74 UJ
Dimethylphenol, 2,4-	0.37 U	0.37 U	2.6 U	0.74 UJ
Di-n-butyl phthalate	0.37 U	0.37 U	2.6 U	0.74 UJ
Di-n-octyl phthalate	0.37 U	0.37 U	2.6 U	0.74 UJ

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-37 SP-PB37(34-36) 12/29/2003	Duplicate of PB-37 (34-36) SP-PBDUP6 12/29/2003	PB-38 SP-PB38/10-12 12/23/2003	PB-38 SP-PB38/12-14 12/23/2003
Methylphenol, 4-	0.37 U	0.37 U	2.6 U	0.74 UJ
Methylphenol,2-	0.37 U	0.37 U	2.6 U	0.74 UJ
Phenol	0.37 U	0.37 U	2.6 U	0.74 UJ
Total SVOCs	ND	ND	<b>53.32</b>	ND
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>8100</b>	<b>6880</b>	<b>11300</b>	<b>15200 J</b>
Antimony	1.5 UJ	1.6 UJ	2.5 UJ	3.1 UJ
Arsenic	<b>1.3</b>	1.3 U	<b>9.7</b>	<b>5.2 J</b>
Barium	<b>52.2</b>	<b>85.2</b>	<b>75.6</b>	<b>56.5 J</b>
Beryllium	0.62 U	0.66 U	1 U	1.3 UJ
Cadmium	1.2 U	1.3 U	2 U	2.5 UJ
Calcium	R	R	<b>3310 J</b>	<b>4620 J</b>
Chromium	<b>15.2 J</b>	<b>13.5 J</b>	<b>58.1 J</b>	<b>36.5 J</b>
Cobalt	<b>10.7</b>	<b>8.6</b>	<b>17.3</b>	<b>9.5 J</b>
Copper	<b>43.4</b>	<b>24.1</b>	<b>98.3</b>	<b>14.1 J</b>
Iron	<b>23200</b>	<b>21400</b>	<b>32100</b>	<b>28000 J</b>
Lead	<b>2.9 J</b>	<b>3.8 J</b>	<b>91.8 J</b>	<b>18.9 J</b>
Magnesium	<b>4830</b>	<b>3380</b>	<b>3850</b>	<b>6910 J</b>
Manganese	<b>177 J</b>	<b>164 J</b>	<b>186 J</b>	<b>258 J</b>
Mercury	0.054 U	0.043 U	<b>0.22</b>	0.1 UJ
Nickel	<b>24.1</b>	<b>17.7</b>	<b>22.9</b>	<b>23.7 J</b>
Potassium	<b>3350 J</b>	<b>2300 J</b>	<b>1350 J</b>	<b>1960 J</b>
Silver	0.37 U	0.39 U	0.61 U	0.76 UJ
Sodium	<b>351 J</b>	285 UJ	<b>1190 J</b>	<b>1200 J</b>
Vanadium	<b>31.7</b>	<b>29.5</b>	<b>37.4</b>	<b>42 J</b>
Zinc	<b>43.3 J</b>	<b>60.7 J</b>	<b>141 J</b>	<b>78.3 J</b>
Cyanide, Total	0.0618 U	<b>0.133</b>	<b>124</b>	0.122 UJ
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-38 SP-PB38/20-22 12/23/2003	PB-39 SP-PB39(12-14) 12/30/2003	PB-39 SP-PB39(14-16) 12/30/2003	PB-40 SP-PB40(8-10) 12/30/2003
<b>VOCs (mg/kg)</b>				
Benzene	0.006 U	<b>0.02</b>	<b>0.007</b>	0.006 U
Ethylbenzene	0.006 U	0.007 U	0.005 U	0.006 U
Toluene	0.006 U	<b>0.0009 J</b>	0.005 U	0.006 U
Xylene, Total	0.006 U	0.007 U	0.005 U	0.006 U
Acetone	<b>0.038 J</b>	<b>0.043 J</b>	<b>0.023 J</b>	<b>0.023 J</b>
Bromodichloromethane	0.006 U	0.007 U	0.005 U	0.006 U
Bromoform	0.006 U	0.007 UJ	0.005 UJ	0.006 UJ
Bromomethane	R	0.007 UJ	0.005 UJ	0.006 UJ
Butanone,2- (MEK)	0.011 UJ	<b>0.008 J</b>	0.01 U	0.012 U
Carbon disulfide	<b>0.006 J</b>	<b>0.009</b>	<b>0.003 J</b>	<b>0.004 J</b>
Chlorobenzene	0.006 U	0.007 U	0.005 U	0.006 U
Chloroform	0.006 U	0.007 U	0.005 U	0.006 U
Chloromethane	0.006 UJ	0.007 U	0.005 U	0.006 U
Dichloroethane,1,2-	0.006 U	0.007 U	0.005 U	0.006 U
Dichloroethene, cis-1,2-	<b>0.004 J</b>	0.007 U	0.005 U	0.006 U
Methylene chloride	<b>0.002 J</b>	0.007 U	0.005 U	0.006 U
Styrene	0.006 U	0.007 U	0.005 U	0.006 U
Tetrachloroethene	0.006 U	0.007 U	0.005 U	0.006 U
Trichloroethene	0.006 UJ	0.007 U	0.005 U	0.006 U
Vinyl chloride	0.006 U	0.007 U	0.005 U	0.006 U
Total VOCs	<b>0.05</b>	<b>0.0809</b>	<b>0.033</b>	<b>0.027</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	0.38 U	0.46 U	0.41 U	<b>0.022 J</b>
Acenaphthylene	0.38 U	0.46 U	0.41 U	0.43 U
Anthracene	0.38 U	0.46 U	0.41 U	<b>0.052 J</b>
Benzo[g,h,i]perylene	0.38 U	0.46 U	0.41 U	<b>0.071 J</b>
Fluoranthene	0.38 U	0.46 U	0.41 U	<b>0.22 J</b>
Fluorene	0.38 U	0.46 U	0.41 U	0.43 U
Methylnaphthalene,2-	0.38 U	0.46 U	0.41 U	0.43 U
Naphthalene	0.38 U	0.46 U	0.41 U	0.43 U
Phenanthrene	0.38 U	0.46 U	0.41 U	<b>0.14 J</b>
Pyrene	0.38 U	0.46 U	0.41 U	<b>0.28 J</b>
Benz[a]anthracene	0.38 U	0.46 U	0.41 U	<b>0.13 J</b>
Benzo[a]pyrene	0.38 U	0.46 U	0.41 U	<b>0.11 J</b>
Benzo[b]fluoranthene	0.38 U	0.46 U	0.41 U	<b>0.097 J</b>
Benzo[k]fluoranthene	0.38 U	0.46 U	0.41 U	<b>0.092 J</b>
Chrysene	0.38 U	0.46 U	0.41 U	<b>0.14 J</b>
Dibenz[a,h]anthracene	0.38 U	0.46 U	0.41 U	0.43 U
Indeno[1,2,3-cd]pyrene	0.38 U	0.46 U	0.41 U	<b>0.067 J</b>
Bis(2-ethylhexyl)phthalate	0.38 U	0.46 U	0.41 U	0.43 U
Butyl benzyl phthalate	0.38 U	0.46 U	0.41 U	0.43 U
Carbazole	0.38 U	0.46 U	0.41 U	0.43 U
Dibenzofuran	0.38 U	0.46 U	0.41 U	0.43 U
Dimethylphenol, 2,4-	0.38 U	0.46 U	0.41 U	0.43 U
Di-n-butyl phthalate	0.38 U	0.46 U	0.41 U	0.43 U
Di-n-octyl phthalate	0.38 U	0.46 U	0.41 U	0.43 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-38 SP-PB38/20-22 12/23/2003	PB-39 SP-PB39(12-14) 12/30/2003	PB-39 SP-PB39(14-16) 12/30/2003	PB-40 SP-PB40(8-10) 12/30/2003
Methylphenol, 4-	0.38 U	0.46 U	0.41 U	<b>0.036 J</b>
Methylphenol,2-	0.38 U	0.46 U	0.41 U	0.43 U
Phenol	0.38 U	0.46 U	0.41 U	0.43 U
Total SVOCs	ND	ND	ND	<b>1.457</b>
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>9970</b>	<b>13400</b>	<b>8830</b>	<b>13300</b>
Antimony	1.6 UJ	2.1 UJ	1.8 UJ	1.9 UJ
Arsenic	1.3 U	<b>2.5</b>	1.5 U	<b>3.5</b>
Barium	<b>88.3</b>	<b>39.8</b>	<b>19.6</b>	<b>62.9</b>
Beryllium	0.66 U	0.86 U	0.75 U	0.79 U
Cadmium	1.3 U	1.7 U	1.5 U	1.6 U
Calcium	<b>1450 J</b>	R	R	R
Chromium	<b>28 J</b>	<b>29 J</b>	<b>19.5 J</b>	<b>33.6 J</b>
Cobalt	<b>7</b>	<b>7.9</b>	<b>5.5</b>	<b>8.6</b>
Copper	<b>16.4</b>	8.2 U	7.9 U	11.8 U
Iron	<b>17600</b>	<b>16100</b>	<b>12200</b>	<b>26700</b>
Lead	<b>4.1 J</b>	<b>6.1 J</b>	<b>3 J</b>	<b>12.7 J</b>
Magnesium	<b>3850</b>	<b>4720</b>	<b>3290</b>	<b>5480</b>
Manganese	<b>207 J</b>	<b>191 J</b>	<b>107 J</b>	<b>334 J</b>
Mercury	0.05 U	0.066 U	0.059 U	0.062 U
Nickel	<b>16.7</b>	<b>18.7</b>	<b>13.7</b>	<b>19.5</b>
Potassium	<b>4040 J</b>	<b>908 J</b>	<b>498 J</b>	<b>1940 J</b>
Silver	0.4 U	0.52 U	0.45 U	0.47 U
Sodium	<b>345 J</b>	329 UJ	217 UJ	295 UJ
Vanadium	<b>36.4</b>	<b>37.7</b>	<b>19.6</b>	<b>38.6</b>
Zinc	<b>46.4 J</b>	<b>59.1 J</b>	<b>38.4 J</b>	<b>55.2 J</b>
Cyanide, Total	0.0608 U	0.0773 U	<b>0.0756</b>	0.071 U
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-40 SP-PB40(14-16) 12/30/2003	PB-40 SP-PB40(17-19) 12/30/2003	PB-40 SP-PB40(20-22) 12/30/2003	PB-41 SP-PB41(12-14) 12/29/2003
<b>VOCs (mg/kg)</b>				
Benzene	0.008 U	NA	0.55 U	<b>0.17 J</b>
Ethylbenzene	0.008 U	NA	0.55 U	<b>1.2 J</b>
Toluene	0.008 U	NA	0.55 U	<b>0.091 J</b>
Xylene, Total	0.008 U	NA	0.55 U	<b>5.8 J</b>
Acetone	<b>0.11 J</b>	NA	1.4 UJ	2.3 UJ
Bromodichloromethane	0.008 U	NA	0.55 U	0.92 UJ
Bromoform	0.008 UJ	NA	0.55 UJ	0.92 UJ
Bromomethane	0.008 UJ	NA	0.55 UJ	0.92 UJ
Butanone,2- (MEK)	<b>0.016 J</b>	NA	0.55 UJ	0.92 UJ
Carbon disulfide	0.008 U	NA	0.55 UJ	0.92 UJ
Chlorobenzene	0.008 U	NA	0.55 U	0.92 UJ
Chloroform	0.008 U	NA	0.55 U	0.92 UJ
Chloromethane	0.008 U	NA	0.55 UJ	0.92 UJ
Dichloroethane,1,2-	0.008 U	NA	0.55 U	0.92 UJ
Dichloroethene, cis-1,2-	0.008 U	NA	0.55 U	0.92 UJ
Methylene chloride	0.008 U	NA	0.55 U	0.92 UJ
Styrene	0.008 U	NA	0.55 U	0.92 UJ
Tetrachloroethene	0.008 U	NA	0.55 U	0.92 UJ
Trichloroethene	0.008 U	NA	0.55 U	0.92 UJ
Vinyl chloride	0.008 U	NA	0.55 UJ	0.92 UJ
Total VOCs	<b>0.126</b>	NA	ND	<b>7.261</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	0.63 U	0.57 U	0.4 U	<b>0.98 J</b>
Acenaphthylene	0.63 U	0.57 U	0.4 U	3.3 UJ
Anthracene	0.63 U	0.57 U	0.4 U	3.3 UJ
Benzo[g,h,i]perylene	0.63 U	0.57 U	0.4 U	3.3 UJ
Fluoranthene	<b>0.057 J</b>	<b>0.043 J</b>	<b>0.05 J</b>	3.3 UJ
Fluorene	0.63 U	0.57 U	0.4 U	<b>0.32 J</b>
Methylnaphthalene,2-	0.63 U	0.57 U	0.4 U	<b>2.5 J</b>
Naphthalene	0.63 U	0.57 U	0.4 U	<b>25 J</b>
Phenanthrene	<b>0.045 J</b>	0.57 U	<b>0.036 J</b>	3.3 UJ
Pyrene	<b>0.062 J</b>	<b>0.045 J</b>	<b>0.047 J</b>	3.3 UJ
Benz[a]anthracene	0.63 U	0.57 U	<b>0.023 J</b>	3.3 UJ
Benzo[a]pyrene	0.63 U	0.57 U	<b>0.021 J</b>	3.3 UJ
Benzo[b]fluoranthene	0.63 U	0.57 U	0.4 U	3.3 UJ
Benzo[k]fluoranthene	0.63 U	0.57 U	0.4 U	3.3 UJ
Chrysene	0.63 U	0.57 U	<b>0.023 J</b>	3.3 UJ
Dibenz[a,h]anthracene	0.63 U	0.57 U	0.4 U	3.3 UJ
Indeno[1,2,3-cd]pyrene	0.63 U	0.57 U	0.4 U	3.3 UJ
Bis(2-ethylhexyl)phthalate	0.63 U	0.57 U	0.4 U	3.3 UJ
Butyl benzyl phthalate	0.63 U	0.57 U	0.4 U	3.3 UJ
Carbazole	0.63 U	0.57 U	0.4 U	<b>0.37 J</b>
Dibenzofuran	0.63 U	0.57 U	0.4 U	<b>0.32 J</b>
Dimethylphenol, 2,4-	0.63 U	0.57 U	0.4 U	3.3 UJ
Di-n-butyl phthalate	0.63 U	0.57 U	0.4 U	3.3 UJ
Di-n-octyl phthalate	0.63 U	0.57 U	0.4 U	3.3 UJ

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-40 SP-PB40(14-16) 12/30/2003	PB-40 SP-PB40(17-19) 12/30/2003	PB-40 SP-PB40(20-22) 12/30/2003	PB-41 SP-PB41(12-14) 12/29/2003
Methylphenol, 4-	0.63 U	0.57 U	0.4 U	3.3 UJ
Methylphenol,2-	0.63 U	0.57 U	0.4 U	3.3 UJ
Phenol	0.63 U	0.57 U	0.4 U	3.3 UJ
Total SVOCs	<b>0.164</b>	<b>0.088</b>	<b>0.2</b>	<b>29.49</b>
<b>Inorganics (mg/Kg)</b>				
Aluminum	<b>19000</b>	NA	<b>12200</b>	<b>18700 J</b>
Antimony	2.8 UJ	NA	1.7 UJ	2.6 UJ
Arsenic	<b>10</b>	NA	1.4 U	<b>7 J</b>
Barium	<b>67.2</b>	NA	<b>35.9</b>	<b>58.4 J</b>
Beryllium	1.2 U	NA	0.72 U	1.1 UJ
Cadmium	2.3 U	NA	1.4 U	2.1 UJ
Calcium	R	NA	R	R
Chromium	<b>46.6 J</b>	NA	<b>28 J</b>	<b>43.4 J</b>
Cobalt	<b>14.6</b>	NA	<b>7.8</b>	<b>16.5 J</b>
Copper	17.2 U	NA	13.8 U	13.9 UJ
Iron	<b>43800</b>	NA	<b>15300</b>	<b>29600 J</b>
Lead	<b>26.1 J</b>	NA	<b>4.3 J</b>	<b>15 J</b>
Magnesium	<b>8740</b>	NA	<b>5340</b>	<b>8860 J</b>
Manganese	<b>437 J</b>	NA	<b>136 J</b>	<b>402 J</b>
Mercury	0.081 U	NA	0.055 U	0.094 UJ
Nickel	<b>31.4</b>	NA	<b>17.7</b>	<b>33.7 J</b>
Potassium	<b>3160 J</b>	NA	<b>1230 J</b>	<b>3430 J</b>
Silver	0.7 U	NA	0.43 U	0.64 UJ
Sodium	<b>1490 J</b>	NA	292 UJ	<b>2140 J</b>
Vanadium	<b>54</b>	NA	<b>33.3</b>	<b>52.9 J</b>
Zinc	<b>96 J</b>	NA	<b>65.2 J</b>	<b>102 J</b>
Cyanide, Total	0.101 U	NA	0.065 U	0.106 UJ
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-41 SP-PB41(14-16) 12/29/2003	PB-42 SP-PB42(8-10) 12/29/2003	PB-42 SP-PB42(14-16) 12/29/2003	TP-07 SP-SBTP7/10-12 12/21/2003
<b>VOCs (mg/kg)</b>				
Benzene	<b>0.19 J</b>	<b>0.004 J</b>	0.008 U	<b>1.4</b>
Ethylbenzene	<b>1.8</b>	0.005 U	0.008 U	0.69 U
Toluene	<b>0.14 J</b>	<b>0.002 J</b>	0.008 U	<b>1.1</b>
Xylene, Total	<b>7.1</b>	<b>0.002 J</b>	0.008 U	<b>0.6 J</b>
Acetone	2.1 UJ	<b>0.032 J</b>	<b>0.091 J</b>	<b>1.4 J</b>
Bromodichloromethane	0.85 U	0.005 U	0.008 U	0.69 U
Bromoform	0.85 UJ	0.005 UJ	0.008 UJ	0.69 UJ
Bromomethane	0.85 UJ	<b>0.004 J</b>	<b>0.005 J</b>	0.69 UJ
Butanone,2- (MEK)	0.85 U	0.011 U	<b>0.016 J</b>	0.69 UJ
Carbon disulfide	0.85 UJ	0.005 U	<b>0.006 J</b>	<b>0.22 J</b>
Chlorobenzene	0.85 U	0.005 U	0.008 U	0.69 U
Chloroform	0.85 U	<b>0.002 J</b>	0.008 U	0.69 U
Chloromethane	0.85 UJ	0.005 U	0.008 U	0.69 UJ
Dichloroethane,1,2-	0.85 U	0.005 U	0.008 U	0.69 U
Dichloroethene, cis-1,2-	0.85 U	0.005 U	0.008 U	0.69 U
Methylene chloride	0.85 U	0.005 U	0.008 U	0.69 U
Styrene	0.85 U	0.005 U	0.008 U	<b>0.094 J</b>
Tetrachloroethene	0.85 U	0.005 U	0.008 U	0.69 U
Trichloroethene	0.85 U	0.005 U	0.008 U	0.69 U
Vinyl chloride	0.85 UJ	0.005 U	0.008 U	0.69 UJ
Total VOCs	<b>9.23</b>	<b>0.046</b>	<b>0.118</b>	<b>4.814</b>
<b>SVOCs (mg/kg)</b>				
Acenaphthene	0.62 U	<b>0.49 J</b>	<b>0.4 J</b>	<b>21 J</b>
Acenaphthylene	0.62 U	<b>1.7 J</b>	<b>0.37 J</b>	<b>110</b>
Anthracene	0.62 U	<b>4.3</b>	<b>1.5</b>	<b>160</b>
Benzo[g,h,i]perylene	0.62 U	<b>5.9</b>	<b>1 J</b>	<b>130</b>
Fluoranthene	0.62 U	<b>23</b>	<b>5.1</b>	<b>490</b>
Fluorene	0.62 U	<b>0.73 J</b>	<b>0.53 J</b>	<b>85 J</b>
Methylnaphthalene,2-	0.62 U	4.2 U	<b>0.2 J</b>	<b>21 J</b>
Naphthalene	0.62 U	<b>0.9 J</b>	<b>0.63 J</b>	<b>23 J</b>
Phenanthrene	0.62 U	<b>12</b>	<b>4</b>	<b>480</b>
Pyrene	0.62 U	<b>23</b>	<b>5</b>	<b>510</b>
Benz[a]anthracene	0.62 U	<b>15</b>	<b>3.4</b>	<b>240</b>
Benzo[a]pyrene	0.62 U	<b>16</b>	<b>4</b>	<b>190</b>
Benzo[b]fluoranthene	0.62 U	<b>12</b>	<b>3.2</b>	<b>140</b>
Benzo[k]fluoranthene	0.62 U	<b>13</b>	<b>2.9</b>	<b>160</b>
Chrysene	0.62 U	<b>13</b>	<b>3.4</b>	<b>220</b>
Dibenz[a,h]anthracene	0.62 U	<b>2.7 J</b>	<b>0.53 J</b>	<b>39 J</b>
Indeno[1,2,3-cd]pyrene	0.62 U	<b>7.3</b>	<b>1.4</b>	<b>110</b>
Bis(2-ethylhexyl)phthalate	0.62 U	4.2 U	1.2 U	90 U
Butyl benzyl phthalate	0.62 U	4.2 U	1.2 U	90 U
Carbazole	0.62 U	<b>0.61 J</b>	<b>0.3 J</b>	<b>26 J</b>
Dibenzofuran	0.62 U	<b>0.51 J</b>	<b>0.42 J</b>	<b>40 J</b>
Dimethylphenol, 2,4-	0.62 U	4.2 U	1.2 U	90 U
Di-n-butyl phthalate	<b>0.027 J</b>	4.2 U	1.2 U	90 U
Di-n-octyl phthalate	0.62 U	4.2 U	1.2 U	90 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	PB-41 SP-PB41(14-16) 12/29/2003	PB-42 SP-PB42(8-10) 12/29/2003	PB-42 SP-PB42(14-16) 12/29/2003	TP-07 SP-SBTP7/10-12 12/21/2003
Methylphenol, 4-	0.62 U	4.2 U	0.21 J	90 U
Methylphenol,2-	0.62 U	4.2 U	0.061 J	90 U
Phenol	0.62 U	4.2 U	0.094 J	90 U
Total SVOCs	0.027	152.14	38.645	3195
<b>Inorganics (mg/Kg)</b>				
Aluminum	18200	7410	13700	3210
Antimony	2.4 UJ	1.6 UJ	2.4 UJ	2 UJ
Arsenic	11.4	2.4	5.1	12.5
Barium	82.9	47.5	45.7	177
Beryllium	0.98	0.68 U	0.99 U	0.85 U
Cadmium	2 U	1.4 U	2 U	1.7 U
Calcium	R	21900 J	R	4090 J
Chromium	44.6 J	17.2 J	34.8 J	13.4 J
Cobalt	18.3	7	9.1	2.6
Copper	15.2 U	27.8	14.3 U	83.9
Iron	34500	18000	25600	44700
Lead	14.5 J	28 J	15.4 J	101 J
Magnesium	8340	8520	5800	1370
Manganese	433 J	221 J	321 J	141 J
Mercury	0.08 U	0.054 U	0.085 U	0.18
Nickel	34.8	13.5	22.3	8.4
Potassium	3020 J	1800 J	2110 J	1530 J
Silver	0.59 U	0.41 U	0.59 U	0.51 U
Sodium	1880 J	483 J	1590 J	524 J
Vanadium	51.9	19.2	36.9	16.4
Zinc	99.1 J	42.4 J	66.5 J	70.9 J
Cyanide, Total	0.0991 U	19.4	0.95	65.7
<b>TOC (mg/Kg)</b>				
Total Organic Carbon	NA	NA	NA	NA

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	TP-07 SP-SBTP7/12-14 12/21/2003	TP-22 SP-SBTP22/10-12 12/21/2003	TP-24 SP-SBTP24/8-10 12/21/2003
<b>VOCs (mg/kg)</b>			
Benzene	<b>1.6 J</b>	0.005 U	0.005 U
Ethylbenzene	<b>6.7 J</b>	0.005 U	0.005 UJ
Toluene	<b>0.27 J</b>	0.005 U	0.005 UJ
Xylene, Total	<b>8.2 J</b>	0.005 U	0.005 UJ
Acetone	<b>2.4 J</b>	<b>0.02 J</b>	<b>0.036 J</b>
Bromodichloromethane	1.4 UJ	0.005 U	0.005 U
Bromoform	1.4 UJ	0.005 U	0.005 UJ
Bromomethane	1.4 UJ	0.005 UJ	R
Butanone,2- (MEK)	1.4 UJ	0.01 UJ	0.011 UJ
Carbon disulfide	<b>0.57 J</b>	0.005 UJ	0.005 UJ
Chlorobenzene	1.4 UJ	0.005 U	0.005 UJ
Chloroform	1.4 UJ	0.005 U	0.005 U
Chloromethane	1.4 UJ	0.005 U	0.005 U
Dichloroethane,1,2-	1.4 UJ	0.005 U	0.005 U
Dichloroethene, cis-1,2-	1.4 UJ	0.005 U	0.005 U
Methylene chloride	1.4 UJ	0.005 UJ	0.005 UJ
Styrene	1.4 UJ	0.005 U	0.005 UJ
Tetrachloroethene	1.4 UJ	0.005 U	0.005 UJ
Trichloroethene	1.4 UJ	0.005 UJ	0.005 UJ
Vinyl chloride	1.4 UJ	0.005 U	0.005 U
Total VOCs	<b>19.74</b>	<b>0.02</b>	<b>0.036</b>
<b>SVOCS (mg/kg)</b>			
Acenaphthene	<b>0.18 J</b>	<b>0.018 J</b>	<b>0.11 J</b>
Acenaphthylene	<b>0.91 J</b>	<b>0.077 J</b>	<b>0.04 J</b>
Anthracene	<b>1.8 J</b>	<b>0.11 J</b>	<b>0.22 J</b>
Benzo[g,h,i]perylene	<b>2.2 J</b>	<b>0.068 J</b>	<b>0.13 J</b>
Fluoranthene	<b>6.1 J</b>	0.44 U	<b>0.8</b>
Fluorene	<b>0.66 J</b>	<b>0.04 J</b>	<b>0.096 J</b>
Methylnaphthalene,2-	3.6 UJ	0.37 U	0.37 U
Naphthalene	<b>26 J</b>	0.37 U	<b>0.046 J</b>
Phenanthrene	<b>6.3 J</b>	0.37 U	<b>0.76</b>
Pyrene	<b>6.7 J</b>	<b>0.5</b>	<b>0.92</b>
Benz[a]anthracene	<b>3.5 J</b>	0.37 U	<b>0.48</b>
Benzo[a]pyrene	<b>2.7 J</b>	<b>0.18 J</b>	<b>0.4</b>
Benzo[b]fluoranthene	<b>1.8 J</b>	<b>0.17 J</b>	<b>0.32 J</b>
Benzo[k]fluoranthene	<b>2.1 J</b>	<b>0.17 J</b>	<b>0.45</b>
Chrysene	<b>3 J</b>	0.37 U	<b>0.46</b>
Dibenz[a,h]anthracene	<b>0.83 J</b>	<b>0.033 J</b>	<b>0.074 J</b>
Indeno[1,2,3-cd]pyrene	<b>2.1 J</b>	<b>0.074 J</b>	<b>0.15 J</b>
Bis(2-ethylhexyl)phthalate	3.6 UJ	0.37 U	0.37 U
Butyl benzyl phthalate	3.6 UJ	0.37 U	0.37 U
Carbazole	3.6 UJ	0.37 U	<b>0.086 J</b>
Dibenzofuran	<b>0.38 J</b>	<b>0.023 J</b>	<b>0.044 J</b>
Dimethylphenol, 2,4-	3.6 UJ	0.37 U	0.37 U
Di-n-butyl phthalate	3.6 UJ	0.37 U	0.37 U
Di-n-octyl phthalate	3.6 UJ	0.37 U	0.37 U

**Table 2**  
**Supplemental Remedial Investigation/Pre-construction Boring Program Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	TP-07 SP-SBTP7/12-14 12/21/2003	TP-22 SP-SBTP22/10-12 12/21/2003	TP-24 SP-SBTP24/8-10 12/21/2003
Methylphenol, 4-	3.6 UJ	0.37 U	0.37 U
Methylphenol,2-	3.6 UJ	0.37 U	0.37 U
Phenol	<b>0.71 J</b>	0.37 U	0.37 U
Total SVOCs	<b>67.97</b>	<b>1.463</b>	<b>5.586</b>
<b>Inorganics (mg/Kg)</b>			
Aluminum	<b>14300 J</b>	<b>9060</b>	<b>7090</b>
Antimony	3.9 UJ	1.5 UJ	1.6 UJ
Arsenic	<b>4.1 J</b>	<b>2</b>	<b>2.4</b>
Barium	<b>45.9 J</b>	<b>66.4</b>	<b>104</b>
Beryllium	1.6 UJ	0.61 U	0.68 U
Cadmium	3.3 UJ	1.2 U	1.4 U
Calcium	<b>4920 J</b>	<b>1390 J</b>	<b>8490 J</b>
Chromium	<b>34.5 J</b>	<b>25.7 J</b>	<b>17.2 J</b>
Cobalt	<b>9.1 J</b>	<b>10.4</b>	<b>5.5</b>
Copper	<b>8.8 J</b>	<b>29</b>	<b>16.3</b>
Iron	<b>28300 J</b>	<b>16200</b>	<b>13700</b>
Lead	<b>7.8 J</b>	<b>23 J</b>	<b>47.6 J</b>
Magnesium	<b>5760 J</b>	<b>4630</b>	<b>3730</b>
Manganese	<b>241 J</b>	<b>150 J</b>	<b>163 J</b>
Mercury	0.12 U	<b>0.054</b>	<b>0.094</b>
Nickel	<b>21.3 J</b>	<b>29.4</b>	<b>13</b>
Potassium	<b>1530 J</b>	<b>2230 J</b>	<b>2140 J</b>
Silver	0.98 UJ	0.37 U	0.41 U
Sodium	<b>1490 J</b>	<b>141 J</b>	<b>252 J</b>
Vanadium	<b>40.6 J</b>	<b>25</b>	<b>20.9</b>
Zinc	<b>59.9 J</b>	<b>59</b>	<b>60.5 J</b>
Cyanide, Total	<b>6.2 J</b>	0.0599 U	0.0605 U
<b>TOC (mg/Kg)</b>			
Total Organic Carbon	NA	NA	NA

**Notes:**

VOCs - Volatile Organic Compounds

SVOCs - Semivolatile Organic Compounds

J - estimated value

U - not detected to the reporting limit (organic analysis)  
and the method detection limit (inorganic analysis)

UJ - not detected and the limit shown is estimated

R - rejected value

NA - Not Analyzed

mg/kg is milligrams per kilogram

ND - Total concentration is listed as ND because  
no compounds were detected.

NE - Cleanup objective not established

Blue - Compound Detected in sample

Red - Concentration exceeds NYSDEC established  
cleanup criteria of 500 mg/kg for Total SVOCs  
and 10 mg/kg for Total VOCs

**Table 3**  
**Supplemental Remedial Investigation/Groundwater Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	NYSDEC Ambient Water Quality Standards	SP-MW1S 01/12/04	SP-MW1D 01/12/04	SP-MW2S 01/13/04	SP-MW2D 01/13/04	SP-MW3S 01/13/04	SP-MW3D 01/13/04
<b>VOCs (ug/L)</b>							
Benzene	1	5 U	5 U	62	750	5 U	2 J
Ethylbenzene	5	5 U	5 U	13	1600	5 U	0.8 J
Toluene	5	5 U	5 U	1 J	3400	5 U	0.9 J
m,p-xylene	5	5 U	5 U	1 J	3100	5 U	2 J
o-xylene	5	5 U	5 U	3 J	1200	5 U	5 U
Acetone	50*	10 U	10 U	10 U	110 J	10 U	10 U
Butanone,2- (MEK)	50*	10 U	10 U	10 U	200 U	10 U	10 U
Dichloroethene, cis-1,2-	5	5 U	5 U	5 U	100 U	5 U	5 U
<b>SVOCs (ug/L)</b>							
Acenaphthene	20*	10 U	10 U	11	200 J	10 U	10 U
Acenaphthylene	NE	10 U	10 U	1 J	2000 U	10 U	10 U
Anthracene	50*	10 U	10 U	1 J	2000 U	10 U	10 U
Fluoranthene	50*	10 U	10 U	3 J	2000 U	10 U	10 U
Fluorene	50*	10 U	10 U	7 J	2000 U	10 U	10 U
Methylnaphthalene,2-	NE	10 U	10 U	10 U	520 J	10 U	10 U
Naphthalene	10*	10 U	10 U	26	12000	10 U	10 U
Phenanthrene	50*	10 U	10 U	0.8 J	110 J	10 U	10 U
Pyrene	50*	10 U	10 U	2 J	2000 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	5	10 U	10 U	10 U	2000 U	10 U	10 U
Carbazole	NE	10 U	10 U	21	270 J	10 U	10 U
Dibenzofuran	NE	10 U	10 U	11	R	10 U	10 U
Methylphenol, 4-	NE	10 UJ	10 UJ	10 UJ	2000 UJ	10 UJ	10 UJ
Phenol	NE	10 UJ	10 UJ	1 J	2000 UJ	10 UJ	10 UJ
<b>Inorganics (mg/L)</b>							
Aluminum - total	NE	0.06 U	0.46	0.06 U	1	0.06 U	11.7
Barium - total	1	0.265	0.309	0.239	0.105	0.274	0.168
Cadmium - total	0.005	0.00094 U	0.0013				
Calcium - total	NE	162	178	172	132	143	56.3
Chromium - total	0.05	0.0014 U	0.0014 U	0.0014 U	0.0034	0.0014 U	0.0377
Cobalt - total	NE	0.0017 U	0.0114				
Copper - total	0.2	0.0026 U	0.0026 U	0.0026 U	0.0043 U	0.0026 U	0.0356

**Table 3**  
**Supplemental Remedial Investigation/Groundwater Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	NYSDEC Ambient Water Quality Standards 01/12/04	SP-MW1S 01/12/04	SP-MW1D 01/12/04	SP-MW2S 01/13/04	SP-MW2D 01/13/04	SP-MW3S 01/13/04	SP-MW3D 01/13/04
Iron - total	0.3	<b>2.47</b>	<b>0.333</b>	<b>23.1</b>	<b>1.44</b>	<b>22.7</b>	<b>27.5</b>
Lead - total	0.025	0.0036 U	<b>0.0312</b>				
Magnesium - total	35*	<b>18.4</b>	<b>22.8</b>	<b>32.7</b>	<b>74.5</b>	<b>30.6</b>	<b>51.5</b>
Manganese - total	0.3	<b>0.518</b>	<b>0.483</b>	<b>1.15</b>	<b>0.356</b>	<b>1.1</b>	<b>0.707</b>
Nickel - total	0.1	0.0018 U	0.0018 U	0.0018 U	<b>0.0185</b>	0.0018 U	<b>0.0277</b>
Potassium - total	NE	<b>30.8 J</b>	<b>49.4 J</b>	<b>32.4 J</b>	<b>97.7 J</b>	<b>31.7 J</b>	<b>44.4 J</b>
Sodium - total	20	<b>207</b>	<b>226</b>	<b>216</b>	<b>225</b>	<b>211</b>	<b>223</b>
Vanadium - total	NE	0.001 U	0.001 U	0.001 U	<b>0.0034</b>	0.001 U	<b>0.0336</b>
Zinc - total	2*	0.011 U	<b>0.0682</b>				
Barium - dissolved	1	NA	NA	NA	NA	NA	<b>0.0808</b>
Calcium - dissolved	NE	NA	NA	NA	NA	NA	<b>40.4</b>
Chromium - dissolved	0.05	NA	NA	NA	NA	NA	<b>0.0035</b>
Cobalt - dissolved	NE	NA	NA	NA	NA	NA	0.0017 U
Iron - dissolved	0.3	NA	NA	NA	NA	NA	<b>3.37</b>
Magnesium - dissolved	35*	NA	NA	NA	NA	NA	<b>39.4</b>
Manganese - dissolved	0.3	NA	NA	NA	NA	NA	<b>0.466</b>
Nickel - dissolved	0.1	NA	NA	NA	NA	NA	<b>0.0041</b>
Potassium - dissolved	NE	NA	NA	NA	NA	NA	<b>36 J</b>
Sodium - dissolved	20	NA	NA	NA	NA	NA	<b>224</b>
Vanadium - dissolved	NE	NA	NA	NA	NA	NA	<b>0.0014</b>
Cyanide, Total	0.2	0.001 UJ	0.001 UJ	<b>0.377</b>	<b>0.316</b>	<b>0.0989</b>	<b>0.0851</b>

**Table 3**  
**Supplemental Remedial Investigation/Groundwater Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	NYSDEC Ambient Water Quality Standards	SP-MW4S 01/13/04	SP-MW4D 01/13/04	Duplicate of SP-MW4D SP-MWDUP 01/13/04	SP-MW5S 01/12/04	SP-MW5D 01/12/04	SP-MW6S 01/12/04	SP-MW6D 01/12/04
<b>VOCs (ug/L)</b>								
Benzene	1	<b>1 J</b>	<b>940</b>	<b>930</b>	<b>0.8 J</b>	<b>0.9 J</b>	5 U	5 U
Ethylbenzene	5	5 U	25 U	25 U	5 U	5 U	5 U	5 U
Toluene	5	5 U	25 U	25 U	5 U	5 U	5 U	5 U
m,p-xylene	5	5 U	25 U	25 U	5 U	5 U	5 U	5 U
o-xylene	5	5 U	<b>3 J</b>	<b>2 J</b>	5 U	5 U	5 U	5 U
Acetone	50*	10 U	50 U	50 U	<b>32 J</b>	<b>14 J</b>	10 U	10 U
Butanone,2- (MEK)	50*	10 U	50 U	50 U	10 U	<b>12 J</b>	10 U	10 U
Dichloroethene, cis-1,2-	5	5 U	25 U	25 U	<b>5 J</b>	5 U	5 U	5 U
<b>SVOCs (ug/L)</b>								
Acenaphthene	20*	<b>0.4 J</b>	<b>47</b>	<b>45</b>	10 U	10 U	10 U	10 U
Acenaphthylene	NE	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	50*	10 U	<b>0.9 J</b>	<b>0.9 J</b>	10 U	10 U	10 U	10 U
Fluoranthene	50*	<b>0.6 J</b>	<b>0.7 J</b>	<b>0.7 J</b>	10 U	10 U	10 U	10 U
Fluorene	50*	10 U	<b>13</b>	<b>13</b>	10 U	10 U	10 U	<b>0.5 J</b>
Methylnaphthalene,2-	NE	10 U	<b>38</b>	<b>37</b>	10 U	10 U	10 U	10 U
Naphthalene	10*	10 U	<b>2 J</b>	<b>1 J</b>	10 U	10 U	10 U	10 U
Phenanthrene	50*	10 U	<b>4 J</b>	<b>4 J</b>	10 U	10 U	10 U	<b>1 J</b>
Pyrene	50*	<b>0.7 J</b>	<b>0.7 J</b>	<b>0.7 J</b>	10 U	10 U	10 U	10 U
Bis(2-ethylhexyl)phthalate	5	10 U	10 U	10 U	10 U	<b>0.5 J</b>	10 U	10 U
Carbazole	NE	10 U	<b>36</b>	<b>35</b>	10 U	10 U	10 U	<b>0.5 J</b>
Dibenzofuran	NE	10 U	<b>2 J</b>	<b>2 J</b>	10 U	10 U	10 U	10 U
Methylphenol, 4-	NE	10 UJ	10 UJ	10 UJ	10 UJ	<b>0.6 J</b>	10 UJ	10 UJ
Phenol	NE	10 UJ	<b>0.8 J</b>	<b>0.7 J</b>	10 UJ	<b>2 J</b>	10 UJ	10 UJ
<b>Inorganics (mg/L)</b>								
Aluminum - total	NE	0.06 U	0.06 U	0.06 U	<b>0.929</b>	<b>0.186</b>	0.06 U	<b>0.553 J</b>
Barium - total	1	<b>0.0793</b>	<b>0.0529</b>	<b>0.0543</b>	<b>0.0178</b>	<b>0.108</b>	<b>0.113</b>	<b>0.123</b>
Cadmium - total	0.005	0.00094 U	0.00094 U	0.00094 U	0.00094 U	0.00094 U	0.00094 U	0.0047 U
Calcium - total	NE	<b>121</b>	<b>158</b>	<b>160</b>	<b>53.3</b>	<b>94.7</b>	<b>148</b>	<b>182</b>
Chromium - total	0.05	0.0014 U	<b>0.0015</b>	<b>0.0016</b>	<b>0.0042</b>	0.0014 U	0.0014 U	0.007 U
Cobalt - total	NE	0.0017 U	0.0017 U	0.0017 U	0.0017 U	0.0017 U	<b>0.0025 J</b>	0.0085 U
Copper - total	0.2	0.0027 U	0.0026 U	0.0026 U	0.0026 U	0.0026 U	0.0026 U	0.013 U

**Table 3**  
**Supplemental Remedial Investigation/Groundwater Analytical Results**  
**East 173rd Street Works**  
**Bronx, New York**

Chemical Name	NYSDEC Ambient Water Quality Standards	SP-MW4S 01/13/04	SP-MW4D 01/13/04	Duplicate of SP-MW4D SP-MWDUP 01/13/04	SP-MW5S 01/12/04	SP-MW5D 01/12/04	SP-MW6S 01/12/04	SP-MW6D 01/12/04
Iron - total	0.3	3.58	1.69	1.72	1.36	8.53	15.2	4.19
Lead - total	0.025	0.0036 U	0.0036 U	0.0036 U	0.0036 U	0.0036 U	0.0036 U	0.018 U
Magnesium - total	35*	72.9	66.8	67.7	50.2	48.7	252	515
Manganese - total	0.3	0.186	2.3	2.34	1.1	7.21	1.57	1.14
Nickel - total	0.1	0.0018 U	0.0018 U	0.0018 U	0.0026	0.0018 U	0.0018 U	0.009 U
Potassium - total	NE	28.3 J	42.6 J	43.2 J	14.8 J	12.9 J	147 J	278 J
Sodium - total	20	294	217	214	98	80.2	216	1670
Vanadium - total	NE	0.001 U	0.0037	0.0037	0.0031	0.001 U	0.001 U	0.005 U
Zinc - total	2*	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	0.055 U
Barium - dissolved	1	NA	NA	NA	NA	NA	0.11	NA
Calcium - dissolved	NE	NA	NA	NA	NA	NA	142	NA
Chromium - dissolved	0.05	NA	NA	NA	NA	NA	0.0014 U	NA
Cobalt - dissolved	NE	NA	NA	NA	NA	NA	0.0023 J	NA
Iron - dissolved	0.3	NA	NA	NA	NA	NA	14.8	NA
Magnesium - dissolved	35*	NA	NA	NA	NA	NA	244	NA
Manganese - dissolved	0.3	NA	NA	NA	NA	NA	1.53	NA
Nickel - dissolved	0.1	NA	NA	NA	NA	NA	0.0018 U	NA
Potassium - dissolved	NE	NA	NA	NA	NA	NA	143 J	NA
Sodium - dissolved	20	NA	NA	NA	NA	NA	217	NA
Vanadium - dissolved	NE	NA	NA	NA	NA	NA	0.001 U	NA
Cyanide, Total	0.2	0.221	0.0281	0.03	0.001 UJ	0.001 UJ	0.0141	0.0031 UJ

**Notes:**

VOCs - Volatile Organic Compounds

SVOCs - Semivolatile Organic Compounds

J - estimated value

U - not detected to reporting limit shown (organic analysis)  
and method detection limit shown (inorganic analysis)

UJ - not detected, limit shown is estimated

R - rejected value

ug/L is micrograms per liter

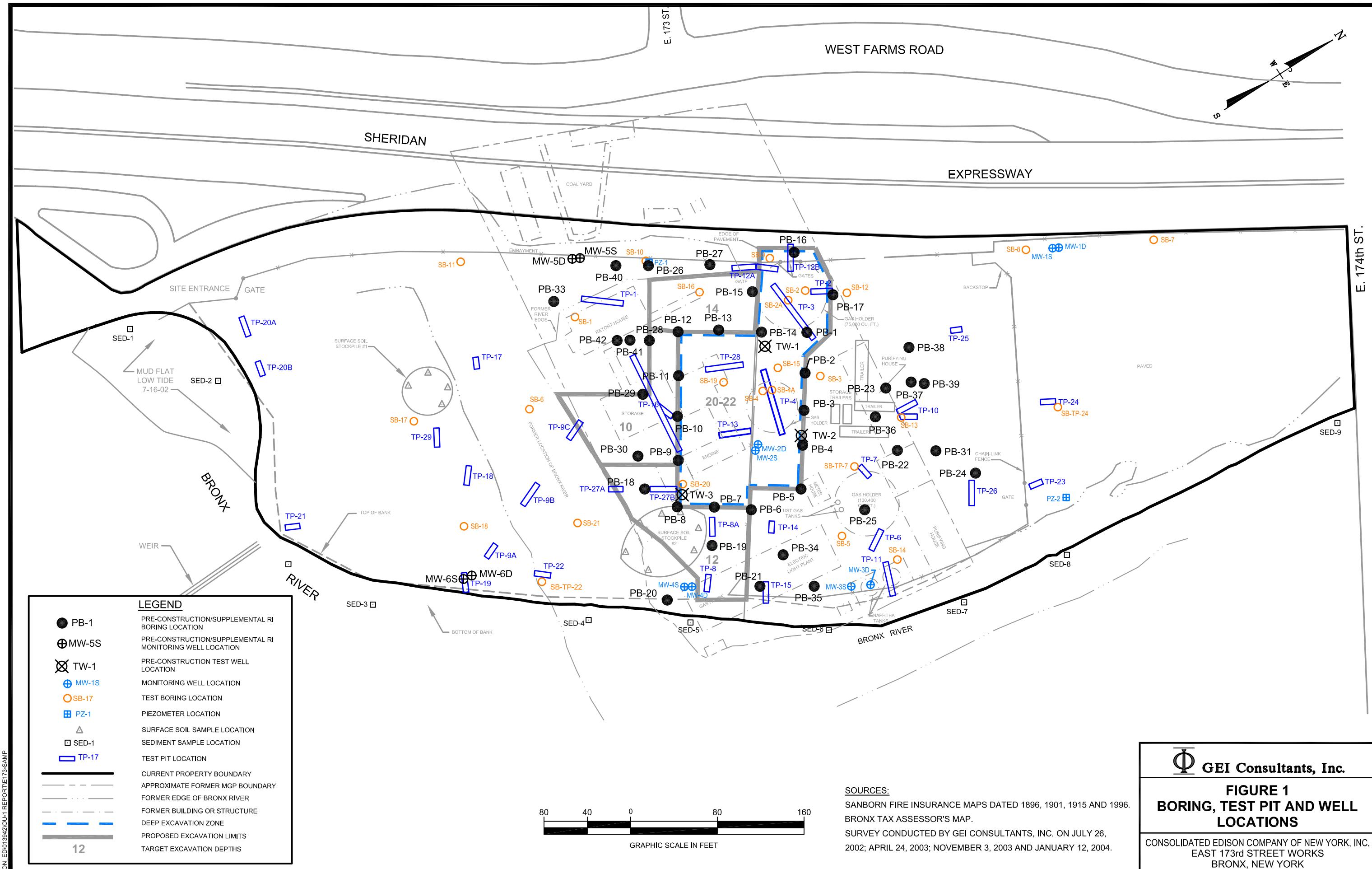
mg/L is milligrams per liter

NA - Not Analyzed

Blue - Compound Detected in sample

Red - Concentration exceeds Water Quality Standards

\* = guidance value



# **Appendix A**

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## **Boring Logs**



GEI Consultants, Inc.

**SOIL BORING (PB-1)**

Boring/Well ID:	PB-1	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/10/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	36'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.43	Drilling Method:	Hollow stem auger/Corer barrel

**Well Construction:**

Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 36'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer      WOR - weight of rod Proportions Used: Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%	

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs.
2					
3					
4					
5	4-6	0	25 15 13 19	24/20	FILL - black silt and coarse sand, some brick, coal fragments, and ash throughout, loose, dry, no staining, no odor
6					PID = 0, 0, 0
7	6-8	0	3 3 2 3	24/14	FILL - black FINE to COARSE SAND and SILT, some ash, brick and coal fragments, loose, tan band from 10-11", clinker/slag, dry to moist in tip, no staining, no odor
8					PID = 0, 0, 0
9	8-10	0	1 1 1	24/7	FILL - black fine to coarse sand and silt, some fine gravel, loose, wet, no staining, no odor
10					PID = 0, 0
11	10-12	0	1 1 1	24/10	Same as 8-10' interval
12					PID = 0, 0
13	12-14	0	wor wor wor 2	24/20	** Gray SILTY CLAY and natural organic material (roots and leaves), moist, no staining, moderate natural organic odor (swampy)
14					PID = 0
15	14-16	0	3 5 2 9	24/11	Gray SILTY CLAY, trace organic material, no staining, moderate organic odor (swampy)
16					PID = 0, 0, 0



### SOIL BORING (PB-1)

Boring/Well ID:	PB-1	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/10/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	36'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.43	Drilling Method:	Hollow stem auger/Corer barrel

**Well Construction:**

Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 36'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description	
					0-13.5"	13.5-20.5"
17	16-18	0	wor	24/20.5	0-13.5" - Same as 14-16' interval	13.5-20.5" - Gray, poorly sorted FINE SAND and SILT, trace clay and natural organic material, moist, no staining, no odor
18			wor			PID = 0, 0, 0
19	18-20	0	2	24/10	Gray, well sorted FINE to COARSE SAND and SILT, moist, no staining, no odor	
20			10	24/10		
			13			
			17			
					PID = 0, 0, 0	
21	20-22	0	10	24/10	Gray, well sorted FINE to COARSE SAND and sub-angular to angular fine gravel, rock fragment in tip, moist, no staining, no odors	
			12	24/10		
			13			
			19			
					PID = 0, 0, 0	
22			16		Gray, poorly sorted FINE to MEDIUM SAND, black weathered rock in tip, moist, no staining, no odor	
23	22-24	0	8	24/18		
			10			
			12			
			22			
					PID = 0, 0, 0	
24			8		Gray, well sorted FINE to COARSE SAND, trace silt, wet, no staining, no odor	
25	24-26	0	9	24/9		
			15			
			18			
					PID = 0, 0, 0	
26			10		** Well sorted FINE to MEDIUM SAND, trace silt and fine gravel, moist, no staining, no odor	
27	26-28	0	35	24/6		
			75			
			55			
					PID = 0, 0, 0	
28			15		0-3" - Sub-angular fine GRAVEL, wet	
29	28-30	0	16	24/13	3-10.5" - Gray, well sorted FINE to COARSE SAND, trace silt and cobble fragments, wet	
			19		10.5-13" - Brown, weathered rock, moist, no staining, no odor	
			25		PID = 0, 0, 0	
30			25			
31	30-32	0	14	24/11	0-5" - Brown, SILT and FINE SAND, trace fine gravel, wet	
			14		5-11" - Brown, well sorted FINE to COARSE SAND, wet, no staining, no odor	
			15		PID = 0, 0, 0	
32						



### SOIL BORING (PB-1)

Boring/Well ID:	PB-1	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/10/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	36'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.43	Drilling Method:	Hollow stem auger/Corer barrel
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 36'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description			
					32-34	34-36		
33	32-34	3.5	12	24/8.5	Brown, well sorted FINE to MEDIUM SAND, trace silt, trace very fine gravel, moist, no staining, no odor			
			13					
			14					
			12		PID = 0, 0, 0			
34			29	15/8	Brown, well sorted SILT and FINE to COARSE SAND, fine gravel (angular) throughout, weathered bedrock in tip, moist, no staining, no odor			
			18					
35	34-36	12.8	100/3"		PID = 0, 0, 0			
					End of boring at 36' bgs. (spoon refusal)			



### **SOIL BORING (PB-2)**

Boring/Well ID:	PB-2	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/12/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	28'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.17	Drilling Method:	Hollow stem auger/Corer barrel
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 28'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	0	26 22 16 14	24/21	** FILL - fine to coarse sand and silt, fly ash, crushed brick, crushed coal, loose, dry, no staining, slight asphalt-like odor
6					PID = 0, 0, 0
7	6-8	1	6 4 2 1	24/6.5	FILL - black fine sand and silt, crushed coal, loose, dry, no staining, slight asphalt-like odor
8					PID = 0, 0, 0
9	8-10	0	WOH WOH WOH WOH	24/0	No Recovery
10					
11	10-12	0	WOH WOH WOH WOH	24/7	** Dark gray SILT, trace fine sand and organic material, wet, no staining, slight MGP/burnt hydrocarbon-like odor
12					PID = 0, 0, 0
13	12-14	0	WOH WOH WOH WOH	24/3	Dark gray SILT and CLAY, trace organic material, wet, no staining, slight natural organic (swampy) odor
14					PID = 0, 0, 0
15	14-16	0	WOH WOH 18 1	24/8	Gray, SILT and CLAY with organic material, moist, no staining, slight natural organic (swampy) odor
16					PID = 0, 0, 0



### SOIL BORING (PB-2)

Boring/Well ID:	PB-2	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/12/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	28'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.17	Drilling Method:	Hollow stem auger/Corer barrel
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 28'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	0	WOH 2 2	24/13	0-8" - Gray SILT and CLAY, trace organic material 8-13" - Gray FINE SAND and SILT, no staining, very slight natural organic (swampy) odor
18			8		PID = 0, 0, 0
19	18-20	0	10 25 15	24/9	Well sorted FINE SAND to VERY FINE GRAVEL, trace cobble fragments, compact, wet, no staining, no odor
20			12 13 14 25		
21	20-22	0	12 13 14 25	24/8	TILL - well sorted FINE to COARSE SAND, trace fine gravel, compact, wet, no staining, no odor
22			13		** Same as 20-22' interval
23	22-24	0.0	15 15 17	24/14	
24			17		
25	24-26	0.0	21 23 19 18	24/15	Same as 20-22' interval
26					
27	26-28	0.0	25 35 55 62	24/5	0-2" - Same as 20-22' interval 3-5" - weathered bedrock
28					

End of boring at 28' bgs. (spoon refusal)



### SOIL BORING (PB-3)

Boring/Well ID:	PB-3	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/15/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	30'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	10.99	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 30'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	0	3	24/10	** FILL - brick pieces, fine to coarse sand and silt, cobble fragments, clinker/slag, compact, dry, no staining, no odor
			10		
			8		PID = 0, 0, 0
6			7		FILL - brick pieces, fine to coarse sand, sub-angular very fine gravel and cobble fragments, clinker/slag, compact, dry, no staining, no odor
7	6-8	0	10	24/13	
			8		
			8		PID = 0, 0, 0
8			5		Well sorted FINE to COARSE SAND, trace cobble fragments, moist, no staining, no odor
9	8-10	0	7	24/8	
			8		
			7		PID = 0, 0, 0
10			3		No Recovery, cobble fragment in tip of spoon
11	10-12	0	3	24/0	
			7		
			9		
12					
13	12-14	199	13		Black FINE to COARSE SAND and sub-angular VERY FINE GRAVEL, loose, wet, no staining, slight diesel fuel-like odor
			8	24/2.5	
			5		
			4		PID = 0
14			16		Black, well sorted FINE to COARSE SAND, trace very fine gravel, piece of fabric, loose, wet,
15	14-16	62	13	24/8	** sheen, slight fuel oil-like odor
			5		
			4		PID = 0, 0
16					



### **SOIL BORING (PB-3)**

Boring/Well ID:	PB-3	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/15/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	30'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	10.99	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 30'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer	WOR - weight of rod
		Proportions Used: Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%	

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	62	3 4 6	24/3	** Same as 14-16' interval
18			6		PID = 0, 0
19	18-20	148	7 3 5	24/4	Black, well sorted FINE to COARSE SAND and sub-angular VERY FINE GRAVEL, wet, slight fuel oil -like odor, 3" cobble fragment in tip of spoon
20			5		PID = 0, 0, 0
21	20-22	83	3 4 10	24/11	Black FINE TO COARSE SAND and SILT, trace angular fine gravel, cobble and brick fragments, piece of fabric, wet, loose, sheen and black staining, slight to moderate fuel oil-like odor
22			8		PID = 10, 12, 54, 29
23	22-24	35	45 20 15	24/22	** 0-5" - brick fragments 5-14" - light brown, FINE SAND and SILT, trace very fine gravel, cobble fragments from 13-14" 14-22" - Well sorted FINE to MEDIUM SAND, wet, sheen, black staining from 14-18"
24			10		PID = 0, 0, 0
25	24-26	0	9 4 5	24/6	Dark gray, well sorted FINE to COARSE SAND, trace very fine gravel, loose, wet, black staining, slight fuel oil-like odor
26			25		PID = 0, 0, 0
27	26-28	0	14 15 15	24/0	No Recovery - rock fragments and medium gravel in tip of spoon
28			25		
29	28-30	0	40 62 55	24/0	No Recovery - Spoon broke off rod
30			40		

End of boring at 30' bgs.



### SOIL BORING (PB-4)

Boring/Well ID:	PB-4	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/12/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	30'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	11.05	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 30'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	0	3 3 3 5	24/12	FILL - dark brown FINE to COARSE SAND, some fine gravel and silt, dry no staining, no odor  PID = 0, 0
6					
7	6-8	0	3 4 4	24/8	** FILL - brown FINE to COARSE SAND, little fine gravel, trace clinker/slag and crushed brick, dry, no staining, no odor
8					
9	8-10	9	3 3 3 4	24/10	Black FINE to MEDIUM SAND and SILT, trace coarse sand, moist, no staining, slight fuel-oil like odor  PID = 0, 0
10					
11	10-12	76	3 3 3 3	24/11	** Dark gray FINE to MEDIUM SAND and SILT, moist no staining, slight fuel-oil like odor  PID = 0, 0
12					
13	12-14	22	2 2 1 2	24/7	Dark gray FINE to MEDIUM SAND and SILT/CLAY, moist, no staining, slight fuel-oil like odor  PID = 0, 0, 0
14					
15	14-16	3	1 1 1	24/14	Dark gray FINE to MEDIUM SAND, some SILT/CLAY, trace fine gravel, moist to wet, no staining, slight fuel-oil like odor  PID = 0, 0, 0
16					
17	16-18	33	1 1 2 3	24/18	0-11" - Gray SILTY CLAY, some plant fragments, moist, no staining, natural organic (swampy) odor 11-18" - Gray FINE SAND and SILT, moist, no staining, natural organic (swampy) odor  PID = 0, 1
18					



### **SOIL BORING (PB-4)**

Boring/Well ID:	PB-4	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/12/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	30'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	11.05	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 30'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
19	18-20	23	WOR WOR 2 2	24/11	** Dark gray FINE SAND, little to some silt, moist  PID = 0, 3, 0
20			WOR		Dark gray FINE to COARSE SAND, little fine gravel and silt, wet,
21	20-22	1	11 12 11	24/7	** no staining, no odor  PID = 0, 0, 0
22			25		0-5" - Same as 20-22' interval
23	22-24	1	37 71 14	24/15	5-15" - FINE to MEDIUM SAND, cobble fragment, some fine gravel, little silt, wet no staining, no odor PID = 0, 0
24			24		Gray FINE to COARSE SAND, trace fine gravel, wet, no staining, no odor
25	24-26	1	17 18 16	24/12	
26			16		PID = 0, 0
27	26-28	1	35 33 29	24/19	Dark gray FINE to COARSE SAND, trace silt and fine gravel, no staining, very slight hydrocarbon-like odor
28			100/4"		PID = 0, 0, 0
29	28-30	0		4/1	cobble fragment in tip of spoon, FINE to COARSE SAND, trace fine gravel, wet, no staining, no odor
30					PID = 0

End of boring at 30' bgs.



### SOIL BORING (PB-5)

Boring/Well ID:	PB-5	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/15/16/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	18'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	11.22	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0-18'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	0	4 5 17 9	24/8	Light brown FINE SAND and SILT, trace medium sand, no staining, no odor
6					PID = 0, 0
7	6-8	0	15 27 24 8	24/12	** FILL - FINE to COARSE SAND and FINE GRAVEL and SILT, some clinker/slag, crushed stone and brick, dry, no staining, no odor
8					PID = 0, 0, 0
9	8-10	0	15 4 3 3	24/11	FILL - Dark brown to black crushed brick, rock and clinker/slag, some silt, wet, no staining, no odor
10					PID = 0, 0
11	10-12	0	2 1 1	24/10	0-6" - Same as 8-10' interval, possible black staining in bottom 2", wet, slight asphalt-like odor 6-10" - Dark gray FINE SAND and SILT, plant fragments, no staining, slight natural organic (swampy) odor PID = 0, 0
12					
13	12-14	0	1 2 5 5	24/14	** Dark gray SILTY CLAY, plant fragments throughout, trace fine sand, moist, no staining, slight natural organic (swampy) odor
14					PID = 0, 0, 0
15	14-16	0	1 3 3 6	24/11	Same as 12-14' interval, no odor
16					PID = 0, 0
17	16-18	0	1 2 4 4	24/22	0-19" - Dark gray SILTY CLAY, plant fragments and thin veins of fine sand throughout, moist, no staining, no odor 19-24" - Gray FINE to MEDIUM SAND, trace silt, moist, no staining, slight natural organic (swampy) odor PID = 0, 0, 0
18					

End of Boring at 18' bgs. (hit pocket of swamp gas -- did not dissipate after 2.5 hours of waiting)



### SOIL BORING (PB-6)

Boring/Well ID:	PB-6	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/16/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	26'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	11.72	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0-26'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	0	2 4 11 29	24/4	SILT, trace fine to coarse sand, compact, dry, no staining, no odor
6					PID = 0, 0, 0
7	6-8	0	2 5 21 16	24/14	FILL - SILT and FINE to COARSE SAND, trace very fine gravel, cobble fragment in tip, compact, moist, no staining, no odor
8					PID - 0, 0, 0
9	8-10	0	2 1 3 3	24/13	0-6" - Brown SILT, trace fine sand, moist 6-13" - Dark brown COARSE SAND and VERY FINE GRAVEL, trace silt, loose, wet no staining, no odor
10					PID = 0, 0, 0
11	10-12	0	3 1 2 2	24/6.5	Brown, FINE to COARSE SAND and SILT (well sorted), loose, wet, black staining, slight MGP-like odor in bottom 1"
12					PID = 0, 0
13	12-14	60	1 1 1	24/14	** 0-3" - Black taffy-like TAR, moist to wet, moderate MGP-like odor 3-14" - Gray SILTY CLAY with organics, moist, moderate MGP-like and natural organic (swampy) odor
14					PID = 10, 18, 50, 74, 36
15	14-16	75	1 2 3	24/19.5	** Gray SILTY CLAY, organics throughout, moist, no staining, moderate MGP-like odor
16					PID = 71, 74, 78, 61
17	16-18	40	1 2 3	24/16	Gray SILTY CLAY, trace fine sand, >50% organic material, no staining, hydrogen sulfide-like odor, possible MGP-like odor
18					PID = 42, 82, 85, 50



### SOIL BORING (PB-6)

Boring/Well ID:	PB-6	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/16/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	26'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	11.72	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0-26'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
19	18-20	60	1 1 2 3	24/23	0-14" - Gray SILTY CLAY, mica flecks, moist 14-23" - Gray FINE to MEDIUM SAND, trace silt, wet, moderate natural organic (swampy) odor with possible MGP-like component PID = 135, 99, 85, 46
20			1	24/20	** 0-16" - Gray SILT and FINE SAND, moist 16-20" - Gray SILT and FINE to COARSE SAND, organics, moist, no staining, moderate natural organic (swampy) odor PID = 30, 80, 50, 75
21	20-22	40	1 1 3	24/20	
22			3	24/16	0-8" - Gray, well sorted FINE to COARSE SAND, wet 8-16" - Gray, well sorted FINE to COARSE SAND, fine gravel and rock fragments, no staining, slight to moderate MGP-like odor PID = 83, 52, 76, 20.5
23	22-24	4	18 42 53	24/16	
24			13 14 41 53	24/16	Gray, well sorted FINE to COARSE SAND, trace silt, mica flecks, moist, no staining, slight MGP-like odor PID = 14, 10, 25, 8
25	24-26	7	100/4"	4/3	0-3" - Weathered BEDROCK (schist) PID = 0, 0, 3
26					End of Boring at 26' bgs.
27	26-28	NA			
28					



GEI Consultants, Inc.

## **SOIL BORING (PB-7)**

Boring/Well ID:	PB-7	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	11/12/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	24'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.42	Drilling Method:	Hollow stem auger

## **Well Construction:**

<b>Riser (from - to):</b>	NA	<b>Bentonite Seal (from - to)</b>	NA
<b>Screen (from - to):</b>	NA	<b>Annular Fill Type/Depth:</b>	NA
<b>Screen Type/Size:</b>	NA	<b>Cement Grout (from - to)</b>	0 to 24'
<b>Sand Pack (from - to):</b>	NA	<b>Well Cover Type:</b>	NA

**Notes:** \*\* Analytical sample collected

WOH - Weight of hammer

## WOR - weight of rod

NA - not applicable

Proportions Used:

Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Handed cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	30.2	26 12 7 12	24/16	0-6" - FILL MATERIAL - Black coal pieces 6-11" - FILL MATERIAL - Red brick pieces and angular gravel 11-18" - FILL MATERIAL - Black clinker/slag and concrete pieces PID = NA
6					
7	6-8	1.3	20 23 25 10	24/18	FILL MATERIAL - Black ash, clinker/slag and coal pieces, no staining, no odor
8					PID = 1, 2, 4
9	8-10	36.6	7 6 2 1	24/4	FILL MATERIAL - Black clinker/slag pieces, some ash
10					PID = 68
11	10-12	58	WOH WOH 1	24/19	0-12" - Black stained FINE SAND, trace ash, clinker/slag, wet, residual tar and sheen, MGP-like odor 12-19" - Dark brown SILTY CLAY, trace plant fragments (roots), wet PID = 17, 11, 8
12					
13	12-14	NA	WOH WOH WOH WOH	24/0	NO RECOVERY
14					
15	14-16	15.7	WOH 1 WOH	24/24	Brown SILTY CLAY, some plant fragments (roots), wet, no staining, natural organic (swampy) ** odor
16					PID = 19, 12, 8 , 7



### SOIL BORING (PB-7)

Boring/Well ID:	PB-7	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	11/12/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	24'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.42	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 24'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - Weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	21	WOH WOH 2 3	24/24	Same as 14-16' interval  PID = 17, 12, 3, 12
18			WOH		0-12" - Same as 16-18' interval
19	18-20	21	WOH WOH WOH 3	24/24	12-24" - Dark brown FINE SAND, some silt and clay, dense, wet, no staining, natural organic (swampy) odor  PID = 42, 19, 16, 7
20			2		Gray-brown FINE SAND, rock fragments in tip of spoon, loose, wet, no staining, no odor
21	20-22	12	1 3 12	24/12 **	PID = 0, 4
22			17		0-4" - Same as 20-22' interval
23	22-24	1.5	12.0 10 100/4"	22/12	4-12" - Brown FINE SAND, angular rock pieces, dense, wet, no staining, no odor
24					End of boring at 24' bgs. (bedrock)



### SOIL BORING (PB-8)

Boring/Well ID:	PB-8	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini, Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/1/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	23.5'	Driller:	Jerry, Glenn
Elevation in Bronx Highway Datum (NYDOT):	10.80	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 23.5'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	0	NA	24/10	0-3" - Brown, well sorted FINE to MEDIUM SAND, moist 3-5.5" - Brown SILT, moist 5.5-8" - Brown, sub-angular FINE GRAVEL 8-10" - Black/white, weathered sandstone, no staining, no odor
6					PID = 0, 0, 0
7	6-8	8	50	24/18	0-10.5" - Well sorted FINE to COARSE SAND, some coal fragments, trace silt, moist
8			24		10.5-18" - White grading to yellow grading to pink weathered QUARTZ fragments, black silt,
			10		dry to wet in tip, no staining, no odor
9	8-10	58	4	24/7	PID = 0, 0, 0
10			4		FILL MATERIAL - Angular very fine gravel, wet, tar in tip of spoon, slight MGP-like odor
11	10-12	18	2	24/13	PID = 0, 0.5
12			1		Gray CLAY, moist, bands of black staining, slight to moderate MGP-like odor
13	12-14	30	5	24/9	PID = 0, 0, 0
14			5		** Gray CLAY, plant fragments throughout, moist, no staining, slight MGP-like odor and natural organic (swampy) odor
15	14-16	3	2	24/15	PID = 0, 1, 1.5
16			2		Same as 12-14' interval
			2		PID = 0.5, 0.5, 0.5



### **SOIL BORING (PB-8)**

Boring/Well ID:	PB-8	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini, Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/1/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	23.5'	Driller:	Jerry, Glenn
Elevation in Bronx Highway Datum (NYDOT):	10.80	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 23.5'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	0	WOH	22/21		Gray CLAY, plant fragments throughout, no staining, moderate natural organic (swampy) odor
			WOH			
			WOH			
			100/4"			PID = 2, 1, 1
18						
						** 0-6" - WOOD FIBERS, wet
19	18-20	2	8	24/12.5		6-12.5" - Gray SILT and CLAY, moist, no staining, no odor
			7			
			3			
			2			
20						PID = 0, 0
						** NO RECOVERY
21	20-22	NA	2	24/0		Moved over, augered down and collected the sample on 12-02-03
			2			
			6			
22						
						Used roller bit through angular FINE GRAVEL
23	22-24	NA	100/0"	24/0		
24						

End of Boring @ 23.5'



## **SOIL BORING (PB-9)**

Boring/Well ID:	PB-9	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	11/11/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	30'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	10.58	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 30'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs.
2					
3					
4					
5	4-6	0	3 6 6	24/13	0-4" - Brown, FINE SAND, trace silt, loose, dry 4-6" - SLAG, ASH, SPENT COAL PIECES 6-11" - Red brick fragments
6			7		11-13" - Brown, FINE SAND, trace silt, dry, concrete pieces in tip of spoon
7	6-8	9	2 18 7	24/12	PID = 0, 0 0-5" - Brown, white, and black ASH, slight MGP odor 5-12" - Black, spent coal pieces, slight MGP odor
8			3		PID = 0, 0
9	8-10	250	2 4 7	24/12	Black, taffy-like TAR with SLAG and pieces of COAL
10			2		PID = NA
11	10-12	NA	1 3 1	24/0	NO RECOVERY
12					
13	12-14	279	WOH WOH WOH 2	24/22	Brown SILT and CLAY, decomposed organic material (peat), slight to moderate MGP-like odor
14					PID = 77, 67, 37, 12
15	14-16	199	WOH WOH WOH WOH	24/19	Same as 12-14' interval, less organic material, wet, no staining, swampy odor with very slight hydrocarbon-like odor
16					PID = 10, 35, 40
17	16-18	218	WOH WOH WOH WOH	24/20	Same as 14-16' interval
18					PID = 80, 75, 30, 30



### **SOIL BORING (PB-9)**

Boring/Well ID:	PB-9	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	11/11/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	30'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	10.58	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 30'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
19	18-20	205	WOH	24/22		Same as 16-18' interval, numerous seems of very viscous tar between 19.1-19.8'
			WOH			
			WOH			
			WOH			
20			WOH			PID = 30, 50, 90, 70
			WOH			
21	20-22	441	WOH	24/12		0-6" - Brown PEAT and SILTY CLAY, trace roots, wet
			WOH			6-12" - Brown PEAT and sandy SILT, trace roots, loose, wet
22			WOH			
			WOH			
23	22-24	948	4	24/14		0-10" - Dark brown SILT, some clay, trace roots and leaves, bands of black staining, moderate MGP-like odor
			7			10-14" - Black FINE to COARSE SAND, some silt, saturated with very viscous tar
24			24			PID = 320
25	24-26	630	7	24/6		Black FINE to COARSE SAND and SILT, trace fine gravel, top of spoon very wet with viscous tar, saturated within soil sample, sheen on water, strong MGP-like odor
			12			
			12			
26			10			PID = 310
27	26-28	NA	6	24/16		0-4" - Black FINE to MEDIUM SAND, wet, tar saturated in soil, sheen, strong MGP-like odor
			10			4-16" - Gray-brown FINE to MEDIUM SAND, some rounded fine gravel, compact, no staining, no odor
28			9			
			6			
						PID = 17, 3.5
29	28-30	27.8	7	24/16		0-8" - Dark brown, FINE to MEDIUM SAND, some sub-angular fine gravel, dense, wet, sheen, ** MGP-like odor
			8			8-16" - Brown FINE SAND, weathered rock layer at 11-13", dense, wet, slight MGP-like odor
30			8			PID = 12, 6.5
31	30-32	NA	7	24/0		No Recovery
			100/5"			
32						

End of Boring at 30' bgs.



### **SOIL BORING (PB-10)**

Boring/Well ID:	PB-10	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	11/10-11/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	32'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	10.98	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 32'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs.
2					
3					
4					
5	4-6	0	2 7 40 27	24/10	0-8" - FILL MATERIAL - Orange-brown pulverized rock, trace brick fragments, dry 8-10" - FILL MATERIAL - Concrete pieces
6					PID = 0, 0
7	6-8	0	5 4 2 2	24/10	0-2.5" - FILL MATERIAL - Concrete pieces 2.5-10" - FILL MATERIAL - Brown-orange pulverized rock, trace coal pieces, loose, dry
8					PID = 0, 0
9	8-10	NA	WOH WOH WOH WOH	24/0	NO RECOVERY
10					PID = NA
11	10-12	<1	WOH WOH WOH WOH	24/5	Brown CLAY, soft, moist, no staining, sulfur odor
12					PID = NA
13	12-14	90	WOH WOH WOH WOH	24/24 **	Brown PEAT, moist, swampy odor
14					PID = 17, 14, 17, 12
15	14-16	120	WOH WOH WOH WOH	24/22	Same as 12-14' interval
16					PID = <1, <1, <1



### **SOIL BORING (PB-10)**

Boring/Well ID:	PB-10	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	11/10-11/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	32'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	10.98	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 32'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	81	WOH	24/23	0-6" - same as 14-16' interval 6-10" - Dark brown-black SILTY FINE SAND, black staining, moderate MGP odor 10-22" - Dark brown FINE SAND, some silt, slight MGP odor PID = 1, 12, 6, 5
18			WOH		
19	18-20	46	WOH	24/20	0-7" - Dark brown FINE SAND and SILT, moist, black staining, slight MGP odor (asphalt-like) ** 7-14.5" - Dark brown SILTY CLAY, trace fine sand and plant fragments (roots) 14.5-20" - Gray FINE to MEDIUM SAND, moist, no staining, no odor
20			WOH		PID = 18, 7, 4, 3
21	20-22	7	1	24/23	0-3.5" - Same as 18-20' interval 3.5-15.5" - Dark brown FINE SAND and SILT, very wet 15.5-22" - Dark brown SILT and FINE SAND, moist, no odor
22			2		22-23" - Gray FINE to MEDIUM SAND, moist, no staining, no odor
23	22-24	6.8	17	24/10	PID = 0, 0, 0, 0 0-3.5" - Grey FINE to MEDIUM SAND, no staining, no odor 3.5-7" - FINE to MEDIUM SAND and angular FINE GRAVEL, rock fragments
24			12		7-10" - Dark gray, FINE to MEDIUM SAND, moist, no staining, no odor
25	24-26	2.4	12	24/11	PID = 0, 0 Gray-brown, FINE to MEDIUM SAND and rounded FINE GRAVEL, rock pieces in tip of spoon, loose, wet, faint MGP odor and swampy odor
26			22		PID = 0, 0
27	26-28	0	40	18/12	Brown FINE to MEDIUM SAND, some fine gravel, loose, very wet, no staining, no odor
28			80		PID = 0, 0
29	28-30	0	88/6"	24/8	88/6" 0-3.5" - Gray-brown FINE SAND, compact, wet, no staining, no odor 3.5-8" - Gray-brown, FINE to MEDIUM SAND, rock in tip of spoon, wet, no staining, no odors
30			12		PID = 0, 0
31	30-32	0	33	24/12	0-2" - Gray-brown, FINE to MEDIUM SAND 2-6" - TILL - Gray angular to sub-angular GRAVEL and SILT, some fine sand
32			83		6-12" - Weathered rock (pulverized quartz) PID = 0, 0

End of boring at 32' bgs.



### SOIL BORING (PB-11)

Boring/Well ID:	PB-11	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	11/7-10/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	26'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.04	Drilling Method:	Drive and wash
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 26'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description	
1					Hand cleared borehole to 5.0' bgs	
2						
3						
4						
5	4-6	0	4 3 18 21	24/14	0-3" - FILL, Black rock fragments, trace brick pieces 3-8" - FILL, Dark brown-black, FINE SAND, some silt, moist 8-12" - FILL, Red brick pieces 12-14" - FILL, Brown FINE SAND, some concrete pieces, trace rock fragments, loose, moist	
6			19		PID = 0	
7	6-8	170	15 18 12	24/21	** 0-3" - FILL, Brown FINE SAND, trace silt and rock fragments, loose, moist 3-6" - FILL, Loose Clinker/Slag 6-21" - FILL, pieces of clinker/slag, strong naphthalene-like odor	
8			1		PID = 0, 9, 17	
9	8-10	30	WOH WOH 1	24/16	Brown SILT, some clay, some plant fragments, slightly dense, moist, strong naphthalene-like odor 11-13" interval - black stained PEAT, naphthalene-like odor	
10					PID = 0.2, 0.1, 0.2	
11	10-12	30	WOH WOH WOH WOH	24/24	0-12" - Brown SILT and ROOTS, some clay, moderately dense, moist, swampy odor 12-24" - same as 8-10' interval	
12					PID = 0, 0, 0.1, 0.2	
13	12-14	62	WOH WOH WOH WOH	24/24	Dark brown SILTY CLAY, plant fragments throughout (roots), slight plasticity, slight sheen at 12.7' along root zone, black staining at 13.6', swampy odor	
14					PID = <1, 3, 8, <1	
15	14-16	132	WOR WOR WOR WOR	24/24	Same as 12-14' interval, slight sheen at 14.8' within root zone, some staining at 15.5', swampy odor	
16					PID = <1, 12, 4, 3	
17	16-18	352	WOH WOH WOH WOH	24/22	Same as 14-16' interval, no staining, moderate MGP odor at bottom of spoon	
18					PID = 15, 10, 20, 45	
19	18-20	1,052	WOH WOH WOH WOH	24/24	0-6" - Same as 12-14' interval 6-24" - Dark brown-black SILTY FINE SAND, moist, pore space partially saturated with residual product, moderate to strong MGP odor	
20					PID = 20, 70, 12, 112, 80	



### SOIL BORING (PB-11)

Boring/Well ID:	PB-11	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	11/7-10/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	26'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.04	Drilling Method:	Drive and wash
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 26'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows /6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
21	20-22	883	WOH WOR WOR 1	24/21	0-3" - Same as 6-24" interval of 18-20' spoon ** 3-12" - SILTY FINE SAND, very wet, tar blebs on surface of material 12-18" - Brown SILTY FINE SAND, no residual product, strong MGP odor, hydrocarbon odor 18-21" - Light brown FINE SAND, no sheen or staining, moderate MGP odor PID = 64, 75, 12, 24
22			10		Gray FINE to COARSE SAND, some rounded fine gravel, coarse gravel in tip of spoon, loose, wet,
23	22-24	77	7	24/12	sheen on spoon (may be from 20-22' interval), naphthalene-like odor
24			7		PID = 16, 0
25	24-26	46	10 60	21/21	0-14" - Gray, FINE to COARSE SAND, some rounded fine gravel, loose, wet, slight naphthalene-like odor ** 14-21" - Coarse sub-angular rock pieces and weathered rock
26			100/3"		PID = <1, <1, 0 End of boring at 26' bgs. (bedrock)



### SOIL BORING (PB-12)

Boring/Well ID:	PB-12	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	11/25/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	24'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	11.12	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 24'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	0	16 18 10 9	24/8	FILL MATERIAL - light brown cobble fragments, medium to coarse sand and silt, dry, no staining, no odor
6					
7	6-8	0.2	29 13 14 13	24/12	FILL MATERIAL - pieces of clinker and coal, brick fragments, some black silt, dry, no staining, no odor
8					
9	8-10	0	6 5 7 10	24/12	FILL MATERIAL - Same as 6-8' interval, wet
10					
11	10-12	0.9	5 6 4 2	24/10	FILL MATERIAL - fine to coarse sand, some silt and fine gravel, little clinker/slag, wet ** no staining, no odor
12					
13	12-14	0.3	2 1 2	24/8	FILL MATERIAL - Same as 10-12' interval
14					
15	14-16	0	2 1 1 1	24/12	Gray SILTY CLAY, trace organic material (roots and leaves), pliable, moist, no staining, slight natural organic odor (swampy)
16					
17	16-18	0	WOH WOH WOH 3	24/22	Gray SILTY CLAY, trace to little plant fragments, moist, no staining, slight natural organic odor (swampy)
18					



### **SOIL BORING (PB-12)**

Boring/Well ID:	PB-12	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	11/25/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	24'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	11.12	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 24'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
19	18-20	0	WOH WOH WOH WOH	24/22	Same as 16-18' interval
20			WOH		
21	20-22	0	WOH WOH WOH 4	24/19	0-13" - Same as 18-20' interval ** 13-19" - Dark gray FINE SANDY CLAY and SILT, wet, no staining, no odor
22					
23	22-24	0	WOH WOH 31 100/4"	24/9	0-5" - Dark gray FINE SAND, little silt, trace clay, moist, no staining, no odor 5-9" - Light gray COARSE SAND and FINE GRAVEL, trace fine to medium sand, wet, no staining, no odors
24					
28					Bedrock cored 24-29' bgs. (logged under separate cover)
27					
27					
28					
29					

End of boring at 29' bgs. (bedrock)



### **SOIL BORING (PB-13)**

Boring/Well ID:	PB-13	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	11/25/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	27'	Driller:	Jerry and Glenn
Elevation in Bronx Highway Datum (NYDOT):	11.48	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 27'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs.
2					
3					
4					
5	4-6	7.5	9 17 33 40	24/19	0-4" - FILL MATERIAL - Brown, poorly sorted FINE to COARSE SAND, moist 4-10" - Brown FINE to MEDIUM SAND and SILT, dry 10-19" - ASH, burnt WOOD, pieces of clinker/slag, no staining, no odor PID = 0.4, 0.5, 1
6					
7	6-8	<1	50 50 35 20	24/24	0.7" - FILL MATERIAL - Brown poorly sorted FINE to COARSE SAND, moist 7-24" - FILL MATERIAL - ASH, COAL fragments, compact, wet in tip, no staining, no odor
8					
9	8-10	<1	9 12 7	24/10	PID = 0, 0, 0, 0 FILL MATERIAL - Black FINE SAND and SILT, some sub-angular fine gravel, rock fragments no staining, no odor
10					
11	10-12	<1	2 1 1	24/14	PID = 0, 0, 0 0-7" - Black FINE to COARSE SAND, very fine gravel, wet, no staining, slight MGP-like odor 7-14" - Gray CLAY, plant fragments throughout, moist, no staining, moderate swampy odor
12					
13	12-14	<1	1 2 1 1	24/21	PID = 0, 0, 0, 0 Same as 7-14" interval of 10-12' sample
14					
15	14-16	<1	1 1 1	24/14.5	PID = 0, 0, 0, 0 ** Same as 12-14' interval
16					
17	16-18	<1	WOH 2 1 1	24/22	PID = 0, 0, 0.2 Gray CLAY and SILT, some plant fragments, trace fine sand, moist, no staining, no odor
18					



### SOIL BORING (PB-13)

Boring/Well ID:	PB-13	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	11/25/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	27'	Driller:	Jerry and Glenn
Elevation in Bronx Highway Datum (NYDOT):	11.48	Drilling Method:	Hollow stem auger

**Well Construction:**

Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 27'
Sand Pack (from - to):	NA	Well Cover Type:	NA

Notes: \*\* Analytical sample collected

WOH - weight of hammer

WOR - weight of rod

NA - not applicable

Proportions Used: Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
19	18-20	<1	3 5 15 16	24/11	Gray FINE to MEDIUM SAND and SILT, some clay, wet, rock fragment in tip of spoon no staining, no odor
20					PID = 0, 0.5, 0
21	20-22	<1	2 7 23 15	24/10	** Light gray and light brown well sorted, FINE to COARSE SAND, trace sub-angular fine gravel, wet, no staining, no odor
22					PID = 0, 0, 0
23	22-24	<1	10 19.0 17 100/3"	24/5	TILL MATERIAL - FINE to MEDIUM SAND AND SILT, mica flecks throughout, some sub-angular very-fine to fine gravel, dry, no staining, no odor
24					PID = 0, 0

End of boring at 27' bgs. (bedrock)



### SOIL BORING (PB-14)

Boring/Well ID:	PB-14	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	11/24/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	32'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.77	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 32'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	0	7 10 17	24/22	0-12" - FILL MATERIAL - light brown fine sand and silt, rock fragments, trace clinker/slag 12-22" - FILL MATERIAL - dark brown to black fine sand and silt, dry, no staining, no odor
6			14		PID = 0, 0, 0
7	6-8	0	5 3	24/8	FILL MATERIAL - Brown silt and fine sand, rock fragments and clinker/slag, moist, no staining, no odor
8			4		PID = 0, 0, 0
9	8-10	0	5 1 5	24/4	Light brown FINE SAND, some silt, wet, no staining, no odor
10			3		PID = 0, 0, 0
11	10-12	1.7	2 1	24/12	Black angular ROCK FRAGMENTS and SILT, some fine gravel, wet, no staining, no odor
12			1		
13	12-14	NA	5 4	24/0	PID = 0, 0 NO RECOVERY
14			2		
15	14-16	1.5	3 1 1	24/2	Same as 10-12' interval
16			2		PID = 0
17	16-18	11	WOH WOH WOH	24/6	Gray SILTY CLAY, trace plant fragments, very soft, moist, no staining, slight natural organic odor (swampy)
18			WOH		PID = 0, 0



### SOIL BORING (PB-14)

Boring/Well ID:	PB-14	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	11/24/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	32'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.77	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 32'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
19	18-20	0	WOH WOH WOH WOH	24/24	** Gray SILTY CLAY, trace fine sand, trace plant fragments, moist, no staining, slight natural organic odor (swampy)
20					PID = 0, 0, 0, 0
21	20-22	4	WOH WOH 2 2	24/3	Gray FINE SAND and SILT, some clay, trace coarse sand and fine gravel, wet, no staining, no odor
22					PID = 0, 0
23	22-24	0	1 2 4 8	24/10	** Dark brown FINE to MEDIUM SAND, trace silt, wet, no staining, very slight hydrocarbon-like odor
24					PID = 0, 0
25	24-26	0	4 4 9 9	24/10	Dark brown FINE to MEDIUM SAND, little coarse sand and fine gravel, trace silt, wet, no staining, no odor
26					PID = 0, 0
27	26-28	0	7 10 9 12	24/7	Dark brown FINE to COARSE SAND, little silt and fine gravel, wet, no staining, no odor
28					PID = 0, 0
29	28-30	0	9 5 8 22	24/11	Same as 26-28' interval
30					PID = 0, 0
31	30-32	0	28 19 7	24/13	Dark brown-dark gray FINE to COARSE SAND, some fine gravel and weathered bedrock fragments, trace silt, moist, no staining, no odor
32			100//5"		PID = 0, 0

End of boring at 32' bgs. (bedrock)



## SOIL BORING (PB-15)

Boring/Well ID:	PB-15	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	11/24/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	29'	Driller:	Jerry and Glenn
Elevation in Bronx Highway Datum (NYDOT):	11.56	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 29'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 inches	Penetration / Recovery (inches)	Soil/Geologic Description
1						Hand cleared borehole to 5.0' bgs
2						
3						
4						
5	4-6	0	26	24/14	0-6" - FILL MATERIAL - brick, fine sand and silt	
			14		6-11" - FILL MATERIAL - ash	
			20		11-14" - FILL MATERIAL - light brown fine sand, trace silt, dry, no staining, no odor	
			20		PID = 0, 0, 0	
6			22		FILL MATERIAL - Rock fragments, fine to medium sand, moist, no staining, no odor	
7	6-8	0	16	24/7		
			8			
			8		PID = 0, 0, 0	
8			8		FILL MATERIAL - fine to coarse sand, trace rock fragments, moist, wet in tip, no staining, no odor	
9	8-10	0	23	14/4.5		
			100/2"			
10					PID = 0, 0	
10-11	NA				NO RECOVERY	
11					Cored through refusal area	
			19		0-6" - FINE SAND and WEATHERED BEDROCK, no staining, no odor	
12	11-13	0	9	24/8	6-8" - Grey ROCK (conglomerate), no staining, very slight MGP-like odor	
			6			
			6		PID = 0, 0, 0	
13			13		Black angular ROCK FRAGMENTS, black and white FINE to MEDIUM SAND and GRAVEL, no staining, no odor	
14	13-15	0	8	24/8		
			7			
			7		PID = 0	
15			3		FINE to MEDIUM SAND and angular GRAVEL, wet, no staining, no odor	
16	15-17	0	13	24/5.5		
			14			
17			5		PID = 0, 0	



### **SOIL BORING (PB-15)**

Boring/Well ID:	PB-15	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	11/24/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	29'	Driller:	Jerry and Glenn
Elevation in Bronx Highway Datum (NYDOT):	11.56	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 29'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
—					
18	17-19	0	25 22 20 15	24/12	0-6" - Black FINE to COARSE SAND, some angular fine gravel 6-12" - Black FINE to COARSE SAND, trace silt, rock fragments, cobble in tip of spoon no staining, no odor PID = 0, 0, 0, 0
19					
20	19-21	0	1 4 10 1	24/0	NO RECOVERY - Rock fragment in tip of spoon, wet, possible MGP-like odor on rock
21					
22	21-23	0	1 2 2 1	24/11	0-9" - FINE to MEDIUM SAND grading to FINE to COARSE SAND 9-10.5" - Black FINE to COARSE SAND and sub-angular FINE GRAVEL, wet, no staining, no odor PID = 0, 0, 0
23					
24	23-25	3577	20 11 20 21	24/6	0-7" - Light brown FINE to MEDIUM SAND, trace coarse sand, wet, no staining, slight to moderate MGP-like odor 7-11" - BRICK, moist, no staining, moderate MGP-like odor PID = 343, 67, 84
25					
26	25-27	137	20 100/2"	8/6	TILL - Brown FINE to COARSE SAND and FINE GRAVEL, trace silt, cobble fragments, wet no staining, slight-moderate MGP-like odor
27					
28	27-29	230	12 27 39 65	24/11.5	Well sorted FINE to COARSE SAND, trace brick fragments, fine gravel, wet, no staining, no odor PID = 0, 0, 1.8, 1.6
29					
30	29-31	NA	100/3"	3/2	WEATHERED ROCK in tip
31					

End of boring at 29' bgs. (bedrock)



### **SOIL BORING (PB-16)**

<b>Boring/Well ID:</b>	PB-16	<b>Client:</b>	Consolidated Edison of New York
<b>Project Number:</b>	013942	<b>Project Name:</b>	Supplemental Remedial Investigation
<b>Logged By:</b>	Tony Koval	<b>Site Address:</b>	East 173rd Street, Bronx, NY
<b>Date:</b>	12/9-10/03	<b>Contractor:</b>	Jersey Boring and Drilling
<b>Total Depth:</b>	32'	<b>Driller:</b>	Dennis Keith and Louis Testio
<b>Elevation in Bronx Highway Datum (NYDOT):</b>	XX.XX	<b>Drilling Method:</b>	Hollow stem auger
<b>Well Construction:</b>			
<b>Riser (from - to):</b>	NA	<b>Bentonite Seal (from - to)</b>	NA
<b>Screen (from - to):</b>	NA	<b>Annular Fill Type/Depth:</b>	NA
<b>Screen Type/Size:</b>	NA	<b>Cement Grout (from - to)</b>	0 to 32'
<b>Sand Pack (from - to):</b>	NA	<b>Well Cover Type:</b>	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used: Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%	WOR - weight of rod

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	0.5	22 100/6"	12/12	** FILL MATERIAL- fine to coarse sand and fine gravel, little silt, wood fragment (piece of timber) in bottom 2" of spoon, black staining in bottom 5" of spoon
6					PID = 0, 0
7	6-8	1	8 8 6 6	24/14	FILL MATERIAL - brown and black fine to coarse sand with fine gravel, little silt, wet, no staining, no odor
8					PID = 1, 2, 1
9	8-10	5	8 22 7 13	24/4	FILL MATERIAL - Black fine sand and silt, pieces of timber in tip of spoon, wet, possible staining, slight burnt hydrocarbon-like odor
10					PID = 0, 0
11	10-12	6	1 1 5	24/14	** Black to dark olive SILT/CLAY, little fine sand, trace fine gravel, fine sand occurs in veins throughout section, very soft and pliable, moist, no staining, slight kerosene-like odor
12					PID = 0, 1, 0
13	12-14	3	1 WOH WOH WOH	24/6	Black SILT/CLAY, trace fine sand and coal fragments, very soft and pliable, no staining, slight kerosene-like odor
14					PID = 0, 0
15	14-16	NA	31 25 22 23	24/12	FILL MATERIAL - rock fragments throughout, some fine to coarse sand, wet, no staining, no odor
16					PID = 0, 0



### **SOIL BORING (PB-16)**

Boring/Well ID:	PB-16	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/9-10/03	Contractor:	Jersey Boring and Drilling
Total Depth:	32'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 32'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	4		11 8 35 32	24/4	Same as 14-16' interval  PID = 0, 4
18				1 1 9 11	24/7	** Black SILTY CLAY, trace fine gravel, very soft, moist, small areas of sheening, slight MGP-like odor
19	18-20	0		1 1 9 11	24/7	** Light brown FINE SAND and SILT, wet, no staining, slight MGP-like odor
20						
21	20-22	NA	WOH WOH WOH	1 WOH WOH	24/7	** Light brown FINE SAND and SILT, wet, no staining, slight MGP-like odor  PID = 4, 5
22						
23	22-24	64		6 3 1 1	24/2	Light brown FINE SAND and SILT, wet, small areas of sheening in wash, slight to moderate naphthalene-like odor
24						
25	24-26	220		100/5"	5/5	FILL MATERIAL - red brick fragments, moist, small areas of sheening in wash, slight to moderate MGP-like odor  PID = 96
26						
27	26-28	12		9 6 WOH WOH	24/4	Light brown FINE to COARSE SAND, some sub-angular fine gravel, wet, no staining, no odor  PID = 0, 0
28						
29	28-30	1		100/5"	5/5	Light brown weathered BEDROCK, breaks apart with trowels, some medium to coarse sand, moist, no staining, no odor  PID = 0
30						
31						Drillers augered through 2' of soft material to collect rock core
32						



### **SOIL BORING (PB-16)**

Boring/Well ID:	PB-16	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/9-10/03	Contractor:	Jersey Boring and Drilling
Total Depth:	32'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger

**Well Construction:**

Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 32'
Sand Pack (from - to):	NA	Well Cover Type:	NA

Notes: \*\* Analytical sample collected

WOH - weight of hammer

WOR - weight of rod

NA - not applicable

Proportions Used: Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
33						
34						
35						
36						
37						

Collected rock core from 32-37' bgs.

End of boring at 37' bgs.



### SOIL BORING (PB-17)

Boring/Well ID:	PB-17	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/9/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	26'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.43	Drilling Method:	Hollow stem auger

**Well Construction:**

Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to)	0 to 26'
Sand Pack (from - to):	NA	Well Cover Type:	NA

Notes: \*\* Analytical sample collected WOH - weight of hammer WOR - weight of rod

NA - not applicable

Proportions Used: Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description	
1					Hand cleared borehole to 5.0' bgs	
2						
3						
4						
5	4-6	0.4	32	24/4	FILL MATERIAL - light brown medium to coarse sand, trace silt, dry, no staining, no odor	
6			6			
			3			
			1		PID = 0, 0	
7	6-8	1	1	24/14	SILTY CLAY, trace fine sand, pliable, moist, veins of fine sand contain black staining, no odor	
8			WOH			
			WOH		PID = 0, 0, 0	
9	8-10	2.5	WOH	24/11	** SILTY CLAY, sand lens from 5-7", brick pieces in tip of spoon, very soft, moist, black mottling throughout, no odor	
10			WOH			
			WOH		PID = 0, 0, 0	
11	10-12	1	WOH	24/7	** Light brown FINE to MEDIUM SAND, some SILT, wet, no staining, no odor	
12			WOH			
			4			
			5		PID = 0, 0, 0	
13	12-14	0	1	24/9	0-5" - FILL MATERIAL - fine to coarse sand with brick fragments, trace fine gravel and silt, wet, no staining, no odor	
14			1		5-9" - SILTY CLAY, plant fragments throughout, moist, no staining, organic (swampy) odor	
			1		PID = 0, 0, 0	
15	14-16	0.6	WOH	24/22	SILTY CLAY, some plant fragments, moist, no staining, slight natural organic (swampy) odor	
16			WOH			
			WOH		PID = 2, 1, 1	



### **SOIL BORING (PB-17)**

Boring/Well ID:	PB-17	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/9/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	26'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.43	Drilling Method:	Hollow stem auger

**Well Construction:**

Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to)	0 to 26'
Sand Pack (from - to):	NA	Well Cover Type:	NA

Notes: \*\* Analytical sample collected

NA - not applicable

WOH - weight of hammer

WOR - weight of rod

Proportions Used: Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description	
17	16-18	0	WOH WOH WOH WOH	24/22	Same as 14-16' interval	
18					PID = 0, 0, 0	
19	18-20	1.1	WOH WOH WOH WOH	24/15	SILTY CLAY, some plant fragments, trace fine sand, moderate plasticity, moist, no staining, no odor	
20					PID = 0.5, 1, 0.5	
21	20-22	1.7	WOR 2 3	24/4	0-2" - SILTY CLAY, some plant fragments, trace fine sand, moderate plasticity, no staining, no odor 2-4" - Dark brown FINE to COARSE SAND, trace SILT, wet, no staining, no odor PID = 0	
22						
23	22-24	0.7	8 14 47 100/5"	24/13	** Light brown FINE to MEDIUM SAND, little coarse sand and fine gravel, pieces of weathered rock in tip of spoon, wet, no staining, no odor	
24					PID = 0, 0, 0	
25	24-26	1.2	50 100/1"	7/7	Brown FINE to COARSE SAND, some fine gravel, trace silt, wet, no staining, no odor	
26					PID = 0, 0, 0	

End of boring at 26' bgs. (due to reaching bedrock)



### SOIL BORING (PB-18)

Boring/Well ID:	PB-18	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval Recorded by: JBD	Site Address:	East 173rd Street, Bronx, NY
Date:	11/20/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	26.7'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	10.46	Drilling Method:	Hollow stem auger

**Well Construction:**

Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to)	0 to 26.7'
Sand Pack (from - to):	NA	Well Cover Type:	NA

Notes: \*\* Analytical sample collected

NA - not applicable

WOH - weight of hammer      WOR - weight of rod  
Proportions Used: Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description	
					1	2
1					Hand cleared borehole to 5.0' bgs	
2						
3						
4						
5	4-6	2.1	30 7 11 11	24/12	FILL MATERIAL - dark brown-black medium to coarse sand and silt, some gravel, dry, no staining, no odor	
6					PID = 0,0,0	
7	6-8	.2	6 7 11 11	24/6	FILL MATERIAL - black pieces of coal and clinker/slag some rock fragments, moist, slight creosote-like odor	
8					PID = 0,0,0	
9	8-10	620	10 7 5 4	24/6	FILL MATERIAL - top 0.2' - piece of wood, stained black bottom 0.3' taffy-like tar, moderate MGP-like odor	
10					PID = 5	
11	10-12	646	3 5 2 2	24/5	FILL MATERIAL - taffy-like tar with pieces of wood, stained black, moderate MGP-like odor	
12					PID = 2,4	
13	12-14	225	1 2 WOH 2	24/6	Gray SILTY CLAY, numerous root fragments, slight MGP-like odor, moist, no staining, no odor	
14					PID = 0.4, 0.7	
15	14-16	295	WOH WOH WOH 2	24/7	Dark greenish-gray SILTY CLAY, root fragments, slight MGP-like odor, moist, no staining	
16					PID = 10, 0.1	



### SOIL BORING (PB-18)

Boring/Well ID:	PB-18	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval Recorded by: JBD	Site Address:	East 173rd Street, Bronx, NY
Date:	11/20/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	26.7'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	10.46	Drilling Method:	Hollow stem auger

**Well Construction:**

Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to)	0 to 26.7'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description	
17	16-18	38	WOH WOH 1 2	24/16	** Gray SILTY CLAY, trace wood fragments, moist, slight natural organic odor (swampy) no staining	
18					PID = 0.5, 2.2, 0.1	
19	18-20	32	WOH WOH WOH	24/20	Gray SILTY CLAY, trace wood fragments, thin veins (horizontal) of fine sand, slight natural organic odor (swampy) no staining, no odor	
20			WOH		PID = 0,0,0,1,0	
21	20-22	30	4 2 32	24/12	Top 0.5' - Gray SILTY CLAY, trace wood fragments, moist, slight natural organic odor (swampy), no staining, no odor Bottom 0.5' - Gray fine to coarse SAND, trace silt, wet, no odor, no staining PID = 0	
22						
23	22-24	0.0	17 20 11 99	24/7	TILL - Greenish gray rock fragments and medium to coarse sand, wet, no staining, no odors. Rock in tip of spoon	
24					PID = 0	
25	24-26	2.0	15 14 12 9	24/6	** TILL - Gray fine to coarse SAND, trace silt, trace fine gravel, wet, no staining, no odor	
26					PID = 0,0,0,0	
27	26-28	0.0	23 100/1"	7/7	Decomposed rock with rock pieces.	
28					PID = 0	

End of boring at 26.7' bgs. (due to reaching bedrock)



### **SOIL BORING (PB-19)**

Boring/Well ID:	PB-19	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/3/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	26'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 26'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	0	6 12 13 5	24/13	FILL MATERIAL - brown fine sand with silt, some coarse sand, trace fine gravel, dry, no staining, no odor
6					
7	6-8	0	3 3 2	24/13	FILL MATERIAL - brown fine to medium sand, some silt and ash, trace coarse sand, moist, no staining, no odor
8					
9	8-10	1	5 3 3 4	24/20	0-8" - Same as 6-8' interval 8-20" - FILL MATERIAL - Black brick fragments and clinker/slag, some medium to coarse sand and silt, moist, no staining, no odor PID = 0, 0, 0
10					
11	10-12	0	1 2 4 3	24/12	0-6" - Same as 8-20" interval from previous spoon 6-12" - Dark brown to black COARSE SAND and FINE GRAVEL and SILT, brick fragments, no staining, no odor
12					
13	12-14	23	5 3 2 2	24/8	** Black MEDIUM to COARSE SAND with FINE GRAVEL, wet, sheen on outside and inside of spoon, PID = 2, 35
14					
15	14-16	101	WOH 2	24/24	** Gray CLAYEY SILT, plant fragments throughout, low plasticity, moist, no staining, natural organic (swampy) odor,
16			1		



### SOIL BORING (PB-19)

Boring/Well ID:	PB-19	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/3/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	26'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to)	0 to 26'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	101	WOH WOH WOH WOH	24/23	Gray SILTY CLAY, some plant fragments, fine to medium sand lens from 18-20", moderate plasticity, no staining, sand lens has slight MGP-like odor, remainder of spoon had natural organic (swampy) odor PID = 20, 13, 14, 11
18					
19	18-20	98	WOH WOH WOH 3	24/22	Dark gray SILTY CLAY, some plant fragments, little fine sand, fine sand lens from 12-14", low plasticity, moist, no staining, natural organic (swampy) odor
20					PID = 8, 25, 3, 19
21	20-22	80	WOH WOH WOH WOH	24/24	0-14" - Same as 18-20' interval 14-24" - Alternating layers of gray FINE SAND and SILT, trace plant fragments, grades to fine sand with little medium gravel, moist, no staining, natural organic (swampy) odor PID = 1, 2, 1, 1
22					
23	22-24	34.0	13.0 7 4	24/10	Gray FINE to MEDIUM SAND some coarse sand, little fine gravel, trace silt, wet, no staining, no odor
24					PID = 0, 0.5, 0
25	24-26	27.0	13 6 5 7	24/8	** Gray FINE to COARSE SAND, little fine gravel, trace silt, wet, no staining, very slight MGP-like odor
26					
27	26-28	NA	100/1"		Weathered bedrock in tip of spoon
28					

End of boring at 26' bgs.



### SOIL BORING (PB-20)

Boring/Well ID:	PB-20	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/8-9/03	Contractor:	Jersey Boring and Drilling
Total Depth:	26'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger

**Well Construction:**

Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 26'
Sand Pack (from - to):	NA	Well Cover Type:	NA

Notes: \*\* Analytical sample collected

WOH - weight of hammer

WOR - weight of rod

NA - not applicable

Proportions Used:

Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	1	13 100/5"	24/9	FILL MATERIAL - brown brick and crushed stone with sand and silt, moist, no staining, no odor
6					PID = 0, 0
7	6-8	1	5 6	24/8	FILL MATERIAL - brown fine to medium sand, silt, and brick fragments, moist, no stain, no odor
8			7 4		PID = 0, 0
9	8-10	0	3 17	24/3	FILL MATERIAL - brown fine to medium sand with silt and rock fragments, cobble fragment in tip of spoon, wet, no staining, no odor
10			6 3		PID = 0
11	10-12	<1	8 11	24/4	Dark brown SILT, some fine sand and wood fragments, soft, wet, no staining, slight natural organic (swampy) odor
12			1 8		PID = 0
13	12-14	8	1 6 11	24/11	** Black SILT, timber fragments throughout, soft, wet, no staining, slight creosote-like odor in middle of interval, pine-like odor in remainder of spoon
14			26		PID = 1, 0, 0
15	14-16	8	7 17 18	24/9	Dark gray SILT, some plant fragments, trace clay, pieces of gravel in tip of spoon, soft, no staining, slight natural organic (swampy) odor
16			11		PID = 4, 0



### **SOIL BORING (PB-20)**

Boring/Well ID:	PB-20	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/8-9/03	Contractor:	Jersey Boring and Drilling
Total Depth:	26'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to)	0 to 26'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	4	9 7 7	24/12 24/12	Dark gray SILT, some plant fragments, piece of timber, trace fine gravel, very soft, no staining, natural organic (swampy) odor mixed with pine-like odor
18			7		PID = 1, 9, 8
19	18-20	16	72 62 5 4	24/5 24/5	Black MUD and WOOD FRAGMENTS, soft, wet, no staining, slight natural organic odor
20					PID = 0, 0
21	20-22	13	WOR WOR WOR WOR	24/11 24/11	Black SILT, some fine sand and plant fragments, very soft, wet, no staining, slight natural organic (swampy) odor
22					PID = 0, 0
23	22-24	9	11 15 18 11	24/8 24/8	Dark gray FINE to COARSE SAND, some fine gravel, trace silt, wet, no staining, no odor,
24					PID = 0, 0
25	24-26	24	24 23 55 90	24/12 24/12	** 0-7" - Same as 22-24' interval 7-12" - Weathered BEDROCK, breaks apart with trowels,
26					PID = 0, 0, 0
27	26-28	NA	150/4"	24/4"	Weathered bedrock, moist, no staining, no odor
28					PID = 0, 0

End of boring at 26' bgs.



### SOIL BORING (PB-21)

Boring/Well ID:	PB-21	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Steven Wallet, Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/16/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	34'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	12.04	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to)	0 to 34'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer	WOR - weight of rod
		Proportions Used:	Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	1	12	24/13	FILL MATERIAL - Brown fine to coarse sand, some silt, pieces of coal, brick and ash throughout, wet in tip of spoon, no staining, no odor
			7		
			6		
			19		PID = 0, 0, 0
6					
7	6-8	15	5	24/12	FILL MATERIAL - dark brown fine to medium silty sand, some angular medium gravel, concrete at 10", moist, no staining, no odor
			6		
			9		
			15		PID = 0
8					
9	8-10	0	25	24/7	FILL MATERIAL - brown fine to coarse sand, trace silt, crushed cobble fragment towards bottom of spoon, wet, no staining no odor
			50		
			27		
			5		PID = 0, 0
10					
11	10-12	0	WOH	24/5	Light brown SILT, some clay, trace fine sand, soft, wet, no staining slight natural organic (swampy) odor
			WOH		
			WOH		
			1		PID = 0, 0
12					
13	12-14	1	WOH	**	Dark olive SILTY CLAY, root and plant fragments throughout, soft, moist to wet, no staining, strong hydrogen sulfide-like odor
			WOH		
			WOH		
			WOH		
14					PID = 45, 76, 17
15	14-16	3	WOH	24/13	Dark olive SILTY CLAY, root and plant fragments throughout, soft, moist to wet, no staining, strong hydrogen sulfide-like odor
			WOH		
			WOH		
			WOH		
16					PID = 19, 27



### **SOIL BORING (PB-21)**

Boring/Well ID:	PB-21	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Steven Wallet, Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/16/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	34'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	12.04	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 34'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	2	WOH WOH WOH WOH	24/7	Dark olive SILTY CLAY, root and plant fragments throughout, soft, moist, no staining, ** moderate to strong hydrogen sulfide-like odor
18					PID = 23
19	18-20	0	WOH WOH WOH WOH	24/3	Gray CLAY, trace silt, pliable and soft, moist, no staining, slight to moderate hydrogen sulfide-like odor
20					PID = 4
21	20-22	NA	WOH WOH WOH WOH	24/6	** Gray CLAY, trace silt and fine sand, soft and pliable, moderate plasticity, no staining, slight hydrogen sulfide-like odor
22					
23	22-24	0	2 2 5 5	24/19	0-12" - Same as 20-22' interval ** 12-19" - Medium sand with silt, some fine sand, wood fragments towards top, moist no staining, slight natural organic (swampy) odor PID = 2, 1, 1
24					
25	24-26	0	20 22 24 15	24/6	Gray FINE to COARSE SAND, trace fine gravel and silt, wet, no staining, no odor
26					PID = 0, 0
27	26-28	0	5 7 5 5	24/9	Light gray FINE SAND, trace silt, wet, no staining, no odor
28					PID = 0, 0, 0
29	28-30	0	16 15 14 15	24/11	Green-gray FINE to COARSE SAND, trace SILT, layer of sub-angular fine gravel in top 3" of section, wet, no staining, no odor
30					PID = 0, 0, 0
31	30-32	0	15 20 15 16	24/11	Green-gray FINE to COARSE SAND and sub-angular FINE GRAVEL, trace silt, wet, no staining, no odor
32					PID = 0, 0



### **SOIL BORING (PB-21)**

Boring/Well ID:	PB-21	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Steven Wallet, Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/16/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	34'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	12.04	Drilling Method:	Hollow stem auger

**Well Construction:**

Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to)	0 to 34'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description	
						4	Light olive FINE to MEDIUM SAND, trace SILT, wet, no staining, no odor
33	32-34	0		4 4 5 7	24/8		PID = 0, 0
34							No Recovery due to encountering bedrock
35	34-36	NA	100/3"		3/0		End of boring at 34' bgs.



### SOIL BORING (PB-22)

Boring/Well ID:	PB-22	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/18/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	16'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	10.54	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 16'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1						Hand cleared borehole to 5.0' bgs
2						
3						
4						
5	4-6	0	2	4	24/7	FILL MATERIAL - red crushed brick, dry, no staining, no odor
6			10			PID = 0, 0
7	6-8	0	12	5	24/8	FILL MATERIAL - crushed brick and rock, concrete fragment in tip, moist, no staining, no odor
8			50/1"			PID = 0
9	8-10	16	6	5	24/12	** FILL MATERIAL - black fine to coarse sand and fine gravel, crushed stone, trace silt, wet, black staining throughout, slight to moderate hydrocarbon-like odor
10			4			PID = 0, 0
11	10-12	292	1	2	24/11	** 0-4" - FILL MATERIAL - black fine to coarse sand and silt and fine gravel, wet 4-11' - SILTY MATERIAL, moist, black staining throughout, moderate to strong burnt hydrocarbon-like odor
12			2			PID = 11, 13, 110
13	12-14	144	2	1	24/14	** Dark olive SILTY CLAY, plant fragments throughout, moderate plasticity, moist, no staining, slight to moderate hydrogen sulfide-like odor
14			2			PID = 30, 27
15	14-16	60	2	1	24/18	Dark olive SILTY CLAY, plant fragments throughout, moderate plasticity, moist, no staining, slight to moderate hydrogen sulfide-like odor
16			WOH	WOH		PID = 13, 12

End of boring at 16' bgs due to reaching clay layer.



### **SOIL BORING (PB-23)**

Boring/Well ID:	PB-23	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/18-19/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	34'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	10.32	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 34'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1						Hand cleared borehole to 5.0' bgs
2						
3						
4						
5	4-6	0	11	11	24/14	FILL MATERIAL - Black asphalt and brick fragments, loose, dry, no staining, no odor
6			10	14		PID = 0, 0, 0
7	6-8	1	6	18	24/1	Brick fragment in tip of spoon, dry, no staining, no odor
8			7			
9	8-10	1	4	2	24/1	PID = 0, 0
10			9	1		Brown COBBLE FRAGMENTS, some silt, trace medium sand, some sub-angular very fine gravel, no staining, slight undeterminable odor
11	10-12	383	1	1	24/8	PID = 0, 0, 0
12			WOH	24/23		** Gray SILTY CLAY, plant fragments throughout, staining, sheen and residual product, moderate MGP-like odor
13	12-14	239	WOH	WOH	24/23	PID = 140, 139, 146
14			WOH	WOH		Gray SILTY CLAY, plant fragments (roots) throughout, black staining, sheen, residual product along roots, moderate MGP-like odor
15	14-16	66	WOH	WOH	24/21	PID = 29, 36, 70, 22
16			WOH	WOH		Gray SILTY CLAY, some plant fragments (roots), black staining, sheen, residual product along roots, moderate MGP-like odor
						PID = 14, 7, 5, 3



### **SOIL BORING (PB-23)**

Boring/Well ID:	PB-23	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/18-19/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	34'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	10.32	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 34'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	31		1 2 8 9	24/16	** Gray, well sorted FINE to MEDIUM SAND and SILT, trace plant fragments (roots), moist, sheen throughout, residual product along root fragments, moderate MGP-like odor  PID = 2, 11, 37, 9
18				95		No Recovery - Used roller bit to auger down 2'
19	18-20	NA	100/1"	100/1"	24/0	
20						No Recovery
21				12		
22	21-23	0		11 16 16.0	24/11	** Gray, well sorted, FINE to COARSE SAND, trace very fine gravel, compact, wet, no staining, very slight MGP-like odor  PID = 0, 0, 0
23				11 25 15 13	24/12	TILL - gray fine to coarse sand and sub-angular to sub-rounded fine to coarse gravel, wet, no staining, no odor  PID = 0, 0, 0
24	23-25	0		26	24/14	TILL - gray fine to coarse sand and sub-angular to subrounded fine to medium gravel, wet, no staining, no odor  PID = 0, 0, 0
25				35 28		
26	25-27	0		4	24/13	0-10" - Tan FINE SAND, trace SILT and medium sand, wet, no staining, no odor  10-13" - Gray, well sorted FINE to COARSE SAND, no staining, no odor
27				3		
28	27-29	0		2		
29				2		
30	29-31	0		31	24/6	Dark gray, well sorted FINE to COARSE SAND, some FINE GRAVEL, wet, no staining, no odor
31				16 14 14		
32	31-33	NA		2 5 7	24/0	NO RECOVERY
33						



### **SOIL BORING (PB-23)**

Boring/Well ID:	PB-23	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/18-19/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	34'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	10.32	Drilling Method:	Hollow stem auger

**Well Construction:**

Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to)	0 to 34'
Sand Pack (from - to):	NA	Well Cover Type:	NA

Notes: \*\* Analytical sample collected  
 WOH - weight of hammer                    WOR - weight of rod  
 NA - not applicable                       Proportions Used: Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description	
34	33-35	0	10 8 100/4"	18/8	** 0-5" - Tan MEDIUM SAND, trace fine sand and fine gravel, no staining, no odor 5-8" - Tan, poorly sorted VERY FINE SAND, some silt, trace fine to medium sand, Schist fragments in tip of spoon PID = 0, 0	
35					End of boring at 35' bgs. (due to reaching bedrock)	



### **SOIL BORING (PB-24)**

Boring/Well ID:	PB-24	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval, Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/19/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	32'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.14	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 32'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1						Hand cleared borehole to 5.0' bgs.
2						
3						
4						
5	4-6	0	45 85 62 60	24/24		FILL MATERIAL - layers of light brown to gray crushed stone and silty fine sand, crushed brick layer from 7-10", very compact, dry, no staining, no odor
6						PID = 0, 0, 0
7	6-8	0	46 35 100/3"	24/12		** Light brown and gray WEATHERED ROCK FRAGMENTS, some medium to coarse sand, dry, no staining, no odor
8						PID = 0, 0, 0
9	8-10	0	25 100/4"	24/11		Light brown and gray, angular to sub-angular FINE to COARSE SAND, some FINE GRAVEL, wet, no staining, no odor
10						PID = 0, 0, 0
11	10-12	0	35 15 4 10	24/10		** Dark green FINE to COARSE SAND, some sub-angular fine gravel, wet, no staining, no odor
12						PID = 0, 0, 0
13	12-14	0	1 1 1 1	24/5		SILTY CLAY, plant fragments (brownish red bark) throughout, no staining, slight natural organic (swampy) odor
14						PID = 0, 0
15	14-16	NA	WOH WOH WOH WOH	24/0		NO RECOVERY
16						
17	16-18	0	WOH WOH WOH WOH	24/4		Gray SILTY CLAY, plant fragments throughout (small roots), moderate plasticity, moist, no staining, slight natural organic (swampy) odor
18						PID = 0



### **SOIL BORING (PB-24)**

Boring/Well ID:	PB-24	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval, Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/19/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	32'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.14	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 32'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
19	18-20	0	WOH		24/17	Same as 16-18' interval
			WOH			
			WOH			
			WOH			
20						
21	20-22	0	2	2	24/13	** 0-1" - Same as 18-20' interval 1-13" - Gray FINE to COARSE SAND and SILT, bands of plant fragments (roots), moist, no staining, no odor PID = 0, 0, 0
			2	2		
			2	2		
			2	2		
22						
23	22-24	0	10	10	24/6	0-5" - Same as 1-13" interval above 5-6" - Gray rounded GRAVEL, wet, no staining, no odor
			18	18		
			15	15		
			20	20		
24						
25	24-26	0	12	10	24/14	0-5" - Gray rounded GRAVEL, wet, no staining, no odor 5-10" - Gray SILTY CLAY, trace mica flecks 10-14" - Brown, well sorted FINE to COARSE SAND, trace silt, compact, no staining, no odor PID = 0, 0, 0
			8	8		
			7	7		
26						
27	26-28	0	15	15	24/11	0-4" - Same as above interval 4-11" - Brownish gray, poorly sorted FINE to COARSE SAND, tight, wet, no staining, no odor
			17	17		
			20	20		
			14	14		
28						
29	28-30	0	3	3	24/16	0-6" - Brownish gray, well sorted FINE to COARSE SAND, tight, wet, no staining, no odor 6-16" - Gray FINE SAND and SILT, wet, no staining, no odor
			3	3		
			5	5		
30						
31	30-32	0	5	100/1"	24/5	0-3" - Same as 6-16" interval above 3-5" - Schist bedrock
32						PID = 0, 0

End of boring at 32' bgs. (bedrock)



### **SOIL BORING (PB-25)**

Boring/Well ID:	PB-25	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval, Steven Wallett	Site Address:	East 173rd Street, Bronx, NY
Date:	12/17/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	28.5'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.26	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 28.5'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	2	40 15 13 9	24/9	FILL MATERIAL - Light brown, sub-angular fine gravel and crushed stone, dry, no staining, no odor  PID = 0, 0
6					
7	6-8	2	5 5 6 4	24/9	** FILL MATERIAL - Light brown, sub-angular fine gravel and crushed stone, wet, no staining, no odor  PID = 0
8					
9	8-10	1306	5 3 20 32	24/11	Core of WOOD timber, moist, black staining at top, pine-like odor towards bottom  PID = 12, 0
10					
11	10-12	NA	2 2 4 2	24/0	NO RECOVERY
12					
13	12-14	NA	3 1 1 1	24/2	Angular to sub-angular fine GRAVEL, no staining, no odor  PID = NT
14					
15	14-16	NA	WOH WOH WOH	24/0	NO RECOVERY
16					



### SOIL BORING (PB-25)

Boring/Well ID:	PB-25	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval, Steven Wallett	Site Address:	East 173rd Street, Bronx, NY
Date:	12/17/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	28.5'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	11.26	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 28.5'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	NA	4 1 1 1	24/0	NO RECOVERY - tried 3" diameter split spoon
18			4		
19	18-20	18	4 4 3	24/6	Light gray FINE to MEDIUM SAND, little silt, trace clay, wood fragments throughout (small branches and roots), no staining, pine-like odor
20			3		PID = NA
21	20-22	20	1 1 8	24/8	** Light gray FINE to MEDIUM SAND, little silt, trace clay, wood fragments (roots) throughout, no staining, slight pine-like odor
22			5		PID = NA
23	22-24	40.0	5.0 30 25	24/8	Gray FINE to MEDIUM SAND, trace silt and fine gravel, wet, no staining, slight pine-like odor
24			15		PID = NA
25	24-26	2.0	14 10 18	24/12	Dark gray FINE to MEDIUM SAND, little sub-angular fine gravel, trace silt, no staining, no odor
26			13		PID = NA
27	26-28	2.0	15 35 23	24/13	** 0-9" - Gray FINE SAND, some medium sand, little fine gravel, wet, no staining, no odor 9-13" - FINE to MEDIUM SAND, trace silt and coarse sand, no staining, very slight MGP-like odor PID = NA
28			37		
29	28-30	1.0	100/2"	8/5	0-3" - Brown FINE to COARSE SAND, trace sub-angular fine gravel, no staining, very slight MGP-like odor 3-5" - WEATHERED SCHIST, very friable
30					

End of boring at 28.5' bgs. (bedrock)



### **SOIL BORING (PB-26)**

Boring/Well ID:	PB-26	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	11/21/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	31'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 31'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	NA	8 5 4 4	0	NO RECOVERY - Cobble fragment in tip of spoon
6					
7	6-8	0	7 31 12 18	24/17	FILL MATERIAL - Rust colored medium to coarse sand, trace silt, crushed stone from 10 to 12", dry, no staining, no odor
8					
9	8-10	19	33 12 7 14	24/1	WEATHERED ROCK, rust colored toward top, black towards bottom, wet, no staining, slight pine-like odor
10					
11	10-12	0	8 17 10 3	24/7	Black MEDIUM to COARSE SAND and FINE GRAVEL, cobble fragment at bottom of interval, wet, no staining, no odor
12					
13	12-14	0	5 4 2 2	24/10	** FILL MATERIAL - Black wood and coal fragments, some silt, wet, no staining, slight burnt hydrocarbon-like odor
14					
14-16					PID = 0, 0, 0
15					Drillers washed out 14-15' bgs.
16	15-17			24/24	Collected Shelby Tube from 15-17' bgs.
17					



### SOIL BORING (PB-26)

Boring/Well ID:	PB-26	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	11/21/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	31'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 31'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
18	17-19	7	3 2 3	24/13	** SILTY CLAY, trace plant fragments increase towards bottom, no staining, slight to moderate naphthalene-like odor (fades towards bottom)  PID = <1, <1, 3
19			3		
20	19-21	1	WOH 1 7	24/19	0-12" - SILTY CLAY, some plant fragments 12-19" - FINE to MEDIUM SAND, trace silt, no staining, no odor
21			10		PID = 0, 0, 0
22	21-23	0	9 18 56	24/11	Gray FINE SAND, trace silt, tightly packed, wet, no staining, no odor
23			100/5"		PID = <1, <1
24	23-25	0	14 12 10 7	24/12	0-6" - Brown and gray FINE GRAVEL with COARSE SAND, loose, wet, no staining, no odor 6-12" - Light brown FINE SILTY SAND, wet, no staining, no odor
25					PID = 0, 0, 0
26	25-27	NA	9 7 6 5	24/7	Light brown FINE SAND, little silt, wet, no staining, no odor
27					PID = 0, 0, 0
28	27-29	0	4 6 9 10	24/12	0-10" - Light brown FINE SAND grading to MEDIUM SAND and SILT, wet, no staining, no odor 10-12" - Reddish brown SILT and FINE SAND, moist, no staining, no odor
29					PID = 0, 0, 0
30			46 22 15	21/12	0-7" - Gray and white, highly weathered ROCK and MEDIUM SAND, trace fine sand, 7-12" - Light brown FINE to MEDIUM SAND and MEDIUM GRAVEL, rock in tip of spoon, well rounded, moist, no staining, no odor
31			100/3		PID = 0, 0, 0

End of boring at 31' bgs (bedrock)



### **SOIL BORING (PB-27)**

Boring/Well ID:	PB-27	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	11/18/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	30'	Driller:	
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 26'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WHO - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	NA	3 3 2 2	24/13	Brown FINE SAND with SILT, trace rock fragments, no staining, no odor
6					PID = 0, 0, 0, 0
7	6-8	NA	3 3 3	24/8	Brown FINE to MEDIUM SAND some silt, trace coarse sand and rock fragments, moist, ** no staining, no odor
8					PID = 0, 0, 0, 0
9	8-10	NA	2 3 4 5	24/0	NO RECOVERY
10					
11	10-12	NA	3 5 4 2	24/0	NO RECOVERY
12					
13	12-14	NA	2 2 2	24/14	0-4" - Black COARSE SAND with FINE GRAVEL, wet, no staining, slight burnt hydrocarbon-like odor 4-10" - Dark brown PEAT and PLANT FRAGMENTS, moist, no staining, slight natural organic (swampy) odor PID = 0, 0, 0, 0
14					
15	14-16	NA	1 1 2 3	24/15	Dark brown PEAT and sub-angular FINE GRAVEL, moist, no staining, slight naphthalene-like ** odor PID = 0, <1, <1
16					



### **SOIL BORING (PB-27)**

Boring/Well ID:	PB-27	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	11/18/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	30'	Driller:	
Elevation in Bronx Highway Datum (NYDOT): XX.XX		Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 26'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WHO - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	NA	WOH WOH 2 4	24/21	Gray SILTY CLAY, plant fragments from 16.3 to 16.5' bgs., moist, no staining, slight natural organic (swampy) odor
18					PID = 0, 0, 0, 0
19	18-20	NA	WOH WOH 1 2	24/23	0-2" - WOOD FRAGMENTS 2-21" - Dark gray SILTY CLAY, trace root fragments and fine sand, no staining, no odor
20					PID = 0, 0, 0, 0
21	20-22	NA	1 13 50 35	24/17	0-6" - Dark gray SILTY CLAY, trace fine sand, moist, no staining, no odor 6-17" - Greenish gray FINE to MEDIUM little silt and coarse sand, trace fine gravel, rust color from 8-10", wet, no staining, no odor
22					
23	22-24	NA	13 8.0 8 12	24/13	0-2" - Reddish brown MEDIUM to COARSE SAND and FINE GRAVEL, wet, no staining, no odor 2-11" - Light brown FINE SAND and SILT, dense, moist
24					
25	24-26	NA	7 34 28	24/4	Similar to 2-11" interval above, cobble fragment broke basket
26			13		PID = NA
27	26-28	NA	13 27 14	24/6	Rust colored MEDIUM to COARSE SAND, some fine gravel, cobble fragment at 4", wet, no staining, no odor
28			37		PID = 0, 0
29	28-30	NA	100/5"	5/4	Brown to white weathered BEDROCK, breaks apart in fingers, moist, no staining, no odor
30					PID = 0

End of boring at 30' bgs. (bedrock)



### **SOIL BORING (PB-28)**

Boring/Well ID:	PB-28	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	11/13/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	22.5'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 22.5'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	1.1	6 7 4 10	24/17	0-8" - Brown FINE SAND, trace SILT, brick and coal fragments, dry 8-15" - BLACK stained SILTY SAND, some coal and rounded gravel pieces, no odor 15-17" - White to tan ASH PID = 0, 0, 0
6			16		0-7" - Red brick fragments
7	6-8	0	17 17	24/14	7-14" - Black SILT, trace concrete fragments, clinker/slag in tip, no staining, no odor
8			18		PID = 0, 0
9	8-10	0	4 15 2 2	24/12 **	Black coal pieces and ASH, some brown SILT, moist, no staining, no odor
10			2		PID = 0, 0
11	10-12	0	2 2 1 1	24/6 **	Black coal pieces and ASH, some brown SILT, moist, no staining, slight MGP-like odor
12			1		PID = 0, 0
13	12-14	1	1 2 2 1	24/11 **	Black CLINKER/SLAG and ASH, loose, wet, no staining, slight MGP-like odor
14			1		PID = 0, 0
15	14-16	1.2	1 2 2	24/20	Brown SILTY CLAY, some root fragments, dense, wet, no staining, natural organic (swampy) odor
16			2		PID = 0, 0, 0, 0



### **SOIL BORING (PB-28)**

Boring/Well ID:	PB-28	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	11/13/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	22.5'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 22.5'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	0	WOH WOH WOH 1	24/24	Brown SILTY CLAY, some root fragments, dense, wet, no staining, natural organic (swampy) odor  PID = 0, 0, 0, 0
19	18-20	0	WOH WOH WOH WOH	24/24	Brown SILTY CLAY, some root fragments, dense, wet, no staining, natural organic (swampy) odor  PID = 0, 0, 0, 0
21	20-22	0	WOH WOH WOH WOH	24/24	0-12" - Brown SILTY CLAY, some root fragments, dense, wet, no staining, ** natural organic (swampy) odor 12-14" - Dark brown SILTY SAND, some clay, wet PID = 0, 0, 0, 0
23	22-24	NA	100/5"	5/0	NO RECOVERY - Rock fragments in tip of spoon
24					PID = NA

End of boring at 24' bgs. (bedrock)



### SOIL BORING (PB-29)

Boring/Well ID:	PB-29	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	12/4/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	24'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 24'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	2.5	3 3 3	24/6	FILL MATERIAL - Rock fragments, medium to coarse sand, and trace silt, moist, no staining, no odor
6					PID = 0, 0
7	6-8		50/0		NO RECOVERY - refusal due to concrete
8					
9	8-10	9.4	8 7 8 3	24/15	** Drillers augered to 8' bgs. FILL MATERIAL - Black clinker/slag with crushed brick fragments, some ash, dry, black staining throughout, slight naphthalene-like odor PID = 0, 0, 0
10					
11	10-12	1.2	4 4 3 1	24/12	FILL MATERIAL - Black clinker/slag with crushed brick fragments, some ash, wet, black staining throughout, slight naphthalene-like odor PID = 0, 0, 0
12					
13	12-14	0.3	1 1 WOH 4	24/14	** Gray SILTY CLAY, plant fragments throughout, moderate plasticity, moist, no staining, no odor PID = 0, 0, 0
14					
15	14-16	0.2	WOH 1	24/23	Same as 12-14' interval but with slight natural organic odor PID = 0, 0, 0
16					



### SOIL BORING (PB-29)

Boring/Well ID:	PB-29	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	12/4/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	24'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 24'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer      WOR - weight of rod Proportions Used: Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%	

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description	
					16-18	18-20
17	16-18	0.1	WOH WOH WOH 2	24/24	Gray SILTY CLAY, piece of wood at 8", no staining, no odor  PID = 0, 0, 0	
18						
19	18-20	95.4	WOH WOH WOH 4	24/24	0-19" - Same as 16-18' interval 19-24" - Dark gray SILTY CLAY, plant fragments throughout, trace fine sand, moist, no staining, slight naphthalene-like odor PID = 14, 40, 24	
20						
21	20-22	287	WOH WOH WOH	24/24	Gray SILTY CLAY, moderate plasticity, grades to fine sand with silt towards bottom, zone of peat from 8-10", moist, no staining, slight naphthalene-like odor	
22					PID = 8, 16, 3	
23	22-24	28.5	14 17 23 100/1"	9/24	** 0-5" - Dark gray FINE to COARSE SAND, little fine gravel, trace silt, wet, no staining, slight to moderate naphthalene-like odor 5-9" - Weathered BEDROCK, moist, no staining, slight MGP-like odor,	
24						

End of boring at 24' bgs. (bedrock)



### **SOIL BORING (PB-30)**

Boring/Well ID:	PB-30	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	11/17/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	30'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 30'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer	WOR - weight of rod
		Proportions Used: Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%	

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	0	2	24/12	0-7" - Brown FINE SAND and SILT, trace rock fragments, moist to wet
			5		7-12" - FILL MATERIAL - Concrete and coal pieces, some ash and fine sand and silt, trace fibers, sand and silt are stained black, no odor
			8		
			10		PID = 0, 0
6					
7	6-8	0	10	7/5	Black SILTY CLAY and ASH, COAL PIECES, GRAVEL, trace fibers, moist
			6		
			6		
			7		PID = 0
8					
9	8-10	<1	10	24/15	0-6" - COARSE SAND and FINE GRAVEL, loose, wet
			6		6-15" - Black FINE SAND, CLINKER/SLAG, wet, slight MGP-like odor
			6		
			7		
10					PID = 0, 0, 0
11	10-12	0	3	24/20	0-4" - Black FINE SAND and GRAVEL, some clinker/slag and brick fragments
			2		4-20" - Grayish brown SILTY CLAY, dense, fine sand lens at 10", clay is moist, sand lens is wet, some black staining from 4-8", no odor
			2		
			2		
12					
13	12-14	0	WOH	24/24	0-8" Same as 4-20" interval above
			WOH		** 8-24" - Brown SILTY CLAY, plant fragments (roots) throughout, dense, no staining, swampy odor
			WOH		natural organic (swampy) odor
			2		PID = 0, 0, 0
14					
15	14-16	0	WOH	24/22	0-6" - Same as 8-24" interval above
			WOH		6-22" - Gray-brown SILTY CLAY, dense, moist, no staining, natural organic (swampy) odor
			WOH		
			WOH		
16					PID = 0, 0, 0
17	16-18	0	WOH	24/14	Same as 8-24" interval
			WOH		
			2		
			2		
18					PID = 0, 0, 0, 0



### SOIL BORING (PB-30)

Boring/Well ID:	PB-30	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	11/17/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	30'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 30'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
19	18-20	0	1 2 WOH	24/19	Dark brown FINE SAND, some silt, trace clay, dense, no staining, natural organic (swampy) odor
20			WOH		PID = 0, 0, 0
21	20-22	<1	2 6 17 17	24/14	Gray-brown FINE SAND, some medium sand, loose, no staining, no odor
22					PID = 0, 0, 0
23	22-24	0	11 25 22 15	24/14	Gray-brown FINE SAND and angular GRAVEL, trace weathered rock in tip, dense, moist, no staining, no odor
24					PID = 0, 0, 0
25	24-26	NA	16 16 8 10	24/0	NO RECOVERY
26					
27	26-28	NA	7 5 5 7	24/0	NO RECOVERY
28					
29	28-30	NA	7 9 100/3"	24/7	Gray weathered ROCK and white rock pieces, trace rounded gravel, slight density, no staining, no odors
30					PID = 0
31	30-32	NA	100/1"	1/1	NO RECOVERY
32					

End of boring at 30' bgs. (bedrock)



### SOIL BORING (PB-31)

Boring/Well ID:	PB-31	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Leroy Feeney	Site Address:	East 173rd Street, Bronx, NY
Date:	12/18/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	18'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 18'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	0	10 5 4 2	24/8	FILL MATERIAL - Light brown fine to coarse sand, cobble fragments throughout, dry, no staining, no odor
6					
7	6-8	1		24/7	FILL MATERIAL - light brown fine to coarse sand, trace fine gravel and silt, rock fragments throughout, moist, no staining, no odor
8					PID = 0
9	8-10	4	2 2 5 40	24/4	FILL MATERIAL - Fine gravel and rock fragments, little fine to coarse sand, moist, possible black staining, no odor
10					PID = 0,0
11	10-12	NA	100/5"	24/7	** FILL MATERIAL - Dark gray rock fragments and fine gravel with fine to coarse sand, moist to wet, no staining, no odor
12					PID = 0, 0
13	12-14	NA	WOH WOH WOH WOH	24/1	NO RECOVERY - Clay in tip of spoon
14					
15	14-16	0	WOH WOH WOH WOH	24/19	** Dark gray SILTY CLAY, plant fragments throughout, moist, no staining, slight natural organic odor
16					PID = 0, 0



### **SOIL BORING (PB-31)**

<b>Boring/Well ID:</b>	PB-31	<b>Client:</b>	Consolidated Edison of New York
<b>Project Number:</b>	013942	<b>Project Name:</b>	Supplemental Remedial Investigation
<b>Logged By:</b>	Leroy Feeney	<b>Site Address:</b>	East 173rd Street, Bronx, NY
<b>Date:</b>	12/18/2003	<b>Contractor:</b>	Jersey Boring and Drilling
<b>Total Depth:</b>	18'	<b>Driller:</b>	Mike Blejhas
<b>Elevation in Bronx Highway Datum (NYDOT):</b> XX.XX		<b>Drilling Method:</b>	Hollow stem auger
<b>Well Construction:</b>			
<b>Riser (from - to):</b>	NA	<b>Bentonite Seal (from - to)</b>	NA
<b>Screen (from - to):</b>	NA	<b>Annular Fill Type/Depth:</b>	NA
<b>Screen Type/Size:</b>	NA	<b>Cement Grout (from - to):</b>	0 to 18'
<b>Sand Pack (from - to):</b>	NA	<b>Well Cover Type:</b>	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	0	WOH WOH WOH WOH	24/17	Gray SILTY CLAY, plant fragments throughout, moist, no staining, slight natural organic odor
18					PID = 0, 0 End of boring at 18' bgs.



### SOIL BORING (PB-33)

Boring/Well ID:	PB-33	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/29/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	19'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 19'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description	
1					Hand cleared borehole to 5.0' bgs	
2						
3						
4						
5	4-6	0	2	24/15	FILL MATERIAL - Brown fine to medium sand and silt, loose, dry, no staining, no odor	
			3			
			5			
			5		PID = 0, 0, 0	
6			4	24/18	0-11" - FILL MATERIAL - Brown fine to medium sand and silt, loose, dry, no staining, no odor	
7	6-8	0	6	24/18	11-14" - Dark gray SILTY CLAY, plant fragments throughout, no staining, no odor	
			6			
			3		PID = 0, 0, 0	
8			2	24/18	** Dark gray SILTY CLAY, plant fragments throughout, no staining, no odor	
9	8-10	0	2	24/18		
			4			
			2		PID = 0, 0	
10			3	24/16	FILL MATERIAL - Dark brown FINE to COARSE SAND and SILT, pieces of coal throughout, dry, no staining, no odor	
11	10-12	0	3	24/16		
			3			
			4		PID = 0, 0	
12			2	24/20	FILL MATERIAL - Dark brown to black SILT and CLAY, some fine sand, trace coal and fine gravel throughout, no staining, no odor	
13	12-14	0	2	24/20		
			2			
			2		PID = 0, 0	
14			2	24/18	0-7" - Brown FINE SAND, trace SILT	
15	14-16	0	1	24/18	7-8" - COAL	
			1		8-18" - Black SILT and CLAY, plant fragments (roots) throughout, no staining, slight swampy odor	
			3		PID = 0, 0, 0	
16			1	24/16	** FILL MATERIAL - Dark brown to black SILTY CLAY, some fine sand and coal, no staining, slight hydrocarbon-like odor	
17	16-18	0	2	24/16		
			2			
			4			
18			34		Spoon refusal - No recovery	
19	18-20	0	100/5"	24/0		
20						

End of boring at 19' bgs. (spoon refusal)



### SOIL BORING (PB-34)

Boring/Well ID:	PB-34	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/22/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	32.5'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 32.5'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1						Hand cleared borehole to 5.0' bgs
2						
3						
4						
5	4-6	0	3	3	24/9.5	FILL MATERIAL - Brick fragments and ash, medium to coarse sand and silt, loose, dry, no staining, no odor
6			5			PID = 0, 0, 0
7	6-8	0	6	4	24/13	** 0-10" - Same as 4-6' interval but with no ash 10-13" - Brown SILT and MEDIUM to COARSE SAND, tight, dry, no staining, no odor
8			1			
9	8-10	0	2	4	24/2	PID = 0, 0, 0
10			1			Brown SILT and VERY FINE GRAVEL and MEDIUM SAND, tight, dry, no staining, no odor
11	10-12	0	1	WOH	24/20	PID = 0, 0, 0
12			1	WOH		** Brownish gray SILTY CLAY, root fragments and mica flecks throughout, moist, no staining, slight natural organic (swampy) odor
13	12-14	0	1	1	24/19	PID = 0, 0, 0
14			1			Brownish gray SILTY CLAY, root fragments and mica flecks throughout, moist, no staining, slight natural organic (swampy) odor
15	14-16	0	1	WOH	24/14	PID = 0, 0, 0
16			WOH	1		Dark gray SILTY CLAY, plant fragments throughout, moist, no staining, slight natural organic (swampy) odor



### **SOIL BORING (PB-34)**

<b>Boring/Well ID:</b>	PB-34	<b>Client:</b>	Consolidated Edison of New York
<b>Project Number:</b>	013942	<b>Project Name:</b>	Supplemental Remedial Investigation
<b>Logged By:</b>	Sarah Battistini	<b>Site Address:</b>	East 173rd Street, Bronx, NY
<b>Date:</b>	12/22/2003	<b>Contractor:</b>	Jersey Boring and Drilling
<b>Total Depth:</b>	32.5'	<b>Driller:</b>	Dennis Keith and Louis Testio
<b>Elevation in Bronx Highway Datum (NYDOT):</b> XX.XX		<b>Drilling Method:</b>	Hollow stem auger
<b>Well Construction:</b>			
<b>Riser (from - to):</b>	NA	<b>Bentonite Seal (from - to)</b>	NA
<b>Screen (from - to):</b>	NA	<b>Annular Fill Type/Depth:</b>	NA
<b>Screen Type/Size:</b>	NA	<b>Cement Grout (from - to):</b>	0 to 32.5'
<b>Sand Pack (from - to):</b>	NA	<b>Well Cover Type:</b>	NA
<b>Notes:</b> ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	0	WOR	24/18		Same as 14-16' interval
18			WOR			PID = 0, 0, 0
19	18-20	0	1	24/24		0-8" - Same as 16-18' interval 8-24" - Gray SILT and FINE to MEDIUM SAND, mica flecks throughout, moist, no staining, slight natural organic (swampy) odor
20			1			PID = 0, 0, 0
21	20-22	0	2	24/13		** Same as 8-24" interval above
22			2			
23	22-24	0	4	16		PID = 0, 0, 0
24			24	24/17		Well sorted FINE to COARSE SAND and VERY FINE GRAVEL, cobble fragments, silty organic lens from 6-8", compact, no staining, no odor
25	24-26	0	36	13	24/19	0-6" - Gray, well sorted FINE to COARSE SAND, tight, wet 6-10.5" - Gray, FINE to COARSE SAND and sub-rounded VERY FINE GRAVEL, wet, tight 10.5-19" - Gray SILT, wet
26			23			PID = 0, 0, 0
27	26-28	0	5	14		0-9" - SILT and FINE SAND, trace very fine gravel, no staining, no odor
28			6	13	24/12	9-12" - SILT and FINE to COARSE SAND, mica flecks throughout, no staining, no odor
29	28-30	NA	6	11		PID = 0, 0, 0
30			8	14	24/12	0-2" - SILT and FINE to COARSE SAND, mica flecks throughout, no staining, no odor
31	30-32	NA	55	55		2-12" - Gray, well sorted FINE to COARSE SAND, trace SILT, trace sub-angular very fine gravel and cobble fragments, compact, no staining, no odor
32			95	42	24/8	PID = 0, 0, 0
			88			TILL - Well sorted MEDIUM to COARSE SAND and SILT and WEATHERED ROCK, compact, moist, no staining, no odor
			79			PID = 0, 0, 0



### **SOIL BORING (PB-34)**

<b>Boring/Well ID:</b>	PB-34	<b>Client:</b>	Consolidated Edison of New York
<b>Project Number:</b>	013942	<b>Project Name:</b>	Supplemental Remedial Investigation
<b>Logged By:</b>	Sarah Battistini	<b>Site Address:</b>	East 173rd Street, Bronx, NY
<b>Date:</b>	12/22/2003	<b>Contractor:</b>	Jersey Boring and Drilling
<b>Total Depth:</b>	32.5'	<b>Driller:</b>	Dennis Keith and Louis Testio
<b>Elevation in Bronx Highway Datum (NYDOT):</b>	XX.XX	<b>Drilling Method:</b>	Hollow stem auger

**Well Construction:**

<b>Riser (from - to):</b>	NA	<b>Bentonite Seal (from - to)</b>	NA
<b>Screen (from - to):</b>	NA	<b>Annular Fill Type/Depth:</b>	NA
<b>Screen Type/Size:</b>	NA	<b>Cement Grout (from - to):</b>	0 to 32.5'
<b>Sand Pack (from - to):</b>	NA	<b>Well Cover Type:</b>	NA

Notes: \*\* Analytical sample collected  
 WOH - weight of hammer      WOR - weight of rod  
 NA - not applicable      Proportions Used: Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description	
					TILL - Well sorted MEDIUM to COARSE SAND and SILT and WEATHERED ROCK, compact, moist, no staining, no odor	PID = 0, 0, 0
33	32-34	NA	80 100/1"	7/7		
34						End of boring at 32.5" bgs.



### **SOIL BORING (PB-35)**

Boring/Well ID:	PB-35	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Anthony G. Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/20/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	34'	Driller:	Mike Blejhas and Mike Blejhas Jr.
Elevation in Bronx Highway Datum (NYDOT): XX.XX		Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 34'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH- weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 4.0' bgs
2					
3					
4					
5	4-6	0	5 6 100/1"	13/6	TOPSOIL AND FILL MATERIAL- Dark brown FINE SAND and SILT, trace rock fragments, no stain , no odor.
6					PID=0
7	6-8	0	1 1 1 1	24/5	** FILL MATERIAL- Black crushed stone (size of coarse sand), wet, black staining (washes off in water) and appears green in sample vial, no odor.
8					PID=0
9	8-10	0	WOH WOH WOH WOH	24/7	FILL MATERIAL- Black pieces of crushed stone, brick, and clinker/slag, wet, no odor.
10					PID=0
11	10-12	NA	WOH WOH WOH WOH	24/0	** NO RECOVERY Moved over, augered down and collected the sample on 12-31-01
12					
13	12-14	0	WOH WOH WOH WOH	24/6	FILL MATERIAL- Black pieces of crushed stone, brick fragments, clinker/slag, trace medium to coarse sand, wet, no stain, no odor.
14					PID=0
15	14-16	NA	WOH WOH WOH WOH	24/0	NO RECOVERY- timber in tip of spoon.
16					



### **SOIL BORING (PB-35)**

Boring/Well ID:	PB-35	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Anthony G. Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/20/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	34'	Driller:	Mike Blejhas and Mike Blejhas Jr.
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger

**Well Construction:**

Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 34'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH- weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	0	WOH	WOH	24/22	Silty CLAY with veins of fine sand throughout, low plasticity, moist, no stain, slight to moderate organic (sulfur) odor.
18			WOH	WOH		PID=0,0
19	18-20	0	WOH	WOH	24/19	Gray SILTY CLAY, some plant fragments throughout, moderate plasticity, fewer veins of fine sand than above, moist, no stain, slight natural organic odor.
20			WOH	WOH		PID=0,0
21	20-22	0	WOH	WOH	24/16	** Gray SILTY CLAY, no plant fragments, moderate plasticity, trace fine sand, moist, no stain, slight natural organic odor.
22			WOH	WOH		PID=0,0
23	22-24	0	3	3	24/19	0-16" - Gray SILTY CLAY, no plant fragments, moderate plasticity, trace fine sand, moist, no stain, no odor.
24			3	4		16-19" - Dark gray FINE to MEDIUM SAND, little coarse sand, wet, no stain, slight natural organic odor. PID=0,0
25	24-26	0	13	13	24/6	MEDIUM to COARSE SAND and FINE GRAVEL (angular to subangular), trace fine sand, wet, no stain, no odor.
26			13	4		PID=0
27	26-28	0	3	2	24/10	0-2" - MEDIUM to COARSE SAND and FINE GRAVEL (angular to subangular), trace fine sand, wet, no stain, no odor.
28			3	4		2-10" - Light gray FINE SAND, trace silt and medium sand, wet, no stain, no odor.
29	28-30	0	3	1	24/9	PID=0,0
30			1	1		Light olive FINE SAND, some silt, wet, no stain, no odor.
31	30-32	NA	3	4	24/0	NO RECOVERY
32			4	5		
			5	7		
			7			



### **SOIL BORING (PB-35)**

Boring/Well ID:	PB-35	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Anthony G. Koval	Site Address:	East 173rd Street, Bronx, NY
Date:	12/20/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	34'	Driller:	Mike Blejhas and Mike Blejhas Jr.
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to)	0 to 34'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH- weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
33	32-34	0	13 14 13 40	24/10	Dark gray to brown FINE to COARSE SAND, little to some silt, trace fine gravel (sub-rounded), wet, no stain, no odor.
34			100/1"	1"/1"	End of boring due to reaching bedrock (weathered bedrock in tip of spoon- breaks apart with trowel)
35	34-36	0			
36					
37					
38					



### SOIL BORING (PB-37)

Boring/Well ID:	PB-37	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval, Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/23/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	37.5'	Driller:	Mike Bleijhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 37.5'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	10	4 5 8 5	24/5	FILL MATERIAL - Fine to medium sand with crushed rock fragments, some coal and ash, rock fragment in tip of spoon, moist, no staining, no odor
6					PID = 0, 0
7	6-8	10	2 2 3 2	24/5	FILL MATERIAL - Fine to medium sand with crushed rock fragments, some coal and ash, rock fragment in tip of spoon, moist, no staining, no odor
8					PID = 0, 0
9	8-10	4	2 1 1	24/8	Pieces of CLINKER/SLAG and BRICK FRAGMENTS, some medium to coarse sand, wet, no staining, no odor
10					PID = 0, 0
11	10-12	5	2 4 3	24/16	FILL MATERIAL - FINE GRAVEL, BRICK, and CLINKER/SLAG fragments, some medium to coarse sand and silt, wet, small areas of sheening in wet areas of spoon, slight hydrocarbon-like odor
12					PID = 0, 0
13	12-14	114	1 2 2 3	24/14	** 0-3" - FILL MATERIAL - FINE GRAVEL, BRICK, and CLINKER/SLAG fragments, some medium to coarse sand and silt, wet, very minor sheening in wet areas of spoon, slight hydrocarbon-like odor 3-14" - Dark olive SILTY CLAY, plant fragments throughout, no staining, slight hydrocarbon-like and natural organic (swampy) odor PID = 9, 9, 14
14					
15	14-16	NA	1 2 2 1	24/16	** Dark gray FINE SAND and SILT, some clay, moist, no staining, slight hydrocarbon-like odor
16					PID = 2, 3, 2
17	16-18	23	1 1 1	24/17	Dark olive FINE to MEDIUM SAND, trace to little silt, wet, no staining, no odor
18					PID = 0, 0
19	18-20	0	23 12 32	24/9	Gray FINE to COARSE SAND, trace to little silt, trace fine gravel, cobble fragment at top of interval, wet, no staining, very slight undeterminable odor
20					PID = <1, <1



### SOIL BORING (PB-37)

Boring/Well ID:	PB-37	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Tony Koval, Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/23/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	37.5'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 37.5'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches	Penetration / Recovery (inches)	Soil/Geologic Description
21	20-22	4	12 15 18 13	24/10	** Gray FINE to COARSE SAND, trace to little silt, trace fine gravel, cobble fragment at top of interval, wet, no staining, no odor PID = 0, 0
22			13		Dark gray FINE to COARSE SAND, little fine gravel, trace silt, wet, no staining, no odor
23	22-24	0	15.0 25 27	24/15	Gray FINE to MEDIUM SAND, wet, no staining, no odor
24			2		PID = 0, 0
25	24-26	0	3 3 4	24/5	COBBLE FRAGMENT, no staining, no odor
26			7		PID = NA
27	26-28	NA	8 8 9	24/1	Gray FINE to MEDIUM SAND, wet, no staining, no odor
28			2		PID = 0, 0
29	28-30	3	4 6 5	24/11	Dark olive MEDIUM to COARSE SAND, some fine sand, trace fine gravel, wet, no staining, no odor
30			2		PID = 0, 0
31	30-32	0	4 8 15	24/16	Alternating layers of MEDIUM to COARSE SAND and FINE SAND, cobble fragment at 12", trace to little angular to sub-angular fine gravel throughout interval, wet, no staining, no odor
32			15		PID = 0, 0
33	32-34	0	15 17 35 37	24/22	Sub-angular to sub-rounded VERY FINE to FINE GRAVEL and COBBLE fragments, bedrock in tip of spoon, wet, no staining, no odor
34			10		PID = 0, 0, 0, 0
35	34-36	0	14 15 25	24/20	** TILL - Well sorted FINE to COARSE SAND, SILT, and VERY FINE GRAVEL, weathered schist in tip, compact, wet, no staining, no odor
36			30		PID = 0, 0, 0, 0
37	36-38	0.6	45 100/1"	24/6	Sub-angular to sub-rounded VERY FINE to FINE GRAVEL and COBBLE fragments, bedrock in tip of spoon, wet, no staining, no odor
38			100/1"		PID = 0, 0

End of boring at 37.5' bgs. (bedrock)



### **SOIL BORING (PB-38)**

Boring/Well ID:	PB-38	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/23/2003, 12/29/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	26'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 26'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	6	3 12 36 42	24/14	FILL MATERIAL - Ash, asphalt chunks, wood and cement pieces, clinker, bands of silt, loose, dry, no staining, no odor
6					PID = 0, 1, 0, 0
7	6-8	4	79 8 6 6	24/16	FILL MATERIAL - Ash, asphalt chunks, cement pieces, clinker, bands of silt, loose, dry, no staining, no odor
8					PID = 0, 0, 0
9	8-10	NA	6 4 2 1	24/0	NO RECOVERY
10					
11	10-12	0	3 1 1 2	24/7	** Brownish gray SILTY CLAY and VERY FINE GRAVEL and SHALE FRAGMENTS, plant fragments throughout, no staining, very slight swampy/burnt hydrocarbon odor
12					PID = 0, 0, 0
13	12-14	NA	1 1 2 4	24/6	** Gray SILTY CLAY, plant fragments throughout, moist, no staining, slight swampy odor
14					PID = 0, 1, 2, 1
15	14-16	0	1 2 2	24/12.5	Dark gray SILTY CLAY, trace plant fragments, moist, no staining, very slight swampy odor
16					PID = 0, 0, 0



### **SOIL BORING (PB-38)**

Boring/Well ID:	PB-38	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/23/2003, 12/29/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	26'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 26'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	0	1 1 1 1	24/23	0-3" - Dark gray SILTY CLAY, trace plant fragments, moist, no staining, very slight swampy odor 3-23" - Dark gray silt, some mica flecks, trace clay, moist, no staining, no odor
18					PID = 0, 0, 0
19	18-20	0	2 14 24 35	0 0	0-5" - Same as 3-23" interval above 5-14" - TILL - silt, fine to coarse sand, and very fine gravel and cobble fragments, wet, no staining, no odor PID = 0, 1, 0
20					
21	20-22	1	32 34 37 28	24/12	** Same as 5-14" interval above
22					
23	22-24	NA	6 13 30 87	24/19	Gray, well sorted FINE to COARSE SAND, trace silt, cobble fragments in bottom 4", wet, loose, no staining, no odor
24					PID = 0, 0, 0
25	24-26	NA	28 39 50 94	24/18	0-6" - Well sorted FINE to COARSE SAND, VERY FINE GRAVEL and SILT, compact, wet 6-18" - TILL - Gray cobble fragments, compact, no staining, no odors
26					PID = 0, 0

End of boring at 26' bgs.



### **SOIL BORING (PB-39)**

Boring/Well ID:	PB-39	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Steven Wallett	Site Address:	East 173rd Street, Bronx, NY
Date:	12/30/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	24'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to):	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 24'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	NA	7 20 18 13	24/16	0-9" - FILL MATERIAL - Brown fine to coarse sand and fine gravel, piece of concrete at 10" 9-16" - Gray FINE SAND and SILT, some fine to medium gravel, several concrete pieces
6					PID = 0
7	6-8	NA	4 3 2 2	24/3	Gray FINE to COARSE SAND and small pieces of COAL
8					PID = 0
9	8-10	NA	1 1 2 2	24/4	0-2" - Light gray SILT and FINE to MEDIUM SAND, some coal and clinker/slag, wet 2-4" - Brown PEAT, SILT, and FINE SAND, no staining, moderate swampy odor
10					PID = 0
11	10-12	NA	2 2 2 2	24/11	Brown PEAT/ meadow mat, silt, some clay and root and leave fragments, no staining, strong hydrogen sulfide-like odor
12					PID = 0, 0, 0
13	12-14	NA	WOH WOH 1 1	24/22	** 0-11" - Dark brown SILTY CLAY, some plant fragments 11-22" - Dark brown SILT and FINE to MEDIUM SAND, trace clay and plant fragments (roots), no staining, no odor PID = 0, 0, 0, 0
14					
15	14-16	NA	WOH WOH 1 2	24/19	** Gray-brown SILTY FINE SAND, trace plant fragments (roots) and fine gravel, no staining, no odor
16					PID = 0, 0, 0, 0



### **SOIL BORING (PB-39)**

<b>Boring/Well ID:</b>	PB-39	<b>Client:</b>	Consolidated Edison of New York
<b>Project Number:</b>	013942	<b>Project Name:</b>	Supplemental Remedial Investigation
<b>Logged By:</b>	Steven Wallett	<b>Site Address:</b>	East 173rd Street, Bronx, NY
<b>Date:</b>	12/30/2003	<b>Contractor:</b>	Jersey Boring and Drilling
<b>Total Depth:</b>	24'	<b>Driller:</b>	Mike Blejhas
<b>Elevation in Bronx Highway Datum (NYDOT):</b>	XX.XX	<b>Drilling Method:</b>	Hollow stem auger
<b>Well Construction:</b>			
<b>Riser (from - to):</b>	NA	<b>Bentonite Seal (from - to):</b>	NA
<b>Screen (from - to):</b>	NA	<b>Annular Fill Type/Depth:</b>	NA
<b>Screen Type/Size:</b>	NA	<b>Cement Grout (from - to):</b>	0 to 24'
<b>Sand Pack (from - to):</b>	NA	<b>Well Cover Type:</b>	NA
<b>Notes:</b> ** Analytical sample collected NA - not applicable		WOH - weight of hammer Proportions Used:	WOR - weight of rod Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
17	16-18	NA	WOH	24/2		Gray brown SILTY FINE to MEDIUM SAND, wet, no staining, no odor
			WOH			
			WOH			
18			1			PID = 0, 0
19	18-20	NA	18			TILL - Gray fine to coarse sand and sub-angular very fine to fine gravel, trace silt, no staining, no odor
			35	24/11		
			38			
20			22			PID = 0, 0
21	20-22	NA	13			TILL - Gray fine to coarse sand and sub-angular very fine to fine gravel, trace silt, no staining, no odor
			25	24/9		
			26			
22			4			
23	22-24	NA	9			NO RECOVERY
			6	24/0		
			6			
24			7			



### SOIL BORING (PB-41)

Boring/Well ID:	PB-41	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/29/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	20.5'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 20.5'
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable		WOH - weight of hammer	WOR - weight of rod
		Proportions Used:	Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1					Hand cleared borehole to 5.0' bgs
2					
3					
4					
5	4-6	0.5	10 12 10 14	24/24	0-18" - FILL MATERIAL - light brown fine sand and silt, trace fine gravel, compact, dry 18-22" - FILL - Dark brown silt, coarse sand, trace powdered brick, compact, dry, 22-24" - Black coal powder and pieces, loose, dry, no staining, no odor PID = 0, 0, 0, 0, 0
6					
7	6-8	149	10 14 19 11	24/18	FILL MATERIAL - Layers of red brick powder and pieces, light brown fine sand and silt, white concrete pieces, brown/black fine sand and silt, lamp black material, loose, dry, no staining, slight MGP/naphthalene-like odor in tip of spoon PID = 0, 0, 0, 8
8					
9	8-10	1.5	2 1 1	24/18	0-8" - Black CLINKER/SLAG 8-18" - Gray SILTY CLAY, plant fragments throughout, no staining, slight natural organic (swampy) odor PID = 0, 0, 0
10					
11	10-12	17.3	WOH WOH WOH 1	24/2	Same as 8-18" interval above  PID = 0, 0.5
12					
13	12-14	43.5	WOH WOH WOH WOH	24/24	** Gray SILTY CLAY, plant fragments throughout, no staining, slight natural organic (swampy) odor and MGP-like odor
14					
15	14-16	0	WOH WOH WOH WOH	24/22	** Gray SILTY CLAY, plant fragments throughout, no staining, slight natural organic (swampy) odor and MGP-like odor  PID = <1, <1, <1, <1
16					



### SOIL BORING (PB-41)

Boring/Well ID:	PB-41	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/29/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	20.5'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger

**Well Construction:**

Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 20.5'
Sand Pack (from - to):	NA	Well Cover Type:	NA

Notes: \*\* Analytical sample collected  
 WOH - weight of hammer      WOR - weight of rod  
 NA - not applicable      Proportions Used: Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description	
						16-18	18-20
17	16-18	0	WOH	WOH	24/24	Gray SILTY CLAY, plant fragments throughout, no staining, slight natural organic (swampy) odor and MGP-like odor	
			WOH	WOH		PID = 0, 0, 0, 0	
18			WOH	WOH	24/23	0-16" - Gray SILTY CLAY, plant fragments throughout, no staining, no odor	
			WOH	WOH		16-23" - Dark gray SILT, compact, moist, no staining, no odor	
19	18-20	22.3	WOH	WOH	24/23		
20			WOH	3		PID = 0, 0, 0	
				75		Weathered ROCK (schist)	
21	20-22	0	100/1"	100/1"	7/6		
22						PID = 0, 0	
						End of boring at 20.5" bgs. (bedrock)	



### **SOIL BORING (PB-42)**

Boring/Well ID:	PB-42	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/29/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	16'	Driller:	Mike Blejhas
Elevation in Bronx Highway Datum (NYDOT):	XX.XX	Drilling Method:	Hollow stem auger
<b>Well Construction:</b>			
Riser (from - to):	NA	Bentonite Seal (from - to)	NA
Screen (from - to):	NA	Annular Fill Type/Depth:	NA
Screen Type/Size:	NA	Cement Grout (from - to):	0 to 16' bgs.
Sand Pack (from - to):	NA	Well Cover Type:	NA
Notes: ** Analytical sample collected NA - not applicable			WOR - weight of rod Proportions Used: Trace - 1-10%, Little - 10-20%, Some - 20-30%, And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID	Headspace (ppm)	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description
1						Hand cleared borehole to 5.0' bgs
2						
3						
4						
5	4-6	0	9	24/22		0-6" - FILL MATERIAL - Well sorted fine to coarse sand, moist
			11			6-22" - Brown FINE to MEDIUM SAND and SILT, VERY FINE to FINE GRAVEL, brick pieces,
			14			top 6" is compact, dry, no staining, no odor
			18			PID = 0, 0
6						
7	6-8	0	35	9/8		Tan to brown FINE to COARSE SAND, cobble fragments in tip of spoon, no staining, no odor
			100/3"			
8						PID = 0, 0
9	8-10	NA	5	24/8.5		** Brown FINE to COARSE SAND and SILT, trace fine gravel, pieces of schist in tip, compact, no staining, no odor
			7			
			9			
			3			PID = 0, 0, 0
10						
11	10-12	0	1	24/7		Gray SILTY CLAY, plant fragments throughout, moist, no staining, no odor
			1			
			3			PID = 0, 0, 0
12						
13	12-14	NA	3	24/0		NO RECOVERY
			2			
			3			
			3			
14						
15	14-16	0	WOH	24/10		** Gray SILTY CLAY, plant fragments throughout, trace very fine gravel, moist, no staining, no odor
			WOH			
			WOH			
			WOH			
16						PID = 0, 0, 0

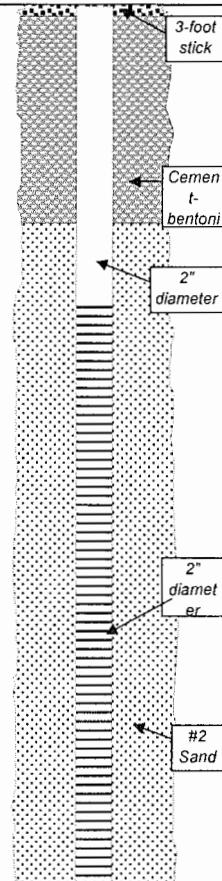
End of boring at 16" bgs. (due to reaching clay layer)



### SOIL BORING/WELL LOG (MW-5S)

Boring/Well ID:	MW-5S	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/5/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	16'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	11.8	Drilling Method:	Hollow stem auger
Elevation (top of riser):	13.82		
<b>Well Construction:</b>			
Riser (from - to):	4' above grade to 10'	Bentonite Seal (from - to):	NA
Screen (from - to):	6' to 16'	Annular Fill Type/Depth:	NA
Screen Type/Size:	2-inch diameter 0.010 slot PVC	Cement Grout (from - to):	0-8'
Sand Pack (from - to):	4' to 16'	Well Cover Type:	3-Foot Stick-Up
Notes ** Analytical sample collec	Proportions Used: Trace - 1-10%	Some - 20-30%	
NA - not applicable	Little - 10-20%	And - 30-50%	

Depth (ft.)	Sample Interval (feet)	PID Headspace	Blows / 6 inches)	Penetration / Recovery (inches)	Soil/Geologic Description	WELL DIAGRAM
1					Hand cleared boring to 5' bgs.	
2						
3						
4						
5					Augered to 6' bgs.	
6					0-2" - SILTY TOPSOIL, Quartz rock fragments	
7	6-8	NA	11	24/12	2-6.5" - SILTY CLAY	
8			6		6.5-12" - FILL MATERIAL - Coarse sand and coal fragments, light brown with black bands (natural)	
9			3		PID = 0, 0, 0	
10			15			
11	8-10	4	13	24/22	FILL MATERIAL - Black pieces of coal and ash, trace silt, loose, dry, no staining, no odors	
12			35		PID = 0, 0, 0	
13			63			
14			26			
15	10-12	NA	12	24/7	FILL MATERIAL - Dark brown to black fine to coarse sand and silt, trace clay, pieces of from 4-5", moist, no staining, no odor	
16			11			
17			6		PID = 0, 0, 0	
18			5			
19	12-14	NA	2	24/22	Grayish brown SILTY CLAY, some plant fragments (roots and leaves), low plasticity, moist, no staining, slight natural organic (swampy) odor	
20			2			
21			6			
22			5		PID = 0, 0, 0	
23	14-16	NA	2	24/23	0-8" - Grayish brown SILTY CLAY, some plant fragments (roots), trace fine sand	
24			4		8-23" - Dark brown SILT, trace to some fine to medium sand, trace clay and plant fragments (roots), moist to wet, no staining, no odor	
25			4		PID = 0, 0, 0	
					End of boring at 16' bgs.	

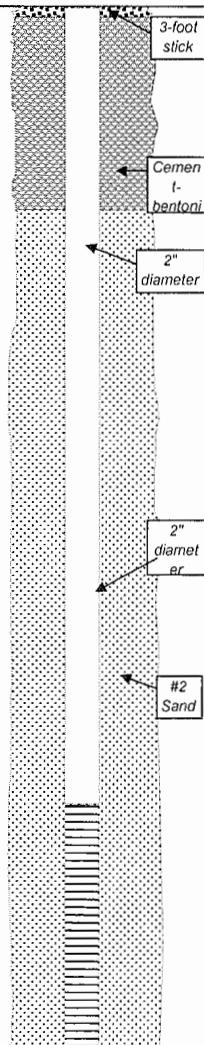




### SOIL BORING/WELL LOG (MW-5D)

Boring/Well ID:	MW-5D	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Steven Wallett	Site Address:	East 173rd Street, Bronx, NY
Date:	12/3/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	26'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	11.79	Drilling Method:	Hollow stem auger
Elevation (top of riser):	13.34		
<b>Well Construction:</b>			
Riser (from - to):	4' above grade to 21'	Bentonite Seal (from - to)	17' to 19'
Screen (from - to):	21' to 26'	Annular Fill Type/Depth:	NA
Screen Type/Size:	2-inch diameter 0.010 slot PVC	Cement Grout (from - to):	0' to 17'
Sand Pack (from - to):	19' to 26'	Well Cover Type:	3-Foot Stick-Up
Notes ** Analytical sample collected NA - not applicable		Proportions Used: Trace - 1-10% Little - 10-20%	Some - 20-30% And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows /6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description	WELL DIAGRAM
1					Hand cleared boring to 5' bgs.	
2						
3						
4						
5	4-6	31	63	24/2	FILL- dark brown silt and fine sand, dry, strong pine odor. Piece of wood in tip, drillers have difficulty drilling from 4.5-5.5' bgs	
6			36			
			13			
			12		PID = 2.5	
7	6-8	17	2	24/9	FILL- dark brown, silt and fine sand, with some fine gravel (rounded), dry, no odor, no staining. 2 pieces of 3/4" rock fragments at tip of spoon	
8			2			
			75			
			43		PID = 2.2	
9	8-10	2.2	13	24/20	FILL- 0-7" - Black SILT AND VERY FINE SAND, contains coarse sand sized pieces of coal. 7"-9" - Rock fragments - schist (angular) 9"-15" - Same as 0-7" 15"-17" - Quartz rock fragments. 17"-20" - Wood core pieces, wet, no odor, no sheen. PID = 0, 0, 0, 0	
10			45			
			65			
			80			
11	10-12	0	3	24/13	** FILL- 0-3" - Black VERY FINE SAND, dry, dusty/powder like 3"-13" - Dark brown - black SILT, some clay and fine sand with trace fine gravel, rounded to sub rounded, wet at tip of spoon, no odor, no sheen. 2 - 3/8" pieces of coal in tip. PID = 0, 0, 0	
12			4			
			4			
			6			
13	12-14	0	2	24/24	Dark Brown ORGANIC CLAY, some silt and fine sand and organic matter, low plasticity, wet, swampy odor, no stain, no sheen	
14			3			
			3		PID = 0, 0, 0, 0	
15	14-16	0	4	24/12	0-2" - Dark brown CLAY and SILT, trace fine sand. 2"-12" - Brown ORGANIC CLAY and SILT, some fine-medium sand, trace roots. 1/2" rock fragments at tip - schist (angular)	
16			2			
			5			
			5		PID = 0, 0, 0, 0	
17 (16-18)	0	2	24/11		0-10"- Brown, well sorted, FINE SAND, trace silt and medium sand. 10-11"- Brown FINE SAND, trace medium sand, few gravel, (angular to subangular) (black schist)	
18		4				
		5				
		7			PID=0, 0, 0	





### **SOIL BORING/WELL LOG (MW-5D)**

Boring/Well ID:	MW-5D	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Steven Wallett	Site Address:	East 173rd Street, Bronx, NY
Date:	12/3/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	26'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	11.79	Drilling Method:	Hollow stem auger
Elevation (top of riser):	13.34		
<b>Well Construction:</b>			
Riser (from - to):	4' above grade to 21'	Bentonite Seal (from - to)	17' to 19'
Screen (from - to):	21' to 26'	Annular Fill Type/Depth:	NA
Screen Type/Size:	2-inch diameter 0.010 slot PVC	Cement Grout (from - to):	0' to 17'
Sand Pack (from - to):	19' to 26'	Well Cover Type:	3-Foot Stick-Up
Notes ** Analytical sample collected NA - not applicable		Proportions Used: Trace - 1-10% Little - 10-20%	Some - 20-30% And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace (ppm)	Blows / 6 (inches)	Penetration Recovery (inches)	Soil/Geologic Description	WELL DIAGRAM
19	(18-20)	0	15 27 45	24/13	Brownish-red, poorly sorted, FINE to COARSE SAND, some fine to medium gravel, (subangular to round), wet, no sheen, so stain.	
20			51		PID=0, 0, 0	
21	(20-22)	0	28 46 33 40	24/19	0-7"- Brown, poorly sorted, FINE to COARSE SAND, trace silt. 7-19"- Brownish-red TILL- fine sand and silt, some fine to medium gravel, (subangular to angular). PID=0, 0, 0	
23	(22-24)	0	52 18 20 19	24/11	0-6"- Brown, well sorted, MEDIUM SAND. 6-11"- Brown SILT and FINE SAND. Very wet, loose. PID=0, 0, 0	
25	(24-26)	0	12 14 17	24/11	Brown, well sorted, FINE SAND, trace SILT, wet, no sheens, no staining, no odors.	
26			10		PID=0, 0, 0	
27	(26-28)	0	27 60 100/3"	15/14	** 0-2"- Brown, poorly sorted, FINE to COARSE SAND. 2-9"- Brown, well sorted, FINE SAND, trace silt, no stains, no odors. 9-15"- Brown TILL- fine sand, some silt and fine to medium gravel, (rounded), dense. PID=0, 0, 0	
28						



### SOIL BORING/WELL LOG (MW-6S)

Boring/Well ID:	MW-6S	Client:	Consolidated Edison of New York
Project Number:	013942	Project Name:	Supplemental Remedial Investigation
Logged By:	Sarah Battistini	Site Address:	East 173rd Street, Bronx, NY
Date:	12/2/2003	Contractor:	Jersey Boring and Drilling
Total Depth:	13'	Driller:	Dennis Keith and Louis Testio
Elevation in Bronx Highway Datum (NYDOT):	8.89	Drilling Method:	Hollow stem auger
Elevation (top of riser):	10.77		
<b>Well Construction:</b>			
Riser (from - to):	4' above grade to 10'	Bentonite Seal (from - to):	0-1' bgs.
Screen (from - to):	3' to 13'	Annular Fill Type/Depth:	# 2 Sand from 1-13' bgs.
Screen Type/Size:	2-inch diameter 0.010 slot PVC	Cement Grout (from - to):	NA
Sand Pack (from - to):	1' to 13'	Well Cover Type:	4-Foot Stick-Up
Notes ** Analytical sample collec:	Proportions Used: Trace - 1-10%		Some - 20-30%
NA - not applicable	Little - 10-20%		And - 30-50%

Depth (ft.)	Sample Interval (feet)	PID Headspace	Blows / 6 (inches)	Penetration / Recovery (inches)	Soil/Geologic Description	WELL DIAGRAM	
1					Hand cleared boring to 5' bgs.		
2							
3							
4							
5							
6	5-7	NA	6 53 21 23	24/14	FILL MATERIAL - Light brown and black fine to coarse sand, some silt and cobble fragments, dry, no staining, no odor		
7					PID = 0, 0, 0		
8	7-9	NA	9 100/1"	24/6	Dark gray to black SILT, some fine to medium sand fine gravel, crushed rock in tip of spoon, moist, no staining, no odor		
9					PID = 0		
10	9-11	NA	4 4 7 9	24/14	NOTE: Moved location approx. 1' east due to refusal - augered back 9' bgs. 0-12" - Brown SILT, some fine sand, moist, no staining, no odor 12-14" - Brown FINE to MEDIUM SAND, some silt, moist, no staining, no odor PID = 0, 0		
11							
12	11-13	NA	2 3 6 6	24/15	0-10" - Light brown FINE SAND, some silt, wet, no staining, no odor 10-15" - Brown MEDIUM to COARSE SAND, little silt, wet, no staining, no odor PID = 0, 0, 0		
13					End of boring at 13' bgs.		

