DuPont Pompton Lakes Works
2000 Cannonball Road
Pompton Lakes, NJ 07442

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June 30, 2010

Mr. Frank Faranca
NJDEP, Bureau of Case Management
401 East State Street
Trenton, NJ 08625

**RE: Northern Manufacturing Area Remedial Investigation Report**
**DuPont Pompton Lakes Works**
**Pompton Lakes, New Jersey**
**SRP PI# 007411**

Dear Mr. Faranca:

Enclosed for review please find three electronic copies and one hard copy of the Remedial Investigation Report for the DuPont Pompton Lakes Works, Northern Manufacturing Area.

If you have any questions, please contact Al Boettler at (302) 892-0647 or myself at (973) 492-7733.

Sincerely,

David E. Epps

David E. Epps, P.G.
Project Director, Pompton Lakes Works
DuPont Corporate Remediation Group

cc: Clifford Ng, USEPA Region II (1 hard copy, 3 CD)
PLW Central File

**New Jersey Department of Environmental Protection**
Site Remediation Program

# REMEDIAL INVESTIGATION REPORT FORM

☒ Non-LSRP (Existing Cases) ☐ LSRP ☐ Subsurface Evaluator

**Date Stamp**
**(For Department use only)**

## SECTION A. SITE NAME AND LOCATION

Site Name: DuPont Pompton Lakes Works Site - Northern Manufacturing Area

List all AKAs: Lake Region; NRD Parcel

Street Address: 2000 Cannonball Road

Municipality: Borough of Pompton Lakes (Township, Borough or City)

County: Passiac Zip Code: 07442

Mailing Address if different than street address:

Program Interest (PI) Number(s): 007411 Case Tracking Number(s):

Date Remediation Initiated Pursuant to N.J.A.C. 7:26C-2.2 or 2.3(b):

State Plane Coordinates for a central location at the site: Easting: 551972 ft Northing: 799618 ft

Municipal Block(s) and Lot(s): Block # 479 Lot # 3

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Block # | 479 | Lot # | 4 | Block # | | Lot # | |
| Block # | 479 | Lot # | 5 | Block # | | Lot # | |
| Block # | | Lot # | | Block # | | Lot # | |
| Block # | | Lot # | | Block # | | Lot # | |

## SECTION B. REQUIRED TECHNICAL SUBMITTALS

| | Not Applicable | Included in this Submission | Previously Submitted | Date of Submission | Date of Revised Submission |
|---|---|---|---|---|---|
| Immediate Environmental Concern Report | ☒ | ☐ | ☐ | | |
| Immediate Response Action Plans | ☒ | ☐ | ☐ | | |
| Preliminary Assessment Report | ☐ | ☐ | ☒ | 04/29/1996 | |
| Receptor Evaluation | ☒ | ☐ | ☐ | | |
| Site Investigation Report | ☐ | ☐ | ☒ | 06/12/2003 | |
| Remedial Investigation/Remedial Action Work Plan | ☐ | ☐ | ☒ | 06/12/2003 | |
| Feasibility Study Report | ☒ | ☐ | ☐ | | |
| Response Action Outcome Report | ☒ | ☐ | ☐ | | |
| Permit Application | ☒ | ☐ | ☐ | | |

## SECTION C. SITE USE

**Current Site Use (check all that apply)**

- ☒ Industrial
- ☐ Residential
- ☐ Commercial
- ☐ School or child care
- ☐ Other
- ☐ Agricultural
- ☐ Park or recreational use
- ☐ Vacant
- ☐ Government

**Intended Future Site Use, if known (check all that apply)**

- ☐ Industrial
- ☐ Residential
- ☐ Commercial
- ☐ School or child care
- ☒ Park or recreational use
- ☐ Vacant
- ☒ Government
- ☐ Future site use unknown

**SECTION D. PUBLIC FUNDS**

Did the remediation utilize public funds? ☐ Yes ☒ No

If "Yes," check applicable: ☐ UST Grant ☐ UST Loan ☐ Brownfield Reimbursement Program
☐ HDSRF Grant ☐ HDSRF Loan ☐ Landfill Reimbursement Program
☐ Spill Fund ☐ Schools Development Authority

**SECTION E. SCOPE OF THE REMEDIAL INVESTIGATION REPORT**

☒ Area(s) of Concern Only (If submitted for specific AOC(s), attach Section H2 of the PA/SI form.)
☐ Full Site (based on a completed and submitted Preliminary Assessment/Site Investigation)

Is the Remedial Investigation complete? ☒ Yes ☐ No

**SECTION F. SITE CONDITIONS**

1. Check each media-type and highest concentration of contamination currently present above any applicable standards/criteria:

| **Soil in ppm** | | | | | | **GW = Ground Water in ppb** | | | | | **SW = Surface Water in ppb** | | | | | **Sed = Sediment in ppm** | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Soil ppm | GW ppb | SW ppb | Sed ppm | | Soil ppm | GW ppb | SW ppb | Sed ppm | | Soil ppm | GW ppb | SW ppb | Sed ppm | |
| *VOCs | ☐ | ☐ | ☐ | ☐ | <100 | ☐ | ☐ | ☐ | ☐ | 100–1,000 | ☐ | ☐ | ☐ | ☐ | >1,000 |
| *SVOCs | ☒ | ☐ | ☐ | ☐ | <100 | ☐ | ☐ | ☐ | ☐ | 100–1,000 | ☐ | ☐ | ☐ | ☐ | >1,000 |
| *PAHs | ☒ | ☐ | ☐ | ☐ | <10 | ☐ | ☐ | ☐ | ☐ | 10–100 | ☐ | ☐ | ☐ | ☐ | >100 |
| *Metals | ☐ | ☐ | ☐ | ☐ | <100 | ☐ | ☐ | ☐ | ☐ | 100–1,000 | ☒ | ☐ | ☐ | ☐ | >1,000 |
| PCBs | ☐ | ☐ | ☐ | ☐ | <10 | ☐ | ☐ | ☐ | ☐ | 10–100 | ☐ | ☐ | ☐ | ☐ | >100 |
| *Pesticides | ☐ | ☐ | ☐ | ☐ | <1 | ☐ | ☐ | ☐ | ☐ | 1-10 | ☐ | ☐ | ☐ | ☐ | >10 |
| Dioxin (ppb) | ☐ | ☐ | ☐ | ☐ | <1 ppb | ☐ | ☐ | ☐ | ☐ | 1-10 ppb | ☐ | ☐ | ☐ | ☐ | >10 ppb |
| Chromium | ☐ | ☐ | ☐ | ☐ | <100 | ☐ | ☐ | ☐ | ☐ | 100–1,000 | ☐ | ☐ | ☐ | ☐ | >1,000 |
| Mercury | ☒ | ☐ | ☐ | ☐ | <100 | ☐ | ☐ | ☐ | ☐ | 100–1,000 | ☐ | ☐ | ☐ | ☐ | >1,000 |
| Arsenic | ☐ | ☐ | ☐ | ☐ | <10 | ☐ | ☐ | ☐ | ☐ | 10–100 | ☒ | ☐ | ☐ | ☐ | >100 |
| TPHC | ☐ | | | ☐ | <1,700 | ☐ | | | ☐ | 1,700–5,100 | ☐ | | | ☐ | >5,100 |

2. For any contaminant group (*) checked above, identify the compound/element with the highest concentration over its applicable remediation standard:

Benzo(a)Pyrene | Lead | | | |

3. Were the laboratory reporting minimum detection limits below applicable remediation standards/ criteria required for the site? ☒ Yes ☐ No

4. Are any of the following conditions currently present (check all that apply):

**Groundwater:**

☒ Contaminated ground water in the overburden aquifer
☐ Contaminated ground water in a confined aquifer
☒ Contaminated ground water in the bedrock aquifer
☒ Contaminated ground water in multiple aquifer units
☐ Multiple distinct ground water plumes
☒ Contaminated ground water migrating off-site
☐ Co-mingled on-site ground water plumes
☐ Co-mingled ground water plumes from both on-site and off-site sources
☒ Contaminated ground water discharging to surface water
☐ Residual or free product
☐ Radionuclides

**Soil:**

☒ On-site discharge(s) impacting soil off-site
☐ Chromate Production Waste
☒ Munitions and explosives of concern
☒ Contaminated soil in the saturated zone
☐ Historic pesticide impacts to soil
☐ Residual or free product
☐ Radionuclides
☐ Historic Fill
☐ Soil contamination due to naturally occurring background conditions

## SECTION G. APPLICABLE REMEDIATION STANDARDS

Indicate the Remediation Standards used for all compounds (check all that apply).

☒ Default (check all that apply below)
☒ Direct Contact ☒ Impact to Groundwater Soil Screening Levels ☐ Ecological Screening Levels

☐ Alternate Remediation Standards for the Ingestion/Dermal Pathway

☐ Alternate Remediation Standards for the Inhalation Pathway

☐ Site Specific Standards for the Impact to Groundwater Pathway (check all that apply below)
☐ Soil-Water Partitioning Equation ☐ SPLP ☐ Sesoil ☐ Sesoil/AT123D

☐ Ecological Remediation Goals

What is the ground water classification for this site as per N.J.A.C. 7:9C (check all that apply)?

☐ Class I-A ☒ Class II-A
☐ Class I-PL Pinelands Protection Area ☐ Class III-A
☐ Class I-PL Pinelands Preservation Area ☐ Class III-B

## SECTION H. BACKGROUND CONDITIONS

1. Have all contaminants found in soil and ground water on site been linked to on-site areas of concern? ☒ Yes ☐ No
2. Did the RI demonstrate via a background investigation, outside the influence of on-site AOCs **and** operational areas, that:
   a. all or any part of the ground water contamination is migrating onto this site per N.J.A.C. 7:26E-3.7(g)? ☐ Yes ☐ No ☒ NA
   b. soil contamination is naturally occurring per N.J.A.C. 7:26E-3.10 ☐ Yes ☐ No ☒ NA

## SECTION I. ALTERNATIVE STANDARD / DEVIATIONS

**Alternative remediation standard**

If proposing an alternative remediation standard pursuant to N.J.A.C. 7:26D-7.4, check here and attach the Alternative Soil Remediation Standard Application Form as an addendum. ☐

**Deviation from regulations**

If the Licensed Site Remediation Professional has varied from the Technical Rules, provide the citation(s) from which the remediation varied and the page(s) in the attached document where the rationale for the deviation is provided.

N.J.A.C. 7:26E- _____ Page _____
N.J.A.C. 7:26E- _____ Page _____
N.J.A.C. 7:26E- _____ Page _____

## SECTION J. HISTORIC FILL

1. The presence of historic fill is supported by (check all that apply):
   ☐ Boring logs ☐ Test Pits ☐ Trenches ☐ Aerial Photos ☐ NJDEP Mapped Areas
   ☐ No historic fill identified at the site. If none, skip to K. below.
2. How was the historic fill characterized pursuant to N.J.A.C. 7:26E-4.6 (check all that apply)?
   ☐ Samples were collected outside areas potentially impacted by on-site operations (i.e., AOC(s))
   ☐ Contaminant levels in Table 4.2 at N.J.A.C. 7:26E-4.6
3. Are any other AOCs (i.e. location of discharge and any contaminants that may have migrated from that area) located within the defined boundaries of the historic fill? ☐ Yes ☐ No
   If "No," skip to K. below
4. Have the same contaminant type(s) (e.g., lead, arsenic, and/or benzo(a)pyrene, etc.) characterized as being present in the historic fill been **sampled for** as a contaminant of concern at these co-located AOCs? ☐ Yes ☐ No

## SECTION K. GROUND WATER TRIGGER

Was a ground water investigation conducted at all AOCs where a ground water investigation was triggered pursuant to N.J.A.C. 7:26E-4.4 (a)? ☐ Yes ☐ No ☒ NA

**SECTION L. GROUND WATER REMEDIAL INVESTIGATION INFORMATION**

1. Were any monitor wells installed in unconfined aquifers in which the water table is higher than the top of the well screen? ☐ Yes ☐ No

   If "Yes," identify the affected wells _____

2. If ground water in the bedrock aquifer is contaminated, were bedrock cores collected and/or were geophysical logging methods conducted to characterize the bedrock aquifer pursuant to N.J.A.C. 7:26E-4.4(g)5? ☐ Yes ☐ No ☐ NA

**SECTION M. LABORATORY DATA**

1. Were all data submitted in the appropriate full and/or reduced formats according to the deliverables defined in N.J.A.C. 7:26E-2? ☒ Yes ☐ No
2. Do all data submitted meet the quality assurance/quality control (QA/QC) requirements incorporated by reference in N.J.A.C. 7:26E-2 for:
   sampling ☒ Yes ☐ No
   analysis ☒ Yes ☐ No
3. How was it determined that the data complied with the QA/QC requirements?
   ☒ Laboratory non-conformance summary/narrative
   ☒ Laboratory correspondence
   ☐ LSRP review
   ☒ Independent contractor review
   ☐ Other: _____
4. Has any data been qualified and used? ☐ Yes ☒ No
5. Has any data been rejected and used? ☐ Yes ☒ No
6. If clean fill has been brought onto the site, has it been analyzed? ☐ Yes ☐ No
7. Comments:

**SECTION N. MISCELLANEOUS**

1. Were any regulated USTs identified during the course of the RI that were not previously known? ☐ Yes ☒ No

   If "Yes," list tank size, contents and registration number(s). _____

2. If "Yes," to item M.1. above and if these USTs were Federally Regulated, was the source/cause of release identified on a Confirmed Discharge Notification form? ☐ Yes ☐ No

   If "No," complete and submit a revised Confirmed Discharge Notification form.

3. Identify Remedial Measures (RMs) conducted during the RI (check all that apply):
   ☐ Soil excavation
   ☐ Potable water supply treatment or replacement
   ☐ Hydraulic containment of source area
   ☐ Soil vapor extraction
   ☐ Enhanced fluid recovery (EFR)
   ☐ UST closure
   ☐ Free product recovery
   ☐ Vapor intrusion mitigation
   ☐ No RMs were conducted during the RI
   ☐ Other(s), specify: _____
4. Did the remedial investigation include sampling to characterize any on-site contaminated media for either on-site or off-site reuse? ☐ Yes ☒ No
5. Has new information (material facts, data or other information) been generated during the RI that corrects or contradicts information, or changes conclusions from, previously submitted reports or information? ☐ Yes ☒ No

   If "Yes," explain: _____

**SECTION O. PERSON RESPONSIBLE FOR CONDUCTING THE REMEDIATION INFORMATION AND CERTIFICATION**

Full Legal Name of the Person Responsible for Conducting the Remediation: Isidoros J. Zanikos

Representative First Name: Isidoros Representative Last Name: Zanikos

Title: Remediation Team Mgr - NJ

Phone Number: 302 999 3844 Ext: Fax:

Mailing Address: CRG - Chestnut Run 715-205 Rt 141 & Faukland Rd

City/Town: Wilmington State: De Zip Code: 19805

Email Address: Isidoros.j.zanikos@usa.dupont.com

Developer Certification Included ☐ or Filed Date of Filing

This certification shall be signed by the person responsible for conducting the remediation who is submitting this notification in accordance with Administrative Requirements for the Remediation of Contaminated Sites rule at N.J.A.C. 7:26C-1.5(a).

*I certify under penalty of law that I have personally examined and am familiar with the information submitted herein, including all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.*

Signature: Isidoros J Zanikos Date: 6/30/10

Name/Title: Isidoros Zanikos **No Changes Since Last Submittal** ☐

Remediation Team Mgr. NJ

**SECTION P. NON-LSRP SITE REMEDIATION PROFESSIONAL STATEMENT**

First Name: Daniel Last Name: Stettner

Phone Number: (973) 492-7723 Ext: Fax: (973) 492-7749

Mailing Address: 2000 Cannonball Road

City/Town: Borough of Pompton Lakes State: NJ Zip Code: 07442

Email Address: Daniel.Stettner@Parsons.com

*I believe that the information contained herein, and including all attached documents, is true, accurate and complete.*

Signature: Date:

Name/Title: Daniel J. Stettner/Senior Field Project Manager

Company Name: Parsons

Completed forms should be sent to:

Bureau of Case Assignment & Initial Notice
New Jersey Department of Environmental Protection
Site Remediation Program
401 East State Street, PO Box 434
Trenton, NJ 08625

**H2. Areas of Concern (For PA or PA/SI Report, list each AOC; for SI Report, list only AOCs documented in this submittal.)**

| | Area of Concern | Currently Exists? ☒ if "Yes" | Formerly Existed? ☒ if "Yes" | Investigation: SI Conducted ☒ if "Yes" | Investigation: RI Proposed ☒ if "Yes" |
|---|---|---|---|---|---|
| 1 | Above ground storage tank and associated piping | ☐ | ☐ | ☐ | ☐ |
| 2 | Area of stressed vegetation | ☐ | ☐ | ☐ | ☐ |
| 3 | Area which receives flood or storm water from potentially contaminated areas | ☒ | ☒ | ☒ | ☒ |
| 4 | Chemical storage cabinet and closet | ☐ | ☐ | ☐ | ☐ |
| 5 | Compressor vent discharge | ☐ | ☐ | ☐ | ☐ |
| 6 | Discharge area pursuant to N.J.A.C. 7:1E | ☐ | ☐ | ☐ | ☐ |
| 7 | Discolored or spill area | ☐ | ☐ | ☐ | ☐ |
| 8 | Drainage swale and culvert | ☐ | ☐ | ☐ | ☐ |
| 9 | Drywell and sump | ☐ | ☐ | ☐ | ☐ |
| 10 | Dumpster | ☐ | ☐ | ☐ | ☐ |
| 11 | Electrical transformer and capacitor | ☐ | ☐ | ☐ | ☐ |
| 12 | Floor drain collection system | ☐ | ☐ | ☐ | ☐ |
| 13 | Former agricultural applied pesticide area | ☐ | ☐ | ☐ | ☐ |
| 14 | Hazardous material storage or handling area | ☐ | ☐ | ☐ | ☐ |
| 15 | Historic fill or any other fill material | ☐ | ☐ | ☐ | ☐ |
| 16 | Hydraulic lift | ☐ | ☐ | ☐ | ☐ |
| 17 | Incinerator | ☐ | ☐ | ☐ | ☐ |
| 18 | Landfill or landfarm | ☐ | ☐ | ☐ | ☐ |
| 19 | Loading and unloading area | ☐ | ☐ | ☐ | ☐ |
| 20 | Non-contact cooling water discharge | ☐ | ☐ | ☐ | ☐ |
| 21 | Open area away from production area | ☒ | ☒ | ☒ | ☒ |
| 22 | Piping, above ground and below ground pumping station, sump and pit | ☐ | ☐ | ☐ | ☐ |
| 23 | Process area sink and piping which receive process waste | ☐ | ☐ | ☐ | ☐ |
| 24 | Rail car | ☐ | ☐ | ☐ | ☐ |
| 25 | Roof leader when process operations vent to the roof | ☐ | ☐ | ☐ | ☐ |
| 26 | Septic system, leachfield or seepage pit | ☐ | ☐ | ☐ | ☐ |
| 27 | Silo | ☐ | ☐ | ☐ | ☐ |
| 28 | Sprayfield | ☐ | ☐ | ☐ | ☐ |
| 29 | Storage pad including drum and/or waste storage | ☐ | ☐ | ☐ | ☐ |
| 30 | Storm sewer and spill containment collection system | ☐ | ☐ | ☐ | ☐ |
| 31 | Storm water detention pond and fire pond | ☐ | ☐ | ☐ | ☐ |
| 32 | Surface impoundment and lagoon | ☐ | ☐ | ☐ | ☐ |
| 33 | Surface water body | ☒ | ☒ | ☒ | ☒ |
| 34 | Underground piping including industrial process sewer | ☐ | ☐ | ☐ | ☐ |
| 35 | Underground storage tank and associated piping | ☐ | ☐ | ☐ | ☐ |
| 36 | Waste pile as defined by N.J.A.C. 7:26 | ☐ | ☐ | ☐ | ☐ |
| 37 | Waste water treatment | ☐ | ☐ | ☐ | ☐ |
| 38 | Other: Former Ballistite Mfg - Decommissioned in 1926. | ☐ | ☒ | ☐ | ☐ |

## LEGEND

- Monitoring Well
- Grounwater Flow Direction
- Water Body
- Former Structure
- Existing Structure
- Property Boundary
- Area of Concern (AOC)
- Interim Remedial Measure (IRM)

N
W E
S

0 100 200 400 Feet

WANAQUE RIVER

ROUTE 287

AOC 117 AOC 119 AOC 113 AOC 151 AOC 150 AOC 149 AOC 148 AOC 201 AOC 200 AOC 147 AOC 146 AOC 112 AOC 199 AOC 202 AOC 115 AOC 116 AOC 114 AOC 111 AOC 145 AOC 110 AOC 108 AOC 109 AOC 197 AOC 196 AOC 195 AOC 107 IRM AOC 193 IRM AOC 194 & 198 IRM

AOC 135 AOC 14 AOC 15 AOC 134 AOC 136 AOC 133 AOC 16 AOC 132 AOC 131 AOC 13 AOC 123 AOC 124 AOC 118 IRM AOC 129 AOC 125 AOC 130 AOC 127 AOC 126 AOC 128 AOC 17 AOC 19 AOC 18 AOC 20 AOC 21 AOC 155 AOC 23 AOC 152 AOC 11 AOC 22 AOC 153 AOC 156 AOC 24 AOC 154 AOC 137 AOC 26 AOC 191 AOC 10 AOC 118 IRM AOC 32 AOC 28 AOC 25 AOC 12 AOC 37 AOC 33 AOC 187 AOC 39 AOC 31 AOC 30 AOC 8 AOC 138 AOC 159 AOC 34 AOC 9 AOC 38 AOC 40 AOC 36 AOC 29 AOC 7 AOC 3 AOC 41 AOC 42 AOC 43 AOC 4 AOC 2 AOC 158 AOC 45 AOC 160 AOC 46 AOC 44 AOC 163 AOC 140 AOC 51 AOC 47/48 AOC 161 AOC 188 AOC 162 AOC 164 AOC 139 AOC 54 AOC 165 AOC 141 AOC 49 AOC 52 AOC 166 AOC 56, 57, 58, 59 IRM AOC 142 AOC 55 AOC 53 AOC 62 AOC 60-61 IRM AOC 63 AOC 64 AOC 167 AOC 68 AOC 65 AOC 66 AOC 189 AOC 67 AOC 69 AOC 190 AOC 72 AOC 171 AOC 74 IRM AOC 143 AOC 70 AOC 144 AOC 71 AOC 75 AOC 76 AOC 172 AOC 73 AOC 173 AOC 168 AOC 74 AOC 169 AOC 79 AOC 77 AOC 170 AOC 78 AOC 176 AOC 174 AOC 80/81 AOC 82 AOC 83 AOC 175 AOC 1 9A AOC 84 AOC 85 AOC 99 AOC 102-IRM AOC 86 AOC 185 AOC 180 AOC 87/179 AOC 183 AOC 121 AOC 122 AOC 89 AOC 90 AOC 184 AOC 97 AOC 88 AOC 120 AOC 91 AOC 94 AOC 96 AOC 92 AOC 100 AOC 93 AOC 95 AOC 181 AOC 178 AOC 177 AOC 104-105 IRM AOC 1 IRM AOC 118 IRM AOC 193 IRM West Bank IRM

141-D 133R 127S 215R 217R 229 228 24 23 29 30 13 12 9 10 6 5 7 5A 61 105A-I 107-D 107-I 107R 106-D 106R 106-I 126-D 126-I 3A 104-I 71I 125R 125-D 125-I 134 136 135 137-D 137-S 137-I 128-I 128-D 128 26 26-I 26-D 145-S 142-S 142-D 144-S 143-D 143-S

CANNONBALL ROAD
TOWARD STREET
DUPONT PLACE
PARK AVENUE EAST
VALBRUNA STAINLESS

TITLE:

CASE INVENTORY DOCUMENT MAP
EASTERN MANUFACTURING AREA
DUPONT POMPTON LAKES WORKS
POMPTON LAKES, NJ

PARSONS
200 COTTONTAIL LANE SOUTH
SOMERSET, NJ 08873

| | |
|---|---|
| CREATED BY: TLM | DATE: 6/27/2010 |
| CHECKED BY: DJS | APPD BY: DJS |
| JOB NUMBER: 445298.01005 | |
| FILE NAME: EMA_CID_Map_final.mxd | |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 1 | North | Old Cap Destruction Facility (Old Shooting Pond) | Soil | Copper, Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RA: IRM conducted in 1990 to prevent the migration of contaminants to AOC 5. The IRM included the removal of impacted materials, milling of the material to detonate any live blasting caps, off-site disposal of the material, the creation of a retention basin and the implementation of erosion control measures. Interim Measure Completed and Approved by NJDEP January 30, 1992. Additional delineation of the buffer area surrounding the IRM was undertaken starting in 2001. RI: Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation performed and completed in 2003-2007. Phase 3 remedial investigation performed and completed in 2008. Additional delineation sampling implemented 4th quarter of 2009. Lead and Mercury were detected in excess of the NR SRS. Copper, Lead, Manganese and Mercury were detected in excess of the IGW SRS. Onsite Delineation to NR SRS complete. Delineation to RDC SRS at the property boundary with Ramapo State Forest is required. **Remedial investigation report scheduled for June 2010.** |
| 2 | North | Upper Burning Ground | Soil | Copper, Lead, Mercury. | Soil | None | Direct Contact, Ground Water | RA: IRM conducted on area to remove cage and erosion control fencing installed in two places along the down-gradient slope, approximately 30 feet and 70 to 90 feet from the former burning cage. Resource Conservation and Recovery Act (RCRA) Closure Pending. RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008. Lead and was detected in excess of the NR SRS. Lead and Mercury were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 3 | North | Old Lead Recycling Area | Soil | Lead, Mercury. | Soil | None | Direct Contact, Ground Water | RA: An interim stabilization measure (ISM) was conducted in October 1996. Visible pieces of lead tubing were covered and the area seeded. Silt fencing was installed to help control erosion from the area. RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008. Lead was detected in excess of the NR SRS. Lead and Mercury were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 4 | North | Sludge Pile and Burning Pit | Soil | Copper, Lead, Mercury. | Soil | None | Direct Contact, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Lead and Mercury was detected in excess of the NR SRS. Copper, Lead and Mercury were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 5 | North | Shooting Pond | Soil | Copper, Lead, Mercury, Selenium | Soil | None | Direct Contact, Surface Water, Ground Water | RA: **Remediation/closure activities occurred from the latter part of 1990 into early 1991**. Remediation activities entailed the excavation of the dredged materials from Acid Brook just up- and down-stream of AOC5/6, milling of the excavated material to detonate any live blasting caps, and off-site disposal of the material. **Confirmation sampling results were presented in the report entitled, Shooting Pond Confirmation Soil Sampling Results, D&M, February 1991.** The wetland restoration took place in mid-1991, and **the shooting pond received RCRA final closure from the NJDEP in their letter dated August 8, 1991**. The document, "Operational History", was submitted to NJDEP in February 1989. RCRA Final Closure Approved August 8, 1991 by NJDEP. |
| 6 | North | Shooting Pond Sludge Pile | Soil | Copper, Lead, Mercury, Selenium | Soil | None | Direct Contact, Surface Water, Ground Water | RA: **Remediation/closure activities occurred from the latter part of 1990 into early 1991**. Remediation activities entailed the excavation of the dredged materials from Acid Brook just up- and down-stream of AOC5/6, milling of the excavated material to detonate any live blasting caps, and off-site disposal of the material. **Confirmation sampling results were presented in the report entitled, Shooting Pond Confirmation Soil Sampling Results, D&M, February 1991.** The wetland restoration took place in mid-1991, and **the shooting pond received RCRA final closure from the NJDEP in their letter dated August 8, 1991**. The document, "Operational History", was submitted to NJDEP in February 1989. RCRA Final Closure Approved August 8, 1991 by NJDEP. |
| 7 | North | Zirconium Disposal Area | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. No compounds were detected in excess of the NR SRS. Lead and Mercury were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |



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# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 8 | North | Mercury Fulminate/Lead Azide Storage Tank A | Soil | Lead, Mercury. | Soil | None | Direct Contact, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No compounds were detected in excess of the NR SRS. Lead and Mercury were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 9 | North | Mercury Fulminate/Lead Azide Storage Tank B | Soil | Lead, Mercury. | Soil | None | Direct Contact, Ground Water | RI: Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on change in June 2008 NJDEP impact to soil screening criteria. Additional delineation sampling conducted in the 4th quarter of 2009 and the 1st quarter of 2010. Mercury was detected in excess of the NR SRS. Lead and Mercury were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 10 | North | Mercury Fulminate/Lead Azide Storage Tank C | Soil | Lead, Mercury. | Soil | None | Direct Contact, Ground Water | RI: Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on results of previous sampling events. Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010. Lead was detected in excess of the NR SRS. Lead and Mercury were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 11 | North | Buried Rags | Soil | Lead. | Soil | None | Direct Contact, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Lead was detected in excess of the NR SRS. Lead was detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 12 | North | Mercury Fulminate Platform | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Mercury was detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 13 | North | Powder Dry House Impoundment | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Mercury was detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 14 | North | 50/25/25 Drain Filter Tank | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. No compounds were detected in excess of the NR SRS. Lead and Mercury were detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 15 | North | Figure 8 Sludge Bowl Dump | Soil | Antimony, Beryllium, Cadmium, Lead, Mercury, Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Began during Phase 3. Delineation sampling completed in 2008 / 2009. Lead was detected in excess of the NR SRS. Antimony, Beryllium, Cadmium, Lead, Mercury and Zinc were detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 16 | North | Mop Station No.1 | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. No compounds were detected in excess of the NR SRS. Lead and Mercury were detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 17 | North | Mop Station No. 2 | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. No compounds were detected in excess of the NR SRS. Lead and Mercury were detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 18 | North | Lead Azide Ponds (3) (also AOC 19) | Soil, ground water | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Lead detected in excess of NR SRS. Lead and Mercury were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 19 | North | Lead Azide Tanks (3) (also AOC 18) | Soil, ground water | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Remedial investigation report scheduled for 2010. Lead detected in excess of NR SRS. Lead and Mercury were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 20 | North | Mop Station No. 3 | Soil | Mercury | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. No exceedances of NR SRS. Mercury detected in excess of IGW SRS. Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010. |
| 21 | North | RDX/PETN Impoundment | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Lead exceeds NR SRS. Lead delineation complete within the boring. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 22 | North | Lead Salt Lagoons | Soil | Lead, Mercury | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Delineation of lead completed to NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 23 | North | Sodium Azide Pit | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. No exceedances of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 24 | North | Sodium Azide Rinse water | Soil | Beryllium, Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Lead detected in excess of NR SRS. Delineation completed within the boring. Beryllium, lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 25 | North | Lead Nitrate Waste Water | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Lead detected in excess of NR SRS. Lead and mercury detected in excess of IGW SRS. Phase 3 delineation sampling completed in 2008 / 2009. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 26 | North | Mercury Fulminate/Lead Azide Storage Tank D | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Mercury detected in excess of NR and IGW SRS. **Delineated within the same boring. Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 27 | North | Mercury Fulminate Platform | Soil | Lead. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Delineation of lead completed to NR SRS. Lead detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 28 | North | Lead Styphnate Pit | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No exceedances of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 29 | North | Lead Styphnate Deactivation Shed 1 | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Mercury detected in excess of NR SRS. Lead and mercury detected in excess of IGW SRS. Phase 3 delineation sampling completed in 2008 / 2009 conducted in concert with AOC 30. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 30 | North | Lead Styphnate Deactivation Runoff Area | Soil | Lead. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009 conducted in concert with AOC 29. Lead detected in excess of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 31 | North | Mercury Fulminate/Lead Azide Storage Tank E | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. **Delineated to NRDC SCC.** Mercury present in excess of NR and IGW SRS. **Remedial investigation report scheduled for June 2010.** |
| 32 | North | Mop Station No. 4 | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No compounds detected in excess of NR SRS. Mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 33 | North | Triple Filter Collection Tank | None | None | None | None | None | **No further action is required by NJDEP for AOC 33, Triple Filter Collection Tank, as stated in their letter dated December 12, 1989.** |
| 34 | North | Mop Station No 5 | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. **Delineated to NRDC SCC within the boring.** Mercury detected in excess of NR and IGW SRS. Lead detected in excess of IGW SRS. **Remedial investigation report scheduled for June 2010.** |
| 35 | North | Mop Station No.6 | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. **Delineated to NRDC SCC within the boring.** Lead and mercury detected in excess of NR and IGW SRS. **Remedial investigation report scheduled for June 2010.** |
| 36 | North | Powder Transfer Sump(s) | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 37 | North | Laboratory Sump | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 38 | North | Mop Station No. 7 | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 39 | North | North Biazzi Dryer Baffle Box | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 40 | North | Biazzi Alcohol/Water Sump | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 41 | North | South Biazzi Dryer Baffle Box | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 42 | North | Barium Peroxide/ Selenium Mix House | Soil | Lead, Mercury, Selenium. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Lead, mercury and selenium detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 43 | North | Mop Station No. 8 | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. **Delineation completed within boring.** Lead and mercury detected in excess of NR and IGW SRS. **Remedial investigation report scheduled for June 2010.** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 44 | North | Mop Station No. 9 | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 45 | North | Mop Station No. 10 | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Lead and mercury detected in excess of NR and IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 46 | North | Mop Station No. 11 | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Mercury detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 47 | Mid | Black Powder Mill | Soil | Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Beryllium, Cadmium, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Lead, Mercury, Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RA: Interim Measure Completed in 1991.<br><br>RI: Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation performed and completed in 2003-2007. Phase 3 remedial investigation performed and completed in 2008. Additional delineation sampling conducted in the 4th quarter of 2009. PAHs, beryllium, cadmium, lead, mercury and zinc in excess of IGW SRS. Lead, mercury and PAHs in excess of NR SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 48 | Mid | Delay Tube Manufacturing | Soil | | Soil | None | Direct Contact, Surface Water, Ground Water | RA: Interim Measure Completed in 1991.<br><br>RI: Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation performed and completed in 2003-2007. Phase 3 remedial investigation performed and completed in 2008. Additional delineation sampling conducted in the 4th quarter of 2009. PAHs, beryllium, cadmium, lead, mercury and zinc in excess of IGW SRS. Lead, mercury and PAHs in excess of NR SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 49 | Mid | Mop Station No 12 | Soil | Beryllium, Lead, Mercury, Selenium. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Beryllium, lead, mercury and selenium detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 50 | Mid | Sawdust Rumbler | Soil | Benzo(a)Anthracene, Benzo(b)Flouranthene, Benzo(a)Pyrene, Dibenz(a,h)Anthracene, Indeno,(1,2,3-cd)Pyrene, Beryllium, Lead, Mercury, Selenium, Zinc | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on changes in the June 2008 NJDEP impact to soil screening criteria. Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010. Benzo(a)Anthracene, Benzo(b)Flouranthene, Benzo(a)Pyrene, Dibenz(a,h)Anthracene, Lead, Mercury detected in excess of NR SRS. Benzo(a)Anthracene, Benzo(b)Flouranthene, Benzo(a)Pyrene, Dibenz(a,h)Anthracene, Indeno,(1,2,3-cd)Pyrene, Beryllium, Lead, Mercury, Selenium, Zinc detected in excess of IGW SRS. **Delineation generally complete. Remedial investigation report scheduled for June 2010.** |
| 51 | Mid | Mop Station No. 13 (within AOC 164) | Soil | Barium, Benzo(a)pyrene, Beryllium, Cadmium, Lead, Mercury, Selenium, Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Benzo(a)pyrene, Lead, Mercury detected in excess of the NR SRS. Barium, Benzo(a)pyrene, Beryllium, Cadmium, Lead, Mercury, Selenium, Zinc detected in excess of the IGW SRS. AOC 51 is located within AOC 140 and is delineated in concert with AOC 140. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 52 | Mid | Mercury Fulminate Storage Building | Soil | None | Soil | None | Direct Contact, Surface Water, Ground Water | RA: Interim Measures Completed February 1997 for entire length of Brook including AOC 52. The remediation of Acid Brook took place in six phases. The investigation and remediation activities performed in AOC 118 are summarized in the On-Site Acid Brook Project Remedial Action Report, dated March 26, 1999, in which DuPont requested a no further action letter from NJDEP for AOC 118. Exploratory Sampling Data Submitted to NJDEP on April 12, 1991. Interim Measure Completed as Part of AOC 118 Interim Measure in 1996.<br><br>RI: DuPont revisited the mercury exceedance of the NR SRS in boring 52-2 Phase 3 delineation sampling completed in 2008. Mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 53 | Mid | Mop Station No. 14 | Soil | Beryllium, Lead, Mercury, Selenium, Tetrachloroethylene. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Exploratory Sampling Data Submitted to NJDEP on April 12, 1991.<br><br>RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Lead and mercury exceed NR SRS. **Delineation completed within the boring.** Tetrachloroethene, beryllium, lead, mercury and selenium in excess of IGW SRS. **Remedial investigation report scheduled for June 2010.** |
| 54 | Mid | Mop Station No. 15 (within AOC 165) | Soil | Beryllium, Lead, Mercury, Selenium. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Lead and mercury exceed NR SRS. Beryllium, lead, mercury and selenium in excess of IGW SRS. Remedial investigation report scheduled for 2010. Because AOC 54 and AOC 142 are mop stations located within former building FA-206 (AOC 165), the lead and mercury exceedances will be delineated within the larger AOC 165. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 55 | Mid | Cap Pressing Area | Soil | Lead, Mercury, Selenium. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Exploratory Sampling Data Submitted to NJDEP on April 12, 1991.<br><br>RI: DuPont revisited the mercury exceedance of the NR SRS in boring 55-3. Phase 3 delineation sampling completed in 2008. Mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 56 | Mid | Sawdust Pile | Soil | Antimony, Barium, Benzene, Beryllium, | Soil | None | Direct Contact, Surface Water, Ground Water | RA: Interim Measure Completed and Approved by NJDEP on December 8, 1992.<br><br>RI: Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation performed and completed in 2003-2007. Phase 3 remedial investigation performed and completed in 2008. Further investigation necessary based on results of previous sampling events. Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010. Antimony, Barium, Benzene, Beryllium, Cadmium, Copper, Lead, Mercury, Methyl Chloride, Nickel, Selenium, Tetrachloroethylene, Trichloroethylene, Zinc in excess of NR SRS. Antimony, Barium, Benzene, Beryllium, Cadmium, Copper, Lead, Mercury, Methyl Chloride, Nickel, Selenium, Tetrachloroethylene, Trichloroethylene, Zinc in excess of IGW SRS. **Delineation generally complete. Remedial investigation report scheduled for June 2010.** |
| 57 | Mid | Old Cap Test Area | Soil | | Soil | None | Direct Contact, Surface Water, Ground Water | RA: Interim Measure Completed and Approved by NJDEP on December 8, 1992.<br><br>RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Antimony, Barium, Benzene, Beryllium, Cadmium, Copper, Lead, Mercury, Methyl Chloride, Nickel, Selenium, Tetrachloroethylene, Trichloroethylene, Zinc in excess of IGW SRS. **Delineation generally complete. Remedial investigation report scheduled for June 2010.** |
| 58 | Mid | Burned Wire Dump | Soil | | Soil | None | Direct Contact, Surface Water, Ground Water | RA: Interim Measure Completed and Approved by NJDEP on December 8, 1992.<br><br>RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. **Delineation generally complete. Remedial investigation report scheduled for June 2010.** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 59 | Mid | Cap Test Well | Soil | Cadmium, Copper, Lead, Mercury, Methyl Chloride, Nickel, Selenium, Tetrachloroethylene, Trichloroethylene, Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RA: DuPont requests a no further action letter from NJDEP for this AOC because this well and its surrounding area has been remediated to bedrock, no further action is necessary.<br><br>RI: Exploratory Sampling Data Submitted to NJDEP on April 12, 1991.<br><br>RI: Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation performed and completed in 2003-2007. Phase 3 remedial investigation performed and completed in 2008. Further investigation necessary based on results of previous sampling events. Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010. Antimony, Barium, Benzene, Beryllium, Cadmium, Copper, Lead, Mercury, Methyl Chloride, Nickel, Selenium, Tetrachloroethylene, Trichloroethylene, Zinc in excess of IGW SRS. **Delineation generally complete. Remedial investigation report scheduled for June 2010.** |
| 60 | Mid | Lower Burning Ground | Soil | | Soil | None | Direct Contact, Surface Water, Ground Water | RA: RCRA Interim Closure approved in 1994. DuPont covered this AOC as part of an IRM.<br><br>RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Antimony, Barium, Benzene, Beryllium, Cadmium, Copper, Lead, Mercury, Methyl Chloride, Nickel, Selenium, Tetrachloroethylene, Trichloroethylene, Zinc in excess of IGW SRS. **Delineation generally complete. Remedial investigation report scheduled for June 2010.** |
| 61 | Mid | Lead Recycling Area | Soil | | Soil | None | Direct Contact, Surface Water, Ground Water | RA: RCRA Interim Closure approved in 1994. DuPont covered this AOC as part of an IRM.<br><br>RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Antimony, Barium, Benzene, Beryllium, Cadmium, Copper, Lead, Mercury, Methyl Chloride, Nickel, Selenium, Tetrachloroethylene, Trichloroethylene, Zinc in excess of IGW SRS. **Delineation generally complete. Remedial investigation report scheduled for June 2010.** |
| 62 | Mid | Mop Station No. 16 | None | None | None | None | Direct Contact, Surface Water, Ground Water | **RI: Investigation complete.** Discussed in 2002 RIWP. No analytes were detected above the NJ-NRDC-SCC or the NJ-IGW-SCC. |
| 63 | Mid | Boron/Red Lead Waste Water Tank 1 | Soil | Cis-1,2 Dichloroethene, Tetrachloroethylene, Trichloroethene, Vinyl Chloride, Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Napthalene, Aluminum, Beryllium, Cadmium, Lead, Magnesium, Mercury, Selenium, Thallium and Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Exploratory Sampling Data Submitted to NJDEP on April 12, 1991.<br><br>RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Lead and Mercury were detected in excess of the NR SRS. Cis-1,2 Dichloroethene, Tetrachloroethylene, Trichloroethene, Vinyl Chloride, Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Naphthalene, Aluminum, Beryllium, Cadmium, Lead, Magnesium, Mercury, Selenium, Thallium and Zinc was detected in excess of the IGW SRS. AOC 63 was replaced by AOC 64 and are therefore discussed in concert. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 64 | Mid | Boron/Red Lead Waste Water Tank 2 | Soil | Cis-1,2 Dichloroethene, Tetrachloroethylene, Trichloroethene, Vinyl Chloride, Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Napthalene, Aluminum, Beryllium, Cadmium, Lead, Magnesium, Mercury, Selenium, Thallium and Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Exploratory Sampling Data Submitted to NJDEP on April 12, 1991.<br><br>RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Lead and Mercury were detected in excess of the NR SRS. Cis-1,2 Dichloroethene, Tetrachloroethylene, Trichloroethene, Vinyl Chloride, Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Naphthalene, Aluminum, Beryllium, Cadmium, Lead, Magnesium, Mercury, Selenium, Thallium and Zinc was detected in excess of the IGW SRS. AOC 63 was replaced by AOC 64 and are therefore discussed in concert. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 65 | Mid | Delay Loader Impoundment | Soil | Beryllium, Lead, Mercury and Tetrachloroethylene. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Lead detected in excess of the NR SRS. **Delineation is completed within the boring.** Beryllium, Lead, Mercury and Tetrachloroethylene in excess of the IGW SRS. **Remedial investigation report scheduled for June 2010.** |
| 66 | Mid | Boron/Red Lead Sand Filter | Soil | 1,1,1-Trichloroethane, 1,1-Dichloroethane, Tetrachloroethylene, Trichloroethene, Benzo(a)anthracene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Beryllium, Lead, Mercury and Selenium. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 3 delineation sampling completed in 2008 / 2009. Tetrachloroethylene, Benzo(a)pyrene, Dibenz(a,h)anthracene and Lead in excess of the NR SRS . 1,1,1-Trichloroethane, 1,1-Dichloroethane, Tetrachloroethylene, Trichloroethene, Benzo(a)anthracene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Beryllium, Lead, Mercury and Selenium were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 67 | Mid | Test Well No. 1 | Soil | Antimony, Beryllium, Cadmium, Copper, Lead, Mercury, N-Nitrosodiphenylamine, Selenium and Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Exploratory Sampling Data Submitted to NJDEP on April 12, 1991.<br><br>RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Lead was detected in excess of the NR SRS. Antimony, Beryllium, Cadmium, Copper, Lead, Mercury, N-Nitrosodiphenylamine, Selenium and Zinc were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 68 | Mid | Lead Styphnate Deactivation Shed 2 | Soil | 1,1,1-Trichloroethane, 1,1-Dichloroethane, Tetrachloroethylene, Trichloroethene, Beryllium, Lead and Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 3 delineation sampling completed in 2008 / 2009. No compounds were detected in excess of the NR SRS. 1,1,1-Trichloroethane, 1,1-Dichloroethane, Tetrachloroethylene, Trichloroethene, Beryllium, Lead and Mercury was detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 69 | Mid | Gasoline UST No.1 | Soil | Tetrachloroethylene, Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Chrysene, Indeno(1,2,3-CD) Pyrene, Aluminum, Beryllium, Lead, Manganese, Mercury, Silver, Thallium and Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Exploratory Sampling Data Submitted to NJDEP on April 12, 1991.<br><br>RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Tetrachloroethylene, Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene and Indeno(1,2,3-CD) Pyrene were detected in excess of the NR SRS. Tetrachloroethylene, Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Chrysene, Indeno(1,2,3-CD) Pyrene, Aluminum, Beryllium, Lead, Manganese, Mercury, Silver, Thallium and Zinc were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 70 | Mid | Experimental Lead Azide Laboratory | Soil | Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Beryllium, Copper, Lead, Mercury, Nickel, Selenium, Silver and Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Exploratory Sampling Data Submitted to NJDEP on April 12, 1991.<br><br>RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Copper and Lead were detected in excess of the NR SRS. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Beryllium, Copper, Lead, Mercury, Nickel, Selenium, Silver and Zinc were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 71 | Mid | Mop Station No. 17 | Soil | Mercury, Methylene Chloride, Nickel | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. No compounds were detected in excess of the NR SRS. Mercury, Methylene Chloride and Nickel were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 72 | Mid | Powder Sump | Soil | Cis 1,2-dichloroethene, Methyl Ethyl Ketone, Tetrachloroethylene, Trichloroethene, Vinyl Chloride, Benzo(a)pyrene, Nitrosodiphenylamine, Beryllium, Cadmium, Chromium, Lead, Mercury, Nickel, Selenium, Silver and Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Tetrachloroethylene, Trichloroethene, Benzo(a)pyrene and Lead were detected in excess of the NR SRS. Cist 1,2-dichloroethene, Methyl Ethyl Ketene, Tetrachloroethylene, Trichloroethene, Vinyl Chloride, Benzo(a)pyrene, Nitrosodiphenylamine, Beryllium, Cadmium, Chromium, Lead, Mercury, Nickel, Selenium, Silver and Zinc were detected in excess of the IGW SRS. **Delineated in combination with AOCs 143 and 144. Remedial investigation report scheduled for June 2010.** |
| 73 | Mid | Assembly Machine Solvent Sump | Soil | None | None | None | None | RI: Exploratory Sampling Data Submitted to NJDEP on April 12, 1991.<br><br>RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No VOCs were detected in excess of NJ SRS in AOC 73 the former Assembly Machine Solvent Sump. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 74 | Mid | Mercury Fulminate Plant | Soil | Benzo(a)pyrene, Dibenz(a,h)anthracene, Aluminum, Barium, Beryllium, Lead, Manganese, Mercury, Selenium and Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RA: IRM completed April 29, 1991. Excavation activities were conducted from May 1992 through June 1992, and are reported in the DuPont Mercury Fulminate Area (SWMUs 74, 75, and 76) Interim Remedial Action Report, dated August 1992. The IRM consisted of removing 4,632 cubic yards of soils and collecting post-excavation samples. 5 cubic yards of soil removed from hillside in 1992.<br><br>RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br><br>RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Benzo(a)pyrene, Dibenz(a,h)anthracene, Lead and Mercury were detected in excess of NR SRS. Benzo(a)pyrene, Dibenz(a,h)anthracene, Aluminum, Barium, Beryllium, Lead, Manganese, Mercury, Selenium and Zinc were detected in excess of the IGW SRS. **Delineated in combination with AOC 75, 76 and 77. Remedial investigation report scheduled for June 2010.** |
| 75 | Mid | Mercury Fulminate Fume Line No.1 (within AOC 74) | Soil | Benzo(a)pyrene, Dibenz(a,h)anthracene, Aluminum, Barium, Beryllium, Lead, Manganese, Mercury, Selenium and Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RA: IRM completed April 29, 1991. Excavation activities were conducted from May 1992 through June 1992, and are reported in the DuPont Mercury Fulminate Area (SWMUs 74, 75, and 76) Interim Remedial Action Report, dated August 1992. The IRM consisted of removing 4,632 cubic yards of soils and collecting post-excavation samples. 5 cubic yards of soil removed from hillside in 1992.<br><br>RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Benzo(a)pyrene, Dibenz(a,h)anthracene, Lead and Mercury were detected in excess of NR SRS. Benzo(a)pyrene, Dibenz(a,h)anthracene, Aluminum, Barium, Beryllium, Lead, Manganese, Mercury, Selenium and Zinc were detected in excess of the IGW SRS. **Delineated in combination with AOC 74, 76 and 77. Remedial investigation report scheduled for June 2010.** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 76 | Mid | Mercury Fulminate Fume Line No.2 (within AOC 74) | Soil | Benzo(a)pyrene, Dibenz(a,h)anthracene, Aluminum, Barium, Beryllium, Lead, Manganese, Mercury, Selenium and Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RA: IRM completed April 29, 1991. Excavation activities were conducted from May 1992 through June 1992, and are reported in the DuPont Mercury Fulminate Area (SWMUs 74, 75, and 76) Interim Remedial Action Report, dated August 1992. The IRM consisted of removing 4,632 cubic yards of soils and collecting post-excavation samples. 5 cubic yards of soil removed from hillside in 1992.<br><br>RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Benzo(a)pyrene, Dibenz(a,h)anthracene, Lead and Mercury were detected in excess of NR SRS. Benzo(a)pyrene, Dibenz(a,h)anthracene, Aluminum, Barium, Beryllium, Lead, Manganese, Mercury, Selenium and Zinc were detected in excess of the IGW SRS. **Delineated in combination with AOC 74, 75 and 77. Remedial investigation report scheduled for June 2010.** |
| 77 | Mid | Scrap Metal Area | Soil | Benzo(a)pyrene, Dibenz(a,h)anthracene, Aluminum, Barium, Beryllium, Lead, Manganese, Mercury, Selenium and Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Exploratory Sampling Data Submitted to NJDEP on April 12, 1991.<br><br>RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Benzo(a)pyrene, Dibenz(a,h)anthracene, Lead and Mercury were detected in excess of NR SRS. Benzo(a)pyrene, Dibenz(a,h)anthracene, Aluminum, Barium, Beryllium, Lead, Manganese, Mercury, Selenium and Zinc were detected in excess of the IGW SRS. **Delineated in combination with AOC 74, 75 and 76. Remedial investigation report scheduled for June 2010.** |
| 78 | Mid | Former Fuel Oil Tank | Soil | Tetrachloroethylene, Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Aluminum, Arsenic, Beryllium, Lead, Manganese, Mercury, Nickel, Silver and Vanadium. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Exploratory Sampling Data Submitted to NJDEP on April 12, 1991.<br><br>RI: Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on change in June 2008 NJDEP impact to soil screening criteria. Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD), Mercury and Vanadium were detected in excess of the NR SRS. Tetrachloroethylene, Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Aluminum, Arsenic, Beryllium, Lead, Manganese, Mercury, Nickel and Silver were detected in excess of the IGW SRS. **Delineation generally complete. Remedial investigation report scheduled for June 2010.** |
| 79 | Mid | Machine Shop Solvent Sump 1 | Soil | 1,1-Dichloroethene, Acetone, Benzene, Carbon Tetrachloride, Chloroform, Cis 1,2-dichloroethene, Methyl Ethyl Ketone, Methylene Chloride, Tetrachloroethylene, Toluene, Trichloroethene, Vinyl Chloride, Xylenes, Diethyl Phthalate, Aluminum, Antimony, Beryllium, Cadmium, Cobalt, Lead, Manganese, Mercury, Nickel, Vanadium and Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Exploratory Sampling Data Submitted to NJDEP on April 12, 1991.<br><br>RI: Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on change in June 2008 NJDEP impact to soil screening criteria. Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010. Carbon Tetrachloride, Chloroform, Tetrachloroethylene, Trichloroethene and Vanadium were detected in excess of the NR SRS. 1,1-Dichloroethene, Acetone, Benzene, Carbon Tetrachloride, Chloroform, Cist 1,2-dichloroethene, Methyl Ethyl Ketene, Methylene Chloride, Tetrachloroethylene, Toluene, Trichloroethene, Vinyl Chloride, Xylenes, Diethyl Phthalate, Aluminum, Antimony, Beryllium, Cadmium, Cobalt, Lead, Manganese, Mercury, Nickel, Vanadium and Zinc were detected in excess of the IGW SRS. **Delineation generally complete. Remedial investigation report scheduled for June 2010.** |
| 80 | Mid | Shell Plant Reverse Osmosis System | None | None | None | None | None | RI: Investigation complete. **NJDEP issued a No Further Action for this AOC in their letter, dated December 12, 1989.** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 81 | Mid | Machine Shop Solvent Shed | Soil | Carbon Tetrachloride, Tetrachloroethylene, Trichloroethene, Aluminum, Beryllium, Cadmium, Lead, Manganese and Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Exploratory Sampling Data Submitted to NJDEP on April 12, 1991.<br><br>RI: Characterization Sampling Data Submitted to NJDEP.<br><br>RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Lead and Mercury were detected in excess of NR SRS. Carbon Tetrachloride, Tetrachloroethylene, Trichloroethene, Aluminum, Beryllium, Cadmium, Lead, Manganese and Mercury were detected in excess of the IGW SRS. **Delineation generally complete. Remedial investigation report scheduled for June 2010.** |
| 82 | Mid | Mercury Fulminate Transfer Platform | Soil | Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Aluminum, Arsenic, Beryllium, Cadmium, Lead, Manganese, Mercury and Silver. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Exploratory Sampling Data Submitted to NJDEP on April 12, 1991.<br><br>RI: Characterization Sampling Data Submitted to NJDEP.<br><br>RI: Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on change in June 2008 NJDEP impact to soil screening criteria. Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Aluminum and Arsenic were detected in excess of NR SRS. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Aluminum, Arsenic, Beryllium, Cadmium, Lead, Manganese, Mercury and Silver were detected in excess of IGW SRS. **Delineation generally complete. Remedial investigation report scheduled for June 2010.** |
| 83 | South | Old Electric Shop | Soil | Copper, Lead, Mercury | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br><br>RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br><br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |
| 84 | South | Control Lab Chemical Sink Pit | Soil | Lead, Mercury, PCBs | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br><br>RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br><br>RI: Characterization Sampling Data Submitted to NJDEP.<br><br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |
| 85 | South | Control Lab Chemical Sink Tank | Soil | No COCs detected in excess of applicable criteria during the sampling reported in the 2002 RIR. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br><br>RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br><br>RI: Characterization Sampling Data Submitted to NJDEP.<br><br>RI: **Investigation complete. Remedial Investigation completed in 2001**. |
| 86 | South | Pickling Acid Tanks | Soil | PAHs | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br><br>RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br><br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |
| 87 | South | Lagoon No. 1 | Soil | Copper, Lead, Mercury, PAHs, PCBs | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br><br>RI: Exploratory Sampling Data submitted to NJDEP May 30, 1991.<br><br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 88 | South | Machine Shop Scrap Dump | Soil | No COCs detected in excess of applicable criteria during the sampling reported in the 2002 RIR. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br>RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br>RI: Characterization Sampling Data Submitted to NJDEP.<br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |
| 89 | South | Acid Crock | Soil | No COCs detected in excess of applicable criteria during the sampling reported in the 2002 RIR. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br>RI: Exploratory Sampling Data submitted to NJDEP May 30, 1991.<br>RI: **Investigation complete.** Phase 3 delineation sampling completed in 2008 / 2009. **Remedial investigation report scheduled for 2010.** |
| 90 | South | Old Paint Shop | Soil | No COCs detected in excess of applicable criteria during the sampling reported in the 2002 RIR. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br>RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br>RI: Characterization Sampling Data Submitted to NJDEP.<br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |
| 91 | South | Lagoon No. 2 | Soil | Copper, PAHs | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br>RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |
| 92 | South | Hand Line Solvent Dump | Soil | No COCs detected in excess of applicable criteria during the sampling reported in the 2002 RIR. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br>RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br>RI: Characterization Sampling Data Submitted to NJDEP.<br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |
| 93 | South | Old Boron/Red Lead Process Area | Soil | No COCs detected in excess of applicable criteria during the sampling reported in the 2002 RIR. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br>RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br>RI: Characterization Sampling Data Submitted to NJDEP.<br>RI: Investigation complete. Remedial Investigation completed in 2001. |
| 94 | South | Test Well No. 2 | Soil | No COCs detected in excess of applicable criteria during the sampling reported in the 2002 RIR. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br>RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br>RI: Characterization Sampling Data Submitted to NJDEP.<br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |
| 95 | South | Lagoon No. 4 | Soil | Copper, PAHs, PCBs | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |
| 96 | South | Test Well No. 3 | Soil | No COCs detected in excess of applicable criteria during the sampling reported in the 2002 RIR. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br>RI: Characterization Sampling Data Submitted to NJDEP.<br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 97 | South | Lagoon No. 3 | Soil | Copper. Lead, Mercury, PAHs, PCBs | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br><br>RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br><br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |
| 98 | South | Old Hand Line Area | Soil | No COCs detected in excess of applicable criteria during the sampling reported in the 2002 RIR. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br><br>RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br><br>RI: Characterization Sampling Data Submitted to NJDEP.<br><br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |
| 99 | South | Fuze Works | Soil | PAHs | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br><br>RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br><br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |
| 100 | South | Old Detonator Assembly Area | Soil | Lead, PAHs | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br><br>RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br><br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |
| 101 | South | Salvage Yard | Soil | Copper, Lead, Mercury | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Data submitted to NJDEP Oct 2002.<br><br>RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br><br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |
| 102 | South | Rivet Line Lagoon | Soil | Copper, Lead, Mercury | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Interim Remedial Measures completed in 2001, Remedial Action Report Submitted to NJDEP 2002.<br><br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |
| 103 | South | General Dump | Soil | Lead, PAHs | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Exploratory Sampling Data submitted to NJDEP April 12, 1991.<br><br>RI: **Investigation complete. Remedial Investigation completed in 2001.** |
| 104 | Mid | Canister Disposal | Soil | Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD), Lead and Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RA: RAR submitted July 2003. In 2000, DuPont excavated and removed all of the soil and debris in this area down to bedrock and collected post-excavation perimeter samples. All investigation data and proposed remedial action for AOCs 102, 104 and 105 are presented in the Remedial Action Work plan AOCs 102, 104, 105 and Tributaries, DuPont, Pompton Lakes: Block 100 Lot7, dated May 25, 2000.<br><br>RI: Investigation complete. Remedial Investigation completed in 2001. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene and Indeno(1,2,3-CD) were detected in excess of the NR SRS. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD), Lead and Mercury were detected in excess of t he IGW SRS. **Delineation in combination with AOC 105 is generally complete . Remedial investigation report scheduled for June 2010.** |
| 105 | Mid | Scrap Metal Dump | Soil | Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD), Lead and Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | submitted July 2003. In 2000, DuPont excavated and removed all of the soil and debris in this area down to bedrock and collected post-excavation perimeter samples. All investigation data and proposed remedial action for AOCs 102, 104 and 105 are presented in the Remedial Action Work plan AOCs 102, 104, 105 and Tributaries, DuPont, Pompton Lakes: Block 100 Lot7, dated May 25, 2000. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene and Indeno(1,2,3-CD) were detected in excess of the NR SRS. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD), Lead and Mercury were detected in excess of t he IGW SRS. **Delineation in combination with AOC 104 is generally complete. Remedial investigation report scheduled for June 2010.** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 106 | South | Sewage Treatment | Soil | | Soil | None | Direct Contact, Surface Water, Ground Water | RA: No further action submitted in 2003. Soil removed from area to depth of 42" in area. |
| 107 | Lake Inez | Main Office Shooting Ground | Soil | Arsenic, Lead, Mercury | Soil | None | Direct Contact, Surface Water, Ground Water | RA: Interim Remedial Measure (IRM) 2001. Remedial action report submitted April 2004.<br><br>RI: Additional delineation required outside IRM area for RDCSCC. "Lake Inez Region Remedial Investigation Work Plan", dated June 12, 2003.<br><br>RI: Investigation complete. Additional delineation sampling implemented during Phase 3 in 2008 / 2009. **Remedial investigation report scheduled for 2010**. |
| 108 | Lake Inez | Old Cladding Tunnel | Soil | Copper | Soil | None | Direct Contact, | RI: "Lake Inez Region Remedial Investigation Work Plan", dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: investigation complete. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. **Remedial investigation report scheduled for 2010.** |
| 109 | Lake Inez | Old Fuze Works | Soil | Arsenic, Lead, Mercury, Copper, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo (a) anthracene, Dibenzo(a,h)anthracene, Indeno(1,2,3,c,d)pyrene | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Geophysical Investigation of the Lake Inez Fuze Works, June 8, 1993. "Lake Inez Region Remedial Investigation Work Plan", dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: "Lake Inez Valley Preliminary Assessment Report", April 1996.<br><br>RI: Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on change in June 2008 NJDEP impact to soil screening criteria. **Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010.** |
| 110 | Lake Inez | Barrel Dump Area | Soil | Lead | Soil | None | Direct Contact, | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Investigation complete. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. **Remedial investigation report scheduled for 2010**. |
| 111 | Lake Inez | Tunnel Residue Dump | Soil | Mercury, Lead, Benzo(a)pyrene, Benzo(b)fluouranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3,c,d)pyrene | Soil | None | Direct Contact | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on change in June 2008 NJDEP impact to soil screening criteria. **Additional delineation sampling performed 4th quarter of 2009 through April 2010.** |
| 112 | Lake Inez | Lakefront Magazine | Soil | None | Soil | None | None | RI: "Lake Inez Region Remedial Investigation Work Plan", dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Investigation complete. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. **Remedial investigation report scheduled for 2010**. |
| 113 | Lake Inez | Lake Inez | Soil | Arsenic, Lead, Mercury, Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-c,d)pyrene | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on change in June 2008 NJDEP impact to soil screening criteria. **Additional delineation sampling performed in 4th quarter of 2009 through 1st quarter of 2010.** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 114 | Lake Inez | Upper Dump | Soil | Lead, Copper, Mercury, Nickel, Antimony, Selenium, Benzo(a)pyrene, Indeno (1,2,3,c,d)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, Benzo(a)anthracene | Soil | None | Direct Contact, | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on change in June 2008 NJDEP impact to soil screening criteria. **Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010.** |
| 115 | Lake Inez | Lead Carbonate Sludge Pile | Soil | Lead, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, Benzo(a,h)anthracene | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on results of previous sampling events. **Additional delineation sampling performed 4th quarter of 2009 through 1st quarter of 2010.** |
| 116 | Mid | Sanitary Sewer Sludge Pile | Soil | Benzo(a)anthracene, Benzo(a)pyrene, Beryllium, Cadmium, Copper, Dienz(a,h)anthracene, Lead, Mercury, Selenium, Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Benzo(a)pyrene, Dienz(a,h)anthracene, Lead, and Mercury were detected in excess of the NR SRS. Benzo(a)anthracene, Benzo(a)pyrene, Beryllium, Cadmium, Copper, Dibenz(a,h)anthracene, Lead, Mercury, Selenium, Zinc were detected in excess of the IGW SRS. **Delineation generally complete. Remedial investigation report scheduled for June 2010.** |
| 117 | NMA | Ballistite Operation | Soil | Benzo(a)pyrene, Arsenic, Beryllium, Lead and Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on results of previous sampling events and a change in June 2008 NJDEP impact to soil screening criteria. Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010. Benzo(a)pyrene, Arsenic and Lead were detected in excess of the RDC SRS . Benzo(a)pyrene, Arsenic, Beryllium, Lead and Mercury were detected in excess of the IGW SRS. **Delineation generally complete. Remedial investigation report scheduled for June 2010.** |
| 118 | ABV | Acid Brook | None | | Soil | None | Direct Contact, Surface Water, Ground Water | RA: Interim Measures Completed February 1997 for entire length of Brook. The remediation of Acid Brook took place in six phases. The investigation and remediation activities performed in AOC 118 are summarized in the On-Site Acid Brook Project Remedial Action Report, dated March 26, 1999, in which DuPont requested a no further action letter from NJDEP for AOC 118.<br><br>RA: **Offsite - No Further Action (NFA) granted.** |
| 118A | ABV Offsite | Acid Brook Delta and Delta Uplands | Soil, Sediment | Mercury, Lead, Copper, Selenium | Soil, Sediment | ecological | Direct Contact, Surface Water, Sediment | **RI Uplands**: Remedial investigation completed in 2009-2010. Mercury and lead were detected above RDC SRS and copper, lead, mercury and selenium were detected above the minimum of ecological and RDC SRS. Delineations complete and remedial investigation report scheduled for June 2010. **RI Delta**: Sediment and surface water data were presented in the "Draft Remedial Action Proposal" (DuPont CRG, 2006) and the "Revised Acid Brook Delta Remedial Investigation Report" (DuPont CRG, 2008). NJDEP, in its letter of May 2008, confirmed that mercury delineation in Pompton Lake was complete. Subsequently, NJDEP, in its letter of June 19, 2008, approved, without conditions, the Revised Acid Brook Delta Remedial Investigation Report (RIR) dated January 30, 2008. **RA Delta and Uplands:** A portion of the uplands was remediated as documented in the "Phase I of the Acid Brook Delta Project Remedial Action Report" (DERS, 1997), submitted to the NJDEP in January 1997. The remedial approach for the delta was determined based on the evaluations contained in the Acid Brook Delta Area Remedial Action Selection Report/Corrective Measures Study (RASR/CMS; DuPont CRG, September 2009) and was subsequently appro |

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| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 119 | NMA | North West Lake Inez | Soil | Arsenic, Beryllium, Lead, Mercury, Benzo(a)pyrene | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on change in June 2008 NJDEP impact to soil screening criteria. Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010. Arsenic and Benzo(a)pyrene were detected in excess of the RDC SRS. Arsenic, Beryllium, Lead, Mercury, Benzo(a)pyrene were detected in excess of the IGW SRS. **Delineation generally complete. Remedial investigation report scheduled for June 2010.** |
| 119 (SOUTH) | WMA | North West Lake Inez | Soil | Arsenic, Lead, Mercury, Thallium, Antimony, Benzo(a)pyrene | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on change in June 2008 NJDEP impact to soil screening criteria. Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010. Arsenic and Benzo(a)pyrene were detected in excess of the RDC SRS. Arsenic, Beryllium, Lead, Mercury, Benzo(a)pyrene were detected in excess of the IGW SRS. **Delineation generally complete. Remedial investigation report scheduled for June 2010.** |
| 120 | South | Gasoline UST No. 2 | Soil | | Soil | None | Direct Contact, Surface Water, Ground Water | RA: **Complete.** USTs Removed February 6, 1989. Site Assessment Compliance Statement filed March 3, 1989. |
| 121 | South | Gasoline UST No. 3 | Soil | | Soil | None | Direct Contact, Surface Water, Ground Water | RA: **Complete.** USTs Removed February 6, 1989. Site Assessment Compliance Statement filed March 3, 1989. |
| 122 | South | Gasoline UST No.4 | Soil | | Soil | None | Direct Contact, Surface Water, Ground Water | RA: **Complete.** USTs Removed February 6, 1989. Site Assessment Compliance Statement filed March 3, 1989. |
| 123 | North | Mop Station No. 1a | Soil | None | None | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 3 delineation sampling completed in 2008 / 2009. **No exceedances of NR and IGW SRS. Remedial investigation report scheduled for June 2010.** |
| 124 | North | Mop Station No. 1b | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No exceedances of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 125 | North | Mop Station No. 1c | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No exceedances of NR SRS. Mercury detected in excess of IGW SRS. D**elineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 126 | North | Mop Station No. 1d | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No exceedances of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation complete. Remedial investigation report scheduled for June 2010.** |
| 127 | North | Mop Station No. 1e | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No exceedances of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 128 | North | Mop Station No. 1f | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No exceedances of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 129 | North | Mop Station No. 1g | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No exceedances of NR SRS. Mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |

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# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 130 | North | Mop Station No. 1h | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No exceedances of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 131 | North | Mop Station No. 1i | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No exceedances of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 132 | North | Mop Station 1j | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. No exceedances of NR SRS. Mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 133 | North | Mop Station No. 1k | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No exceedances of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 134 | North | Mop Station No. 1l | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Mercury detected in excess of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 135 | North | Mop Station No. 1m | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. No exceedances of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 136 | North | Mop Station No. 1n | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Lead detected in excess of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 137 | North | Mop Station No. 1o | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No exceedances of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 138 | North | Biazzi Alcohol Water Shed | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No exceedances of NR SRS. Mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 139 | Mid | Mop Station No. 12a | Soil | Beryllium, Lead, Mercury, Tetrachloroethylene. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Mercury detected in excess of IGW SRS. Beryllium, Lead, Mercury and Tetrachloroethylene detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 140 | Mid | Mop Station No. 13a (within AOC 164) | Soil | None | None | None | Direct Contact, Surface Water, Ground Water | RI: No further action is requested from NJDEP for this AOC because this site was excavated and removed and confirmation samples were collected. Although this site was never investigated, the mop station was removed during the building demolition, and all soils in this area were excavated during the remediation of on-site Acid Brook, Area 6. Response letter from NJDEP requests this AOC be revisited for additional analysis.<br><br>RI: Investigation complete. Phase 3 delineation sampling completed in 2008 / 2009. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 141 | Mid | Mop Station No. 14a | Soil | Beryllium, Lead, Mercury, Selenium. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No compounds were detected in excess of the NRDC SCC. Mercury detected in excess of NR SRS. Beryllium, Lead, Mercury, Selenium detected in excess of the IGW SRS. **Delineation to NRD SCC complete. Delineation in combination with AOC 166. Remedial investigation report scheduled for June 2010.** |

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# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 142 | Mid | Mop Station No. 15a (within AOC 165) | Soil | Benzo(a)anthracene, Benzo(a)pyrene, Dibenz(a,h)anthracene, ) Beryllium, Cadmium, Lead, Mercury, Nickel, N-Nitrosodiphenylamine, Selenium, Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Benzo(a)pyrene, Dibenz(a,h)anthracene, Lead, Mercury detected in excess of NR SRS. Benzo(a)anthracene, Benzo(a)pyrene, Dibenz(a,h)anthracene, ) Beryllium, Cadmium, Lead, Mercury, Nickel, N-Nitrosodiphenylamine, Selenium, Zinc detected in excess of IGW SRS. **Delineation to NR SRS complete. Delineation in combination with AOC 54 and AOC 165. Remedial investigation report scheduled for June 2010.** |
| 143 | Mid | Powder Sump Tank #1 | Soil | Cis 1,2-dichloroethene, Methyl Ethyl Ketone, Tetrachloroethylene, Trichloroethene, Vinyl Chloride, Benzo(a)pyrene, Nitrosodiphenylamine, Beryllium, Cadmium, Chromium, Lead, Mercury, Nickel, Selenium, Silver and Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Tetrachloroethylene, Trichloroethene, Benzo(a)pyrene and Lead were detected in excess of the NR SRS. Cist 1,2-dichloroethene, Methyl Ethyl Ketene, Tetrachloroethylene, Trichloroethene, Vinyl Chloride, Benzo(a)pyrene, Nitrosodiphenylamine, Beryllium, Cadmium, Chromium, Lead, Mercury, Nickel, Selenium, Silver and Zinc were detected in excess of the IGW SRS. **Delineated in combination with AOCs 72 and 144. Remedial investigation report scheduled for June 2010.** |
| 144 | Mid | Powder Sump Tank # 2 | Soil | Cis 1,2-dichloroethene, Methyl Ethyl Ketone, Tetrachloroethylene, Trichloroethene, Vinyl Chloride, Benzo(a)pyrene, Nitrosodiphenylamine, Beryllium, Cadmium, Chromium, Lead, Mercury, Nickel, Selenium, Silver and Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Tetrachloroethylene, Trichloroethene, Benzo(a)pyrene and Lead were detected in excess of the NR SRS. Cist 1,2-dichloroethene, Methyl Ethyl Ketene, Tetrachloroethylene, Trichloroethene, Vinyl Chloride, Benzo(a)pyrene, Nitrosodiphenylamine, Beryllium, Cadmium, Chromium, Lead, Mercury, Nickel, Selenium, Silver and Zinc were detected in excess of the IGW SRS. **Delineated in combination with AOCs 72 and 143. Remedial investigation report scheduled for June 2010.** |
| 145 | WMA | Tunnel Residue Dump | Soil | Lead | Soil | None | Direct Contact, | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Investigation complete. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. **Remedial investigation report scheduled for 2010**. |
| 146 | WMA | Lakefront Magazine 1 | Soil | Lead, Arsenic, Copper | Soil | None | Direct Contact | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on results of previous sampling events. Additional delineation sampling implemented in the 4th quarter of 2009. **Additional delineation sampling performed 4th quarter of 2009 through 1st quarter of 2010.** |
| 147 | WMA | Lakefront Magazine 2 | Soil | Lead, Arsenic, Copper, Thallium, Zinc | Soil | None | Direct Contact | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on results of previous sampling events. **Additional delineation sampling performed 4th quarter of 2009 through 1st quarter of 2010.** |
| 148 | WMA | Lakefront Magazine 3 | Soil | Lead | Soil | None | Direct Contact | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Investigation complete. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. **Remedial investigation report scheduled for 2010**. |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 149 | WMA | Lakefront Magazine 4 | Soil | None | Soil | None | NA | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Investigation complete. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. **Remedial investigation report scheduled for 2010**. |
| 150 | WMA | Lakefront Magazine 5 | Soil | None | Soil | None | NA | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Investigation complete. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. **Remedial investigation report scheduled for 2010**. |
| 151 | WMA | Lakefront Magazine 6 | Soil | Lead, Copper, Thallium, Antimony | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on results of previous sampling events. **Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010.** |
| 152 | North | Area under foundation FA-1200 | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Lead detected in excess of NR SRS. Lead and mercury detected in excess of the IGW SRS. **Delineation to NR SRS complete. Delineation in combination with AOC 153. Remedial investigation report scheduled for June 2010.** |
| 153 | North | Area around and east of FA-113 | Soil | Lead, Mercury, Selenium. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Lead detected in excess of the NR SRS. Lead, mercury and selenium detected in excess of the IGW SRS. **Delineation to NR SRS complete. Delineation in combination with AOC 153. Remedial investigation report scheduled for June 2010.** |
| 154 | North | Area around and east of FA-118 | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Lead detected in excess of NR SRS. Lead and mercury detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 155 | North | Area around and under FA-1330 | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Lead detected in excess of NR SRS. Lead and mercury detected in excess of the IGW SRS. Delineation to NR SRS complete. **Remedial investigation report scheduled for June 2010.** |
| 156 | North | Area south of FA-1068 | Soil | Lead. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No compounds detected in excess of NR SRS. Lead detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 157 | North | Drain and swale at FA-1152 | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No compounds detected in excess of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 158 | North | Area below FA-154 | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No compounds detected in excess of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 159 | North | Alcohol drain in FA-172 | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No compounds detected in excess of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 160 | North | Area of FA-1090 | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No compounds detected in excess of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 161 | North | Area between FA-200 and FA-160 | Soil | Mercury | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. No compounds detected in excess of NR SRS. Mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 162 | Mid | Area around and under FA-203 | Soil | Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Beryllium, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Lead, Mercury, Selenium, Tetrachloroethylene. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene and Lead detected in excess of NR SRS. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Beryllium, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Lead, Mercury, Selenium and Tetrachloroethylene detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 163 | North | Area around FA-1193 | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2002. Mercury detected in excess of NR SRS. Lead and mercury detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 164 | Mid | Area around and under FA-287 | Soil | Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Beryllium, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Lead, Mercury, Selenium. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on results of previous sampling events. Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Lead and Mercury detected in excess of the NR SRS. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Beryllium, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Lead, Mercury and Selenium detected in excess of IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 165 | Mid | Area around FA-206 | Soil | Beryllium, Lead, Mercury, Selenium. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Lead and Mercury detected in excess of the NR SRS. Beryllium, Lead, Mercury and Selenium detected in excess of IGW SRS. **Delineation to NR SRS complete. Delineation in combination with AOC 54 and AOC 142. Remedial investigation report scheduled for June 2010.** |
| 166 | Mid | Area east of FA-209 | Soil | Benzo(a)anthracene, Benzo(a)pyrene, Beryllium, Cadmium, Lead, Mercury and Selenium. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Benzo(a)pyrene and Mercury were detected in excess of the NR SRS. Benzo(a)anthracene, Benzo(a)pyrene, Beryllium, Cadmium, Lead, Mercury and Selenium were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Delineation in combination with AOC 54 and AOC 142. Remedial investigation report scheduled for June 2010**. |
| 167 | Mid | Area between FA-1098 and barricade | Soil | Cis-1,2 Dichloroethene, Tetrachloroethylene, Trichloroethene, Vinyl Chloride, Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Aluminum, Beryllium, Cadmium, Lead, Magnesium, Mercury, Selenium, Thallium and Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Tetrachloroethylene, Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Lead and Mercury were detected in excess of NR SRS. Cis-1,2 Dichloroethene, Tetrachloroethylene, Trichloroethene, Vinyl Chloride, Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Aluminum, Beryllium, Cadmium, Lead, Magnesium, Mercury, Selenium, Thallium and Zinc were detected in excess of the IGW SRS. **Delineation to NR SRS generally complete. Remedial investigation report scheduled for June 2010.** |
| 168 | Mid | 3 Dry wells behind FA-1034 | Soil | Tetrachloroethylene, Trichloroethene, Aluminum, Beryllium, Manganese and Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Mercury was detected in excess of the NR SRS. Tetrachloroethylene, Trichloroethene, Aluminum, Beryllium, Manganese and Mercury were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 169 | Mid | Drain in FA-1034 | None | None | None | None | None | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2002-2007. **Remedial investigation report scheduled for June 2010. Addressed in AOC 186 - Storm Sewers** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 170 | Mid | Tank area near FA-1034 | Soil | Benzo(a)pyrene. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2002-2007. Phase 3 delineation sampling completed in 2008 / 2009. **Delineated to NRDC SCC.** Benzo(a)pyrene was detected in excess of the NR and IGW SRS. **Remedial investigation report scheduled for June 2010.** |
| 171 | Mid | Area around FA-1132 | Soil | Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Beryllium, Copper, Lead, Mercury, Nickel, Selenium, Silver and Zinc. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Copper and Lead were detected in excess of the NR SRS. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Dibenz(a,h)anthracene, Indeno(1,2,3-CD) Pyrene, Beryllium, Copper, Lead, Mercury, Nickel, Selenium, Silver and Zinc were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 172 | Mid | Drain in FA-537 | None | None | None | None | None | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2002-2007. **Remedial investigation report scheduled for 2010**. **Addressed in AOC 186 - Storm Sewers** |
| 173 | Mid | Powerhouse | Soil | Methylene Chloride, Tetrachloroethylene, Trichloroethene, Beryllium, Lead, Mercury and Nickel. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Benzo(a)pyrene was detected in excess of the NR SRS. Benzo(a)anthracene, Benzo(b)flouranthene, Benzo(a)pyrene, Methylene Chloride, Tetrachloroethylene, Trichloroethene, Beryllium, Lead, Mercury and Nickel were detected in excess of the IGW SRS. Remedial investigation report scheduled for 2010. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 174 | Mid | Area under FA-424 | Soil | Tetrachloroethylene. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. No compounds were detected in excess of the NR SRS. Tetrachloroethylene was detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 175 | Mid | FA-406 including drain | Soil | Carbon Tetrachloride, Tetrachloroethylene, Trichloroethene, Aluminum, Beryllium, Cadmium, Lead, Manganese and Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Lead and Mercury were detected in excess of NR SRS. Carbon Tetrachloride, Tetrachloroethylene, Trichloroethene, Aluminum, Beryllium, Cadmium, Lead, Manganese and Mercury were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 176 | Mid | Area under FA-416 | Soil | 1,1-Dichloroethene, Tetrachloroethylene, Trichloroethene, Benzo(a)anthracene, Benzo(a)pyrene, Dibenz(a,h)anthracene. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2002-2007. Phase 3 delineation sampling completed in 2008 / 2009. Benzo(a)pyrene and Dibenz(a,h)anthracene were detected in excess of the NR SRS. 1,1-Dichloroethene, Tetrachloroethylene, Trichloroethene, Benzo(a)anthracene, Benzo(a)pyrene, Dibenz(a,h)anthracene were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 177 | South | Area south of FA-595 | Soil | lene Chloride, Lead and Me | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Complete. Sampled in 2001, **RIR submitted to NJDEP 2002.** No analytical results were detected above the NR SRS. Methylene Chloride, Lead and Mercury were detected in excess of IGW SRS. |
| 178 | South | Area south of FA-446 | Soil | Methylene Chloride | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Complete. Sampled in 2001, **RIR submitted to NJDEP 2002.** No analytical results were detected above the NR SRS. Methylene Chloride was detected in excess of IGW SRS. |
| 179 | South | Drain in FA-1047 and FA-1220 | Soil | Tetrachloroethylene, Lead and Mercury | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Complete. Sampled in 2001, **RIR submitted to NJDEP 2002.** No analytical results were detected above the NRDC SCC in effect at the time the RIR was submitted. Tetrachloroethylene, Lead and Mercury were detected in excess of IGW SRS. |
| 180 | South | Aboveground Storage Tank/drain in FA-789 | Soil | Lead and Mercury | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Complete. Sampled in 2001, **RIR submitted to NJDEP 2002.** No analytical results were detected above the NRDC SCC in effect at the time the RIR was submitted. Methylene Chloride, Lead and Mercury were detected in excess of IGW SRS. |
| 181 | South | Area around FA-554 and FA-1057 | Soil | Lead and Mercury | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Complete. Sampled in 2001, **RIR submitted to NJDEP 2002**. No analytical results were detected above the NR SRS. Methylene Chloride, Lead and Mercury were detected in excess of IGW SRS. |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 182 | ABV | Transformers | Soil | PCB 1248, PCB 1254, PCB 1260. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: The document "Former Operating Area Preliminary Assessment Report", was submitted to NJDEP April 17, 1995.<br><br>RI: Data submitted to NJDEP Oct 2002.<br><br>RI: Phase 1 Remedial Investigation performed in 2001. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on results of previous sampling events. Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010. PCB 1248, PCB 1254, PCB 1260 were detected in excess of the NR and IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 183 | South | Storm Water Detention Basin | Soil | Methylene Chloride, Lead and Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Complete. Sampled in 2001, **RIR submitted to NJDEP 2002.** No analytical results were detected above the NRDC SCC in effect at the time the RIR was submitted. Methylene Chloride, Lead and Mercury were detected in excess of IGW SRS. |
| 184 | South | Storm Water Detention Basin | Soil | Methylene Chloride, Lead and Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Complete. Sampled in 2001, **RIR submitted to NJDEP 2002**. No analytical results were detected above the NR SRS. Methylene Chloride, Lead and Mercury were detected in excess of IGW SRS. |
| 185 | South | Storm Water Detention Basin | Soil | Tetrachloroethylene, Lead and Mercury | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Complete. Sampled in 2001, **RIR submitted to NJDEP 2002.** No analytical results were detected above the NR SRS. Tetrachloroethylene, Lead and Mercury were detected in excess of IGW SRS. |
| 186 | ABV | Storm Sewer | None | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RA: IRM Completed 1994. The document "Former Operating Area Preliminary Assessment Report", was submitted to NJDEP April 17, 1995.<br><br>RA: NFA Proposed for area addressed by IRM; additional delineation required outside area addressed by IRM scheduled for Spring 2008.<br><br>RI: Investigation complete. Phase 3 delineation sampling completed in 2008 / 2009. Remedial investigation report scheduled for 2010. No compounds were detected in excess of the NR SRS. Lead and Mercury were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 187 | North | Area outside vent of FA-1250 | Soil | Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. No compounds were detected in excess of the NR SRS. Mercury was detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 188 | Mid | Area under FA-226 | Soil | Benzo(a)pyrene, Beryllium, Lead and Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Phase 2 remedial investigation completed in 2002-2007. Phase 3 delineation sampling completed in 2008 / 2009. Benzo(a)pyrene and Mercury were detected in excess of the NR SRS. Benzo(a)pyrene, Beryllium, Lead and Mercury were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 189 | Mid | Septic tank west of FA-1098 | Soil | Beryllium, Lead and Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. Mercury detected in excess of the NR SRS. Beryllium, Lead and Mercury were detected in excess of the IGW SRS. Remedial investigation report scheduled for 2010. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 190 | Mid | Area near FA-1117 | Soil | Aluminum, Beryllium, Manganese and Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. No compounds detected in excess of the NR SRS. Aluminum, Beryllium, Manganese and Mercury were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 191 | North | Area near FA-1336 | Soil | Lead, Mercury. | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Investigation complete. Phase 1 Remedial Investigation completed in 2001. No compounds were detected in excess of the NR SRS. Lead and Mercury were detected in excess of the IGW SRS. **Delineation to NR SRS complete. Remedial investigation report scheduled for June 2010.** |
| 192 | WMA | Old Fuze Works Wire Dump | Soil | Arsenic, Copper, Lead, Mercury, Thallium, Benzo(a)pyrene, Benzo(a)anthracene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-C,d)pyrene | Soil | None | Direct Contact, Surface Water, Ground Water | RA: Interim Remedial Measures Completed January 1997, "On-Site Lake Inez Valley Areas of Concern 192 and 193 Remedial Action Report", September 1998.<br><br>RA: Additional delineation required outside IRM area for RDCSCC. "Lake Inez Region Remedial Investigation Work Plan", dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Investigation complete. Phase 3 delineation sampling completed in 2008 / 2009. **Remedial investigation report scheduled for 2010.** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 193 | WMA | Old Fuze Works Miscellaneous Waste Site | Soil | Mercury, Benzo(a)anthracene, Benzo(b)byrene, Benzo(b)fluoranthene, Dibenz(a,h)anthracene | Soil | None | Direct Contact, Surface Water, Ground Water | RA: Stabilization Measures Completed January 1997, "On-Site Lake Inez Valley Areas of Concern 192 and 193 Remedial Action Report", September 1998. Proposed no further action.<br><br>RA: Additional delineation required outside IRM area for RDCSCC. "Lake Inez Region Remedial Investigation Work Plan", dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Phase 3 delineation sampling completed in 2008 / 2009 outside area addressed by IRM. Further investigation necessary based on change in June 2008 NJDEP impact to soil screening criteria. **Additional delineation sampling performed 4th quarter of 2009 through 1st quarter of 2010.** |
| 194 | WMA | Old Fuze Works Dump | Soil | Arsenic, Copper, Lead, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, Benzo(a)anthracene | Soil | None | Direct Contact, Surface Water, Ground Water | RA: Interim Remedial Measures Completed February 1997, "On-Site Lake Inez Valley Areas of Concern 194 and 198 Remedial Action Report", February 16, 1998.<br><br>RA: Additional delineation required outside IRM area for RDCSCC. "Lake Inez Region Remedial Investigation Work Plan", dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Investigation complete. Phase 3 delineation sampling completed in 2008 / 2009 outside area addressed by IRM. **Remedial investigation report scheduled for 2010**. |
| 195 | WMA | Area of iron filings | Soil | Lead, Mercury, Thallium, Benzo(a)pyrene, Benzo(a)anthracene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-C,d)pyrene | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on results of previous sampling events. **Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010.** |
| 196 | WMA | Police shooting range | Soil | Benzo(a)pyrene, Benzo(a)anthracene, Benzo(b)fluoranthene, Indeno(1,2,3-c,d)pyrene | Soil | None | Direct Contact, Surface Water, Ground Water | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on change in June 2008 NJDEP impact to soil screening criteria. **Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010.** |
| 197 | WMA | Area of tar deposits | Soil | None | None | None | NA | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Investigation complete. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. **Remedial investigation report scheduled for 2010**. |
| 198 | WMA | Area of tar deposits | Soil | Arsenic, Copper, Lead, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, Benzo(a)anthracene | Soil | None | Direct Contact, Surface Water, Ground Water | RA: Interim Remedial Measure completed in AOC 198 Interim Measure, "On-Site Lake Inez Valley Areas of Concern 194 and 198 Remedial Action Report", February 16, 1998.<br><br>RA: Additional delineation required outside IRM area for RDCSCC. "Lake Inez Region Remedial Investigation Work Plan", dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Delineation to NR SRS complete. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009 outside area addressed by IRM. **Remedial investigation report scheduled for 2010.** |
| 199 | WMA | Burning area | Soil | Arsenic, Lead, Copper, Thallium, Antimony, Benzo(a)pyrene; Benzo(b)fluouranthene | Soil | None | Direct Contact, Surface Water, Ground Water | RI: "Lake Inez Region Remedial Investigation Work Plan", dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter .<br><br>RI: Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on change in June 2008 NJDEP impact to soil screening criteria. **Additional delineation sampling performed 4th quarter of 2009 through 1st quarter of 2010.** |

# DuPont Pompton Lakes Works
# Case Inventory Document

| AOC Designation, Receptor, Emergency Response & Institutional Control Tracking | Plant Region | Name | Impacted Media | Contaminants of Concern (COC) | Exposure Route | Receptors | | Current Status / Outcome |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Existing | Potential | |
| 200 | WMA | Area of former process ponds | Soil | Arsenic | Soil | None | Direct Contact, | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Investigation complete. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. **Remedial investigation report scheduled for 2010**. |
| 201 | Lake Inez | Unknown stone well | Soil | None | NA | None | NA | RI: Lake Inez Region Remedial Investigation Work Plan, dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter.<br><br>RI: Investigation complete. Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. **Remedial investigation report scheduled for 2010**. |
| 202 | WMA | Unknown pit | Soil | Lead, Arsenic | Soil | None | Direct Contact, Surface Water, Ground Water | RI: "Lake Inez Region Remedial Investigation Work Plan", dated June 12, 2003, November 21, 2003 comment letter from NJDEP, and DuPont's December 29, 2003 response letter .<br><br>RI: Phase 2 remedial investigation completed in 2003-2007. Phase 3 delineation sampling completed in 2008 / 2009. Further investigation necessary based on change in June 2008 NJDEP impact to soil screening criteria. **Additional delineation sampling begun in the 4th quarter of 2009 scheduled for completion in the 1st quarter of 2010.** |
| Classification Exception Area | North | CEA #1 | Ground Water | Lead | Ingestion | None | None | Comprehensive Ground Water Monitoring Program in place including semi-annual sampling program with annual reporting in February. The 2009 Ground Water Monitoring Report was submitted in February 2010. The Classification Exception Area - Biennial Certification was submitted in April 2010. |
| Classification Exception Area | Mid | CEA #2 | Ground Water | Tetrachloroethene, Trichloroethene, Vinyl Chloride, cis-1,2 Dichloroethene, 1-1, Dichloroethene, 1-2, Dichlorethane. | Ingestion | None | None | Comprehensive Ground Water Monitoring Program in place including semi-annual sampling program with annual reporting in February. The 2009 Ground Water Monitoring Report was submitted in February 2010. The Classification Exception Area - Biennial Certification was submitted in April 2010. |
| Classification Exception Area | South | CEA #3 | Ground Water | Tetrachloroethene, Trichloroethene, Vinyl Chloride, cis-1,2 Dichloroethene, trans-1,2 Dichloroethene, 1-1, Dichloroethene, 1-2, Dichlorethane, Carbon Tetrachloride. | Ingestion | None | None | Comprehensive Ground Water Monitoring Program in place including semi-annual sampling program with annual reporting in February. The 2009 Ground Water Monitoring Report was submitted in February 2010. The Classification Exception Area - Biennial Certification was submitted in April 2010. |
| Classification Exception Area | Offsite | CEA #4 | Ground Water | Tetrachloroethene, Trichloroethene, Vinyl Chloride, cis-1,2 Dichloroethene, trans-1,2 Dichloroethene, 1-1, Dichloroethene, Carbon Tetrachloride. | Ingestion | None | None | Comprehensive Ground Water Monitoring Program in place including semi-annual sampling program with annual reporting in February. The 2009 Ground Water Monitoring Report was submitted in February 2010. The Classification Exception Area - Biennial Certification was submitted in April 2010. |
| Vapor Intrusion Issues | Offsite | | Indoor Air | PCE | Inhalation | Yes | Yes | |

*Acronyms:*

AOC - Area of Concern
IRM - Interim Remedial Measure
RDCSCC - Residential Direct Contact Soil Cleanup Criteria
NRDCSCC - Non Residential Direct Contact Soil Cleanup Criteria
NJDEP - New Jersey Department of Environmental Protection
PA - Preliminary Assessment
RA- Remedial Action
RAWP - Remedial Action Work Plan
PCBs - Polychlorinated Bi-Phenyls
PETN - pentaerythritol tetranitrate
RDX - Cyclotrimethylenetrinitramine

# REMEDIAL INVESTIGATION REPORT
# NORTHERN MANUFACTURING AREA
## PI#007411
## POMPTON LAKES WORKS
## POMPTON LAKES, NEW JERSEY

*Prepared for:*

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June 2010

DuPont PN 507668
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# ACRONYMS

| | |
|---|---|
| AOC | Area of Concern |
| B(a)P | Benzo(a)pyrene |
| BEE | Baseline Ecological Evaluation |
| bgs | below ground surface |
| CGMP | Comprehensive Groundwater Monitoring Program |
| CID | Case Inventory Document |
| COPEC | Contaminants of Potential Ecological Concern |
| CRG | Corporate Remediation Group |
| DDR | DuPont Data Review |
| DERS | DuPont Environmental Remediation Services |
| DuPont | E. I. du Pont de Nemours and Company |
| ESNR | Environmentally Sensitive Natural Resource |
| GPS | Global Positioning Satellite |
| I-287 | Interstate 287 |
| IGWSRS | Impact to Ground Water Soil Remediation Standards |
| LLI | Lancaster Laboratories, Inc. |
| mg/kg | milligrams per kilogram |
| msl | mean sea level |
| NJDEP | New Jersey Department of Environmental Protection |
| NMA | Northern Manufacturing Area |
| NRD | Natural Resource Damages |
| NRDCSRS | Non-Residential Direct Contact Soil Remediation Standards |
| PAH | Polynuclear Aromatic Hydrocarbons |
| Parsons | Parsons Commercial Technology Group Inc. |
| PLW | Pompton Lakes Works |
| PP | Priority Pollutant |
| QAPP | Quality Assurance Project Plan |
| QA/QC | Quality Assurance/ Quality Control |
| RASR | Remedial Action Selection Report |
| RCC | Railroad Construction Corp |
| RDCSRS | Residential Direct Contact Soil Remediation Standard |
| RIR | Remedial Investigation Report |
| RI | Remedial Investigation |
| RIWP | Remedial Investigation Workplan |
| Site | Pompton Lakes Works |
| SRS | Soil Remediation Standards |
| TRSR | Technical Requirements for Site Remediation |
| URS | URS Diamond |
| SVOC | Semi-Volatile Organic Compound |
| WRV | Wanaque River Valley |
| XRF | X-Ray Fluorescence |

# EXECUTIVE SUMMARY

The purpose of this remedial investigation report (RIR) is to present the results of the remedial investigations conducted at the former E. I. du Pont de Nemours and Company (DuPont) Pompton Lakes Works (PLW) Northern Manufacturing Area (NMA), which is located in the Wanaque River Valley (WRV) in Pompton Lakes, New Jersey (Figure 1). The NMA consists of two parcels of land which were donated by DuPont as part of a Compensatory Restoration Administrative Consent Order Natural Resource Damages (NRD) Settlement (effective June 30, 2005) with the New Jersey Department of Environmental Protection (NJDEP). The NMA contains two Areas of Concern (AOCs 117 and a portion of 119) which were investigated as part of the Lake Inez Region Remedial Investigation Report (RIWP), prepared by DuPont in 2003. As part of the donation, existing structures will be demolished. In addition, soils previously identified as being impacted by site-related activities were to be further investigated and remediated for unrestrictive use.

This RIR for the NMA summaries the activities completed as part of the investigation and provides the analytical results. Since the submittal of the Lake Inez RIWP, DuPont has collected and analyzed more than 700 samples in the NMA. In accordance with N.J.A.C. 7:26E-4.1(b), analytical results were compared to current NJDEP Residential Direct Contact Soil Remediation Standards (RDCSRS) for delineation purposes.

As presented in this RIR, delineation is substantially complete, although some areas require additional sampling for vertical delineation. Additional sampling and evaluating potential remedial alternatives will be considered as part of the Remedial Action Selection Report (RASR). A baseline ecological evaluation was also completed for the project area in accordance with N.J.A.C. 7:26E-3:11.

DuPont will prepare a RASR for submission to NJDEP upon approval of this report by the regulatory agencies.

# 1.0 INTRODUCTION

The former E. I. du Pont de Nemours and Company (DuPont) Pompton Lakes Works (PLW, the Site) Northern Manufacturing Area (NMA) is located in the Wanaque River Valley (WRV), formerly Lake Inez, in the boroughs of Wanaque and Pompton Lakes, New Jersey (Figure 1). The NMA consists of two parcels of land which are to be donated by DuPont as part of a Compensatory Restoration Administrative Consent Order Natural Resource Damages (NRD) Settlement (effective June 30, 2005) with the New Jersey Department of Environmental Protection (NJDEP). The NMA contains two Areas of Concern (AOCs 117 and a portion of 119) which were investigated as part of the approved Lake Inez Region Remedial Investigation Report (*Work Plan*[1]) (RIWP) prepared by DuPont in 2003. In addition, soils previously identified as having the potential to be impacted by site-related activities were to be further investigated.

This Remedial Investigation Report (RIR) for the NMA summarizes the activities completed as part of the investigation and provides the analytical results. This report is being submitted in accordance with the requirements of the Administrative Consent Order (NJDEP, 1988).

DuPont retained URS Diamond (URS) for performance of all field activities related to the remedial investigation (RI) prior to July 2009. DuPont has retained Parsons Commercial Technology Group Inc. (Parsons) for performance of field activities subsequent to July 2009 and for preparation of the RIR.

## 1.1 BACKGROUND

In August 1994, the DuPont PLW (located in Pompton Lakes, Passaic County, New Jersey) submitted a Phase I Site Investigation Work Plan to the NJDEP to investigate potential AOCs at the site. DuPont and the NJDEP agreed to prioritizing AOCs and phasing the investigation to allow for the most efficient implementation of the site investigation. The document underwent a review and comments period; however, it was never formally approved by NJDEP.

In July 1999, DuPont agreed to conduct the remainder of the RI for the site using the readopted NJDEP Technical Requirements for Site Remediation (TRSR). For purposes of the RI, the site was divided into four regions based on geography and operational history. They are as follows:

- Eastern Manufacturing Area (formerly Acid Brook Valley), South Plant Region
- Eastern Manufacturing Area, Mid-Plant Region
- Eastern Manufacturing Area, North Plant Region
- Western Manufacturing Area (formerly WRV, former Lake Inez region)

Subsequently, the WRV area had further been divided into two areas, the NMA (also referred to as the NRD area) and the Western Manufacturing Areas (WMA). The WMA is being addressed in a separate submittal. The NMA RI results are being presented in this RIR.

[1] The Lake Inez Remedial Investigation Report was, in fact, a work plan for remedial investigations.

## 1.2 OBJECTIVES

The objective of this RI was to holistically evaluate the NMA to determine if any areas have been impacted by former site operations. Previous investigations were completed as part of two separate work plans, a summary of these investigations and the objectives of these investigations are presented in Section 2.4.

The purpose of this RIR is to present the soil data collected during the implementation the work plans. The RI goals for the EMA were to:

- Holistically investigate site soil to determine whether site-related constituents are present, and, if present, whether these concentrations warrant further evaluation; and
- Delineate site-related constituents that exceed applicable NJDEP SRS.

The specific goal of the RI as defined in the NRD Settlement documentation is to horizontally and vertically delineate to Residential Direct Contact Soil Remediation Standards (RDCSRS) at all locations where releases from manufacturing or associated manufacturing activities occurred in the NMA.

## 1.3 REPORT ORGANIZATION

The RIR includes the following sections:

- This section (Section 1) provides the background, objectives, and organization of this report.
- Section 2 presents information on the Site location and operating history and a summary of previous investigations conducted at the Site.
- Section 3 presents a description of the Site, environmental conditions, and the well records search.
- Section 4 provides a summary of the RI activities conducted including RIWP changes.
- Section 5 presents a discussion on the reliability of laboratory analytical data, a summary of RI results, a description of significant events impacting results, and the Site survey.
- Section 6 discusses the RI results including a summary of the BEE.
- Section 7 provides conclusions based on the data and recommends additional activities for the Site.
- Section 8 provides a list of references.

Appendices to the RIR include:

- Lake Inez Remedial Investigation Report (Work Plan)
- Historical Aerial Photographs
- Summary of Surface Soil Samples and Boring Logs
- Baseline Ecological Evaluation

## 1.4 CASE INVENTORY DOCUMENT

As required by the TRSR [N.J.A.C 7:26E-4.8(b)6], a case inventory document (CID), which provides the status of the individual AOCs for the Site, is included in this RIR, along with the required NJDEP RIR form. Both documents are presented at the front of this document.

# 2.0 SITE HISTORY

This section contains a discussion of site operations and investigation history. Additional information can be found in the RIWP (DuPont Construction Remediation Group [CRG], 2003a).

## 2.1 SITE DESCRIPTION

The 570-acre PLW site is located in the boroughs of Pompton Lakes and Wanaque in Passaic County, New Jersey. Figure 1 provides the site location on the United States Geological Survey 7.5-minute Wanaque Quadrangle Map. The site consists of northeast trending ridges and valleys containing two major drainage areas, including the Wanaque River (former Lake Inez) on the west and the Acid Brook on the east. I-287 crosses the northern and western parts of the site isolating approximately 70 acres. The site is bordered to the northeast and east by the Ramapo State Forest (deciduous forest and some deciduous wooded wetlands), to the south by the town of Pompton Lakes (industrial, commercial/services and residential land use) and Pompton Lake, and to the west and northwest by Twin Lake Valley (commercial/services and residential land use) and the Borough of Wanaque.

The NMA consists of Block 479, Lots 3, 4 and 5 that total approximately 70 acres and are located north of the I-287 Bridge over the Wanaque River in the Borough of Wanaque, in Passaic County (Figure 2). Smokeless powder (trade name Ballistite) was manufactured between 1902 and the early 1920s in Lots 3 and 4 (55 acres). Lot 5 is approximately 15 acres in size and was used as buffer land. No manufacturing took place on Lot 5. (DuPont CRG, 2003a)

Area of Concern (AOC) 117 and a portion of AOC 119 are located within the NMA. A 9.1-acre portion of AOC 117 is located to the east of the Wanaque River and the remaining 6.6-acre portion of AOC 117 is located west of the river. The NMA portion of AOC 119 is approximately 0.6 acres and is also located west of the river. See Figures 3a and 3b for AOC locations.

## 2.2 OPERATIONAL HISTORY

As described in the Operational History of Pompton Lakes Works (CH2M Hill, 1988), manufacture of explosive products on the site can be traced back to the late 1800s. Detailed histories of this area are contained in the aforementioned report, as well as the 1995 Former Operating Area Preliminary Assessment (PA) Report (DERS, April 27, 1995), and the Lake Inez Preliminary Assessment Report (DERS, April 29, 1996). A summary of these histories as they pertain to the project area is as follows:

- 1894 - American Smokeless Powder Company opens and begins production on property purchased from H. Julius Smith in the north/northwestern area of the Lake Inez Valley.
- 1902 - DuPont purchases the American Smokeless Powder Company plant and continues production of smokeless powder on the area of the Lake Inez Valley.
- 1926 - DuPont ceases all operations and production in the Lake Inez Valley. A pumping station is maintained to supply water to the expanding production in the adjacent Acid Brook Valley.

- 1984 - The Lake Inez dam is removed, draining the lake. The NMA area north of the dam is no longer Lake Inez, and the region is now referred to as the WRV. The pumping station is decommissioned.
- 1988 - DuPont and the NJDEP agree to investigate the impacts of manufacturing in the WVA.

Two of the NMA parcels located within the WVA, Lots 3 and 4, extend over approximately 55 acres and were part of the explosive manufacturing operation that predates the PLW operating history in the WRV (former Lake Inez Valley) (CH2MHill, 1988). History indicates these parcels were part of the Smokeless Powder Manufacturing Facility (Ballistite) beginning in 1902 which ceased operation in the early 1920's.

Nitrocellulose, Ballistite, and smokeless powder were manufactured in the areas of AOC 117 and 119 in the northern portion of the Lake Inez region. Wood/cotton fiber, nitric acid, sulfuric acid, barium nitrate, diphenylamine, ethyl alcohol, acetone, urea, and naphthalene were used as raw materials in the production process. The buildings in these areas were subsequently decommissioned by burning. Remnants of facility structures, primarily concrete footings, stone and concrete foundations and masonry walls remain in the area.

## 2.3 HISTORIC AERIAL PHOTOGRAPHS

Historical aerial photographs (approximately one per decade beginning with 1940) have been obtained and reviewed. All of the photographs were taken after cessation of the manufacturing operations in the NMA. The aerial photographs are included in Appendix B.

## 2.4 PREVIOUS INVESTIGATIONS

### 2.4.1 Day and Zimmerman

The New Jersey Department of Transportation contracted Day and Zimmerman in 1984 to collect and analyze soil samples from the northern portion of the Lake Inez valley. Samples were analyzed for nitrate, nitrite, lead, mercury, and organic explosives. No constituents above NJDEP soil cleanup criteria were detected. (Day and Zimmerman, 1984)

### 2.4.2 Lake Inez Preliminary Assessment

The Lake Inez Valley Preliminary Assessment Report prepared by DuPont Environmental Remediation Services (DERS) (DERS, 1996) included the investigation of AOCs 117 and 119. The report concluded that AOC 117 (the former ballistite manufacturing area) was larger than initially assessed. Additionally, the report concluded that AOC 119 was likely the remnants of the former American Smokeless Powder Company, which had been purchased by DuPont in 1902 and was located on the northwest bank of Lake Inez.

### 2.4.3 Preliminary Assessment of Properties for Divestiture

The Preliminary Assessment of Properties for Divestiture (DuPont, 1996) presented the Preliminary Assessment Reports for four parcels of DuPont property. One of these parcels (Block 479, Lot 5) is included in the NMA. The report concluded that these

parcels were used as buffer land for explosives manufacturing operations. No manufacturing or disposal activities were known to have been conducted on this property, nor were any identified during the completion of the preliminary assessment. However, lead and mercury were detected in soil. The lead detections were localized along Ringwood Avenue and were attributed to anthropogenic sources.

# 3.0 PHYSICAL SETTING

## 3.1 SITE DESCRIPTION

The Site is situated in two north/northeast-south/southwest trending valleys: the WRV (formerly Lake Inez), and the Acid Brook Valley that is located east of the WRV. Bedrock exposure separates the two watersheds. The NMA Parcel is located entirely in the WRV.

The project area is located north of the I-287 bridge that bisects the PLW Site, and is located entirely within the Highlands Preservation Area. Land use to the east is State of New Jersey park land. To the north, south, and west of the project area is a mix of park land, residential, commercial, and industrial uses. The area on the east side of the Wanaque River gradually rises from the river bank to a plateau, and then to a steep and rocky topography, which provides extremely difficult access to several remnant structures. The area on the west side of the river is relatively flat with predominately low lying areas of possible wetlands. Drainage tributaries lie within the suspected flood plain of the river.

## 3.2 SURFICIAL AND BEDROCK GEOLOGY

### 3.2.1 Geology

Situated in the New Jersey Highlands physiographic province, the project area consists of northeast trending ridges and a valley containing the Wanaque River (formerly Lake Inez) on the west. The Wanaque River is approximately 200 feet above mean sea level (msl) where it bisects Lot 3 (Figure 2). A broad floodway (500 to 700 feet wide) on either side of the river rises gradually to approximately 214 feet msl, where it meets bedrock outcroppings. Bedrock rises abruptly to nearly 400 feet msl on the east and west side of the river. Both the river valley and upland areas are heavily vegetated, with the exception of the areas immediately under the I-287 bridge. Water flow is controlled approximately one mile upstream of PLW at the Wanaque Reservoir's Raymond Dam.

### 3.2.2 Bedrock

The bedrock consists of various Precambrian era high-grade metamorphosed gneisses. The majority of the unconsolidated soils in the Lake Inez region were deposited as the Wisconsin glacier retreated. The unconsolidated soils are a poorly sorted deposit of sand, gravel, cobbles, silt, and clay that range in thickness from a thin soil cover where bedrock outcrops to approximately 60 feet in the WRV.

### 3.2.3 Hydrogeology

The average annual rainfall in the vicinity of the Site is 48.5 inches per year, and groundwater in the Lake Inez region (including the NRD Parcel) is encountered at a depth of between 8 and 19 feet below ground surface (bgs). The thickness of the saturated alluvial zone varies from approximately 32 feet in the mid-valley to 47 feet near the former Lake Inez dam. The groundwater flow direction in the alluvium is generally south and the approximate horizontal gradient is 0.001 feet/foot.

Although there are no groundwater wells in the NMA, a CGMP was developed for the site in 1995, and is based on an extensive review of all the data collected from 126 groundwater monitoring wells (36 offsite and 90 onsite). The data analysis performed under the CGWMP determined that the primary constituents of concern in groundwater,

both onsite and offsite, are chlorinated volatile organic compounds (VOCs). Thirty-three wells (15 onsite and 18 offsite) were selected to monitor for VOCs on a semi-annual basis. Annual reports are submitted to the NJDEP as part of the CGWMP. Four additional wells (44, 51, 25 and 25-I) were added to the semi-annual monitoring program in 2009.

### 3.2.4 Surface Water/Sediment

The Wanaque River bisects the project area, flowing from north to south. The river originates from the Wanaque Reservoir, approximately 2.5 miles due north of Pompton Lake and discharges into the Pequannock River at the Riverdale-Pompton Lakes municipal boundary. The river was formerly dammed downstream of the project area to create Lake Inez; however, the dam was removed in 1984 and the river returned to its channel. In the project area, the Wanaque River is approximately 80 feet in length.

The RI of the surface water and sediment is being conducted by URS and will be submitted under separate cover.

## 3.3 LAND USE

Currently, the land is not used for any industrial or any other activities. The two parcels will be donated in the future to the State of New Jersey. Because the project area is located entirely within the Highlands Preservation Area and is adjacent to State park land, that land use will be consistent with these uses.

Land use within 1,000 feet of the project area is principally recreational with some residential, small business, and light industrial areas. It is bound by undeveloped municipal property and the Ramapo State Forest to the north; the Ramapo State Forest to the east; I-287 to the south; and, a combination of municipal, residential, small business and light industrial areas to the west.

## 3.4 WETLANDS

A wetland survey was conducted in September 2005 to delineate jurisdictional wetland resources. The survey identified 15 wetlands in the WRV, 12 of which are located in the NMA including an intermittent channel. Wetlands 1 through 4 and 7 are located in the western parcel and encompass 1.049 acres. Wetlands 5, 6, 8 through 11 and 13 are located in the eastern parcel and encompass 1.285 acres. Wetlands 12, 14 and 15 are located south of I-287 in the WMA.

# 4.0 REMEDIAL INVESTIGATION ACTIVITIES

The RI activities were implemented in accordance with the RIWP prepared by DuPont CRG, dated June 12, 2003. A summary of the sampling program is provided in Table 1.

## 4.1 APPROACH

As described in the RIWP, the sampling approach included three categories: perimeter sampling, holistic region sampling, AOC structure-specific sampling, and perimeter delineation sampling. Holistic sampling was used to evaluate if conditions within the former manufacturing facility were impacted by operations. AOC structure-specific sampling was completed at remnant structures across the AOC. Perimeter sampling was limited because of the commitment to donation of this area to the State.

## 4.2 METHODOLOGIES

Surface samples were collected from the 0 to 6-inch interval using a stainless trowel and subsurface samples were collected with a bucket auger or a mechanized sampling device. Sample locations generally had one sample collected within the surface interval and two samples collected from the subsurface at grid locations, unless refusal was encountered. Depth intervals were determined based on lithology and field screening (PID, thermal reactivity test, portable XRF, and EXPRAY).

## 4.3 AOC SPECIFIC SAMPLING

In order to evaluate the potential for releases related to operations in the NMA in a holistic fashion, 100-foot to 200-foot grids were superimposed on the two large AOCs (AOCs 117 and 119) covering the majority of the NMA region. Samples were collected at each grid node within the AOC boundary. The borings were located to determine if a release to soils from former manufacturing operations had occurred and where a release has been detected to delineate the nature and extent of constituents of potential concern in the NMA. Subsequent sampling events were conducted to delineate the original detections at the corresponding grid node or structure. RI activities were also focused upon sampling soil in the vicinity of former structures in the former Ballistite Production Area. Samples were to be collected on the downgradient side of each structure. Sample locations are shown in Figures 3A and 3B.

## 4.4 AOC 117 BALLISTITE PRODUCTION AREA

AOC 117 consists of the former Ballistite Production Area. In order to approach the NMA in a holistic fashion as described in the RIWP, a large grid was used to determine the number of locations. Based on a 200-foot grid, 17 locations were investigated using a GeoProbe® drill rig.

Samples in AOC 117 were collected from 17 grid nodes. Grid nodes 334-104 through 334-109 are located on the western side of the Wanaque River (Figure 3b.) Grid nodes 334-110 through 334-120 are located on the eastern side of the Wanaque River (Figure 3a.) Three additional grid nodes, 334-101 through 334-103, were designated to delineate an extension of AOC 119, which crosses from the Western Manufacturing Area into the southern boundary of the NMA on the west side of Wanaque River (Figure 3b.)

Based on the raw materials and the decommissioning by burning, the RIWP proposed the following analyses for the investigation:

- 100% Field screening for organic explosives (EXPRAY)
- 10% Nitroaromatics-Nitroamines (NJ certified lab)
- 10% Nitrate/Nitrite (NJ certified lab)
- 33% Polynuclear Aromatic Hydrocarbons (PAHs), one sample from each boring (NJ-certified lab)
- 100% Copper, lead, mercury (PLW onsite Laboratory by x-ray fluorescence [XRF])
- 100% Arsenic (NJ-certified lab)
- 10% Priority Pollutant (PP) Metals (NJ-certified lab)

All initial samples were analyzed for lead, copper and mercury utilizing the PLW XRF. A NJ-certified laboratory analyzed the samples for arsenic. Ten percent of the samples were also sent to a NJ-certified laboratory for PP metals analyses. One sample from each boring location was analyzed for PAH. All samples were field screened for organic explosives, with ten percent sent to a NJ-certified laboratory for nitroaromatic-nitroamines analyses.

The specific number of borings and analytes for each grid node are discussed below. Sample identification numbers for the NMA RIR consist of 334 followed by the grid node number. Boring logs and a summary of surface soil samples are provided in Appendix C. An abridged copy of the Lake Inez RIWP is included in Appendix A with the complete RIWP included in the electronic file.

**AOC 117 – Grid Node 104**

Grid node 104 was sampled and analyzed for PAHs, Metals and organic explosives.

- One initial boring: 334-104 at a depth of 0 – 0.5 feet bgs, 3 – 3.5 feet bgs and 6 – 6.5 feet bgs (arsenic only).

**AOC 117 – Grid Node 105**

Grid node 105 was sampled and analyzed for PAHs, arsenic, copper, lead and mercury.

- One initial boring: 334-105 at a depth of 0 – 0.5 feet bgs, 3 – 3.5 feet bgs, and 6 – 6.5 feet bgs (lead only).

**AOC 117 – Grid Note 105D Including Structures 117-01 and 117-02**

Grid node 105D was sampled and analyzed for arsenic and lead. Grid Node 105-D was intended to be the delineation of Grid Node 105. However, the original boring location was obscured from view and the field team relied upon re-acquiring the location with a field global positioning satellite (GPS) unit. The initial samples included:

- One initial boring: 334-105D at a depth of 3 – 3.5 feet and 6 – 6.5 bgs.
- Four step-out borings: 334-162 through 334-165 at a depth of 0 – 0.5 feet bgs (arsenic and/or lead).

Follow on phases:

- Four borings 334-274 through 334-277 were sampled at a depth of 0 – 0.5 feet bgs. An additional sample was later collected from Boring 334-274 at a depth of 0.5 – 1 foot bgs.

- Four borings 334-293 through 334-296 were sampled at a depth of 0 – 0.5 feet bgs. Additional samples were later collected from Boring 334-307 at a depth of 0.5 – 1 foot, 1 – 1.5 feet, 1.5-2 feet, and 2 – 2.5 feet bgs.
- Five borings 334-305 through 334-309 were sampled at a depth of 0 – 0.5 feet bgs.
- Four borings 334-314 through 334-317 were sampled at a depth of 0 – 0.5 feet bgs.
- Five borings 334-320 through 334-324 were sampled at a depth of 0 – 0.5 feet bgs.
- Five borings 334-360 through 334-364 were sampled at a depth of 0 – 0.5 feet bgs.
- Two borings 334-380 and 334-381 were sampled at a depth of 0 – 0.5 feet bgs.
- Two borings 334-382 and 334-383 were sampled at a depth of 0 – 0.5 feet bgs.
- One boring 334-384 was sampled at a depth of 0 – 0.5 feet bgs.
- Three borings 334-385, 334-397 and 334-399 were sampled at a depth of 0 – 0.5 feet bgs.
- One boring 334-398 was sampled at a depth of 0 – 0.5 feet bgs.
- One boring 334-400 was sampled at a depth of 0 – 0.5 feet bgs.
- One boring 334-414 was sampled at a depth of 0 – 0.5 feet bgs.
- Four borings 334-432 through 334-435 were sampled at a depth of 0 – 0.5 feet bgs.

Eleven borings were sampled to complete the vertical delineation in this area. They are as follows:

- Three borings 334-B11, 334-B14 and 334- B18 were sampled at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.
- Four borings 334-B9, 334-B10, 334-B12 and 334-B13 were sampled at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.
- Four borings 334-B15, 334-B16, 334-B17 and 334-B20 were sampled at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.
- Three additional step outs: 334-P1 at a depth of 0 – 0.5 feet bgs and an additional sample was later collected a depth of 3.5 – 4 feet bgs. Borings 334-P2 and 334-P12 were sampled at depths of 0-0.5 feet bgs and 1-1.5 feet bgs respectively.

**AOC 117 – Grid Node 106**

Grid node 106 was sampled and analyzed for PAH, organic explosives, arsenic, copper, lead and mercury.

- One initial sample: 334-106 at a depth of 0 – 0.5 feet bgs; and additional samples were later collected from a depth of 3 - 3.5 feet and 6 – 6.5 feet bgs; and later again at a depth of 0.5 – 1 feet bgs.
- Four step-out samples: 334-428 through 334-431 at a depth of 0 – 0.5 feet bgs.

Follow on phases:

- One sample 334-B19 was collected to complete the vertical delineation in this area. Samples were collected at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.

**AOC 117 – Grid Node 106D**

Grid node 106-D is located in AOC 117 and was sampled and analyzed for arsenic and lead. Grid Node 106-D was intended to be the delineation of Grid Node 106. However, the original boring location was obscured from view and the field team relied upon re-acquiring the location with a field GPS unit. This resulted in the delineation of a second area as described below.

- One initial sample: 334-106D at a depth of 3 – 3.5 feet bgs and 6 – 6.5 bgs.
- Four step-out samples: 334-158 through 334-161 at a depth of 0 – 0.5 feet bgs.

Follow on phases:

- Four samples 334-270 through 334-273 were collected at a depth of 0 – 0.5 feet bgs.
- One sample 334-330 was collected at a depth of 0 – 0.5 feet bgs.
- One sample 334-B4 was collected to complete the vertical delineation in this area. Samples were collected at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.

**AOC 117 – Grid Node 107**

Grid node 107 was sampled and analyzed for PAH, PP Metals and organic explosives.

- One initial sample: 334-107 at a depth of 0 – 0.5 feet bgs and additional samples were later collected from a depth of 3-3.5 feet bgs and 6 – 6.5 feet bgs.
- Four step-out samples: 334-150 through 334-153 at a depth of 0 – 0.5 feet bgs.

Follow on phases:

- Two samples from boring 334-B7 were collected and analyzed for lead. Two samples from the boring 334-B8 location were analyzed for arsenic and lead. These samples were collected on 1/8/08 to complete the vertical delineation in this area. Samples were collected at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.

**AOC 117 – Grid Node 108**

Grid node 108 was sampled and analyzed for PAH, arsenic, copper, lead and mercury.

- One initial sample: 334-108 at a depth of 0 – 0.5 feet bgs and additional samples were later collected from a depth of 3-3.5 feet bgs and 6 – 6.5 feet bgs.
- Four step-out samples: 334-166 through 334-169 at a depth of 0 – 0.5 feet bgs.

Follow on phases:

- One sample 334-B8 was collected to complete the vertical delineation in this area. Samples were collected at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.

**AOC 117 – Grid Node 109**

Grid node 109 was sampled and analyzed for PAH, PP Metals and organic explosives.

- One initial sample: 334-109 at a depth of 0 – 0.5 feet bgs and additional samples were later collected from a depth of 3-3.5 feet bgs and 6 – 6.5 feet bgs.
- Four step-out samples: 334-154 through 334-157 at a depth of 0 – 0.5 feet bgs.

**AOC 117 – Grid Node 110**

Grid node 110 was sampled and analyzed for PAH, PP Metals and organic explosives.

- One initial sample: 334-110 at a depth of 0 – 0.5 feet bgs and additional samples were later collected from a depth of 2 - 2.5 feet bgs, 6 – 6.5 feet bgs and 7 – 7.5 feet bgs.

**AOC 117 – Grid Node 111**

Grid node 111 was sampled and analyzed for PAH, arsenic, copper, lead and mercury.

- One initial sample: 334-111 at a depth of 0 – 0.5 feet bgs and additional samples were later collected from a depth of 2-2.5 feet bgs and 7 – 7.5 feet bgs.

**AOC 117 – Grid Node 112 and Structure 117-14**

Grid node 112 was sampled and analyzed for PAH, organic explosives, arsenic, copper, lead and mercury.

- One initial sample: 334-112 at a depth of 0 – 0.5 feet bgs.
- Four step-out samples: 334-142 through 334-145 at a depth of 0 – 0.5 feet bgs.

Follow on phases:

- Two step outs: 334-330E and 334-332E at a depth of 0 – 0.5 feet bgs.
- One step out: 334-352 at a depth of 0 – 0.5 feet bgs.
- One step out: 334-250 at a depth of 0 – 0.5 feet bgs.
- Two samples 334-B89 and 334-B90 were collected to complete the vertical delineation in this area. Samples were collected at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.

**AOC 117 – Grid Node 113**

Grid node 113 was sampled and analyzed for PAH, PP Metals and organic explosives.

- One initial sample: 334-113 at a depth of 0 – 0.5 feet bgs.
- Four step-out samples: 334-138 through 334-141 at a depth of 0 – 0.5 feet bgs.

**AOC 117 – Grid Node 114**

**Grid node 114 was sampled and analyzed for PAH, organic explosives, arsenic, copper, lead and mercury.**

- One initial sample: 334-114 at a depth of 0 – 0.5 feet bgs.
- Four step-out samples: 334-134 through 334-137 at a depth of 0 – 0.5 feet bgs.

**AOC 117 – Grid Node 115**

Grid node 115 was sampled and analyzed for PAHs, arsenic, copper, lead and mercury.

- One sample: 334-115 at a depth of 0 – 0.5 feet bgs.

**AOC 117 – Grid Node 116**

Grid node 116 was sampled and analyzed for PAH and metals.

- One initial sample: 334-116 at a depth of 0 – 0.5 feet bgs.
- Four step-out samples: 334-130 through 334-133 at a depth of 0 – 0.5 feet bgs.

**AOC 117 – Grid Node 117**

Grid node 117 was sampled and analyzed for PAH, arsenic, copper, lead and mercury.

- One sample: 334-117 at a depth of 0 – 0.5 feet bgs.

**AOC 117 - Grid Node 118**

Grid node 118 was sampled and analyzed for PAH, arsenic, copper, lead and mercury.

- One sample: 334-118 at a depth of 0 – 0.5 feet bgs.

**AOC 117 - Grid Node 119**

Grid node 119 was sampled and analyzed for PAH and PP Metals.

- One initial sample: 334-119 at a depth of 0 – 0.5 feet bgs.
- Four step-out samples: 334-122 through 334-125 at a depth of 0 – 0.5 feet bgs.

**AOC 117 - Grid Node 120**

Grid node 120 was sampled and analyzed for PAH, PP Metals and organic explosives.

- One initial sample: 334-120 at a depth of 0 – 0.5 feet bgs.
- Four step-out samples: 334-126 through 334-129 at a depth of 0 – 0.5 feet bgs.

**AOC 117 - Structure 117-01 and 117-02**

See Grid node 105D.

**AOC 117 - Structure 117-03**

Structure 117-03 was sampled and analyzed for lead.

- One sample: 334-190 at a depth of 0 – 0.5 feet bgs.

**AOC 117 - Structure 117-04**

Structure 117-04 was sampled and analyzed for lead.

- One sample: 334-188 at a depth of 0 – 0.5 feet bgs.

**AOC 117 - Structure 117-05**

Structure 117-05 was sampled and analyzed for lead.

- One initial sample: 334-189 at a depth of 0 – 0.5 feet bgs.
- Three step-out samples: 334-229 through 334-231 at a depth of 0 – 0.5 feet bgs. Sample location 334-231 was additional samples were later collected from depths of 0.5 – 1 feet bgs and 1 – 1.5 feet bgs.

Follow on phases:

- Four step outs: 334-278 through 334-281 at a depth of 0 – 0.5 feet bgs.
- Three step out: 334-390 through 334-392 at a depth of 0 – 0.5 feet bgs.
- Two step outs: 334-302 and 334-303 at a depth of 0 – 0.5 feet bgs.
- One step out: 334-312 at a depth of 0 – 0.5 feet bgs.
- One samples 334-B3 was collected to complete the vertical delineation in this area. Samples were collected at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.

**AOC 117 - Structure 117-06**

Structure 117-06 was sampled and analyzed for lead.

- One initial sample: 334-191 at a depth of 0 – 0.5 feet bgs.
- Three step-out samples: 334-226 through 334-228 at a depth of 0 – 0.5 feet bgs. At sample location 334-226, additional samples were later collected at depth of 0.5 – 1 feet bgs; at a depth of 1 – 1.5 feet bgs; at a depth of 1.5 – 2 feet bgs; and at a depth of 2 -2.5 feet bgs.

Follow on phases:

- Four step outs: 334-282 through 334-285 at a depth of 0 – 0.5 feet bgs.
- Four step out: 334-286 through 334-289 at a depth of 0 – 0.5 feet bgs.
- Three step outs: 334-299 through 334-301 at a depth of 0 – 0.5 feet bgs.
- Two step outs: 334-310 and 334-311 at a depth of 0 – 0.5 feet bgs.
- One step out: 334-318 at a depth of 0 – 0.5 feet bgs.
- Four borings 334-B5 through 334-B-8 were advanced to complete the vertical delineation in this area. Samples were collected at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.

**AOC 117 - Structure 117-07**

Structure 117-07 was sampled and analyzed for lead.

- One initial sample: 334-187 at a depth of 0 – 0.5 feet bgs.
- Three step-out samples: 334-232 through 334-234 at a depth of 0 – 0.5 feet bgs. At sample location 334-232, additional samples were later collected from a depth of 0.5 – 1 foot bgs and a depth of 1 – 1.5 feet bgs to complete the vertical delineation in the area.

Follow on phases:

- Four step outs: 334-262 through 334-265 at a depth of 0 – 0.5 feet bgs.
- Two step outs: 334-297 and 334-298 at a depth of 0 – 0.5 feet bgs.

- One step out: 334-304 at a depth of 0 – 0.5 feet bgs.
- One step out: 334-313 at a depth of 0 – 0.5 feet bgs.
- One step out: 334-319 at a depth of 0 – 0.5 feet bgs.

**AOC 117 - Structure 117-08**

Structure 117-08 was sampled and analyzed for lead and arsenic.

Lead:

- One initial sample: 334-186 at a depth of 0 – 0.5 feet bgs.
- Three step-out samples: 334-235 through 334-237 at a depth of 0 – 0.5 feet bgs.
- Four step outs: 334-266 through 334-269 at a depth of 0 – 0.5 feet bgs.
- One step out: 334-B2 at depths of 1.0 – 1.5 feet bgs and 2.0 – 2.5 feet bgs to complete vertical delineation in the area.

Arsenic:

- Soil borings were advanced in the area of structure 117-08 for arsenic analysis. Arsenic samples were collected from 334-B105 and 334-B106, 334-512, 334-RB1, 334-P6, 334-P16, and 334-B53 through 334-B60.

**AOC 117 - Structure 117-09**

Structure 117-09 was sampled and analyzed for lead.

- One initial sample: 334-200 at a depth of 0 – 0.5 feet bgs.
- Four step-out samples: 334-219 through 334-222 at a depth of 0 – 0.5 feet bgs. At sample location 334-219, additional samples were later collected a depth of 0.5 – 1 foot bgs and at a depth of 1.0 – 1.5 feet bgs to complete the vertical delineation in the area.

Follow on phase:

- Two step out samples: 334-260 and 334-261 at a depth of 0 – 0.5 feet bgs.

**AOC 117 - Structure 117-10**

Structure 117-06 was sampled and analyzed for lead.

- One initial sample: 334-191 at a depth of 0 – 0.5 feet bgs.
- Three step-out samples: 334-226 through 334-228 at a depth of 0 – 0.5 feet bgs. At sample location 334-226, additional samples were later collected at a depth of 0.5 – 1 feet bgs; at a depth of 1 – 1.5 feet bgs; at a depth of 1.5 – 2 feet bgs; and at a depth of 2 -2.5 feet bgs.

Follow on phases:

- Four step outs: 334-282 through 334-285 at a depth of 0 – 0.5 feet bgs.
- Three step out: 334-287 through 334-289 at a depth of 0 – 0.5 feet bgs.
- Three step outs: 334-299 through 334-301 at a depth of 0 – 0.5 feet bgs.
- Two step outs: 334-310 and 334-311 at a depth of 0 – 0.5 feet bgs.

- One step out: 334-318 at a depth of 0 – 0.5 feet bgs.
- Three samples 334-B6 through 334-B-8 was collected complete the vertical delineation in this area. Samples were collected at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.

**AOC 117 - Structure 117-11**

Structure 117-11 was sampled and analyzed for lead.

- Two initial sample: 334-198 and 334-199 at a depth of 0 – 0.5 feet bgs.
- Six step-out samples: 334-213 through 334-218 at a depth of 0 – 0.5 feet bgs.

Follow on phases:

- Seven step outs: 334-251 through 334-257 at a depth of 0 – 0.5 feet bgs.
- At Boring 334-254, additional samples were later collected from depths of 0.5 – 1 feet bgs, 1 -1.5 feet bgs, and 1.5 – 2 feet bgs.
- Seven step outs: 334-333E through 334-339E at a depth of 0 – 0.5 feet bgs. At Boring 334-337E, additional samples were later collected at depths of 0.5 – 1 feet bgs, 1 -1.5 feet bgs, 1.5 – 2 feet bgs, and 2 – 2.5 feet bgs.
- Six step outs: 334-353 through 334-358 at a depth of 0 – 0.5 feet bgs.
- Four step outs: 334-372 through 334-275 at a depth of 0 – 0.5 feet bgs.
- Three step outs: 334-390 through 334-292 at a depth of 0 – 0.5 feet bgs.
- Two step outs: 334-403 and 334-404 at a depth of 0 – 0.5 feet bgs.
- Two step outs: 334-410 and 334-411 at a depth of 0 – 0.5 feet bgs.
- Two step outs: 334-416 through 334-418 at a depth of 0 – 0.5 feet bgs.
- Two step outs: 334-419 and 334-420 at a depth of 0 – 0.5 feet bgs.
- Twelve samples 334-B77 through 334-B88 were collected to complete the vertical delineation in this area. Samples were collected at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.
- Two additional perimeter sample locations 334-P11 and 334-P18 were also collected. 334-P11 was sampled at a depth of 0 – 0.5 feet bgs. At 334-P11, additional samples were later collected from a depth of 1 – 1.5 feet bgs and 334-P18 was sampled at a depth of 0 -0.5 feet bgs.

**AOC 117 - Structure 117-12 and Grid Node 110**

Structure 117-12 was sampled and analyzed for lead. The delineation of the lead impacted soils in the vicinity of structure 117-12 converged with the delineation of the grid node 110 and as such is discussed in combination here.

- One initial sample at grid node 110: 334-110 at a depth of 0 – 0.5 feet bgs.
- Four step-out samples: 334-146 through 334-149 at a depth of 0 – 0.5 feet bgs.
- At sample location 334-148, additional samples were later collected from at a depth of 0.5 – 1 feet bgs; at a depth of 1 – 1.5 feet bgs; and at a depth of 1.5 – 2 feet bgs.

- The samples added for lead delineation of Structure 117-12 were borings 334-224 and 334-225 at a depth of 0 – 0.5 feet bgs.

Follow on phases:

- One step out: 334-259 at a depth of 0 – 0.5 feet bgs.
- Two step outs: 334-340E and 334-341E at a depth of 0 – 0.5 feet bgs.
- One step out: 334-359 at a depth of 0 – 0.5 feet bgs.
- Two step outs: 334-376 and 334-379 at a depth of 0 – 0.5 feet bgs.
- Four step outs: 334-393 through 334-396 at a depth of 0 – 0.5 feet bgs.
- Three step out: 334-405 through 334-27 at a depth of 0 – 0.5 feet bgs.
- Two step outs: 334-412 and 334-413 at a depth of 0 – 0.5 feet bgs.
- Two step outs: 334-415 and 334-417 at a depth of 0 – 0.5 feet bgs.
- One step out: 334-419 at a depth of 0 – 0.5 feet bgs.
- One step out: 334-422 at a depth of 0 – 0.5 feet bgs.

Eleven borings were sampled to complete the vertical delineation in this area. They are as follows:

- One boring 334-B78 was sampled at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.
- Two borings 334-B71 and B75 were sampled at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.
- Two borings 334-B73 and B76 were sampled at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.
- Three borings 334-B65, 334-B72 and B74 were sampled at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.
- Three borings 334-B64, 334-B67 and B70 were sampled at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.
- One additional step-out sample: 334-P9 at a depth of 0 – 0.5 feet bgs.

**AOC 117 - Structure 117-13**

Structure 117-13 was sampled and analyzed for lead.

- One sample: 334-409 at a depth of 0 – 0.5 feet bgs.

**AOC 117 - Structure 117-14 and Grid Node 112**

Structure 117-14 abuts Grid node 112. Grid node 112 was sampled and analyzed for PAH, organic explosives, arsenic, copper, lead, and mercury. Structure 117-14 was sampled and analyzed for lead, which was detected above of the RDCSRS at Grid Node 112.

- One initial sample: 334-112 at a depth of 0 – 0.5 feet bgs.
- Four step-out samples: 334-142 through 334-145 at a depth of 0 – 0.5 feet bgs.

Follow on phases:

- Two step outs: 334-330E and 334-332E at a depth of 0 – 0.5 feet bgs.
- One step out: 334-352 at a depth of 0 – 0.5 feet bgs.
- One step out: 334-250 at a depth of 0 – 0.5 feet bgs.
- Two samples 334-B89 and 334-B90 were collected to complete the vertical delineation in this area. Samples were collected at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.

**AOC 117 - Structure 117-15**

Structure 117-15 was sampled and analyzed for lead.

- One sample: 334-197 at a depth of 0 – 0.5 feet bgs.

**AOC 117 - Structures 117-16 through 117-18**

The structure numbering convention runs from 117-01 through 117-27, excluding structure numbers 117-16 through 117-18 which were not used.

**AOC 117 - Structure 117-19**

Structure 117-19 was sampled and analyzed for lead.

- One initial sample: 334-196 at a depth of 0 – 0.5 feet bgs. At sample location 334-196, additional samples were later collected at a depth of 0.5 – 1 feet bgs; at a depth of 1 – 1.5 feet bgs; and at a depth of 1.5 – 2 feet bgs.
- Three step-out samples: 334-201 through 334-203 at a depth of 0 – 0.5 feet bgs.

Follow on phases:

- One step out: 334-249 at a depth of 0 – 0.5 feet bgs.
- One step out: 334-329E at a depth of 0 – 0.5 feet bgs.
- One sample 334-B91 was collected to complete the vertical delineation in this area. A sample was collected at a depth of 1 – 1.3 feet bgs at the bedrock surface.

**AOC 117 - Structure 117-20**

Structure 117-20 was sampled and analyzed for lead.

- One sample: 334-195 at a depth of 0 – 0.5 feet bgs.

**AOC 117 - Structure 117-21**

**Structure 117-21 was sampled and analyzed for lead.**

- One sample: 334-194 at a depth of 0 – 0.5 feet bgs.

**AOC 117 - Structure 117-22**

Structure 117-22 was sampled and analyzed for lead.

- One sample: 334-244 at a depth of 0 – 0.5 feet bgs.

**AOC 117 - Structure 117-23**

Structure 117-23 was sampled and analyzed for lead.

- One initial sample: 334-193 at a depth of 0 – 0.5 feet bgs.
- Three step-out samples: 334-208 through 334-210 at a depth of 0 – 0.5 feet bgs. At sample location 334-248, an additional sample was later collected from at a depth of 0.5 – 1 foot bgs.

Follow on phases:

- Five step outs: 334-244 through 334-248 at a depth of 0 – 0.5 feet bgs.
- Four step outs: 334-321E through 334-324E at a depth of 0 – 0.5 feet bgs.
- Four step outs: 334-348 through 334-351 at a depth of 0 – 0.5 feet bgs.
- Four step outs: 334-366 through 334-369 at a depth of 0 – 0.5 feet bgs.
- Two step outs: 334-388 and 334-389 at a depth of 0 – 0.5 feet bgs.
- Seven samples, 334-B92 through 334-B98, were collected to complete the vertical delineation in this area. Samples were collected at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals. At Boring 334-B95, an additional sample was later collected from a depth of 3 – 3.5 feet bgs.

**AOC 117 - Structure 117-24**

Structure 117-24 was sampled and analyzed for lead.

- One initial sample: 334-192 at a depth of 0 – 0.5 feet bgs.
- Four step-out samples: 334-204 through 334-207 at a depth of 0 – 0.5 feet bgs. At sample location 334-204, additional samples were later collected at a depth of 0.5 – 1 feet bgs; at a depth of 1 – 1.5 feet bgs; and at a depth of 1.5 – 2 feet bgs.

Follow on phases:

- Two step outs: 334-242 and 334-243 at a depth of 0 – 0.5 feet bgs.
- Two step outs: 334-319E and 334-320E at a depth of 0 – 0.5 feet bgs.
- Two step outs: 334-346 through 334-347 at a depth of 0 – 0.5 feet bgs.
- One step out: 334-365 at a depth of 0 – 0.5 feet bgs.
- One step out: 334-387 at a depth of 0 – 0.5 feet bgs.
- Three samples 334-B99, 334-B100 and 334-B110 were collected complete the vertical delineation in this area. Borings 334-B99 and 334-B-100 were sampled at depths of 1 – 1.5 feet bgs and 2 – 2.5 feet bgs. Boring 334-B110 was collected at a depth of 1 – 1.5 feet bgs and 2 – 2.5 feet bgs. At Boring 334-100, an additional sample was later collected from a depth of 3 -3.5 feet bgs.

**AOC 117 - Structure 117-25**

Structure 117-25 was sampled and analyzed for lead.

- One initial sample: 334-211 at a depth of 0 – 0.5 feet bgs.

- Four step-out samples: 334-238 through 334-241 at a depth of 0 – 0.5 feet bgs. At sample location 334-240, additional samples were later collected from at a depth of 0.5 – 1 feet bgs; at a depth of 1 – 1.5 feet bgs; at a depth of 1.5 – 2 feet bgs; at a depth of 2 -2.5 feet bgs.; and at a depth of 3 – 3.5 feet bgs.

Follow on phases:

- Four step outs: 334-325E through 334-328E at a depth of 0 – 0.5 feet bgs.
- Four step out: 334-342 through 334-345 at a depth of 0 – 0.5 feet bgs.
- Two step outs: 334-370 and through 334-371 at a depth of 0 – 0.5 feet bgs.
- One step out: 334-386 at a depth of 0 – 0.5 feet bgs.
- One step out: 334-402 at a depth of 0 – 0.5 feet bgs.
- One step out: 334-408 at a depth of 0 – 0.5 feet bgs.
- One step out: 334-469 at a depth of 0 – 0.5 feet bgs.
- Two samples, 334-B103 and 334-B104, were collected to complete the vertical delineation in this area. Samples were collected at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals. At Boring 334-104, additional samples were later collected from at depths of 3.5 – 4 feet and 4 – 4.25 feet bgs.

**AOC 117 - Structure 117-26**

Structure 117-26 was sampled and analyzed for lead.

- One sample: 334-212 at a depth of 0 – 0.5 feet bgs.

**AOC 117 - Structure 117-27**

Structure 117-27 was sampled and analyzed for arsenic and lead.

- One initial sample: 334-488 and 334-491 at a depth of 0 – 0.5 feet bgs.
- Four step-out samples: 334-493 through 334-496 at a depth of 0 – 0.5 feet bgs.

Follow on phases:

- One step out: 334-498 at a depth of 0 – 0.5 feet bgs.
- Two samples 334-B22 through 334-B-21 were collected to complete the vertical delineation in this area. Samples were collected at the 1 – 1.5-foot and 2 - 2.5-foot bgs intervals.

## 4.5 AOC 119 - NORTHWEST LAKE INEZ

Based on a 100-foot grid, 45 locations were initially investigated using a GeoProbe® drill rig. All samples were analyzed for lead, copper and mercury by the PLW onsite laboratory using XRF. A New Jersey certified laboratory analyzed samples for arsenic. Ten percent of the samples were sent to a NJ certified laboratory for PP metals analyses. One sample from each boring location was analyzed for PAH. All samples were field screened for organic explosives, with ten percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

**Grid Node 101**

Grid node 101 was sampled and analyzed for PAH, copper, lead, and mercury.

- Step-out samples 334-182, 183, 184 and 185 were analyzed for lead at 0 – 0.5 feet bgs and for arsenic at 0 – 0.5 feet bgs.
- Two samples at location 334-B61 from 1.0 to 1.5 feet bgs and 2.0 to 2.5 feet bgs were analyzed for arsenic.

**Grid Node 102**

Grid node 102 was sampled and analyzed for PAHs and PP Metals.

- One sample: 334-102 at a depth of 0 – 0.5 feet bgs.

**Grid Node 103**

Grid node 103 was sampled and analyzed for PAH, organic explosives, copper, lead, and mercury.

## 4.6 ROAD BED SAMPLING

Seven composite samples were collected from a road bed within AOC 117. The road generally runs from structure 117-08 to 117-06. The samples were collected from ground surface to the first contact with native soil and consisted largely of ash and cinders.

The seven samples include: 334-RB-1 at a depth of 0 – 2 feet bgs; 334-RB-2 at a depth of 0 – 1.4 feet bgs; 334-RB-3 at a depth of 0 – 3.3 feet bgs; 334-RB-4 at a depth of 0 – 1.3 feet bgs; 334-RB-5 at a depth of 0 – 1.7 feet bgs; 334-RB-6 at a depth of 0 – 1.2 feet bgs; and 334-RB-7 at a depth of 0 – 1.4 feet bgs. The samples were analyzed for PAH and PP Metals.

# 5.0 TECHNICAL OVERVIEW OF REMEDIAL INVESTIGATION ACTIVITIES

The purpose of the RI was to collect data so as to determine if a release to soils from operations within the NMA occurred and if so define the nature and extent of that release.

## 5.1 RELIABILITY OF ANALYTICAL DATA

Samples for soil obtained during the RI were collected in accordance with the Quality Assurance Project Plan (QAPP) (DuPont CRG, 2003) and the RIWP (DuPont CRG, 2003). Variations to these procedures and quality results are discussed in the following sections. A summary of analytical methods and quality assurance indicators is provided in Table 2.

### 5.1.1 Field Analytical Methods

All soil samples collected during the NMA RI activities were screened in the field for reactivity and organic explosives prior to submission to the laboratory. Procedures to perform field explosive screening are presented in Appendix C of the Lake Inez Region RIWP, which is included as Appendix A to this RIR.

### 5.1.2 Laboratory Analytical Methods

Soil samples were analyzed for site-specific metals (i.e. copper, lead, and mercury) at the PLW onsite Environmental Analysis Lab. Samples were analyzed using a Spectrace QUAN X XRF utilizing the fundamental parameters analysis method. Approximately 10 to 33 percent of the lead samples were then sent to Lancaster Laboratories, Inc. (LLI), NJDEP Certification PA011, for metals confirmation and additional analyses.

Samples undergoing additional analyses were analyzed at LLI using methods listed in Table 2. Analytical parameters included arsenic, PP metals, PAH, nitroaromatic-nitramine compounds, and nitrate/nitrite. Method selection criteria for the project were determined based on the analytical methods used in past investigations and on the Data Quality Objectives, along with the method detection limits achievable for each parameter. Each analytical method was chosen to address the intended use of the data (generated at a particular sampling point) in a timely and cost-effective manner.

Quality assurance/ quality control (QA/QC) samples confirmed the accuracy of the laboratory and field samples, in accordance with the QAPP.

### 5.1.3 Data Validation

The electronic data submitted for this sampling event was reviewed by URS via the DuPont Data Review (DDR) process. The DDR is an automated internal review process used by DuPont to determine if the data is usable. The data is run through this automated program where a series of checks are performed on the data. The data is evaluated against hold time criteria, checked for blank contamination, assessed against matrix spike/ matrix, spike duplicate recoveries, assessed against relative percent differences (RPDs) between these samples, assessed against laboratory control sample/control sample duplicate recoveries, assessed against. RPDs between these samples, assessed against RPDs between laboratory replicates, and assessed against

surrogate spike recoveries. The DDR applies the following data qualifiers to analysis results, as warranted:

**DDR Analytical Qualifiers**

| Qualifier | Definition |
|---|---|
| B | Not detected substantially above the level in the laboratory of field blanks |
| R | Unusable result. Analyte may or may not be present in the sample |
| J | Analyte present. Report value may not be accurate or precise. |
| UJ | Not detected. Reporting limit may not be accurate or precise. |

All data reported in this RIR was reviewed using the DDR process described above. No data used for evaluation/interpretation in this report was qualified "R." DDR reports and the laboratory analytical data reports are maintained on file and are available upon request.

Two samples were reported with detection limits that were higher than the NJDEP SRS:

- Sample 334-106 result for nitrobenzene was below the laboratory detection limit, which is higher than the NJDEP Impact to Ground Water Soil Remediation Standard (IGWSRS).
- Sample 334-116 results for benzo(a)pyrene [B(a)P] and dibenz(a,h)anthracene were also below the laboratory detection limits, which were higher than the RDCSRS.

### 5.1.4 Quality Assurance/Quality Control Samples

QA/QC was performed on field samples during the RI to assess the accuracy and representativeness of samples collected. Field QA/QC checks include field blanks, temperature blanks, trip blanks, and field duplicate samples. Laboratory QA/QC checks include matrix spike and matrix spike duplicate samples.

QA/QC samples confirmed the accuracy of the laboratory and field samples, in accordance with the QAPP. A summary of QA/QC sample results is provided in Tables 3a through 3c. Table 3d provides a comparison of the PLW onsite laboratory XRF lead results to the LLI analytical results.

## 5.2 SUMMARY OF RESULTS

A summary of analytical results is provided in Tables 4 (Semi-Volatile Organic Compounds), 5 (Metals), and 6 (Organic Explosives). Figures 5 through 15 of this report provide the sample locations and a summary of detected constituents from all investigative phases conducted in the NMA. A detailed discussion of the results is provided in Section 6.0.

## 5.3 SIGNIFICANT EVENTS IMPACTING RESULTS

Errors in the synchronization of field GPS data with the land surveyor efforts resulted in two sets of grid node locations. As a result, step-out on samples intended to be located at 334-105 and 334-106 were placed in other areas. These errors were resolved and the

correct locations are presented on Figures 3a and 3b. The borings that were incorrectly located are identified as 334-105D and 334-106D, respectively.

## 5.4 SITE SURVEY

The survey of sample locations was performed by Railroad Construction Corp (RCC), a New Jersey-licensed Land Surveyor. The New Jersey State Plane Coordinate System (NAD83) was used for horizontal control and the North American Vertical Datum (NAVD-88) for vertical elevations. This data was supplemented by URS field staff collecting GPS data.

Based on the survey, an AutoCAD base map (including topographic contours) of the Site was prepared by RCC. The AutoCAD base map includes present structures, surficial features, and selected subsurface features. The AutoCAD base map was utilized within Geographic Information System software to create the RIR figures with the exception of the Site Location Map. Scales are as noted on each figure.

# 6.0 PRESENTATION OF FINDINGS

This section presents the analytical results of the RI sampling efforts and summarizes the investigation status for AOCs located within the NMA. A complete summary of samples collected during this RI are presented on Table 3. Lithologic soil boring logs are provided in Appendix F. Analytical results are summarized on the Figures 5a through 15b and Tables 4 through 6. Laboratory analytical reports are maintained by DuPont and are available upon request.

## 6.1 DATA SCREENING PROCESS

As presented in the RIWP, analytical results are to be compared to appropriate screening criteria to determine if the RI objectives had been met for that AOC. The criteria used are described in section 1.2 of this document. The following sections present the results of the RI for the NMA. The RI findings are presented in Tables 4 through 6. Figures 3 through 6 present the data.

## 6.2 AOC 117 – BALLISTITE OPERATION ANALYTICAL RESULTS

A total of 726 samples were collected across AOC-117. These locations included the original grid nodes described in the RIWP, as well as step-out delineation locations. Based on the areal extent of the AOC, sampling locations and results are posted on Figures 5a through 14a. The figure key map is provided in Figure 4. Surface and subsurface samples were collected at the depths and the parameters listed on Table 1. A grid sampling approach was used to determine if historic manufacturing operations had releases to the soil. A total of 17 grid nodes were initially sampled for operational related constituents. Of these 17 grid nodes, results for seven were greater than RDCSRS. Subsequent step-out samples were collected in accordance with the RIWP.

Parameters exceeding their respective RDCSRS are presented below.

| PARAMETER | RDC SRS (mg/kg) | # OF SAMPLES ANALYZED | # OF SAMPLES ABOVE RDCSRS | AVERAGE CONCENTRATION DETECTED (mg/kg) | MAXIMUM CONCENTRATION DETECTED (mg/kg) |
|---|---|---|---|---|---|
| BENZO[A]PYRENE | 0.2 | 20 | 5 | 0.12 | 0.38J |
| ARSENIC | 19 | 304 | 116 | 25.77 | 356 |
| LEAD | 400 | 589 | 234 | 7,105.22 | 94,701.75 |

Based on the entirety of the AOC analytical results, AOC 117 is considered substantially delineated.

The following text provides a summary of the results from this sampling.

### 6.2.1 AOC 117: Grid Node 104 Results

Grid node 104 is located on the western side of AOC-117-West (Figure 5a). Samples were collected from 0 – 0.5 feet bgs and 3 – 3.5 feet bgs and were analyzed for PAHs, metals, thallium, and organic explosives. A third sample interval from 6 – 6.5 feet bgs was analyzed for arsenic only.

- The 0 to 0.5 foot sample had only one constituent (arsenic 51.6 milligrams per kilogram (mg/kg)) at a concentration of above the RDCSRS of 19 mg/kg. Subsequent samples (334-170 to 173) showed no detections of arsenic above the RDCSRS.

Delineation objectives have been met.

### 6.2.2 AOC 117: Grid Node 105 Results

Grid node 105 is located on the western side of AOC-117-West (Figure 6a). This location was sampled and analyzed for PAH, arsenic, copper, lead and mercury from 0 – 0.5 feet bgs. Samples from 3 – 3.5 feet bgs and 6-6.5 feet bgs were analyzed for lead only.

- B(a)P2 was detected at an estimated concentration of 0.33J mg/kg in 334-105 at a depth of 0-0.5 feet bgs approximating the RDCSRS of 0.2 mg/kg.
- Arsenic was detected at a concentration of 20.5 mg/kg in 334-105 at a depth of 0-0.5 feet bgs which is approximating the RDCSRS of 19 mg/kg.
- Lead in the deeper 3.0-3.5-foot and 6-6.5-foot bgs intervals was detected below RDCSRS.

Based on the RI results, arsenic at 334-105 location was delineated to RDCSRS by the step-out borings as a part Grid Node 334-105D and vertically delineated at a depth of one foot bgs. Delineation objectives have been met.

### 6.2.3 AOC 117: Grid Node 105D Including Structures 117-01 and 117-02 Results

Grid node 105D was intended to be located at 334-105, but was mistakenly placed in a different location (Figure 6a and Table 5). It was sampled and analyzed for arsenic from 3 – 3.5 feet bgs and 6 – 6.5 feet bgs. Fifty-eight additional soil borings were later advanced in the area of 334-105D up to a depth of 6.5 feet bgs. Samples were collected from 334-105D, 334-162 through 334-165, 334-322, 334-274 through 334-277, 334-293 through 334-296, 334-305 through 334-309, 334-314 through 334-317, 334-320 through 334-324, 334-360 through 334-364, 334-380 through 334-385, 334-397 through 334-400, 334-414, 334-432 through 334-435, 334-B9 through 334-B18 and 334-B20 locations. Of these 58 soil borings, 334-B9 through 334-B18 and 334-B20 were advanced to vertically delineate the soil impacts at several boring locations.

- Arsenic was detected at a concentration of 21.9 mg/kg in 334-294 location at a depth of 0-0.5 feet bgs which is approximating the RDCSRS of 19 mg/kg. The concentration of arsenic was horizontally delineated in the surrounding borings 334-274, 334-432, 334-433, 334-434, and 334-435. Arsenic was vertically delineated at a depth of one foot bgs as its concentration was detected below RDCSRS at 334-B18 and 334-B20 locations.
- Lead was detected above the RDCSRS at 36 boring locations at a depth of 0-0.5 feet bgs. It was horizontally delineated in the surrounding borings 334-323, 334-360, 334-P12, 334-414, 334-382, and 334-363. Lead was vertically delineated at a

[2] The RDCSRS for B(a)P was lowered from 0.66 mg/kg to 0.2 mg/kg after the RIWP was submitted in 2003. This is less than an order of magnitude change in the comparison criteria.

depth of 2 feet bgs at 334-307, 334-334, 334-B9, 334-B11, 334-B-12, 334-B13, 334-B18, and P1.

Delineation objectives have been met.

### 6.2.4 AOC 117: Grid Node 106 Results

One surface sample at grid node 106 was analyzed for PAH, arsenic, copper, lead, mercury, and organic explosives (Figure 6a and Tables 4 through 6). Soil boring 334-B19 was advanced to vertically delineate arsenic detections in soil at node 106.

- Arsenic was detected at a concentration of 114 mg/kg in 334-106 location at a depth of 0-0.5 feet bgs above the RDCSRS. Arsenic was vertically delineated at a depth of one foot bgs at 334-B19 location.
- B(a)P was detected at an estimated concentration of 0.21 mg/kg, approximating the RDCSRS of 0.2 mg/kg.

Delineation objectives have been met.

### 6.2.5 AOC 117: Grid Node 106D Results

Grid node 106D was originally intended to be a step out for 334-106, but was mistakenly installed in a different location. It was sampled and analyzed for arsenic. Eleven additional soil borings were advanced up to a depth of 6.5 feet bgs and sampled and analyzed for arsenic and lead. The samples were collected from 334-106D, 334-158 through 334-161, 334-270 through 334-273, 334-330, and 334-B14 locations. Of these 11 soil borings, 334-B14 was advanced to vertically delineate the arsenic impacts in soil. (Figure 6a and Table 5)

- Arsenic was detected at a concentration of 23.8 to 28.2 mg/kg in 334-158 through 334-161 locations at a depth of 0-0.5 feet bgs approximating of the RDCSRS of 19 mg/kg. Arsenic was horizontally delineated in surrounding borings 334-270, 334-272, 334-273, 334-330 as arsenic concentrations were below RDCSRS at these locations. Arsenic was below RDCSRS at a depth of one foot bgs by 334-B14.
- Lead was detected at a concentration of 508J approximating RDCSRS at a depth of 0-0.5 feet bgs in 334-161. This result was horizontally delineated by 334-158, 334-159, 334-160 and 334-273. It was vertically delineated at a depth of one foot bgs by 334-B14.

Delineation objectives have been met.

### 6.2.6 AOC 117: Grid Node 107 Results

Grid node 107 is located in the northeastern portion of AOC-117-West (Figures 7a and 7b and Tables 4 through 6). It was sampled and analyzed for PAH, metals and organic explosives. Seven step-out soil borings were advanced up to a depth of 6.5 feet bgs to delineate arsenic. The samples were collected from 334-107, 334-151 through 153, 334-B7 and 3334-B8 locations.

- Arsenic was detected at a concentration of 28.4 mg/kg in 334-107 location at a depth of 0-0.5 feet bgs approximating of the RDCSRS of 19 mg/kg.
- The concentration of arsenic in surrounding samples collected from 334-150 through 153 was detected below RDCSRS.

- At 0 to 0.5 feet bgs in 334-107, all metals were detected below RDCSRS and NRDCSRS.
- All other parameters were detected either below detection limits or below RDCSRS.

Delineation objectives have been met.

### 6.2.7 AOC 117: Grid Node 108 Results

Grid node 108 was sampled and analyzed for PAH, arsenic, copper, lead and mercury. Five soil borings were advanced up to a depth of 6.5 feet bgs. The samples were collected from 334-108 and 334-166 through 169. (Tables 4 and 5)

- Lead and mercury were below RDCSRS at a depth of 0-0.5 feet bgs in soil boring 334-108.
- All other parameters were detected either below detection limits or below RDCSRS.

Delineation objectives have been met.

### 6.2.8 AOC 117: Grid Node 109 Results

Grid node 109 was sampled and analyzed for PAH, metals and organic explosives. Five soil borings were advanced up to a depth of 6.5 feet bgs. The samples were collected from 334-109 and 334-154 through 157 locations. (Tables 4 through 6)

- The concentrations of all compounds were either below detection limits or below RDCSRS.

Delineation objectives have been met.

### 6.2.9 AOC 117: Grid Node 110 Results

Grid node 110 was sampled and analyzed for PAHs, metals and organic explosives from 0 - 0.5 feet bgs. The sample from 2 – 2.5 feet bgs was analyzed for organic explosives and metals. The sample from 6 - 6.5 feet was analyzed for PAH and metals, and from 7 – 7.5 feet for copper, lead, and mercury. (Figures 9a and 9b; Tables 4 through 6)

- No PAH were detected above RDCSRS from 0 – 0.5 feet bgs.
- No metals were detected above RDCSRS from 0 – 0.5 feet bgs.

Delineation objectives have been met.

### 6.2.10 AOC 117: Grid Node 111 Results

Grid node 111 is located in the western half of ACO-117-East (Figures 10a and 10b; Tables 5 and 6) was sampled at the surface and analyzed for PAHs, arsenic, copper, lead and mercury. Two additional samples were collected from soil boring location 334-111 at 2 - 2.5 feet bgs (PAH, arsenic, lead and mercury) and 7 - 7.5 feet bgs (arsenic).

- B(a)P was detected at an estimated concentration of 0.35J mg/kg approximating the RDCSRS of 0.2 mg/kg at 0 – 0.5 feet bgs. All PAH were below detection limits at 2 – 2.5 feet bgs.

- Lead was detected below RDCSRS at a depth of 0-0.5 feet bgs in the soil boring 334-111 and below RDCSRS in the deeper sample at 2 – 2.5 feet bgs.
- The concentrations of the remaining compounds were detected either below detection limits or below RDCSRS.

Delineation objectives have been met.

### 6.2.11 AOC 117: Grid Node 112 and Structure 117-14 Results

The soil samples associated with the Grid Node 112 (Figures 11a and 11b; Tables 4 through 6) were co-located with Structure 117-14. For further information, please see the discussion below for Structure 117-14.

### 6.2.12 AOC 117: Grid Node 113 Results

Grid node 113 was sampled and analyzed for PAHs, metals and organic explosives. Five surficial soil borings (334-113, 334-138 through 334-141) were advanced and samples were collected from 0-0.5 feet bgs.

- The concentrations of beryllium and lead were detected below RDCSRS at the soil boring 334-113.
- None of the step-out samples that were collected and analyzed for thallium were above RDCSRS.
- The concentrations of the remaining parameters were detected either below detection limits or below RDCSRS.

Delineation objectives have been met.

### 6.2.13 AOC 117: Grid Node 114 Results

Grid node 114 was sampled and analyzed for PAH, arsenic, copper, lead, mercury and organic explosives. Five surficial soil borings (334-114, 334-134 through 334-137) were advanced and samples were collected from 0 - 0.5 feet bgs.

- The concentration of lead was detected below RDCSRS at the soil borings 334-114, 334-134, 334-135 and 334-136.
- The concentrations of the remaining parameters were detected either below detection limits or below RDCSRS.

Delineation objectives have been met.

### 6.2.14 AOC 117: Grid Node 115 Results

Grid node 115 is located on the eastern side of AOC-117-East (Figure 14a; Tables 4 and 5). It was sampled and analyzed for PAHs, arsenic, copper, lead and mercury. One sample was collected from soil boring 334-115 from 0-0.5 feet bgs.

- All parameters were detected either below detection limits or below RDCSRS.

Delineation objectives have been met.

### 6.2.15 AOC 117: Grid Node 116 Results

Grid node 116 was sampled and analyzed for PAHs and metals. Five surficial soil borings (334-116, 334-130 through 334-133) were advanced and samples were collected from 0-0.5 feet bgs. (Tables 4 and 5)

- PAH results for 334-116 at 0 – 0.5 feet bgs were below detection limits.
- Lead and mercury at this depth were detected below RDCSRS. All other metals were below RDCSRS.
- The RDCSRS for thallium was increased to 3 mg/kg with the promulgation of the 2009 SRSs which is a value greater than the PQL. Therefore, the steps out samples (334-130 through 334-133) that were collected and analyzed for thallium were not necessary as none of the samples detected thallium above RDCSRS.

Delineation objectives have been met.

### 6.2.16 AOC 117: Grid Node 117 Results

Grid node 117 was sampled and analyzed for PAHs, arsenic, copper, lead and mercury. One surficial soil sample (334-117) was collected from 0 - 0.5 feet bgs. (Tables 4 and 50

- PAH results were below RDCSRS.
- Mercury was detected below RDCSRS. All other metals were below RDCSRS.

Delineation objectives have been met.

### 6.2.17 AOC 117: Grid Node 118 Results

Grid node 118 was sampled and analyzed for PAH, arsenic, copper, lead and mercury. One surface soil sample (334-118) was collected from 0 - 0.5 feet bgs. (Tables 4 and 5)

- PAH results were below RDCSRS.
- Lead and mercury was detected below RDCSRS. All other metals were below RDCSRS.

Delineation objectives have been met.

### 6.2.18 AOC 117: Grid Node 119 Results

Grid node 119 was sampled and analyzed for PAH and metals. Five surficial soil borings (334-119, 334-122 through 334-125) were advanced and samples were collected from 0-0.5 feet bgs. (Tables 4 and 5)

- PAH results for 334-119 at 0 – 0.5 feet bgs were below detection limits.
- Beryllium and lead at this depth were detected below RDCSRS. All other metals were below RDCSRS.
- The SRS for thallium was increased to 3 mg/kg which is a value greater than the PQL. Therefore, the steps out samples (334-122 through 334-125) that were collected and analyzed for thallium were not necessary as none of the samples detected thallium above RDCSRS.

Delineation objectives have been met.

### 6.2.19 AOC 117: Grid Node 120 Results

Grid node 120 was sampled and analyzed for organic explosives, PAH and metals. Five surficial soil borings (334-120, 334-126 through 334-129) were advanced and samples were collected from 0-0.5 feet bgs. (Tables 4 and 5)

- PAH results for 334-120 at 0 – 0.5 feet bgs were below detection limits.
- The concentrations of beryllium, lead and mercury were detected below RDCSRS. All other metals were below RDCSRS.
- None of the step-out samples, 334-126 through 334-129, resulted in thallium above RDCSRS.

Delineation objectives have been met.

### 6.2.20 AOC 117 FORMER STRUCTURE-SPECIFIC SAMPLING

In addition to the holistic grid node samples, samples were collected near former structures in NMA. Twenty-seven former structures were located in AOC 117. Soil results for 18 of the former structures were above the RDCSRS for lead. Additional samples were collected to delineate the extent of the contamination in soil and characterize the soil for potential reuse and/or disposal. In some cases, sample locations overlap the grid node samples and results are used for both purposes.

The structures nodes are delineated to RDCSRS as follows:

**AOC 117: Structure 117-01 and 117-02 Results**

The soil samples associated with the Structure 117-01 were co-located with Grid node 105D (Figure 6a). For further information, please see the discussion above for grid node 105D.

**AOC 117: Structure 117-03 Results**

Structure 117-03 was sampled for lead (Figure 6a). One soil sample at a depth of 0-0.5 feet bgs was collected from location 334-190.

- Lead was detected below RDCSRS.

Delineation objectives have been met.

**AOC 117: Structure 117-04 Results**

Structure 117-04 was sampled for lead (Figure 6a). One soil sample at a depth of 0-0.5 feet bgs was collected from 334-188 location.

- Lead was detected below RDCSRS.

Delineation objectives have been met.

**AOC 117: Structure 117-05 Results**

Structure 117-05 was sampled for lead (Figure 6a. Fifteen soil borings were advanced up to a depth of 2.5 feet bgs. The samples were collected from 334-189, 334-229 through 334-231, 334-278 through 334-281, 334-390 through 334-392, 334-302, 334-303, 334-312 and 334-B3 locations. Of these 15 soil borings, 334-B3 was advanced to vertically delineate the lead impacts in soil.

- Lead was detected at a concentration of 730.276 mg/kg in 334-189 location at a depth of 0-0.5 feet bgs above the RDCSRS of 400 mg/kg. The concentration of lead was horizontally delineated to RDCSRS in the surrounding borings 334-279, 334-290, 334-302, 334-312. Lead was vertically delineated at a depth of one foot bgs as its concentration was detected below RDCSRS at 334-B3 location.

Delineation objectives have been met.

**AOC 117: Structure 117-06 Results**

The former structure 117-06 was sampled and analyzed for PAH, metals and organic explosives (Figures 7a and 7b; Tables 4 and 5). Twenty-two soil borings were advanced up to a depth of 2.5 feet bgs. The samples were collected from 334-191, 334-226 through 334-228, 334-282 through 334-285, 334-286 through 334-289, 334-299 through 334-301, 334-310 and 334-311, 334-318, and 334-B5 through 334-B8 locations. All soil samples were analyzed for lead. Of these borings, 334-B5 through 334-B8 were advanced to vertically delineate the lead impacts in soil. PAH was analyzed at ne location, 334-107, at 0 – 0.5 feet bgs. PAH results were below RDCSRS.

- Lead was detected above RDCSRS in the samples collected at a depth of 0 - 0.5 feet bgs from 334-191, 334-226 through 334-228, 334-282 through 334-285, 334-287 through 334-289, 334-299, 334-301, and 334-311 locations.
- Lead was detected below RDCSRS in the samples collected at a depth of 0 - 0.5 feet bgs from 334-286, 334-300, 334-310, and 334-318.
- Of the eight samples collected from 334-B5 through 334-B9, the concentration of lead was detected below RDCSRS in only one sample collected at a depth of 1 - 1.5 feet bgs from 334-B5. The sample collected from 334-B5 for lead at a depth of 2 - 2.5 feet bgs was detected below RDCSRS.
- The concentrations of the remaining parameters were detected either below detection limits or below RDCSRS.

Delineation objectives have been met.

**AOC 117: Structure 117-07 Results**

The former structure 117-07 is located on the western side of AOC 117-West (Figure 5a; Table 5) and was sampled and analyzed for metals. Thirteen soil borings were advanced up to a depth of 1.5 feet bgs. The samples were collected from 334-187, 334-232 through 334-234, 334-262 through 334-265, 334-297 and 334-298,334-304, 334-313, and 334-319. All soil samples were analyzed for lead. Of these borings, 334-232 was advanced to vertically delineate the lead impacts in soil.

- Lead was detected at boring location 334-187 at a concentration of 758 mg/kg above of the RDCSRS of 400 mg/kg.
- Lead was delineated by the step-out borings to the north, south and east at locations 334-267, 334-265, and 334-298 and vertically delineated at a depth of approximately one foot bgs from sample location 34-232.

Delineation objectives have been met.

**AOC 117: Structure 117-08 Results**

The former structure 117-08 is located on the western side of AOC 117-West (Figure 5a and Table 5) and was sampled and analyzed for metals. Nine surface soil samples were collected up to a depth of 0.5 feet bgs for the purpose of lead analysis from 334-186, 334-235 through 334-237, 334-266 through 334-269, and 334-B2. Also, soil samples were collected in the area of structure 117-08 for the purpose of arsenic analysis. The arsenic samples were collected from 334-186, 334-B105 and 334-B106, 334-512, 334-RB1, and 334-B53 through 334-B60.

- Lead was detected at boring location 334-186 at a concentration of 516 mg/kg approximating of the RDCSRS of 400 mg/kg.
- Lead was delineated by the step-out borings north, south and east at locations 334-266, 334-267, 334-268, 334-269, 334-B2 and vertically delineated at a depth of approximately 2 feet bgs from sample location 334-B2.
- Arsenic was detected at sample location 334-P16 at a concentration of 29 and 5.39 mg/kg approximating of the RDCSRS of 19 mg/kg.
- Arsenic was delineated by sample locations 334-B106, 334-B56, and 334-B58.

Delineation objectives have been met.

**AOC 117: Structure 117-09 Results**

The former structure 117-09 is located southwest of AOC-117-East (Figure 8a and Table 5) and was sampled and analyzed for lead. One soil sample at a depth of 0-0.5 feet bgs was collected from each of the seven locations (334-200, 334-219 through 334-222, 334-260 and 334-261). In addition, two soil samples from 334-219 were collected for vertical delineation of lead impacts in soil.

- Lead was detected above RDCSRS in the samples collected at a depth of 0-0.5 feet bgs from 334-200, 334-219, 334-222 and at a depth of 0.5-1 feet bgs from 334-219 locations.
- Lead was detected below RDCSRS in the samples collected at a depth of 0-0.5 feet bgs from 334-220, 334-221, 334-260, and 334-261.
- Lead was detected below RDCSRS in the sample collected for vertical delineation from 1-1.5 feet bgs at 334-219 location.

Delineation objectives have been met.

**AOC 117: Structure 117-10 Results**

Thirty eight soil borings were advanced up to a depth of 2.5 feet bgs (Figure 9b and Table 5). The samples were collected from 334-198, 334-213 through 334-215, 334-251 through 334-254, 334-333-E through 334-336-E, 334-353 through 334-356, 334-372 through 334-374, 334-390 through 334-392, 334-403, 334-404, 334-410, 334-411, 334-416, 334-418 through 334-420, and 334-B79 through 334-B87. Of these 38 borings, 334-B79 through 334-B87 were advanced to 2.5 feet bgs to vertically delineate the lead impacts in soil.

- Lead was detected above RDCSRS at a concentration of 3,823.59 mg/kg in 334-198 at a depth of 0-0.5 feet bgs The lead was detected above RDCSRS at a

concentration of 1,984.02 mg/kg in a step out boring 334-251 (i.e., north of 334-198) at a depth of 0-0.5 feet bgs.

- The horizontal delineation for borings 334-198 and 334-251 is completed by borings 334-354 (west), 334-390 (southeast) and 334-419 (north).
- Vertical delineation at 2 feet bgs is provided by 334-B85 and 334-B87.

Delineation objectives have been met.

**AOC 117: Structure 117-11 Results**

Fifteen soil samples were collected up to a depth of 2.5 feet bgs (Figure 9b and Table 50. The samples were collected from 334-199, 334-216 through 334-218, 334-255 through 334-258, 334-337-E through 334-339-E, 334-357, 334-358 and 334-B88.

- Lead was detected above RDCSRS at a concentration of 2615.05 mg/kg in 334-199 location at a depth of 0-0.5 feet bgs. Lead was horizontally delineated by step out borings 334-256, 334-375, 334-339-E and 334-357.
- Vertical delineation of lead for this structure is defined by results from boring 334-337E.

Delineation objectives have been met.

**AOC 117: Structure 117-12 and Grid Node 110 Results**

Structure 117-12 was sampled and analyzed for lead (Figure 9b and Table 5). The delineation of the lead impacted soils in the vicinity of structure 117-12 converged with the delineation of the grid node 110. Thirty eight soil borings were advanced up to a depth of 2.5 feet bgs. The samples were collected from 334-110, 334-146 through 334-149, 334-224 and 334-225, 334-259, 334-340E and 334-341E, 334-359, 334-376 and 334-379, 334-393 through 334-396, 334-405 through 334-27, 334-412 and 334-413, 334-415 and 334-417, 334-419, 334-422, 334-B64, 334-B65, 334-B67, 334-B70 through B76, 334-B78, and 334-P9. Of these borings, 334-B64, 334-B65, 334-B67, 334-B70 through B76, 334-B78, and 334-P9 were advanced to 2 feet bgs to vertically delineate the lead impacts in soil.

- Lead detected above of the RDCSRS was horizontally delineated by borings 334-417, 334-395, 334-407, 334-224, 334-P9 and 334-P10.
- Lead was vertically delineated at a depth of approximately 1 - 2 feet bgs by borings 334-B62, 334B67, 334-B70, 334-B71 and 334-B73.
- Mercury and beryllium were detected below RDCSRS in the samples collected at a depth of 0-0.5 feet bgs from 334-110. .

Delineation objectives have been met.

**AOC 117: Structure 117-13 Results**

This structure is located in the western half of AOC-117-East (Figure 10b). One soil sample at a depth of 0-0.5 feet bgs was collected from 334-409 location and analyzed for lead.

- Lead was detected at a concentration of 373.453 mg/kg in 334-409 location at a depth of 0-0.5 feet bgs below the RDCSRS of 400 mg/kg.

Delineation objectives have been met.

**AOC 117: Structure 117-14 and Grid Node 112 Results**

Structure 117-14 abuts grid node 112 to the south of Structure 117-12 (Figures 11a and 11b; Tables 4, 5 and 6)). Grid node 112 was sampled and analyzed for PAHs, organic explosives, arsenic, copper, lead and mercury. No PAH were detected above any SRS. Structure 117-14 was sampled for lead which was detected above of the RDCSRS at Grid Node 112.

Nine soil borings were advanced up to a depth of one foot bgs. The samples were collected from 334-112, 334-142 through 334-145, 334-250, 334-252, 334-330E and 334-332E locations. Of these borings, 334-250 was advanced to one foot bgs to vertically delineate the lead impacts in soil.

- Lead was detected above RDCSRS in the samples collected at a depth of 0-0.5 feet bgs from 334-112, 334-142, 334-330E, 334-332E and 334-250 locations.
- Lead was detected below RDCSRS in the samples collected at a depth of 0-0.5 feet bgs from 334-143 and 334-352.
- Lead was detected below RDCSRS in the sample collected for vertical delineation from 0.5-1 foot bgs at 334-250 location.
- Mercury was detected below RDCSRS in the samples collected at a depth of 0-0.5 feet bgs from 334-112.
- The concentrations of the remaining parameters were detected either below detection limits or below RDCSRS.

Delineation objectives have been met.

**AOC 117: Structure 117-15 Results**

One soil sample at a depth of 0-0.5 feet bgs was collected from 334-197 location and analyzed for lead.

- Lead was detected at a concentration of 220.81 mg/kg in 334-197 location at a depth of 0-0.5 feet bgs below the RDCSRS of 400 mg/kg.

Based on the RI results, no further investigation and action is proposed.

**AOC 117: Structures 117-16 through 117-18**

The structure numbering convention runs from 117-01 through 117-27, excluding structure numbers 117-16 through 117-18 which were not used.

**AOC 117: Structure 117-19 Results**

Structure 117-19 is located in the middle of AOC 117-East (Figure 12a and Table 5) and was sampled and analyzed for lead. Seven soil borings were advanced up to a depth of 2 feet bgs. The samples were collected from 334-196, 334-201 through 334-203, 334-249, 334-329E, and 334-B91. Of these seven soil borings, 334-B91 and 334-196 were advanced to vertically delineate the soil impacts at several boring locations.

- Lead was detected above RDCSRS in all four samples collected from 334-196. Lead was horizontally delineated in soil borings 334-202, 334-329E, 334-203, 334-249 and 334-B91 as the lead was detected below RDCSRS.

- Lead was detected below RDCSRS in the samples collected at a depth of 0-0.5 feet bgs from 334-202, 334-203, 334-29E, and 334-249.
- Vertical delineation for the area is defined by 334-B91.

Delineation objectives have been met.

**AOC 117: Structure 117-20 Results**

One soil sample at a depth of 0-0.5 feet bgs was collected from 334-195 location and analyzed for lead (Table 5).

- Lead was detected at a concentration of 121 mg/kg in 334-195 location at a depth of 0-0.5 feet bgs below the RDCSRS of 400 mg/kg.

Based on the RI results, no further investigation and action is proposed.

**AOC 117: Structure 117-21 Results**

One soil sample at a depth of 0 - 0.5 feet bgs was collected from 334-194 location and analyzed for lead (Table 5).

- Lead was detected at a concentration of 156.12 mg/kg in 334-194 location at a depth of 0-0.5 feet bgs below the RDCSRS of 400 mg/kg.

Based on the RI results, no further investigation and action is proposed.

**AOC 117: Structure 117-22 Results**

Structure 117-23 is located east of AOC-117-East (Figure 14a and Table 5). Two soil samples at a depth of 0-0.5 feet bgs were collected from 334-244 and 334-B98 and analyzed for lead.

- Lead results were below the RDCSRS in both locations.

Based on the RI results, no further action is proposed.

**AOC 117: Structure 117-23 Results**

Structure 117-23 is located east of AOC 117-East (Figure 14a and Table 5) and was sampled and analyzed for lead. Thirty (30) soil borings were advanced up to a depth of 3.5 feet bgs. The samples were collected from 334-193, 334-208 through 334-210, 334-244 through 334-248, 334-321E through 334-324E, 334-348 through 334-351, 334-366 through 334-369, 334-388 and 334-389 and 334-B92 through 334-B98. Of these 30 soil borings, 334-B92 through 334-B98 were advanced to vertically delineate the soil impacts at several boring locations.

- Lead was detected at a concentration of 77,224.05 mg/kg in 334-193 location at a depth of 0-0.5 feet bgs above of the RDCSRS of 400 mg/kg. The concentration of lead was horizontally delineated in the surrounding borings 334-366, 334-367, 334-388, 334-389 and 334-115 (Grid node 115) since the concentration was detected approximating at only one location and below RDCSRS for the remainder of the locations.
- Lead was vertically delineated at a depth of one foot bgs across the structure area, except at one location (B-95 -3.5 bgs at 8,320J mg/kg). It should be noted that concentrations were significantly lower at the shallower depths.

Delineation objectives have been met.

**AOC 117: Structure 117-24 Results**

Structure 117-24 is located in the eastern portion of AOC 117-East (Figure 14a and Table 5) and was sampled and analyzed for lead. Sixteen soil borings were advanced up to a depth of 3.5 feet bgs. The samples were collected from 334-192, 334-204 through 334-207, 334-242, 334-243, 334-319E, 334-320E, 334-346, 334-347, 334-365, 334-387, 334-B99, 334-B100 and 334-B110 locations. Of these 16 soil borings, 334-B99, 334-B100 and 334-B110 were advanced to vertically delineate the soil impacts at several boring locations.

- The concentrations of lead at 0 – 0.5 feet bgs were horizontally delineated in the surrounding borings 334-205, 334-206, 334-B109, 334-B110, 334-347, and 334-401 since the concentration was detected below RDCSRS at these locations. Lead was vertically delineated at a depth of 3 feet bgs as the concentration was detected below RDCSRS at 334-B100.

Delineation objectives have been met.

**AOC 117: Structure 117-25 Results**

Structure 117-25 is located north of ACO-117-East (Figure 13a and Table 5) and was sampled and analyzed for lead. Twenty-one soil borings were advanced up to a depth of four feet bgs. The samples were collected from 334-211, 334-238 through 334-241, 334-325E through 334-328E, 334-342 through 334-345, 334-370 and through 334-371, 334-386, 334-402, 334-408, 334-469, 334-B103 and 334-B104. Of these 21 soil borings, 334-B103 and 334-B104 were advanced to vertically delineate the soil impacts at several boring locations.

- Lead was detected at a concentration of 6,118 mg/kg in 334-211 location at a depth of 0-0.5 feet bgs above of the RDCSRS of 400 mg/kg. The concentration of lead was horizontally delineated in the surrounding borings 334-342, 334-345, 334-371 and 334-408 as the lead was detected below RDCSRS at these locations. Lead was vertically delineated at a depth of 4 feet bgs as the concentration was detected below RDCSRS at 334-B104.
- Lead was detected below RDCSRS in the surrounding borings 334-342, 334-345, 334-371 and 334-408.

Delineation objectives have been met

**AOC 117: Structure 117-26 Results**

One soil sample at a depth of 0 - 0.5 feet bgs was collected from 334-212 location and analyzed for lead (Table 5).

- Lead was detected at a concentration of 261.82 mg/kg in 334-212 location at a depth of 0-0.5 feet bgs below the RDCSRS of 400 mg/kg.

Based on the RI results, no further action is proposed.

**AOC 117: Structure 117-27 Results**

Eight soil borings were advanced up to a depth of 2.5 feet bgs (Figure 6a). The samples were collected from 334-488 through 334-491, 334-493 through 334-496, 334-498, 334-

B-21 and 334-B-22. Of these eight soil borings, 334-B-21 and 334-B-22 were advanced to vertically delineate the soil impacts at several boring locations.

- Sample 334-488 was analyzed for arsenic. Arsenic was not detected above RDCSRS.
- Lead was detected at a concentration of 1,060 mg/kg in 334-491 location at a depth of 0-0.5 feet bgs. Lead was horizontally delineated to the west, north and east by the surrounding samples 334-493, 334-496, and 334-498. Vertical delineation is provided by 334-B22 at a depth of 1 foot.

Delineation objectives have been met.

## 6.3 AOC 119-NORTHWEST LAKE INEZ RESULTS

A total of 13 samples were collected across AOC-119 in NMA. These locations included the three original grid nodes described in the RIWP, as well as step-out delineation locations at one grid node. Sample results are posted on Figures 15a and 15b. Surface and subsurface samples were collected at the depths and analyzed for the parameters listed on Table 1.

Parameters exceeding their respective RDCSRS are presented below.

| PARAMETER | RDC SRS (mg/kg) | # OF SAMPLES ANALYZED | # OF SAMPLES ABOVE RDC | AVERAGE CONCENTRATION DETECTED (mg/kg) | MAXIMUM CONCENTRATION DETECTED (mg/kg) |
|---|---|---|---|---|---|
| BENZO[A]PYRENE | 0.2 | 3 | 2 | 0.23 | 0.38J |
| ARSENIC | 19 | 9 | 1 | 13.03 | 21.8 |
| LEAD | 400 | 7 | 1 | 183.94 | 488 |

Two of the three grid nodes exceeded the RDCSRS. The grid nodes are delineated as shown below. AOC-119 sample results are provided on Figures 15a and 15b, and in Tables 4, 5 and 6.

### 6.3.1 Grid Node 101 Results

Grid node 101 is located in AOC 119. One initial sample from 0 to 0.5 feet bgs was analyzed for PAHs, arsenic, copper, lead and mercury.

- B(a)P was detected at 0.36J approximating of the RDCSRS of 0.2 mg/kg.
- Lead was detected at 488 mg/kg approximating of the RDCSRS of 400 mg/kg.
- Arsenic was detected at 21.8 mg/kg approximating of the RDCSRS of 19 mg/kg.

Step-out samples 334-182, 183, 184 and 185 were analyzed for arsenic and lead at 0 – 0.5 feet bgs. Sample location 334-B61 from 1.0 – 1.5 feet bgs and 2.0-2.5 feet bgs were analyzed for arsenic.

- Arsenic was below RDCSRS

Delineation objectives have been met.

### 6.3.2 Grid Node 102 Results

Grid node 102 is located in AOC 119. One sample from 0 to 0.5 feet bgs was analyzed for PAHs and PP Metals. No results were above RDCSRS.

Delineation objectives have been met.

### 6.3.3 Grid Node 103 Results

Grid node 103 is located in AOC 119. One sample from 0 to 0.5 feet bgs was analyzed for PAH, organic explosives, arsenic, copper, lead, and mercury.

- B(a)P was detected at 0.38J approximating of the RDCSRS of 0.2 mg/kg.

Delineation objectives have been met.

## 6.4 ROAD BED SAMPLING RESULTS

Seven composite samples were collected from a road bed within AOC 117 and analyzed for PAH and metals. The road runs generally from structure 117-08 to 117-06. The samples were collected from ground surface to the first contact with native soil and consisted largely of ash and cinders.

- No sample results were detected above the RDCSRS.

Delineation objectives have been met.

## 6.5 BASELINE ECOLOGICAL EVALUATION

A BEE was conducted in Lots 3 and 4 of the NMA to determine whether additional ecological investigation or evaluations of remedial alternatives are warranted. The BEE was conducted in accordance with the requirements of the NJDEP TRSR and ecological risk assessment guidance (USEPA, 1997). A summary of the BEE is provided below; the complete BEE is provided as Appendix D.

The scope of the BEE places the assessment of potential ecological risk in the context of remedial strategies for the project area and satisfies the requirements of N.J.A.C. 7:26E-3:11 (NJDEP, 2010). The specific scope of work for the BEE includes identifying the co-occurrence of the following:

- Site-specific contaminants of potential ecological concern (COPECs);
- Environmentally sensitive natural resources (ESNRs) on or in the vicinity of the site; and
- Potential contaminant migration pathways to ESNRs.

The primary objective of the BEE is to evaluate existing information and analytical data for the site to determine whether additional ecological investigation or evaluations of remedial alternatives are warranted.

The project area is contained entirely within the New Jersey Highlands Preservation Area. Deciduous forests are the predominant covertype and comprise the matrix habitat within which other habitat types exist. Other terrestrial/wetland habitats that exist within the forest matrix include mixed forested/scrub-shrub habitat on the floodplain of the Wanaque River and emergent, forested and/or riverine wetlands.

The baseline ecological evaluation of existing information and analytical data indicated that COPECs, ESNRs, and contaminant migration pathways co-occur in the project

area. The primary contaminant migration pathway to ESNRs is the migration of COPECs from the decommissioning and remnants of facility structures to adjacent soils. As a result, the primary ecological exposure medium is soils adjacent to the remnants of former facility structures. COPECs identified in surficial soils adjacent to these structures include arsenic, copper, lead, mercury, selenium, zinc, and high molecular weight (HMW) PAHs. Further evaluation of remedial alternatives for the NMA should address potential ecological exposure to the COPECs identified in the BEE.

# 7.0 CONCLUSIONS AND RECOMMENDATIONS

## 7.1 CONCLUSIONS

Based on the data presented within this report the following conclusions are drawn:

- The results of the soil sampling showed that B(a)P, arsenic and lead are present in soil at concentrations above the RDCSRS in various portions of the NMA.
    - Lead is the primary constituent of potential concern. It is attributable to both historical operations and the decommissioning of the former plant structures by incineration. The lead, non-sparking floor plans melted and/or were left in place during the decommissioning process.
    - Arsenic is also present approximating or only slightly exceeding the RDCSRS in multiple areas. Based on knowledge of Site history, arsenic is not associated with manufacturing processes in this area.
    - B(a)P is present approximating RDCSRS in only three sample locations. Based on site history, B(a)P is probably present as a result of the burning of structures in the NMA during decommissioning.
- No further action is warranted at the following AOC locations:
    - AOC 117- nodes: 108, 109, 110, 113, 114, 115, 116, 117, 118, 119, and 120 as well as structures: 3, 4, 13, 15, 20, 21, 22, and 26.
    - AOC 119 – nodes: 102 and the road beds
- Delineation is complete or substantially complete at the following AOC locations and as such no further investigation is warranted:
    - AOC 117- nodes: 104, 105, 105D, 106, 106D, 107, 110, 111, and 112 as well as structures: 1, 2, 5, 6, 7, 8, 9, 10, 11, 12, 19, 23, 24, 25, and 27.
    - AOC 119 – nodes: 101 and 103

## 7.2 RECOMMENDATIONS

Based on the data presented in this report and the conclusions offered above, it is recommended that a RASR be prepared for submission to NJDEP within 90 days of NJDEP's approval of this report. The RASR will include an evaluation of potential remedial actions for soil where concentrations are greater than RDCSRS as a result of site activities.

# 8.0 REFERENCES

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[3] The Lake Inez Remedial Investigation Report was, in fact, a work plan for remedial investigations.

# TABLES

Table 1. Summary of Sampling Program

| AOC | Sample ID | Date | Depth (ft-bgs) | Analytical Parameter |
|---|---|---|---|---|
| 117 | 334-104 | 19-May-03 | 0 | Organic Explosives, PAH, Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Zinc, Nitrate, Nitrite |
| | 334-104 | 13-Sep-05 | 3-3.5 | Organic Explosives, PAH, Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Zinc, Nitrate, Nitrite |
| | 334-104 | 13-Sep-05 | 6-6.5 | Arsenic |
| | 334-105 | 19-May-03 | 0 | PAH, Arsenic, Copper, Lead, Mercury |
| | 334-105 | 13-Sep-05 | 3-3.5 | Lead |
| | 334-105 | 13-Sep-05 | 6-6.5 | Lead |
| | 334-105-D | 13-Sep-05 | 3-3.5 | Arsenic |
| | 334-105-D | 13-Sep-05 | 6-6.5 | Arsenic |
| | 334-106 | 19-May-03 | 0 | Organic Explosives, PAH, Arsenic, Copper, Lead, Mercury, Nitrate, Nitrite |
| | 334-106 | 13-Sep-05 | 3-3.5 | Lead |
| | 334-106 | 13-Sep-05 | 6-6.5 | Lead |
| | 334-106 | 30-Sep-05 | 0.5-1 | Lead |
| | 334-106 | 10-Oct-05 | 0.5-1 | Lead |
| | 334-106-D | 13-Sep-05 | 3-3.5 | Arsenic |
| | 334-106-D | 13-Sep-05 | 6-6.5 | Arsenic |
| | 334-107 | 19-May-03 | 0 | Organic Explosives, PAH, Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Zinc, Nitrate, Nitrite |
| | 334-107 | 13-Sep-05 | 3-3.5 | Lead |
| | 334-107 | 13-Sep-05 | 6-6.5 | Lead |
| | 334-107 | 13-Sep-05 | 3-3.5 | Arsenic |
| | 334-107 | 13-Sep-05 | 6-6.5 | Arsenic |
| | 334-108 | 19-May-03 | 0 | PAH, Arsenic, Copper, Lead, Mercury |
| | 334-108 | 13-Sep-05 | 3-3.5 | Lead |
| | 334-108 | 13-Sep-05 | 6-6.5 | Lead |
| | 334-108 | 13-Sep-05 | 3-3.5 | Arsenic |
| | 334-108 | 13-Sep-05 | 6-6.5 | Arsenic |
| | 334-109 | 19-May-03 | 0 | PAH, Arsenic, Copper, Lead, Mercury, Nitrate, Nitrite |
| | 334-109 | 13-Sep-05 | 3-3.5 | Lead |
| | 334-109 | 13-Sep-05 | 6-6.5 | Lead |
| | 334-109 | 13-Sep-05 | 3-3.5 | Organic Explosives, Arsenic, Copper, Lead, Mercury, Nitrate, Nitrite |
| | 334-109 | 13-Sep-05 | 6-6.5 | Arsenic |
| | 334-110 | 19-May-03 | 0 | Organic Explosives, PAH, Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Zinc, Nitrate, Nitrite |
| | 334-110 | 30-Sep-03 | 2-2.5 | Organic Explosives, Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Zinc, Nitrate, Nitrite |
| | 334-110 | 30-Sep-03 | 6-6.5 | PAH, Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Zinc, Nitrate, Nitrite |
| | 334-110 | 29-Sep-03 | 7-7.5 | Copper, Lead, Mercury |
| | 334-111 | 19-May-03 | 0 | PAH, Arsenic, Copper, Lead, Mercury |
| | 334-111 | 29-Sep-03 | 2-2.5 | PAH, Arsenic, Copper, Lead, Mercury |
| | 334-111 | 30-Sep-03 | 7-7.5 | Arsenic |
| | 334-112 | 19-May-03 | 0 | Organic Explosives, PAH, Arsenic, Copper, Lead, Mercury, Nitrate, Nitrite |
| | 334-113 | 19-May-03 | 0 | PAH, Antimony, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Zinc |
| | 334-114 | 19-May-03 | 0 | Organic Explosives, PAH, Arsenic, Copper, Lead, Mercury, Nitrate, Nitrite |
| | 334-115 | 19-May-03 | 0 | PAH, Arsenic, Copper, Lead, Mercury |
| | 334-116 | 19-May-03 | 0 | PAH, Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Zinc |

Notes:
AOC - Area of Concern
ft-bgs - feet below ground surface
PAH - Polynuclear Aromatic Hydrocarbons

Table 1. Summary of Sampling Program

| AOC | Sample ID | Date | Depth (ft-bgs) | Analytical Parameter |
|---|---|---|---|---|
| 117 | 334-117 | 19-May-03 | 0 | PAH, Arsenic, Copper, Lead, Mercury |
| | 334-118 | 19-May-03 | 0 | PAH, Arsenic, Copper, Mercury |
| | 334-119 | 19-May-03 | 0 | PAH, Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Zinc |
| | 334-120 | 19-May-03 | 0 | Organic Explosives, PAH, Antimony, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Zinc, Nitrate, Nitrite |
| | 334-122 | 19-Sep-05 | 0 - 0.5 | Thallium |
| | 334-123 | 19-Sep-05 | 0 - 0.5 | Thallium |
| | 334-124 | 19-Sep-05 | 0 - 0.5 | Thallium |
| | 334-125 | 19-Sep-05 | 0 - 0.5 | Thallium |
| | 334-126 | 19-Sep-05 | 0 - 0.5 | Thallium |
| | 334-127 | 19-Sep-05 | 0 - 0.5 | Thallium |
| | 334-128 | 19-Sep-05 | 0 - 0.5 | Thallium |
| | 334-129 | 19-Sep-05 | 0 - 0.5 | Thallium |
| | 334-130 | 19-Sep-05 | 0 - 0.5 | Thallium |
| | 334-131 | 19-Sep-05 | 0 - 0.5 | Thallium |
| | 334-132 | 19-Sep-05 | 0 - 0.5 | Thallium |
| | 334-133 | 19-Sep-05 | 0 - 0.5 | Thallium |
| | 334-134 | 02-Dec-04 | 0 | Lead |
| | 334-134 | 13-Dec-04 | 0 - 0.5 | Copper, Lead, Mercury |
| | 334-135 | 02-Dec-04 | 0 | Lead |
| | 334-135 | 13-Dec-04 | 0 - 0.5 | Copper, Lead, Mercury |
| | 334-136 | 02-Dec-04 | 0 | Lead |
| | 334-136 | 13-Dec-04 | 0 - 0.5 | Copper, Lead, Mercury |
| | 334-137 | 02-Dec-04 | 0 | Lead |
| | 334-137 | 13-Dec-04 | 0 - 0.5 | Copper, Lead, Mercury |
| | 334-138 | 19-Sep-05 | 0 - 0.5 | Thallium |
| | 334-139 | 19-Sep-05 | 0 - 0.5 | Thallium |
| | 334-140 | 19-Sep-05 | 0 - 0.5 | Thallium |
| | 334-141 | 19-Sep-05 | 0 - 0.5 | Thallium |
| | 334-142 | 13-Dec-04 | 0 - 0.5 | Copper, Lead, Mercury |
| | 334-143 | 03-Dec-04 | 0 | Arsenic, Lead |
| | 334-143 | 13-Dec-04 | 0 - 0.5 | Copper, Lead, Mercury |
| | 334-144 | 03-Dec-04 | 0 | Arsenic, Lead |
| | 334-144 | 13-Dec-04 | 0 - 0.5 | Copper, Lead, Mercury |
| | 334-145 | 03-Dec-04 | 0 | Arsenic, Lead |
| | 334-145 | 13-Dec-04 | 0 - 0.5 | Copper, Lead, Mercury |
| | 334-146 | 03-Dec-04 | 0 | Arsenic, Lead |
| | 334-146 | 13-Dec-04 | 0 - 0.5 | Copper, Lead, Mercury |
| | 334-147 | 13-Dec-04 | 0 - 0.5 | Copper, Lead, Mercury |
| | 334-148 | 13-Dec-04 | 0 - 0.5 | Copper, Lead, Mercury |
| | 334-148 | 20-Oct-05 | 0.5-1 | Lead |
| | 334-148 | 27-Oct-05 | 1-1.5 | Lead |
| | 334-149 | 03-Dec-04 | 0 | Arsenic, Lead |
| | 334-149 | 13-Dec-04 | 0 - 0.5 | Copper, Lead, Mercury |
| | 334-150 | 14-Sep-05 | 0 - 0.5 | Arsenic |
| | 334-151 | 14-Sep-05 | 0 - 0.5 | Arsenic |
| | 334-152 | 14-Sep-05 | 0 - 0.5 | Arsenic |
| | 334-153 | 14-Sep-05 | 0 - 0.5 | Arsenic |
| | 334-154 | 14-Sep-05 | 0 - 0.5 | Arsenic |
| | 334-155 | 14-Sep-05 | 0 - 0.5 | Arsenic |
| | 334-156 | 14-Sep-05 | 0 - 0.5 | Arsenic |

Notes:
AOC - Area of Concern
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PAH - Polynuclear Aromatic Hydrocarbons

Table 1. Summary of Sampling Program

| AOC | Sample ID | Date | Depth (ft-bgs) | Analytical Parameter |
|---|---|---|---|---|
| | 334-157 | 14-Sep-05 | 0 - 0.5 | Arsenic |
| | 334-158 | 14-Sep-05 | 0 - 0.5 | Arsenic, Lead |
| | 334-159 | 14-Sep-05 | 0 - 0.5 | Arsenic, Lead |
| | 334-160 | 14-Sep-05 | 0 - 0.5 | Arsenic, Lead |
| | 334-161 | 14-Sep-05 | 0 - 0.5 | Arsenic, Lead |
| | 334-162 | 14-Sep-05 | 0 - 0.5 | Arsenic, Lead |
| | 334-163 | 14-Sep-05 | 0 - 0.5 | Arsenic, Lead |
| | 334-164 | 14-Sep-05 | 0 - 0.5 | Arsenic, Lead |
| | 334-165 | 14-Sep-05 | 0 - 0.5 | Arsenic, Lead |
| | 334-166 | 14-Sep-05 | 0 - 0.5 | Arsenic |
| | 334-167 | 14-Sep-05 | 0 - 0.5 | Arsenic |
| | 334-168 | 14-Sep-05 | 0 - 0.5 | Arsenic |
| | 334-169 | 14-Sep-05 | 0 - 0.5 | Arsenic |
| | 334-170 | 14-Sep-05 | 0 - 0.5 | Arsenic |
| | 334-171 | 14-Sep-05 | 0 - 0.5 | Arsenic |
| | 334-172 | 14-Sep-05 | 0 - 0.5 | Arsenic |
| | 334-173 | 14-Sep-05 | 0 - 0.5 | Arsenic |
| | 334-182 | 15-Mar-06 | 0 - 0.5 | Lead |
| | 334-182 | 21-Mar-06 | 0 - 0.5 | Arsenic |
| | 334-183 | 15-Mar-06 | 0 - 0.5 | Lead |
| | 334-183 | 21-Mar-06 | 0 - 0.5 | Arsenic |
| | 334-184 | 15-Mar-06 | 0 - 0.5 | Lead |
| | 334-184 | 21-Mar-06 | 0 - 0.5 | Arsenic |
| | 334-185 | 15-Mar-06 | 0 - 0.5 | Lead |
| | 334-185 | 21-Mar-06 | 0 - 0.5 | Arsenic |
| **117** | 334-186 | 08-Sep-05 | 0 - 0.5 | Lead |
| | 334-187 | 08-Sep-05 | 0 - 0.5 | Lead |
| | 334-188 | 08-Sep-05 | 0 - 0.5 | Lead |
| | 334-189 | 08-Sep-05 | 0 - 0.5 | Lead |
| | 334-190 | 08-Sep-05 | 0 - 0.5 | Lead |
| | 334-191 | 08-Sep-05 | 0 - 0.5 | Lead |
| | 334-192 | 09-Sep-05 | 0 - 0.5 | Lead |
| | 334-193 | 09-Sep-05 | 0 - 0.5 | Lead |
| | 334-194 | 08-Sep-05 | 0 - 0.5 | Lead |
| | 334-194 | 09-Sep-05 | 0 - 0.5 | Lead |
| | 334-195 | 08-Sep-05 | 0 - 0.5 | Lead |
| | 334-195 | 09-Sep-05 | 0 - 0.5 | Lead |
| | 334-196 | 09-Sep-05 | 0 - 0.5 | Lead |
| | 334-196 | 20-Oct-05 | 0.5-1 | Lead |
| | 334-196 | 27-Oct-05 | 1-1.5 | Lead |
| | 334-196 | 31-Oct-05 | 1.5-2 | Lead |
| | 334-197 | 08-Sep-05 | 0 - 0.5 | Lead |
| | 334-197 | 09-Sep-05 | 0 - 0.5 | Lead |
| | 334-198 | 09-Sep-05 | 0 - 0.5 | Lead |
| | 334-199 | 09-Sep-05 | 0 - 0.5 | Lead |
| | 334-200 | 09-Sep-05 | 0 - 0.5 | Lead |
| | 334-201 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-202 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-203 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-204 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-204 | 20-Oct-05 | 0.5-1 | Lead |

Notes:
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Table 1. Summary of Sampling Program

| AOC | Sample ID | Date | Depth (ft-bgs) | Analytical Parameter |
|---|---|---|---|---|
| | 334-204 | 27-Oct-05 | 1-1.5 | Lead |
| | 334-204 | 31-Oct-05 | 1.5-2 | Lead |
| | 334-205 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-206 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-207 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-208 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-209 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-210 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-211 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-212 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-213 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-214 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-215 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-216 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-217 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-218 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-219 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-219 | 20-Oct-05 | 0.5-1 | Lead |
| | 334-219 | 27-Oct-05 | 1-1.5 | Lead |
| | 334-220 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-221 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-222 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-223 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-224 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-225 | 17-Oct-05 | 0 - 0.5 | Lead |
| **117** | 334-226 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-226 | 30-Sep-05 | 0.5-1 | Lead |
| | 334-226 | 18-Oct-05 | 1-1.5 | Lead |
| | 334-226 | 19-Oct-05 | 1.5-2 | Lead |
| | 334-226 | 21-Oct-05 | 2-2.5 | Lead |
| | 334-227 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-228 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-229 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-230 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-231 | 22-Sep-05 | 0 - 0.5 | Lead |
| | 334-231 | 30-Sep-05 | 0.5-1 | Lead |
| | 334-231 | 18-Oct-05 | 1-1.5 | Lead |
| | 334-232 | 27-Sep-05 | 0 - 0.5 | Lead |
| | 334-232 | 19-Oct-05 | 0.5-1 | Lead |
| | 334-232 | 21-Oct-05 | 1-1.5 | Lead |
| | 334-233 | 27-Sep-05 | 0 - 0.5 | Lead |
| | 334-234 | 27-Sep-05 | 0 - 0.5 | Lead |
| | 334-235 | 27-Sep-05 | 0 - 0.5 | Lead |
| | 334-236 | 27-Sep-05 | 0 - 0.5 | Lead |
| | 334-237 | 27-Sep-05 | 0 - 0.5 | Lead |
| | 334-238 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-239 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-240 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-240 | 27-Oct-05 | 0.5-1 | Lead |
| | 334-240 | 01-Nov-05 | 1-1.5 | Lead |
| | 334-240 | 02-Nov-05 | 1.5-2 | Lead |

Notes:
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PAH - Polynuclear Aromatic Hydrocarbons

Table 1. Summary of Sampling Program

| AOC | Sample ID | Date | Depth (ft-bgs) | Analytical Parameter |
|---|---|---|---|---|
| | 334-240 | 03-Nov-05 | 2-2.5 | Lead |
| | 334-240 | 19-Nov-05 | 3-3.5 | Lead |
| | 334-241 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-242 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-243 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-244 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-245 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-246 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-247 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-248 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-248 | 20-Oct-05 | 0.5-1 | Lead |
| | 334-249 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-250 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-250 | 20-Oct-05 | 0.5-1 | Lead |
| | 334-251 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-252 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-253 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-254 | 30-Sep-05 | 0 - 0.5 | Lead |
| | 334-254 | 20-Oct-05 | 0.5-1 | Lead |
| | 334-254 | 27-Oct-05 | 1-1.5 | Lead |
| | 334-254 | 02-Nov-05 | 1.5-2 | Lead |
| | 334-254 | 15-Nov-10 | 1-1.5 | Lead |
| | 334-254 | 15-Nov-10 | 1.5-2 | Lead |
| | 334-255 | 30-Sep-10 | 0 - 0.5 | Lead |
| | 334-256 | 30-Sep-10 | 0 - 0.5 | Lead |
| **117** | 334-257 | 30-Sep-10 | 0 - 0.5 | Lead |
| | 334-258 | 30-Sep-10 | 0 - 0.5 | Lead |
| | 334-259 | 30-Sep-10 | 0 - 0.5 | Lead |
| | 334-260 | 30-Sep-10 | 0 - 0.5 | Lead |
| | 334-261 | 30-Sep-10 | 0 - 0.5 | Lead |
| | 334-262 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-263 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-264 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-265 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-266 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-267 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-268 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-269 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-270 | 03-Oct-05 | 0 - 0.5 | Arsenic |
| | 334-271 | 03-Oct-05 | 0 - 0.5 | Arsenic |
| | 334-272 | 03-Oct-05 | 0 - 0.5 | Arsenic |
| | 334-273 | 03-Oct-05 | 0 - 0.5 | Arsenic, Lead |
| | 334-274 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-274 | 25-Oct-05 | 0.5-1 | Lead |
| | 334-275 | 21-Mar-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-276 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-277 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-278 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-279 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-280 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-281 | 03-Oct-05 | 0 - 0.5 | Lead |

Notes:
AOC - Area of Concern
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PAH - Polynuclear Aromatic Hydrocarbons

Table 1. Summary of Sampling Program

| AOC | Sample ID | Date | Depth (ft-bgs) | Analytical Parameter |
|---|---|---|---|---|
| | 334-282 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-283 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-284 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-285 | 03-Oct-05 | 0 - 0.5 | Lead |
| | 334-286 | 05-Oct-05 | 0 - 0.5 | Lead |
| | 334-287 | 05-Oct-05 | 0 - 0.5 | Lead |
| | 334-288 | 05-Oct-05 | 0 - 0.5 | Lead |
| | 334-289 | 05-Oct-05 | 0 - 0.5 | Lead |
| | 334-290 | 05-Oct-05 | 0 - 0.5 | Lead |
| | 334-291 | 05-Oct-05 | 0 - 0.5 | Lead |
| | 334-292 | 05-Oct-05 | 0 - 0.5 | Lead |
| | 334-293 | 05-Oct-05 | 0 - 0.5 | Lead |
| | 334-294 | 05-Oct-05 | 0 - 0.5 | Lead |
| | 334-295 | 05-Oct-05 | 0 - 0.5 | Lead |
| | 334-296 | 05-Oct-05 | 0 - 0.5 | Lead |
| | 334-297 | 05-Oct-05 | 0 - 0.5 | Lead |
| | 334-298 | 05-Oct-05 | 0 - 0.5 | Lead |
| | 334-299 | 06-Oct-05 | 0 - 0.5 | Lead |
| | 334-300 | 06-Oct-05 | 0 - 0.5 | Lead |
| | 334-301 | 06-Oct-05 | 0 - 0.5 | Lead |
| | 334-302 | 06-Oct-05 | 0 - 0.5 | Lead |
| | 334-303 | 06-Oct-05 | 0 - 0.5 | Lead |
| | 334-304 | 06-Oct-05 | 0 - 0.5 | Lead |
| | 334-305 | 06-Oct-05 | 0 - 0.5 | Lead |
| | 334-306 | 06-Oct-05 | 0 - 0.5 | Lead |
| **117** | 334-307 | 30-Sep-05 | 0.5-1 | Lead |
| | 334-307 | 06-Oct-05 | 0 - 0.5 | Lead |
| | 334-307 | 18-Oct-05 | 1-1.5 | Lead |
| | 334-307 | 19-Oct-05 | 1.5-2 | Lead |
| | 334-307 | 21-Oct-05 | 2-2.5 | Lead |
| | 334-308 | 06-Oct-05 | 0 - 0.5 | Lead |
| | 334-309 | 06-Oct-05 | 0 - 0.5 | Lead |
| | 334-310 | 07-Oct-05 | 0 - 0.5 | Lead |
| | 334-311 | 07-Oct-05 | 0 - 0.5 | Lead |
| | 334-312 | 07-Oct-05 | 0 - 0.5 | Lead |
| | 334-313 | 07-Oct-05 | 0 - 0.5 | Lead |
| | 334-314 | 07-Oct-05 | 0 - 0.5 | Lead |
| | 334-315 | 07-Oct-05 | 0 - 0.5 | Lead |
| | 334-316 | 07-Oct-05 | 0 - 0.5 | Lead |
| | 334-317 | 07-Oct-05 | 0 - 0.5 | Lead |
| | 334-318 | 10-Oct-05 | 0 - 0.5 | Lead |
| | 334-319 | 18-Oct-05 | 0 - 0.5 | Lead |
| | 334-319E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-320 | 10-Oct-05 | 0 - 0.5 | Lead |
| | 334-320E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-321 | 18-Oct-05 | 0 - 0.5 | Lead |
| | 334-321E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-322 | 10-Oct-05 | 0 - 0.5 | Lead |
| | 334-322E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-323 | 10-Oct-05 | 0 - 0.5 | Lead |
| | 334-323E | 11-Oct-05 | 0 - 0.5 | Lead |

Notes:
AOC - Area of Concern
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PAH - Polynuclear Aromatic Hydrocarbons

Table 1. Summary of Sampling Program

| AOC | Sample ID | Date | Depth (ft-bgs) | Analytical Parameter |
|---|---|---|---|---|
| | 334-324 | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-324E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-325E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-326E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-327E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-328E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-329E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-330 | 10-Oct-05 | 0 - 0.5 | Arsenic, Lead |
| | 334-330E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-332E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-333E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-334E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-335E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-336E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-337E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-337E | 20-Oct-05 | 0.5-1 | Lead |
| | 334-337E | 27-Oct-05 | 1-1.5 | Lead |
| | 334-337E | 31-Oct-05 | 1.5-2 | Lead |
| | 334-337E | 01-Nov-05 | 2-2.5 | Lead |
| | 334-338E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-339E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-340E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-341E | 11-Oct-05 | 0 - 0.5 | Lead |
| | 334-342 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-343 | 17-Oct-05 | 0 - 0.5 | Lead |
| **117** | 334-344 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-345 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-346 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-347 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-348 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-349 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-350 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-351 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-352 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-353 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-354 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-355 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-356 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-357 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-308 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-359 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-360 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-361 | 17-Oct-05 | 0 - 0.5 | Lead |
| | 334-362 | 19-Oct-05 | 0 - 0.5 | Lead |
| | 334-363 | 19-Oct-05 | 0 - 0.5 | Lead |
| | 334-364 | 19-Oct-05 | 0 - 0.5 | Lead |
| | 334-365 | 19-Oct-05 | 0 - 0.5 | Lead |
| | 334-366 | 20-Oct-05 | 0 - 0.5 | Lead |
| | 334-367 | 20-Oct-05 | 0 - 0.5 | Lead |
| | 334-368 | 20-Oct-05 | 0 - 0.5 | Lead |
| | 334-369 | 20-Oct-05 | 0 - 0.5 | Lead |

Notes:
AOC - Area of Concern
ft-bgs - feet below ground surface
PAH - Polynuclear Aromatic Hydrocarbons

Table 1. Summary of Sampling Program

| AOC | Sample ID | Date | Depth (ft-bgs) | Analytical Parameter |
|---|---|---|---|---|
| | 334-370 | 20-Oct-05 | 0 - 0.5 | Lead |
| | 334-371 | 20-Oct-05 | 0 - 0.5 | Lead |
| | 334-372 | 20-Oct-05 | 0 - 0.5 | Lead |
| | 334-373 | 20-Oct-05 | 0 - 0.5 | Lead |
| | 334-374 | 20-Oct-05 | 0 - 0.5 | Lead |
| | 334-375 | 20-Oct-05 | 0 - 0.5 | Lead |
| | 334-376 | 20-Oct-05 | 0 - 0.5 | Lead |
| | 334-377 | 20-Oct-05 | 0 - 0.5 | Lead |
| | 334-378 | 20-Oct-05 | 0 - 0.5 | Lead |
| | 334-379 | 20-Oct-05 | 0 - 0.5 | Lead |
| | 334-380 | 21-Oct-05 | 0 - 0.5 | Lead |
| | 334-381 | 25-Oct-05 | 0 - 0.5 | Lead |
| | 334-382 | 24-Oct-05 | 0 - 0.5 | Lead |
| | 334-383 | 24-Oct-05 | 0 - 0.5 | Lead |
| | 334-384 | 25-Oct-05 | 0 - 0.5 | Lead |
| | 334-385 | 27-Oct-05 | 0 - 0.5 | Lead |
| | 334-386 | 27-Oct-05 | 0 - 0.5 | Lead |
| | 334-387 | 27-Oct-05 | 0 - 0.5 | Lead |
| | 334-388 | 27-Oct-05 | 0 - 0.5 | Lead |
| | 334-389 | 27-Oct-05 | 0 - 0.5 | Lead |
| | 334-390 | 27-Oct-05 | 0 - 0.5 | Lead |
| | 334-391 | 27-Oct-05 | 0 - 0.5 | Lead |
| | 334-392 | 27-Oct-05 | 0 - 0.5 | Lead |
| | 334-393 | 27-Oct-05 | 0 - 0.5 | Lead |
| | 334-394 | 27-Oct-05 | 0 - 0.5 | Lead |
| **117** | 334-395 | 27-Oct-05 | 0 - 0.5 | Lead |
| | 334-396 | 27-Oct-05 | 0 - 0.5 | Lead |
| | 334-397 | 27-Oct-05 | 0 - 0.5 | Lead |
| | 334-398 | 28-Oct-05 | 0 - 0.5 | Lead |
| | 334-399 | 27-Oct-05 | 0 - 0.5 | Lead |
| | 334-400 | 31-Oct-05 | 0 - 0.5 | Lead |
| | 334-401 | 31-Oct-05 | 0 - 0.5 | Lead |
| | 334-402 | 31-Oct-05 | 0 - 0.5 | Lead |
| | 334-403 | 31-Oct-05 | 0 - 0.5 | Lead |
| | 334-404 | 31-Oct-05 | 0 - 0.5 | Lead |
| | 334-405 | 31-Oct-05 | 0 - 0.5 | Lead |
| | 334-406 | 31-Oct-05 | 0 - 0.5 | Lead |
| | 334-407 | 31-Oct-05 | 0 - 0.5 | Lead |
| | 334-408 | 01-Nov-05 | 0 - 0.5 | Lead |
| | 334-409 | 01-Nov-05 | 0 - 0.5 | Lead |
| | 334-410 | 01-Nov-05 | 0 - 0.5 | Lead |
| | 334-411 | 01-Nov-05 | 0 - 0.5 | Lead |
| | 334-412 | 01-Nov-05 | 0 - 0.5 | Lead |
| | 334-413 | 01-Nov-05 | 0 - 0.5 | Lead |
| | 334-414 | 01-Nov-05 | 0 - 0.5 | Lead |
| | 334-415 | 02-Nov-05 | 0-2 | Lead |
| | 334-415 | 02-Nov-05 | 0 - 0.5 | Lead |
| | 334-416 | 02-Nov-05 | 0 - 0.5 | Lead |
| | 334-417 | 02-Nov-05 | 0 - 0.5 | Lead |
| | 334-418 | 02-Nov-05 | 0 - 0.5 | Lead |
| | 334-419 | 03-Nov-05 | 0 - 0.5 | Lead |

Notes:
AOC - Area of Concern
ft-bgs - feet below ground surface
PAH - Polynuclear Aromatic Hydrocarbons

Table 1. Summary of Sampling Program

| AOC | Sample ID | Date | Depth (ft-bgs) | Analytical Parameter |
|---|---|---|---|---|
| | 334-420 | 10-Nov-05 | 0 - 0.5 | Lead |
| | 334-422 | 12-Jan-06 | 0 - 0.5 | Lead |
| | 334-424 | 07-Feb-06 | 0 - 0.5 | Lead |
| | 334-425 | 07-Feb-06 | 0 - 0.5 | Lead |
| | 334-426 | 07-Feb-06 | 0 - 0.5 | Lead |
| | 334-427 | 07-Feb-06 | 0 - 0.5 | Lead |
| | 334-428 | 07-Feb-06 | 0 - 0.5 | Lead |
| | 334-429 | 07-Feb-06 | 0 - 0.5 | Lead |
| | 334-430 | 07-Feb-06 | 0 - 0.5 | Lead |
| | 334-431 | 07-Feb-06 | 0 - 0.5 | Lead |
| | 334-432 | 07-Feb-06 | 0 - 0.5 | Lead |
| | 334-433 | 07-Feb-06 | 0 - 0.5 | Arsenic |
| | 334-434 | 07-Feb-06 | 0 - 0.5 | Arsenic |
| | 334-435 | 07-Feb-06 | 0 - 0.5 | Arsenic |
| | 334-436 | 16-Feb-05 | 0 - 0.5 | Arsenic, Lead |
| | 334-437 | 16-Feb-05 | 0 - 0.5 | Arsenic, Lead |
| | 334-438 | 16-Feb-05 | 0 - 0.5 | Arsenic, Lead |
| | 334-439 | 16-Feb-05 | 0 - 0.5 | Arsenic, Lead |
| | 334-440 | 01-Mar-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-441 | 01-Mar-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-442 | 01-Mar-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-443 | 01-Mar-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-444 | 10-Mar-06 | 0 - 0.5 | Arsenic |
| | 334-445 | 10-Mar-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-446 | 10-Mar-06 | 0 - 0.5 | Arsenic, Lead |
| **117** | 334-447 | 10-Mar-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-448 | 21-Mar-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-449 | 21-Mar-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-450 | 21-Mar-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-451 | 29-Mar-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-452 | 29-Mar-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-453 | 06-Apr-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-454 | 06-Apr-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-454E | 07-Apr-06 | 0 - 0.5 | Lead |
| | 334-456 | 14-Apr-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-457 | 14-Apr-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-460 | 25-Apr-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-461 | 25-Apr-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-462 | 03-May-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-463 | 03-May-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-464 | 15-May-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-465 | 15-May-06 | 0 - 0.5 | Selenium |
| | 334-468 | 02-Jun-06 | 0 - 0.5 | Arsenic, Selenium |
| | 334-469 | 06-Jun-06 | 0 - 0.5 | Lead |
| | 334-470 | 13-Jun-06 | 0 - 0.5 | Arsenic, Selenium |
| | 334-471 | 22-Jun-06 | 0 - 0.5 | Arsenic, Selenium |
| | 334-472 | 28-Jun-06 | 0 - 0.5 | Arsenic, Selenium |
| | 334-473 | 28-Jul-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-474 | 18-Aug-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-475 | 18-Aug-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-476 | 18-Aug-06 | 0 - 0.5 | Arsenic, Lead |

Notes:
AOC - Area of Concern
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PAH - Polynuclear Aromatic Hydrocarbons

Table 1. Summary of Sampling Program

| AOC | Sample ID | Date | Depth (ft-bgs) | Analytical Parameter |
|---|---|---|---|---|
| | 334-477 | 18-Aug-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-478 | 18-Sep-06 | 0 - 0.5 | Arsenic |
| | 334-479 | 18-Sep-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-480 | 18-Sep-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-481 | 18-Sep-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-482 | 06-Oct-06 | 0 - 0.5 | Arsenic |
| | 334-483 | 06-Oct-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-484 | 06-Oct-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-485 | 23-Oct-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-486 | 23-Oct-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-487 | 23-Oct-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-488 | 03-Nov-06 | 0 - 0.5 | Arsenic |
| | 334-489 | 03-Nov-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-490 | 03-Nov-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-491 | 03-Nov-06 | 0 - 0.5 | Lead |
| | 334-492 | 10-Nov-06 | 0 - 0.5 | Arsenic |
| | 334-493 | 17-Nov-06 | 0 - 0.5 | Lead |
| | 334-494 | 17-Nov-06 | 0 - 0.5 | Lead |
| | 334-495 | 17-Nov-06 | 0 - 0.5 | Lead |
| | 334-496 | 17-Nov-06 | 0 - 0.5 | Lead |
| | 334-497 | 17-Nov-06 | 0 - 0.5 | Arsenic |
| | 334-498 | 01-Dec-06 | 0 - 0.5 | Lead |
| | 334-499 | 01-Dec-06 | 0 - 0.5 | Arsenic |
| | 334-500 | 01-Dec-06 | 0 - 0.5 | Arsenic, Lead |
| | 334-501 | 08-Dec-06 | 0 - 0.5 | Arsenic |
| **117** | 334-502 | 15-Dec-06 | 0 - 0.5 | Arsenic |
| | 334-503 | 15-Dec-06 | 0 - 0.5 | Arsenic, Selenium |
| | 334-504 | 22-Dec-06 | 0 - 0.5 | Arsenic |
| | 334-505 | 29-Jan-07 | 0 - 0.5 | Arsenic, Selenium |
| | 334-506 | 26-Jan-07 | 0 - 0.5 | Arsenic |
| | 334-507 | 12-Feb-07 | 0 - 0.5 | Arsenic, Selenium |
| | 334-508 | 23-Mar-07 | 0 - 0.5 | Arsenic, Selenium |
| | 334-509 | 04-May-07 | 0 - 0.5 | Arsenic, Selenium |
| | 334-510 | 22-May-07 | 0 - 0.5 | Arsenic, Selenium |
| | 334-511 | 15-Aug-07 | 0 - 0.5 | Arsenic, Selenium |
| | 334-512 | 15-Aug-07 | 0 - 0.5 | Arsenic, Selenium |
| | 334-516 | 14-Sep-07 | 0 - 0.5 | Arsenic, Selenium |
| | 334-517 | 19-Nov-09 | 0 - 0.5 | Lead |
| | 334-B1 | 31-Jan-08 | 1-1.5 | Lead |
| | 334-B1 | 31-Jan-08 | 2-2.5 | Lead |
| | 334-B10 | 09-Jan-08 | 1-1.5 | Lead |
| | 334-B10 | 09-Jan-08 | 2-2.5 | Lead |
| | 334-B100 | 26-Mar-08 | 1-1.5 | Lead |
| | 334-B100 | 26-Mar-08 | 2-2.5 | Lead |
| | 334-B100 | 17-Nov-08 | 3-3.5 | Lead |
| | 334-B101 | 26-Mar-08 | 1-1.5 | Lead |
| | 334-B102 | 26-Mar-08 | 1-1.5 | Lead |
| | 334-B103 | 26-Mar-08 | 1-1.5 | Lead |
| | 334-B103 | 26-Mar-08 | 2-2.5 | Lead |
| | 334-B104 | 26-Mar-08 | 1-1.5 | Lead |
| | 334-B104 | 26-Mar-08 | 2-2.5 | Lead |

Notes:
AOC - Area of Concern
ft-bgs - feet below ground surface
PAH - Polynuclear Aromatic Hydrocarbons

Table 1. Summary of Sampling Program

| AOC | Sample ID | Date | Depth (ft-bgs) | Analytical Parameter |
|---|---|---|---|---|
| | 334-B104 | 21-Nov-08 | 3.5-4 | Lead |
| | 334-B104 | 19-Nov-08 | 4-4.5 | Lead |
| | 334-B105 | 20-Nov-08 | 0 - 0.5 | Arsenic |
| | 334-B106 | 20-Nov-08 | 0 - 0.5 | Arsenic |
| | 334-B107 | 20-Nov-08 | 0 - 0.5 | Arsenic |
| | 334-B108 | 20-Nov-08 | 0 - 0.5 | Arsenic |
| | 334-B109 | 21-Nov-08 | 0 - 0.5 | Lead |
| | 334-B11 | 08-Jan-08 | 1-1.5 | Lead |
| | 334-B11 | 08-Jan-08 | 2-2.5 | Lead |
| | 334-B110 | 21-Nov-08 | 0 - 0.5 | Lead |
| | 334-B12 | 09-Jan-08 | 1-1.5 | Lead |
| | 334-B12 | 09-Jan-08 | 2-2.5 | Lead |
| | 334-B13 | 09-Jan-08 | 1-1.5 | Lead |
| | 334-B13 | 09-Jan-08 | 2-2.5 | Lead |
| | 334-B14 | 08-Jan-08 | 1-1.5 | Lead |
| | 334-B14 | 08-Jan-08 | 2-2.5 | Lead |
| | 334-B15 | 15-Jan-08 | 1-1.5 | Lead |
| | 334-B15 | 15-Jan-08 | 2-2.5 | Lead |
| | 334-B16 | 15-Jan-08 | 1-1.65 | Lead |
| | 334-B16 | 15-Jan-08 | 2-2.5 | Lead |
| | 334-B17 | 15-Jan-08 | 1-1.5 | Lead |
| | 334-B17 | 15-Jan-08 | 2-2.5 | Lead |
| | 334-B18 | 08-Jan-08 | 1-1.5 | Arsenic, Lead |
| | 334-B18 | 08-Jan-08 | 2-2.5 | Arsenic, Lead |
| | 334-B19 | 15-Jan-08 | 1-1.5 | Arsenic |
| **117** | 334-B19 | 15-Jan-08 | 2-2.5 | Arsenic |
| | 334-B2 | 31-Jan-08 | 1-1.5 | Lead |
| | 334-B2 | 31-Jan-08 | 2-2.5 | Lead |
| | 334-B20 | 15-Jan-08 | 1-1.5 | Lead |
| | 334-B20 | 15-Jan-08 | 2-2.5 | Lead |
| | 334-B21 | 15-Jan-08 | 1-1.5 | Lead |
| | 334-B21 | 05-Feb-08 | 2-2.5 | Lead |
| | 334-B22 | 05-Feb-08 | 1-1.5 | Lead |
| | 334-B22 | 31-Jan-08 | 2-2.5 | Lead |
| | 334-B23 | 31-Jan-08 | 1-1.5 | Arsenic |
| | 334-B24 | 17-Jan-08 | 1-1.5 | Arsenic |
| | 334-B24 | 17-Jan-08 | 2-2.5 | Arsenic |
| | 334-B25 | 17-Jan-08 | 1-1.5 | Arsenic |
| | 334-B25 | 17-Jan-08 | 2-2.5 | Arsenic |
| | 334-B25 | 20-Nov-08 | 4-4.5 | Arsenic |
| | 334-B26 | 16-Jan-08 | 1-1.5 | Arsenic |
| | 334-B26 | 16-Jan-08 | 2-2.3 | Arsenic |
| | 334-B27 | 16-Jan-08 | 1-1.5 | Arsenic |
| | 334-B27 | 16-Jan-08 | 2-2.5 | Arsenic |
| | 334-B28 | 17-Jan-08 | 1-1.5 | Arsenic |
| | 334-B28 | 17-Jan-08 | 2-2.5 | Arsenic |
| | 334-B29 | 17-Jan-08 | 1-1.5 | Arsenic |
| | 334-B29 | 17-Jan-08 | 2-2.5 | Arsenic |
| | 334-B3 | 15-Jan-08 | 1-1.5 | Lead |
| | 334-B3 | 15-Jan-08 | 2-2.5 | Lead |
| | 334-B30 | 16-Jan-08 | 1-1.5 | Arsenic |

Notes:
AOC - Area of Concern
ft-bgs - feet below ground surface
PAH - Polynuclear Aromatic Hydrocarbons

Table 1. Summary of Sampling Program

| AOC | Sample ID | Date | Depth (ft-bgs) | Analytical Parameter |
|---|---|---|---|---|
| 117 | 334-B30 | 16-Jan-08 | 2-2.5 | Arsenic |
| | 334-B31 | 16-Jan-08 | 1-1.5 | Arsenic |
| | 334-B31 | 16-Jan-08 | 2-2.4 | Arsenic |
| | 334-B32 | 16-Jan-08 | 1-1.5 | Arsenic |
| | 334-B32 | 16-Jan-08 | 2-2.5 | Arsenic |
| | 334-B33 | 17-Jan-08 | 1-1.5 | Arsenic |
| | 334-B33 | 17-Jan-08 | 2-2.5 | Arsenic |
| | 334-B34 | 17-Jan-08 | 1-1.5 | Arsenic |
| | 334-B34 | 17-Jan-08 | 2-2.5 | Arsenic |
| | 334-B34 | 18-Jan-08 | 3-3.5 | Arsenic |
| | 334-B35 | 16-Jan-08 | 1-1.5 | Arsenic |
| | 334-B35 | 16-Jan-08 | 2-2.5 | Arsenic |
| | 334-B36 | 16-Jan-08 | 1-1.5 | Arsenic |
| | 334-B36 | 16-Jan-08 | 2-2.5 | Arsenic |
| | 334-B37 | 16-Jan-08 | 1-1.5 | Arsenic |
| | 334-B37 | 16-Jan-08 | 2-2.5 | Arsenic |
| | 334-B38 | 22-Jan-08 | 1-1.5 | Arsenic |
| | 334-B38 | 22-Jan-08 | 2-2.5 | Arsenic |
| | 334-B39 | 23-Jan-08 | 1-1.5 | Arsenic |
| | 334-B39 | 23-Jan-08 | 2-2.5 | Arsenic |
| | 334-B4 | 15-Jan-08 | 1-1.5 | Arsenic, Lead |
| | 334-B4 | 15-Jan-08 | 2-2.5 | Arsenic, Lead |
| | 334-B40 | 18-Jan-08 | 1-1.5 | Arsenic |
| | 334-B40 | 18-Jan-08 | 2-2.5 | Arsenic |
| | 334-B41 | 18-Jan-08 | 1-1.5 | Arsenic |
| | 334-B41 | 18-Jan-08 | 2-2.5 | Arsenic |
| | 334-B42 | 18-Jan-08 | 1-1.5 | Arsenic |
| | 334-B42 | 18-Jan-08 | 2-2.5 | Arsenic |
| | 334-B42 | 19-Jan-08 | 3-3.5 | Arsenic |
| | 334-B43 | 22-Jan-08 | 1-1.5 | Arsenic |
| | 334-B43 | 22-Jan-08 | 2-2.5 | Arsenic |
| | 334-B44 | 22-Jan-08 | 1-1.5 | Arsenic |
| | 334-B44 | 22-Jan-08 | 2-2.5 | Arsenic |
| | 334-B45 | 18-Jan-08 | 1-1.5 | Arsenic |
| | 334-B45 | 18-Jan-08 | 2-2.5 | Arsenic |
| | 334-B46 | 18-Jan-08 | 1-1.5 | Arsenic |
| | 334-B46 | 18-Jan-08 | 2-2.5 | Arsenic |
| | 334-B46 | 21-Nov-08 | 3.5-4 | Arsenic |
| | 334-B47 | 23-Jan-08 | 1-1.5 | Arsenic |
| | 334-B47 | 23-Jan-08 | 2-2.5 | Arsenic |
| | 334-B47 | 21-Nov-08 | 4-4.5 | Arsenic |
| | 334-B48 | 23-Jan-08 | 1-1.5 | Arsenic |
| | 334-B48 | 23-Jan-08 | 2-2.5 | Arsenic |
| | 334-B49 | 22-Jan-08 | 1-1.5 | Arsenic |
| | 334-B49 | 22-Jan-08 | 2-2.5 | Arsenic |
| | 334-B49 | 20-Nov-08 | 3-3.5 | Arsenic |
| | 334-B5 | 08-Jan-08 | 1-1.5 | Lead |
| | 334-B5 | 08-Jan-08 | 2-2.5 | Lead |
| | 334-B50 | 22-Jan-08 | 1-1.5 | Arsenic |
| | 334-B50 | 22-Jan-08 | 2-2.5 | Arsenic |
| | 334-B51 | 23-Jan-08 | 1-1.5 | Arsenic |

Notes:
AOC - Area of Concern
ft-bgs - feet below ground surface
PAH - Polynuclear Aromatic Hydrocarbons

Table 1. Summary of Sampling Program

| AOC | Sample ID | Date | Depth (ft-bgs) | Analytical Parameter |
|---|---|---|---|---|
| 117 | 334-B51 | 23-Jan-08 | 2-2.5 | Arsenic |
| | 334-B52 | 23-Jan-08 | 1-1.5 | Arsenic |
| | 334-B52 | 23-Jan-08 | 2-2.5 | Arsenic |
| | 334-B53 | 31-Jan-08 | 1-1.5 | Arsenic |
| | 334-B53 | 31-Jan-08 | 2-2.5 | Arsenic |
| | 334-B54 | 03-Apr-08 | 1-1.5 | Arsenic |
| | 334-B54 | 03-Apr-08 | 2-2.5 | Arsenic |
| | 334-B55 | 31-Jan-08 | 1-1.5 | Arsenic |
| | 334-B55 | 31-Jan-08 | 2-2.5 | Arsenic |
| | 334-B55 | 18-Nov-08 | 3-3.5 | Arsenic |
| | 334-B56 | 31-Jan-08 | 1-1.5 | Arsenic |
| | 334-B56 | 31-Jan-08 | 2-2.5 | Arsenic |
| | 334-B57 | 30-Jan-08 | 1-1.5 | Arsenic |
| | 334-B57 | 30-Jan-08 | 2-2.5 | Arsenic |
| | 334-B58 | 30-Jan-08 | 1-1.5 | Arsenic |
| | 334-B58 | 30-Jan-08 | 2-2.5 | Arsenic |
| | 334-B59 | 31-Jan-08 | 1-1.5 | Arsenic |
| | 334-B59 | 31-Jan-08 | 2-2.5 | Arsenic |
| | 334-B59 | 20-Nov-08 | 3-3.5 | Arsenic |
| | 334-B6 | 08-Jan-08 | 1-1.5 | Lead |
| | 334-B6 | 08-Jan-08 | 2-2.5 | Lead |
| | 334-B60 | 16-Jan-08 | 1-1.5 | Arsenic |
| | 334-B60 | 16-Jan-08 | 2-2.5 | Arsenic |
| | 334-B60 | 18-Nov-08 | 3-3.5 | Arsenic |
| | 334-B61 | 15-Jan-08 | 1-1.5 | Arsenic |
| | 334-B61 | 15-Jan-08 | 2-2.5 | Arsenic |
| | 334-B64 | 27-Mar-08 | 1-1.5 | Lead |
| | 334-B64 | 27-Mar-08 | 2-2.5 | Lead |
| | 334-B65 | 04-Mar-08 | 1-1.5 | Lead |
| | 334-B65 | 04-Mar-08 | 2-2.5 | Lead |
| | 334-B67 | 27-Mar-08 | 1-1.5 | Lead |
| | 334-B67 | 27-Mar-08 | 2-2.5 | Lead |
| | 334-B7 | 08-Jan-08 | 1-1.5 | Lead |
| | 334-B7 | 08-Jan-08 | 2-2.5 | Lead |
| | 334-B70 | 27-Mar-08 | 1-1.5 | Lead |
| | 334-B70 | 27-Mar-08 | 2-2.5 | Lead |
| | 334-B71 | 12-Feb-08 | 1-1.5 | Lead |
| | 334-B71 | 12-Feb-08 | 2-2.5 | Lead |
| | 334-B72 | 04-Mar-08 | 1-1.5 | Lead |
| | 334-B73 | 15-Feb-08 | 1-1.5 | Lead |
| | 334-B73 | 15-Feb-08 | 2-2.5 | Lead |
| | 334-B74 | 04-Mar-05 | 1-1.5 | Lead |
| | 334-B74 | 04-Mar-05 | 2-2.5 | Lead |
| | 334-B75 | 12-Feb-08 | 1-1.5 | Lead |
| | 334-B75 | 12-Feb-08 | 2-2.5 | Lead |
| | 334-B76 | 15-Feb-08 | 1-1.5 | Lead |
| | 334-B76 | 15-Feb-08 | 2-2.5 | Lead |
| | 334-B77 | 07-Feb-08 | 1-1.5 | Lead |
| | 334-B77 | 07-Feb-08 | 2-2.5 | Lead |
| | 334-B78 | 08-Feb-08 | 1-1.5 | Lead |
| | 334-B78 | 08-Feb-08 | 2-2.5 | Lead |

Notes:
AOC - Area of Concern
ft-bgs - feet below ground surface
PAH - Polynuclear Aromatic Hydrocarbons

Table 1. Summary of Sampling Program

| AOC | Sample ID | Date | Depth (ft-bgs) | Analytical Parameter |
|---|---|---|---|---|
| | 334-B79 | 07-Feb-08 | 1-1.5 | Lead |
| | 334-B79 | 07-Feb-08 | 2-2.5 | Lead |
| | 334-B8 | 08-Jan-08 | 1-1.4 | Lead |
| | 334-B8 | 08-Jan-08 | 2-2.5 | Lead |
| | 334-B80 | 08-Feb-08 | 1-1.5 | Lead |
| | 334-B80 | 08-Feb-08 | 2-2.5 | Lead |
| | 334-B81 | 07-Feb-08 | 1-1.5 | Lead |
| | 334-B81 | 07-Feb-08 | 2-2.5 | Lead |
| | 334-B82 | 08-Feb-08 | 1-1.5 | Lead |
| | 334-B82 | 08-Feb-08 | 2-2.5 | Lead |
| | 334-B83 | 07-Feb-08 | 1-1.5 | Lead |
| | 334-B83 | 07-Feb-08 | 2-2.5 | Lead |
| | 334-B84 | 07-Feb-08 | 1-1.5 | Lead |
| | 334-B84 | 07-Feb-08 | 2-2.5 | Lead |
| | 334-B85 | 07-Feb-08 | 1-1.5 | Lead |
| | 334-B85 | 07-Feb-08 | 2-2.5 | Lead |
| | 334-B86 | 12-Feb-08 | 1-1.5 | Lead |
| | 334-B86 | 12-Feb-08 | 2-2.5 | Lead |
| | 334-B87 | 08-Feb-08 | 1-1.5 | Lead |
| | 334-B87 | 08-Feb-08 | 2-2.5 | Lead |
| | 334-B88 | 08-Feb-08 | 1-1.5 | Lead |
| | 334-B88 | 08-Feb-08 | 2-2.5 | Lead |
| | 334-B89 | 27-Mar-08 | 1-1.5 | Lead |
| | 334-B89 | 27-Mar-08 | 2-2.5 | Lead |
| | 334-B9 | 09-Jan-08 | 1-1.5 | Lead |
| **117** | 334-B9 | 09-Jan-08 | 2-2.5 | Lead |
| | 334-B90 | 27-Mar-08 | 1-1.5 | Lead |
| | 334-B90 | 27-Mar-08 | 2-2.5 | Lead |
| | 334-B91 | 03-Apr-08 | 1-1.5 | Lead |
| | 334-B91 | 03-Apr-08 | 2-2.5 | Lead |
| | 334-B92 | 03-Apr-08 | 1-1.5 | Lead |
| | 334-B92 | 03-Apr-08 | 2-2.5 | Lead |
| | 334-B93 | 03-Apr-08 | 1-1.5 | Lead |
| | 334-B94 | 03-Apr-08 | 1-1.5 | Lead |
| | 334-B94 | 03-Apr-08 | 2-2.5 | Lead |
| | 334-B95 | 03-Apr-08 | 1-1.5 | Lead |
| | 334-B95 | 03-Apr-08 | 2-2.5 | Lead |
| | 334-B95 | 17-Nov-08 | 3-3.5 | Lead |
| | 334-B96 | 03-Apr-08 | 1-1.5 | Lead |
| | 334-B96 | 03-Apr-08 | 2-2.3 | Lead |
| | 334-B97 | 03-Apr-08 | 1-1.5 | Lead |
| | 334-B97 | 03-Apr-08 | 2-2.5 | Lead |
| | 334-B98 | 03-Apr-08 | 1-1.5 | Lead |
| | 334-B98 | 03-Apr-08 | 2-2.3 | Lead |
| | 334-B99 | 26-Mar-08 | 1-1.5 | Lead |
| | 334-B99 | 26-Mar-08 | 2-2.5 | Lead |
| | 334-P1 | 15-Jan-08 | 0 - 0.5 | Lead |
| | 334-P1 | 21-Nov-08 | 3.5-4 | Lead |
| | 334-P10 | 06-Feb-08 | 0 - 0.5 | Lead |
| | 334-P11 | 07-Feb-08 | 0 - 0.5 | Lead |
| | 334-P11 | 18-Nov-08 | 1-1.5 | Lead |

Notes:
AOC - Area of Concern
ft-bgs - feet below ground surface
PAH - Polynuclear Aromatic Hydrocarbons

Table 1. Summary of Sampling Program

| AOC | Sample ID | Date | Depth (ft-bgs) | Analytical Parameter |
|---|---|---|---|---|
| 117 | 334-P12 | 20-Nov-08 | 0 - 0.5 | Lead |
| | 334-P13 | 17-Nov-08 | 0 - 0.5 | Arsenic |
| | 334-P14 | 21-Nov-08 | 0 - 0.5 | Arsenic |
| | 334-P15 | 20-Nov-08 | 0 - 0.5 | Arsenic |
| | 334-P15 | 15-Jan-09 | 0 - 0.5 | Arsenic |
| | 334-P16 | 20-Nov-08 | 0 - 0.5 | Arsenic |
| | 334-P16 | 15-Jan-09 | 0 - 0.5 | Arsenic |
| | 334-P17 | 18-Nov-08 | 0 - 0.5 | Arsenic |
| | 334-P18 | 18-Nov-08 | 0 - 0.5 | Lead |
| | 334-P2 | 05-Feb-08 | 0 - 0.5 | Lead |
| | 334-P2 | 20-Nov-08 | 1-1.5 | Lead |
| | 334-P3 | 05-Feb-08 | 0 - 0.5 | Arsenic |
| | 334-P4 | 05-Feb-08 | 0 - 0.5 | Arsenic |
| | 334-P4 | 18-Nov-08 | 3-3.5 | Arsenic |
| | 334-P5 | 05-Feb-08 | 0 - 0.5 | Arsenic |
| | 334-P5 | 21-Nov-08 | 4-4.5 | Arsenic |
| | 334-P6 | 05-Feb-08 | 0 - 0.5 | Arsenic |
| | 334-P6 | 21-Nov-08 | 2-2.5 | Arsenic |
| | 334-P7 | 05-Feb-08 | 0 - 0.5 | Arsenic |
| | 334-P8 | 05-Feb-08 | 0 - 0.5 | Arsenic |
| | 334-P8 | 18-Nov-08 | 1-1.5 | Arsenic |
| | 334-P9 | 06-Feb-08 | 0 - 0.5 | Lead |
| | | | | |
| 119 | 334-101 | 19-May-03 | 0 | PAH, Arsenic, Copper, Lead, Mercury |
| | 334-102 | 19-May-03 | 0 | PAH, Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Zinc |
| | 334-103 | 19-May-03 | 0 | Organic Explosives, PAH, Arsenic, Copper, Lead, Mercury, Nitrate, Nitrite |
| | 334-182 | 15-Mar-06 | 0 - 0.5 | Lead |
| | 334-182 | 21-Mar-06 | 0 - 0.5 | Arsenic |
| | 334-183 | 15-Mar-06 | 0 - 0.5 | Lead |
| | 334-183 | 21-Mar-06 | 0 - 0.5 | Arsenic |
| | 334-184 | 15-Mar-06 | 0 - 0.5 | Lead |
| | 334-184 | 21-Mar-06 | 0 - 0.5 | Arsenic |
| | 334-185 | 15-Mar-06 | 0 - 0.5 | Lead |
| | 334-185 | 21-Mar-06 | 0 - 0.5 | Arsenic |
| | 334-B61 | 15-Jan-08 | 1-1.5 | Arsenic |
| | 334-B61 | 15-Jan-08 | 2-2.5 | Arsenic |
| | | | | |
| RB | 334-RB1 | 12-Dec-07 | 0-2 | PAH, Antimony, Arsenic, Beryllium, Cadmium, Chroimium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Zinc |
| | 334-RB2 | 13-Dec-07 | 0-1.4 | PAH, Antimony, Arsenic, Beryllium, Cadmium, Chroimium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Zinc |
| | 334-RB3 | 13-Dec-07 | 0-3.3 | PAH, Antimony, Arsenic, Beryllium, Cadmium, Chroimium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Zinc |
| | 334-RB4 | 13-Dec-07 | 0-1.3 | PAH, Antimony, Arsenic, Beryllium, Cadmium, Chroimium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Zinc |
| | 334-RB5 | 14-Dec-07 | 0-1.7 | PAH, Antimony, Arsenic, Beryllium, Cadmium, Chroimium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Zinc |
| | 334-RB6 | 14-Dec-07 | 0-1.2 | PAH, Antimony, Arsenic, Beryllium, Cadmium, Chroimium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Zinc |
| | 334-RB7 | 14-Dec-07 | 0-1.4 | PAH, Antimony, Arsenic, Beryllium, Cadmium, Chroimium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, Zinc |

Notes:
AOC - Area of Concern
ft-bgs - feet below ground surface
PAH - Polynuclear Aromatic Hydrocarbons

Table 2. Analytical Methods and Quality Assurance Indicators

| Parameter | Matrix | Analytical Method | Sample Size / Container | Preservative | Holding Time |
|---|---|---|---|---|---|
| Polynuclear Aromatic Hydrocarbons | Soil | SW846-8310/8270C | 100 g / glass jar | Cool, 4 deg. C. | 14 Day Extraction 40 Day Analysis |
| Organic Explosives (Nitroaromatics/Nitramines) | Soil | SW846 - 8330 | 100 g / glass jar | Cool, 4 deg. C. | 14 Day Extraction 40 Day Analysis |
| Metals, except Hg (ICP) | Soil | SW846 3050B/6010B | 100 g / plastic or glass jar | Cool, 4 deg. C. | 6 Months |
| Mercury (Hg) | Soil | SW846 7471 | 100 g / plastic or glass jar | Cool, 4 deg. C. | 28 Days |
| Nitrate/ Nitrite | Soil | EPA 300.0 | 50g / glass jar | Cool, 4 deg. C. | 28 Days |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-101-FB | 333-FBLK3 | 334-1-FBLK |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-101-FB | POM-K-333-FBLK3 | POM-K-334-1-FBLK |
| **Lab ID** | | | | 4047593 | 5578083 | 4121733 |
| **Date** | | | | 5/19/03 | 1/15/09 | 9/11/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | 0.0088 J | | ND (0.0085) |
| ARSENIC | 19 | 19 | 19 | 0.0094 J | ND (0.01) | ND (0.0049) |
| BERYLLIUM | 16 | 140 | 0.5 | 0.0042 J | | ND (0.00034) |
| CADMIUM | 78 | 78 | 1 | ND (0.00087) | | ND (0.00087) |
| CHROMIUM | | | | 0.113 | | ND (0.0022) |
| COPPER | 3100 | 45000 | 7300 | 0.0155 | | ND (0.0021) |
| LEAD | 400 | 800 | 59 | ND (0.0093) | | ND (0.0093) |
| MERCURY | 23 | 65 | 0.1 | ND (0.00016) | | ND (0.00016) |
| NICKEL | 1600 | 23000 | 31 | ND (0.0038) | | ND (0.0038) |
| SELENIUM | 390 | 5700 | 7 | ND (0.0047) | | ND (0.0047) |
| SILVER | 390 | 5700 | 1 | ND (0.0018) | | ND (0.0018) |
| THALLIUM | 5 | 79 | 3 | ND (0.0089) | | ND (0.0089) |
| ZINC | 23000 | 110000 | 600 | ND (0.0041) | | ND (0.0041) |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1,3,5-TRINITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1,3-DINITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1,4-DINITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1-METHYL-3-NITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1-METHYL-4-NITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1-METHYLNAPHTHALENE | | | | | ND (0.001) | ND (0.001) |
| 1-NITRONAPHTHALENE | | | | ND (0.0002) | | ND (0.0002) |
| 2,4,6-TRINITROTOLUENE | | | | ND (0.0002) | | ND (0.0002) |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | ND (0.0002) | | ND (0.0002) |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | ND (0.0002) | | ND (0.0002) |
| 2-AMINO-4,6-DINITROTOLUENE | | | | ND (0.0002) | | ND (0.0002) |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | ND (0.001) | ND (0.001) |
| 2-NITROTOLUENE | | | | ND (0.0002) | | ND (0.0002) |
| 4-AMINO-2,6-DINITROTOLUENE | | | | ND (0.0002) | | ND (0.0002) |
| ACENAPHTHENE | 3400 | 37000 | 74 | ND (0.0009) | ND (0.001) | ND (0.001) |
| ACENAPHTHYLENE | | 300000 | | ND (0.0009) | ND (0.001) | ND (0.001) |
| ANTHRACENE | 17000 | 30000 | 1500 | ND (0.0009) | ND (0.001) | ND (0.001) |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-101-FB | 333-FBLK3 | 334-1-FBLK |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-101-FB | POM-K-333-FBLK3 | POM-K-334-1-FBLK |
| **Lab ID** | | | | 4047593 | 5578083 | 4121733 |
| **Date** | | | | 5/19/03 | 1/15/09 | 9/11/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | ND (0.0009) | ND (0.001) | ND (0.001) |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | ND (0.0009) | ND (0.001) | ND (0.001) |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | ND (0.0009) | ND (0.001) | ND (0.001) |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | ND (0.0009) | ND (0.001) | ND (0.001) |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | ND (0.0009) | ND (0.001) | ND (0.001) |
| CHRYSENE | 62 | 230 | 52 | ND (0.0009) | ND (0.001) | ND (0.001) |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | ND (0.0009) | ND (0.001) | ND (0.001) |
| FLUORANTHENE | 2300 | 24000 | 840 | ND (0.0009) | ND (0.001) | ND (0.001) |
| FLUORENE | 2300 | 24000 | 110 | ND (0.0009) | ND (0.001) | ND (0.001) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | ND (0.0009) | ND (0.001) | ND (0.001) |
| NAPHTHALENE | 6 | 17 | 16 | ND (0.0009) | ND (0.001) | ND (0.001) |
| NITROBENZENE | 31 | 340 | 0.2 | ND (0.0002) | | ND (0.0002) |
| PHENANTHRENE | | 300000 | | ND (0.0009) | ND (0.001) | ND (0.001) |
| PYRENE | 1700 | 18000 | 550 | ND (0.0009) | ND (0.001) | ND (0.001) |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | ND (0.004) | | ND (0.004) |
| NITRATE | | | | 0.27 | | 0.26 |
| NITRITE | | | | ND (0.08) | | ND (0.08) |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | ND (0.0002) | | ND (0.0002) |
| PENTAERYTHRITOL TETRANITRATE | | | | ND (0.004) | | ND (0.004) |
| RDX | | | | ND (0.0002) | | ND (0.0002) |
| TETRYL | | | | ND (0.0002) | | ND (0.0002) |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-17-FBLK | 334-17-FBLK | 334-29-FBLK |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-334-17-FBLK | POM-K-334-17-FBLK | POM-K-334-29-FBLK |
| Lab ID | | | | 4123776 | 4123776 | 4124813 |
| Date | | | | 9/15/03 | 9/15/03 | 9/16/03 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | ND (0.0085) | | ND (0.0085) |
| ARSENIC | 19 | 19 | 19 | ND (0.0049) | | ND (0.0049) |
| BERYLLIUM | 16 | 140 | 0.5 | ND (0.00034) | | ND (0.00034) |
| CADMIUM | 78 | 78 | 1 | ND (0.00087) | | ND (0.00087) |
| CHROMIUM | | | | ND (0.0022) | | ND (0.0022) |
| COPPER | 3100 | 45000 | 7300 | ND (0.0021) | | ND (0.0021) |
| LEAD | 400 | 800 | 59 | ND (0.0093) | | ND (0.0093) |
| MERCURY | 23 | 65 | 0.1 | ND (0.00016) | | ND (0.00016) |
| NICKEL | 1600 | 23000 | 31 | ND (0.0038) | | ND (0.0038) |
| SELENIUM | 390 | 5700 | 7 | ND (0.0047) | | ND (0.0047) |
| SILVER | 390 | 5700 | 1 | ND (0.0018) | | ND (0.0018) |
| THALLIUM | 5 | 79 | 3 | ND (0.0089) | | ND (0.0089) |
| ZINC | 23000 | 110000 | 600 | ND (0.0041) | | ND (0.0041) |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | ND (0.0002) | |
| 1,3,5-TRINITROBENZENE | | | | | ND (0.0002) | |
| 1,3-DINITROBENZENE | | | | | ND (0.0002) | |
| 1,4-DINITROBENZENE | | | | | ND (0.0002) | |
| 1-METHYL-3-NITROBENZENE | | | | | ND (0.0002) | |
| 1-METHYL-4-NITROBENZENE | | | | | ND (0.0002) | |
| 1-METHYLNAPHTHALENE | | | | ND (0.001) | | ND (0.001) UJ |
| 1-NITRONAPHTHALENE | | | | | ND (0.0002) | |
| 2,4,6-TRINITROTOLUENE | | | | | ND (0.0002) | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | ND (0.0002) | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | ND (0.0002) | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | ND (0.0002) | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | ND (0.001) | | ND (0.001) UJ |
| 2-NITROTOLUENE | | | | | ND (0.0002) | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | ND (0.0002) | |
| ACENAPHTHENE | 3400 | 37000 | 74 | ND (0.001) | | ND (0.001) UJ |
| ACENAPHTHYLENE | | 300000 | | ND (0.001) | | ND (0.001) |
| ANTHRACENE | 17000 | 30000 | 1500 | ND (0.001) | | ND (0.001) |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-17-FBLK | 334-17-FBLK | 334-29-FBLK |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-17-FBLK | POM-K-334-17-FBLK | POM-K-334-29-FBLK |
| **Lab ID** | | | | 4123776 | 4123776 | 4124813 |
| **Date** | | | | 9/15/03 | 9/15/03 | 9/16/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | ND (0.001) | | ND (0.001) |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | ND (0.001) | | ND (0.001) |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | ND (0.001) | | ND (0.001) |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | ND (0.001) | | ND (0.001) |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | ND (0.001) | | ND (0.001) |
| CHRYSENE | 62 | 230 | 52 | ND (0.001) | | ND (0.001) |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | ND (0.001) | | ND (0.001) |
| FLUORANTHENE | 2300 | 24000 | 840 | ND (0.001) | | ND (0.001) |
| FLUORENE | 2300 | 24000 | 110 | ND (0.001) | | ND (0.001) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | ND (0.001) | | ND (0.001) |
| NAPHTHALENE | 6 | 17 | 16 | ND (0.001) | | ND (0.001) UJ |
| NITROBENZENE | 31 | 340 | 0.2 | | ND (0.0002) | |
| PHENANTHRENE | | 300000 | | ND (0.001) | | ND (0.001) |
| PYRENE | 1700 | 18000 | 550 | ND (0.001) | | ND (0.001) |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | ND (0.004) | |
| NITRATE | | | | ND (0.08) | | ND (0.08) |
| NITRITE | | | | ND (0.08) | | ND (0.08) |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | ND (0.0002) | |
| PENTAERYTHRITOL TETRANITRATE | | | | | ND (0.004) | |
| RDX | | | | | ND (0.0002) | |
| TETRYL | | | | | ND (0.0002) | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-29-FBLK | 334-36-FBLK | 334-36-FBLK |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-334-29-FBLK | POM-K-334-36-FBLK | POM-K-334-36-FBLK |
| Lab ID | | | | 4124813 | 4125619 | 4125619 |
| Date | | | | 9/16/03 | 9/17/03 | 9/17/03 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | ND (0.0085) | |
| ARSENIC | 19 | 19 | 19 | | ND (0.0049) | |
| BERYLLIUM | 16 | 140 | 0.5 | | ND (0.00034) | |
| CADMIUM | 78 | 78 | 1 | | ND (0.00087) | |
| CHROMIUM | | | | | ND (0.0022) | |
| COPPER | 3100 | 45000 | 7300 | | ND (0.0021) | |
| LEAD | 400 | 800 | 59 | | ND (0.0093) | |
| MERCURY | 23 | 65 | 0.1 | | ND (0.00016) | |
| NICKEL | 1600 | 23000 | 31 | | ND (0.0038) | |
| SELENIUM | 390 | 5700 | 7 | | ND (0.0047) | |
| SILVER | 390 | 5700 | 1 | | ND (0.0018) | |
| THALLIUM | 5 | 79 | 3 | | ND (0.0089) | |
| ZINC | 23000 | 110000 | 600 | | 0.0125 J | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1,3,5-TRINITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1,3-DINITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1,4-DINITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1-METHYL-3-NITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1-METHYL-4-NITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1-METHYLNAPHTHALENE | | | | | ND (0.001) | |
| 1-NITRONAPHTHALENE | | | | ND (0.0002) | | ND (0.0002) |
| 2,4,6-TRINITROTOLUENE | | | | ND (0.0002) | | ND (0.0002) |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | ND (0.0002) | | ND (0.0002) |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | ND (0.0002) | | ND (0.0002) |
| 2-AMINO-4,6-DINITROTOLUENE | | | | ND (0.0002) | | ND (0.0002) |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | ND (0.001) | |
| 2-NITROTOLUENE | | | | ND (0.0002) | | ND (0.0002) |
| 4-AMINO-2,6-DINITROTOLUENE | | | | ND (0.0002) | | ND (0.0002) |
| ACENAPHTHENE | 3400 | 37000 | 74 | | ND (0.001) | |
| ACENAPHTHYLENE | | 300000 | | | ND (0.001) | |
| ANTHRACENE | 17000 | 30000 | 1500 | | ND (0.001) | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-29-FBLK | 334-36-FBLK | 334-36-FBLK |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-29-FBLK | POM-K-334-36-FBLK | POM-K-334-36-FBLK |
| **Lab ID** | | | | 4124813 | 4125619 | 4125619 |
| **Date** | | | | 9/16/03 | 9/17/03 | 9/17/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | ND (0.001) | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | ND (0.001) | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | ND (0.001) | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | ND (0.001) | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | ND (0.001) | |
| CHRYSENE | 62 | 230 | 52 | | ND (0.001) | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | ND (0.001) | |
| FLUORANTHENE | 2300 | 24000 | 840 | | ND (0.001) | |
| FLUORENE | 2300 | 24000 | 110 | | ND (0.001) | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | ND (0.001) | |
| NAPHTHALENE | 6 | 17 | 16 | | ND (0.001) | |
| NITROBENZENE | 31 | 340 | 0.2 | ND (0.0002) | | ND (0.0002) |
| PHENANTHRENE | | 300000 | | | ND (0.001) | |
| PYRENE | 1700 | 18000 | 550 | | ND (0.001) | |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | ND (0.004) | | ND (0.004) |
| NITRATE | | | | | ND (0.08) | |
| NITRITE | | | | | ND (0.08) | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | ND (0.0002) | | ND (0.0002) |
| PENTAERYTHRITOL TETRANITRATE | | | | ND (0.004) | | ND (0.004) |
| RDX | | | | ND (0.0002) | | ND (0.0002) |
| TETRYL | | | | ND (0.0002) | | ND (0.0002) |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-4-FBLK | 334-4-FBLK | 334-56-FBLK |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-334-4-FBLK | POM-K-334-4-FBLK | POM-K-334-56-FBLK |
| Lab ID | | | | 4122661 | 4122661 | 4130143 |
| Date | | | | 9/12/03 | 9/12/03 | 9/18/03 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | ND (0.0085) | | ND (0.0085) |
| ARSENIC | 19 | 19 | 19 | 0.0134 | | ND (0.0049) UJ |
| BERYLLIUM | 16 | 140 | 0.5 | ND (0.00034) | | ND (0.00034) |
| CADMIUM | 78 | 78 | 1 | ND (0.00087) | | ND (0.00087) |
| CHROMIUM | | | | ND (0.0022) | | ND (0.0022) |
| COPPER | 3100 | 45000 | 7300 | 0.0107 | | ND (0.0021) |
| LEAD | 400 | 800 | 59 | ND (0.0093) | | ND (0.0093) |
| MERCURY | 23 | 65 | 0.1 | ND (0.00016) | | ND (0.00016) |
| NICKEL | 1600 | 23000 | 31 | ND (0.0038) | | ND (0.0038) |
| SELENIUM | 390 | 5700 | 7 | ND (0.0047) | | ND (0.0047) UJ |
| SILVER | 390 | 5700 | 1 | 0.01 | | ND (0.0018) |
| THALLIUM | 5 | 79 | 3 | 0.0247 | | ND (0.0089) |
| ZINC | 23000 | 110000 | 600 | 0.0055 J | | 0.0214 |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | ND (0.0002) | |
| 1,3,5-TRINITROBENZENE | | | | | ND (0.0002) | |
| 1,3-DINITROBENZENE | | | | | ND (0.0002) | |
| 1,4-DINITROBENZENE | | | | | ND (0.0002) | |
| 1-METHYL-3-NITROBENZENE | | | | | ND (0.0002) | |
| 1-METHYL-4-NITROBENZENE | | | | | ND (0.0002) | |
| 1-METHYLNAPHTHALENE | | | | | | ND (0.001) |
| 1-NITRONAPHTHALENE | | | | | ND (0.0002) | |
| 2,4,6-TRINITROTOLUENE | | | | | ND (0.0002) | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | ND (0.0002) | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | ND (0.0002) | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | ND (0.0002) | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | ND (0.001) |
| 2-NITROTOLUENE | | | | | ND (0.0002) | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | ND (0.0002) | |
| ACENAPHTHENE | 3400 | 37000 | 74 | ND (0.001) | | ND (0.001) |
| ACENAPHTHYLENE | | 300000 | | ND (0.001) | | ND (0.001) |
| ANTHRACENE | 17000 | 30000 | 1500 | ND (0.001) | | ND (0.001) |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-4-FBLK | 334-4-FBLK | 334-56-FBLK |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-4-FBLK | POM-K-334-4-FBLK | POM-K-334-56-FBLK |
| **Lab ID** | | | | 4122661 | 4122661 | 4130143 |
| **Date** | | | | 9/12/03 | 9/12/03 | 9/18/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | ND (0.001) | | ND (0.001) |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | ND (0.001) | | ND (0.001) |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | ND (0.001) | | ND (0.001) |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | ND (0.001) | | ND (0.001) |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | ND (0.001) | | ND (0.001) |
| CHRYSENE | 62 | 230 | 52 | ND (0.001) | | ND (0.001) |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | ND (0.001) | | ND (0.001) |
| FLUORANTHENE | 2300 | 24000 | 840 | ND (0.001) | | ND (0.001) |
| FLUORENE | 2300 | 24000 | 110 | ND (0.001) | | ND (0.001) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | ND (0.001) | | ND (0.001) |
| NAPHTHALENE | 6 | 17 | 16 | ND (0.001) | | ND (0.001) |
| NITROBENZENE | 31 | 340 | 0.2 | | ND (0.0002) | |
| PHENANTHRENE | | 300000 | | ND (0.001) | | ND (0.001) |
| PYRENE | 1700 | 18000 | 550 | ND (0.001) | | ND (0.001) |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | ND (0.004) | |
| NITRATE | | | | ND (0.08) | | ND (0.08) |
| NITRITE | | | | ND (0.08) | | ND (0.08) |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | ND (0.0002) | |
| PENTAERYTHRITOL TETRANITRATE | | | | | ND (0.004) | |
| RDX | | | | | ND (0.0002) | |
| TETRYL | | | | | ND (0.0002) | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-56-FBLK | 334-63-FBLK | 334-63-FBLK |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-334-56-FBLK | POM-K-334-63-FBLK | POM-K-334-63-FBLK |
| Lab ID | | | | 4130143 | 4130135 | 4130135 |
| Date | | | | 9/18/03 | 9/25/03 | 9/25/03 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | ND (0.0085) | |
| ARSENIC | 19 | 19 | 19 | | ND (0.0049) UJ | |
| BERYLLIUM | 16 | 140 | 0.5 | | ND (0.00034) | |
| CADMIUM | 78 | 78 | 1 | | ND (0.00087) | |
| CHROMIUM | | | | | ND (0.0022) | |
| COPPER | 3100 | 45000 | 7300 | | ND (0.0021) | |
| LEAD | 400 | 800 | 59 | | ND (0.0093) | |
| MERCURY | 23 | 65 | 0.1 | | ND (0.00016) | |
| NICKEL | 1600 | 23000 | 31 | | ND (0.0038) | |
| SELENIUM | 390 | 5700 | 7 | | ND (0.0047) UJ | |
| SILVER | 390 | 5700 | 1 | | ND (0.0018) | |
| THALLIUM | 5 | 79 | 3 | | ND (0.0089) | |
| ZINC | 23000 | 110000 | 600 | | 0.0161 J | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1,3,5-TRINITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1,3-DINITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1,4-DINITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1-METHYL-3-NITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1-METHYL-4-NITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1-METHYLNAPHTHALENE | | | | | ND (0.0009) | |
| 1-NITRONAPHTHALENE | | | | ND (0.0002) | | ND (0.0002) |
| 2,4,6-TRINITROTOLUENE | | | | ND (0.0002) | | ND (0.0002) |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | ND (0.0002) | | ND (0.0002) |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | ND (0.0002) | | ND (0.0002) |
| 2-AMINO-4,6-DINITROTOLUENE | | | | ND (0.0002) | | ND (0.0002) |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | ND (0.0009) | |
| 2-NITROTOLUENE | | | | ND (0.0002) | | ND (0.0002) |
| 4-AMINO-2,6-DINITROTOLUENE | | | | ND (0.0002) | | ND (0.0002) |
| ACENAPHTHENE | 3400 | 37000 | 74 | | ND (0.0009) | |
| ACENAPHTHYLENE | | 300000 | | | ND (0.0009) | |
| ANTHRACENE | 17000 | 30000 | 1500 | | ND (0.0009) | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-56-FBLK | 334-63-FBLK | 334-63-FBLK |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-56-FBLK | POM-K-334-63-FBLK | POM-K-334-63-FBLK |
| **Lab ID** | | | | 4130143 | 4130135 | 4130135 |
| **Date** | | | | 9/18/03 | 9/25/03 | 9/25/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | ND (0.0009) | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | ND (0.0009) | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | ND (0.0009) | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | ND (0.0009) | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | ND (0.0009) | |
| CHRYSENE | 62 | 230 | 52 | | ND (0.0009) | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | ND (0.0009) | |
| FLUORANTHENE | 2300 | 24000 | 840 | | ND (0.0009) | |
| FLUORENE | 2300 | 24000 | 110 | | ND (0.0009) | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | ND (0.0009) | |
| NAPHTHALENE | 6 | 17 | 16 | | ND (0.0009) | |
| NITROBENZENE | 31 | 340 | 0.2 | ND (0.0002) | | ND (0.0002) |
| PHENANTHRENE | | 300000 | | | ND (0.0009) | |
| PYRENE | 1700 | 18000 | 550 | | ND (0.0009) | |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | ND (0.004) | | ND (0.004) |
| NITRATE | | | | | ND (0.08) | |
| NITRITE | | | | | ND (0.08) | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | ND (0.0002) | | ND (0.0002) |
| PENTAERYTHRITOL TETRANITRATE | | | | ND (0.004) | | ND (0.004) |
| RDX | | | | ND (0.0002) | | ND (0.0002) |
| TETRYL | | | | ND (0.0002) | | ND (0.0002) |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-76-FBLK | 334-76-FBLK | 334-85-FBLK |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-334-76-FBLK | POM-K-334-76-FBLK | POM-K-334-85-FBLK |
| Lab ID | | | | 4132834 | 4132834 | 4132841 |
| Date | | | | 9/29/03 | 9/29/03 | 9/29/03 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | ND (0.0085) | | ND (0.0085) |
| ARSENIC | 19 | 19 | 19 | ND (0.0049) | | ND (0.0049) |
| BERYLLIUM | 16 | 140 | 0.5 | ND (0.00034) | | ND (0.00034) |
| CADMIUM | 78 | 78 | 1 | ND (0.00087) | | ND (0.00087) |
| CHROMIUM | | | | ND (0.0022) | | ND (0.0022) |
| COPPER | 3100 | 45000 | 7300 | ND (0.0021) | | ND (0.0021) |
| LEAD | 400 | 800 | 59 | ND (0.0093) | | ND (0.0093) |
| MERCURY | 23 | 65 | 0.1 | ND (0.00016) | | ND (0.00016) |
| NICKEL | 1600 | 23000 | 31 | ND (0.0038) | | ND (0.0038) |
| SELENIUM | 390 | 5700 | 7 | 0.006 J | | ND (0.0047) |
| SILVER | 390 | 5700 | 1 | ND (0.0018) | | ND (0.0018) |
| THALLIUM | 5 | 79 | 3 | ND (0.0089) | | ND (0.0089) |
| ZINC | 23000 | 110000 | 600 | ND (0.0041) | | ND (0.0041) |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | ND (0.0002) | |
| 1,3,5-TRINITROBENZENE | | | | | ND (0.0002) | |
| 1,3-DINITROBENZENE | | | | | ND (0.0002) | |
| 1,4-DINITROBENZENE | | | | | ND (0.0002) | |
| 1-METHYL-3-NITROBENZENE | | | | | ND (0.0002) | |
| 1-METHYL-4-NITROBENZENE | | | | | ND (0.0002) | |
| 1-METHYLNAPHTHALENE | | | | ND (0.001) | | ND (0.001) |
| 1-NITRONAPHTHALENE | | | | | ND (0.0002) | |
| 2,4,6-TRINITROTOLUENE | | | | | ND (0.0002) | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | ND (0.0002) | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | ND (0.0002) | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | ND (0.0002) | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | ND (0.001) | | ND (0.001) |
| 2-NITROTOLUENE | | | | | ND (0.0002) | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | ND (0.0002) | |
| ACENAPHTHENE | 3400 | 37000 | 74 | ND (0.001) | | ND (0.001) |
| ACENAPHTHYLENE | | 300000 | | ND (0.001) | | ND (0.001) |
| ANTHRACENE | 17000 | 30000 | 1500 | ND (0.001) | | ND (0.001) |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-76-FBLK | 334-76-FBLK | 334-85-FBLK |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-76-FBLK | POM-K-334-76-FBLK | POM-K-334-85-FBLK |
| **Lab ID** | | | | 4132834 | 4132834 | 4132841 |
| **Date** | | | | 9/29/03 | 9/29/03 | 9/29/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | ND (0.001) | | ND (0.001) |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | ND (0.001) | | ND (0.001) |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | ND (0.001) | | ND (0.001) |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | ND (0.001) | | ND (0.001) |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | ND (0.001) | | ND (0.001) |
| CHRYSENE | 62 | 230 | 52 | ND (0.001) | | ND (0.001) |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | ND (0.001) | | ND (0.001) |
| FLUORANTHENE | 2300 | 24000 | 840 | ND (0.001) | | ND (0.001) |
| FLUORENE | 2300 | 24000 | 110 | ND (0.001) | | ND (0.001) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | ND (0.001) | | ND (0.001) |
| NAPHTHALENE | 6 | 17 | 16 | ND (0.001) | | ND (0.001) |
| NITROBENZENE | 31 | 340 | 0.2 | | ND (0.0002) | |
| PHENANTHRENE | | 300000 | | ND (0.001) | | ND (0.001) |
| PYRENE | 1700 | 18000 | 550 | ND (0.001) | | ND (0.001) |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | ND (0.004) | |
| NITRATE | | | | ND (0.08) | | ND (0.08) |
| NITRITE | | | | ND (0.08) | | ND (0.08) |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | ND (0.0002) | |
| PENTAERYTHRITOL TETRANITRATE | | | | | ND (0.004) | |
| RDX | | | | | ND (0.0002) | |
| TETRYL | | | | | ND (0.0002) | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-85-FBLK | 334-93-FBLK | 334-93-FBLK |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-334-85-FBLK | POM-K-334-93-FBLK | POM-K-334-93-FBLK |
| Lab ID | | | | 4132841 | 4133605 | 4133605 |
| Date | | | | 9/29/03 | 9/30/03 | 9/30/03 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | ND (0.0085) | |
| ARSENIC | 19 | 19 | 19 | | ND (0.0049) | |
| BERYLLIUM | 16 | 140 | 0.5 | | ND (0.00034) | |
| CADMIUM | 78 | 78 | 1 | | ND (0.00087) | |
| CHROMIUM | | | | | ND (0.0022) | |
| COPPER | 3100 | 45000 | 7300 | | ND (0.0021) | |
| LEAD | 400 | 800 | 59 | | ND (0.0093) | |
| MERCURY | 23 | 65 | 0.1 | | ND (0.00016) | |
| NICKEL | 1600 | 23000 | 31 | | ND (0.0038) | |
| SELENIUM | 390 | 5700 | 7 | | ND (0.0047) | |
| SILVER | 390 | 5700 | 1 | | ND (0.0018) | |
| THALLIUM | 5 | 79 | 3 | | ND (0.0089) | |
| ZINC | 23000 | 110000 | 600 | | ND (0.0041) | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1,3,5-TRINITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1,3-DINITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1,4-DINITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1-METHYL-3-NITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1-METHYL-4-NITROBENZENE | | | | ND (0.0002) | | ND (0.0002) |
| 1-METHYLNAPHTHALENE | | | | | ND (0.0009) | |
| 1-NITRONAPHTHALENE | | | | ND (0.0002) | | ND (0.0002) |
| 2,4,6-TRINITROTOLUENE | | | | ND (0.0002) | | ND (0.0002) |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | ND (0.0002) | | ND (0.0002) |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | ND (0.0002) | | ND (0.0002) |
| 2-AMINO-4,6-DINITROTOLUENE | | | | ND (0.0002) | | ND (0.0002) |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | ND (0.0009) | |
| 2-NITROTOLUENE | | | | ND (0.0002) | | ND (0.0002) |
| 4-AMINO-2,6-DINITROTOLUENE | | | | ND (0.0002) | | ND (0.0002) |
| ACENAPHTHENE | 3400 | 37000 | 74 | | ND (0.0009) | |
| ACENAPHTHYLENE | | 300000 | | | ND (0.0009) | |
| ANTHRACENE | 17000 | 30000 | 1500 | | ND (0.0009) | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-85-FBLK | 334-93-FBLK | 334-93-FBLK |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-85-FBLK | POM-K-334-93-FBLK | POM-K-334-93-FBLK |
| **Lab ID** | | | | 4132841 | 4133605 | 4133605 |
| **Date** | | | | 9/29/03 | 9/30/03 | 9/30/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | ND (0.0009) | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | ND (0.0009) | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | ND (0.0009) | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | ND (0.0009) | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | ND (0.0009) | |
| CHRYSENE | 62 | 230 | 52 | | ND (0.0009) | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | ND (0.0009) | |
| FLUORANTHENE | 2300 | 24000 | 840 | | ND (0.0009) | |
| FLUORENE | 2300 | 24000 | 110 | | ND (0.0009) | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | ND (0.0009) | |
| NAPHTHALENE | 6 | 17 | 16 | | ND (0.0009) | |
| NITROBENZENE | 31 | 340 | 0.2 | ND (0.0002) | | ND (0.0002) |
| PHENANTHRENE | | 300000 | | | ND (0.0009) | |
| PYRENE | 1700 | 18000 | 550 | | ND (0.0009) | |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | ND (0.004) | | ND (0.004) |
| NITRATE | | | | | ND (0.08) | |
| NITRITE | | | | | ND (0.08) | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | ND (0.0002) | | ND (0.0002) |
| PENTAERYTHRITOL TETRANITRATE | | | | ND (0.004) | | ND (0.004) |
| RDX | | | | ND (0.0002) | | ND (0.0002) |
| TETRYL | | | | ND (0.0002) | | ND (0.0002) |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-EQBLK-0 | 334-EQBLK1 | 334-EQBLK1 |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-334-EQBLK-0 | POM-K-334-EQBLK1 | POM-K-334-EQBLK1 |
| Lab ID | | | | 5317537 | 4603362 | 5279625 |
| Date | | | | 3/26/08 | 9/13/05 | 2/12/08 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | ND (0.0064) | |
| ARSENIC | 19 | 19 | 19 | | ND (0.0093) | |
| BERYLLIUM | 16 | 140 | 0.5 | | ND (0.00044) | |
| CADMIUM | 78 | 78 | 1 | | ND (0.00097) | |
| CHROMIUM | | | | | ND (0.0048) | |
| COPPER | 3100 | 45000 | 7300 | | 0.002 J | |
| LEAD | 400 | 800 | 59 | ND (0.0069) | 0.0089 J | ND (0.0069) |
| MERCURY | 23 | 65 | 0.1 | | ND (0.000062) | |
| NICKEL | 1600 | 23000 | 31 | | ND (0.0058) | |
| SELENIUM | 390 | 5700 | 7 | | ND (0.0094) | |
| SILVER | 390 | 5700 | 1 | | ND (0.002) | |
| THALLIUM | 5 | 79 | 3 | | ND (0.01) | |
| ZINC | 23000 | 110000 | 600 | | 0.0201 | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | ND (0.0002) | |
| 1,3,5-TRINITROBENZENE | | | | | ND (0.0002) | |
| 1,3-DINITROBENZENE | | | | | ND (0.0002) | |
| 1,4-DINITROBENZENE | | | | | ND (0.0002) | |
| 1-METHYL-3-NITROBENZENE | | | | | ND (0.0004) | |
| 1-METHYL-4-NITROBENZENE | | | | | ND (0.0006) | |
| 1-METHYLNAPHTHALENE | | | | | | |
| 1-NITRONAPHTHALENE | | | | | ND (0.0002) | |
| 2,4,6-TRINITROTOLUENE | | | | | ND (0.0002) | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | ND (0.0002) | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | ND (0.0002) | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | ND (0.0002) | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | |
| 2-NITROTOLUENE | | | | | ND (0.0002) | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | ND (0.0003) | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | |
| ACENAPHTHYLENE | | 300000 | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-EQBLK-0 | 334-EQBLK1 | 334-EQBLK1 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-EQBLK-0 | POM-K-334-EQBLK1 | POM-K-334-EQBLK1 |
| **Lab ID** | | | | 5317537 | 4603362 | 5279625 |
| **Date** | | | | 3/26/08 | 9/13/05 | 2/12/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | |
| CHRYSENE | 62 | 230 | 52 | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | |
| FLUORENE | 2300 | 24000 | 110 | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | ND (0.0002) | |
| PHENANTHRENE | | 300000 | | | | |
| PYRENE | 1700 | 18000 | 550 | | | |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | ND (0.0052) | |
| NITRATE | | | | | ND (0.08) UJ | |
| NITRITE | | | | | ND (0.08) UJ | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | ND (0.00065) | |
| PENTAERYTHRITOL TETRANITRATE | | | | | ND (0.006) | |
| RDX | | | | | ND (0.0002) | |
| TETRYL | | | | | ND (0.0002) | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-EQBLK1 | 334-EQBLK-1 | 334-EQBLK-1 |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-334-EQBLK1 | POM-K-334-EQBLK-1 | POM-K-334-EQBLK-1 |
| Lab ID | | | | 5841030 | 5237635 | 5259350 |
| Date | | | | 11/17/09 | 12/12/07 | 1/15/08 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | ND (0.0097) | |
| ARSENIC | 19 | 19 | 19 | ND (0.0072) UJ | ND (0.01) | ND (0.01) |
| BERYLLIUM | 16 | 140 | 0.5 | | ND (0.0009) | |
| CADMIUM | 78 | 78 | 1 | | ND (0.0009) | |
| CHROMIUM | | | | | ND (0.0023) | |
| COPPER | 3100 | 45000 | 7300 | | ND (0.0022) | |
| LEAD | 400 | 800 | 59 | ND (0.0069) UJ | ND (0.0069) | ND (0.0069) |
| MERCURY | 23 | 65 | 0.1 | | ND (0.000056) | |
| NICKEL | 1600 | 23000 | 31 | | ND (0.0056) | |
| SELENIUM | 390 | 5700 | 7 | | ND (0.00053) | |
| SILVER | 390 | 5700 | 1 | | ND (0.0016) | |
| THALLIUM | 5 | 79 | 3 | | ND (0.000037) | |
| ZINC | 23000 | 110000 | 600 | | ND (0.0081) | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | |
| 1,3-DINITROBENZENE | | | | | | |
| 1,4-DINITROBENZENE | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | ND (0.0009) | |
| 1-NITRONAPHTHALENE | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | ND (0.0009) | |
| 2-NITROTOLUENE | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | ND (0.0009) | |
| ACENAPHTHYLENE | | 300000 | | | ND (0.0009) | |
| ANTHRACENE | 17000 | 30000 | 1500 | | ND (0.0009) | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-EQBLK1 | 334-EQBLK-1 | 334-EQBLK-1 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-EQBLK1 | POM-K-334-EQBLK-1 | POM-K-334-EQBLK-1 |
| **Lab ID** | | | | 5841030 | 5237635 | 5259350 |
| **Date** | | | | 11/17/09 | 12/12/07 | 1/15/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | ND (0.0009) | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | ND (0.0009) | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | ND (0.0009) | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | ND (0.0009) | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | ND (0.0009) | |
| CHRYSENE | 62 | 230 | 52 | | ND (0.0009) | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | ND (0.0009) | |
| FLUORANTHENE | 2300 | 24000 | 840 | | ND (0.0009) | |
| FLUORENE | 2300 | 24000 | 110 | | ND (0.0009) | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | ND (0.0009) | |
| NAPHTHALENE | 6 | 17 | 16 | | ND (0.0009) | |
| NITROBENZENE | 31 | 340 | 0.2 | | | |
| PHENANTHRENE | | 300000 | | | ND (0.0009) | |
| PYRENE | 1700 | 18000 | 550 | | ND (0.0009) | |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | | |
| NITRATE | | | | | | |
| NITRITE | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | |
| RDX | | | | | | |
| TETRYL | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-EQBLK-1 | 334-EQBLK-1 | 334-EQBLK-1 |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-334-EQBLK-1 | POM-K-334-EQBLK-1 | POM-K-334-EQBLK-1 |
| Lab ID | | | | 5260674 | 5264122 | 5270010 |
| Date | | | | 1/18/08 | 1/23/08 | 1/30/08 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ND (0.01) | ND (0.01) | ND (0.01) |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | |
| 1,3-DINITROBENZENE | | | | | | |
| 1,4-DINITROBENZENE | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | |
| 1-NITRONAPHTHALENE | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | |
| 2-NITROTOLUENE | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | |
| ACENAPHTHYLENE | | 300000 | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-EQBLK-1 | 334-EQBLK-1 | 334-EQBLK-1 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-EQBLK-1 | POM-K-334-EQBLK-1 | POM-K-334-EQBLK-1 |
| **Lab ID** | | | | 5260674 | 5264122 | 5270010 |
| **Date** | | | | 1/18/08 | 1/23/08 | 1/30/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | |
| CHRYSENE | 62 | 230 | 52 | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | |
| FLUORENE | 2300 | 24000 | 110 | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | | |
| PHENANTHRENE | | 300000 | | | | |
| PYRENE | 1700 | 18000 | 550 | | | |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | | |
| NITRATE | | | | | | |
| NITRITE | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | |
| RDX | | | | | | |
| TETRYL | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-EQBLK-1 | 334-EQBLK-1 | 334-EQBLK-1 |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-334-EQBLK-1 | POM-K-334-EQBLK-1 | POM-K-334-EQBLK-1 |
| Lab ID | | | | 5274614 | 5276651 | 5282206 |
| Date | | | | 2/5/08 | 2/7/08 | 2/15/08 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ND (0.01) | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ND (0.0069) | ND (0.0069) | ND (0.0069) |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | |
| 1,3-DINITROBENZENE | | | | | | |
| 1,4-DINITROBENZENE | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | |
| 1-NITRONAPHTHALENE | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | |
| 2-NITROTOLUENE | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | |
| ACENAPHTHYLENE | | 300000 | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-EQBLK-1 | 334-EQBLK-1 | 334-EQBLK-1 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-EQBLK-1 | POM-K-334-EQBLK-1 | POM-K-334-EQBLK-1 |
| **Lab ID** | | | | 5274614 | 5276651 | 5282206 |
| **Date** | | | | 2/5/08 | 2/7/08 | 2/15/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | |
| CHRYSENE | 62 | 230 | 52 | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | |
| FLUORENE | 2300 | 24000 | 110 | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | | |
| PHENANTHRENE | | 300000 | | | | |
| PYRENE | 1700 | 18000 | 550 | | | |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | | |
| NITRATE | | | | | | |
| NITRITE | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | |
| RDX | | | | | | |
| TETRYL | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-EQBLK-1 | 334-EQBLK-1 | 334-EQBLK-1 |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-334-EQBLK-1 | POM-K-334-EQBLK-1 | POM-K-334-EQBLK-1 |
| Lab ID | | | | 5296265 | 5317538 | 5324018 |
| Date | | | | 3/4/08 | 3/27/08 | 4/3/08 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | ND (0.01) |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ND (0.0069) | ND (0.0069) | ND (0.0069) |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | |
| 1,3-DINITROBENZENE | | | | | | |
| 1,4-DINITROBENZENE | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | |
| 1-NITRONAPHTHALENE | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | |
| 2-NITROTOLUENE | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | |
| ACENAPHTHYLENE | | 300000 | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-EQBLK-1 | 334-EQBLK-1 | 334-EQBLK-1 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-EQBLK-1 | POM-K-334-EQBLK-1 | POM-K-334-EQBLK-1 |
| **Lab ID** | | | | 5296265 | 5317538 | 5324018 |
| **Date** | | | | 3/4/08 | 3/27/08 | 4/3/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | |
| CHRYSENE | 62 | 230 | 52 | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | |
| FLUORENE | 2300 | 24000 | 110 | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | | |
| PHENANTHRENE | | 300000 | | | | |
| PYRENE | 1700 | 18000 | 550 | | | |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | | |
| NITRATE | | | | | | |
| NITRITE | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | |
| RDX | | | | | | |
| TETRYL | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-EQBLK-1 | 334-EQBLK-1 | 334-EQBLK2 |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-334-EQBLK-1 | POM-K-334-EQBLK-1 | POM-K-334-EQBLK2 |
| Lab ID | | | | 5535234 | 5538967 | 4603363 |
| Date | | | | 11/17/08 | 11/20/08 | 9/14/05 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | ND (0.0064) |
| ARSENIC | 19 | 19 | 19 | ND (0.01) | ND (0.01) | ND (0.0093) |
| BERYLLIUM | 16 | 140 | 0.5 | | | ND (0.00044) |
| CADMIUM | 78 | 78 | 1 | | | ND (0.00097) |
| CHROMIUM | | | | | | ND (0.0048) |
| COPPER | 3100 | 45000 | 7300 | | | ND (0.0018) |
| LEAD | 400 | 800 | 59 | ND (0.0069) | ND (0.0069) | ND (0.0084) |
| MERCURY | 23 | 65 | 0.1 | | | ND (0.000062) |
| NICKEL | 1600 | 23000 | 31 | | | ND (0.0058) |
| SELENIUM | 390 | 5700 | 7 | | | ND (0.0094) |
| SILVER | 390 | 5700 | 1 | | | ND (0.002) |
| THALLIUM | 5 | 79 | 3 | | | ND (0.01) |
| ZINC | 23000 | 110000 | 600 | | | 0.0081 J |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | | ND (0.0002) |
| 1,3,5-TRINITROBENZENE | | | | | | ND (0.0002) |
| 1,3-DINITROBENZENE | | | | | | ND (0.0002) |
| 1,4-DINITROBENZENE | | | | | | ND (0.0002) |
| 1-METHYL-3-NITROBENZENE | | | | | | ND (0.0004) |
| 1-METHYL-4-NITROBENZENE | | | | | | ND (0.0006) |
| 1-METHYLNAPHTHALENE | | | | | | |
| 1-NITRONAPHTHALENE | | | | | | ND (0.0002) |
| 2,4,6-TRINITROTOLUENE | | | | | | ND (0.0002) |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | ND (0.0002) |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | ND (0.0002) |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | ND (0.0002) |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | |
| 2-NITROTOLUENE | | | | | | ND (0.0002) |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | ND (0.0003) |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | |
| ACENAPHTHYLENE | | 300000 | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-EQBLK-1 | 334-EQBLK-1 | 334-EQBLK2 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-EQBLK-1 | POM-K-334-EQBLK-1 | POM-K-334-EQBLK2 |
| **Lab ID** | | | | 5535234 | 5538967 | 4603363 |
| **Date** | | | | 11/17/08 | 11/20/08 | 9/14/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | |
| CHRYSENE | 62 | 230 | 52 | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | |
| FLUORENE | 2300 | 24000 | 110 | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | | ND (0.0002) |
| PHENANTHRENE | | 300000 | | | | |
| PYRENE | 1700 | 18000 | 550 | | | |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | | ND (0.0052) |
| NITRATE | | | | | | 0.093 J |
| NITRITE | | | | | | ND (0.08) |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | ND (0.00065) |
| PENTAERYTHRITOL TETRANITRATE | | | | | | ND (0.006) |
| RDX | | | | | | ND (0.0002) |
| TETRYL | | | | | | ND (0.0002) |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-EQBLK2 | 334-EQBLK2 | 334-EQBLK-2 |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-334-EQBLK2 | POM-K-334-EQBLK2 | POM-K-334-EQBLK-2 |
| Lab ID | | | | 5252915 | 5843196 | 5237636 |
| Date | | | | 1/8/08 | 11/18/09 | 12/13/07 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | ND (0.0097) |
| ARSENIC | 19 | 19 | 19 | ND (0.01) | ND (0.0072) UJ | ND (0.01) |
| BERYLLIUM | 16 | 140 | 0.5 | | | ND (0.0009) |
| CADMIUM | 78 | 78 | 1 | | | ND (0.0009) |
| CHROMIUM | | | | | | ND (0.0023) |
| COPPER | 3100 | 45000 | 7300 | | | ND (0.0022) |
| LEAD | 400 | 800 | 59 | ND (0.0069) | ND (0.0069) UJ | ND (0.0069) |
| MERCURY | 23 | 65 | 0.1 | | | ND (0.000056) |
| NICKEL | 1600 | 23000 | 31 | | | ND (0.0056) |
| SELENIUM | 390 | 5700 | 7 | | | ND (0.00053) |
| SILVER | 390 | 5700 | 1 | | | ND (0.0016) |
| THALLIUM | 5 | 79 | 3 | | | ND (0.000037) |
| ZINC | 23000 | 110000 | 600 | | | ND (0.0081) |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | |
| 1,3-DINITROBENZENE | | | | | | |
| 1,4-DINITROBENZENE | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | ND (0.001) |
| 1-NITRONAPHTHALENE | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | ND (0.001) |
| 2-NITROTOLUENE | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | ND (0.001) |
| ACENAPHTHYLENE | | 300000 | | | | ND (0.001) |
| ANTHRACENE | 17000 | 30000 | 1500 | | | ND (0.001) |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-EQBLK2 | 334-EQBLK2 | 334-EQBLK-2 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-EQBLK2 | POM-K-334-EQBLK2 | POM-K-334-EQBLK-2 |
| **Lab ID** | | | | 5252915 | 5843196 | 5237636 |
| **Date** | | | | 1/8/08 | 11/18/09 | 12/13/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | ND (0.001) |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | ND (0.001) |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | ND (0.001) |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | ND (0.001) |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | ND (0.001) |
| CHRYSENE | 62 | 230 | 52 | | | ND (0.001) |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | ND (0.001) |
| FLUORANTHENE | 2300 | 24000 | 840 | | | ND (0.001) |
| FLUORENE | 2300 | 24000 | 110 | | | ND (0.001) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | ND (0.001) |
| NAPHTHALENE | 6 | 17 | 16 | | | ND (0.001) |
| NITROBENZENE | 31 | 340 | 0.2 | | | |
| PHENANTHRENE | | 300000 | | | | ND (0.001) |
| PYRENE | 1700 | 18000 | 550 | | | ND (0.001) |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | | |
| NITRATE | | | | | | |
| NITRITE | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | |
| RDX | | | | | | |
| TETRYL | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-EQBLK-2 | 334-EQBLK-2 | 334-EQBLK-2 |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-334-EQBLK-2 | POM-K-334-EQBLK-2 | POM-K-334-EQBLK-2 |
| Lab ID | | | | 5259371 | 5270009 | 5274624 |
| Date | | | | 1/16/08 | 1/31/08 | 2/6/08 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ND (0.01) | ND (0.01) | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | ND (0.0069) | ND (0.0069) |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | |
| 1,3-DINITROBENZENE | | | | | | |
| 1,4-DINITROBENZENE | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | |
| 1-NITRONAPHTHALENE | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | |
| 2-NITROTOLUENE | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | |
| ACENAPHTHYLENE | | 300000 | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-EQBLK-2 | 334-EQBLK-2 | 334-EQBLK-2 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-EQBLK-2 | POM-K-334-EQBLK-2 | POM-K-334-EQBLK-2 |
| **Lab ID** | | | | 5259371 | 5270009 | 5274624 |
| **Date** | | | | 1/16/08 | 1/31/08 | 2/6/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | |
| CHRYSENE | 62 | 230 | 52 | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | |
| FLUORENE | 2300 | 24000 | 110 | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | | |
| PHENANTHRENE | | 300000 | | | | |
| PYRENE | 1700 | 18000 | 550 | | | |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | | |
| NITRATE | | | | | | |
| NITRITE | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | |
| RDX | | | | | | |
| TETRYL | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-EQBLK-2 | 334-EQBLK-2 | 334-EQBLK-2 |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-334-EQBLK-2 | POM-K-334-EQBLK-2 | POM-K-334-EQBLK-2 |
| Lab ID | | | | 5276652 | 5535233 | 5538968 |
| Date | | | | 2/8/08 | 11/18/08 | 11/21/08 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | ND (0.01) | ND (0.01) |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ND (0.0069) | ND (0.0069) | ND (0.0069) |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | |
| 1,3-DINITROBENZENE | | | | | | |
| 1,4-DINITROBENZENE | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | |
| 1-NITRONAPHTHALENE | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | |
| 2-NITROTOLUENE | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | |
| ACENAPHTHYLENE | | 300000 | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-EQBLK-2 | 334-EQBLK-2 | 334-EQBLK-2 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-EQBLK-2 | POM-K-334-EQBLK-2 | POM-K-334-EQBLK-2 |
| **Lab ID** | | | | 5276652 | 5535233 | 5538968 |
| **Date** | | | | 2/8/08 | 11/18/08 | 11/21/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | |
| CHRYSENE | 62 | 230 | 52 | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | |
| FLUORENE | 2300 | 24000 | 110 | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | | |
| PHENANTHRENE | | 300000 | | | | |
| PYRENE | 1700 | 18000 | 550 | | | |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | | |
| NITRATE | | | | | | |
| NITRITE | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | |
| RDX | | | | | | |
| TETRYL | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-EQBLK3 | 334-EQBLK3 | 334-EQBLK-3 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-EQBLK3 | POM-K-334-EQBLK3 | POM-K-334-EQBLK-3 |
| **Lab ID** | | | | 5252932 | 5844820 | 5237637 |
| **Date** | | | | 1/9/08 | 11/19/09 | 12/14/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | ND (0.0097) |
| ARSENIC | 19 | 19 | 19 | | ND (0.0072) | ND (0.01) |
| BERYLLIUM | 16 | 140 | 0.5 | | | ND (0.0009) |
| CADMIUM | 78 | 78 | 1 | | | ND (0.0009) |
| CHROMIUM | | | | | | ND (0.0023) |
| COPPER | 3100 | 45000 | 7300 | | | ND (0.0022) |
| LEAD | 400 | 800 | 59 | ND (0.0069) | ND (0.0069) | ND (0.0069) |
| MERCURY | 23 | 65 | 0.1 | | | ND (0.000056) |
| NICKEL | 1600 | 23000 | 31 | | | ND (0.0056) |
| SELENIUM | 390 | 5700 | 7 | | | ND (0.00053) |
| SILVER | 390 | 5700 | 1 | | | ND (0.0016) |
| THALLIUM | 5 | 79 | 3 | | | ND (0.000037) |
| ZINC | 23000 | 110000 | 600 | | | ND (0.0081) |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | |
| 1,3-DINITROBENZENE | | | | | | |
| 1,4-DINITROBENZENE | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | ND (0.0009) |
| 1-NITRONAPHTHALENE | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | ND (0.0009) |
| 2-NITROTOLUENE | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | ND (0.0009) |
| ACENAPHTHYLENE | | 300000 | | | | ND (0.0009) |
| ANTHRACENE | 17000 | 30000 | 1500 | | | ND (0.0009) |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-EQBLK3 | 334-EQBLK3 | 334-EQBLK-3 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-EQBLK3 | POM-K-334-EQBLK3 | POM-K-334-EQBLK-3 |
| **Lab ID** | | | | 5252932 | 5844820 | 5237637 |
| **Date** | | | | 1/9/08 | 11/19/09 | 12/14/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | ND (0.0009) |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | ND (0.0009) |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | ND (0.0009) |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | ND (0.0009) |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | ND (0.0009) |
| CHRYSENE | 62 | 230 | 52 | | | ND (0.0009) |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | ND (0.0009) |
| FLUORANTHENE | 2300 | 24000 | 840 | | | ND (0.0009) |
| FLUORENE | 2300 | 24000 | 110 | | | ND (0.0009) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | ND (0.0009) |
| NAPHTHALENE | 6 | 17 | 16 | | | ND (0.0009) |
| NITROBENZENE | 31 | 340 | 0.2 | | | |
| PHENANTHRENE | | 300000 | | | | ND (0.0009) |
| PYRENE | 1700 | 18000 | 550 | | | ND (0.0009) |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | | |
| NITRATE | | | | | | |
| NITRITE | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | |
| RDX | | | | | | |
| TETRYL | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-EQBLK-3 | 334-EQBLK-4 | 334-FBLK1 |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-334-EQBLK-3 | POM-K-334-EQBLK-4 | POM-K-334-FBLK1 |
| Lab ID | | | | 5259385 | 5264121 | 4436430 |
| Date | | | | 1/17/08 | 1/22/08 | 12/22/04 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ND (0.01) | ND (0.01) | ND (0.0047) |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | ND (0.01) |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | |
| 1,3-DINITROBENZENE | | | | | | |
| 1,4-DINITROBENZENE | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | |
| 1-NITRONAPHTHALENE | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | |
| 2-NITROTOLUENE | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | |
| ACENAPHTHYLENE | | 300000 | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-EQBLK-3 | 334-EQBLK-4 | 334-FBLK1 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-334-EQBLK-3 | POM-K-334-EQBLK-4 | POM-K-334-FBLK1 |
| **Lab ID** | | | | 5259385 | 5264121 | 4436430 |
| **Date** | | | | 1/17/08 | 1/22/08 | 12/22/04 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | |
| CHRYSENE | 62 | 230 | 52 | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | |
| FLUORENE | 2300 | 24000 | 110 | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | | |
| PHENANTHRENE | | 300000 | | | | |
| PYRENE | 1700 | 18000 | 550 | | | |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | | |
| NITRATE | | | | | | |
| NITRITE | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | |
| RDX | | | | | | |
| TETRYL | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | FBLK | FBLK | FBLK | FBLK |
|---|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 | 0 |
| Sample ID | | | | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK |
| Lab ID | | | | 4706647 | 4711867 | 4720178 | 4726518 |
| Date | | | | 2/7/06 | 2/16/06 | 3/1/06 | 3/10/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L | mg/L |
| **METALS** | | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | ND (0.0093) | ND (0.0093) | ND (0.0093) | ND (0.0093) |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | | | | |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | ND (0.00057) | ND (0.00057) | ND (0.00057) | ND (0.00057) |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | ND (0.0053) | | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | | |
| 1,2-DINITROBENZENE | | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | | |
| 1,3-DINITROBENZENE | | | | | | | |
| 1,4-DINITROBENZENE | | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | | |
| 1-NITRONAPHTHALENE | | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | | |
| 2-NITROTOLUENE | | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | | |
| ACENAPHTHYLENE | | 300000 | | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | FBLK | FBLK | FBLK | FBLK |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK |
| **Lab ID** | | | | 4706647 | 4711867 | 4720178 | 4726518 |
| **Date** | | | | 2/7/06 | 2/16/06 | 3/1/06 | 3/10/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | | |
| CHRYSENE | 62 | 230 | 52 | | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | | |
| FLUORENE | 2300 | 24000 | 110 | | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | | | |
| PHENANTHRENE | | 300000 | | | | | |
| PYRENE | 1700 | 18000 | 550 | | | | |
| **OTHERS** | | | | | | | |
| NITROGLYCERIN | | | | | | | |
| NITRATE | | | | | | | |
| NITRITE | | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | | |
| RDX | | | | | | | |
| TETRYL | | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | FBLK | FBLK | FBLK | FBLK |
|---|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 | 0 |
| Sample ID | | | | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK |
| Lab ID | | | | 4734769 | 4739633 | 4745541 | 4751813 |
| Date | | | | 3/21/06 | 3/29/06 | 4/6/06 | 4/14/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L | mg/L |
| **METALS** | | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | ND (0.0093) | ND (0.0093) | ND (0.0093) | ND (0.0093) |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | | | | |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | ND (0.00057) | ND (0.00057) | ND (0.00057) | ND (0.00057) |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | | |
| 1,2-DINITROBENZENE | | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | | |
| 1,3-DINITROBENZENE | | | | | | | |
| 1,4-DINITROBENZENE | | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | | |
| 1-NITRONAPHTHALENE | | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | | |
| 2-NITROTOLUENE | | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | | |
| ACENAPHTHYLENE | | 300000 | | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | FBLK | FBLK | FBLK | FBLK |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK |
| **Lab ID** | | | | 4734769 | 4739633 | 4745541 | 4751813 |
| **Date** | | | | 3/21/06 | 3/29/06 | 4/6/06 | 4/14/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | | |
| CHRYSENE | 62 | 230 | 52 | | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | | |
| FLUORENE | 2300 | 24000 | 110 | | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | | | |
| PHENANTHRENE | | 300000 | | | | | |
| PYRENE | 1700 | 18000 | 550 | | | | |
| **OTHERS** | | | | | | | |
| NITROGLYCERIN | | | | | | | |
| NITRATE | | | | | | | |
| NITRITE | | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | | |
| RDX | | | | | | | |
| TETRYL | | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | FBLK | FBLK |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 |
| **Sample ID** | | | | POM-K-FBLK | POM-K-FBLK |
| **Lab ID** | | | | 4757877 | 4763591 |
| **Date** | | | | 4/25/06 | 5/3/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | ND (0.0093) | ND (0.0093) |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | ND (0.00057) | ND (0.00057) |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | FBLK | FBLK |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 |
| **Sample ID** | | | | POM-K-FBLK | POM-K-FBLK |
| **Lab ID** | | | | 4757877 | 4763591 |
| **Date** | | | | 4/25/06 | 5/3/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | FBLK | FBLK | FBLK | FBLK |
|---|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 | 0 |
| Sample ID | | | | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK |
| Lab ID | | | | 4777090 | 4785539 | 4793219 | 4800453 |
| Date | | | | 5/15/06 | 6/2/06 | 6/13/06 | 6/22/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L | mg/L |
| **METALS** | | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | ND (0.0093) | ND (0.01) | ND (0.01) | ND (0.01) |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | | | | |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | ND (0.00057) | ND (0.0005) | ND (0.0005) | ND (0.0005) |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | | |
| 1,2-DINITROBENZENE | | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | | |
| 1,3-DINITROBENZENE | | | | | | | |
| 1,4-DINITROBENZENE | | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | | |
| 1-NITRONAPHTHALENE | | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | | |
| 2-NITROTOLUENE | | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | | |
| ACENAPHTHYLENE | | 300000 | | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | FBLK | FBLK | FBLK | FBLK |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK |
| **Lab ID** | | | | 4777090 | 4785539 | 4793219 | 4800453 |
| **Date** | | | | 5/15/06 | 6/2/06 | 6/13/06 | 6/22/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | | |
| CHRYSENE | 62 | 230 | 52 | | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | | |
| FLUORENE | 2300 | 24000 | 110 | | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | | | |
| PHENANTHRENE | | 300000 | | | | | |
| PYRENE | 1700 | 18000 | 550 | | | | |
| **OTHERS** | | | | | | | |
| NITROGLYCERIN | | | | | | | |
| NITRATE | | | | | | | |
| NITRITE | | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | | |
| RDX | | | | | | | |
| TETRYL | | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | FBLK | FBLK | FBLK |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK |
| Lab ID | | | | 4805750 | 4826988 | 4846053 |
| Date | | | | 6/28/06 | 7/28/06 | 8/18/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ND (0.01) | ND (0.01) | ND (0.01) |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | ND (0.0005) | ND (0.0005) | ND (0.0005) |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | |
| 1,3-DINITROBENZENE | | | | | | |
| 1,4-DINITROBENZENE | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | |
| 1-NITRONAPHTHALENE | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | |
| 2-NITROTOLUENE | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | |
| ACENAPHTHYLENE | | 300000 | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | FBLK | FBLK | FBLK |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK |
| **Lab ID** | | | | 4805750 | 4826988 | 4846053 |
| **Date** | | | | 6/28/06 | 7/28/06 | 8/18/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | |
| CHRYSENE | 62 | 230 | 52 | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | |
| FLUORENE | 2300 | 24000 | 110 | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | | |
| PHENANTHRENE | | 300000 | | | | |
| PYRENE | 1700 | 18000 | 550 | | | |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | | |
| NITRATE | | | | | | |
| NITRITE | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | |
| RDX | | | | | | |
| TETRYL | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | FBLK | FBLK | FBLK | FBLK |
|---|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 | 0 |
| Sample ID | | | | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK |
| Lab ID | | | | 4867440 | 4884175 | 4898512 | 4907655 |
| Date | | | | 9/18/06 | 10/6/06 | 10/23/06 | 11/3/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L | mg/L |
| **METALS** | | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | ND (0.01) | ND (0.01) | ND (0.01) | ND (0.01) |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | | | | ND (0.0069) |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | ND (0.0005) | ND (0.0005) | ND (0.0005) | ND (0.0005) |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | | |
| 1,2-DINITROBENZENE | | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | | |
| 1,3-DINITROBENZENE | | | | | | | |
| 1,4-DINITROBENZENE | | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | | |
| 1-NITRONAPHTHALENE | | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | | |
| 2-NITROTOLUENE | | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | | |
| ACENAPHTHYLENE | | 300000 | | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | FBLK | FBLK | FBLK | FBLK |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK |
| **Lab ID** | | | | 4867440 | 4884175 | 4898512 | 4907655 |
| **Date** | | | | 9/18/06 | 10/6/06 | 10/23/06 | 11/3/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | | |
| CHRYSENE | 62 | 230 | 52 | | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | | |
| FLUORENE | 2300 | 24000 | 110 | | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | | | |
| PHENANTHRENE | | 300000 | | | | | |
| PYRENE | 1700 | 18000 | 550 | | | | |
| **OTHERS** | | | | | | | |
| NITROGLYCERIN | | | | | | | |
| NITRATE | | | | | | | |
| NITRITE | | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | | |
| RDX | | | | | | | |
| TETRYL | | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | FBLK | FBLK | FBLK |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 |
| Sample ID | | | | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK |
| Lab ID | | | | 4913711 | 4920451 | 4928830 |
| Date | | | | 11/10/06 | 11/17/06 | 12/1/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ND (0.01) | ND (0.01) | ND (0.01) |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | ND (0.0069) | ND (0.0069) |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | ND (0.0005) |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | |
| 1,3-DINITROBENZENE | | | | | | |
| 1,4-DINITROBENZENE | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | |
| 1-NITRONAPHTHALENE | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | |
| 2-NITROTOLUENE | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | |
| ACENAPHTHYLENE | | 300000 | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | FBLK | FBLK | FBLK |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK |
| **Lab ID** | | | | 4913711 | 4920451 | 4928830 |
| **Date** | | | | 11/10/06 | 11/17/06 | 12/1/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | |
| CHRYSENE | 62 | 230 | 52 | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | |
| FLUORENE | 2300 | 24000 | 110 | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | | |
| PHENANTHRENE | | 300000 | | | | |
| PYRENE | 1700 | 18000 | 550 | | | |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | | |
| NITRATE | | | | | | |
| NITRITE | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | |
| RDX | | | | | | |
| TETRYL | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | FBLK | FBLK | FBLK | FBLK |
|---|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 | 0 |
| Sample ID | | | | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK |
| Lab ID | | | | 4935494 | 4941859 | 4948168 | 4970476 |
| Date | | | | 12/8/06 | 12/15/06 | 12/22/06 | 1/29/07 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L | mg/L |
| **METALS** | | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | ND (0.01) | ND (0.01) | ND (0.01) | ND (0.01) |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | | | | |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | ND (0.0005) | | ND (0.0005) |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | | |
| 1,2-DINITROBENZENE | | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | | |
| 1,3-DINITROBENZENE | | | | | | | |
| 1,4-DINITROBENZENE | | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | | |
| 1-NITRONAPHTHALENE | | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | | |
| 2-NITROTOLUENE | | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | | |
| ACENAPHTHYLENE | | 300000 | | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | FBLK | FBLK | FBLK | FBLK |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK |
| **Lab ID** | | | | 4935494 | 4941859 | 4948168 | 4970476 |
| **Date** | | | | 12/8/06 | 12/15/06 | 12/22/06 | 1/29/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | | |
| CHRYSENE | 62 | 230 | 52 | | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | | |
| FLUORENE | 2300 | 24000 | 110 | | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | | | |
| PHENANTHRENE | | 300000 | | | | | |
| PYRENE | 1700 | 18000 | 550 | | | | |
| **OTHERS** | | | | | | | |
| NITROGLYCERIN | | | | | | | |
| NITRATE | | | | | | | |
| NITRITE | | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | | |
| RDX | | | | | | | |
| TETRYL | | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | FBLK |
|---|---|---|---|---|
| **Top (ft)** | | | | 0 |
| **Bottom (ft)** | | | | 0 |
| **Sample ID** | | | | POM-K-FBLK |
| **Lab ID** | | | | 4982104 |
| **Date** | | | | 2/12/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L |
| **METALS** | | | | |
| ANTIMONY | 31 | 450 | 6 | |
| ARSENIC | 19 | 19 | 19 | ND (0.01) |
| BERYLLIUM | 16 | 140 | 0.5 | |
| CADMIUM | 78 | 78 | 1 | |
| CHROMIUM | | | | |
| COPPER | 3100 | 45000 | 7300 | |
| LEAD | 400 | 800 | 59 | |
| MERCURY | 23 | 65 | 0.1 | |
| NICKEL | 1600 | 23000 | 31 | |
| SELENIUM | 390 | 5700 | 7 | ND (0.0005) |
| SILVER | 390 | 5700 | 1 | |
| THALLIUM | 5 | 79 | 3 | |
| ZINC | 23000 | 110000 | 600 | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | |
| 1,2-DINITROBENZENE | | | | |
| 1,3,5-TRINITROBENZENE | | | | |
| 1,3-DINITROBENZENE | | | | |
| 1,4-DINITROBENZENE | | | | |
| 1-METHYL-3-NITROBENZENE | | | | |
| 1-METHYL-4-NITROBENZENE | | | | |
| 1-METHYLNAPHTHALENE | | | | |
| 1-NITRONAPHTHALENE | | | | |
| 2,4,6-TRINITROTOLUENE | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | |
| 2-NITROTOLUENE | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | |
| ACENAPHTHYLENE | | 300000 | | |
| ANTHRACENE | 17000 | 30000 | 1500 | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | FBLK |
|---|---|---|---|---|
| **Top (ft)** | | | | 0 |
| **Bottom (ft)** | | | | 0 |
| **Sample ID** | | | | POM-K-FBLK |
| **Lab ID** | | | | 4982104 |
| **Date** | | | | 2/12/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | |
| CHRYSENE | 62 | 230 | 52 | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | |
| FLUORANTHENE | 2300 | 24000 | 840 | |
| FLUORENE | 2300 | 24000 | 110 | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | |
| NAPHTHALENE | 6 | 17 | 16 | |
| NITROBENZENE | 31 | 340 | 0.2 | |
| PHENANTHRENE | | 300000 | | |
| PYRENE | 1700 | 18000 | 550 | |
| **OTHERS** | | | | |
| NITROGLYCERIN | | | | |
| NITRATE | | | | |
| NITRITE | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | |
| RDX | | | | |
| TETRYL | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | FBLK | FBLK | FBLK | FBLK |
|---|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 | 0 | 0 |
| Bottom (ft) | | | | 0 | 0 | 0 | 0 |
| Sample ID | | | | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK |
| Lab ID | | | | 5018988 | 5049240 | 5061665 | 5129930 |
| Date | | | | 3/23/07 | 5/8/07 | 5/22/07 | 8/15/07 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L | mg/L |
| **METALS** | | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | ND (0.01) | ND (0.01) | ND (0.01) | 0.0389 |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | | | | |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | ND (0.0005) | ND (0.0005) | 0.00075 J | ND (0.00053) |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | | |
| 1,2-DINITROBENZENE | | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | | |
| 1,3-DINITROBENZENE | | | | | | | |
| 1,4-DINITROBENZENE | | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | | |
| 1-NITRONAPHTHALENE | | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | | |
| 2-NITROTOLUENE | | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | | |
| ACENAPHTHYLENE | | 300000 | | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | FBLK | FBLK | FBLK | FBLK |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 | 0 |
| **Sample ID** | | | | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK | POM-K-FBLK |
| **Lab ID** | | | | 5018988 | 5049240 | 5061665 | 5129930 |
| **Date** | | | | 3/23/07 | 5/8/07 | 5/22/07 | 8/15/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Blank Water | Blank Water | Blank Water |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/L | mg/L | mg/L |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | | |
| CHRYSENE | 62 | 230 | 52 | | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | | |
| FLUORENE | 2300 | 24000 | 110 | | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | | | |
| PHENANTHRENE | | 300000 | | | | | |
| PYRENE | 1700 | 18000 | 550 | | | | |
| **OTHERS** | | | | | | | |
| NITROGLYCERIN | | | | | | | |
| NITRATE | | | | | | | |
| NITRITE | | | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | | | |
| RDX | | | | | | | |
| TETRYL | | | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | FBLK | 334-109 | 334-136 |
|---|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 3 | 0 |
| Bottom (ft) | | | | 0 | 3.5 | 0 |
| Sample ID | | | | POM-K-FBLK | POM-S-334-109(3.0-3.5)-DUP | POM-S-334-136-DUP |
| Lab ID | | | | 5157291 | 4604738 | 4436428 |
| Date | | | | 9/14/07 | 9/13/05 | 12/2/04 |
| Field Medium | NJDEP | NJDEP | NJDEP | Blank Water | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/kg | mg/kg |
| **METALS** | | | | | | |
| ANTIMONY | 31 | 450 | 6 | | ND (0.884) UJ | |
| ARSENIC | 19 | 19 | 19 | ND (0.01) | 1.17 J | |
| BERYLLIUM | 16 | 140 | 0.5 | | 0.448 J | |
| CADMIUM | 78 | 78 | 1 | | ND (0.0927) | |
| CHROMIUM | | | | | 21.1 | |
| COPPER | 3100 | 45000 | 7300 | | 9.1 | |
| LEAD | 400 | 800 | 59 | | 3.33 | 78.4 |
| MERCURY | 23 | 65 | 0.1 | | ND (0.0029) | |
| NICKEL | 1600 | 23000 | 31 | | 11.8 | |
| SELENIUM | 390 | 5700 | 7 | ND (0.00053) | ND (1.03) | |
| SILVER | 390 | 5700 | 1 | | 0.249 J | |
| THALLIUM | 5 | 79 | 3 | | ND (1.03) | |
| ZINC | 23000 | 110000 | 600 | | 30.3 | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | | |
| 1,2-DINITROBENZENE | | | | | ND (0.11) | |
| 1,3,5-TRINITROBENZENE | | | | | ND (0.11) | |
| 1,3-DINITROBENZENE | | | | | ND (0.11) | |
| 1,4-DINITROBENZENE | | | | | ND (0.11) | |
| 1-METHYL-3-NITROBENZENE | | | | | ND (0.11) | |
| 1-METHYL-4-NITROBENZENE | | | | | ND (0.19) | |
| 1-METHYLNAPHTHALENE | | | | | | |
| 1-NITRONAPHTHALENE | | | | | ND (0.11) | |
| 2,4,6-TRINITROTOLUENE | | | | | ND (0.11) | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | ND (0.11) | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | ND (0.11) | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | ND (0.11) | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | |
| 2-NITROTOLUENE | | | | | ND (0.12) | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | ND (0.11) | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | | |
| ACENAPHTHYLENE | | 300000 | | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | FBLK | 334-109 | 334-136 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 3 | 0 |
| **Bottom (ft)** | | | | 0 | 3.5 | 0 |
| **Sample ID** | | | | POM-K-FBLK | POM-S-334-109(3.0-3.5)-DUP | POM-S-334-136-DUP |
| **Lab ID** | | | | 5157291 | 4604738 | 4436428 |
| **Date** | | | | 9/14/07 | 9/13/05 | 12/2/04 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Blank Water | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/L | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | | |
| CHRYSENE | 62 | 230 | 52 | | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | | |
| FLUORENE | 2300 | 24000 | 110 | | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | | |
| NAPHTHALENE | 6 | 17 | 16 | | | |
| NITROBENZENE | 31 | 340 | 0.2 | | ND (0.11) | |
| PHENANTHRENE | | 300000 | | | | |
| PYRENE | 1700 | 18000 | 550 | | | |
| **OTHERS** | | | | | | |
| NITROGLYCERIN | | | | | ND (2.2) | |
| NITRATE | | | | | ND (0.9) | |
| NITRITE | | | | | ND (0.9) | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | ND (0.28) | |
| PENTAERYTHRITOL TETRANITRATE | | | | | ND (2.2) | |
| RDX | | | | | ND (0.11) | |
| TETRYL | | | | | ND (0.12) | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-140 | 334-161 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-140(0.0-0.5)-DUP | POM-S-334-161(0.0-0.5)-DUP |
| Lab ID | | | | 4610425 | 4603338 |
| Date | | | | 9/19/05 | 9/14/05 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | | 25.7 J |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | 438 J |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | | |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | 0.303 J | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-140 | 334-161 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-140(0.0-0.5)-DUP | POM-S-334-161(0.0-0.5)-DUP |
| **Lab ID** | | | | 4610425 | 4603338 |
| **Date** | | | | 9/19/05 | 9/14/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-254 | 334-272 |
|---|---|---|---|---|---|
| Top (ft) | | | | 1.5 | 0 |
| Bottom (ft) | | | | 2 | 0.5 |
| Sample ID | | | | POM-S-334-254-1.5-2.0 | POM-S-334-272(0.0-0.5)-DUP |
| Lab ID | | | | 334254 | 4615799 |
| Date | | | | 11/15/05 | 10/3/05 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | | 15.9 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | 398.34 | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | | |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-254 | 334-272 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 1.5 | 0 |
| **Bottom (ft)** | | | | 2 | 0.5 |
| **Sample ID** | | | | POM-S-334-254-1.5-2.0 | POM-S-334-272(0.0-0.5)-DUP |
| **Lab ID** | | | | 334254 | 4615799 |
| **Date** | | | | 11/15/05 | 10/3/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-432 | 334-436 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-432(0.0-0.5)-DUP | POM-S-334-436(0.0-0.5)-DUP |
| Lab ID | | | | 4706643 | 4711863 |
| Date | | | | 2/7/06 | 2/16/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 10.8 | 55.7 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | | 2.99 J |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-432 | 334-436 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-432(0.0-0.5)-DUP | POM-S-334-436(0.0-0.5)-DUP |
| **Lab ID** | | | | 4706643 | 4711863 |
| **Date** | | | | 2/7/06 | 2/16/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-440 | 334-447 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-440(0.0-0.5)-DUP | POM-S-334-447(0.0-0.5)-DUP |
| Lab ID | | | | 4720174 | 4726526 |
| Date | | | | 3/1/06 | 3/10/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 19 J | 58.8 J |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | 1.75 J | 2.34 J |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-440 | 334-447 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-440(0.0-0.5)-DUP | POM-S-334-447(0.0-0.5)-DUP |
| **Lab ID** | | | | 4720174 | 4726526 |
| **Date** | | | | 3/1/06 | 3/10/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-449 | 334-451 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-449(0.0-0.5)-DUP | POM-S-334-451(0.0-0.5)-DUP |
| Lab ID | | | | 4734763 | 4739631 |
| Date | | | | 3/21/06 | 3/29/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 59.7 | 152 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | 4.07 J | 7.23 J |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-449 | 334-451 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-449(0.0-0.5)-DUP | POM-S-334-451(0.0-0.5)-DUP |
| **Lab ID** | | | | 4734763 | 4739631 |
| **Date** | | | | 3/21/06 | 3/29/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-454 | 334-454 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-454(0.0-0.5)-DUP | POM-S-334-454(0.0-0.5)-DUP |
| Lab ID | | | | 4745547 | 4745547 |
| Date | | | | 4/6/06 | 4/6/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 80.5 | 80.5 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | 4.4 | 4.4 |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-454 | 334-454 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-454(0.0-0.5)-DUP | POM-S-334-454(0.0-0.5)-DUP |
| **Lab ID** | | | | 4745547 | 4745547 |
| **Date** | | | | 4/6/06 | 4/6/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-457 | 334-470 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-457(0.0-0.5)-DUP | POM-S-334-470(0.0-0.5)-DUP |
| Lab ID | | | | 4751811 | 4793218 |
| Date | | | | 4/14/06 | 6/13/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 36.9 | 45.7 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | 2.83 J | 4.81 |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-457 | 334-470 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-457(0.0-0.5)-DUP | POM-S-334-470(0.0-0.5)-DUP |
| **Lab ID** | | | | 4751811 | 4793218 |
| **Date** | | | | 4/14/06 | 6/13/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-471 | 334-472 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-471(0.0-0.5)-DUP | POM-S-334-472(0.0-0.5)-DUP |
| Lab ID | | | | 4800452 | 4805749 |
| Date | | | | 6/22/06 | 6/28/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 60.6 | 114 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | 4.29 J | 5.43 |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-471 | 334-472 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-471(0.0-0.5)-DUP | POM-S-334-472(0.0-0.5)-DUP |
| **Lab ID** | | | | 4800452 | 4805749 |
| **Date** | | | | 6/22/06 | 6/28/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-473 | 334-476 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-473(0.0-0.5)-DUP | POM-S-334-476(0.0-0.5)-DUP |
| Lab ID | | | | 4826987 | 4846052 |
| Date | | | | 7/28/06 | 8/18/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 4.4 | 207 J |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | 0.839 J | 8.1 |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-473 | 334-476 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-473(0.0-0.5)-DUP | POM-S-334-476(0.0-0.5)-DUP |
| **Lab ID** | | | | 4826987 | 4846052 |
| **Date** | | | | 7/28/06 | 8/18/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-479 | 334-483 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-479(0.0-0.5)-DUP | POM-S-334-483(0.0-0.5)-DUP |
| Lab ID | | | | 4867436 | 4884174 |
| Date | | | | 9/18/06 | 10/6/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 12.1 J | 19.8 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | 1.56 J | 1.94 J |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-479 | 334-483 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-479(0.0-0.5)-DUP | POM-S-334-483(0.0-0.5)-DUP |
| **Lab ID** | | | | 4867436 | 4884174 |
| **Date** | | | | 9/18/06 | 10/6/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-485 | 334-489 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-485(0.0-0.5)-DUP | POM-S-334-489(0.0-0.5)-DUP |
| Lab ID | | | | 4898509 | 4907653 |
| Date | | | | 10/23/06 | 11/3/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 35.9 | 32 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | 2.39 J | 1.39 J |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-485 | 334-489 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-485(0.0-0.5)-DUP | POM-S-334-489(0.0-0.5)-DUP |
| **Lab ID** | | | | 4898509 | 4907653 |
| **Date** | | | | 10/23/06 | 11/3/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-492 | 334-494 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-492(0.0-0.5)-DUP | POM-S-334-494(0-0.5)-DUP |
| Lab ID | | | | 4913710 | 4920450 |
| Date | | | | 11/10/06 | 11/17/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 86.1 | |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | 584 |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | | |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-492 | 334-494 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-492(0.0-0.5)-DUP | POM-S-334-494(0-0.5)-DUP |
| **Lab ID** | | | | 4913710 | 4920450 |
| **Date** | | | | 11/10/06 | 11/17/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-497 | 334-498 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-497(0-0.5)-DUP | POM-S-334-498(0.0-0.5)-DUP |
| Lab ID | | | | 4920456 | 4928829 |
| Date | | | | 11/17/06 | 12/1/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 79.1 | |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | 116 |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | | |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-497 | 334-498 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-497(0-0.5)-DUP | POM-S-334-498(0.0-0.5)-DUP |
| **Lab ID** | | | | 4920456 | 4928829 |
| **Date** | | | | 11/17/06 | 12/1/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-500 | 334-501 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-500(0.0-0.5)-DUP | POM-S-334-501(0.0-0.5)-DUP |
| Lab ID | | | | 4928823 | 4935493 |
| Date | | | | 12/1/06 | 12/8/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 8.22 | 67.9 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | 1.51 J | |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-500 | 334-501 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-500(0.0-0.5)-DUP | POM-S-334-501(0.0-0.5)-DUP |
| **Lab ID** | | | | 4928823 | 4935493 |
| **Date** | | | | 12/1/06 | 12/8/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-503 | 334-504 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-503(0.0-0.5)-DUP | POM-S-334-504(0.0-0.5)-DUP |
| Lab ID | | | | 4941858 | 4948167 |
| Date | | | | 12/15/06 | 12/22/06 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 17.5 | 22.5 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | 1.6 J | |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-503 | 334-504 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-503(0.0-0.5)-DUP | POM-S-334-504(0.0-0.5)-DUP |
| **Lab ID** | | | | 4941858 | 4948167 |
| **Date** | | | | 12/15/06 | 12/22/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-506 | 334-507 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-506(0.0-0.5)-DUP | POM-S-334-507(0.0-0.5)-DUP |
| Lab ID | | | | 4970475 | 4982103 |
| Date | | | | 1/26/07 | 2/12/07 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 13 | 181 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | | 5.12 |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-506 | 334-507 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-506(0.0-0.5)-DUP | POM-S-334-507(0.0-0.5)-DUP |
| **Lab ID** | | | | 4970475 | 4982103 |
| **Date** | | | | 1/26/07 | 2/12/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-508 | 334-509 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-508(0.0-0.5)-DUP | POM-S-334-509(0.0-0.5)-DUP |
| Lab ID | | | | 5018987 | 5049239 |
| Date | | | | 3/23/07 | 5/4/07 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 39.3 | 62.5 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | 2.14 J | 2.17 J |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-508 | 334-509 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-508(0.0-0.5)-DUP | POM-S-334-509(0.0-0.5)-DUP |
| **Lab ID** | | | | 5018987 | 5049239 |
| **Date** | | | | 3/23/07 | 5/4/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-512 | 334-516 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 0 |
| Bottom (ft) | | | | 0.5 | 0.5 |
| Sample ID | | | | POM-S-334-512(0.0-0.5)-DUP | POM-S-334-516(0.0-0.5)-DUP |
| Lab ID | | | | 5129929 | 5157290 |
| Date | | | | 8/15/07 | 9/14/07 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 14.1 J | 7.42 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | 1.8 J | 3.16 J |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-512 | 334-516 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-512(0.0-0.5)-DUP | POM-S-334-516(0.0-0.5)-DUP |
| **Lab ID** | | | | 5129929 | 5157290 |
| **Date** | | | | 8/15/07 | 9/14/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-B103 | 334-B104 |
|---|---|---|---|---|---|
| Top (ft) | | | | 1 | 4 |
| Bottom (ft) | | | | 1.5 | 4.25 |
| Sample ID | | | | POM-S-334-B103(1.0-1.5)-DUP | POM-S-334-B104(4.0-4.25)-DUP |
| Lab ID | | | | 5317533 | 5844819 |
| Date | | | | 3/26/08 | 11/19/09 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | | |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | 46.7 | 46.9 |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | | |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-B103 | 334-B104 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 4 |
| **Bottom (ft)** | | | | 1.5 | 4.25 |
| **Sample ID** | | | | POM-S-334-B103(1.0-1.5)-DUP | POM-S-334-B104(4.0-4.25)-DUP |
| **Lab ID** | | | | 5317533 | 5844819 |
| **Date** | | | | 3/26/08 | 11/19/09 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-B108 | 334-B18 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 1 |
| Bottom (ft) | | | | 0.5 | 1.5 |
| Sample ID | | | | POM-S-334-B108(0.0-0.5)-DUP | POM-S-334-B18(1-1.5)-DUP |
| Lab ID | | | | 5538975 | 5252922 |
| Date | | | | 11/20/08 | 1/8/08 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 9.75 | 15.6 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | 112 |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | | |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-B108 | 334-B18 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 1 |
| **Bottom (ft)** | | | | 0.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B108(0.0-0.5)-DUP | POM-S-334-B18(1-1.5)-DUP |
| **Lab ID** | | | | 5538975 | 5252922 |
| **Date** | | | | 11/20/08 | 1/8/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-B22 | 334-B37 |
|---|---|---|---|---|---|
| Top (ft) | | | | 1 | 1 |
| Bottom (ft) | | | | 1.5 | 1.5 |
| Sample ID | | | | POM-S-334-B22(1.0-1.5)-DUP | POM-S-334-B37(1.0-1.5)-DUP |
| Lab ID | | | | 5270019 | 5259369 |
| Date | | | | 1/31/08 | 1/16/08 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | | 61.7 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | 37.9 | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | | |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-B22 | 334-B37 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 1 |
| **Bottom (ft)** | | | | 1.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B22(1.0-1.5)-DUP | POM-S-334-B37(1.0-1.5)-DUP |
| **Lab ID** | | | | 5270019 | 5259369 |
| **Date** | | | | 1/31/08 | 1/16/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-B4 | 334-B44 |
|---|---|---|---|---|---|
| Top (ft) | | | | 1 | 1 |
| Bottom (ft) | | | | 1.5 | 1.5 |
| Sample ID | | | | POM-S-334-B4(1.0-1.5)-DUP | POM-S-334-B44(1.0-1.5)-DUP |
| Lab ID | | | | 5259339 | 5264117 |
| Date | | | | 1/15/08 | 1/22/08 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 8.09 | 4.55 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | 23.1 | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | | |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-B4 | 334-B44 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 1 |
| **Bottom (ft)** | | | | 1.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B4(1.0-1.5)-DUP | POM-S-334-B44(1.0-1.5)-DUP |
| **Lab ID** | | | | 5259339 | 5264117 |
| **Date** | | | | 1/15/08 | 1/22/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-B46 | 334-B59 |
|---|---|---|---|---|---|
| Top (ft) | | | | 1 | 2 |
| Bottom (ft) | | | | 1.5 | 2.5 |
| Sample ID | | | | POM-S-334-B46(1.0-1.5)-DUP | POM-S-334-B59(2.0-2.5)-DUP |
| Lab ID | | | | 5260670 | 5270036 |
| Date | | | | 1/18/08 | 1/31/08 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 133 | 22.8 |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | | |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-B46 | 334-B59 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 |
| **Bottom (ft)** | | | | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B46(1.0-1.5)-DUP | POM-S-334-B59(2.0-2.5)-DUP |
| **Lab ID** | | | | 5260670 | 5270036 |
| **Date** | | | | 1/18/08 | 1/31/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-B76 | 334-B98 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 1 |
| **Bottom (ft)** | | | | 1.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B76(1.0-1.5)-DUP | POM-S-334-B98(1.0-1.5)-DUP |
| **Lab ID** | | | | 5282213 | 5324013 |
| **Date** | | | | 2/15/08 | 4/3/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | | |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | 57.8 | 79 |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | | |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-B76 | 334-B98 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 1 |
| **Bottom (ft)** | | | | 1.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B76(1.0-1.5)-DUP | POM-S-334-B98(1.0-1.5)-DUP |
| **Lab ID** | | | | 5282213 | 5324013 |
| **Date** | | | | 2/15/08 | 4/3/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| Location (Boring ID) | | | | 334-P11 | 334-P11 |
|---|---|---|---|---|---|
| Top (ft) | | | | 0 | 1 |
| Bottom (ft) | | | | 0.5 | 1.5 |
| Sample ID | | | | POM-S-334-P11(0.0-0.5)-DUP | POM-S-334-P11(1.0-1.5)-DUP |
| Lab ID | | | | 5276646 | 5535227 |
| Date | | | | 2/7/08 | 11/18/08 |
| Field Medium | NJDEP | NJDEP | NJDEP | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| **METALS** | | | | | |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | | |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | 406 | 46 J |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | | |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | | |
| 1,2-DINITROBENZENE | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | |
| 1,3-DINITROBENZENE | | | | | |
| 1,4-DINITROBENZENE | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | |
| 1-METHYLNAPHTHALENE | | | | | |
| 1-NITRONAPHTHALENE | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | |
| 2-NITROTOLUENE | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | | |
| ACENAPHTHYLENE | | 300000 | | | |
| ANTHRACENE | 17000 | 30000 | 1500 | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-P11 | 334-P11 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 1 |
| **Bottom (ft)** | | | | 0.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-P11(0.0-0.5)-DUP | POM-S-334-P11(1.0-1.5)-DUP |
| **Lab ID** | | | | 5276646 | 5535227 |
| **Date** | | | | 2/7/08 | 11/18/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | | |
| CHRYSENE | 62 | 230 | 52 | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | | |
| FLUORANTHENE | 2300 | 24000 | 840 | | |
| FLUORENE | 2300 | 24000 | 110 | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | | |
| NAPHTHALENE | 6 | 17 | 16 | | |
| NITROBENZENE | 31 | 340 | 0.2 | | |
| PHENANTHRENE | | 300000 | | | |
| PYRENE | 1700 | 18000 | 550 | | |
| **OTHERS** | | | | | |
| NITROGLYCERIN | | | | | |
| NITRATE | | | | | |
| NITRITE | | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | | |
| RDX | | | | | |
| TETRYL | | | | | |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-RB-2 |
|---|---|---|---|---|
| **Top (ft)** | | | | 0 |
| **Bottom (ft)** | | | | 1.4 |
| **Sample ID** | | | | POM-S-334-RB-2(0.0-1.4)-DUP |
| **Lab ID** | | | | 5237629 |
| **Date** | | | | 12/13/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg |
| **METALS** | | | | |
| ANTIMONY | 31 | 450 | 6 | ND (1.07) |
| ARSENIC | 19 | 19 | 19 | 5.58 |
| BERYLLIUM | 16 | 140 | 0.5 | 0.391 J |
| CADMIUM | 78 | 78 | 1 | 0.193 J |
| CHROMIUM | | | | 8.05 J |
| COPPER | 3100 | 45000 | 7300 | 28.8 |
| LEAD | 400 | 800 | 59 | 54.5 |
| MERCURY | 23 | 65 | 0.1 | 0.117 J |
| NICKEL | 1600 | 23000 | 31 | 10.7 |
| SELENIUM | 390 | 5700 | 7 | ND (1.12) |
| SILVER | 390 | 5700 | 1 | ND (0.201) |
| THALLIUM | 5 | 79 | 3 | 0.133 J |
| ZINC | 23000 | 110000 | 600 | 26.1 |
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | |
| 1,2-DINITROBENZENE | | | | |
| 1,3,5-TRINITROBENZENE | | | | |
| 1,3-DINITROBENZENE | | | | |
| 1,4-DINITROBENZENE | | | | |
| 1-METHYL-3-NITROBENZENE | | | | |
| 1-METHYL-4-NITROBENZENE | | | | |
| 1-METHYLNAPHTHALENE | | | | ND (0.04) |
| 1-NITRONAPHTHALENE | | | | |
| 2,4,6-TRINITROTOLUENE | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | ND (0.04) |
| 2-NITROTOLUENE | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | ND (0.04) |
| ACENAPHTHYLENE | | 300000 | | ND (0.04) |
| ANTHRACENE | 17000 | 30000 | 1500 | ND (0.04) |

Table 3a. Summary of Analytical Results - Quality Assurance

| **Location (Boring ID)** | | | | 334-RB-2 |
|---|---|---|---|---|
| **Top (ft)** | | | | 0 |
| **Bottom (ft)** | | | | 1.4 |
| **Sample ID** | | | | POM-S-334-RB-2(0.0-1.4)-DUP |
| **Lab ID** | | | | 5237629 |
| **Date** | | | | 12/13/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | ND (0.04) |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | ND (0.04) |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | ND (0.04) |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | ND (0.04) |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | ND (0.04) |
| CHRYSENE | 62 | 230 | 52 | ND (0.04) |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | ND (0.04) |
| FLUORANTHENE | 2300 | 24000 | 840 | ND (0.04) |
| FLUORENE | 2300 | 24000 | 110 | ND (0.04) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | ND (0.04) |
| NAPHTHALENE | 6 | 17 | 16 | ND (0.04) |
| NITROBENZENE | 31 | 340 | 0.2 | |
| PHENANTHRENE | | 300000 | | ND (0.04) |
| PYRENE | 1700 | 18000 | 550 | 0.044 J |
| **OTHERS** | | | | |
| NITROGLYCERIN | | | | |
| NITRATE | | | | |
| NITRITE | | | | |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | |
| PENTAERYTHRITOL TETRANITRATE | | | | |
| RDX | | | | |
| TETRYL | | | | |

Table 3b Summary of Analytical Results - XRF vs. Laboratory Analysis

| Sample ID | Date Sampled | TOP (ft bgs) | BOTTOM (ft bgs) | Sample ID | Lab ID | Field Medium | Lancaster Result Value (mg/kg) | Screening Lab XRF Result (mg/kg) |
|---|---|---|---|---|---|---|---|---|
| 334-104 | 9/13/05 | 3 | 3.5 | POM-S-334-104-3.0-3.5 | 334104 | Soil | 15.2 | 13.706 |
| 334-106 | 9/30/05 | 0.5 | 1 | POM-S-334-106-0.5-1.0 | 334106 | Soil | 75.5 J | 69.848 |
| 334-109 | 9/13/05 | 3 | 3.5 | POM-S-334-109-3.0-3.5 | 334109 | Soil | 3.07 | 10.6 |
| 334-134 | 12/13/04 | 0 | 0.5 | POM-S-334-134 | 334134 | Soil | 162 | 174.448 |
| 334-135 | 12/13/04 | 0 | 0.5 | POM-S-334-135 | 334135 | Soil | 170 | 229.644 |
| 334-136 | 12/13/04 | 0 | 0.5 | POM-S-334-136 | 334136 | Soil | 67.9 | 85.187 |
| 334-137 | 12/13/04 | 0 | 0.5 | POM-S-334-137 | 334137 | Soil | 54.1 | 57.023 |
| 334-143 | 12/13/04 | 0 | 0.5 | POM-S-334-143 | 334143 | Soil | 111 | 135.616 |
| 334-144 | 12/13/04 | 0 | 0.5 | POM-S-334-144 | 334144 | Soil | 63.3 | 54.609 |
| 334-145 | 12/13/04 | 0 | 0.5 | POM-S-334-145 | 334145 | Soil | 34.9 | 32.053 |
| 334-146 | 12/13/04 | 0 | 0.5 | POM-S-334-146 | 334146 | Soil | 167 | 288.41 |
| 334-148 | 10/27/05 | 1 | 1.5 | POM-S-334-148-1.0-1.5 | 334148 | Soil | 57.8 | 57.317 |
| 334-149 | 12/13/04 | 0 | 0.5 | POM-S-334-149 | 334149 | Soil | 53.2 | 119.543 |
| 334-158 | 9/14/05 | 0 | 0.5 | POM-S-334-158 | 334158 | Soil | 327 J | 395.504 |
| 334-159 | 9/14/05 | 0 | 0.5 | POM-S-334-159 | 334159 | Soil | 289 J | 390.324 |
| 334-160 | 9/14/05 | 0 | 0.5 | POM-S-334-160 | 334160 | Soil | 227 J | 300.252 |
| 334-161 | 9/14/05 | 0 | 0.5 | POM-S-334-161 | 334161 | Soil | **508 J** | 264.566 |
| 334-162 | 9/14/05 | 0 | 0.5 | POM-S-334-162 | 334162 | Soil | 222 J | 373.206 |
| 334-165 | 9/14/05 | 0 | 0.5 | POM-S-334-165 | 334165 | Soil | 395 J | **497.214** |
| 334-188 | 9/8/05 | 0 | 0.5 | POM-S-334-188 | 334188 | Soil | 121 J | 148.309 |
| 334-190 | 9/8/05 | 0 | 0.5 | POM-S-334-190 | 334190 | Soil | 100 J | 179.942 |
| 334-194 | 9/9/05 | 0 | 0.5 | POM-S-334-194 | 334194 | Soil | 124 J | 156.119 |
| 334-195 | 9/9/05 | 0 | 0.5 | POM-S-334-195 | 334195 | Soil | 87.4 J | 121.004 |
| 334-197 | 9/9/05 | 0 | 0.5 | POM-S-334-197 | 334197 | Soil | 170 J | 220.811 |
| 334-202 | 9/22/05 | 0 | 0.5 | POM-S-334-202 | 334202 | Soil | 262 J | 323.164 |
| 334-203 | 9/22/05 | 0 | 0.5 | POM-S-334-203 | 334203 | Soil | 294 J | 358.062 |
| 334-205 | 9/22/05 | 0 | 0.5 | POM-S-334-205 | 334205 | Soil | 200 J | 202.336 |
| 334-206 | 9/22/05 | 0 | 0.5 | POM-S-334-206 | 334206 | Soil | 275 J | 383.058 |
| 334-212 | 9/22/05 | 0 | 0.5 | POM-S-334-212 | 334212 | Soil | 230 J | 261.822 |
| 334-219 | 10/27/05 | 1 | 1.5 | POM-S-334-219-1.0-1.5 | 334219 | Soil | 5.73 | ND () |
| 334-220 | 9/22/05 | 0 | 0.5 | POM-S-334-220 | 334220 | Soil | 249 J | 317.383 |
| 334-221 | 9/22/05 | 0 | 0.5 | POM-S-334-221 | 334221 | Soil | 288 J | 344.163 |
| 334-224 | 9/22/05 | 0 | 0.5 | POM-S-334-224 | 334224 | Soil | 38.7 J | 66.185 |
| 334-226 | 10/21/05 | 2 | 2.5 | POM-S-334-226-2.0-2.5 | 334226 | Soil | 25.7 | 26.057 |
| 334-231 | 10/18/05 | 1 | 1.5 | POM-S-334-231-1.0-1.5 | 334231 | Soil | 228 | 218.382 |
| 334-232 | 10/21/05 | 1 | 1.5 | POM-S-334-232-1.0-1.5 | 334232 | Soil | 52.7 | 61.278 |
| 334-244 | 9/30/05 | 0 | 0.5 | POM-S-334-244 | 334244 | Soil | 128 J | 157.744 |
| 334-249 | 9/30/05 | 0 | 0.5 | POM-S-334-249 | 334249 | Soil | 41.5 J | 55.44 |
| 334-250 | 10/20/05 | 0.5 | 1 | POM-S-334-250-0.5-1.0 | 334250 | Soil | 121 | 205.907 |
| 334-254 | 10/27/05 | 1 | 1.5 | POM-S-334-254-1.0-1.5 | 334254 | Soil | **798.68** | **653.133** |
| 334-254 | 11/2/05 | 1.5 | 2 | POM-S-334-254(1.5-2.0) | 4641876 | Soil | 210.48 | ***5420*** |
| 334-254 | 11/2/05 | 1.5 | 2 | POM-S-334-254(1.5-2.0) | 4651654 | Soil | 209.262 | 185 J |
| 334-254 | 11/2/05 | 1.5 | 2 | POM-S-334-254(1.5-2.0) | 4651655 | Soil | 188 J | **441.276** |
| 334-256 | 9/30/05 | 0 | 0.5 | POM-S-334-256 | 334256 | Soil | 149 J | 242.892 |
| 334-259 | 9/30/05 | 0 | 0.5 | POM-S-334-259 | 334259 | Soil | 322 J | 393.966 |
| 334-260 | 9/30/05 | 0 | 0.5 | POM-S-334-260 | 334260 | Soil | 207 | 231.088 |
| 334-261 | 9/30/05 | 0 | 0.5 | POM-S-334-261 | 334261 | Soil | 187 | 260.43 |
| 334-262 | 10/3/05 | 0 | 0.5 | POM-S-334-262 | 334262 | Soil | 268 | 390.001 |
| 334-265 | 10/3/05 | 0 | 0.5 | POM-S-334-265 | 334265 | Soil | 111 | 136.885 |

Table 3b Summary of Analytical Results - XRF vs. Laboratory Analysis

| Sample ID | Date Sampled | TOP (ft bgs) | BOTTOM (ft bgs) | Sample ID | Lab ID | Field Medium | Lancaster Result Value (mg/kg) | Screening Lab XRF Result (mg/kg) |
|---|---|---|---|---|---|---|---|---|
| 334-266 | 10/3/05 | 0 | 0.5 | POM-S-334-266 | 334266 | Soil | 230 | 338.6 |
| 334-267 | 10/3/05 | 0 | 0.5 | POM-S-334-267 | 334267 | Soil | 145 | 284.916 |
| 334-269 | 10/3/05 | 0 | 0.5 | POM-S-334-269(0.0-0.5) | 4617759 | Soil | 389.805 | 277 |
| 334-273 | 10/3/05 | 0 | 0.5 | POM-S-334-273 | 334273 | Soil | 132 | 181.915 |
| 334-274 | 10/25/05 | 0.5 | 1 | POM-S-334-274-0.5-1.0 | 334274 | Soil | 68.5 | 149.457 |
| 334-279 | 10/3/05 | 0 | 0.5 | POM-S-334-279 | 334279 | Soil | 150 | 180.756 |
| 334-286 | 10/5/05 | 0 | 0.5 | POM-S-334-286 | 334286 | Soil | 75.7 J | 94.873 |
| 334-290 | 10/5/05 | 0 | 0.5 | POM-S-334-290 | 334290 | Soil | 313 J | 388.125 |
| 334-298 | 10/5/05 | 0 | 0.5 | POM-S-334-298 | 334298 | Soil | 173 J | **401.021** |
| 334-300 | 10/6/05 | 0 | 0.5 | POM-S-334-300 | 334300 | Soil | 196 J | 254.273 |
| 334-302 | 10/6/05 | 0 | 0.5 | POM-S-334-302 | 334302 | Soil | 210 J | 335.131 |
| 334-307 | 10/21/05 | 2 | 2.5 | POM-S-334-307-2.0-2.5 | 334307 | Soil | 145 | 219.051 |
| 334-310 | 10/7/05 | 0 | 0.5 | POM-S-334-310 | 334310 | Soil | 118 J | 176.494 |
| 334-312 | 10/7/05 | 0 | 0.5 | POM-S-334-312(0.0-0.5) | 4626012 | Soil | MG/KG | 164 J |
| 334-318 | 10/10/05 | 0 | 0.5 | POM-S-334-318 | 334318 | Soil | 164 J | 242.344 |
| 334-319 | 10/18/05 | 0 | 0.5 | POM-S-334-319 | 334319 | Soil | 235 | 332.705 |
| 334-321 | 10/18/05 | 0 | 0.5 | POM-S-334-321 | 334321 | Soil | 209 | 309.642 |
| 334-323 | 10/10/05 | 0 | 0.5 | POM-S-334-323 | 334323 | Soil | 170 J | 220.688 |
| 334-329-E | 10/11/05 | 0 | 0.5 | POM-S-334-329-E | 334329E | Soil | 166 J | 273.88 |
| 334-337E | 11/1/05 | 2 | 2.5 | POM-S-334-337E-2.0-2.5 | 334337E | Soil | 14.8 | 18.873 |
| 334-339-E | 10/11/05 | 0 | 0.5 | POM-S-334-339-E | 334339E | Soil | 79 J | 102.762 |
| 334-342 | 10/17/05 | 0 | 0.5 | POM-S-334-342 | 334342 | Soil | 143 | 205.701 |
| 334-345 | 10/17/05 | 0 | 0.5 | POM-S-334-345 | 334345 | Soil | 127 | 202.202 |
| 334-347 | 10/17/05 | 0 | 0.5 | POM-S-334-347 | 334347 | Soil | 191 | 274.392 |
| 334-352 | 10/17/05 | 0 | 0.5 | POM-S-334-352 | 334352 | Soil | 222 | 260.663 |
| 334-354 | 10/17/05 | 0 | 0.5 | POM-S-334-354 | 334354 | Soil | 49.7 | 84.664 |
| 334-357 | 10/17/05 | 0 | 0.5 | POM-S-334-357 | 334357 | Soil | 84.5 | 132.386 |
| 334-360 | 10/18/05 | 0 | 0.5 | POM-S-334-360 | 334360 | Soil | 117 | 240.426 |
| 334-363 | 10/19/05 | 0 | 0.5 | POM-S-334-363 | 334363 | Soil | 73.2 | 110.713 |
| 334-366 | 10/20/05 | 0 | 0.5 | POM-S-334-366 | 334366 | Soil | 29.2 | 34.518 |
| 334-367 | 10/20/05 | 0 | 0.5 | POM-S-334-367 | 334367 | Soil | 259 | **401.27** |
| 334-371 | 10/20/05 | 0 | 0.5 | POM-S-334-371 | 334371 | Soil | 77.6 | 126.98 |
| 334-375 | 10/20/05 | 0 | 0.5 | POM-S-334-375 | 334375 | Soil | 29.1 | 29.666 |
| 334-382 | 10/24/05 | 0 | 0.5 | POM-S-334-382 | 334382 | Soil | 152 | 203.983 |
| 334-388 | 10/27/05 | 0 | 0.5 | POM-S-334-388 | 334388 | Soil | 150 | 222.304 |
| 334-389 | 10/27/05 | 0 | 0.5 | POM-S-334-389 | 334389 | Soil | 190 | 216.377 |
| 334-390 | 10/27/05 | 0 | 0.5 | POM-S-334-390 | 334390 | Soil | 226 | 382.77 |
| 334-395 | 10/27/05 | 0 | 0.5 | POM-S-334-395 | 334395 | Soil | 59 | 165.602 |
| 334-401 | 10/31/05 | 0 | 0.5 | POM-S-334-401 | 334401 | Soil | 54 | 49.486 |
| 334-407 | 10/31/05 | 0 | 0.5 | POM-S-334-407 | 334407 | Soil | 81.3 | 193.537 |
| 334-408 | 11/1/05 | 0 | 0.5 | POM-S-334-408 | 334408 | Soil | MG/KG | 222.973 |
| 334-409 | 11/1/05 | 0 | 0.5 | POM-S-334-409 | 334409 | Soil | 267 | 373.453 |
| 334-414 | 11/1/05 | 0 | 0.5 | POM-S-334-414 | 334414 | Soil | 171 | 305.683 |
| 334-415 | 11/2/05 | 0 | 0.5 | POM-S-334-415 | 334415 | Soil | 381 | **435.032** |
| 334-417 | 11/2/05 | 0 | 0.5 | POM-S-334-417 | 334417 | Soil | 252 | 350.192 |
| 334-418 | 11/2/05 | 0 | 0.5 | POM-S-334-418 | 334418 | Soil | **402** | **548.291** |
| 334-419 | 11/3/05 | 0 | 0.5 | POM-S-334-419 | 334419 | Soil | 301 | 385.44 |
| 334-420 | 11/10/05 | 0 | 0.5 | POM-S-334-420 | 334420 | Soil | 344 | **419.541** |

Table 4. Summary of Analytical Results - AOC 117 Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-104 | 334-104 | 334-105 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 3 | 0 |
| **Bottom (ft)** | | | | 0 | 3.5 | 0 |
| **Sample ID** | | | | POM-S-334-104 (0-5) | POM-S-334-104(3.0-3.5) | POM-S-334-105 (0-5) |
| **Lab ID** | | | | 4047597 | 4604733 | 4047598 |
| **Date** | | | | 5/19/03 | 9/13/05 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| 1,2-DINITROBENZENE | | | | ND (0.14) | ND (0.12) | |
| 1,3,5-TRINITROBENZENE | | | | ND (0.14) | ND (0.12) | |
| 1,3-DINITROBENZENE | | | | ND (0.14) | ND (0.12) | |
| 1,4-DINITROBENZENE | | | | ND (0.14) | ND (0.12) | |
| 1-METHYL-3-NITROBENZENE | | | | ND (0.14) | ND (0.12) | |
| 1-METHYL-4-NITROBENZENE | | | | ND (0.14) | ND (0.2) | |
| 1-METHYLNAPHTHALENE | | | | | | |
| 1-NITRONAPHTHALENE | | | | ND (0.14) | ND (0.12) | |
| 2,4,6-TRINITROTOLUENE | | | | ND (0.14) | ND (0.12) | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | ND (0.14) | ND (0.12) | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | ND (0.14) | ND (0.12) | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | ND (0.14) | ND (0.12) | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | |
| 2-NITROTOLUENE | | | | ND (0.14) | ND (0.13) | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | ND (0.14) | ND (0.12) | |
| ACENAPHTHENE | 3400 | 37000 | 74 | ND (0.047) | | ND (0.044) |
| ACENAPHTHYLENE | | 300000 | | ND (0.047) | | ND (0.044) |
| ANTHRACENE | 17000 | 30000 | 1500 | ND (0.047) | | 0.061 J |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | 0.078 J | | 0.22 J |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | 0.2 J | | 0.38 J |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | 0.14 J | | 0.31 J |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | 0.064 J | | 0.09 J |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | 0.14 J | | ***0.33 J*** |
| CHRYSENE | 62 | 230 | 52 | 0.16 J | | 0.35 J |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | 0.048 J | | 0.12 J |
| FLUORANTHENE | 2300 | 24000 | 840 | 0.13 J | | 0.24 J |

Table 4. Summary of Analytical Results - AOC 117 Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-104 | 334-104 | 334-105 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 3 | 0 |
| **Bottom (ft)** | | | | 0 | 3.5 | 0 |
| **Sample ID** | | | | POM-S-334-104 (0-5) | POM-S-334-104(3.0-3.5) | POM-S-334-105 (0-5) |
| **Lab ID** | | | | 4047597 | 4604733 | 4047598 |
| **Date** | | | | 5/19/03 | 9/13/05 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| FLUORENE | 2300 | 24000 | 110 | ND (0.047) | | ND (0.044) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | 0.13 J | | 0.25 J |
| NAPHTHALENE | 6 | 17 | 16 | ND (0.047) | | ND (0.044) |
| NITROBENZENE | 31 | 340 | 0.2 | ND (0.14) | ND (0.12) | |
| PHENANTHRENE | | 300000 | | 0.085 J | | 0.12 J |
| PYRENE | 1700 | 18000 | 550 | 0.26 J | | 0.52 |

Table 4. Summary of Analytical Results - AOC 117 Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-106 | 334-107 | 334-108 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-S-334-106 (0-5) | POM-S-334-107 (0-5) | POM-S-334-108 (0-5) |
| **Lab ID** | | | | 4047599 | 4047600 | 4047601 |
| **Date** | | | | 5/19/03 | 5/19/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| 1,2-DINITROBENZENE | | | | ND (0.21) | ND (0.11) | |
| 1,3,5-TRINITROBENZENE | | | | ND (0.21) | ND (0.11) | |
| 1,3-DINITROBENZENE | | | | ND (0.21) | ND (0.11) | |
| 1,4-DINITROBENZENE | | | | ND (0.21) | ND (0.11) | |
| 1-METHYL-3-NITROBENZENE | | | | ND (0.21) | ND (0.11) | |
| 1-METHYL-4-NITROBENZENE | | | | ND (0.21) | ND (0.11) | |
| 1-METHYLNAPHTHALENE | | | | | | |
| 1-NITRONAPHTHALENE | | | | ND (0.21) | ND (0.11) | |
| 2,4,6-TRINITROTOLUENE | | | | ND (0.21) | ND (0.11) | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | ND (0.21) | ND (0.11) | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | ND (0.21) | ND (0.11) | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | ND (0.21) | ND (0.11) | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | |
| 2-NITROTOLUENE | | | | ND (0.21) | ND (0.11) | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | ND (0.21) | ND (0.11) | |
| ACENAPHTHENE | 3400 | 37000 | 74 | ND (0.07) | ND (0.038) | ND (0.036) |
| ACENAPHTHYLENE | | 300000 | | ND (0.07) | ND (0.038) | ND (0.036) |
| ANTHRACENE | 17000 | 30000 | 1500 | ND (0.07) | ND (0.038) | ND (0.036) |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | 0.17 J | 0.067 J | 0.072 J |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | 0.37 J | 0.098 J | 0.1 J |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | 0.22 J | 0.049 J | 0.046 J |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | 0.12 J | ND (0.038) | ND (0.036) |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | ***0.21 J*** | 0.06 J | 0.071 J |
| CHRYSENE | 62 | 230 | 52 | 0.3 J | 0.12 J | 0.1 J |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | 0.1 J | ND (0.038) | ND (0.036) |
| FLUORANTHENE | 2300 | 24000 | 840 | 0.27 J | 0.12 J | 0.14 J |

Table 4. Summary of Analytical Results - AOC 117 Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-106 | 334-107 | 334-108 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-S-334-106 (0-5) | POM-S-334-107 (0-5) | POM-S-334-108 (0-5) |
| **Lab ID** | | | | 4047599 | 4047600 | 4047601 |
| **Date** | | | | 5/19/03 | 5/19/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| FLUORENE | 2300 | 24000 | 110 | ND (0.07) | ND (0.038) | ND (0.036) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | 0.21 J | 0.042 J | 0.05 J |
| NAPHTHALENE | 6 | 17 | 16 | ND (0.07) | ND (0.038) | ND (0.036) |
| NITROBENZENE | 31 | 340 | 0.2 | ND (0.21) | ND (0.11) | |
| PHENANTHRENE | | 300000 | | 0.19 J | 0.15 J | 0.13 J |
| PYRENE | 1700 | 18000 | 550 | 0.41 J | 0.16 J | 0.24 J |

Table 4. Summary of Analytical Results - AOC 117 Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-109 | 334-109 | 334-109 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 3 | 3 |
| **Bottom (ft)** | | | | 0 | 3.5 | 3.5 |
| **Sample ID** | | | | POM-S-334-109 (0-5) | POM-S-334-109(3.0-3.5)-DUP | POM-S-334-109(3.0-3.5) |
| **Lab ID** | | | | 4047602 | 4604738 | 4604734 |
| **Date** | | | | 5/19/03 | 9/13/05 | 9/13/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| 1,2-DINITROBENZENE | | | | | ND (0.11) | ND (0.11) |
| 1,3,5-TRINITROBENZENE | | | | | ND (0.11) | ND (0.11) |
| 1,3-DINITROBENZENE | | | | | ND (0.11) | ND (0.11) |
| 1,4-DINITROBENZENE | | | | | ND (0.11) | ND (0.11) |
| 1-METHYL-3-NITROBENZENE | | | | | ND (0.11) | ND (0.11) |
| 1-METHYL-4-NITROBENZENE | | | | | ND (0.19) | ND (0.19) |
| 1-METHYLNAPHTHALENE | | | | | | |
| 1-NITRONAPHTHALENE | | | | | ND (0.11) | ND (0.11) |
| 2,4,6-TRINITROTOLUENE | | | | | ND (0.11) | ND (0.11) |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | ND (0.11) | ND (0.11) |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | ND (0.11) | ND (0.11) |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | ND (0.11) | ND (0.11) |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | |
| 2-NITROTOLUENE | | | | | ND (0.12) | ND (0.12) |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | ND (0.11) | ND (0.11) |
| ACENAPHTHENE | 3400 | 37000 | 74 | ND (0.039) | | |
| ACENAPHTHYLENE | | 300000 | | ND (0.039) | | |
| ANTHRACENE | 17000 | 30000 | 1500 | ND (0.039) | | |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | 0.087 J | | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | 0.12 J | | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | 0.053 J | | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | ND (0.039) | | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | 0.064 J | | |
| CHRYSENE | 62 | 230 | 52 | 0.33 J | | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | 0.041 J | | |
| FLUORANTHENE | 2300 | 24000 | 840 | 0.11 J | | |

Table 4. Summary of Analytical Results - AOC 117 Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-109 | 334-109 | 334-109 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 3 | 3 |
| **Bottom (ft)** | | | | 0 | 3.5 | 3.5 |
| **Sample ID** | | | | POM-S-334-109 (0-5) | POM-S-334-109(3.0-3.5)-DUP | POM-S-334-109(3.0-3.5) |
| **Lab ID** | | | | 4047602 | 4604738 | 4604734 |
| **Date** | | | | 5/19/03 | 9/13/05 | 9/13/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| FLUORENE | 2300 | 24000 | 110 | ND (0.039) | | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | 0.043 J | | |
| NAPHTHALENE | 6 | 17 | 16 | 0.064 J | | |
| NITROBENZENE | 31 | 340 | 0.2 | | ND (0.11) | ND (0.11) |
| PHENANTHRENE | | 300000 | | 0.26 J | | |
| PYRENE | 1700 | 18000 | 550 | 0.15 J | | |

Table 4. Summary of Analytical Results - AOC 117 Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-110 | 334-110 | 334-110 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 6 | 2 |
| **Bottom (ft)** | | | | 0 | 6.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-110 (0-5) | POM-S-334-110(6-6.5) | POM-S-334-110(2-2.5) |
| **Lab ID** | | | | 4047603 | 4134532 | 4134542 |
| **Date** | | | | 5/19/03 | 9/30/03 | 9/30/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| 1,2-DINITROBENZENE | | | | ND (0.12) | | ND (0.12) |
| 1,3,5-TRINITROBENZENE | | | | ND (0.12) | | ND (0.12) |
| 1,3-DINITROBENZENE | | | | ND (0.12) | | ND (0.12) |
| 1,4-DINITROBENZENE | | | | ND (0.12) | | ND (0.12) |
| 1-METHYL-3-NITROBENZENE | | | | ND (0.12) | | ND (0.12) |
| 1-METHYL-4-NITROBENZENE | | | | ND (0.12) | | ND (0.16) |
| 1-METHYLNAPHTHALENE | | | | | ND (0.036) | |
| 1-NITRONAPHTHALENE | | | | ND (0.12) | | ND (0.12) |
| 2,4,6-TRINITROTOLUENE | | | | ND (0.12) | | ND (0.12) |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | ND (0.12) | | ND (0.12) |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | ND (0.12) | | ND (0.12) |
| 2-AMINO-4,6-DINITROTOLUENE | | | | ND (0.12) | | ND (0.12) |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | ND (0.036) | |
| 2-NITROTOLUENE | | | | ND (0.12) | | ND (0.13) |
| 4-AMINO-2,6-DINITROTOLUENE | | | | ND (0.12) | | ND (0.12) |
| ACENAPHTHENE | 3400 | 37000 | 74 | ND (0.041) | ND (0.036) | |
| ACENAPHTHYLENE | | 300000 | | ND (0.041) | ND (0.036) | |
| ANTHRACENE | 17000 | 30000 | 1500 | ND (0.041) | ND (0.036) | |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | ND (0.041) | ND (0.036) | |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | ND (0.041) | ND (0.036) | |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | ND (0.041) | ND (0.036) | |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | ND (0.041) | ND (0.036) | |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | ND (0.041) | ND (0.036) | |
| CHRYSENE | 62 | 230 | 52 | 0.041 J | ND (0.036) | |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | ND (0.041) | ND (0.036) | |
| FLUORANTHENE | 2300 | 24000 | 840 | 0.052 J | ND (0.036) | |

Table 4. Summary of Analytical Results - AOC 117 Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-110 | 334-110 | 334-110 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 6 | 2 |
| **Bottom (ft)** | | | | 0 | 6.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-110 (0-5) | POM-S-334-110(6-6.5) | POM-S-334-110(2-2.5) |
| **Lab ID** | | | | 4047603 | 4134532 | 4134542 |
| **Date** | | | | 5/19/03 | 9/30/03 | 9/30/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| FLUORENE | 2300 | 24000 | 110 | ND (0.041) | ND (0.036) | |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | ND (0.041) | ND (0.036) | |
| NAPHTHALENE | 6 | 17 | 16 | ND (0.041) | ND (0.036) | |
| NITROBENZENE | 31 | 340 | 0.2 | ND (0.12) | | ND (0.12) |
| PHENANTHRENE | | 300000 | | 0.041 J | ND (0.036) | |
| PYRENE | 1700 | 18000 | 550 | 0.076 J | ND (0.036) | |

Table 4. Summary of Analytical Results - AOC 117 Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-111 | 334-111 | 334-112 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 2 | 0 |
| **Bottom (ft)** | | | | 0 | 2.5 | 0 |
| **Sample ID** | | | | POM-S-334-111 (0-5) | POM-S-334-111(2-2.5) | POM-S-334-112 (0-5) |
| **Lab ID** | | | | 4047604 | 4134534 | 4047605 |
| **Date** | | | | 5/19/03 | 9/30/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| 1,2-DINITROBENZENE | | | | | | ND (0.12) |
| 1,3,5-TRINITROBENZENE | | | | | | ND (0.12) |
| 1,3-DINITROBENZENE | | | | | | ND (0.12) |
| 1,4-DINITROBENZENE | | | | | | ND (0.12) |
| 1-METHYL-3-NITROBENZENE | | | | | | ND (0.12) |
| 1-METHYL-4-NITROBENZENE | | | | | | ND (0.12) |
| 1-METHYLNAPHTHALENE | | | | | ND (0.039) | |
| 1-NITRONAPHTHALENE | | | | | | ND (0.12) |
| 2,4,6-TRINITROTOLUENE | | | | | | ND (0.12) |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | ND (0.12) |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | ND (0.12) |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | ND (0.12) |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | ND (0.039) | |
| 2-NITROTOLUENE | | | | | | ND (0.12) |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | ND (0.12) |
| ACENAPHTHENE | 3400 | 37000 | 74 | 0.045 J | ND (0.039) | ND (0.041) |
| ACENAPHTHYLENE | | 300000 | | ND (0.04) | ND (0.039) | ND (0.041) |
| ANTHRACENE | 17000 | 30000 | 1500 | 0.16 J | ND (0.039) | ND (0.041) |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | 0.33 J | ND (0.039) | 0.043 J |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | 0.43 | ND (0.039) | 0.068 J |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | 0.23 J | ND (0.039) | ND (0.041) |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | 0.18 J | ND (0.039) | ND (0.041) |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | ***0.35 J*** | ND (0.039) | 0.042 J |
| CHRYSENE | 62 | 230 | 52 | 0.34 J | ND (0.039) | 0.05 J |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | 0.073 J | ND (0.039) | ND (0.041) |
| FLUORANTHENE | 2300 | 24000 | 840 | 0.61 | ND (0.039) | 0.073 J |

Table 4. Summary of Analytical Results - AOC 117 Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-111 | 334-111 | 334-112 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 2 | 0 |
| **Bottom (ft)** | | | | 0 | 2.5 | 0 |
| **Sample ID** | | | | POM-S-334-111 (0-5) | POM-S-334-111(2-2.5) | POM-S-334-112 (0-5) |
| **Lab ID** | | | | 4047604 | 4134534 | 4047605 |
| **Date** | | | | 5/19/03 | 9/30/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| FLUORENE | 2300 | 24000 | 110 | 0.055 J | ND (0.039) | ND (0.041) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | 0.25 J | ND (0.039) | 0.044 J |
| NAPHTHALENE | 6 | 17 | 16 | ND (0.04) | ND (0.039) | ND (0.041) |
| NITROBENZENE | 31 | 340 | 0.2 | | | ND (0.12) |
| PHENANTHRENE | | 300000 | | 0.62 | ND (0.039) | 0.048 J |
| PYRENE | 1700 | 18000 | 550 | 0.7 | ND (0.039) | 0.098 J |

Table 4. Summary of Analytical Results - AOC 117 Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-113 | 334-114 | 334-115 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-S-334-113 (0-5) | POM-S-334-114 (0-5) | POM-S-334-115 (0-5) |
| **Lab ID** | | | | 4047606 | 4047607 | 4047608 |
| **Date** | | | | 5/19/03 | 5/19/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| 1,2-DINITROBENZENE | | | | | ND (0.11) | |
| 1,3,5-TRINITROBENZENE | | | | | ND (0.11) | |
| 1,3-DINITROBENZENE | | | | | ND (0.11) | |
| 1,4-DINITROBENZENE | | | | | ND (0.11) | |
| 1-METHYL-3-NITROBENZENE | | | | | ND (0.11) | |
| 1-METHYL-4-NITROBENZENE | | | | | ND (0.11) | |
| 1-METHYLNAPHTHALENE | | | | | | |
| 1-NITRONAPHTHALENE | | | | | ND (0.11) | |
| 2,4,6-TRINITROTOLUENE | | | | | ND (0.11) | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | ND (0.11) | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | ND (0.11) | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | ND (0.11) | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | |
| 2-NITROTOLUENE | | | | | ND (0.11) | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | ND (0.11) | |
| ACENAPHTHENE | 3400 | 37000 | 74 | ND (0.039) | ND (0.036) | ND (0.049) |
| ACENAPHTHYLENE | | 300000 | | ND (0.039) | ND (0.036) | ND (0.049) |
| ANTHRACENE | 17000 | 30000 | 1500 | 0.089 J | 0.094 J | ND (0.049) |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | 0.2 J | 0.17 J | ND (0.049) |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | 0.24 J | 0.2 J | ND (0.049) |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | 0.13 J | 0.092 J | ND (0.049) |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | 0.1 J | 0.098 J | ND (0.049) |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | 0.2 J | 0.17 J | ND (0.049) |
| CHRYSENE | 62 | 230 | 52 | 0.18 J | 0.18 J | ND (0.049) |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | 0.043 J | ND (0.036) | ND (0.049) |
| FLUORANTHENE | 2300 | 24000 | 840 | 0.37 J | 0.36 | ND (0.049) |

Table 4. Summary of Analytical Results - AOC 117 Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-113 | 334-114 | 334-115 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-S-334-113 (0-5) | POM-S-334-114 (0-5) | POM-S-334-115 (0-5) |
| **Lab ID** | | | | 4047606 | 4047607 | 4047608 |
| **Date** | | | | 5/19/03 | 5/19/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| FLUORENE | 2300 | 24000 | 110 | ND (0.039) | ND (0.036) | ND (0.049) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | 0.14 J | 0.12 J | ND (0.049) |
| NAPHTHALENE | 6 | 17 | 16 | ND (0.039) | ND (0.036) | ND (0.049) |
| NITROBENZENE | 31 | 340 | 0.2 | | ND (0.11) | |
| PHENANTHRENE | | 300000 | | 0.34 J | 0.37 | ND (0.049) |
| PYRENE | 1700 | 18000 | 550 | 0.43 | 0.39 | 0.054 J |

Table 4. Summary of Analytical Results - AOC 117 Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-116 | 334-117 | 334-118 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-S-334-116 (0-5) | POM-S-334-117 (0-5) | POM-S-334-118 (0-5) |
| **Lab ID** | | | | 4047609 | 4047610 | 4047611 |
| **Date** | | | | 5/19/03 | 5/19/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| 1,2-DINITROBENZENE | | | | | | |
| 1,3,5-TRINITROBENZENE | | | | | | |
| 1,3-DINITROBENZENE | | | | | | |
| 1,4-DINITROBENZENE | | | | | | |
| 1-METHYL-3-NITROBENZENE | | | | | | |
| 1-METHYL-4-NITROBENZENE | | | | | | |
| 1-METHYLNAPHTHALENE | | | | | | |
| 1-NITRONAPHTHALENE | | | | | | |
| 2,4,6-TRINITROTOLUENE | | | | | | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | |
| 2-NITROTOLUENE | | | | | | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | |
| ACENAPHTHENE | 3400 | 37000 | 74 | ND (0.29) | ND (0.043) | ND (0.051) |
| ACENAPHTHYLENE | | 300000 | | ND (0.29) | ND (0.043) | ND (0.051) |
| ANTHRACENE | 17000 | 30000 | 1500 | ND (0.29) | ND (0.043) | ND (0.051) |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | ND (0.29) | ND (0.043) | ND (0.051) |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | ND (0.29) | 0.12 J | 0.08 J |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | ND (0.29) | 0.083 J | ND (0.051) |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | ND (0.29) | ND (0.043) | ND (0.051) |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | ND (0.29) | 0.049 J | ND (0.051) |
| CHRYSENE | 62 | 230 | 52 | ND (0.29) | 0.05 J | 0.066 J |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | ND (0.29) | 0.048 J | ND (0.051) |
| FLUORANTHENE | 2300 | 24000 | 840 | ND (0.29) | 0.053 J | 0.088 J |

Table 4. Summary of Analytical Results - AOC 117 Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-116 | 334-117 | 334-118 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-S-334-116 (0-5) | POM-S-334-117 (0-5) | POM-S-334-118 (0-5) |
| **Lab ID** | | | | 4047609 | 4047610 | 4047611 |
| **Date** | | | | 5/19/03 | 5/19/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| FLUORENE | 2300 | 24000 | 110 | ND (0.29) | ND (0.043) | ND (0.051) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | ND (0.29) | 0.067 J | ND (0.051) |
| NAPHTHALENE | 6 | 17 | 16 | ND (0.29) | ND (0.043) | ND (0.051) |
| NITROBENZENE | 31 | 340 | 0.2 | | | |
| PHENANTHRENE | | 300000 | | ND (0.29) | ND (0.043) | 0.078 J |
| PYRENE | 1700 | 18000 | 550 | ND (0.29) | 0.07 J | 0.11 J |

Table 4. Summary of Analytical Results - AOC 117 Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-119 | 334-120 | 334-121 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0.5 |
| **Sample ID** | | | | POM-S-334-119 (0-5) | POM-S-334-120 (0-5) | POM-S-334-121(0-0.5) |
| **Lab ID** | | | | 4047612 | 4047613 | 4134531 |
| **Date** | | | | 5/19/03 | 5/19/03 | 9/30/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| 1,2-DINITROBENZENE | | | | | ND (0.13) | |
| 1,3,5-TRINITROBENZENE | | | | | ND (0.13) | |
| 1,3-DINITROBENZENE | | | | | ND (0.13) | |
| 1,4-DINITROBENZENE | | | | | ND (0.13) | |
| 1-METHYL-3-NITROBENZENE | | | | | ND (0.13) | |
| 1-METHYL-4-NITROBENZENE | | | | | ND (0.13) | |
| 1-METHYLNAPHTHALENE | | | | | | ND (0.057) |
| 1-NITRONAPHTHALENE | | | | | ND (0.13) | |
| 2,4,6-TRINITROTOLUENE | | | | | ND (0.13) | |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | ND (0.13) | |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | ND (0.13) | |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | ND (0.13) | |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | | | ND (0.057) |
| 2-NITROTOLUENE | | | | | ND (0.13) | |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | ND (0.13) | |
| ACENAPHTHENE | 3400 | 37000 | 74 | ND (0.039) | ND (0.045) | ND (0.057) |
| ACENAPHTHYLENE | | 300000 | | ND (0.039) | ND (0.045) | 0.074 J |
| ANTHRACENE | 17000 | 30000 | 1500 | ND (0.039) | ND (0.045) | 0.077 J |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | ND (0.039) | ND (0.045) | 0.28 J |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | ND (0.039) | ND (0.045) | 0.5 J |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | ND (0.039) | ND (0.045) | 0.19 J |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | ND (0.039) | ND (0.045) | ND (0.057) |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | ND (0.039) | ND (0.045) | ***0.26 J*** |
| CHRYSENE | 62 | 230 | 52 | ND (0.039) | ND (0.045) | 0.46 J |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | ND (0.039) | ND (0.045) | 0.059 J |
| FLUORANTHENE | 2300 | 24000 | 840 | ND (0.039) | ND (0.045) | 0.43 J |

Table 4. Summary of Analytical Results - AOC 117 Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-119 | 334-120 | 334-121 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0.5 |
| **Sample ID** | | | | POM-S-334-119 (0-5) | POM-S-334-120 (0-5) | POM-S-334-121(0-0.5) |
| **Lab ID** | | | | 4047612 | 4047613 | 4134531 |
| **Date** | | | | 5/19/03 | 5/19/03 | 9/30/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| FLUORENE | 2300 | 24000 | 110 | ND (0.039) | ND (0.045) | ND (0.057) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | ND (0.039) | ND (0.045) | 0.19 J |
| NAPHTHALENE | 6 | 17 | 16 | ND (0.039) | ND (0.045) | ND (0.057) |
| NITROBENZENE | 31 | 340 | 0.2 | | ND (0.13) | |
| PHENANTHRENE | | 300000 | | ND (0.039) | ND (0.045) | 0.39 J |
| PYRENE | 1700 | 18000 | 550 | ND (0.039) | ND (0.045) | 0.77 |

Table 4. Summary of Analytical Results - AOC 119 - Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-101 | 334-102 | 334-103 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-S-334-101 (0-5) | POM-S-334-102 (0-5) | POM-S-334-103 (0-5) |
| **Lab ID** | | | | 4047594 | 4047595 | 4047596 |
| **Date** | | | | 5/19/03 | 5/19/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| 1,2-DINITROBENZENE | | | | | | ND (0.15) |
| 1,3,5-TRINITROBENZENE | | | | | | ND (0.15) |
| 1,3-DINITROBENZENE | | | | | | ND (0.15) |
| 1,4-DINITROBENZENE | | | | | | ND (0.15) |
| 1-METHYL-3-NITROBENZENE | | | | | | ND (0.15) |
| 1-METHYL-4-NITROBENZENE | | | | | | ND (0.15) |
| 1-NITRONAPHTHALENE | | | | | | ND (0.15) |
| 2,4,6-TRINITROTOLUENE | | | | | | ND (0.15) |
| 2,4-DINITROTOLUENE | 0.7 | 3 | | | | ND (0.15) |
| 2,6-DINITROTOLUENE | 0.7 | 3 | | | | ND (0.15) |
| 2-AMINO-4,6-DINITROTOLUENE | | | | | | ND (0.15) |
| 2-NITROTOLUENE | | | | | | ND (0.15) |
| 4-AMINO-2,6-DINITROTOLUENE | | | | | | ND (0.15) UJ |
| ACENAPHTHENE | 3400 | 37000 | 74 | ND (0.06) | ND (0.049) | ND (0.051) |
| ACENAPHTHYLENE | | 300000 | | 0.085 J | ND (0.049) | 0.12 J |
| ANTHRACENE | 17000 | 30000 | 1500 | 0.078 J | ND (0.049) | 0.1 J |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | 0.31 J | 0.061 J | 0.26 J |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | 0.6 | 0.1 J | 0.6 |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | 0.29 J | 0.062 J | 0.22 J |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | 0.23 J | ND (0.049) | 0.14 J |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | ***0.36 J*** | 0.063 J | ***0.38 J*** |

Table 4. Summary of Analytical Results - AOC 119 - Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-101 | 334-102 | 334-103 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-S-334-101 (0-5) | POM-S-334-102 (0-5) | POM-S-334-103 (0-5) |
| **Lab ID** | | | | 4047594 | 4047595 | 4047596 |
| **Date** | | | | 5/19/03 | 5/19/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| CHRYSENE | 62 | 230 | 52 | 0.47 J | 0.081 J | 0.52 |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | 0.12 J | ND (0.049) | 0.094 J |
| FLUORANTHENE | 2300 | 24000 | 840 | 0.63 | 0.11 J | 0.59 |
| FLUORENE | 2300 | 24000 | 110 | ND (0.06) | ND (0.049) | ND (0.051) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | 0.37 J | 0.061 J | 0.33 J |
| NAPHTHALENE | 6 | 17 | 16 | ND (0.06) | ND (0.049) | ND (0.051) |
| NITROBENZENE | 31 | 340 | 0.2 | | | ND (0.15) |
| PHENANTHRENE | | 300000 | | 0.47 J | 0.083 J | 0.48 J |
| PYRENE | 1700 | 18000 | 550 | 0.88 | 0.15 J | 0.96 |

Table 4. Summary of Analytical Results - Road Bed AOC - Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-RB-1 | 334-RB-2 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 2 | 1.4 |
| **Sample ID** | | | | POM-S-334-RB-1(0.0-2.0) | POM-S-334-RB-2(0.0-1.4)-DUP |
| **Lab ID** | | | | 5237624 | 5237629 |
| **Date** | | | | 12/12/07 | 12/13/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| 1-METHYLNAPHTHALENE | | | | ND (0.04) | ND (0.04) |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | ND (0.04) | ND (0.04) |
| ACENAPHTHENE | 3400 | 37000 | 74 | ND (0.04) | ND (0.04) |
| ACENAPHTHYLENE | | 300000 | | ND (0.04) | ND (0.04) |
| ANTHRACENE | 17000 | 30000 | 1500 | ND (0.04) | ND (0.04) |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | ND (0.04) | ND (0.04) |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | ND (0.04) | ND (0.04) |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | ND (0.04) | ND (0.04) |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | ND (0.04) | ND (0.04) |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | ND (0.04) | ND (0.04) |
| CHRYSENE | 62 | 230 | 52 | ND (0.04) | ND (0.04) |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | ND (0.04) | ND (0.04) |
| FLUORANTHENE | 2300 | 24000 | 840 | ND (0.04) | ND (0.04) |
| FLUORENE | 2300 | 24000 | 110 | ND (0.04) | ND (0.04) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | ND (0.04) | ND (0.04) |
| NAPHTHALENE | 6 | 17 | 16 | ND (0.04) | ND (0.04) |
| PHENANTHRENE | | 300000 | | ND (0.04) | ND (0.04) |
| PYRENE | 1700 | 18000 | 550 | ND (0.04) | 0.044 J |

Table 4. Summary of Analytical Results - Road Bed AOC - Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-RB-2 | 334-RB-3 | 334-RB-4 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 1.4 | 3.3 | 1.3 |
| **Sample ID** | | | | POM-S-334-RB-2(0.0-1.4) | POM-S-334-RB-3(0.0-3.3) | POM-S-334-RB-4(0.0-1.3) |
| **Lab ID** | | | | 5237625 | 5237630 | 5237631 |
| **Date** | | | | 12/13/07 | 12/13/07 | 12/13/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| 1-METHYLNAPHTHALENE | | | | ND (0.039) | ND (0.038) | ND (0.04) |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | ND (0.039) | ND (0.038) | ND (0.04) |
| ACENAPHTHENE | 3400 | 37000 | 74 | ND (0.039) | ND (0.038) | ND (0.04) |
| ACENAPHTHYLENE | | 300000 | | ND (0.039) | ND (0.038) | ND (0.04) |
| ANTHRACENE | 17000 | 30000 | 1500 | ND (0.039) | ND (0.038) | ND (0.04) |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | ND (0.039) | ND (0.038) | ND (0.04) |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | ND (0.039) | ND (0.038) | ND (0.04) |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | ND (0.039) | ND (0.038) | ND (0.04) |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | ND (0.039) | ND (0.038) | ND (0.04) |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | ND (0.039) | ND (0.038) | ND (0.04) |
| CHRYSENE | 62 | 230 | 52 | ND (0.039) | ND (0.038) | ND (0.04) |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | ND (0.039) | ND (0.038) | ND (0.04) |
| FLUORANTHENE | 2300 | 24000 | 840 | ND (0.039) | ND (0.038) | ND (0.04) |
| FLUORENE | 2300 | 24000 | 110 | ND (0.039) | ND (0.038) | ND (0.04) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | ND (0.039) | ND (0.038) | ND (0.04) |
| NAPHTHALENE | 6 | 17 | 16 | ND (0.039) | ND (0.038) | ND (0.04) |
| PHENANTHRENE | | 300000 | | ND (0.039) | ND (0.038) | ND (0.04) |
| PYRENE | 1700 | 18000 | 550 | ND (0.039) | ND (0.038) | ND (0.04) |

Table 4. Summary of Analytical Results - Road Bed AOC - Polynuclear Aromatic Hydrocarbons

| **Location (Boring ID)** | | | | 334-RB-5 | 334-RB-6 | 334-RB-7 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 1.7 | 1.2 | 1.4 |
| **Sample ID** | | | | POM-S-334-RB-5(0.0-1.7) | POM-S-334-RB-6(0.0-1.2) | POM-S-334-RB-7(0.0-1.4) |
| **Lab ID** | | | | 5237632 | 5237633 | 5237634 |
| **Date** | | | | 12/14/07 | 12/14/07 | 12/14/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| 1-METHYLNAPHTHALENE | | | | ND (0.039) | ND (0.04) | ND (0.04) |
| 2-METHYLNAPHTHALENE | 230 | 2400 | 5 | ND (0.039) | ND (0.04) | ND (0.04) |
| ACENAPHTHENE | 3400 | 37000 | 74 | ND (0.039) | ND (0.04) | ND (0.04) |
| ACENAPHTHYLENE | | 300000 | | ND (0.039) | ND (0.04) | ND (0.04) |
| ANTHRACENE | 17000 | 30000 | 1500 | ND (0.039) | ND (0.04) | ND (0.04) |
| BENZO(A)ANTHRACENE | 0.6 | 2 | 0.5 | 0.13 J | ND (0.04) | ND (0.04) |
| BENZO(B)FLUORANTHENE | 0.6 | 2 | 2 | 0.17 J | ND (0.04) | ND (0.04) |
| BENZO(G,H,I)PERYLENE | 380000 | 30000 | | 0.088 J | ND (0.04) | ND (0.04) |
| BENZO(K)FLUORANTHENE | 6 | 23 | 16 | 0.07 J | ND (0.04) | ND (0.04) |
| BENZO[A]PYRENE | 0.2 | 0.2 | 0.2 | 0.12 J | ND (0.04) | ND (0.04) |
| CHRYSENE | 62 | 230 | 52 | 0.14 J | ND (0.04) | ND (0.04) |
| DIBENZ(A,H)ANTHRACENE | 0.2 | 0.2 | 0.5 | ND (0.039) | ND (0.04) | ND (0.04) |
| FLUORANTHENE | 2300 | 24000 | 840 | 0.14 J | ND (0.04) | ND (0.04) |
| FLUORENE | 2300 | 24000 | 110 | ND (0.039) | ND (0.04) | ND (0.04) |
| INDENO (1,2,3-CD) PYRENE | 0.6 | 2 | 5 | 0.077 J | ND (0.04) | ND (0.04) |
| NAPHTHALENE | 6 | 17 | 16 | ND (0.039) | ND (0.04) | ND (0.04) |
| PHENANTHRENE | | 300000 | | 0.046 J | ND (0.04) | ND (0.04) |
| PYRENE | 1700 | 18000 | 550 | 0.17 J | ND (0.04) | 0.048 J |

**Notes:**

NJ RDC SRS - New Jersey Residential Direct Contact Soil Remediation Standards, November 2009

NJ NRDC SRS - New Jersey Non-Residential Direct Contact Soil Remediation Standards, November 2009

NJ IGW SRS - New Jersey Impact to Ground Water Soil Remediation Standards, November 2009

**5** - Bold typeface, exceeds NJ RDC SRS

*5* - Italicized typeface, exceeds NJ NRDC SRS

5 - Underlined typeface, exceeds NJ IGW SRS

ft - feet

mg/kg - milligrams per kilogram

DUP - Duplicate sample

U - Compound not detected at reported detection limit

J - Compound was detected at an estimated value between the PQL & MDL

ND - Not detected at reported detection limit

Blank Cells – Not Analyzed/Not Applicable

Grey Highlighted Cells – PQL is greater than the respective criteria: RDC SRS, NRDC SRS, IGW SRS

ND (NS) – No PQL set

X - Unknown isomer of the compound

A - TIC is a possible aldol-condensation product

B - Analyte was also detected in the blank

ND/ND() - No PQL recorded

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-104 | 334-104 | 334-104 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 3 | 6 |
| **Bottom (ft)** | | | | 0 | 3.5 | 6.5 |
| **Sample ID** | | | | POM-S-334-104 (0-5) | POM-S-334-104(3.0-3.5) | POM-S-334-104(6.0-6.5) |
| **Lab ID** | | | | 4047597 | 4604733 | 4604749 |
| **Date** | | | | 5/19/03 | 9/13/05 | 9/13/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | ND (0.931) | ND (0.913) UJ | |
| ARSENIC | 19 | 19 | 19 | ***51.6*** | 4.63 | 2.38 J |
| BERYLLIUM | 16 | 140 | 0.5 | 0.858 | 1.08 | |
| CADMIUM | 78 | 78 | 1 | ND (0.0762) | ND (0.479) | |
| CHROMIUM | | | | 31.2 | 38.7 | |
| COPPER | 3100 | 45000 | 7300 | 47.2 | 8.96 | |
| LEAD | 400 | 800 | 59 | 261 | 15.2 | |
| MERCURY | 23 | 65 | 0.1 | 1.83 | 0.0126 J | |
| NICKEL | 1600 | 23000 | 31 | 18.3 | 15.4 | |
| SELENIUM | 390 | 5700 | 7 | 3.24 | ND (1.07) | |
| SILVER | 390 | 5700 | 1 | 0.274 J | 0.47 J | |
| THALLIUM | 5 | 79 | 3 | ND (1.31) | 4.65 | |
| ZINC | 23000 | 110000 | 600 | 264 | 72.9 | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-104 | 334-104 | 334-105 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 3 | 6 | 0 |
| **Bottom (ft)** | | | | 3.5 | 6.5 | 0 |
| **Sample ID** | | | | POM-S-334-104-3.0-3.5 | POM-S-334-104-6.0-6.5 | POM-S-334-105 (0-5) |
| **Lab ID** | | | | 334104 | 334104 | 4047598 |
| **Date** | | | | 9/13/05 | 9/13/05 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | ***20.5*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | 58.2 |
| LEAD | 400 | 800 | 59 | 13.706 | 11.555 | 254 |
| MERCURY | 23 | 65 | 0.1 | | | 0.742 |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-105 | 334-105 | 334-105-D |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 3 | 6 | 3 |
| **Bottom (ft)** | | | | 3.5 | 6.5 | 3.5 |
| **Sample ID** | | | | POM-S-334-105-3.0-3.5 | POM-S-334-105-6.0-6.5 | POM-S-334-105(3.0-3.5) |
| **Lab ID** | | | | 334105 | 334105 | 4604750 |
| **Date** | | | | 9/13/05 | 9/13/05 | 9/13/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | 2.04 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 5.883 | 17.004 | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-105-D | 334-106 | 334-106 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 6 | 0 | 3 |
| **Bottom (ft)** | | | | 6.5 | 0 | 3.5 |
| **Sample ID** | | | | POM-S-334-105(6.0-6.5) | POM-S-334-106 (0-5) | POM-S-334-106-3.0-3.5 |
| **Lab ID** | | | | 4604751 | 4047599 | 334106 |
| **Date** | | | | 9/13/05 | 5/19/03 | 9/13/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 2.7 | ***114*** | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | 98.9 | |
| LEAD | 400 | 800 | 59 | | 379 | 26.715 |
| MERCURY | 23 | 65 | 0.1 | | 2.01 | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-106 | 334-106 | 334-106 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 6 | 0.5 | 0.5 |
| **Bottom (ft)** | | | | 6.5 | 1 | 1 |
| **Sample ID** | | | | POM-S-334-106-6.0-6.5 | POM-S-334-106-0.5-1.0 | POM-S-334-106(0.5-1.0) |
| **Lab ID** | | | | 334106 | 334106 | 4626016 |
| **Date** | | | | 9/13/05 | 9/30/05 | 10/10/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 0.955 | 69.848 | 75.5 J |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-106-D | 334-106-D | 334-107 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 3 | 6 | 0 |
| **Bottom (ft)** | | | | 3.5 | 6.5 | 0 |
| **Sample ID** | | | | POM-S-334-106(3.0-3.5) | POM-S-334-106(6.0-6.5) | POM-S-334-107 (0-5) |
| **Lab ID** | | | | 4604752 | 4604753 | 4047600 |
| **Date** | | | | 9/13/05 | 9/13/05 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | ND (0.759) |
| ARSENIC | 19 | 19 | 19 | 3.84 | 1.37 J | ***28.4*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | 0.647 |
| CADMIUM | 78 | 78 | 1 | | | ND (0.0621) |
| CHROMIUM | | | | | | 10.8 |
| COPPER | 3100 | 45000 | 7300 | | | 24.3 |
| LEAD | 400 | 800 | 59 | | | 135 |
| MERCURY | 23 | 65 | 0.1 | | | 0.309 |
| NICKEL | 1600 | 23000 | 31 | | | 10.2 |
| SELENIUM | 390 | 5700 | 7 | | | 2.6 |
| SILVER | 390 | 5700 | 1 | | | 0.177 J |
| THALLIUM | 5 | 79 | 3 | | | 1.66 B |
| ZINC | 23000 | 110000 | 600 | | | 35.2 |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-107 | 334-107 | 334-107 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 3 | 6 | 3 |
| **Bottom (ft)** | | | | 3.5 | 6.5 | 3.5 |
| **Sample ID** | | | | POM-S-334-107-3.0-3.5 | POM-S-334-107-6.0-6.5 | POM-S-334-107(3.0-3.5) |
| **Lab ID** | | | | 334107 | 334107 | 4604754 |
| **Date** | | | | 9/13/05 | 9/13/05 | 9/13/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | 1.83 J |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 9.433 | 46.064 | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-107 | 334-108 | 334-108 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 6 | 0 | 3 |
| **Bottom (ft)** | | | | 6.5 | 0 | 3.5 |
| **Sample ID** | | | | POM-S-334-107(6.0-6.5) | POM-S-334-108 (0-5) | POM-S-334-108-3.0-3.5 |
| **Lab ID** | | | | 4604755 | 4047601 | 334108 |
| **Date** | | | | 9/13/05 | 5/19/03 | 9/13/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 4.27 | 5.29 | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | 36.1 | |
| LEAD | 400 | 800 | 59 | | 103 | 9.384 |
| MERCURY | 23 | 65 | 0.1 | | 0.181 | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-108 | 334-108 | 334-108 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 6 | 3 | 6 |
| **Bottom (ft)** | | | | 6.5 | 3.5 | 6.5 |
| **Sample ID** | | | | POM-S-334-108-6.0-6.5 | POM-S-334-108(3.0-3.5) | POM-S-334-108(6.0-6.5) |
| **Lab ID** | | | | 334108 | 4604756 | 4604757 |
| **Date** | | | | 9/13/05 | 9/13/05 | 9/13/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | 1.36 J | ND (0.789) |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 3.29 | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-109 | 334-109 | 334-109 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 3 | 6 |
| **Bottom (ft)** | | | | 0 | 3.5 | 6.5 |
| **Sample ID** | | | | POM-S-334-109 (0-5) | POM-S-334-109-3.0-3.5 | POM-S-334-109-6.0-6.5 |
| **Lab ID** | | | | 4047602 | 334109 | 334109 |
| **Date** | | | | 5/19/03 | 9/13/05 | 9/13/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 17.5 | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | 18.2 | | |
| LEAD | 400 | 800 | 59 | 18.8 | 10.6 | 7.163 |
| MERCURY | 23 | 65 | 0.1 | 0.0955 J | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-109 | 334-109 | 334-109 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 3 | 3 | 6 |
| **Bottom (ft)** | | | | 3.5 | 3.5 | 6.5 |
| **Sample ID** | | | | POM-S-334-109(3.0-3.5)-DUP | POM-S-334-109(3.0-3.5) | POM-S-334-109(6.0-6.5) |
| **Lab ID** | | | | 4604738 | 4604734 | 4604758 |
| **Date** | | | | 9/13/05 | 9/13/05 | 9/13/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | ND (0.884) UJ | ND (0.872) UJ | |
| ARSENIC | 19 | 19 | 19 | 1.17 J | 1.7 J | 1.46 J |
| BERYLLIUM | 16 | 140 | 0.5 | 0.448 J | 0.404 J | |
| CADMIUM | 78 | 78 | 1 | ND (0.0927) | ND (0.0915) | |
| CHROMIUM | | | | 21.1 | 18.1 | |
| COPPER | 3100 | 45000 | 7300 | 9.1 | 8.25 | |
| LEAD | 400 | 800 | 59 | 3.33 | 3.07 | |
| MERCURY | 23 | 65 | 0.1 | ND (0.0029) | 0.0053 J | |
| NICKEL | 1600 | 23000 | 31 | 11.8 | 10.6 | |
| SELENIUM | 390 | 5700 | 7 | ND (1.03) | ND (1.02) | |
| SILVER | 390 | 5700 | 1 | 0.249 J | 0.221 J | |
| THALLIUM | 5 | 79 | 3 | ND (1.03) | ND (1.02) | |
| ZINC | 23000 | 110000 | 600 | 30.3 | 32.9 | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-110 | 334-110 | 334-110 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 7 | 6 |
| **Bottom (ft)** | | | | 0 | 7.5 | 6.5 |
| **Sample ID** | | | | POM-S-334-110 (0-5) | POM-S-334-110-7-7.5 | POM-S-334-110(6-6.5) |
| **Lab ID** | | | | 4047603 | 334110 | 4134532 |
| **Date** | | | | 5/19/03 | 9/29/03 | 9/30/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | ND (0.812) | | ND (0.703) |
| ARSENIC | 19 | 19 | 19 | 5.12 | | 2.58 |
| BERYLLIUM | 16 | 140 | 0.5 | 0.561 J | | 0.495 J |
| CADMIUM | 78 | 78 | 1 | 0.4 J | | ND (0.288) |
| CHROMIUM | | | | 14.9 | | 18.8 |
| COPPER | 3100 | 45000 | 7300 | 43.3 | 53.668 | 20.9 |
| LEAD | 400 | 800 | 59 | 259 | ND () | 12 |
| MERCURY | 23 | 65 | 0.1 | 0.112 J | ND () | ND (0.003) |
| NICKEL | 1600 | 23000 | 31 | 16.2 | | 17.1 |
| SELENIUM | 390 | 5700 | 7 | 1.29 | | ND (0.501) |
| SILVER | 390 | 5700 | 1 | ND (0.185) | | ND (0.16) |
| THALLIUM | 5 | 79 | 3 | 1.87 B | | ND (0.991) |
| ZINC | 23000 | 110000 | 600 | 323 | | 42.2 |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-110 | 334-111 | 334-111 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 0 | 2 |
| **Bottom (ft)** | | | | 2.5 | 0 | 2.5 |
| **Sample ID** | | | | POM-S-334-110(2-2.5) | POM-S-334-111 (0-5) | POM-S-334-111-2-2.5 |
| **Lab ID** | | | | 4134533 | 4047604 | 334111 |
| **Date** | | | | 9/30/03 | 5/19/03 | 9/29/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | ND (0.793) | | |
| ARSENIC | 19 | 19 | 19 | 4.93 | 2.46 B | |
| BERYLLIUM | 16 | 140 | 0.5 | 0.771 | | |
| CADMIUM | 78 | 78 | 1 | ND (0.324) | | |
| CHROMIUM | | | | 25.7 | | |
| COPPER | 3100 | 45000 | 7300 | 15.9 | 26.8 | 28.264 |
| LEAD | 400 | 800 | 59 | 9.73 | 144 | 10.775 |
| MERCURY | 23 | 65 | 0.1 | 0.0231 J | 0.0716 J | ND () |
| NICKEL | 1600 | 23000 | 31 | 18.9 | | |
| SELENIUM | 390 | 5700 | 7 | 1.24 | | |
| SILVER | 390 | 5700 | 1 | ND (0.18) | | |
| THALLIUM | 5 | 79 | 3 | ND (1.12) | | |
| ZINC | 23000 | 110000 | 600 | 135 | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-111 | 334-111 | 334-112 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 7 | 0 |
| **Bottom (ft)** | | | | 2.5 | 7.5 | 0 |
| **Sample ID** | | | | POM-S-334-111(2-2.5) | POM-S-334-111(7-7.5) | POM-S-334-112 (0-5) |
| **Lab ID** | | | | 4134534 | 4134503 | 4047605 |
| **Date** | | | | 9/30/03 | 9/30/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 2.03 | 7.21 | 9.32 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | 46.2 |
| LEAD | 400 | 800 | 59 | | | ***1090*** |
| MERCURY | 23 | 65 | 0.1 | | | 0.311 |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-113 | 334-114 | 334-115 | 334-116 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 | 0 |
| **Sample ID** | | | | POM-S-334-113 (0-5) | POM-S-334-114 (0-5) | POM-S-334-115 (0-5) | POM-S-334-116 (0-5) |
| **Lab ID** | | | | 4047606 | 4047607 | 4047608 | 4047609 |
| **Date** | | | | 5/19/03 | 5/19/03 | 5/19/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | ND (0.778) | | | ND (1.09) |
| ARSENIC | 19 | 19 | 19 | 1.54 B | 2.04 B | 6.63 | 8.37 |
| BERYLLIUM | 16 | 140 | 0.5 | 0.723 | | | 0.242 J |
| CADMIUM | 78 | 78 | 1 | ND (0.0637) | | | ND (0.0889) |
| CHROMIUM | | | | 16.2 | | | 7.32 |
| COPPER | 3100 | 45000 | 7300 | 26.5 | 43.5 | 16 | 36.4 |
| LEAD | 400 | 800 | 59 | 85.7 | 225 | 55.1 | 117 |
| MERCURY | 23 | 65 | 0.1 | 0.0531 J | 0.0884 J | 0.278 | 0.696 |
| NICKEL | 1600 | 23000 | 31 | 14.8 | | | 6.44 |
| SELENIUM | 390 | 5700 | 7 | 0.601 J | | | 2.36 |
| SILVER | 390 | 5700 | 1 | ND (0.177) | | | ND (0.247) |
| THALLIUM | 5 | 79 | 3 | 2.73 B | | | 2.6 B |
| ZINC | 23000 | 110000 | 600 | 76.4 | | | 38.8 |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-117 | 334-118 | 334-119 | 334-120 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 | 0 |
| **Sample ID** | | | | POM-S-334-117 (0-5) | POM-S-334-118 (0-5) | POM-S-334-119 (0-5) | POM-S-334-120 (0-5) |
| **Lab ID** | | | | 4047610 | 4047611 | 4047612 | 4047613 |
| **Date** | | | | 5/19/03 | 5/19/03 | 5/19/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | ND (0.789) | ND (0.865) |
| ARSENIC | 19 | 19 | 19 | 4.9 | 8.7 | 4.4 | 2.07 B |
| BERYLLIUM | 16 | 140 | 0.5 | | | 0.654 | 0.641 J |
| CADMIUM | 78 | 78 | 1 | | | ND (0.0645) | ND (0.0708) |
| CHROMIUM | | | | | | 20.5 | 19.1 |
| COPPER | 3100 | 45000 | 7300 | 16.1 | 19.1 | 17.3 | 13.4 |
| LEAD | 400 | 800 | 59 | 43.3 | 60.6 | 81 | 240 |
| MERCURY | 23 | 65 | 0.1 | 0.13 | 0.467 | 0.0636 J | 0.115 J |
| NICKEL | 1600 | 23000 | 31 | | | 17.8 | 11.8 |
| SELENIUM | 390 | 5700 | 7 | | | 0.563 J | 1 J |
| SILVER | 390 | 5700 | 1 | | | ND (0.179) | 0.367 J |
| THALLIUM | 5 | 79 | 3 | | | 2.3 B | 2.4 B |
| ZINC | 23000 | 110000 | 600 | | | 62.8 | 59.1 |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-121 | 334-121 | 334-121 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 2 | 6.5 |
| **Bottom (ft)** | | | | 0.5 | 2.5 | 7 |
| **Sample ID** | | | | POM-S-334-121(0-0.5) | POM-S-334-121(2-2.5) | POM-S-334-121(6.5-7.0) |
| **Lab ID** | | | | 4134531 | 4134501 | 4134502 |
| **Date** | | | | 9/30/03 | 9/30/03 | 9/30/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 10.6 | 1.51 | 1.79 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-121 | 334-121 | 334-121 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 2 | 6.5 |
| **Bottom (ft)** | | | | 0.5 | 2.5 | 7 |
| **Sample ID** | | | | POM-S-334-121-0-0.5 | POM-S-334-121-2-2.5 | POM-S-334-121-6.5-7 |
| **Lab ID** | | | | 334121 | 334121 | 334121 |
| **Date** | | | | 10/3/03 | 10/3/03 | 10/3/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | 216.917 | 11.371 | 35.174 |
| LEAD | 400 | 800 | 59 | 382.874 | 2.985 | ND () |
| MERCURY | 23 | 65 | 0.1 | 7.612 | ND () | ND () |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-122 | 334-123 | 334-124 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-122(0.0-0.5) | POM-S-334-123(0.0-0.5) | POM-S-334-124(0.0-0.5) |
| **Lab ID** | | | | 4610414 | 4610415 | 4610416 |
| **Date** | | | | 9/19/05 | 9/19/05 | 9/19/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | 0.449 J | 0.253 J | 0.265 J |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-125 | 334-126 | 334-127 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-125(0.0-0.5) | POM-S-334-126(0.0-0.5) | POM-S-334-127(0.0-0.5) |
| **Lab ID** | | | | 4610417 | 4610406 | 4610407 |
| **Date** | | | | 9/19/05 | 9/19/05 | 9/19/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | 0.354 J | 0.14 J | 0.19 J |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-128 | 334-129 | 334-130 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-128(0.0-0.5) | POM-S-334-129(0.0-0.5) | POM-S-334-130(0.0-0.5) |
| **Lab ID** | | | | 4610408 | 4610409 | 4610410 |
| **Date** | | | | 9/19/05 | 9/19/05 | 9/19/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | 0.16 J | 0.217 J | 0.158 J |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-131 | 334-132 | 334-133 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-131(0.0-0.5) | POM-S-334-132(0.0-0.5) | POM-S-334-133(0.0-0.5) |
| **Lab ID** | | | | 4610411 | 4610412 | 4610413 |
| **Date** | | | | 9/19/05 | 9/19/05 | 9/19/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | 0.43 J | 0.307 J | 0.281 J |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-134 | 334-134 | 334-135 | 334-135 | 334-136 |
|---|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0.5 | 0 | 0.5 | 0 |
| **Sample ID** | | | | POM-S-334-134 | POM-S-334-134 | POM-S-334-135 | POM-S-334-135 | POM-S-334-136 |
| **Lab ID** | | | | 4436425 | 334134 | 4436426 | 334135 | 4436427 |
| **Date** | | | | 12/2/04 | 12/13/04 | 12/2/04 | 12/13/04 | 12/2/04 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | | |
| ARSENIC | 19 | 19 | 19 | | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | | |
| CADMIUM | 78 | 78 | 1 | | | | | |
| CHROMIUM | | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | 43.038 | | 43.933 | |
| LEAD | 400 | 800 | 59 | 162 | 174.448 | 170 | 229.644 | 67.9 |
| MERCURY | 23 | 65 | 0.1 | | ND () | | 1.366 | |
| NICKEL | 1600 | 23000 | 31 | | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | | |
| SILVER | 390 | 5700 | 1 | | | | | |
| THALLIUM | 5 | 79 | 3 | | | | | |
| ZINC | 23000 | 110000 | 600 | | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-136 | 334-136 | 334-137 | 334-137 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0.5 | 0 | 0.5 |
| **Sample ID** | | | | POM-S-334-136-DUP | POM-S-334-136 | POM-S-334-137 | POM-S-334-137 |
| **Lab ID** | | | | 4436428 | 334136 | 4436429 | 334137 |
| **Date** | | | | 12/2/04 | 12/13/04 | 12/2/04 | 12/13/04 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | 23.395 | | 27.628 |
| LEAD | 400 | 800 | 59 | 78.4 | 85.187 | 54.1 | 57.023 |
| MERCURY | 23 | 65 | 0.1 | | ND () | | ND () |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-138 | 334-139 | 334-140 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-138(0.0-0.5) | POM-S-334-139(0.0-0.5) | POM-S-334-140(0.0-0.5)-DUP |
| **Lab ID** | | | | 4610418 | 4610422 | 4610425 |
| **Date** | | | | 9/19/05 | 9/19/05 | 9/19/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | 0.229 J | 0.353 J | 0.303 J |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-140 | 334-141 | 334-142 | 334-143 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0 |
| **Sample ID** | | | | POM-S-334-140(0.0-0.5) | POM-S-334-141(0.0-0.5) | POM-S-334-142 | POM-S-334-143 |
| **Lab ID** | | | | 4610423 | 4610564 | 334142 | 4436431 |
| **Date** | | | | 9/19/05 | 9/19/05 | 12/13/04 | 12/3/04 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | 8.05 |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | 49.17 | |
| LEAD | 400 | 800 | 59 | | | **682.259** | 111 |
| MERCURY | 23 | 65 | 0.1 | | | ND () | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | 0.29 J | 0.297 J | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-143 | 334-144 | 334-144 | 334-145 | 334-145 |
|---|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0 | 0.5 | 0 | 0.5 |
| **Sample ID** | | | | POM-S-334-143 | POM-S-334-144 | POM-S-334-144 | POM-S-334-145 | POM-S-334-145 |
| **Lab ID** | | | | 334143 | 4436435 | 334144 | 4436436 | 334145 |
| **Date** | | | | 12/13/04 | 12/3/04 | 12/13/04 | 12/3/04 | 12/13/04 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | | |
| ARSENIC | 19 | 19 | 19 | | 7.73 | | 4.91 | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | | |
| CADMIUM | 78 | 78 | 1 | | | | | |
| CHROMIUM | | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | 40.474 | | 35.82 | | 27.386 |
| LEAD | 400 | 800 | 59 | 135.616 | 63.3 | 54.609 | 34.9 | 32.053 |
| MERCURY | 23 | 65 | 0.1 | ND () | | 4.559 | | ND () |
| NICKEL | 1600 | 23000 | 31 | | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | | |
| SILVER | 390 | 5700 | 1 | | | | | |
| THALLIUM | 5 | 79 | 3 | | | | | |
| ZINC | 23000 | 110000 | 600 | | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-146 | 334-146 | 334-147 | 334-148 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-146 | POM-S-334-146 | POM-S-334-147 | POM-S-334-148 |
| **Lab ID** | | | | 4436437 | 334146 | 334147 | 334148 |
| **Date** | | | | 12/3/04 | 12/13/04 | 12/13/04 | 12/13/04 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | 6.28 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | 120.455 | 162.886 | 392.09 |
| LEAD | 400 | 800 | 59 | 167 | 288.41 | **760.283** | ***9298.348*** |
| MERCURY | 23 | 65 | 0.1 | | ND () | ND () | ND () |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-148 | 334-148 | 334-148 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0.5 | 1 | 1 |
| **Bottom (ft)** | | | | 1 | 1.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-148-0.5-1.0 | POM-S-334-148(1.0-1.5) | POM-S-334-148-1.0-1.5 |
| **Lab ID** | | | | 334148 | 4641865 | 334148 |
| **Date** | | | | 10/20/05 | 10/27/05 | 10/27/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***5452.279*** | 57.8 | 57.317 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-149 | 334-149 | 334-150 | 334-151 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-149 | POM-S-334-149 | POM-S-334-150(0.0-0.5) | POM-S-334-151(0.0-0.5) |
| **Lab ID** | | | | 4436438 | 334149 | 4603323 | 4603324 |
| **Date** | | | | 12/3/04 | 12/13/04 | 9/14/05 | 9/14/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | 4.99 | | 2.91 J | 5.99 J |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | 80.274 | | |
| LEAD | 400 | 800 | 59 | 53.2 | 119.543 | | |
| MERCURY | 23 | 65 | 0.1 | | ND () | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-152 | 334-153 | 334-154 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-152(0.0-0.5) | POM-S-334-153(0.0-0.5) | POM-S-334-154(0.0-0.5) |
| **Lab ID** | | | | 4603325 | 4603326 | 4603327 |
| **Date** | | | | 9/14/05 | 9/14/05 | 9/14/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 2.52 J | 11.5 J | 5.44 J |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-155 | 334-156 | 334-157 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-155(0.0-0.5) | POM-S-334-156(0.0-0.5) | POM-S-334-157(0.0-0.5) |
| **Lab ID** | | | | 4603328 | 4603329 | 4603330 |
| **Date** | | | | 9/14/05 | 9/14/05 | 9/14/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 5.91 J | 5.4 J | 4.06 J |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-158 | 334-158 | 334-158 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-158(0.0-0.5) | POM-S-334-158(0.0-0.5) | POM-S-334-158 |
| **Lab ID** | | | | 4603331 | 4617731 | 334158 |
| **Date** | | | | 9/14/05 | 9/14/05 | 9/14/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***27.1 J*** | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | 327 J | 395.504 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-159 | 334-159 | 334-159 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-159(0.0-0.5) | POM-S-334-159(0.0-0.5) | POM-S-334-159 |
| **Lab ID** | | | | 4603332 | 4617732 | 334159 |
| **Date** | | | | 9/14/05 | 9/14/05 | 9/14/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***27.4 J*** | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | 289 J | 390.324 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-160 | 334-160 | 334-160 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-160(0.0-0.5) | POM-S-334-160(0.0-0.5) | POM-S-334-160 |
| **Lab ID** | | | | 4603333 | 4617733 | 334160 |
| **Date** | | | | 9/14/05 | 9/14/05 | 9/14/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***23.8 J*** | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | 227 J | 300.252 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-161 | 334-161 | 334-161 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-161(0.0-0.5)-DUP | POM-S-334-161(0.0-0.5) | POM-S-334-161(0.0-0.5) |
| **Lab ID** | | | | 4603338 | 4603334 | 4617734 |
| **Date** | | | | 9/14/05 | 9/14/05 | 9/14/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***25.7 J*** | ***28.2 J*** | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | **438 J** | **508 J** | 186 J |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-161 | 334-162 | 334-162 | 334-162 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-161 | POM-S-334-162(0.0-0.5) | POM-S-334-162(0.0-0.5) | POM-S-334-162 |
| **Lab ID** | | | | 334161 | 4603339 | 4617735 | 334162 |
| **Date** | | | | 9/14/05 | 9/14/05 | 9/14/05 | 9/14/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | 10.3 J | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 264.566 | | 222 J | 373.206 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-163 | 334-163 | 334-164 | 334-164 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-163(0.0-0.5) | POM-S-334-163 | POM-S-334-164(0.0-0.5) | POM-S-334-164 |
| **Lab ID** | | | | 4603340 | 334163 | 4603341 | 334164 |
| **Date** | | | | 9/14/05 | 9/14/05 | 9/14/05 | 9/14/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | 8.38 J | | ***20.4 J*** | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | | **754.213** | | ***4526.498*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-165 | 334-165 | 334-166 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-165(0.0-0.5) | POM-S-334-165 | POM-S-334-166(0.0-0.5) |
| **Lab ID** | | | | 4603342 | 334165 | 4603343 |
| **Date** | | | | 9/14/05 | 9/14/05 | 9/14/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 10.8 J | | 7.04 J |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 395 J | **497.214** | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-167 | 334-168 | 334-169 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-167(0.0-0.5) | POM-S-334-168(0.0-0.5) | POM-S-334-169(0.0-0.5) |
| **Lab ID** | | | | 4603344 | 4603345 | 4603357 |
| **Date** | | | | 9/14/05 | 9/14/05 | 9/14/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 16 J | 15.9 J | 10.1 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-170 | 334-171 | 334-172 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-170(0.0-0.5) | POM-S-334-171(0.0-0.5) | POM-S-334-172(0.0-0.5) |
| **Lab ID** | | | | 4603358 | 4603359 | 4603360 |
| **Date** | | | | 9/14/05 | 9/14/05 | 9/14/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 12.1 | 15.3 | 8.25 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-173 | 334-182 | 334-182 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-173(0.0-0.5) | POM-S-334-182(0.0-0.5) | POM-S-334-182(0.0-0.5) |
| **Lab ID** | | | | 4603361 | 4738160 | 4734765 |
| **Date** | | | | 9/14/05 | 3/15/06 | 3/21/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 8.28 | | 15.2 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | 148 | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-183 | 334-183 | 334-184 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-183(0.0-0.5) | POM-S-334-183(0.0-0.5) | POM-S-334-184(0.0-0.5) |
| **Lab ID** | | | | 4738161 | 4734766 | 4738162 |
| **Date** | | | | 3/15/06 | 3/21/06 | 3/15/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | 12.4 | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 155 | | 39.1 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-184 | 334-185 | 334-185 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-184(0.0-0.5) | POM-S-334-185(0.0-0.5) | POM-S-334-185(0.0-0.5) |
| **Lab ID** | | | | 4734767 | 4738163 | 4734768 |
| **Date** | | | | 3/21/06 | 3/15/06 | 3/21/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 13.6 | | 18.5 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | 76.6 | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-186 | 334-187 | 334-188 | 334-188 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-186 | POM-S-334-187 | POM-S-334-188(0.0-0.5) | POM-S-334-188 |
| **Lab ID** | | | | 334186 | 334187 | 4617736 | 334188 |
| **Date** | | | | 9/8/05 | 9/8/05 | 9/8/05 | 9/8/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | **517.473** | **758.696** | 121 J | 148.309 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-189 | 334-190 | 334-190 | 334-191 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-189 | POM-S-334-190(0.0-0.5) | POM-S-334-190 | POM-S-334-191 |
| **Lab ID** | | | | 334189 | 4617737 | 334190 | 334191 |
| **Date** | | | | 9/8/05 | 9/8/05 | 9/8/05 | 9/8/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | **730.276** | 100 J | 179.942 | ***1713.583*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-192 | 334-193 | 334-194 | 334-194 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-192 | POM-S-334-193 | POM-S-334-194(0.0-0.5) | POM-S-334-194 |
| **Lab ID** | | | | 334192 | 334193 | 4617738 | 334194 |
| **Date** | | | | 9/9/05 | 9/9/05 | 9/8/05 | 9/9/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***4935.266*** | ***77224.047*** | 124 J | 156.119 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-195 | 334-195 | 334-196 | 334-196 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0.5 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 1 |
| **Sample ID** | | | | POM-S-334-195(0.0-0.5) | POM-S-334-195 | POM-S-334-196 | POM-S-334-196-0.5-1.0 |
| **Lab ID** | | | | 4617739 | 334195 | 334196 | 334196 |
| **Date** | | | | 9/8/05 | 9/9/05 | 9/9/05 | 10/20/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 87.4 J | 121.004 | **669.94** | ***1998.147*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-196 | 334-196 | 334-197 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 1.5 | 0 |
| **Bottom (ft)** | | | | 1.5 | 2 | 0.5 |
| **Sample ID** | | | | POM-S-334-196-1.0-1.5 | POM-S-334-196-1.5-2.0 | POM-S-334-197(0.0-0.5) |
| **Lab ID** | | | | 334196 | 334196 | 4617740 |
| **Date** | | | | 10/27/05 | 10/31/05 | 9/8/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***923.691*** | **531.724** | 170 J |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-197 | 334-198 | 334-199 | 334-200 | 334-201 |
|---|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-197 | POM-S-334-198 | POM-S-334-199 | POM-S-334-200 | POM-S-334-201 |
| **Lab ID** | | | | 334197 | 334198 | 334199 | 334200 | 334201 |
| **Date** | | | | 9/9/05 | 9/9/05 | 9/9/05 | 9/9/05 | 9/22/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | | |
| ARSENIC | 19 | 19 | 19 | | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | | |
| CADMIUM | 78 | 78 | 1 | | | | | |
| CHROMIUM | | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | | |
| LEAD | 400 | 800 | 59 | 220.811 | ***3823.599*** | ***2615.054*** | **737.313** | **560.186** |
| MERCURY | 23 | 65 | 0.1 | | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | | |
| SILVER | 390 | 5700 | 1 | | | | | |
| THALLIUM | 5 | 79 | 3 | | | | | |
| ZINC | 23000 | 110000 | 600 | | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-202 | 334-202 | 334-203 | 334-203 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-202(0.0-0.5) | POM-S-334-202 | POM-S-334-203(0.0-0.5) | POM-S-334-203 |
| **Lab ID** | | | | 4617741 | 334202 | 4617742 | 334203 |
| **Date** | | | | 9/22/05 | 9/22/05 | 9/22/05 | 9/22/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 262 J | 323.164 | 294 J | 358.062 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-204 | 334-204 | 334-204 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0.5 | 1 |
| **Bottom (ft)** | | | | 0.5 | 1 | 1.5 |
| **Sample ID** | | | | POM-S-334-204 | POM-S-334-204-0.5-1.0 | POM-S-334-204-1.0-1.5 |
| **Lab ID** | | | | 334204 | 334204 | 334204 |
| **Date** | | | | 9/22/05 | 10/20/05 | 10/27/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***53256.875*** | ***29894.137*** | ***2259.628*** |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-204 | 334-205 | 334-205 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1.5 | 0 | 0 |
| **Bottom (ft)** | | | | 2 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-204-1.5-2.0 | POM-S-334-205(0.0-0.5) | POM-S-334-205 |
| **Lab ID** | | | | 334204 | 4617743 | 334205 |
| **Date** | | | | 10/31/05 | 9/22/05 | 9/22/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***33890.191*** | 200 J | 202.336 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-206 | 334-206 | 334-207 | 334-208 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-206(0.0-0.5) | POM-S-334-206 | POM-S-334-207 | POM-S-334-208 |
| **Lab ID** | | | | 4617744 | 334206 | 334207 | 334208 |
| **Date** | | | | 9/22/05 | 9/22/05 | 9/22/05 | 9/22/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 275 J | 383.058 | ***9537.138*** | ***12410.414*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-209 | 334-210 | 334-211 | 334-212 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-209 | POM-S-334-210 | POM-S-334-211 | POM-S-334-212(0.0-0.5) |
| **Lab ID** | | | | 334209 | 334210 | 334211 | 4617745 |
| **Date** | | | | 9/22/05 | 9/22/05 | 9/22/05 | 9/22/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***18823.547*** | ***1573.363*** | ***6118.14*** | 230 J |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-212 | 334-213 | 334-214 | 334-215 | 334-216 |
|---|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-212 | POM-S-334-213 | POM-S-334-214 | POM-S-334-215 | POM-S-334-216 |
| **Lab ID** | | | | 334212 | 334213 | 334214 | 334215 | 334216 |
| **Date** | | | | 9/22/05 | 9/22/05 | 9/22/05 | 9/22/05 | 9/22/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | | |
| ARSENIC | 19 | 19 | 19 | | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | | |
| CADMIUM | 78 | 78 | 1 | | | | | |
| CHROMIUM | | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | | |
| LEAD | 400 | 800 | 59 | 261.822 | ***24890.273*** | ***1914.661*** | ***2405.854*** | ***7418.615*** |
| MERCURY | 23 | 65 | 0.1 | | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | | |
| SILVER | 390 | 5700 | 1 | | | | | |
| THALLIUM | 5 | 79 | 3 | | | | | |
| ZINC | 23000 | 110000 | 600 | | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-217 | 334-218 | 334-219 | 334-219 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0.5 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 1 |
| **Sample ID** | | | | POM-S-334-217 | POM-S-334-218 | POM-S-334-219 | POM-S-334-219-0.5-1.0 |
| **Lab ID** | | | | 334217 | 334218 | 334219 | 334219 |
| **Date** | | | | 9/22/05 | 9/22/05 | 9/22/05 | 10/20/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***1084.198*** | **750.987** | ***1005.176*** | **462.877** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-219 | 334-219 | 334-220 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 1 | 0 |
| **Bottom (ft)** | | | | 1.5 | 1.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-219-1.0-1.5 | POM-S-334-219(1.0-1.5) | POM-S-334-220 |
| **Lab ID** | | | | 334219 | 4641860 | 334220 |
| **Date** | | | | 10/27/05 | 10/27/05 | 9/22/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ND () | 5.73 | 317.383 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-220 | 334-221 | 334-221 | 334-222 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-220(0.0-0.5) | POM-S-334-221(0.0-0.5) | POM-S-334-221 | POM-S-334-222 |
| **Lab ID** | | | | 4617746 | 4617747 | 334221 | 334222 |
| **Date** | | | | 9/22/05 | 9/22/05 | 9/22/05 | 9/22/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 249 J | 288 J | 344.163 | **542.093** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-223 | 334-224 | 334-224 | 334-225 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-223 | POM-S-334-224(0.0-0.5) | POM-S-334-224 | POM-S-334-225 |
| **Lab ID** | | | | 334223 | 4626002 | 334224 | 334225 |
| **Date** | | | | 9/22/05 | 9/22/05 | 9/22/05 | 10/17/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | **506.525** | 38.7 J | 66.185 | **447.974** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-226 | 334-226 | 334-226 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0.5 | 1 |
| **Bottom (ft)** | | | | 0.5 | 1 | 1.5 |
| **Sample ID** | | | | POM-S-334-226 | POM-S-334-226-0.5-1.0 | POM-S-334-226-1.0-1.5 |
| **Lab ID** | | | | 334226 | 334226 | 334226 |
| **Date** | | | | 9/22/05 | 9/30/05 | 10/18/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***3459.606*** | ***6531.895*** | ***1981.211*** |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-226 | 334-226 | 334-226 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1.5 | 2 | 2 |
| **Bottom (ft)** | | | | 2 | 2.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-226-1.5-2.0 | POM-S-334-226-2.0-2.5 | POM-S-334-226(2.0-2.5) |
| **Lab ID** | | | | 334226 | 334226 | 4641855 |
| **Date** | | | | 10/19/05 | 10/21/05 | 10/21/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***1319.904*** | 26.057 | 25.7 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-227 | 334-228 | 334-229 | 334-230 | 334-231 |
|---|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-227 | POM-S-334-228 | POM-S-334-229 | POM-S-334-230 | POM-S-334-231 |
| **Lab ID** | | | | 334227 | 334228 | 334229 | 334230 | 334231 |
| **Date** | | | | 9/22/05 | 9/22/05 | 9/22/05 | 9/22/05 | 9/22/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | | |
| ARSENIC | 19 | 19 | 19 | | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | | |
| CADMIUM | 78 | 78 | 1 | | | | | |
| CHROMIUM | | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | | |
| LEAD | 400 | 800 | 59 | ***2571.924*** | ***2931.329*** | **440.904** | ***801.371*** | ***2313.409*** |
| MERCURY | 23 | 65 | 0.1 | | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | | |
| SILVER | 390 | 5700 | 1 | | | | | |
| THALLIUM | 5 | 79 | 3 | | | | | |
| ZINC | 23000 | 110000 | 600 | | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-231 | 334-231 | 334-231 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0.5 | 1 | 1 |
| **Bottom (ft)** | | | | 1 | 1.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-231-0.5-1.0 | POM-S-334-231-1.0-1.5 | POM-S-334-231(1.0-1.5) |
| **Lab ID** | | | | 334231 | 334231 | 4631187 |
| **Date** | | | | 9/30/05 | 10/18/05 | 10/18/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | **588.587** | 218.382 | 228 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-232 | 334-232 | 334-232 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0.5 | 1 |
| **Bottom (ft)** | | | | 0.5 | 1 | 1.5 |
| **Sample ID** | | | | POM-S-334-232 | POM-S-334-232-0.5-1.0 | POM-S-334-232-1.0-1.5 |
| **Lab ID** | | | | 334232 | 334232 | 334232 |
| **Date** | | | | 9/27/05 | 10/19/05 | 10/21/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***1701.397*** | **636.897** | 61.278 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-232 | 334-233 | 334-234 | 334-235 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 1.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-232(1.0-1.5) | POM-S-334-233 | POM-S-334-234 | POM-S-334-235 |
| **Lab ID** | | | | 4641856 | 334233 | 334234 | 334235 |
| **Date** | | | | 10/21/05 | 9/27/05 | 9/27/05 | 9/27/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 52.7 | **650.979** | ***857.062*** | **535.415** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-236 | 334-237 | 334-238 | 334-239 | 334-240 |
|---|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-236 | POM-S-334-237 | POM-S-334-238 | POM-S-334-239 | POM-S-334-240 |
| **Lab ID** | | | | 334236 | 334237 | 334238 | 334239 | 334240 |
| **Date** | | | | 9/27/05 | 9/27/05 | 9/30/05 | 9/30/05 | 9/30/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | | |
| ARSENIC | 19 | 19 | 19 | | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | | |
| CADMIUM | 78 | 78 | 1 | | | | | |
| CHROMIUM | | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | | |
| LEAD | 400 | 800 | 59 | **408.393** | **683.397** | ***7315.32*** | ***3988.497*** | ***24715.234*** |
| MERCURY | 23 | 65 | 0.1 | | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | | |
| SILVER | 390 | 5700 | 1 | | | | | |
| THALLIUM | 5 | 79 | 3 | | | | | |
| ZINC | 23000 | 110000 | 600 | | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-240 | 334-240 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0.5 | 1 |
| **Bottom (ft)** | | | | 1 | 1.5 |
| **Sample ID** | | | | POM-S-334-240-0.5-1.0 | POM-S-334-240-1.0-1.5 |
| **Lab ID** | | | | 334240 | 334240 |
| **Date** | | | | 10/27/05 | 11/1/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | | |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | ***28526.828*** | ***26813.285*** |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | | |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-240 | 334-240 | 334-240 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1.5 | 2 | 3 |
| **Bottom (ft)** | | | | 2 | 2.5 | 3.5 |
| **Sample ID** | | | | POM-S-334-240-1.5-2.0 | POM-S-334-240-2.0-2.5 | POM-S-334-240(3.0-3.5) |
| **Lab ID** | | | | 334240 | 334240 | 5844809 |
| **Date** | | | | 11/2/05 | 11/3/05 | 11/19/09 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***1917.463*** | ***1021.484*** | 310 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-241 | 334-242 | 334-243 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-241 | POM-S-334-242 | POM-S-334-243 |
| **Lab ID** | | | | 334241 | 334242 | 334243 |
| **Date** | | | | 9/30/05 | 9/30/05 | 9/30/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***7569.642*** | ***6087.096*** | ***51513.715*** |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-244 | 334-244 | 334-245 | 334-246 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-244(0.0-0.5) | POM-S-334-244 | POM-S-334-245 | POM-S-334-246 |
| **Lab ID** | | | | 4617748 | 334244 | 334245 | 334246 |
| **Date** | | | | 9/30/05 | 9/30/05 | 9/30/05 | 9/30/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 128 J | 157.744 | ***2417.548*** | ***10268.2*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-247 | 334-248 | 334-248 | 334-249 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0.5 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 1 | 0.5 |
| **Sample ID** | | | | POM-S-334-247 | POM-S-334-248 | POM-S-334-248-0.5-1.0 | POM-S-334-249(0.0-0.5) |
| **Lab ID** | | | | 334247 | 334248 | 334248 | 4618480 |
| **Date** | | | | 9/30/05 | 9/30/05 | 10/20/05 | 9/30/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***1397.583*** | ***46424.023*** | ***24563.598*** | 41.5 J |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-249 | 334-250 | 334-250 | 334-250 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0.5 | 0.5 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 1 | 1 |
| **Sample ID** | | | | POM-S-334-249 | POM-S-334-250 | POM-S-334-250(0.5-1.0) | POM-S-334-250(0.5-1.0) |
| **Lab ID** | | | | 334249 | 334250 | 4631186 | 4641852 |
| **Date** | | | | 9/30/05 | 9/30/05 | 10/20/05 | 10/20/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 55.44 | ***2204.976*** | 121 | 102 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-250 | 334-251 | 334-252 | 334-253 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0.5 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 1 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-250-0.5-1.0 | POM-S-334-251 | POM-S-334-252 | POM-S-334-253 |
| **Lab ID** | | | | 334250 | 334251 | 334252 | 334253 |
| **Date** | | | | 10/20/05 | 9/30/05 | 9/30/05 | 9/30/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 205.907 | ***1984.082*** | ***986.083*** | ***2321.867*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-254 | 334-254 | 334-254 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0.5 | 1 |
| **Bottom (ft)** | | | | 0.5 | 1 | 1.5 |
| **Sample ID** | | | | POM-S-334-254 | POM-S-334-254-0.5-1.0 | POM-S-334-254-1.0-1.5 |
| **Lab ID** | | | | 334254 | 334254 | 334254 |
| **Date** | | | | 9/30/05 | 10/20/05 | 10/27/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***27699.838*** | ***2764.381*** | **653.133** |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-254 | 334-254 | 334-254 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1.5 | 1.5 | 1.5 |
| **Bottom (ft)** | | | | 2 | 2 | 2 |
| **Sample ID** | | | | POM-S-334-254(1.5-2.0) | POM-S-334-254(1.5-2.0) | POM-S-334-254(1.5-2.0) |
| **Lab ID** | | | | 4641876 | 4651654 | 4651655 |
| **Date** | | | | 11/2/05 | 11/2/05 | 11/2/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***5420*** | 185 J | 188 J |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-254 | 334-254 | 334-254 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1.5 | 1.5 | 1 |
| **Bottom (ft)** | | | | 2 | 2 | 1.5 |
| **Sample ID** | | | | POM-S-334-254-1.5-2.0 | POM-S-334-254-1.5-2.0 | POM-S-334-254-1.0-1.5 |
| **Lab ID** | | | | 334254 | 334254 | 334254 |
| **Date** | | | | 11/2/05 | 11/15/05 | 11/15/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | **441.276** | 210.48 | **798.68** |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-254 | 334-254 | 334-255 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1.5 | 1.5 | 0 |
| **Bottom (ft)** | | | | 2 | 2 | 0.5 |
| **Sample ID** | | | | POM-S-334-254-1.5-2.0 | POM-S-334-254-1.5-2.0 | POM-S-334-255 |
| **Lab ID** | | | | 334254 | 334254 | 334255 |
| **Date** | | | | 11/15/05 | 11/15/05 | 9/30/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 398.34 | 209.262 | ***1131.326*** |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-256 | 334-256 | 334-257 | 334-258 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-256(0.0-0.5) | POM-S-334-256 | POM-S-334-257 | POM-S-334-258 |
| **Lab ID** | | | | 4617750 | 334256 | 334257 | 334258 |
| **Date** | | | | 9/30/05 | 9/30/05 | 9/30/05 | 9/30/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 149 J | 242.892 | ***908.41*** | ***1657.382*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-259 | 334-259 | 334-260 | 334-260 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-259(0.0-0.5) | POM-S-334-259 | POM-S-334-260(0.0-0.5) | POM-S-334-260 |
| **Lab ID** | | | | 4626006 | 334259 | 4617753 | 334260 |
| **Date** | | | | 9/30/05 | 9/30/05 | 9/30/05 | 9/30/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 322 J | 393.966 | 207 | 231.088 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-261 | 334-261 | 334-262 | 334-262 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-261(0.0-0.5) | POM-S-334-261 | POM-S-334-262(0.0-0.5) | POM-S-334-262 |
| **Lab ID** | | | | 4617754 | 334261 | 4617755 | 334262 |
| **Date** | | | | 9/30/05 | 9/30/05 | 10/3/05 | 10/3/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 187 | 260.43 | 268 | 390.001 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-263 | 334-264 | 334-265 | 334-265 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-263 | POM-S-334-264 | POM-S-334-265(0.0-0.5) | POM-S-334-265 |
| **Lab ID** | | | | 334263 | 334264 | 4617756 | 334265 |
| **Date** | | | | 10/3/05 | 10/3/05 | 10/3/05 | 10/3/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***1165.375*** | **489.781** | 111 | 136.885 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-266 | 334-266 | 334-267 | 334-267 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-266 | POM-S-334-266(0.0-0.5) | POM-S-334-267 | POM-S-334-267(0.0-0.5) |
| **Lab ID** | | | | 334266 | 4617757 | 334267 | 4617758 |
| **Date** | | | | 10/3/05 | 10/3/05 | 10/3/05 | 10/3/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 338.6 | 230 | 284.916 | 145 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-268 | 334-269 | 334-269 | 334-270 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-268 | POM-S-334-269(0.0-0.5) | POM-S-334-269 | POM-S-334-270(0.0-0.5) |
| **Lab ID** | | | | 334268 | 4617759 | 334269 | 4615791 |
| **Date** | | | | 10/3/05 | 10/3/05 | 10/3/05 | 10/3/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | 18.2 |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | **446.922** | 277 | 389.805 | |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-271 | 334-272 | 334-272 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-271(0.0-0.5) | POM-S-334-272(0.0-0.5)-DUP | POM-S-334-272(0.0-0.5) |
| **Lab ID** | | | | 4615792 | 4615799 | 4615796 |
| **Date** | | | | 10/3/05 | 10/3/05 | 10/3/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***32.8*** | 15.9 | 17 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-273 | 334-273 | 334-273 | 334-274 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-273(0.0-0.5) | POM-S-334-273(0.0-0.5) | POM-S-334-273 | POM-S-334-274 |
| **Lab ID** | | | | 4615797 | 4618456 | 334273 | 334274 |
| **Date** | | | | 10/3/05 | 10/3/05 | 10/3/05 | 10/3/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | 14.4 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | | 132 | 181.915 | ***1134.353*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-274 | 334-274 | 334-275 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0.5 | 0.5 | 0 |
| **Bottom (ft)** | | | | 1 | 1 | 0.5 |
| **Sample ID** | | | | POM-S-334-274(0.5-1.0) | POM-S-334-274-0.5-1.0 | POM-S-334-275(0.0-0.5) |
| **Lab ID** | | | | 4641859 | 334274 | 4615798 |
| **Date** | | | | 10/25/05 | 10/25/05 | 10/3/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | ***25.7*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 68.5 | 149.457 | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-275 | 334-276 | 334-277 | 334-278 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-275 | POM-S-334-276 | POM-S-334-277 | POM-S-334-278 |
| **Lab ID** | | | | 334275 | 334276 | 334277 | 334278 |
| **Date** | | | | 10/3/05 | 10/3/05 | 10/3/05 | 10/3/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***1290.2*** | **677.982** | ***1488.862*** | **494.053** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-279 | 334-279 | 334-280 | 334-281 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-279(0.0-0.5) | POM-S-334-279 | POM-S-334-280 | POM-S-334-281 |
| **Lab ID** | | | | 4617761 | 334279 | 334280 | 334281 |
| **Date** | | | | 10/3/05 | 10/3/05 | 10/3/05 | 10/3/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 150 | 180.756 | ***1046.39*** | **622.904** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-282 | 334-283 | 334-284 | 334-285 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-282 | POM-S-334-283 | POM-S-334-284 | POM-S-334-285 |
| **Lab ID** | | | | 334282 | 334283 | 334284 | 334285 |
| **Date** | | | | 10/3/05 | 10/3/05 | 10/3/05 | 10/3/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***921.38*** | ***1185.934*** | ***422.122*** | ***1397.082*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-286 | 334-286 | 334-287 | 334-288 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-286(0.0-0.5) | POM-S-334-286 | POM-S-334-287 | POM-S-334-288 |
| **Lab ID** | | | | 4626007 | 334286 | 334287 | 334288 |
| **Date** | | | | 10/5/05 | 10/5/05 | 10/5/05 | 10/5/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 75.7 J | 94.873 | ***411.565*** | ***1022.843*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-289 | 334-290 | 334-290 | 334-291 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-289 | POM-S-334-290(0.0-0.5) | POM-S-334-290 | POM-S-334-291 |
| **Lab ID** | | | | 334289 | 4626008 | 334290 | 334291 |
| **Date** | | | | 10/5/05 | 10/5/05 | 10/5/05 | 10/5/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | **726.243** | 313 J | 388.125 | ***868.427*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-292 | 334-293 | 334-294 | 334-294 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-292 | POM-S-334-293 | POM-S-334-294 | POM-S-334-294(0.0-0.5) |
| **Lab ID** | | | | 334292 | 334293 | 334294 | 4626030 |
| **Date** | | | | 10/5/05 | 10/5/05 | 10/5/05 | 10/5/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | ***21.9*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | **505.292** | **468.78** | ***1442.025*** | |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-295 | 334-296 | 334-297 | 334-298 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-295 | POM-S-334-296 | POM-S-334-297 | POM-S-334-298 |
| **Lab ID** | | | | 334295 | 334296 | 334297 | 334298 |
| **Date** | | | | 10/5/05 | 10/5/05 | 10/5/05 | 10/5/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | **656.809** | **650.104** | **686.646** | **401.021** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-298 | 334-299 | 334-300 | 334-300 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-298(0.0-0.5) | POM-S-334-299 | POM-S-334-300(0.0-0.5) | POM-S-334-300 |
| **Lab ID** | | | | 4626009 | 334299 | 4626011 | 334300 |
| **Date** | | | | 10/5/05 | 10/6/05 | 10/6/05 | 10/6/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 173 J | **485.056** | 196 J | 254.273 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-301 | 334-302 | 334-302 | 334-303 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-301 | POM-S-334-302(0.0-0.5) | POM-S-334-302 | POM-S-334-303 |
| **Lab ID** | | | | 334301 | 4626010 | 334302 | 334303 |
| **Date** | | | | 10/6/05 | 10/6/05 | 10/6/05 | 10/6/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***1525.058*** | 210 J | 335.131 | ***805.912*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-304 | 334-305 | 334-306 | 334-306 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-304 | POM-S-334-305 | POM-S-334-306 | POM-S-334-306(0.0-0.5) |
| **Lab ID** | | | | 334304 | 334305 | 334306 | 4631189 |
| **Date** | | | | 10/6/05 | 10/6/05 | 10/6/05 | 10/6/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | 17.5 |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***1103.188*** | **534.826** | ***1818.059*** | |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-307 | 334-307 | 334-307 | 334-307 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0.5 | 0 | 1 | 1.5 |
| **Bottom (ft)** | | | | 1 | 0.5 | 1.5 | 2 |
| **Sample ID** | | | | POM-S-334-307-0.5-1.0 | POM-S-334-307 | POM-S-334-307-1.0-1.5 | POM-S-334-307 |
| **Lab ID** | | | | 334307 | 334307 | 334307 | 334307 |
| **Date** | | | | 9/30/05 | 10/6/05 | 10/18/05 | 10/19/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***1325.376*** | ***8747.648*** | ***2865.366*** | ***2442.264*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-307 | 334-307 | 334-308 | 334-309 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 2 | 0 | 0 |
| **Bottom (ft)** | | | | 2.5 | 2.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-307-2.0-2.5 | POM-S-334-307(2.0-2.5) | POM-S-334-308 | POM-S-334-309 |
| **Lab ID** | | | | 334307 | 4641857 | 334308 | 334309 |
| **Date** | | | | 10/21/05 | 10/21/05 | 10/6/05 | 10/6/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 219.051 | 145 | ***1228.921*** | ***2858.531*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-310 | 334-310 | 334-311 | 334-312 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-310(0.0-0.5) | POM-S-334-310 | POM-S-334-311 | POM-S-334-312(0.0-0.5) |
| **Lab ID** | | | | 4626013 | 334310 | 334311 | 4626012 |
| **Date** | | | | 10/7/05 | 10/7/05 | 10/7/05 | 10/7/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 118 J | 176.494 | ***810.083*** | 164 J |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-312 | 334-313 | 334-314 | 334-315 | 334-316 |
|---|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-312 | POM-S-334-313 | POM-S-334-314 | POM-S-334-315 | POM-S-334-316 |
| **Lab ID** | | | | 334312 | 334313 | 334314 | 334315 | 334316 |
| **Date** | | | | 10/7/05 | 10/7/05 | 10/7/05 | 10/7/05 | 10/7/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | | |
| ARSENIC | 19 | 19 | 19 | | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | | |
| CADMIUM | 78 | 78 | 1 | | | | | |
| CHROMIUM | | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | | |
| LEAD | 400 | 800 | 59 | 142.026 | ***1570.133*** | **505.056** | **632.919** | ***2559.198*** |
| MERCURY | 23 | 65 | 0.1 | | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | | |
| SILVER | 390 | 5700 | 1 | | | | | |
| THALLIUM | 5 | 79 | 3 | | | | | |
| ZINC | 23000 | 110000 | 600 | | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-317 | 334-318 | 334-318 | 334-319 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-317 | POM-S-334-318 | POM-S-334-318(0.0-0.5) | POM-S-334-319 |
| **Lab ID** | | | | 334317 | 334318 | 4626014 | 334319 |
| **Date** | | | | 10/7/05 | 10/10/05 | 10/10/05 | 10/18/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***932.691*** | 242.344 | 164 J | 332.705 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-319 | 334-319-E | 334-320 | 334-320-E |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-319(0.0-0.5) | POM-S-334-319-E | POM-S-334-320 | POM-S-334-320-E |
| **Lab ID** | | | | 4631184 | 334319E | 334320 | 334320E |
| **Date** | | | | 10/18/05 | 10/11/05 | 10/10/05 | 10/11/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 235 | ***7746.885*** | ***907.717*** | ***28495.553*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-321 | 334-321 | 334-321-E | 334-322 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-321(0.0-0.5) | POM-S-334-321 | POM-S-334-321-E | POM-S-334-322 |
| **Lab ID** | | | | 4631182 | 334321 | 334321E | 334322 |
| **Date** | | | | 10/18/05 | 10/18/05 | 10/11/05 | 10/10/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 209 | 309.642 | ***1186.692*** | ***5273.73*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-322-E | 334-323 | 334-323 | 334-323-E |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-322-E | POM-S-334-323 | POM-S-334-323(0.0-0.5) | POM-S-334-323-E |
| **Lab ID** | | | | 334322E | 334323 | 4626015 | 334323E |
| **Date** | | | | 10/11/05 | 10/10/05 | 10/10/05 | 10/11/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***839.066*** | 220.688 | 170 J | ***5113.081*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-324 | 334-324-E | 334-325-E | 334-326-E |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-324 | POM-S-334-324-E | POM-S-334-325-E | POM-S-334-326-E |
| **Lab ID** | | | | 334324 | 334324E | 334325E | 334326E |
| **Date** | | | | 10/18/05 | 10/11/05 | 10/11/05 | 10/11/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***802.28*** | ***94701.75*** | ***1200.012*** | ***10920.303*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-327-E | 334-328-E | 334-329-E | 334-329-E |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-327-E | POM-S-334-328-E | POM-S-334-329-E | POM-S-334-329-E(0.0-0.5) |
| **Lab ID** | | | | 334327E | 334328E | 334329E | 4626017 |
| **Date** | | | | 10/11/05 | 10/11/05 | 10/11/05 | 10/11/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***8764.886*** | ***2661.805*** | 273.88 | 166 J |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-330 | 334-330-E | 334-332-E | 334-333-E |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-330(0.0-0.5) | POM-S-334-330-E | POM-S-334-332-E | POM-S-334-333-E |
| **Lab ID** | | | | 4626026 | 334330E | 334332E | 334333E |
| **Date** | | | | 10/10/05 | 10/11/05 | 10/11/05 | 10/11/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | 14.4 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | | ***1259.629*** | ***802.23*** | ***2533.058*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-334-E | 334-335-E | 334-336-E | 334-337E |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0.5 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 1 |
| **Sample ID** | | | | POM-S-334-334-E | POM-S-334-335-E | POM-S-334-336-E | POM-S-334-337E-0.5-1.0 |
| **Lab ID** | | | | 334334E | 334335E | 334336E | 334337E |
| **Date** | | | | 10/11/05 | 10/11/05 | 10/11/05 | 10/20/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***978.73*** | ***717.778*** | ***7994.309*** | ***4548.177*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-337E | 334-337E | 334-337E |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 1.5 | 2 |
| **Bottom (ft)** | | | | 1.5 | 2 | 2.5 |
| **Sample ID** | | | | POM-S-334-337E-1.0-1.5 | POM-S-334-337E-1.5-2.0 | POM-S-334-337E-2.0-2.5 |
| **Lab ID** | | | | 334337E | 334337E | 334337E |
| **Date** | | | | 10/27/05 | 10/31/05 | 11/1/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***1375.176*** | ***965.934*** | 18.873 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-337E | 334-337-E | 334-338-E | 334-339-E |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 2.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-337E(2.0-2.5) | POM-S-334-337-E | POM-S-334-338-E | POM-S-334-339-E |
| **Lab ID** | | | | 4641874 | 334337E | 334338E | 334339E |
| **Date** | | | | 11/1/05 | 10/11/05 | 10/11/05 | 10/11/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 14.8 | ***9351.047*** | **696.703** | 102.762 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-339-E | 334-340-E | 334-341-E |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-339-E(0.0-0.5) | POM-S-334-340-E | POM-S-334-341-E |
| **Lab ID** | | | | 4626018 | 334340E | 334341E |
| **Date** | | | | 10/11/05 | 10/11/05 | 10/11/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 79 J | ***1703.046*** | ***1920.511*** |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-342 | 334-342 | 334-343 | 334-344 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-342(0.0-0.5) | POM-S-334-342 | POM-S-334-343 | POM-S-334-344 |
| **Lab ID** | | | | 4631188 | 334342 | 334343 | 334344 |
| **Date** | | | | 10/17/05 | 10/17/05 | 10/17/05 | 10/17/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 143 | 205.701 | ***18266.082*** | ***3496.343*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-345 | 334-345 | 334-346 | 334-347 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-345(0.0-0.5) | POM-S-334-345 | POM-S-334-346 | POM-S-334-347(0.0-0.5) |
| **Lab ID** | | | | 4631174 | 334345 | 334346 | 4631180 |
| **Date** | | | | 10/17/05 | 10/17/05 | 10/17/05 | 10/17/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 127 | 202.202 | ***10406.737*** | 191 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-347 | 334-348 | 334-349 | 334-350 | 334-351 |
|---|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-347 | POM-S-334-348 | POM-S-334-349 | POM-S-334-350 | POM-S-334-351 |
| **Lab ID** | | | | 334347 | 334348 | 334349 | 334350 | 334351 |
| **Date** | | | | 10/17/05 | 10/17/05 | 10/17/05 | 10/17/05 | 10/17/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | | |
| ARSENIC | 19 | 19 | 19 | | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | | |
| CADMIUM | 78 | 78 | 1 | | | | | |
| CHROMIUM | | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | | |
| LEAD | 400 | 800 | 59 | 274.392 | ***820.187*** | ***1203.68*** | ***4246.862*** | ***43597.598*** |
| MERCURY | 23 | 65 | 0.1 | | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | | |
| SILVER | 390 | 5700 | 1 | | | | | |
| THALLIUM | 5 | 79 | 3 | | | | | |
| ZINC | 23000 | 110000 | 600 | | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-352 | 334-352 | 334-353 | 334-354 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-352 | POM-S-334-352(0.0-0.5) | POM-S-334-353 | POM-S-334-354(0.0-0.5) |
| **Lab ID** | | | | 334352 | 4631181 | 334353 | 4631178 |
| **Date** | | | | 10/17/05 | 10/17/05 | 10/17/05 | 10/17/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 260.663 | 222 | ***7951.634*** | 49.7 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-354 | 334-355 | 334-356 | 334-357 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-354 | POM-S-334-355 | POM-S-334-356 | POM-S-334-357(0.0-0.5) |
| **Lab ID** | | | | 334354 | 334355 | 334356 | 4631179 |
| **Date** | | | | 10/17/05 | 10/17/05 | 10/17/05 | 10/17/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 84.664 | ***973.678*** | **666.177** | 84.5 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-357 | 334-358 | 334-359 | 334-360 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-357 | POM-S-334-358 | POM-S-334-359 | POM-S-334-360(0.0-0.5) |
| **Lab ID** | | | | 334357 | 334358 | 334359 | 4631183 |
| **Date** | | | | 10/17/05 | 10/17/05 | 10/17/05 | 10/18/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 132.386 | **710.7** | **575.651** | 117 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-360 | 334-361 | 334-362 | 334-362 | 334-363 |
|---|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-360 | POM-S-334-361 | POM-S-334-362 | POM-S-334-362 | POM-S-334-363 |
| **Lab ID** | | | | 334360 | 334361 | 334362 | 334362 | 334363 |
| **Date** | | | | 10/18/05 | 10/18/05 | 10/19/05 | 10/19/05 | 10/19/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | | |
| ARSENIC | 19 | 19 | 19 | | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | | |
| CADMIUM | 78 | 78 | 1 | | | | | |
| CHROMIUM | | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | | |
| LEAD | 400 | 800 | 59 | 240.426 | ***8128.787*** | ***2170.087*** | ***1923.709*** | 110.713 |
| MERCURY | 23 | 65 | 0.1 | | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | | |
| SILVER | 390 | 5700 | 1 | | | | | |
| THALLIUM | 5 | 79 | 3 | | | | | |
| ZINC | 23000 | 110000 | 600 | | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-363 | 334-363 | 334-364 | 334-365 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-363(0.0-0.5) | POM-S-334-363 | POM-S-334-364 | POM-S-334-365 |
| **Lab ID** | | | | 4631185 | 334363 | 334364 | 334365 |
| **Date** | | | | 10/19/05 | 10/19/05 | 10/19/05 | 10/20/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 73.2 | 157.014 | **482.905** | ***1705.749*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-366 | 334-366 | 334-367 | 334-367 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-366(0.0-0.5) | POM-S-334-366 | POM-S-334-367(0.0-0.5) | POM-S-334-367 |
| **Lab ID** | | | | 4641847 | 334366 | 4641853 | 334367 |
| **Date** | | | | 10/20/05 | 10/20/05 | 10/20/05 | 10/20/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 29.2 | 34.518 | 259 | **401.27** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-368 | 334-369 | 334-370 | 334-371 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-368 | POM-S-334-369 | POM-S-334-370 | POM-S-334-371(0.0-0.5) |
| **Lab ID** | | | | 334368 | 334369 | 334370 | 4641851 |
| **Date** | | | | 10/20/05 | 10/20/05 | 10/20/05 | 10/20/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***1272.535*** | ***446.879*** | ***14043.545*** | 77.6 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-371 | 334-372 | 334-373 | 334-374 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-371 | POM-S-334-372 | POM-S-334-373 | POM-S-334-374 |
| **Lab ID** | | | | 334371 | 334372 | 334373 | 334374 |
| **Date** | | | | 10/20/05 | 10/20/05 | 10/20/05 | 10/20/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 126.98 | ***1371.488*** | ***15590.757*** | ***1686.583*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-375 | 334-375 | 334-376 | 334-377 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-375(0.0-0.5) | POM-S-334-375 | POM-S-334-376 | POM-S-334-377 |
| **Lab ID** | | | | 4641854 | 334375 | 334376 | 334377 |
| **Date** | | | | 10/20/05 | 10/20/05 | 10/20/05 | 10/20/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 29.1 | 29.666 | **542.097** | ***1165.409*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-378 | 334-379 | 334-380 | 334-381 | 334-382 |
|---|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-378 | POM-S-334-379 | POM-S-334-380 | POM-S-334-381 | POM-S-334-382 |
| **Lab ID** | | | | 334378 | 334379 | 334380 | 334381 | 334382 |
| **Date** | | | | 10/20/05 | 10/20/05 | 10/21/05 | 10/21/05 | 10/24/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | | |
| ARSENIC | 19 | 19 | 19 | | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | | |
| CADMIUM | 78 | 78 | 1 | | | | | |
| CHROMIUM | | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | | |
| LEAD | 400 | 800 | 59 | ***725.777*** | ***893.72*** | ***1487.666*** | ***1151.055*** | 203.983 |
| MERCURY | 23 | 65 | 0.1 | | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | | |
| SILVER | 390 | 5700 | 1 | | | | | |
| THALLIUM | 5 | 79 | 3 | | | | | |
| ZINC | 23000 | 110000 | 600 | | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-382 | 334-383 | 334-384 | 334-385 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-382(0.0-0.5) | POM-S-334-383 | POM-S-334-384 | POM-S-334-385 |
| **Lab ID** | | | | 4641858 | 334383 | 334384 | 334385 |
| **Date** | | | | 10/24/05 | 10/24/05 | 10/25/05 | 10/27/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 152 | ***3676.988*** | ***2132.024*** | ***1849.806*** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-386 | 334-387 | 334-388 | 334-388 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-386 | POM-S-334-387 | POM-S-334-388 | POM-S-334-388(0.0-0.5) |
| **Lab ID** | | | | 334386 | 334387 | 334388 | 4641862 |
| **Date** | | | | 10/27/05 | 10/27/05 | 10/27/05 | 10/27/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***16272.742*** | ***1896.516*** | 222.304 | 150 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-389 | 334-389 | 334-390 | 334-390 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-389 | POM-S-334-389(0.0-0.5) | POM-S-334-390 | POM-S-334-390(0.0-0.5) |
| **Lab ID** | | | | 334389 | 4641863 | 334390 | 4641864 |
| **Date** | | | | 10/27/05 | 10/27/05 | 10/27/05 | 10/27/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 216.377 | 190 | 382.77 | 226 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-391 | 334-392 | 334-393 | 334-394 | 334-395 |
|---|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-391 | POM-S-334-392 | POM-S-334-393 | POM-S-334-394 | POM-S-334-395 |
| **Lab ID** | | | | 334391 | 334392 | 334393 | 334394 | 334395 |
| **Date** | | | | 10/27/05 | 10/27/05 | 10/27/05 | 10/27/05 | 10/27/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | | |
| ARSENIC | 19 | 19 | 19 | | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | | |
| CADMIUM | 78 | 78 | 1 | | | | | |
| CHROMIUM | | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | | |
| LEAD | 400 | 800 | 59 | ***3570.681*** | ***1568.837*** | ***1424.267*** | **558.666** | 165.602 |
| MERCURY | 23 | 65 | 0.1 | | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | | |
| SILVER | 390 | 5700 | 1 | | | | | |
| THALLIUM | 5 | 79 | 3 | | | | | |
| ZINC | 23000 | 110000 | 600 | | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-395 | 334-396 | 334-397 | 334-398 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-395(0.0-0.5) | POM-S-334-396 | POM-S-334-397 | POM-S-334-398 |
| **Lab ID** | | | | 4641861 | 334396 | 334397 | 334398 |
| **Date** | | | | 10/27/05 | 10/27/05 | 10/27/05 | 10/28/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 59 | **454.347** | **604.568** | **508.714** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-399 | 334-400 | 334-401 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-399 | POM-S-334-400 | POM-S-334-401 |
| **Lab ID** | | | | 334399 | 334400 | 334401 |
| **Date** | | | | 10/27/05 | 10/31/05 | 10/31/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***874*** | **465.338** | 49.486 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-401 | 334-402 | 334-403 | 334-404 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-401(0.0-0.5) | POM-S-334-402 | POM-S-334-403 | POM-S-334-404 |
| **Lab ID** | | | | 4641866 | 334402 | 334403 | 334404 |
| **Date** | | | | 10/31/05 | 10/31/05 | 10/31/05 | 10/31/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 54 | ***32361.92*** | ***1533.467*** | **527.792** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-405 | 334-406 | 334-407 | 334-407 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-405 | POM-S-334-406 | POM-S-334-407 | POM-S-334-407(0.0-0.5) |
| **Lab ID** | | | | 334405 | 334406 | 334407 | 4641867 |
| **Date** | | | | 10/31/05 | 10/31/05 | 10/31/05 | 10/31/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | **700.734** | **655.784** | 193.537 | 81.3 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-408 | 334-408 | 334-409 | 334-409 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-408(0.0-0.5) | POM-S-334-408 | POM-S-334-409(0.0-0.5) | POM-S-334-409 |
| **Lab ID** | | | | 4641869 | 334408 | 4641870 | 334409 |
| **Date** | | | | 11/1/05 | 11/1/05 | 11/1/05 | 11/1/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 165 | 222.973 | 267 | 373.453 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-410 | 334-411 | 334-412 | 334-413 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-410 | POM-S-334-411 | POM-S-334-412 | POM-S-334-413 |
| **Lab ID** | | | | 334410 | 334411 | 334412 | 334413 |
| **Date** | | | | 11/1/05 | 11/1/05 | 11/1/05 | 11/1/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | **546.187** | **576.03** | **601.658** | **622.429** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-414 | 334-414 | 334-415 | 334-415 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 2 | 0.5 |
| **Sample ID** | | | | POM-S-334-414(0.0-0.5) | POM-S-334-414 | POM-S-334-415(0.0-2.0) | POM-S-334-415 |
| **Lab ID** | | | | 4641868 | 334414 | 4641877 | 334415 |
| **Date** | | | | 11/1/05 | 11/1/05 | 11/2/05 | 11/2/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | 171 | 305.683 | 381 | **435.032** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-416 | 334-417 | 334-417 | 334-418 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-416 | POM-S-334-417(0.0-0.5) | POM-S-334-417 | POM-S-334-418(0.0-0.5) |
| **Lab ID** | | | | 334416 | 4641875 | 334417 | 4640240 |
| **Date** | | | | 11/2/05 | 11/2/05 | 11/2/05 | 11/2/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | ***927.649*** | 252 | 350.192 | **402** |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-418 | 334-419 | 334-419 | 334-420 |
|---|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-418 | POM-S-334-419 | POM-S-334-419(0.0-0.5) | POM-S-334-420(0.0-0.5) |
| **Lab ID** | | | | 334418 | 334419 | 4641878 | 4646161 |
| **Date** | | | | 11/2/05 | 11/3/05 | 11/3/05 | 11/10/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | | |
| ARSENIC | 19 | 19 | 19 | | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | | |
| CADMIUM | 78 | 78 | 1 | | | | |
| CHROMIUM | | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | | |
| LEAD | 400 | 800 | 59 | **548.291** | 385.44 | 301 | 344 |
| MERCURY | 23 | 65 | 0.1 | | | | |
| NICKEL | 1600 | 23000 | 31 | | | | |
| SELENIUM | 390 | 5700 | 7 | | | | |
| SILVER | 390 | 5700 | 1 | | | | |
| THALLIUM | 5 | 79 | 3 | | | | |
| ZINC | 23000 | 110000 | 600 | | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-420 | 334-422 | 334-424 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-420 | POM-S-334-422(0.0-0.5) | POM-S-334-424(0.0-0.5) |
| **Lab ID** | | | | 334420 | 4738156 | 4706631 |
| **Date** | | | | 11/10/05 | 1/12/06 | 2/7/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | ***92.3*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | **419.541** | 96.8 | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | 4.55 |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | 485 |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-425 | 334-426 | 334-427 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-425(0.0-0.5) | POM-S-334-426(0.0-0.5) | POM-S-334-427(0.0-0.5) |
| **Lab ID** | | | | 4706635 | 4706636 | 4706637 |
| **Date** | | | | 2/7/06 | 2/7/06 | 2/7/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***103*** | ***48.2*** | ***82.2*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 4.69 J | 2.51 J | 4.77 |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | 516 | 134 | 72.2 |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-428 | 334-429 | 334-430 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-428(0.0-0.5) | POM-S-334-429(0.0-0.5) | POM-S-334-430(0.0-0.5) |
| **Lab ID** | | | | 4706638 | 4706639 | 4706640 |
| **Date** | | | | 2/7/06 | 2/7/06 | 2/7/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 12.7 | 11.4 | 9.93 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-431 | 334-432 | 334-432 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-431(0.0-0.5) | POM-S-334-432(0.0-0.5)-DUP | POM-S-334-432(0.0-0.5) |
| **Lab ID** | | | | 4706641 | 4706643 | 4706642 |
| **Date** | | | | 2/7/06 | 2/7/06 | 2/7/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 10.5 | 10.8 | 12.1 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-433 | 334-434 | 334-435 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-433(0.0-0.5) | POM-S-334-434(0.0-0.5) | POM-S-334-435(0.0-0.5) |
| **Lab ID** | | | | 4706644 | 4706645 | 4706646 |
| **Date** | | | | 2/7/06 | 2/7/06 | 2/7/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 9.12 | 14.1 | 8.98 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-436 | 334-436 | 334-437 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-436(0.0-0.5)-DUP | POM-S-334-436(0.0-0.5) | POM-S-334-437(0.0-0.5) |
| **Lab ID** | | | | 4711863 | 4711859 | 4711864 |
| **Date** | | | | 2/16/06 | 2/16/06 | 2/16/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***55.7*** | ***51.8*** | ***96.2*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 2.99 J | 4.64 | 6.48 |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-438 | 334-439 | 334-440 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-438(0.0-0.5) | POM-S-334-439(0.0-0.5) | POM-S-334-440(0.0-0.5)-DUP |
| **Lab ID** | | | | 4711865 | 4711866 | 4720174 |
| **Date** | | | | 2/16/06 | 2/16/06 | 3/1/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***46*** | ***158*** | 19 J |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 2.29 J | 5.47 | 1.75 J |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-440 | 334-441 | 334-442 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-440(0.0-0.5) | POM-S-334-441(0.0-0.5) | POM-S-334-442(0.0-0.5) |
| **Lab ID** | | | | 4720170 | 4720175 | 4720176 |
| **Date** | | | | 3/1/06 | 3/1/06 | 3/1/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***24.3 J*** | ***86.5 J*** | ***75.6 J*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 1.48 J | 5.93 | 3.91 |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-443 | 334-444 | 334-445 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-443(0.0-0.5) | POM-S-334-444(0.0-0.5) | POM-S-334-445(0.0-0.5) |
| **Lab ID** | | | | 4720177 | 4726519 | 4726520 |
| **Date** | | | | 3/1/06 | 3/10/06 | 3/10/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***113 J*** | 13.2 J | ***30.2 J*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 4.22 | | 4.36 |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-446 | 334-447 | 334-447 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-446(0.0-0.5) | POM-S-334-447(0.0-0.5)-DUP | POM-S-334-447(0.0-0.5) |
| **Lab ID** | | | | 4726521 | 4726526 | 4726522 |
| **Date** | | | | 3/10/06 | 3/10/06 | 3/10/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***97.2 J*** | ***58.8 J*** | ***48.2 J*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 3.17 J | 2.34 J | 2.36 J |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-448 | 334-449 | 334-449 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-448(0.0-0.5) | POM-S-334-449(0.0-0.5)-DUP | POM-S-334-449(0.0-0.5) |
| **Lab ID** | | | | 4734758 | 4734763 | 4734759 |
| **Date** | | | | 3/21/06 | 3/21/06 | 3/21/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***58.5*** | ***59.7*** | ***66.2*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 4.64 J | 4.07 J | 3.73 J |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-450 | 334-451 | 334-451 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-450(0.0-0.5) | POM-S-334-451(0.0-0.5)-DUP | POM-S-334-451(0.0-0.5) |
| **Lab ID** | | | | 4734764 | 4739631 | 4739627 |
| **Date** | | | | 3/21/06 | 3/29/06 | 3/29/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 16.7 | ***152*** | ***147*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 1.17 J | 7.23 J | 7.18 J |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-452 | 334-453 | 334-454 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-452(0.0-0.5) | POM-S-334-453(0.0-0.5) | POM-S-334-454(0.0-0.5)-DUP |
| **Lab ID** | | | | 4739632 | 4745542 | 4745547 |
| **Date** | | | | 3/29/06 | 4/6/06 | 4/6/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***87.6*** | ***65.8*** | ***80.5*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 4.48 J | 3.61 J | 4.4 |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-454 | 334-454-E | 334-456 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-454(0.0-0.5) | POM-S-334-454(0.0-0.5) | POM-S-334-456(0.0-0.5) |
| **Lab ID** | | | | 4745543 | 4756688 | 4751812 |
| **Date** | | | | 4/6/06 | 4/7/06 | 4/14/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***81.4*** | | ***107*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | 160 | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 4.4 | | 3.56 J |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-457 | 334-457 | 334-460 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-457(0.0-0.5)-DUP | POM-S-334-457(0.0-0.5) | POM-S-334-460(0.0-0.5) |
| **Lab ID** | | | | 4751811 | 4751807 | 4757878 |
| **Date** | | | | 4/14/06 | 4/14/06 | 4/25/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***36.9*** | ***39.2*** | ***98.9*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 2.83 J | 3.21 J | 8.91 J |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-461 | 334-461 | 334-462 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-461(0.0-0.5)-DUP | POM-S-334-461(0.0-0.5) | POM-S-334-462(0.0-0.5)-DUP |
| **Lab ID** | | | | 4757883 | 4757879 | 4763589 |
| **Date** | | | | 4/25/06 | 4/25/06 | 5/3/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***26.6*** | ***25.7*** | ***53*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 3.61 J | 4 J | 4.21 |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-462 | 334-463 | 334-464 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-462(0.0-0.5) | POM-S-334-463(0.0-0.5) | POM-S-334-464(0.0-0.5)-DUP |
| **Lab ID** | | | | 4763585 | 4763590 | 4773248 |
| **Date** | | | | 5/3/06 | 5/3/06 | 5/15/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***90*** | 17.2 | ***64.9*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 7.67 J | 2.73 J | 5.62 |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-464 | 334-465 | 334-468 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-464(0.0-0.5) | POM-S-334-465(0.0-0.5) | POM-S-334-468(0.0-0.5)-DUP |
| **Lab ID** | | | | 4773244 | 4773249 | 4785538 |
| **Date** | | | | 5/15/06 | 5/15/06 | 6/2/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***62.8*** | | ***66.8*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 5.5 | 1.49 J | 5.44 |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-468 | 334-469 | 334-470 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-468(0.0-0.5) | POM-S-334-469(0.0-0.5) | POM-S-334-470(0.0-0.5)-DUP |
| **Lab ID** | | | | 4785534 | 4788916 | 4793218 |
| **Date** | | | | 6/2/06 | 6/6/06 | 6/13/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***75.2*** | | ***45.7*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | 182 | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 5.18 | | 4.81 |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-470 | 334-471 | 334-471 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-470(0.0-0.5) | POM-S-334-471(0.0-0.5)-DUP | POM-S-334-471(0.0-0.5) |
| **Lab ID** | | | | 4793214 | 4800452 | 4800448 |
| **Date** | | | | 6/13/06 | 6/22/06 | 6/22/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***44.5*** | ***60.6*** | ***58.1*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 5.13 | 4.29 J | 3.91 J |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-472 | 334-472 | 334-473 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-472(0.0-0.5)-DUP | POM-S-334-472(0.0-0.5) | POM-S-334-473(0.0-0.5)-DUP |
| **Lab ID** | | | | 4805749 | 4805745 | 4826987 |
| **Date** | | | | 6/28/06 | 6/28/06 | 7/28/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***114*** | ***115*** | 4.4 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 5.43 | 4.98 | 0.839 J |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-473 | 334-474 | 334-475 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-473(0.0-0.5) | POM-S-334-474(0.0-0.5) | POM-S-334-475(0.0-0.5) |
| **Lab ID** | | | | 4826983 | 4846045 | 4846046 |
| **Date** | | | | 7/28/06 | 8/18/06 | 8/18/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 6.41 | ***23.5 J*** | ***79.1 J*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 0.947 J | 2 J | 4.03 |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-476 | 334-476 | 334-477 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-476(0.0-0.5)-DUP | POM-S-334-476(0.0-0.5) | POM-S-334-477(0.0-0.5) |
| **Lab ID** | | | | 4846052 | 4846048 | 4846047 |
| **Date** | | | | 8/18/06 | 8/18/06 | 8/18/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***207 J*** | ***139 J*** | ***51.4 J*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 8.1 | 6.22 | 3.34 |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-478 | 334-479 | 334-479 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-478(0.0-0.5) | POM-S-334-479(0.0-0.5)-DUP | POM-S-334-479(0.0-0.5) |
| **Lab ID** | | | | 4867439 | 4867436 | 4867432 |
| **Date** | | | | 9/18/06 | 9/18/06 | 9/18/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***270 J*** | 12.1 J | 15 J |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | 1.56 J | 2.03 J |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-480 | 334-481 | 334-482 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-480(0.0-0.5) | POM-S-334-481(0.0-0.5) | POM-S-334-482(0.0-0.5) |
| **Lab ID** | | | | 4867437 | 4867438 | 4884168 |
| **Date** | | | | 9/18/06 | 9/18/06 | 10/6/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***29.8 J*** | ***74.5 J*** | ***201*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 2.97 J | 4.79 J | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-483 | 334-483 | 334-484 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-483(0.0-0.5)-DUP | POM-S-334-483(0.0-0.5) | POM-S-334-484(0.0-0.5) |
| **Lab ID** | | | | 4884174 | 4884170 | 4884169 |
| **Date** | | | | 10/6/06 | 10/6/06 | 10/6/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***19.8*** | 18.6 | ***76.7*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 1.94 J | 2.04 J | 6.49 |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-485 | 334-485 | 334-486 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-485(0.0-0.5)-DUP | POM-S-334-485(0.0-0.5) | POM-S-334-486(0.0-0.5) |
| **Lab ID** | | | | 4898509 | 4898505 | 4898510 |
| **Date** | | | | 10/23/06 | 10/23/06 | 10/23/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***35.9*** | ***33.2*** | ***54.1*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 2.39 J | 1.97 J | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-487 | 334-488 | 334-489 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-487(0.0-0.5) | POM-S-334-488(0.0-0.5) | POM-S-334-489(0.0-0.5)-DUP |
| **Lab ID** | | | | 4898511 | 4907648 | 4907653 |
| **Date** | | | | 10/23/06 | 11/3/06 | 11/3/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***55.4*** | 13.4 | ***32*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 2.62 J | | 1.39 J |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-489 | 334-490 | 334-491 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-489(0.0-0.5) | POM-S-334-490(0.0-0.5) | POM-S-334-491(0.0-0.5) |
| **Lab ID** | | | | 4907649 | 4907654 | 4908282 |
| **Date** | | | | 11/3/06 | 11/3/06 | 11/3/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***33*** | 4.52 | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | ***1060 J*** |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 1.91 J | 0.491 J | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-492 | 334-492 | 334-493 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-492(0.0-0.5)-DUP | POM-S-334-492-(0.0-0.5) | POM-S-334-493(0-0.5) |
| **Lab ID** | | | | 4913710 | 4913706 | 4920443 |
| **Date** | | | | 11/10/06 | 11/10/06 | 11/17/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***86.1*** | ***89*** | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | 238 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-494 | 334-494 | 334-495 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-494(0-0.5)-DUP | POM-S-334-494(0-0.5) | POM-S-334-495(0-0.5) |
| **Lab ID** | | | | 4920450 | 4920446 | 4920444 |
| **Date** | | | | 11/17/06 | 11/17/06 | 11/17/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | **584** | **554** | ***1190*** |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-496 | 334-497 | 334-497 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.4 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-496(0-0.4) | POM-S-334-497(0-0.5)-DUP | POM-S-334-497(0-0.5) |
| **Lab ID** | | | | 4920445 | 4920456 | 4920452 |
| **Date** | | | | 11/17/06 | 11/17/06 | 11/17/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | ***79.1*** | ***67.7*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 55.3 | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-498 | 334-498 | 334-499 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-498(0.0-0.5)-DUP | POM-S-334-498(0.0-0.5) | POM-S-334-499(0.0-0.5) |
| **Lab ID** | | | | 4928829 | 4928825 | 4928824 |
| **Date** | | | | 12/1/06 | 12/1/06 | 12/1/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | ***198*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 116 | 131 | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-500 | 334-500 | 334-501 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-500(0.0-0.5)-DUP | POM-S-334-500-(0.0-0.5) | POM-S-334-501(0.0-0.5)-DUP |
| **Lab ID** | | | | 4928823 | 4928819 | 4935493 |
| **Date** | | | | 12/1/06 | 12/1/06 | 12/8/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 8.22 | 7.87 | ***67.9*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 1.51 J | 1.34 J | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-501 | 334-502 | 334-503 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-501(0.0-0.5) | POM-S-334-502-(0.0-0.5) | POM-S-334-503(0.0-0.5)-DUP |
| **Lab ID** | | | | 4935489 | 4941853 | 4941858 |
| **Date** | | | | 12/8/06 | 12/15/06 | 12/15/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***71.8*** | ***26.8*** | 17.5 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | 1.6 J |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-503 | 334-504 | 334-504 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-503-(0.0-0.5) | POM-S-334-504(0.0-0.5)-DUP | POM-S-334-504(0.0-0.5) |
| **Lab ID** | | | | 4941854 | 4948167 | 4948163 |
| **Date** | | | | 12/15/06 | 12/22/06 | 12/22/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 15.9 | ***22.5*** | ***23.6*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 1.59 J | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-505 | 334-506 | 334-506 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-505(0.0-0.5) | POM-S-334-506(0.0-0.5)-DUP | POM-S-334-506(0.0-0.5) |
| **Lab ID** | | | | 4970477 | 4970475 | 4970474 |
| **Date** | | | | 1/29/07 | 1/26/07 | 1/26/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***98.9*** | 13 | 12.3 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 2.84 J | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-507 | 334-507 | 334-508 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-507(0.0-0.5)-DUP | POM-S-334-507(0.0-0.5) | POM-S-334-508(0.0-0.5)-DUP |
| **Lab ID** | | | | 4982103 | 4982099 | 5018987 |
| **Date** | | | | 2/12/07 | 2/12/07 | 3/23/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***181*** | ***186*** | ***39.3*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 5.12 | 5.57 | 2.14 J |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-508 | 334-509 | 334-509 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-508(0.0-0.5) | POM-S-334-509(0.0-0.5)-DUP | POM-S-334-509(0.0-0.5) |
| **Lab ID** | | | | 5018983 | 5049239 | 5049235 |
| **Date** | | | | 3/23/07 | 5/4/07 | 5/4/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***33.7*** | ***62.5*** | ***61.3*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 2.2 J | 2.17 J | 2.23 J |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-510 | 334-511 | 334-512 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-510(0.0-0.5) | POM-S-334-511(0.0-0.5) | POM-S-334-512(0.0-0.5)-DUP |
| **Lab ID** | | | | 5061664 | 5129924 | 5129929 |
| **Date** | | | | 5/22/07 | 8/15/07 | 8/15/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***68.7 J*** | 16.2 J | 14.1 J |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 2.12 J | ND (1.23) | 1.8 J |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-512 | 334-516 | 334-516 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-512(0.0-0.5) | POM-S-334-516(0.0-0.5)-DUP | POM-S-334-516(0.0-0.5) |
| **Lab ID** | | | | 5129925 | 5157290 | 5157286 |
| **Date** | | | | 8/15/07 | 9/14/07 | 9/14/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***25.5 J*** | 7.42 | 11.7 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | 2.18 J | 3.16 J | 3.05 J |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-517 | 334-B1 | 334-B1 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 1 | 2 |
| **Bottom (ft)** | | | | 0.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-517(0.0-0.5) | POM-S-334-B1(1.0-1.5) | POM-S-334-B1(2.0-2.5) |
| **Lab ID** | | | | 5844810 | 5270011 | 5270012 |
| **Date** | | | | 11/19/09 | 1/31/08 | 1/31/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 266 | 17.6 | 50.7 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B10 | 334-B10 | 334-B100 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B10(1-1.5) | POM-S-334-B10(2-2.5) | POM-S-334-B100(1.0-1.5) |
| **Lab ID** | | | | 5252926 | 5252927 | 5317525 |
| **Date** | | | | 1/9/08 | 1/9/08 | 3/26/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***1830*** | 117 | ***4470*** |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B100 | 334-B100 | 334-B101 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 3 | 1 |
| **Bottom (ft)** | | | | 2.5 | 3.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B100(2.0-2.5) | POM-S-334-B100(3.0-3.5) | POM-S-334-B101(1.0-1.5) |
| **Lab ID** | | | | 5317526 | 5535220 | 5317535 |
| **Date** | | | | 3/26/08 | 11/17/08 | 3/26/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | **627** | 27.3 J | ***20100*** |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B102 | 334-B103 | 334-B103 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 1 | 1 |
| **Bottom (ft)** | | | | 1.5 | 1.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B102(1.0-1.5) | POM-S-334-B103(1.0-1.5)-DUP | POM-S-334-B103(1.0-1.5) |
| **Lab ID** | | | | 5317536 | 5317533 | 5317529 |
| **Date** | | | | 3/26/08 | 3/26/08 | 3/26/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 86.5 | 46.7 | 34.3 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B103 | 334-B104 | 334-B104 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B103(2.0-2.5) | POM-S-334-B104(1.0-1.5) | POM-S-334-B104(2.0-2.5) |
| **Lab ID** | | | | 5317534 | 5317527 | 5317528 |
| **Date** | | | | 3/26/08 | 3/26/08 | 3/26/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 99.1 | 108 | ***25600*** |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B104 | 334-B104 | 334-B104 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 3.5 | 4 | 4 |
| **Bottom (ft)** | | | | 4 | 4.25 | 4.25 |
| **Sample ID** | | | | POM-S-334-B104(3.5-4.0) | POM-S-334-B104(4.0-4.25)-DUP | POM-S-334-B104(4.0-4.25) |
| **Lab ID** | | | | 5538966 | 5844819 | 5844815 |
| **Date** | | | | 11/21/08 | 11/19/09 | 11/19/09 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***9700*** | 46.9 | 283 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B105 | 334-B106 | 334-B107 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-B105(0.0-0.5) | POM-S-334-B106(0.0-0.5) | POM-S-334-B107(0.0-0.5) |
| **Lab ID** | | | | 5538980 | 5538979 | 5538956 |
| **Date** | | | | 11/20/08 | 11/20/08 | 11/20/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 11.8 | 10.2 | 9.76 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B108 | 334-B108 | 334-B109 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-B108(0.0-0.5)-DUP | POM-S-334-B108(0.0-0.5) | POM-S-334-B109(0.0-0.5) |
| **Lab ID** | | | | 5538975 | 5538971 | 5538965 |
| **Date** | | | | 11/20/08 | 11/20/08 | 11/21/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 9.75 | 13 | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | 214 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B11 | 334-B11 | 334-B110 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 0 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-B11(1-1.5) | POM-S-334-B11(2-2.5) | POM-S-334-B110(0.0-0.5) |
| **Lab ID** | | | | 5252913 | 5252914 | 5538964 |
| **Date** | | | | 1/8/08 | 1/8/08 | 11/21/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 5.87 | 4.29 | 188 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B12 | 334-B12 | 334-B13 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B12(1-1.5) | POM-S-334-B12(2.0-2.5) | POM-S-334-B13(1-1.5) |
| **Lab ID** | | | | 5252928 | 5252929 | 5252930 |
| **Date** | | | | 1/9/08 | 1/9/08 | 1/9/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 5.37 | 4.35 | 16.8 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B13 | 334-B14 | 334-B14 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B13(2.0-2.5) | POM-S-334-B14(1-1.5) | POM-S-334-B14(2.0-2.5) |
| **Lab ID** | | | | 5252931 | 5252916 | 5252917 |
| **Date** | | | | 1/9/08 | 1/8/08 | 1/8/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 12.4 | 7.16 | 9.81 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B15 | 334-B15 | 334-B16 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B15(1.0-1.5) | POM-S-334-B15(2.0-2.5) | POM-S-334-B16(1.0-1.5) |
| **Lab ID** | | | | 5259329 | 5259330 | 5259331 |
| **Date** | | | | 1/15/08 | 1/15/08 | 1/15/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 43.6 | 16.6 | 265 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B16 | 334-B17 | 334-B17 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B16(2.0-2.5) | POM-S-334-B17(1.0-1.5) | POM-S-334-B17(2.0-2.5) |
| **Lab ID** | | | | 5259332 | 5259333 | 5259334 |
| **Date** | | | | 1/15/08 | 1/15/08 | 1/15/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 7.33 | 52.8 | 31.6 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B18 | 334-B18 | 334-B18 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 1 | 2 |
| **Bottom (ft)** | | | | 1.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B18(1-1.5)-DUP | POM-S-334-B18(1-1.5) | POM-S-334-B18(2-2.5) |
| **Lab ID** | | | | 5252922 | 5252918 | 5252923 |
| **Date** | | | | 1/8/08 | 1/8/08 | 1/8/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 15.6 | 16.9 | 3.66 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 112 | 124 | 6.43 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B19 | 334-B19 | 334-B2 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B19(1.0-1.5) | POM-S-334-B19(2.0-2.5) | POM-S-334-B2(1.0-1.5) |
| **Lab ID** | | | | 5259341 | 5259342 | 5270013 |
| **Date** | | | | 1/15/08 | 1/15/08 | 1/31/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 7.98 | 5.13 | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | 149 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B2 | 334-B20 | 334-B20 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B2(2.0-2.5) | POM-S-334-B20(1.0-1.5) | POM-S-334-B20(2.0-2.5) |
| **Lab ID** | | | | 5270014 | 5259345 | 5259346 |
| **Date** | | | | 1/31/08 | 1/15/08 | 1/15/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | 5.41 | 3.24 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 114 | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B21 | 334-B21 | 334-B22 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B21(1.0-1.5) | POM-S-334-B21(2.0-2.5) | POM-S-334-B22(1.0-1.5)-DUP |
| **Lab ID** | | | | 5274622 | 5274623 | 5270019 |
| **Date** | | | | 2/5/08 | 2/5/08 | 1/31/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 11.5 | 30.8 | 37.9 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B22 | 334-B22 | 334-B23 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B22(1.0-1.5) | POM-S-334-B22(2.0-2.5) | POM-S-334-B23(1.0-1.5) |
| **Lab ID** | | | | 5270015 | 5270020 | 5259384 |
| **Date** | | | | 1/31/08 | 1/31/08 | 1/17/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | ND (1.31) UJ |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 32.6 | 55.9 | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B24 | 334-B24 | 334-B25 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B24(1.0-1.5) | POM-S-334-B24(2.0-2.5) | POM-S-334-B25(1.0-1.5) |
| **Lab ID** | | | | 5259374 | 5259375 | 5259372 |
| **Date** | | | | 1/17/08 | 1/17/08 | 1/17/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 3.72 J | 1.48 J | ***40.7 J*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B25 | 334-B25 | 334-B26 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 4 | 1 |
| **Bottom (ft)** | | | | 2.5 | 4.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B25(2.0-2.5) | POM-S-334-B25(4.0-4.5) | POM-S-334-B26(1.0-1.5) |
| **Lab ID** | | | | 5259373 | 5538976 | 5259361 |
| **Date** | | | | 1/17/08 | 11/20/08 | 1/16/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***33.4 J*** | ***19.3*** | 3.05 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B26 | 334-B27 | 334-B27 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.3 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B26(2.0-2.3) | POM-S-334-B27(1.0-1.5) | POM-S-334-B27(2.0-2.5) |
| **Lab ID** | | | | 5259362 | 5259351 | 5259352 |
| **Date** | | | | 1/16/08 | 1/16/08 | 1/16/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 3.28 | 2.25 | 3.07 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B28 | 334-B28 | 334-B29 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B28(1.0-1.5) | POM-S-334-B28(2.0-2.5) | POM-S-334-B29(1.0-1.5) |
| **Lab ID** | | | | 5259376 | 5259377 | 5259378 |
| **Date** | | | | 1/17/08 | 1/17/08 | 1/17/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 1.39 J | 1.86 J | ND (1.13) UJ |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B29 | 334-B3 | 334-B3 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B29(2.0-2.5) | POM-S-334-B3(1.0-1.5) | POM-S-334-B3(2.0-2.5) |
| **Lab ID** | | | | 5259379 | 5259343 | 5259344 |
| **Date** | | | | 1/17/08 | 1/15/08 | 1/15/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 1.14 J | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | 8.39 | 4.81 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B30 | 334-B30 | 334-B31 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B30(1.0-1.5) | POM-S-334-B30(2.0-2.5) | POM-S-334-B31(1.0-1.5) |
| **Lab ID** | | | | 5259357 | 5259358 | 5259355 |
| **Date** | | | | 1/16/08 | 1/16/08 | 1/16/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 2.97 | 4.67 | ***21.1*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B31 | 334-B32 | 334-B32 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.4 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B31(2.0-2.4) | POM-S-334-B32(1.0-1.5) | POM-S-334-B32(2.0-2.5) |
| **Lab ID** | | | | 5259356 | 5259353 | 5259354 |
| **Date** | | | | 1/16/08 | 1/16/08 | 1/16/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 3.11 | 8.09 | 16.6 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B33 | 334-B33 | 334-B34 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B33(1.0-1.5) | POM-S-334-B33(2.0-2.5) | POM-S-334-B34(1.0-1.5) |
| **Lab ID** | | | | 5259382 | 5259383 | 5259380 |
| **Date** | | | | 1/17/08 | 1/17/08 | 1/17/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***29.5 J*** | 15.7 J | ***59.2 J*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B34 | 334-B34 | 334-B35 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 3 | 1 |
| **Bottom (ft)** | | | | 2.5 | 3.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B34(2.0-2.5) | POM-S-334-B34(3.0-3.5) | POM-S-334-B35(1.0-1.5) |
| **Lab ID** | | | | 5259381 | 5535231 | 5259359 |
| **Date** | | | | 1/17/08 | 11/18/08 | 1/16/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***25.1 J*** | 17.8 | 2.16 J |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B35 | 334-B36 | 334-B36 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B35(2.0-2.5) | POM-S-334-B36(1.0-1.5) | POM-S-334-B36(2.0-2.5) |
| **Lab ID** | | | | 5259360 | 5259363 | 5259364 |
| **Date** | | | | 1/16/08 | 1/16/08 | 1/16/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ND (1.16) | 4.8 | 2.86 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B37 | 334-B37 | 334-B37 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 1 | 2 |
| **Bottom (ft)** | | | | 1.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B37(1.0-1.5)-DUP | POM-S-334-B37(1.0-1.5) | POM-S-334-B37(2.0-2.5) |
| **Lab ID** | | | | 5259369 | 5259365 | 5259370 |
| **Date** | | | | 1/16/08 | 1/16/08 | 1/16/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***61.7*** | ***56.5*** | 9.91 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B38 | 334-B38 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 |
| **Bottom (ft)** | | | | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B38(1.0-1.5) | POM-S-334-B38(2.0-2.5) |
| **Lab ID** | | | | 5264111 | 5264112 |
| **Date** | | | | 1/22/08 | 1/22/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | 1.94 J | 1.89 J |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | | |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B39 | 334-B39 | 334-B4 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B39(1.0-1.5) | POM-S-334-B39(2.0-2.5) | POM-S-334-B4(1.0-1.5)-DUP |
| **Lab ID** | | | | 5264123 | 5264124 | 5259339 |
| **Date** | | | | 1/23/08 | 1/23/08 | 1/15/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 2.69 | 1.92 J | 8.09 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | 23.1 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B4 | 334-B4 | 334-B40 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.3 | 1.5 |
| **Sample ID** | | | | POM-S-334-B4(1.0-1.5) | POM-S-334-B4(2.0-2.3) | POM-S-334-B40(1.0-1.5) |
| **Lab ID** | | | | 5259335 | 5259340 | 5260664 |
| **Date** | | | | 1/15/08 | 1/15/08 | 1/18/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 8.34 | 6.29 | 16.5 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 24 | 34.5 | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B40 | 334-B41 | 334-B41 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B40(2.0-2.5) | POM-S-334-B41(1.0-1.5) | POM-S-334-B41(2.0-2.5) |
| **Lab ID** | | | | 5260665 | 5260662 | 5260663 |
| **Date** | | | | 1/18/08 | 1/18/08 | 1/18/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 17.5 | ***51.3*** | 13.3 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B42 | 334-B42 | 334-B42 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 3 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 3.5 |
| **Sample ID** | | | | POM-S-334-B42(1.0-1.5) | POM-S-334-B42(2.0-2.5) | POM-S-334-B42(3.0-3.5) |
| **Lab ID** | | | | 5260660 | 5260661 | 5844811 |
| **Date** | | | | 1/18/08 | 1/18/08 | 11/19/09 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 8.19 | ***151*** | ***21.7 J*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B43 | 334-B43 | 334-B44 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B43(1.0-1.5) | POM-S-334-B43(2.0-2.5) | POM-S-334-B44(1.0-1.5)-DUP |
| **Lab ID** | | | | 5264119 | 5264120 | 5264117 |
| **Date** | | | | 1/22/08 | 1/22/08 | 1/22/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 6.32 | 3.02 | 4.55 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B44 | 334-B44 | 334-B45 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B44(1.0-1.5) | POM-S-334-B44(2.0-2.5) | POM-S-334-B45(1.0-1.5) |
| **Lab ID** | | | | 5264113 | 5264118 | 5260672 |
| **Date** | | | | 1/22/08 | 1/22/08 | 1/18/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 7.89 | 3.86 | 13.7 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B45 | 334-B46 | 334-B46 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 1 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B45(2.0-2.5) | POM-S-334-B46(1.0-1.5)-DUP | POM-S-334-B46(1.0-1.5) |
| **Lab ID** | | | | 5260673 | 5260670 | 5260666 |
| **Date** | | | | 1/18/08 | 1/18/08 | 1/18/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***19.9*** | ***133*** | ***101*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B46 | 334-B46 | 334-B47 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 3.5 | 1 |
| **Bottom (ft)** | | | | 2.5 | 4 | 1.5 |
| **Sample ID** | | | | POM-S-334-B46(2.0-2.5) | POM-S-334-B46(3.5-4.0) | POM-S-334-B47(1.0-1.5) |
| **Lab ID** | | | | 5260671 | 5538963 | 5264125 |
| **Date** | | | | 1/18/08 | 11/21/08 | 1/23/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***51.9*** | ***53.2*** | 6.28 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B47 | 334-B47 | 334-B48 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 4.5 | 1 |
| **Bottom (ft)** | | | | 2.5 | 5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B47(2.0-2.5) | POM-S-334-B47(4.5-5.0) | POM-S-334-B48(1.0-1.5) |
| **Lab ID** | | | | 5264126 | 5538962 | 5264131 |
| **Date** | | | | 1/23/08 | 11/21/08 | 1/23/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***67.2*** | ***30.8*** | ***76.2*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B48 | 334-B49 | 334-B49 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B48(2.0-2.5) | POM-S-334-B49(1.0-1.5) | POM-S-334-B49(2.0-2.5) |
| **Lab ID** | | | | 5264132 | 5264109 | 5264110 |
| **Date** | | | | 1/23/08 | 1/22/08 | 1/22/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 10.2 | 2.07 J | ***50*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B49 | 334-B5 | 334-B5 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 3 | 1 | 2 |
| **Bottom (ft)** | | | | 3.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B49(3.0-3.5) | POM-S-334-B5(1-1.5) | POM-S-334-B5(2-2.5) |
| **Lab ID** | | | | 5538957 | 5252911 | 5252912 |
| **Date** | | | | 11/20/08 | 1/8/08 | 1/8/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 4.29 | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | 216 | 8.82 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B50 | 334-B50 | 334-B51 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B50(1.0-1.5) | POM-S-334-B50(2.0-2.5) | POM-S-334-B51(1.0-1.5) |
| **Lab ID** | | | | 5264107 | 5264108 | 5264129 |
| **Date** | | | | 1/22/08 | 1/22/08 | 1/23/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 7.79 | 2.1 J | ***120*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B51 | 334-B52 | 334-B52 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B51(2.0-2.5) | POM-S-334-B52(1.0-1.5) | POM-S-334-B52(2.0-2.5) |
| **Lab ID** | | | | 5264130 | 5264127 | 5264128 |
| **Date** | | | | 1/23/08 | 1/23/08 | 1/23/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 15.8 | 4.21 | 8.21 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B53 | 334-B53 | 334-B54 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B53(1.0-1.5) | POM-S-334-B53(2.0-2.5) | POM-S-334-B54(1.0-1.5) |
| **Lab ID** | | | | 5270029 | 5270030 | 5324016 |
| **Date** | | | | 1/31/08 | 1/31/08 | 4/3/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 16.3 | 4.37 | 5.74 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B54 | 334-B55 | 334-B55 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B54(2.0-2.5) | POM-S-334-B55(1.0-1.5) | POM-S-334-B55(2.0-2.5) |
| **Lab ID** | | | | 5324017 | 5270027 | 5270028 |
| **Date** | | | | 4/3/08 | 1/31/08 | 1/31/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 5.36 | ***162*** | ***21.5*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B55 | 334-B56 | 334-B56 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 3 | 1 | 2 |
| **Bottom (ft)** | | | | 3.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B55(3.0-3.5) | POM-S-334-B56(1.0-1.5) | POM-S-334-B56(2.0-2.5) |
| **Lab ID** | | | | 5535232 | 5270025 | 5270026 |
| **Date** | | | | 11/18/08 | 1/31/08 | 1/31/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 2.57 | 9.58 | 6.12 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B57 | 334-B57 | 334-B58 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B57(1.0-1.5) | POM-S-334-B57(2.0-2.5) | POM-S-334-B58(1.0-1.5) |
| **Lab ID** | | | | 5270023 | 5270024 | 5270021 |
| **Date** | | | | 1/30/08 | 1/30/08 | 1/30/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 3.38 | 2.07 J | 8.94 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B58 | 334-B59 | 334-B59 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B58(2.0-2.5) | POM-S-334-B59(1.0-1.5) | POM-S-334-B59(2.0-2.5)-DUP |
| **Lab ID** | | | | 5270022 | 5270031 | 5270036 |
| **Date** | | | | 1/30/08 | 1/31/08 | 1/31/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 3.13 | ***19.8*** | ***22.8*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B59 | 334-B59 | 334-B6 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 3 | 1 |
| **Bottom (ft)** | | | | 2.5 | 3.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B59(2.0-2.5) | POM-S-334-B59(3.0-3.5) | POM-S-334-B6(1-1.5) |
| **Lab ID** | | | | 5270032 | 5538977 | 5252909 |
| **Date** | | | | 1/31/08 | 11/20/08 | 1/8/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 14.7 | 10.7 | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | 26.1 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B6 | 334-B60 | 334-B60 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B6(2.0-2.5) | POM-S-334-B60(1.0-1.5) | POM-S-334-B60(2.0-2.5) |
| **Lab ID** | | | | 5252910 | 5270037 | 5270038 |
| **Date** | | | | 1/8/08 | 1/31/08 | 1/31/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | ***23.6*** | ***356*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 4.74 | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B60 | 334-B61 | 334-B61 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 3 | 1 | 2 |
| **Bottom (ft)** | | | | 3.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B60(3.0-3.5) | POM-S-334-B61(1.0-1.5) | POM-S-334-B61(2.0-2.5) |
| **Lab ID** | | | | 5535235 | 5259347 | 5259348 |
| **Date** | | | | 11/18/08 | 1/15/08 | 1/15/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 5.18 | 5.13 | 4.88 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B64 | 334-B64 | 334-B65 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B64(1.0-1.5) | POM-S-334-B64(2.0-2.5) | POM-S-334-B65(1.0-1.5) |
| **Lab ID** | | | | 5317517 | 5317518 | 5296262 |
| **Date** | | | | 3/27/08 | 3/27/08 | 3/4/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 178 | 11.4 | 7.03 J |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B65 | 334-B67 | 334-B67 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B65(2.0-2.5) | POM-S-334-B67(1.0-1.5) | POM-S-334-B67(2.0-2.5) |
| **Lab ID** | | | | 5296263 | 5317521 | 5317522 |
| **Date** | | | | 3/4/08 | 3/27/08 | 3/27/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 156 J | **499** | 10.2 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B7 | 334-B7 | 334-B70 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B7(1-1.5) | POM-S-334-B7(2.0-2.5) | POM-S-334-B70(1.0-1.5) |
| **Lab ID** | | | | 5252907 | 5252908 | 5317519 |
| **Date** | | | | 1/8/08 | 1/8/08 | 3/27/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 31.3 | 26.4 | ***1670*** |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B70 | 334-B71 | 334-B71 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B70(2.0-2.5) | POM-S-334-B71(1.0-1.5) | POM-S-334-B71(2.0-2.5) |
| **Lab ID** | | | | 5317520 | 5279623 | 5279624 |
| **Date** | | | | 3/27/08 | 2/12/08 | 2/12/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 228 | 33.3 | 10.7 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B72 | 334-B73 | 334-B73 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 1 | 2 |
| **Bottom (ft)** | | | | 1.3 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B72(1.0-1.3) | POM-S-334-B73(1.0-1.5) | POM-S-334-B73(2.0-2.5) |
| **Lab ID** | | | | 5296264 | 5282207 | 5282208 |
| **Date** | | | | 3/4/08 | 2/15/08 | 2/15/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 63 J | 46.1 | 17.4 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B74 | 334-B74 | 334-B75 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B74(1.0-1.5) | POM-S-334-B74(2.0-2.5) | POM-S-334-B75(1.0-1.5) |
| **Lab ID** | | | | 5296260 | 5296261 | 5279619 |
| **Date** | | | | 3/4/08 | 3/4/08 | 2/12/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 44.9 J | 8.58 J | 15.5 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B75 | 334-B76 | 334-B76 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 1 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B75(2.0-2.5) | POM-S-334-B76(1.0-1.5)-DUP | POM-S-334-B76(1.0-1.5) |
| **Lab ID** | | | | 5279620 | 5282213 | 5282209 |
| **Date** | | | | 2/12/08 | 2/15/08 | 2/15/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 11.3 | 57.8 | 63.1 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B76 | 334-B77 | 334-B77 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B76(2.0-2.5) | POM-S-334-B77(1.0-1.5) | POM-S-334-B77(2.0-2.5) |
| **Lab ID** | | | | 5282214 | 5276638 | 5276639 |
| **Date** | | | | 2/15/08 | 2/7/08 | 2/7/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 7.88 | 8.48 | 7.89 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B78 | 334-B78 | 334-B79 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B78(1.0-1.5) | POM-S-334-B78(2.0-2.5) | POM-S-334-B79(1.0-1.5) |
| **Lab ID** | | | | 5276657 | 5276658 | 5276636 |
| **Date** | | | | 2/8/08 | 2/8/08 | 2/7/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 22.4 | 9.24 | 13.1 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B79 | 334-B8 | 334-B8 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.4 | 2.5 |
| **Sample ID** | | | | POM-S-334-B79(2.0-2.5) | POM-S-334-B8(1-1.4) | POM-S-334-B8(2.0-2.5) |
| **Lab ID** | | | | 5276637 | 5252905 | 5252906 |
| **Date** | | | | 2/7/08 | 1/8/08 | 1/8/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | 2.1 J | 3.11 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 16.4 | 24.4 | 4.84 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B80 | 334-B80 | 334-B81 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B80(1.0-1.5) | POM-S-334-B80(2.0-2.5) | POM-S-334-B81(1.0-1.5) |
| **Lab ID** | | | | 5276655 | 5276656 | 5276632 |
| **Date** | | | | 2/8/08 | 2/8/08 | 2/7/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 15.8 | 10.5 | 16 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B81 | 334-B82 | 334-B82 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B81(2.0-2.5) | POM-S-334-B82(1.0-1.5) | POM-S-334-B82(2.0-2.5) |
| **Lab ID** | | | | 5276633 | 5276653 | 5276654 |
| **Date** | | | | 2/7/08 | 2/8/08 | 2/8/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 5.01 | 21.3 | 13.1 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B83 | 334-B83 | 334-B84 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B83(1.0-1.5) | POM-S-334-B83(2.0-2.5) | POM-S-334-B84(1.0-1.5) |
| **Lab ID** | | | | 5276634 | 5276635 | 5276640 |
| **Date** | | | | 2/7/08 | 2/7/08 | 2/7/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 8.32 | 5.91 | 8.66 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B84 | 334-B85 | 334-B85 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B84(2.0-2.5) | POM-S-334-B85(1.0-1.5) | POM-S-334-B85(2.0-2.5) |
| **Lab ID** | | | | 5276641 | 5276649 | 5276650 |
| **Date** | | | | 2/7/08 | 2/7/08 | 2/7/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 6.48 | 16.5 | 9.31 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B86 | 334-B86 | 334-B87 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B86(1.0-1.5) | POM-S-334-B86(2.0-2.5) | POM-S-334-B87(1.0-1.5) |
| **Lab ID** | | | | 5279621 | 5279622 | 5276659 |
| **Date** | | | | 2/12/08 | 2/12/08 | 2/8/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 6.73 | 4.08 | 9.56 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B87 | 334-B88 | 334-B88 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B87(2.0-2.5) | POM-S-334-B88(1.0-1.5) | POM-S-334-B88(2.0-2.5) |
| **Lab ID** | | | | 5276660 | 5276647 | 5276648 |
| **Date** | | | | 2/8/08 | 2/8/08 | 2/8/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 6.05 | 8.61 | 6.33 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B89 | 334-B89 | 334-B9 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B89(1.0-1.5) | POM-S-334-B89(2.0-2.5) | POM-S-334-B9(1-1.5) |
| **Lab ID** | | | | 5317515 | 5317516 | 5252924 |
| **Date** | | | | 3/27/08 | 3/27/08 | 1/9/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 70.5 | 13.9 | 15 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B9 | 334-B90 | 334-B90 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B9(2-2.5) | POM-S-334-B90(1.0-1.5) | POM-S-334-B90(2.0-2.5) |
| **Lab ID** | | | | 5252925 | 5317513 | 5317514 |
| **Date** | | | | 1/9/08 | 3/27/08 | 3/27/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 3.68 | 12.4 | 9.95 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B91 | 334-B92 | 334-B92 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 1 | 2 |
| **Bottom (ft)** | | | | 1.3 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B91(1.0-1.3) | POM-S-334-B92(1.0-1.5) | POM-S-334-B92(2.0-2.5) |
| **Lab ID** | | | | 5324015 | 5323998 | 5323999 |
| **Date** | | | | 4/3/08 | 4/3/08 | 4/3/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 56.8 | 96.8 | 25.8 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B93 | 334-B94 | 334-B94 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 1 | 2 |
| **Bottom (ft)** | | | | 1.5 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B93(1.0-1.5) | POM-S-334-B94(1.0-1.5) | POM-S-334-B94(2.0-2.5) |
| **Lab ID** | | | | 5324006 | 5324000 | 5324001 |
| **Date** | | | | 4/3/08 | 4/3/08 | 4/3/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 15.2 | 9.39 | 58.1 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B95 | 334-B95 | 334-B95 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 3 |
| **Bottom (ft)** | | | | 1.5 | 2.4 | 3.5 |
| **Sample ID** | | | | POM-S-334-B95(1.0-1.5) | POM-S-334-B95(2.0-2.4) | POM-S-334-B95(3.0-3.5) |
| **Lab ID** | | | | 5324004 | 5324005 | 5535219 |
| **Date** | | | | 4/3/08 | 4/3/08 | 11/17/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***1910*** | ***934*** | ***8320 J*** |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B96 | 334-B96 | 334-B97 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 2 | 1 |
| **Bottom (ft)** | | | | 1.5 | 2.3 | 1.5 |
| **Sample ID** | | | | POM-S-334-B96(1.0-1.5) | POM-S-334-B96(2.0-2.3) | POM-S-334-B97(1.0-1.5) |
| **Lab ID** | | | | 5324002 | 5324003 | 5324007 |
| **Date** | | | | 4/3/08 | 4/3/08 | 4/3/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 9.23 | 15.3 | 8.01 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B97 | 334-B98 | 334-B98 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 1 |
| **Bottom (ft)** | | | | 2.5 | 1.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-B97(2.0-2.5) | POM-S-334-B98(1.0-1.5)-DUP | POM-S-334-B98(1.0-1.5) |
| **Lab ID** | | | | 5324008 | 5324013 | 5324009 |
| **Date** | | | | 4/3/08 | 4/3/08 | 4/3/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 7.85 | 79 | 65.5 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-B98 | 334-B99 | 334-B99 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 1 | 2 |
| **Bottom (ft)** | | | | 2.3 | 1.5 | 2.5 |
| **Sample ID** | | | | POM-S-334-B98(2.0-2.3) | POM-S-334-B99(1.0-1.5) | POM-S-334-B99(2.0-2.5) |
| **Lab ID** | | | | 5324014 | 5317523 | 5317524 |
| **Date** | | | | 4/3/08 | 3/26/08 | 3/26/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 33.9 | 124 | 52.1 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-P1 | 334-P1 | 334-P10 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 3.5 | 0 |
| **Bottom (ft)** | | | | 0.5 | 4 | 0.5 |
| **Sample ID** | | | | POM-S-334-P1(0.0-0.5) | POM-S-334-P1(3.5-4.0) | POM-S-334-P10(0.0-0.5) |
| **Lab ID** | | | | 5259349 | 5538959 | 5274626 |
| **Date** | | | | 1/15/08 | 11/21/08 | 2/6/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | ***5470*** | 365 | 317 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-P11 | 334-P11 | 334-P11 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 1 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-P11(0.0-0.5)-DUP | POM-S-334-P11(0.0-0.5) | POM-S-334-P11(1.0-1.5)-DUP |
| **Lab ID** | | | | 5276646 | 5276642 | 5535227 |
| **Date** | | | | 2/7/08 | 2/7/08 | 11/18/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | **406** | 386 | 46 J |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-P11 | 334-P12 | 334-P13 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 0 | 0 |
| **Bottom (ft)** | | | | 1.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-P11(1.0-1.5) | POM-S-334-P12(0.0-0.5) | POM-S-334-P13(0.0-0.5) |
| **Lab ID** | | | | 5535223 | 5538969 | 5535221 |
| **Date** | | | | 11/18/08 | 11/20/08 | 11/17/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | 17.4 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 36.6 J | 89.5 | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-P14 | 334-P15 | 334-P15 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-P14(0.0-0.5) | POM-S-334-P15(0.0-0.5) | POM-S-334-P15(0.0-0.5) |
| **Lab ID** | | | | 5538958 | 5538955 | 5578081 |
| **Date** | | | | 11/21/08 | 11/20/08 | 1/15/09 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***19.7*** | ***40.9*** | 5.52 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-P16 | 334-P16 | 334-P17 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-P16(0.0-0.5) | POM-S-334-P16(0.0-0.5) | POM-S-334-P17(0.0-0.5) |
| **Lab ID** | | | | 5538978 | 5578082 | 5535230 |
| **Date** | | | | 11/20/08 | 1/15/09 | 11/18/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***29.6*** | 5.39 | 11.8 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-P18 | 334-P2 | 334-P2 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 1 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-P18(0.0-0.5) | POM-S-334-P2(0.0-0.5) | POM-S-334-P2(1.0-1.5) |
| **Lab ID** | | | | 5535222 | 5274621 | 5538970 |
| **Date** | | | | 11/18/08 | 2/5/08 | 11/20/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 95.7 J | **438** | 12.4 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-P3 | 334-P4 | 334-P4 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 3 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 3.5 |
| **Sample ID** | | | | POM-S-334-P3(0.0-0.5) | POM-S-334-P4(0.0-0.5) | POM-S-334-P4(3.0-3.5) |
| **Lab ID** | | | | 5274615 | 5274617 | 5535228 |
| **Date** | | | | 2/5/08 | 2/5/08 | 11/18/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 15.7 | ***66.3*** | 16.7 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-P5 | 334-P5 | 334-P6 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 4 | 0 |
| **Bottom (ft)** | | | | 0.5 | 4.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-P5(0.0-0.5) | POM-S-334-P5(4.0-4.5) | POM-S-334-P6(0.0-0.5) |
| **Lab ID** | | | | 5274618 | 5538960 | 5274619 |
| **Date** | | | | 2/5/08 | 11/21/08 | 2/5/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | ***63.6*** | ***52.2*** | ***119*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-P6 | 334-P7 | 334-P8 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 0 | 0 |
| **Bottom (ft)** | | | | 2.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-P6(2.0-2.5) | POM-S-334-P7(0.0-0.5) | POM-S-334-P8(0.0-0.5) |
| **Lab ID** | | | | 5538961 | 5274620 | 5274616 |
| **Date** | | | | 11/21/08 | 2/5/08 | 2/5/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 13.7 | 4.89 | ***22.4*** |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 117 - Metals

| **Location (Boring ID)** | | | | 334-P8 | 334-P9 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 1 | 0 |
| **Bottom (ft)** | | | | 1.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-P8(1.0-1.5) | POM-S-334-P9(0.0-0.5) |
| **Lab ID** | | | | 5535229 | 5274625 |
| **Date** | | | | 11/18/08 | 2/6/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | |
| ARSENIC | 19 | 19 | 19 | ***19.3*** | |
| BERYLLIUM | 16 | 140 | 0.5 | | |
| CADMIUM | 78 | 78 | 1 | | |
| CHROMIUM | | | | | |
| COPPER | 3100 | 45000 | 7300 | | |
| LEAD | 400 | 800 | 59 | | 14.1 |
| MERCURY | 23 | 65 | 0.1 | | |
| NICKEL | 1600 | 23000 | 31 | | |
| SELENIUM | 390 | 5700 | 7 | | |
| SILVER | 390 | 5700 | 1 | | |
| THALLIUM | 5 | 79 | 3 | | |
| ZINC | 23000 | 110000 | 600 | | |

Table 5. Summary of Analytical Results - AOC 119 - Metals

| **Location (Boring ID)** | | | | 334-101 | 334-102 | 334-103 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 | 0 |
| **Sample ID** | | | | POM-S-334-101 (0-5) | POM-S-334-102 (0-5) | POM-S-334-103 (0-5) |
| **Lab ID** | | | | 4047594 | 4047595 | 4047596 |
| **Date** | | | | 5/19/03 | 5/19/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | ND (0.982) | |
| ARSENIC | 19 | 19 | 19 | ***21.8*** | 7.64 | 18.1 |
| BERYLLIUM | 16 | 140 | 0.5 | | 0.97 | |
| CADMIUM | 78 | 78 | 1 | | ND (0.0804) | |
| CHROMIUM | | | | | 19.5 | |
| COPPER | 3100 | 45000 | 7300 | 138 | 43.8 | 137 |
| LEAD | 400 | 800 | 59 | **488** | 93.9 | 287 |
| MERCURY | 23 | 65 | 0.1 | 2.81 | 0.439 | 1.49 |
| NICKEL | 1600 | 23000 | 31 | | 15.8 | |
| SELENIUM | 390 | 5700 | 7 | | 1.99 | |
| SILVER | 390 | 5700 | 1 | | ND (0.223) | |
| THALLIUM | 5 | 79 | 3 | | 3.89 B | |
| ZINC | 23000 | 110000 | 600 | | 92.7 | |

Table 5. Summary of Analytical Results - AOC 119 - Metals

| **Location (Boring ID)** | | | | 334-182 | 334-182 | 334-183 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-182(0.0-0.5) | POM-S-334-182(0.0-0.5) | POM-S-334-183(0.0-0.5) |
| **Lab ID** | | | | 4738160 | 4734765 | 4738161 |
| **Date** | | | | 3/15/06 | 3/21/06 | 3/15/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | 15.2 | |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 148 | | 155 |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 119 - Metals

| **Location (Boring ID)** | | | | 334-183 | 334-184 | 334-184 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 0.5 |
| **Sample ID** | | | | POM-S-334-183(0.0-0.5) | POM-S-334-184(0.0-0.5) | POM-S-334-184(0.0-0.5) |
| **Lab ID** | | | | 4734766 | 4738162 | 4734767 |
| **Date** | | | | 3/21/06 | 3/15/06 | 3/21/06 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | 12.4 | | 13.6 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | | 39.1 | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 119 - Metals

| **Location (Boring ID)** | | | | 334-185 | 334-185 | 334-B61 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 1 |
| **Bottom (ft)** | | | | 0.5 | 0.5 | 1.5 |
| **Sample ID** | | | | POM-S-334-185(0.0-0.5) | POM-S-334-185(0.0-0.5) | POM-S-334-B61(1.0-1.5) |
| **Lab ID** | | | | 4738163 | 4734768 | 5259347 |
| **Date** | | | | 3/15/06 | 3/21/06 | 1/15/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | | | |
| ARSENIC | 19 | 19 | 19 | | 18.5 | 5.13 |
| BERYLLIUM | 16 | 140 | 0.5 | | | |
| CADMIUM | 78 | 78 | 1 | | | |
| CHROMIUM | | | | | | |
| COPPER | 3100 | 45000 | 7300 | | | |
| LEAD | 400 | 800 | 59 | 76.6 | | |
| MERCURY | 23 | 65 | 0.1 | | | |
| NICKEL | 1600 | 23000 | 31 | | | |
| SELENIUM | 390 | 5700 | 7 | | | |
| SILVER | 390 | 5700 | 1 | | | |
| THALLIUM | 5 | 79 | 3 | | | |
| ZINC | 23000 | 110000 | 600 | | | |

Table 5. Summary of Analytical Results - AOC 119 - Metals

| **Location (Boring ID)** | | | | 334-B61 |
|---|---|---|---|---|
| **Top (ft)** | | | | 2 |
| **Bottom (ft)** | | | | 2.5 |
| **Sample ID** | | | | POM-S-334-B61(2.0-2.5) |
| **Lab ID** | | | | 5259348 |
| **Date** | | | | 1/15/08 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg |
| ANTIMONY | 31 | 450 | 6 | |
| ARSENIC | 19 | 19 | 19 | 4.88 |
| BERYLLIUM | 16 | 140 | 0.5 | |
| CADMIUM | 78 | 78 | 1 | |
| CHROMIUM | | | | |
| COPPER | 3100 | 45000 | 7300 | |
| LEAD | 400 | 800 | 59 | |
| MERCURY | 23 | 65 | 0.1 | |
| NICKEL | 1600 | 23000 | 31 | |
| SELENIUM | 390 | 5700 | 7 | |
| SILVER | 390 | 5700 | 1 | |
| THALLIUM | 5 | 79 | 3 | |
| ZINC | 23000 | 110000 | 600 | |

Table 5. Summary of Analytical Results - Road Bed AOC - Metals

| **Location (Boring ID)** | | | | 334-RB-1 | 334-RB-2 | 334-RB-2 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 2 | 1.4 | 1.4 |
| **Sample ID** | | | | POM-S-334-RB-1(0.0-2.0) | POM-S-334-RB-2(0.0-1.4)-DUP | POM-S-334-RB-2(0.0-1.4) |
| **Lab ID** | | | | 5237624 | 5237629 | 5237625 |
| **Date** | | | | 12/12/07 | 12/13/07 | 12/13/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | ND (1.06) | ND (1.07) | ND (1.06) |
| ARSENIC | 19 | 19 | 19 | 8.3 | 5.58 | 4.17 |
| BERYLLIUM | 16 | 140 | 0.5 | 0.413 J | 0.391 J | 0.352 J |
| CADMIUM | 78 | 78 | 1 | 0.223 J | 0.193 J | 0.3 J |
| CHROMIUM | | | | 8.74 J | 8.05 J | 9.4 J |
| COPPER | 3100 | 45000 | 7300 | 35.5 | 28.8 | 27.6 |
| LEAD | 400 | 800 | 59 | 88.9 | 54.5 | 51.5 |
| MERCURY | 23 | 65 | 0.1 | 0.144 | 0.117 J | 0.0841 J |
| NICKEL | 1600 | 23000 | 31 | 9.71 | 10.7 | 13.2 |
| SELENIUM | 390 | 5700 | 7 | 1.57 J | ND (1.12) | ND (1.09) |
| SILVER | 390 | 5700 | 1 | ND (0.2) | ND (0.201) | ND (0.199) |
| THALLIUM | 5 | 79 | 3 | 0.156 J | 0.133 J | 0.154 J |
| ZINC | 23000 | 110000 | 600 | 34.8 | 26.1 | 37.9 |

Table 5. Summary of Analytical Results - Road Bed AOC - Metals

| **Location (Boring ID)** | | | | 334-RB-3 | 334-RB-4 | 334-RB-5 |
|---|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 | 0 |
| **Bottom (ft)** | | | | 3.3 | 1.3 | 1.7 |
| **Sample ID** | | | | POM-S-334-RB-3(0.0-3.3) | POM-S-334-RB-4(0.0-1.3) | POM-S-334-RB-5(0.0-1.7) |
| **Lab ID** | | | | 5237630 | 5237631 | 5237632 |
| **Date** | | | | 12/13/07 | 12/13/07 | 12/14/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | ND (1.04) | ND (1.09) | ND (1.02) |
| ARSENIC | 19 | 19 | 19 | 2.07 J | 2.93 | 2.11 J |
| BERYLLIUM | 16 | 140 | 0.5 | 0.574 J | 0.329 J | 0.308 J |
| CADMIUM | 78 | 78 | 1 | 0.322 J | 0.12 J | 0.0737 J |
| CHROMIUM | | | | 8.75 J | 11.2 J | 9.64 J |
| COPPER | 3100 | 45000 | 7300 | 25.1 | 34.7 | 21.8 |
| LEAD | 400 | 800 | 59 | 11.4 | 139 | 67.5 |
| MERCURY | 23 | 65 | 0.1 | 0.0682 J | 0.146 | 0.22 |
| NICKEL | 1600 | 23000 | 31 | 13.3 | 13 | 14.6 |
| SELENIUM | 390 | 5700 | 7 | ND (1.06) | ND (1.09) | 1.52 J |
| SILVER | 390 | 5700 | 1 | 0.197 J | ND (0.206) | 0.197 J |
| THALLIUM | 5 | 79 | 3 | 0.0532 J | 0.0824 J | 0.0789 J |
| ZINC | 23000 | 110000 | 600 | 85.2 | 27.9 | 25.6 |

Table 5. Summary of Analytical Results - Road Bed AOC - Metals

| **Location (Boring ID)** | | | | 334-RB-6 | 334-RB-7 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 1.2 | 1.4 |
| **Sample ID** | | | | POM-S-334-RB-6(0.0-1.2) | POM-S-334-RB-7(0.0-1.4) |
| **Lab ID** | | | | 5237633 | 5237634 |
| **Date** | | | | 12/14/07 | 12/14/07 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| ANTIMONY | 31 | 450 | 6 | 1.2 J | ND (1.04) |
| ARSENIC | 19 | 19 | 19 | 3.61 | 2.49 |
| BERYLLIUM | 16 | 140 | 0.5 | 0.355 J | 0.565 J |
| CADMIUM | 78 | 78 | 1 | 0.0795 J | 0.133 J |
| CHROMIUM | | | | 6.86 J | 12.2 J |
| COPPER | 3100 | 45000 | 7300 | 21.2 | 30.1 |
| LEAD | 400 | 800 | 59 | 32.5 | 27.7 |
| MERCURY | 23 | 65 | 0.1 | 0.157 | 0.141 |
| NICKEL | 1600 | 23000 | 31 | 9.2 | 12 |
| SELENIUM | 390 | 5700 | 7 | 1.66 J | 1.61 J |
| SILVER | 390 | 5700 | 1 | 0.202 J | ND (0.196) |
| THALLIUM | 5 | 79 | 3 | 0.108 J | 0.0966 J |
| ZINC | 23000 | 110000 | 600 | 18.1 | 24.9 |

**Notes:**

NJ RDC SRS - New Jersey Residential Direct Contact Soil Remediation Standards, November 2009

NJ NRDC SRS - New Jersey Non-Residential Direct Contact Soil Remediation Standards, November 2009

NJ IGW SRS - New Jersey Impact to Ground Water Soil Remediation Standards, November 2009

**5** - Bold typeface, exceeds NJ RDC SRS

*5* - Italicized typeface, exceeds NJ NRDC SRS

5 - Underlined typeface, exceeds NJ IGW SRS

ft - feet

mg/kg - milligrams per kilogram

DUP - Duplicate sample

U - Compound not detected at reported detection limit

J - Compound was detected at an estimated value between the PQL & MDL

ND - Not detected at reported detection limit

Blank Cells – Not Analyzed/Not Applicable

Grey Highlighted Cells – PQL is greater than the respective criteria: RDC SRS, NRDC SRS, IGW SRS

ND (NS) – No PQL set

X - Unknown isomer of the compound

A - TIC is a possible aldol-condensation product

B - Analyte was also detected in the blank

ND/ND() - No PQL recorded

Table 6. Summary of Analytical Results - AOC 117 - Organic Explosives

| **Location (Boring ID)** | | | | 334-104 | 334-104 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 3 |
| **Bottom (ft)** | | | | 0 | 3.5 |
| **Sample ID** | | | | POM-S-334-104 (0-5) | POM-S-334-104(3.0-3.5) |
| **Lab ID** | | | | 4047597 | 4604733 |
| **Date** | | | | 5/19/03 | 9/13/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| NITROGLYCERIN | | | | ND (2.8) | ND (2.3) |
| NITRATE | | | | 3.5 | ND (0.93) |
| NITRITE | | | | ND (1.1) | ND (0.93) |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | ND (0.14) | ND (0.29) |
| PENTAERYTHRITOL TETRANITRATE | | | | ND (2.8) | ND (2.3) |
| RDX | | | | ND (0.14) | ND (0.12) |
| TETRYL | | | | ND (0.14) | ND (0.13) |

Table 6. Summary of Analytical Results - AOC 117 - Organic Explosives

| **Location (Boring ID)** | | | | 334-106 | 334-107 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 |
| **Sample ID** | | | | POM-S-334-106 (0-5) | POM-S-334-107 (0-5) |
| **Lab ID** | | | | 4047599 | 4047600 |
| **Date** | | | | 5/19/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| NITROGLYCERIN | | | | ND (4.2) | ND (2.3) |
| NITRATE | | | | 3 J | 2 |
| NITRITE | | | | ND (1.7) | ND (0.92) |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | ND (0.21) | ND (0.11) |
| PENTAERYTHRITOL TETRANITRATE | | | | ND (4.2) | ND (2.3) |
| RDX | | | | ND (0.21) | ND (0.11) |
| TETRYL | | | | ND (0.21) | ND (0.11) |

Table 6. Summary of Analytical Results - AOC 117 - Organic Explosives

| **Location (Boring ID)** | | | | 334-109 | 334-109 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 3 | 3 |
| **Bottom (ft)** | | | | 3.5 | 3.5 |
| **Sample ID** | | | | POM-S-334-109(3.0-3.5)-DUP | POM-S-334-109(3.0-3.5) |
| **Lab ID** | | | | 4604738 | 4604734 |
| **Date** | | | | 9/13/05 | 9/13/05 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| NITROGLYCERIN | | | | ND (2.2) | ND (2.2) |
| NITRATE | | | | ND (0.9) | ND (0.88) |
| NITRITE | | | | ND (0.9) | ND (0.88) |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | ND (0.28) | ND (0.28) |
| PENTAERYTHRITOL TETRANITRATE | | | | ND (2.2) | ND (2.2) |
| RDX | | | | ND (0.11) | ND (0.11) |
| TETRYL | | | | ND (0.12) | ND (0.12) |

Table 6. Summary of Analytical Results - AOC 117 - Organic Explosives

| **Location (Boring ID)** | | | | 334-110 | 334-110 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 2 |
| **Bottom (ft)** | | | | 0 | 2.5 |
| **Sample ID** | | | | POM-S-334-110 (0-5) | POM-S-334-110(2-2.5) |
| **Lab ID** | | | | 4047603 | 4134533 |
| **Date** | | | | 5/19/03 | 9/30/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| NITROGLYCERIN | | | | ND (2.5) | |
| NITRATE | | | | 2.4 | ND (0.97) |
| NITRITE | | | | ND (0.98) | ND (0.97) |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | ND (0.12) | |
| PENTAERYTHRITOL TETRANITRATE | | | | ND (2.5) | |
| RDX | | | | ND (0.12) | |
| TETRYL | | | | ND (0.12) | |

Table 6. Summary of Analytical Results - AOC 117 - Organic Explosives

| **Location (Boring ID)** | | | | 334-110 | 334-112 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 2 | 0 |
| **Bottom (ft)** | | | | 2.5 | 0 |
| **Sample ID** | | | | POM-S-334-110(2-2.5) | POM-S-334-112 (0-5) |
| **Lab ID** | | | | 4134542 | 4047605 |
| **Date** | | | | 9/30/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| NITROGLYCERIN | | | | ND (2.4) | ND (6.3) |
| NITRATE | | | | | 6 |
| NITRITE | | | | | ND (0.99) |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | ND (0.12) | ND (0.12) |
| PENTAERYTHRITOL TETRANITRATE | | | | ND (2.4) | ND (2.5) |
| RDX | | | | ND (0.12) | ND (0.12) |
| TETRYL | | | | ND (0.13) | ND (0.12) |

Table 6. Summary of Analytical Results - AOC 117 - Organic Explosives

| **Location (Boring ID)** | | | | 334-114 | 334-120 |
|---|---|---|---|---|---|
| **Top (ft)** | | | | 0 | 0 |
| **Bottom (ft)** | | | | 0 | 0 |
| **Sample ID** | | | | POM-S-334-114 (0-5) | POM-S-334-120 (0-5) |
| **Lab ID** | | | | 4047607 | 4047613 |
| **Date** | | | | 5/19/03 | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | mg/kg | mg/kg |
| NITROGLYCERIN | | | | ND (2.2) | ND (2.7) |
| NITRATE | | | | 1 J | ND (1.1) |
| NITRITE | | | | ND (0.88) | ND (1.1) |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | ND (0.11) | ND (0.13) |
| PENTAERYTHRITOL TETRANITRATE | | | | ND (2.2) | ND (2.7) |
| RDX | | | | ND (0.11) | ND (0.13) |
| TETRYL | | | | ND (0.11) | ND (0.13) |

Table 6. Summary of Analytical Results - AOC 119 - Organic Explosives

| **Location (Boring ID)** | | | | 334-103 |
|---|---|---|---|---|
| **Top (ft)** | | | | 0 |
| **Bottom (ft)** | | | | 0 |
| **Sample ID** | | | | POM-S-334-103 (0-5) |
| **Lab ID** | | | | 4047596 |
| **Date** | | | | 5/19/03 |
| **Field Medium** | **NJDEP** | **NJDEP** | **NJDEP** | Soil |
| **Analyte** | **RDCSRS** | **NRDCSRS** | **IGWSRS** | FS |
| NITROGLYCERIN | | | | ND (3.1) |
| NITRATE | | | | 25.5 |
| NITRITE | | | | ND (1.2) |
| OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE | | | | ND (0.15) |
| PENTAERYTHRITOL TETRANITRATE | | | | ND (3.1) |
| RDX | | | | ND (0.15) |
| TETRYL | | | | ND (0.15) |

**Notes:**

NJ RDC SRS - New Jersey Residential Direct Contact Soil Remediation Standards, November 2009

NJ NRDC SRS - New Jersey Non-Residential Direct Contact Soil Remediation Standards, November 2009

NJ IGW SRS - New Jersey Impact to Ground Water Soil Remediation Standards, November 2009

**5** - Bold typeface, exceeds NJ RDC SRS

*5* - Italicized typeface, exceeds NJ NRDC SRS

5 - Underlined typeface, exceeds NJ IGW SRS

ft - feet

mg/kg - milligrams per kilogram

DUP - Duplicate sample

U - Compound not detected at reported detection limit

J - Compound was detected at an estimated value between the PQL & MDL

ND - Not detected at reported detection limit

Blank Cells – Not Analyzed/Not Applicable

Grey Highlighted Cells – PQL is greater than the respective criteria: RDC SRS, NRDC SRS, IGW SRS

ND (NS) – No PQL set

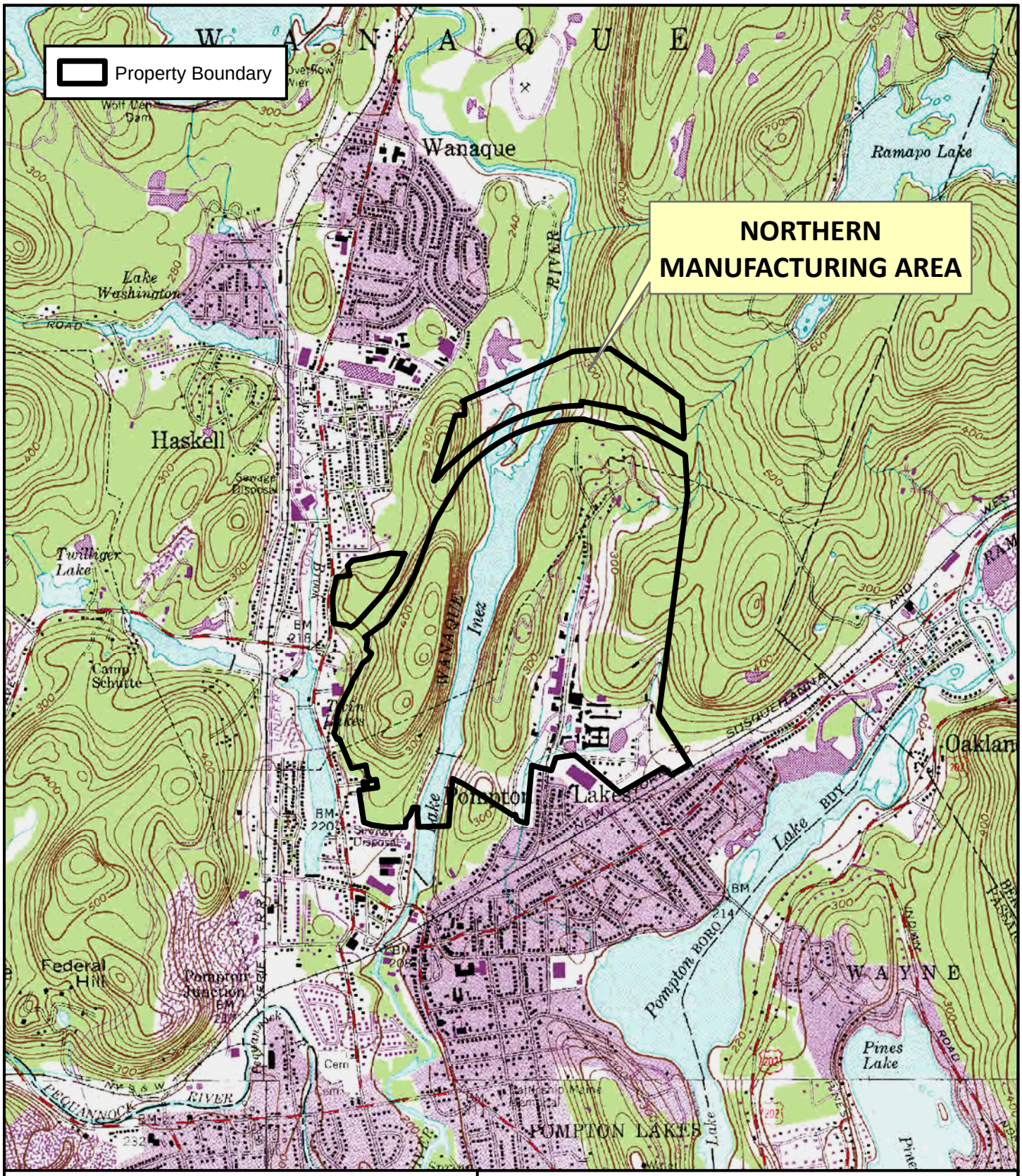
X - Unknown isomer of the compound

A - TIC is a possible aldol-condensation product

B - Analyte was also detected in the blank

ND/ND() - No PQL recorded

# FIGURES




**QUADRANGLE LOCATION**

Wanaque, NJ
USGS 7.5 Minute Topographic Quadrangle Tile

N

0 500 1,000 2,000 Feet

TITLE:

# FIGURE 1
## SITE LOCATION MAP
## NORTHERN MANUFACTURING AREA
## DUPONT POMPTON LAKES WORKS
## POMPTON LAKES, NJ


PARSONS
200 COTTONTAIL LANE SOUTH
SOMERSET, NJ 08873


| | |
|---|---|
| CREATED BY: MTK | DATE: 6/4/2010 |
| CHECKED BY: | APPD BY: DJS |
| JOB NUMBER: 445298.01005 | |
| FILE NAME: NMA_USGS_Site_Location | |

N

Feet

0 150 300 600

NORTHERN MANUFACTURING AREA

BLOCK 479 LOT 3

BLOCK 479 LOT 4

ROUTE 287

BOROUGH OF WANAQUE

BOROUGH OF POMPTON LAKES

WESTERN MANUFACTURING AREA

BLOCK 479 LOT 5

BLOCK 479 LOT 4.01

EASTERN MANUFACTURING AREA

BLOCK 100 LOT 3

BLOCK 100 LOT 7

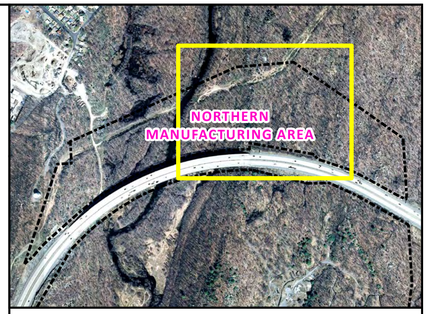
BLOCK 100 LOT 6.01

TITLE:

FIGURE 2
SITEWIDE LOT AND BLOCK MAP
DUPONT POMPTON LAKES WORKS
POMPTON LAKES, NJ

PARSONS
200 COTTONTAIL LANE SOUTH
SOMERSET, NJ 08873

| | |
|---|---|
| CREATED BY: MTK | DATE: 6/4/2010 |
| CHECKED BY: | APPD BY: DJS |
| JOB NUMBER: 445298.01005 | |
| FILE NAME: Sitewide_Lot_Block_Map.mxd | |




WANAQUE RIVER

ROUTE 287

Soil Sample
Former Stucture
Existing Structure
Facility Road (Unpaved)
Facility Road (Paved)
Water Body
AOC: Delineation Complete
IRM: Delineation Complete
Property Boundary
Relevant Plant Region
Figure Area

N

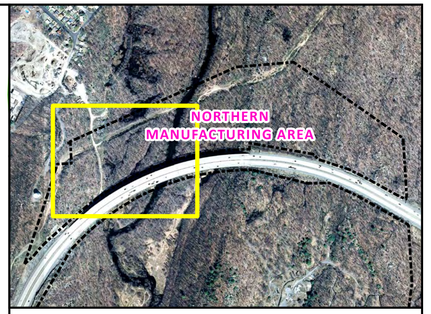
0 30 60 120 Feet

TITLE:

FIGURE 3a
SOIL SAMPLE LOCATION MAP - EAST
NORTHERN MANUFACTURING AREA
DUPONT POMPTON LAKES WORKS
POMPTON LAKES, NJ

PARSONS
200 COTTONTAIL LANE SOUTH
SOMERSET, NJ 08873

| | |
|---|---|
| CREATED BY: MTK | DATE: 6/1/2010 |
| CHECKED BY: | APPD BY: DGS |
| JOB NUMBER: 445298.01005 | |
| FILE NAME: NMA_SSL_Map_East.mxd | |




- Soil Sample
- Former Stucture
- Existing Structure
- Facility Road (Unpaved)
- Facility Road (Paved)
- Water Body
- AOC: Delineation Complete
- IRM: Delineation Complete
- Property Boundary
- Relevant Plant Region
- Figure Area

N

0 25 50 100 Feet

AOC 117
AOC 119
AOC 113
ROUTE 287
PASSAIC RIVER
117-01
117-02
117-03
117-04
117-05
117-06
117-07
117-08
117-09
117-27

TITLE:

FIGURE 3b
SOIL SAMPLE LOCATION MAP - WEST
NORTHERN MANUFACTURING AREA
DUPONT POMPTON LAKES WORKS
POMPTON LAKES, NJ

PARSONS
200 COTTONTAIL LANE SOUTH
SOMERSET, NJ 08873

| | |
|---|---|
| CREATED BY: MTK | DATE: 6/1/2010 |
| CHECKED BY: | APPD BY: DGS |
| JOB NUMBER: 445298.01005 | |
| FILE NAME: NMA_SSL_Map_West.mxd | |

# APPENDICES

# APPENDIX A
# ABRIDGED LAKE INEZ REMEDIAL INVESTIGATION REPORT (WORK PLAN) W/ FULL DOCUMENT ON CD

DuPont Engineering
Pompton Lakes Works
Pompton Lakes, NJ 07442

DuPont Engineering

CC: Andy Park-USEPA
A. Boettler
E. Seger
Mj. Vetter
E. Cahill
E. Merrill
PL Library
Book
File

June 12, 2003

Mr. Frank Faranca
NJDEP
Division of Responsible Party Site Remediation
401 East State Street
PO Box 028
Trenton, NJ 08625

Dear Mr. Faranca,

**Lake Inez Region Remedial Investigation Workplan**
**DuPont Pompton Lakes Works, Pompton Lakes, New Jersey**

Enclosed please find two (2) copies of the Lake Inez Region Remedial Investigation Workplan, prepared for the DuPont Pompton Lakes Works (PLW), one hard copy and one electronic copy.

Should you have any questions, please contact Al Boettler at (302) 892-0647.

Sincerely,

Ralph H. Sloat
Sr. Site Director

RHS:bb
Enc.

# LAKE INEZ REGION REMEDIAL INVESTIGATION REPORT DUPONT POMPTON LAKES WORKS, POMPTON LAKES, NEW JERSEY

Date: June 12, 2003

Project No.: 7035
18983386.00001

CORPORATE REMEDIATION GROUP
*An Alliance between*
*DuPont and URS Diamond*

Barley Mill Plaza, Building 27
Wilmington, Delaware 19805

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# 1.0 INTRODUCTION

In August 1994, the DuPont Pompton Lakes Works (PLW), located in Pompton Lakes, New Jersey, submitted a *Phase I Site Investigation Work Plan* to the New Jersey Department of Environmental Protection (NJDEP) to investigate potential areas of concern (AOCs) at the site. Both parties agreed to prioritizing AOCs and phasing the investigation to allow for the most efficient implementation of the site investigation. The document underwent a review and comments period (letters dated April 26, 1995 and June 30, 1995); however, it was never formally approved by NJDEP.

In July 1999, DuPont agreed to conduct the remainder of the Remedial Investigation (RI) for the site using the readopted NJDEP Technical Requirements for Site Remediation. For the purposes of the remedial investigation, the site was divided into four regions, based on geography and operational history. They are as follows:

- ❏ Acid Brook Valley, south plant region
- ❏ Acid Brook Valley, mid plant region
- ❏ Acid Brook Valley, north plant region
- ❏ Wanaque River Valley (former Lake Inez) region

DuPont and the NJDEP agreed to conduct further investigations in the Wanaque river valley in a holistic manner, rather than on an AOC-by-AOC basis. This *Phase I Remedial Investigation Work Plan* (RIWP), summarizes the previous activities and details the proposed RI activities for the Wanaque valley.

The purpose of this RI is to holistically evaluate the Wanaque River Valley, hereafter referred to as the Lake Inez region, to determine if any areas have been impacted by the former site operations. Data collected during the RI will be used to evaluate whether remedial action is warranted, and if so, to what extent. Since considerable data had been collected on some of the AOCs in the Lake Inez region, the existing data were first evaluated (Section 3.0 of the RIWP) to identify constituents of potential concern and existing data gaps. Following comprehensive data analysis, the sampling program was designed so as to focus on the constituents of concern (COCs) in the Lake Inez region, in addition to addressing existing data gaps. This approach best addressed the need for adequate data to characterize and delineate site-specific COCs. This RIWP is confined to soils. The Wanaque River sediments will be addressed as part of an ecological study. Groundwater analytical data from wells installed in the Lake Inez region show that no Comprehensive Groundwater Monitoring Program (CGMP) constituents are above NJ GWIIA (see Section 2.2 and 3.8).

The goals of the RI for the Lake Inez region are to:

- ❏ Holistically investigate site soil to determine whether site-related constituents are present, and, if present, whether these concentrations warrant further evaluation.
- ❏ Delineate site-related constituents, if found at the site boundary, that exceed residential screening concentrations.

- ❏ Identify the migration pathways, and actual or potential receptors of these site-related constituents of potential concern.
- ❏ Collect the data necessary for conducting a Baseline Ecological Evaluation (BEE).
- ❏ Collect and evaluate all data necessary to evaluate remedial action alternatives.

## 1.1 Site Background

In 1988, DuPont PLW entered into an Administrative Consent Order (ACO) with the NJDEP. In 1992, DuPont was issued a Hazardous and Solid Waste (HSWA) permit by the EPA. This ACO and HSWA permit required DuPont to conduct a remedial investigation addressing all contamination at/or emanating from the site. Remedial activities have been performed, both on- and off-site. Extensive off-site soil cleanup and groundwater monitoring of the Acid Brook valley have occurred. On-site stabilization includes the installation and operation of a groundwater treatment system to contain and treat the on-site Acid Brook valley groundwater VOC plume. Extensive off-site soil cleanup of the Wanaque River floodplain has been performed. Groundwater monitoring of the Lake Inez region has also been performed. The results of groundwater monitoring demonstrate that there are no VOCs in Lake Inez Valley groundwater. In addition, many on-site soil remedial activities have been performed in both the Lake Inez region and the Acid Brook valley to remediate and stabilize the site.

### 1.1.1 Physical Setting

The 570-acre PLW site is located in the boroughs of Pompton Lakes and Wanaque in central Passaic County in northern New Jersey. The site is visible on the United States Geological Survey (USGS) 7.5-minute Wanaque Quadrangle Map (see Figure 1). The site consists of northeast trending ridges and valleys containing two major drainage areas, the Wanaque River (formerly Lake Inez) on the west, and the Acid Brook on the east. Interstate 287 (I-287) crosses the northern and western parts of the site isolating approximately 70 acres (56 in the Lake Inez region and 14 in the Acid Brook Valley region). The site is bordered to the northeast and east by the Ramapo State Forest (deciduous forest and some deciduous wooded wetlands), to the south by the town of Pompton Lakes (industrial, commercial/services and residential land use), and to the west and northwest by Twin Lake Valley (commercial/services and residential land use), and town of Haskell.

### 1.1.2 Wanaque River Valley

On-site, the Wanaque River flows south through a valley characterized by steep bedrock slopes along the east and west banks. Valley topography is relatively flat in the immediate vicinity of the river, with the flood plain widening considerably in the northern portion of the valley. The Wanaque River south of the site is classified as trout maintenance waters. Water flow is controlled approximately one mile up stream of PLW at the Wanaque Reservoir's Raymond Dam. Approximately 1.5 miles south of PLW, the Wanaque River joins with the Pequannock River.

Prior to 1984, there was a dam across the Wanaque River, located south of the site and north of the Wanaque Avenue Bridge. It is DuPont's understanding that the United States Army Corp of Engineers (USACE) removed a portion of the dam in 1984, as it was becoming unstable. This action drained Lake Inez.

### 1.1.3 Acid Brook Valley

On the PLW facility, the Acid Brook flows south through a valley characterized by bedrock ridges in the north and middle portions of the site. The valley is high and narrow in the north and slopes south, widening until it opens up in to a flat plain in the southern portion of the site. The Acid Brook itself originates in the Ramapo State Forest land north/northeast of the site. Acid Brook's primary sources are several springs that combine with overland flow. Approximately one-half mile south of the site, Acid Brook discharges into Pompton Lake, an impoundment that was created by damming the Ramapo River. The Ramapo River flows over the Pompton Lake dam. Approximately 1.5 miles down stream, the Ramapo and Pequannock Rivers join to form the Pompton River. The Pompton River flows into the Passaic River, which empties into Newark Bay.

## 1.2 Historical Information and Preliminary Assessments

In the late 1800s to the early 1900s, the H. Julius Smith Blasting Cap Plant was operating in the southern Lake Inez region. The American Smokeless Powder Company, followed by Laflin and Rand, was operating in the northern Lake Inez region. The Metallic Cap Company was operating in the Acid Brook Valley. In 1902, DuPont purchased the site and began operating the DuPont Electric Exploder Company in the southern Lake Inez region and a smokeless powder operation in the northern Lake Inez region. In 1908, DuPont opened the DuPont Cap Works in the Acid Brook Valley. In 1926, all manufacturing operations were moved out of the Wanaque River Valley. In the 1980's, The State of New Jersey Department of Transportation (NJDOT) acquired land across the northern portion of the site for the construction of Interstate 287. DuPont operations generated a variety of explosives and explosive products until April 1994, when the plant was closed.

In 1988, CH2M Hill conducted a preliminary assessment (PA) (*Operational History of the Pompton Lakes Works)* of the PLW site for all areas that were no longer in operation. Historical operations and past disposal practices were documented, and 118 AOCs were identified. In 1992, the HSWA permit assigned AOCs with multiple geographical locations individual AOC designations by location, thereby increasing the 118 AOCs to 151 AOCs. Of these 151 AOCs, 18 are located in the Wanaque valley.

After PLW manufacturing operations ceased in April 1994, DuPont Environmental Remediation Services (DERS) conducted a PA (*Former Operating Area Preliminary Assessment Report*, dated April 28, 1995) of the former operating areas.

DERS also conducted a PA of the Wanaque River valley former manufacturing facilities in accordance with the NJ Technical Requirements for Site Remediation. These facilities were originally described in the *Operational History of the Pompton Lakes Works* where the valley was divided into four larger AOCs. In order to conduct a more efficient investigation, field mapping and a limited geophysical survey were conducted to identify

smaller potential AOCs within the four large areas in Lake Inez Valley. These results are presented in *Lake Inez Valley Preliminary Assessment Report* (DERS, 1996). An additional 11 AOCs were identified in the Lake Inez Valley.

A total of 202 AOCs have been identified on the PLW site, and 178 have been investigated to date. Twenty-nine of the AOCs are located in the Lake Inez region. Five of the 29 AOCs have been addressed by remedial and/or stabilization measures, and a geophysical investigation was conducted on one AOC. The current status of the Lake Inez region AOCs is presented in Table 1.

# 2.0 CONCEPTUAL SITE MODEL

A conceptual site model (CSM) is a three-dimensional representation of site conditions that represents what is known (or suspected) about the contaminant source area(s) and the physical, chemical, and biological processes that determine the transport of contaminants from sources through environmental media to potential environmental receptors. Because the site will be investigated by region, region-specific information and data will be discussed in Section 3.

## 2.1 Physical Processes—Geology and Hydrogeology

Geologically, PLW is situated at the eastern edge of the New Jersey Highlands physiographic province, approximately one-half mile from the boundary between the Precambrian Highlands and the Triassic basin. The boundary between these two geologic provinces is a northeast oriented major normal fault. Known as the Ramapo Fault, this boundary occurs in the vicinity of Pompton Lake. The site is situated in two north/northeast-south/southwest trending valleys: the Wanaque River Valley (formerly Lake Inez), and the Acid Brook Valley, which is located east of the Wanaque River Valley. Bedrock exposure separates the two watersheds. The following sections provide more detail on the Lake Inez region geology and hydrogeology.

### 2.1.1 Bedrock

The bedrock at PLW consists of various high-grade metamorphosed gneisses that have been deformed several times since their formation during the Precambrian era. The gneiss bedrock can be subdivided into four lithologic units:

- Banded gneiss
- Hornblende-potassium feldspar quartz gneiss
- Feldspathic gneiss
- Amphibolite (Golder Associates, 1988)

Based on field mapping by Golder Associates in 1988, gneiss foliations are oriented nearly vertical, and strike north-northeast, parallel to the valley orientation. All the bedrock units contain joints, which are generally parallel to the regional foliation. Other joint trends are present at orientations up to 90 degrees from the regional trend. The predominant joint spacing in all rock units is between 1 and 5 feet (Golder Associates, 1988). During the Wisconsin glaciation, soils that overlay the bedrock were nearly completely removed by the glacier. This glaciation scoured the valley into its present day configuration.

### 2.1.2 Unconsolidated Soils

The majority of the unconsolidated soils in the Lake Inez region were deposited as the Wisconsin glacier retreated, 20,000 to 17,000 years ago. These alluvial deposits are, for the most part, stratified drift deposits (layered sand, gravel, silt and clay deposited by

glacial melt water). Deposits of colluvium, or unsorted cliff debris, at the site may in part consist of dislodged glacial till. Glacial till is a poorly sorted, non-stratified soil ranging in grain size from clay to boulders that are deposited by glacial ice.

In the Lake Inez region, the unconsolidated soils are a poorly sorted deposit of sand, gravel, cobbles, silt, and clay. The alluvial deposits range in thickness from a thin soil cover where bedrock outcrops to approximately 60 feet in the valley (URSD February 2003).

### 2.1.3 Hydrogeology

The average annual rainfall in the vicinity of the site is 48.5 inches per year (in/yr.), as measured at a gauging station near Raymond Dam at the Wanaque Reservoir. Infiltration rates for the area range from 12 to 27 in/yr. (Hoffman, 1994).

Groundwater in the Lake Inez region is encountered at a depth of between 8 and 19 feet below ground surface. The thickness of the saturated alluvial zone varies from 23 feet at well 141-D in the middle of the Lake Inez region to 42 feet at wells 142-D and 143-D at the southern end of the Lake Inez region. Generally, groundwater flow in the alluvium is south. Depth to groundwater in the exposed bedrock zone may fluctuate on-site from 2 to 5 feet, in response to seasonal precipitation (Golder Associates, 1988).

The horizontal gradient in the alluvium is approximately 0.001 ft/ft. The vertical gradient at well cluster 142 is a slight downward gradient, and at well cluster 143, it is a slight upward gradient (CRG, February 2003). Overall, the dominant groundwater flow direction in the alluvium is horizontal.

## 2.2 Chemical and Biological Processes

Based on previous soil investigations (on-site and off-site), the main constituents of potential concern are the three metals, mercury, lead and copper, and polyaromatic hydrocarbons (PAHs). This is consistent with the Lake Inez region site history of assembly of mercury fulminate caps in buildings with lead lined floors and use of copper shells and wire, and the decommissioning of the buildings by burning.

Five groundwater monitor wells were installed in the Lake Inez region in July and August of 2002. Samples were collected during November of 2002. Sample results were non-detect for CGMP VOC constituents at all locations. In response to the NJDEP's April 16, 2003 letter, the 5 groundwater monitor wells were sampled again in May 2003 for Appendix IX VOCs and priority pollutant metals, to confirm groundwater has not been impacted by former site operations. The results of this and any subsequent sampling will be presented in the 2003 Site Investigation Groundwater Report in early 2004.

Physical processes (e.g., surface-water flow) are the main mechanism controlling the migration of metals at the site. Surface runoff is managed through control measures on high priority AOCs identified as part of the Lake Inez PA. Control measures include silt fencing, hydroseeding, interim remedial measures, and natural cover.

# 3.0 LAKE INEZ REGION PREVIOUS SOIL INVESTIGATIONS

The PLW Lake Inez region encompasses approximately 187 acres south of I-287. Of those 187 acres, approximately 94 acres are relatively flat. The PLW Lake Inez region encompasses approximately 56 acres north of I-287, of which 23 acres are relatively flat. The site was used for explosive manufacturing from the late 1800s until 1926. During this period, the H. Julius Smith Blasting Cap Plant, which became the DuPont Electric Exploder Company in 1902, operated in the southern portion of the Lake Inez region. The American Smokeless Powder Plant operated in the northern portion of the Lake Inez region. Twenty-nine of the 202 PLW AOCs are located in the Lake Inez region. Figure 2 shows the entire Lake Inez region. Figures 3a and 3b present the enlarged maps of the southern and northern Lake Inez region, respectively. Figure 4 shows the previous boring locations.

Five of the 29 AOCs have had stabilization or remedial measures. The current status of the Lake Inez region AOCs is presented in Table 1. Table 2 presents a summary of the previous samples. All analytical results are presented in Tables 3a and 3b. Exceedances of the applicable criteria are presented in Table 4.

## 3.1 AOC 192

This is a smaller AOC identified within AOC 109 by the PA (DERS, 1996). The AOC is located on the western bank of the Wanaque River at the southern end of the old Fuze Works. Analytical results from site investigation borings identified arsenic, copper, lead, mercury, thallium and polynuclear aromatic hydrocarbons (PAHs) as the constituents of concern (COCs). In order to mitigate the potential of migration of the COCs, interim remedial measures (IRM) were conducted during November and December 1996. The IRM consisted of excavation to native soils, post excavation sampling, backfilling with clean soil, and re-establishing the vegetation disturbed by the IRM. These activities are documented in the "*On-Site Lake Inez Valley Areas of Concern 192 and 193 Remedial Action Report*", submitted to the NJDEP in September 1998. The IRM limits and post-excavation boring locations are shown on Figure 4. The analytical results are presented in Tables 3a and 3b.

## 3.2 AOC 193

This is a smaller AOC identified within AOC 109 by the PA (DERS, 1996). The AOC is located on the western bank of the Wanaque River at the northern end of the old Fuze Works. Analytical results from site investigation borings identified beryllium in one sample and benzo(a) pyrene in one sample above the New Jersey Non Residential Direct Contact Soil Cleanup Criteria (NJ-NRDC-SCC). In order to mitigate the potential of migration of the COCs, interim stabilization measures (ISM) were conducted during December 1996 and January 1997. The ISM included treatment of the area by adding fertilizer, lime, and topsoil. The area was then hydroseeded to re-establish a vegetative cover. These activities are documented in the "*On-Site Lake Inez Valley Areas of Concern 192 and 193 Remedial Action Report*", submitted to the NJDEP in September

1998. DuPont requested a No Further Action (NFA) from the NJDEP for this AOC. The ISM extents and the site investigation boring locations are shown on Figure 4. The analytical results are presented in Table 3b.

## 3.3 AOC 194

This is a smaller AOC identified within AOC 113 by the PA (DERS, 1996). The AOC is located on the western bank of the Wanaque River at the northern end of the old Fuze Works. Analytical results from site investigation borings identified arsenic, copper, lead, mercury, and PAHs as the COCs. In order to mitigate the potential of migration of the COCs, an IRM was conducted during December 1996, January and February 1997. The IRM consisted of excavation of soils containing COCs above the NJ-NRDC-SCC, post excavation sampling, backfilling with clean soil, and re-establishment of vegetation. These activities are documented in the "*On-Site Lake Inez Valley Areas of Concern 194 and 198 Remedial Action Report*", submitted to the NJDEP on February 16, 1998. The IRM limits and post-excavation boring locations are shown on Figure 4. The analytical results are presented in Table 3b.

## 3.4 AOC 198

This is a smaller AOC identified within AOC 113 by the PA (DERS, 1996). The AOC is located on the western bank of the Wanaque River at the northern end of the old Fuze Works, immediately north of AOC 194. Analytical results from site investigation borings identified arsenic, copper, lead, mercury, and PAHs as the COCs. In order to mitigate the potential of migration of the COCs, an IRM was conducted during December 1996, January and February 1997. The IRM consisted of excavation of soils containing COCs above the NJ-NRDC-SCC, post excavation sampling, backfilling with clean soil, and re-establishment of vegetation. These activities are documented in the "*On-Site Lake Inez Valley Areas of Concern 194 and 198 Remedial Action Report*", submitted to the NJDEP on February 16, 1998. The IRM limits and post-excavation boring locations are shown on Figure 4. The analytical results are presented in Tables 3b.

## 3.5 AOC 107

AOC 107 was identified in the OH (CH2M Hill, 1988). The AOC is located on the southern property boundary, east of the Wanaque River, on the ridge, outside of the floodplain. Analytical results from site investigation borings identified arsenic, copper, lead, and mercury as the COCs. In order to mitigate the potential for migration of the COCs, an IRM was conducted from April through June 2001. The IRM consisted of excavation of soils containing the COCs, post excavation sampling, backfilling with clean soil, and re-establishing vegetation. The southern boundary was remediated to the New Jersey Residential Direct Contact Soil Cleanup Criteria (NJ-RDC-SCC), and the eastern, northern and western boundaries were remediated to the NJ-NRDC-SCC. These activities are documented in the “AOC 107 Interim Remedial Measures-Remedial Action Report”, submitted to the NJDEP on April 30, 2003. The IRM limits and post-excavation boring locations are shown on Figure 4. The analytical results are presented in Tables 3a and 3b.

## 3.6 West Bank and Off-Site Wanaque River Flood Plain

Exploratory sampling conducted in 1990 indicated the presence of copper, lead and mercury in soil in the Wanaque flood plain off-site. Additional sampling was conducted over the next few years, and presented in the "*Wanaque River Investigation Summary*", submitted to NJDEP in March 1995. Based on the investigation data, constituents of concern were found above the NJ-RDC-SCC in isolated areas within the 100-year flood plain down-stream of the site. DuPont and NJDEP agreed to conduct the off-site remediation in phases, beginning with residential properties.

### 3.6.1 Residential Properties South of the Wanaque Avenue Bridge

8 residential properties had COCs in isolated areas on their properties. These properties were remediated and restored in 1999, and Remedial Action Reports submitted for each property. The NJDEP has issued No Further Action letters for these properties.

### 3.6.2 Commercial Properties and Public Lands South of the Wanaque Avenue Bridge

5 commercial and 5 public lands had COCs in isolated areas on their properties. These properties were remediated and restored in 2000, and Remedial Action Reports submitted for each property. No Further Action letters are pending for these properties.

### 3.6.3 Residential and Commercial Properties North of the Wanaque Avenue Bridge

The area termed the West Bank is located immediately south of AOC 192, and is partly on DuPont property, immediately adjacent to the Senior Housing, and partly on the former Artistic Weaving site south of the site. This area was remediated and restored in 2001 to the New Jersey Residential Direct Contact Soil Cleanup Criteria (NJRDCSCC). The northern extent of this remediation tied into the southern extent of the AOC 192 remediation. These activities are documented in the "*Wanaque River West Bank Wanaque River Residential/Commercial Remediation Remedial Action Report*", submitted to NJDEP on April 15, 2002. The on-site west bank IRM limits and post-excavation boring locations are shown on Figure 4. The analytical results are presented in Tables 3a and 3b. No Further Action letters are pending for these properties.

The Wanaque east bank flood plain located south of the site and north of the Wanaque Avenue Bridge will be remediated in the second half of 2003. This will complete all the off-site soil remediation in the Wanaque River flood plain south of the DuPont site.

## 3.7 Constituents of Potential Concern in Soil

The purpose of this RI Work Plan is to holistically evaluate the Lake Inez region, to determine if any areas have been impacted by the former operations, and to determine the need for further remedial action. Because considerable data have been collected for several of the AOCs in the Lake Inez region and from off-site down-gradient soils, the existing data were evaluated to identify constituents of potential concern, and to identify

existing data gaps. Table 2 summarizes all the soil investigation samples collected between 1990 and 2002 in the Lake Inez region. The purpose of Table 2 is to summarize the analyte classes for each sample. Table 3a presents a summary of all site perimeter analytical data collected to date screened against the lower of the NJ-RDC-SCC or the NJ-IGW-SCC. Table 3b presents a summary of all interior Lake Inez region analytical data collected to date screened against the lower of the NJ-NRDC-SCC or the NJ-IGW-SCC. Table 4 presents a summary of all interior Lake Inez region analytical exceedances in soil above the lower of the NJ-NRDC-SCC or the NJ-IGW-SCC.

DuPont performed a statistical data evaluation on the Lake Inez region using the existing laboratory and XRF soil data (166 borings and 248 samples). The data were compared to generic screening concentrations. Site perimeter samples were compared to the lower of the NJ-RDC-SCC or the NJ-IGW-SCC, and interior samples were compared to the lower of the NJ-NRDC-SCC or the NJ-IGW-SCC (Table 5). Since the Lake Inez region interior is isolated from adjacent properties and because future use of this site will be non-residential in nature (deed restricted), the NJ-NRDC-SCC were used as the screening concentrations. The lower of the NJ-NRDC-SCC or the NJ-IGW-SCC were used to generate data summaries by analyte including the average concentration, maximum concentration, and percentage of exceedances for constituents in the interior of the Lake Inez region. If an analyte was non-detect, then ½ the detection limit was used. The results of this evaluation are presented in Table 5 and summarized below.

- Benzo(a)pyrene was identified above the NJ-NRDC-SCC (0.66) in 31.1%, 14 of the 45 samples collected to date (see Figure 4). The average concentration of benzo(a)pyrene in the Lake Inez region is 1.3 mg/kg, with a maximum detected concentration of 23.0 mg/kg.
- Benzo(b)fluoranthene was identified above the NJ-NRDC-SCC (4 mg/kg) in 15.9%, 7 of the 44 samples collected to date (see Figure 4). The average benzo(b)fluoranthene concentration in the Lake Inez region is 1.6 mg/kg, with a maximum detected concentration of 13 mg/kg.
- Beryllium was identified above the NJ-NRDC-SCC (2 mg/kg) in 12.5%, 1 of the 8 samples collected to date (see Figure 4). The average beryllium concentration in the Lake Inez region is 0.9 mg/kg, with a maximum concentration of 3.2 mg/kg.
- Thallium was identified above the NJ-NRDC-SCC (2 mg/kg) in 12.5%, 3 of the 24 samples collected to date (see Figure 4). The average thallium concentration in the Lake Inez region is 2.4 mg/kg, with a maximum concentration of 10 mg/kg. Three samples were non-detect with high detection limits (10 mg/kg is half the PQL for the highest detection limit).
- Arsenic was identified above the NJ-NRDC-SCC (20 mg/kg) in 11.6%, 15 of the 129 samples collected to date (see Figure 4). The average arsenic concentration in the Lake Inez region is 10.5 mg/kg, with a maximum concentration of 58.8 mg/kg.
- Dibenzo(a,h)anthracene was identified above the NJ-NRDC-SCC (0.66 mg/kg) in 11.6%, 5 of the 43 samples collected to date (see Figure 4). The average

concentration of dibenzo(a,h)anthracene in the Lake Inez region is 0.2 mg/kg, with a maximum detected concentration of 2 mg/kg.

- Benzo(a)anthracene was identified above the NJ-NRDC-SCC (4 mg/kg) in 9.1%, 4 of the 44 samples collected to date (see Figure 4). The average concentration of benzo(a)anthracene in the Lake Inez region is 1.2 mg/kg, with a maximum detected concentration of 23.0 mg/kg.
- Copper was identified above the NJ-NRDC-SCC (600 mg/kg) in 7.8%, 10 of the 129 samples collected to date (see Figure 4). The average copper concentration in the Lake Inez region is 612 mg/kg, with a maximum concentration of 21,200 mg/kg.
- Lead was identified above the NJ-NRDC-SCC (600 mg/kg) in 7.8%, 10 of the 129 samples collected to date (see Figure 4). The average lead concentration in the Lake Inez region is 234 mg/kg, with a maximum concentration of 3,196 mg/kg.
- Indeno(1,2,3-cd)pyrene was identified above the NJ-NRDC-SCC (4 mg/kg) in 4.7%, 2 of the 43 samples collected to date (see Figure 4). The average concentration of indeno(1,2,3-cd)pyrene in the Lake Inez region is 0.6 mg/kg, with a maximum detected concentration of 5.1 mg/kg.
- Mercury was identified above the NJ-NRDC-SCC (270 mg/kg) in 0.8%, 1 of the 129 samples collected to date (see Figure 4). The average mercury concentration in the Lake Inez region is 43.2 mg/kg, with a maximum concentration of 970 mg/kg.

The screening evaluation identified the main constituents of potential concern in the southern portion of the Lake Inez region as PAHs, beryllium, thallium, arsenic, copper, lead and mercury. Analysis for the organic explosives DNT, NB, TNT, HMX, RDX, PETN and Tetryl was performed at a NJ certified laboratory as part of the post-excavation sampling for AOCs 192 and 194. All samples were non-detect for organic explosives. In addition, all post-excavation samples from AOCs 192 and 194 were immediately field screened for organic explosives using an Expray test kit. No post-excavation samples tested positive. This indicates that organic explosives are not a constituent of concern in the Old Fuze Works.

## 3.8 Groundwater Investigation Summary

The focus of this Lake Inez region RI will be limited to soil. A bedrock groundwater well, 133R, was installed in 1990, sampled quarterly in 1990, and exhibited no VOC concentrations above the MDL in March, May, August and November 1990. Alluvial wells were installed in the Lake Inez region during July and August 2002, and sampled in November 2002. Groundwater sampling results exhibited no VOC concentrations above the MDL. Since the alluvial and bedrock wells exhibited no VOC concentrations above the MDL, no further groundwater action is proposed. The Lake Inez region groundwater is discussed further in the "*Site Investigation Groundwater Report*", submitted to the NJDEP in February 2003. In response to the NJDEP's April 16, 2003 comment letter, the 5 groundwater monitor wells will be sampled again in May 2003 for Appendix IX

VOCs and priority pollutant metals, to confirm groundwater has not been impacted by former site operations.

## 3.9 Wanaque River Ecological Assessment

The Wanaque River sediments will be addressed as part of an ecological study. A work plan outlining the assessment will be submitted in 2004, after the soil investigation results have been reviewed.

# 4.0 LAKE INEZ REGION PROPOSED SOIL INVESTIGATIONS

The primary medium of potential concern for the Lake Inez region is soil. Site-related constituents have been identified above non-residential screening levels in some of the AOCs that have been investigated. The Lake Inez terrain consists of bedrock ridges with shallow soil cover, with thicker soil cover occurring in the valley. Surface water has the greatest potential to be the transport mechanism for soils, with the majority of surface water runoff going to the Wanaque River. The Wanaque River flood plain (AOC 113), however, has been remediated down-gradient of the site, except for the east bank, and potential migration of constituents through surface runoff has been minimized by the IRMs discussed in Section 3.0. Groundwater is not a medium of concern, based on the sample results from monitoring wells in the Lake Inez region.

Historical data were evaluated (Section 3.0), the result being that this work plan focuses on collecting the data necessary to adequately evaluate the Lake Inez region. The proposed investigation within the Lake Inez region will be a "one-step" investigation that will address existing data gaps, verify historic data, delineate the constituents of potential concern, and identify any areas that may warrant remedial action and/or stabilization. Real time data evaluation will be performed during the RI. Additional borings will be added as deemed necessary to obtain data in support of any potential remedial action or stabilization measures. Any potential remedial action or stabilization measures will be identified as areas demonstrating significantly elevated contamination, as defined in the RI objectives. DuPont will keep the NJDEP technical lead informed of project activities on a bi-weekly basis, and solicit NJDEP input during the investigation. Both DuPont and the NJDEP are responsible for requesting meetings on an as-needed basis. The intent of this field investigation is to fully characterize the Lake Inez region in one phase, as appropriate for future non-residential use. If more than one iteration of field activities is required to complete the "one-step" investigation, all data will be summarized in one RI report. It is also possible that future sampling may be needed to refine the scope of a remedial measure.

## 4.1 Proposed Analytes

### 4.1.1 Southern Lake Inez Region

The constituents of potential concern evaluation presented in Section 3.7 identified the main constituents of potential concern in the southern portion of the Lake Inez region. Based on the evaluation the proposed analytes are:

- 33% PAHs, one sample from each boring (NJ certified lab)
- 100% Copper, lead , mercury (PLW XRF)
- 100% Arsenic (NJ certified lab)
- 10% PP Metals (NJ certified lab)
- 100% Field screening for organic explosives (EXPRAY)
- 10% Nitroaromatics-Nitroamines (NJ certified lab)

### 4.1.2 Northern Lake Inez Region

Nitrocellulose, ballistite and smokeless powder were manufactured in the areas of AOC 117 and 119 in the northern portion of the Lake Inez region. The buildings in these areas were decommissioned by burning. The following raw materials were used to produce those products:

- Wood/cotton fiber
- Nitric acid
- Sulfuric acid
- Barium nitrate
- Dipheylamine
- Ethyl alcohol
- Acetone
- Urea
- Naphthalene

The NJDOT contracted with Day and Zimmerman in 1984 to collect and analyze soil samples on northern portion of the Lake Inez valley. Samples were analyzed for nitrate, nitrite, lead, mercury, and organic explosives. There were no SCC exceedances.

Based on the raw materials and decommissioning by burning, the proposed analytes are:

- 100% Field screening for organic explosives (EXPRAY)
- 10% Nitroaromatics-Nitroamines (NJ certified lab)
- 10% Nitrate/Nitrite (NJ certified lab)
- 33% PAHs, one sample from each boring (NJ certified lab)
- 100% Copper, lead , mercury (PLW XRF)
- 100% Arsenic (NJ certified lab)
- 10% PP Metals (NJ certified lab)

## 4.2 Extent of Potential Constituents of Concern

The sampling approach has been divided into three categories: perimeter sampling, holistic region sampling and AOC specific sampling. Perimeter sampling is designed to determine the extent of constituents near the site boundary. Holistic region sampling addresses areas between previously investigated AOCs. AOC specific sampling targets those AOCs that have not previously been sampled or AOCs that warrant further investigation.

The original OH identified AOCs as large areas (e.g., AOC 109 is the entire area of the Old Fuze Works). The PA identified specific areas of concern within these large AOCs, many of which have already been stabilized. All the Lake Inez Region AOCs are shown on Figure 2. For the purposes of the remedial investigation, the large AOC boundaries have been modified to account for topography, indications of former activities such as building foundations and/or footers, and to exclude the smaller AOCs within the larger ones. The modified AOCs for the southern Lake Inez region are shown on Figure 3a and the northern Lake Inez region AOCs are shown on Figure 3b. All proposed boring locations are shown in Figures 5a and 5b. The proposed boring locations will be located in the field using GPS survey equipment from coordinates identified on the map. Once

the borings have been marked in the field, the field geologist will inspect the sample locations. The field geologist will have the responsibility to relocate any soil boring in order to target areas of potential migration, discolored soil, stressed vegetation, odor, or based on professional judgment. Positional data collected using the GPS survey equipment will conform to the accuracy requirements and guidelines set forth in NJDEP's *Standards for using Code-based Global Positioning Systems (GPS) for the development of Accurate Location Data.*

Soil samples will be collected during the Lake Inez investigation using a GeoProbe® or similar direct-push sampling apparatus. Surface samples may be collected from the 0 to 6-inch interval using a stainless trowel. Subsurface samples will be collected with a GeoProbe® using a soil core barrel with a plastic liner. Sample collection procedures are detailed in Section 7.

Sample locations will generally have one sample collected within the surface interval and two samples collected from the subsurface, unless bedrock is encountered or it is otherwise noted below. Because steep bedrock slopes characterize the Lake Inez region, the soil cover is thin to non-existent in some areas. The field geologist will have the responsibility to determine which depth intervals to sample based on lithology and field screening (PID, thermal reactivity test, and EXPRAY). If the screening procedures do not indicate any interval(s) to target, then borings will generally be sampled at the 0 to 0.5-foot, 3 to 3.5-foot and 6 to 6.5-foot intervals. Sampling intervals for areas with a total soil depth of less than 6.5-foot will be adjusted so that samples will be taken at 0 to 0.5, at the median interval, and at 0.5-foot above the bedrock refusal depth. Samples will be collected in 0.5-foot intervals.

The delineation goals of the RI, agreed upon by DuPont and the NJDEP are to:

- ❏ Delineate to Residential Direct Contact Soil Cleanup Criteria (RDCSCC) at the fence line, where manufacturing or associated manufacturing activities occurred in the area. The only location that meets these conditions is the southern fence line along the Wanaque West Bank.
- ❏ Delineate surface concentration of constituents to the Non Residential Direct Contact Soil Cleanup Criteria (NRDCSCC) at the perimeter of the manufacturing or associated manufacturing areas that are internal to the site.
- ❏ Perform additional delineation within the grid if concentrations exceed: the lower of 100 X NRDCSCC or health-based limits, in order to better define remedial action.
- ❏ Vertically delineate and horizontally delineate at depth (>2 feet) non-VOC samples with significant concentrations (two orders of magnitude) above the NJ-NRDC-SCC. Health based concentrations for those constituents whose NJ-NRDC-SCC are not health based (e.g., benzo(a)pyrene) will be used.
- ❏ Collect and evaluate data necessary to evaluate remedial action alternatives consistent with site reuse.

### 4.2.1 Perimeter Sampling

Perimeter sampling was conducted along the southern Lake Inez region as part of the AOC 192, West Bank, and AOC 107 IRMs, and East Bank investigation. All post excavation analytical result along the site perimeter were below the RDCSCC for the three IRMs. Three East Bank investigation samples exceed the mercury RDCSCC, and 1 sample exceeds the copper RDCSCC. The East Bank will be remediated in 2003. The site perimeter borings and their analyte list are identified in Table 2, and the analytical results presented in Tables 3a and 4. Boring locations are presented in Figure 4.

Other AOCs adjacent to the site perimeter (e.g., northern extent of AOC 117) will be delineated to the RDCSCC at the site perimeter during this remedial investigation.

### 4.2.2 Holistic and AOC Specific Sampling

In order to approach the Lake Inez region in a holistic fashion, 100-foot to 200-foot grids have been superimposed on the four large AOCs covering the majority of the Lake Inez region, AOCs 109, 113, 117 and 119. Samples will be collected at each grid node within the AOC boundary. For AOC 113, Lake Inez, only the flood plain area of the Wanaque River will be addressed during this investigation. A 52-foot grid (1 location per 2,700 square feet) has been applied to most of the remaining 20 smaller AOCs. The proposed borings are located to characterize the contaminants in the Lake Inez region consistent with the *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E), and to address worker protection during site redevelopment. Proposed boring locations are shown in Figures 5a and 5b. The specific grid size, number of borings and proposed analytes for each AOC are discussed below.

#### AOC 107-Main Office Shooting Ground

No additional sampling is proposed for AOC 107. The exceedances outside the western perimeter of the AOC 107 IRM will be delineated as part of AOC 113.

#### AOC 108—Old Cladding Tunnel

Since the tunnel is into the bedrock hillside, it is anticipated that only surface samples can be collected. One sample will be collected inside the tunnel, if possible, one sample at the mouth of the tunnel, and one sample will target the drainage area from the tunnel, as shown in Figure 5a. All samples will be analyzed for PP metals, and one sample will be analyzed for PAHs. All samples will be field screened for the presence of organic explosives.

#### AOC 109-Old Fuze Works

Based on a 100-foot grid, 42 locations will be investigated using a GeoProbe®, as shown in Figure 5a. Samples will be collected from each location based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze for arsenic. All samples will be field screened for the presence of organic explosives. One sample from each boring location will be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

### AOC 110-Barrel Dump Area

Based on a 52-foot grid, 3 locations will be investigated using a GeoProbe®, as shown on Figure 5a. Samples will be collected from each location based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze for arsenic. 10 percent of the samples will be sent to a NJ certified laboratory for PP metals analyses. One sample from each boring location will be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

### AOC 111-Tunnel Residue Dump

Based on a 52-foot grid, 4 locations will be investigated using a GeoProbe®, as shown on Figure 5a. Samples will be collected from each location based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze all samples for arsenic. 10 percent of the samples will be sent to a NJ certified laboratory for PP metals analyses. One sample from each boring location will be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

### AOC 112-Lakefront Magazine, AOC 146 – Lakefront Magazine 1

One location at each AOC will be investigated using the GeoProbe®, as shown on the northern Lake Inez region Figure 5b. Samples will be collected from each location based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze for arsenic. 10 percent of the samples will be sent to a NJ certified laboratory for PP metals analyses. One sample from each boring location will be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

### AOC 113-Lake Inez (Wanaque River Flood Plain Area)

The field mapping conducted as part of the Lake Inez PA identified no areas of concern, so a larger grid was used to determine the number of locations. Based on a 150-foot grid, 96 locations will be investigated using a GeoProbe®, as shown on Figures 5a and 5b. Samples will be collected from each location based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze for arsenic. 10 percent of the samples will be sent to a NJ certified laboratory for PP metals analyses. One sample from each boring location will be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses. The Wanaque River sediments will be addressed as part of a future ecological study.

### AOC 114-Upper Dump

Based on a 52-foot grid, 3 locations will be investigated using a GeoProbe®, as shown on Figure 5b. Samples will be collected from each location based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze for arsenic. 10 percent of the samples

will be sent to a NJ certified laboratory for PP metals analyses. One sample from each boring location will be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

### AOC 115-Lead Carbonate Sludge Pile

Two locations will be investigated using a GeoProbe®, as shown on Figure 5b. Samples will be collected from each location based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze for arsenic. 10 percent of the samples will be sent to a NJ certified laboratory for PP metals analyses. One sample from each boring location will be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

### AOC 117-Ballistite Operation

The Day and Zimmerman investigation of the Northern Lake Inez valley area for NJDOT did not identify any constituents above SCC, so a larger grid was used to determine the number of locations. Based on a 200-foot grid, 17 locations will be investigated using a GeoProbe®, as shown on Figure 5b. Samples will be collected from each location based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze for arsenic. 10 percent of the samples will be sent to a NJ certified laboratory for PP metals analyses. One sample from each boring location will be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

### AOC 119-North West Lake Inez

Based on a 100-foot grid, 45 locations will be investigated using a GeoProbe®, as shown on Figure 5b. Samples will be collected from each location based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze for arsenic. 10 percent of the samples will be sent to a NJ certified laboratory for PP metals analyses. One sample from each boring location will be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

### AOC 145-Tunnel Residue Dump

One location will be investigated using the GeoProbe®, as shown on Figure 5a. Samples will be collected based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze for arsenic. 10 percent of the samples will be sent to a NJ certified laboratory for PP metals analyses. One sample from the boring will be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

### AOCs 147 through 151-Lakefront Magazines 2 through 6

One location at each AOC will be investigated using the GeoProbe®, as shown on the northern Lake Inez region Figure 5b. Samples will be collected from each location based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze for arsenic. 10 percent of the samples will be sent to a NJ certified laboratory for PP metals analyses. One sample from each boring location will be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

### AOC 192-Old Fuze Works Wire Dump

No additional sampling is proposed for AOC 192. The perimeter exceedances will be delineated by borings located in AOC 109.

### AOC 195-Area of Iron Filings

Three locations will be investigated using a GeoProbe®, as shown on Figure 5a. Samples will be collected from each location based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze for arsenic. 10 percent of the samples will be sent to a NJ certified laboratory for PP metals analyses. One sample from each boring location will be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

### AOC 196-Police Shooting Range

Four locations will be investigated using a GeoProbe®, as shown on Figure 5a. Samples will be collected from each location based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze for arsenic. 10 percent of the samples will be sent to a NJ certified laboratory for PP metals analyses. One sample from each boring location will be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

### AOC 197-Area of Tar Deposits

One location will be investigated using the GeoProbe®, as shown on Figure 5a. Samples will be collected based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze for arsenic. 10 percent of the samples will be sent to a NJ certified laboratory for PP metals analyses. One sample from the boring will be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

### AOC 199-Burning Area

Eight locations will be investigated using a GeoProbe®, as shown on Figure 5b. Samples will be collected from each location based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze for arsenic. 10 percent of the samples will be sent to a NJ certified laboratory for PP metals analyses. One sample from each boring location will

be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

#### AOC 200-Area of Former Process Ponds

Nine locations will be investigated using a GeoProbe®, as shown on Figure 5b. Samples will be collected from each location based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze for arsenic. 10 percent of the samples will be sent to a NJ certified laboratory for PP metals analyses. One sample from each boring location will be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

#### AOC 201-Unknown Stone Well

One soil sample will be collected from the bottom of the well, as shown on Figure 5b. The sample will be analyzed for lead, copper and mercury utilizing the lab XRF, and field screened for organic explosives. A NJ certified laboratory will analyze the sample for arsenic.

#### AOC 202-Unknown Pit

One location will be investigated using the GeoProbe®, as shown on Figure 5b. Samples will be collected based on the guidelines set forth in Section 4.2. All samples will be analyzed for lead, copper and mercury utilizing the lab XRF. A NJ certified laboratory will analyze for arsenic. 10 percent of the samples will be sent to a NJ certified laboratory for PP metals analyses. One sample from the boring will be analyzed for PAHs. All samples will be field screened for organic explosives, with 10 percent sent to a NJ certified laboratory for nitroaromatic-nitroamines analyses.

### 4.2.3 Baseline Ecological Assessment

#### Background and Objectives

The objective of a baseline ecological evaluation (BEE) is to examine the site for the co-occurrence of (1) contaminants of potential ecological concern (COPECs), (2) environmentally sensitive areas, and (3) chemical migration pathways to these sensitive areas. The intent of the BEE is to use existing site documents, existing analytical data, and the results of a qualitative site visit to document these conditions. This streamlined evaluation will assist in identifying areas of the site where "no further action" can be supported without additional investigation, and those areas where further ecological evaluation may be appropriate, (NJDEP, 1997).

#### Investigation Methods

Environmental data and information obtained from this Remedial Investigation as well as previously collected data will be evaluated in accordance with N.J.A.C. 7:26E-3.11 for the Lake Inez region to determine the following:

- ❏ Presence of constituents of potential ecological concern
- ❏ Potential migration pathways to environmentally sensitive areas, and

- Areas of the site that are not potentially impacted by the identified constituents and migration pathways.

Environmentally sensitive areas will be identified and described in the BEE. Supplemental field information will be collected, as necessary, to adequately document any potential sensitive areas.

In determining which constituents are of potential ecological concern, measured concentrations will be compared to appropriate ecologically based benchmarks or screening concentrations. Estimated concentrations may be appropriate if models are used in evaluating potential migration pathways. A weight-of-evidence approach may also be included in determining the constituents of potential ecological concern.

The results of BEE will summarize and interpret the findings of the evaluation and present a reasonable decision regarding the need for further studies.

# 5.0 REMEDIAL INVESTIGATION SCHEDULE

A detailed schedule for the site/remedial investigation of the entire PLW site is attached as Table 6. The overall project is expected to take approximately 4 years or approximately 1 year per region to develop the work plan, implement the work plan and write a summary report. In order to meet this schedule, DuPont and the NJDEP will have to coordinate their activities and work together during each phase, in each region.

# 6.0 ROLES AND RESPONSIBILITIES

The individual responsible for overall DuPont project coordination is Mr. Edward S. Seger. The URS Diamond project manager is Ms. Marjorie E. Vetter. The URS Diamond technical lead is Mr. Edward (Ted) H. Cahill. The URS Diamond project quality officer is Ms. Barbara C. Rhodes. The URS Diamond Health and Safety Specialist is Ms. Kathryn A. Sova. The DuPont Risk Assessment Specialist is Ms. Maryann J. Nicholson. Roles and responsibilities are also discussed in the QAPP, Appendix A.

# 7.0 SAMPLE COLLECTION PROCEDURES

Soil samples will be collected, depending on the site conditions:

- ❏ with a GeoProbe® rig or similar direct-push sampling device,
- ❏ with a stainless steel sampling trowel,
- ❏ Or with a hand auger.

In general, all deep soil samples will be collected with the GeoProbe,® and shallow soil samples with hand auger or trowel. If there are safety concerns because of the potential for explosive devices, non-sparking sampling equipment, a remote drill rig, or test pits may be utilized for sample collection.

## 7.1 Surface Sample

Surface soil samples will be collected from 0 to 6 inches below grade using a stainless steel trowel, hand auger, or from the GeoProbe® core. The soil sample will be transferred to a stainless steel mixing pan using the stainless steel trowel, homogenized, and then transferred to laboratory supplied jars. No samples that are to be analyzed for volatile constituents will be collected using this method, or from the 0-6 inch interval.

## 7.2 Subsurface Sample

In general, subsurface soil samples will be collected using the GeoProbe® direct push method, or with a stainless steel hand auger. The GeoProbe® sampling method for samples that will be analyzed for non-volatile constituents is described in Section 7.2.1. The GeoProbe® sampling method for samples that will be analyzed for volatile constituents is described in Section 7.2.2. Test pits may be used at sampling locations with the potential for explosives or explosive devices. The test pit sampling methods for all constituents are described in Section 7.2.3. All sampling techniques will be in accordance with the methods described in the 1992 NJDEP *Field Sampling Procedures Manual*. These procedures will be followed at all investigation boring locations.

### 7.2.1 GeoProbe® Method

At this time, it is anticipated that all subsurface soil samples will be collected using the GeoProbe® direct-push method. The GeoProbe® rig will be used to drive a 2-inch diameter, 4-foot long steel macro-core tube to the desired depth. Soil samples are contained in a disposable plastic liner inside the macro-core tube. A clean, new plastic liner will be used for each sample core. The field geologist will lay the cores on an elevated cutting table to protect them from coming in contact with any surface soil, cut the plastic liner in half longitudinally using a hook-blade razor knife, and open the cores for visual inspection, classification, and sampling. All cores will be screened with a flame ionization detector (FID) or photoionization detector (PID) equipped with an 11.7 eV bulb. In addition, all cores will be screened for organic explosives using an EXPRAY colorimetric test kit. In locations where larger quantities of soil are needed (i.e.,

duplicates), adjacent borings will be advanced to the desired depth until sufficient soil is acquired for the sample.

Samples will be collected from the core liners using a stainless steel trowel, transferred to a stainless steel pan, homogenized, and transferred to the appropriate laboratory supplied containers. All sampling and analysis will be conducted in accordance with the *Quality Assurance Project Plan*, which is included as Appendix A. After sample collection, the samples to be analyzed for site specific metals (e.g., copper, lead, and mercury) will be transferred to the PLW on-site screening laboratory. Samples will then be placed on ice, packed in laboratory-supplied coolers and shipped to Lancaster Labs via lab courier.

### 7.2.2 Volatile Organic Sampling Methods

Soil samples to be analyzed for volatile organic compounds will be collected with the GeoProbe® sampling rig, unless explosive compounds are identified in the area. The subsurface sampling core barrel will be extruded from below ground surface and then have the 2 inch diameter by 4 foot long poly core liner removed from the coring device. The poly cores will be cut in half longitudinally using a hook-blade razor knife, and opened for visual inspection and PID screening. Samples to be analyzed for volatile organic compounds will be collected from an appropriate depth(s) (>6 inch) as determined by soil matrix or PID readings. All VOC samples will be collected using an EnCore™ soil-sampling device.

### 7.2.3 Test Pit Sampling Methods

Because PLW historically manufactured explosive compounds and products, there are inherent dangers associated with sampling soils that may contain these constituents. DuPont may elect to perform a subsurface soil evaluation at any given location utilizing test pit sampling procedures. Based on a review of the Lake Inez region operations by site personnel, and an evaluation of the entire Lake Inez region explosive compound sample screening results, no test pits have been proposed at this time. However, if during the field investigation DuPont determines that at discrete locations explosive compounds or products are present, DuPont will discontinue the GeoProbe® sampling program and continue the subsurface investigation using a backhoe appropriately equipped to protect the operator. The backhoe will excavate a test pit to the deepest sampling interval or to four feet below ground surface, which ever comes first. The field geologist will inspect the soils in the sidewall of the exposed excavation and perform PID screening. Soil samples from the desired sampling interval(s) will then be collected from the excavation. Samples will be collected using one of the following methods.

- ❏ Directly from the sidewall using a stainless steel sampling trowel and/or an EnCore™ sampling device if VOC sampling is needed.

- ❏ From the backhoe bucket in an area where the sample material is not in contact with the bucket using a stainless steel sampling trowel and/or VOC sampling device if VOC sampling is needed.

- ❏ From the bottom of the excavation utilizing a four-inch diameter stainless steel hand auger, or trowel.

The field geologist will not be permitted to enter any excavation deeper than four feet. Field personnel will use appropriate PPE when handling these samples. Excavation safety procedures are detailed in the HASP (Appendix B).

## 7.3 Sample Screening Procedures

Samples will be screened for reactivity using the explosives screening procedures outlined in Appendix C of this workplan. Any sample indicating a positive reaction to the flame reactivity test will be disposed of in accordance with all applicable rules and regulations.

## 7.4 Sample Description

The field geologist will use the Unified Soil classification System (USCS), to log all soils investigated during this program.

## 7.5 Equipment Decontamination Procedures

All soil sampling equipment will be decontaminated in accordance with the 1992 NJDEP *Field Sampling Procedures Manual*. This Section describes the methods to be used for field decontamination of the GeoProbe® and other sampling tools.

The GeoProbe® will be cleaned after arrival on-site and before departing. A clean macro-core(s) and a new core liner will be used at each sampling location, for each interval sampled. Trowels, mixing pans, macro-core barrels, and tips will be decontaminated in the PLW screening laboratory, where the rinse-water is collected and periodically sent out for disposal following all applicable rules and regulations. Decontamination procedures are outlined in the QAPP (Appendix A). Plastic core liners are not reusable, and will be disposed of in accordance with the Waste Management Plan (WMP) following a single use.

## 7.6 Documentation

All field information is to be recorded by the field geologist in ink and in bound notebooks. Sample information will include the following: sample type, date sampled, time sampled, project id, site number, boring number, depth interval, sampling phase, cooler number, bottle number, number of bottles filled, sample preservative, type of container, volume of sample, sampler, technician, and any other pertinent comments (e.g., soil description, weather, PID reading, etc.). Sample information will be entered into the PLW on-site sample database, from which a chain of custody will be developed for shipment to the laboratory. Documentation procedures are discussed further in the QAPP (Appendix A).

# 8.0 QUALITY ASSURANCE

To ensure the accuracy, precision and completeness of data collected during the RI, all sampling activities will be conducted in accordance with the *Quality Assurance Project Plan* (see Appendix A). The QAPP includes: a description of the project organization, quality assurance objectives, sample procedures (e.g., bottle types, preservation methods, holding times), custody, decontamination procedures, analytical procedures, data reduction, validation and reporting, quality control checks (e.g., duplicate samples, trip blanks, field blanks), performance audits, preventative maintenance, and other information, such as procedures for corrective action.

# 9.0 WASTE MANAGEMENT

A waste management plan will be developed in accordance with applicable state and federal regulations and applicable DuPont guidance and policy.

# 10.0 HEALTH AND SAFETY

A health and safety plan was developed specific to the activities to be conducted in accordance with 29 CFR 1920.120 (see Appendix B). In addition, a project safety analysis (PSA) will be conducted prior to initiation of fieldwork. Field safety audits will be conducted periodically during the duration of the fieldwork.

# 11.0 REFERENCES

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# TABLES

Table 1
Areas of Concern (AOC) Status
Lake Inez Region
DuPont Pompton Lakes Works

| AOC # | AOC Name | Current Status |
|---|---|---|
| 107 | Main Office Shooting Ground | Interim Remedial Measure 2001, RAR submitted in 2003. |
| 108 | Old Cladding Tunnel | |
| 109 | Old Fuze Works | "Geophysical Investigation of the Lake Inez Fuze Works", June 8, 1993 |
| 110 | Barrel Dump Area | |
| 111 | Tunnel Residue Dump | |
| 112 | Lakefront Magazine | |
| 113 | Lake Inez | "Lake Inez Valley Preliminary Assessment Report", April 1996, and "Wanaque River Investigation Summary", March 1995. |
| 114 | Upper Dump | |
| 115 | Lead Carbonate Sludge Pile | |
| 117 | Ballestite Operation | |
| 119 | North West Lake Inez | |
| 145 | Tunnel Residue Dump | |
| 146 | Lakefront Magazine 1 | |
| 147 | Lakefront Magazine 2 | |
| 148 | Lakefront Magazine 3 | |
| 149 | Lakefront Magazine 4 | |
| 150 | Lakefront Magazine 5 | |
| 151 | Lakefront Magazine 6 | |
| 192* | Old Fuze Works Wire Dump | Interim Remedial Measures Completed January 1997, "On-Site Lake Inez Valley Areas of Concern 192 and 193 Remedial Action Report", September 1998 |
| 193* | Old Fuze Works Miscellaneous Waste Site | Stabilization Measures Completed January 1997, "On-Site Lake Inez Valley Areas of Concern 192 and 193 Remedial Action Report", September 1998. Proposed no further action. |
| 194* | Old Fuze Works Dump | Interim Remedial Measures Completed February 1997, "On-Site Lake Inez Valley Areas of Concern 194 and 198 Remedial Action Report", February 16, 1998 |
| 195* | Area of iron filings | |
| 196* | Police shooting range | |
| 197* | Area of tar deposits | |
| 198* | Area of tar deposits | Interim Remedial Measure completed wih AOC 194 Interim Measure, "On-Site Lake Inez Valley Areas of Concern 194 and 198 Remedial Action Report", February 16, 1998 |
| 199* | Burning area | |
| 200* | Area of former process ponds | |
| 201* | Unknown stone well | |
| 202* | Unknown pit | |

Notes: * New AOC added since 1992 HSWA Permit issued.
Lake Inez PA, April 29, 1996

Table 2
1990-2002 Sample Summary
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | DUPNO | Analytes | # Results | Job Name | Sample ID | Site Perimeter or Interior | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| 107-100 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-100-0 | | AOC 107 |
| 107-100 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-100-0 | | AOC 107 |
| 107-101 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-101-0 | | AOC 107 |
| 107-101 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-101-0 | | AOC 107 |
| 107-102 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-102-0 | | AOC 107 |
| 107-104 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-104-0 | | AOC 107 |
| 107-104 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-104-0 | | AOC 107 |
| 107-105 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-105-0 | | AOC 107 |
| 107-105 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-105-0 | | AOC 107 |
| 107-106 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-106-0 | | AOC 107 |
| 107-106 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-106-0 | | AOC 107 |
| 107-107 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-107-0 | | AOC 107 |
| 107-107 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-107-0 | | AOC 107 |
| 107-108 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-108-0 | | AOC 107 |
| 107-108 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-108-0 | | AOC 107 |
| 107-109 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-109-0 | | AOC 107 |
| 107-110 | 0 | 0.5 | 7/14/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-110-0 | Perimeter | AOC 107 |
| 107-110 | 0 | 0.5 | 7/14/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-110-0 | Perimeter | AOC 107 |
| 107-112 | 0 | 0.5 | 7/14/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-112-0 | | AOC 107 |
| 107-113 | 0 | 0.5 | 7/14/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-113-0 | Perimeter | AOC 107 |
| 107-113 | 0 | 0.5 | 7/14/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-113-0 | Perimeter | AOC 107 |
| 107-114 | 0 | 0.5 | 7/14/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-114-0 | Perimeter | AOC 107 |
| 107-114 | 0 | 0.5 | 7/14/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-114-0 | Perimeter | AOC 107 |
| 107-115 | 0 | 0.5 | 7/14/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-115-0 | Perimeter | AOC 107 |
| 107-115 | 0 | 0.5 | 7/14/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-115-0 | Perimeter | AOC 107 |
| 107-116 | 0 | 0.5 | 7/14/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-116-0 | | AOC 107 |
| 107-116 | 0 | 0.5 | 7/14/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-116-0 | | AOC 107 |
| 107-117 | 0 | 0.5 | 7/14/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-117-0 | | AOC 107 |
| 107-118 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-118-0 | | AOC 107 |
| 107-119 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-S-107-119-0 | | AOC 107 |
| 107-119 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-119-0 | | AOC 107 |
| 107-120 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-S-107-120-0 | | AOC 107 |
| 107-120 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-120-0 | | AOC 107 |
| 107-121 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-S-107-121-0 | | AOC 107 |
| 107-121 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-121-0 | | AOC 107 |
| 107-122 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-S-107-122-0 | | AOC 107 |
| 107-122 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-122-0 | | AOC 107 |
| 107-123 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-S-107-123-0 | Perimeter | AOC 107 |
| 107-123 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-123-0 | Perimeter | AOC 107 |
| 107-124 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-124-0 | | AOC 107 |

Table 2
1990-2002 Sample Summary
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | DUPNO | Analytes | # Results | Job Name | Sample ID | Site Perimeter or Interior | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| 107-125 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | SAM99-9 | POM-S-107-125-0 | | AOC 107 |
| 107-125 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-125-0 | | AOC 107 |
| 107-126 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-126-0 | | AOC 107 |
| 107-126 | 0 | 0.5 | 8/10/1999 | DUP | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-126-0DUP | | AOC 107 |
| 107-127 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | SAM99-9 | POM-S-107-127-0 | | AOC 107 |
| 107-127 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-127-0 | | AOC 107 |
| 107-128 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | SAM99-9 | POM-S-107-128-0 | | AOC 107 |
| 107-128 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-128-0 | | AOC 107 |
| 107-129 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | SAM99-9 | POM-S-107-129-0 | | AOC 107 |
| 107-129 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-129-0 | | AOC 107 |
| 107-130 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-130-0 | | AOC 107 |
| 107-131 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-131-0 | | AOC 107 |
| 107-132 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-132-0 | | AOC 107 |
| 107-133 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-133-0 | | AOC 107 |
| 107-134 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-S-107-134-0 | Perimeter | AOC 107 |
| 107-134 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-134-0 | Perimeter | AOC 107 |
| 107-135 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-S-107-135-0 | Perimeter | AOC 107 |
| 107-135 | 0 | 0.5 | 8/10/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-135-0 | Perimeter | AOC 107 |
| 107-137 | 0 | 0.5 | 8/16/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-137-0 | | AOC 107 |
| 107-137 | 0 | 0.5 | 8/16/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-137-0 | | AOC 107 |
| 107-139 | 0 | 0.5 | 8/16/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-139-0 | | AOC 107 |
| 107-140 | 0 | 0.5 | 8/16/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-140-0 | | AOC 107 |
| 107-141 | 0 | 0.5 | 8/16/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-141-0 | | AOC 107 |
| 107-141 | 0 | 0.5 | 8/16/1999 | DUP | As, Cu, Hg | 3 | UPL-AOC 107 XRF DATA | 107-141-0DUP | | AOC 107 |
| 107-142 | 0 | 0.5 | 8/16/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-142-0 | | AOC 107 |
| 107-143 | 0 | 0.5 | 8/16/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-143-0 | | AOC 107 |
| 107-144 | 0 | 0.5 | 8/30/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-144-0 | | AOC 107 |
| 107-145 | 0 | 0.5 | 8/30/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-145-0 | | AOC 107 |
| 107-146 | 0 | 0.5 | 8/30/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-146-0 | | AOC 107 |
| 107-148 | 0 | 0.5 | 8/30/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-148-0 | | AOC 107 |
| 107-149 | 0 | 0.5 | 8/30/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-149-0 | | AOC 107 |
| 107-150 | 0 | 0.5 | 8/30/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-150-0 | | AOC 107 |
| 107-150 | 0 | 0.5 | 8/30/1999 | DUP | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-150-0DUP | | AOC 107 |
| 107-151 | 0 | 0.5 | 8/30/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-151-0 | | AOC 107 |
| 107-152 | 0 | 0.5 | 8/30/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-152-0 | | AOC 107 |
| 107-153 | 0 | 0.5 | 8/30/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-153-0 | | AOC 107 |
| 107-154 | 0 | 0.5 | 12/2/1999 | - | Hg | 1 | SAM99-9 | POM-107-154-0 | | AOC 107 |
| 107-155 | 0 | 0.5 | 12/8/1999 | - | Hg | 1 | SAM99-9 | POM-107-155-0 | Perimeter | AOC 107 |
| 107-155 | 0 | 0.5 | 12/8/1999 | - | Hg | 1 | UPL-AOC 107 XRF DATA | 107-155-0 | Perimeter | AOC 107 |
| 107-158 | 0 | 0.5 | 10/13/2000 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-158-0 | | AOC 107 |

Table 2
1990-2002 Sample Summary
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | DUPNO | Analytes | # Results | Job Name | Sample ID | Site Perimeter or Interior | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| 107-172 | 0 | 0.5 | 10/13/2000 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-172-0 | | AOC 107 |
| 107-176 | 0 | 0.5 | 10/13/2000 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-176-0 | | AOC 107 |
| 107-177 | 0 | 0.5 | 10/13/2000 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-177-0 | | AOC 107 |
| 107-182 | 0 | 0.5 | 10/25/2000 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-182-0 | | AOC 107 |
| 107-183 | 0 | 0.5 | 10/25/2000 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-183-0 | | AOC 107 |
| 107-184 | 0 | 0.5 | 10/25/2000 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-184-0 | | AOC 107 |
| 107-185 | 0 | 0.5 | 10/25/2000 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-185-0 | | AOC 107 |
| 107-187 | 0 | 0.5 | 10/25/2000 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-187-0 | | AOC 107 |
| 107-21 | 0 | 0.5 | 5/13/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-21-0 | | AOC 107 |
| 107-21 | 0 | 0.5 | 5/13/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-21-0 | | AOC 107 |
| 107-216 | 0 | 0.5 | 11/27/2000 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-216-0 | | AOC 107 |
| 107-220 | 0 | 0.5 | 11/29/2000 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-220-0 | Perimeter | AOC 107 |
| 107-33 | 0 | 0.5 | 5/27/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-33-0 | | AOC 107 |
| 107-33 | 0 | 0.5 | 5/27/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-33-0 | | AOC 107 |
| 107-34 | 0 | 0.5 | 5/27/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-34-0 | | AOC 107 |
| 107-34 | 0 | 0.5 | 5/27/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-34-0 | | AOC 107 |
| 107-36 | 0 | 0.5 | 5/27/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-36-0 | | AOC 107 |
| 107-36 | 0 | 0.5 | 5/27/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-36-0 | | AOC 107 |
| 107-40 | 0 | 0.5 | 5/27/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-40-0 | | AOC 107 |
| 107-44 | 0 | 0.5 | 6/3/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-44-0 | | AOC 107 |
| 107-44 | 0 | 0.5 | 6/3/1999 | DUP | As, Cu, Hg | 3 | SAM99-9 | POM-107-44-0DUP | | AOC 107 |
| 107-44 | 0 | 0.5 | 6/3/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-44-0 | | AOC 107 |
| 107-44 | 0 | 0.5 | 6/3/1999 | DUP | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-44-0DUP | | AOC 107 |
| 107-45 | 0 | 0.5 | 6/3/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-45-0 | | AOC 107 |
| 107-45 | 0 | 0.5 | 6/3/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-45-0 | | AOC 107 |
| 107-54 | 0 | 0.5 | 6/3/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-54-0 | | AOC 107 |
| 107-54 | 0 | 0.5 | 6/3/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-54-0 | | AOC 107 |
| 107-55 | 0 | 0.5 | 6/3/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-55-0 | | AOC 107 |
| 107-55 | 0 | 0.5 | 6/3/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-55-0 | | AOC 107 |
| 107-56 | 0 | 0.5 | 6/3/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-56-0 | | AOC 107 |
| 107-56 | 0 | 0.5 | 6/3/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-56-0 | | AOC 107 |
| 107-58 | 0 | 0.5 | 6/3/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-58-0 | | AOC 107 |
| 107-58 | 0 | 0.5 | 6/3/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-58-0 | | AOC 107 |
| 107-61 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-61-0 | | AOC 107 |
| 107-61 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-61-0 | | AOC 107 |
| 107-62 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-62-0 | | AOC 107 |
| 107-62 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-62-0 | | AOC 107 |
| 107-63 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-63-0 | | AOC 107 |
| 107-63 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-63-0 | | AOC 107 |
| 107-66 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-66-0 | | AOC 107 |

Table 2
1990-2002 Sample Summary
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | DUPNO | Analytes | # Results | Job Name | Sample ID | Site Perimeter or Interior | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| 107-66 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-66-0 | | AOC 107 |
| 107-67 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-67-0 | | AOC 107 |
| 107-67 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-67-0 | | AOC 107 |
| 107-70 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-70-0 | | AOC 107 |
| 107-70 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-70-0 | | AOC 107 |
| 107-71 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-71-0 | | AOC 107 |
| 107-71 | 0 | 0.5 | 6/7/1999 | DUP | As, Cu, Hg | 3 | SAM99-9 | POM-107-71-0DUP | | AOC 107 |
| 107-71 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-71-0 | | AOC 107 |
| 107-71 | 0 | 0.5 | 6/7/1999 | DUP | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-71-0DUP | | AOC 107 |
| 107-72 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-72-0 | | AOC 107 |
| 107-72 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-72-0 | | AOC 107 |
| 107-73 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-73-0 | | AOC 107 |
| 107-73 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-73-0 | | AOC 107 |
| 107-74 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-74-0 | | AOC 107 |
| 107-74 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-74-0 | | AOC 107 |
| 107-75 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-75-0 | | AOC 107 |
| 107-75 | 0 | 0.5 | 6/7/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-75-0 | | AOC 107 |
| 107-79 | 0 | 0.5 | 6/25/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-79-0 | Perimeter | AOC 107 |
| 107-79 | 0 | 0.5 | 6/25/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-79-0 | Perimeter | AOC 107 |
| 107-80 | 0 | 0.5 | 6/25/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-80-0 | | AOC 107 |
| 107-81 | 0 | 0.5 | 6/25/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-81-0 | Perimeter | AOC 107 |
| 107-81 | 0 | 0.5 | 6/25/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-81-0 | Perimeter | AOC 107 |
| 107-82 | 0 | 0.5 | 6/25/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-82-0 | | AOC 107 |
| 107-83 | 0 | 0.5 | 6/25/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-83-0 | | AOC 107 |
| 107-84 | 0 | 0.5 | 6/25/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-84-0 | | AOC 107 |
| 107-85 | 0 | 0.5 | 6/25/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-85-0 | | AOC 107 |
| 107-86 | 0 | 0.5 | 6/25/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-86-0 | | AOC 107 |
| 107-87 | 0 | 0.5 | 6/25/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-87-0 | | AOC 107 |
| 107-87 | 0 | 0.5 | 6/25/1999 | DUP | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-87-0DUP | | AOC 107 |
| 107-88 | 0 | 0.5 | 6/25/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-88-0 | | AOC 107 |
| 107-90 | 0 | 0.5 | 6/25/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-90-0 | | AOC 107 |
| 107-91 | 0 | 0.5 | 6/25/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-91-0 | | AOC 107 |
| 107-92 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-92-0 | | AOC 107 |
| 107-95 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-95-0 | | AOC 107 |
| 107-96 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-96-0 | Perimeter | AOC 107 |
| 107-96 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-96-0 | Perimeter | AOC 107 |
| 107-97 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-97-0 | | AOC 107 |
| 107-98 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-98-0 | | AOC 107 |
| 107-99 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Hg | 3 | SAM99-9 | POM-107-99-0 | | AOC 107 |
| 107-99 | 0 | 0.5 | 7/12/1999 | - | As, Cu, Pb, Hg | 4 | UPL-AOC 107 XRF DATA | 107-99-0 | | AOC 107 |

Table 2
1990-2002 Sample Summary
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | DUPNO | Analytes | # Results | Job Name | Sample ID | Site Perimeter or Interior | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| 192-100 | 0 | 0.5 | 11/26/1996 | - | PAHs, As, Cu, Pb, Hg, Tl | 21 | SAM96-52/53 192/194 CONF | 192-100-0 | | AOC 192 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | PAHs, As, Cu, Pb, Hg, Tl | 21 | SAM96-52/53 192/194 CONF | 192-127-0 | | AOC 192 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg, Tl | 40 | SAM96-52/53 192/194 CONF | 192-128-0 | | AOC 192 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | PAHs, As, Cu, Pb, Hg, Tl | 21 | SAM96-52/53 192/194 CONF | 192-129-0 | | AOC 192 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | PAHs, As, Cu, Pb, Hg, Tl | 21 | SAM96-52/53 192/194 CONF | 192-129-0DUP | | AOC 192 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | PAHs, As, Cu, Pb, Hg, Tl | 21 | SAM96-52/53 192/194 CONF | 192-130-0 | Perimeter | AOC 192 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg, Tl | 40 | SAM96-52/53 192/194 CONF | 192-131-0 | Perimeter | AOC 192 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg, Tl | 40 | SAM96-52/53 192/194 CONF | 192-133-0 | | AOC 192 - river |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg, Tl | 40 | SAM96-52/53 192/194 CONF | 192-133-0DUP | | AOC 192 |
| 192-21 | 0 | 0.5 | 11/5/1996 | - | PAHs, As, Cu, Pb, Hg, Tl | 21 | SAM96-52/53 192/194 CONF | 192-21-0 | | AOC 192 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg, Tl | 40 | SAM96-52/53 192/194 CONF | 192-22-0 | | AOC 192 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg, Tl | 40 | SAM96-52/53 192/194 CONF | 192-22-0-DUP | | AOC 192 - river |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | PAHs, As, Cu, Pb, Hg, Tl | 21 | SAM96-52/53 192/194 CONF | 192-23-0 | | AOC 192 - river |
| 192-34 | 0 | 0.5 | 11/12/1996 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg, Tl | 40 | SAM96-52/53 192/194 CONF | 192-34-0 | | AOC 192 |
| 192-35 | 0 | 0.5 | 11/12/1996 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg, Tl | 40 | SAM96-52/53 192/194 CONF | 192-35-0 | | AOC 192 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg, Tl | 40 | SAM96-52/53 192/194 CONF | 192-37-0 | | AOC 192 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg, Tl | 40 | SAM96-52/53 192/194 CONF | 192-38-0 | | AOC 192 - river |
| 192-54 | 0 | 0.5 | 11/14/1996 | - | PAHs, As, Cu, Pb, Hg, Tl | 21 | SAM96-52 | 192-54-0 | | AOC 192 |
| 192-54 | 0 | 0.5 | 11/14/1996 | - | PAHs, As, Cu, Pb, Hg, Tl | 21 | SAM96-52/53 192/194 CONF | 192-54-0 | | AOC 192 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | PAHs, As, Cu, Pb, Hg, Tl | 21 | SAM96-52/53 192/194 CONF | 192-66-0 | | AOC 192 - river |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg, Tl | 40 | SAM96-52/53 192/194 CONF | 192-67-0 | | AOC 192 - river |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg, Tl | 40 | SAM96-52/53 192/194 CONF | 192-68-0 | | AOC 192 - river |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | PAHs, As, Cu, Pb, Hg, Tl | 21 | SAM96-52/53 192/194 CONF | 192-69-0 | | AOC 192 - river |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | PAHs, As, Cu, Pb, Hg, Tl | 21 | SAM96-52/53 192/194 CONF | 192-85-0 | | AOC 192 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg, Tl | 40 | SAM96-52/53 192/194 CONF | 192-91-0 | | AOC 192 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | PAHs, As, Cu, Pb, Hg, Tl | 21 | SAM96-52/53 192/194 CONF | 192-97-0 | | AOC 192 |

Table 2
1990-2002 Sample Summary
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | DUPNO | Analytes | # Results | Job Name | Sample ID | Site Perimeter or Interior | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| 192-98 | 0 | 0.5 | 11/26/1996 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg, Tl | 40 | SAM96-52/53 192/194 CONF | 192-98-0 | | AOC 192 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | PPL SVOC+25, PPL Metals | 86 | LAKE INEZ AOC | POM-AOC-193-1 | | AOC 193 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | PPL SVOC+25, PPL Metals | 93 | LAKE INEZ AOC | POM-AOC-193-SAMPLE-1 | | AOC 193 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | PPL SVOC+25, PPL Metals | 93 | LAKE INEZ AOC | POM-AOC-193-SAMPLE-2 | | AOC 193 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | PPL SVOC, PPL Metals | 60 | AOC 192, 193, 194 | POM-193-3-24 | | AOC 193 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | PPL SVOC, PPL Metals | 60 | SAM96-41 | 193-3-24 | | AOC 193 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | PPL SVOC, PPL Metals | 60 | AOC 192, 193, 194 | POM-193-4-24 | | AOC 193 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | PPL SVOC, PPL Metals | 61 | SAM96-41 | 193-4-24 | | AOC 193 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | PPL SVOC, PPL Metals | 60 | AOC 192, 193, 194 | POM-193-5-24 | | AOC 193 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | PPL SVOC, PPL Metals | 59 | SAM96-41 | 193-5-24 | | AOC 193 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | PAHs, As, Cu, Pb, Hg | 20 | SAM96-52/53 192/194 CONF | 194-105-0 | | AOC 194 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg | 39 | SAM96-52/53 192/194 CONF | 194-106-0 | | AOC 194 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg | 39 | SAM96-52/53 192/194 CONF | 194-110-0 | | AOC 194 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | PAHs, As, Cu, Pb, Hg | 20 | SAM96-52/53 192/194 CONF | 194-111-0 | | AOC 194 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg | 39 | SAM96-52/53 192/194 CONF | 194-115-0 | | AOC 194 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg | 39 | SAM96-53 | 194-115-0 | | AOC 194 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | PAHs, As, Cu, Pb, Hg | 20 | SAM96-52/53 192/194 CONF | 194-39-0 | | AOC 194 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg | 39 | SAM96-52/53 192/194 CONF | 194-40-0 | | AOC 194 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | PAHs, As, Cu, Pb, Hg | 20 | SAM96-52/53 192/194 CONF | 194-45-0 | | AOC 194 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg | 39 | SAM96-52/53 192/194 CONF | 194-46-0 | | AOC 194 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | PAHs, As, Cu, Pb, Hg | 20 | SAM96-52/53 192/194 CONF | 194-47-0 | | AOC 194 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg | 39 | SAM96-52/53 192/194 CONF | 194-53-0 | | AOC 194 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | PAHs, As, Cu, Pb, Hg | 20 | SAM96-52/53 192/194 CONF | 194-54-0 | | AOC 194 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg | 39 | SAM96-52/53 192/194 CONF | 194-55-0 | | AOC 194 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | PAHs, As, Cu, Pb, Hg | 20 | SAM96-52/53 192/194 CONF | 194-56-0 | | AOC 194 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg | 39 | SAM96-52/53 192/194 CONF | 194-63-0 | | AOC 194 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg | 39 | SAM96-52/53 192/194 CONF | 194-66-0 | | AOC 194 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | Nitroaromatics/Nitramines, PAHs, As, Cu, Pb, Hg | 39 | SAM96-52/53 192/194 CONF | 194-85-0 | | AOC 194 |

Table 2
1990-2002 Sample Summary
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | DUPNO | Analytes | # Results | Job Name | Sample ID | Site Perimeter or Interior | Location |
|---|---|---|---|---|---|---|---|---|---|---|
| 194-86 | 0 | 0.5 | 1/23/1997 | - | PAHs, As, Cu, Pb, Hg | 20 | SAM96-52/53 192/194 CONF | 194-86-0 | | AOC 194 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | PPL SVOC+25, Cu, Pb, Hg | 62 | SAM90-21 | 558-2-0 | Perimeter | West Bank |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | PPL SVOC+25, Cu, Pb, Hg | 64 | SAM90-21 | 558-31-0 | Perimeter | West Bank |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | PAHs, As, Cu, Pb, Hg | 19 | SAM98-4 | 748-1-0 | Perimeter | West Bank |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | PAHs, As, Cu, Pb, Hg | 19 | SAM98-4 | 748-1-0DUP | Perimeter | West Bank |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | PAHs, Cu, Pb, Hg | 18 | SAM98-4 | 748-14-0 | Perimeter | West Bank |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | PAHs, Cu, Pb, Hg | 18 | SAM98-4 | 748-14-18 | Perimeter | West Bank |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | PAHs, As, Cu, Pb, Hg | 20 | SAM99-23 | POM-748-18-0 | Perimeter | West Bank |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | PAHs, As, Cu, Pb, Hg | 20 | SAM99-23 | POM-748-18-0DUP | Perimeter | West Bank |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | PAHs, As, Cu, Pb, Hg | 20 | SAM99-23 | POM-748-19-0 | Perimeter | West Bank |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | PAHs, As, Cu, Pb, Hg | 20 | SAM99-23 | POM-748-20-0 | Perimeter | West Bank |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | PAHs, Cu, Pb, Hg | 19 | SAM99-23 | POM-748-22-0 | Perimeter | West Bank |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | PAHs, Cu, Pb, Hg | 19 | SAM99-23 | POM-748-23-0 | Perimeter | West Bank |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | PAHs, Cu, Pb, Hg | 19 | SAM99-23 | POM-748-24-0 | Perimeter | West Bank |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | PAHs, Cu, Pb, Hg | 19 | SAM99-23 | POM-748-25-0 | Perimeter | West Bank |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | PAHs, As, Cu, Pb, Hg | 20 | SAM99-23 | POM-748-31-0 | | West Bank - river |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | PAHs, As, Cu, Pb, Hg | 20 | SAM99-23 | POM-748-31-0DUP | | West Bank - river |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | PAHs, Cu, Pb, Hg | 19 | SAM99-23 | POM-748-32-0 | | West Bank - river |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | PAHs, Cu, Pb, Hg | 19 | SAM99-23 | POM-748-33-0 | | West Bank - river |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | PAHs, Cu, Pb, Hg | 19 | SAM99-23 | POM-748-34-0 | | West Bank - river |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | PAHs, Cu, Pb, Hg | 19 | SAM99-23 | POM-748-35-0 | | West Bank - river |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | PAHs, Cu, Pb, Hg | 19 | SAM99-23 | POM-748-37-0 | Perimeter | West Bank |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | PAHs, Cu, Pb, Hg | 19 | SAM00-3 | POM-748-55-18 | Perimeter | West Bank |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | PAHs, Cu, Pb, Hg | 19 | SAM00-3 | POM-748-59-18 | Perimeter | West Bank |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | PAHs, Cu, Pb, Hg | 19 | SAM00-3 | POM-748-61-18 | Perimeter | West Bank |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | PAHs, Cu, Pb, Hg | 19 | SAM00-3 | POM-748-64-18 | Perimeter | West Bank |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | PAHs, Cu, Pb, Hg | 19 | SAM00-3 | POM-748-64-18DUP | Perimeter | West Bank |

Table 3a
Summary of All Analytical Results-Perimeter Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ Res or IGW SCC | NJ Res or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107-110 | 0 | 0.5 | 7/14/1999 | - | ARSENIC | 12. | 1 | - | 20 | SAM99-9 | 3191904-1 |
| 107-110 | 0 | 0.5 | 7/14/1999 | - | COPPER | 37.7 | 1 | - | 600 | SAM99-9 | 3191904-1 |
| 107-110 | 0 | 0.5 | 7/14/1999 | - | MERCURY | 10.4 | 1 | - | 14 | SAM99-9 | 3191904-1 |
| 107-110 | 0 | 0.5 | 7/14/1999 | - | ARSENIC | 9.645 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107110-001 |
| 107-110 | 0 | 0.5 | 7/14/1999 | - | COPPER | 54.78 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107110-001 |
| 107-110 | 0 | 0.5 | 7/14/1999 | - | LEAD | 76.354 | 1 | - | 400 | UPL-AOC 107 XRF DATA | X107110-001 |
| 107-110 | 0 | 0.5 | 7/14/1999 | - | MERCURY | 8.112 | 1 | - | 14 | UPL-AOC 107 XRF DATA | X107110-001 |
| 107-113 | 0 | 0.5 | 7/14/1999 | - | ARSENIC | 12. | 1 | - | 20 | SAM99-9 | 3191903-1 |
| 107-113 | 0 | 0.5 | 7/14/1999 | - | COPPER | 27.9 | 1 | - | 600 | SAM99-9 | 3191903-1 |
| 107-113 | 0 | 0.5 | 7/14/1999 | - | MERCURY | 1.70 | 1 | - | 14 | SAM99-9 | 3191903-1 |
| 107-113 | 0 | 0.5 | 7/14/1999 | - | ARSENIC | 6.755 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107113-001 |
| 107-113 | 0 | 0.5 | 7/14/1999 | - | COPPER | 26.214 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107113-001 |
| 107-113 | 0 | 0.5 | 7/14/1999 | - | LEAD | 44.734 | 1 | - | 400 | UPL-AOC 107 XRF DATA | X107113-001 |
| 107-113 | 0 | 0.5 | 7/14/1999 | - | MERCURY | 3.602 | 1 | - | 14 | UPL-AOC 107 XRF DATA | X107113-001 |
| 107-114 | 0 | 0.5 | 7/14/1999 | - | ARSENIC | 10.0 J | 1 | - | 20 | SAM99-9 | 3191902-1 |
| 107-114 | 0 | 0.5 | 7/14/1999 | - | COPPER | 29.0 | 1 | - | 600 | SAM99-9 | 3191902-1 |
| 107-114 | 0 | 0.5 | 7/14/1999 | - | MERCURY | 8.7 | 1 | - | 14 | SAM99-9 | 3191902-1 |
| 107-114 | 0 | 0.5 | 7/14/1999 | - | ARSENIC | 14.407 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107114-001 |
| 107-114 | 0 | 0.5 | 7/14/1999 | - | COPPER | 38.21 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107114-001 |
| 107-114 | 0 | 0.5 | 7/14/1999 | - | LEAD | 115.365 | 1 | - | 400 | UPL-AOC 107 XRF DATA | X107114-001 |
| 107-114 | 0 | 0.5 | 7/14/1999 | - | MERCURY | 11.218 | 1 | - | 14 | UPL-AOC 107 XRF DATA | X107114-001 |
| 107-115 | 0 | 0.5 | 7/14/1999 | - | ARSENIC | 11. | 1 | - | 20 | SAM99-9 | 3191901-1 |
| 107-115 | 0 | 0.5 | 7/14/1999 | - | COPPER | 27.9 | 1 | - | 600 | SAM99-9 | 3191901-1 |
| 107-115 | 0 | 0.5 | 7/14/1999 | - | MERCURY | 6.4 | 1 | - | 14 | SAM99-9 | 3191901-1 |
| 107-115 | 0 | 0.5 | 7/14/1999 | - | ARSENIC | 10.844 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107115-001 |
| 107-115 | 0 | 0.5 | 7/14/1999 | - | COPPER | 24.768 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107115-001 |
| 107-115 | 0 | 0.5 | 7/14/1999 | - | LEAD | 31.67 | 1 | - | 400 | UPL-AOC 107 XRF DATA | X107115-001 |
| 107-115 | 0 | 0.5 | 7/14/1999 | - | MERCURY | 7.617 | 1 | - | 14 | UPL-AOC 107 XRF DATA | X107115-001 |
| 107-123 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 5.0 J | 1 | - | 20 | SAM99-9 | 3211801-1 |
| 107-123 | 0 | 0.5 | 8/10/1999 | - | COPPER | 20.3 | 1 | - | 600 | SAM99-9 | 3211801-1 |
| 107-123 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 4.3 | 1 | - | 14 | SAM99-9 | 3211801-1 |
| 107-123 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 6.606 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107123-001 |
| 107-123 | 0 | 0.5 | 8/10/1999 | - | COPPER | 26.36 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107123-001 |
| 107-123 | 0 | 0.5 | 8/10/1999 | - | LEAD | 21.205 | 1 | - | 400 | UPL-AOC 107 XRF DATA | X107123-001 |
| 107-123 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 2.508 | 1 | - | 14 | UPL-AOC 107 XRF DATA | X107123-001 |
| 107-134 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 8.1 J | 1 | - | 20 | SAM99-9 | 3211795-1 |
| 107-134 | 0 | 0.5 | 8/10/1999 | - | COPPER | 25.8 | 1 | - | 600 | SAM99-9 | 3211795-1 |
| 107-134 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 6.2 | 1 | - | 14 | SAM99-9 | 3211795-1 |
| 107-134 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 1.159 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107134-001 |
| 107-134 | 0 | 0.5 | 8/10/1999 | - | COPPER | 29.686 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107134-001 |
| 107-134 | 0 | 0.5 | 8/10/1999 | - | LEAD | 87.989 | 1 | - | 400 | UPL-AOC 107 XRF DATA | X107134-001 |
| 107-134 | 0 | 0.5 | 8/10/1999 | - | MERCURY | ND (8) | 0 | - | 14 | UPL-AOC 107 XRF DATA | X107134-001 |
| 107-135 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 6.9 J | 1 | - | 20 | SAM99-9 | 3211794-1 |
| 107-135 | 0 | 0.5 | 8/10/1999 | - | COPPER | 16.3 | 1 | - | 600 | SAM99-9 | 3211794-1 |
| 107-135 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 5.2 | 1 | - | 14 | SAM99-9 | 3211794-1 |
| 107-135 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 12.483 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107135-001 |
| 107-135 | 0 | 0.5 | 8/10/1999 | - | COPPER | 20.661 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107135-001 |
| 107-135 | 0 | 0.5 | 8/10/1999 | - | LEAD | 38.613 | 1 | - | 400 | UPL-AOC 107 XRF DATA | X107135-001 |
| 107-135 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 9.621 | 1 | - | 14 | UPL-AOC 107 XRF DATA | X107135-001 |
| 107-155 | 0 | 0.5 | 12/8/1999 | - | MERCURY | 12.5 | 1 | - | 14 | SAM99-9 | 3287440-1 |
| 107-155 | 0 | 0.5 | 12/8/1999 | - | MERCURY | 13.23 | 1 | - | 14 | UPL-AOC 107 XRF DATA | X107155-001 |
| 107-220 | 0 | 0.5 | 11/29/2000 | - | ARSENIC | 6.661 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107220-001 |
| 107-220 | 0 | 0.5 | 11/29/2000 | - | COPPER | 49.794 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107220-001 |
| 107-220 | 0 | 0.5 | 11/29/2000 | - | LEAD | 77.775 | 1 | - | 400 | UPL-AOC 107 XRF DATA | X107220-001 |
| 107-220 | 0 | 0.5 | 11/29/2000 | - | MERCURY | 3.483 | 1 | - | 14 | UPL-AOC 107 XRF DATA | X107220-001 |
| 107-79 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 5.3 J | 1 | - | 20 | SAM99-9 | 3184390-1 |
| 107-79 | 0 | 0.5 | 6/25/1999 | - | COPPER | 24.4 | 1 | - | 600 | SAM99-9 | 3184390-1 |
| 107-79 | 0 | 0.5 | 6/25/1999 | - | MERCURY | 5.7 | 1 | - | 14 | SAM99-9 | 3184390-1 |
| 107-79 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 8.828 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107079-001 |
| 107-79 | 0 | 0.5 | 6/25/1999 | - | COPPER | 28.886 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107079-001 |
| 107-79 | 0 | 0.5 | 6/25/1999 | - | LEAD | 48.388 | 1 | - | 400 | UPL-AOC 107 XRF DATA | X107079-001 |
| 107-79 | 0 | 0.5 | 6/25/1999 | - | MERCURY | 10.215 | 1 | - | 14 | UPL-AOC 107 XRF DATA | X107079-001 |
| 107-81 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 5.2 J | 1 | - | 20 | SAM99-9 | 3184389-1 |
| 107-81 | 0 | 0.5 | 6/25/1999 | - | COPPER | 16.9 | 1 | - | 600 | SAM99-9 | 3184389-1 |
| 107-81 | 0 | 0.5 | 6/25/1999 | - | MERCURY | 0.97 | 1 | - | 14 | SAM99-9 | 3184389-1 |
| 107-81 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 11.881 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107081-001 |
| 107-81 | 0 | 0.5 | 6/25/1999 | - | COPPER | 18.715 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107081-001 |
| 107-81 | 0 | 0.5 | 6/25/1999 | - | LEAD | 31.443 | 1 | - | 400 | UPL-AOC 107 XRF DATA | X107081-001 |

Table 3a
Summary of All Analytical Results-Perimeter Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ Res or IGW SCC | NJ Res or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107-81 | 0 | 0.5 | 6/25/1999 | - | MERCURY | ND (8) | 0 | - | 14 | UPL-AOC 107 XRF DATA | X107081-001 |
| 107-96 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 12. | 1 | - | 20 | SAM99-9 | 3191914-1 |
| 107-96 | 0 | 0.5 | 7/12/1999 | - | COPPER | 29.8 | 1 | - | 600 | SAM99-9 | 3191914-1 |
| 107-96 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 7.1 | 1 | - | 14 | SAM99-9 | 3191914-1 |
| 107-96 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 5.853 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107096-001 |
| 107-96 | 0 | 0.5 | 7/12/1999 | - | COPPER | 40.095 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107096-001 |
| 107-96 | 0 | 0.5 | 7/12/1999 | - | LEAD | 115.438 | 1 | - | 400 | UPL-AOC 107 XRF DATA | X107096-001 |
| 107-96 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 2.586 | 1 | - | 14 | UPL-AOC 107 XRF DATA | X107096-001 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | ACENAPHTHENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | ANTHRACENE | 0.11 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | ARSENIC | ND (3.7) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)ANTHRACENE | 0.39 J | 1 | - | 0.9 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)PYRENE | 0.37 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | BENZO(B)FLUORANTHENE | 0.46 | 1 | - | 0.9 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | BENZO(K)FLUORANTHENE | ND (0.17) | 0 | - | 0.9 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | CHRYSENE | 0.39 J | 1 | - | 9 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | COPPER | 39.4 | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | DIBENZO(A,H)ANTHRACENE | 0.16 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | FLUORANTHENE | 0.7 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | FLUORENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | INDENO(1,2,3-CD)PYRENE | 0.34 J | 1 | - | 0.9 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | LEAD | 104. | 1 | - | 400 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | MERCURY | .40 | 1 | - | 14 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | NAPHTHALENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | PYRENE | 0.7 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | THALLIUM | 1.61 J | 1 | - | 2 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | ACENAPHTHYLENE | ND (0.042) | 0 | | | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | BENZO(G,H,I)PERYLENE | 0.29 J | 1 | | | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | PHENANTHRENE | 0.5 | 1 | | | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 2,4,6-TRINITROTOLUENE | ND (0.02) | 0 | - | 3 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 1 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 1 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | ACENAPHTHENE | ND (0.039) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | ANTHRACENE | ND (0.039) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | ARSENIC | ND (3.5) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)ANTHRACENE | 0.26 J | 1 | - | 0.9 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)PYRENE | 0.24 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | BENZO(B)FLUORANTHENE | 0.42 | 1 | - | 0.9 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | BENZO(K)FLUORANTHENE | ND (0.16) | 0 | - | 0.9 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | CHRYSENE | 0.28 J | 1 | - | 9 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | COPPER | 60.0 | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.079) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | FLUORANTHENE | 0.4 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | FLUORENE | ND (0.039) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | INDENO(1,2,3-CD)PYRENE | 0.25 J | 1 | - | 0.9 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | LEAD | 61. | 1 | - | 400 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | MERCURY | .59 | 1 | - | 14 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | NAPHTHALENE | ND (0.039) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | NITROBENZENE | ND (0.02) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | PETN | ND (4.) | 0 | - | 80 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | PYRENE | 0.43 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | RDX | ND (0.08) | 0 | - | 17 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | TETRYL | ND (0.02) | 0 | - | 570 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | THALLIUM | ND (.45) | 0 | - | 2 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 1,2-DINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 1,3,5-TRINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 1,4-DINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 1-METHYL-2-NITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 1-NITRONAPHTHALENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | ACENAPHTHYLENE | ND (0.039) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | BENZO(G,H,I)PERYLENE | 0.23 J | 1 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | M-DINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |

Table 3a
Summary of All Analytical Results-Perimeter Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ Res or IGW SCC | NJ Res or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 192-131 | 0 | 0.5 | 12/3/1996 | - | PHENANTHRENE | 0.21 J | 1 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 1,2,4-TRICHLOROBENZENE | <3.8 | 0 | - | 68 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 1,2-DICHLOROBENZENE | <3.8 | 0 | - | 50 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 1,3-DICHLOROBENZENE | <3.8 | 0 | - | 100 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 1,4-DICHLOROBENZENE | <3.8 | 0 | - | 100 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 2,4,6-TRICHLOROPHENOL | <3.8 | 0 | - | 10 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 2,4-DICHLOROPHENOL | <3.8 | 0 | - | 10 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 2,4-DIMETHYLPHENOL | <3.8 | 0 | - | 10 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 2,4-DINITROPHENOL | <18. | 0 | - | 10 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 2-CHLOROPHENOL | <3.8 | 0 | - | 10 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 4-CHLORO-3-METHYLPHENOL | <3.8 | 0 | - | 100 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | ACENAPHTHENE | <3.8 | 0 | - | 100 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | ANTHRACENE | <3.8 | 0 | - | 100 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | BIS(2-CHLOROISOPROPYL)ETHER | <3.8 | 0 | - | 10 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | BIS(2-ETHYLHEXYL)PHTHALATE | <3.8 | 0 | - | 49 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | BUTYL BENZYL PHTHALATE | <3.8 | 0 | - | 100 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | CHRYSENE | <3.8 | 0 | - | 9 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | COPPER | 48.5 | 1 | - | 600 | SAM90-21 | 007996-003 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | DIETHYL PHTHALATE | <3.8 | 0 | - | 50 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | DIMETHYL PHTHALATE | <3.8 | 0 | - | 50 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | DI-N-BUTYL PHTHALATE | <3.8 | 0 | - | 100 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | DI-N-OCTYL PHTHALATE | <3.8 | 0 | - | 100 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | FLUORANTHENE | <3.8 | 0 | - | 100 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | FLUORENE | <3.8 | 0 | - | 100 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | HEXACHLOROCYCLOPENTADIENE | <3.8 | 0 | - | 100 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | HEXACHLOROETHANE | <3.8 | 0 | - | 6 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | ISOPHORONE | <3.8 | 0 | - | 50 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | LEAD | 31.1 | 1 | - | 400 | SAM90-21 | 007996-003 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | MERCURY | 1.0 | 1 | - | 14 | SAM90-21 | 007996-003 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | NAPHTHALENE | <3.8 | 0 | - | 100 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | NITROBENZENE | <3.8 | 0 | - | 10 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | N-NITROSODIPHENYLAMINE | <3.8 | 0 | - | 100 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | PHENOL | <3.8 | 0 | - | 50 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | PYRENE | <3.8 | 0 | - | 100 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 2,4-DINITROTOLUENE | <3.8 | 0 | hi DL | 1 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 2,6-DINITROTOLUENE | <3.8 | 0 | hi DL | 1 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 3,3'-DICHLOROBENZIDINE | <7.6 | 0 | hi DL | 2 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | BENZO(A)ANTHRACENE | <3.8 | 0 | hi DL | 0.9 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | BENZO(A)PYRENE | <3.8 | 0 | hi DL | 0.66 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | BENZO(B)FLUORANTHENE | <3.8 | 0 | hi DL | 0.9 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | BENZO(K)FLUORANTHENE | <3.8 | 0 | hi DL | 0.9 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | BIS(2-CHLOROETHYL) ETHER | <3.8 | 0 | hi DL | 0.66 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | DIBENZO(A,H)ANTHRACENE | <3.8 | 0 | hi DL | 0.66 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | HEXACHLOROBENZENE | <3.8 | 0 | hi DL | 0.66 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | HEXACHLOROBUTADIENE | <3.8 | 0 | hi DL | 1 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | INDENO(1,2,3-CD)PYRENE | <3.8 | 0 | hi DL | 0.9 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | N-NITROSODI-N-PROPYLAMINE | <3.8 | 0 | hi DL | 0.66 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | PENTACHLOROPHENOL | <18. | 0 | hi DL | 6 | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 1,2-DIPHENYLHYDRAZINE | <3.8 | 0 | | | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 2-CHLORONAPHTHALENE | <3.8 | 0 | | | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 2-NITROPHENOL | <3.8 | 0 | | | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 4,6-DINITRO-2-METHYLPHENOL | <18. | 0 | | | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 4-BROMOPHENYL PHENYL ETHER | <3.8 | 0 | | | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 4-CHLOROPHENYL PHENYL ETHER | <3.8 | 0 | | | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | 4-NITROPHENOL | <18. | 0 | | | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | ACENAPHTHYLENE | <3.8 | 0 | | | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | BENZIDINE | <3.8 | 0 | | | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | BENZO(G,H,I)PERYLENE | <3.8 | 0 | | | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | BIS(2-CHLOROETHOXY)METHANE | <3.8 | 0 | | | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | PHENANTHRENE | <3.8 | 0 | | | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | UNKNOWN | 55. J | 1 | | | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | UNKNOWN | 7.4 J | 1 | | | SAM90-21 | 008316-019 |
| 558-2 | 0 | 0.5 | 6/14/1990 | - | UNKNOWN | 5.5 J | 1 | | | SAM90-21 | 008316-019 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 1,2,4-TRICHLOROBENZENE | <2. | 0 | - | 68 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 1,2-DICHLOROBENZENE | <2. | 0 | - | 50 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 1,3-DICHLOROBENZENE | <2. | 0 | - | 100 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 1,4-DICHLOROBENZENE | <2. | 0 | - | 100 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 2,4,6-TRICHLOROPHENOL | <2. | 0 | - | 10 | SAM90-21 | 008316-018 |

Table 3a
Summary of All Analytical Results-Perimeter Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ Res or IGW SCC | NJ Res or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 2,4-DICHLOROPHENOL | <2. | 0 | - | 10 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 2,4-DIMETHYLPHENOL | <2. | 0 | - | 10 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 2,4-DINITROPHENOL | <9.8 | 0 | - | 10 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 2,4-DINITROTOLUENE | <2. | 0 | - | 1 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 2,6-DINITROTOLUENE | <2. | 0 | - | 1 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 2-CHLOROPHENOL | <2. | 0 | - | 10 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 3,3'-DICHLOROBENZIDINE | <4. | 0 | - | 2 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 4-CHLORO-3-METHYLPHENOL | <2. | 0 | - | 100 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | ACENAPHTHENE | <2. | 0 | - | 100 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | ANTHRACENE | <2. | 0 | - | 100 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | BIS(2-CHLOROISOPROPYL)ETHER | <2. | 0 | - | 10 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | BIS(2-ETHYLHEXYL)PHTHALATE | <2. | 0 | - | 49 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | BUTYL BENZYL PHTHALATE | <2. | 0 | - | 100 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | CHRYSENE | <2. | 0 | - | 9 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | COPPER | 124 | 1 | - | 600 | SAM90-21 | 008310-001 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | DIETHYL PHTHALATE | <2. | 0 | - | 50 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | DIMETHYL PHTHALATE | <2. | 0 | - | 50 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | DI-N-BUTYL PHTHALATE | <2. | 0 | - | 100 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | DI-N-OCTYL PHTHALATE | <2. | 0 | - | 100 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | FLUORANTHENE | <2. | 0 | - | 100 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | FLUORENE | <2. | 0 | - | 100 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | HEXACHLOROBUTADIENE | <2. | 0 | - | 1 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | HEXACHLOROCYCLOPENTADIENE | <2. | 0 | - | 100 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | HEXACHLOROETHANE | <2. | 0 | - | 6 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | ISOPHORONE | <2. | 0 | - | 50 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | LEAD | 44.7 | 1 | - | 400 | SAM90-21 | 008310-001 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | MERCURY | 4.0 | 1 | - | 14 | SAM90-21 | 008310-001 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | NAPHTHALENE | <2. | 0 | - | 100 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | NITROBENZENE | <2. | 0 | - | 10 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | N-NITROSODIPHENYLAMINE | <2. | 0 | - | 100 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | PENTACHLOROPHENOL | <9.8 | 0 | - | 6 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | PHENOL | <2. | 0 | - | 50 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | PYRENE | <2. | 0 | - | 100 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | BENZO(A)ANTHRACENE | <2. | 0 | hi DL | 0.9 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | BENZO(A)PYRENE | <2. | 0 | hi DL | 0.66 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | BENZO(B)FLUORANTHENE | <2. | 0 | hi DL | 0.9 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | BENZO(K)FLUORANTHENE | <2. | 0 | hi DL | 0.9 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | BIS(2-CHLOROETHYL) ETHER | <2. | 0 | hi DL | 0.66 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | DIBENZO(A,H)ANTHRACENE | <2. | 0 | hi DL | 0.66 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | HEXACHLOROBENZENE | <2. | 0 | hi DL | 0.66 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | INDENO(1,2,3-CD)PYRENE | <2. | 0 | hi DL | 0.9 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | N-NITROSODI-N-PROPYLAMINE | <2. | 0 | hi DL | 0.66 | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 1,2-DIPHENYLHYDRAZINE | <2. | 0 | | | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 2-CHLORONAPHTHALENE | <2. | 0 | | | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 2-NITROPHENOL | <2. | 0 | | | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 4,6-DINITRO-2-METHYLPHENOL | <9.8 | 0 | | | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 4-BROMOPHENYL PHENYL ETHER | <2. | 0 | | | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 4-CHLOROPHENYL PHENYL ETHER | <2. | 0 | | | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | 4-NITROPHENOL | <9.8 | 0 | | | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | ACENAPHTHYLENE | <2. | 0 | | | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | BENZIDINE | <2. | 0 | | | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | BENZO(G,H,I)PERYLENE | <2. | 0 | | | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | BIS(2-CHLOROETHOXY)METHANE | <2. | 0 | | | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | HYDROCARBON | 0.81 J | 1 | | | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | PHENANTHRENE | <2. | 0 | | | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | UNKNOWN | 1.2 J | 1 | | | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | UNKNOWN | 46. J | 1 | | | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | UNKNOWN | 1.2 J | 1 | | | SAM90-21 | 008316-018 |
| 558-31 | 0 | 0.5 | 6/19/1990 | - | UNKNOWN | 1. J | 1 | | | SAM90-21 | 008316-018 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | ANTHRACENE | ND (0.039) | 0 | - | 100 | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | ARSENIC | 3.9 J | 1 | - | 20 | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | BENZO(A)ANTHRACENE | 0.042 J | 1 | - | 0.9 | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | BENZO(A)PYRENE | 0.044 J | 1 | - | 0.66 | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | BENZO(B)FLUORANTHENE | 0.065 J | 1 | - | 0.9 | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | BENZO(K)FLUORANTHENE | ND (0.039) | 0 | - | 0.9 | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | CHRYSENE | 0.047 J | 1 | - | 9 | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | COPPER | 45.5 | 1 | - | 600 | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | DIBENZO(A,H)ANTHRACENE | ND (0.039) | 0 | - | 0.66 | SAM98-4 | 2978705-1 |

Table 3a
Summary of All Analytical Results-Perimeter Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ Res or IGW SCC | NJ Res or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 748-1 | 0 | 0.5 | 8/7/1998 | - | FLUORANTHENE | 0.078 J | 1 | - | 100 | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | FLUORENE | ND (0.039) | 0 | - | 100 | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | INDENO(1,2,3-CD)PYRENE | ND (0.039) | 0 | - | 0.9 | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | LEAD | 35. | 1 | - | 400 | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | MERCURY | 1.26 | 1 | - | 14 | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | NAPHTHALENE | ND (0.039) | 0 | - | 100 | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | PYRENE | 0.072 J | 1 | - | 100 | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | ANTHRACENE | ND (0.038) | 0 | - | 100 | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | ARSENIC | 3.4 J | 1 | - | 20 | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | BENZO(A)ANTHRACENE | 0.039 J | 1 | - | 0.9 | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | BENZO(A)PYRENE | 0.045 J | 1 | - | 0.66 | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | BENZO(B)FLUORANTHENE | 0.059 J | 1 | - | 0.9 | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | BENZO(K)FLUORANTHENE | ND (0.038) | 0 | - | 0.9 | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | CHRYSENE | 0.046 J | 1 | - | 9 | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | COPPER | 44.3 | 1 | - | 600 | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | DIBENZO(A,H)ANTHRACENE | ND (0.038) | 0 | - | 0.66 | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | FLUORANTHENE | 0.073 J | 1 | - | 100 | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | FLUORENE | ND (0.038) | 0 | - | 100 | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | INDENO(1,2,3-CD)PYRENE | ND (0.038) | 0 | - | 0.9 | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | LEAD | 29. | 1 | - | 400 | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | MERCURY | 1.31 | 1 | - | 14 | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | NAPHTHALENE | ND (0.038) | 0 | - | 100 | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | PYRENE | 0.069 J | 1 | - | 100 | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | ACENAPHTHYLENE | ND (0.039) | 0 | | | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | BENZO(G,H,I)PERYLENE | ND (0.039) | 0 | | | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | - | PHENANTHRENE | ND (0.039) | 0 | | | SAM98-4 | 2978705-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | ACENAPHTHYLENE | ND (0.038) | 0 | | | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | BENZO(G,H,I)PERYLENE | ND (0.038) | 0 | | | SAM98-4 | 2978706-1 |
| 748-1 | 0 | 0.5 | 8/7/1998 | DUP | PHENANTHRENE | ND (0.038) | 0 | | | SAM98-4 | 2978706-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | ANTHRACENE | ND (0.041) | 0 | - | 100 | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | BENZO(A)ANTHRACENE | 0.044 J | 1 | - | 0.9 | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | BENZO(A)PYRENE | 0.048 J | 1 | - | 0.66 | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | BENZO(B)FLUORANTHENE | ND (0.041) | 0 | - | 0.9 | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | BENZO(K)FLUORANTHENE | ND (0.041) | 0 | - | 0.9 | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | CHRYSENE | 0.056 J | 1 | - | 9 | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | COPPER | 123. | 1 | - | 600 | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | DIBENZO(A,H)ANTHRACENE | ND (0.041) | 0 | - | 0.66 | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | FLUORANTHENE | 0.087 J | 1 | - | 100 | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | FLUORENE | ND (0.041) | 0 | - | 100 | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | INDENO(1,2,3-CD)PYRENE | ND (0.041) | 0 | - | 0.9 | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | LEAD | 89. | 1 | - | 400 | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | MERCURY | 9.9 | 1 | - | 14 | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | NAPHTHALENE | ND (0.041) | 0 | - | 100 | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | PYRENE | 0.09 J | 1 | - | 100 | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | ACENAPHTHYLENE | ND (0.041) | 0 | | | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | BENZO(G,H,I)PERYLENE | 0.045 J | 1 | | | SAM98-4 | 2997476-1 |
| 748-14 | 0 | 0.5 | 9/10/1998 | - | PHENANTHRENE | ND (0.041) | 0 | | | SAM98-4 | 2997476-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | ANTHRACENE | ND (0.037) | 0 | - | 100 | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | BENZO(A)ANTHRACENE | ND (0.037) | 0 | - | 0.9 | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | BENZO(A)PYRENE | ND (0.037) | 0 | - | 0.66 | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | BENZO(B)FLUORANTHENE | ND (0.037) | 0 | - | 0.9 | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | BENZO(K)FLUORANTHENE | ND (0.037) | 0 | - | 0.9 | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | CHRYSENE | ND (0.037) | 0 | - | 9 | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | COPPER | 26.8 | 1 | - | 600 | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | DIBENZO(A,H)ANTHRACENE | ND (0.037) | 0 | - | 0.66 | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | FLUORANTHENE | ND (0.037) | 0 | - | 100 | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | FLUORENE | ND (0.037) | 0 | - | 100 | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | INDENO(1,2,3-CD)PYRENE | ND (0.037) | 0 | - | 0.9 | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | LEAD | 9.5 J | 1 | - | 400 | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | MERCURY | 0.57 | 1 | - | 14 | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | NAPHTHALENE | ND (0.037) | 0 | - | 100 | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | PYRENE | ND (0.037) | 0 | - | 100 | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | ACENAPHTHYLENE | ND (0.037) | 0 | | | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | BENZO(G,H,I)PERYLENE | ND (0.037) | 0 | | | SAM98-4 | 2997475-1 |
| 748-14 | 1.5 | 2 | 9/10/1998 | - | PHENANTHRENE | ND (0.037) | 0 | | | SAM98-4 | 2997475-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | ACENAPHTHENE | ND (0.035) | 0 | - | 100 | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | ANTHRACENE | ND (0.035) | 0 | - | 100 | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | ARSENIC | 2.9 J | 1 | - | 20 | SAM99-23 | 3247827-1 |

Table 3a
Summary of All Analytical Results-Perimeter Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ Res or IGW SCC | NJ Res or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 748-18 | 0 | 0.5 | 10/7/1999 | - | BENZO(A)ANTHRACENE | ND (0.035) | 0 | - | 0.9 | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | BENZO(A)PYRENE | ND (0.035) | 0 | - | 0.66 | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | BENZO(B)FLUORANTHENE | ND (0.035) | 0 | - | 0.9 | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | BENZO(K)FLUORANTHENE | ND (0.035) | 0 | - | 0.9 | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | CHRYSENE | ND (0.035) | 0 | - | 9 | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | COPPER | 9.0 | 1 | - | 600 | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | DIBENZO(A,H)ANTHRACENE | ND (0.035) | 0 | - | 0.66 | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | FLUORANTHENE | ND (0.035) | 0 | - | 100 | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | FLUORENE | ND (0.035) | 0 | - | 100 | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | INDENO(1,2,3-CD)PYRENE | ND (0.035) | 0 | - | 0.9 | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | LEAD | 5.5 J | 1 | - | 400 | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | MERCURY | 0.0198 J | 1 | - | 14 | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | NAPHTHALENE | ND (0.035) | 0 | - | 100 | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | PYRENE | ND (0.035) | 0 | - | 100 | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | ACENAPHTHENE | ND (0.035) | 0 | - | 100 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | ANTHRACENE | ND (0.035) | 0 | - | 100 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | ARSENIC | ND (2.4) | 0 | - | 20 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | BENZO(A)ANTHRACENE | ND (0.035) | 0 | - | 0.9 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | BENZO(A)PYRENE | ND (0.035) | 0 | - | 0.66 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | BENZO(B)FLUORANTHENE | ND (0.035) | 0 | - | 0.9 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | BENZO(K)FLUORANTHENE | ND (0.035) | 0 | - | 0.9 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | CHRYSENE | ND (0.035) | 0 | - | 9 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | COPPER | 9.7 | 1 | - | 600 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | DIBENZO(A,H)ANTHRACENE | ND (0.035) | 0 | - | 0.66 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | FLUORANTHENE | ND (0.035) | 0 | - | 100 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | FLUORENE | ND (0.035) | 0 | - | 100 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | INDENO(1,2,3-CD)PYRENE | ND (0.035) | 0 | - | 0.9 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | LEAD | 6.0 J | 1 | - | 400 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | MERCURY | 0.0101 J | 1 | - | 14 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | NAPHTHALENE | ND (0.035) | 0 | - | 100 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | PYRENE | ND (0.035) | 0 | - | 100 | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | ACENAPHTHYLENE | ND (0.035) | 0 | | | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | BENZO(G,H,I)PERYLENE | ND (0.035) | 0 | | | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | - | PHENANTHRENE | ND (0.035) | 0 | | | SAM99-23 | 3247827-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | ACENAPHTHYLENE | ND (0.035) | 0 | | | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | BENZO(G,H,I)PERYLENE | ND (0.035) | 0 | | | SAM99-23 | 3247826-1 |
| 748-18 | 0 | 0.5 | 10/7/1999 | DUP | PHENANTHRENE | ND (0.035) | 0 | | | SAM99-23 | 3247826-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | ACENAPHTHENE | ND (0.039) | 0 | - | 100 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | ANTHRACENE | ND (0.039) | 0 | - | 100 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | ARSENIC | 4.0 J | 1 | - | 20 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | BENZO(A)ANTHRACENE | 0.059 J | 1 | - | 0.9 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | BENZO(A)PYRENE | 0.074 J | 1 | - | 0.66 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | BENZO(B)FLUORANTHENE | 0.1 J | 1 | - | 0.9 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | BENZO(K)FLUORANTHENE | 0.043 J | 1 | - | 0.9 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | CHRYSENE | 0.08 J | 1 | - | 9 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | COPPER | 25.5 | 1 | - | 600 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | DIBENZO(A,H)ANTHRACENE | ND (0.039) | 0 | - | 0.66 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | FLUORANTHENE | 0.1 J | 1 | - | 100 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | FLUORENE | ND (0.039) | 0 | - | 100 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | INDENO(1,2,3-CD)PYRENE | 0.073 J | 1 | - | 0.9 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | LEAD | 32. | 1 | - | 400 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | MERCURY | 0.43 | 1 | - | 14 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | NAPHTHALENE | ND (0.039) | 0 | - | 100 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | PYRENE | 0.11 J | 1 | - | 100 | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | ACENAPHTHYLENE | ND (0.039) | 0 | | | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | BENZO(G,H,I)PERYLENE | 0.058 J | 1 | | | SAM99-23 | 3247825-1 |
| 748-19 | 0 | 0.5 | 10/7/1999 | - | PHENANTHRENE | 0.045 J | 1 | | | SAM99-23 | 3247825-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | ACENAPHTHENE | ND (0.041) | 0 | - | 100 | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | ANTHRACENE | ND (0.041) | 0 | - | 100 | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | ARSENIC | 4.8 J | 1 | - | 20 | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | BENZO(A)ANTHRACENE | 0.15 J | 1 | - | 0.9 | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | BENZO(A)PYRENE | 0.17 J | 1 | - | 0.66 | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | BENZO(B)FLUORANTHENE | 0.25 J | 1 | - | 0.9 | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | BENZO(K)FLUORANTHENE | 0.068 J | 1 | - | 0.9 | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | CHRYSENE | 0.19 J | 1 | - | 9 | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | COPPER | 73.1 | 1 | - | 600 | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | DIBENZO(A,H)ANTHRACENE | 0.044 J | 1 | - | 0.66 | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | FLUORANTHENE | 0.25 J | 1 | - | 100 | SAM99-23 | 3247824-1 |

Table 3a
Summary of All Analytical Results-Perimeter Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ Res or IGW SCC | NJ Res or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 748-20 | 0 | 0.5 | 10/7/1999 | - | FLUORENE | ND (0.041) | 0 | - | 100 | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | INDENO(1,2,3-CD)PYRENE | 0.15 J | 1 | - | 0.9 | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | LEAD | 120. | 1 | - | 400 | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | MERCURY | 6.4 | 1 | - | 14 | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | NAPHTHALENE | ND (0.041) | 0 | - | 100 | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | PYRENE | 0.32 J | 1 | - | 100 | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | ACENAPHTHYLENE | ND (0.041) | 0 | | | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | BENZO(G,H,I)PERYLENE | 0.15 J | 1 | | | SAM99-23 | 3247824-1 |
| 748-20 | 0 | 0.5 | 10/7/1999 | - | PHENANTHRENE | 0.16 J | 1 | | | SAM99-23 | 3247824-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | ACENAPHTHENE | ND (0.041) | 0 | - | 100 | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | ANTHRACENE | 0.055 J | 1 | - | 100 | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | BENZO(A)ANTHRACENE | 0.28 J | 1 | - | 0.9 | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | BENZO(A)PYRENE | 0.35 J | 1 | - | 0.66 | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | BENZO(B)FLUORANTHENE | 0.46 | 1 | - | 0.9 | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | BENZO(K)FLUORANTHENE | 0.16 J | 1 | - | 0.9 | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | CHRYSENE | 0.37 J | 1 | - | 9 | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | COPPER | 95.2 | 1 | - | 600 | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | DIBENZO(A,H)ANTHRACENE | 0.12 J | 1 | - | 0.66 | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | FLUORANTHENE | 0.4 J | 1 | - | 100 | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | FLUORENE | ND (0.041) | 0 | - | 100 | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | INDENO(1,2,3-CD)PYRENE | 0.31 J | 1 | - | 0.9 | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | LEAD | 111. | 1 | - | 400 | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | MERCURY | 3.2 | 1 | - | 14 | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | NAPHTHALENE | ND (0.041) | 0 | - | 100 | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | PYRENE | 0.47 | 1 | - | 100 | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | ACENAPHTHYLENE | 0.093 J | 1 | | | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | BENZO(G,H,I)PERYLENE | 0.33 J | 1 | | | SAM99-23 | 3247819-1 |
| 748-22 | 0 | 0.5 | 10/7/1999 | - | PHENANTHRENE | 0.17 J | 1 | | | SAM99-23 | 3247819-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | ACENAPHTHENE | ND (0.041) | 0 | - | 100 | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | ANTHRACENE | 0.09 J | 1 | - | 100 | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | BENZO(A)ANTHRACENE | 0.42 | 1 | - | 0.9 | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | BENZO(A)PYRENE | 0.56 | 1 | - | 0.66 | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | BENZO(B)FLUORANTHENE | 0.78 | 1 | - | 0.9 | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | BENZO(K)FLUORANTHENE | 0.33 J | 1 | - | 0.9 | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | CHRYSENE | 0.59 | 1 | - | 9 | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | COPPER | 77.3 | 1 | - | 600 | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | DIBENZO(A,H)ANTHRACENE | 0.13 J | 1 | - | 0.66 | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | FLUORANTHENE | 0.77 | 1 | - | 100 | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | FLUORENE | ND (0.041) | 0 | - | 100 | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | INDENO(1,2,3-CD)PYRENE | 0.53 | 1 | - | 0.9 | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | LEAD | 137. | 1 | - | 400 | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | MERCURY | 2.33 | 1 | - | 14 | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | NAPHTHALENE | ND (0.041) | 0 | - | 100 | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | PYRENE | 0.87 | 1 | - | 100 | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | ACENAPHTHYLENE | 0.19 J | 1 | | | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | BENZO(G,H,I)PERYLENE | 0.54 | 1 | | | SAM99-23 | 3247820-1 |
| 748-23 | 0 | 0.5 | 10/7/1999 | - | PHENANTHRENE | 0.35 J | 1 | | | SAM99-23 | 3247820-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | ACENAPHTHENE | ND (0.039) | 0 | - | 100 | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | ANTHRACENE | ND (0.039) | 0 | - | 100 | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | BENZO(A)ANTHRACENE | 0.14 J | 1 | - | 0.9 | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | BENZO(A)PYRENE | 0.16 J | 1 | - | 0.66 | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | BENZO(B)FLUORANTHENE | 0.18 J | 1 | - | 0.9 | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | BENZO(K)FLUORANTHENE | 0.11 J | 1 | - | 0.9 | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | CHRYSENE | 0.17 J | 1 | - | 9 | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | COPPER | 31.1 | 1 | - | 600 | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | DIBENZO(A,H)ANTHRACENE | ND (0.039) | 0 | - | 0.66 | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | FLUORANTHENE | 0.24 J | 1 | - | 100 | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | FLUORENE | ND (0.039) | 0 | - | 100 | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | INDENO(1,2,3-CD)PYRENE | 0.14 J | 1 | - | 0.9 | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | LEAD | 57. | 1 | - | 400 | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | MERCURY | 0.33 | 1 | - | 14 | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | NAPHTHALENE | ND (0.039) | 0 | - | 100 | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | PYRENE | 0.28 J | 1 | - | 100 | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | ACENAPHTHYLENE | ND (0.039) | 0 | | | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | BENZO(G,H,I)PERYLENE | 0.14 J | 1 | | | SAM99-23 | 3247821-1 |
| 748-24 | 0 | 0.5 | 10/7/1999 | - | PHENANTHRENE | 0.14 J | 1 | | | SAM99-23 | 3247821-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | ACENAPHTHENE | ND (0.096) | 0 | - | 100 | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | ANTHRACENE | ND (0.096) | 0 | - | 100 | SAM99-23 | 3247822-1 |

Table 3a
Summary of All Analytical Results-Perimeter Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ Res or IGW SCC | NJ Res or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 748-25 | 0 | 0.5 | 10/7/1999 | - | BENZO(A)ANTHRACENE | 0.14 J | 1 | - | 0.9 | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | BENZO(A)PYRENE | 0.14 J | 1 | - | 0.66 | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | BENZO(B)FLUORANTHENE | 0.19 J | 1 | - | 0.9 | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | BENZO(K)FLUORANTHENE | 0.099 J | 1 | - | 0.9 | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | CHRYSENE | 0.17 J | 1 | - | 9 | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | COPPER | 38. | 1 | - | 600 | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | DIBENZO(A,H)ANTHRACENE | ND (0.096) | 0 | - | 0.66 | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | FLUORANTHENE | 0.28 J | 1 | - | 100 | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | FLUORENE | ND (0.096) | 0 | - | 100 | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | INDENO(1,2,3-CD)PYRENE | 0.12 J | 1 | - | 0.9 | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | LEAD | 36. | 1 | - | 400 | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | MERCURY | 1.35 | 1 | - | 14 | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | NAPHTHALENE | ND (0.096) | 0 | - | 100 | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | PYRENE | 0.31 J | 1 | - | 100 | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | ACENAPHTHYLENE | ND (0.096) | 0 | | | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | BENZO(G,H,I)PERYLENE | 0.11 J | 1 | | | SAM99-23 | 3247822-1 |
| 748-25 | 0 | 0.5 | 10/7/1999 | - | PHENANTHRENE | 0.15 J | 1 | | | SAM99-23 | 3247822-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | ACENAPHTHENE | ND (0.055) | 0 | - | 100 | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | ANTHRACENE | ND (0.055) | 0 | - | 100 | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | ARSENIC | 4.4 J | 1 | - | 20 | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | BENZO(A)ANTHRACENE | 0.22 J | 1 | - | 0.9 | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | BENZO(A)PYRENE | 0.26 J | 1 | - | 0.66 | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | BENZO(B)FLUORANTHENE | 0.32 J | 1 | - | 0.9 | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | BENZO(K)FLUORANTHENE | 0.12 J | 1 | - | 0.9 | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | CHRYSENE | 0.31 J | 1 | - | 9 | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | COPPER | 328. | 1 | - | 600 | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | DIBENZO(A,H)ANTHRACENE | 0.43 J | 1 | - | 0.66 | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | FLUORANTHENE | 0.47 J | 1 | - | 100 | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | FLUORENE | ND (0.055) | 0 | - | 100 | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | INDENO(1,2,3-CD)PYRENE | 0.25 J | 1 | - | 0.9 | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | LEAD | 148. | 1 | - | 400 | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | NAPHTHALENE | ND (0.055) | 0 | - | 100 | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | PYRENE | 0.48 J | 1 | - | 100 | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | ACENAPHTHENE | ND (0.056) | 0 | - | 100 | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | ANTHRACENE | ND (0.056) | 0 | - | 100 | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | ARSENIC | ND (3.8) | 0 | - | 20 | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | BENZO(A)ANTHRACENE | 0.22 J | 1 | - | 0.9 | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | BENZO(A)PYRENE | 0.26 J | 1 | - | 0.66 | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | BENZO(B)FLUORANTHENE | 0.34 J | 1 | - | 0.9 | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | BENZO(K)FLUORANTHENE | 0.12 J | 1 | - | 0.9 | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | CHRYSENE | 0.31 J | 1 | - | 9 | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | COPPER | 436. | 1 | - | 600 | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | DIBENZO(A,H)ANTHRACENE | 0.41 J | 1 | - | 0.66 | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | FLUORANTHENE | 0.44 J | 1 | - | 100 | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | FLUORENE | ND (0.056) | 0 | - | 100 | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | INDENO(1,2,3-CD)PYRENE | 0.15 J | 1 | - | 0.9 | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | LEAD | 159. | 1 | - | 400 | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | NAPHTHALENE | ND (0.056) | 0 | - | 100 | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | PYRENE | 0.4 J | 1 | - | 100 | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | ACENAPHTHYLENE | ND (0.055) | 0 | | | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | BENZO(G,H,I)PERYLENE | 0.24 J | 1 | | | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | - | PHENANTHRENE | 0.23 J | 1 | | | SAM99-23 | 3250914-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | ACENAPHTHYLENE | ND (0.056) | 0 | | | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | BENZO(G,H,I)PERYLENE | 0.13 J | 1 | | | SAM99-23 | 3250913-1 |
| 748-31 | 0 | 0.5 | 10/12/1999 | DUP | PHENANTHRENE | 0.21 J | 1 | | | SAM99-23 | 3250913-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | ACENAPHTHENE | ND (0.06) | 0 | - | 100 | SAM99-23 | 3250912-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | ANTHRACENE | 0.063 J | 1 | - | 100 | SAM99-23 | 3250912-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | BENZO(A)ANTHRACENE | 0.21 J | 1 | - | 0.9 | SAM99-23 | 3250912-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | BENZO(A)PYRENE | 0.24 J | 1 | - | 0.66 | SAM99-23 | 3250912-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | BENZO(B)FLUORANTHENE | 0.32 J | 1 | - | 0.9 | SAM99-23 | 3250912-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | BENZO(K)FLUORANTHENE | 0.15 J | 1 | - | 0.9 | SAM99-23 | 3250912-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | CHRYSENE | 0.29 J | 1 | - | 9 | SAM99-23 | 3250912-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | COPPER | 148. | 1 | - | 600 | SAM99-23 | 3250912-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | DIBENZO(A,H)ANTHRACENE | 0.43 J | 1 | - | 0.66 | SAM99-23 | 3250912-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | FLUORANTHENE | 0.41 J | 1 | - | 100 | SAM99-23 | 3250912-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | FLUORENE | ND (0.06) | 0 | - | 100 | SAM99-23 | 3250912-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | INDENO(1,2,3-CD)PYRENE | 0.15 J | 1 | - | 0.9 | SAM99-23 | 3250912-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | LEAD | 109. | 1 | - | 400 | SAM99-23 | 3250912-1 |

Table 3a
Summary of All Analytical Results-Perimeter Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ Res or IGW SCC | NJ Res or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 748-32 | 0 | 0.5 | 10/12/1999 | - | NAPHTHALENE | ND (0.06) | 0 | - | 100 | SAM99-23 | 3250912-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | PYRENE | 0.41 J | 1 | - | 100 | SAM99-23 | 3250912-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | ACENAPHTHYLENE | 0.065 J | 1 | | | SAM99-23 | 3250912-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | BENZO(G,H,I)PERYLENE | 0.12 J | 1 | | | SAM99-23 | 3250912-1 |
| 748-32 | 0 | 0.5 | 10/12/1999 | - | PHENANTHRENE | 0.21 J | 1 | | | SAM99-23 | 3250912-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | ACENAPHTHENE | ND (0.062) | 0 | - | 100 | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | ANTHRACENE | ND (0.062) | 0 | - | 100 | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | BENZO(A)ANTHRACENE | 0.15 J | 1 | - | 0.9 | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | BENZO(A)PYRENE | 0.19 J | 1 | - | 0.66 | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | BENZO(B)FLUORANTHENE | 0.24 J | 1 | - | 0.9 | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | BENZO(K)FLUORANTHENE | 0.1 J | 1 | - | 0.9 | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | CHRYSENE | 0.25 J | 1 | - | 9 | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | COPPER | 180. | 1 | - | 600 | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | DIBENZO(A,H)ANTHRACENE | 0.44 J | 1 | - | 0.66 | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | FLUORANTHENE | 0.31 J | 1 | - | 100 | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | FLUORENE | ND (0.062) | 0 | - | 100 | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | INDENO(1,2,3-CD)PYRENE | 0.12 J | 1 | - | 0.9 | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | LEAD | 148. | 1 | - | 400 | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | NAPHTHALENE | ND (0.062) | 0 | - | 100 | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | PYRENE | 0.32 J | 1 | - | 100 | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | ACENAPHTHYLENE | 0.069 J | 1 | | | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | BENZO(G,H,I)PERYLENE | 0.1 J | 1 | | | SAM99-23 | 3250911-1 |
| 748-33 | 0 | 0.5 | 10/12/1999 | - | PHENANTHRENE | 0.16 J | 1 | | | SAM99-23 | 3250911-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | ACENAPHTHENE | ND (0.064) | 0 | - | 100 | SAM99-23 | 3250910-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | ANTHRACENE | 0.23 J | 1 | - | 100 | SAM99-23 | 3250910-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | BENZO(A)ANTHRACENE | 0.74 | 1 | - | 0.9 | SAM99-23 | 3250910-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | BENZO(B)FLUORANTHENE | 0.85 | 1 | - | 0.9 | SAM99-23 | 3250910-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | BENZO(K)FLUORANTHENE | 0.38 J | 1 | - | 0.9 | SAM99-23 | 3250910-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | CHRYSENE | 0.93 | 1 | - | 9 | SAM99-23 | 3250910-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | COPPER | 153. | 1 | - | 600 | SAM99-23 | 3250910-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | DIBENZO(A,H)ANTHRACENE | 0.52 J | 1 | - | 0.66 | SAM99-23 | 3250910-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | FLUORANTHENE | 1.5 | 1 | - | 100 | SAM99-23 | 3250910-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | FLUORENE | 0.072 J | 1 | - | 100 | SAM99-23 | 3250910-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | INDENO(1,2,3-CD)PYRENE | 0.29 J | 1 | - | 0.9 | SAM99-23 | 3250910-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | LEAD | 162. | 1 | - | 400 | SAM99-23 | 3250910-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | NAPHTHALENE | ND (0.064) | 0 | - | 100 | SAM99-23 | 3250910-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | PYRENE | 1.1 | 1 | - | 100 | SAM99-23 | 3250910-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | ACENAPHTHYLENE | 0.16 J | 1 | | | SAM99-23 | 3250910-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | BENZO(G,H,I)PERYLENE | 0.23 J | 1 | | | SAM99-23 | 3250910-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | PHENANTHRENE | 0.58 J | 1 | | | SAM99-23 | 3250910-1 |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | ACENAPHTHENE | 0.11 J | 1 | - | 100 | SAM99-23 | 3250909-1 |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | ANTHRACENE | 1.1 | 1 | - | 100 | SAM99-23 | 3250909-1 |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | COPPER | 501. | 1 | - | 600 | SAM99-23 | 3250909-1 |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | DIBENZO(A,H)ANTHRACENE | 0.65 J | 1 | - | 0.66 | SAM99-23 | 3250909-1 |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | FLUORANTHENE | 6.8 | 1 | - | 100 | SAM99-23 | 3250909-1 |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | FLUORENE | 0.24 J | 1 | - | 100 | SAM99-23 | 3250909-1 |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | INDENO(1,2,3-CD)PYRENE | 0.15 J | 1 | - | 0.9 | SAM99-23 | 3250909-1 |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | NAPHTHALENE | 0.14 J | 1 | - | 100 | SAM99-23 | 3250909-1 |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | PYRENE | 7.2 | 1 | - | 100 | SAM99-23 | 3250909-1 |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | ACENAPHTHYLENE | 0.6 J | 1 | | | SAM99-23 | 3250909-1 |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | BENZO(G,H,I)PERYLENE | ND (0.083) | 0 | | | SAM99-23 | 3250909-1 |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | PHENANTHRENE | 2.9 | 1 | | | SAM99-23 | 3250909-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | ACENAPHTHENE | ND (0.04) | 0 | - | 100 | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | ANTHRACENE | 0.046 J | 1 | - | 100 | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | BENZO(A)ANTHRACENE | 0.18 J | 1 | - | 0.9 | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | BENZO(A)PYRENE | 0.2 J | 1 | - | 0.66 | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | BENZO(B)FLUORANTHENE | 0.22 J | 1 | - | 0.9 | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | BENZO(K)FLUORANTHENE | 0.099 J | 1 | - | 0.9 | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | CHRYSENE | 0.2 J | 1 | - | 9 | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | COPPER | 22.4 | 1 | - | 600 | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | DIBENZO(A,H)ANTHRACENE | 0.3 J | 1 | - | 0.66 | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | FLUORANTHENE | 0.32 J | 1 | - | 100 | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | FLUORENE | ND (0.04) | 0 | - | 100 | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | INDENO(1,2,3-CD)PYRENE | 0.15 J | 1 | - | 0.9 | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | LEAD | 41. | 1 | - | 400 | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | MERCURY | 0.18 | 1 | - | 14 | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | NAPHTHALENE | ND (0.04) | 0 | - | 100 | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | PYRENE | 0.27 J | 1 | - | 100 | SAM99-23 | 3250908-1 |

Table 3a
Summary of All Analytical Results-Perimeter Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ Res or IGW SCC | NJ Res or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 748-37 | 0 | 0.5 | 10/12/1999 | - | ACENAPHTHYLENE | ND (0.04) | 0 | | | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | BENZO(G,H,I)PERYLENE | 0.11 J | 1 | | | SAM99-23 | 3250908-1 |
| 748-37 | 0 | 0.5 | 10/12/1999 | - | PHENANTHRENE | 0.15 J | 1 | | | SAM99-23 | 3250908-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | ACENAPHTHENE | ND (0.041) | 0 | - | 100 | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | ANTHRACENE | ND (0.041) | 0 | - | 100 | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | BENZO(A)ANTHRACENE | 0.05 J | 1 | - | 0.9 | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | BENZO(A)PYRENE | 0.062 J | 1 | - | 0.66 | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | BENZO(B)FLUORANTHENE | 0.094 J | 1 | - | 0.9 | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | BENZO(K)FLUORANTHENE | ND (0.041) | 0 | - | 0.9 | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | CHRYSENE | 0.074 J | 1 | - | 9 | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | COPPER | 139. | 1 | - | 600 | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | DIBENZO(A,H)ANTHRACENE | ND (0.041) | 0 | - | 0.66 | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | FLUORANTHENE | 0.093 J | 1 | - | 100 | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | FLUORENE | ND (0.041) | 0 | - | 100 | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | INDENO(1,2,3-CD)PYRENE | 0.068 J | 1 | - | 0.9 | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | LEAD | 72. | 1 | - | 400 | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | MERCURY | 6.8 | 1 | - | 14 | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | NAPHTHALENE | ND (0.041) | 0 | - | 100 | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | PYRENE | 0.084 J | 1 | - | 100 | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | ACENAPHTHYLENE | ND (0.041) | 0 | | | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | BENZO(G,H,I)PERYLENE | 0.064 J | 1 | | | SAM00-3 | 3351194-1 |
| 748-55 | 1.5 | 2 | 3/29/2000 | - | PHENANTHRENE | ND (0.041) | 0 | | | SAM00-3 | 3351194-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | ACENAPHTHENE | ND (0.037) | 0 | - | 100 | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | ANTHRACENE | ND (0.037) | 0 | - | 100 | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | BENZO(A)ANTHRACENE | ND (0.037) | 0 | - | 0.9 | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | BENZO(A)PYRENE | ND (0.037) | 0 | - | 0.66 | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | BENZO(B)FLUORANTHENE | 0.045 J | 1 | - | 0.9 | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | BENZO(K)FLUORANTHENE | ND (0.037) | 0 | - | 0.9 | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | CHRYSENE | 0.044 J | 1 | - | 9 | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | COPPER | 51.0 | 1 | - | 600 | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | DIBENZO(A,H)ANTHRACENE | ND (0.037) | 0 | - | 0.66 | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | FLUORANTHENE | 0.058 J | 1 | - | 100 | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | FLUORENE | ND (0.037) | 0 | - | 100 | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | INDENO(1,2,3-CD)PYRENE | ND (0.037) | 0 | - | 0.9 | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | LEAD | 36. | 1 | - | 400 | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | MERCURY | 0.98 | 1 | - | 14 | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | NAPHTHALENE | ND (0.037) | 0 | - | 100 | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | PYRENE | 0.054 J | 1 | - | 100 | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | ACENAPHTHYLENE | ND (0.037) | 0 | | | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | BENZO(G,H,I)PERYLENE | 0.038 J | 1 | | | SAM00-3 | 3351193-1 |
| 748-59 | 1.5 | 2 | 3/29/2000 | - | PHENANTHRENE | ND (0.037) | 0 | | | SAM00-3 | 3351193-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | ACENAPHTHENE | ND (0.04) | 0 | - | 100 | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | ANTHRACENE | 0.05 J | 1 | - | 100 | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | BENZO(A)ANTHRACENE | 0.17 J | 1 | - | 0.9 | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | BENZO(A)PYRENE | 0.19 J | 1 | - | 0.66 | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | BENZO(B)FLUORANTHENE | 0.22 J | 1 | - | 0.9 | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | BENZO(K)FLUORANTHENE | 0.076 J | 1 | - | 0.9 | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | CHRYSENE | 0.22 J | 1 | - | 9 | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | COPPER | 127. | 1 | - | 600 | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | DIBENZO(A,H)ANTHRACENE | 0.057 J | 1 | - | 0.66 | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | FLUORANTHENE | 0.35 J | 1 | - | 100 | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | FLUORENE | ND (0.04) | 0 | - | 100 | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | INDENO(1,2,3-CD)PYRENE | 0.16 J | 1 | - | 0.9 | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | LEAD | 108. | 1 | - | 400 | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | MERCURY | 6.5 | 1 | - | 14 | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | NAPHTHALENE | ND (0.04) | 0 | - | 100 | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | PYRENE | 0.35 J | 1 | - | 100 | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | ACENAPHTHYLENE | ND (0.04) | 0 | | | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | BENZO(G,H,I)PERYLENE | 0.17 J | 1 | | | SAM00-3 | 3351192-1 |
| 748-61 | 1.5 | 2 | 3/29/2000 | - | PHENANTHRENE | 0.21 J | 1 | | | SAM00-3 | 3351192-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | ACENAPHTHENE | ND (0.037) | 0 | - | 100 | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | ANTHRACENE | ND (0.037) | 0 | - | 100 | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | BENZO(A)ANTHRACENE | 0.09 J | 1 | - | 0.9 | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | BENZO(A)PYRENE | 0.086 J | 1 | - | 0.66 | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | BENZO(B)FLUORANTHENE | 0.11 J | 1 | - | 0.9 | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | BENZO(K)FLUORANTHENE | 0.048 J | 1 | - | 0.9 | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | CHRYSENE | 0.1 J | 1 | - | 9 | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | COPPER | 75.3 | 1 | - | 600 | SAM00-3 | 3352836-1 |

Table 3a
Summary of All Analytical Results-Perimeter Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ Res or IGW SCC | NJ Res or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 748-64 | 1.5 | 2 | 3/31/2000 | - | DIBENZO(A,H)ANTHRACENE | ND (0.037) | 0 | - | 0.66 | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | FLUORANTHENE | 0.18 J | 1 | - | 100 | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | FLUORENE | ND (0.037) | 0 | - | 100 | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | INDENO(1,2,3-CD)PYRENE | 0.061 J | 1 | - | 0.9 | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | LEAD | 54. | 1 | - | 400 | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | MERCURY | 7.4 | 1 | - | 14 | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | NAPHTHALENE | ND (0.037) | 0 | - | 100 | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | PYRENE | 0.17 J | 1 | - | 100 | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | ACENAPHTHENE | ND (0.037) | 0 | - | 100 | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | ANTHRACENE | 0.038 J | 1 | - | 100 | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | BENZO(A)ANTHRACENE | 0.15 J | 1 | - | 0.9 | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | BENZO(A)PYRENE | 0.14 J | 1 | - | 0.66 | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | BENZO(B)FLUORANTHENE | 0.18 J | 1 | - | 0.9 | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | BENZO(K)FLUORANTHENE | 0.076 J | 1 | - | 0.9 | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | CHRYSENE | 0.17 J | 1 | - | 9 | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | COPPER | 70.4 | 1 | - | 600 | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | DIBENZO(A,H)ANTHRACENE | ND (0.037) | 0 | - | 0.66 | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | FLUORANTHENE | 0.32 J | 1 | - | 100 | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | FLUORENE | ND (0.037) | 0 | - | 100 | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | INDENO(1,2,3-CD)PYRENE | 0.095 J | 1 | - | 0.9 | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | LEAD | 51. | 1 | - | 400 | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | MERCURY | 8.9 | 1 | - | 14 | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | NAPHTHALENE | ND (0.037) | 0 | - | 100 | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | PYRENE | 0.29 J | 1 | - | 100 | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | ACENAPHTHYLENE | ND (0.037) | 0 | | | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | BENZO(G,H,I)PERYLENE | 0.06 J | 1 | | | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | - | PHENANTHRENE | 0.13 J | 1 | | | SAM00-3 | 3352836-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | ACENAPHTHYLENE | ND (0.037) | 0 | | | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | BENZO(G,H,I)PERYLENE | 0.085 J | 1 | | | SAM00-3 | 3352835-1 |
| 748-64 | 1.5 | 2 | 3/31/2000 | DUP | PHENANTHRENE | 0.2 J | 1 | | | SAM00-3 | 3352835-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107-100 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 15. | 1 | - | 20 | SAM99-9 | 3191912-1 |
| 107-100 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 13.328 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107100-001 |
| 107-100 | 0 | 0.5 | 7/12/1999 | - | COPPER | 45.3 | 1 | - | 600 | SAM99-9 | 3191912-1 |
| 107-100 | 0 | 0.5 | 7/12/1999 | - | COPPER | 52.528 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107100-001 |
| 107-100 | 0 | 0.5 | 7/12/1999 | - | LEAD | 92.997 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107100-001 |
| 107-100 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 11.8 | 1 | - | 270 | SAM99-9 | 3191912-1 |
| 107-100 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 9.842 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107100-001 |
| 107-101 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 9.3 J | 1 | - | 20 | SAM99-9 | 3191911-1 |
| 107-101 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 9.237 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107101-001 |
| 107-101 | 0 | 0.5 | 7/12/1999 | - | COPPER | 43.6 | 1 | - | 600 | SAM99-9 | 3191911-1 |
| 107-101 | 0 | 0.5 | 7/12/1999 | - | COPPER | 46.63 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107101-001 |
| 107-101 | 0 | 0.5 | 7/12/1999 | - | LEAD | 82.135 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107101-001 |
| 107-101 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 15.2 | 1 | - | 270 | SAM99-9 | 3191911-1 |
| 107-101 | 0 | 0.5 | 7/12/1999 | - | MERCURY | ND (8) | 0 | - | 270 | UPL-AOC 107 XRF DATA | X107101-001 |
| 107-102 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 31.481 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107102-001 |
| 107-102 | 0 | 0.5 | 7/12/1999 | - | COPPER | 147.706 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107102-001 |
| 107-102 | 0 | 0.5 | 7/12/1999 | - | LEAD | 225.491 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107102-001 |
| 107-102 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 44.336 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107102-001 |
| 107-104 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 17. | 1 | - | 20 | SAM99-9 | 3191909-1 |
| 107-104 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 20.801 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107104-001 |
| 107-104 | 0 | 0.5 | 7/12/1999 | - | COPPER | 54.2 | 1 | - | 600 | SAM99-9 | 3191909-1 |
| 107-104 | 0 | 0.5 | 7/12/1999 | - | COPPER | 76.933 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107104-001 |
| 107-104 | 0 | 0.5 | 7/12/1999 | - | LEAD | 203.3 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107104-001 |
| 107-104 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 7.7 | 1 | - | 270 | SAM99-9 | 3191909-1 |
| 107-104 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 11.227 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107104-001 |
| 107-105 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 15. | 1 | - | 20 | SAM99-9 | 3191908-1 |
| 107-105 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 9.277 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107105-001 |
| 107-105 | 0 | 0.5 | 7/12/1999 | - | COPPER | 26.3 | 1 | - | 600 | SAM99-9 | 3191908-1 |
| 107-105 | 0 | 0.5 | 7/12/1999 | - | COPPER | 32.042 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107105-001 |
| 107-105 | 0 | 0.5 | 7/12/1999 | - | LEAD | 65.831 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107105-001 |
| 107-105 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 3.02 | 1 | - | 270 | SAM99-9 | 3191908-1 |
| 107-105 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 12.234 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107105-001 |
| 107-106 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 13. | 1 | - | 20 | SAM99-9 | 3191907-1 |
| 107-106 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 15.597 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107106-001 |
| 107-106 | 0 | 0.5 | 7/12/1999 | - | COPPER | 28.4 | 1 | - | 600 | SAM99-9 | 3191907-1 |
| 107-106 | 0 | 0.5 | 7/12/1999 | - | COPPER | 38.14 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107106-001 |
| 107-106 | 0 | 0.5 | 7/12/1999 | - | LEAD | 114.355 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107106-001 |
| 107-106 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 6.0 | 1 | - | 270 | SAM99-9 | 3191907-1 |
| 107-106 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 8.538 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107106-001 |
| 107-107 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 5.8 J | 1 | - | 20 | SAM99-9 | 3191906-1 |
| 107-107 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 4.117 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107107-001 |
| 107-107 | 0 | 0.5 | 7/12/1999 | - | COPPER | 437. | 1 | - | 600 | SAM99-9 | 3191906-1 |
| 107-107 | 0 | 0.5 | 7/12/1999 | - | COPPER | 454.647 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107107-001 |
| 107-107 | 0 | 0.5 | 7/12/1999 | - | LEAD | 21.393 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107107-001 |
| 107-107 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 0.61 | 1 | - | 270 | SAM99-9 | 3191906-1 |
| 107-107 | 0 | 0.5 | 7/12/1999 | - | MERCURY | ND (8) | 0 | - | 270 | UPL-AOC 107 XRF DATA | X107107-001 |
| 107-108 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 11. | 1 | - | 20 | SAM99-9 | 3191905-1 |
| 107-108 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 8.979 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107108-001 |
| 107-108 | 0 | 0.5 | 7/12/1999 | - | COPPER | 77.8 | 1 | - | 600 | SAM99-9 | 3191905-1 |
| 107-108 | 0 | 0.5 | 7/12/1999 | - | COPPER | 133.345 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107108-001 |
| 107-108 | 0 | 0.5 | 7/12/1999 | - | LEAD | 92.166 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107108-001 |
| 107-108 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 1.21 | 1 | - | 270 | SAM99-9 | 3191905-1 |
| 107-108 | 0 | 0.5 | 7/12/1999 | - | MERCURY | ND (8) | 0 | - | 270 | UPL-AOC 107 XRF DATA | X107108-001 |
| 107-109 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | ND (8) | 0 | - | 20 | UPL-AOC 107 XRF DATA | X107109-001 |
| 107-109 | 0 | 0.5 | 7/12/1999 | - | COPPER | 21.145 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107109-001 |
| 107-109 | 0 | 0.5 | 7/12/1999 | - | LEAD | 747.395 | 1 | YES | 600 | UPL-AOC 107 XRF DATA | X107109-001 |
| 107-109 | 0 | 0.5 | 7/12/1999 | - | MERCURY | ND (8) | 0 | - | 270 | UPL-AOC 107 XRF DATA | X107109-001 |
| 107-112 | 0 | 0.5 | 7/14/1999 | - | ARSENIC | 8.122 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107112-001 |
| 107-112 | 0 | 0.5 | 7/14/1999 | - | COPPER | 76.88 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107112-001 |
| 107-112 | 0 | 0.5 | 7/14/1999 | - | LEAD | 67.179 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107112-001 |
| 107-112 | 0 | 0.5 | 7/14/1999 | - | MERCURY | 30.577 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107112-001 |
| 107-116 | 0 | 0.5 | 7/14/1999 | - | ARSENIC | 13. | 1 | - | 20 | SAM99-9 | 3191900-1 |
| 107-116 | 0 | 0.5 | 7/14/1999 | - | ARSENIC | 9.628 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107116-001 |
| 107-116 | 0 | 0.5 | 7/14/1999 | - | COPPER | 15.0 | 1 | - | 600 | SAM99-9 | 3191900-1 |
| 107-116 | 0 | 0.5 | 7/14/1999 | - | COPPER | 23.772 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107116-001 |
| 107-116 | 0 | 0.5 | 7/14/1999 | - | LEAD | 10.747 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107116-001 |
| 107-116 | 0 | 0.5 | 7/14/1999 | - | MERCURY | 1.29 | 1 | - | 270 | SAM99-9 | 3191900-1 |
| 107-116 | 0 | 0.5 | 7/14/1999 | - | MERCURY | ND (8) | 0 | - | 270 | UPL-AOC 107 XRF DATA | X107116-001 |
| 107-118 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 18.548 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107118-001 |
| 107-118 | 0 | 0.5 | 8/10/1999 | - | COPPER | 347.588 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107118-001 |
| 107-118 | 0 | 0.5 | 8/10/1999 | - | LEAD | 208.074 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107118-001 |
| 107-118 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 168.158 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107118-001 |
| 107-119 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 6.6 J | 1 | - | 20 | SAM99-9 | 3211805-1 |
| 107-119 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 5.135 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107119-001 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107-119 | 0 | 0.5 | 8/10/1999 | - | COPPER | 27.8 | 1 | - | 600 | SAM99-9 | 3211805-1 |
| 107-119 | 0 | 0.5 | 8/10/1999 | - | COPPER | 40.996 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107119-001 |
| 107-119 | 0 | 0.5 | 8/10/1999 | - | LEAD | 35.234 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107119-001 |
| 107-119 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 8.3 | 1 | - | 270 | SAM99-9 | 3211805-1 |
| 107-119 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 14.669 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107119-001 |
| 107-120 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 7.8 J | 1 | - | 20 | SAM99-9 | 3211804-1 |
| 107-120 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 3.901 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107120-001 |
| 107-120 | 0 | 0.5 | 8/10/1999 | - | COPPER | 22.7 | 1 | - | 600 | SAM99-9 | 3211804-1 |
| 107-120 | 0 | 0.5 | 8/10/1999 | - | COPPER | 30.136 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107120-001 |
| 107-120 | 0 | 0.5 | 8/10/1999 | - | LEAD | 53.92 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107120-001 |
| 107-120 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 1.79 | 1 | - | 270 | SAM99-9 | 3211804-1 |
| 107-120 | 0 | 0.5 | 8/10/1999 | - | MERCURY | ND (8) | 0 | - | 270 | UPL-AOC 107 XRF DATA | X107120-001 |
| 107-121 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 6.4 J | 1 | - | 20 | SAM99-9 | 3211803-1 |
| 107-121 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 12.24 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107121-001 |
| 107-121 | 0 | 0.5 | 8/10/1999 | - | COPPER | 20.5 | 1 | - | 600 | SAM99-9 | 3211803-1 |
| 107-121 | 0 | 0.5 | 8/10/1999 | - | COPPER | 32.281 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107121-001 |
| 107-121 | 0 | 0.5 | 8/10/1999 | - | LEAD | 38.243 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107121-001 |
| 107-121 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 7.5 | 1 | - | 270 | SAM99-9 | 3211803-1 |
| 107-121 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 8.214 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107121-001 |
| 107-122 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 6.2 J | 1 | - | 20 | SAM99-9 | 3211802-1 |
| 107-122 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 15.903 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107122-001 |
| 107-122 | 0 | 0.5 | 8/10/1999 | - | COPPER | 25.2 | 1 | - | 600 | SAM99-9 | 3211802-1 |
| 107-122 | 0 | 0.5 | 8/10/1999 | - | COPPER | 36.008 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107122-001 |
| 107-122 | 0 | 0.5 | 8/10/1999 | - | LEAD | 46.408 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107122-001 |
| 107-122 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 7.9 | 1 | - | 270 | SAM99-9 | 3211802-1 |
| 107-122 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 3.438 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107122-001 |
| 107-124 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 2.459 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107124-001 |
| 107-124 | 0 | 0.5 | 8/10/1999 | - | COPPER | 169.465 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107124-001 |
| 107-124 | 0 | 0.5 | 8/10/1999 | - | LEAD | 87.72 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107124-001 |
| 107-124 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 118.312 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107124-001 |
| 107-125 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 3.4 J | 1 | - | 20 | SAM99-9 | 3211800-1 |
| 107-125 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 10.928 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107125-001 |
| 107-125 | 0 | 0.5 | 8/10/1999 | - | COPPER | 20.0 | 1 | - | 600 | SAM99-9 | 3211800-1 |
| 107-125 | 0 | 0.5 | 8/10/1999 | - | COPPER | 38.652 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107125-001 |
| 107-125 | 0 | 0.5 | 8/10/1999 | - | LEAD | 214. | 1 | - | 600 | SAM99-9 | 3211800-1 |
| 107-125 | 0 | 0.5 | 8/10/1999 | - | LEAD | 319.479 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107125-001 |
| 107-125 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 1.86 | 1 | - | 270 | SAM99-9 | 3211800-1 |
| 107-125 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 1.25 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107125-001 |
| 107-126 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 7.955 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107126-001 |
| 107-126 | 0 | 0.5 | 8/10/1999 | - | COPPER | 137.699 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107126-001 |
| 107-126 | 0 | 0.5 | 8/10/1999 | - | LEAD | 214.841 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107126-001 |
| 107-126 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 50.302 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107126-001 |
| 107-126 | 0 | 0.5 | 8/10/1999 | DUP | ARSENIC | 20.433 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107126-002 |
| 107-126 | 0 | 0.5 | 8/10/1999 | DUP | COPPER | 172.861 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107126-002 |
| 107-126 | 0 | 0.5 | 8/10/1999 | DUP | LEAD | 218.348 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107126-002 |
| 107-126 | 0 | 0.5 | 8/10/1999 | DUP | MERCURY | 44.297 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107126-002 |
| 107-128 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 3.8 J | 1 | - | 20 | SAM99-9 | 3211797-1 |
| 107-128 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 9.06 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107128-001 |
| 107-128 | 0 | 0.5 | 8/10/1999 | - | COPPER | 15.3 | 1 | - | 600 | SAM99-9 | 3211797-1 |
| 107-128 | 0 | 0.5 | 8/10/1999 | - | COPPER | 18.438 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107128-001 |
| 107-128 | 0 | 0.5 | 8/10/1999 | - | LEAD | 111. | 1 | - | 600 | SAM99-9 | 3211797-1 |
| 107-128 | 0 | 0.5 | 8/10/1999 | - | LEAD | 110.396 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107128-001 |
| 107-128 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 3.1 | 1 | - | 270 | SAM99-9 | 3211797-1 |
| 107-128 | 0 | 0.5 | 8/10/1999 | - | MERCURY | ND (8) | 0 | - | 270 | UPL-AOC 107 XRF DATA | X107128-001 |
| 107-129 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 5.4 J | 1 | - | 20 | SAM99-9 | 3211796-1 |
| 107-129 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 7.288 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107129-001 |
| 107-129 | 0 | 0.5 | 8/10/1999 | - | COPPER | 20.3 | 1 | - | 600 | SAM99-9 | 3211796-1 |
| 107-129 | 0 | 0.5 | 8/10/1999 | - | COPPER | 21.311 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107129-001 |
| 107-129 | 0 | 0.5 | 8/10/1999 | - | LEAD | 61. | 1 | - | 600 | SAM99-9 | 3211796-1 |
| 107-129 | 0 | 0.5 | 8/10/1999 | - | LEAD | 61.544 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107129-001 |
| 107-129 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 2.8 | 1 | - | 270 | SAM99-9 | 3211796-1 |
| 107-129 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 8.316 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107129-001 |
| 107-130 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 24.002 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107130-001 |
| 107-130 | 0 | 0.5 | 8/10/1999 | - | COPPER | 98.644 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107130-001 |
| 107-130 | 0 | 0.5 | 8/10/1999 | - | LEAD | 336.987 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107130-001 |
| 107-130 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 6.312 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107130-001 |
| 107-131 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 5.588 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107131-001 |
| 107-131 | 0 | 0.5 | 8/10/1999 | - | COPPER | 243.16 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107131-001 |
| 107-131 | 0 | 0.5 | 8/10/1999 | - | LEAD | 225.697 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107131-001 |
| 107-131 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 46.83 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107131-001 |
| 107-132 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 14.959 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107132-001 |
| 107-132 | 0 | 0.5 | 8/10/1999 | - | COPPER | 303.397 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107132-001 |
| 107-132 | 0 | 0.5 | 8/10/1999 | - | LEAD | 84.302 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107132-001 |
| 107-132 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 185.82 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107132-001 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107-133 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 15.75 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107133-001 |
| 107-133 | 0 | 0.5 | 8/10/1999 | - | COPPER | 656.265 | 1 | YES | 600 | UPL-AOC 107 XRF DATA | X107133-001 |
| 107-133 | 0 | 0.5 | 8/10/1999 | - | LEAD | 107.479 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107133-001 |
| 107-133 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 970.591 | 1 | YES | 270 | UPL-AOC 107 XRF DATA | X107133-001 |
| 107-137 | 0 | 0.5 | 8/16/1999 | - | ARSENIC | 4.5 J | 1 | - | 20 | SAM99-9 | 3213464-1 |
| 107-137 | 0 | 0.5 | 8/16/1999 | - | ARSENIC | 2.725 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107137-001 |
| 107-137 | 0 | 0.5 | 8/16/1999 | - | COPPER | 13.9 | 1 | - | 600 | SAM99-9 | 3213464-1 |
| 107-137 | 0 | 0.5 | 8/16/1999 | - | COPPER | 9.684 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107137-001 |
| 107-137 | 0 | 0.5 | 8/16/1999 | - | LEAD | 12.273 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107137-001 |
| 107-137 | 0 | 0.5 | 8/16/1999 | - | MERCURY | 0.35 | 1 | - | 270 | SAM99-9 | 3213464-1 |
| 107-137 | 0 | 0.5 | 8/16/1999 | - | MERCURY | 1.114 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107137-001 |
| 107-139 | 0 | 0.5 | 8/16/1999 | - | ARSENIC | 12.188 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107139-001 |
| 107-139 | 0 | 0.5 | 8/16/1999 | - | COPPER | 355.277 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107139-001 |
| 107-139 | 0 | 0.5 | 8/16/1999 | - | LEAD | 278.788 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107139-001 |
| 107-139 | 0 | 0.5 | 8/16/1999 | - | MERCURY | 234.661 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107139-001 |
| 107-140 | 0 | 0.5 | 8/16/1999 | - | ARSENIC | 7.912 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107140-001 |
| 107-140 | 0 | 0.5 | 8/16/1999 | - | COPPER | 95.935 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107140-001 |
| 107-140 | 0 | 0.5 | 8/16/1999 | - | LEAD | 219.48 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107140-001 |
| 107-140 | 0 | 0.5 | 8/16/1999 | - | MERCURY | 35.178 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107140-001 |
| 107-141 | 0 | 0.5 | 8/16/1999 | - | ARSENIC | 5.741 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107141-001 |
| 107-141 | 0 | 0.5 | 8/16/1999 | - | COPPER | 93.23 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107141-001 |
| 107-141 | 0 | 0.5 | 8/16/1999 | - | LEAD | 55.12 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107141-001 |
| 107-141 | 0 | 0.5 | 8/16/1999 | - | MERCURY | 34.771 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107141-001 |
| 107-141 | 0 | 0.5 | 8/16/1999 | DUP | ARSENIC | 3.748 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107141-002 |
| 107-141 | 0 | 0.5 | 8/16/1999 | DUP | COPPER | 117.439 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107141-002 |
| 107-141 | 0 | 0.5 | 8/16/1999 | DUP | MERCURY | 47.546 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107141-002 |
| 107-142 | 0 | 0.5 | 8/16/1999 | - | ARSENIC | 6.122 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107142-001 |
| 107-142 | 0 | 0.5 | 8/16/1999 | - | COPPER | 154.629 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107142-001 |
| 107-142 | 0 | 0.5 | 8/16/1999 | - | LEAD | 112.93 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107142-001 |
| 107-142 | 0 | 0.5 | 8/16/1999 | - | MERCURY | 40.113 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107142-001 |
| 107-143 | 0 | 0.5 | 8/16/1999 | - | ARSENIC | 14.893 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107143-001 |
| 107-143 | 0 | 0.5 | 8/16/1999 | - | COPPER | 289.27 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107143-001 |
| 107-143 | 0 | 0.5 | 8/16/1999 | - | LEAD | 191.086 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107143-001 |
| 107-143 | 0 | 0.5 | 8/16/1999 | - | MERCURY | 112.628 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107143-001 |
| 107-144 | 0 | 0.5 | 8/30/1999 | - | ARSENIC | 15.335 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107144-001 |
| 107-144 | 0 | 0.5 | 8/30/1999 | - | COPPER | 58.685 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107144-001 |
| 107-144 | 0 | 0.5 | 8/30/1999 | - | LEAD | 782.956 | 1 | YES | 600 | UPL-AOC 107 XRF DATA | X107144-001 |
| 107-144 | 0 | 0.5 | 8/30/1999 | - | MERCURY | ND (8) | 0 | - | 270 | UPL-AOC 107 XRF DATA | X107144-001 |
| 107-145 | 0 | 0.5 | 8/30/1999 | - | ARSENIC | 13.685 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107145-001 |
| 107-145 | 0 | 0.5 | 8/30/1999 | - | COPPER | 125.398 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107145-001 |
| 107-145 | 0 | 0.5 | 8/30/1999 | - | LEAD | 937.684 | 1 | YES | 600 | UPL-AOC 107 XRF DATA | X107145-001 |
| 107-145 | 0 | 0.5 | 8/30/1999 | - | MERCURY | 5.66 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107145-001 |
| 107-146 | 0 | 0.5 | 8/30/1999 | - | ARSENIC | 18.416 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107146-001 |
| 107-146 | 0 | 0.5 | 8/30/1999 | - | COPPER | 159.843 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107146-001 |
| 107-146 | 0 | 0.5 | 8/30/1999 | - | LEAD | 329.487 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107146-001 |
| 107-146 | 0 | 0.5 | 8/30/1999 | - | MERCURY | 29.164 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107146-001 |
| 107-148 | 0 | 0.5 | 8/30/1999 | - | ARSENIC | 22.073 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107148-001 |
| 107-148 | 0 | 0.5 | 8/30/1999 | - | COPPER | 233.027 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107148-001 |
| 107-148 | 0 | 0.5 | 8/30/1999 | - | LEAD | 362.133 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107148-001 |
| 107-148 | 0 | 0.5 | 8/30/1999 | - | MERCURY | 56.378 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107148-001 |
| 107-149 | 0 | 0.5 | 8/30/1999 | - | ARSENIC | 1.394 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107149-001 |
| 107-149 | 0 | 0.5 | 8/30/1999 | - | COPPER | 60.95 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107149-001 |
| 107-149 | 0 | 0.5 | 8/30/1999 | - | LEAD | 235.792 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107149-001 |
| 107-149 | 0 | 0.5 | 8/30/1999 | - | MERCURY | 16.618 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107149-001 |
| 107-150 | 0 | 0.5 | 8/30/1999 | - | ARSENIC | 4.501 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107150-001 |
| 107-150 | 0 | 0.5 | 8/30/1999 | - | COPPER | 321.61 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107150-001 |
| 107-150 | 0 | 0.5 | 8/30/1999 | - | LEAD | 225.693 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107150-001 |
| 107-150 | 0 | 0.5 | 8/30/1999 | - | MERCURY | 90.206 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107150-001 |
| 107-150 | 0 | 0.5 | 8/30/1999 | DUP | ARSENIC | 6.83 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107150-002 |
| 107-150 | 0 | 0.5 | 8/30/1999 | DUP | COPPER | 334.352 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107150-002 |
| 107-150 | 0 | 0.5 | 8/30/1999 | DUP | LEAD | 196.364 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107150-002 |
| 107-150 | 0 | 0.5 | 8/30/1999 | DUP | MERCURY | 79.967 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107150-002 |
| 107-151 | 0 | 0.5 | 8/30/1999 | - | ARSENIC | 2.897 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107151-001 |
| 107-151 | 0 | 0.5 | 8/30/1999 | - | COPPER | 75.837 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107151-001 |
| 107-151 | 0 | 0.5 | 8/30/1999 | - | LEAD | 61.367 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107151-001 |
| 107-151 | 0 | 0.5 | 8/30/1999 | - | MERCURY | 9.69 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107151-001 |
| 107-152 | 0 | 0.5 | 8/30/1999 | - | ARSENIC | 10.35 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107152-001 |
| 107-152 | 0 | 0.5 | 8/30/1999 | - | COPPER | 258.281 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107152-001 |
| 107-152 | 0 | 0.5 | 8/30/1999 | - | LEAD | 252.737 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107152-001 |
| 107-152 | 0 | 0.5 | 8/30/1999 | - | MERCURY | 106.265 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107152-001 |
| 107-153 | 0 | 0.5 | 8/30/1999 | - | ARSENIC | ND (8) | 0 | - | 20 | UPL-AOC 107 XRF DATA | X107153-001 |
| 107-153 | 0 | 0.5 | 8/30/1999 | - | COPPER | 38.823 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107153-001 |
| 107-153 | 0 | 0.5 | 8/30/1999 | - | LEAD | 27.17 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107153-001 |
| 107-153 | 0 | 0.5 | 8/30/1999 | - | MERCURY | 18.46 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107153-001 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107-158 | 0 | 0.5 | 10/13/2000 | - | ARSENIC | 8.646 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107158-001 |
| 107-158 | 0 | 0.5 | 10/13/2000 | - | COPPER | 177.393 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107158-001 |
| 107-158 | 0 | 0.5 | 10/13/2000 | - | LEAD | 360.792 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107158-001 |
| 107-158 | 0 | 0.5 | 10/13/2000 | - | MERCURY | 80.18 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107158-001 |
| 107-172 | 0 | 0.5 | 10/13/2000 | - | ARSENIC | 12.078 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107172-001 |
| 107-172 | 0 | 0.5 | 10/13/2000 | - | COPPER | 55.037 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107172-001 |
| 107-172 | 0 | 0.5 | 10/13/2000 | - | LEAD | 559.27 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107172-001 |
| 107-172 | 0 | 0.5 | 10/13/2000 | - | MERCURY | 19.722 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107172-001 |
| 107-176 | 0 | 0.5 | 10/13/2000 | - | ARSENIC | 10.898 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107176-001 |
| 107-176 | 0 | 0.5 | 10/13/2000 | - | COPPER | 74.176 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107176-001 |
| 107-176 | 0 | 0.5 | 10/13/2000 | - | LEAD | 170.395 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107176-001 |
| 107-176 | 0 | 0.5 | 10/13/2000 | - | MERCURY | 17.157 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107176-001 |
| 107-182 | 0 | 0.5 | 10/25/2000 | - | ARSENIC | 3.311 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107182-001 |
| 107-182 | 0 | 0.5 | 10/25/2000 | - | COPPER | 378.9 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107182-001 |
| 107-182 | 0 | 0.5 | 10/25/2000 | - | LEAD | 82.356 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107182-001 |
| 107-182 | 0 | 0.5 | 10/25/2000 | - | MERCURY | 157.901 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107182-001 |
| 107-183 | 0 | 0.5 | 10/25/2000 | - | ARSENIC | 7.463 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107183-001 |
| 107-183 | 0 | 0.5 | 10/25/2000 | - | COPPER | 37.462 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107183-001 |
| 107-183 | 0 | 0.5 | 10/25/2000 | - | LEAD | 155.445 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107183-001 |
| 107-183 | 0 | 0.5 | 10/25/2000 | - | MERCURY | 16.138 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107183-001 |
| 107-184 | 0 | 0.5 | 10/25/2000 | - | ARSENIC | 3.403 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107184-001 |
| 107-184 | 0 | 0.5 | 10/25/2000 | - | COPPER | 98.73 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107184-001 |
| 107-184 | 0 | 0.5 | 10/25/2000 | - | LEAD | 30.707 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107184-001 |
| 107-184 | 0 | 0.5 | 10/25/2000 | - | MERCURY | 27.14 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107184-001 |
| 107-185 | 0 | 0.5 | 10/25/2000 | - | ARSENIC | ND (8) | 0 | - | 20 | UPL-AOC 107 XRF DATA | X107185-001 |
| 107-185 | 0 | 0.5 | 10/25/2000 | - | COPPER | 30.47 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107185-001 |
| 107-185 | 0 | 0.5 | 10/25/2000 | - | LEAD | 37.8 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107185-001 |
| 107-185 | 0 | 0.5 | 10/25/2000 | - | MERCURY | 10.035 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107185-001 |
| 107-187 | 0 | 0.5 | 10/25/2000 | - | ARSENIC | 8.406 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107187-001 |
| 107-187 | 0 | 0.5 | 10/25/2000 | - | COPPER | 317.17 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107187-001 |
| 107-187 | 0 | 0.5 | 10/25/2000 | - | LEAD | 21.017 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107187-001 |
| 107-187 | 0 | 0.5 | 10/25/2000 | - | MERCURY | 117.968 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107187-001 |
| 107-21 | 0 | 0.5 | 5/13/1999 | - | ARSENIC | 4.3 J | 1 | - | 20 | SAM99-9 | 3152691-1 |
| 107-21 | 0 | 0.5 | 5/13/1999 | - | ARSENIC | 8.307 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107021-001 |
| 107-21 | 0 | 0.5 | 5/13/1999 | - | COPPER | 379. | 1 | - | 600 | SAM99-9 | 3152691-1 |
| 107-21 | 0 | 0.5 | 5/13/1999 | - | COPPER | 493.854 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107021-001 |
| 107-21 | 0 | 0.5 | 5/13/1999 | - | LEAD | 16.697 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107021-001 |
| 107-21 | 0 | 0.5 | 5/13/1999 | - | MERCURY | 130. | 1 | - | 270 | SAM99-9 | 3152691-1 |
| 107-21 | 0 | 0.5 | 5/13/1999 | - | MERCURY | 123.246 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107021-001 |
| 107-216 | 0 | 0.5 | 11/27/2000 | - | ARSENIC | 12.9 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107216-001 |
| 107-216 | 0 | 0.5 | 11/27/2000 | - | COPPER | 185.023 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107216-001 |
| 107-216 | 0 | 0.5 | 11/27/2000 | - | LEAD | 271.07 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107216-001 |
| 107-216 | 0 | 0.5 | 11/27/2000 | - | MERCURY | 74.909 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107216-001 |
| 107-33 | 0 | 0.5 | 5/27/1999 | - | ARSENIC | 3.1 J | 1 | - | 20 | SAM99-9 | 3162253-1 |
| 107-33 | 0 | 0.5 | 5/27/1999 | - | ARSENIC | 5.76 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107033-001 |
| 107-33 | 0 | 0.5 | 5/27/1999 | - | COPPER | 27.7 | 1 | - | 600 | SAM99-9 | 3162253-1 |
| 107-33 | 0 | 0.5 | 5/27/1999 | - | COPPER | 35.025 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107033-001 |
| 107-33 | 0 | 0.5 | 5/27/1999 | - | LEAD | 3.384 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107033-001 |
| 107-33 | 0 | 0.5 | 5/27/1999 | - | MERCURY | 7.6 | 1 | - | 270 | SAM99-9 | 3162253-1 |
| 107-33 | 0 | 0.5 | 5/27/1999 | - | MERCURY | 10.613 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107033-001 |
| 107-34 | 0 | 0.5 | 5/27/1999 | - | ARSENIC | 3.6 J | 1 | - | 20 | SAM99-9 | 3162252-1 |
| 107-34 | 0 | 0.5 | 5/27/1999 | - | ARSENIC | 4.468 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107034-001 |
| 107-34 | 0 | 0.5 | 5/27/1999 | - | COPPER | 26.0 | 1 | - | 600 | SAM99-9 | 3162252-1 |
| 107-34 | 0 | 0.5 | 5/27/1999 | - | COPPER | 36.113 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107034-001 |
| 107-34 | 0 | 0.5 | 5/27/1999 | - | LEAD | 41.46 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107034-001 |
| 107-34 | 0 | 0.5 | 5/27/1999 | - | MERCURY | 7.5 | 1 | - | 270 | SAM99-9 | 3162252-1 |
| 107-34 | 0 | 0.5 | 5/27/1999 | - | MERCURY | 13.387 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107034-001 |
| 107-36 | 0 | 0.5 | 5/27/1999 | - | ARSENIC | 10.5 J | 1 | - | 20 | SAM99-9 | 3162251-1 |
| 107-36 | 0 | 0.5 | 5/27/1999 | - | ARSENIC | 8.608 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107036-001 |
| 107-36 | 0 | 0.5 | 5/27/1999 | - | COPPER | 159. | 1 | - | 600 | SAM99-9 | 3162251-1 |
| 107-36 | 0 | 0.5 | 5/27/1999 | - | COPPER | 93.821 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107036-001 |
| 107-36 | 0 | 0.5 | 5/27/1999 | - | LEAD | 59.112 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107036-001 |
| 107-36 | 0 | 0.5 | 5/27/1999 | - | MERCURY | 59. | 1 | - | 270 | SAM99-9 | 3162251-1 |
| 107-36 | 0 | 0.5 | 5/27/1999 | - | MERCURY | 30.192 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107036-001 |
| 107-40 | 0 | 0.5 | 5/27/1999 | - | ARSENIC | 5.207 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107040-001 |
| 107-40 | 0 | 0.5 | 5/27/1999 | - | COPPER | 296.11 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107040-001 |
| 107-40 | 0 | 0.5 | 5/27/1999 | - | LEAD | 31.869 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107040-001 |
| 107-40 | 0 | 0.5 | 5/27/1999 | - | MERCURY | 158.909 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107040-001 |
| 107-44 | 0 | 0.5 | 6/3/1999 | - | ARSENIC | 3.0 J | 1 | - | 20 | SAM99-9 | 3166532-1 |
| 107-44 | 0 | 0.5 | 6/3/1999 | - | ARSENIC | 4.268 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107044-001 |
| 107-44 | 0 | 0.5 | 6/3/1999 | - | COPPER | 29.2 | 1 | - | 600 | SAM99-9 | 3166532-1 |
| 107-44 | 0 | 0.5 | 6/3/1999 | - | COPPER | 47.005 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107044-001 |
| 107-44 | 0 | 0.5 | 6/3/1999 | - | LEAD | 27.324 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107044-001 |
| 107-44 | 0 | 0.5 | 6/3/1999 | - | MERCURY | 9.1 | 1 | - | 270 | SAM99-9 | 3166532-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107-44 | 0 | 0.5 | 6/3/1999 | - | MERCURY | 7.432 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107044-001 |
| 107-44 | 0 | 0.5 | 6/3/1999 | DUP | ARSENIC | 2.9 J | 1 | - | 20 | SAM99-9 | 3166531-1 |
| 107-44 | 0 | 0.5 | 6/3/1999 | DUP | ARSENIC | 8.565 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107044-002 |
| 107-44 | 0 | 0.5 | 6/3/1999 | DUP | COPPER | 26.2 | 1 | - | 600 | SAM99-9 | 3166531-1 |
| 107-44 | 0 | 0.5 | 6/3/1999 | DUP | COPPER | 29.01 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107044-002 |
| 107-44 | 0 | 0.5 | 6/3/1999 | DUP | LEAD | 14.884 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107044-002 |
| 107-44 | 0 | 0.5 | 6/3/1999 | DUP | MERCURY | 9.7 | 1 | - | 270 | SAM99-9 | 3166531-1 |
| 107-44 | 0 | 0.5 | 6/3/1999 | DUP | MERCURY | 8.856 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107044-002 |
| 107-45 | 0 | 0.5 | 6/3/1999 | - | ARSENIC | 4.4 J | 1 | - | 20 | SAM99-9 | 3166530-1 |
| 107-45 | 0 | 0.5 | 6/3/1999 | - | ARSENIC | 18.97 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107045-001 |
| 107-45 | 0 | 0.5 | 6/3/1999 | - | COPPER | 42.6 | 1 | - | 600 | SAM99-9 | 3166530-1 |
| 107-45 | 0 | 0.5 | 6/3/1999 | - | COPPER | 45.833 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107045-001 |
| 107-45 | 0 | 0.5 | 6/3/1999 | - | LEAD | 44.405 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107045-001 |
| 107-45 | 0 | 0.5 | 6/3/1999 | - | MERCURY | 7.0 | 1 | - | 270 | SAM99-9 | 3166530-1 |
| 107-45 | 0 | 0.5 | 6/3/1999 | - | MERCURY | 5.755 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107045-001 |
| 107-54 | 0 | 0.5 | 6/3/1999 | - | ARSENIC | 10.1 J | 1 | - | 20 | SAM99-9 | 3166528-1 |
| 107-54 | 0 | 0.5 | 6/3/1999 | - | ARSENIC | 10.393 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107054-001 |
| 107-54 | 0 | 0.5 | 6/3/1999 | - | COPPER | 239. | 1 | - | 600 | SAM99-9 | 3166528-1 |
| 107-54 | 0 | 0.5 | 6/3/1999 | - | COPPER | 347.421 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107054-001 |
| 107-54 | 0 | 0.5 | 6/3/1999 | - | LEAD | 121.578 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107054-001 |
| 107-54 | 0 | 0.5 | 6/3/1999 | - | MERCURY | 60. | 1 | - | 270 | SAM99-9 | 3166528-1 |
| 107-54 | 0 | 0.5 | 6/3/1999 | - | MERCURY | 71.34 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107054-001 |
| 107-55 | 0 | 0.5 | 6/3/1999 | - | ARSENIC | 12.9 J | 1 | - | 20 | SAM99-9 | 3166527-1 |
| 107-55 | 0 | 0.5 | 6/3/1999 | - | ARSENIC | 12.258 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107055-001 |
| 107-55 | 0 | 0.5 | 6/3/1999 | - | COPPER | 212. | 1 | - | 600 | SAM99-9 | 3166527-1 |
| 107-55 | 0 | 0.5 | 6/3/1999 | - | COPPER | 279.776 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107055-001 |
| 107-55 | 0 | 0.5 | 6/3/1999 | - | LEAD | 180.317 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107055-001 |
| 107-55 | 0 | 0.5 | 6/3/1999 | - | MERCURY | 87. | 1 | - | 270 | SAM99-9 | 3166527-1 |
| 107-55 | 0 | 0.5 | 6/3/1999 | - | MERCURY | 142.07 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107055-001 |
| 107-56 | 0 | 0.5 | 6/3/1999 | - | ARSENIC | 2.8 J | 1 | - | 20 | SAM99-9 | 3166526-1 |
| 107-56 | 0 | 0.5 | 6/3/1999 | - | ARSENIC | 2.414 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107056-001 |
| 107-56 | 0 | 0.5 | 6/3/1999 | - | COPPER | 146. | 1 | - | 600 | SAM99-9 | 3166526-1 |
| 107-56 | 0 | 0.5 | 6/3/1999 | - | COPPER | 173.061 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107056-001 |
| 107-56 | 0 | 0.5 | 6/3/1999 | - | LEAD | 28.733 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107056-001 |
| 107-56 | 0 | 0.5 | 6/3/1999 | - | MERCURY | 58. | 1 | - | 270 | SAM99-9 | 3166526-1 |
| 107-56 | 0 | 0.5 | 6/3/1999 | - | MERCURY | 77.724 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107056-001 |
| 107-58 | 0 | 0.5 | 6/3/1999 | - | ARSENIC | 4.1 J | 1 | - | 20 | SAM99-9 | 3166525-1 |
| 107-58 | 0 | 0.5 | 6/3/1999 | - | ARSENIC | 2.48 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107058-001 |
| 107-58 | 0 | 0.5 | 6/3/1999 | - | COPPER | 24.3 | 1 | - | 600 | SAM99-9 | 3166525-1 |
| 107-58 | 0 | 0.5 | 6/3/1999 | - | COPPER | 31.063 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107058-001 |
| 107-58 | 0 | 0.5 | 6/3/1999 | - | LEAD | 55.426 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107058-001 |
| 107-58 | 0 | 0.5 | 6/3/1999 | - | MERCURY | 7.0 | 1 | - | 270 | SAM99-9 | 3166525-1 |
| 107-58 | 0 | 0.5 | 6/3/1999 | - | MERCURY | 10.582 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107058-001 |
| 107-61 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 3.4 J | 1 | - | 20 | SAM99-9 | 3169323-1 |
| 107-61 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 8.824 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107061-001 |
| 107-61 | 0 | 0.5 | 6/7/1999 | - | COPPER | 13.9 | 1 | - | 600 | SAM99-9 | 3169323-1 |
| 107-61 | 0 | 0.5 | 6/7/1999 | - | COPPER | 10.968 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107061-001 |
| 107-61 | 0 | 0.5 | 6/7/1999 | - | LEAD | 4.07 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107061-001 |
| 107-61 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 2.29 | 1 | - | 270 | SAM99-9 | 3169323-1 |
| 107-61 | 0 | 0.5 | 6/7/1999 | - | MERCURY | ND (8) | 0 | - | 270 | UPL-AOC 107 XRF DATA | X107061-001 |
| 107-62 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 3.8 J | 1 | - | 20 | SAM99-9 | 3169322-1 |
| 107-62 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 4.279 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107062-001 |
| 107-62 | 0 | 0.5 | 6/7/1999 | - | COPPER | 19.8 | 1 | - | 600 | SAM99-9 | 3169322-1 |
| 107-62 | 0 | 0.5 | 6/7/1999 | - | COPPER | 27.043 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107062-001 |
| 107-62 | 0 | 0.5 | 6/7/1999 | - | LEAD | 14.461 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107062-001 |
| 107-62 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 1.49 | 1 | - | 270 | SAM99-9 | 3169322-1 |
| 107-62 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 1.989 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107062-001 |
| 107-63 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 5.3 J | 1 | - | 20 | SAM99-9 | 3169321-1 |
| 107-63 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 5.207 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107063-001 |
| 107-63 | 0 | 0.5 | 6/7/1999 | - | COPPER | 267. | 1 | - | 600 | SAM99-9 | 3169321-1 |
| 107-63 | 0 | 0.5 | 6/7/1999 | - | COPPER | 275.156 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107063-001 |
| 107-63 | 0 | 0.5 | 6/7/1999 | - | LEAD | 164.042 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107063-001 |
| 107-63 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 169. | 1 | - | 270 | SAM99-9 | 3169321-1 |
| 107-63 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 145.978 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107063-001 |
| 107-66 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 4.6 J | 1 | - | 20 | SAM99-9 | 3169320-1 |
| 107-66 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 5.945 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107066-001 |
| 107-66 | 0 | 0.5 | 6/7/1999 | - | COPPER | 18.5 | 1 | - | 600 | SAM99-9 | 3169320-1 |
| 107-66 | 0 | 0.5 | 6/7/1999 | - | COPPER | 25.186 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107066-001 |
| 107-66 | 0 | 0.5 | 6/7/1999 | - | LEAD | 126.213 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107066-001 |
| 107-66 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 1.60 | 1 | - | 270 | SAM99-9 | 3169320-1 |
| 107-66 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 0.943 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107066-001 |
| 107-67 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 5.4 J | 1 | - | 20 | SAM99-9 | 3169319-1 |
| 107-67 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 9.047 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107067-001 |
| 107-67 | 0 | 0.5 | 6/7/1999 | - | COPPER | 20.9 | 1 | - | 600 | SAM99-9 | 3169319-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107-67 | 0 | 0.5 | 6/7/1999 | - | COPPER | 26.075 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107067-001 |
| 107-67 | 0 | 0.5 | 6/7/1999 | - | LEAD | 35.263 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107067-001 |
| 107-67 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 4.3 | 1 | - | 270 | SAM99-9 | 3169319-1 |
| 107-67 | 0 | 0.5 | 6/7/1999 | - | MERCURY | ND (8) | 0 | - | 270 | UPL-AOC 107 XRF DATA | X107067-001 |
| 107-70 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 9.8 J | 1 | - | 20 | SAM99-9 | 3169317-1 |
| 107-70 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 6.74 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107070-001 |
| 107-70 | 0 | 0.5 | 6/7/1999 | - | COPPER | 74.1 | 1 | - | 600 | SAM99-9 | 3169317-1 |
| 107-70 | 0 | 0.5 | 6/7/1999 | - | COPPER | 109.024 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107070-001 |
| 107-70 | 0 | 0.5 | 6/7/1999 | - | LEAD | 97.939 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107070-001 |
| 107-70 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 59.5 | 1 | - | 270 | SAM99-9 | 3169317-1 |
| 107-70 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 84.635 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107070-001 |
| 107-71 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | ND (2.4) | 0 | - | 20 | SAM99-9 | 3169316-1 |
| 107-71 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | ND (8) | 0 | - | 20 | UPL-AOC 107 XRF DATA | X107071-001 |
| 107-71 | 0 | 0.5 | 6/7/1999 | - | COPPER | 29.5 | 1 | - | 600 | SAM99-9 | 3169316-1 |
| 107-71 | 0 | 0.5 | 6/7/1999 | - | COPPER | 43.541 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107071-001 |
| 107-71 | 0 | 0.5 | 6/7/1999 | - | LEAD | 8.416 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107071-001 |
| 107-71 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 6.4 | 1 | - | 270 | SAM99-9 | 3169316-1 |
| 107-71 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 9.269 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107071-001 |
| 107-71 | 0 | 0.5 | 6/7/1999 | DUP | ARSENIC | ND (2.4) | 0 | - | 20 | SAM99-9 | 3169311-1 |
| 107-71 | 0 | 0.5 | 6/7/1999 | DUP | ARSENIC | 5.011 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107071-002 |
| 107-71 | 0 | 0.5 | 6/7/1999 | DUP | COPPER | 27.5 | 1 | - | 600 | SAM99-9 | 3169311-1 |
| 107-71 | 0 | 0.5 | 6/7/1999 | DUP | COPPER | 48.406 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107071-002 |
| 107-71 | 0 | 0.5 | 6/7/1999 | DUP | LEAD | ND (4) | 0 | - | 600 | UPL-AOC 107 XRF DATA | X107071-002 |
| 107-71 | 0 | 0.5 | 6/7/1999 | DUP | MERCURY | 6.1 | 1 | - | 270 | SAM99-9 | 3169311-1 |
| 107-71 | 0 | 0.5 | 6/7/1999 | DUP | MERCURY | 8.427 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107071-002 |
| 107-72 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 4.6 J | 1 | - | 20 | SAM99-9 | 3169315-1 |
| 107-72 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 0.908 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107072-001 |
| 107-72 | 0 | 0.5 | 6/7/1999 | - | COPPER | 112. | 1 | - | 600 | SAM99-9 | 3169315-1 |
| 107-72 | 0 | 0.5 | 6/7/1999 | - | COPPER | 153.972 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107072-001 |
| 107-72 | 0 | 0.5 | 6/7/1999 | - | LEAD | 160.024 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107072-001 |
| 107-72 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 1.89 | 1 | - | 270 | SAM99-9 | 3169315-1 |
| 107-72 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 4.094 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107072-001 |
| 107-73 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 3.7 J | 1 | - | 20 | SAM99-9 | 3169314-1 |
| 107-73 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 11.067 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107073-001 |
| 107-73 | 0 | 0.5 | 6/7/1999 | - | COPPER | 25.8 | 1 | - | 600 | SAM99-9 | 3169314-1 |
| 107-73 | 0 | 0.5 | 6/7/1999 | - | COPPER | 41.499 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107073-001 |
| 107-73 | 0 | 0.5 | 6/7/1999 | - | LEAD | 89.242 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107073-001 |
| 107-73 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 3.4 | 1 | - | 270 | SAM99-9 | 3169314-1 |
| 107-73 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 24.822 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107073-001 |
| 107-74 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 4.7 J | 1 | - | 20 | SAM99-9 | 3169313-1 |
| 107-74 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 7.343 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107074-001 |
| 107-74 | 0 | 0.5 | 6/7/1999 | - | COPPER | 32.9 | 1 | - | 600 | SAM99-9 | 3169313-1 |
| 107-74 | 0 | 0.5 | 6/7/1999 | - | COPPER | 42.434 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107074-001 |
| 107-74 | 0 | 0.5 | 6/7/1999 | - | LEAD | 87.625 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107074-001 |
| 107-74 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 3.9 | 1 | - | 270 | SAM99-9 | 3169313-1 |
| 107-74 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 6.608 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107074-001 |
| 107-75 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 9.2 J | 1 | - | 20 | SAM99-9 | 3169312-1 |
| 107-75 | 0 | 0.5 | 6/7/1999 | - | ARSENIC | 12.579 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107075-001 |
| 107-75 | 0 | 0.5 | 6/7/1999 | - | COPPER | 129. | 1 | - | 600 | SAM99-9 | 3169312-1 |
| 107-75 | 0 | 0.5 | 6/7/1999 | - | COPPER | 189.399 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107075-001 |
| 107-75 | 0 | 0.5 | 6/7/1999 | - | LEAD | 344.544 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107075-001 |
| 107-75 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 55.4 | 1 | - | 270 | SAM99-9 | 3169312-1 |
| 107-75 | 0 | 0.5 | 6/7/1999 | - | MERCURY | 77.641 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107075-001 |
| 107-80 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 46.664 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107080-001 |
| 107-80 | 0 | 0.5 | 6/25/1999 | - | COPPER | 117.683 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107080-001 |
| 107-80 | 0 | 0.5 | 6/25/1999 | - | LEAD | 328.683 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107080-001 |
| 107-80 | 0 | 0.5 | 6/25/1999 | - | MERCURY | 160.455 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107080-001 |
| 107-82 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 20.205 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107082-001 |
| 107-82 | 0 | 0.5 | 6/25/1999 | - | COPPER | 97.466 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107082-001 |
| 107-82 | 0 | 0.5 | 6/25/1999 | - | LEAD | 144.314 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107082-001 |
| 107-82 | 0 | 0.5 | 6/25/1999 | - | MERCURY | 36.307 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107082-001 |
| 107-83 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 19.759 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107083-001 |
| 107-83 | 0 | 0.5 | 6/25/1999 | - | COPPER | 142.108 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107083-001 |
| 107-83 | 0 | 0.5 | 6/25/1999 | - | LEAD | 225.267 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107083-001 |
| 107-83 | 0 | 0.5 | 6/25/1999 | - | MERCURY | 24.936 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107083-001 |
| 107-84 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 26.102 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107084-001 |
| 107-84 | 0 | 0.5 | 6/25/1999 | - | COPPER | 164.71 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107084-001 |
| 107-84 | 0 | 0.5 | 6/25/1999 | - | LEAD | 163.83 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107084-001 |
| 107-84 | 0 | 0.5 | 6/25/1999 | - | MERCURY | 36.75 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107084-001 |
| 107-85 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 18.953 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107085-001 |
| 107-85 | 0 | 0.5 | 6/25/1999 | - | COPPER | 250.144 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107085-001 |
| 107-85 | 0 | 0.5 | 6/25/1999 | - | LEAD | 124.084 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107085-001 |
| 107-85 | 0 | 0.5 | 6/25/1999 | - | MERCURY | 108.332 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107085-001 |
| 107-86 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 27.69 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107086-001 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107-86 | 0 | 0.5 | 6/25/1999 | - | COPPER | 271.578 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107086-001 |
| 107-86 | 0 | 0.5 | 6/25/1999 | - | LEAD | 283.276 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107086-001 |
| 107-86 | 0 | 0.5 | 6/25/1999 | - | MERCURY | 182.4 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107086-001 |
| 107-87 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 55.15 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107087-001 |
| 107-87 | 0 | 0.5 | 6/25/1999 | - | COPPER | 975.343 | 1 | YES | 600 | UPL-AOC 107 XRF DATA | X107087-001 |
| 107-87 | 0 | 0.5 | 6/25/1999 | - | LEAD | 3195.988 | 1 | YES | 600 | UPL-AOC 107 XRF DATA | X107087-001 |
| 107-87 | 0 | 0.5 | 6/25/1999 | - | MERCURY | 15.949 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107087-001 |
| 107-87 | 0 | 0.5 | 6/25/1999 | DUP | ARSENIC | 58.823 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107087-002 |
| 107-87 | 0 | 0.5 | 6/25/1999 | DUP | COPPER | 1193.14 | 1 | YES | 600 | UPL-AOC 107 XRF DATA | X107087-002 |
| 107-87 | 0 | 0.5 | 6/25/1999 | DUP | LEAD | 3195.816 | 1 | YES | 600 | UPL-AOC 107 XRF DATA | X107087-002 |
| 107-87 | 0 | 0.5 | 6/25/1999 | DUP | MERCURY | 16.265 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107087-002 |
| 107-88 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | ND (8) | 0 | - | 20 | UPL-AOC 107 XRF DATA | X107088-001 |
| 107-88 | 0 | 0.5 | 6/25/1999 | - | COPPER | 344.514 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107088-001 |
| 107-88 | 0 | 0.5 | 6/25/1999 | - | LEAD | 108.69 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107088-001 |
| 107-88 | 0 | 0.5 | 6/25/1999 | - | MERCURY | 149.38 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107088-001 |
| 107-90 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 22.915 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107090-001 |
| 107-90 | 0 | 0.5 | 6/25/1999 | - | COPPER | 43.756 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107090-001 |
| 107-90 | 0 | 0.5 | 6/25/1999 | - | LEAD | 151.133 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107090-001 |
| 107-90 | 0 | 0.5 | 6/25/1999 | - | MERCURY | 6.719 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107090-001 |
| 107-91 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 21.898 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107091-001 |
| 107-91 | 0 | 0.5 | 6/25/1999 | - | COPPER | 119.805 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107091-001 |
| 107-91 | 0 | 0.5 | 6/25/1999 | - | LEAD | 274.255 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107091-001 |
| 107-91 | 0 | 0.5 | 6/25/1999 | - | MERCURY | 46.654 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107091-001 |
| 107-95 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 23.725 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107095-001 |
| 107-95 | 0 | 0.5 | 7/12/1999 | - | COPPER | 66.34 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107095-001 |
| 107-95 | 0 | 0.5 | 7/12/1999 | - | LEAD | 103.875 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107095-001 |
| 107-95 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 28.683 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107095-001 |
| 107-97 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 19.73 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107097-001 |
| 107-97 | 0 | 0.5 | 7/12/1999 | - | COPPER | 70.213 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107097-001 |
| 107-97 | 0 | 0.5 | 7/12/1999 | - | LEAD | 108.01 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107097-001 |
| 107-97 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 18.335 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107097-001 |
| 107-98 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 14.023 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107098-001 |
| 107-98 | 0 | 0.5 | 7/12/1999 | - | COPPER | 66.162 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107098-001 |
| 107-98 | 0 | 0.5 | 7/12/1999 | - | LEAD | 77.264 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107098-001 |
| 107-98 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 27.715 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107098-001 |
| 107-99 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 19. | 1 | - | 20 | SAM99-9 | 3191913-1 |
| 107-99 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 8.525 | 1 | - | 20 | UPL-AOC 107 XRF DATA | X107099-001 |
| 107-99 | 0 | 0.5 | 7/12/1999 | - | COPPER | 80.8 | 1 | - | 600 | SAM99-9 | 3191913-1 |
| 107-99 | 0 | 0.5 | 7/12/1999 | - | COPPER | 90.009 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107099-001 |
| 107-99 | 0 | 0.5 | 7/12/1999 | - | LEAD | 171.523 | 1 | - | 600 | UPL-AOC 107 XRF DATA | X107099-001 |
| 107-99 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 20.7 | 1 | - | 270 | SAM99-9 | 3191913-1 |
| 107-99 | 0 | 0.5 | 7/12/1999 | - | MERCURY | 13.393 | 1 | - | 270 | UPL-AOC 107 XRF DATA | X107099-001 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | ACENAPHTHENE | 0.12 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | ACENAPHTHYLENE | 2. | 1 | | | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | ANTHRACENE | 0.59 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | ARSENIC | ND (3.2) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | BENZO(A)ANTHRACENE | 4.7 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | BENZO(A)PYRENE | 8.5 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | BENZO(B)FLUORANTHENE | 13. | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | BENZO(G,H,I)PERYLENE | 5.4 | 1 | | | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | BENZO(K)FLUORANTHENE | 4. | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | CHRYSENE | 5.1 | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | COPPER | 250. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | DIBENZO(A,H)ANTHRACENE | 1.4 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | FLUORANTHENE | 3.3 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | FLUORENE | 0.13 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | INDENO(1,2,3-CD)PYRENE | 4.7 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | LEAD | 105. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | MERCURY | .33 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | NAPHTHALENE | 0.3 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | PHENANTHRENE | 0.79 | 1 | | | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | PYRENE | 4.9 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | THALLIUM | ND (.42) | 0 | - | 2 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | ACENAPHTHENE | ND (0.036) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | ACENAPHTHYLENE | 1.3 | 1 | | | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | ANTHRACENE | 0.6 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | ARSENIC | ND (3.1) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)ANTHRACENE | 5.4 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)PYRENE | 6.4 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | BENZO(B)FLUORANTHENE | 9.8 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | BENZO(G,H,I)PERYLENE | 4.4 | 1 | | | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | BENZO(K)FLUORANTHENE | 4. | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | CHRYSENE | 5.7 | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | COPPER | 450. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2626747-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 192-127 | 0 | 0.5 | 12/3/1996 | - | DIBENZO(A,H)ANTHRACENE | 2. | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | FLUORANTHENE | 7.8 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | FLUORENE | 0.077 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | INDENO(1,2,3-CD)PYRENE | 5.1 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | LEAD | 213. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | MERCURY | .50 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | NAPHTHALENE | 0.31 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | PHENANTHRENE | 1.8 | 1 | | | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | PYRENE | 8.1 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | THALLIUM | ND (.41) | 0 | - | 2 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | 1,2-DINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | 1,3,5-TRINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | 1,4-DINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | 1-METHYL-2-NITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | 1-NITRONAPHTHALENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | 2,4,6-TRINITROTOLUENE | ND (0.02) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | ACENAPHTHENE | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | ACENAPHTHYLENE | 0.63 | 1 | | | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | ANTHRACENE | 0.38 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | ARSENIC | 3.5 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)ANTHRACENE | 3.7 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)PYRENE | 3.9 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | BENZO(B)FLUORANTHENE | 6.1 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | BENZO(G,H,I)PERYLENE | 2.5 | 1 | | | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | BENZO(K)FLUORANTHENE | 2.3 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | CHRYSENE | 4. | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | COPPER | 2980. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | DIBENZO(A,H)ANTHRACENE | 0.89 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | FLUORANTHENE | 6.3 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | FLUORENE | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | INDENO(1,2,3-CD)PYRENE | 2.8 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | LEAD | 190. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | M-DINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | MERCURY | .50 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | NAPHTHALENE | 0.15 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | NITROBENZENE | ND (0.02) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | PHENANTHRENE | 1.7 | 1 | | | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | PYRENE | 5.8 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | RDX | ND (0.08) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | TETRYL | ND (0.02) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | THALLIUM | .65 J | 1 | - | 2 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | ACENAPHTHENE | ND (0.041) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | ACENAPHTHYLENE | 0.065 J | 1 | | | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | ANTHRACENE | 0.12 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | ARSENIC | 18. | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)ANTHRACENE | 0.85 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)PYRENE | 0.95 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | BENZO(B)FLUORANTHENE | 1.3 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | BENZO(G,H,I)PERYLENE | 0.51 | 1 | | | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | BENZO(K)FLUORANTHENE | 0.41 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | CHRYSENE | 0.99 | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | COPPER | 13500. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | DIBENZO(A,H)ANTHRACENE | 0.29 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | FLUORANTHENE | 1.1 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | FLUORENE | ND (0.041) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | INDENO(1,2,3-CD)PYRENE | 0.65 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | LEAD | 2370. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | MERCURY | 2.04 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | NAPHTHALENE | ND (0.041) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | PHENANTHRENE | 0.62 | 1 | | | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | PYRENE | 1.5 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | THALLIUM | 5.8 | 1 | YES | 2 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | ACENAPHTHENE | 0.044 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | ACENAPHTHYLENE | 0.086 J | 1 | | | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | ANTHRACENE | 0.14 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626744-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | ARSENIC | 13. | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | BENZO(A)ANTHRACENE | 0.9 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | BENZO(A)PYRENE | 1.2 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | BENZO(B)FLUORANTHENE | 1.4 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | BENZO(G,H,I)PERYLENE | 0.61 | 1 | | | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | BENZO(K)FLUORANTHENE | 0.43 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | CHRYSENE | 1. | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | COPPER | 5030. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | DIBENZO(A,H)ANTHRACENE | 0.4 | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | FLUORANTHENE | 1.3 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | FLUORENE | 0.045 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | INDENO(1,2,3-CD)PYRENE | 0.71 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | LEAD | 2160. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | MERCURY | 2.61 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | NAPHTHALENE | 0.038 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | PHENANTHRENE | 0.75 | 1 | | | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | PYRENE | 1.4 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | THALLIUM | 3.6 | 1 | YES | 2 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | ACENAPHTHENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | ACENAPHTHYLENE | ND (0.042) | 0 | | | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | ANTHRACENE | 0.11 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | ARSENIC | ND (3.7) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)ANTHRACENE | 0.39 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)PYRENE | 0.37 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | BENZO(B)FLUORANTHENE | 0.46 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | BENZO(G,H,I)PERYLENE | 0.29 J | 1 | | | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | BENZO(K)FLUORANTHENE | ND (0.17) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | CHRYSENE | 0.39 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | COPPER | 39.4 | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | DIBENZO(A,H)ANTHRACENE | 0.16 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | FLUORANTHENE | 0.7 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | FLUORENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | INDENO(1,2,3-CD)PYRENE | 0.34 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | LEAD | 104. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | MERCURY | .40 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | NAPHTHALENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | PHENANTHRENE | 0.5 | 1 | | | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | PYRENE | 0.7 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-130 | 0 | 0.5 | 12/3/1996 | - | THALLIUM | 1.61 J | 1 | - | 2 | SAM96-52/53 192/194 CONF | 2626743-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 1,2-DINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 1,3,5-TRINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 1,4-DINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 1-METHYL-2-NITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 1-NITRONAPHTHALENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 2,4,6-TRINITROTOLUENE | ND (0.02) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | ACENAPHTHENE | ND (0.039) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | ACENAPHTHYLENE | ND (0.039) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | ANTHRACENE | ND (0.039) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | ARSENIC | ND (3.5) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)ANTHRACENE | 0.26 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)PYRENE | 0.24 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | BENZO(B)FLUORANTHENE | 0.42 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | BENZO(G,H,I)PERYLENE | 0.23 J | 1 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | BENZO(K)FLUORANTHENE | ND (0.16) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | CHRYSENE | 0.28 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | COPPER | 60.0 | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.079) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | FLUORANTHENE | 0.4 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | FLUORENE | ND (0.039) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | INDENO(1,2,3-CD)PYRENE | 0.25 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | LEAD | 61. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | M-DINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | MERCURY | .59 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | NAPHTHALENE | ND (0.039) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | NITROBENZENE | ND (0.02) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2626742-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 192-131 | 0 | 0.5 | 12/3/1996 | - | PHENANTHRENE | 0.21 J | 1 | | | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | PYRENE | 0.43 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | RDX | ND (0.08) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | TETRYL | ND (0.02) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-131 | 0 | 0.5 | 12/3/1996 | - | THALLIUM | ND (.45) | 0 | - | 2 | SAM96-52/53 192/194 CONF | 2626742-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | 1,2-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | 1,3,5-TRINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | 1,4-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | 1-METHYL-2-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | 1-METHYL-3-NITROBENZENE | ND (0.05) | 0 | | | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | 1-METHYL-4-NITROBENZENE | ND (0.05) | 0 | | | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | 1-NITRONAPHTHALENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | 2,4,6-TRINITROTOLUENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | 2,4-DINITROTOLUENE | ND (0.05) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | 2,6-DINITROTOLUENE | ND (0.05) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.05) | 0 | | | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | ACENAPHTHENE | ND (0.051) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | ACENAPHTHYLENE | ND (0.051) | 0 | | | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | ANTHRACENE | ND (0.051) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | ARSENIC | 10.3 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | BENZO(A)ANTHRACENE | 0.33 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | BENZO(A)PYRENE | 0.41 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | BENZO(B)FLUORANTHENE | 0.58 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | BENZO(G,H,I)PERYLENE | 0.27 J | 1 | | | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | BENZO(K)FLUORANTHENE | ND (0.21) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | CHRYSENE | 0.57 | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | COPPER | 332. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.1) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | FLUORANTHENE | 0.56 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | FLUORENE | ND (0.051) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | HMX | ND (0.05) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | INDENO(1,2,3-CD)PYRENE | ND (0.1) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | LEAD | 276. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | M-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | MERCURY | 35. | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | NAPHTHALENE | ND (0.051) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | NITROBENZENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | NITROGLYCERIN | ND (5.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | PETN | ND (5.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | PHENANTHRENE | 0.33 J | 1 | | | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | PYRENE | 0.76 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | RDX | ND (0.1) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | TETRYL | ND (0.03) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | - | THALLIUM | 1.36 J | 1 | - | 2 | SAM96-52/53 192/194 CONF | 2629783-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | 1,2-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | 1,3,5-TRINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | 1,4-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | 1-METHYL-2-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | 1-METHYL-3-NITROBENZENE | ND (0.05) | 0 | | | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | 1-METHYL-4-NITROBENZENE | ND (0.05) | 0 | | | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | 1-NITRONAPHTHALENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | 2,4,6-TRINITROTOLUENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | 2,4-DINITROTOLUENE | ND (0.05) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | 2,6-DINITROTOLUENE | ND (0.05) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | 2-AMINO-4,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | 4-AMINO-2,6-DINITROTOLUENE | ND (0.05) | 0 | | | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | ACENAPHTHENE | ND (0.052) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | ACENAPHTHYLENE | ND (0.052) | 0 | | | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | ANTHRACENE | 0.075 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | ARSENIC | 12.2 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | BENZO(A)ANTHRACENE | 0.5 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | BENZO(A)PYRENE | 0.55 | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | BENZO(B)FLUORANTHENE | 0.78 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | BENZO(G,H,I)PERYLENE | ND (0.1) | 0 | | | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | BENZO(K)FLUORANTHENE | 0.25 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | CHRYSENE | 0.73 | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | COPPER | 340. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | DIBENZO(A,H)ANTHRACENE | ND (0.1) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | FLUORANTHENE | 0.81 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | FLUORENE | ND (0.052) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | HMX | ND (0.05) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | INDENO(1,2,3-CD)PYRENE | 0.32 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | LEAD | 290. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2629782-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | M-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | MERCURY | 35. | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | NAPHTHALENE | ND (0.052) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | NITROBENZENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | NITROGLYCERIN | ND (5.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | PETN | ND (5.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | PHENANTHRENE | 0.42 J | 1 | | | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | PYRENE | 1.5 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | RDX | ND (0.1) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | TETRYL | ND (0.03) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-133 | 0 | 0.5 | 12/9/1996 | DUP | THALLIUM | 1.83 J | 1 | - | 2 | SAM96-52/53 192/194 CONF | 2629782-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | 1,2-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | 1,3,5-TRINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | 1,4-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | 1-METHYL-2-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | 1-NITRONAPHTHALENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | 2,4,6-TRINITROTOLUENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | ACENAPHTHENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | ACENAPHTHYLENE | ND (0.042) | 0 | | | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | ANTHRACENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | ARSENIC | ND (3.7) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | BENZO(A)ANTHRACENE | 0.11 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | BENZO(A)PYRENE | 0.1 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | BENZO(B)FLUORANTHENE | 0.14 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | BENZO(G,H,I)PERYLENE | ND (0.083) | 0 | | | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | BENZO(K)FLUORANTHENE | ND (0.17) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | CHRYSENE | 0.14 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | COPPER | 337. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.083) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | FLUORANTHENE | 0.16 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | FLUORENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | INDENO(1,2,3-CD)PYRENE | ND (0.083) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | LEAD | 169. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | M-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | MERCURY | 4.6 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | NAPHTHALENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | NITROBENZENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | PHENANTHRENE | ND (0.042) | 0 | | | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | PYRENE | 0.21 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | RDX | ND (0.09) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | TETRYL | ND (0.03) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | - | THALLIUM | ND (.48) | 0 | - | 2 | SAM96-52/53 192/194 CONF | 2612092-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | 1,2-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | 1,3,5-TRINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | 1,4-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | 1-METHYL-2-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | 1-NITRONAPHTHALENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | 2,4,6-TRINITROTOLUENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | 2-AMINO-4,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | ACENAPHTHENE | ND (0.044) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | ACENAPHTHYLENE | ND (0.044) | 0 | | | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | ANTHRACENE | ND (0.044) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | ARSENIC | ND (3.9) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | BENZO(A)ANTHRACENE | 0.098 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | BENZO(A)PYRENE | 0.099 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | BENZO(B)FLUORANTHENE | 0.13 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | BENZO(G,H,I)PERYLENE | ND (0.089) | 0 | | | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | BENZO(K)FLUORANTHENE | ND (0.18) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | CHRYSENE | 0.14 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | COPPER | 296. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2612091-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | DIBENZO(A,H)ANTHRACENE | ND (0.089) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | FLUORANTHENE | 0.16 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | FLUORENE | ND (0.044) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | INDENO(1,2,3-CD)PYRENE | ND (0.089) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | LEAD | 161. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | M-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | MERCURY | 5.7 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | NAPHTHALENE | ND (0.044) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | NITROBENZENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | PHENANTHRENE | ND (0.044) | 0 | | | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | PYRENE | 0.22 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | RDX | ND (0.09) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | TETRYL | ND (0.03) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-22 | 0 | 0.5 | 11/5/1996 | DUP | THALLIUM | ND (.51) | 0 | - | 2 | SAM96-52/53 192/194 CONF | 2612091-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | ACENAPHTHENE | ND (0.041) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | ACENAPHTHYLENE | ND (0.041) | 0 | | | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | ANTHRACENE | ND (0.041) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | ARSENIC | ND (3.7) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | BENZO(A)ANTHRACENE | 0.052 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | BENZO(A)PYRENE | ND (0.081) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | BENZO(B)FLUORANTHENE | ND (0.081) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | BENZO(G,H,I)PERYLENE | ND (0.081) | 0 | | | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | BENZO(K)FLUORANTHENE | ND (0.16) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | CHRYSENE | 0.074 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | COPPER | 180. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.081) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | FLUORANTHENE | 0.066 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | FLUORENE | ND (0.041) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | INDENO(1,2,3-CD)PYRENE | ND (0.081) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | LEAD | 135. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | MERCURY | 1.35 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | NAPHTHALENE | ND (0.041) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | PHENANTHRENE | ND (0.041) | 0 | | | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | PYRENE | 0.11 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-23 | 0 | 0.5 | 11/5/1996 | - | THALLIUM | ND (.48) | 0 | - | 2 | SAM96-52/53 192/194 CONF | 2612090-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | 1,2-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | 1,3,5-TRINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | 1,4-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | 1-METHYL-2-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | 1-NITRONAPHTHALENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | 2,4,6-TRINITROTOLUENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | ACENAPHTHENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | ACENAPHTHYLENE | 0.17 J | 1 | | | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | ANTHRACENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | ARSENIC | ND (4.1) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | BENZO(A)ANTHRACENE | 0.54 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | BENZO(A)PYRENE | 0.61 | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | BENZO(B)FLUORANTHENE | 0.9 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | BENZO(G,H,I)PERYLENE | 0.21 J | 1 | | | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | BENZO(K)FLUORANTHENE | 0.36 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | CHRYSENE | 0.8 | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | COPPER | 382. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.092) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | FLUORANTHENE | 0.77 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | FLUORENE | 0.048 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | INDENO(1,2,3-CD)PYRENE | 0.2 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | LEAD | 322. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | M-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | MERCURY | 2.08 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | NAPHTHALENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | NITROBENZENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | PHENANTHRENE | 0.35 J | 1 | | | SAM96-52/53 192/194 CONF | 2616780-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 192-37 | 0 | 0.5 | 11/12/1996 | - | PYRENE | 1.2 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | RDX | ND (0.1) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | TETRYL | ND (0.03) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-37 | 0 | 0.5 | 11/12/1996 | - | THALLIUM | .67 J | 1 | - | 2 | SAM96-52/53 192/194 CONF | 2616780-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | 1,2-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | 1,3,5-TRINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | 1,4-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | 1-METHYL-2-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | 1-NITRONAPHTHALENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | 2,4,6-TRINITROTOLUENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | ACENAPHTHENE | ND (0.047) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | ACENAPHTHYLENE | ND (0.047) | 0 | | | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | ANTHRACENE | ND (0.047) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | ARSENIC | 4.9 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | BENZO(A)ANTHRACENE | ND (0.047) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | BENZO(A)PYRENE | ND (0.094) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | BENZO(B)FLUORANTHENE | ND (0.094) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | BENZO(G,H,I)PERYLENE | ND (0.094) | 0 | | | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | BENZO(K)FLUORANTHENE | ND (0.19) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | CHRYSENE | 0.05 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | COPPER | 131. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.094) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | FLUORANTHENE | ND (0.047) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | FLUORENE | ND (0.047) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | INDENO(1,2,3-CD)PYRENE | ND (0.094) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | LEAD | 107. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | M-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | MERCURY | 9.7 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | NAPHTHALENE | ND (0.047) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | NITROBENZENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | PHENANTHRENE | ND (0.047) | 0 | | | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | PYRENE | ND (0.094) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | RDX | ND (0.1) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | TETRYL | ND (0.03) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-38 | 0 | 0.5 | 11/12/1996 | - | THALLIUM | .88 J | 1 | - | 2 | SAM96-52/53 192/194 CONF | 2616779-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | ACENAPHTHENE | ND (0.039) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | ACENAPHTHYLENE | 0.23 J | 1 | | | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | ANTHRACENE | ND (0.039) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | ARSENIC | 11.0 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | BENZO(A)ANTHRACENE | 0.75 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | BENZO(A)PYRENE | 0.89 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | BENZO(B)FLUORANTHENE | 1.4 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | BENZO(G,H,I)PERYLENE | 0.5 | 1 | | | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | BENZO(K)FLUORANTHENE | 0.5 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | CHRYSENE | 1.1 | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | COPPER | 11800. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | DIBENZO(A,H)ANTHRACENE | 0.21 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | FLUORANTHENE | 1.1 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | FLUORENE | ND (0.039) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | INDENO(1,2,3-CD)PYRENE | 0.46 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | LEAD | 1370. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | MERCURY | 4.2 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | NAPHTHALENE | ND (0.039) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | PHENANTHRENE | 0.32 J | 1 | | | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | PYRENE | 1.5 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | THALLIUM | 1.75 J | 1 | - | 2 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | 1,2-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | 1,3,5-TRINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | 1,4-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | 1-METHYL-2-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | 1-NITRONAPHTHALENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | 2,4,6-TRINITROTOLUENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2621093-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 192-67 | 0 | 0.5 | 11/19/1996 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | ACENAPHTHENE | 0.095 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | ACENAPHTHYLENE | 0.056 J | 1 | | | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | ANTHRACENE | 0.98 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | ARSENIC | 9.3 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | BENZO(A)ANTHRACENE | 4.8 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | BENZO(A)PYRENE | 3.5 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | BENZO(B)FLUORANTHENE | 4.7 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | BENZO(G,H,I)PERYLENE | 1.1 | 1 | | | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | BENZO(K)FLUORANTHENE | 1.9 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | CHRYSENE | 5.5 | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | COPPER | 21200. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | DIBENZO(A,H)ANTHRACENE | 0.47 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | FLUORANTHENE | 5.6 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | FLUORENE | 0.12 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | INDENO(1,2,3-CD)PYRENE | 1.2 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | LEAD | 618. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | M-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | MERCURY | 49.0 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | NAPHTHALENE | ND (0.048) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | NITROBENZENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | PHENANTHRENE | 3.9 | 1 | | | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | PYRENE | 7.1 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | RDX | ND (0.1) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | TETRYL | ND (0.03) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | THALLIUM | 1.42 J | 1 | - | 2 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | 1,2-DINITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | 1,3,5-TRINITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | 1,4-DINITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | 1-METHYL-2-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | 1-METHYL-3-NITROBENZENE | ND (0.05) | 0 | | | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | 1-METHYL-4-NITROBENZENE | ND (0.05) | 0 | | | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | 1-NITRONAPHTHALENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | 2,4,6-TRINITROTOLUENE | ND (0.04) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | 2,4-DINITROTOLUENE | ND (0.05) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | 2,6-DINITROTOLUENE | ND (0.05) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.05) | 0 | | | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | ACENAPHTHENE | ND (0.06) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | ACENAPHTHYLENE | 0.14 J | 1 | | | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | ANTHRACENE | ND (0.06) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | ARSENIC | 24. | 1 | YES | 20 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | BENZO(A)ANTHRACENE | 0.62 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | BENZO(A)PYRENE | 0.6 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | BENZO(B)FLUORANTHENE | 0.89 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | BENZO(G,H,I)PERYLENE | 0.32 J | 1 | | | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | BENZO(K)FLUORANTHENE | 0.29 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | CHRYSENE | 0.9 | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | COPPER | 1570. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.12) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | FLUORANTHENE | 1. | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | FLUORENE | 0.071 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | HMX | ND (0.05) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | INDENO(1,2,3-CD)PYRENE | 0.3 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | LEAD | 685. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | M-DINITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | MERCURY | 165. | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | NAPHTHALENE | ND (0.06) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | NITROBENZENE | ND (0.04) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | NITROGLYCERIN | ND (5.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | PETN | ND (5.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | PHENANTHRENE | 0.58 J | 1 | | | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | PYRENE | 1.3 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | RDX | ND (0.1) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | TETRYL | ND (0.04) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | THALLIUM | ND (.69) | 0 | - | 2 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | ACENAPHTHENE | ND (0.037) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | ACENAPHTHYLENE | 0.11 J | 1 | | | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | ANTHRACENE | ND (0.037) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2621091-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 192-69 | 0 | 0.5 | 11/19/1996 | - | ARSENIC | 25. | 1 | YES | 20 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | BENZO(A)ANTHRACENE | 0.89 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | BENZO(A)PYRENE | 0.88 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | BENZO(B)FLUORANTHENE | 1.3 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | BENZO(G,H,I)PERYLENE | 0.58 | 1 | | | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | BENZO(K)FLUORANTHENE | 0.39 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | CHRYSENE | 1.2 | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | COPPER | 6340. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | DIBENZO(A,H)ANTHRACENE | 0.27 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | FLUORANTHENE | 1.2 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | FLUORENE | ND (0.037) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | INDENO(1,2,3-CD)PYRENE | 0.46 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | LEAD | 1850. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | MERCURY | 2.9 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | NAPHTHALENE | ND (0.037) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | PHENANTHRENE | 0.85 | 1 | | | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | PYRENE | 1.6 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | THALLIUM | 8.2 | 1 | YES | 2 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | ACENAPHTHENE | 0.17 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | ACENAPHTHYLENE | 0.25 J | 1 | | | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | ANTHRACENE | 0.12 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | ARSENIC | 9.7 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | BENZO(A)ANTHRACENE | 0.35 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | BENZO(A)PYRENE | 0.45 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | BENZO(B)FLUORANTHENE | 0.71 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | BENZO(G,H,I)PERYLENE | 0.22 J | 1 | | | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | BENZO(K)FLUORANTHENE | ND (0.24) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | CHRYSENE | 0.53 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | COPPER | 376. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.12) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | FLUORANTHENE | 0.61 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | FLUORENE | 0.085 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | INDENO(1,2,3-CD)PYRENE | 0.19 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | LEAD | 365. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | MERCURY | 25.4 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | NAPHTHALENE | 0.18 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | PHENANTHRENE | 0.38 J | 1 | | | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | PYRENE | 0.92 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-85 | 0 | 0.5 | 11/25/1996 | - | THALLIUM | ND (.68) | 0 | - | 2 | SAM96-52/53 192/194 CONF | 2624675-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | 1,2-DINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | 1,3,5-TRINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | 1,4-DINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | 1-METHYL-2-NITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | 1-METHYL-3-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | 1-METHYL-4-NITROBENZENE | ND (0.05) | 0 | | | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | 1-NITRONAPHTHALENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | 2,4,6-TRINITROTOLUENE | ND (0.02) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | 2,4-DINITROTOLUENE | ND (0.03) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | 2,6-DINITROTOLUENE | ND (0.03) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | ACENAPHTHENE | 0.12 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | ACENAPHTHYLENE | 0.63 | 1 | | | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | ANTHRACENE | 0.38 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | ARSENIC | 4.1 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | BENZO(A)ANTHRACENE | 2.7 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | BENZO(A)PYRENE | 3.5 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | BENZO(B)FLUORANTHENE | 5.5 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | BENZO(G,H,I)PERYLENE | 3.4 | 1 | | | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | BENZO(K)FLUORANTHENE | 1.7 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | CHRYSENE | 3. | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | COPPER | 213. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | DIBENZO(A,H)ANTHRACENE | 0.81 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | FLUORANTHENE | 3.6 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | FLUORENE | 0.13 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | HMX | ND (0.03) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | INDENO(1,2,3-CD)PYRENE | 2.8 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | LEAD | 157. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | M-DINITROBENZENE | ND (0.05) | 0 | | | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | MERCURY | .79 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | NAPHTHALENE | 0.18 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | NITROBENZENE | ND (0.05) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | NITROGLYCERIN | ND (3.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | PETN | ND (3.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2624667-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 192-91 | 0 | 0.5 | 11/25/1996 | - | PHENANTHRENE | 1.6 | 1 | | | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | PYRENE | 5.9 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | RDX | ND (0.08) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | TETRYL | ND (0.1) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | THALLIUM | ND (.44) | 0 | - | 2 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | ACENAPHTHENE | 0.2 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | ACENAPHTHYLENE | 0.36 J | 1 | | | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | ANTHRACENE | 0.19 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | ARSENIC | 14.4 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | BENZO(A)ANTHRACENE | 0.85 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | BENZO(A)PYRENE | 1.1 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | BENZO(B)FLUORANTHENE | 1.8 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | BENZO(G,H,I)PERYLENE | 0.85 | 1 | | | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | BENZO(K)FLUORANTHENE | 0.58 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | CHRYSENE | 1.2 | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | COPPER | 647. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | DIBENZO(A,H)ANTHRACENE | 0.22 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | FLUORANTHENE | 1.3 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | FLUORENE | 0.13 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | INDENO(1,2,3-CD)PYRENE | 0.64 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | LEAD | 649. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | MERCURY | 20.6 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | NAPHTHALENE | 0.21 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | PHENANTHRENE | 0.68 | 1 | | | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | PYRENE | 2.6 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | THALLIUM | 6.9 | 1 | YES | 2 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | 1,2-DINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | 1,3,5-TRINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | 1,4-DINITROBENZENE | ND (0.08) | 0 | | | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | 1-METHYL-2-NITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | 1-NITRONAPHTHALENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | 2,4,6-TRINITROTOLUENE | ND (0.02) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | ACENAPHTHENE | 0.13 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | ACENAPHTHYLENE | 1.1 | 1 | | | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | ANTHRACENE | 0.44 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | ARSENIC | 9.6 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | BENZO(A)ANTHRACENE | 2.7 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | BENZO(A)PYRENE | 3.9 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | BENZO(B)FLUORANTHENE | 6.7 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | BENZO(G,H,I)PERYLENE | 3. | 1 | | | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | BENZO(K)FLUORANTHENE | 2. | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | CHRYSENE | 3.1 | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | COPPER | 1320. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | DIBENZO(A,H)ANTHRACENE | 0.8 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | FLUORANTHENE | 3.2 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | FLUORENE | 0.12 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | INDENO(1,2,3-CD)PYRENE | 2.5 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | LEAD | 272. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | M-DINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | MERCURY | 1.12 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | NAPHTHALENE | 0.23 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | NITROBENZENE | ND (0.02) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | PHENANTHRENE | 1.5 | 1 | | | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | PYRENE | 4.9 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | RDX | ND (0.08) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | TETRYL | ND (0.02) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | THALLIUM | ND (.46) | 0 | - | 2 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 1,2,4-TRICHLOROBENZENE | ND (0.04) | 0 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 1,2-DICHLOROBENZENE | ND (0.04) | 0 | - | 50 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 1,2-DIPHENYLHYDRAZINE | ND (0.08) | 0 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 1,3-DICHLOROBENZENE | ND (0.04) | 0 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 1,4-DICHLOROBENZENE | ND (0.04) | 0 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 2,4,6-TRICHLOROPHENOL | ND (0.08) | 0 | - | 10 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 2,4-DICHLOROPHENOL | ND (0.04) | 0 | - | 10 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 2,4-DIMETHYLPHENOL | ND (0.08) | 0 | - | 10 | LAKE INEZ AOC | 2394055-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 2,4-DINITROPHENOL | ND (0.2) | 0 | - | 10 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 2,4-DINITROTOLUENE | ND (0.08) | 0 | - | 4 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 2,6-DINITROTOLUENE | ND (0.08) | 0 | - | 4 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 2-CHLORONAPHTHALENE | ND (0.04) | 0 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 2-CHLOROPHENOL | ND (0.04) | 0 | - | 10 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 2-NITROPHENOL | ND (0.08) | 0 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 3,3'-DICHLOROBENZIDINE | ND (0.16) | 0 | - | 6 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 4,6-DINITRO-2-METHYLPHENOL | ND (0.2) | 0 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 4-BROMOPHENYL PHENYL ETHER | ND (0.12) | 0 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 4-CHLORO-3-METHYLPHENOL | ND (0.08) | 0 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 4-CHLOROPHENYL PHENYL ETHER | ND (0.08) | 0 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 4-HYDROXY-4-METHYL2PENTANONE | 13. AJB | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | 4-NITROPHENOL | ND (0.2) | 0 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | ACENAPHTHENE | ND (0.04) | 0 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | ACENAPHTHYLENE | ND (0.04) | 0 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | ANTHRACENE | 0.085 J | 1 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | ANTIMONY | ND (1.1) | 0 | - | 340 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | ARSENIC | 5.5 J | 1 | - | 20 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | BENZIDINE | ND (1.) | 0 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | BENZO(A)ANTHRACENE | 0.68 | 1 | - | 4 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | BENZO(A)PYRENE | 0.65 | 1 | - | 0.66 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | BENZO(B)FLUORANTHENE | 1.3 | 1 | - | 4 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | BENZO(G,H,I)PERYLENE | 0.44 | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | BENZO(K)FLUORANTHENE | ND (0.16) | 0 | - | 4 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | BERYLLIUM | .34 J | 1 | - | 2 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | BIS(2-CHLOROETHOXY)METHANE | ND (0.04) | 0 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | BIS(2-CHLOROETHYL) ETHER | ND (0.08) | 0 | - | 3 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | BIS(2-CHLOROISOPROPYL)ETHER | ND (0.08) | 0 | - | 10 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | BIS(2-ETHYLHEXYL)PHTHALATE | 0.26 J | 1 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | BUTYL BENZYL PHTHALATE | ND (0.08) | 0 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | CADMIUM | ND (.42) | 0 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | CHROMIUM | 7.7 | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | CHRYSENE | 0.72 | 1 | - | 40 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | COPPER | 148. | 1 | - | 600 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | CYANIDE, TOTAL | .2 | 1 | - | 21000 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | DIBENZO(A,H)ANTHRACENE | 0.13 J | 1 | - | 0.66 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | DIETHYL PHTHALATE | ND (0.08) | 0 | - | 50 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | DIMETHYL PHTHALATE | ND (0.04) | 0 | - | 50 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | DI-N-BUTYL PHTHALATE | ND (0.04) | 0 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | DI-N-OCTYL PHTHALATE | ND (0.08) | 0 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | FLUORANTHENE | 1.3 | 1 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | FLUORENE | ND (0.04) | 0 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | HEXACHLOROBENZENE | ND (0.12) | 0 | - | 2 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | HEXACHLOROBUTADIENE | ND (0.08) | 0 | - | 21 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | HEXACHLOROCYCLOPENTADIENE | ND (0.2) | 0 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | HEXACHLOROETHANE | ND (0.08) | 0 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | INDENO(1,2,3-CD)PYRENE | 0.47 | 1 | - | 4 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | ISOPHORONE | ND (0.08) | 0 | - | 50 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | LEAD | 130. | 1 | - | 600 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | MERCURY | 9.3 | 1 | - | 270 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | NAPHTHALENE | ND (0.04) | 0 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | NICKEL | 3.41 J | 1 | - | 2400 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | NITROBENZENE | ND (0.04) | 0 | - | 10 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | N-NITROSODIMETHYLAMINE | ND (0.08) | 0 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | N-NITROSODI-N-PROPYLAMINE | ND (0.08) | 0 | - | 0.66 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | N-NITROSODIPHENYLAMINE | ND (0.08) | 0 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | PENTACHLOROPHENOL | ND (0.2) | 0 | - | 24 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | PHENANTHRENE | 0.63 | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | PHENOL | ND (0.04) | 0 | - | 50 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | PYRENE | 1.6 | 1 | - | 100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | SELENIUM | ND (5.0) | 0 | - | 3100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | SILVER | ND (.68) | 0 | - | 4100 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | THALLIUM | ND (.14) | 0 | - | 2 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 0.5 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 0.61 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 0.82 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 1.2 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 0.46 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 16. J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 0.61 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 15. J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 1. J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 1.6 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 0.87 J | 1 | | | LAKE INEZ AOC | 2394055-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 0.99 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 0.64 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 0.42 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 0.7 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 1.5 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 0.54 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 1.1 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 2.5 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 0.92 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 1.9 J | 1 | | | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | - | ZINC | 21. | 1 | - | 1500 | LAKE INEZ AOC | 2394055-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 1,2,4-TRICHLOROBENZENE | ND (0.041) | 0 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 1,2-DICHLOROBENZENE | ND (0.041) | 0 | - | 50 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 1,2-DIPHENYLHYDRAZINE | ND (0.083) | 0 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 1,3-DICHLOROBENZENE | ND (0.041) | 0 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 1,4-DICHLOROBENZENE | ND (0.041) | 0 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 2,4,6-TRICHLOROPHENOL | ND (0.083) | 0 | - | 10 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 2,4-DICHLOROPHENOL | ND (0.041) | 0 | - | 10 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 2,4-DIMETHYLPHENOL | ND (0.083) | 0 | - | 10 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 2,4-DINITROPHENOL | ND (0.21) | 0 | - | 10 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 2,4-DINITROTOLUENE | ND (0.083) | 0 | - | 4 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 2,6-DINITROTOLUENE | ND (0.083) | 0 | - | 4 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 2-CHLORONAPHTHALENE | ND (0.041) | 0 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 2-CHLOROPHENOL | ND (0.041) | 0 | - | 10 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 2-NITROPHENOL | ND (0.083) | 0 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 3,3'-DICHLOROBENZIDINE | ND (0.17) | 0 | - | 6 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 4,6-DINITRO-2-METHYLPHENOL | ND (0.21) | 0 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 4-BROMOPHENYL PHENYL ETHER | ND (0.12) | 0 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 4-CHLORO-3-METHYLPHENOL | ND (0.083) | 0 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 4-CHLOROPHENYL PHENYL ETHER | ND (0.083) | 0 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 4-HYDROXY-4-METHYL2PENTANONE | 7.3 AJB | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | 4-NITROPHENOL | ND (0.21) | 0 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | ACENAPHTHENE | ND (0.041) | 0 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | ACENAPHTHYLENE | ND (0.041) | 0 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | ANTHRACENE | 0.1 J | 1 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | ANTIMONY | ND (1.2) | 0 | - | 340 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | ARSENIC | 6.6 J | 1 | - | 20 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | BENZIDINE | ND (1.) | 0 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | BENZO(A)ANTHRACENE | 0.41 J | 1 | - | 4 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | BENZO(A)PYRENE | 0.37 J | 1 | - | 0.66 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | BENZO(B)FLUORANTHENE | 0.67 | 1 | - | 4 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | BENZO(G,H,I)PERYLENE | 0.25 J | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | BENZO(K)FLUORANTHENE | ND (0.17) | 0 | - | 4 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | BERYLLIUM | 3.24 | 1 | YES | 2 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | BIS(2-CHLOROETHOXY)METHANE | ND (0.041) | 0 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | BIS(2-CHLOROETHYL) ETHER | ND (0.083) | 0 | - | 3 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | BIS(2-CHLOROISOPROPYL)ETHER | ND (0.083) | 0 | - | 10 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | BIS(2-ETHYLHEXYL)PHTHALATE | ND (0.083) | 0 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | BUTYL BENZYL PHTHALATE | ND (0.083) | 0 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | CADMIUM | ND (.43) | 0 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | CHROMIUM | 6.7 | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | CHRYSENE | 0.41 J | 1 | - | 40 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | COPPER | 190. | 1 | - | 600 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | CYANIDE, TOTAL | .3 | 1 | - | 21000 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | DIBENZO(A,H)ANTHRACENE | ND (0.083) | 0 | - | 0.66 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | DIETHYL PHTHALATE | ND (0.083) | 0 | - | 50 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | DIMETHYL PHTHALATE | ND (0.041) | 0 | - | 50 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | DI-N-BUTYL PHTHALATE | ND (0.041) | 0 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | DI-N-OCTYL PHTHALATE | ND (0.083) | 0 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | FLUORANTHENE | 1. | 1 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | FLUORENE | 0.053 J | 1 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | HEXACHLOROBENZENE | ND (0.12) | 0 | - | 2 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | HEXACHLOROBUTADIENE | ND (0.083) | 0 | - | 21 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | HEXACHLOROCYCLOPENTADIENE | ND (0.21) | 0 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | HEXACHLOROETHANE | ND (0.083) | 0 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | INDENO(1,2,3-CD)PYRENE | 0.26 J | 1 | - | 4 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | ISOPHORONE | ND (0.083) | 0 | - | 50 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | LEAD | 154. | 1 | - | 600 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | MERCURY | 9.8 | 1 | - | 270 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | NAPHTHALENE | ND (0.041) | 0 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | NICKEL | 4.07 J | 1 | - | 2400 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | NITROBENZENE | ND (0.041) | 0 | - | 10 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | N-NITROSODIMETHYLAMINE | ND (0.083) | 0 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | N-NITROSODI-N-PROPYLAMINE | ND (0.083) | 0 | - | 0.66 | LAKE INEZ AOC | 2394065-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | N-NITROSODIPHENYLAMINE | ND (0.083) | 0 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | PENTACHLOROPHENOL | ND (0.21) | 0 | - | 24 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | PHENANTHRENE | 0.64 | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | PHENOL | ND (0.041) | 0 | - | 50 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | PYRENE | 0.8 | 1 | - | 100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | SELENIUM | ND (5.2) | 0 | - | 3100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | SILVER | ND (.70) | 0 | - | 4100 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | THALLIUM | ND (.15) | 0 | - | 2 | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | UNKNOWN | 0.24 J | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | UNKNOWN | 0.51 J | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | UNKNOWN | 0.22 J | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | UNKNOWN | 4. J | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | UNKNOWN | 3.9 J | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | UNKNOWN | 0.8 J | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | UNKNOWN | 0.87 J | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | UNKNOWN | 0.19 J | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | UNKNOWN | 0.22 J | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | UNKNOWN ALKANE | 0.8 J | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | UNKNOWN ALKANE | 0.49 J | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | UNKNOWN ALKANE | 0.95 J | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | UNKNOWN ALKANE | 0.23 J | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | UNKNOWN ALKANE | 0.26 J | 1 | | | LAKE INEZ AOC | 2394065-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | ZINC | 23. | 1 | - | 1500 | LAKE INEZ AOC | 2394065-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 1,2,4-TRICHLOROBENZENE | ND (0.051) | 0 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 1,2-DICHLOROBENZENE | ND (0.051) | 0 | - | 50 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 1,2-DIPHENYLHYDRAZINE | ND (0.1) | 0 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 1,3-DICHLOROBENZENE | ND (0.051) | 0 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 1,4-DICHLOROBENZENE | ND (0.051) | 0 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 2,4,6-TRICHLOROPHENOL | ND (0.1) | 0 | - | 10 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 2,4-DICHLOROPHENOL | ND (0.051) | 0 | - | 10 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 2,4-DIMETHYLPHENOL | ND (0.1) | 0 | - | 10 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 2,4-DINITROPHENOL | ND (0.25) | 0 | - | 10 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 2,4-DINITROTOLUENE | ND (0.1) | 0 | - | 4 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 2,6-DINITROTOLUENE | ND (0.1) | 0 | - | 4 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 2-CHLORONAPHTHALENE | ND (0.051) | 0 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 2-CHLOROPHENOL | ND (0.051) | 0 | - | 10 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 2-NITROPHENOL | ND (0.1) | 0 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 3,3'-DICHLOROBENZIDINE | ND (0.2) | 0 | - | 6 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 4,6-DINITRO-2-METHYLPHENOL | ND (0.25) | 0 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 4-BROMOPHENYL PHENYL ETHER | ND (0.15) | 0 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 4-CHLORO-3-METHYLPHENOL | ND (0.1) | 0 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 4-CHLOROPHENYL PHENYL ETHER | ND (0.1) | 0 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 4-HYDROXY-4-METHYL2PENTANONE | 15. AJB | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | 4-NITROPHENOL | ND (0.25) | 0 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | ACENAPHTHENE | ND (0.051) | 0 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | ACENAPHTHYLENE | ND (0.051) | 0 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | ANTHRACENE | 0.094 J | 1 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | ANTIMONY | ND (1.4) | 0 | - | 340 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | ARSENIC | 17. | 1 | - | 20 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | BENZIDINE | ND (1.3) | 0 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | BENZO(A)ANTHRACENE | 0.69 | 1 | - | 4 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | BENZO(A)PYRENE | 0.76 | 1 | YES | 0.66 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | BENZO(B)FLUORANTHENE | 1.4 | 1 | - | 4 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | BENZO(G,H,I)PERYLENE | 0.63 | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | BENZO(K)FLUORANTHENE | ND (0.2) | 0 | - | 4 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | BERYLLIUM | .61 J | 1 | - | 2 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | BIS(2-CHLOROETHOXY)METHANE | ND (0.051) | 0 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | BIS(2-CHLOROETHYL) ETHER | ND (0.1) | 0 | - | 3 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | BIS(2-CHLOROISOPROPYL)ETHER | ND (0.1) | 0 | - | 10 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | BIS(2-ETHYLHEXYL)PHTHALATE | ND (0.1) | 0 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | BUTYL BENZYL PHTHALATE | ND (0.1) | 0 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | CADMIUM | ND (.53) | 0 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | CHROMIUM | 25.2 | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | CHRYSENE | 0.78 | 1 | - | 40 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | COPPER | 219. | 1 | - | 600 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | CYANIDE, TOTAL | .7 | 1 | - | 21000 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | DIBENZO(A,H)ANTHRACENE | 0.25 J | 1 | - | 0.66 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | DIETHYL PHTHALATE | ND (0.1) | 0 | - | 50 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | DIMETHYL PHTHALATE | ND (0.051) | 0 | - | 50 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | DI-N-BUTYL PHTHALATE | ND (0.051) | 0 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | DI-N-OCTYL PHTHALATE | ND (0.1) | 0 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | FLUORANTHENE | 1.2 | 1 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | FLUORENE | ND (0.051) | 0 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | HEXACHLOROBENZENE | ND (0.15) | 0 | - | 2 | LAKE INEZ AOC | 2394056-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 193-2 | 0 | 0.5 | 10/2/1995 | - | HEXACHLOROBUTADIENE | ND (0.1) | 0 | - | 21 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | HEXACHLOROCYCLOPENTADIENE | ND (0.25) | 0 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | HEXACHLOROETHANE | ND (0.1) | 0 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | INDENO(1,2,3-CD)PYRENE | 0.56 | 1 | - | 4 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | ISOPHORONE | ND (0.1) | 0 | - | 50 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | LEAD | 249. | 1 | - | 600 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | MERCURY | 178. | 1 | - | 270 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | NAPHTHALENE | ND (0.051) | 0 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | NICKEL | 7.7 | 1 | - | 2400 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | NITROBENZENE | ND (0.051) | 0 | - | 10 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | N-NITROSODIMETHYLAMINE | ND (0.1) | 0 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | N-NITROSODI-N-PROPYLAMINE | ND (0.1) | 0 | - | 0.66 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | N-NITROSODIPHENYLAMINE | ND (0.1) | 0 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | PENTACHLOROPHENOL | ND (0.25) | 0 | - | 24 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | PHENANTHRENE | 0.55 | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | PHENOL | ND (0.051) | 0 | - | 50 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | PYRENE | 1.8 | 1 | - | 100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | SELENIUM | ND (6.3) | 0 | - | 3100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | SILVER | ND (.86) | 0 | - | 4100 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | THALLIUM | ND (.18) | 0 | - | 2 | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 0.74 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 3.8 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 1.1 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 0.99 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 4.9 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 0.67 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 0.87 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN | 1. J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 1.2 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 1.3 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 1.3 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 2.9 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 2. J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 1.8 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 1.7 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 0.87 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 1.4 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 0.99 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 1.3 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 1.5 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | UNKNOWN ALKANE | 2.1 J | 1 | | | LAKE INEZ AOC | 2394056-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | ZINC | 87. | 1 | - | 1500 | LAKE INEZ AOC | 2394056-1 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | 1,2,4-TRICHLOROBENZENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | 1,2,4-TRICHLOROBENZENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | 1,2-DICHLOROBENZENE | ND (0.033) | 0 | - | 50 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | 1,2-DICHLOROBENZENE | <0.33 | 0 | - | 50 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | 1,2-DIPHENYLHYDRAZINE | ND (0.067) | 0 | | | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | 1,2-DIPHENYLHYDRAZINE | <0.33 | 0 | | | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | 1,3-DICHLOROBENZENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | 1,3-DICHLOROBENZENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | 1,4-DICHLOROBENZENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | 1,4-DICHLOROBENZENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | 2,4-DINITROTOLUENE | ND (0.067) | 0 | - | 4 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | 2,4-DINITROTOLUENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | 2,6-DINITROTOLUENE | ND (0.067) | 0 | - | 4 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | 2,6-DINITROTOLUENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | 2-CHLORONAPHTHALENE | ND (0.033) | 0 | | | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | 2-CHLORONAPHTHALENE | <0.33 | 0 | | | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | 3,3'-DICHLOROBENZIDINE | ND (0.13) | 0 | - | 6 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | 3,3'-DICHLOROBENZIDINE | <0.67 | 0 | - | 6 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | 4-BROMOPHENYL PHENYL ETHER | ND (0.1) | 0 | | | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | 4-BROMOPHENYL PHENYL ETHER | <0.33 | 0 | | | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | 4-CHLOROPHENYL PHENYL ETHER | ND (0.067) | 0 | | | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | 4-CHLOROPHENYL PHENYL ETHER | <0.33 | 0 | | | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | ACENAPHTHENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | ACENAPHTHENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | ACENAPHTHYLENE | ND (0.033) | 0 | | | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | ACENAPHTHYLENE | <0.33 | 0 | | | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | ANTHRACENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | ANTHRACENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | ANTIMONY | <0.248 | 0 | - | 340 | AOC 192, 193, 194 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | ANTIMONY | 0.248 | 1 | - | 340 | SAM96-41 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | ARSENIC | 4.96 J | 1 | - | 20 | AOC 192, 193, 194 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | ARSENIC | 4.96 | 1 | - | 20 | SAM96-41 | P602079-29 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 193-3 | 2 | 2.5 | 2/21/1996 | - | BENZIDINE | ND (0.83) | 0 | | | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | BENZIDINE | <1.7 | 0 | | | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | BENZO(A)ANTHRACENE | ND (0.033) | 0 | - | 4 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | BENZO(A)ANTHRACENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | BENZO(A)PYRENE | ND (0.067) | 0 | - | 0.66 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | BENZO(A)PYRENE | <0.33 | 0 | - | 0.66 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | BENZO(B)FLUORANTHENE | ND (0.067) | 0 | - | 4 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | BENZO(B)FLUORANTHENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | BENZO(G,H,I)PERYLENE | ND (0.067) | 0 | | | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | BENZO(G,H,I)PERYLENE | <0.33 | 0 | | | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | BENZO(K)FLUORANTHENE | ND (0.13) | 0 | - | 4 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | BENZO(K)FLUORANTHENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | BERYLLIUM | .661 | 1 | - | 2 | AOC 192, 193, 194 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | BERYLLIUM | .661 | 1 | - | 2 | SAM96-41 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | BIS(2-CHLOROETHOXY)METHANE | ND (0.033) | 0 | | | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | BIS(2-CHLOROETHOXY)METHANE | <0.33 | 0 | | | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | BIS(2-CHLOROETHYL) ETHER | ND (0.067) | 0 | - | 3 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | BIS(2-CHLOROETHYL) ETHER | <0.33 | 0 | - | 3 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | BIS(2-CHLOROISOPROPYL)ETHER | ND (0.067) | 0 | - | 10 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | BIS(2-CHLOROISOPROPYL)ETHER | <0.33 | 0 | - | 10 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | BIS(2-ETHYLHEXYL)PHTHALATE | 0.13 J | 1 | - | 100 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | BIS(2-ETHYLHEXYL)PHTHALATE | 0.13 | 1 | - | 100 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | BUTYL BENZYL PHTHALATE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | BUTYL BENZYL PHTHALATE | <0.33 | 0 | - | 100 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | CADMIUM | .214 J | 1 | - | 100 | AOC 192, 193, 194 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | CADMIUM | .214 | 1 | - | 100 | SAM96-41 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | CHROMIUM | 18.6 | 1 | | | AOC 192, 193, 194 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | CHROMIUM | 18.6 | 1 | | | SAM96-41 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | CHRYSENE | ND (0.033) | 0 | - | 40 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | CHRYSENE | <0.33 | 0 | - | 40 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | COPPER | 86 | 1 | - | 600 | AOC 192, 193, 194 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | COPPER | 86 | 1 | - | 600 | SAM96-41 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | CYANIDE, TOTAL | .11 J | 1 | - | 21000 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | CYANIDE, TOTAL | .11 | 1 | - | 21000 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.067) | 0 | - | 0.66 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | DIBENZO(A,H)ANTHRACENE | <0.33 | 0 | - | 0.66 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | DIETHYL PHTHALATE | ND (0.067) | 0 | - | 50 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | DIETHYL PHTHALATE | <0.33 | 0 | - | 50 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | DIMETHYL PHTHALATE | ND (0.033) | 0 | - | 50 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | DIMETHYL PHTHALATE | <0.33 | 0 | - | 50 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | DI-N-BUTYL PHTHALATE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | DI-N-BUTYL PHTHALATE | <0.33 | 0 | - | 100 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | DI-N-OCTYL PHTHALATE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | DI-N-OCTYL PHTHALATE | <0.33 | 0 | - | 100 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | FLUORANTHENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | FLUORANTHENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | FLUORENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | FLUORENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | HEXACHLOROBENZENE | ND (0.1) | 0 | - | 2 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | HEXACHLOROBENZENE | <0.33 | 0 | - | 2 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | HEXACHLOROBUTADIENE | ND (0.067) | 0 | - | 21 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | HEXACHLOROBUTADIENE | <0.33 | 0 | - | 21 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | HEXACHLOROCYCLOPENTADIENE | ND (0.17) | 0 | - | 100 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | HEXACHLOROCYCLOPENTADIENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | HEXACHLOROETHANE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | HEXACHLOROETHANE | <0.33 | 0 | - | 100 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | INDENO(1,2,3-CD)PYRENE | ND (0.067) | 0 | - | 4 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | INDENO(1,2,3-CD)PYRENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | ISOPHORONE | ND (0.067) | 0 | - | 50 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | ISOPHORONE | <0.33 | 0 | - | 50 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | LEAD | 7.8 | 1 | - | 600 | AOC 192, 193, 194 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | LEAD | 7.8 | 1 | - | 600 | SAM96-41 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | MERCURY | 0.272 | 1 | - | 270 | AOC 192, 193, 194 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | MERCURY | 0.272 | 1 | - | 270 | SAM96-41 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | NAPHTHALENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | NAPHTHALENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | NICKEL | 11.9 | 1 | - | 2400 | AOC 192, 193, 194 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | NICKEL | 11.9 | 1 | - | 2400 | SAM96-41 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | NITROBENZENE | ND (0.033) | 0 | - | 10 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | NITROBENZENE | <0.33 | 0 | - | 10 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | N-NITROSODIMETHYLAMINE | ND (0.067) | 0 | | | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | N-NITROSODIMETHYLAMINE | <0.33 | 0 | | | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | N-NITROSODI-N-PROPYLAMINE | ND (0.067) | 0 | - | 0.66 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | N-NITROSODI-N-PROPYLAMINE | <0.33 | 0 | - | 0.66 | SAM96-41 | 2466687-01 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 193-3 | 2 | 2.5 | 2/21/1996 | - | N-NITROSODIPHENYLAMINE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | N-NITROSODIPHENYLAMINE | <0.33 | 0 | - | 100 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | PHENANTHRENE | ND (0.033) | 0 | | | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | PHENANTHRENE | <0.33 | 0 | | | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | PYRENE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466687-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | PYRENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466687-01 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | SELENIUM | 6.42 J | 1 | - | 3100 | AOC 192, 193, 194 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | SELENIUM | 6.42 | 1 | - | 3100 | SAM96-41 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | SILVER | ND (.51) | 0 | - | 4100 | AOC 192, 193, 194 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | SILVER | <2 | 0 | - | 4100 | SAM96-41 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | THALLIUM | ND (3) | 0 | - | 2 | AOC 192, 193, 194 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | THALLIUM | <20 | 0 | hi DL | 2 | SAM96-41 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/21/1996 | - | ZINC | 235 | 1 | - | 1500 | AOC 192, 193, 194 | P602079-29 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | ZINC | 23 | 1 | - | 1500 | SAM96-41 | P602079-29 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | 1,2,4-TRICHLOROBENZENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | 1,2,4-TRICHLOROBENZENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | 1,2-DICHLOROBENZENE | ND (0.033) | 0 | - | 50 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | 1,2-DICHLOROBENZENE | <0.33 | 0 | - | 50 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | 1,2-DIPHENYLHYDRAZINE | ND (0.067) | 0 | | | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | 1,2-DIPHENYLHYDRAZINE | <0.33 | 0 | | | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | 1,3-DICHLOROBENZENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | 1,3-DICHLOROBENZENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | 1,4-DICHLOROBENZENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | 1,4-DICHLOROBENZENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | 2,4-DINITROTOLUENE | ND (0.067) | 0 | - | 4 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | 2,4-DINITROTOLUENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | 2,6-DINITROTOLUENE | ND (0.067) | 0 | - | 4 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | 2,6-DINITROTOLUENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | 2-CHLORONAPHTHALENE | ND (0.033) | 0 | | | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | 2-CHLORONAPHTHALENE | <0.33 | 0 | | | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | 3,3'-DICHLOROBENZIDINE | ND (0.13) | 0 | - | 6 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | 3,3'-DICHLOROBENZIDINE | <0.67 | 0 | - | 6 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | 4-BROMOPHENYL PHENYL ETHER | ND (0.1) | 0 | | | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | 4-BROMOPHENYL PHENYL ETHER | <0.33 | 0 | | | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | 4-CHLOROPHENYL PHENYL ETHER | ND (0.067) | 0 | | | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | 4-CHLOROPHENYL PHENYL ETHER | <0.33 | 0 | | | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | ACENAPHTHENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | ACENAPHTHENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | ACENAPHTHYLENE | ND (0.033) | 0 | | | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | ACENAPHTHYLENE | <0.33 | 0 | | | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | ANTHRACENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | ANTHRACENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | ANTIMONY | <0.184 | 0 | - | 340 | AOC 192, 193, 194 | P602079-30 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | ANTIMONY | 0.184 | 1 | - | 340 | SAM96-41 | P602079-030 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | ARSENIC | 9.8 J | 1 | - | 20 | AOC 192, 193, 194 | P602079-30 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | ARSENIC | 9.8 | 1 | - | 20 | SAM96-41 | P602079-030 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | BENZIDINE | ND (0.83) | 0 | | | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | BENZIDINE | <1.7 | 0 | | | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | BENZO(A)ANTHRACENE | ND (0.033) | 0 | - | 4 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | BENZO(A)ANTHRACENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | BENZO(A)PYRENE | ND (0.067) | 0 | - | 0.66 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | BENZO(A)PYRENE | <0.33 | 0 | - | 0.66 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | BENZO(B)FLUORANTHENE | ND (0.067) | 0 | - | 4 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | BENZO(B)FLUORANTHENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | BENZO(G,H,I)PERYLENE | ND (0.067) | 0 | | | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | BENZO(G,H,I)PERYLENE | <0.33 | 0 | | | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | BENZO(K)FLUORANTHENE | ND (0.13) | 0 | - | 4 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | BENZO(K)FLUORANTHENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | BERYLLIUM | .576 | 1 | - | 2 | AOC 192, 193, 194 | P602079-30 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | BERYLLIUM | .576 | 1 | - | 2 | SAM96-41 | P602079-030 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | BIS(2-CHLOROETHOXY)METHANE | ND (0.033) | 0 | | | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | BIS(2-CHLOROETHOXY)METHANE | <0.33 | 0 | | | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | BIS(2-CHLOROETHYL) ETHER | ND (0.067) | 0 | - | 3 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | BIS(2-CHLOROETHYL) ETHER | <0.33 | 0 | - | 3 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | BIS(2-CHLOROISOPROPYL)ETHER | ND (0.067) | 0 | - | 10 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | BIS(2-CHLOROISOPROPYL)ETHER | <0.33 | 0 | - | 10 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | BIS(2-ETHYLHEXYL)PHTHALATE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | BIS(2-ETHYLHEXYL)PHTHALATE | <0.33 | 0 | - | 100 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | BUTYL BENZYL PHTHALATE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | BUTYL BENZYL PHTHALATE | <0.33 | 0 | - | 100 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | CADMIUM | .239 J | 1 | - | 100 | AOC 192, 193, 194 | P602079-30 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | CADMIUM | .239 | 1 | - | 100 | SAM96-41 | P602079-030 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | CHROMIUM | 23 | 1 | | | AOC 192, 193, 194 | P602079-30 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | CHROMIUM | 23 | 1 | | | SAM96-41 | P602079-030 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 193-4 | 2 | 2.5 | 2/21/1996 | - | CHRYSENE | ND (0.033) | 0 | - | 40 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | CHRYSENE | <0.33 | 0 | - | 40 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | COPPER | 89.6 | 1 | - | 600 | AOC 192, 193, 194 | P602079-30 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | COPPER | 89.6 | 1 | - | 600 | SAM96-41 | P602079-030 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | CYANIDE, TOTAL | ND (.10) | 0 | - | 21000 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | CYANIDE, TOTAL | <0.1 | 0 | - | 21000 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.067) | 0 | - | 0.66 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | DIBENZO(A,H)ANTHRACENE | <0.33 | 0 | - | 0.66 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | DIETHYL PHTHALATE | ND (0.067) | 0 | - | 50 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | DIETHYL PHTHALATE | <0.33 | 0 | - | 50 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | DIMETHYL PHTHALATE | ND (0.033) | 0 | - | 50 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | DIMETHYL PHTHALATE | <0.33 | 0 | - | 50 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | DI-N-BUTYL PHTHALATE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | DI-N-BUTYL PHTHALATE | <0.33 | 0 | - | 100 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | DI-N-OCTYL PHTHALATE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | DI-N-OCTYL PHTHALATE | <0.33 | 0 | - | 100 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | FLUORANTHENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | FLUORANTHENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | FLUORENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | FLUORENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | HEXACHLOROBENZENE | ND (0.1) | 0 | - | 2 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | HEXACHLOROBENZENE | <0.33 | 0 | - | 2 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | HEXACHLOROBUTADIENE | ND (0.067) | 0 | - | 21 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | HEXACHLOROBUTADIENE | <0.33 | 0 | - | 21 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | HEXACHLOROCYCLOPENTADIENE | ND (0.17) | 0 | - | 100 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | HEXACHLOROCYCLOPENTADIENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | HEXACHLOROETHANE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | HEXACHLOROETHANE | <0.33 | 0 | - | 100 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | INDENO(1,2,3-CD)PYRENE | ND (0.067) | 0 | - | 4 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | INDENO(1,2,3-CD)PYRENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | ISOPHORONE | ND (0.067) | 0 | - | 50 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | ISOPHORONE | <0.33 | 0 | - | 50 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | LEAD | 8.29 | 1 | - | 600 | AOC 192, 193, 194 | P602079-30 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | LEAD | 8.29 | 1 | - | 600 | SAM96-41 | P602079-030 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | MERCURY | <0.0300 | 0 | - | 270 | AOC 192, 193, 194 | P602079-30 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | MERCURY | 0.0300 | 1 | - | 270 | SAM96-41 | P602079-030 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | NAPHTHALENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | NAPHTHALENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | NICKEL | 13.2 | 1 | - | 2400 | AOC 192, 193, 194 | P602079-30 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | NICKEL | 13.2 | 1 | - | 2400 | SAM96-41 | P602079-030 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | NITROBENZENE | ND (0.033) | 0 | - | 10 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | NITROBENZENE | <0.33 | 0 | - | 10 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | N-NITROSODIMETHYLAMINE | ND (0.067) | 0 | | | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | N-NITROSODIMETHYLAMINE | <0.33 | 0 | | | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | N-NITROSODI-N-PROPYLAMINE | ND (0.067) | 0 | - | 0.66 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | N-NITROSODI-N-PROPYLAMINE | <0.33 | 0 | - | 0.66 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | N-NITROSODIPHENYLAMINE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | N-NITROSODIPHENYLAMINE | <0.33 | 0 | - | 100 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | PHENANTHRENE | ND (0.033) | 0 | | | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | PHENANTHRENE | <0.33 | 0 | | | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | PYRENE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466688-1 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | PYRENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466688-01 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | SELENIUM | ND (5.35) | 0 | - | 3100 | AOC 192, 193, 194 | P602079-30 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | SELENIUM | <24.3 | 0 | - | 3100 | SAM96-41 | P602079-030 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | SILVER | ND (1.24) | 0 | - | 4100 | AOC 192, 193, 194 | P602079-30 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | SILVER | <4.86 | 0 | - | 4100 | SAM96-41 | P602079-030 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | THALLIUM | ND (7.29) | 0 | hi DL | 2 | AOC 192, 193, 194 | P602079-30 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | THALLIUM | <20 | 0 | hi DL | 2 | SAM96-41 | P602079-030 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | THALLIUM | <20 | 0 | hi DL | 2 | SAM96-41 | P602079-030 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | ZINC | 79.2 | 1 | - | 1500 | AOC 192, 193, 194 | P602079-30 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | ZINC | 79.2 | 1 | - | 1500 | SAM96-41 | P602079-030 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | 1,2,4-TRICHLOROBENZENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | 1,2,4-TRICHLOROBENZENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | 1,2-DICHLOROBENZENE | ND (0.033) | 0 | - | 50 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | 1,2-DICHLOROBENZENE | <0.33 | 0 | - | 50 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | 1,2-DIPHENYLHYDRAZINE | ND (0.067) | 0 | | | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | 1,2-DIPHENYLHYDRAZINE | <0.33 | 0 | | | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | 1,3-DICHLOROBENZENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | 1,3-DICHLOROBENZENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | 1,4-DICHLOROBENZENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | 1,4-DICHLOROBENZENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | 2,4-DINITROTOLUENE | ND (0.067) | 0 | - | 4 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | 2,4-DINITROTOLUENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | 2,6-DINITROTOLUENE | ND (0.067) | 0 | - | 4 | AOC 192, 193, 194 | 2466689-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 193-5 | 2 | 2.5 | 2/20/1996 | - | 2,6-DINITROTOLUENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | 2-CHLORONAPHTHALENE | ND (0.033) | 0 | | | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | 2-CHLORONAPHTHALENE | <0.33 | 0 | | | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | 3,3'-DICHLOROBENZIDINE | ND (0.13) | 0 | - | 6 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | 3,3'-DICHLOROBENZIDINE | <0.67 | 0 | - | 6 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | 4-BROMOPHENYL PHENYL ETHER | ND (0.1) | 0 | | | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | 4-BROMOPHENYL PHENYL ETHER | <0.33 | 0 | | | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | 4-CHLOROPHENYL PHENYL ETHER | ND (0.067) | 0 | | | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | 4-CHLOROPHENYL PHENYL ETHER | <0.33 | 0 | | | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | ACENAPHTHENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | ACENAPHTHENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | ACENAPHTHYLENE | ND (0.033) | 0 | | | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | ACENAPHTHYLENE | <0.33 | 0 | | | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | ANTHRACENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | ANTHRACENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | ANTIMONY | <0.249 | 0 | - | 340 | AOC 192, 193, 194 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | ANTIMONY | 0.249 | 1 | - | 340 | SAM96-41 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | ARSENIC | 5.47 J | 1 | - | 20 | AOC 192, 193, 194 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | ARSENIC | 5.47 | 1 | - | 20 | SAM96-41 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | BENZIDINE | ND (0.83) | 0 | | | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | BENZIDINE | <1.7 | 0 | | | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | BENZO(A)ANTHRACENE | ND (0.033) | 0 | - | 4 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | BENZO(A)ANTHRACENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | BENZO(A)PYRENE | ND (0.067) | 0 | - | 0.66 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | BENZO(A)PYRENE | <0.33 | 0 | - | 0.66 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | BENZO(B)FLUORANTHENE | ND (0.067) | 0 | - | 4 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | BENZO(B)FLUORANTHENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | BENZO(G,H,I)PERYLENE | ND (0.067) | 0 | | | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | BENZO(G,H,I)PERYLENE | <0.33 | 0 | | | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | BENZO(K)FLUORANTHENE | ND (0.13) | 0 | - | 4 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | BENZO(K)FLUORANTHENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | BERYLLIUM | .443 J | 1 | - | 2 | AOC 192, 193, 194 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | BERYLLIUM | .443 | 1 | - | 2 | SAM96-41 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | BIS(2-CHLOROETHOXY)METHANE | ND (0.033) | 0 | | | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | BIS(2-CHLOROETHOXY)METHANE | <0.33 | 0 | | | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | BIS(2-CHLOROETHYL) ETHER | ND (0.067) | 0 | - | 3 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | BIS(2-CHLOROETHYL) ETHER | <0.33 | 0 | - | 3 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | BIS(2-CHLOROISOPROPYL)ETHER | ND (0.067) | 0 | - | 10 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | BIS(2-CHLOROISOPROPYL)ETHER | <0.33 | 0 | - | 10 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | BIS(2-ETHYLHEXYL)PHTHALATE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | BIS(2-ETHYLHEXYL)PHTHALATE | <0.33 | 0 | - | 100 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | BUTYL BENZYL PHTHALATE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | BUTYL BENZYL PHTHALATE | <0.33 | 0 | - | 100 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | CADMIUM | .206 J | 1 | - | 100 | AOC 192, 193, 194 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | CADMIUM | .06 | 1 | - | 100 | SAM96-41 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | CHROMIUM | 19.6 | 1 | | | AOC 192, 193, 194 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | CHROMIUM | 19.6 | 1 | | | SAM96-41 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | CHRYSENE | ND (0.033) | 0 | - | 40 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | CHRYSENE | <0.33 | 0 | - | 40 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | COPPER | 92.6 | 1 | - | 600 | AOC 192, 193, 194 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | COPPER | 92.6 | 1 | - | 600 | SAM96-41 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | CYANIDE, TOTAL | ND (.10) | 0 | - | 21000 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | CYANIDE, TOTAL | <0.1 | 0 | - | 21000 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.067) | 0 | - | 0.66 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | DIBENZO(A,H)ANTHRACENE | <0.33 | 0 | - | 0.66 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | DIETHYL PHTHALATE | ND (0.067) | 0 | - | 50 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | DIETHYL PHTHALATE | <0.33 | 0 | - | 50 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | DIMETHYL PHTHALATE | ND (0.033) | 0 | - | 50 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | DIMETHYL PHTHALATE | <0.33 | 0 | - | 50 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | DI-N-BUTYL PHTHALATE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | DI-N-BUTYL PHTHALATE | <0.33 | 0 | - | 100 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | DI-N-OCTYL PHTHALATE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | DI-N-OCTYL PHTHALATE | <0.33 | 0 | - | 100 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | FLUORANTHENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | FLUORANTHENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466689-31 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | FLUORENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | FLUORENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | HEXACHLOROBENZENE | ND (0.1) | 0 | - | 2 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | HEXACHLOROBENZENE | <0.33 | 0 | - | 2 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | HEXACHLOROBUTADIENE | ND (0.067) | 0 | - | 21 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | HEXACHLOROBUTADIENE | <0.33 | 0 | - | 21 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | HEXACHLOROCYCLOPENTADIENE | ND (0.17) | 0 | - | 100 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | HEXACHLOROCYCLOPENTADIENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | HEXACHLOROETHANE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466689-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 193-5 | 2 | 2.5 | 2/20/1996 | - | HEXACHLOROETHANE | <0.33 | 0 | - | 100 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | INDENO(1,2,3-CD)PYRENE | ND (0.067) | 0 | - | 4 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | INDENO(1,2,3-CD)PYRENE | <0.33 | 0 | - | 4 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | ISOPHORONE | ND (0.067) | 0 | - | 50 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | ISOPHORONE | <0.33 | 0 | - | 50 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | LEAD | 8.1 | 1 | - | 600 | AOC 192, 193, 194 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | LEAD | 8.1 | 1 | - | 600 | SAM96-41 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | MERCURY | 0.0400 J | 1 | - | 270 | AOC 192, 193, 194 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | MERCURY | 0.0400 | 1 | - | 270 | SAM96-41 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | NAPHTHALENE | ND (0.033) | 0 | - | 100 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | NAPHTHALENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | NICKEL | 10.7 | 1 | - | 2400 | AOC 192, 193, 194 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | NICKEL | 10.7 | 1 | - | 2400 | SAM96-41 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | NITROBENZENE | ND (0.033) | 0 | - | 10 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | NITROBENZENE | <0.33 | 0 | - | 10 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | N-NITROSODIMETHYLAMINE | ND (0.067) | 0 | | | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | N-NITROSODIMETHYLAMINE | <0.33 | 0 | | | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | N-NITROSODI-N-PROPYLAMINE | ND (0.067) | 0 | - | 0.66 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | N-NITROSODI-N-PROPYLAMINE | <0.33 | 0 | - | 0.66 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | N-NITROSODIPHENYLAMINE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | N-NITROSODIPHENYLAMINE | <0.33 | 0 | - | 100 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | PHENANTHRENE | ND (0.033) | 0 | | | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | PHENANTHRENE | <0.33 | 0 | | | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | PYRENE | ND (0.067) | 0 | - | 100 | AOC 192, 193, 194 | 2466689-1 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | PYRENE | <0.33 | 0 | - | 100 | SAM96-41 | 2466689-01 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | SELENIUM | 6.03 J | 1 | - | 3100 | AOC 192, 193, 194 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | SELENIUM | 6.03 | 1 | - | 3100 | SAM96-41 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | SILVER | ND (.509) | 0 | - | 4100 | AOC 192, 193, 194 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | SILVER | <2 | 0 | - | 4100 | SAM96-41 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | THALLIUM | ND (3) | 0 | - | 2 | AOC 192, 193, 194 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/21/1996 | - | ZINC | 78.8 | 1 | - | 1500 | AOC 192, 193, 194 | P602079-31 |
| 193-5 | 2 | 2.5 | 2/20/1996 | - | ZINC | 78.8 | 1 | - | 1500 | SAM96-41 | P602079-31 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | ACENAPHTHENE | ND (0.045) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | ACENAPHTHYLENE | ND (0.045) | 0 | | | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | ANTHRACENE | ND (0.045) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | ARSENIC | ND (3.9) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | BENZO(A)ANTHRACENE | ND (0.045) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | BENZO(A)PYRENE | ND (0.089) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | BENZO(B)FLUORANTHENE | ND (0.089) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | BENZO(G,H,I)PERYLENE | ND (0.089) | 0 | | | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | BENZO(K)FLUORANTHENE | ND (0.18) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | CHRYSENE | ND (0.045) | 0 | - | 40 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | COPPER | 55.1 | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | DIBENZO(A,H)ANTHRACENE | ND (0.089) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | FLUORANTHENE | ND (0.045) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | FLUORENE | ND (0.045) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | INDENO(1,2,3-CD)PYRENE | ND (0.089) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | LEAD | 16. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | MERCURY | .066 J | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | NAPHTHALENE | ND (0.045) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | PHENANTHRENE | ND (0.045) | 0 | | | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-105 | 0 | 0.5 | 1/29/1997 | - | PYRENE | ND (0.089) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654017-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | 1,2-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | 1,3,5-TRINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | 1,4-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | 1-METHYL-2-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | 1-NITRONAPHTHALENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | 2,4,6-TRINITROTOLUENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | ACENAPHTHENE | ND (0.043) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | ACENAPHTHYLENE | ND (0.043) | 0 | | | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | ANTHRACENE | ND (0.043) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | ARSENIC | 4.5 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | BENZO(A)ANTHRACENE | 0.052 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | BENZO(A)PYRENE | ND (0.086) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | BENZO(B)FLUORANTHENE | ND (0.086) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | BENZO(G,H,I)PERYLENE | ND (0.086) | 0 | | | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | BENZO(K)FLUORANTHENE | ND (0.17) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | CHRYSENE | 0.056 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2654016-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 194-106 | 0 | 0.5 | 1/29/1997 | - | COPPER | 101. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | DIBENZO(A,H)ANTHRACENE | ND (0.086) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | FLUORANTHENE | 0.058 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | FLUORENE | ND (0.043) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | INDENO(1,2,3-CD)PYRENE | ND (0.086) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | LEAD | 120. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | M-DINITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | MERCURY | .36 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | NAPHTHALENE | ND (0.043) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | NITROBENZENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | PHENANTHRENE | ND (0.043) | 0 | | | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | PYRENE | ND (0.086) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | RDX | ND (0.09) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-106 | 0 | 0.5 | 1/29/1997 | - | TETRYL | ND (0.03) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2654016-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | 1,2-DINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | 1,3,5-TRINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | 1,4-DINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | 1-METHYL-2-NITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | 1-NITRONAPHTHALENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | 2,4,6-TRINITROTOLUENE | ND (0.02) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | ACENAPHTHENE | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | ACENAPHTHYLENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | ANTHRACENE | 0.23 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | ARSENIC | ND (3.5) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | BENZO(A)ANTHRACENE | 0.7 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | BENZO(A)PYRENE | 0.64 | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | BENZO(B)FLUORANTHENE | 0.75 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | BENZO(G,H,I)PERYLENE | 0.24 J | 1 | | | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | BENZO(K)FLUORANTHENE | 0.3 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | CHRYSENE | 0.7 | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | COPPER | 69.5 | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | DIBENZO(A,H)ANTHRACENE | 0.081 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | FLUORANTHENE | 1.2 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | FLUORENE | 0.075 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | INDENO(1,2,3-CD)PYRENE | 0.25 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | LEAD | 88. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | M-DINITROBENZENE | ND (0.02) | 0 | | | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | MERCURY | .89 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | NAPHTHALENE | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | NITROBENZENE | ND (0.02) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | PHENANTHRENE | 0.95 | 1 | | | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | PYRENE | 1.4 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | RDX | ND (0.08) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-110 | 0 | 0.5 | 1/29/1997 | - | TETRYL | ND (0.02) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2654011-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | ACENAPHTHENE | ND (0.039) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | ACENAPHTHYLENE | ND (0.039) | 0 | | | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | ANTHRACENE | 0.15 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | ARSENIC | ND (3.4) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | BENZO(A)ANTHRACENE | 0.67 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | BENZO(A)PYRENE | 0.57 | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | BENZO(B)FLUORANTHENE | 0.74 | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | BENZO(G,H,I)PERYLENE | 0.24 J | 1 | | | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | BENZO(K)FLUORANTHENE | 0.27 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | CHRYSENE | 0.68 | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | COPPER | 92.8 | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | DIBENZO(A,H)ANTHRACENE | 0.078 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | FLUORANTHENE | 0.99 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | FLUORENE | 0.061 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | INDENO(1,2,3-CD)PYRENE | 0.23 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | LEAD | 176. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | MERCURY | .52 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | NAPHTHALENE | 0.043 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2654010-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 194-111 | 0 | 0.5 | 1/29/1997 | - | PHENANTHRENE | 0.62 | 1 | | | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-111 | 0 | 0.5 | 1/29/1997 | - | PYRENE | 1.1 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2654010-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 1,2-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 1,2-DINITROBENZENE | <0.1 | 0 | | | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 1,3,5-TRINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 1,3,5-TRINITROBENZENE | <0.1 | 0 | | | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 1,4-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 1,4-DINITROBENZENE | <0.1 | 0 | | | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 1-METHYL-2-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 1-METHYL-2-NITROBENZENE | <0.1 | 0 | | | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 1-METHYL-3-NITROBENZENE | <0.3 | 0 | | | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 1-METHYL-4-NITROBENZENE | <0.3 | 0 | | | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 1-NITRONAPHTHALENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 1-NITRONAPHTHALENE | <0.1 | 0 | | | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 2,4,6-TRINITROTOLUENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 2,4,6-TRINITROTOLUENE | <0.1 | 0 | - | 10 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 2,4-DINITROTOLUENE | <0.3 | 0 | - | 4 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 2,6-DINITROTOLUENE | <0.3 | 0 | - | 4 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 2-AMINO-4,6-DINITROTOLUENE | <0.1 | 0 | | | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | 4-AMINO-2,6-DINITROTOLUENE | <0.3 | 0 | | | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | ACENAPHTHENE | ND (0.048) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | ACENAPHTHENE | <0.48 | 0 | - | 100 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | ACENAPHTHYLENE | ND (0.048) | 0 | | | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | ACENAPHTHYLENE | <0.48 | 0 | | | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | ANTHRACENE | ND (0.048) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | ANTHRACENE | <0.48 | 0 | - | 100 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | ARSENIC | 6.9 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | ARSENIC | 6.9 | 1 | - | 20 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | BENZO(A)ANTHRACENE | 0.2 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | BENZO(A)ANTHRACENE | 0.2 | 1 | - | 4 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | BENZO(A)PYRENE | 0.19 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | BENZO(A)PYRENE | 0.19 | 1 | - | 0.66 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | BENZO(B)FLUORANTHENE | 0.26 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | BENZO(B)FLUORANTHENE | 0.26 | 1 | - | 4 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | BENZO(G,H,I)PERYLENE | 0.11 J | 1 | | | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | BENZO(G,H,I)PERYLENE | 0.11 | 1 | | | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | BENZO(K)FLUORANTHENE | ND (0.19) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | BENZO(K)FLUORANTHENE | <0.48 | 0 | - | 4 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | CHRYSENE | 0.23 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | CHRYSENE | 0.23 | 1 | - | 40 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | COPPER | 65.8 | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | COPPER | 65.8 | 1 | - | 600 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | DIBENZO(A,H)ANTHRACENE | ND (0.097) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | DIBENZO(A,H)ANTHRACENE | <0.48 | 0 | - | 0.66 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | FLUORANTHENE | 0.37 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | FLUORANTHENE | 0.37 | 1 | - | 100 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | FLUORENE | ND (0.048) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | FLUORENE | <0.48 | 0 | - | 100 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | HMX | <0.3 | 0 | - | 100 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | INDENO(1,2,3-CD)PYRENE | 0.1 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | INDENO(1,2,3-CD)PYRENE | 0.1 | 1 | - | 4 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | LEAD | 180. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | LEAD | 180. | 1 | - | 600 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | M-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | M-DINITROBENZENE | <0.1 | 0 | | | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | MERCURY | 1.34 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | MERCURY | 1.34 | 1 | - | 270 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | NAPHTHALENE | ND (0.048) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | NAPHTHALENE | <0.48 | 0 | - | 100 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | NITROBENZENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | NITROBENZENE | <0.1 | 0 | - | 10 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | NITROGLYCERIN | <22. | 0 | hi DL | 10 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | PETN | <22. | 0 | - | 2044 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | PHENANTHRENE | 0.19 J | 1 | | | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | PHENANTHRENE | 0.19 | 1 | | | SAM96-53 | 2654551-01 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 194-115 | 0 | 0.5 | 1/30/1997 | - | PYRENE | 0.33 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | PYRENE | 0.33 | 1 | - | 100 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | RDX | ND (0.1) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | RDX | <0.6 | 0 | - | 100 | SAM96-53 | 2654551-01 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | TETRYL | ND (0.03) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2654551-1 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | TETRYL | <0.1 | 0 | - | 10000 | SAM96-53 | 2654551-01 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | ACENAPHTHENE | ND (0.053) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | ACENAPHTHYLENE | ND (0.053) | 0 | | | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | ANTHRACENE | ND (0.053) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | ARSENIC | 7.0 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | BENZO(A)ANTHRACENE | ND (0.053) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | BENZO(A)PYRENE | ND (0.11) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | BENZO(B)FLUORANTHENE | ND (0.11) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | BENZO(G,H,I)PERYLENE | ND (0.11) | 0 | | | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | BENZO(K)FLUORANTHENE | ND (0.21) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | CHRYSENE | ND (0.053) | 0 | - | 40 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | COPPER | 59.8 | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.11) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | FLUORANTHENE | ND (0.053) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | FLUORENE | ND (0.053) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | INDENO(1,2,3-CD)PYRENE | ND (0.11) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | LEAD | 55. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | MERCURY | .61 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | NAPHTHALENE | ND (0.053) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | PHENANTHRENE | ND (0.053) | 0 | | | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-39 | 0 | 0.5 | 12/9/1996 | - | PYRENE | ND (0.11) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629800-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | 1,2-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | 1,3,5-TRINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | 1,4-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | 1-METHYL-2-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | 1-NITRONAPHTHALENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | 2,4,6-TRINITROTOLUENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | ACENAPHTHENE | ND (0.049) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | ACENAPHTHYLENE | ND (0.049) | 0 | | | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | ANTHRACENE | ND (0.049) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | ARSENIC | ND (4.3) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | BENZO(A)ANTHRACENE | 0.13 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | BENZO(A)PYRENE | ND (0.098) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | BENZO(B)FLUORANTHENE | 0.17 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | BENZO(G,H,I)PERYLENE | ND (0.098) | 0 | | | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | BENZO(K)FLUORANTHENE | ND (0.2) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | CHRYSENE | 0.3 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | COPPER | 147. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.098) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | FLUORANTHENE | 0.25 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | FLUORENE | ND (0.049) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | INDENO(1,2,3-CD)PYRENE | ND (0.098) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | LEAD | 47. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | M-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | MERCURY | .37 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | NAPHTHALENE | ND (0.049) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | NITROBENZENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | PHENANTHRENE | 0.29 J | 1 | | | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | PYRENE | 0.38 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | RDX | ND (0.1) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-40 | 0 | 0.5 | 12/9/1996 | - | TETRYL | ND (0.03) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2629799-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | ACENAPHTHENE | ND (0.048) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | ACENAPHTHYLENE | ND (0.048) | 0 | | | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | ANTHRACENE | ND (0.048) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | ARSENIC | 4.9 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | BENZO(A)ANTHRACENE | ND (0.048) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | BENZO(A)PYRENE | ND (0.096) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | BENZO(B)FLUORANTHENE | ND (0.096) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | BENZO(G,H,I)PERYLENE | ND (0.096) | 0 | | | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | BENZO(K)FLUORANTHENE | ND (0.19) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2631339-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 194-45 | 0 | 0.5 | 12/11/1996 | - | CHRYSENE | 0.14 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | COPPER | 162. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.096) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | FLUORANTHENE | 0.064 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | FLUORENE | ND (0.048) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | INDENO(1,2,3-CD)PYRENE | ND (0.096) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | LEAD | 394. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | MERCURY | 2.06 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | NAPHTHALENE | ND (0.048) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | PHENANTHRENE | ND (0.048) | 0 | | | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-45 | 0 | 0.5 | 12/11/1996 | - | PYRENE | ND (0.096) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631339-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | 1,2-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | 1,3,5-TRINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | 1,4-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | 1-METHYL-2-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | 1-NITRONAPHTHALENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | 2,4,6-TRINITROTOLUENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | ACENAPHTHENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | ACENAPHTHYLENE | ND (0.046) | 0 | | | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | ANTHRACENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | ARSENIC | ND (4.1) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | BENZO(A)ANTHRACENE | ND (0.046) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | BENZO(A)PYRENE | ND (0.093) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | BENZO(B)FLUORANTHENE | ND (0.093) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | BENZO(G,H,I)PERYLENE | ND (0.093) | 0 | | | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | BENZO(K)FLUORANTHENE | ND (0.19) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | CHRYSENE | ND (0.046) | 0 | - | 40 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | COPPER | 446. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.093) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | FLUORANTHENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | FLUORENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | INDENO(1,2,3-CD)PYRENE | ND (0.093) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | LEAD | 11.6 J | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | M-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | MERCURY | .62 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | NAPHTHALENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | NITROBENZENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | PHENANTHRENE | ND (0.046) | 0 | | | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | PYRENE | ND (0.093) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | RDX | ND (0.1) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-46 | 0 | 0.5 | 12/11/1996 | - | TETRYL | ND (0.03) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2631338-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | ACENAPHTHENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | ACENAPHTHYLENE | ND (0.046) | 0 | | | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | ANTHRACENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | ARSENIC | ND (4.0) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | BENZO(A)ANTHRACENE | ND (0.046) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | BENZO(A)PYRENE | ND (0.091) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | BENZO(B)FLUORANTHENE | ND (0.091) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | BENZO(G,H,I)PERYLENE | ND (0.091) | 0 | | | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | BENZO(K)FLUORANTHENE | ND (0.18) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | CHRYSENE | 0.11 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | COPPER | 308. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.091) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | FLUORANTHENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | FLUORENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | INDENO(1,2,3-CD)PYRENE | ND (0.091) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | LEAD | 56. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | MERCURY | 5.5 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | NAPHTHALENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | PHENANTHRENE | ND (0.046) | 0 | | | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-47 | 0 | 0.5 | 12/11/1996 | - | PYRENE | ND (0.091) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2631337-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | 1,2-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | 1,3,5-TRINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | 1,4-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | 1-METHYL-2-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2634607-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 194-53 | 0 | 0.5 | 12/17/1996 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | 1-NITRONAPHTHALENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | 2,4,6-TRINITROTOLUENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | ACENAPHTHENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | ACENAPHTHYLENE | ND (0.046) | 0 | | | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | ANTHRACENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | ARSENIC | 5.3 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | BENZO(A)ANTHRACENE | 0.055 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | BENZO(A)PYRENE | ND (0.093) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | BENZO(B)FLUORANTHENE | 0.31 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | BENZO(G,H,I)PERYLENE | ND (0.093) | 0 | | | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | BENZO(K)FLUORANTHENE | ND (0.19) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | CHRYSENE | 0.1 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | COPPER | 175. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | DIBENZO(A,H)ANTHRACENE | 0.23 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | FLUORANTHENE | 0.054 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | FLUORENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | INDENO(1,2,3-CD)PYRENE | 0.24 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | LEAD | 315. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | M-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | MERCURY | 3.54 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | NAPHTHALENE | ND (0.046) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | NITROBENZENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | PHENANTHRENE | ND (0.046) | 0 | | | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | PYRENE | 0.14 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | RDX | ND (0.1) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-53 | 0 | 0.5 | 12/17/1996 | - | TETRYL | ND (0.03) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2634607-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | ACENAPHTHENE | ND (0.044) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | ACENAPHTHYLENE | ND (0.044) | 0 | | | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | ANTHRACENE | ND (0.044) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | ARSENIC | 8.3 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | BENZO(A)ANTHRACENE | 0.12 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | BENZO(A)PYRENE | 0.19 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | BENZO(B)FLUORANTHENE | 0.38 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | BENZO(G,H,I)PERYLENE | 0.097 J | 1 | | | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | BENZO(K)FLUORANTHENE | ND (0.18) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | CHRYSENE | 0.15 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | COPPER | 31.8 | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | DIBENZO(A,H)ANTHRACENE | 0.25 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | FLUORANTHENE | 0.14 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | FLUORENE | ND (0.044) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | INDENO(1,2,3-CD)PYRENE | 0.26 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | LEAD | 83. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | MERCURY | .93 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | NAPHTHALENE | ND (0.044) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | PHENANTHRENE | 0.07 J | 1 | | | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-54 | 0 | 0.5 | 12/17/1996 | - | PYRENE | 0.19 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2634606-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | 1,2-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | 1,3,5-TRINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | 1,4-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | 1-METHYL-2-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | 1-METHYL-3-NITROBENZENE | ND (0.05) | 0 | | | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | 1-METHYL-4-NITROBENZENE | ND (0.05) | 0 | | | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | 1-NITRONAPHTHALENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | 2,4,6-TRINITROTOLUENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | 2,4-DINITROTOLUENE | ND (0.05) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | 2,6-DINITROTOLUENE | ND (0.05) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.05) | 0 | | | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | ACENAPHTHENE | ND (0.052) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | ACENAPHTHYLENE | ND (0.052) | 0 | | | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | ANTHRACENE | ND (0.052) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | ARSENIC | 8.0 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | BENZO(A)ANTHRACENE | 0.13 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | BENZO(A)PYRENE | 0.16 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | BENZO(B)FLUORANTHENE | 0.43 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2634605-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 194-55 | 0 | 0.5 | 12/17/1996 | - | BENZO(G,H,I)PERYLENE | ND (0.1) | 0 | | | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | BENZO(K)FLUORANTHENE | ND (0.21) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | CHRYSENE | 0.24 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | COPPER | 156. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | DIBENZO(A,H)ANTHRACENE | 0.26 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | FLUORANTHENE | 0.24 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | FLUORENE | ND (0.052) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | HMX | ND (0.05) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | INDENO(1,2,3-CD)PYRENE | 0.29 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | LEAD | 540. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | M-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | MERCURY | .87 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | NAPHTHALENE | ND (0.052) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | NITROBENZENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | NITROGLYCERIN | ND (5.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | PETN | ND (5.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | PHENANTHRENE | 0.18 J | 1 | | | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | PYRENE | 0.37 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | RDX | ND (0.1) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-55 | 0 | 0.5 | 12/17/1996 | - | TETRYL | ND (0.03) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2634605-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | ACENAPHTHENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | ACENAPHTHYLENE | ND (0.042) | 0 | | | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | ANTHRACENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | ARSENIC | ND (3.7) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | BENZO(A)ANTHRACENE | ND (0.042) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | BENZO(A)PYRENE | ND (0.084) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | BENZO(B)FLUORANTHENE | 0.26 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | BENZO(G,H,I)PERYLENE | ND (0.084) | 0 | | | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | BENZO(K)FLUORANTHENE | ND (0.17) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | CHRYSENE | 0.044 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | COPPER | 143. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | DIBENZO(A,H)ANTHRACENE | ND (0.084) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | FLUORANTHENE | 0.063 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | FLUORENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | INDENO(1,2,3-CD)PYRENE | 0.2 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | LEAD | 68. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | MERCURY | .25 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | NAPHTHALENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | PHENANTHRENE | ND (0.042) | 0 | | | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-56 | 0 | 0.5 | 12/17/1996 | - | PYRENE | ND (0.084) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2634604-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | 1,2-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | 1,3,5-TRINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | 1,4-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | 1-METHYL-2-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | 1-NITRONAPHTHALENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | 2,4,6-TRINITROTOLUENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | ACENAPHTHENE | ND (0.047) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | ACENAPHTHYLENE | 0.099 J | 1 | | | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | ANTHRACENE | 0.17 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | ARSENIC | ND (4.2) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | BENZO(A)ANTHRACENE | 0.13 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | BENZO(A)PYRENE | 0.12 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | BENZO(B)FLUORANTHENE | 0.18 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | BENZO(G,H,I)PERYLENE | ND (0.094) | 0 | | | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | BENZO(K)FLUORANTHENE | ND (0.19) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | CHRYSENE | 0.17 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | COPPER | 365. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | DIBENZO(A,H)ANTHRACENE | ND (0.094) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | FLUORANTHENE | 0.21 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | FLUORENE | 0.14 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | INDENO(1,2,3-CD)PYRENE | ND (0.094) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | LEAD | 226. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | M-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | MERCURY | 17.0 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | NAPHTHALENE | ND (0.047) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | NITROBENZENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2646601-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 194-63 | 0 | 0.5 | 1/15/1997 | - | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | PHENANTHRENE | 0.18 J | 1 | | | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | PYRENE | 0.32 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | RDX | ND (0.1) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-63 | 0 | 0.5 | 1/15/1997 | - | TETRYL | ND (0.03) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2646601-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | 1,2-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | 1,3,5-TRINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | 1,4-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | 1-METHYL-2-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | 1-NITRONAPHTHALENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | 2,4,6-TRINITROTOLUENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | ACENAPHTHENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | ACENAPHTHYLENE | ND (0.042) | 0 | | | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | ANTHRACENE | 0.15 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | ARSENIC | 5.6 J | 1 | - | 20 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | BENZO(A)ANTHRACENE | 0.2 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | BENZO(A)PYRENE | 0.18 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | BENZO(B)FLUORANTHENE | 0.26 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | BENZO(G,H,I)PERYLENE | 0.16 J | 1 | | | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | BENZO(K)FLUORANTHENE | ND (0.17) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | CHRYSENE | 0.22 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | COPPER | 83.5 | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | DIBENZO(A,H)ANTHRACENE | ND (0.085) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | FLUORANTHENE | 0.27 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | FLUORENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | INDENO(1,2,3-CD)PYRENE | 0.16 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | LEAD | 215. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | M-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | MERCURY | 3.65 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | NAPHTHALENE | ND (0.042) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | NITROBENZENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | PHENANTHRENE | 0.18 J | 1 | | | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | PYRENE | 0.46 | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | RDX | ND (0.09) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-66 | 0 | 0.5 | 1/15/1997 | - | TETRYL | ND (0.03) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2646599-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | 1,2-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | 1,3,5-TRINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | 1,4-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | 1-METHYL-2-NITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | 1-METHYL-3-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | 1-METHYL-4-NITROBENZENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | 1-NITRONAPHTHALENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | 2,4,6-TRINITROTOLUENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | 2,4-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | 2,6-DINITROTOLUENE | ND (0.04) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | 2-AMINO-4,6-DINITROTOLUENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | 4-AMINO-2,6-DINITROTOLUENE | ND (0.04) | 0 | | | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | ACENAPHTHENE | ND (0.05) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | ACENAPHTHYLENE | ND (0.05) | 0 | | | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | ANTHRACENE | ND (0.05) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | ARSENIC | ND (4.4) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | BENZO(A)ANTHRACENE | 0.063 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | BENZO(A)PYRENE | ND (0.1) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | BENZO(B)FLUORANTHENE | ND (0.1) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | BENZO(G,H,I)PERYLENE | ND (0.1) | 0 | | | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | BENZO(K)FLUORANTHENE | ND (0.2) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | CHRYSENE | 0.07 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | COPPER | 278. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | DIBENZO(A,H)ANTHRACENE | ND (0.1) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | FLUORANTHENE | 0.22 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | FLUORENE | ND (0.05) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | HMX | ND (0.04) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | INDENO(1,2,3-CD)PYRENE | ND (0.1) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | LEAD | 82. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | M-DINITROBENZENE | ND (0.03) | 0 | | | SAM96-52/53 192/194 CONF | 2650834-1 |

Table 3b
Summary of All Analytical Results-Interior Borings
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 194-85 | 0 | 0.5 | 1/23/1997 | - | MERCURY | .85 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | NAPHTHALENE | ND (0.05) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | NITROBENZENE | ND (0.03) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | NITROGLYCERIN | ND (4.) | 0 | - | 10 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | PETN | ND (4.) | 0 | - | 2044 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | PHENANTHRENE | ND (0.05) | 0 | | | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | PYRENE | ND (0.1) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | RDX | ND (0.1) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-85 | 0 | 0.5 | 1/23/1997 | - | TETRYL | ND (0.03) | 0 | - | 10000 | SAM96-52/53 192/194 CONF | 2650834-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | ACENAPHTHENE | ND (0.078) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | ACENAPHTHYLENE | ND (0.078) | 0 | | | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | ANTHRACENE | ND (0.078) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | ARSENIC | ND (6.8) | 0 | - | 20 | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | BENZO(A)ANTHRACENE | 0.24 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | BENZO(A)PYRENE | 0.27 J | 1 | - | 0.66 | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | BENZO(B)FLUORANTHENE | 0.39 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | BENZO(G,H,I)PERYLENE | 0.19 J | 1 | | | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | BENZO(K)FLUORANTHENE | ND (0.31) | 0 | - | 4 | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | CHRYSENE | 0.35 J | 1 | - | 40 | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | COPPER | 284. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | DIBENZO(A,H)ANTHRACENE | ND (0.16) | 0 | - | 0.66 | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | FLUORANTHENE | 0.51 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | FLUORENE | ND (0.078) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | INDENO(1,2,3-CD)PYRENE | 0.2 J | 1 | - | 4 | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | LEAD | 575. | 1 | - | 600 | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | MERCURY | 1.58 | 1 | - | 270 | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | NAPHTHALENE | ND (0.078) | 0 | - | 100 | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | PHENANTHRENE | 0.28 J | 1 | | | SAM96-52/53 192/194 CONF | 2650833-1 |
| 194-86 | 0 | 0.5 | 1/23/1997 | - | PYRENE | 0.54 J | 1 | - | 100 | SAM96-52/53 192/194 CONF | 2650833-1 |

Table 4
Interior Analytical Results Above the Lower of NJ NR or IGW SCC
Lake Inez Region
DuPont Pompton Lakes Works

| Boring ID | Top (feet) | Bottom (feet) | Date Sampled | Duplicate | Analyte | Results (mg/kg) | Hit | Above NJ NR or IGW SSC | NJ NR or IGW SCC (mg/kg) | Job Name | Lab_ID |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107-102 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 31.481 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107102-001 |
| 107-104 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 20.801 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107104-001 |
| 107-126 | 0 | 0.5 | 8/10/1999 | DUP | ARSENIC | 20.433 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107126-002 |
| 107-130 | 0 | 0.5 | 8/10/1999 | - | ARSENIC | 24.002 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107130-001 |
| 107-148 | 0 | 0.5 | 8/30/1999 | - | ARSENIC | 22.073 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107148-001 |
| 107-80 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 46.664 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107080-001 |
| 107-82 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 20.205 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107082-001 |
| 107-84 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 26.102 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107084-001 |
| 107-86 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 27.69 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107086-001 |
| 107-87 | 0 | 0.5 | 6/25/1999 | DUP | ARSENIC | 58.823 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107087-002 |
| 107-87 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 55.15 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107087-001 |
| 107-90 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 22.915 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107090-001 |
| 107-91 | 0 | 0.5 | 6/25/1999 | - | ARSENIC | 21.898 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107091-001 |
| 107-95 | 0 | 0.5 | 7/12/1999 | - | ARSENIC | 23.725 | 1 | YES | 20 | UPL-AOC 107 XRF DATA | X107095-001 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | ARSENIC | 24. | 1 | YES | 20 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | ARSENIC | 25. | 1 | YES | 20 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | BENZO(A)ANTHRACENE | 4.7 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)ANTHRACENE | 5.4 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | BENZO(A)ANTHRACENE | 4.8 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | BENZO(A)ANTHRACENE | 16. | 1 | YES | 4 | SAM99-23 | 3250909-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | BENZO(A)PYRENE | 8.5 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)PYRENE | 6.4 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)PYRENE | 3.9 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | BENZO(A)PYRENE | 1.2 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | BENZO(A)PYRENE | 0.95 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | BENZO(A)PYRENE | 0.89 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | BENZO(A)PYRENE | 3.5 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | BENZO(A)PYRENE | 0.88 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | BENZO(A)PYRENE | 3.5 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | BENZO(A)PYRENE | 1.1 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | BENZO(A)PYRENE | 3.9 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 193-2 | 0 | 0.5 | 10/2/1995 | - | BENZO(A)PYRENE | 0.76 | 1 | YES | 0.66 | LAKE INEZ AOC | 2394056-1 |
| 748-34 | 0 | 0.5 | 10/12/1999 | - | BENZO(A)PYRENE | 0.67 | 1 | YES | 0.66 | SAM99-23 | 3250910-1 |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | BENZO(A)PYRENE | 23. | 1 | YES | 0.66 | SAM99-23 | 3250909-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | BENZO(B)FLUORANTHENE | 13. | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | BENZO(B)FLUORANTHENE | 9.8 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | BENZO(B)FLUORANTHENE | 6.1 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | BENZO(B)FLUORANTHENE | 4.7 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | BENZO(B)FLUORANTHENE | 5.5 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | BENZO(B)FLUORANTHENE | 6.7 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | BENZO(B)FLUORANTHENE | 13. | 1 | YES | 4 | SAM99-23 | 3250909-1 |
| 748-35 | 0 | 0.5 | 10/12/1999 | - | BENZO(K)FLUORANTHENE | 4. | 1 | YES | 4 | SAM99-23 | 3250909-1 |
| 193-1 | 0 | 0.5 | 10/2/1995 | DUP | BERYLLIUM | 3.24 | 1 | YES | 2 | LAKE INEZ AOC | 2394065-1 |
| 107-133 | 0 | 0.5 | 8/10/1999 | - | COPPER | 656.265 | 1 | YES | 600 | UPL-AOC 107 XRF DATA | X107133-001 |
| 107-87 | 0 | 0.5 | 6/25/1999 | DUP | COPPER | 1193.14 | 1 | YES | 600 | UPL-AOC 107 XRF DATA | X107087-002 |
| 107-87 | 0 | 0.5 | 6/25/1999 | - | COPPER | 975.343 | 1 | YES | 600 | UPL-AOC 107 XRF DATA | X107087-001 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | COPPER | 2980. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | COPPER | 5030. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | COPPER | 13500. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | COPPER | 11800. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | COPPER | 21200. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | COPPER | 1570. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | COPPER | 6340. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | COPPER | 647. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | COPPER | 1320. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | DIBENZO(A,H)ANTHRACENE | 1.4 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | DIBENZO(A,H)ANTHRACENE | 2. | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 192-128 | 0 | 0.5 | 12/3/1996 | - | DIBENZO(A,H)ANTHRACENE | 0.89 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2626746-1 |
| 192-91 | 0 | 0.5 | 11/25/1996 | - | DIBENZO(A,H)ANTHRACENE | 0.81 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2624667-1 |
| 192-98 | 0 | 0.5 | 11/26/1996 | - | DIBENZO(A,H)ANTHRACENE | 0.8 | 1 | YES | 0.66 | SAM96-52/53 192/194 CONF | 2624692-1 |
| 192-100 | 0 | 0.5 | 11/26/1996 | - | INDENO(1,2,3-CD)PYRENE | 4.7 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2624690-1 |
| 192-127 | 0 | 0.5 | 12/3/1996 | - | INDENO(1,2,3-CD)PYRENE | 5.1 | 1 | YES | 4 | SAM96-52/53 192/194 CONF | 2626747-1 |
| 107-109 | 0 | 0.5 | 7/12/1999 | - | LEAD | 747.395 | 1 | YES | 600 | UPL-AOC 107 XRF DATA | X107109-001 |
| 107-144 | 0 | 0.5 | 8/30/1999 | - | LEAD | 782.956 | 1 | YES | 600 | UPL-AOC 107 XRF DATA | X107144-001 |
| 107-145 | 0 | 0.5 | 8/30/1999 | - | LEAD | 937.684 | 1 | YES | 600 | UPL-AOC 107 XRF DATA | X107145-001 |
| 107-87 | 0 | 0.5 | 6/25/1999 | - | LEAD | 3195.988 | 1 | YES | 600 | UPL-AOC 107 XRF DATA | X107087-001 |

Table 4
Interior Analytical Results Above the Lower of NJ NR or IGW SCC
Lake Inez Region
DuPont Pompton Lakes Works

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 107-87 | 0 | 0.5 | 6/25/1999 | DUP | LEAD | 3195.816 | 1 | YES | 600 | UPL-AOC 107 XRF DATA | X107087-002 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | LEAD | 2160. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | LEAD | 2370. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-66 | 0 | 0.5 | 11/19/1996 | - | LEAD | 1370. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2621094-1 |
| 192-67 | 0 | 0.5 | 11/19/1996 | - | LEAD | 618. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2621093-1 |
| 192-68 | 0 | 0.5 | 11/19/1996 | - | LEAD | 685. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2621092-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | LEAD | 1850. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | LEAD | 649. | 1 | YES | 600 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 107-133 | 0 | 0.5 | 8/10/1999 | - | MERCURY | 970.591 | 1 | YES | 270 | UPL-AOC 107 XRF DATA | X107133-001 |
| 194-115 | 0 | 0.5 | 1/30/1997 | - | NITROGLYCERIN | <22. | 0 | hi DL | 10 | SAM96-53 | 2654551-01 |
| 192-129 | 0 | 0.5 | 12/3/1996 | DUP | THALLIUM | 3.6 | 1 | YES | 2 | SAM96-52/53 192/194 CONF | 2626744-1 |
| 192-129 | 0 | 0.5 | 12/3/1996 | - | THALLIUM | 5.8 | 1 | YES | 2 | SAM96-52/53 192/194 CONF | 2626745-1 |
| 192-69 | 0 | 0.5 | 11/19/1996 | - | THALLIUM | 8.2 | 1 | YES | 2 | SAM96-52/53 192/194 CONF | 2621091-1 |
| 192-97 | 0 | 0.5 | 11/26/1996 | - | THALLIUM | 6.9 | 1 | YES | 2 | SAM96-52/53 192/194 CONF | 2624693-1 |
| 193-3 | 2 | 2.5 | 2/20/1996 | - | THALLIUM | <20 | 0 | hi DL | 2 | SAM96-41 | P602079-29 |
| 193-4 | 2 | 2.5 | 2/20/1996 | - | THALLIUM | <20 | 0 | hi DL | 2 | SAM96-41 | P602079-030 |
| 193-4 | 2 | 2.5 | 2/21/1996 | - | THALLIUM | ND (7.29) | 0 | hi DL | 2 | AOC 192, 193, 194 | P602079-30 |

Table 5
Analytical Summary Statistics
Lake Inez Region
DuPont Pompton Lakes Works

| Analyte Group | Analyte | # Samples | # Hits | # Hits Above | # Above | Average (mg/kg) | Maximum (mg/kg) | NJ NR IGW SCC (mg/kg) | Any Hit Above | Factor (Average / Limit) | % Hits Above NR IGW |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PAH | BENZO(A)PYRENE | 45 | 27 | 14 | 14 | 1.29 | 23.00 | 0.66 | 1 | 1.95455 | 31.1% |
| PAH | BENZO(B)FLUORANTHENE | 44 | 28 | 7 | 7 | 1.56 | 13.00 | 4 | 1 | 0.39000 | 15.9% |
| Metal | BERYLLIUM | 8 | 8 | 1 | 1 | 0.90 | 3.24 | 2 | 1 | 0.45062 | 12.5% |
| Metal | THALLIUM | 24 | 9 | 3 | 6 | 2.37 | 10.00 | 2 | 1 | 1.18656 | 12.5% |
| Metal | ARSENIC | 129 | 109 | 15 | 15 | 10.48 | 58.82 | 20 | 1 | 0.52394 | 11.6% |
| PAH | DIBENZO(A,H)ANTHRACENE | 43 | 17 | 5 | 5 | 0.24 | 2.00 | 0.66 | 1 | 0.37088 | 11.6% |
| Metal | COPPER | 129 | 129 | 10 | 10 | 612.24 | 21200.00 | 600 | 1 | 1.02039 | 7.8% |
| Metal | LEAD | 129 | 129 | 10 | 10 | 234.24 | 3195.99 | 600 | 1 | 0.39039 | 7.8% |
| PAH | BENZO(A)ANTHRACENE | 44 | 31 | 4 | 4 | 1.17 | 23.00 | 4 | 1 | 0.29250 | 9.1% |
| PAH | INDENO(1,2,3-CD)PYRENE | 43 | 25 | 2 | 2 | 0.62 | 5.10 | 4 | 1 | 0.15405 | 4.7% |
| Metal | MERCURY | 129 | 126 | 1 | 1 | 43.23 | 970.59 | 270 | 1 | 0.16010 | 0.8% |
| Metal | ANTIMONY | 8 | 3 | 0 | 0 | 0.29 | 0.70 | 340 | 0 | 0.00085 | 0.0% |
| Metal | CADMIUM | 8 | 6 | 0 | 0 | 0.21 | 0.26 | 100 | 0 | 0.00206 | 0.0% |
| Metal | CYANIDE, TOTAL | 8 | 4 | 0 | 0 | 0.18 | 0.70 | 21000 | 0 | 0.00001 | 0.0% |
| Metal | NICKEL | 8 | 8 | 0 | 0 | 10.42 | 13.20 | 2400 | 0 | 0.00434 | 0.0% |
| Metal | SELENIUM | 8 | 4 | 0 | 0 | 5.68 | 12.15 | 3100 | 0 | 0.00183 | 0.0% |
| Metal | SILVER | 8 | 0 | 0 | 0 | 0.79 | 2.43 | 4100 | 0 | 0.00019 | 0.0% |
| Metal | ZINC | 8 | 8 | 0 | 0 | 85.50 | 235.00 | 1500 | 0 | 0.05700 | 0.0% |
| Org. Expl. | 2,4-DINITROTOLUENE | 27 | 0 | 0 | 0 | 0.04 | 0.17 | 4 | 0 | 0.01118 | 0.0% |
| Org. Expl. | 2,6-DINITROTOLUENE | 27 | 0 | 0 | 0 | 0.04 | 0.17 | 4 | 0 | 0.01118 | 0.0% |
| Org. Expl. | HMX | 19 | 0 | 0 | 0 | 0.03 | 0.15 | 100 | 0 | 0.00027 | 0.0% |
| Org. Expl. | NITROBENZENE | 27 | 0 | 0 | 0 | 0.03 | 0.17 | 10 | 0 | 0.00337 | 0.0% |
| Org. Expl. | NITROGLYCERIN | 19 | 0 | 0 | 1 | 2.53 | 11.00 | 10 | 0 | 0.25263 | 0.0% |
| Org. Expl. | PETN | 19 | 0 | 0 | 0 | 2.53 | 11.00 | 2044 | 0 | 0.00247 | 0.0% |
| Org. Expl. | RDX | 19 | 0 | 0 | 0 | 0.06 | 0.30 | 100 | 0 | 0.00060 | 0.0% |
| Org. Expl. | TETRYL | 19 | 0 | 0 | 0 | 0.02 | 0.05 | 10000 | 0 | 0.00000 | 0.0% |
| PAH | ACENAPHTHENE | 43 | 7 | 0 | 0 | 0.05 | 0.24 | 100 | 0 | 0.00054 | 0.0% |
| PAH | ANTHRACENE | 43 | 16 | 0 | 0 | 0.14 | 0.98 | 100 | 0 | 0.00141 | 0.0% |
| PAH | BENZO(K)FLUORANTHENE | 44 | 16 | 0 | 0 | 0.52 | 4.00 | 4 | 0 | 0.12930 | 0.0% |
| PAH | CHRYSENE | 43 | 34 | 0 | 0 | 0.93 | 5.70 | 40 | 0 | 0.02314 | 0.0% |
| PAH | FLUORANTHENE | 43 | 32 | 0 | 0 | 1.07 | 7.80 | 100 | 0 | 0.01068 | 0.0% |
| PAH | FLUORENE | 43 | 14 | 0 | 0 | 0.06 | 0.24 | 100 | 0 | 0.00060 | 0.0% |
| PAH | NAPHTHALENE | 43 | 9 | 0 | 0 | 0.07 | 0.31 | 100 | 0 | 0.00071 | 0.0% |
| PAH | PYRENE | 43 | 28 | 0 | 0 | 1.37 | 8.10 | 100 | 0 | 0.01367 | 0.0% |
| SVOC | 1,2,4-TRICHLOROBENZENE | 8 | 0 | 0 | 0 | 0.07 | 0.17 | 100 | 0 | 0.00074 | 0.0% |
| SVOC | 1,2-DICHLOROBENZENE | 8 | 0 | 0 | 0 | 0.07 | 0.17 | 50 | 0 | 0.00148 | 0.0% |
| SVOC | 1,3-DICHLOROBENZENE | 8 | 0 | 0 | 0 | 0.07 | 0.17 | 100 | 0 | 0.00074 | 0.0% |
| SVOC | 1,4-DICHLOROBENZENE | 8 | 0 | 0 | 0 | 0.07 | 0.17 | 100 | 0 | 0.00074 | 0.0% |
| SVOC | 2,4,6-TRICHLOROPHENOL | 2 | 0 | 0 | 0 | 0.05 | 0.05 | 10 | 0 | 0.00457 | 0.0% |
| SVOC | 2,4,6-TRINITROTOLUENE | 19 | 0 | 0 | 0 | 0.02 | 0.05 | 10 | 0 | 0.00161 | 0.0% |
| SVOC | 2,4-DICHLOROPHENOL | 2 | 0 | 0 | 0 | 0.02 | 0.03 | 10 | 0 | 0.00230 | 0.0% |
| SVOC | 2,4-DIMETHYLPHENOL | 2 | 0 | 0 | 0 | 0.05 | 0.05 | 10 | 0 | 0.00457 | 0.0% |
| SVOC | 2,4-DINITROPHENOL | 2 | 0 | 0 | 0 | 0.12 | 0.13 | 10 | 0 | 0.01150 | 0.0% |
| SVOC | 2-CHLOROPHENOL | 2 | 0 | 0 | 0 | 0.02 | 0.03 | 10 | 0 | 0.00230 | 0.0% |
| SVOC | 3,3'-DICHLOROBENZIDINE | 8 | 0 | 0 | 0 | 0.17 | 0.34 | 6 | 0 | 0.02885 | 0.0% |
| SVOC | 4-CHLORO-3-METHYLPHENOL | 2 | 0 | 0 | 0 | 0.05 | 0.05 | 100 | 0 | 0.00046 | 0.0% |
| SVOC | BIS(2-CHLOROETHYL) ETHER | 8 | 0 | 0 | 0 | 0.09 | 0.17 | 3 | 0 | 0.02862 | 0.0% |
| SVOC | BIS(2-CHLOROISOPROPYL)ETHER | 8 | 0 | 0 | 0 | 0.09 | 0.17 | 10 | 0 | 0.00859 | 0.0% |
| SVOC | BIS(2-ETHYLHEXYL)PHTHALATE | 8 | 3 | 0 | 0 | 0.12 | 0.26 | 100 | 0 | 0.00121 | 0.0% |
| SVOC | BUTYL BENZYL PHTHALATE | 8 | 0 | 0 | 0 | 0.09 | 0.17 | 100 | 0 | 0.00086 | 0.0% |
| SVOC | DIETHYL PHTHALATE | 8 | 0 | 0 | 0 | 0.09 | 0.17 | 50 | 0 | 0.00172 | 0.0% |
| SVOC | DIMETHYL PHTHALATE | 8 | 0 | 0 | 0 | 0.07 | 0.17 | 50 | 0 | 0.00148 | 0.0% |
| SVOC | DI-N-BUTYL PHTHALATE | 8 | 0 | 0 | 0 | 0.07 | 0.17 | 100 | 0 | 0.00074 | 0.0% |
| SVOC | DI-N-OCTYL PHTHALATE | 8 | 0 | 0 | 0 | 0.09 | 0.17 | 100 | 0 | 0.00086 | 0.0% |
| SVOC | HEXACHLOROBENZENE | 8 | 0 | 0 | 0 | 0.10 | 0.17 | 2 | 0 | 0.04875 | 0.0% |
| SVOC | HEXACHLOROBUTADIENE | 8 | 0 | 0 | 0 | 0.09 | 0.17 | 21 | 0 | 0.00409 | 0.0% |
| SVOC | HEXACHLOROCYCLOPENTADIENE | 8 | 0 | 0 | 0 | 0.12 | 0.17 | 100 | 0 | 0.00122 | 0.0% |
| SVOC | HEXACHLOROETHANE | 8 | 0 | 0 | 0 | 0.09 | 0.17 | 100 | 0 | 0.00086 | 0.0% |
| SVOC | ISOPHORONE | 8 | 0 | 0 | 0 | 0.09 | 0.17 | 50 | 0 | 0.00172 | 0.0% |
| SVOC | N-NITROSODI-N-PROPYLAMINE | 8 | 0 | 0 | 0 | 0.09 | 0.17 | 0.66 | 0 | 0.13011 | 0.0% |
| SVOC | N-NITROSODIPHENYLAMINE | 8 | 0 | 0 | 0 | 0.09 | 0.17 | 100 | 0 | 0.00086 | 0.0% |
| SVOC | PENTACHLOROPHENOL | 2 | 0 | 0 | 0 | 0.12 | 0.13 | 24 | 0 | 0.00479 | 0.0% |
| SVOC | PHENOL | 2 | 0 | 0 | 0 | 0.02 | 0.03 | 50 | 0 | 0.00046 | 0.0% |

Table 6
Remedial Investigation Schedule
DuPont Pompton Lakes Works

| ID | Task Name | Start | Finish |
|---|---|---|---|
| 1 | Decision to Re-Write Investigation Work Plan | Mon 5/3/99 | Mon 5/3/99 |
| 2 | **South Plant Work Plan** | **Fri 7/2/99** | **Fri 1/7/00** |
| 3 | Develop stragey | Fri 7/2/99 | Thu 7/15/99 |
| 4 | Meet with NJDEP | Fri 7/16/99 | Fri 7/16/99 |
| 5 | Move historic SP data to CED | Fri 7/2/99 | Thu 11/18/99 |
| 6 | Develop work plan, HASP, QAPP | Fri 7/2/99 | Fri 11/19/99 |
| 7 | Review work plan, HASP, QAPP | Mon 11/8/99 | Wed 12/8/99 |
| 8 | Meet with NJDEP | Wed 12/8/99 | Wed 12/8/99 |
| 9 | Address NJDEP comments | Thu 12/9/99 | Thu 1/6/00 |
| 10 | Submit report to NJDEP | Fri 1/7/00 | Fri 1/7/00 |
| 11 | **NJDEP review** | **Mon 1/10/00** | **Mon 10/30/00** |
| 12 | NJDEP technical review | Mon 1/10/00 | Thu 9/14/00 |
| 13 | receive NJDEP comments | Fri 9/15/00 | Fri 9/15/00 |
| 14 | address NJDEP comments | Mon 9/18/00 | Fri 10/13/00 |
| 15 | receive NJDEP approval | Mon 10/30/00 | Mon 10/30/00 |
| 16 | **Contractor Selection** | **Fri 1/19/01** | **Tue 2/20/01** |
| 23 | **South Plant Investigation** | **Fri 5/4/01** | **Mon 10/28/02** |
| 24 | Sampling | Fri 5/4/01 | Fri 6/29/01 |
| 25 | Laboratory Analyses | Fri 5/4/01 | Thu 7/26/01 |
| 26 | Data Evaluation | Fri 5/4/01 | Thu 7/26/01 |
| 27 | Sampling of low lying areas | Wed 10/10/01 | Wed 10/31/01 |
| 28 | Laboratory Analyses | Wed 10/10/01 | Wed 11/28/01 |
| 29 | Data Evaluation | Wed 10/10/01 | Wed 11/28/01 |
| 30 | Sampling further delineation | Mon 8/19/02 | Fri 8/30/02 |
| 31 | Laboratory Analyses | Mon 8/19/02 | Fri 9/27/02 |
| 32 | Data Evaluation | Mon 8/19/02 | Fri 9/27/02 |
| 33 | Report Preparation and Review | Fri 7/19/02 | Fri 10/25/02 |

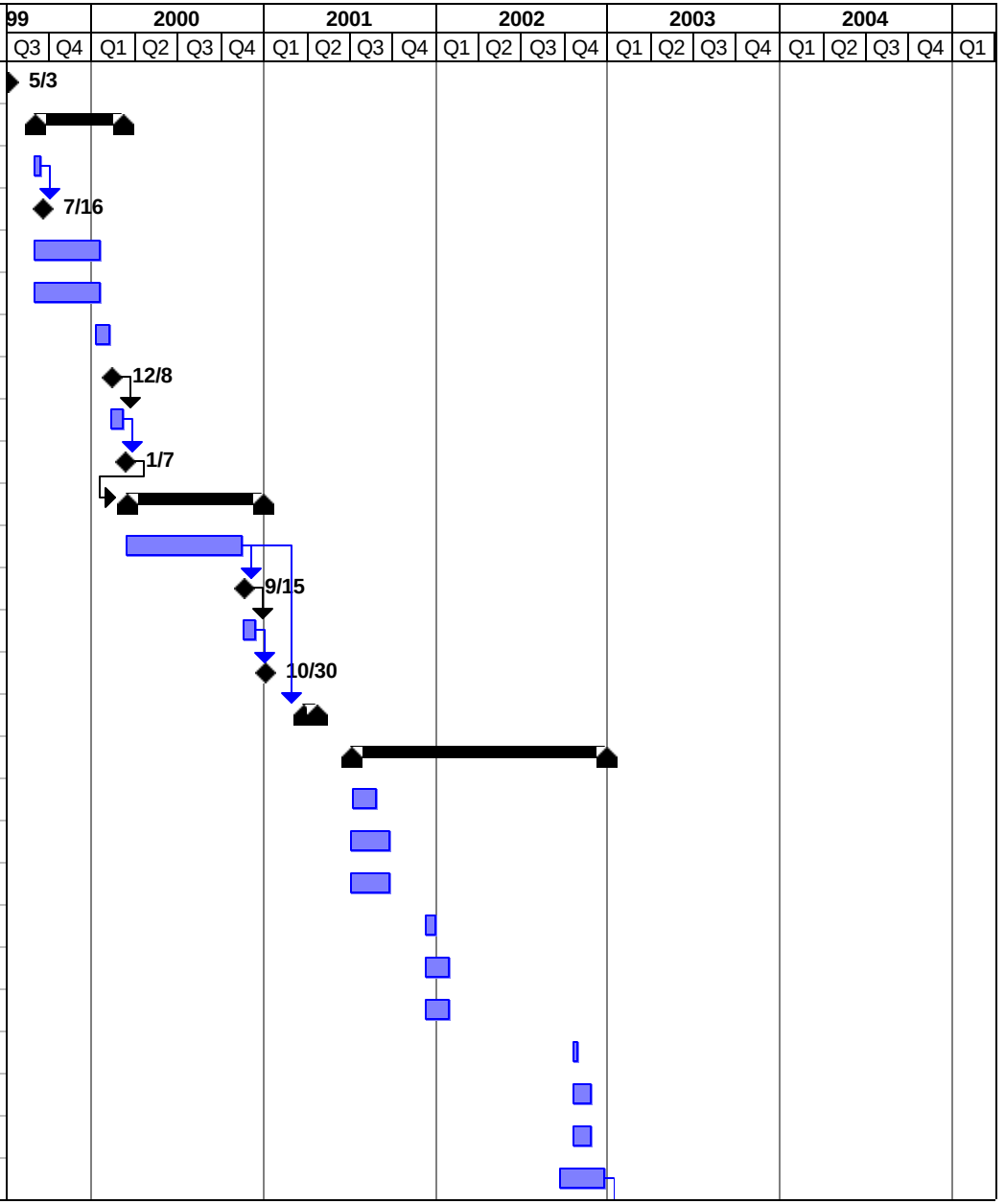


Table 6
Remedial Investigation Schedule
DuPont Pompton Lakes Works

| ID | Task Name | Start | Finish |
|---|---|---|---|
| 34 | Submit report to NJDEP | Fri 10/25/02 | Mon 10/28/02 |
| 35 | **NJDEP review** | **Mon 10/28/02** | **Wed 6/18/03** |
| 36 | NJDEP technical review | Mon 10/28/02 | Mon 12/23/02 |
| 37 | receive NJDEP comments | Wed 3/26/03 | Wed 3/26/03 |
| 38 | address NJDEP comments | Thu 3/27/03 | Wed 4/23/03 |
| 39 | receive NJDEP approval | Thu 5/8/03 | Wed 6/18/03 |
| 40 | | | |
| 41 | **Mid Plant Work Plan** | **Mon 7/3/00** | **Wed 6/13/01** |
| 42 | Move historic MP data to CED | Mon 7/3/00 | Fri 10/6/00 |
| 43 | Review historic data | Mon 10/9/00 | Fri 11/10/00 |
| 44 | Develop work plan, HASP, QAPP | Mon 11/13/00 | Fri 12/22/00 |
| 45 | Meet with NJDEP | Thu 3/15/01 | Thu 3/15/01 |
| 46 | Address NJDEP comments | Fri 3/16/01 | Thu 4/12/01 |
| 47 | Submit report to NJDEP | Wed 6/13/01 | Wed 6/13/01 |
| 48 | **NJDEP review** | **Thu 6/14/01** | **Fri 11/30/01** |
| 49 | NJDEP technical review | Thu 6/14/01 | Wed 10/17/01 |
| 50 | receive NJDEP comments | Thu 10/18/01 | Thu 10/18/01 |
| 51 | address NJDEP comments | Fri 10/19/01 | Thu 11/15/01 |
| 52 | receive NJDEP approval | Fri 11/30/01 | Fri 11/30/01 |
| 53 | **Contractor Selection** | **Mon 9/3/01** | **Thu 9/27/01** |
| 60 | **Mid Plant Investigation** | **Fri 9/28/01** | **Tue 1/6/04** |
| 61 | Sampling | Fri 9/28/01 | Wed 11/7/01 |
| 62 | Laboratory Analyses | Fri 9/28/01 | Thu 12/20/01 |
| 63 | Data Evaluation | Fri 9/28/01 | Thu 1/31/02 |
| 64 | Sampling of explosive sites | Mon 9/9/02 | Fri 10/4/02 |
| 65 | Laboratory Analyses | Fri 8/23/02 | Fri 10/18/02 |
| 66 | Data Evaluation | Fri 10/18/02 | Thu 1/9/03 |

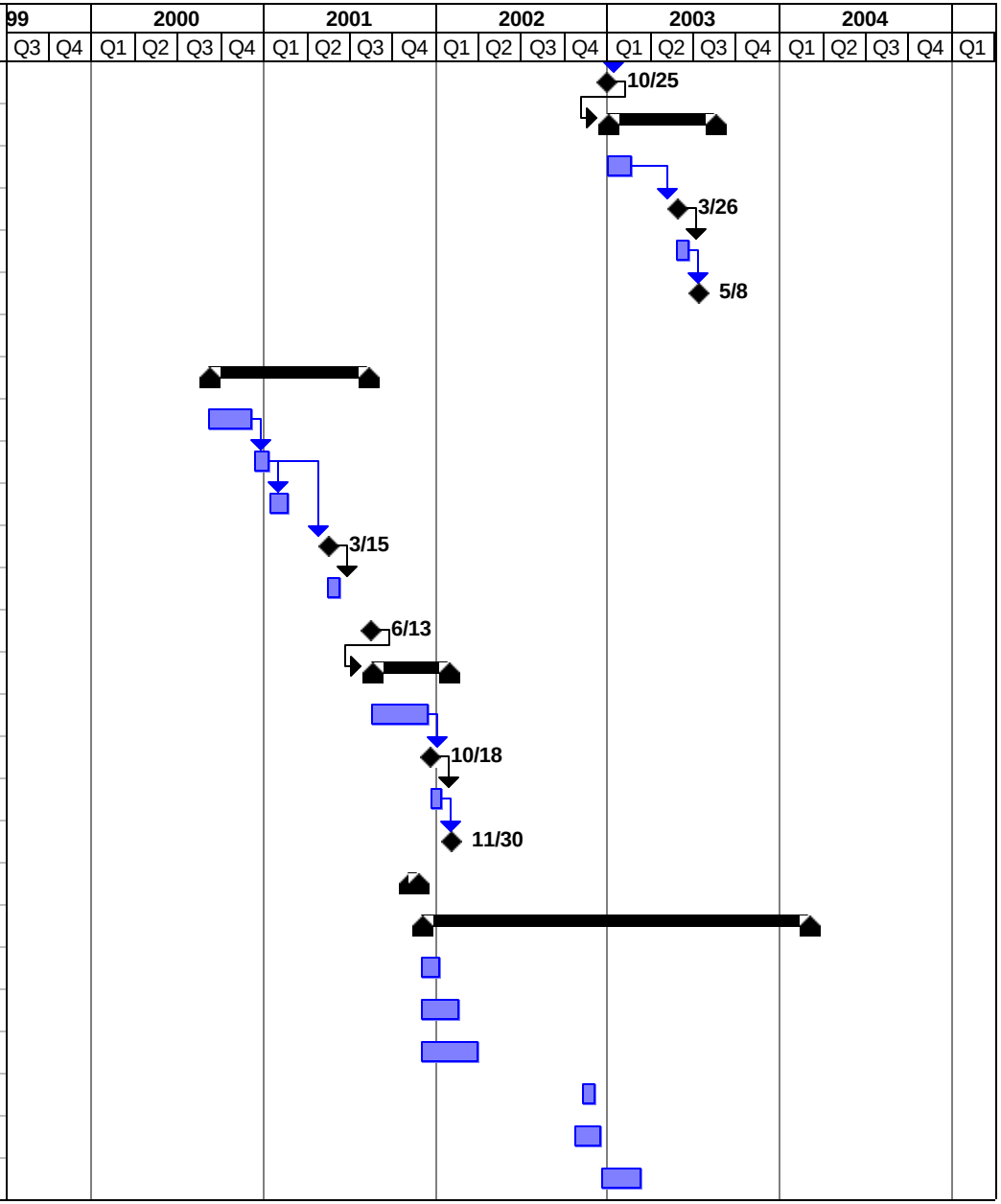


Table 6
Remedial Investigation Schedule
DuPont Pompton Lakes Works

| ID | Task Name | Start | Finish |
|---|---|---|---|
| 67 | Sampling additional delineation | Mon 6/16/03 | Fri 6/27/03 |
| 68 | Report Preparation and Review | Fri 12/20/02 | Fri 9/26/03 |
| 69 | Submit report to NJDEP | Fri 9/26/03 | Fri 9/26/03 |
| 70 | **NJDEP review** | **Fri 9/26/03** | **Tue 1/6/04** |
| 71 | NJDEP technical review | Fri 9/26/03 | Fri 11/21/03 |
| 72 | receive NJDEP comments | Fri 11/21/03 | Mon 11/24/03 |
| 73 | address NJDEP comments | Mon 11/24/03 | Mon 12/22/03 |
| 74 | receive NJDEP approval | Mon 1/5/04 | Tue 1/6/04 |
| 75 | | | |
| 76 | **North Plant Work Plan** | **Mon 11/5/01** | **Wed 3/20/02** |
| 77 | Review historic data | Mon 11/5/01 | Fri 12/7/01 |
| 78 | Develop work plan, HASP, QAPP | Mon 12/10/01 | Fri 3/1/02 |
| 79 | Meet with NJDEP | Tue 3/5/02 | Tue 3/5/02 |
| 80 | Address NJDEP comments | Wed 3/6/02 | Tue 3/19/02 |
| 81 | Submit report to NJDEP | Wed 3/20/02 | Wed 3/20/02 |
| 82 | **NJDEP review** | **Thu 3/21/02** | **Fri 6/28/02** |
| 83 | NJDEP technical review | Thu 3/21/02 | Wed 5/15/02 |
| 84 | receive NJDEP comments | Thu 5/16/02 | Thu 5/16/02 |
| 85 | address NJDEP comments | Fri 5/17/02 | Thu 6/13/02 |
| 86 | receive NJDEP approval | Fri 6/28/02 | Fri 6/28/02 |
| 87 | **Contractor Selection** | **Fri 5/24/02** | **Mon 7/8/02** |
| 94 | **North Plant Investigation** | **Tue 7/9/02** | **Wed 3/24/04** |
| 95 | Sampling | Tue 7/16/02 | Thu 10/17/02 |
| 96 | Laboratory Analyses | Tue 7/9/02 | Thu 11/7/02 |
| 97 | Data Evaluation | Tue 7/9/02 | Thu 11/7/02 |
| 98 | Sampling additional delineation | Mon 11/18/02 | Fri 12/13/02 |
| 99 | Laboratory Analyses | Mon 11/18/02 | Fri 1/10/03 |

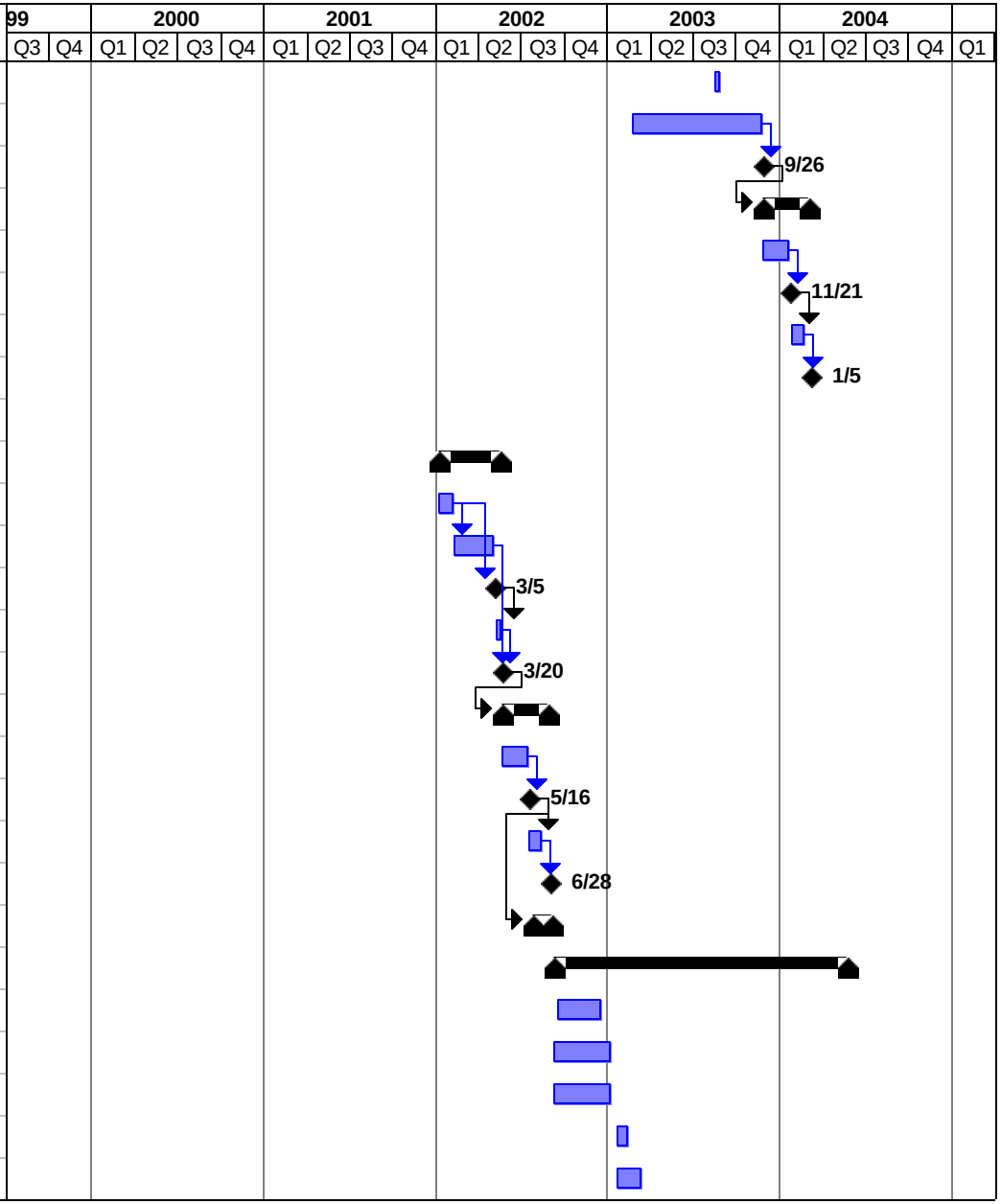


Table 6
Remedial Investigation Schedule
DuPont Pompton Lakes Works

| ID | Task Name | Start | Finish |
|---|---|---|---|
| 100 | Sampling additional delineation | Mon 6/16/03 | Fri 6/27/03 |
| 101 | Data Evaluation | Mon 11/18/02 | Fri 8/22/03 |
| 102 | Report Preparation and Review | Mon 8/25/03 | Fri 12/12/03 |
| 103 | Submit report to NJDEP | Mon 12/15/03 | Mon 12/15/03 |
| 104 | **NJDEP review** | **Tue 12/16/03** | **Wed 3/24/04** |
| 105 | NJDEP technical review | Tue 12/16/03 | Mon 2/9/04 |
| 106 | receive NJDEP comments | Tue 2/10/04 | Tue 2/10/04 |
| 107 | address NJDEP comments | Wed 2/11/04 | Tue 3/9/04 |
| 108 | receive NJDEP approval | Wed 3/24/04 | Wed 3/24/04 |
| 109 | | | |
| 110 | **Lake Inez Well Installation/Development** | Mon 7/29/02 | Fri 8/2/02 |
| 111 | **Lake Inez Sample Wells - 1st Round** | Mon 11/11/02 | Mon 11/11/02 |
| 112 | **Lake Inez Sample Wells - 2nd Round** | Tue 5/6/03 | Tue 5/6/03 |
| 113 | **Lake Inez Well 142-S Redevelopment** | Wed 7/9/03 | Wed 7/9/03 |
| 114 | **Lake Inez Well 142-S Sampling** | Tue 11/4/03 | Tue 11/4/03 |
| 115 | | | |
| 116 | **Lake Inez Work Plan** | **Mon 9/9/02** | **Fri 6/13/03** |
| 117 | Review historic data | Mon 9/9/02 | Fri 11/1/02 |
| 118 | Develop work plan, HASP, QAPP | Mon 11/4/02 | Thu 6/12/03 |
| 119 | Submit report to NJDEP | Fri 6/13/03 | Fri 6/13/03 |
| 120 | **NJDEP review** | **Mon 6/16/03** | **Mon 9/8/03** |
| 121 | NJDEP technical review | Mon 6/16/03 | Thu 7/10/03 |
| 122 | receive NJDEP comments | Fri 7/11/03 | Fri 7/11/03 |
| 123 | address NJDEP comments | Mon 7/14/03 | Fri 8/8/03 |
| 124 | receive NJDEP approval | Mon 9/8/03 | Mon 9/8/03 |
| 125 | **Contractor Selection** | **Fri 6/13/03** | **Mon 7/14/03** |
| 132 | **Lake Inez Investigation** | **Mon 7/14/03** | **Mon 8/2/04** |

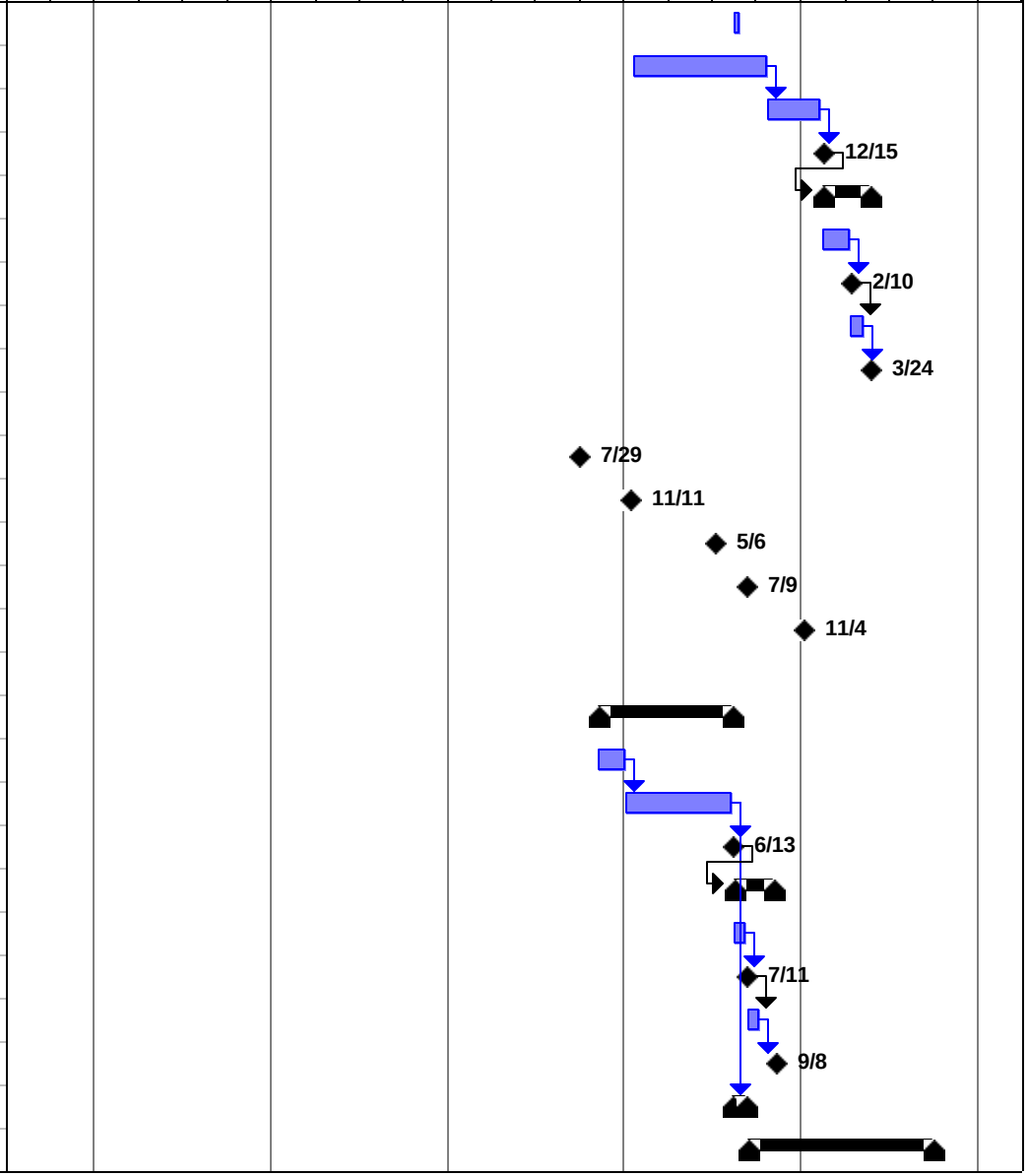
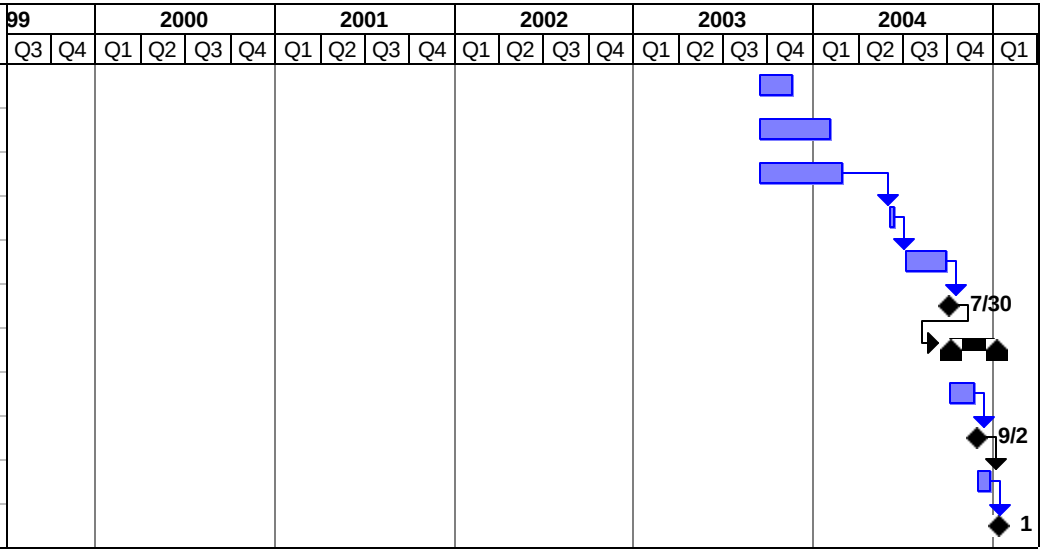
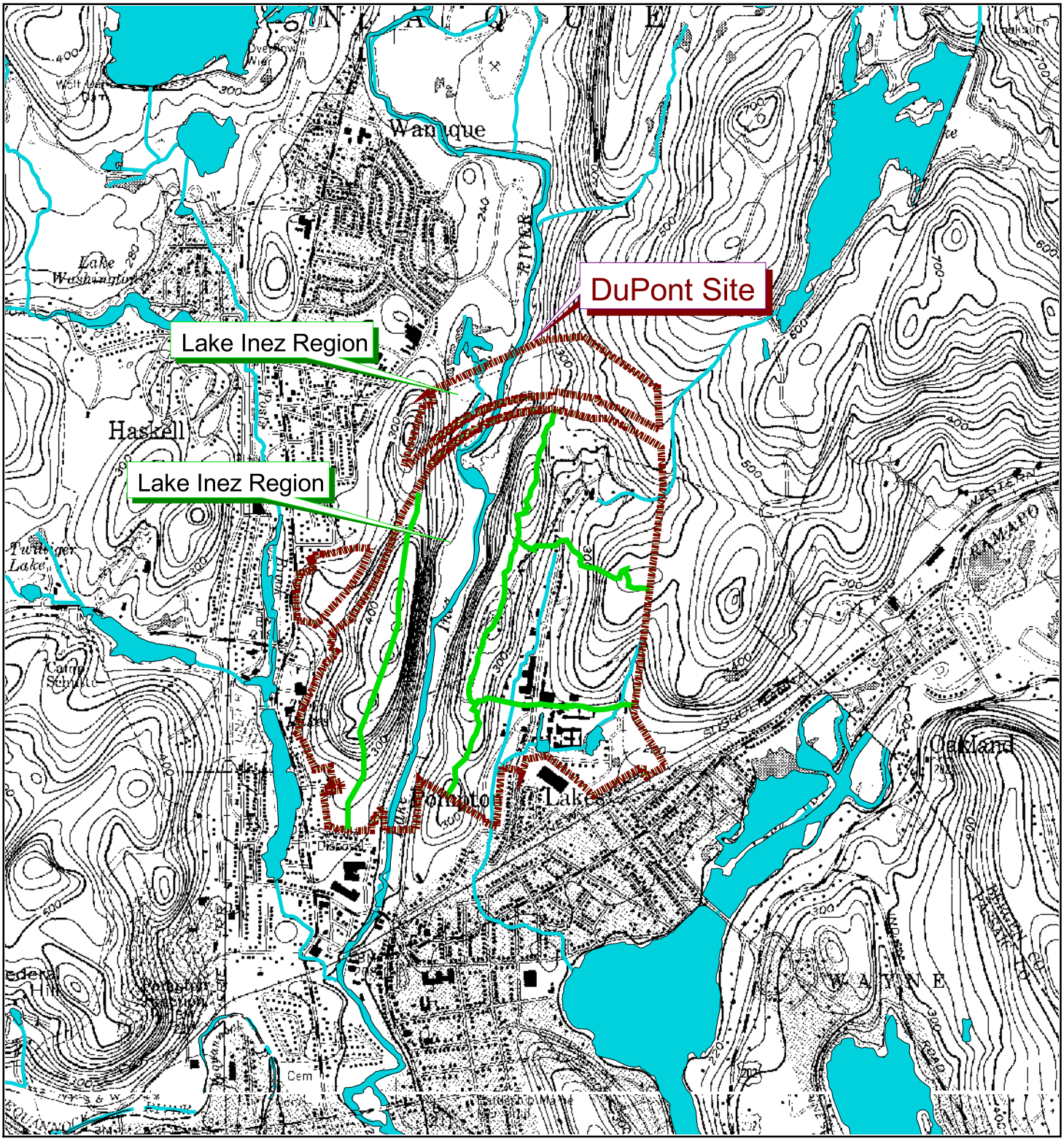


Table 6
Remedial Investigation Schedule
DuPont Pompton Lakes Works

| ID | Task Name | Start | Finish |
|---|---|---|---|
| **133** | Sampling | Mon 7/14/03 | Fri 9/19/03 |
| **134** | Laboratory Analyses | Mon 7/14/03 | Fri 12/5/03 |
| **135** | Data Evaluation | Mon 7/14/03 | Fri 1/2/04 |
| **136** | Sampling additional delineation | Mon 4/5/04 | Fri 4/16/04 |
| **137** | Report Preparation and Review | Fri 5/7/04 | Fri 7/30/04 |
| **138** | Submit report to NJDEP | Fri 7/30/04 | Mon 8/2/04 |
| **139** | **NJDEP review** | **Mon 8/2/04** | **Wed 11/10/04** |
| **140** | NJDEP technical review | Mon 8/2/04 | Mon 9/27/04 |
| **141** | receive NJDEP comments | Mon 9/27/04 | Tue 9/28/04 |
| **142** | address NJDEP comments | Tue 9/28/04 | Tue 10/26/04 |
| **143** | receive NJDEP approval | Tue 11/9/04 | Wed 11/10/04 |

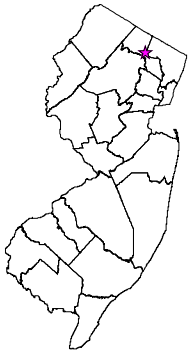


# FIGURES




2000 0 2000 4000 6000 Feet

1 0 1 Miles



DUPONT

**Corporate Remediation Group**

*An Alliance between*
*DuPont and URS Diamond*

2000 Cannonball Road
Pompton Lakes, New Jersey 07442

**SITE LOCATION MAP**

**DuPont Pompton Lakes Works**
**Pompton Lakes, New Jersey**

**Figure 1**

NJDEP GIS - Passaic County NAD83

AOC 167
AOC 151
AOC 152
AOC 149
AOC 119
AOC 200
AOC 148
AOC W7
AOC 147
AOC 112
AOC 199
AOC 202
AOC 114
AOC 113
AOC 111
AOC 198
AOC 109
AOC 107
AOC 110
AOC 104
AOC 108
AOC 192
AOC 106
AOC 105
AOC 102
Lake Inez

## LEGEND

0' 100'
SCALE: 1:01 = 100-FT

Mapped by photogrametric methods to comply with National Accuracy Standards.
Base map compiled from aerial photos flown 1/6/1995.
The base map represents features as the time of the flyover.
Contour Interval is 2-foot, NGVD 1988.

DATE: March 17, 2003
MAPPERS: E.R. Cahill & M.E. Vetter
DRAWING: Inez-RIWP_v8.dgn

EXISTING BUILDING
FORMER BUILDING, SLAB REMAINING
PUBLIC ROAD
PRIVATE ROAD
SURFACE CONTOUR (10-FT INTERVALS)
RAILROAD TRACKS
LAKE INEZ REGION BOUNDARY
DUPONT PROPERTY BOUNDARY
FENCE
SURFACE WATER BODY
SOLID WASTE MANAGEMENT UNIT
AOC

CORPORATE REMEDIATION GROUP
*An Alliance Between*
*DuPont and URS Diamond*

2000 Cannonball Road
Pompton Lakes, New Jersey

LAKE INEZ REGION
WITH ORIGINAL AOCs

LAKE INEZ REGION
REMEDIAL INVESTIGATION
DUPONT POMPTON LAKES WORKS

Figure 2

...\Inez-RI\RIWP\Inez-RIWP_v8.dgn 6/9/2003 1:40:15 PM

AOC 198
AOC 194
AOC 111
AOC 145
AOC 110
AOC 109
AOC 193
AOC 108
AOC 197
AOC 113
AOC 107
AOC 196
AOC 195
AOC 192

Mapped by photographic methods to comply with National Accuracy Standards.
Aerial flyover performed on Nov. 16, 1998 in NAD 1983.
The base map represents feaures at the time of the flyover.
Contour Interval is 2-foot, NGVD 1988.

DATE: March 17, 2003
MAPPERS: E.H. Cahill & M.E. Vetter
DRAWING: \Inez-RI\WP_v8.dgn

0 120
Scale 1-in = 120-ft

## LEGEND

- EXISTING BUILDING
- FORMER BUILDING, SLAB REMAINING
- PUBLIC ROAD
- PRIVATE ROAD
- SURFACE CONTOUR (10-FT INTERVAL)
- RAILROAD TRACKS
- LAKE INEZ REGION BOUNDARY
- DUPONT PROPERTY BOUNDARY
- FENCE
- SURFACE WATER BODY
- IRM AREA
- REVISED AOC AREA
- ORIGINAL AOC AREA
- AOC 113 FLOODPLAIN AREA

CORPORATE REMEDIATION GROUP
*An Alliance Between*
*DuPont and URS Diamond*

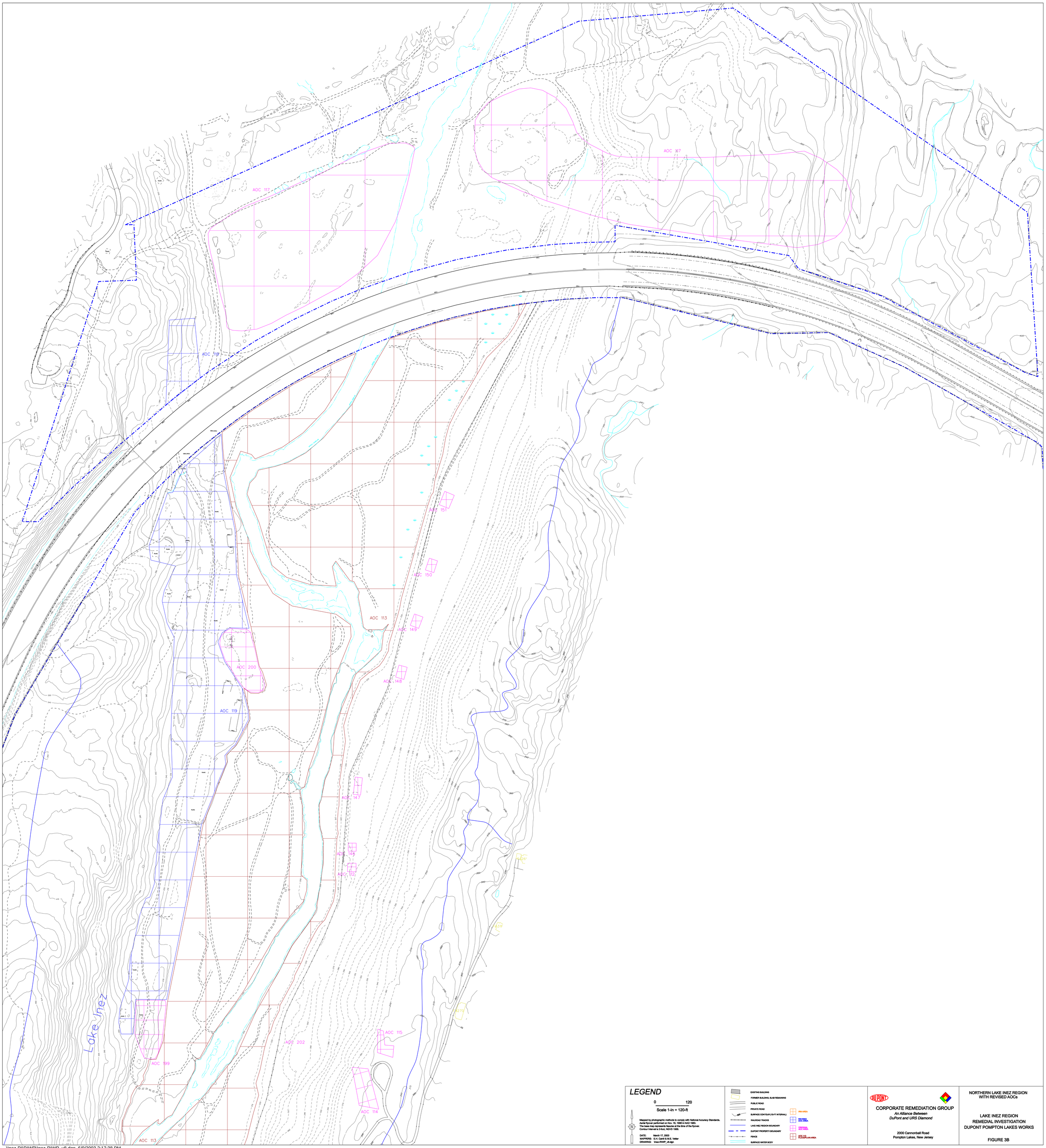
2000 Cannonball Road
Pompton Lakes, New Jersey

SOUTHERN LAKE INEZ REGION
WITH REVISED AOCs

LAKE INEZ REGION
REMEDIAL INVESTIGATION
DUPONT POMPTON LAKES WORKS

FIGURE 3A

...\Inez-RI\RIWP\Inez-RIWP_v8.dgn 6/9/2003 2:01:49 PM




## LEGEND

0 120

Scale 1-in = 120-ft

Mapped by photographic methods to comply with National Accuracy Standards.
Aerial flyover performed on Nov. 16, 1998 in NAD 1983.
The base map represents feaums at the time of the flyover.
Contour Interval is 2-foot, NGVD 1988.

DATE: March 17, 2003
MAPPERS: E.H. Cahill & M.E. Vetter
DRAWING: \\nez-RI\WP\...v8.dgn

EXISTING BUILDING
FORMER BUILDING, SLAB REMAINING
PUBLIC ROAD
PRIVATE ROAD
SURFACE CONTOUR (10-FT INTERVAL)
RAILROAD TRACKS
LAKE INEZ REGION BOUNDARY
DUPONT PROPERTY BOUNDARY
FENCE
SURFACE WATER BODY

IRM AREA
REVISED AOC AREA
ADDITIONAL AOC AREA
AOC 100 FLOODPLAIN AREA

CORPORATE REMEDIATION GROUP
*An Alliance Between*
*DuPont and URS Diamond*

2000 Cannonball Road
Pompton Lakes, New Jersey

NORTHERN LAKE INEZ REGION
WITH REVISED AOCs

LAKE INEZ REGION
REMEDIAL INVESTIGATION
DUPONT POMPTON LAKES WORKS

FIGURE 3B

...\Inez-RI\RIWP\Inez-RIWP_v8.dgn 6/9/2003 2:17:38 PM

AOC 198
AOC 194
AOC 111
AOC 145
AOC 110
AOC 193
AOC 109
AOC 108
AOC 197
AOC 196
AOC 113
AOC 107
AOC 195
AOC 192

194-39
194-54
194-40
194-45
194-55
194-46
194-47
194-53
194-56
194-83
194-105
194-106
194-85
194-115
194-110
194-111
194-86
194-88

193-5
193-6
Benz(a)pyrene 3.2
193-4
193-3
193-2
Benzo(a)pyrene 0.76

938
783
20.4
58.8
1,193
3,198
107-68
107-128
107-129
107-182
107-45
107-216
107-40
107-187
107-178
107-185
107-172
107-184
107-183
107-56
107-75
107-21
107-58
107-66
107-61
107-62
107-67
107-105
107-63
107-104
107-36
107-70
107-54
107-158
107-115
107-114
107-134
107-220
107-155
107-79

Benzo(a)pyrene 3.9
Benzo(b)fluoranthene 6.7
Dibenzo(a,h)anthracene 0.8
Benzo(a)pyrene 1.1
Benzo(a)pyrene 3.6
Benzo(b)fluoranthene 5.5
Dibenzo(a,h)anthracene 0.81
Benzo(a)anthracene 4.7
Benzo(a)pyrene 5.8
Benzo(b)fluoranthene 13
Dibenzo(a,h)anthracene 1.4
Indeno(1,2,3-cd)pyrene 4.7
Benzo(a)anthracene 5.4
Benzo(a)pyrene 8.4
Benzo(b)fluoranthene 9.8
Dibenzo(a,h)anthracene 2
Indeno(1,2,3-cd)pyrene 5.1
Benzo(a)pyrene 3.9
Benzo(b)fluoranthene 6.1
Dibenzo(a,h)anthracene 0.68
Benzo(a)pyrene 1.2
Benzo(a)anthracene 16
Benzo(a)pyrene 23
Benzo(b)fluoranthene 13
Dibenzo(a,h)anthracene 4
Indeno(1,2,3-cd)pyrene 20

192-85
192-97
192-37
192-38
192-98
192-91
192-133
192-100
192-66
192-127
Benzo(a)pyrene 0.89
192-69
192-128
192-68
Benzo(a)pyrene 0.88
192-67
192-129
192-23
Benzo(a)anthracene 4.8
Benzo(a)pyrene 3.5
Benzo(b)fluoranthene 4.7
192-130
192-131
192-22
556-2
748-18
748-1
748-19
748-31
558-3
748-20
748-63
748-64
748-32
748-59
748-55
748-33
748-22
748-23
748-34
Benzo(a)pyrene 0.67
748-24
748-35
748-25
748-37
748-14
723-1
723-2
558-19
558-20

Mapped by photographic methods to comply with National Accuracy Standards.
Aerial flyover performed on Nov. 16, 1998 in NAD 1983.
The base map represents feaures at the time of the flyover.
Contour Interval is 2-foot, NGVD 1988.

DATE: March 17, 2003
MAPPERS: E.H. Cahill & M.E. Vetter
DRAWING: \Inez-RI\WP_v8.dgn

0 120
Scale 1-in = 120-ft

## LEGEND

- EXISTING BUILDING
- FORMER BUILDING, SLAB REMAINING
- PUBLIC ROAD
- PRIVATE ROAD
- SURFACE CONTOUR (10-FT INTERVAL)
- RAILROAD TRACKS
- LAKE INEZ REGION BOUNDARY
- DUPONT PROPERTY BOUNDARY
- FENCE
- SURFACE WATER BODY
- IRM AREA
- REVISED AOC AREA
- ORIGINAL AOC AREA
- AOC 113 FLOODPLAIN AREA
- 194-66 • IRM Well Sample
- 193-1 • IRM Boring
- 748-23 • IRM Perimeter Sample
- Site Investigation Sample

Analytes Exceeding Soil Cleanup Criteria
- Arsenic (ppm)
- Copper (ppm)
- Lead (ppm)
- Mercury (ppm)
- Thallium (ppm)
- Beryllium (ppm)
- PAHs (ppm)

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*An Alliance Between*
*DuPont and URS Diamond*

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Pompton Lakes, New Jersey

PREVIOUS BORINGS
AND
ANALYTES EXCEEDING
SOIL CLEANUP CRITERIA

LAKE INEZ REGION
REMEDIAL INVESTIGATION
DUPONT POMPTON LAKES WORKS

FIGURE 4

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AOC 198
AOC 194
AOC 111
AOC 145
AOC 110
AOC 109
AOC 193
AOC 108
AOC 197
AOC 113
AOC 107
AOC 196
AOC 195
AOC 192

Mapped by photographic methods to comply with National Accuracy Standards.
Aerial flyover performed on Nov. 16, 1998 in NAD 1983.
The base map represents feaures at the time of the flyover.
Contour Interval is 2-foot, NGVD 1988.

DATE: March 17, 2003
MAPPERS: E.H. Cahill & M.E. Vetter
DRAWING: \Inez-RIWP_v8.dgn

0 120
Scale 1-in = 120-ft

## LEGEND

- EXISTING BUILDING
- FORMER BUILDING, SLAB REMAINING
- PUBLIC ROAD
- PRIVATE ROAD
- SURFACE CONTOUR (10-FT INTERVAL)
- RAILROAD TRACKS
- LAKE INEZ REGION BOUNDARY
- DUPONT PROPERTY BOUNDARY
- FENCE
- SURFACE WATER BODY
- IRM AREA
- REVISED AOC AREA
- ORIGINAL AOC AREA
- AOC 113 FLOODPLAIN AREA
- As, Cu, Pb, Hg ANALYSIS
- PP Metals ANALYSIS
- PAH ANALYSIS
- ORGANIC EXPLOSIVE ANALYSIS
- PCB ANALYSIS

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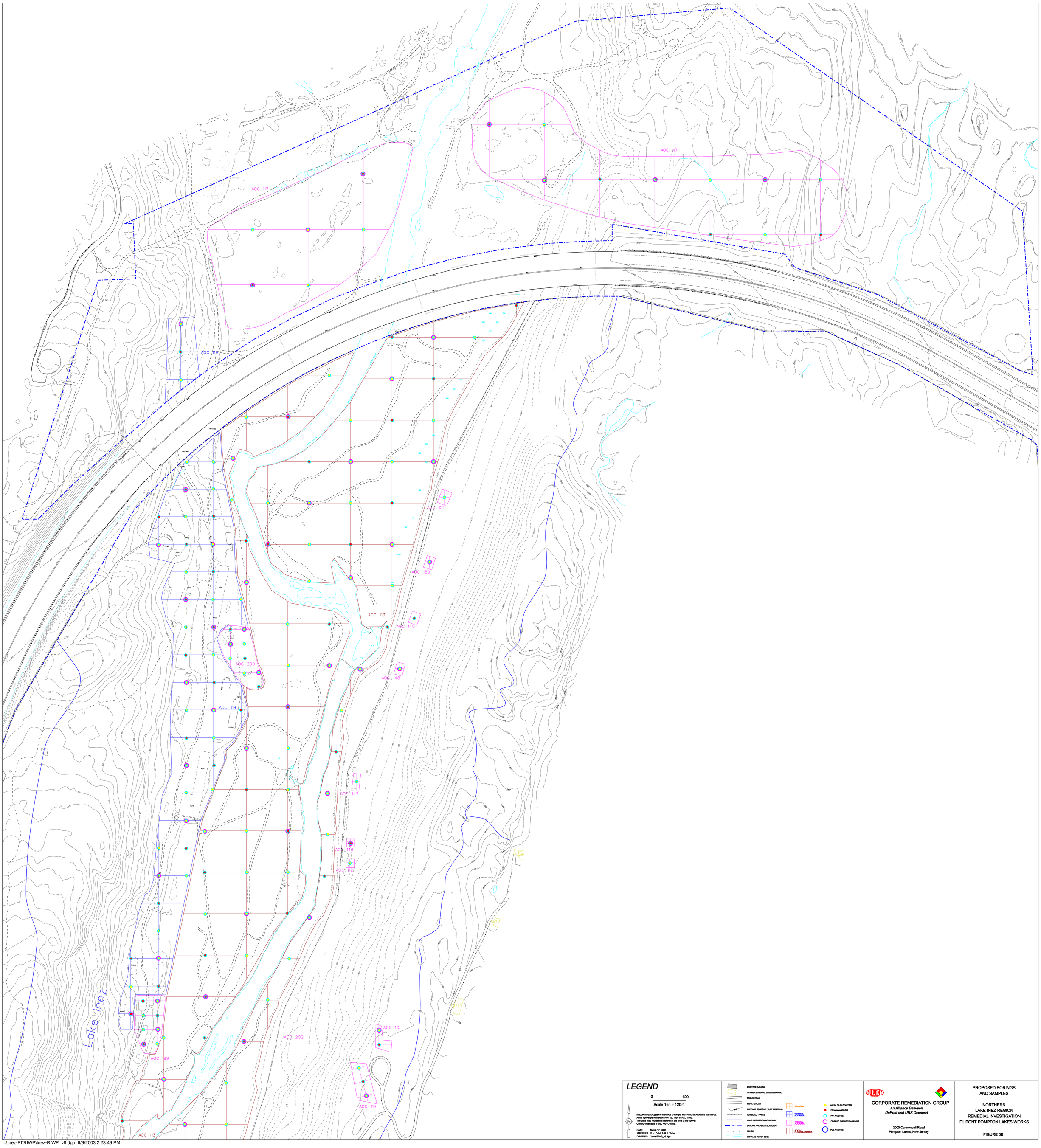
PROPOSED BORINGS
AND SAMPLES

SOUTHERN
LAKE INEZ REGION
REMEDIAL INVESTIGATION
DUPONT POMPTON LAKES WORKS

FIGURE 5A

...\Inez-RI\RIWP\Inez-RIWP_v8.dgn 6/9/2003 2:08:29 PM




## LEGEND

0 — 120

Scale 1-in = 120-ft

Mapped by photographic methods to comply with National Accuracy Standards.
Aerial flyover performed on Nov. 16, 1998 in NAD 1983.
The base map represents feaums at the time of the flyover.
Contour Interval is 2-foot, NGVD 1988.

DATE: March 17, 2003
MAPPERS: E.H. Cahill & M.E. Vetter
DRAWING: \Inez-RIWP_v8.dgn

- EXISTING BUILDING
- FORMER BUILDING, SLAB REMAINING
- PUBLIC ROAD
- PRIVATE ROAD
- SURFACE CONTOUR (10-FT INTERVAL)
- RAILROAD TRACKS
- LAKE INEZ REGION BOUNDARY
- DUPONT PROPERTY BOUNDARY
- FENCE
- SURFACE WATER BODY

- PIM AREA
- REMEDIAL AOC AREA
- REMOVAL AOC AREA
- AOC 119 FLOODPLAIN AREA

- As, Cd, Pb, Hg ANALYSIS
- PP Metals ANALYSIS
- PAH ANALYSIS
- ORGANIC EXPLOSIVE ANALYSIS
- PCB ANALYSIS

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PROPOSED BORINGS
AND SAMPLES

NORTHERN
LAKE INEZ REGION
REMEDIAL INVESTIGATION
DUPONT POMPTON LAKES WORKS

FIGURE 5B

...\Inez-RI\RIWP\Inez-RIWP_v8.dgn 6/9/2003 2:23:49 PM

# APPENDICES

# APPENDIX A—QAPP PLAN

# QUALITY ASSURANCE PROJECT PLAN FOR DUPONT POMPTON LAKES WORKS, LAKE INEZ REGION REMEDIAL INVESTIGATION

Date:June 12, 2003

Project No.: 7035
18983386.00001

CORPORATE REMEDIATION GROUP
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2000 Cannonball Road
Pompton Lakes, NJ 07442

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## EXHIBITS

Exhibit 1 Laboratory Quality Assurance Plan
Exhibit 2 XRF SOP-DuPont Pompton Lakes Works Laboratory

# EXECUTIVE SUMMARY

This Quality Assurance Project Plan (QAPP) for DuPont Pompton Lakes Works (PLW), Pompton Lakes, New Jersey, has been prepared as part of the Lake Inez Region Remedial Investigation Work Plan (RIWP). The objective of this QAPP is to specify the terms, policies, organization, objectives, functional responsibilities, and specific quality assurance and quality control (QA/QC) in place to ensure that data quality goals of the project are met. Environmental Protection Agency (EPA) *Guidance for Quality Assurance Project Plans* (QA/G-5) was used in preparation of this QAPP.

The Lake Inez Region RIWP describes work to be conducted by DuPont, and provides a summary of project objectives, a site assessment plan, and a schedule for implementation of all activities. The Lake Inez Region Remedial Investigation Health and Safety Plan (HASP), included as Appendix B of the RIWP, details the methodologies, safety procedures, and personnel and equipment needs for the project.

This QAPP (Appendix A of the RIWP) describes the project quality assurance rationale, sampling and analytical procedures, sample handling and tracking, laboratory analyses, quality control, data reporting, and data quality objectives for the project.

Tables referenced in the text are attached. The Laboratory Quality Assurance Plan (LQAP) is included as Exhibit 1.

# 1.0 PROJECT DESCRIPTION

## 1.1 Site Location And History

DuPont Pompton Lakes Works (PLW) is located in central Passaic County, in northern New Jersey. Between 1902 and 1994, DuPont manufactured a variety of explosives-related products at the Pompton Lakes Works. Manufacturing ceased in April 1994. Analytes and areas of concern (AOCs) for the current investigation have been defined based upon evaluation of data from numerous previous investigations at the site, a review of site history, and preliminary assessments.

The Lake Inez Region RIWP (Sections 1 through 3) presents summary information on site location, geology, and history, including a description of previous investigations.

## 1.2 Current Investigation

DuPont will conduct a remedial investigation (RI) for the Lake Inez Region area at PLW. As fully detailed in Section 4 of the RIWP, this Lake Inez Region RI will target soil as the medium of potential concern and will accomplish the following:

- ❏ Delineate to Residential Direct Contact Soil Cleanup Criteria (RDCSCC) at the fence line, provided manufacturing or associated manufacturing activities occurred in the area.
- ❏ Delineate surface concentration of constituents to the Non Residential Direct Contact Soil Cleanup Criteria (NRDCSCC) at the perimeter of the manufacturing or associated manufacturing areas that are internal to the site.
- ❏ Perform additional delineation within the grid if concentrations exceed 100 X NRDCSCC or health-based limits, whichever is lower in order, to better define remedial action.
- ❏ Vertically delineate and horizontally delineate at depth (>2 feet) non-VOC samples with significant concentrations (two orders of magnitude) above the NJ-NRDC-SCC. Use health based concentrations for those constituents whose NJ-NRDC-SCC are not health based (e.g., benzo(a)pyrene).
- ❏ Collect and evaluate data necessary to evaluate remedial action alternatives consistent with site reuse.

# 2.0 PROJECT ORGANIZATION AND RESPONSIBILITY

DuPont's Corporate Remediation Group (CRG) will conduct the remedial investigation. DuPont CRG is an alliance between DuPont and URS Diamond (a subsidiary of URS Corporation). Laboratory analytical testing will be conducted at Lancaster Laboratories, Inc. (LLI), Lancaster, Pennsylvania, or another New Jersey certified laboratory

## 2.1 DuPont Project Director

Edward Seger (DuPont) is the Project Director and has primary responsibility for all technical, financial, and scheduling matters, including:

- ❏ Providing strategic-level review of technical activities
- ❏ Coordinating all aspects of project activity
- ❏ Approving project-specific procedures and internally prepared plans, drawings, and reports

## 2.2 Project Manager

Marjorie Vetter (URS Diamond) is the Project Manager, and is responsible for project implementation. Ms. Vetter has the authority to commit the resources necessary to meet project objectives and requirements. The project manager will report directly to the project director, and is responsible for technical quality control and project oversight.

Ms. Vetter's responsibilities include:

- ❏ Assigning duties to the project team and orientation of the team to project requirements
- ❏ Disseminating project-related information from DuPont to the project team
- ❏ Acting as liaison with subcontractor organizations, unless specifically delegated to others
- ❏ Interacting with the QA officer and health and safety officer to ensure that these programs are functioning effectively
- ❏ Serving as the collection point for project team reporting of nonconformance with QA procedures or changes in project documents and activities

## 2.3 Technical Lead/Project Geologist/Site Coordinator

Edward H. Cahill (URS Diamond) will serve in the related roles of technical lead, project geologist, and site coordinator for the Lake Inez Region RI project. He is responsible for:

- ❏ Ensuring that the sampling program is operating effectively
- ❏ Evaluating site soil data

- ❏ Report preparation
- ❏ Coordinating the site investigation and sampling teams
- ❏ Ensuring that day-to-day sampling and documentation procedures are consistent with QA/QC objectives
- ❏ Interacting with the project chemist and laboratory to facilitate services

## 2.4 Project Chemist/Quality Assurance Officer

Barbara Rhodes (URS Diamond) is project chemist and QA officer. Her responsibilities include:

- ❏ Developing and administering the QAPP
- ❏ Ensuring project QA objectives are documented and communicated, and that day-to-day project activities are consistent with those objectives
- ❏ Scheduling all sample container orders and analytical requests with the laboratory.
- ❏ Collecting both hard copy and electronic data from the laboratory
- ❏ Conducting QC review of analytical data and data reports
- ❏ Serving as liaison between the lab and project team to ensure the analytical program is consistent with RI goals
- ❏ Notifying project management of QA exceptions and failures

## 2.5 Health and Safety Officer

Kathryn Sova (URS Diamond) is health and safety officer for the project. Her responsibilities include developing and administering the project Health and Safety Plan consistent with all applicable state and federal regulations

## 2.6 Laboratory Personnel

Lancaster Laboratories, Inc. (LLI) will provide analytical services for this project. LLI maintains New Jersey Department of Environmental Protection (NJDEP) certification. Exhibit 1 contains additional information on the qualifications, capabilities, and certifications of the project laboratory.

The key laboratory personnel for this project will be the laboratory project manager and the laboratory QA director. The laboratory project manager will be responsible for execution of the analytical testing program for the project; that is, the laboratory project manager will be responsible for laboratory analyses and data processing, and will be the point of contact for the project geologist and project chemist. The laboratory QA director is responsible for ensuring that laboratory internal QA procedures are followed and for processing QA data. These procedures are detailed in the laboratory QA plan [LQAP] in Exhibit 1.

The laboratory has signed a contract with DuPont detailing the terms and conditions for services. This contract includes a guarantee to dispose of samples following analysis, in accordance with all pertinent federal, state, and local regulations.

## 2.7 Technical Consultants

Senior CRG staff members with expertise in the disciplines associated with the remedial investigation are available to the project as needed. These individuals will participate in the project as arranged by the project director or project manager.

## 2.8 Technical and Support Staff

Individuals in this category will participate in the many technical activities associated with the project as directed by the project manager.

## 2.9 Project Risk Assessment Specialist

Maryann Nicholson (DuPont) is the risk assessment specialist for this project. Her responsibilities include:

- ❏ Providing guidance on data collection to ensure valid input for risk assessment.
- ❏ Conducting a site risk assessment based on analytical results.

# 3.0 QUALITY ASSURANCE OBJECTIVES FOR MEASUREMENT

The primary purpose and objectives of this investigation are presented in the PLW Lake Inez Region RIWP. To ensure that the data generated during the remedial investigation are of adequate and consistent quality for the stated purpose, data quality objectives (DQOs) have been established in terms of precision and accuracy.

Sampling, analysis, and associated QA efforts are aimed at achieving these objectives in a safe, timely, and cost-effective manner.

## 3.1 Data Quality Characteristics

DQOs are statements of the level of uncertainty that a decision-maker is willing to accept in results derived from environmental measurements. Uncertainty in sample parameter results may arise from a combination of factors, including sampling procedures, sample matrix characteristics, sample non-homogeneity, and the inherent accuracy and precision limitations of analytical methods. DQOs are quantitatively and qualitatively described in terms of data quality characteristics, i.e., precision, accuracy, representativeness, completeness, and comparability (see Section 11.0). These characteristics are defined as follows:

- *Accuracy*
  Accuracy is the degree of agreement of a measurement with an accepted true value.
- *Precision*
  Precision is the agreement between numeric values for two or more measurements that have been obtained in an identical fashion.
- *Completeness*
  Completeness is a measure of the amount of valid data obtained from the measurement system compared to the amount that was expected under normal conditions.
- *Representativeness*
  Representativeness expresses the degree to which sample data accurately and precisely represent a selected characteristic of a population, parameter variations at the sampling point, a process condition, or an environmental condition.
- *Comparability*
  Comparability expresses consistency in sampling and analytical procedures so that one data set can be compared to another.

## 3.2 Data Quality Objectives for the RI

The purpose of the remedial investigation (RI) is to conduct a sampling and analysis program for soil in the Lake Inez Region area of DuPont Pompton Lakes Works. The

data gathered from this RI will be used with existing and future data to fully characterize conditions at the site. To accomplish this, the accuracy and precision acceptance criteria required for this investigation are listed in Table A- 1. To ensure comparability of historical data, all measurement data will be collected and reported using standard methods and units consistent with specified methodologies.

## 3.3 Sampling Quality Objectives

All sampling events will follow standard operating procedures to provide common ground for comparison of data. Sampling procedures described in the May 1992 NJDEP *Field Sampling Procedures Manual* and analytical methodology set forth in the 1996 USEPA *SW-846 3rd Edition Update III* will be used throughout the program, thus ensuring representative and comparable results of known accuracy and precision.

## 3.4 Laboratory Quality Objectives

The laboratory quality objectives (LQOs) are designed to provide results of known, consistent, and documented quality. The QA officer or designate is responsible for performing periodic performance audits with participating laboratories to ensure that acceptable precision and accuracy are maintained (see Section 9.0). Specific laboratory QC procedures for analyses can be found in the EPA documents describing specified analytical methodologies, including *Test Methods for Evaluating Solid Waste Physical/Chemical Methods* (EPA document number SW-846, 3rd Edition), *Methods for Chemical Analysis, Water and Wastes* (EPA document 600/479-020). Additional parameters may be analyzed using *Standard Methods for the Examination of Water and Wastewater* (18th edition, 1992).

EPA methodologies, as well as others, require the use of instrument performance checks, laboratory control samples, method blanks, duplicate samples, replicate assays, calibration checks, and matrix spike samples for the evaluation of laboratory precision and accuracy during metals analysis. The frequency and application of QC sample analysis is further defined in those sections of this QAPP addressing the respective methods.

# 4.0 SAMPLING PROCEDURES

Section 7.0 of the PLW Lake Inez Region RIWP presents the soil sampling procedures and field measurement techniques to be used during the field investigation. The work plan will adhere to the QA/QC policies and procedures outlined in this QAPP. The project manager will be accountable for ensuring compliance of all field sampling and associated documentation procedures.

## 4.1 Field Documentation

The project geologist is responsible for maintaining the field notebook. The notebook will provide a daily record of significant events, observations, and measurements during the field investigation. The notebook must be bound and waterproof, with each page numbered and completed in waterproof ink. Each page will be signed by the user and dated. All members of the field sampling team will have access to the field notebook. The notebook will be maintained as a permanent record and will remain the property of DuPont.

The field notebook is intended to provide sufficient data and observations to reconstruct events that occurred during sampling, and to refresh the memories of sampling team members if required to give testimony during legal proceedings. In legal proceedings, notes, if referred to, are subject to cross-examination and may be admissible as evidence. The field notebook entries must be legible, factual, detailed, and objective. Errors must be lined out, initialed, and replaced with correct information.

The geologist will ensure that each sample collected is fully documented in the field notebook, noting at least the following information as required by the 1992 NJDEP *Field Sampling Procedures Manual*:

- ❏ Purpose of event
- ❏ Event location
- ❏ Sample identification number
- ❏ Sample source (e.g., soil boring, sediment, surface soil)
- ❏ Sample type and collection equipment (e.g., grab sample, composite sample)
- ❏ Sample location, date, and time
- ❏ Personnel present
- ❏ Depth of sample
- ❏ Weather conditions
- ❏ Sample appearance (e.g., color, odor, texture)
- ❏ Number of containers for each aliquot collected
- ❏ Container size, type, and preservative used in each sample aliquot
- ❏ Parameters (analytes from each sample aliquot)

- ❏ Comments and observations at time of sample withdrawal
- ❏ Signature of recorder and date of field event completion

## 4.2 Preliminary Activities

At minimum, the project manager and the sampling personnel will complete the following checklist prior to the sampling event:

- ❏ Coordinate with laboratory staff to ensure that sample arrival is properly anticipated (especially if weekend delivery will occur).
- ❏ Determine that appropriate forms and logbooks are available for use during the sampling event.
- ❏ Establish accountability and responsibility for each activity to be conducted by sampling team personnel.
- ❏ Conduct a preliminary inspection, inventory, and cleaning of all field equipment. Ensure that preventive maintenance is up-to-date. Calibrate and re-check all field analytical instrumentation.
- ❏ Review the work plan to determine that each individual is aware of the protocols and required procedures.
- ❏ Review the health and safety plan (HASP) for health and safety requirements. If applicable, place markers at the location of all underground and overhead utilities. Determine what level of personal protective clothing and equipment will be needed for each location. Review procedures for use, removal, and decontamination of personal protective equipment to avoid personal exposure to potentially hazardous sample materials. Review emergency escape and medical emergency procedures.
- ❏ Review the HASP to determine the location of specified decontamination areas for sampling equipment.
- ❏ Review the work plan to determine what types of devices are to be used for withdrawal and collection of each sample type. Review decontamination procedures for all sampling equipment.

## 4.3 Sample Locations, Types, and Parameters

Field samples and QC samples (duplicates, matrix spikes) will be collected from locations within the PLW Lake Inez Region as specified in Sections 4.2.2, 7.0 and Figures 5a and 5b of the RIWP. The locations selected reflect perimeter, holistic, and AOC-specific sampling.

All samples will be screened in the field for primary and organic explosives. All samples passing this hazard screen will be analyzed in the Pompton Lakes Works on-site laboratory for site-specific metals, i.e., lead, copper, and mercury.

After the on-site metals analysis, some samples will be submitted to LLI. for determination of some or all of the following parameters, using the SW846 methods specified:

| Parameter | Instrument/ Detector | SW846 Method Number |
|---|---|---|
| Arsenic | ICP/ICP Trace/CVAAS | 6010B/7471A |
| PAHs | GC/MS | 8270C |
| Nitroaromatics/Nitramines) | HPLC | 8330 |
| PPL Metals | ICP/ICP-Trace/CVAAS | 6010B/7471A |
| Nitrate/Nitrite | IC | 9056 |

Table A-1 specifies Data Quality Objectives for the SW-846 analyses.

### 4.3.1 Sample Containers

LLI will supply sample containers in quantities, sizes, and types appropriate for planned use. Only new sample containers will be used. They will be packed in insulated coolers, which will serve as shipping containers, and will be delivered to the site in bulk, prior to sampling.

For most planned analyses, the appropriate sample container is 1 or more 16-oz glass jars with screw cap. See Table A- 2 for details concerning containers.

### 4.3.2 Sample Descriptions

Prior to each day's sampling, adhesive sample labels will be preprinted with site name, sampling date, sample source, sample container number, and required analysis, and permanently affixed to the required sample container(s). When the sample is collected in the field, the sample label will be completed with sampling time, sample depth, sampler's name, and any necessary sample screening information (e.g., high PID).

### 4.3.3 Sampling Locations and Field Data

Planned sampling locations are clearly identified on the site map (see RIWP, Figures 5a and 5b).

All field data for every sample collected in the Pompton Lakes Lake Inez Region RI will be recorded in the field notebook. Field data needed for the chain(s)-of-custody (COC)

will be entered into the on-site Pompton Database each day, and later exported to the DuPont CRG Corporate Environmental Database (CED) for data management purposes.

## 4.4 Sampling Equipment and Procedures

Soil samples will be collected, depending on the site conditions, with either a GeoProbe® rig or with a stainless steel sampling trowel or hand auger. In general, all deep soil samples will be collected with the GeoProbe,® and shallow soil samples with hand auger or trowel. If safety concerns arise because of the potential for explosive devices, then non-sparking sampling equipment, a remote drill rig, or test pits may be utilized for sample collection. The current sampling plan does not include use of test pits; nonetheless, a test pit sampling method is described in the Lake Inez Region RIWP (Section 7.2.3), should the need arise.

Generally, one sample will be collected within the surface interval and two samples collected from the subsurface for each sample location, unless bedrock or groundwater is encountered before reaching desired boring depth. Soil cover in the Lake Inez Region is thin to non-existent in some areas. Accordingly, the field geologist will have responsibility to determine which depth intervals to sample, based on lithology and field screening. If the screening procedures indicate no interval(s) to target, then borings will generally be sampled at the 0 to 0.5-foot, 3 to 3.5-foot and 6 to 6.5-foot intervals. Sampling intervals for areas with a total soil depth of less than 6.5' will be adjusted so that samples will be taken at 0 to 0.5, at the median interval, and at 0.5' above the bedrock refusal depth. Samples will be collected in 0.5' intervals.

Sampling locations for field duplicate and QC sample collection will be selected at the discretion of the field geologist. Locations for QC samples will be selected to ensure representativeness as well as sufficient sample volumes required by QA/QC protocols.

Sampling will be performed in accordance with the methods described in the 1992 NJDEP *Field Sampling Procedures Manual*, or with methods otherwise approved by NJDEP.

All field personnel will use appropriate PPE during all phases of sample collection.

Field equipment will include at least the following:

- ❏ Laboratory-supplied sample collection bottles
- ❏ A field sampling record and, if necessary, test pit logs
- ❏ Photoionization detector (PID) with 11.7 eV lamp for organic vapor analysis
- ❏ Stainless-steel knife, trowels, spoons, scoops, and bowls
- ❏ Non-phosphate detergents and decontamination solvents
- ❏ Reagent grade water (ASTM Type II)
- ❏ Sufficient ice to maintain the samples at 4 ± 2°C.

Before collecting each sample, sampling equipment will be cleaned according to the decontamination procedures outlined in Section 4.6 of this QAPP. Also, each sampling team member will don a new pair of latex gloves.

### 4.4.1 Surface Soil Sampling

Surface soil samples will be collected from 0 to 6 inches below grade using a stainless steel trowel, hand auger, or from the GeoProbe® core. The soil sample will be transferred to a stainless steel mixing pan using the stainless steel trowel, homogenized, and then transferred to laboratory supplied jars.

### 4.4.2 Subsurface Soil Sampling

In general, subsurface soil samples will be collected using the GeoProbe® direct push method, or with a stainless steel hand auger. Test pits may be used at sampling locations with the potential for explosive devices. All sampling techniques will be in accordance with the methods described in the 1992 NJDEP *Field Sampling Procedures Manual*. These procedures will be followed at all investigation boring locations

#### GeoProbe® Method

As currently planned, all subsurface soil samples will be collected by the GeoProbe® direct-push method. The GeoProbe® rig will be used to drive a 2-inch diameter, 4-foot long steel sampling tube to the desired depth. Soil samples are contained in a disposable plastic liner inside the sampling tube. A clean, new plastic liner will be used for each sample core. The field geologist will lay the cores on an elevated cutting table to protect them from contact with any surface soil, cut the plastic liner in half longitudinally using a hook-blade razor knife, and open the cores for hazard screening, visual inspection, classification, and sampling. In locations where larger quantities of soil are needed (i.e., duplicates), adjacent borings will be advanced to the desired depth until sufficient soil is acquired for the sample.

Samples will be collected from the core liners and transferred to the appropriate laboratory supplied containers.

### 4.4.3 Sample Screening Procedures

Upon collection, all soil cores or samples will be screened for hazardous volatiles using a photoionization detector (PID). All samples will also be screened for reactivity using thermal reactivity methods. Finally, samples will be screened for organic explosives PETN, RDX, TNT, TETRYL and HMX using an EXPRAY@ colorimetric test kit. Any sample yielding a positive reaction to any explosives screening procedure will be discarded in accordance with applicable hazardous waste disposal regulations. Results from these analyses will be recorded in the field geologist's notebook. Under no circumstances will reactive samples be submitted to either the PLW on-site laboratory or

to Lancaster Laboratories. Appendix C of the Lake Inez Region RIWP details the explosive screening procedures to be used during field activities.

## 4.5 Sample Preservation

Once collected and labeled, samples will be placed as soon as possible into the insulated sample cooler, which will serve as a shipping container. Because temperature preservation (4°C) is required for all planned analyses (See Table A- 2 for preservation and hold time requirements), the cooler will be packed with wet ice.

All samples will be sent first to the Pompton Lakes Works on-site laboratory for determination of site-specific metals, after which some will be shipped to LLI for additional analysis. Samples will at all times be maintained at required preservation temperature.

## 4.6 Decontamination Procedures

A policy of using disposable or dedicated equipment will be implemented on site such that, where feasible, equipment would be used for collection of a single sample only. Where this is not applicable, soil-sampling equipment will be decontaminated in accordance with the 1992 NJDEP *Field Sampling Procedures Manual*. This section describes the methods to be used for field decontamination of the GeoProbe® and other sampling tools.

The GeoProbe® will be cleaned after arrival on-site and before departing. A clean macro-core(s) and a new core liner will be used at each sampling location, for each interval sampled. Trowels, mixing pans, macro-core barrels, and tips will be decontaminated in the PLW screening laboratory, where the rinse-water is collected and periodically sent out for disposal following all applicable rules and regulations.

### 4.6.1 Laboratory Decontamination Procedures

Sampling equipment will be laboratory cleaned prior to the field event in the following manner:

- ❏ Wash with non-phosphate detergent plus tap water.
- ❏ Rinse with tap water.
- ❏ Rinse with distilled and deionized water.
- ❏ Rinse with 10% nitric acid.
- ❏ Rinse with distilled and deionized water.
- ❏ Air-dry completely.
- ❏ Wrap in plastic.

Equipment will be decontaminated in the PLW screening laboratory, where the rinse-water is collected and periodically sent out for disposal following all applicable rules and regulations

### 4.6.2 Field Decontamination Procedures

During the sampling event, sampling equipment may be decontaminated in the following manner between sample locations:

- ❏ Wash with non-phosphate detergent plus tap water.
- ❏ Rinse with tap water.
- ❏ Rinse with reagent grade water.

Wash and rinse water will be collected in a barrel or carboy and properly analyzed before disposal.

# 5.0 SAMPLE CUSTODY

The sample custody procedures outlined in this section ensure the tracking of possession and handling of individual samples from the time of field collection through laboratory analysis.

## 5.1 Sample Labels and Security Seals

Each sample will have a sample label permanently affixed to the outside of the container in an obvious location. The label will specify the container number (or lot number), sample identification number, name of the collector, location sampled, date and time sampled, preservatives used, and parameters to be analyzed. Information will be recorded on the sample label with waterproof ink.

Samples shipped from the facility to an outside laboratory by a commercial courier will be transported in an insulated shipping container sealed with tamper-evident tape or a tamper-evident seal. If any security seal is received broken, this fact will be recorded on the COC form and the laboratory will immediately notify the project site coordinator and/or project chemist.

## 5.2 Chain-of-Custody Record

Each sample may consist of several individual sample aliquots contained in separate, numbered sample containers. Each sample container will be logged on the COC form prior to delivery/shipment to the laboratory. The COC form will be generated at PLW.

The following information will be recorded on the COC form:

- ❏ Sample type
- ❏ Collector's name
- ❏ Dates and times of sample collection
- ❏ Sample identification numbers
- ❏ Number of containers for each sample aliquot
- ❏ Container size
- ❏ Type of preservation (including ice)
- ❏ Parameters (analytes from each sample aliquot)
- ❏ Rush analyses (if requested)
- ❏ Special handling instructions
- ❏ Destination of samples
- ❏ Name, date, time, and signature of each individual possessing the samples

The COC form will be signed by each individual responsible for custody of the sample containers and will accompany the samples to the laboratory.

The project geologist will be responsible for custody of all samples taken during the field investigation. Custody of the samples will be defined as actual physical possession, in view after physical possession, or locked and/or sealed in a tamper-resistant container after physical possession. At the time of custody transfer, the individual relinquishing the samples will observe as the transferee inspects the samples for integrity and number and dates and signs the COC form, with the exception that commercial courier possession will be documented through the commercial courier waybill. The original signed COC form will accompany the samples to the laboratory and will be forwarded to the project chemist, once sample analysis is complete.

The site coordinator will arrange for sample pickup by laboratory courier or for sample shipment using an overnight delivery service. The project site coordinator is responsible for ensuring adherence to U. S. Department of Transportation regulations concerning the shipment of environmental samples to a laboratory for analysis.

## 5.3 Laboratory Receipt and Analysis Request Log

The laboratory will designate a sample custodian for the project. This person is responsible for inspecting and verifying correctness of COC records when received and for verifying that all samples are accounted for and custody seals are intact. The custodian is also responsible for verifying that sample temperatures when received are appropriate for the level of preservation required. When the samples are received, the sample custodian will note the sample conditions, and sign the COC form. The sample custodian will immediately notify the laboratory project manager, who will then notify the project chemist, of any discrepancies. The project chemist will, in turn, notify the project manager.

As samples arrive at the laboratory, they will be entered into a sample management system. The following minimum information will be provided:

- ❏ Laboratory sample number/identification
- ❏ Field sample designation
- ❏ List of analyses requested for each sample container

Immediately after receipt, samples will be transferred to a secure storage area with appropriate temperature control (as established by EPA document SW-846, third edition, Chapters 2, 3, and 4), to await preparation and analysis. Only authorized laboratory personnel will have access to the locked storage area(s). The laboratory will maintain written records to show the handling chronology for each sample by various individuals at the laboratory during the analysis process. The laboratory sample custodian is responsible for providing a laboratory identification number for each field or equipment blank, so that a comparison may be made to the samples shipped in the same cooler.

# 6.0 CALIBRATION PROCESS

Analytical equipment will be calibrated per the manufacturer's instructions. The technician assigned to maintain each unit will be responsible for calibrating the equipment.

## 6.1 Field Calibration

Equipment will be calibrated daily. The project geologist is responsible for ensuring adherence to the calibration schedule, and verifying the operator's understanding of proper use, maintenance, and storage of each instrument. A calibration logbook will be kept with each instrument to record the field calibration. Each logbook contains the date of calibration, the operator's initials, the calibration measurements, and observations about the instrument or calibration procedures. A complete set of manufacturer's directions for equipment calibration should accompany the instruments on site.

The PID is the only major field measurement instruments planned for use in this project. The PID calibration procedure is summarized here:

*ThermoAnalytical® Photoionization Detector*
Periodic calibration is required for PID output changes because of the potential for inlet filter restriction, lamp window fouling, sample pump wear, and other factors.

During calibration, the *ThermoAnalytical®* PID is first exposed to Zero Gas. A small signal is generated, and this zero signal is stored by the microprocessor.

In high-sensitivity operation, the microprocessor subtracts the zero signal from the PID signal and multiplies the difference by 1,000. This number is then displayed.

When one of the 5-Cal Memories is selected, the *ThermoAnalytical®* PID is next exposed to Span Gas. This span signal is stored. The microprocessor subtracts the zero signal from the span signal and divides the difference by the user-entered Span Gas concentration. The resulting sensitivity is stored in the selected Cal Memory with the zero signal. In operation, the microprocessor first subtracts the zero signal from the PID signal and then divides the difference by the sensitivity. The number is then displayed.

The microprocessor accumulates all readings over a 15-second interval and determines the minimum, average, and medium readings. It stores these numbers along with the highest-priority instrument status and the most recent time, date, and event number that occurred during the 15-second interval. The *ThermoAnalytical®* PID automatically records these results for 12 hours of operation.

## 6.2 Laboratory Calibration

Procedures for initial calibration and continuing calibration verification are in place for all instruments within the laboratory; descriptions and schedules for calibration procedures are presented in the LQAP (Exhibit 1).

# 7.0 ANALYTICAL PROCEDURES

DuPont has retained LLI to perform analytical services for this project. Other qualified laboratories may be used. If a change in laboratory is required, DuPont will submit the laboratory qualifications, as an addendum to this QAPP, to the NJDEP for approval prior to their project involvement.

The project QA officer is responsible for communicating DQOs. The project chemist is responsible for communicating required methods of analysis, and specific parameter lists to the laboratory, and for communicating sampling and analysis schedules to the laboratory with sufficient lead-time to meet contractual agreements with the laboratory.

The analytical program presented in this document describes the procedures that DuPont, contractors, and the laboratory will use during implementation of the Lake Inez Region RI. The LQAP is presented as Exhibit 1. The laboratory will follow the QA/QC procedures listed in the methods referenced in this QAPP. Report deliverable requirements are discussed in Section 8.

## 7.1 Field Analytical Methods

All soil samples collected during the Pompton Lakes Works Lake Inez Region RI will be screened in the field for reactivity and organic explosives prior to submission to the laboratory. Procedures to perform field explosive screening are presented in Appendix C of the Lake Inez Region RIWP.

## 7.2 Laboratory Analytical Methods

All soil samples will be analyzed for site-specific metals (i.e. copper, lead, and mercury) at the Pompton Lakes Works Environmental Analysis Lab. Samples will be analyzed using a Spectrace QUAN X XRF utilizing the fundamental parameters analysis method. (See Exhibit 2 for instrument calibration, sample prep, and sample analysis procedures.) Approximately 10-33% of these samples will then be sent to LLI for metals confirmation and additional analyses. Initial and confirmation analysis results for site-specific metals will be compared and discussed in the final project report.

Samples undergoing additional analyses will be analyzed at Lancaster Laboratories, Inc. using EPA SW846 methods. Analytical parameters include arsenic, Priority Pollutant List (PPL) metals, polynuclear aromatic hydrocarbons (PAHs), nitroaromatic/nitramine compounds, and nitrate/nitrite. Planned analytical methodologies are listed in Tables A-1 and A-2. Target compounds for each analytical parameter are presented in Table A- 3.

Method selection criteria for the project were determined from analytical methods used in past investigations and by the DQOs, along with the method detection limits achievable for each parameter. Each analytical method was chosen to address the intended use of the data (generated at a particular sampling point) in a timely and cost-effective manner.

## 7.3 Laboratory Quality Controls

LLI's procedures for internal QC are described in the LQAP (see Exhibit 1). The minimum acceptable level of laboratory QC procedures is defined by the methods and protocols cited for analysis, requirements for laboratory certification and operation mandated by the EPA and NJDEP, and any other requirements governing this project.

## 7.4 Reporting Limits

Factors influencing the analytical detection and quantitation limits include the actual method used, sample matrix, interferences, and analyte concentration. Threshold limits presented in this plan for the various parameters are general estimates based upon relevant EPA SW-846 methods and typical laboratory results. The actual PQLs and MDLs may vary from sample to sample in accordance with standard laboratory practices (e.g., dilution necessitated by high analyte concentration). Sample results will be reported to the MDL. Table A-4 presents typical MDLs for the specific analytes to be reported in this investigation.

## 7.5 Field Quality Controls

The quality and integrity of samples collected at the facility will be monitored by routine preparation of various QA/QC blanks, equipment calibration documentation, and equipment decontamination documentation. Table A- 4 summarizes the frequency of QA/QC samples. The project geologist is responsible for ensuring that all field quality control samples are properly collected, labeled, and shipped.

Equipment blanks will be prepared by pouring laboratory supplied deionized water over clean, non-dedicated sampling equipment (e.g., trowels, backhoe bucket) and collecting in a stainless steel pan. The rinsate will be transferred to sample containers and handled in the same fashion as other samples. Equipment blanks will be analyzed for the same parameters as other samples collected using the same device. The minimum frequency of collection for equipment blanks is one per twenty, or 5%, not to exceed one per day per analyte.

In the event that dedicated sampling equipment is used at each sampling location, one field blank will be collected per day. This field blank will be collected by directly transferring ASTM Type II distilled water (or equivalent) to the sample containers, and handling as any other sample.

Field duplicate samples will be collected in the same manner as routine field samples at a frequency of ~5%. The duplicate sample will be analyzed for the same parameters as the original sample, and the analytical results will be compared with those of the original sample. The analytical results of the original sample and the duplicate sample should be used to evaluate the cumulative precision of the analysis, as it is affected by the limitations of the analytical method, sample matrix, and sample collection techniques.

# 8.0 DATA REDUCTION, VALIDATION AND REPORTING

## 8.1 Data Reduction

Data reduction involves the process of generating qualitative and quantitative sample information through observations, field procedures, analytical measurements, and calculations.

Data reduction occurs in:

- ❏ The work plan through sample locations and naming conventions.
- ❏ The field sampling process through use of field logs and field measurements.
- ❏ Field communications with the laboratory in sample analysis requests.
- ❏ Field operations with collection, preservation, and COC documentation.
- ❏ Laboratory operations with sample receipt, handling, sample preparation and analysis, collation of raw data, and generation of laboratory results.
- ❏ Post-laboratory operations with collation of analytical results in a format suitable for documents such as reports, maps, and trend plots

Specific QC measures, developed to ensure accuracy throughout the data reduction process, are described in Sections 10.0 and 12.0.

## 8.2 Data Review

The internal DuPont Data Review process will be performed on 100 percent of the data received from the Lancaster Laboratories. This process includes:

- ❏ verification of laboratory reports against the associated chains-of-custody to ensure completeness of all tests on all samples submitted;
- ❏ verification of the accuracy of reports submitted by the laboratory
- ❏ verification of representativeness of field sample results by reviewing field and field/equipment blank data;
- ❏ determination of data usability by reviewing matrix QC sample results and laboratory control sample results versus laboratory QC acceptance criteria;
- ❏ verification of QC batch integrity to ensure method compliance; and
- ❏ verification of appropriateness of the Case Narrative comments accompanying the reports to ensure compliance.

### 8.2.1 Data Qualification Procedures Inherent in the QAPP

Section 3.0 of this QAPP quantitatively defines DQOs in terms of performance levels of accuracy, precision, and completeness. Section 9.0 defines the internal QC checks put in place to measure the quality of data and results as well as the interrelated, periodic

processes of system and performance audits for field and laboratory operations. Section 11.0 describes specific procedures in place to assess data precision, accuracy, and completeness. Section 12.0 specifies corrective action paths for situations involving nonconformance with the QAPP objectives. Section 13.0 describes QA reporting to management to document the overall processes previously described.

QA policy objectives for laboratory operations are described in this QAPP and in the LQAP (see Exhibit 1).

### 8.2.2 Data Validation Required by Mutual Consent

DuPont does not anticipate application of an additional level of data validation for this project. Data will be reviewed for QC problems by the laboratory and by DuPont CRG. The project manager is accountable for all analytical data. The QA officer is responsible for determining the schedule for periodic review of project work. The laboratory case narrative will be the initial point of data review for each group of samples.

## 8.3 Data Reporting

Significant figure conventions given in EPA document SW-846 or the *Handbook for Analytical Quality Control in Water and Wastewater Laboratories* (EPA-600/4-79-019, March 1979) will be followed. Reported concentrations will not be corrected for contaminants found in associated method and field/equipment blanks. The laboratory is responsible for generating and reviewing the data (see Section 9.2.1). The laboratory is also responsible for creating the data packages.

# 9.0 QUALITY CONTROL CHECKS

QC checks are the operational techniques and activities that are used to fulfill the requirements of QA policies. QC is an integrated system of activities in the area of quality planning, quality assessment, and quality improvement included to provide the program with a measurable assurance that the required standards of quality are met.

## 9.1 Field Quality Control

### 9.1.1 Field Quality Control Samples

Two types of field QC samples will be used during this project. These include field or equipment blanks and field duplicates. The definition and frequency of collection for each is provided in Section 7.5. The analytical results for these QC samples become the quantitative focus of the field performance audits.

## 9.2 Laboratory Quality Control

The following section summarizes the laboratory and field system and performance audits that may be used during the course of the project.

### 9.2.1 Laboratory Quality Control Practices

Two levels of laboratory control will be implemented for the Lake Inez Region RI data. They include internal QC practices documented in the LQAP (see Exhibit 1) and laboratory QC standards imposed by DuPont. The LQAP must at least meet the QC standards described in Section 3.3 of this QAPP. Additionally, the laboratory must provide at least three levels of data review prior to reporting the results to DuPont, including:

- ❏ Initial review of method compliance with respect to sample preparation, analysis, and QC acceptance criteria and a check of accuracy of calculations and presentation of results.
- ❏ A second review of the raw data, which may be conducted by the laboratory supervisor or a designate and must be documented.
- ❏ A check for completeness and appropriateness, which entails an overview by a third party to ensure that all requested tests are appropriate and that all requested sample results have been provided.

The laboratory manager or a designee must sign written reports. All supporting hard-copy documentation generated by the laboratory will be maintained in an archive for a minimum of three years, and will not be disposed of without written consent from DuPont.

## 9.3 Field Audits

### 9.3.1 Field System Audit

System audits are characterized by systematic, on-site, qualitative reviews, and may be conducted in concert with all field-related QC activities. The project QA officer would be responsible for defining the system audit format, and the project manager would approve the format. The project manager would name the field system audit team, including an individual with extensive experience in field sampling activities. The project QA officer would prepare the final system audit report, which would be directed to the project manager and project director (see Section 13.0).

No field system audits are planned for this project. However, a system audit may be conducted at the discretion of the project director in the event of a significant incident involving safety, an unfavorable performance audit, or another reason deemed appropriate. At minimum, the on-site qualitative review would cover the following:

- *Organization and Responsibility*
  Is the QA organization effective and efficient?
- *Sample Collection*
  Are the written procedures for sample collection available and appropriate to meet regulatory requirements, and are they being followed?
- *Chain of Custody*
  Have the appropriate steps been followed to ensure the traceability of sample origin and integrity?
- *Operational Procedures*
  Are the appropriate checks made in the field, and are records of these checks properly maintained?
- *Equipment*
  Is the specified equipment available and maintained in good working order?
- *Training*
  Are field teams adequately trained?
- *Records*
  Are record keeping procedures adequate and functional?
- *Corrective Action*
  Do non-compliant situations engender appropriate corrective reactions? Are these situations and corrections properly documented on the Corrective Action Form?
- *Health and Safety*
  Are the proper procedures, precautions, equipment, training, etc. being implemented to protect the team members adequately during the field operation?

### 9.3.2 Field Performance Audit

Performance audits are characterized by a quantitative check for accuracy in field measurements, field QC sample results, and field data transfer procedures. Field performance audits consist of the periodic evaluation of analytical results of field and trip blanks to:

- ❏ assess the field procedures used
- ❏ check for and minimize non-sample-related contamination
- ❏ verify that representative samples are being provided for testing, evaluation, and interpretation.

No field performance audits are planned for this project. However, a performance audit may be conducted at the discretion of the project director in the event of a significant incident involving safety, an unfavorable field system audit, or another reason deemed appropriate. The project manager is responsible for naming the individual who would conduct the field performance audit. This person should have a working knowledge of both the analytical techniques and field sampling procedures being used. All field duplicates and blanks collected during the project should be reviewed. At minimum, the performance audit would include the following:

- ❏ *Data Integrity Check*
  Randomly check to determine if field data has been accurately transferred to final reports, verification of sample location identifications, and areas sampled.
- ❏ *Equipment or Field Blanks*
  Determine if blanks and related samples evidence significant contamination from improperly cleaned sampling equipment. (See Section 7.5 for a description of field blanks.) Provide a summary report showing all equipment/field blank contamination, and highlight samples which may have been affected by contamination.
- ❏ *Field Duplicates*
  Determine if sample pairs differ significantly in reported results for any analytical parameters. The acceptance criteria for the maximum relative percent difference (% RPD) should generally be less than 40 percent. Provide a summary report in conjunction with the blank summary report.

## 9.4 Laboratory Audits

### 9.4.1 Laboratory System Audit

Any laboratory employed for this project will have been pre-qualified by a satisfactory system audit performed by DuPont. An audit may be scheduled at the discretion of the project director or project manager if data evaluation and review suggest that a laboratory quality issue exists. The LQAP (see Exhibit 1) describes the QA/QC program in place at the laboratory. At minimum, the QAPP and laboratory performance audit must address the:

- ❏ Custody and storage of samples and sample aliquots within the laboratory.
- ❏ Procedures for sample pre-analysis preparation.
- ❏ Calibration techniques for each analytical method, including standards preparation.
- ❏ Procedures for raw data management and calculation of results.
- ❏ Policies and procedures for complying with methodologies and protocols, including required QC steps and acceptance criteria.
- ❏ Preventive and corrective maintenance of instrumentation.
- ❏ Methods for determining acceptable limits of detection, precision, and accuracy.
- ❏ Procedures for cross-checking calculated results.
- ❏ Procedures for notifying the client of method nonconformance situations that might arise at the laboratory or after samples are received.

## 9.5 Laboratory Performance Audit Checkpoints

No laboratory performance audit is planned for the Pompton Lakes Works Lake Inez Region RI project. However, a data review will be conducted on laboratory results to determine if the DQOs, as stated in Section 3.2, have been met. Checkpoints to be reviewed include method blanks, laboratory replicates, matrix spikes, and matrix spike duplicates. Samples will be grouped into QC batches of not more than 20 samples of similar matrix type.

Accuracy will be evaluated for each batch using the corresponding matrix spike and surrogate or standard recovery for each batch (see Section 11.4) coupled with acceptance criteria listed in the appropriate methods. Laboratory control sample recovery data would be used to qualify corresponding batch data if matrix spike or surrogate standard recoveries do not meet method acceptance criteria or if insufficient sample material was received to complete the matrix spike duplicate assays.

Precision will be evaluated for each batch, using % RPD from either matrix spike duplicates or laboratory sample replicates (see Section 11.3). Again, laboratory control sample duplicate % RPD results would be used to qualify data if insufficient sample material was received to evaluate either a laboratory replicate assay or a matrix spike duplicate.

# 10.0 PREVENTIVE MAINTENANCE

Preventive maintenance of laboratory and field equipment is essential to obtaining accurate data. Unnecessary re-sampling and analysis can also be avoided if equipment is well maintained.

## 10.1 Field Maintenance

The field sampling team will maintain a calibration and maintenance checklist for each piece of equipment used on-site. The frequency of calibration, the technician in charge of the calibration, and any notes regarding the maintenance of the instrument will be recorded. The field sampling team is ultimately responsible for cleaning and maintaining the field equipment according to procedures specified by the manufacturer. Complete manufacturers' instructions for calibration and maintenance will be kept with each piece of equipment. The field equipment will be serviced when routine daily inspections indicate the need for maintenance.

Routine maintenance of field equipment includes:

- ❏ Removing surface dirt and debris
- ❏ Ensuring proper storage of equipment
- ❏ Inspecting equipment prior to use
- ❏ Calibrating equipment according to Section 6.0
- ❏ Charging battery packs when not in use
- ❏ Maintaining spare replacement parts in the field to minimize downtime
- ❏ The following is a representative list of spare parts for this program
- ❏ Batteries, as required, for all equipment used
- ❏ Extra sample containers and preservatives
- ❏ Health and safety equipment (i.e., gloves, filters, boots, *Tyvek*® clothing)
- ❏ Extra coolers and packing equipment and sample location stakes
- ❏ Flagging tape
- ❏ Calibration solutions and gases

In the event that a piece of equipment requires repair, a list of manufacturers' addresses, phone numbers, and contact persons will be kept on-site.

## 10.2 Laboratory Maintenance

Standard operating and maintenance procedures for any laboratory equipment used by the laboratory are provided in the LQAP (Exhibit 1).

# 11.0 DATA MEASUREMENT

The DQOs for the project were established in terms of representativeness, comparability, precision, accuracy, and completeness of the data set. Accuracy for this project will be quantitatively assessed through the evaluation of relative percent recovery of matrix spikes, matrix spike duplicates, laboratory control spikes and control spike duplicates, and surrogate standards. Accuracy will be qualitatively assessed through the evaluation of instrument performance checks, such as surrogate recovery and inter-element interference checks, where applicable to a specific method. Precision will be quantitatively assessed through the evaluation of relative percent difference values for matrix spike duplicates, laboratory control spike duplicates, field duplicates, and laboratory replicates. Field duplicate samples will be identified as a regular sample. Comparison of results for original and field duplicate samples will assist in evaluation of overall representativeness of the data. The appropriate laboratory QC procedure is specified in each analytical method. Completeness will be determined following periodic evaluation of the accuracy and precision results of the project data sets.

EPA SW846 (Test Methods for Evaluating Solid Waste, Physical and Chemical Methods) will be used to specify the quality of data and define the analytical techniques required to produce the DQOs. The LQAP provides an assessment of the laboratory's analytical capabilities and staff qualifications to perform the specified level of quality.

## 11.1 Representativeness

Representativeness expresses the degree to which data accurately and precisely represents a measured characteristic of a population, parameter variations at the sampling point, a process condition, or an environmental condition.

The degree of representativeness is dependent on the objectives of the measurement results. Thus, representativeness can be classified into the following four objective levels:

- *Level 1*
  Sample is only representative of the point of sampling (e.g., drum, storage tank, single point within a stream or land area).
- *Level 2*
  Sample is part of a set and represents a defined area or portion of land or water—not just the point of sampling (e.g., a stream transect, sampling grid of a land area, underground aquifer).
- *Level 3*
  Sample represents a relationship between the source of contamination and the location sampled (e.g., source and monitoring well, source and stream).
- *Level 4*
  Sample is nonrepresentative. Sample is used for assessment purposes only (e.g., preliminary assessment, spot check).

The objective of sampling and analysis will be that results are representative of the medium monitored and its condition, to a degree consistent with the desired objective level. Objective Levels 1 and 2 will be used to accomplish project objectives.

## 11.2 Comparability

For this project, all measurement data will be calculated and reported in units consistent with standard practice to allow comparability of data. Data comparability also includes trends.

## 11.3 Precision

Precision measures the degree to which a set of replicate results is internally consistent, without assumption of any prior information as to the true result. Precision is assessed by means of duplicate/replicate sample analysis. To determine the precision of the analytical methods, a program of replicate analyses will be followed. The laboratory will split a sample into two sub-samples and analyze each independently at at least the minimum frequency defined in the appropriate method. This approach is followed for laboratory replicate samples, matrix spike duplicates, and matrix replicates.

The results of the replicate analysis will be used to calculate the QC parameter, relative percent difference (RPD) for precision evaluation. The following equation is used to calculate RPD:

$$RPD = \frac{D_2 - D_1}{(D_1 + D_2)/2} \times 100 \qquad (1)$$

where,

$D_1$ is defined as the first sub-sample's value

$D_2$ is defined as the second sub-sample's value

The frequency of laboratory replicates is described in Exhibit 1. In addition to evaluation of the method precision, duplicate samples will be collected in the field and analyzed independently. The results will be used to evaluate the total system's variability, including sampling variations.

Both the laboratory and DUPONT CRG will evaluate the analytical precision produced by laboratory replicate analyses, while only DUPONT CRG will evaluate field splits. Evaluation of both types of data will be in accordance with the referenced methods and this plan.

## 11.4 Accuracy

Accuracy means the nearness of a result or the mean of a set of results to the true value. Accuracy is assessed by means of reference samples and percent recoveries. To determine the accuracy of an analytical method, a program of sample spiking will be followed. The minimum spiking frequency is stated in the referenced methods. The results of sample spiking will be used to calculate the QC parameter, relative percent recovery (RPR) for accuracy evaluation. The following equation will be used:

$$RPR = \frac{SSR - SR}{SA} \times 100$$

where,

SSR = Spiked sample result

SR = Sample result

SA = Spike added

The frequency for the spiking is described in Exhibit 1. In addition to a spiking program, samples, standards, and blanks subject to organic analyses will be spiked with surrogate compounds. Laboratory performance on individual samples will be established by the recovery of surrogate compounds.

## 11.5 Completeness

Completeness for each parameter is calculated as follows:

$$\frac{Usable\ Data}{Total\ Data\ Generated} \times 100 = \%\ Complete$$

Usable data is defined as not rejected during the data validation or data review process. The percent complete will be used to determine whether the data quality meets the objectives for the project.

If the completeness objectives are not met for individual parameters, DuPont will review the reasons for the invalid data. Depending on the reasons (e.g., holding time exceeded) and the effect of the incomplete data on the accomplishment of the project objectives, additional samples may be collected and analyzed. A subjective evaluation will also be conducted if a sample does not generate data for a parameter category (e.g., volatile organic constituents, metals). Such a data gap could result from sample container breakage or loss, or from sample custody not being maintained. If DuPont determines that the missing results are critical to accomplishing the work plan objectives, additional sampling will be conducted to obtain the missing data.

# 12.0 CORRECTIVE ACTION

Corrective action is required for any lack of compliance with the requirements of this QAPP. Each employee working in the program is responsible for identifying QA problems and for initiating corrective action.

Significant QA corrective actions at the analytical laboratory will be documented in a case narrative and forwarded to the project QA officer. A detailed discussion of corrective actions associated with the analytical laboratory is provided in the LQAP (see Exhibit 1).

Corrective actions addressing field or other conditions will be documented in reports. The person initiating the corrective action will complete a nonconformance report form. This will be forwarded to the immediate supervisor or to the project QA officer for implementation of appropriate corrective action. The follow-up and outcome will be documented on the same form. The completed non-conformance report will then be forwarded to the regional QA officer and the project manager for review. The project director is responsible for ensuring that the corrective actions adequately address root causes and are implemented in a responsive manner. The project director will also be responsible for confirming that the corrective actions have been effective.

# 13.0 QUALITY ASSURANCE REPORTS TO MANAGEMENT

Periodic reports detailing the results of QA/QC activities described in previous sections (see Sections 9.0, and 12.0) will be submitted to management from the project QA officer. These documents will include reports on:

- ❏ Significant deviations from protocol as stated in the RI work plan or the QAPP.
- ❏ Field system and performance audits.
- ❏ Laboratory system and performance audits.
- ❏ Corrective action and follow-up.

Copies of quality assurance reports will be submitted to the project director, project manager, and the NJDEP (as required).

# 14.0 DOCUMENT CONTROL

The project director is accountable for maintaining project record files and storage archives to meet the requirements of the project. The project director is also responsible for providing facilities for adequate storage space, security, and confidentiality.

The project director will be responsible for indexing, issuing, and maintaining files for all field logbooks, field notebooks, project correspondence, system and performance audits, nonconformance reports, data validation reports, sample data reports, QA reports to management, and other associated documentation. A centralized location will be identified for this purpose, and a document custodian will be chosen. DuPont will maintain this archived information for seven years following completion of the project. The laboratory will maintain all hard-copy documentation associated with the project for three years following completion of the program. The laboratory will also maintain disposal records for all project samples for 30 years.

# TABLES

## Table A-1
## Precision and Accuracy Objectives for Soil Samples

| Test* | Test Method** | Required Precision (Maximum Relative % Difference) | Required Accuracy (Relative % Recovery) |
|---|---|---|---|
| Polynuclear Aromatic Hydrocarbons (PAHs) | SW-846 Method 3550/8270C | 35 | 60-140 |
| PPL Metals | SW-846 Method 3050B/6010B/7471A | 35 | 70-130 |
| Nitrate + Nitrite | SW-846 Method 9056 | 35 | 70-130 |
| Nitroaromatics/Nitramines | SW-846 Method 8330 | 35 | 50-150 |

*See QAPP Table 3 for compounds in each parameter list; results will be reported on a dry-weight basis for soil.

**Methods are from *Test Methods for Evaluating Solid Waste, Physical and Chemical Methods* , (EPA document SW-846), Third Edition with Update III.

## Table A-2
## Summary of Holding Times, Containers and Preservation for Soil Samples

| Test* | Test Method** | Container | Holding Time | Preservation |
|---|---|---|---|---|
| PAHs | SW-846<br>Method 3550/8270C | G | 14 days to extraction/40 days to analysis | Cool, 4°C |
| PPL Metals | SW-846<br>Method 3050B/6010B/7471A | P, G | 6 months<br>Mercury only: 28 days | Cool, 4°C |
| Nitrate + Nitrite | SW-846<br>Method 9056 | G | 28 days | Cool, 4°C |
| Nitroaromatics/Nitramines | SW-846<br>Method 8330 | G | 14 days to extraction/40 days to analysis | Cool, 4°C |

*See QAPP Table A-3 for individual target compounds.

**Methods are from *Test Methods for Evaluating Solid Waste, Physical and Chemical Methods* (EPA document SW-846), Third Edition with Update III, unless noted otherwise.

**Table A-3**
**Remedial Investigation Analytical Target List**

| Polynuclear Aromatic Hydrocarbons (PAHs) (ug/kg) | | | | | |
|---|---|---|---|---|---|
| | MDL | PQL | | MDL | PQL |
| Naphthalene | 33 | 330 | Benzo(a)anthracene | 33 | 330 |
| Acenaphthylene | 33 | 330 | Chrysene | 33 | 330 |
| Acenaphthene | 33 | 330 | Benzo(b)fluoranthene | 67 | 330 |
| Fluorene | 33 | 330 | Benzo(k)fluoranthene | 133 | 330 |
| Phenanthrene | 33 | 330 | Benzo(a)pyrene | 67 | 330 |
| Anthracene | 33 | 330 | Dibenzo(a,h)anthracene | 67 | 330 |
| Fluoranthene | 33 | 330 | Benzo(g,h,i)perylene | 67 | 330 |
| Pyrene | 67 | 330 | Indeno(1,2,3-cd)pyrene | 67 | 330 |
| 1-Methylnaphthalene | 33 | 330 | 2-Methylnaphthalene | 33 | 330 |

| Nitroaromatics/Nitramines ( ug/kg) | | | | | |
|---|---|---|---|---|---|
| | MDL | PQL | | MDL | PQL |
| 2,4-Dinitrotoluene | 100 | 200 | PETN | 5000 | 10000 |
| 2,6-Dinitrotoluene | 100 | 200 | RDX | 100 | 200 |
| HMX | 100 | 200 | Tetryl | 100 | 200 |
| Nitroglycerin | 5000 | 10000 | 2,4,6-Trinitrotoluene | 100 | 200 |
| 1,3,5-Trinitrobenzene | 100 | 200 | 1,2-Dinitrobenzene | 100 | 200 |
| 1,3-Dinitrobenzene | 100 | 200 | 1,4-Dinitrobenzene | 100 | 200 |
| Nitrobenzene | 100 | 200 | 2-Nitrotoluene | 100 | 200 |
| 4-Amino-2,6-dinitrotoluene | 100 | 200 | 3-Nitrotoluene | 100 | 200 |
| 2-Amino-4,6-dinitrotoluene | 100 | 200 | 4-Nitrotoluene | 100 | 200 |
| 1-Nitronapthalene | 100 | 200 | | | |

| PPL Metals (mg/kg) | | | | | |
|---|---|---|---|---|---|
| | MDL | PQL | | MDL | PQL |
| Antimony | 0.62 | 2 | Mercury | 0.0065 | 0.1 |
| Arsenic | 0.42 | 1 | Nickel | 0.2 | 0.6 |
| Beryllium | 0.06 | 0.3 | Selenium | 0.41 | 1 |
| Cadmium | 0.09 | 0.1 | Silver | 0.06 | 0.4 |
| Chromium | 0.16 | 0.5 | Thallium | 0.83 | 2 |
| Copper | 0.11 | 0.5 | Zinc | 0.28 | 0.5 |
| Lead | 0.98 | 1 | | | |

| Nitrate + Nitrite ( mg/kg) | | |
|---|---|---|
| | MDL | PQL |
| Nitrate | 0.89 | 1.2 |
| Nitrite | 0.89 | 1.2 |

**Table A-4**
**Summary of Quality Control Samples**

| Matrix | Parameter | Per 20 Samples | | Per Day | |
|---|---|---|---|---|---|
| | | Matrix Spike/Matrix Spike Duplicate | Field Duplicate | Field Blank[1] | Equipment Blank[2] |
| Soil | PAHs | 1 | 1 | 1 | 1 |
| | Metals | 1 | 1 | 1 | 1 |
| | Nitrate/Nitrite | 1 | 1 | 1 | 1 |
| | Nitroaromatics/Nitramines | 1 | 1 | 1 | 1 |
| | | | | | |

[1] Field Blank will be collected in lieu of Equipment Blank only if dedicated equipment is used.

[2]Equipment Blank will be collected at a frequency of one per day per analyte.

# EXHIBITS

# EXHIBIT 1

## Laboratory Quality Assurance Plan

# LABORATORY QUALITY ASSURANCE PLAN

**OCTOBER 9, 1990**
**REVISED: June 25, 1999**

**WARNING:** The information contained herein is of a highly confidential and proprietary nature. Lancaster Laboratories specifically prohibits the dissemination or transfer of this information to any person or organization not directly affiliated with the project for which it was prepared.

## 1. Laboratory Quality Assurance Plan

This document provides the laboratory portion of the response to EPA's *Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans* QAMS-005/80, Sections 5.1 through 5.16 as revised December 29, 1980, and EPA-600/4-83-004, February 1983. Guidance was also obtained from *Preparation Aids for the Development of Category 1 Quality Assurance Project Plans*, Office of Research and Development, USEPA, EPA/600/8-91/003, February 1991.

As much as possible, the procedures in this document have been standardized to make them applicable to all types of environmental monitoring and measurement projects. However, under certain site-specific conditions, all of the procedures discussed in this document may not be appropriate. In such cases it will be necessary to adapt the procedures to the specific conditions of the investigation.

Quality Assurance Officer: _____

| Section | Pages | Revision | Date |
|---|---|---|---|
| 1. Title Page | 1 | 7 | 06/25/99 |
| 2. Table of Contents | 1 | 7 | 06/25/99 |
| 3. Project Description | 1 | 5 | 04/27/98 |
| 4. Project Organization and Responsibility | 4 | 5 | 04/27/98 |
| 5. QA Objectives for Measurement Data, in terms of precision, accuracy, completeness, representativeness, and comparability | 4 | 4 | 04/27/98 |
| 6. Sampling Procedures | 3 | 4 | 04/27/98 |
| 7. Sample Custody | 32 | 5 | 04/27/98 |
| 8. Calibration Procedures and Frequency | 6 | 5 | 04/27/98 |
| 9. Analytical Procedures | 29 | 5 | 04/27/98 |
| 10. Data Reduction, Validation, and Reporting | 10 | 5 | 04/27/98 |
| 11. Internal Quality Control Checks | 28 | 5 | 04/27/98 |
| 12. Performance and Systems Audits | 10 | 7 | 06/25/99 |
| 13. Preventive Maintenance | 3 | 4 | 04/27/98 |
| 14. Specific Routine Procedures Used to Assess Data Precision, Accuracy, and Completeness | 4 | 5 | 04/27/98 |
| 15. Corrective Action | 3 | 4 | 04/27/98 |
| 16. Quality Assurance Reports to Management | 1 | 3 | 07/24/95 |
| Appendix A - Example Reporting Forms | 80 | 5 | 04/27/98 |

## 3. Project Description

This quality assurance project plan provides specific quality assurance and quality control procedures involved in the generation of data of acceptable quality and completeness. Tests will be performed according to the analytical methodology set forth in the USEPA SW-846 3rd Edition, Update III, 1996. SW-846 provides specific analytical procedures to be used and defines the specific application of these procedures. Proven instruments and techniques will be used to identify and measure the concentrations of volatiles, semivolatiles, and pesticide compounds and/or the inorganic elements. The laboratory will employ state-of-the-art GC/MS and/or GC procedures to perform all organic analyses, including all necessary preparation for analysis. Inorganic analyses will be performed using graphite furnace atomic absorption spectrophotometry (AA), inductively coupled plasma spectroscopy, cold vapor AA, flame AA, or hydride generation AA. Wet chemical analyses will use appropriate instrumentation. The client is responsible for providing specifics on the project site.

**Test Methods for Evaluating Solid Waste - Physical/Chemical Methods*, SW-846, 3rd Edition, Update III, December 1996.

## 4. Project Organization

The objectives of the laboratory Quality Assurance Program are to establish procedures which will ensure that data generated in the laboratory are within acceptable limits of accuracy and precision, to ensure that quality control measures are being carried out, and to ensure accountability of the data through sample and data management procedures. To this end, a Quality Assurance Department has been established. The Quality Assurance Officer reports directly to the President of Lancaster Laboratories and has no direct responsibilities for data production, thus avoiding any conflict of interest.

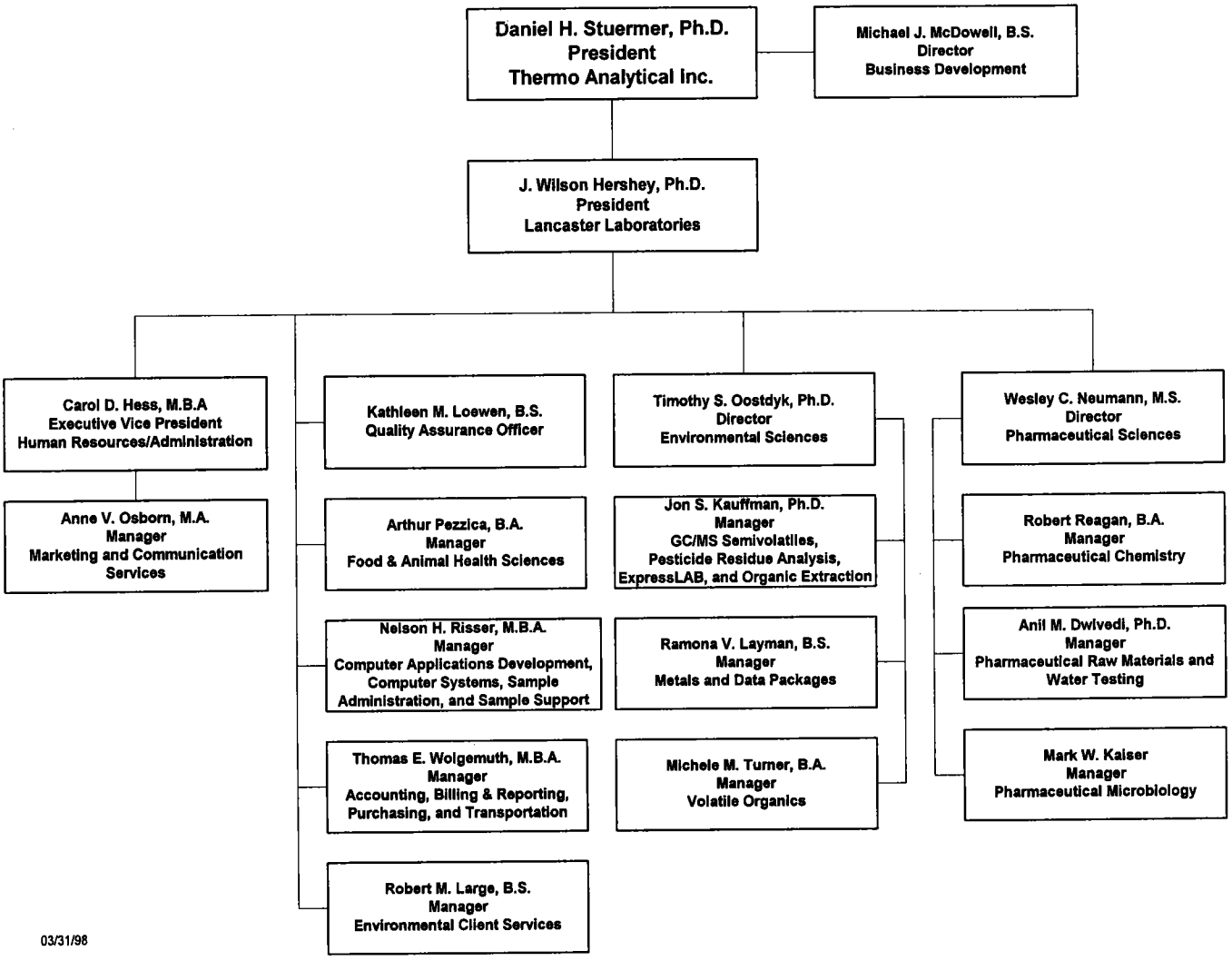
The attached organizational charts show key managerial personnel. Resumes of key individuals may be found in the enclosed *Qualifications Manual.*

The Sample Administration Group will be responsible for receiving samples, signing the external chain of custody, checking sample condition, assigning unique laboratory sample identification numbers, and initiating internal chain-of-custody forms. Sample Support personnel will be responsible for assigning storage locations, checking and adjusting preservation, homogenizing the sample as needed, and sample discard.

Group leaders listed in each technical area are responsible for performing laboratory analyses, quality control as specified in the methods, instrument calibration, and technical data review. Data is reported using a computerized sample management system, which tracks sample progress through the laboratory and generates client reports when all analyses are complete. Quality control data is entered onto the same system for purposes of charting and monitoring data quality.

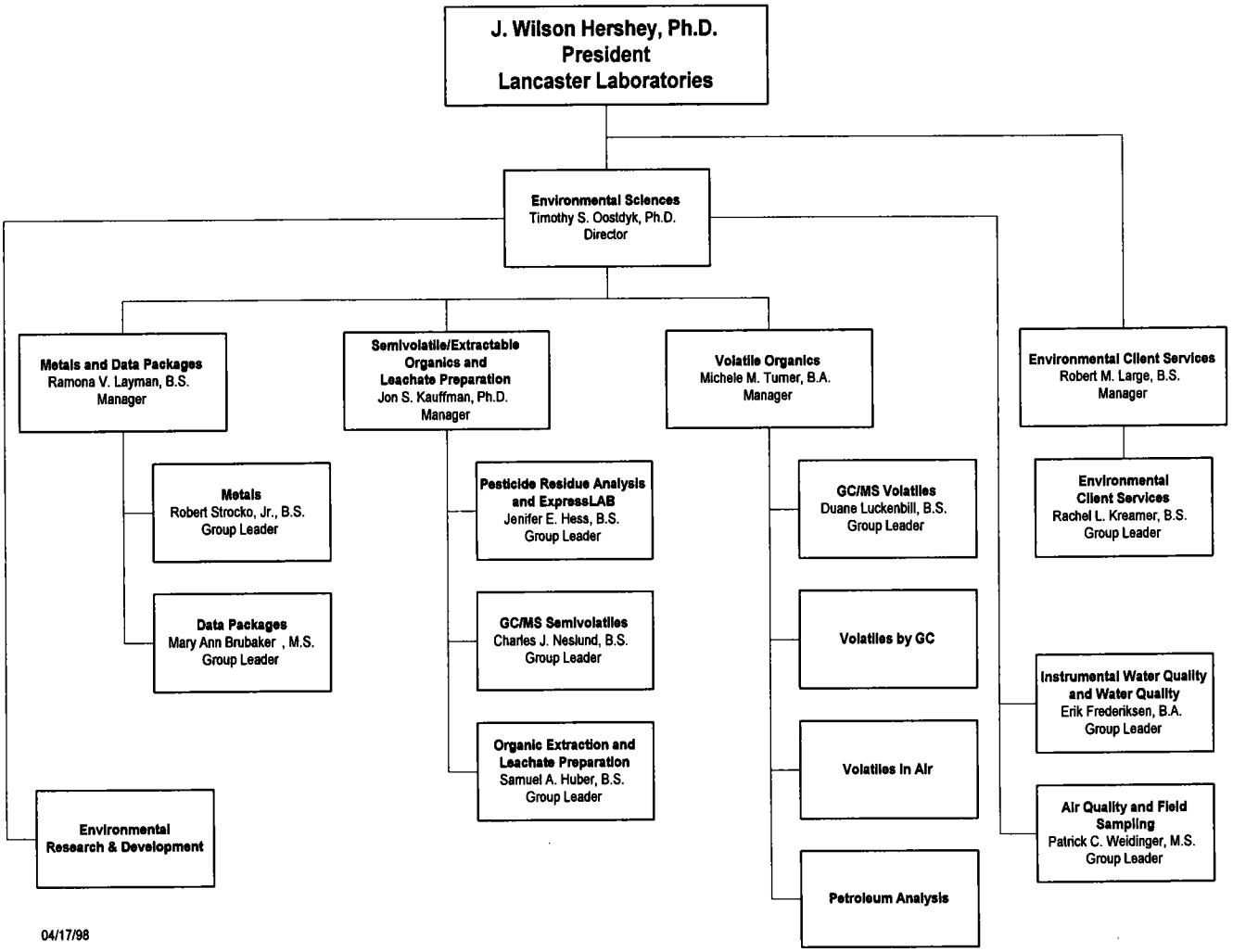
The Quality Assurance Department is responsible for reviewing quality control data, conducting audits in the laboratory and reporting findings to management, maintaining current copies of all analytical methods, maintaining copies of computer code used to calculate and report results, submitting blind samples to the laboratory, and ensuring that appropriate corrective action is taken when quality problems are observed.

Data package deliverables are available upon request. The Quality Assurance Department reviews the contents of the deliverables for completeness and to be sure that all quality control checks were performed and met specifications. This step includes review of holding times, calibrations, instrument tuning, blank results, duplicate results, matrix spike results, surrogate results, and laboratory control samples (where applicable). Every attempt to meet specifications will be made, and any item outside of the specifications will be noted in the narrative. The laboratory will not validate data with regard to usability since this generally requires specific knowledge about the site.


Daniel H. Stuermer, Ph.D.
President
Thermo Analytical Inc.
Michael J. McDowell, B.S.
Director
Business Development
J. Wilson Hershey, Ph.D.
President
Lancaster Laboratories
Carol D. Hess, M.B.A
Executive Vice President
Human Resources/Administration
Anne V. Osborn, M.A.
Manager
Marketing and Communication
Services
Kathleen M. Loewen, B.S.
Quality Assurance Officer
Arthur Pezzica, B.A.
Manager
Food & Animal Health Sciences
Nelson H. Risser, M.B.A.
Manager
Computer Applications Development,
Computer Systems, Sample
Administration, and Sample Support
Thomas E. Wolgemuth, M.B.A.
Manager
Accounting, Billing & Reporting,
Purchasing, and Transportation
Robert M. Large, B.S.
Manager
Environmental Client Services
Timothy S. Oostdyk, Ph.D.
Director
Environmental Sciences
Jon S. Kauffman, Ph.D.
Manager
GC/MS Semivolatiles,
Pesticide Residue Analysis,
ExpressLAB, and Organic Extraction
Ramona V. Layman, B.S.
Manager
Metals and Data Packages
Michele M. Turner, B.A.
Manager
Volatile Organics
Wesley C. Neumann, M.S.
Director
Pharmaceutical Sciences
Robert Reagan, B.A.
Manager
Pharmaceutical Chemistry
Anil M. Dwivedi, Ph.D.
Manager
Pharmaceutical Raw Materials and
Water Testing
Mark W. Kaiser
Manager
Pharmaceutical Microbiology

03/31/98

## Environmental Sciences



## 5. QA Objectives for Measurement Data

Quality assurance is the overall program for assuring reliability of monitoring and measurement data. Quality control is the routine application of procedures for obtaining set standards of performance in the monitoring and measurement process. Data quality requirements are based on the intended use of the data, the measurement process, and the availability of resources. The quality of all data generated and processed during this investigation will be assessed for precision, accuracy, representativeness, comparability, and completeness. These specifications will be met through precision and accuracy criteria as specified in Section 11. Detection limits are presented in Section 9.

Precision - Precision is determined by measuring the agreement among individual measurements of the same property, under similar conditions. The laboratory objective is to equal or exceed the precision demonstrated for the applied analytical method on comparable samples. The degree of agreement is expressed as the relative percent difference (RPD%). Evaluation of the RPD% is based on statistical evaluation of past lab data or guidelines within the methods for organic and inorganic analyses. External evaluation of precision is accomplished by analysis of standard reference material and interlaboratory performance data.

Accuracy - Accuracy is a measure of the closeness of an individual measurement to the true or expected value. Analyzing a reference material of known concentration or reanalyzing a sample which has been spiked with a known concentration/amount is a way to determine accuracy. Accuracy is expressed as a percent recovery (%R). Evaluation of the %R is based on statistical evaluation of past lab data or guidelines within the methods for organic and inorganic analyses.

Representativeness - Representativeness expresses the degree to which data accurately represents the media and conditions being measured. The representativeness of the data from the sampling site will depend on the sampling procedure. Sample collection is the responsibility of the client. Samples will be

homogenized, if required, as part of the laboratory sample preparation. By comparing the quality control data for the samples against other data for similar samples analyzed at the same time, representativeness can be determined for this objective.

Comparability - Comparability conveys the confidence with which one set of data can be compared to another. The analytical results can be compared to other laboratories by using traceable standards and standard methodology and consistent reporting units. The Laboratory Quality Assurance Program documents internal performance, and the interlaboratory studies document performance compared to other laboratories.

Completeness - Completeness is a measure of the quantity of valid data acquired from a measurement process compared to the amount that was expected to be acquired under the measurement conditions. The completeness of an analysis can be documented by including in the data deliverables sufficient information to allow the data user to assess the quality of the results. Additional information will be stored in the laboratories archives, both hard copy and magnetic tape. Quality Assurance standard operating procedures (SOPs) are in place to provide traceability of all reported results.

To ensure attainment of the quality assurance objectives, SOPs are in place detailing the requirements for the correct performance of laboratory procedures. The laboratory SOPs fall under five general categories:

1. Corporate policy
2. Quality assurance
3. Sample administration
4. General laboratory procedures
5. Analytical (i.e., methods, standard preps., instrumentation)

All SOPs are approved by the QA Department prior to implementation. The distribution of current SOPs and archiving of outdated ones are controlled through a master file. Table 5-1 provides an index of QA SOPs in place in support of the Quality Assurance objectives. These requirements are supplemented by the procedures in the laboratory and analytical SOPs.

**Table 5-1**

| Document # | Document Title |
|---|---|
| QA-101 | Sample Collection |
| QA-102 | Sample Log-in |
| QA-103 | Sample Storage and Discard |
| QA-104 | Internal Chain-of-Custody Documentation |
| QA-105 | Analytical Methods Manual |
| QA-106 | Validation and Authorization of Analytical Methods |
| QA-107 | Analytical Methods for Nonstandard Analyses |
| QA-108 | Subcontracting to Other Laboratories |
| QA-109 | Laboratory Notebooks, Logbooks, and Documentation |
| QA-110 | Reagents |
| QA-111 | Instrument and Equipment Calibration |
| QA-112 | Instrument and Equipment Maintenance |
| QA-113 | Data Entry, Verification, and Reporting of Results for the Computerized Sample Management System (CSMS) |
| QA-114 | Data Storage, Security, and Archiving |
| QA-115 | Quality Control Records |
| QA-116 | Investigation and Corrective Action of Unacceptable Quality Control Data |
| QA-117 | Personnel Training Records and Curriculum Vitaes |
| QA-118 | Quality Assurance Audits |
| QA-119 | Proficiency Samples |
| QA-120 | Documentation of Programming for the Sample Management System |
| QA-121 | Quality Assurance Guidelines for Computers and Computerized Systems |
| QA-122 | Investigation and Corrective Action Reporting for Laboratory Problems |
| QA-123 | Missed Holding Time Reports |
| QA-124 | External Audits |
| QA-125 | Document Control |
| QA-126 | Qualification and Validation Documentation for Laboratory Instrumentation and Equipment |
| QA-127 | Handling of Client Technical Complaints (Investigations and Response) |
| QA-128 | Compliance with Good Laboratory Practice (GLP) Regulations |

## 6. Sampling Procedures

In order for meaningful analytical data to be produced, the samples analyzed must be representative of the system from which they are drawn. It is the responsibility of the client to ensure that the samples are collected according to accepted or standard sampling methods.

The laboratory will provide the appropriate sample containers, required preservative, chain-of-custody forms, shipping containers, labels, and seals. The majority of sample containers are purchased precleaned by the supplier. Any reused bottles are cleaned in-house following laboratory standard operating procedures. Special containers with traceability documentation are available upon request. Because the laboratory does not stock this type of container, 1 month prior notice is required.

Each lot of preservative will be documented and checked for contaminants before use. The appropriate bottle will be preserved with the new preservative and filled with deionized water to represent a sample. A similar container (that does not contain preservative) will be filled with deionized water to be used as a blank check. Analysis results are documented for each preservative lot number.

Trip blanks will be prepared by the laboratory and accompany sample containers at the project required frequency. Analyte free water will also be provided for field blanks.

A list of containers, preservatives, and holding times follows in Table 6-1.

**Table 6-1**

**Sample Containers, Preservatives, and Holding Times for Aqueous and Solid Samples**

| Fraction | Vol. Req. (mL) Wt. Req. (g) | Container P=Plastic G=Glass | Preservation[a] | Holding Time[d] From Date of Collection Water | Soil |
|---|---|---|---|---|---|
| Volatiles | 3 × 40 mL 100 g[f] | G | Cool, 4°C[b] pH <2 w/HCl | 14 Days | 14 |
| Pesticides | 2 × 1000 mL 100 g | G | Cool, 4°C[b] | 7 Days to extractione | 14 |
| Herbicides | 2 × 1000 mL 100 g | G | Cool, 4°C[b] | 7 Days to extraction[e] | 14 |
| Halocarbons | 3 × 40 mL 100 g[f] | G | Cool, 4°C[b] pH <2 w/ HCl[c] | 14 Days | 14 |
| Aromatics | 3 × 40 mL 100 g[f] | G | Cool, 4°C[b] pH <2 w/ HCl | 14 Days | 14 |
| Semivolatiles (Acid/Base Neutrals) | 3 × 1000 mL 100 g | G | Cool, 4°C[b] | 7 Days to extraction[e] | 14 |
| PAHs (HPLC) | 2 × 1000 mL 100 g | G | Cool, 4°C $Na_2S_2O_3$ | 7 Days to extraction[e] | 14 |
| Metals | 1000 mL 100 g | P,G | $HNO_3$ to pH <2 | 6 Months Hg 28 days | 6 |
| Cyanide | 5000 mL 100 g | P,G | Cool, 4°C NaOH to pH >12 ascorbic acid | 14 Days | 14 |
| Sulfide | 500 mL 100 g | G | Cool, 4°C (NaOH, ZnAC Waters Only) | 7 Days | 7 |
| Phenol | 1000 mL 100 g | G | Cool, 4°C $H_2SO_4$ to pH <2 | 28 Days | 28 |
| TPH | 2 × 1000 mL 100 g | G | Cool, 4°C pH <2 w/ HCl | 7 Days | 14 |
| TPH-GRO | 3 × 40 mL 100 g | G | Cool, 4°C pH <2 w/ HCl | 14 Days to extraction[e] | 14 |
| TPH-DRO | 2 × 1000 mL 200 g | G | Cool, 4°C <2 with HCl | 7 Days | 14 |
| TOX | 4 × 250 mL 50 g | G | Cool, 4°C $H_2SO_4$ to pH <2, $Na_2SO_3$ | 28 Days | N/A |
| TOC | 125 mL 20 g | G | Cool, 4°C $H_2SO_4$ to pH <2 | 28 Days | 28 |

[a]pH Adjustment with acid/base is performed on water samples only.

[b]Sodium thiosulfate needed for chlorinated water samples

[c]Due to the inaccurate recovery of 2-chloroethyl vinyl ether in the presence of HCl, Halocarbon samples analyzed for this compound should not be preserved.

[d]Samples will be analyzed as soon as possible after collection. The times listed are the maximum times that samples will be held before analysis and still be considered valid.

[e]Analysis 40 days from extraction.

[f]This is for soils not sampled by Method 5035. For Method 5035, see below.

**NOTE:** For volatiles analysis, the container should be filled completely, with no headspace. **All sample containers, preservatives, and mailers will be supplied at no additional charge upon request, except for the special containers with traceability documentation. There is an additional charge for this type of container.**

**Method 5035**

Containers for sampling soils for volatile organic compounds

| Analysis Level | Option # | EnCore™ Sampler | Methanol Preserved 40-mL Vial | Unpreserved Container for Moisture | Travel Blank |
|---|---|---|---|---|---|
| Low | A | 3 (7*) | — | 1 | Water |
| High | B | 1 (3*) | — | 1 | Water |
| | C | — | 1 (3*) | 1 | Methanol |

*Total number of sampled containers needed for background/MS/MSD analyses. Because only one analysis will come from each container, additional samples must be collected for matrix spikes/matrix spike duplicate analyses or other quality control analyses. The number of containers for MS/MSD samples is listed above.

## 7. Sample Custody

Samples are unpacked and inspected in the sample receipt area. At this time, the samples are examined for breakage and agreement with the associated client paperwork. The cooler temperatures will be checked upon receipt and recorded. As the samples are unpacked, the sample label information will be compared to the chain-of-custody record and any discrepancies or missing information will be documented. If necessary, the cooler will be closed and placed in cold storage until instructions and resolution of any discrepancies are received from the client.

A member of our Sample Administration Group will act as sample custodian for the project. To ensure accountability of our results, a unique identification number is assigned to each sample as soon as possible after receipt at the laboratory. When samples requiring preservation by either acid or base are received at the laboratory, the pH will be measured and documented, with the exception of samples designated for volatile analysis. Samples requiring refrigeration will be stored in our walk-in cooler which is maintained at 2° to 4°C. The use of our computer system in tracking samples (by the Lancaster Labs sample number assignment) will control custody of the sample from receipt until the time of its disposal. The security system on our laboratory building allows us to designate the entire facility as a secure area since all exterior doors are either locked or attended. Therefore, hand-to-hand chain of custody is not part of our routine procedure, but is available upon request. If requested, hand-to-hand chain of custody will be provided as per attached SOP-QA-104, "Chain-of-Custody Documentation." The laboratory chain of custody will begin with the preparation of bottles. The procedures for sample log-in, storage, and chain-of-custody documentation are detailed in the QA standard operating procedures included in Section No. 7 (SOP-QA-102, SOP-QA-103, and SOP-QA-104). Examples of sample labels and a custody seal are shown in Figure 7.1.

**Figure 7-1**

**CLIENT**

If you do not have an account with us, results will not be released until payment is received.

**SAMPLE INDENTIFICATION / LOCATION** **CL. RES:**

**COLLECTION INFORMATION**

☐ COMPOSITE
☐ GRAB

**DATE** **TIME** **BY:**

**TESTING REQUIRED** **PRESERVATIVE(S) ADDED**

Lancaster Laboratories
2425 New Holland Pike, Lancaster, PA 17601-5994

LLI #

Sample Label (Field)

WW 1869683 DIS-000 26A 10/16/92
GRP-353016
EMP-210
00649-ABC MANUFACTURING, INC.
MW-4 GRAB WATER SAMPLE
SEMI-ANNUAL MONITORING PROJECT
COLLECTED ON 10/17/92 AT 1525 BY FRB
0219 0220 0516 1126

Sample Label (Laboratory)

Lancaster Laboratories
*Where quality is a science*

CUSTODY SEAL

2425 New Holland Pike, Lancaster, PA 17601-5994 (717) 656-2301

DATE:_____

SIGNATURE:_____

Laboratory Custody Seal

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SOP-QA-102.02
Supersedes Date: 03/14/97
Effective Date: APR 0 1 1998
Page 1 of 5

## QUALITY ASSURANCE OPERATIONS MANUAL
## Sample Log-In

**Purpose:**

In order to provide accountability of our results, protect client confidentiality, and to prevent sample loss/mix-up, a continuous and unique Lancaster Laboratories (LL) identification number is assigned to each sample upon laboratory receipt.

**Scope:**

This SOP will cover the procedure used to log client samples into the computerized sample management system (CSMS) after receipt. The Sample Administration Group is responsible for laboratory sample log-in. Sample Administration has procedures to define this sample entry process.

This procedure applies only to samples which are logged into and tracked by the CSMS. There are only a few cases where samples may not be tracked using the CSMS. These include samples which will be stored for a long period of time prior to analysis, (e.g., stability storage) or for special project samples that could be reported in a narrative research and development style report instead of our usual analytical reports. Written procedures for tracking samples not entered into the CSMS need to be developed by the technical department responsible for the project or analysis of those samples.

**Personnel Training and Qualifications:**

Training in sample log-in is performed in accordance with Sample Administration training procedures.

**Procedure:**

1. All samples received for testing shall be delivered to the Sample Administration Department immediately upon arrival at the laboratory.

2. The Sample Administration Department will be responsible for unpacking and organizing the samples.

3. Client correspondence relating to the samples shall also be transferred to the Sample Administration Department. This may include purchase orders, quotations, letters, phone logs, and Incoming Sample Activity Records (ISARs).

4. Personnel of the Sample Administration Group shall log the samples into the CSMS as soon as practical after receipt. Samples awaiting log-in are stored in temporary holding areas, at required temperature, to maintain the sample integrity. At the time of entry the computer will assign a unique Lancaster Laboratories' identification number to each sample. Samples can be received at the laboratory 7 days a week, 24 hours a day, 365 days of the year. Samples should be logged in on the same day as they are received, but there could be following exceptions:

    a. Samples received on a holiday will not be logged-in until the next normal work day. Samples received from 6 p.m. on Saturday through 11 p.m. on Sunday will be logged-in Sunday evening by third shift Sample Administration personnel.

    b. Samples submitted by clients which do not identify the type of testing to be performed or with unclear or incomplete paperwork documentation - Every effort will be made to contact the client on the same day of sample receipt. In this situation, the samples will be tracked in a hold database. The group of samples will be assigned a hold number. This database is maintained by the Sample Administration Group.

If same day sample log-in is not possible, all specified and appropriate storage requirements will be observed (e.g., refrigeration).

5. Upon assignment of a sample number, the CSMS will generate a label which shall be attached to the sample container. Every effort will be made as to not obscure the client label. The information on the sample label will include the LL sample number, the client name, the storage location, the analyses requested, a bottle code indicating container and preservative type, if applicable, a unique bar code (used for samples stored in Automated Sample Retrieval and Storage System locations [ASRS]), and any applicable notes to laboratory personnel.

6. Preservation, homogenization, and subsampling, if necessary, will be the responsibility of the Sample Support Group, or the testing laboratory. SOPs are in place within the group to define these procedures. A list of preservatives required for routine environmental analyses may be found in the *Environmental Schedule of Services*. A preservation, sulfate, and chlorine check shall be performed immediately after sample log-in for all applicable environmental samples.

7. After all above steps are performed, as required, samples shall be stored in an assigned storage location, taken to the laboratory for testing, or may temporarily be stored in SA until technical center picks up samples.

8. The next working morning, after sample log-in, a copy of an entry acknowledgment will print from the CSMS. The acknowledgment is a hard copy record of the sample entry. It will summarize, the LL sample number, the sample(s) submitted in an entry group, the test(s) to be performed, the client requesting the work, the account to be billed for the work, and the unique sample identifications assigned by the client. This acknowledgment is mailed to the client to confirm sample receipt and entry.

9. Another copy of the sample acknowledgment will print and be designated as the laboratory copy. This acknowledgment, in addition to client paperwork, will be audited by three levels of personnel after the entry process:

   a. **Sample Administration** will audit to assure that the entry corresponds to all entry documentation including client supplied paperwork and/or quotations.

   b. **Client Services** will audit to assure the entry is reflective of client documentation and that additional client/project requirements were communicated and taken into consideration. They will also verify that account and billing information is accurate.

   c. **Technical centers** will assure appropriate preparation and analysis set-up steps have been added to the entry. They will also verify that project and technical requirements have been taken into consideration from a technical point of view.

   Each reviewer will initial the top of the SA file copy of the acknowledgment to document their review. Additional copies of this acknowledgment can be made for laboratory personnel.

10. The LL sample number assigned to each sample shall be used to identify the sample in all laboratory records, including laboratory notebooks, instrument printouts, and laboratory final reports. The sample number will also be used to identify all additional containers of the sample which may be created during sample preparation and analysis. This will include subsamples, extracts, and digests.

**Revision Log:**

Initiated Date: 03/87

| Ver. # | Effective Date | Change |
|---|---|---|
| 00 | 02/15/96 | Previous issue |
| 01 | 03/14/97 | Major changes are as follows:<br>• Expanded upon the scope of the procedure<br>• Added section about printing and auditing of the sample entry acknowledgment<br>• Added Personnel Training and Qualification section<br>• Removed specifics on how to document preservation checks |
| 02 | APR 0 1 1998 | Major changes are as follows:<br>• Corrected typo<br>• Wording changes in Procedure section to clarify current operations |

SOPQA102.DOC
031198

Prepared by: Kathy D. Wetzel Date: 3/23/98

Approved by: Kathleen J. Loewen Date: 3/23/98

Approved by: William Heraty Date: 3/24/98

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Supersedes Date: 10/01/96
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**QUALITY ASSURANCE OPERATIONS MANUAL**

**Sample Storage and Discard**

**Purpose:**

Sample integrity can be compromised by improper storage conditions. The objective of this procedure is to prevent sample deterioration and mix-up prior to analysis. The computerized sample management system (CSMS) is used to assign storage locations to assist in the orderly storage of samples. Systems are also in place to ensure organized retrieval of samples for analysis and discard/return to client at an appropriate date.

**Scope:**

This procedure applies to all Lancaster Laboratories business units (Environmental Sciences, Food and Animal Health Sciences, Pharmaceutical Sciences). The content of this procedure will describe general systems that are in place for sample storage, retrieval, return, and discard. Additional procedures may be in place to describe specific storage operations and requirements within each business unit.

The scope of this procedure does not address the storage and monitoring of samples stored in stability chambers. Separate procedures are in place within the Pharmaceutical area to describe these operations.

The scope of this procedure also does not address the storage and discard of controlled substances. This is defined within SOP-LA-036, "Controlled Substance Handling Procedure."

**Safety Precautions:**

Refer to the corporate *Chemical Hygiene Plan* which provides safety information. Contact your supervisor if you have questions or concerns about a sample.

**Personnel Training and Qualifications:**

Personnel who handle client samples must be familiar with the requirements of this procedure.

**Procedure:**

A. Sample storage and transfer

1. Sample Administration will gather information into the CSMS at the time of sample entry about the approximate size of samples to be received in a group and the type of storage they require (e.g., refrigerator, freezer, or room temperature).

2. The CSMS will assign the storage location and record the length of time the samples must be retained after the analysis report has been issued.

3. Samples will be stored in the assigned storage location, when not in the laboratory area.

4. In the event that a sample location change is needed, a Sample Storage Custodian or designated analyst will access the appropriate CSMS program and choose a new location. After a successful change in location has occurred, the new location will be written on each Lancaster Laboratories sample label, or a new label will be reprinted and adhered to the sample. The sample will then be transferred to the new storage location.

5. Analysts requiring the use of a sample may determine its location by referring to a departmental sample status sheet, CSMS, or SA entry paperwork.

6. To prevent unnecessary deterioration of the samples, the contents needed for analysis shall be removed and the sample returned to storage with a minimum of delay.

B. Security of storage areas

There are varying degrees of additional security requirements for storage areas, which are in addition to the building security. This additional security may be driven by various regulatory agencies. The following are different levels of security which are in place at the laboratory.

1. Samples may be located in an individual laboratory area which is not locked. No additional security is required, in addition to the existing building security. Samples may only be removed from and returned to these locations by an analyst working in that area. Care shall be exercised in returning the samples to their appropriate location.

2. Locked storage areas are also available in many individual laboratory areas, in addition to the environmental sample support area. Access to these storage areas is limited to analysts who are responsible for testing the samples that are stored there. These areas are locked when the laboratories are unattended; keys or combinations are available only to members of the department where they are located. Again, care shall be exercised in returning the sample to its appropriate location.

3. Controlled access areas are attended by a sample custodian and are large areas used by more than one group. Samples stored in controlled access areas are coordinated by the sample custodian assigned to the area. Only appropriate personnel may access this controlled area. After analysis, samples are returned to this storage center and placed in their designated storage location.

   Pharmaceutical and Animal Health samples are stored in a controlled access area. Environmental and some Food samples which are also stored in a

separate controlled access area are tracked by an automated sample retrieval storage system (ASRS). Samples are barcoded in and out of this system to track retrieval, return, and disposal.

4. Forensic storage areas are locked and admission to these areas is permitted only to sample custodians. Most of the samples stored in these areas require chain-of-custody documentation as outlined in SOP-QA-104, "Internal Chain of Custody Documentation." Samples may not be removed from this area without signing a chain-of-custody form. A chain-of-custody record may also be kept for samples, at the request of the client, even if the samples are not for forensic purposes.

5. Security of the controlled substance samples storage area is addressed by SOP-LA-036.

C. Sample discard

1. When the retention time for sample storage has expired, a discard list will be generated from the CSMS. The retention dates are based upon client requirements or defaulted to a given number of days past the date when the final analysis report is generated, if no client requirement is given.

2. These samples will be removed from their assigned storage area by a sample custodian or analyst, and either disposed of or returned to the client.

3. Hazardous samples shall either be returned to clients, decontaminated, or disposed of at the direction of supervisory personnel.

D. Storage conditions

1. The temperature of each sample storage location requiring a temperature control should be checked during each normal working day by an assigned person responsible for the sample storage area. This information shall be recorded.

2. Temperature documentation can be recorded on logs posted on the outside of the unit or by computerized recording devices or chart recorders.

3. The following temperature ranges need to be maintained within storage units.

| | Refrigerator Storage | Freezer Storage |
|---|---|---|
| Environmental | 2° to 4°C | -10° to -20°C |
| Foods | 2° to 6°C | -10° to -20°C |
| Pharmaceutical<br>Animal Health | 2° to 8°C | -10° to -20°C |

**NOTE:**

Pharmaceutical Room Temperature Sample Storage (for Pharmaceutical, Animal Health, and GLP samples) is maintained at 15° to 30°C.

Foods also has storage conditions available at -40° ± 10°C and -80° ± 10°C.

4. If the temperature recorded does not fall within these ranges, corrective action needs to be taken.

5. Temperature monitoring documentation shall be recorded in ink and changes shall be made in accordance with the error correction procedure outlined in SOP-QA-109, "Laboratory Notebooks, Logbooks, and Documentation."

6. Temperature records must be reviewed by a second qualified person and this information must be permanently archived.

7. In the event that additional storage areas are needed as "overflow" storage, systems must be put into place before samples can be stored. These areas must also be monitored for acceptable storage conditions.

8. If a client requests storage conditions which are outside the temperature ranges defined above, arrangements will be made to accommodate the request, if possible.

**Revision Log:**

Initiated Date: 03/87

| Ver. # | Effective Date | Change |
|---|---|---|
| 00 | 10/01/96 | Previous Issue |
| 01 | SEP 0 2 1997 | Major changes are as follows:<br>• Expanded upon Scope, Purpose, and Procedure to include Pharmaceutical Sciences and Animal Health<br>• Added Personnel Training and Qualifications section<br>• Broke Procedure section down into sample storage and transfer, security of storage areas, sample discard, and storage conditions<br>• Incorporated Procedural Amendment #1<br>• Clarified the scope of this procedure does not apply to the storage of samples in our stability chambers or the storage of controlled substances |

SOPQA103.DOC
081597

Prepared by: Kathy D Wetzel Date: 8/15/97

Approved by: Kathleen M Lowen Date: 8/18/97

Approved by: J. Nelson Hershey Date: 8/19/97

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Page 1 of 19

**QUALITY ASSURANCE OPERATIONS MANUAL**

**Internal Chain-of-Custody Documentation**

**Purpose:**

In order to demonstrate reliability of data which may be used as evidence in a legal case, required by a regulatory agency, or required by a client, an accurate written record tracing the possession of samples must be maintained from the time they are received at the laboratory until the last requested analysis is verified. The purpose of a chain of custody is to ensure traceability of samples while they are in the possession of the laboratory.

**Scope:**

This procedure describes the initiating and maintaining of chain-of-custody (COC) documentation for samples that require this level of traceability. It applies to all business units of Lancaster Laboratories (Environmental Sciences, Food and Animal Health Sciences, Pharmaceutical Sciences) when a client or regulatory agency requests an accurate written record tracing the possession of samples from the time they are received at the laboratory until the last requested analysis is verified. This procedure also applies to samples, especially environmental samples, which may be used as evidence is a legal case.

The first section of this procedure summarizes the COC requirements for food, animal health, and pharmaceutical samples. The second section summarizes the requirements for environmental COC samples.

**Definition:**

A sample is in custody if it is in any one of the following states:

1. In actual physical possession.
2. In view after being in physical possession.
3. Locked up so no one can tamper with it.
4. In a secured area, restricted to authorized personnel (e.g., in the ASRS system, pharmaceutical samples storage area).

**Personnel Training & Qualifications:**

Training for this procedure consists of reading SOP-QA-104. Supervisory review of all COC documentation should be done until the trainer is satisfied that proficiency has been achieved. Training of all laboratory personnel is the responsibility of the group leader. Documentation that this training has been completed must be kept in the training records.

**Procedure:**

A. Food, Animal Health, and Pharmaceutical procedure

1. General overview

a. Chain-of-custody documentation shall be kept upon the request of a client or regulatory agency. As with all analytical data, it is **extremely** important that this documentation be filled out completely and accurately with every sample transfer. **Everyone who handles the COC has the responsibility to check for documentation compliance to the point of their acquisition.** If changes need to be made to the form, they shall be made in accordance to the error correction

procedure addressed in SOP-QA-109, "Laboratory Notebooks, Logbooks, and Documentation." It is the responsibility of the person who made an error in documentation to correct the error.

b. For Food, Animal Health, and Pharmaceutical samples, internal COC documentation will begin when samples are received at the laboratory.

c. A member of the Sample Administration group will receive and unpack the samples. They will sign the client paperwork that accompanies the samples, if provided. If the samples were picked up by our Transportation department, the driver must also sign applicable paperwork to relinquish the samples to Sample Administration.

d. The Sample Administration group will track the custody of samples between receipt and entry into the computerized sample management system (CSMS) on the SA Receipt Documentation Log (Figure 2 attached). The client's sample designation will be used for identification purposes until a unique Lancaster Laboratories' number is assigned.

e. Samples will be entered into the CSMS as described in SOP-QA-102, "Sample Log-in."

f. After entry, samples are released by the Sample Administration group to be stored in other areas of the laboratory (e.g., Foods, Pharmaceutical specific storage areas). During this time, they may be accessed by several people in that area. Each of these people must note the specific sample numbers in their custody in addition to date, time, and reason for removal from storage. Chain-of-custody transfer documentation is recorded on a form which is given as Figure 6 of this procedure.

2. Documentation of custody changes

   a. An example of how to document changes in sample custody is shown as Figure 6 of this procedure. Each change of sample custody must be accurately documented in a consistent format. Entries documenting change of custody will use the following format:

      Signature: First initial, full last name, employee number
      Date: Month/day/year
      Time: Documented as military time
      Ink: Black ink is preferred, red ink and pencil are not acceptable

   b. When sample(s) are released from storage, they must be signed out by the analyst receiving them. The analyst must note the sample number(s) taken, the date and time received, and a note as to the reason why they were removed from storage (reason for change of custody).

   c. When an analyst returns sample(s) to storage, they must note the sample number(s) being returned in addition to time of return.

   d. If the custody of sample(s) is passed from one analyst to another, the following must be noted: the sample number(s) transferred, the reason for the transfer, in addition to the time and date of transfer. It is the responsibility of the analyst now in possession of the samples to ensure they are returned to the storage area.

   e. Each specific test that an analyst performs, in conjunction with the associated sample number(s), must be accurately documented by the analysts in the Reason for Change of Custody column before the samples are returned to the sample storage area.

3. Additional COC issues

   a. Chain-of-custody paperwork will remain with and accompany sample containers at all times.

   b. When sample analysis is complete, samples shall be returned to the storage area, in conjunction with the COC form.

   c. Original COC documentation will be maintained at the laboratory and filed in the sample storage area. COC documentation will be overchecked in conjunction with the sample data before a copy is sent to the client. The copy could either accompany the samples as they are returned to the client or it could be included within a client data package.

   d. All personnel who handle sample containers shall make every attempt to ensure that all changes of custody are accurately and completely documented. **Disciplinary action may be taken for employees who fail to comply with these important requirements.**

B. Environmental procedure

1. Initiation of COC documentation

   a. Chain-of-custody documentation shall be kept upon the request of the client or for any samples which are known to be involved in a legal dispute. As with all analytical data, it is **extremely** important that this documentation is filled out completely and accurately with every sample transfer. **Everyone who handles the COC has the responsibility to check for documentation compliance to the point of their acquisition.** If changes need to be made to the form, they shall be made in accordance to the error correction procedure addressed in SOP-QA-109. It will be the responsibility of the person who made an error in documentation to correct the error.

b. If requested by the client, the COC documentation will begin with the preparation of sampling containers. A form (Figure 1 attached) will be initiated by the person packing the bottle order for shipment to the client. If the delivery of containers is via Lancaster Laboratories Transportation department, the driver shall sign the form when they relinquish the bottles to the client. Drivers must also sign COC forms when they pick up samples for analysis.

c. When samples arrive at the laboratory for analysis, a member of the Sample Administration group will receive them and sign the external COC form that accompanies the samples, if provided. If the samples were picked up by our Transportation Department, the driver must sign the COC to relinquish the samples to Sample Administration.

d. The Sample Administration group will track the custody of samples between receipt and entry into the CSMS on the SA Receipt Documentation Log (Figure 2 attached). The client's sample designation will be used for identification purposes until a unique Lancaster Laboratories' number is assigned.

e. Samples will be entered into the Sample Management System as described in SOP-QA-102. Sample Administration will enter an analysis number for "Laboratory Chain of Custody" if requested. A lab note will print to inform analysts of the need for COC documentation. This note will also be automatically added to the sample labels.

2. Creating the internal COC

a. Sample Administration personnel shall initiate an internal Laboratory Chain of Custody form at the time of sample entry (Figure 3 attached) for each type of container in the sample group. A master list of all chains created will also be initiated for each sample group at the time of entry (Figure 4 attached). The samples will then be relinquished to a sample custodian who will store the samples in an assigned secure

location. This change of custody from sample entry to storage shall be documented on the chain, as well as any interim exchanges for rush analysis, preservation, homogenization, or temporary storage in the SA HOLD. The internal COC forms will then accompany the samples from storage to the laboratory for analysis.

b. If samples need to be checked out from the Sample Administration group before Lancaster Laboratories' numbers have been assigned to them, SA will be responsible for starting a COC form. They will note the available header information, the samples being relinquished (documented by the client sample designation), and the reason for transfer.

c. After sample entry, the original copy of the external client COC/analysis request form will be filed with Accounts Receivable, to be returned to the client with their invoice. Other copies of the external form will stay within SA to be filed within the client's paperwork file.

3. Documentation of custody changes

a. An example of how to document changes in sample custody is shown in Figures 3 and 5. Each change of sample custody must be accurately documented in a consistent format. All signatures documenting changes of custody will use the following format:

Signatures: first initial, full last name, employee number
Date: Month/day/year
Time: Documented as military time
Ink: Black ink is preferred, red ink and pencil are not acceptable

(1) When sample support releases samples to an analyst they must:

Note the sample number(s) released and sign the "Released By" column of the chain.

(2) When an analyst receives samples from sample support they must:

Sign the "Received By" column, note the date and time samples are received, and note the reason why they are taking the samples (reason for change of custody).

(3) When an analyst returns samples to sample support they must:

Note all sample numbers being returned, sign the released by column, and note time and date of return.

(4) When sample support receives samples from an analyst they must:

Sign the received by column and note the reason for sample transfer.

b. Sample handling should be kept to a minimum. Analysts requiring use of a sample will requisition it through the computer requisition program. During the hours when sample support is manned by sample custodians, a custodian will receive the computerized requisition and remove the sample from storage. The custodian will ensure that the bottle type listed on the COC form matches the bottle type being distributed. **It will be the shared responsibility of the analyst and sample custodian to insure that forms are signed, dated, and reason for sample transfer are recorded with each change of custody, as directed by Item (3)a. above.**

c. Each specific test that an analyst performed in conjunction with the associated sample number(s) must be accurately documented by the analyst before the samples are returned to a sample custodian in the sample storage area.

d. When an analyst requires the use of samples when a sample custodian will not be on duty, they must requisition samples earlier in the day or on the previous day. These samples and associated COCs will be pulled by a sample custodian and placed in the locked SA HOLD storage area. The sample custodian will note on the COC the change in transfer to the SA HOLD in addition to the time, date, and the sample numbers. The analyst picking up the samples will document the specific samples being checked out, record SA HOLD in the released by column, sign the received by column, note the time, date, and reason for transfer. When the analyst returns the samples to the SA HOLD, they must sign the samples back into the SA HOLD.

e. The following changes of custody will be handled in the following manner:

(1) Documentation is required for all shift changes. Signatures involving transfers from one shift to another shall be the responsibility of the analyst who originally acquired the samples from sample support.

(2) Occasionally, a sample container will be needed for analysis by an analyst in a department while it is in the custody of an analyst in another department. It will be the responsibility of the first person who received the sample to note on the COC the specific sample numbers requested by the second person and to sign the released by column. The second person will sign the received by column and note the time, date, and reason for sample transfer. After the second person is finished with the sample, the sample will be returned back to the first person or to the sample storage area.

(3) In situations where a sample group must be split between departments working on different analyses, a supplemental COC must be initiated by the Sample Support group. The

supplemental chain will be used to accompany that portion of the sample group which is needed by a second department, when another department has part of the sample group and the COC for the entire group. This supplemental COC will be created only when absolutely necessary to minimize paperwork and confusion. This chain must also be documented on the master list of chains initiated for the sample group.

(4) If COC samples are stored in other areas of the laboratory or in a specific department, they must be stored in a locked area. When samples are taken from a departmental storage area, the released by column of the COC is documented as "department XX storage." If samples are returned to this area when complete, the received by column will be noted as department XX storage.

4. Additional COC issues

a. Analysts in possession of samples shall remove the aliquot required for their analysis and return the samples to the Sample Support group with a minimum of delay. During this time of possession, samples must fall under the definition of sample custody.

b. If additional containers of the sample are created (e.g. subsamples, extracts, distillates, leachates, digests, etc.), an additional COC form must be created by the department if they do not document this information on the original COC form (Figure 5 attached). This form will be marked with the container type and will be initiated to accompany the new sample container. Each department in the lab has specifically designed COC forms which will be used if new containers are created. All changes of custody involving handling of new containers in the department (e.g. analysis, storage, vials on instruments, etc.) will be documented on the departmental specific COC form or on the original COC form. Any specific handling or documentation requirements for departmental chains can be described in a departmental SOP.

5. When sample analysis is complete

   a. After sample analysis, samples shall be returned to the Sample Support group as soon as possible. Original COC forms shall also be returned with the samples and this change of custody noted. At this time, it will be the responsibility of the Sample Support group to review the COC forms to ensure that all documentation on the forms is complete before they file the forms in their area. Sample custodians will not return a sample to its assigned storage location without signing the accompanying chain and performing this completeness check. All chains should either end with a note of "All Sample Consumed," "Discard," or "Storage" for the final reason of transfer.

   b. All completed COC forms for the original sample containers will be retained in files within Sample Support. The Data Package group will retrieve these forms so a copy can be included in the data package. All departmental created COC forms will be collected by the department's data package group so a copy can be included in the data package. These forms will not be returned to the Sample Support group since these sample containers will not be returned to the Sample Support group. The original copy of all COC forms will be retained on file by the laboratory.

   c. All personnel who handle sample containers shall make every attempt to ensure that all changes of custody are accurately and completely documented. **Disciplinary action may be taken for employees who fail to comply with these important requirements.**

   d. In the event that a signature or other information is inadvertently not recorded on a COC form, the Sample Support and Data Package groups, in conjunction with the technical centers, shall determine what information is missing by checking computer requisition records, raw data, or the sample support work schedule. The responsible party shall add the missing information or make the necessary correction at the

bottom of the COC form, in addition to noting the situation that caused the error in documentation. The person making this note needs to sign and date the information using the current date. Any errors in COC documentation that cause noncompliances must be noted in the case narrative of the sample data package. Examples of specific cases are on file in the Data Package Department.

**Revision Log:**

Initiated Date: 03/87

| Ver. # | Effective Date | Change |
|---|---|---|
| 00 | 12/01/95 | Previous Issue |
| 01 | 03/14/97 | Major changes are as follows:<br>• Training section added.<br>• Examples of SA Receipt Documentation Log and Metals Locked Storage COC updated.<br>• Section E.1., Option to end chain with "All Sample Consumed" added. |
| 02 | SEP 0 2 1997 | Major changes are as follows:<br>• Incorporated specific Procedure section for Food, Animal Health, and Pharmaceutical procedures.<br>• Expanded upon the scope of the procedure. |

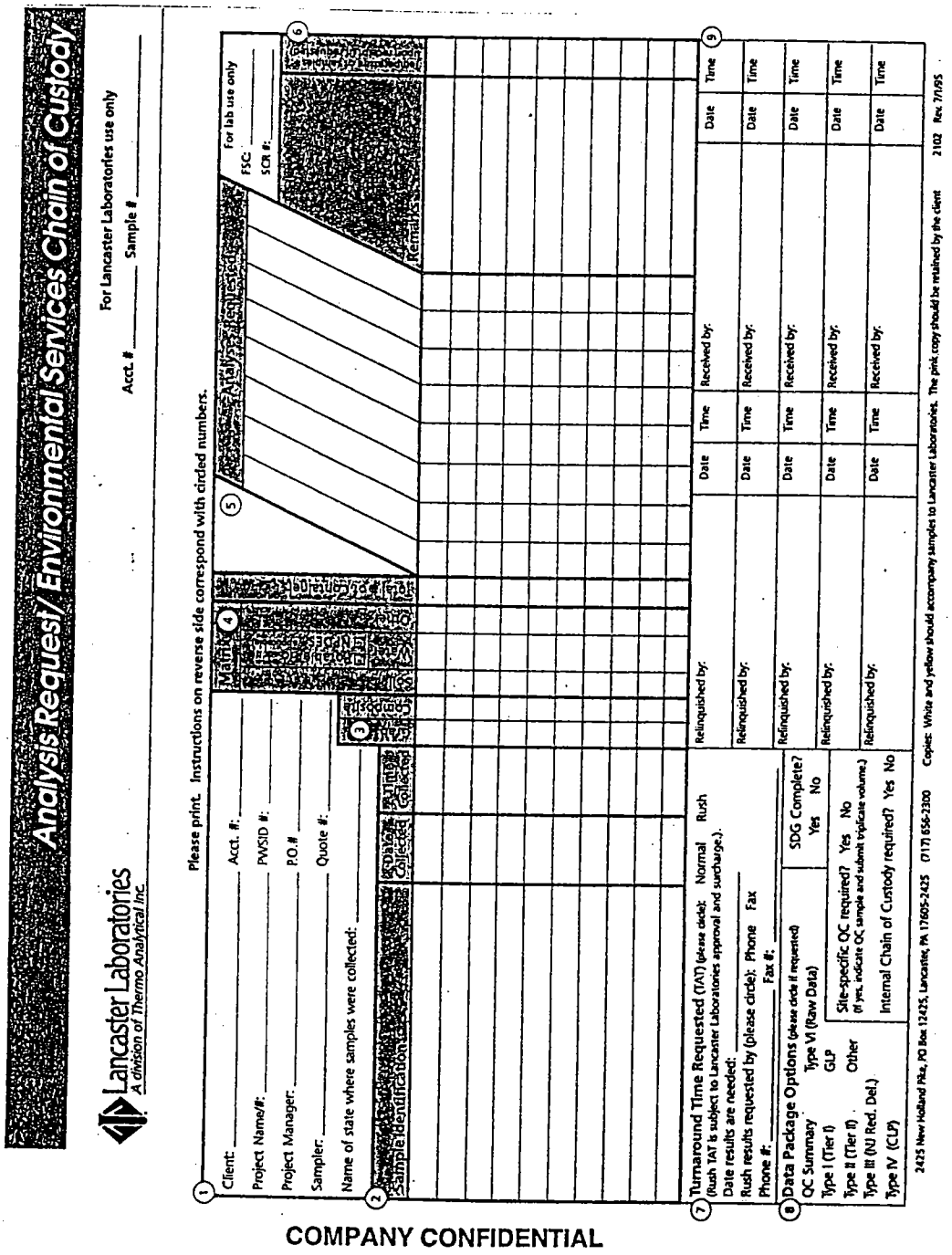
SOPQA104.DOC
081297

Prepared by: Kathy D Wetzel Date: 8/12/97

Approved by: Kathleen M. Loewen Date: 8/14/97

Approved by: J Lulon Hershey Date: 8/18/97

Figure 1




COMPANY CONFIDENTIAL

**Figure 1 - Continued**

## DIRECTIONS FOR COMPLETING THIS FORM

(1) **Client:** Your company's name

**Acct. #:** Your account number with Lancaster Laboratories

**Project Name/#:** The way your company refers to the work involved with these samples. You may want to include project location as part of the description.

**PWSID:** Potable Water Source ID#

**Project Manager:** The person at your company responsible for overseeing the project

**P.O. #:** Your company's purchase order number

**Sampler:** The name of the person who collected the samples

**Quote #:** The reference number that appears on your quote (if Lancaster Laboratories gave you a number)

State where sample was collected: Please indicate where the sample was taken, e.g., Pa., N.J., etc.

(2) **Sample Identification:** The unique sample description you want to appear on the analytical report

**Date Collected/Time Collected:** When the sample was collected

(3) **Grab:** Check here if sample was taken at one time from a single spot.

**Composite:** Check here if samples were taken from more than one spot, or periodically, and combined to make one sample.

(4) **Matrix:** Check the type of sample you are submitting. If it is a water sample, please indicate if it is a potable water or if it is an NPDES sample.

**Number of Containers:** Indicate the total number of containers for each sampling point.

(5) **Analyses Requested:** Write the name of each analysis (or an abbreviation of it) here, and use the catalog number that appears at the beginning of each line in the *Schedule of Services*. Be sure to indicate which analyses are to be performed on which samples.

(6) **Remarks:** List special instructions about the sample here (e.g., hazardous elements, high levels of analyte, etc.). The space can also be used (if needed) for listing additional analyses.

(7) **Turnaround time Requested:** Circle **Normal** if you want routine TAT, which is usually within 10-15 days. If you need your results faster, call ahead to schedule **Rush** work.

**Rush Results Requested by:** Circle **Fax** or **Phone** and include the number.

(8) **Data Package Options:** Call our Client Services Group (717-656-2301) if you have questions about these choices.

**SDG Complete?** Indicate Yes if this is a complete sample delivery group or No if you will be submitting additional samples to be included in the same data package.

Note: We need to have one quality control (QC) sample for every 20 samples you send, if you are requesting site-specific QC. Please give us this sample in triplicate volume and identify it by writing "QC" in the **Remarks** column.

The internal chain of custody is a hand-to-hand documentation recording a sample's movement throughout the company. We routinely start a chain of custody for data-package samples unless we are told otherwise. There is a $25 per sample charge for the chain-of-custody documentation.

(9) **Relinquished by/Received by:** The form must be signed each time the sample changes hands. We can supply chain-of-custody seals for the outside of your packages if you require them.

Thank you for using Lancaster Laboratories.

Please call our Client Services Group (717-656-2301) if you have any questions about completing this form.

Figure 2

Lancaster Laboratories
2425 New Holland Pike • Lancaster, PA 17601-5994

Sample Administration
Receipt Documentation Log

Client/Project: XYZ Associates / Well Monitoring
Shipping Container Sealed: (Y) / N
Date of Receipt: 6/27/97
COC Seal Present: (Y) / N
Time of Receipt: 1350
COC Seal Intact: (Y) / N
Source Code: 60
Package: (Chilled) / Not Chilled
Unpacker Emp. No.: 210

| Temperature of Shipping Containers | |
|---|---|
| #1 | #2 |
| Thermometer ID: 123 | Thermometer ID: |
| Temp.: N/A | Temp.: |
| (Temp. Bottle) / Surface Temp. | Temp. Bottle / Surface Temp. |
| (Wet Ice) / Dry Ice / Ice Packs | Wet Ice / Dry Ice / Ice Packs |
| Ice Present? (Y) / N | Ice Present? Y / N |
| #3 | #4 |
| Thermometer ID: | Thermometer ID: |
| Temp.: | Temp.: |
| Temp. Bottle / Surface Temp. | Temp. Bottle / Surface Temp. |
| Wet Ice / Dry Ice / Ice Packs | Wet Ice / Dry Ice / Ice Packs |
| Ice Present? Y / N | Ice Present? Y / N |

Paperwork Discrepancy/Unpacking Problems: Broken 40ml Vial, Client ID 345-01. Client Called 6/27/97 at 1610.

| Sample Administration Chain of Custody | | | |
|---|---|---|---|
| Name | Date | Time | Reason for Transfer |
| K. Stutso | 6/27/97 | 1600 | Unpacking |
| A. Hutchison | 6/27/97 | 1615 | (Place in Storage) or Entry |
| D. Neslund | 6/27/97 | 1800 | Remove from Storage / Entry |
| | | | Place in Storage or Entry |
| | | | Entry |

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Figure 3

Lancaster Laboratories
2425 New Holland Pike • Lancaster, PA 17601-5994

Locked Storage Chain of Custody
Original Sample

Client/Project: XYZ Associates

Preservative: HCl Matrix: Water SDG: XYZ01

Sample # Range of Entry Group: 2420638-39 Bottle Type: #38 40 ml Vial

| Sample Number(s) In Custody | Released By | Received By | Date of Transfer | Time of Transfer | Reason for Change of Custody | Dist., Extr., or Digest Chain Created (X) |
|---|---|---|---|---|---|---|
| 2420638-39 | D. 208 Neslund | SS Storage | 11/27/95 | 1600 | Entry & Storage | |
| 2420638-39 | SS Storage | B. 705 Weaver | 11/29/95 | 700 | Remove from SS Storage | |
| 2420638-39 | B. 705 Weaver | dept 21 Storage | 11/28/95 | 715 | VOA Storage | |
| 2420638-39 | dept 21 Storage | K. 396 Witman | 11/29/95 | 1315 | VOA Analysis | X |
| 2420638-39 | K. Witman 396 | L. 513 Taylor | 11/29/95 | 1700 | VOA Analyst Shift Change | |
| 2420638-39 | L. 513 Taylor | dept 21 Storage | 11/29/95 | 2100 | VOA Storage | |
| 2420638-39 | dept 21 Storage | C. 266 Ayars | 12/3/95 | 800 | Transfer to SS Storage | |
| 2420638-39 | C. Ayars 266 | L. 630 Kessler | 12/3/95 | 815 | Storage | |
| | | | | | | |
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Figure 4

Lancaster Laboratories
2425 New Holland Pike • Lancaster, PA 17601-5994

Master List of Chain of Custodies

Client/Project: XYZ associates

Sample # Range of Entry Group: 242032-39

SDG: XYZ01 Matrix: (Liquid) Solid Mixed Other

| Original Sample Chains | | |
|---|---|---|
| **Bottle Type** | **Started By** | **Date Started** |
| 40 ml Glass Vial (#38) | D. Neslund 208 | 11/27/95 |
| 1000 ml Amber Glass (#45) | ↓ | ↓ |
| 1000 ml Plastic (#09) | | |
| 1000 ml Amber Glass (#29) | | |
| | | |
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| Supplemental Chains | | |
|---|---|---|
| **Bottle Type** | **Started By** | **Date Started** |
| 77 | C. Ojard 266 | 11/27/95 |
| 21 | C. Ojard 266 | 11/27/95 |
| | | |

| Extraction, Digestion, Distillates, Etc. | | |
|---|---|---|
| **Bottle Type** | **Started By** | **Date Started** |
| | | |
| | | |
| | | |
| | | |

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**Figure 5**

Lancaster Laboratories
2425 New Holland Pike • Lancaster, PA 17601-5994

Locked Storage Chain of Custody
Metals

Client/Project: XYZ Associates

Sample #: 2420632-9 SDG: XYZ01

Digest Type (circle one): Hg (Metals) GF Hydrides Trial No: 2 (If not 1, fill in)

Batch No: 95305 1849 004

| Sample Number(s) in Custody | Released By | Received By | Date of Transfer | Time of Transfer | Reason for Change of Custody |
|---|---|---|---|---|---|
| 2420632,4,6 | S. Correa/523 | J. Garrett/428 | 12/1/95 | 1631 | Metals prep Shift change |
| 2420632,4,6 | J. Garrett/428 | ICP Storage | 12/1/95 | 1920 | ICP Storage |
| 2420632,4,6 | ICP Storage | D. Sackett/142 | 12/1/95 | 2115 | ICP Analysis |
| 2420632,4,6 | D. Sackett/142 | ICP Storage | 12/1/95 | 2135 | ICP Storage. |
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**Figure 6**

Lancaster Laboratories
2425 New Holland Pike • Lancaster, PA 17601-5994

**Food, Pharmaceutical, Animal Health**
**Locked Storage Chain of Custody**
**Original Sample**

Client/Project: Smith Pharmaceutical

Preservative: N/A Matrix: Tablets

Sample # Range of Entry Group: 2830419-30

Bottle Type: Amber Glass - 100 Tablets/Bottle

| Sample Number(s) in Custody | Released By | Received By | Date of Transfer | Time of Transfer | Reason for Change of Custody |
|---|---|---|---|---|---|
| 2830419-30 | L. Carruthers 074 | M. Coho 589 | 7/25/97 | 1300 | Entry/Transfer to Pharm. Storage |
| 2830419-30 | M. Coho 589 | Pharm Storage | 7/25/97 | 1315 | Storage |
| 2830419-30 | Pharm Storage | E. Ortiz 572 | 7/27/97 | 800 | PN analysis |
| 2830419-30 | E. Ortiz 572 | Pharm Storage | 7/27/97 | 1000 | Storage |
| 2830419-30 | Pharm Storage | D. Wright 330 | 7/29/97 | 930 | GC assay Analysis |
| 2830419-30 | D. Wright 330 | Pharm Storage | 7/29/97 | 1400 | Storage |
| | | | | | |
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## 8. Calibration Procedures

Procedures for initial calibration and continuing calibration verification are in place for all instruments within the laboratory. The calibrations generally involve checking instrument response to standards for each target compound to be analyzed. The source and accuracy of standards used for this purpose are integral to obtaining the best quality data. Standards used at Lancaster Laboratories are purchased from commercial supply houses either as neat compounds or as solutions with certified concentrations. The accuracy and quality of these purchased standards is verified through documentation provided by these commercial sources. Most solutions and all neat materials require subsequent dilution to an appropriate working range. All dilutions performed are documented and the resulting solution is checked by obtaining the instrument response of the new solution and comparing with the response to the solution currently in use. Any discrepancies between the responses are investigated and resolved before the new solution is used. Each standard is assigned a code which allows traceability to the original components. The standard container is marked with the code, name of solution, concentration, date prepared, expiration date, and the initials of the preparer. Shelf life and storage conditions for standards are included in the standard operating procedures and old standards are replaced before their expiration date.

Each instrument is calibrated with a given frequency using one or more concentrations of the standard solution. As analysis proceeds, the calibration is checked for any unacceptable change in instrument response. If the calibration check verifies the initial response, the analysis proceeds. If the calibration check indicates that a significant change in instrument response has occurred, then a new calibration is initiated. If necessary, maintenance may be performed prior to the recalibration.

Calibration records are usually kept in the form of raw data with the other instrument printouts. In cases where no data system is used, calibration data is manually recorded in notebooks. Any maintenance or repair is also recorded in a notebook. The information recorded either in the notebooks or on the instrument printout includes the date, instrument ID, employee name and/or identification number, and concentration or code number of standard.

The frequency of calibration and calibration verification, number of concentrations used, and acceptance criteria for each of the instruments to be used are listed in Table 8-1. In addition to checking the instrument response to target compounds, the GC/MS units are checked to ensure that standard mass spectral abundance criteria are met. Prior to each calibration, instruments being used for volatile compound analysis are tuned using bromofluorobenzene (BFB) and instruments being used for semivolatile analysis are tuned using decafluorotriphenylphosphine (DFTPP). The key ions and their abundance criteria are listed in Table 8-2.

**Table 8-1**

| | Initial Calibration | | | Continuing Calibration Verification | | |
|---|---|---|---|---|---|---|
| Instrument | Frequency | # Std Conc | Acceptance Criteria | Frequency | # Std Conc | Acceptance Criteria |
| GC/MS Volatiles* | After C-cal fails | 6 | RF for SPCCs >0.300 for chlorobenzene and 1,2,2-tetrachloroethane, and >0.100 for 1,1-dichloroethene, bromoform and chloromethane<br>CCCs <30% | Every 12 hours | 1 | RF for SPCCs >0.300 except for bromoform >0.10<br>%Drift for CCCs <20 |
| GC/MS Semivolatiles* | After C-cal fails | 6 | RF for SPCC's >0.050 Max %RSD for CCC's <30% | Every 12 hours | 1 | RF for SPCCs 0.050<br>%Drift for CCCs <20 |
| GC VOA Halocarbons and/or Aromatics | After C-cal fails | At least 5 | %RSD of <20% for individual compounds or for average of all compounds | Every 12 hours, or every 10 samples | 1 | %Drift ± 15% for individual compounds or average of all compounds |
| GC Pesticides | Each new run<br>After C-cal fails | 5 | 20% RSD of RFs of initial calibration to use avg. RF, otherwise use curve fit. Degradation for DDT, endrin 15%<br>Alternatively, if the average of the %RSDs of all compounds in the calibration standard is ≤20%, then the AVG RF can be used for all compounds. | Every 10 samples<br>Every 20 samples or 12 hours for Method 8081A, 8082 | 1 | ≤15% difference from initial response for quantitation<br>C-cal - A CCV is also compliant if the average RPD is ≤15% for all compounds in the CCV standard.<br>DDT/Endrin breakdown check 15% every 12 hours or 20 injections |
| HPLC | Each new run or after C-cal fails | 5 | 20% RSD of RFs of initial calibration to use average RF, otherwise use curve fit<br>Alternatively, if the average of the %RSDs of all compounds in the calibration standard is ≤20%, then the AVG RF can be used for all compounds. | Every 10 samples | 1 | ≤15% difference from initial response for quantitation<br>C-cal - A CCV is also compliant if the average RPD is ≤15% for all compounds in the CCV standard. |
| GC TPH-GRO | After C-cal fails | At least 5 | %RSD of <20% otherwise use calibration curve | Every 12 hours or every 10 samples | 1 | %Drift ±15% |
| GC TPH-DRO | After C-cal fails | 5 | % RSD of <20% otherwise use calibration curve | Every 10 samples | 1 | %Drift ±15% |
| ICP/Trace ICP | Each new run | 1 | Independent calibration verification within ±10%, standards <5%RSD | Every 10 samples | 1 | Same as initial |
| CVAA | Each new run | 5 | Independent calibration verification within ±10%<br>Correlation coefficient >0.995 | Every 10 samples | 1 | ±20% of true value |

**Table 8-1**

| | Initial Calibration | | | Continuing Calibration Verification | | |
|---|---|---|---|---|---|---|
| Instrument | Frequency | # Std Conc | Acceptance Criteria | Frequency | # Std Conc | Acceptance Criteria |
| GFAA | Each new run | 5 | Independent calibration verification within ±10%<br>Correlation coefficient >0.995 | Every 10 samples | 1 | ±20% of true value |
| Flame AA | Each new run | 5 | Independent calibration verification within ±10%<br>Correlation coefficient >0.995 | Every 10 samples | 1 | ±20% of true value |
| Autoanalyzer | Daily | 6 | Correlation coefficient >0.995 | Every 10 samples | 1 | ±10% of true value |
| Infrared Spectrophotometer (FTIR) | Daily | 5 | Correlation coefficient >0.995 | Every 10 samples | 1 | ±10% of true value |
| TOC Analyzer | Daily | 5 | ±10% @ STD | Every 10 samples | 1 | ±10% of true value |
| TOX Analyzer | Each Batch | 4 | ±5% @ STD | Every 8 samples | 1 | ±5% of true value |
| Balance | Daily | 4 | Top-loading balance ±.5%<br>Analytical balances ± .1% for weights >.1 g<br>.05 g ± .5%<br>.02 g ± 1.0%<br>.01 g ± 2.0%<br>.005 g ± 2.0% | N/A | N/A | N/A |

*All compounds with %RSD >15 must use first or second order regression fit of the six calibration points. Alternatively, if average of the %RSD of all compounds in calibration standard is ≤15%, the AVG RF can be used for all compounds.

Abbreviations

# Std Conc - The number of standard concentrations used

SPCCs - System performance check compounds

CCCs - Calibration check compounds

RF - Response factor

%RSD - Percent relative standard deviation

C-cal - Continuing calibration

CVAA - Cold vapor atomic absorption spectrophotometer

HPLC - High Performance Liquid Chromatography

ICP - Inductively coupled plasma spectrophotometer; ICP run also includes interelement correction check standard (beginning and end of run)

GFAA - Graphite furnace atomic absorption spectrophotometer

| Table 8-2 | |
|---|---|
| **Mass** | **Ion Abundance Criteria** |
| **BFB Key Ion Abundance Criteria:** | |
| 50 | 15% to 40% of mass 95 |
| 75 | 30% to 60% of mass 95 |
| 95 | base peak, 100% relative abundance |
| 96 | 5% to 9% of mass 95 |
| 173 | less than 2% of mass 174 |
| 174 | greater than 50% of mass 95 |
| 175 | 5% to 9% of mass 174 |
| 176 | greater than 95% but less than 101% of mass 174 |
| 177 | 5% to 9% of mass 176 |
| **DFTPP Key Ions and Ion Abundance Criteria:** | |
| 51 | 30% to 60% of mass 198 |
| 68 | less than 2% of mass 69 |
| 70 | less than 2% of mass 69 |
| 127 | 40% to 60% of mass 198 |
| 197 | less than 1% of mass 198 |
| 198 | Base peak, 100% relative abundance |
| 199 | 5% to 9% of mass 198 |
| 275 | 10% to 30% of mass 198 |
| 365 | greater than 1% of mass 198 |
| 441 | Present but less than mass 443 |
| 442 | greater than 40% of mass 198 |
| 443 | 17% to 23% of mass 442 |

## 9. Analytical Procedures

The analytical procedures to be used for organics and inorganics are those described in the USEPA SW-846 3rd Edition, Update III, 1996, for the preparation and analysis of water, sediment, and soil for the client specified compounds. Copies of the analytical procedures are located in the laboratory and available for use by analysts. Copies of analytical methods are available upon request.

Volatiles by GC/MS - This method determines the concentration of volatile (purgeable) organics. The analysis is based on purging the volatiles onto a Tenax/silica gel trap, desorbing the volatiles onto a gas chromatographic column which separates them and identifying the separated components with a mass spectrometer. Method 8260B/5030B/5035.

Semivolatiles - This method determines the concentration of semivolatile organic compounds that are separated into an organic solvent and are amenable to gas chromatography. The method involves solvent extraction of the sample to isolate analytes and GC/MS analysis to determine semivolatile compounds present in the sample. Method 8270C.

Volatiles by GC - This method determines the concentration of volatile (purgeable) organic compounds. The analysis is based on purging the volatiles from the sample onto an appropriate sorbent trap and desorbing the volatiles onto a gas chromatographic column. Using an appropriate temperature program, the compounds are separated by the column and both qualitative and quantitative detection is achieved with a photoionization and/or electrolytic conductivity detector. Method 5030B/8021B/5035. Non-halogenated organics are analyzed by flame ionization detectors. Method 5030B/8015B, 5035.

Pesticides, PCBs, & Herbicides - This method determines the concentration of organochloride pesticides, polychlorinated biphenyls, herbicides, and organophosphate pesticides. The procedure includes solvent extraction of the sample, analysis of the extract on a gas chromatograph/electron capture detector

(GC/EC) using a capillary column, and confirmation on a GC/EC using a second capillary column. A nitrogen-phosphorus detector is used for organophosphates. If the compound concentration is sufficient, confirmation may be done on GC/MS upon request. Pesticides Methods 8081A and 8141A. PCBs Method 8082. Herbicides Method 8151A.

PAHs by HPLC - The sample aliquot is extracted with methylene chloride. The extract is filtered (soils), dried, concentrated by evaporation and exchanged into acetonitrile. Silica gel cleanup is used if necessary. The extract is analyzed by reverse-phase HPLC with both UV and fluorescence detectors. Methods 3550B/3630C/8310.

TPH-GRO - This method determines the concentration of gasoline range organics (2-methylpentane to 1,2,4-trimethylbenzene). The analysis is based on purging the volatiles from the sample onto an appropriate sorbent trap and desorbing the volatiles onto a gas chromatographic column. Using an appropriate temperature program, the compounds are separated by the column and both qualitative and quantitative detection is achieved with a flame ionization detector. BTEX may be determined simultaneously on systems equipped with a photoionization detector in tandem with the FID. Method 8015B/5030B/5035.

TPH-DRO - This method determines the concentration of diesel range organics (C-10 to C-28 hydrocarbons). The procedure includes solvent extraction of the sample and analysis of the extract on a gas chromatograph/flame ionization detector (GC/FID) using a megabore capillary column.

Method API "Method for Determination of Diesel Range Organics," Revision 2, 02/05/95; or California Department of Health Services LUFT Task Force TPH Analysis - Diesel Method (Modified), California Modified 8015 Method, Method 8015B.

Inductively Coupled Plasma (ICP) - This is a technique for the simultaneous determination of elements in solution after acid digestion. The basis of the method is the measurement of atomic emission by an optical spectroscopic technique. Characteristic atomic line emission spectra are produced by excitation of the

sample in a radio frequency inductively coupled plasma. Because the temperature of the plasma is considerably higher, it is especially useful for refractory metals. Method 6010B.

The Trace ICP is the same technique as the ICP listed above except for the orientation of the plasma (horizontal instead of vertical) and upgraded optical and sample introduction systems, resulting in instrument detection limits approximately a magnitude lower than the traditional ICP.

Graphite Furnace Atomic Absorption (GFAA) - This is a method of analysis designed to detect trace amounts of the analyte through electrothermal atomization. Samples are digested before analysis. The graphite furnace AA spectrophotometer heats the sample within a graphite tube using an electrical current (i.e., flameless furnace) and measures the absorption of specific metallic elements at discrete wavelengths. (See attached list for method number.)

Cold Vapor Atomic Absorption - Organic mercury compounds are oxidized and the mercury is reduced to the elemental state and aerated from solution in a closed system. The mercury vapor passes through a cell positioned in the light path of a spectrophotometer and absorbance (peak height) is measured. Method 7470A/7471A.

Flame Atomic Absorption - This method is also suited to metals analysis. A solution of the sample to be analyzed is sprayed into a flame which generates sufficient heat to decompose the sample into its constituent atoms directly in the optical path. The difference in light intensity is measured at specific wavelengths using a spectrophotometer. (See attached list for method number.)

Total Cyanide Analysis - Distillation of the sample releases the cyanide from cyanide complexes as HCN. The liberated HCN and simple cyanides are converted to cyanogen chloride by reaction with chloramine T. This reacts with pyridine and barbituric acid reagent to give a red colored complex. The absorbance is read at 570 nm and is compared to a standard curve. An autoanalyzer is used. Method 9012A.

Phenols - This method is based on automated distillation of phenol and the subsequent reaction with 4-aminoantipyrine in basic buffer to produce a red colored complex. The absorbance is read at 505 nm and is compared to a standard curve. An autoanalyzer is used. Method 9066.

Moisture - A known sample weight is placed in a drying oven maintained at 103° to 105°C for 8 to 24 hours. The sample is reweighed after drying and this value is divided by the original weight. The result is used to calculate analytical concentration on a dry-weight basis. *Methods for the Chemical Analysis of Water and Wastes*, Office of R&D, USEPA-EMSL, Cincinnati, OH, USEPA 600/4-79-020. Method 160.3. (modified).

Total Petroleum Hydrocarbons - Samples are extracted with freon and the resulting solution is treated with silica gel to remove fatty acids and other polar compounds. The remaining nonpolar compounds are designated as petroleum hydrocarbons and are quantitatively measured using infrared spectroscopy. *Methods for the Chemical Analysis of Water and Wastes*, Office of R&D, USEPA-EMSL, Cincinnati, OH, March 1979, USEPA 600/4-79-020. Method 418.1 (modified for soils).

Sulfide Analysis - The sample is acidified and a known excess of iodine is added. The iodine reacts with sulfide in acid solution, oxidizing sulfide to sulfur. The excess iodine is back-titrated with sodium thiosulfate. Method 9030A.

Total Organic Carbon (TOC) - Following acidification, the sample is purged with nitrogen to remove inorganic carbon. Persulfate is injected to oxidize organic carbon to carbon dioxide which is detected by IR. An OI Model 700 TOC analyzer is used. Method 9060.

Total Organic Halogen (TOX) - Organic halogen is adsorbed onto an activated carbon column and combusted in an oxygen furnace. The resulting hydrogen halide gases are collected in an acetic acid buffer. The halides are titrated microcoulometrically through the generation of Ag+ ions. A Mitsubishi TOX analyzer is used. Method 9020B.

| Inorganic Method Numbers | | | | |
|---|---|---|---|---|
| | ICP | GFAA | Flame AA | Cold Vapor |
| Aluminum | 6010B | | 7020 | |
| Antimony | 6010B | 7041 | | |
| Arsenic | 6010B | 7060A | | |
| Barium | 6010B | | 7080A | |
| Beryllium | 6010B | 7091 | | |
| Cadmium | 6010B | 7131A | 7130 | |
| Calcium | 6010B | | 7140 | |
| Chromium | 6010B | 7191 | 7190 | |
| Cobalt | 6010B | | | |
| Copper | 6010B | 7211 | 7210 | |
| Iron | 6010B | | 7380 | |
| Lead | 6010B | 7421 | 7420 | |
| Magnesium | 6010B | | 7450 | |
| Manganese | 6010B | | 7460 | |
| Mercury | | | | 7470A/7471A |
| Molybdenum | 6010B | | | |
| Nickel | 6010B | 7521 | 7520 | |
| Potassium | 6010B | | 7610 | |
| Selenium | 6010B | 7740 | | |
| Silver | 6010B | 7761 | 7760A | |
| Sodium | 6010B | | 7710 | |
| Thallium | 6010B | 7841 | | |
| Tin | 6010B | | | |
| Vanadium | 6010B | | | |
| Zinc | 6010B | | 7950 | |

The number of parameters analyzed and the method used will be determined by the site-specific requirements.

| Volatile Priority Pollutant Compound List (GC/MS - 8260B) | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compounds | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| Chloromethane | 5. | 3. | 5. | 2. |
| Bromomethane | 5. | 3. | 5. | 3. |
| Vinyl chloride | 5. | 2. | 5. | 2. |
| Chloroethane | 5. | 3. | 5. | 3. |
| Acrolein | 100. | 40. | 100. | 20. |
| Acrylonitrile | 50. | 10. | 50. | 10. |
| Methylene chloride | 5. | 2. | 5. | 2. |
| Trichlorofluoromethane | 5. | 2. | 5. | 2. |
| 1,1-Dichloroethene | 5. | 1. | 5. | 2. |
| 1,1-Dichloroethane | 5. | 2. | 5. | 1. |
| *trans*-1,2-Dichloroethene | 5. | 2. | 5. | 2. |
| Chloroform | 5. | 1. | 5. | 1. |
| 1,2-Dichloroethane | 5. | 2. | 5. | 2. |
| 1,1,1-Trichloroethane | 5. | 1. | 5. | 1. |
| Carbon tetrachloride | 5. | 1. | 5. | 1. |
| Bromodichloromethane | 5. | 1. | 5. | 2. |
| 1,1,2,2-Tetrachloroethane | 5. | 2. | 5. | 1. |
| 1,2-Dichloropropane | 5. | 1. | 5. | 3. |
| *trans*-1,3-Dichloropropene | 5. | 1. | 5. | 1. |
| Trichloroethene | 5. | 1. | 5. | 1. |
| Dibromochloromethane | 5. | 2. | 5. | 1. |
| 1,1,2-Trichloroethane | 5. | 2. | 5. | 2. |
| Benzene | 5. | 1. | 5. | 1. |
| *cis*-1,3-Dichloropropene | 5. | 1. | 5. | 1. |
| 2-Chloroethylvinyl ether | 10. | 2. | 10. | 2. |
| Bromoform | 5. | 1. | 5. | 1. |
| Tetrachloroethene | 5. | 1. | 5. | 1. |
| Toluene | 5. | 2. | 5. | 1. |
| Chlorobenzene | 5. | 1. | 5. | 1. |
| Ethylbenzene | 5. | 2. | 5. | 1. |
| Xylene (total) | 5. | 1. | 5. | 1. |
| *cis*-1,2-Dichloroethene | 5. | 2. | 5. | 2. |

*Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

**Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on a dry-weight basis will be higher.

The laboratory routinely reports at the limit of quantitation (LOQ) but can estimate down to the J-value when requested by the client if a valid mass spectrum is obtained. Values reported below the LOQ are reported with a J-flag and are defined as estimated values.

LOQ and J-values are evaluated annually and subject to change.

| Appendix IX Volatile Compounds (GC/MS 8260B) | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| Chloromethane | 5. | 3. | 5. | 2. |
| Bromomethane | 5. | 3. | 5. | 3. |
| Vinyl chloride | 5. | 2. | 5. | 2. |
| Dichlorodifluoromethane | 5. | 2. | 5. | 2. |
| Chloroethane | 5. | 3. | 5. | 3. |
| Methyl iodide | 5. | 1. | 5. | 3. |
| Acrolein | 100. | 40. | 100. | 20. |
| Acrylonitrile | 50. | 10. | 50. | 10. |
| Acetonitrile | 100. | 25. | 100. | 25. |
| Methylene chloride | 5. | 2. | 5. | 2. |
| Acetone | 20. | 6. | 20. | 7. |
| Trichlorofluoromethane | 5. | 2. | 5. | 2. |
| Carbon disulfide | 5. | 3. | 5. | 3. |
| Propionitrile | 100. | 30. | 100. | 30. |
| 1,1-Dichloroethene | 5. | 1. | 5. | 2. |
| Allyl chloride | 5. | 1. | 5. | 1. |
| 1,1-Dichloroethane | 5. | 2. | 5. | 1. |
| *trans*-1,2-Dichloroethene | 5. | 2. | 5. | 2. |
| Chloroform | 5. | 1. | 5. | 1. |
| 1,2-Dichloroethane | 5. | 2. | 5. | 2. |
| Methacrylonitrile | 50. | 10. | 50. | 5. |
| 2-Butanone | 10. | 3. | 10. | 7. |
| Dibromomethane | 5. | 1. | 5. | 1. |
| 1,1,1-Trichloroethane | 5. | 1. | 5. | 1. |
| 1,4-Dioxane | 250. | 70. | 250. | 70. |
| Carbon tetrachloride | 5. | 1. | 5. | 1. |
| Isobutyl alcohol | 250. | 100. | 250. | 100. |
| Vinyl acetate | 10. | 2. | 10. | 3. |
| Bromodichloromethane | 5. | 1. | 5. | 2. |
| 2-Chloro-1,3-butadiene | 5. | 2. | 5. | 2. |
| 1,2-Dichloropropane | 5. | 1. | 5. | 3. |
| *trans*-1,3-Dichloropropene | 5. | 1. | 5. | 1. |
| Trichloroethene | 5. | 1. | 5. | 1. |
| Dibromochloromethane | 5. | 2. | 5. | 1. |
| 1,1,2-Trichloroethane | 5. | 2. | 5. | 2. |

| Appendix IX Volatile Compounds (GC/MS 8260B) | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| 1,2-Dibromoethane | 5. | 1. | 5. | 1. |
| *cis*-1,2-Dichloroethene | 5. | 2. | 5. | 2. |
| Benzene | 5. | 1. | 5. | 1. |
| *cis*-1,3-Dichloropropene | 5. | 1. | 5. | 1. |
| Methyl methacrylate | 5. | 1. | 5. | 1. |
| 1,1,1,2-Tetrachloroethane | 5. | 1. | 5. | 2. |
| Bromoform | 5. | 1. | 5. | 1. |
| *trans*-1,4-Dichloro-2-butene | 50. | 15. | 50. | 10. |
| 1,2,3-Trichloropropane | 5. | 1. | 5. | 1. |
| 2-Hexanone | 10. | 7. | 10. | 3. |
| 4-Methyl-2-pentanone | 10. | 5. | 10. | 3. |
| Tetrachloroethene | 5. | 1. | 5. | 1. |
| 1,1,2,2-Tetrachloroethane | 5. | 2. | 5. | 1. |
| Toluene | 5. | 2. | 5. | 1. |
| Ethyl methacrylate | 5. | 1. | 5. | 1. |
| Chlorobenzene | 5. | 1. | 5. | 1. |
| Pentachloroethane | 5. | 1. | 5. | 1. |
| Ethylbenzene | 5. | 2. | 5. | 1. |
| 1,2-Dibromo-3-chloropropane | 5. | 3. | 5. | 2. |
| Styrene | 5. | 1. | 5. | 1. |
| Xylenes (total) | 5. | 1. | 5. | 1. |

For samples preserved with 1 + 1 HCl to pH <2, low recovery of acid labile compounds is likely to occur.

*Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

**Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on a dry-weight basis will be higher.

The laboratory routinely reports at the limit of quantitation (LOQ) but can estimate down to the J-value when requested by the client if a valid mass spectrum is obtained. Values reported below the LOQ are reported with a J-flag and are defined as estimated values.

LOQ and J-values are evaluated annually and subject to change.

| GC/MS Volatile Compound List (8260B) | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| Dichlorodifluoromethane | 5. | 2. | 5. | 2. |
| Chloromethane | 5. | 3. | 5. | 2. |
| Vinyl Chloride | 5. | 2. | 5. | 2. |
| Bromomethane | 5. | 3. | 5. | 3. |
| Chloroethane | 5. | 3. | 5. | 3. |
| Trichlorofluoromethane | 5. | 2. | 5. | 2. |
| 1,1-Dichloroethene | 5. | 1. | 5. | 2. |
| 1,1-Dichloroethane | 5. | 1. | 5. | 1. |
| Methylene Chloride | 5. | 2. | 5. | 2. |
| *trans*-1,2-Dichloroethene | 5. | 2. | 5. | 2. |
| 2,2-Dichloropropane | 5. | 1. | 5. | 1. |
| *cis*-1,2-Dichloroethene | 5. | 2. | 5. | 2. |
| Chloroform | 5. | 1. | 5. | 1. |
| Bromochloromethane | 5. | 1. | 5. | 1. |
| 1,1,1-Trichloroethane | 5. | 1. | 5. | 1. |
| Carbon Tetrachloride | 5. | 1. | 5. | 1. |
| 1,1-Dichloropropene | 5. | 1. | 5. | 1. |
| Benzene | 5. | 1. | 5. | 1. |
| 1,2-Dichloroethane | 5. | 2. | 5. | 2. |
| Trichloroethene | 5. | 1. | 5. | 1. |
| 1,2-Dichloropropane | 5. | 1. | 5. | 3. |
| Dibromomethane | 5. | 1. | 5. | 1. |
| Bromodichloromethane | 5. | 1. | 5. | 2. |
| Toluene | 5. | 2. | 5. | 1. |
| 1,1,2-Trichloroethane | 5. | 2. | 5. | 2. |
| Tetrachloroethene | 5. | 1. | 5. | 1. |
| 1,3-Dichloropropane | 5. | 1. | 5. | 1. |
| Dibromochloromethane | 5. | 2. | 5. | 1. |
| 1,2-Dibromoethane | 5. | 1. | 5. | 1. |
| Chlorobenzene | 5. | 1. | 5. | 1. |
| 1,1,1,2-Tetrachloroethane | 5. | 1. | 5. | 2. |
| Ethylbenzene | 5. | 2. | 5. | 1. |
| *m*+*p*-Xylene | 5. | 1. | 5. | 1. |
| *o*-Xylene | 5. | 1. | 5. | 1. |

| GC/MS Volatile Compound List (8260B) | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| Styrene | 5. | 1. | 5. | 1. |
| Bromoform | 5. | 1. | 5. | 1. |
| Isopropylbenzene | 5. | 2. | 5. | 3. |
| 1,1,2,2-Tetrachloroethane | 5. | 2. | 5. | 1. |
| Bromobenzene | 5. | 1. | 5. | 1. |
| 1,2,3-Trichloropropane | 5. | 1. | 5. | 1. |
| *n*-Propylbenzene | 5. | 1. | 5. | 1. |
| 2-Chlorotoluene | 5. | 1. | 5. | 1. |
| 1,3,5-Trimethylbenzene | 5. | 1. | 5. | 1. |
| 4-Chlorotoluene | 5. | 1. | 5. | 1. |
| *tert*-Butylbenzene | 5. | 1. | 5. | 1. |
| 1,2,4-Trimethylbenzene | 5. | 1. | 5. | 1. |
| *sec*-Butylbenzene | 5. | 1. | 5. | 1. |
| *p*-Isopropyltoluene | 5. | 1. | 5. | 1. |
| 1,3-Dichlorobenzene | 5. | 2. | 5. | 2. |
| 1,4-Dichlorobenzene | 5. | 2. | 5. | 2. |
| *n*-Butylbenzene | 5. | 1. | 5. | 1. |
| 1,2-Dichlorobenzene | 5 | 2. | 5. | 2. |
| 1,2-Dibromo-3-chloropropane | 5. | 3. | 5. | 2. |
| 1,2,4-Trichlorobenzene | 5. | 1. | 5. | 1. |
| Hexachlorobutadiene | 5. | 2. | 5. | 2. |
| Naphthalene | 5. | 1. | 5. | 1. |
| 1,2,3-Trichlorobenzene | 5. | 1. | 5. | 1. |

*Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

**Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on a dry-weight basis will be higher.

The laboratory routinely reports at the limit of quantitation (LOQ) but can estimate down to the J-value when requested by the client if a valid mass spectrum is obtained. Values reported below the LOQ are reported with a J-flag and are defined as estimated values.

LOQ and J-values are evaluated annually and subject to change.

| Semivolatile Priority Pollutant Compound List | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| 2-Chlorophenol | 10. | 1. | 330. | 33. |
| Phenol | 10. | 1. | 330. | 33. |
| 2-Nitrophenol | 10. | 2. | 330. | 67. |
| 2,4-Dimethylphenol | 10. | 1. | 330. | 67. |
| 2,4-Dichlorophenol | 10. | 2. | 330. | 33. |
| 4-Chloro-3-methylphenol | 10. | 2. | 330. | 67. |
| 2,4,6-Trichlorophenol | 10. | 1. | 330. | 67. |
| 2,4-Dinitrophenol | 25. | 5. | 830. | 167. |
| 4-Nitrophenol | 25. | 5. | 830. | 167. |
| 2-Methyl-4,6-dinitrophenol | 25. | 5. | 830. | 167. |
| Pentachlorophenol | 25. | 1. | 830. | 167. |
| N-nitrosodimethylamine | 10. | 2. | 330. | 67. |
| bis (2-Chloroethyl) ether | 10. | 1. | 330. | 67. |
| 1,3-Dichlorobenzene | 10. | 1. | 330. | 33. |
| 1,4-Dichlorobenzene | 10. | 1. | 330. | 33. |
| 1,2-Dichlorobenzene | 10. | 1. | 330. | 33. |
| bis (2-Chloroisopropyl) ether | 10. | 2. | 330. | 100. |
| Hexachloroethane | 10. | 2. | 330. | 67. |
| N-nitrosodi-*n*-propylamine | 10. | 2. | 330. | 67. |
| Nitrobenzene | 10. | 1. | 330. | 33. |
| Isophorone | 10. | 1. | 330. | 67. |
| bis (2-Chloroethoxy) methane | 10. | 1. | 330. | 33. |
| 1,2,4-trichlorobenzene | 10. | 1. | 330. | 33. |
| Naphthalene | 10. | 1. | 330. | 33. |
| Hexachlorobutadiene | 10. | 1. | 330. | 67. |
| Hexachlorocyclopentadiene | 10. | 3. | 330. | 167. |
| 2-Chloronaphthalene | 10. | 1. | 330. | 33. |
| Acenaphthylene | 10. | 1. | 330. | 33. |
| Dimethyl phthalate | 10. | 3. | 330. | 33. |
| 2,6-Dinitrotoluene | 10. | 1. | 330. | 67. |
| Acenaphthene | 10. | 1. | 330. | 33. |
| 2,4-Dinitrotoluene | 10. | 2. | 330. | 67. |
| Fluorene | 10. | 1. | 330. | 33. |
| 4-Chlorophenyl phenyl ether | 10. | 2. | 330. | 67. |

| Semivolatile Priority Pollutant Compound List | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| Diethyl phthalate | 10. | 2. | 330. | 67. |
| 1,2-Diphenylhydrazine | 10. | 1. | 330. | 67. |
| N-nitrosodiphenylamine | 10. | 2. | 330. | 67. |
| 4-Bromophenyl phenyl ether | 10. | 2. | 330. | 100. |
| Hexachlorobenzene | 10. | 1. | 330. | 100. |
| Phenanthrene | 10. | 1. | 330. | 33. |
| Anthracene | 10. | 1. | 330. | 33. |
| Di-n-butyl phthalate | 10. | 1. | 330. | 33. |
| Fluoranthene | 10. | 1. | 330. | 33. |
| Pyrene | 10. | 1. | 330. | 67. |
| Benzidine | 100. | 20. | 3300. | 833. |
| Butyl benzyl phthalate | 10. | 2. | 330. | 67. |
| Benzo (a) anthracene | 10. | 1. | 330. | 33. |
| Chrysene | 10. | 1. | 330. | 33. |
| 3,3'-Dichlorobenzidine | 20. | 2. | 670. | 133. |
| bis (2-Ethylhexyl) phthalate | 10. | 2. | 330. | 67. |
| Di-n-octyl phthalate | 10. | 2. | 330. | 67. |
| Benzo (b) fluoranthene | 10. | 2. | 330. | 67. |
| Benzo (k) fluoranthene | 10. | 2. | 330. | 133. |
| Benzo (a) pyrene | 10. | 2. | 330. | 67. |
| Indeno (1,2,3-cd) pyrene | 10. | 2. | 330. | 67. |
| Dibenz (a,h) anthracene | 10. | 2. | 330. | 67. |
| Benzo (ghi) perylene | 10. | 2. | 330. | 67. |

*Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

**Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on a dry-weight basis will be higher.

The laboratory routinely reports at the limit of quantitation (LOQ) but can estimate down to the J-value when requested by the client if a valid mass spectrum is obtained. Values reported below the LOQ are reported with a J-flag and are defined as estimated values.

LOQ and J-values are evaluated annually and subject to change.

| Appendix IX Semivolatile Compounds | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| Acenaphthene | 10. | 1. | 330. | 33. |
| Acenaphthylene | 10. | 1. | 330. | 33. |
| Acetophenone | 10. | 2. | 330. | 33. |
| 2-Acetylaminofluorene | 10. | 2. | 330. | 67. |
| 4-Aminobiphenyl | 10. | 1. | 330. | 133. |
| Aniline | 10. | 2. | 330. | 100. |
| Anthracene | 10. | 1. | 330. | 33. |
| Benzo (a) anthracene | 10. | 1. | 330. | 33. |
| Benzo (b) fluoranthene | 10. | 2. | 330. | 67. |
| Benzo (k) fluoranthene | 10. | 2. | 330. | 133. |
| Benzo (ghi) perylene | 10. | 2. | 330. | 67. |
| Benzo (a) pyrene | 10. | 2. | 330. | 67. |
| Benzyl alcohol | 20. | 2. | 670. | 100. |
| bis (2-Chloroethoxy) methane | 10. | 1. | 330. | 33. |
| bis (2-Chloroethyl) ether | 10. | 1. | 330. | 67. |
| bis (2-Ethylhexyl) phthalate | 10. | 2. | 330. | 67. |
| 4-Bromophenyl phenyl ether | 10. | 2. | 330. | 100. |
| Butyl benzyl phthalate | 10. | 2. | 330. | 67. |
| 4-Chloroaniline | 10. | 2. | 330. | 100. |
| Chlorobenzilate | 10. | 4. | 330. | 67. |
| 4-Chloro-3-methylphenol | 10. | 2. | 330. | 67. |
| 2-Chloronaphthalene | 10. | 1. | 330. | 33. |
| 2-Chlorophenol | 10. | 1. | 330. | 33. |
| 4-Chlorophenyl phenyl ether | 10. | 2. | 330. | 67. |
| Chrysene | 10. | 1. | 330. | 33. |
| 2-methyl phenol | 10. | 2. | 330. | 67. |
| 3 and 4 methyl phenol | 10. | 2. | 330. | 100. |
| Diallate | 10. | 2. | 330. | 100. |
| Dibenzofuran | 10. | 1. | 330. | 33. |
| Di-n-butyl phthalate | 10. | 1. | 330. | 33. |
| Dibenz (a,h) anthracene | 10. | 2. | 330. | 67. |
| 1,2-Dichlorobenzene | 10. | 1. | 330. | 33. |
| 1,3-Dichlorobenzene | 10. | 1. | 330. | 33. |
| 1,4-Dichlorobenzene | 10. | 1. | 330. | 33. |
| 3,3'-Dichlorobenzidine | 20. | 2. | 670. | 133. |

| Appendix IX Semivolatile Compounds | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| 2,4-Dichlorophenol | 10. | 2. | 330. | 33. |
| 2,6-Dichlorophenol | 10. | 1. | 330. | 67. |
| Diethyl phthalate | 10. | 2. | 330. | 67. |
| Dimethoate | 10. | 2. | 330. | 100. |
| *p*-(Dimethylamino) azobenzene | 10. | 1. | 330. | 133. |
| 7,12-Dimethylbenz(a) anthracene | 10. | 2. | 330. | 33. |
| 3,3'-Dimethylbenzidine | 20. | 2. | 670. | 100. |
| a,a-dimethyl-1-phenethylamine | 20. | 1. | 670. | 67. |
| 2,4-Dimethylphenol | 10. | 1. | 330. | 67. |
| Dimethyl phthalate | 10. | 3. | 330. | 33. |
| *m*-Dinitrobenzene | 10. | 2. | 330. | 67. |
| 2-Methyl-4,6-dinitrophenol | 25. | 5. | 830. | 167. |
| 2,4-Dinitrophenol | 25. | 5. | 830. | 167. |
| 2,4-Dinitrotoluene | 10. | 2. | 330. | 67. |
| 2,6-Dinitrotoluene | 10. | 1. | 330. | 67. |
| Di-n-octyl phthalate | 10. | 2. | 330. | 67. |
| Ethyl methanesulfonate | 20. | 1. | 670. | 67. |
| Fluoranthene | 10. | 1. | 330. | 33. |
| Fluorene | 10. | 1. | 330. | 33. |
| Hexachlorobenzene | 10. | 1. | 330. | 100. |
| Hexachlorobutadiene | 10. | 1. | 330. | 67. |
| Hexachlorocyclopentadiene | 10. | 3. | 330. | 167. |
| Hexachloroethane | 10. | 2. | 330. | 67. |
| Hexachloropropene | 10. | 2. | 330. | 67. |
| Indeno (1,2,3-cd) pyrene | 10. | 2. | 330. | 67. |
| Isodrin | 20. | 1. | 670. | 33. |
| Isophorone | 10. | 1. | 330. | 67. |
| Isosafrole | 10. | 1. | 330. | 33. |
| Methapyrilene | 20. | 1. | 670. | 133. |
| 3-Methylchloranthene | 10. | 2. | 330. | 67. |
| Methyl methanesulfonate | 10. | 1. | 330. | 33. |
| Methylnaphthalene | 10. | 1. | 330. | 33. |
| Naphthalene | 10. | 1. | 330. | 33. |
| 1,4-Naphthoquinone | 10. | 1. | 330. | 100. |
| 1-Naphthylamine | 10. | 2. | 330. | 33. |

| Appendix IX Semivolatile Compounds | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| 2-Naphthylamine | 10. | 2. | 330. | 33. |
| 2-Nitroaniline | 10. | 1. | 330. | 67. |
| 3-Nitroaniline | 10. | 1. | 330. | 67. |
| 4-Nitroaniline | 10. | 2. | 330. | 100. |
| Nitrobenzene | 10. | 1. | 330. | 33. |
| 2-Nitrophenol | 10. | 2. | 330. | 67. |
| 4-Nitrophenol | 25. | 5. | 830. | 167. |
| 4-Nitroquinoline 1-oxide | 100. | 10. | 3300. | 330. |
| N-Nitrosodi-n-butylamine | 10. | 2. | 330. | 67. |
| N-Nitrosodiethylamine | 10. | 2. | 330. | 100. |
| N-Nitrosodimethylamine | 10. | 2. | 330. | 67. |
| N-Nitrosodiphenylamine1 | 10. | 2. | 330. | 67. |
| N-Nitrosodi-n-propylamine | 10. | 2. | 330. | 67. |
| N-Nitrosomethylethylamine | 10. | 2. | 330. | 133. |
| N-Nitrosomorpholine | 10. | 1. | 330. | 67. |
| N-Nitrosopiperidine | 10. | 2. | 330. | 67. |
| N-Nitrospyrrolidine | 10. | 2. | 330. | 100. |
| 5-Nitro-o-toluidine | 10. | 2. | 330. | 100. |
| Pentachlorobenzene | 10. | 1. | 330. | 67. |
| Pentachloronitrobenzene | 10. | 2. | 330. | 100. |
| Pentachlorophenol | 25. | 1. | 830. | 167. |
| Phenacetin | 10. | 2. | 330. | 67. |
| Phenanthrene | 10. | 1. | 330. | 33. |
| Phenol | 10. | 1. | 330. | 33. |
| 1,4-Phenylenediamine | 200. | 20. | 6700. | 667. |
| 2-Picoline | 10. | 1. | 330. | 67. |
| Pronamide | 10. | 1. | 330. | 100. |
| Pyrene | 10. | 1. | 330. | 67. |
| Pyridine | 10. | 2. | 330. | 33. |
| Safrole | 10. | 2. | 330. | 67. |
| 1,2,4,5-Tetrachlorobenzene | 10. | 1. | 330. | 67. |
| 2,3,4,6-Tetrachlorphenol | 10. | 2. | 330. | 33. |
| Tetraethyl dithiopyrophosphate | 10. | 2. | 330. | 67. |
| Thionazin | 20. | 2. | 670. | 200. |
| o-Toluidine | 10. | 2. | 330. | 100. |

| Appendix IX Semivolatile Compounds | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| 1,2,4-Trichlorobenzene | 10. | 1. | 330. | 33. |
| 2,4,5-Trichlorophenol | 10. | 1. | 330. | 67. |
| 2,4,6-Trichlorophenol | 10. | 1. | 330. | 67. |
| 0,0,0-Triethylphosphorothioate | 10. | 2. | 330. | 67. |
| 1,3,5-Trinitrobenzene | 10. | 5. | 330. | 167. |

*Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

**Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on a dry-weight basis will be higher.

The laboratory routinely reports at the limit of quantitation (LOQ) but can estimate down to the J-value when requested by the client if a valid mass spectrum is obtained. Values reported below the LOQ are reported with a J-flag and are defined as estimated values.

[1]N-Nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-Nitrosodiphenylamine represents the combined total of both compounds.

LOQ and J-values are evaluated annually and subject to change.

| Volatiles by GC<br>Volatile Organics List | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| Chloromethane | 5. | .5 | 100. | 10. |
| Bromomethane | 5. | .5 | 100. | 1. |
| Dichlorodifluoromethane | 2. | .2 | 40. | 8. |
| Vinyl chloride | 1. | .2 | 20. | 4. |
| Chloroethane | 1. | .2 | 20. | 4. |
| Methylene chloride | 1. | .2 | 20. | 4. |
| Trichlorofluoromethane | 1. | .2 | 20. | 4. |
| 1,1-Dichloroethene | 1. | .2 | 20. | 4. |
| 1,1-Dichloroethane | 1. | .2 | 20. | 4. |
| *cis*-1,2-Dichloroethene | 1. | .2 | 20. | 4. |
| *trans*-1,2-Dichloroethene | 1. | .2 | 20. | 4. |
| Chloroform | 1. | .2 | 20. | 4. |
| 1,2-Dichloroethane | 1. | .2 | 20. | 4. |
| 1,1,1-Trichloroethane | 1. | .2 | 20. | 4. |
| Carbon tetrachloride | 1. | .2 | 20. | 4. |
| Bromodichloromethane | 1. | .2 | 20. | 4. |
| 1,2-Dichlorpropane | 1. | .2 | 20. | 4. |
| *trans*-1,3-Dichloropropene | 1. | .2 | 20. | 4. |
| Trichloroethene | 1. | .2 | 20. | 4. |
| Dibromochloromethane | 1. | .2 | 20. | 4. |
| 1,1,2-Trichloroethane | 1. | .2 | 20. | 4. |
| *cis*-1,3-Dichloropropene | 1. | .2 | 20. | 4. |
| 2-Chloroethylvinyl-ether | 10. | 1.0 | 200. | 20. |
| Bromoform | 1. | .2 | 20. | 4. |
| 1,1,2,2-Tetrachloroethane | 1. | .2 | 20. | 4. |
| Tetrachloroethene | 1. | .2 | 20. | 4. |
| Chlorobenzene | 1. | .2 | 20. | 4. |
| Benzene | 1. | .2 | 20. | 4. |
| Toluene | 1. | .2 | 20. | 4. |
| Ethylbenzene | 1. | .2 | 20. | 4. |
| *o*-Xylene | 1. | .6 | 60. | 12. |
| *m*-Xylene | 2. | .6 | 60. | 12. |
| *p*-Xylene | 3. | .6 | 60. | 12. |

*Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

**Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on a dry-weight basis will be higher.

The laboratory routinely reports at the limit of quantitation (LOQ) but can estimate down to the J-value when requested by the client. Values reported below the LOQ are reported with a J-flag and are defined as estimated values.

LOQ and J-values are evaluated annually and subject to change.

| TPH GRO/DRO | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (mg/L) | J-Value (mg/L) | LOQ* (mg/kg) | J-Value (mg/kg) |
| TPH-GRO | 0.05 | 0.02 | 1. | 0.2 |
| TPH-DRO | 0.4 | 0.2 | 7. | 4. |

**NOTE:** J-values listed are higher than determined MDLs. This is because the method sums the total detectable area under the chromatographic plot in region of interest, instead of actual fuel peak area as the respective fuel.

*Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

**Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on a dry-weight basis will be higher.

The laboratory routinely reports at the limit of quantitation (LOQ) but can estimate down to the J-value when requested by the client. Values reported below the LOQ are reported with a J-flag and are defined as estimated values.

LOQ and J-values are evaluated annually and subject to change.

| Petroleum Analysis | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| Benzene | 1. | 0.2 | 5. | 2. |
| Toluene | 1. | 0.2 | 5. | 2. |
| Ethylbenzene | 1. | 0.2 | 5. | 2. |
| Total Xylene | 3. | 0.6 | 15. | 5. |
| Methyl Teritary Butyl Ether | 1. | 0.3 | 20. | 5. |
| Napthalene | 5. | 1. | 20. | 5. |

*Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

**Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on a dry-weight basis will be higher.

The laboratory routinely reports at the limit of quantitation (LOQ) but can estimate down to the J-value when requested by the client. Values reported below the LOQ are reported with a J-flag and are defined as estimated values.

LOQ and J-values are evaluated annually and subject to change.

| Pesticide/PCB Priority Pollutant Compound List | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| alpha-BHC | 0.01 | 0.002 | 0.33 | .067 |
| beta-BHC | 0.01 | 0.002 | 0.33 | .067 |
| gamma-BHC (Lindane) | 0.01 | 0.002 | 0.33 | .067 |
| delta-BHC | 0.01 | 0.002 | 0.33 | .067 |
| Heptachlor | 0.01 | 0.002 | 0.33 | .067 |
| Aldrin | 0.01 | 0.002 | 0.33 | .067 |
| Heptachlor epoxide | 0.01 | 0.002 | 0.33 | .067 |
| 4,4-DDE | 0.02 | 0.004 | 0.67 | .13 |
| 4,4-DDD | 0.02 | 0.004 | 0.67 | .13 |
| 4,4-DDT | 0.02 | 0.004 | 0.67 | .13 |
| Dieldrin | 0.02 | 0.004 | 0.67 | .13 |
| Endrin | 0.02 | 0.004 | 0.67 | .13 |
| Chlordane | 0.5 | 0.05 | 17. | 3.3 |
| Toxaphene | 1. | 0.2 | 33. | 6.7 |
| Endosulfan I | 0.01 | 0.002 | 0.33 | .067 |
| Endosulfan II | 0.02 | 0.004 | 0.67 | .13 |
| Endosulfan sulfate | 0.02 | 0.004 | 0.67 | .13 |
| Endrin aldehyde | 0.02 | 0.004 | 0.67 | .13 |
| Methoxychlor | 0.1 | 0.002 | 3.3 | .67 |
| PCB-1016 | 0.5 | 0.1 | 17. | 3.3 |
| PCB-1221 | 0.5 | 0.1 | 17. | 3.3 |
| PCB-1232 | 0.5 | 0.1 | 17. | 3.3 |
| PCB-1242 | 0.5 | 0.1 | 17. | 3.3 |
| PCB-1248 | 0.5 | 0.1 | 17. | 3.3 |
| PCB-1254 | 0.5 | 0.1 | 17. | 3.3 |
| PCB-1260 | 0.5 | 0.1 | 17. | 3.3 |

*Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

**Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on a dry-weight basis will be higher.

The laboratory routinely reports at the limit of quantitation (LOQ) but can estimate down to the J-value when requested by the client. Values reported below the LOQ are reported with a J-flag and are defined as estimated values.

LOQ and J-values are evaluated annually and subject to change.

| Appendix IX Organochlorines | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| Aldrin | 0.01 | 0.002 | 0.33 | .067 |
| alpha-BHC | 0.01 | 0.002 | 0.33 | .067 |
| beta-BHC | 0.01 | 0.002 | 0.33 | .067 |
| delta-BHC | 0.01 | 0.002 | 0.33 | .067 |
| gamma-BHC (Lindane) | 0.01 | 0.002 | 0.33 | .067 |
| Chlordane | 0.5 | 0.05 | 17. | 3.3 |
| 4,4-DDT | 0.02 | 0.004 | 0.67 | .13 |
| 4,4-DDE | 0.02 | 0.004 | 0.67 | .13 |
| 4,4-DDD | 0.02 | 0.004 | 0.67 | .13 |
| Dieldrin | 0.02 | 0.004 | 0.67 | .13 |
| Endosulfan I | 0.01 | 0.002 | 0.33 | .067 |
| Endosulfan II | 0.02 | 0.004 | 0.67 | .13 |
| Endosulfan sulfate | 0.02 | 0.004 | 0.67 | .13 |
| Endrin | 0.02 | 0.004 | 0.67 | .13 |
| Endrin aldehyde | 0.02 | 0.004 | 0.67 | .13 |
| Heptachlor | 0.01 | 0.002 | 0.33 | .067 |
| Heptachlor epoxide | 0.01 | 0.002 | 0.33 | .067 |
| Kepone | 0.1 | 0.02 | 3.3 | .67 |
| Methoxychlor | 0.1 | 0.002 | 3.3 | .67 |
| PCB-1016 | 0.5 | 0.1 | 17. | 3.3 |
| PCB-1221 | 0.5 | 0.1 | 17. | 3.3 |
| PCB-1232 | 0.5 | 0.1 | 17. | 3.3 |
| PCB-1242 | 0.5 | 0.1 | 17. | 3.3 |
| PCB-1248 | 0.5 | 0.1 | 17. | 3.3 |
| PCB-1254 | 0.5 | 0.1 | 17. | 3.3 |
| PCB-1260 | 0.5 | 0.1 | 17. | 3.3 |
| Toxaphene | 1. | 0.2 | 33. | 6.7 |

*Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

**Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on a dry-weight basis will be higher.

The laboratory routinely reports at the limit of quantitation (LOQ) but can estimate down to the J-value when requested by the client. Values reported below the LOQ are reported with a J-flag and are defined as estimated values.

LOQ and J-values are evaluated annually and subject to change.

| Appendix IX Herbicide Compounds | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| 2,4-D | .5 | .1 | 17. | 3.3 |
| Dinoseb | .25 | .05 | 8.3 | 1.7 |
| 2,4,5-TP | .05 | .01 | 1.7 | 3.3 |
| 2,4,5-T | .05 | .01 | 1.7 | 3.3 |

*Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

**Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on a dry-weight basis will be higher.

The laboratory routinely reports at the limit of quantitation (LOQ) but can estimate down to the J-value when requested by the client. Values reported below the LOQ are reported with a J-flag and are defined as estimated values.

LOQ and J-values are evaluated annually and subject to change.

| Appendix IX Organophosphates | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| Disulfoton | .4 | .2 | 13. | 6.5 |
| Methyl parathion | .4 | .2 | 13. | 6.5 |
| Ethyl parathion | .4 | .2 | 13. | 6.5 |
| Famphur | .4 | .2 | 13. | 6.7 |
| Phorate | .4 | .2 | 13. | 6.5 |

*Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

**Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on a dry-weight basis will be higher.

The laboratory routinely reports at the limit of quantitation (LOQ) but can estimate down to the J-value when requested by the client. Values reported below the LOQ are reported with a J-flag and are defined as estimated values.

LOQ and J-values are evaluated annually and subject to change.

| PAHs by HPLC 8310 | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Compound | LOQ* (µg/L) | J-Value (µg/L) | LOQ* (µg/kg) | J-Value (µg/kg) |
| Naphthalene | 8. | .8 | 270. | 27. |
| Acenapthylene | 8. | .8 | 270. | 27. |
| Acenaphthene | 8. | .8 | 270. | 27. |
| Fluorene | .8 | .17 | 27. | 2.5 |
| Phenanthrene | .3 | .046 | 11. | 1. |
| Anthracene | .2 | .031 | 5. | 0.5 |
| Fluoranthene | .2 | .02 | 5. | 0.5 |
| Pyrene | .8 | .18 | 27. | 2.5 |
| Benzo(a)anthracene | .08 | .018 | 3. | 0.25 |
| Chrysene | .3 | .059 | 11. | 1. |
| Benzo(b)fluoranthene | .06 | .035 | 2. | 0.2 |
| Benzo(k)fluoranthene | .06 | .027 | 2. | 0.2 |
| Benzo(a)pyrene | .08 | .022 | 3. | 0.25 |
| Dibenzo(a,h)anthracene | .2 | .047 | 5. | 0.5 |
| Benzo(g,h,i)perylene | .5 | .099 | 16. | 1.5 |
| Indeno(1,2,3-cd)pyrene | .3 | .064 | 11. | 1. |

*Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

**Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on a dry-weight basis will be higher.

The laboratory routinely reports at the limit of quantitation (LOQ) but can estimate down to the J-value when requested by the client. Values reported below the LOQ are reported with a J-flag and are defined as estimated values.

LOQ and J-values are evaluated annually and subject to change.

| Inorganic Priority Pollutants List (PPL) | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Analyte | LOQ* (mg/L) | J-Value (mg/L) | LOQ* (mg/kg) | J-Value (mg/kg) |
| Antimony | 0.2 | 0.015 | 20. | 2.2 |
| Arsenic[1] | 0.01 | 0.0027 | 1. | 0.25 |
| Beryllium | 0.01 | 0.0013 | 0.5 | 0.074 |
| Cadmium | 0.01 | 0.0027 | 2. | 0.13 |
| Chromium | 0.03 | 0.0043 | 4. | 0.47 |
| Copper | 0.025 | 0.0038 | 4. | 0.50 |
| Lead[1] | 0.005 | 0.0020 | 0.5 | 0.16 |
| Mercury[2] | 0.0002 | 0.000043 | 0.1 | 0.028 |
| Nickel | 0.05 | 0.0054 | 5. | 0.46 |
| Selenium[1] | 0.01 | 0.0027 | 0.5 | 0.18 |
| Silver | 0.02 | 0.0036 | 2. | 0.45 |
| Thallium[1] | 0.02 | 0.0045 | 2. | 0.39 |
| Zinc | 0.025 | 0.012 | 10. | 0.40 |
| Cyanide | 0.005 | 0.004 | 0.125 | 0.1 |

[1]Analyzed by Trace ICP

[2]Analyzed by Cold Vapor

Except for cyanide, all other elements analyzed by ICP.

*Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

**Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on a dry-weight basis will be higher.

The laboratory routinely reports at the limit of quantitation (LOQ) but can estimate down to the J-value when requested by the client. Values reported below the LOQ are reported with a J-flag and are defined as estimated values.

LOQ and J-values are evaluated annually and subject to change.

| Inorganic Appendix IX Analyte List | | | | |
|---|---|---|---|---|
| | Waters | | Soils** | |
| Analyte | LOQ* (mg/L) | J-Value (mg/L) | LOQ* (mg/kg) | J-Value (mg/kg) |
| Antimony | 0.2 | 0.015 | 20. | 2.2 |
| Arsenic[1] | 0.01 | 0.0027 | 1. | 0.25 |
| Barium | 0.1 | 0.0022 | 10. | 2.2 |
| Beryllium | 0.01 | 0.0013 | 0.5 | 0.074 |
| Cadmium | 0.01 | 0.0027 | 2. | 0.13 |
| Chromium | 0.03 | 0.0043 | 4. | 0.47 |
| Cobalt | 0.05 | 0.0055 | 5. | 0.52 |
| Copper | 0.025 | 0.0038 | 4. | 0.50 |
| Lead[1] | 0.005 | 0.0020 | 0.5 | 0.16 |
| Mercury[2] | 0.0002 | 0.000043 | 0.1 | 0.028 |
| Nickel | 0.05 | 0.0054 | 5. | 0.46 |
| Selenium[1] | 0.01 | 0.0027 | 0.5 | 0.18 |
| Silver | 0.02 | 0.0036 | 2. | 0.45 |
| Thallium[1] | 0.02 | 0.0045 | 2. | 0.39 |
| Tin | 0.3 | 0.025 | 25. | 2.2 |
| Vanadium | 0.02 | 0.0070 | 2. | 0.68 |
| Zinc | 0.025 | 0.012 | 10. | 0.40 |
| Cyanide | 0.005 | 0.004 | 0.125 | 0.1 |
| Sulfide | 2. | 0.56 | 20. | 5.46 |

[1]Analysis by Trace ICP

[2]Analysis by Cold Vapor

Except for cyanide and sulfide, all other elements analyzed by ICP.

*Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

**Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on a dry-weight basis will be higher.

The laboratory routinely reports at the limit of quantitation (LOQ) but can estimate down to the J-value when requested by the client. Values reported below the LOQ are reported with a J-flag and are defined as estimated values.

LOQ and J-values are evaluated annually and subject to change.

| Parameter | Waters | | Soils** | |
|---|---|---|---|---|
| | LOQ* (mg/L) | J-Value (mg/L) | LOQ* (mg/kg) | J-Value (mg/kg) |
| Phenols | 0.01 | 0.004 | 0.7 | 0.23 |
| TOC | 1.0 | 0.16 | 50. | 12. |
| TOX | 5. µg/L | 1.3 µg/L | 100. | 100. |
| TPH | 0.5 | 0.16 | 40. | 12.6 |

*Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

**Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on a dry-weight basis will be higher.

The laboratory routinely reports at the limit of quantitation (LOQ) but can estimate down to the J-value when requested by the client. Values reported below the LOQ are reported with a J-flag and are defined as estimated values.

LOQ and J-values are evaluated annually and subject to change.

## 10. Data Reduction, Validation, and Reporting

Raw analytical data generated in the laboratories is collected on printouts from the instruments and associated data system or manually in bound notebooks. Analysts review data as it is generated to determine that the instruments are performing within specifications. This review includes calibration checks, surrogate recoveries, blank checks, retention time reproducibility, and other QC checks described in Sections No. 8 and 11. If any problems are noted during the analytical run, corrective action is taken and documented.

Each analytical run is reviewed by a chemist for completeness and accuracy prior to interpretation and data reduction. The following calculations are used to reduce raw data to reportable results.

GC/MS calculation used by the data system to determine concentration in extract for **semivolatiles** or in the sample itself for **volatiles**:

$$Q = (Ax)(Is) / (Als)(RRF)(Vi)$$

Where:

Ax = Peak area

Als = Internal standard peak area

Is = Amount of internal standard injected (ng)

RRF = Relative response factor

Vi = Volume of extract injected (L) or volume sample purged (mL)

The extract concentration is further reduced by considering the initial sample weight or volume and the final extract volume:

$$Concentration = (Q)\,(D)\,(F)\,(1000)\,/\,(I)$$

Where:

Q = Concentration determined by the data system (mg/L)

D = Dilution factor if needed

F = Final extract volume (mL)

I = Initial sample weight (grams) or volume (mL)

Results are reported in µg/L for water samples and µg/kg for solid samples. Soil samples are reported on an as received and on a dry-weight basis. The results are reported on Lancaster Labs Analysis Report Forms shown in Appendix A.

For **volatiles by GC and petroleum analysis**, a calibration is performed with a minimum of five levels using either an internal standard calibration or external calibration.

A. Internal standard calibration

$$CF = \frac{(Ax)\,(Cis)}{(Ais)\,(Cx)} \quad or \quad CF = \frac{(Hx)\,(Cis)}{(His)\,(Cx)}$$

Where:

Ax = Peak area of the compound to be measured in that level of the initial calibration

Hx = Height area of the compound to be measured in that level of the initial calibration

Ais = Peak area of the internal standard

His = Height are of the internal standard

Cis = Concentration of the internal standard.
**NOTE:** On some systems, this is set at 1.

Cx = Concentration of the compound spiked into that level

$$\overline{CF} = \frac{\sum all\ CF\ in\ the\ initial\ calibration}{n}$$

Where:

n = Number of levels in the initial calibration

$$Concentration = \frac{(Ax)(Cis)}{(Ais)(\overline{CF})} \times DF \quad or \quad \frac{(Hx)(Cis)}{(His)(\overline{CF})} \times DF$$

Where:

Ax = Peak area of the compound to be measured

Hx = Height area of the compound to be measured

Ais = Peak area of the internal standard

His = Height area of the internal standard

Cis = Concentration of the internal standard.
**NOTE:** On some systems, this is set at 1.

$\overline{CF}$ = Average calibration factor

DF = Dilution factor or preparation factor

B. External calibration

$$CF = \frac{Ax}{CF} \times DF \quad or \quad \frac{Hx}{\overline{CF}} \times DF$$

$$Concentration = \frac{Ax}{\overline{CF}} \times DF \quad or \quad \frac{Hx}{\overline{CF}} \times DF$$

When all parameters are defined in A above.

Results are reported in µg/L for water samples and mg/kg for solid samples. Soil samples are reported on an as-received and on a dry-weight basis. Results are reported on Lancaster Labs Analysis Report Forms shown in Appendix A.

For **herbicides and organophate pesticides**, an internal standard calibration is used. The results are calculated from the curve when the individual analyte %RSD is >20% and the average of the analyte %RSDs is also >20%. Otherwise, the results are calculated using the average response factor.

A. Curve

$$Sample\ Concentration,\ \mu g\ /\ kg\ or\ \mu g\ /\ L = Extract\ Concentration \times \frac{DF \times FV}{IW\ (or\ IV)}$$

Where:

Extract Conc., = (peak ht. - Y-intercept)/slope

FV = Final volume

IW or IV = Initial weight, initial volume

DF = Dilution Factor

AF = Additional preparation factors

B. Average response factor

$$Extract\ Conc., mg / L = \frac{pk\ ht\ in\ sample}{Average\ Response\ Factor\ (ARF)} \times \frac{Int\ std\ ht\ in\ L3\ std}{Int\ std\ ht\ in\ sample}$$

Where:

ARF = Average Response Factor [(RF Calib1 + ... + RF Calib 5)/5]

The results for the **PAHs by HPLC and pesticide/PCBs** analyses are calculated using the following equation:

$$\frac{Pk\ Ht \times FV \times DF \times AF}{ARF \times IV\ (or\ IW)} = Concentration\ (mg / L)\ or\ \mu g / kg$$

Where:

Pk Ht = Peak height found in sample

ARF = Average response factor (Pk Ht/Concentration of analyte in standard)

FV = Final volume of sample extract (mL)

DF = Dilution factor (where applicable)

IV = Initial volume of sample extracted (mL)

IW = Initial weight of the sample extracted (gm)

AF = Additional factor

If a curve is used, then $\frac{\text{Pk Ht}}{\text{ARF}}$ is replaced by the following in the preceding equation:

$$\frac{Pk\ Ht \quad - \quad y - intercept}{slope}$$

Results are reported as µg/L for water samples and µg/kg for solid samples. Soil samples are reported on an as received and on a dry weight basis. Results are reported on Lancaster Labs Analysis Report Forms shown in Appendix A.

For **TPH-GRO and TPH-DRO**, an external calibration procedure of at least five levels of standards is used. The resulting point-to-point calibration curve is used by the data system to calculate analyte concentrations. The equations that the data system uses for calculating analyte concentrations are shown below:

$$Concentration = (Ax\ /\ Rf) \times (DF)$$

Where:

Ax = Total peak area in region defined as analyte

DF = Dilution factor

RF = Average response factor from the calibration curve, calculated as shown below:

$$RF = \frac{[(As1\ /\ Qs1) + (As2\ /\ Qs2) + (As3\ /\ Qs3) + (As4\ /\ Qs4) + (As5\ /\ Qs5) + \ldots (Asn\ /\ Qsn)}{n}$$

Where:

As# = Analyte peak sum area for all components of calibration level #

Qs# = Analyte concentration sum for all components of calibration level #

n = Number of calibration levels

Results are reported in mg/L for water samples and in mg/kg for solid samples. Soil samples are reported on an as-received and on a dry-weight basis.

For DRO, calculation also includes the Factor "F/I"

Where:

F = Final extract volume (mL)

I = Initial sample weight (grams) or volume (mL)

The results for **inorganic** analyses are calculated using the following equation:

$$Concentration = (A)\,(D)\,(E)\;\; /\,(F)$$

Where:

A = The concentration determined by AA, ICP, or FTIR using calibration data programmed into the instrument (mg/L)

D = Dilution factor if needed

E = Final extract volume (mL)

F = Initial sample volume (mL) or weight (gm)

Results are usually reported in mg/L for water samples and in mg/kg for solid samples. Alternate units are available upon request. Soil samples are reported on an as received and on a dry weight basis. The results are reported on Lancaster Labs Analysis Report Forms shown in Appendix A.

The principle criteria used to validate data will be the acceptance criteria described in Sections No. 8 and 11 and protocols specified in laboratory SOPs. Following review, interpretation, and data reduction by the analyst, data is transferred to the laboratory sample management system either by direct data upload from the analytical data system or manually. This system stores client information, sample results, and QC results. A security system is in place to control access of laboratory personnel and to provide an audit trail for information changes. The data is again reviewed by the group leader or another analyst whose function is to provide an independent review and verified on the sample management system. The person performing the verification step reviews all data including quality control information prior to verifying the data. Any errors identified and corrected during the review process are documented and addressed with appropriate personnel to ensure generation of quality data. If data package deliverables have been requested, the laboratory will complete the appropriate forms (see Appendix A) summarizing the quality control information, and transfer copies of all raw data (instrument printouts, spectra, chromatograms, laboratory notebooks, etc.) to the Data Packages Group. This group will combine the information from the various analytical groups and the analytical reports from the laboratory sample management system into one package in the client requested format. This package is reviewed for quality, compliance, and conformance to SOPs and to ensure that all QC goals have been met. Any analytical problems are discussed in the case narrative, which is also included with the data package deliverables.

The validation of the data for quality assurance includes spot checking raw data versus the final report, checking that all pertinent raw data is included and does refer to the samples analyzed, review of all QC results for conformance with the method, and review of the case narrative for description of any unusual occurrences during analysis. This validation is performed using techniques similar to those used by the Sample Management Office for the USEPA's Contract Laboratory Program. The validation performed by the laboratory does not address usability of the data, which usually requires some knowledge of the site. The laboratory will make every attempt to meet the requirements of this QAPP, thus reducing the need to assess usability of the data.

The laboratory sample management system is programmed to accept and track the results of quality control samples including blanks, surrogates, recoveries, duplicates, controls, and reference materials. The computer is programmed with the acceptance criteria for each type of QC sample and will display an out-of-spec message if the data is not within specifications. All data outside of specifications appears on a report to the Quality Assurance Department on the next working day. These are reviewed by the Quality Assurance Department for severity of the problems and trends in the data. The reports are then sent to the analytical groups for the purpose of documenting the corrective action taken. The sample management system also produces control charts and has searching capabilities to aid in data review. The flow of data from the time the samples enter the laboratory until the data is reported are summarized in Table 10-1.

Any data recorded manually will be collected in bound notebooks. All entries will be in ink, with no erasures or white-out being permitted. Any changes in data will be made using a single line to avoid obliteration of the original entry and will be dated and signed. Any data resulting from instrument printouts will be dated and will contain the signature and/or identification of the analyst responsible for its generation. After copies of the data are incorporated into the data package deliverables, the originals will be stored in locked archives at the laboratory for a period of 7 years.

Project files will be created per client/project and will contain chain-of-custody records, analysis requirements, and laboratory acknowledgments which document samples received, laboratory sample number assignment, and analysis requested. Raw data is filed per batch number assignment and laboratory sample number which correlates to the sample receipt documents. When the project is complete, all documentation is archived in a limited access area and retained for 5 years.

**Table 10-1**

**Sample and Data Routing at Lancaster Laboratories**

| Action | Personnel Involved |
|---|---|
| Sample received at Lancaster Labs | Sample Administration |
| Sample is entered onto sample management system (lab ID number assigned, analyses scheduled, chain of custody started, storage location assigned) | Sample Administration |
| Sample stored in assigned location (refrigerator, freezer, etc.) | Sample Support |
| Acknowledgment sent to client | Sample Administration |
| Removed from storage for analysis; necessary aliquot taken and sample returned to storage | Technical Personnel |
| Analysis is performed according to selected analytical method; raw data recorded, reviewed, and transferred to computer by chemist or technician* | Technical Personnel |
| Computer performs calculations as programmed according to methods | Data Processing |
| Chemist or supervisor verifies raw data | Technical Personnel |
| Data package deliverables are assembled | Data Package Group |
| Data packages are reviewed prior to mailing | Quality Assurance, Data Package Personnel, and Laboratory Management |

*Analyses requiring the chemist's interpretation may involve manual data reduction prior to entry onto the computer.

## 11. Internal Quality Control Checks

The particular types and frequencies of quality control checks analyzed with each sample are defined in USEPA SW-846 3rd Edition, Update III, 1996. The quality control checks routinely performed during sample analysis include surrogates, matrix spikes, duplicates, blanks, internal standards, and laboratory control samples. In addition to these checks, some inorganic analyses employ serial dilutions and interference check samples.

Surrogates (used for organic analysis only) - Each sample, matrix spike, matrix spike duplicate, and blank are spiked with surrogate compounds prior to purging and extraction in order to monitor preparation and analysis. Surrogates are used to evaluate analytical efficiency by measuring recovery.

Matrix Spikes - A matrix (soil or water) is spiked with known quantities of specific compounds and subjected to the entire analytical procedure in order to indicate the appropriateness of the method for the matrix by measuring recovery.

Duplicates (matrix spike duplicate - organics and inorganics; duplicate - inorganics) - A second aliquot of a matrix/sample is analyzed at the same time as the original sample in order to determine the precision of the method. Recovery of the original compared to the duplicate is expressed as relative percent differences (RPD).

Blanks (method, preparation) - Blanks are an analytical control consisting of a volume of deionized, distilled laboratory water for water samples, or a purified solid matrix for soil/sediment samples. (Metals use a digested reagent blank with soils.) They are treated with the same reagents, internal standards, and surrogate standards and carried through the entire analytical procedure. The blank is used to define the level of laboratory background contamination.

Internal Standards (used for GC/MS and some GC analysis) - Internal standards are compounds added to every standard, blank matrix, spike, matrix spike duplicate, and sample at a known concentration, prior to analysis. Comparison of the peak areas of the internal standards are used for internal standard quantitation as well as to determine when changes in the instrument response will adversely affect quantification of target compounds.

Serial Dilutions (used for inorganics GFAA and ICP only) - If the analyte concentration is sufficiently high an analysis of a five-fold dilution must agree within 10% of the original determination. If the dilution analysis is not within 10%, a chemical or physical interference effect should be suspected.

Interference Check Sample (ICP) - To verify interelement and background correction factors a solution containing both interfering and analyte elements of known concentration is analyzed at the beginning and end of each analysis run or a minimum of twice per 8 hours.

Laboratory Control Samples - Aqueous and solid control samples of known composition are analyzed using the same sample preparation, reagents, and analytical methods employed for the sample. An LCS is analyzed with every batch.

The results of quality control samples are entered into the computer along with sample results. The computer is programmed to compare the individual values with the acceptance limits. If the results are not within the acceptance criteria, appropriate corrective action is taken where necessary. Management is kept informed by daily reports of QC outliers generated by the computerized system. Monthly reports on results of all QC analyses showing mean and standard deviation will indicate trends or method bias. Control charts are plotted via computer and may be accessed at any time by all analysts.

The tables that follow show the types and frequency of QC performed, along with the acceptance limits and corrective action.

**Table 11-1**

**Quality Control**

**GC/MS Volatiles (8260B)**

| Type | Acceptance Limits(%) WATERS | SOILS | Frequency | Corrective Action |
|---|---|---|---|---|
| **Surrogates:** | | | Each sample, MS, MSD, LCS, and blank | Reanalyze sample if outside limits; if reanalysis confirms original, document on report and/or case narrative |
| Toluene-d8 | 88 - 110 | 81 - 117 | | |
| Bromofluorobenzene | 86 - 115 | 74 - 121 | | |
| 1,2-Dichloroethane-d4 | 80 - 120 | 80 - 120 | | |
| Dibromofluoromethane | 86 - 118 | 80 - 120 | | |
| **Matrix Spikes:** Spike all compounds of interest | See Table 11.2 for acceptance criteria | | Each group (≤20) of samples per matrix/level | LCS run for compounds outside acceptance limits |
| **Laboratory Control Samples:** Spike all compounds of interest | See Table 11.2 for acceptance criteria | | Each group (≤20) of samples per matrix/level | Reanalyze LCS and associated samples for compounds outside acceptance limits that are also outside MS/MSD acceptance limits |
| **Matrix Spike Duplicates (RPD):** Spike all compounds of interest | ≤30% | | Each group (≤20) of samples per matrix/level | Evaluated by analyst in relationship to other QC results |
| **Blanks:** | ≤LOQ for all compounds | | Once for each 12-hour time period | Reanalyze blank and associated samples if blank outside limits |
| **Internal Standards:** | -50% to +100% of internal standard area of 12-hour STD | | Each sample, MS, MSD, LCS, and blank | Reanalyze samples; if reanalysis confirms original, document on report or case narrative |
| Bromochloromethane<br>1,4-Difluorobenzene<br>Chlorobenzene-d5 | RT Change ≤30 sec. | | | |

Acceptance limits are based on statistical evaluation of laboratory data and are subject to change.

**Table 11-2**

**GC/MS Statistical Acceptance Limits for Volatile Compounds (8260B)**

| Compound Name | Waters | | Soils | |
|---|---|---|---|---|
| | LCS/LCSD (%) | MS/MSD (%) | LCS/LCSD (%) | MS/MSD (%) |
| Dichlorodifluoromethane | 44-117 | 35-130 | 36-136 | 31-143 |
| Chloromethane | 55-119 | 54-125 | 48-130 | 45-134 |
| Vinyl Chloride | 62-122 | 58-132 | 60-127 | 58-133 |
| Bromomethane | 46-125 | 44-138 | 46-134 | 43-135 |
| Chloroethane | 34-127 | 37-139 | 30-142 | 18-148 |
| Trichlorofluoromethane | 33-160 | 34-173 | 39-135 | 21-158 |
| 1,1-Dichloroethene | 57-153 | 65-147 | 69-146 | 67-153 |
| Methylene Chloride | 81-118 | 79-122 | 69-126 | 65-136 |
| *trans*-1,2-Dichloroethene | 78-118 | 79-122 | 73-126 | 74-127 |
| 1,1-Dichloroethane | 84-123 | 77-132 | 81-130 | 79-134 |
| 2,2-Dichloropropane | 79-130 | 75-142 | 79-132 | 76-138 |
| *cis*-1,2-Dichloroethene | 84-118 | 84-121 | 84-123 | 80-128 |
| Chloroform | 82-122 | 80-126 | 82-123 | 78-129 |
| Bromochloromethane | 73-117 | 48-137 | 69-134 | 59-138 |
| 1,1,1-Trichloroethane | 77-137 | 77-140 | 84-132 | 82-135 |
| Carbon Tetrachloride | 69-136 | 68-138 | 78-129 | 68-138 |
| 1,1-Dichloropropene | 86-121 | 82-128 | 82-130 | 82-128 |
| Benzene | 82-123 | 79-127 | 77-126 | 76-128 |
| 1,2-Dichloroethane | 82-126 | 79-132 | 81-123 | 78-125 |
| Trichloroethene | 80-122 | 78-127 | 81-123 | 74-130 |
| 1,2-Dichloropropane | 82-120 | 79-125 | 77-127 | 76-129 |
| Dibromomethane | 89-113 | 84-120 | 82-119 | 79-119 |
| Bromodichloromethane | 84-118 | 82-122 | 80-121 | 80-120 |
| Toluene | 80-126 | 78-130 | 74-128 | 69-140 |
| 1,1,2-Trichloroethane | 87-120 | 84-122 | 81-124 | 65-144 |
| Tetrachloroethene | 78-140 | 72-145 | 83-150 | 74-157 |
| 1,3-Dichloropropane | 89-122 | 86-124 | 79-128 | 78-125 |
| Dibromochloromethane | 88-114 | 82-119 | 80-120 | 76-125 |
| 1,2-Dibromoethane | 90-114 | 84-120 | 84-118 | 79-119 |
| Chlorobenzene | 84-119 | 84-120 | 81-121 | 81-122 |
| 1,1,1,2-Tetrachloroethane | 90-117 | 86-121 | 87-122 | 85-126 |
| Ethylbenzene | 89-124 | 86-127 | 86-129 | 77-138 |
| *m+p*-Xylene | 88-123 | 83-129 | 86-128 | 83-130 |
| *o*-Xylene | 88-123 | 86-124 | 86-127 | 56-159 |
| Styrene | 88-121 | 86-123 | 84-127 | 84-124 |

**Table 11-2**

**GC/MS Statistical Acceptance Limits for Volatile Compounds (8260B)**

| Compound Name | Waters | | Soils | |
|---|---|---|---|---|
| | LCS/LCSD (%) | MS/MSD (%) | LCS/LCSD (%) | MS/MSD (%) |
| Bromoform | 80-118 | 71-124 | 73-120 | 68-122 |
| Isopropylbenzene | 85-120 | 77-130 | 84-127 | 77-130 |
| 1,1,2,2-Tetrachloroethane | 73-131 | 72-132 | 70-124 | 59-142 |
| Bromobenzene | 86-115 | 84-119 | 85-122 | 78-132 |
| 1,2,3-Trichloropropane | 84-120 | 74-131 | 72-122 | 66-134 |
| Acetone | 64-134 | 50-142 | 46-133 | 29-163 |
| Carbon Disulfide | 62-173 | 74-157 | 52-165 | 56-171 |
| *n*-Propylbenzene | 74-127 | 69-138 | 76-135 | 66-145 |
| 2-Chlorotoluene | 81-124 | 78-130 | 78-129 | 62-151 |
| 1,3,5-Trimethylbenzene | 72-129 | 70-136 | 78-134 | 67-150 |
| 4-Chlorotoluene | 82-122 | 79-129 | 78-130 | 75-134 |
| *tert*-Butylbenzene | 84-123 | 79-129 | 81-134 | 73-140 |
| 1,2,4-Trimethylbenzene | 80-130 | 79-133 | 77-138 | 61-151 |
| *sec*-Butylbenzene | 76-128 | 71-135 | 75-136 | 57-150 |
| *p*-Isopropyltoluene | 78-127 | 75-133 | 80-139 | 71-143 |
| 1,3-Dichlorobenzene | 83-118 | 81-121 | 81-125 | 82-121 |
| 1,4-Dichlorobenzene | 82-113 | 81-116 | 79-122 | 78-120 |
| *n*-Butylbenzene | 53-138 | 54-146 | 68-147 | 50-157 |
| 1,2-Dichlorobenzene | 85-117 | 84-120 | 83-125 | 61-142 |
| 1,2-Dibromo-3-chloropropane | 63-137 | 48-152 | 53-133 | 46-141 |
| 1,2,4-Trichlorobenzene | 70-124 | 58-133 | 72-130 | 51-132 |
| Hexachlorobutadiene | 35-160 | 34-166 | 65-156 | 24-170 |
| Naphthalene | 55-140 | 43-147 | 57-126 | 27-137 |
| 1,2,3-Trichlorobenzene | 64-130 | 56-137 | 66-129 | 42-132 |
| *trans*-1,3-Dichloropropene | 62-136 | 84-118 | 69-131 | 68-135 |
| 4-Methyl-2-pentanone | 70-133 | 58-140 | 63-123 | 47-140 |
| *cis*-1,3-Dichloropropene | 86-118 | 84-119 | 79-126 | 79-123 |
| Xylene (Total) | 89-123 | 88-123 | 88-128 | 83-135 |
| 2-Hexanone | 68-139 | 62-138 | 60-128 | 40-154 |
| 2-Butanone | 47-153 | 51-148 | 61-130 | 47-147 |

Acceptance limits are based on statistical evaluation of laboratory data and are subject to change.

**Table 11-3**

**Quality Control**
**GC/MS Semivolatiles**

| Type | Acceptance Limits (%) WATERS | SOILS | Frequency | Corrective Action |
|---|---|---|---|---|
| **Surrogate:** | | | Each sample, MS, MSD, LCS, and blank | Repeat extraction and analysis; if reanalysis confirms originals, document on report and/or case narrative |
| Nitrobenzene-d5 | 47 - 114 | 31 - 126 | | |
| 2-Fluorobiphenyl | 51 - 106 | 45 - 113 | | |
| Terphenyl-d14 | 37 - 119 | 37 - 130 | | |
| Phenol-d6 | 7 - 74 | 39 - 108 | | |
| 2-Fluorophenol | 25 - 88 | 35 - 108 | | |
| 2,4,6-Tribromophenol | 34 - 125 | 23 - 125 | | |
| **Matrix Spikes:** Spike all compounds of interest | See Table 11-4 for acceptance limits | | Each group (≤20) of samples per matrix/level | Run LCS for compounds outside acceptance limits |
| **Laboratory Control Sample:** Spike all compounds of interest | See Table 11-4 for acceptance limits | | Each group (≤20) when MS/MSD falls outside established limits | Re-extract and reanalyze LCS and associated samples for compounds outside acceptance limits |
| **Matrix Spike Duplicates (RPD):** Same as for matrix spikes | ≤30% | | Each group (≤20) of samples per matrix/level | Evaluated by analyst in relationship to other QC results |
| **Blanks:** | ≤LOQ for all compounds | | Once per case or group (≤20) of samples, each matrix, level, instrument | Re-extract and reanalyze blank and associated samples |
| **Internal Standards:** | -50 to +100 of internal standard area of 12-hour STD | | Each sample, MS, MSD, LCS, and blank | Reanalyze samples; if reanalysis confirms original, document on report and/or case narrative |
| 1,4-Dichlorobenzene-d4<br>Naphthalene-d8<br>Acenaphthene-d10<br>Phenanthrene-d10<br>Chrysene-d12<br>Perylene-d12 | RT change ≤30 sec. | | | |

Acceptance limits are based on statistical evaluation of laboratory data and are subject to change.

**Table 11-4**

**Semivolatile Matrix Spike/
Matrix Spike Duplicate Sample Recovery**

| Compound Name | Water | | Soil | |
|---|---|---|---|---|
| | LCS/LCSD (%) | MS/MSD (%) | LCS/LCSD (%) | MS/MSD (%) |
| N-Nitrosodimethylamine | 46-81 | 42-84 | 47-109 | 48-113 |
| Phenol | 5-83 | 5-112 | 49-105 | 29-112 |
| bis (2-Chloroethyl) ether | 66-106 | 40-128 | 53-109 | 12-158 |
| 2-Chlorophenol | 62-107 | 56-112 | 55-107 | 36-124 |
| 1,3-Dichlorobenzene | 45-91 | 44-99 | 53-103 | 31-123 |
| 1,4-Dichlorobenzene | 45-94 | 34-108 | 52-103 | 20-124 |
| 1,2-Dichlorobenzene | 52-97 | 32-121 | 56-107 | 44-113 |
| bis (2-Chloroisopropyl) ether | 43-118 | 38-118 | 38-117 | 36-121 |
| N-Nitroso-di-*n*-propylamine | 62-118 | 58-120 | 50-124 | 38-140 |
| Hexachloroethane | 40-84 | 40-113 | 52-108 | 40-113 |
| Nitrobenzene | 61-113 | 43-127 | 56-110 | 40-125 |
| Isophorone | 66-113 | 42-134 | 57-114 | 46-127 |
| 2-Nitrophenol | 67-104 | 64-108 | 59-107 | 40-125 |
| 2,4-Dimethylphenol | 52-99 | 33-107 | 39-108 | 32-119 |
| bis (2-Chloroethoxy) methane | 64-103 | 57-108 | 56-103 | 40-121 |
| 2,4-Dichlorophenol | 65-98 | 61-101 | 59-100 | 39-135 |
| 1,2,4-Trichlorobenzene | 52-93 | 50-98 | 57-104 | 44-125 |
| Naphthalane | 58-99 | 50-106 | 60-97 | 41-115 |
| Hexachlorobutadiene | 24-86 | 24-98 | 56-115 | 35-116 |
| 4-Chloro-3-methylphenol | 60-111 | 54-115 | 56-108 | 22-142 |
| Hexachlorocyclopentadiene | 17-80 | 15-83 | 27-113 | 1-127 |
| 2,4,6-Trichlorophenol | 66-105 | 43-121 | 62-106 | 37-127 |
| 2-Chloronaphthalene | 61-103 | 60-106 | 60-106 | 60-118 |
| Dimethylphthalate | 1-90 | 11-107 | 61-104 | 44-112 |
| Acenaphthylene | 64-100 | 61-103 | 62-101 | 42-119 |
| 2,6-Dinitrotoluene | 64-112 | 45-128 | 58-113 | 39-136 |
| Acenaphthene | 61-100 | 60-101 | 61-100 | 47-114 |
| 2,4-Dinitrophenol | 25-124 | 6-120 | 29-117 | 1-126 |
| 4-Nitrophenol | 3-83 | 1-93 | 44-110 | 5-132 |
| 2,4-Dinitrotoluene | 64-112 | 45-128 | 58-113 | 39-136 |
| Diethylphthalate | 30-99 | 46-106 | 59-104 | 43-114 |
| 4-Chlorophenyl-phenylether | 62-104 | 58-106 | 52-110 | 41-115 |
| Fluorene | 61-108 | 59-110 | 59-109 | 59-121 |

**Table 11-4**

**Semivolatile Matrix Spike/
Matrix Spike Duplicate Sample Recovery**

| Compound Name | Water | | Soil | |
|---|---|---|---|---|
| | LCS/LCSD (%) | MS/MSD (%) | LCS/LCSD (%) | MS/MSD (%) |
| 4,6-Dinitro-2-methylphenol | 43-120 | 38-116 | 42-107 | 5-128 |
| N-Nitrosodiphenylamine | 64-103 | 44-124 | 60-106 | 28-144 |
| 1,2-Diphenylhydrazine | 57-123 | 46-133 | 52-129 | 31-149 |
| 4-Bromophenyl-phenylether | 69-102 | 63-106 | 61-110 | 53-125 |
| Hexachlorobenzene | 62-109 | 48-118 | 52-123 | 31-135 |
| Pentachlorophenol | 46-114 | 14-130 | 42-108 | 14-131 |
| Phenanthrene | 68-102 | 64-105 | 62-107 | 54-120 |
| Anthracene | 66-101 | 62-103 | 62-105 | 42-119 |
| Di-*n*-butylphthalate | 61-105 | 60-110 | 59-114 | 35-118 |
| Fluoranthene | 66-106 | 61-109 | 58-110 | 26-137 |
| Benzidine | 1-116 | 1-125 | 1-74 | 1-70 |
| Pyrene | 58-112 | 55-114 | 52-115 | 52-115 |
| Butylbenzylphthalate | 48-105 | 53-110 | 58-119 | 45-133 |
| 3,3'-Dichlorobenzidine | 37-104 | 37-106 | 15-94 | 1-125 |
| Benzo(a)anthracene | 69-101 | 64-103 | 63-106 | 33-135 |
| Chrysene | 67-101 | 63-104 | 60-107 | 9-153 |
| bis(2-Ethylhexyl)phthalate | 64-113 | 39-131 | 8-158 | 8-158 |
| Di-*n*-octylphthalate | 59-118 | 52-121 | 54-127 | 41-146 |
| Benzo(b)fluoranthene | 64-101 | 54-108 | 59-105 | 24-148 |
| Benzo(k)fluoranthene | 67-105 | 59-112 | 63-108 | 41-126 |
| Benzo(a)pyrene | 65-101 | 60-102 | 61-107 | 21-139 |
| Indeno(1,2,3-cd)pyrene | 59-111 | 55-114 | 55-111 | 28-127 |
| Dibenz(a,h)anthracene | 66-117 | 57-124 | 60-117 | 11-152 |
| Benzo(g,h,i)perylene | 52-113 | 12-133 | 55-115 | 49-121 |
| Aniline | 53-99 | 33-113 | 30-97 | 1-126 |
| Acetophenone | 68-136 | 64-137 | 59-134 | 31-161 |
| Ethyl methanesulfonate | 50-123 | 57-115 | 65-117 | 38-142 |
| Methyl methanesulfonate | 43-114 | 54-106 | 66-122 | 1-164 |
| N-nitrosodiethyalmine | 37-135 | 37-135 | 37-135 | 37-135 |
| N-nitrosomethylethylamine | 58-140 | 73-132 | 78-128 | 1-187 |
| N-nitrosomorpholine | 49-120 | 50-118 | 78-109 | 1-158 |
| N-nitrosopiperidine | 52-123 | 73-108 | 78-105 | 1-158 |
| N-nitrosopyrrolidine | 1-152 | 60-121 | 77-113 | 1-160 |

**Table 11-4**

**Semivolatile Matrix Spike/
Matrix Spike Duplicate Sample Recovery**

| Compound Name | Water | | Soil | |
|---|---|---|---|---|
| | LCS/LCSD (%) | MS/MSD (%) | LCS/LCSD (%) | MS/MSD (%) |
| 2-picoline | 26-135 | 28-127 | 29-129 | 1-142 |
| *o*-Toluidine | 60-94 | 1-145 | 12-89 | 1-128 |
| Benzyl Alcohol | 59-108 | 44-117 | 62-115 | 9-146 |
| 2-chlorophenol | 62-107 | 56-112 | 55-107 | 36-124 |
| 2-methylphenol | 55-96 | 25-122 | 57-101 | 20-130 |
| 3- or 4-methylphenol | 48-99 | 15-130 | 48-116 | 22-138 |
| Pyridine | 38-82 | 31-85 | 34-92 | 21-96 |
| 2,6-dichlorophenol | 64-107 | 58-110 | 62-109 | 1-156 |
| 1,3-dinitrobenzene | 62-111 | 26-142 | 61-109 | 1-150 |
| Hexachloropropene | 70-130 | 70-130 | 70-130 | 70-130 |
| Isosafrole | 9-76 | 10-76 | 14-72 | 1-100 |
| 1,4-naphthoquinone | 70-130 | 70-130 | 70-130 | 70-130 |
| N-nitrosodi-*n*-butylamine | 48-120 | 72-101 | 75-103 | 1-168 |
| 1,4-phenylenediamine | 70-130 | 70-130 | 70-130 | 70-130 |
| Safrole | 4-122 | 18-109 | 30-109 | 1-136 |
| 1,2,4,5-tetrachlorobenzene | 67-105 | 9-160 | 61-113 | 30-141 |
| O,O,O-triethylphosphorothioate | 46-118 | 53-119 | 67-103 | 52-126 |
| a,a-dimethylphenethylamine | 4-100 | 4-100 | 4-100 | 4-100 |
| 4-chloroaniline | 34-101 | 9-119 | 1-102 | 1-123 |
| 2-methylnaphthalene | 62-98 | 57-103 | 60-102 | 45-112 |
| 2-nitroaniline | 58-112 | 60-111 | 54-111 | 8-154 |
| 2,4,5-trichlorophenol | 67-103 | 40-122 | 63-107 | 18-139 |
| 2,3,4,6-tetrachlorophenol | 21-137 | 19-109 | 62-103 | 1-134 |
| Dimethoate | 1-59 | 1-83 | 23-79 | 1-123 |
| 1-naphthylamine | 1-179 | 1-140 | 1-99 | 1-147 |
| 2-naphthylamine | 2-162 | 1-173 | 1-100 | 1-93 |
| 5-nitro-*o*-toluidine | 70-130 | 70-130 | 70-130 | 70-130 |
| Pentachlorobenzene | 8-162 | 34-137 | 69-100 | 1-148 |
| Phenacetin | 7-180 | 10-177 | 69-105 | 1-152 |
| Tetraethyl dithiopyrophosphate | 41-125 | 44-132 | 62-111 | 1-193 |
| 1,3,5-trinitrobenzene | 70-130 | 70-130 | 70-130 | 70-130 |
| Diallate (trans/cis) | 48-128 | 69-113 | 23-79 | 1-123 |
| Diphenylamine | 64-103 | 44-124 | 60-106 | 28-144 |

**Table 11-4**

**Semivolatile Matrix Spike/
Matrix Spike Duplicate Sample Recovery**

| Compound Name | Water | | Soil | |
|---|---|---|---|---|
| | LCS/LCSD (%) | MS/MSD (%) | LCS/LCSD (%) | MS/MSD (%) |
| Thionazin | 60-114 | 61-114 | 63-110 | 3-147 |
| Dibenzofuran | 67-99 | 64-100 | 62-102 | 38-120 |
| 3-nitroaniline | 40-108 | 43-105 | 9-110 | 8-114 |
| 4-nitroaniline | 37-120 | 1-170 | 55-116 | 55-116 |
| 2-acetylaminofluorene | 70-130 | 70-130 | 70-130 | 70-130 |
| 4-aminobiphenyl | 1-174 | 28-130 | 1-46 | 1-112 |
| Chlorobenzilate | 1-132 | 24-144 | 9-223 | 6-198 |
| *p*-(dimethylamino) azobenzene | 14-184 | 2-187 | 1-186 | 1-247 |
| 7,12-dimethylbenz(a) anthracene | 87-184 | 83-184 | 99-213 | 1-286 |
| 3,3'-dimethylbenzidine | 1-149 | 1-153 | 1-137 | 1-110 |
| Isodrin | 51-110 | 52-109 | 66-117 | 1-145 |
| 3-methylcholanthrene | 71-135 | 66-132 | 58-169 | 1-206 |
| 4-nitroquinoline-1-oxide | 70-130 | 70-130 | 70-130 | 70-130 |
| Pentachloronitrobenzene | 68-108 | 58-112 | 68-115 | 10-146 |
| Pronamide | 1-138 | 3-123 | 1-132 | 1-153 |
| Methapyrilene | 25-151 | 24-154 | 35-138 | 1-142 |

Acceptance limits are based on statistical evaluation of laboratory data and are subject to change.

**Table 11-5**

**Quality Control**
**Pesticides/PCBs**

| Type | Acceptance Limits (%) WATERS | SOILS | Frequency | Corrective Action |
|---|---|---|---|---|
| **Surrogate:** | | | Added to each sample, MS/MSD, blank, LCS/LCSD during the extraction phase | At least one surrogate must be in spec unless matrix related problems are evident; if matrix related problems are evident, report results and comment in case narrative |
| Organochlorine Pesticides; | | | | |
| DCB | 60 - 120 | 50 - 120 | | |
| TCMX | 60 - 120 | 50 - 120 | | |
| Herbicides; | | | | |
| DCAA | 60 - 120 | 50 - 120 | | |
| Organophosphate Pesticides; | | | | |
| 2NMX | 60 - 120 | 50 - 120 | | |
| **Matrix Spikes:** | | | Each extraction group (≤20) of samples per matrix/level | Run LCS for compounds outside acceptance limits |
| Organochlorine Pesticides; Spike all compounds of interest, except PCBs, chlordane, and toxaphene | See Table 11-6 | | | |
| Herbicides (all compounds of interest); | | | | |
| 2,4-D | 52 141 | 58 - 147 | | |
| 2,4,5-TP | 51-126 | 44 - 153 | | |
| 2,4,5-T | 59-130 | 40 - 145 | | |
| Dinoseb | 4-96 | 1 - 33 | | |
| Organophosphate Pesticides; | | | | |
| Phorate | 63 - 139 | 42 - 146 | | |
| Disulfoton | 65 - 125 | 1 - 119 | | |
| Famphur | 61 - 155 | 40 - 174 | | |
| Methyl Parathion | 51 - 152 | 1 - 116 | | |
| Ethyl Parathion | 62 - 120 | 1 - 140 | | |
| **PCBs:** | | | | |
| 1016 | 43 - 126 | 64 - 127 | | |
| 1260 | 51 - 126 | 69 - 123 | | |

**Table 11-5**

**Quality Control**
**Pesticides/PCBs**

| Type | Acceptance Limits (%) WATERS | SOILS | Frequency | Corrective Action |
|---|---|---|---|---|
| **Laboratory Control Sample:** | | | Each group (≤20) when MS/MSD falls outside established limits | Re-extract and reanalyze LCS and associated samples for compounds outside acceptance limits |
| Organochlorine Pesticides; Spike all compounds of interest, except PCBs, chlordane, and toxaphene | See attached Table 11-6 | | | |
| Herbicides; | | | | |
| 2,4-D | 52 141 | 58 - 147 | | |
| 2,4,5-TP | 51-126 | 44 - 153 | | |
| 2,4,5-T | 59-130 | 40 - 145 | | |
| Dinoseb | 4-96 | 1 - 33 | | |
| Organophosphate Pesticides; | | | | |
| Phorate | 63 - 139 | 42 - 146 | | |
| Disulfoton | 65 - 125 | 1 - 119 | | |
| Famphur | 61 - 155 | 40 - 174 | | |
| Methyl Parathion | 51 - 152 | 1 - 116 | | |
| Ethyl Parathion | 62 - 120 | 1 - 140 | | |
| **Matrix Spike Duplicates (RPD):** | Water ≤30% | | Each group ( 20) of samples per matrix/level | Evaluated by analyst in relationship to other QC results |
| Organochlorine Pesticides; Spike all compounds of interest, except PCBs, chlordane, and toxaphene | Soils ≤50% | | | |
| Herbicides; | | | | |
| 2,4-D | | | | |
| 2,4,5-TP | | | | |
| 2,4,5-T | | | | |
| Dinoseb | | | | |
| Organophosphate Pesticides; | | | | |
| Phorate | | | | |
| Disulfoton | | | | |
| Famphur | | | | |
| Methyl Parathion | | | | |
| Ethyl Parathion | | | | |

**Table 11-5**

**Quality Control**
**Pesticides/PCBs**

| Type | Acceptance Limits (%) WATERS SOILS | Frequency | Corrective Action |
|---|---|---|---|
| **Blanks:** | ≤LOQ for all compounds | Once per case or extraction group (≤20) of samples, each matrix, level, instrument | Inject a hexane or solvent blank first to be sure the analytical system is clean then reinject the blank itself. If the reinjected blank is acceptable, any samples extracted with this blank should be reinjected if they, too, contain the analyte which was contaminating the blank. If the reinjected blank is unacceptable, any affected samples must be reextracted. |

Acceptance limits are based on statistical evaluation of compiled laboratory data and are subject to change.

**Table 11-6**
**Quality Control**
**Pesticides/PCBs**

**Organochlorine Pesticides Spike Acceptance Limits**

| Compound Name | Matrix Spike and Laboratory Control Sample Limits | |
|---|---|---|
| | Waters (%) | Soils (%) |
| Lindane | 62-132 | 51-142 |
| Heptachlor | 46-120 | 60-137 |
| Aldrin | 41-115 | 49-145 |
| DDT | 59-135 | 60-138 |
| Dieldrin | 61-122 | 59-130 |
| Endrin | 68-148 | 69-152 |
| Methoxychlor | 60-164 | 52-174 |
| Delta-BHC | 64-132 | 44-145 |
| Heptachlor Epoxide | 64-126 | 59-136 |
| Endosulfanl | 45-132 | 46-135 |
| Endrin Aldehyde | 52-142 | 28-166 |
| Alpha-BHC | 60-133 | 48-144 |
| Beta-BHC | 64-122 | 34-145 |
| DDE | 55-126 | 61-135 |
| DDD | 60-134 | 53-141 |
| Endosulfan II | 52-130 | 48-132 |
| Endosulfan Sulfate | 67-132 | 40-150 |

Acceptance limits are based on statistical evaluation of compiled laboratory data and are subject to change.

**Table 11-7**

**Quality Control**
**Volatiles by GC**

| Type | Acceptance Limits (%) WATERS | SOILS | Frequency | Corrective Action |
|---|---|---|---|---|
| **Surrogates:** | | | Each sample, MS, MSD, and blank | Results would not be reported if the surrogate recovery is outside the limits unless matrix related problems are evident |
| Halocarbons; 1-Bromo-4-chlorobenzene (Hall) | 70 - 130 | 70 - 130 | | |
| Aromatics; 1-Bromo-4-chlorobenzene (Hall) | 70 - 130 | 70 - 130 | | |
| Halocarbons/Aromatics; 1-Bromo-4-chlorobenzene (Hall) | 70 - 130 | 70 - 130 | | |
| Non-halogenated; 2-hexanone (FID) | 75 - 125 | 70 - 130 | | |
| **Matrix Spikes:** Spike all compounds of interest except: | See Table 11-8 for acceptance limits | | Each group of samples of similar matrix/level (≤20) each method | Analyze LCS for compounds outside of acceptance limits |
| **Laboratory Control Sample/Check Standard:** Spike all compounds of interest except: Dichlorodifluoromethane *trans*-1,2-Dichloroethene *trans*-1,3-Dichloropropene 1,1,2-Trichloroethane *cis*-1,3-Dichloropropene 1,1,2,2-Tetrachloroethane | See Table 11-8 for acceptance limits | | Each group (≤20) when MS/MSD falls outside established limits | Reanalyze LCS and associated samples for compounds outside of acceptance limits |

**Table 11-7**

**Quality Control**
**Volatiles by GC**

| Type | Acceptance Limits (%) WATERS | SOILS | Frequency | Corrective Action |
|---|---|---|---|---|
| **Internal Standard:** Fluorobenzene | 80 - 120 | 80 - 120 | Each sample, MS, MSD, blank | Reanalyze samples; if reanalysis confirms original, document on report and/or case narrative |
| **Matrix Spike Duplicate (RPD):** Same compounds as matrix spikes | See Table 11-9 for acceptance limits | | Each group (≤20) of samples per matrix/level | Evaluated by analyst in relationship to other QC results |
| **Blanks:** | ≤LOQ for all compounds | | Every 12 hours | Reanalyze blank and associated samples if blank is outside limits |

Acceptance limits are based on statistical evaluation of laboratory data and are subject to change.

**Table 11-8**

**Quality Control Volatiles by GC**

**Spike Acceptance Limits**

| Compound Name | MS/MSD/LCS (%) Waters | MS/MSD/LSD (%) Soils | Max. % RPD Waters | Max. % RPD Soils |
|---|---|---|---|---|
| Chloromethane | 18-134 | 40-115 | 30 | 30 |
| Bromomethane | 54-134 | 50-115 | 30 | 30 |
| Vinyl Chloride | 49-145 | 39-115 | 30 | 30 |
| Chloroethane | 50-133 | 49-115 | 30 | 30 |
| Methyl Chloride | 67-134 | 66-115 | 30 | 30 |
| Trichlorofluoromethane | 45-128 | 35-115 | 30 | 30 |
| 1,1-Dichloroethene | 76-135 | 53-115 | 30 | 30 |
| 1,1-Dichloroethane | 81-127 | 82-115 | 30 | 30 |
| 1,2-Dichloroethene (cis/trans) | 81-132 | 67-115 | 30 | 30 |
| Chloroform | 82-124 | 83-115 | 30 | 30 |
| 1,2-Dichloroethane | 82-120 | 87-115 | 30 | 30 |
| 1,1,1-Trichloroethane | 80-129 | 74-115 | 30 | 30 |
| Carbon Tetrachloride | 79-135 | 71-115 | 30 | 30 |
| Bromodichloromethane | 74-125 | 85-115 | 30 | 30 |
| 1,2-Dichloropropane | 82-121 | 80-115 | 30 | 30 |
| Trichloroethene (PID) | 77-132 | 60-118 | 30 | 30 |
| Dibromochloromethane | 64-127 | 88-115 | 30 | 30 |
| Bromoform | 56-139 | 84-115 | 30 | 30 |
| Tetrachloroethene | 77-138 | 78-115 | 30 | 30 |
| Chlorobenzene (PID) | 83-119 | 78-108 | 30 | 30 |
| Benzene (PID) | 77-125 | 76-105 | 30 | 30 |
| Toluene (PID) | 69-126 | 72-109 | 30 | 30 |
| Ethylbenzene (PID) | 73-125 | 75-109 | 30 | 30 |
| *o*-Dichlorobenzene (Hall) | 72-135 | 70-130 | 30 | 30 |
| *m*-Dichlorobenzene (Hall) | 92-126 | 84-101 | 30 | 30 |
| *p*-Dichlorobenzene (PID) | 81-126 | 82-113 | 30 | 30 |
| *o*-Xylene | 82-122 | 77-107 | 30 | 30 |
| *m* +*p*-Xylene | 82-123 | 77-108 | 30 | 30 |
| Total Xylenes | 82-123 | 77-108 | 30 | 30 |

Acceptance limits are based on statistical evaluation of compiled laboratory data and are subject to change.

**Table 11-9**

**Petroleum Analysis**
**Acceptance Criteria**

| Type | Acceptance Limits (%) WATERS | SOILS | Frequency | Corrective Action |
|---|---|---|---|---|
| **Surrogate:**<br><br>ααα-Trifluorotoluene | 70 - 130 | 20 - 130 | Each sample, MS, MSD, LCS, and blank | Reanalyze sample if outside limits; if reanalysis confirms original, document a report and/or case narrative |
| **Matrix Spike:**<br><br>Spike all compounds of interest | See Table 11-10 | | Each group (≤20) of samples per matrix/level | Run LCS for compounds outside of acceptance limits |
| **Laboratory Control Sample:**<br><br>Spike all compounds of interest | See Table 11-10 | | Each group (≤20) of samples per matrix/level | Reanalyze LCS and associated samples for compounds outside acceptance limits that are also outside MS/MSD acceptance limits |
| **Matrix Spike Duplicates (RPD):** | ≤30% | | Each group (≤20) of samples per matrix/level | Evaluated by an analyst in relationship to other QC results |
| **Blanks:** | ≤LOQ for all compounds | | At least one per 20 samples | Reanalyze blank and associated samples if blank is outside limits |
| **Internal Standards:**<br><br>1-Chloro-3-fluorobenzene | -50% to +100% if internal standard area | | Each sample, MS, MSD, LCS, and blank analyzed on the PID | Reanalyze samples; if reanalysis confirms original, document on report or case narrative |

**Table 11-10**

**Petroleum Analysis**

| Compound Name | MS% Water | MS% Soil | Max. % RPD Water | Max. % RPD Soil | LCS% Water | LCS% Soil |
|---|---|---|---|---|---|---|
| Benzene | 78-138 | 70-130 | 30 | 30 | 78-138 | 70-130 |
| Toluene | 78-118 | 70-130 | 30 | 30 | 78-118 | 70-130 |
| Ethylbenzene | 77-119 | 70-130 | 30 | 30 | 77-119 | 70-130 |
| Total Xylenes | 76-116 | 70-130 | 30 | 30 | 76-116 | 70-130 |
| MTBE | 76-144 | 70-130 | 30 | 30 | 76-144 | 70-130 |
| Naphthalene | 83-112 | 70-130 | 30 | 30 | 83-112 | 70-130 |

Acceptance limits are based on statistical evaluation of laboratory data and are subject to change.

**Table 11-11**

**Quality Control**
**PAHs by HPLC (8310)**

| Type | Acceptance Limits (%) WATERS | SOILS | Frequency | Corrective Action |
|---|---|---|---|---|
| **Surrogate:** | | | Added to each sample, MS/MSD, blank, LCS/LCSD during the extraction phase | Surrogate must be in spec unless matrix related problems are evident. If matrix related problems are evident, report results and comment in case narrative. |
| Nitrobenzene or | 60 - 120 | 50 - 120 | | |
| Triphenylene | 60 - 120 | 50 - 120 | | |
| **Matrix Spike:** | See Table 11-12 | | Each group (≤20) of samples per matrix/level | Run LCS for compounds outside acceptance limits |
| Spike all compounds of interest | | | | |
| **Laboratory Control Sample:** | See Table 11-12 | | Each group (≤20) when MS/MSD falls outside established limits | Re-extract and reanalyze LCS and associated samples for compounds outside acceptance limits |
| Spike all compounds of interest | | | | |
| **Matrix Spike Duplicates (RPD):** | ≤30% | ≤50% | Each group (≤20) of samples per matrix/level | Evaluated by analyst in relationship to other QC results |
| Spike all compounds of interest | | | | |
| **Blanks:** | ≤LOQ for all compounds | | Once per case or extraction group (≤20) of samples, each matrix, level, instrument | Inject a hexane or solvent blank first to be sure the analytical system is clean then reinject the blank itself. If the reinjected blank is acceptable, any samples extracted with this blank should be reinjected, if they, too, contain the analyte which was contaminating the blank. If the reinjected blank is unacceptable, any affected samples must be re-extracted. |

Acceptance limits are based on statistical evaluation of compiled laboratory data and are subject to change.

**Table 11-12**

**Quality Control**

**PAHs by HPLC Spike Acceptance Limits**

| Compound Name | Matrix Spike and Laboratory Control Sample Limits | |
|---|---|---|
| | Waters (%) | Soils (%) |
| Naphthalene | 37-120 | 31-162 |
| Acenapthylene | 41-135 | 39-166 |
| Acenapthene | 38-135 | 38-170 |
| Fluorene | 41-140 | 40-175 |
| Phenanthrene | 48-152 | 47-176 |
| Anthracene | 42-143 | 38-164 |
| Fluoranthene | 48-155 | 48-167 |
| Pyrene | 51-146 | 42-162 |
| Benzo(a)anthracene | 52-146 | 51-148 |
| Chrysene | 56-145 | 52-148 |
| Benzo(b)fluoranthene | 59-141 | 55-142 |
| Benzo(k)fluoranthene | 60-137 | 56-139 |
| Benzo(a)pyrene | 42-158 | 33-156 |
| Dibenzo(a,h)anthracene | 49-142 | 47-139 |
| Benzo(g,h,i)perylene | 46-148 | 40-150 |
| Indeno(1,2,3-cd)pyrene | 64-134 | 50-146 |

Acceptance limits are based on statistical evaluation of compiled laboratory data and are subject to change.

**Table 11-13**

**Quality Control**
**TPH-DRO**

| Type | Acceptance Limits(%) WATERS | SOILS | Frequency | Corrective Action |
|---|---|---|---|---|
| **Surrogate:** | | | Added to each sample, MS/MSD, blank, LCS/LCSD during the extraction phase | At least one surrogate must be in spec unless matrix related problems are evident. If matrix related problems are evident, report results and comment in case narrative. |
| Chlorobenzene | 50 - 150 | 50 - 150 | | |
| *o*-Terphenyl | 50 - 150 | 50 - 150 | | |
| **Matrix Spike:** | | | Each group (≤20) of samples per matrix/level | Reinject if surrogates appear low. If still out of spec, evaluate for matrix effect. If matrix effect, accept based on LCS data. If no matrix effect, repeat batch. |
| No. 2 Fuel: | | | | |
| 8015B | 60 - 120 | 60 - 120 | | |
| API | | | | |
| California | | | | |
| **Laboratory Control Sample:** | | | Each group ≤20 | Reinject if surrogates appear low. If still out of spec, repeat batch. |
| No. 2 Fuel | 60 - 120 | 60 - 120 | | |
| **Laboratory Control Duplicates (RPD):** | | | Each group (≤20) of samples per matrix/level | Evaluated by analyst in relationship to other QC results |
| No. 2 Fuel | ≤20% for waters and soils | | | |
| **Blanks:** | ≤LOQ for analyte | | Once per case or extraction group (≤20) of samples, each matrix, level, instrument | Inject a solvent blank first to be sure the analytical system is clean then reinject the blank itself. If the reinjected blank is acceptable, any samples extracted with this blank should be reinjected, if they, too, contain the analyte which was contaminating the blank. If the reinjected blank is unacceptable, any affected samples must be re-extracted. |

**Table 11-14**

**Quality Control**
**TPH-GRO**

| Type | Acceptance Limits(%) WATERS | SOILS | Frequency | Corrective Action |
|---|---|---|---|---|
| **Surrogate:** | | | Each sample, MS/MSD, and blank | Results would not be reported if the surrogate recovery is outside the limits unless matrix related problems are evident |
| 1-Chloro-3-fluorobenzene (FID) | 70 - 130 | 70 - 130 | | |
| trifluorotoluene (FID) | 70 - 130 | 70 - 130 | | |
| **Matrix Spike:** | | | Each group of samples of similar matrix/level (≤20) each method | Analyze LCS |
| Gasoline standard | | | | |
| 8015B | 70 - 130 | 70 - 130 | | |
| **Laboratory Control Sample** | | | Each group (≤20) when MS/MSD falls outside established limits | Reanalyze LCS and associated samples if MS/MSD fails |
| Gasoline standard | 70 - 130 | 70 - 130 | | |
| **Matrix Spike Duplicate (RPD):** | Maximum RPD 30% | Maximum RPD 30% | Each group (≤20) of samples per matrix/level | Evaluated by analyst in relationship to other QC results |
| Same compounds as matrix spikes | | | | |
| **Blanks:** | ≤LOQ for analytes | | At least one per 20 samples | Reanalyze blank and associated samples if blank is outside limits |

**Table 11-15**

**Quality Control**
**Inorganics**

| Type | Acceptance Limits (%) WATERS SOILS | Frequency | Corrective Action |
|---|---|---|---|
| **Matrix Spikes:** | **AA:** 80% to 120% except where sample conc. exceeds spike conc. by ≥4×<br>**ICP:** 75% to 125% except where sample conc. exceeds spike conc. by ≥4× | Each group of samples of similar matrix/level (≤20) each method | Analyze post-digestion spike sample |
| **Matrix Spike Duplicate (RPD):** | Same as above<br>±20% RPD | Each group of samples of similar matrix/level ( 20) each method | Analyze post-digestion spike sample if not already run for MS, flag the data |
| **Duplicates (RPD):** | ±20% RPD for sample values ≥5× LOQ | Each group of samples of similar matrix/level (≤20) each method | Flag the data |
| **Blanks:**<br>Initial Calibration (ICB)<br>Continuing Calibration (CCB) | **ICP:** <3× IDL or blank <1/10 conc. of action level and samples not ±10% of action level<br>**AA:** <LOQ | Each wavelength immediately after calibration verification at 10% frequency or every 2 hours (beginning and end of run min.)<br>Each SDG or batch (≤20 samples) | Correct problem, recalibrate, and rerun |
| Preparation Blank | ≤LOQ<br>>LOQ then lowest conc. in sample must be 20× blk. conc. | | Redigest and reanalyze blank and associated samples if sample result <20× blank result |

**Table 11-15**

**Quality Control**
**Inorganics**

| Type | Acceptance Limits (%) WATERS | SOILS | Frequency | Corrective Action |
|---|---|---|---|---|
| **Serial Dilutions (ICP & GFAA only):** | Within ±10% of the original determination | | Each group of (≤20) of similar matrix/level | Flag the data |
| **Interference Check Sample (ICP only):** | ±20% of the true value for the analytes | | Each wavelength after Initial Calibration Verification at beginning and end of the run or min. of 2× per 8 hour | Recalibrate the instrument |
| **Laboratory Control Sample:** | Aqueous 80% to 120% (except Ag and Sb) Solids commercial certified standard advisory range See Table 11-17 | | Each SDG or batch (≤20 samples), each method | Redigest and reanalyze LCS and associated samples |
| **Post Digestion Spike:** | **AA:** 85% to 115% **ICP:** 75% to 125% | | When matrix spikes are outside 80% to 120% range | Flag the data |
| **Analytical Spike:** | 85% to 115% | | One per 20 field samples | See Table 11-16A |

**Figure 11-1A**

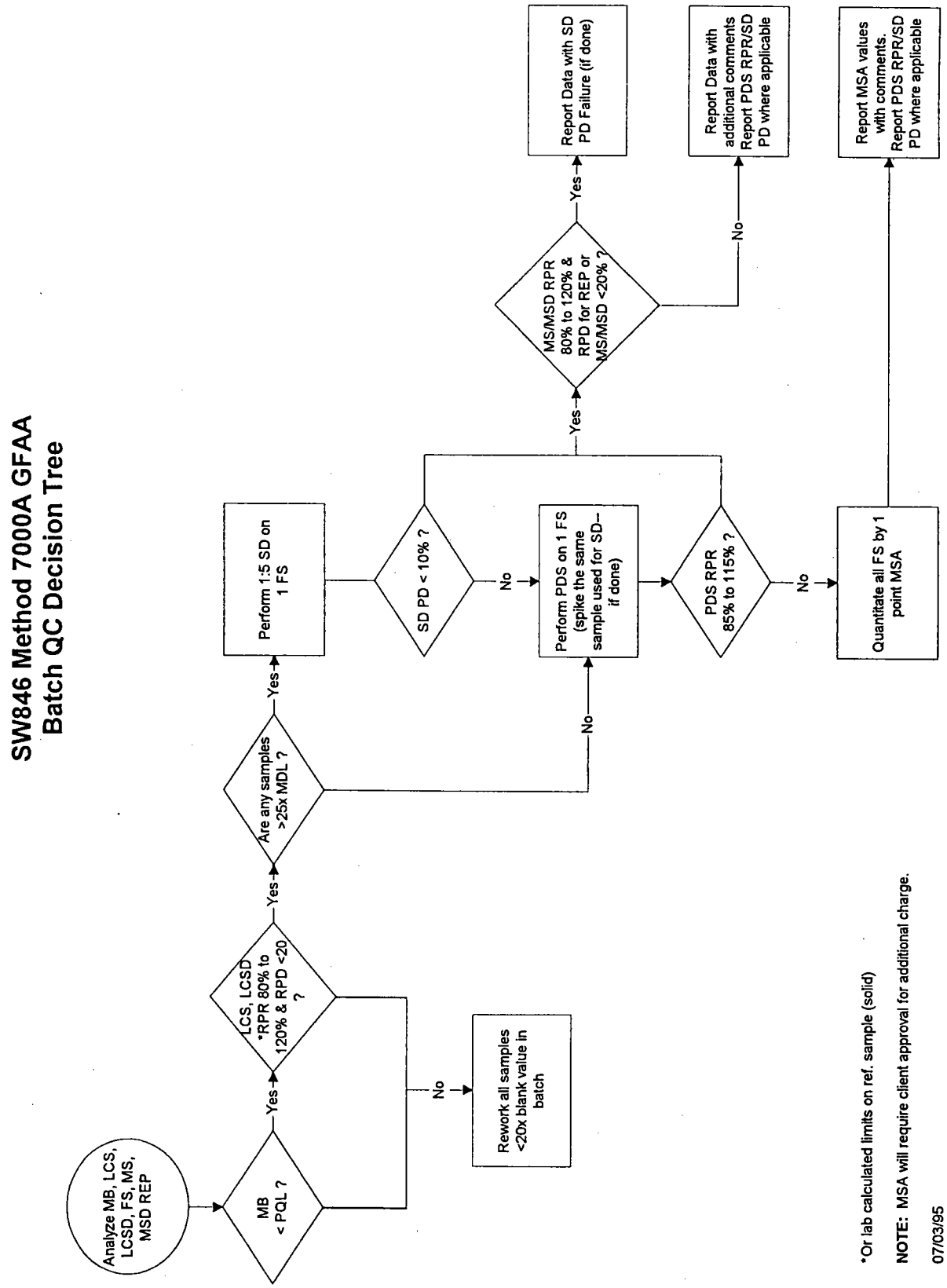
SW846 Method 7000A GFAA
Batch QC Decision Tree
Analyze MB, LCS, LCSD, FS, MS, MSD REP
MB < PQL ?
Yes
No
Rework all samples <20x blank value in batch
LCS, LCSD *RPR 80% to 120% & RPD <20 ?
Yes
Are any samples >25x MDL ?
Yes
No
Perform 1:5 SD on 1 FS
SD PD < 10% ?
No
Perform PDS on 1 FS (spike the same sample used for SD-- if done)
PDS RPR 85% to 115% ?
No
Quantitate all FS by 1 point MSA
Report MSA values with comments. Report PDS RPR/SD PD where applicable
Yes
MS/MSD RPR 80% to 120% & RPD for REP or MS/MSD <20% ?
No
Report Data with additional comments Report PDS RPR/SD PD where applicable
Yes
Report Data with SD PD Failure (if done)
*Or lab calculated limits on ref. sample (solid)
NOTE: MSA will require client approval for additional charge.
07/03/95

**Table 11-16**

ENVIRONMENTAL RESOURCE ASSOCIATES
ARVADA, COLORADO 1-800-372-0122

# Certification

## PriorityPollutnT™/CLP Inorganic Soils — Quality Control Standards

Catalog Nº PPS-46 Lot Nº 232

| Parameter | Certified Value | Performance Acceptance Limits™ |
|---|---|---|
| **TRACE METALS PriorityPollutnT™ (Catalog No 540)** | **mg/Kg** | **mg/Kg** |
| aluminum | 4500 | 2820 - 6190 |
| antimony | 38.2 | 7.41 - 81.3 |
| arsenic | 103 | 73.4 - 133 |
| barium | 170 | 126 - 214 |
| beryllium | 120 | 91.2 - 148 |
| boron | 102 | 68.8 - 135 |
| cadmium | 88.8 | 66.9 - 111 |
| calcium | 1990 | 1440 - 2530 |
| chromium | 133 | 104 - 163 |
| cobalt | 72.9 | 56.3 - 89.5 |
| copper | 85.0 | 68.0 - 102 |
| iron | 7580 | 4270 - 10900 |
| lead | 86.4 | 58.0 - 115 |
| magnesium | 1180 | 810 - 1560 |
| manganese | 187 | 147 - 228 |
| mercury | 2.86 | 1.78 - 3.94 |
| molybdenum | 96.1 | 69.8 - 122 |
| nickel | 95.5 | 72.1 - 119 |
| potassium | 2160 | 1580 - 2740 |
| selenium | 129 | 93.9 - 165 |
| silver | 117 | 84.5 - 150 |
| sodium | 392 | 258 - 526 |
| strontium | 95.6 | 65.1 - 126 |
| thallium | 105 | 55.4 - 155 |
| tin | 67.1 | 44.1 - 90.1 |
| titanium | 216 | 129 - 303 |
| vanadium | 73.5 | 47.0 - 100 |
| zinc | 71.8 | 53.4 - 90.2 |
| **CYANIDE PriorityPollutnT™ (Catalog No 541)** | **mg/Kg** | **mg/Kg** |
| total cyanide | 138 | 70.9 - 204 |

The ***Trace Metals Certified Values*** are equal to the mean recoveries for each parameter as determined in an interlaboratory round robin study. The standard was digested using various EPA methods such as Method 3050, 3051, etc. and the digest analyzed by ICP and atomic absorption spectroscopy.

The ***Cyanide Certified Value*** is equal to the mean recovery as determined in an interlaboratory round robin study. The standard was distilled and analyzed following the procedure outlined in Method 9010, SW-846.

The ***Performance Acceptance Limits (PALs™)*** are listed as guidelines for acceptable analytical results given the limitations of the USEPA methodologies commonly used to determine these parameters and closely approximate the 95% confidence interval. The PALs™ are based on data generated by your peer laboratories in ERA's InterLaB™ programs. If your result falls outside of the PALs™, ERA recommends that you investigate potential sources of error in your preparation and/or analytical procedures. For further technical assistance, call ERA at 1-800-372-0122.

For users of internal standards, ERA has determined that scandium is present in this soil at 2.2 mg/Kg and that yttrium is present at 17 mg/Kg.

**Table 11-17**

**Quality Control Acceptance Criteria**

| Parameter | Blank | Spike Recovery (%) | Duplicate RPD (%) | Lab Control Recovery |
|---|---|---|---|---|
| Phenols | <LOQ | 53 - 126 | ≤20 | 70 - 116 |
| Total Petroleum Hydrocarbons | <LOQ | 61 - 110 | ≤34 | 66 - 106% |
| TOC | <LOQ | 75 - 125 | ≤20 | Commercial certified standard advisory range |
| TOX | <LOQ | 75 - 125 | ≤20 | 90 - 110 |
| Sulfide | <LOQ | 76 - 114 | ≤20 | 85 - 110 |

**Corrective Action:** If either the LCS or Blank are outside the criteria, the QC and associated samples will be reprepped and reanalyzed.

Maximum batch size is 20 field samples.

Acceptance limits are based on statistical evaluation of compiled laboratory data and/or the referenced method and subject to change.

## 12. Performance and System Audits

System audits are conducted on each department at Lancaster Laboratories by members of the Quality Assurance Department. The audits include checks on methodology, reagent preparation, equipment calibration and maintenance, quality control results, and training of personnel. The results of the audits and corrective action, where necessary, are communicated to laboratory personnel and management by means of a written report. Audits by outside organizations including clients, regulatory personnel, and the USEPA are permitted by arrangement with the Quality Assurance Department.

The Quality Assurance Department reviews summaries of the quality control data entered onto the computerized sample management system by analysts. Control charts and statistics are reviewed for trends which may indicate problems with the analytical data. In this way, small problems are identified before they have any significant impact on laboratory results.

Performance audits consist of both intralaboratory and interlaboratory check samples. QC samples from commercial suppliers are analyzed quarterly to assess laboratory accuracy including a double blind program. The Laboratory also participates in a number of interlaboratory performance evaluation studies which involve analysis of samples with concentrations of analytes that are known to the sponsoring organization, but unknown to the laboratory. Inorganics, pesticide/herbicides, trihalomethanes, volatile organic compounds, semivolatile organic compounds, and traditional wet chemistry analyses are analyzed by Lancaster Labs for studies conducted by the USEPA and the New York Department of Health. Lancaster Labs has participated in the USEPA Contract Laboratory Program which provides laboratory analysis in support of the Superfund program. Part of maintaining this contract includes analysis of quarterly blind samples. Representative results from some of these studies are attached to this section.

Report: PE005
Page: 1
Date: 30SEP98

Performance Evaluation Report
USEPA Water Supply Study WS041

Participant ID: PA00009 Lancaster Labs Type: OTHER Requesting Office: NH

| Sample Number | Reported Value | True Value* | Acceptance Limits | Performance Evaluation |
|---|---|---|---|---|
| **TRACE METALS IN MICROGRAMS PER LITER:** | | | | |
| 001-ARSENIC | | | | |
| 001 | 67.6 | 65.6 | 58.2- 72.9 | Accept. |
| 003-CADMIUM | | | | |
| 001 | 17.7 | 18.2 | 14.6- 21.8 | Accept. |
| 004-CHROMIUM | | | | |
| 001 | 55.2 | 55.5 | 47.2- 63.8 | Accept. |
| 007-SELENIUM | | | | |
| 001 | 46.8 | 46.3 | 37- 55.6 | Accept. |
| 091-COPPER | | | | |
| 001 | 692. | 702 | 632- 772 | Accept. |
| 140-ANTIMONY | | | | |
| 001 | 31.8 | 31.4 | 22- 40.8 | Accept. |
| 141-BERYLLIUM | | | | |
| 001 | 2.44 | 2.58 | 2.19- 2.97 | Accept. |
| 142-NICKEL | | | | |
| 001 | 348. | 352 | 299- 405 | Accept. |
| 143-THALLIUM | | | | |
| 001 | 3.59 | 3.50 | 2.45- 4.55 | Accept. |
| 226-BORON | | | | |
| 002 | 819. | 790 | 736- 874 | Accept. |
| 236-MANGANESE | | | | |
| 002 | 182. | 183 | 167- 196 | Accept. |
| 237-MOLYBDENUM | | | | |
| 002 | 78.7 | 76.7 | 66.2- 86.4 | Accept. |
| 239-ZINC | | | | |
| 002 | 380. | 402 | 359- 441 | Accept. |
| **NITRATE/NITRITE/FLUORIDE IN MILLIGRAMS PER LITER:** | | | | |
| 009-NITRATE AS N | | | | |
| 001 | 12.4 | 15.0 | 13.5- 16.5 | Not Accept. |
| 010-FLUORIDE | | | | |
| 001 | 5.61 | 6.20 | 5.58- 6.82 | Accept. |
| 092-NITRITE AS N | | | | |
| 001 | 1.80 | 1.70 | 1.45- 1.96 | Accept. |
| 261-ORTHOPHOSPHATE AS P | | | | |
| 001 | 1.26 | 1.30 | 1.19- 1.39 | Accept. |
| **INSECTICIDES IN MICROGRAMS PER LITER:** | | | | |
| 011-ENDRIN | | | | |
| 001 | 0.784 | 0.789 | 0.552- 1.03 | Accept. |
| 012-LINDANE | | | | |
| 001 | 2.69 | 2.50 | 1.38- 3.63 | Accept. |

Report: PE005
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Date: 30SEP98

Performance Evaluation Report
USEPA Water Supply Study WS041

Participant ID: PA00009 Type: OTHER Requesting Office: NH

| Sample Number | Reported Value | True Value* | Acceptance Limits | Performance Evaluation |
|---|---|---|---|---|
| 013-METHOXYCHLOR | | | | |
| 001 | 26.4 | 26.8 | 14.7- 38.9 | Accept. |
| 014-TOXAPHENE | | | | |
| 002 | 7.29 | 6.90 | 3.8- 10 | Accept. |
| 093-ALACHLOR | | | | |
| 004 | 12.7 | 12.9 | 7.1- 18.7 | Accept. |
| 094-ATRAZINE | | | | |
| 004 | 14.3 | 14.5 | 7.98- 21 | Accept. |
| 095-HEPTACHLOR | | | | |
| 001 | 0.710 | 0.830 | 0.457- 1.2 | Accept. |
| 096-HEPTACHLOR EPOXIDE | | | | |
| 001 | 0.620 | 0.630 | 0.347-0.914 | Accept. |
| 097-CHLORDANE (TOTAL) | | | | |
| 003 | 2.57 | 2.90 | 1.6- 4.21 | Accept. |
| 112-HEXACHLOROCYCLOPENTADIENE | | | | |
| 001 | 1.08 | 1.93 | 0.0861- 2.58 | Accept. |
| 113-SIMAZINE | | | | |
| 004 | 13.1 | 11.8 | 3.29- 17.9 | Accept. |
| 172-HEXACHLOROBENZENE | | | | |
| 001 | 1.00 | 1.03 | 0.426- 1.23 | Accept. |
| 258-DIELDRIN | | | | |
| 001 | 0.928 | 0.920 | 0.622- 1.14 | Accept. |
| 259-PROPACHLOR | | | | |
| 001 | 5.38 | 5.02 | 3.14- 6.8 | Accept. |
| CARBAMATES IN MICROGRAMS PER LITER: | | | | |
| 098-ALDICARB | | | | |
| 001 | 35.7 | 35.3 | 26.6- 45.1 | Accept. |
| 099-ALDICARB SULFONE | | | | |
| 001 | 14.8 | 15.3 | 10.4- 17.5 | Accept. |
| 100-ALDICARB SULFOXIDE | | | | |
| 001 | 23.0 | 26.0 | 16.6- 30 | Accept. |
| 101-CARBOFURAN | | | | |
| 001 | 43.4 | 43.7 | 24- 63.4 | Accept. |
| 114-OXAMYL (VYDATE) | | | | |
| 001 | 31.8 | 33.8 | 23.6- 40.8 | Accept. |
| 245-METHOMYL | | | | |
| 001 | 217. | 238 | 187- 270 | Accept. |
| HERBICIDES IN MICROGRAMS PER LITER: | | | | |
| 015-2,4-D | | | | |
| 001 | 49.7 | 73.1 | 36.6- 110 | Accept. |
| 016-2,4,5-TP (SILVEX) | | | | |
| 001 | 21.9 | 24.1 | 12.1- 36.2 | Accept. |

Report: PE005
Performance Evaluation Report Page: 3
USEPA Water Supply Study WS041 Date: 30SEP98

Participant ID: PA00009 Type: OTHER Requesting Office: NH

| | Sample Number | Reported Value | True Value* | Acceptance Limits | Performance Evaluation |
|---|---|---|---|---|---|
| 102-PENTACHLOROPHENOL | 001 | 24.9 | 34.6 | 17.3- 51.9 | Accept. |
| 115-DALAPON | 001 | 143. | 183 | D.L. - 258 | Accept. |
| 116-DINOSEB | 001 | 13.9 | 27.6 | 0.568- 41.9 | Accept. |
| 117-PICLORAM | 001 | 47.0 | 62.1 | D.L. - 86.9 | Accept. |
| 247-DICAMBA | 001 | 94.4 | 123 | 32.1- 167 | Accept. |
| 262-ACIFLUORFEN | 001 | 71.4 | 72.1 | 25.4- 101 | Accept. |
| POLYCHLORINATED BIPHENYLS IN MICROGRAMS PER LITER: | | | | | |
| 118-DECACHLOROBIPHENYL | 001 | 1.98 | 1.80 | D.L. - 3.6 | Accept. |
| PAH'S IN MICROGRAMS PER LITER: | | | | | |
| 122-BENZO(A)PYRENE | 001 | 1.28 | 2.37 | 0.502- 2.87 | Accept. |
| 136-DI (2-ETHYLHEXYL)PHTHAL. | 001 | 16.0 | 15.3 | 6.95- 24.7 | Accept. |
| TRIHALOMETHANES IN MICROGRAMS PER LITER: | | | | | |
| 017-CHLOROFORM | 001 | 13.2 | 14.4 | 11.5- 17.3 | Accept. |
| 018-BROMOFORM | 001 | 14.5 | 16.6 | 13.3- 19.9 | Accept. |
| 019-BROMODICHLOROMETHANE | 001 | 10.7 | 12.3 | 9.84- 14.8 | Accept. |
| 020-CHLORODIBROMOMETHANE | 001 | 16.3 | 19.4 | 15.5- 23.3 | Accept. |
| 021-TOTAL TRIHALOMETHANE | 001 | 54.7 | 62.7 | 50.2- 75.2 | Accept. |
| VOLATILE ORGANIC COMPOUNDS IN MICROGRAMS PER LITER: | | | | | |
| 032-VINYL CHLORIDE | 001 | 24.1 | 22.3 | 13.4- 31.2 | Accept. |
| 034-1,1-DICHLOROETHYLENE | 001 | 6.60 | 5.25 | 3.15- 7.35 | Accept. |
| 035-1,2-DICHLOROETHANE | 001 | 15.4 | 13.7 | 11- 16.4 | Accept. |
| 036-1,1,1-TRICHLOROETHANE | 001 | 13.7 | 12.6 | 10.1- 15.1 | Accept. |

Report: PE005
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Date: 30SEP98

Performance Evaluation Report
USEPA Water Supply Study WS041

Participant ID: PA00009 Type: OTHER Requesting Office: NH

| Sample Number | Reported Value | True Value* | Acceptance Limits | Performance Evaluation |
|---|---|---|---|---|
| 037-CARBON TETRACHLORIDE | | | | |
| 001 | 15.7 | 14.2 | 11.4- 17 | Accept. |
| 038-TRICHLOROETHYLENE | | | | |
| 001 | 7.33 | 6.87 | 4.12- 9.62 | Accept. |
| 039-BENZENE | | | | |
| 001 | 19.6 | 18.7 | 15- 22.4 | Accept. |
| 040-TETRACHLOROETHYLENE | | | | |
| 001 | 10.5 | 11.5 | 9.2- 13.8 | Accept. |
| 041-1,4-DICHLOROBENZENE | | | | |
| 001 | 15.8 | 15.8 | 12.6- 19 | Accept. |
| 044-1,2 DICHLOROPROPANE | | | | |
| 001 | 15.8 | 15.4 | 12.3- 18.5 | Accept. |
| 045-1,2DIBROMO3CHLOROPROPANE | | | | |
| 003 | 0.301 | 0.451 | 0.271-0.631 | Accept. |
| 046-ETHYLENE DIBROMIDE (EDB) | | | | |
| 003 | 0.267 | 0.344 | 0.206-0.482 | Accept. |
| 047-TOLUENE | | | | |
| 001 | 19.9 | 18.7 | 15- 22.4 | Accept. |
| 048-ETHYLBENZENE | | | | |
| 001 | 15.1 | 14.7 | 11.8- 17.6 | Accept. |
| 049-CHLOROBENZENE | | | | |
| 001 | 19.3 | 18.6 | 14.9- 22.3 | Accept. |
| 053-STYRENE | | | | |
| 001 | 13.1 | 12.4 | 9.92- 14.9 | Accept. |
| 054-1,2 DICHLOROBENZENE | | | | |
| 001 | 12.7 | 11.3 | 9.04- 13.6 | Accept. |
| 055-DICHLOROMETHANE | | | | |
| 001 | 15.6 | 15.9 | 12.7- 19.1 | Accept. |
| 060-2,2-DICHLOROPROPANE | | | | |
| 002 | 13.2 | 12.7 | 9.73- 14.4 | Accept. |
| 061-1,1,2-TRICHLOROETHANE | | | | |
| 001 | 12.6 | 13.3 | 10.6- 16 | Accept. |
| 063-1,1,1,2TETRACHLOROETHANE | | | | |
| 002 | 14.9 | 15.2 | 12- 17.5 | Accept. |
| 064-1,2,3-TRICHLOROPROPANE | | | | |
| 002 | 15.5 | 14.8 | 10.2- 18 | Accept. |
| 076-1,2,4-TRICHLOROBENZENE | | | | |
| 001 | 14.6 | 14.2 | 11.4- 17 | Accept. |
| 077-1,2,3-TRICHLOROBENZENE | | | | |
| 002 | 20.6 | 18.4 | 12.7- 21.5 | Accept. |
| 081-HEXACHLOROBUTADIENE | | | | |
| 002 | 13.5 | 11.6 | 8.53- 14.5 | Accept. |
| 090-TOTAL XYLENES | | | | |
| 001 | 34.8 | 30.8 | 24.6- 37 | Accept. |

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Date: 30SEP98

Performance Evaluation Report
USEPA Water Supply Study WS041

Participant ID: PA00009 Type: OTHER Requesting Office: NH

| | Sample Number | Reported Value | True Value* | Acceptance Limits | Performance Evaluation |
|---|---|---|---|---|---|
| 152-C 1,3 DICHLOROPROPENE | | | | | |
| | 002 | 13.7 | 15.2 | 12.1- 17.4 | Accept. |
| 153-T 1,3 DICHLOROPROPENE | | | | | |
| | 002 | 13.0 | 13.7 | 10- 15.6 | Accept. |
| MISCELLANEOUS ANALYTES: | | | | | |
| 022-RESIDUAL FREE CHLORINE(MILLIGRAMS PER LITER) | | | | | |
| | 001 | 1.79 | 1.90 | 1.55- 2.32 | Accept. |
| 023-TURBIDITY(NTU'S) | | | | | |
| | 001 | 2.89 | 2.60 | 2.37- 3.31 | Accept. |
| 024-TOTAL FILTERABLE RESIDUE(MILLIGRAMS PER LITER) | | | | | |
| | 001 | 407. | 474 | 287- 826 | Accept. |
| 025-CALCIUM HARDNESS(MG. CACO3/L) | | | | | |
| | 001 | 261. | 248 | 229- 266 | Accept. |
| 026-PH-UNITS | | | | | |
| | 001 | 9.06 | 9.13 | 8.88- 9.28 | Accept. |
| 027-ALKALINITY(MG. CACO3/L) | | | | | |
| | 001 | 51.6 | 50.6 | 48- 56.7 | Accept. |
| 029-SODIUM(MILLIGRAMS PER LITER) | | | | | |
| | 001 | 23.7 | 23.3 | 21.6- 26.3 | Accept. |
| 263-TOC | | | | | |
| | 001 | 1.70 | 1.60 | 1.21- 2.05 | Accept. |
| 264-LOW-LEVEL TURBIDITY(BY BENCH-TOP, PORTABLE, OR IR INSTR.) | | | | | |
| | 002 | | Not Evaluated in this Study | | |
| | 003 | | Not Evaluated in this Study | | |
| | 004 | | Not Evaluated in this Study | | |

********** END OF DATA FOR PA00009 **********
NOTE: FOR LIMITS AND TRUE VALUES, ASSUME THREE SIGNIFICANT DIGITS.
********** END OF REPORT FOR PA00009 **********

* Based on gravimetric calculations, or a reference value when necessary.

JAN 12

LANCASTER LAB QCL
TIMOTHY OOSTDYK PHD
2425 NEW HOLLAND PIKE
LANCASTER PA 17601

Performance [illegible]
USEPA Water Pollution Study WP040

Report: EE005
Page: 1
Date: 19NOV98

Participant ID: PA00009 Type: CTHES Requesting Office: 01

| Sample Number | Reported Value | True Value* | Acceptance Limits | Warning Limits | Performance Evaluation |
|---|---|---|---|---|---|
| TRACE METALS IN MICROGRAMS/LITER | | | | | |
| 001-ALUMINUM | | | | | |
| 01 | 3040. | 3105 | 2740- 3440 | 2830- 3350 | Accept. |
| 002-ARSENIC | | | | | |
| 01 | 148. | 160 | 128- 190 | 136- 183 | Accept. |
| 003-BERYLLIUM | | | | | |
| 02 | 36.9 | 36.9 | 33.1- 42.2 | 34.2- 41 | Accept. |
| 004-CADMIUM | | | | | |
| 01 | 162. | 170 | 147- 193 | 152- 187 | Accept. |
| 01 | 697. | 700 | 654- 751 | 670- 765 | Accept. |
| 008-IRON | | | | | |
| 01 | 790. | 834 | 744- 936 | 768- 912 | Accept. |
| 009-MERCURY | | | | | |
| 01 | 1.21 | 1.15 | 0.813- 1.47 | 0.895- 1.39 | Accept. |
| 010-MANGANESE | | | | | |
| 01 | 230. | 240 | 216- 259 | 222- 254 | Accept. |
| 011-NICKEL | | | | | |
| 01 | 2490. | 2501 | 2340- 2860 | 2400- 2790 | Accept. |
| 012-LEAD | | | | | |
| 01 | 68.4 | 70.6 | 61.7- 83.3 | 64.4- 80.6 | Accept. |
| 013-SELENIUM | | | | | |
| 01 | 231. | 260 | 189- 297 | 202- 284 | Accept. |
| 014-VANADIUM | | | | | |
| 01 | 4240. | 4202 | 3880- 4640 | 3980- 4550 | Accept. |
| 015-ZINC | | | | | |
| 01 | 609. | 631 | 563- 709 | 581- 690 | Accept. |
| 016-ANTIMONY | | | | | |
| 02 | 500. | 499 | 381- 590 | 407- 564 | Accept. |
| 017-SILVER | | | | | |
| 02 | 821. | 851 | 736- 930 | 760- 906 | Accept. |
| 018-THALLIUM | | | | | |
| 02 | 830. | 841 | 747- 970 | 775- 942 | Accept. |
| 074-MOLYBDENUM | | | | | |
| 02 | 19.4 | 18.2 | 14- 22 | 15- 21 | Accept. |
| 075-STRONTIUM | | | | | |
| 02 | 302. | 301 | 263- 342 | 273- 332 | Accept. |
| 076-TITANIUM | | | | | |
| 02 | 161. | 160 | 142- 177 | 147- 173 | Accept. |
| MINERALS IN MILLIGRAMS/LITER (EXCEPT AS NOTED) | | | | | |
| 020-SPEC. COND.(UMHOS/CM AT 25 C) | | | | | |
| 01 | 490. | 525 | 471- 544 | 480- 535 | Accept. |

Report: PE005
Page: 2
Date: 15SOV98

Performance Evaluation Report
USEPA Water Pollution Study WP040

Participant ID: PA00009 Type: OTHER Requesting Office: OT

| Sample Number | Reported Value | True Value* | Acceptance Limits | Warning Limits | Performance Evaluation |
|---|---|---|---|---|---|
| 021-TDS AT 180 C | | | | | |
| 01 | 277. | 274 | 230- 337 | 243- 323 | Accept. |
| 022-TOTAL HARDNESS(AS CACO3) | | | | | |
| 01 | 99.2 | 105 | 93.3- 119 | 96.5- 116 | Accept. |
| 023-CALCIUM | | | | | |
| 01 | 28.3 | 29.0 | 25.1- 33.2 | 26.1- 32.2 | Accept. |
| 024-MAGNESIUM | | | | | |
| 01 | 7.50 | 8.00 | 7.06- 8.86 | 7.29- 8.64 | Accept. |
| 028-CHLORIDE | | | | | |
| 01 | 74.3 | 74.9 | 68.1- 81.2 | 70- 81.3 | Accept. |
| 029-FLUORIDE | | | | | |
| 01 | 0.826 | 0.860 | 0.738- 1.05 | 0.777- 1.01 | Accept. |
| 030-SULFATE | | | | | |
| 01 | 67.8 | 69.0 | 58.3- 78.4 | 60.8- 75.9 | Accept. |
| NUTRIENTS IN MILLIGRAMS/LITER | | | | | |
| 031-AMMONIA-NITROGEN | | | | | |
| 01 | 4.85 | 4.80 | 3.89- 5.84 | 4.13- 5.6 | Accept. |
| 032-NITRATE-NITROGEN | | | | | |
| 01 | 11.8 | 12.0 | 10.1- 13.9 | 10.6- 13.4 | Accept. |
| 033-ORTHOPHOSPHATE | | | | | |
| 01 | 0.578 | 0.580 | 0.496-0.669 | 0.516-0.648 | Accept. |
| 034-KJELDAHL-NITROGEN | | | | | |
| 02 | 4.37 | 5.40 | 4.02- 6.79 | 4.35- 6.45 | Accept. |
| 035-TOTAL PHOSPHORUS | | | | | |
| 02 | 3.49 | 4.00 | 3.3- 4.68 | 3.47- 4.52 | Accept. |
| DEMANDS IN MILLIGRAMS/LITER | | | | | |
| 036-COD | | | | | |
| 01 | 64.0 | 60.7 | 52.5- 73.5 | 46.5- 69.5 | Accept. |
| 037-TOC | | | | | |
| 01 | 24.8 | 24.0 | 20.7- 28.1 | 21.6- 27.2 | Accept. |
| 038-5-DAY BOD | | | | | |
| 01 | 42.2 | 37.6 | 17.7- 57.2 | 22.6- 52.2 | Accept. |
| 102-CARBONACEOUS BOD | | | | | |
| 01 | 39.0 | 31.9 | 14.5- 53.4 | 19.6- 48.3 | Accept. |
| PCB'S IN MICROGRAMS/LITER | | | | | |
| 042-PCB-AROCLOR 1232 | | | | | |
| 01 | 3.53 | 4.73 | 1.1- 7.18 | 1.88- 6.41 | Accept. |
| 046-PCB-AROCLOR 1260 | | | | | |
| 02 | 2.52 | 3.24 | 1.29- 4.6 | 1.71- 4.18 | Accept. |

Report: PE005
Page: 3
Date: 19DEC95

Performance Evaluation Report
USEPA Water Pollution Study WP040

Participant ID: PA00009 Type: CTEEF Requesting Office: OT

| Sample Number | Reported Value | True Value* | Acceptance Limits | Warning Limits | Performance Evaluation |
|---|---|---|---|---|---|
| **PCB'S IN OIL IN MILLIGRAMS/KILOGRAM** | | | | | |
| 099-PCB IN OIL- 1016/1242 | | | | | |
| 02 | 34.7 | 38.7 | 3.96- 57.2 | 10.8- 50.3 | Accept. |
| 100-PCB IN OIL- 1254 | | | | | |
| 01 | 22.2 | 24.0 | D.L. - 40.2 | 3.97- 34.9 | Accept. |
| **PESTICIDES IN MICROGRAMS/LITER** | | | | | |
| 050-DDE | | | | | |
| 01 | 3.20 | 3.64 | 1.74- 5.1 | 2.16- 4.68 | Accept. |
| 051-DDT | | | | | |
| 01 | 6.79 | 8.42 | 2.61- 12.7 | 3.89- 11.5 | Accept. |
| 052-HEPTACHLOR | | | | | |
| 01 | 1.60 | 2.49 | 0.837- 3.41 | 1.16- 3.08 | Accept. |
| 053-CHLORDANE | | | | | |
| 02 | 3.11 | 4.81 | 2.08- 6.8 | 2.68- 6.2 | Accept. |
| 078-HEPTACHLOR EPOXIDE | | | | | |
| 01 | 1.37 | 1.98 | 1.13- 2.42 | 1.29- 2.26 | Accept. |
| **VOLATILE HALOCARBONS IN MICROGRAMS/LITER** | | | | | |
| 054-1,2 DICHLOROETHANE | | | | | |
| 01 | 15.8 | 14.6 | 9.85- 18.5 | 10.9- 17.4 | Accept. |
| 055-CHLOROFORM | | | | | |
| 01 | 19.0 | 18.4 | 13.7- 21.7 | 14.7- 20.7 | Accept. |
| 056-1,1,1 TRICHLOROETHANE | | | | | |
| 01 | 33.8 | 32.8 | 22.2- 41.1 | 24.6- 38.7 | Accept. |
| 057-TRICHLOROETHENE | | | | | |
| 01 | 23.2 | 23.4 | 15.6- 29.8 | 17.4- 28 | Accept. |
| 058-CARBONTETRACHLORIDE | | | | | |
| 01 | 27.0 | 26.3 | 16.3- 32.9 | 18.3- 30.8 | Accept. |
| 059-TETRACHLOROETHENE | | | | | |
| 01 | 32.3 | 32.5 | 21.6- 39.5 | 23.8- 37.2 | Accept. |
| 060-BROMODICHLOROMETHANE | | | | | |
| 01 | 17.7 | 16.5 | 10.9- 19.8 | 12- 18.7 | Accept. |
| 061-DIBROMOCHLOROMETHANE | | | | | |
| 01 | 30.9 | 32.7 | 21.4- 40.6 | 23.8- 38.2 | Accept. |
| 062-BROMOFORM | | | | | |
| 01 | 14.6 | 14.7 | 8.12- 18.7 | 9.44- 17.3 | Accept. |
| 063-METHYLENE CHLORIDE | | | | | |
| 01 | 45.4 | 44.1 | 29.7- 58.8 | 33.3- 55.1 | Accept. |
| 064-CHLOROBENZENE | | | | | |
| 01 | 24.6 | 24.7 | 17.6- 29.3 | 19- 27.8 | Accept. |

Report: PE00S
Page: 4
Date: 15NOV98

Performance Evaluation Report
USEPA Water Pollution Study WP040

Participant ID: PA00009 Type: OTHER Requesting Office: 01

| Sample Number | Reported Value | True Value* | Acceptance Limits | Warning Limits | Performance Evaluation |
|---|---|---|---|---|---|
| VOLATILE AROMATICS IN MICROGRAMS/LITER | | | | | |
| 065-BENZENE 01 | 29.1 | 25.7 | 21.9- 33.7 | 23.4- 32.2 | Accept. |
| 066-ETHYLBENZENE 01 | 42.3 | 42.6 | 29.9- 54 | 32.9- 50.9 | Accept. |
| 067-TOLUENE 01 | 33.9 | 32.3 | 23.9- 39.8 | 25.9- 37.8 | Accept. |
| [illegible] | | | | | |
| MISCELLANEOUS ANALYTES | | | | | |
| 019-PH-UNITS 01 | 8.54 | 8.60 | 8.31- 8.92 | 8.38- 8.84 | Accept. |
| 071-TOTAL CYANIDE(IN MG/L) 01 | 0.122 | 0.140 | 0.089-0.184 | 0.101-0.172 | Accept. |
| 072-NON-FILTERABLE RESIDUE(IN MG/L) 01 | 54.2 | 64.0 | 12.4- 80.7 | 20.9- 72.1 | Accept. |
| 073-OIL AND GREASE (FREON EXTRACTION)(IN MG/L) 01 | 14.3 | 19.1 | 5.9- 27.5 | 8.78- 24.6 | Accept. |
| 097-TOTAL PHENOLICS(IN MG/L) 01 | .0405 | 0.0668 | 0.0261-0.108 | 0.0367-0.097 | Accept. |
| 098-TOTAL RESIDUAL CHLORINE(IN MG/L) 01 | 1.06 | 0.930 | 0.811- 1.32 | 0.878- 1.25 | Accept. |
| 104-OIL AND GREASE (HEXANE EXTRACTION)(IN MG/L) 01 | 16.1 | 19.1 | 5.65- 28.7 | 8.82- 25.6 | Accept. |

********** END OF DATA FOR PA00009 **********
NOTE: FOR LIMITS AND TRUE VALUES, ASSUME THREE SIGNIFICANT DIGITS.
********** END OF REPORT FOR PA00009 **********

* Based on gravimetric calculations, or a reference value when necessary.

## 13. Preventive Maintenance

In order to ensure timely production of data, Lancaster Laboratories schedules routine preventive maintenance of instruments based on manufacturer's recommendations. Maintenance of the laboratory instruments is the responsibility of the technical group using the equipment in conjunction with our in-house Equipment Maintenance Group. A schedule of routinely performed instrument maintenance tasks is attached as Table 13-1. All preventive maintenance, as well as maintenance performed as corrective action, is recorded in instrument logs.

Critical spare parts are kept in supply at the laboratory by the Equipment Maintenance Group. Most items not kept in stock at the laboratory are available through overnight delivery from the manufacturer. In addition, Lancaster Labs maintains multiple numbers of most of the critical instruments used in our laboratory operations. A recent equipment inventory may be found in the *Qualification Manual*. Because we are a large laboratory with redundant capacity, the problems of instrument downtime are minimized.

**Table 13-1**

**Preventive Maintenance Schedule**

| Instrument | Preventive Maintenance | Frequency |
|---|---|---|
| GC/MS | Change septum | Weekly or AN* |
| | Check fans | Monthly |
| | Check cool flow | Monthly |
| | Clean source | Bimonthly or AN |
| | Change oil in vacuum pump | Semiannually |
| | Change oil in turbo pump | Semiannually |
| GC Volatiles | Check propanol level | Semiweekly or AN |
| | Check all flows | Prior to calib. or AN |
| | Conductivity detector maintenance: | AN |
| | Clean cell | AN |
| | Change reaction tube | AN |
| | Change Teflon line | AN |
| | Change resin | AN |
| | Replace trap | AN |
| | Column maintenance | AN |
| | Change PID lamp | AN |
| | Precalibration instrument settings check | Prior to each calibration |
| GC | Septum change | Each run |
| | Column maintenance | AN |
| | Clean detector | AN |
| | Vacuum filters | Semiannually |
| | Leak check ECDs | Semiannually |
| Flame AA and Hydride Generation AA | Rinse burner head, chamber and trap | AN: Min. Weekly |
| | Clean nebulizer | Weekly |
| | Inspect tubing and O-rings | Monthly |
| | Replace lamp | AN |
| GFAA | Rinse workhead assembly | Weekly |
| | Clean windows | Weekly |
| | Replace probe tubing | AN |
| | Check rinse bottle & drain | Daily |
| Cold Vapor AA | Change drying tube | Daily |
| | Replace pump tubing | AN: Min. weekly |
| | Lubricate pump head | Weekly |
| | Lubricate autosampler | Weekly |
| | Inspect optical cell and windows | Monthly |
| | Clean | AN |
| ICP | Clean torch | AN |
| | Clean nebulizer & spray chamber | AN |
| | Replace pump winding | Check Daily |
| | Lubricate autosampler | Check Daily |
| | Check mirror | Daily |
| | Checking tubing to torch | Daily |
| | Check fan filters, clean if needed | Weekly |
| | Check cool flow, clean if needed | Weekly |
| | Check water filter, replace if needed | Quarterly |

**Table 13-1**

**Preventive Maintenance Schedule**

| Instrument | Preventive Maintenance | Frequency |
|---|---|---|
| Autoanalyzer | Clean sample probe | AN |
| | Clean proportioning pump | Weekly |
| | Inspect pump tubing, replace if worn | AN |
| | Clean wash receptacles | Monthly |
| | Inspect condition of distillation head | Monthly |
| Infrared Spectrometer (FTIR) | Check on-demand diagnostics | Quarterly |
| | Check wavenumber with polystyrene film | Quarterly |
| | Change dessicant | Quarterly |
| HPLC | Pump lubrication | Annually |
| | Check pump seals | Annually |
| | Check valves cleaned or rebuilt | AN |
| | Detector maintenance: | AN |
| | Bulb replacement and adjustment | |
| | Flow cell cleaning | |
| | Routine column maintenance | AN |
| | Replace Teflon lines | AN |
| | Autosampler septa replacement | AN |
| | In-line filter sonication/cleaning | AN |
| | System pasivation | AN |
| | PCRS pump lubrication | AN |
| Total Organic Carbon Analyzer | Check IR zero | AN |
| | Check for leaks | AN |
| | Check acid pump calib. | Bimonthly |
| | Check persulfate pump calibration | Bimonthly |
| | Inspect 6-port rotary valve | AN |
| | Inspect sample pump head | AN |
| | Wash molecular sieve | AN |
| | Check sample loop calibration | Monthly |
| | Clean gas permeation tube | AN |
| | Inspect digestion vessel O-rings | AN |
| | Check activated carbon scrubber | AN |
| | Dust back and clean circuit boards | AN |
| | Check IR cell | AN |
| Total Organic Halogen Analyzer | Polish counter electrode | Daily |
| | Polish sensor electrode | Biweekly |
| | Clean loaders and pistons | Biweekly |
| | Replace agar bridge | Monthly |

* AN means as needed. Any of these items may be performed more frequently if response during operation indicates this is necessary.

## 14. Specific Routine Procedures Used to Assess Data Precision, Accuracy, and Completeness

Precision - Precision refers to the reproducibility of a method when it is repeated on a second aliquot of the same sample. The degree of agreement is expressed as the relative percent difference (RPD). The RPD will be calculated according to the following equation:

$$RPD = \frac{|D_2 - D_1|}{(D_1 + D_2) / 2} \times 100$$

Where:

$D_1$ = First sample value

$D_2$ = Second sample value (Duplicate)

Duplicates will be run on at least 5% of the samples. Acceptance criteria shall be based on statistical evaluation of past lab data. (See Section No. 11.) All quality control sample results are entered into the computer and compared with acceptance limits. In addition, there is a monthly review of values on the computer QC system. Data obtained from quality control samples is entered onto our computer system which charts the data and calculates a mean and standard deviation on a monthly basis. The Quality Assurance Department then reviews this data for trends which may indicate analytical problems. The control charts are graphical methods for monitoring precision and bias over time.

Accuracy - Accuracy refers to the agreement between the amount of a compound measured by the test method and the amount actually present. Accuracy is usually expressed as a percent recovery (R). Recoveries will be calculated according to the following equations:

$$Surrogate\ \text{Recovery} = \frac{Qd}{Qa} \times 100$$

Where:

Qd = Quantity determined by analysis

Qa = Quantity added to sample

$$Matrix\ Spike\ \text{Recovery} = \frac{SSR - SR}{SA} \times 100$$

Where:

SSR = Spiked sample results

SR = Sample results

SA = Spike added

$$Laboratory\ Control\ Sample\ \text{Recovery} = \frac{LCS\ Found}{LCS\ True} \times 100$$

Surrogate standards are added to each sample analyzed for organics. Spikes and laboratory control samples will be run on at least 5% of the samples (each batch or SDG, ≤20 samples). Refer to Section 11 for acceptance criteria for accuracy. The computer is programmed to compare the individual values with the acceptance limits and inform the analyst if the results meet specification. If the results are not within the acceptance criteria, corrective action suitable to the situation will be taken. This may include, but is not limited to, checking calculations and instrument performance, reanalysis of the associated samples, examining other QC analyzed with the same batch of samples, and qualifying results with documentation of any QC problems in the case narrative.

Commercial quality control materials are run at least quarterly to ensure accuracy of the analytical procedure. Repetitive analysis of a reference material will also yield precision data. Accuracy information determined from reference materials is valuable because variables specific to sample matrix are eliminated.

The QC program is capable of charting data for surrogates, spikes, control materials, and reference materials. The Quality Assurance Department reviews these charts for any indication of possible problems (i.e., shift in the mean and standard deviation).

Completeness - Completeness is the percentage of valid data acquired from a measurement system compared to the amount of valid measurements that were planned to be collected. The objective is analysis of all samples submitted intact, and to ensure that sufficient sample weight/volume is available should the initial analysis not meet acceptance criteria. The laboratory's sample management system will assign a unique identification number to the sample which tracks and controls movement of samples from the time of receipt until disposal. All data generated will be recorded referencing the corresponding sample identification number. The completeness of an analysis can be documented by including in the data deliverables sufficient information to allow the data user to assess the quality of the results. This information will include, but is not limited to, summaries of QC data and sample results, chromatograms, spectra, and instrument tune and calibration data. Additional information will be stored in the laboratory's archives, both hard copy and magnetic tape.

$$Completeness = \frac{Number\ of\ valid\ measurements}{Total\ measurements\ needed} \times 100$$

Method Detection Limit - It is important to ascertain the limit of quantitation that can be achieved by a given method, particularly when the method is commonly used to determine trace levels of analyte. The Environmental Protection Agency has set forth one method for determining method detection limits (MDLs) from which limits of quantitation (LOQs) can be extrapolated.

MDL is defined as follows for all measurements:

Where:

$$MDL = t_{(n-1,1-a=0.99)} \times s$$

MDL = Method detection limit

s = Standard deviation of the replicate analyses

$t_{(n-1,1-a=0.99)}$ = Students' t-value for a one-sided 99% confidence level and a standard deviation estimate with n-1 degrees of freedom

Definitions:

Method detection limit (MDL) - The method detection limit is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. It is determined from analysis of a sample in a given matrix containing the analyte.

Limit of quantitation (LOQ) - The limit of quantitation is defined as the level above which quantitative results may be obtained with a specified degree of confidence. The EPA recommends setting quantitation limits at a value of 5× to 10× the MDL.

A list of MDLs and LOQs determined for each sample matrix type will be kept on file in the QA department. MDLs will be verified on an annual basis.

## 15. Corrective Action

Whenever any of the data generated falls outside of the established acceptance criteria outlined for instrument tune and calibration (Section 8) and internal QC (Section 11), the cause of this irregularity must be investigated, corrected, and documented. The documentation will be used to prevent a recurrence of the problem and to inform management of the situation.

If the results are not within acceptance criteria, the appropriate corrective action will be initiated. This may include, but is not limited to, checking calculation and instrument performance, reanalysis of the associated samples, examining other QC analyzed with the same batch of samples, and qualifying results with a comment stating the observed deviation.

A standard operating procedure is in place which outlines the procedures to be followed when quality control data for an analysis falls outside of previously established acceptance limits. All QC data must be entered onto the computerized QC system promptly after its generation and daily "out-of-spec" data is reported via this system. Any data outside the acceptance criteria will be reviewed by the Quality Assurance Department. Where appropriate, the Quality Assurance Department will place outliers in one of three categories:

A. Marginal Outlier - Data that are outside the 95% confidence interval but within the 99% confidence interval. This category may also be used for QC samples subject to matrix interferences or sample inhomogeneity.

B. Outlier - Data outside the 99% confidence interval and/or observable trends such as a shift in mean and standard deviation.

C. Extreme Outlier - Such data would indicate the system is out of control and no results should be reported to clients; an example would be more than one reference or control falling outside the 99% confidence interval.

The daily out-of-spec reports are then distributed to group leaders or their QC coordinator who will check all supporting data and document their findings and any corrective action taken. Documentation of QC data will be filed in the

departmental QC notebook. In the case of outliers or extreme outliers, the Quality Assurance Department may issue a formal request for investigation and corrective action (see sample form that follows). The Quality Assurance Department is responsible for initiating the corrective actions, insuring that the actions are taken in a timely manner, and that the desired results are produced. The QA Department will circulate all completed Investigation and Corrective Action forms to the appropriate manager.

The Quality Assurance Department is also responsible for conducting periodic audits which ensure compliance with laboratory SOPs and assist in identifying and correcting any deficiencies. These audits may entail observation as procedures are carried out or a review of records to demonstrate traceability and compliance with all documented record keeping procedures. The QA Department will then issue a written report which summarizes the audit. The technical centers must respond in writing to the audit report within 30 days of report receipt. The response will address the corrective action that needs to be taken along with an expected completion date. Audit results and the corresponding response are communicated to laboratory personnel and management. Follow-up audits verify that proper corrective action has been taken for the identified discrepancy.

**Figure 15-1A**

Lancaster Laboratories
2425 New Holland Pike • Lancaster, PA 17601-5994

No. _____

## Investigation and Corrective Action Report (ICAR)

Part I - Description of the Problem (Attach additional page, if needed, in addition to supporting documentation.)

1. Date of issue:
2. LL sample number(s) involved:
3. Nature of the problem (describe in detail):

Initiated by: _____

Part II - The Investigation (Attach additional page, if needed, in addition to supporting documentation.)

1. Steps taken to investigate the problem:
2. Explanation of probable cause(s):
3. Steps taken to prevent future occurrence:
4. Must investigation be complete before reporting further data to clients? Yes No
5. In addition to the samples listed above, would any additional data already reported to clients be affected by this problem? Yes No If yes, please explain

Investigator(s): _____ Date: _____

Investigator(s): _____ Date: _____

Supervisor(s): _____ Date: _____

Supervisor(s): _____ Date: _____

Quality Assurance: _____ Date: _____

Return to QA by: _____

## 16. Quality Assurance Reports to Management

Reports of quality status from the Quality Assurance Department to management are made frequently and in various forms. All results from internal or external performance evaluation samples are circulated to management. A report of each audit performed is prepared and copied to management. Monthly summaries of data obtained from analysis of quality control check samples are generated via the computerized sample management system. These summaries include mean and standard deviation to aid in assessment of data accuracy and precision. Forms summarizing problems which require investigation and corrective action are completed by group leaders and circulated to management. Through these channels, laboratory management is kept apprised of QA/QC activities.

Any problems or unusual observations that occur during the analysis of samples for a specific project will be listed on the laboratory report and/or in the case narrative delivered with the data package. The items often discussed in this manner include samples with surrogate recovery outside of the acceptance criteria and samples with matrix problems requiring dilution and causing increased detection limits. Where applicable, any corrective action attempted or performed to address the problem will also be presented.

The laboratory will contact the client for direction regarding major problems such as samples listed on the chain of custody but missing from the shipping container, samples which arrive broken or are accidentally broken in the laboratory, and samples with severe matrix problems. The client will be contacted if it is necessary to change any item in the original project plan.

# Appendix A

## Example Reporting Forms

## Data Package Content

- Title Page
- Sample Reference
- Table of Contents
- Chain of Custody
- Laboratory Chronicle
- Methodology/Reference Summary
- Laboratory Analysis Reports
- Per Parameter:
  - Case Narrative
  - Quality Control Summary
    - Tune[1]
    - Surrogate Recovery
    - Method Blank
    - Matrix Spike/Matrix Spike Duplicate
    - Duplicate[2]
    - Standard Addition[2]
    - Serial Dilution[2]
    - Laboratory Control Sample Recovery (if applicable)
    - Interference Check[2]
    - Internal Standard[1]
  - Sample Data
    - Sample Result Summary and LOQs
    - Sample Chromatograms
    - Quantitation Reports
    - Mass Spectra[1]
    - Library Searches[1] (if applicable)
    - Confirmatory Chromatogram[3]
    - Confirmatory Quantitation Report[3]
- Standards Data
  - Initial Calibration Summary Forms
  - Initial Calibration Data
  - Continuing Calibration Summary Forms
  - Continuing Calibration Data
  - Chromatograms and Quantitation Reports of Standards
  - Calibration Data for Confirmation Columns[3]
  - Calibration Curve (When quantitating against init. calib.)
  - ICAP Interference Table[2]

Raw QC Data

- BFB/DFTPP Spectra and Mass Listing[1]
- Method Blank Chromatograms, Quantitation Reports,
  - Mass Spectra[1] (GC/MS)
- Matrix Spike/Matrix Spike Duplicate Chromatograms and Quant.
- Duplicate Data Printouts[2]
- Standard Addition Data[2]
- Serial Dilution Data[2]
- Laboratory Control Sample (if applicable)
- Copy of Instrument Run Log

Extraction/Digestion Logs

Gel Permeation Chromatography (GPC), if applicable

- All Peaks Identified
- % Resolution Calculations

[1] GC/MS only
[2] Inorganics only
[3] GC only (if applicable)

*Amount of documentation is dependent upon client request.

# Lancaster Laboratories
*A division of Thermo Analytical Inc.*



**LLI Sample No. WW 2869067**
Collected:

Submitted: 2/ 4/98 Reported: 3/26/98
Discard: 4/10/98

Trace Metals - 1

EPA WP039 Proficiency Samples

Account No: 00649
Lancaster Laboratories
2425 New Holland Pike
Lancaster PA 17601-5994

P.O.
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| 1743 | Aluminum | 0.47 | 0.20 | mg/l |
| 1749 | Cadmium | 0.034 | 0.010 | mg/l |
| 1751 | Chromium | 0.214 | 0.030 | mg/l |
| 1752 | Cobalt | 0.083 | 0.050 | mg/l |
| 1753 | Copper | 0.075 | 0.025 | mg/l |
| 1754 | Iron | 0.19 | 0.10 | mg/l |
| 1755 | Lead | 1.90 | 0.10 | mg/l |
| 1758 | Manganese | 0.527 | 0.010 | mg/l |
| 1761 | Nickel | 0.734 | 0.050 | mg/l |
| 1771 | Vanadium | 1.43 | 0.020 | mg/l |
| 1772 | Zinc | 0.126 | 0.025 | mg/l |
| 7035 | Arsenic TR | 0.888 | 0.010 | mg/l |
| 7036 | Selenium TR | 0.768 | 0.010 | mg/l |
| 0243 | Aluminum | 0.52 | 0.20 | mg/l |
| 0249 | Cadmium | 0.026 | 0.010 | mg/l |
| 0251 | Chromium | 0.213 | 0.030 | mg/l |
| 0253 | Copper | 0.061 | 0.025 | mg/l |
| 0254 | Iron | 0.21 | 0.10 | mg/l |
| 0255 | Lead | 1.79 | 0.10 | mg/l |
| 0258 | Manganese | 0.496 | 0.010 | mg/l |
| 0259 | Mercury | 0.00058 | 0.00020 | mg/l |
| 0261 | Nickel | 0.645 | 0.050 | mg/l |
| 0272 | Zinc | 0.138 | 0.025 | mg/l |
| 1045 | Arsenic (furnace method) | 0.79 | 0.20 | mg/l |
| 1064 | Selenium (furnace method) | 0.64 | 0.25 | mg/l |

1 COPY TO Lancaster Laboratories, Inc. ATTN: Ms. Sue Shorter

Questions? Contact your Client Services Representative
Kay G. Hower at (717) 656-2300
19:28:31 D 0001 20 601254
609 15.00 00041600 ASR000

Respectfully Submitted
Ramona V. Layman
Manager, Metals/Data Deliv.

MEMBER ACIL
Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
A division of Thermo Analytical Inc.



**LLI Sample No. WW 2869072**
Collected:

Submitted: 2/ 4/98 Reported: 3/26/98
Discard: 4/10/98

Demand - 1

EPA WP039 Proficiency Samples

Account No: 00649
Lancaster Laboratories
2425 New Holland Pike
Lancaster PA 17601-5994

P.O.
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| 0273 | Total Organic Carbon | 74.2 | 1.0 | mg/l |
| | The Total Organic Carbon (TOC) result reported above was determined by measuring total carbon by a persulfate digestion/infrared detection method on an acidified sample which has been purged of inorganic carbon using nitrogen. It represents "non-purgeable TOC". | | | |
| 0235 | Biochemical Oxygen Demand | 126. | 2.0 | mg/l |
| 1364 | Carbonaceous BOD | 128. | 2.0 | mg/l |
| 4001 | Chemical Oxygen Demand | 198. | 50. | mg/l |

1 COPY TO Lancaster Laboratories, Inc. ATTN: Ms. Sue Shorter

Questions? Contact your Client Services Representative
Kay G. Hower at (717) 656-2300
19:31:04 D 0001 20 601254
609 0.00 00012600 ASR000

Respectfully Submitted
Ramona V. Layman
Manager, Metals/Data Deliv.

MEMBER ACIL
Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
A division of Thermo Analytical Inc.



**LLI Sample No. WW 2869077**
Collected:

Submitted: 2/ 4/98 Reported: 3/26/98
Discard: 4/10/98

Pesticides - 1

EPA WP039 Proficiency Samples

Account No: 00649
Lancaster Laboratories
2425 New Holland Pike
Lancaster PA 17601-5994

P.O.
Rel.

| CAT NO. | ANALYSIS NAME | AS RECEIVED RESULTS | LIMIT OF QUANTITATION | UNITS |
|---|---|---|---|---|
| Pesticides/PCB's in Water | | | | |
| 1902 | Alpha BHC | < 0.010 | 0.010 | ug/l |
| 1903 | Beta BHC | < 0.010 | 0.010 | ug/l |
| 0453 | Gamma BHC - Lindane | < 0.010 | 0.010 | ug/l |
| 1904 | Delta BHC | < 0.010 | 0.010 | ug/l |
| 0454 | Heptachlor | 0.61 | 0.10 | ug/l |
| 0455 | Aldrin | 0.97 | 0.10 | ug/l |
| 1905 | Heptachlor Epoxide | 0.50 | 0.10 | ug/l |
| 1906 | DDE | 1.53 | 0.10 | ug/l |
| 1907 | DDD | 2.01 | 0.10 | ug/l |
| 0478 | DDT | 2.51 | 0.10 | ug/l |
| 0469 | Dieldrin | 1.66 | 0.10 | ug/l |
| 0477 | Endrin | < 0.010 | 0.010 | ug/l |
| 1908 | Chlordane | < 0.30 | 0.30 | ug/l |
| 1909 | Toxaphene | < 4.0 | 4.0 | ug/l |
| 1910 | Endosulfan I | < 0.010 | 0.010 | ug/l |
| 1911 | Endosulfan II | < 0.010 | 0.010 | ug/l |
| 1912 | Endosulfan Sulfate | < 0.030 | 0.030 | ug/l |
| 0638 | Endrin Aldehyde | < 0.10 | 0.10 | ug/l |
| 1913 | PCB-1016 | < 1.0 | 1.0 | ug/l |
| 1914 | PCB-1221 | < 1.0 | 1.0 | ug/l |
| 1915 | PCB-1232 | < 1.0 | 1.0 | ug/l |
| 1916 | PCB-1242 | < 1.0 | 1.0 | ug/l |
| 1917 | PCB-1248 | < 1.0 | 1.0 | ug/l |
| 1918 | PCB-1254 | < 1.0 | 1.0 | ug/l |
| 1919 | PCB-1260 | < 1.0 | 1.0 | ug/l |

Questions? Contact your Client Services Representative
Kay G. Hower at (717) 656-2300

Respectfully Submitted
Jenifer E. Hess, B.S.
Group Leader Pesticides/PCBs

MEMBER ACIL
Lancaster Laboratories
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

# WATER VOLATILE SURROGATE RECOVERY

2A

Lab Name: LANCASTER LABS SDG No: MOY01

| | EPA SAMPLE NO. | S1 (DBFM) # | S2 (DCA) # | S3 (TOL) # | S4 (BFB) # | OTHER | TOTAL OUT |
|---|---|---|---|---|---|---|---|
| 01 | MLCHR | 106 | 98 | 100 | 101 | | |
| 02 | MLCHRMS | 112 | 104 | 104 | 105 | | |
| 03 | MLCHRMSD | 108 | 102 | 100 | 100 | | |
| 04 | MLTBN | 108 | 102 | 101 | 103 | | |
| 05 | | | | | | | |
| 06 | LAB QC | | | | | | |
| 07 | VBLKJ13 | 100 | 102 | 98 | 92 | | |
| 08 | VBLKJ17 | 106 | 98 | 100 | 100 | | |
| 09 | LCSJ13 | 99 | 104 | 98 | 94 | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |
| 23 | | | | | | | |
| 24 | | | | | | | |
| 25 | | | | | | | |

| | | | | QC LIMITS |
|---|---|---|---|---|
| S1 | (DBFM) | = | Dibromofluoromethane | 86 - 118 |
| S2 | (DCA) | = | 1,2-Dichloroethane-d4 | 80 - 120 |
| S3 | (TOL) | = | Toluene-d8 | 88 - 110 |
| S4 | (BFB) | = | 4-Bromofluorobenzene | 86 - 115 |

\# Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out



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A subsidiary of Thermo TerraTech Inc., a Thermo Electron company

5A

# VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

Lab File ID: >JAMT7 BFB Injection Date: 04/22/98

Instrument ID: HP03047 BFB Injection Time: 18:39

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 16.6 |
| 75 | 30.0 - 60.0% of mass 95 | 44.0 |
| 95 | Base peak, 100% relative abundance | 100. |
| 96 | 5.0 - 9.0% of mass 95 | 7.1 |
| 173 | Less than 2.0% of mass 174 | 0.0 ( 0.0)1 |
| 174 | Greater than 50.0% of mass 95 | 50.2 |
| 175 | 5.0 - 9.0% of mass 174 | 3.6 ( 7.2)1 |
| 176 | Greater than 95.0%, but less than 101.0% of mass 174 | 48.0 ( 95.7)1 |
| 177 | 5.0 - 9.0% of mass 176 | 3.3 ( 7.0)2 |

1-Value is % mass 174 2-Value is % mass 176

HIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | VSTD050 | 050 PPB IC | >JAMID | 04/22/98 | 20:48 |
| 02 | VSTD100 | 100 PPB IC | >JAMIE | 04/22/98 | 21:24 |
| 03 | VSTD300 | 300 PPB IC | >JAMIF | 04/22/98 | 21:59 |
| 04 | VSTD004 | 004 PPB IC | >JAMIG | 04/23/98 | 01:02 |
| 05 | VSTD010 | 010 PPB IC | >JAMIH | 04/23/98 | 02:13 |
| 06 | VSTD020 | 020 PPB IC | >JAMII | 04/23/98 | 03:08 |
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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKI05

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

Matrix: (soil/water) SOIL Lab Sample ID: VBLKI05

Sample wt/vol: 10.0 (g/mL) G Lab File ID: >IAQB1

Level: (low/med) MED Date Received: _____.

% Moisture: not dec. _____ Date Analyzed: 04/26/98

Column: (pack/cap) CAP Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) | MDL UG/KG | Q |
|---|---|---|---|---|
| 75-71-8 | Dichlorodifluoromethane | | 250 | U |
| 74-87-3 | Chloromethane | | 250 | U |
| 75-01-4 | Vinyl Chloride | | 250 | U |
| 74-83-9 | Bromomethane | | 380 | U |
| 75-00-3 | Chloroethane | | 380 | U |
| 75-69-4 | Trichlorofluoromethane | | 250 | U |
| 107-02-8 | Acrolein | | 2500 | U |
| 75-35-4 | 1,1-Dichloroethene | | 250 | U |
| 76-13-1 | Freon 113 | | 250 | U |
| 67-64-1 | Acetone | | 880 | U |
| 75-15-0 | Carbon Disulfide | | 380 | U |
| 75-09-2 | Methylene Chloride | | 250 | U |
| 107-13-1 | Acrylonitrile | | 1200 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 250 | U |
| 75-65-0 | t-Butyl Alcohol | | 2500 | U |
| 1634-04-4 | Methyl t-Butyl Ether | | 120 | U |
| 75-34-3 | 1,1-Dichloroethane | | 120 | U |
| 594-20-7 | 2,2-Dichloropropane | | 120 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 250 | U |
| 78-93-3 | 2-Butanone | | 880 | U |
| 74-97-5 | Bromochloromethane | | 120 | U |
| 67-66-3 | Chloroform | | 120 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 120 | U |
| 56-23-5 | Carbon Tetrachloride | | 120 | U |
| 563-58-6 | 1,1-Dichloropropene | | 120 | U |
| 71-43-2 | Benzene | | 120 | U |
| 107-06-2 | 1,2-Dichloroethane | | 250 | U |
| 79-01-6 | Trichloroethene | | 120 | U |
| 78-87-5 | 1,2-Dichloropropane | | 380 | U |
| 74-95-3 | Dibromomethane | | 120 | U |
| 75-27-4 | Bromodichloromethane | | 250 | U |
| 110-75-8 | 2-Chloroethyl Vinyl Ether | | 250 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 120 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | | 380 | U |
| 108-88-3 | Toluene | | 120 | U |

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKI05

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

Matrix: (soil/water) SOIL Lab Sample ID: VBLKI05

Sample wt/vol: 10.0 (g/mL) G Lab File ID: >IAQB1

Level: (low/med) MED Date Received: _____.

% Moisture: not dec. _____ Date Analyzed: 04/26/98

Column: (pack/cap) CAP Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) | MDL UG/KG | Q |
|---|---|---|---|---|
| 10061-02-6 | trans-1,3-Dichloropropene | | 120 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 250 | U |
| 127-18-4 | Tetrachloroethene | | 120 | U |
| 142-28-9 | 1,3-Dichloropropane | | 120 | U |
| 591-78-6 | 2-Hexanone | | 380 | U |
| 124-48-1 | Dibromochloromethane | | 120 | U |
| 106-93-4 | 1,2-Dibromoethane | | 120 | U |
| 108-90-7 | Chlorobenzene | | 120 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 250 | U |
| 100-41-4 | Ethylbenzene | | 120 | U |
| 1330-20-7 | m+p-Xylene | | 120 | U |
| 95-47-6 | o-Xylene | | 120 | U |
| 100-42-5 | Styrene | | 120 | U |
| 75-25-2 | Bromoform | | 120 | U |
| 98-82-8 | Isopropylbenzene | | 380 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 120 | U |
| 108-86-1 | Bromobenzene | | 120 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 120 | U |
| 103-65-1 | n-Propylbenzene | | 120 | U |
| 95-49-8 | 2-Chlorotoluene | | 120 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 120 | U |
| 106-43-4 | 4-Chlorotoluene | | 120 | U |
| 98-06-6 | tert-Butylbenzene | | 120 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 120 | U |
| 135-98-8 | sec-Butylbenzene | | 120 | U |
| 99-87-6 | p-Isopropyltoluene | | 120 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 250 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 250 | U |
| 104-51-8 | n-Butylbenzene | | 120 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 250 | U |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | | 250 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 120 | U |
| 87-68-3 | Hexachlorobutadiene | | 250 | U |
| 91-20-3 | Naphthalene | | 120 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | | 120 | U |

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKI05

Lab Name: LANCASTER LABS Contract: _____

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

Matrix: (soil/water) SOIL Lab Sample ID: VBLKI05

Sample wt/vol: 10.0 (g/mL) G Lab File ID: >IAQB1

Level: (low/med) MED Date Received: _____.

% Moisture: not dec. _____ Date Analyzed: 04/26/98

Column: (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | | | | | |
| 2. | | | | | |
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| 25. | | | | | |

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

Lab File ID: >JAKB1 Lab Sample ID: VBLKJ13

Date Analyzed: 04/20/98 Time Analyzed: 11:15

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: HP03047

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | TIME ANALYZED |
|---|---|---|---|---|
| 01 | LCSJ13 | LCSJ13 | >JAK06 | 15:25 |
| 02 | ESMW4DL | 2907187 | >JAK07 | 16:25 |
| 03 | VP6--DL | 2907190 | >JAK08 | 17:03 |
| 04 | VP6-- | 2907190 | >JAK09 | 17:39 |
| 05 | 47EW2 | 2907307 | >JAK10 | 18:38 |
| 06 | 47EW3 | 2907308 | >JAK11 | 19:15 |
| 07 | | | | |
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COMMENTS: _____.

_____.

8A

# VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No.: _____ SDG No.: _____.

Lab File ID (Standard): >JAKS2 Date Analyzed: 04/20/98

Instrument ID: HP03047 Time Analyzed: 10:13

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

| | | IS1(FBZ) AREA # | RT | IS2(CBZ) AREA # | RT | IS3(DCB) AREA # | RT |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 115936 | 11.16 | 82736 | 15.44 | 42201 | 18.79 |
| | UPPER LIMIT | 231872 | | 165472 | | 84402 | |
| | LOWER LIMIT | 57968 | | 41368 | | 21101 | |
| | EPA SAMPLE NO. | | | | | | |
| 01 | VBLKJ13 | 127105 | 11.16 | 92558 | 15.45 | 44749 | 18.79 |
| 02 | LCSJ13 | 131383 | 11.18 | 94445 | 15.49 | 49279 | 18.84 |
| 03 | ESMW4DL | 138204 | 11.16 | 100360 | 15.44 | 49635 | 18.78 |
| 04 | VP6--DL | 129000 | 11.16 | 93165 | 15.45 | 44978 | 18.78 |
| 05 | VP6-- | 125872 | 11.17 | 90957 | 15.44 | 44652 | 18.80 |
| 06 | 47EW2 | 137616 | 11.15 | 100123 | 15.44 | 50220 | 18.79 |
| 07 | 47EW3 | 132361 | 11.16 | 95398 | 15.45 | 47264 | 18.79 |
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| 22 | | | | | | | |

IS1 (FBZ) = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

# Column used to flag internal standard area values with an asterisk.

Lancaster Laboratories, Inc.

GC/MS Volatiles Matrix Spike/Spike Duplicate Recoveries

Unspiked: ^JAN02 | Matrix spike: ^JAN04 | Spike Duplicate: ^JAN08

MLCHR 2910334 | MLCHRMS 2910334 | MLCHRMSD 2910334

Method: 8260 5mL +SPECIALS | Matrix/Level: WL | Batch: J981101AD

Instrument: HP03047 | Dilution Factor: 1.0

| COMPOUND NAME | SPIKE LEVEL | US CONC UG/L | MS CONC UG/L | MSD CONC UG/L | MS REC % | MSD REC % | RANGE LOWER-UPPER | IN SPEC | RPD % | RPD MAX |
|---|---|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 20.00 | 0.00 | 17.02 | 17.60 | 85 | 88 | 44-150 | YES | -3 | 30.00 |
| Chloromethane | 20.00 | 0.00 | 18.73 | 17.37 | 94 | 87 | 36-150 | YES | 8 | 30.00 |
| Vinyl Chloride | 20.00 | 0.00 | 20.44 | 19.96 | 102 | 100 | 55-141 | YES | 2 | 30.00 |
| Bromomethane | 20.00 | 0.00 | 19.88 | 19.54 | 99 | 98 | 17-149 | YES | 2 | 30.00 |
| Chloroethane | 20.00 | 0.00 | 17.25 | 17.31 | 86 | 86 | 28-140 | YES | -0 | 30.00 |
| Trichlorofluoromethane | 20.00 | 0.00 | 21.75 | 11.97 | 109 | 60 | 42-151 | NO | 58 | 30.00 |
| Acrolein | 150.00 | 0.00 | 176.41 | 169.18 | 118 | 113 | 55-140 | YES | 4 | 30.00 |
| 1,1-Dichloroethene | 20.00 | 0.00 | 23.76 | 22.17 | 119 | 111 | 48-141 | YES | 7 | 30.00 |
| Acetone | 150.00 | 0.00 | 142.63 | 132.53 | 95 | 88 | 59-119 | YES | 7 | 30.00 |
| Carbon Disulfide | 150.00 | 0.00 | 215.48 | 128.90 | 144 | 86 | 36-177 | NO | 50 | 30.00 |
| Methylene Chloride | 20.00 | 0.00 | 21.93 | 20.44 | 110 | 102 | 52-133 | YES | 7 | 30.00 |
| Acrylonitrile | 150.00 | 0.00 | 174.40 | 161.66 | 116 | 108 | 69-135 | YES | 8 | 30.00 |
| trans-1,2-Dichloroethene | 20.00 | 0.00 | 23.04 | 21.25 | 115 | 106 | 46-131 | YES | 8 | 30.00 |
| t-Butyl Alcohol | 200.00 | 0.00 | 246.05 | 232.52 | 123 | 116 | 30-200 | YES | 6 | 30.00 |
| Methyl t-Butyl Ether | 20.00 | 0.00 | 22.00 | 20.64 | 110 | 103 | 30-200 | YES | 6 | 30.00 |
| 1,1-Dichloroethane | 20.00 | 0.00 | 23.24 | 21.43 | 116 | 107 | 66-125 | YES | 8 | 30.00 |
| 2,2-Dichloropropane | 20.00 | 0.00 | 25.91 | 23.88 | 130 | 119 | 74-127 | NO | 8 | 30.00 |
| cis-1,2-Dichloroethene | 20.00 | 0.00 | 23.18 | 21.81 | 116 | 109 | 69-125 | YES | 6 | 30.00 |
| 2-Butanone | 150.00 | 0.00 | 173.62 | 164.86 | 116 | 110 | 62-125 | YES | 5 | 30.00 |
| Chloroform | 20.00 | 0.00 | 21.94 | 20.60 | 110 | 103 | 79-121 | YES | 6 | 30.00 |
| Bromochloromethane | 20.00 | 0.00 | 21.12 | 20.62 | 106 | 103 | 72-119 | YES | 2 | 30.00 |
| 1,1,1-Trichloroethane | 20.00 | 0.00 | 26.00 | 24.39 | 130 | 122 | 73-132 | YES | 6 | 30.00 |
| Carbon Tetrachloride | 20.00 | 0.00 | 23.25 | 21.36 | 116 | 107 | 68-134 | YES | 8 | 30.00 |
| 1,1-Dichloropropene | 20.00 | 0.00 | 23.34 | 21.92 | 117 | 110 | 59-131 | YES | 6 | 30.00 |
| Benzene | 20.00 | 0.00 | 23.33 | 21.78 | 117 | 109 | 64-127 | YES | 7 | 30.00 |
| 1,2-Dichloroethane | 20.00 | 0.00 | 22.36 | 21.31 | 112 | 106 | 72-124 | YES | 5 | 30.00 |
| Trichloroethene | 20.00 | 0.00 | 23.70 | 22.23 | 118 | 111 | 69-130 | YES | 6 | 30.00 |
| 1,2-Dichloropropane | 20.00 | 0.00 | 22.26 | 20.70 | 111 | 103 | 71-123 | YES | 7 | 30.00 |
| Dibromomethane | 20.00 | 0.00 | 21.67 | 20.36 | 108 | 102 | 76-117 | YES | 6 | 30.00 |
| Bromodichloromethane | 20.00 | 0.00 | 22.66 | 20.48 | 113 | 102 | 65-120 | YES | 10 | 30.00 |
| 2-Chloroethyl Vinyl Ether | 20.00 | 0.00 | 7.12 | 3.96 | 36 | 20 | 30-200 | NO | 57 | 30.00 |
| cis-1,3-Dichloropropene | 20.00 | 0.00 | 22.57 | 20.98 | 113 | 105 | 71-118 | YES | 7 | 30.00 |
| 4-Methyl-2-Pentanone | 100.00 | 0.00 | 122.28 | 116.96 | 122 | 117 | 64-135 | YES | 4 | 30.00 |
| Toluene | 20.00 | 0.00 | 23.15 | 21.82 | 116 | 109 | 56-150 | YES | 6 | 30.00 |
| trans-1,3-Dichloropropene | 20.00 | 0.00 | 21.96 | 20.36 | 110 | 102 | 70-119 | YES | 8 | 30.00 |

N/C = Could not calculate

Lab Chronicle: _____ Ent. by _____

_____ Ver. by _____

* The %RPD for this compound exceeds requirements.

Lancaster Laboratories, Inc.

GC/MS Volatiles Matrix Spike/Spike Duplicate Recoveries

Unspiked: ^JAN02
MLCHR 2910334
Method: 8260 5mL +SPECIALS
Instrument: HP03047

Matrix spike: ^JAN04
MLCHRMS 2910334
Matrix/Level: WL
Dilution Factor: 1.0

Spike Duplicate: ^JAN08
MLCHRMSD 2910334
Batch: J981101AD

| COMPOUND NAME | SPIKE LEVEL | US CONC UG/L | MS CONC UG/L | MSD CONC UG/L | MS REC % | MSD REC % | RANGE LOWER-UPPER | IN SPEC | RPD % | RPD MAX |
|---|---|---|---|---|---|---|---|---|---|---|
| 1,1,2-Trichloroethane | 20.00 | 0.00 | 21.85 | 20.69 | 109 | 103 | 74-118 | YES | 5 | 30.00 |
| Tetrachloroethene | 20.00 | 0.00 | 25.21 | 23.12 | 126 | 116 | 61-148 | YES | 9 | 30.00 |
| 1,3-Dichloropropane | 20.00 | 0.00 | 22.13 | 20.81 | 111 | 104 | 72-123 | YES | 6 | 30.00 |
| 2-Hexanone | 100.00 | 0.00 | 123.48 | 121.10 | 123 | 121 | 60-136 | YES | 2 | 30.00 |
| Dibromochloromethane | 20.00 | 0.00 | 21.21 | 20.19 | 106 | 101 | 71-118 | YES | 5 | 30.00 |
| 1,2-Dibromoethane | 20.00 | 0.00 | 22.27 | 21.04 | 111 | 105 | 72-116 | YES | 6 | 30.00 |
| Chlorobenzene | 20.00 | 0.00 | 23.72 | 22.10 | 119 | 110 | 74-120 | YES | 7 | 30.00 |
| 1,1,1,2-Tetrachloroethane | 20.00 | 0.00 | 22.67 | 22.04 | 113 | 110 | 79-120 | YES | 3 | 30.00 |
| Ethylbenzene | 20.00 | 0.00 | 23.02 | 21.74 | 115 | 109 | 74-130 | YES | 6 | 30.00 |
| m+p-Xylene | 40.00 | 0.00 | 47.66 | 44.23 | 119 | 110 | 74-131 | YES | 7 | 30.00 |
| o-Xylene | 20.00 | 0.00 | 23.68 | 22.01 | 118 | 110 | 74-128 | YES | 7 | 30.00 |
| Styrene | 20.00 | 0.00 | 23.40 | 22.07 | 117 | 110 | 60-134 | YES | 6 | 30.00 |
| Bromoform | 20.00 | 0.00 | 23.85 | 21.91 | 119 | 110 | 72-115 | NO | 8 | 30.00 |
| Isopropylbenzene | 20.00 | 0.00 | 24.06 | 22.69 | 120 | 113 | 75-140 | YES | 6 | 30.00 |
| 1,1,2,2-Tetrachloroethane | 20.00 | 0.00 | 21.35 | 20.53 | 107 | 103 | 65-123 | YES | 4 | 30.00 |
| Bromobenzene | 20.00 | 0.00 | 22.65 | 21.23 | 113 | 106 | 76-120 | YES | 6 | 30.00 |
| 1,2,3-Trichloropropane | 20.00 | 0.00 | 21.95 | 20.31 | 110 | 102 | 70-121 | YES | 8 | 30.00 |
| n-Propylbenzene | 20.00 | 0.00 | 23.26 | 22.29 | 116 | 111 | 66-144 | YES | 4 | 30.00 |
| 2-Chlorotoluene | 20.00 | 0.00 | 22.63 | 21.40 | 113 | 107 | 70-128 | YES | 6 | 30.00 |
| 1,3,5-Trimethylbenzene | 20.00 | 0.00 | 24.05 | 23.05 | 120 | 115 | 71-132 | YES | 4 | 30.00 |
| 4-Chlorotoluene | 20.00 | 0.00 | 22.98 | 21.74 | 115 | 109 | 67-130 | YES | 6 | 30.00 |
| tert-Butylbenzene | 20.00 | 0.00 | 24.61 | 23.53 | 123 | 118 | 72-134 | YES | 4 | 30.00 |
| 1,2,4-Trimethylbenzene | 20.00 | 0.00 | 23.94 | 22.75 | 120 | 114 | 66-130 | YES | 5 | 30.00 |
| sec-Butylbenzene | 20.00 | 0.00 | 24.02 | 22.97 | 120 | 115 | 70-135 | YES | 4 | 30.00 |
| p-Isopropyltoluene | 20.00 | 0.00 | 23.20 | 22.25 | 116 | 111 | 76-139 | YES | 4 | 30.00 |
| 1,3-Dichlorobenzene | 20.00 | 0.00 | 22.73 | 21.66 | 114 | 108 | 76-119 | YES | 5 | 30.00 |
| 1,4-Dichlorobenzene | 20.00 | 0.00 | 22.74 | 21.76 | 114 | 109 | 75-119 | YES | 4 | 30.00 |
| n-Butylbenzene | 20.00 | 0.00 | 22.68 | 22.08 | 113 | 110 | 66-144 | YES | 3 | 30.00 |
| 1,2-Dichlorobenzene | 20.00 | 0.00 | 23.24 | 22.05 | 116 | 110 | 73-121 | YES | 5 | 30.00 |
| 1,2-Dibromo-3-Chloropropane | 20.00 | 0.00 | 21.80 | 20.26 | 109 | 101 | 46-127 | YES | 7 | 30.00 |
| 1,2,4-Trichlorobenzene | 20.00 | 0.00 | 23.44 | 22.93 | 117 | 115 | 57-128 | YES | 2 | 30.00 |
| Hexachlorobutadiene | 20.00 | 0.00 | 22.30 | 19.83 | 112 | 99 | 67-155 | YES | 12 | 30.00 |
| Naphthalene | 20.00 | 0.00 | 25.90 | 23.81 | 130 | 119 | 22-149 | YES | 8 | 30.00 |
| 1,2,3-Trichlorobenzene | 20.00 | 0.00 | 26.51 | 26.04 | 132 | 130 | 44-134 | YES | 2 | 30.00 |

N/C = Could not calculate

Lab Chronicle: _____ Ent. by _____

_____ Ver. by _____

* The %RPD for this compound exceeds requirements.

Lancaster Laboratories, Inc.

GC/MS Volatiles Laboratory Control Sample Recovery

File: ^JAK06 Injected: 04/20/98 at 15:25 Method: 8260 5mL +SPEC

Inst: HP03047 Sample: LCSJ13 LCSJ13 Matrix/level: WL

Dilution Factor: 1.0 Batch: J981101AA

| COMPOUND NAME | SPIKE LEVEL | LCS CONC UG/L | LCS REC % | RANGE LOWER-UPPER | IN SPEC |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 20.00 | 21.03 | 105 | 57- 144 | YES |
| Chloromethane | 20.00 | 20.24 | 101 | 58- 156 | YES |
| Vinyl Chloride | 20.00 | 22.05 | 110 | 74- 134 | YES |
| Bromomethane | 20.00 | 23.87 | 119 | 30- 154 | YES |
| Chloroethane | 20.00 | 22.35 | 112 | 38- 142 | YES |
| Trichlorofluoromethane | 20.00 | 32.96 | 165 | 73- 130 | NO |
| Acrolein | 150.00 | 132.03 | 88 | 22- 169 | YES |
| 1,1-Dichloroethene | 20.00 | 22.74 | 114 | 38- 153 | YES |
| Acetone | 150.00 | 162.53 | 108 | 57- 117 | YES |
| Carbon Disulfide | 150.00 | 168.38 | 112 | 41- 186 | YES |
| Methylene Chloride | 20.00 | 20.93 | 105 | 57- 132 | YES |
| Acrylonitrile | 150.00 | 161.08 | 107 | 65- 132 | YES |
| trans-1,2-Dichloroethene | 20.00 | 21.38 | 107 | 34- 148 | YES |
| Methyl t-Butyl Ether | 20.00 | 19.71 | 98 | 30- 200 | YES |
| 1,1-Dichloroethane | 20.00 | 22.08 | 110 | 59- 132 | YES |
| 2,2-Dichloropropane | 20.00 | 23.37 | 117 | 76- 118 | YES |
| cis-1,2-Dichloroethene | 20.00 | 21.58 | 108 | 63- 130 | YES |
| 2-Butanone | 150.00 | 174.93 | 117 | 63- 120 | YES |
| Chloroform | 20.00 | 22.14 | 111 | 73- 126 | YES |
| Bromochloromethane | 20.00 | 16.94 | 85 | 68- 115 | YES |
| 1,1,1-Trichloroethane | 20.00 | 22.82 | 114 | 65- 139 | YES |
| Carbon Tetrachloride | 20.00 | 21.70 | 108 | 61- 139 | YES |
| 1,1-Dichloropropene | 20.00 | 22.37 | 112 | 47- 140 | YES |
| Benzene | 20.00 | 21.27 | 106 | 58- 133 | YES |
| 1,2-Dichloroethane | 20.00 | 21.40 | 107 | 68- 125 | YES |
| Trichloroethene | 20.00 | 21.57 | 108 | 67- 130 | YES |
| 1,2-Dichloropropane | 20.00 | 21.50 | 108 | 70- 123 | YES |
| Dibromomethane | 20.00 | 20.98 | 105 | 67- 124 | YES |
| Bromodichloromethane | 20.00 | 21.64 | 108 | 64- 123 | YES |
| 2-Chloroethyl Vinyl Ether | 20.00 | 19.50 | 98 | 30- 200 | YES |
| cis-1,3-Dichloropropene | 20.00 | 22.03 | 110 | 66- 124 | YES |
| 4-Methyl-2-Pentanone | 100.00 | 106.03 | 106 | 73- 125 | YES |
| Toluene | 20.00 | 21.73 | 109 | 63- 143 | YES |
| trans-1,3-Dichloropropene | 20.00 | 20.96 | 105 | 66- 125 | YES |
| 1,1,2-Trichloroethane | 20.00 | 20.94 | 105 | 72- 119 | YES |

Lab Chronicle: _____ Ent. by _____.

_____ Ver. by _____.

_____.

Lancaster Laboratories, Inc.

GC/MS Volatiles Laboratory Control Sample Recovery

File: ^JAK06 Injected: 04/20/98 at 15:25 Method: 8260 5mL +SPEC

Inst: HP03047 Sample: LCSJ13 LCSJ13 Matrix/level: WL

Dilution Factor: 1.0 Batch: J981101AA

| COMPOUND NAME | SPIKE LEVEL | LCS CONC UG/L | LCS REC % | RANGE LOWER-UPPER | IN SPEC |
|---|---|---|---|---|---|
| Tetrachloroethene | 20.00 | 23.86 | 119 | 62- 150 | YES |
| 1,3-Dichloropropane | 20.00 | 21.23 | 106 | 67- 123 | YES |
| 2-Hexanone | 100.00 | 103.82 | 104 | 66- 126 | YES |
| Dibromochloromethane | 20.00 | 20.27 | 101 | 69- 115 | YES |
| 1,2-Dibromoethane | 20.00 | 20.55 | 103 | 66- 122 | YES |
| Chlorobenzene | 20.00 | 21.13 | 106 | 74- 120 | YES |
| 1,1,1,2-Tetrachloroethane | 20.00 | 21.48 | 107 | 77- 122 | YES |
| Ethylbenzene | 20.00 | 22.04 | 110 | 70- 132 | YES |
| m+p-Xylene | 40.00 | 42.92 | 107 | 68- 135 | YES |
| o-Xylene | 20.00 | 21.67 | 108 | 68- 132 | YES |
| Styrene | 20.00 | 21.51 | 108 | 74- 127 | YES |
| Bromoform | 20.00 | 19.36 | 97 | 70- 114 | YES |
| Isopropylbenzene | 20.00 | 21.34 | 107 | 74- 138 | YES |
| 1,1,2,2-Tetrachloroethane | 20.00 | 20.65 | 103 | 70- 119 | YES |
| Bromobenzene | 20.00 | 20.58 | 103 | 74- 118 | YES |
| 1,2,3-Trichloropropane | 20.00 | 20.30 | 102 | 66- 125 | YES |
| n-Propylbenzene | 20.00 | 22.10 | 110 | 69- 145 | YES |
| 2-Chlorotoluene | 20.00 | 21.79 | 109 | 71- 132 | YES |
| 1,3,5-Trimethylbenzene | 20.00 | 21.81 | 109 | 66- 135 | YES |
| 4-Chlorotoluene | 20.00 | 22.17 | 111 | 65- 133 | YES |
| tert-Butylbenzene | 20.00 | 20.78 | 104 | 75- 133 | YES |
| 1,2,4-Trimethylbenzene | 20.00 | 21.54 | 108 | 61- 136 | YES |
| sec-Butylbenzene | 20.00 | 21.50 | 108 | 64- 140 | YES |
| p-Isopropyltoluene | 20.00 | 21.44 | 107 | 68- 144 | YES |
| 1,3-Dichlorobenzene | 20.00 | 20.51 | 102 | 42- 150 | YES |
| 1,4-Dichlorobenzene | 20.00 | 20.38 | 102 | 42- 150 | YES |
| n-Butylbenzene | 20.00 | 21.88 | 109 | 63- 148 | YES |
| 1,2-Dichlorobenzene | 20.00 | 20.72 | 104 | 49- 139 | YES |
| 1,2-Dibromo-3-Chloropropane | 20.00 | 24.50 | 122 | 51- 120 | NO |
| 1,2,4-Trichlorobenzene | 20.00 | 13.73 | 69 | 52- 128 | YES |
| Hexachlorobutadiene | 20.00 | 17.43 | 87 | 63- 140 | YES |
| Naphthalene | 20.00 | 13.59 | 68 | 50- 122 | YES |
| 1,2,3-Trichlorobenzene | 20.00 | 10.25 | 51 | 52- 131 | NO |

Lab Chronicle: _____ Ent. by _____.

_____ Ver. by _____.

_____.

1E

# VOLATILE ORGANICS ANALYSIS DATA SHEET
# TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

00448

Lab Name: LANCASTER LABS Contract: _____

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

Matrix: (soil/water) SOIL Lab Sample ID: 2916270

Sample wt/vol: 11.5 (g/mL) G Lab File ID: >IY316

Level: (low/med) MED Date Received: 04/23/98

% Moisture: not dec. 16 Date Analyzed: 05/04/98

Column: (pack/cap) CAP Dilution Factor: .9

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | | Unknown alkane | 14.57 | 30000. | J |
| 2. | | C9H12 aromatic | 17.14 | 47000. | J |
| 3. | | C9H12 aromatic | 17.26 | 44000. | J |
| 4. | | C9H12 aromatic | 17.56 | 28000. | J |
| 5. | | C9H12 aromatic | 17.82 | 55000. | J |
| 6. | | C10H14 aromatic | 18.43 | 37000. | J |
| 7. | | C10H14 aromatic | 18.75 | 39000. | J |
| 8. | | C10H14 aromatic | 18.84 | 33000. | J |
| 9. | | C10H14 aromatic | 19.30 | 21000. | J |
| 10. | | C10H14 aromatic | 19.41 | 25000. | J |
| 11. | | | | | |
| 12. | | | | | |
| 13. | | | | | |
| 14. | | | | | |
| 15. | | | | | |
| 16. | | | | | |
| 17. | | | | | |
| 18. | | | | | |
| 19. | | | | | |
| 20. | | | | | |
| 21. | | | | | |
| 22. | | | | | |
| 23. | | | | | |
| 24. | | | | | |
| 25. | | | | | |

# VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No. _____. SDG No.: _____.

Instrument ID: HP03047 Calibration Date(s): 04/22/98 04/23/98

Calibration Times: 2048 0308

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

___.

Min RRF for SPCC(#) = 0.300 (0.10 for Bromoform, Chloromethane, and 1,1-Dichloroethane) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF 4= >JAMIG RRF 10= >JAMIH RRF 20= >JAMII
RRF 50= >JAMID RRF100= >JAMIE RRF300= >JAMIF

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| COMPOUND | | RRF 4 | RRF 10 | RRF 20 | RRF 50 | RRF100 | RRF300 | ___ RRF | % RSD | CAL. METHOD | |
| Dichlorodifluoromethane | | .445 | .397 | .394 | .400 | .397 | .413 | .408 | 4.8 | AVG | |
| Chloromethane | # | .274 | .278 | .273 | .252 | .245 | .249 | .252 | 5.6 | AVG | # |
| Vinyl Chloride | * | .271 | .291 | .285 | .274 | .272 | .271 | .277 | 3.1 | AVG | * |
| Bromomethane | | .260 | .273 | .267 | .250 | .249 | .242 | .257 | 4.7 | AVG | |
| Chloroethane | | .181 | .205 | .200 | .175 | .186 | .155 | .184 | 9.8 | AVG | |
| Trichlorofluoromethane | | .187 | .212 | .208 | .173 | .211 | .250 | .207 | 12.8 | AVG | |
| Ethyl Ether | | .238 | .227 | .229 | .213 | .217 | .211 | .222 | 4.7 | AVG | |
| Acrolein | | .029 | .030 | .031 | .028 | .029 | .030 | .030 | 3.2 | AVG | |
| 1,1-Dichloroethene | * | .242 | .248 | .243 | .252 | .249 | .244 | .246 | 1.6 | AVG | * |
| Acetone | @ | .079 | .059 | .054 | .043 | .044 | .042 | .053 | 26.5 | AVG | @ |
| Methyl Iodide | | .539 | .538 | .523 | .548 | .545 | .551 | .541 | 1.9 | AVG | |
| Carbon Disulfide | | .733 | .716 | .685 | .411 | .540 | .611 | .616 | 20.1 | 2NDDEG | |
| 2-Propanol | | .009 | .012 | .012 | .011 | .011 | .011 | .011 | 8.4 | AVG | |
| Allyl Chloride | | .481 | .444 | .423 | .402 | .406 | .375 | .422 | 8.8 | AVG | |
| Methylene Chloride | | .304 | .293 | .285 | .276 | .279 | .280 | .286 | 3.7 | AVG | |
| Acrylonitrile | | .063 | .060 | .063 | .057 | .060 | .060 | .061 | 3.6 | AVG | |
| trans-1,2-Dichloroethene | | .274 | .275 | .271 | .272 | .275 | .267 | .272 | 1.2 | AVG | |
| t-Butyl Alcohol | | .019 | .022 | .022 | .022 | .023 | .022 | .022 | 7.1 | AVG | |
| Methyl t-Butyl Ether | | .741 | .703 | .713 | .656 | .679 | .662 | .692 | 4.7 | AVG | |
| n-Hexane | | .396 | .380 | .359 | .406 | .411 | .405 | .393 | 5.1 | AVG | |
| 1,1-Dichloroethane | # | .514 | .514 | .511 | .502 | .518 | .506 | .511 | 1.1 | AVG | # |
| Vinyl Acetate | | .660 | .621 | .641 | .600 | .620 | .595 | .623 | 4.0 | AVG | |
| 2-Chloro-1,3-Butadiene | | .359 | .357 | .370 | .374 | .376 | .367 | .367 | 2.2 | AVG | |
| 2,2-Dichloropropane | | .312 | .320 | .308 | .315 | .317 | .305 | .313 | 1.9 | AVG | |
| cis-1,2-Dichloroethene | | .298 | .290 | .284 | .283 | .287 | .283 | .287 | 2.1 | AVG | |
| 2-Butanone | | .118 | .095 | .096 | .086 | .087 | .085 | .094 | 13.1 | AVG | |
| Propionitrile | | .024 | .022 | .024 | .021 | .023 | .022 | .023 | 4.1 | AVG | |
| Methacrylonitrile | | .090 | .083 | .087 | .078 | .083 | .080 | .083 | 5.5 | AVG | |
| Tetrahydrofuran | | .055 | .062 | .064 | .058 | .059 | .055 | .059 | 6.0 | AVG | |
| Chloroform | * | .553 | .526 | .510 | .514 | .516 | .508 | .521 | 3.3 | AVG | * |
| Bromochloromethane | | .169 | .179 | .174 | .166 | .169 | .169 | .171 | 2.7 | AVG | |
| 1,1,1-Trichloroethane | | .352 | .358 | .360 | .372 | .377 | .313 | .355 | 6.4 | AVG | |
| Cyclohexane | | .460 | .446 | .432 | .447 | .448 | .451 | .447 | 2.0 | AVG | |

@- Average response factor used due to poor curve fit.

# VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No. _____. SDG No.: _____.

Instrument ID: HP03047 Calibration Date(s): 04/22/98 04/23/98

Calibration Times: 2048 0308

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

___.

Min RRF for SPCC(#) = 0.300 (0.10 for Bromoform, Chloromethane, and 1,1-Dichloroethane) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF 4= >JAMIG RRF 10= >JAMIH RRF 20= >JAMII
RRF 50= >JAMID RRF100= >JAMIE RRF300= >JAMIF

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| COMPOUND | | RRF 4 | RRF 10 | RRF 20 | RRF 50 | RRF100 | RRF300 | RRF | % RSD | CAL. METHOD | |
| Carbon Tetrachloride | | .309 | .308 | .307 | .327 | .329 | .334 | .319 | 3.9 | AVG | |
| 1,1-Dichloropropene | | .399 | .384 | .382 | .387 | .390 | .385 | .388 | 1.6 | AVG | |
| Isobutyl Alcohol | | .005 | .006 | .006 | .006 | .006 | .005 | .006 | 8.1 | AVG | |
| Benzene | | .864 | .851 | .820 | .814 | .821 | .808 | .830 | 2.7 | AVG | |
| 1,2-Dichloroethane | | .294 | .299 | .296 | .291 | .300 | .298 | .295 | 1.5 | AVG | |
| n-Heptane | | .375 | .291 | .245 | .270 | .266 | .258 | .284 | 16.5 | 2NDDEG | |
| n-Butanol | | .004 | .005 | .006 | .005 | .006 | .006 | .005 | 9.3 | AVG | |
| Trichloroethene | | .326 | .314 | .309 | .322 | .322 | .312 | .317 | 2.1 | AVG | |
| 1,2-Dichloropropane | * | .365 | .358 | .357 | .349 | .355 | .340 | .354 | 2.4 | AVG | * |
| Methyl Methacrylate | | .223 | .202 | .220 | .200 | .210 | .196 | .209 | 5.3 | AVG | |
| Dibromomethane | | .283 | .277 | .286 | .277 | .282 | .269 | .279 | 2.1 | AVG | |
| 1,4-Dioxane | | .001 | .002 | .002 | .002 | .003 | .002 | .002 | 23.6 | 1STDEG | |
| n-Propyl Acetate | | .157 | .147 | .153 | .140 | .146 | .136 | .145 | 5.4 | AVG | |
| Bromodichloromethane | | .457 | .493 | .494 | .493 | .488 | .489 | .484 | 2.8 | AVG | |
| 2-Nitropropane | | .074 | .044 | .045 | .041 | .043 | .042 | .048 | 26.5 | 2NDDEG | |
| 2-Chloroethyl Vinyl Ether | | .214 | .188 | .196 | .186 | .192 | .189 | .194 | 5.3 | AVG | |
| cis-1,3-Dichloropropene | | .477 | .482 | .484 | .479 | .492 | .478 | .482 | 1.2 | AVG | |
| 4-Methyl-2-Pentanone | | .319 | .268 | .280 | .245 | .256 | .243 | .269 | 10.5 | AVG | |
| Toluene | * | .795 | .747 | .748 | .753 | .752 | .730 | .754 | 2.9 | AVG | * |
| trans-1,3-Dichloropropene | | .591 | .583 | .582 | .587 | .601 | .586 | .588 | 1.2 | AVG | |
| Ethyl Methacrylate | | .743 | .670 | .686 | .638 | .672 | .643 | .675 | 5.6 | AVG | |
| 1,1,2-Trichloroethane | | .400 | .385 | .391 | .374 | .380 | .367 | .383 | 3.1 | AVG | |
| Tetrachloroethene | | .377 | .370 | .362 | .388 | .381 | .370 | .375 | 2.5 | AVG | |
| 1,3-Dichloropropane | | .733 | .723 | .720 | .691 | .685 | .628 | .695 | 5.6 | AVG | |
| 2-Hexanone | | .367 | .284 | .294 | .241 | .250 | .241 | .279 | 17.3 | 2NDDEG | |
| Dibromochloromethane | | .514 | .571 | .573 | .522 | .522 | .558 | .543 | 4.9 | AVG | |
| 1,2-Dibromoethane | | .579 | .576 | .576 | .549 | .565 | .546 | .565 | 2.5 | AVG | |
| Chlorobenzene | # | .881 | .883 | .859 | .870 | .875 | .844 | .869 | 1.7 | AVG | # |
| 1,1,1,2-Tetrachloroethane | | .401 | .411 | .399 | .403 | .410 | .392 | .403 | 1.8 | AVG | |
| Ethylbenzene | * | 1.607 | 1.567 | 1.506 | 1.535 | 1.520 | 1.397 | 1.522 | 4.7 | AVG | * |
| m+p-Xylene | | .532 | .529 | .518 | .526 | .524 | .506 | .523 | 1.8 | AVG | |
| o-Xylene | | .500 | .502 | .493 | .502 | .504 | .472 | .496 | 2.5 | AVG | |
| Styrene | | .870 | .901 | .900 | .906 | .916 | .858 | .892 | 2.5 | AVG | |
| Bromoform | # | .184 | .273 | .293 | .263 | .271 | .313 | .266 | 16.6 | 2NDDEG | # |

# VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No. _____. SDG No.: _____.

Instrument ID: HP03047 Calibration Date(s): 04/22/98 04/23/98

Calibration Times: 2048 0308

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

___.

Min RRF for SPCC(#) = 0.300 (0.10 for Bromoform, Chloromethane, and 1,1-Dichloroethane) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF 4= >JAMIG RRF 10= >JAMIH RRF 20= >JAMII
RRF 50= >JAMID RRF100= >JAMIE RRF300= >JAMIF

| COMPOUND | RRF 4 | RRF 10 | RRF 20 | RRF 50 | RRF100 | RRF300 | ___ RRF | % RSD | CAL. METHOD | |
|---|---|---|---|---|---|---|---|---|---|---|
| Isopropylbenzene | 1.438 | 1.456 | 1.402 | 1.452 | 1.470 | 1.402 | 1.437 | 2.0 | AVG | |
| trans-1,4-Dichloro-2-Butene | .137 | .129 | .132 | .122 | .123 | .108 | .125 | 8.2 | AVG | |
| 1,1,2,2-Tetrachloroethane | # 1.377 | 1.357 | 1.405 | 1.260 | 1.307 | 1.220 | 1.321 | 5.4 | AVG | # |
| Bromobenzene | .776 | .762 | .759 | .745 | .757 | .725 | .754 | 2.3 | AVG | |
| 1,2,3-Trichloropropane | .277 | .287 | .295 | .266 | .278 | .248 | .275 | 6.0 | AVG | |
| n-Propylbenzene | 4.059 | 3.968 | 3.785 | 3.851 | 3.887 | 3.655 | 3.867 | 3.6 | AVG | |
| 2-Chlorotoluene | 2.729 | 2.631 | 2.482 | 2.526 | 2.493 | 2.331 | 2.532 | 5.4 | AVG | |
| 1,3,5-Trimethylbenzene | 2.493 | 2.475 | 2.366 | 2.419 | 2.413 | 2.275 | 2.407 | 3.3 | AVG | |
| 4-Chlorotoluene | 3.028 | 2.989 | 2.934 | 2.833 | 2.854 | 2.663 | 2.883 | 4.6 | AVG | |
| tert-Butylbenzene | .506 | .555 | .530 | .528 | .531 | .493 | .524 | 4.1 | AVG | |
| Pentachloroethane | .496 | .539 | .544 | .543 | .557 | .506 | .531 | 4.5 | AVG | |
| 1,2,4-Trimethylbenzene | 2.566 | 2.537 | 2.451 | 2.430 | 2.433 | 2.185 | 2.434 | 5.5 | AVG | |
| sec-Butylbenzene | 3.636 | 3.483 | 3.327 | 3.434 | 3.411 | 3.267 | 3.426 | 3.8 | AVG | |
| p-Isopropyltoluene | 2.739 | 2.655 | 2.519 | 2.624 | 2.602 | 2.379 | 2.586 | 4.8 | AVG | |
| 1,3-Dichlorobenzene | 1.395 | 1.351 | 1.274 | 1.261 | 1.284 | 1.225 | 1.298 | 4.8 | AVG | |
| 1,4-Dichlorobenzene | 1.507 | 1.482 | 1.446 | 1.435 | 1.439 | 1.390 | 1.450 | 2.8 | AVG | |
| n-Butylbenzene | 3.432 | 3.086 | 2.853 | 3.014 | 2.947 | 2.746 | 3.013 | 7.9 | AVG | |
| 1,2-Dichlorobenzene | 1.281 | 1.262 | 1.231 | 1.197 | 1.223 | 1.159 | 1.225 | 3.6 | AVG | |
| 1,2-Dibromo-3-Chloropropane | .189 | .185 | .210 | .161 | .167 | .165 | .180 | 10.5 | AVG | |
| 1,2,4-Trichlorobenzene | .574 | .534 | .523 | .447 | .470 | .458 | .501 | 10.0 | AVG | |
| Hexachlorobutadiene | .512 | .415 | .360 | .358 | .360 | .356 | .393 | 15.9 | 1STDEG | |
| Naphthalene | .986 | .827 | .897 | .617 | .665 | .643 | .756 | 17.0 | 2NDDEG | |
| 1,2,3-Trichlorobenzene | .329 | .289 | .284 | .211 | .225 | .214 | .259 | 18.8 | 2NDDEG | |
| Dibromofluoromethane | .398 | .434 | .436 | .446 | .454 | .433 | .433 | 4.4 | AVG | |
| 1,2-Dichloroethane-d4 | .261 | .272 | .278 | .280 | .283 | .253 | .271 | 4.4 | AVG | |
| Toluene-d8 | 1.168 | 1.220 | 1.223 | 1.241 | 1.251 | 1.298 | 1.234 | 3.5 | AVG | |
| 4-Bromofluorobenzene | .817 | .799 | .780 | .783 | .787 | .801 | .795 | 1.7 | AVG | |



The average RSD for the calibration is: 6.8

7A

# VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

Instrument ID: HP03047 Calibration Date: 04/20/98 Time: 1013

Lab File ID: >JAKS2 Init. Calib. Date(s): 04/13/98 04/14/98

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min RRF50 for SPCC(#)= 0.300 (0.10 for Bromoform) Max %Drift for CCC(*)= 20.0%

| COMPOUND | | $\overline{RRF}$ | RRF 50 | ACTUAL CONC. | TRUE CONC. | % DRIFT |
|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | | .350 | .475 | 59.45 | 50.0 | -18.9 |
| Chloromethane | # | .234 | .272 | 58.18 | 50.0 | -16.4# |
| Vinyl Chloride | * | .249 | .280 | 56.17 | 50.0 | -12.3* |
| Bromomethane | | .249 | .287 | 57.53 | 50.0 | -15.1 |
| Chloroethane | | .161 | .189 | 58.52 | 50.0 | -17.0 |
| Trichlorofluoromethane | | .240 | .407 | 72.47 | 50.0 | -44.9 |
| Acrolein | | .034 | .028 | 409.34 | 500.0 | 18.1 |
| 1,1-Dichloroethene | * | .249 | .244 | 48.87 | 50.0 | 2.3* |
| Acetone | | .045 | .043 | 104.57 | 100.0 | -4.6 |
| Carbon Disulfide | | .772 | .709 | 45.94 | 50.0 | 8.1 |
| Methylene Chloride | | .284 | .275 | 48.30 | 50.0 | 3.4 |
| Acrylonitrile | | .058 | .060 | 520.52 | 500.0 | -4.1 |
| trans-1,2-Dichloroethene | | .282 | .280 | 49.64 | 50.0 | .7 |
| Methyl t-Butyl Ether | | .663 | .668 | 50.40 | 50.0 | -.8 |
| 1,1-Dichloroethane | # | .490 | .498 | 50.83 | 50.0 | -1.7# |
| 2,2-Dichloropropane | | .345 | .372 | 53.89 | 50.0 | -7.8 |
| cis-1,2-Dichloroethene | | .299 | .302 | 50.43 | 50.0 | -.9 |
| 2-Butanone | | .085 | .090 | 105.54 | 100.0 | -5.5 |
| Chloroform | * | .502 | .526 | 52.35 | 50.0 | -4.7* |
| Bromochloromethane | | .174 | .169 | 48.70 | 50.0 | 2.6 |
| 1,1,1-Trichloroethane | | .389 | .408 | 52.40 | 50.0 | -4.8 |
| Carbon Tetrachloride | | .352 | .366 | 52.01 | 50.0 | -4.0 |
| 1,1-Dichloropropene | | .383 | .403 | 52.57 | 50.0 | -5.1 |
| Benzene | | .832 | .840 | 50.46 | 50.0 | -.9 |
| 1,2-Dichloroethane | | .280 | .302 | 53.90 | 50.0 | -7.8 |
| Trichloroethene | | .331 | .334 | 50.41 | 50.0 | -.8 |
| 1,2-Dichloropropane | * | .342 | .352 | 51.39 | 50.0 | -2.8* |
| Dibromomethane | | .272 | .287 | 52.77 | 50.0 | -5.5 |
| Bromodichloromethane | | .492 | .522 | 53.10 | 50.0 | -6.2 |
| 2-Chloroethyl Vinyl Ether | | .206 | .200 | 97.16 | 100.0 | 2.8 |
| cis-1,3-Dichloropropene | | .463 | .486 | 52.43 | 50.0 | -4.9 |
| 4-Methyl-2-Pentanone | | .263 | .266 | 101.00 | 100.0 | -1.0 |
| Toluene | * | .783 | .770 | 49.16 | 50.0 | 1.7* |
| trans-1,3-Dichloropropene | | .548 | .567 | 51.75 | 50.0 | -3.5 |

Chloromethane, 1,1-Dichloroethane and Bromoform must meet a minimum RRF of .10.

7A

# VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

Instrument ID: HP03047 Calibration Date: 04/20/98 Time: 1013

Lab File ID: >JAKS2 Init. Calib. Date(s): 04/13/98 04/14/98

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min RRF50 for SPCC(#)= 0.300 (0.10 for Bromoform) Max %Drift for CCC(*)= 20.0%

| COMPOUND | | $\overline{RRF}$ | RRF 50 | ACTUAL CONC. | TRUE CONC. | % DRIFT |
|---|---|---|---|---|---|---|
| 1,1,2-Trichloroethane | | .359 | .364 | 50.70 | 50.0 | -1.4 |
| Tetrachloroethene | | .448 | .436 | 48.73 | 50.0 | 2.5 |
| 1,3-Dichloropropane | | .635 | .655 | 51.59 | 50.0 | -3.2 |
| 2-Hexanone | | .244 | .252 | 103.15 | 100.0 | -3.1 |
| Dibromochloromethane | | .591 | .608 | 51.42 | 50.0 | -2.8 |
| 1,2-Dibromoethane | | .551 | .563 | 51.01 | 50.0 | -2.0 |
| Chlorobenzene | # | .924 | .923 | 49.96 | 50.0 | .1# |
| 1,1,1,2-Tetrachloroethane | | .421 | .434 | 51.53 | 50.0 | -3.1 |
| Ethylbenzene | * | 1.509 | 1.569 | 51.99 | 50.0 | -4.0* |
| m+p-Xylene | | .550 | .563 | 102.26 | 100.0 | -2.3 |
| o-Xylene | | .522 | .537 | 51.46 | 50.0 | -2.9 |
| Styrene | | .942 | .958 | 50.84 | 50.0 | -1.7 |
| Bromoform | # | .357 | .360 | 50.47 | 50.0 | -.9# |
| Isopropylbenzene | | 1.531 | 1.534 | 50.12 | 50.0 | -.2 |
| 1,1,2,2-Tetrachloroethane | # | 1.113 | 1.192 | 53.58 | 50.0 | -7.2# |
| Bromobenzene | | .820 | .821 | 50.05 | 50.0 | -.1 |
| 1,2,3-Trichloropropane | | .253 | .267 | 52.89 | 50.0 | -5.8 |
| n-Propylbenzene | | 3.714 | 3.871 | 52.12 | 50.0 | -4.2 |
| 2-Chlorotoluene | | 2.348 | 2.410 | 51.32 | 50.0 | -2.6 |
| 1,3,5-Trimethylbenzene | | 2.391 | 2.426 | 50.74 | 50.0 | -1.5 |
| 4-Chlorotoluene | | 2.678 | 2.793 | 52.16 | 50.0 | -4.3 |
| tert-Butylbenzene | | .581 | .563 | 48.42 | 50.0 | 3.2 |
| 1,2,4-Trimethylbenzene | | 2.411 | 2.464 | 51.10 | 50.0 | -2.2 |
| sec-Butylbenzene | | 3.466 | 3.478 | 50.17 | 50.0 | -.3 |
| p-Isopropyltoluene | | 2.692 | 2.692 | 50.00 | 50.0 | -.0 |
| 1,3-Dichlorobenzene | | 1.378 | 1.390 | 50.42 | 50.0 | -.8 |
| 1,4-Dichlorobenzene | | 1.539 | 1.528 | 49.63 | 50.0 | .7 |
| n-Butylbenzene | | 2.888 | 2.979 | 51.57 | 50.0 | -3.1 |
| 1,2-Dichlorobenzene | | 1.250 | 1.266 | 50.64 | 50.0 | -1.3 |
| 1,2-Dibromo-3-Chloropropane | | .091 | .124 | 67.85 | 50.0 | -35.7 |
| 1,2,4-Trichlorobenzene | | .375 | .319 | 42.49 | 50.0 | 15.0 |
| Hexachlorobutadiene | | .402 | .292 | 36.29 | 50.0 | 27.4 |
| Naphthalene | | .396 | .379 | 47.86 | 50.0 | 4.3 |
| 1,2,3-Trichlorobenzene | | .152 | .110 | 36.12 | 50.0 | 27.8 |
| Dibromofluoromethane | | .455 | .454 | 49.88 | 50.0 | .2 |
| 1,2-Dichloroethane-d4 | | .245 | .267 | 54.39 | 50.0 | -8.8 |
| Toluene-d8 | | 1.193 | 1.163 | 48.73 | 50.0 | 2.5 |
| 4-Bromofluorobenzene | | .765 | .703 | 45.96 | 50.0 | 8.1 |

Chloromethane, 1,1-Dichloroethane and Bromoform must meet a minimum RRF of .10.

5B

# SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
# DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: LANCASTER LABS  Contract: _____.

Lab Code: LANCAS  Case No.: _____.  SAS No.: _____.  SDG No.: _____.

Lab File ID: >Z730Z  DFTPP Injection Date: 07/05/95

Instrument ID: HP02550  DFTPP Injection Time: 15:40

| m/e | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE |
|---|---|---|
| 51 | 30.0 - 80.0% of mass 198 | 58.0 |
| 68 | Less than 2.0% of mass 69 | 0.0 ( 0.0)1 |
| 69 | Mass 69 relative abundance | 66.2 |
| 70 | Less than 2.0% of mass 69 | 0.0 ( 0.0)1 |
| 127 | 25.0 - 75.0% of mass 198 | 44.0 |
| 197 | Less than 1.0% of mass 198 | 0.0 |
| 198 | Base Peak, 100% relative abundance | 100. |
| 199 | 5.0 to 9.0% of mass 198 | 6.6 |
| 275 | 10.0 - 30.0% of mass 198 | 19.9 |
| 365 | Greater than 0.75% of mass 198 | 1.87 |
| 441 | Present, but less than mass 443 | 8.8 |
| 442 | 40.0 - 110.0% of mass 198 | 59.9 |
| 443 | 15.0 - 24.0% of mass 442 | 11.4 ( 19.0)2 |

1-Value is % mass 69  2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|---|
| 01 | SSTD50 | CLP1815 | >Z7301 | 07/05/95 | 16:08 |
| 02 | 0303BMSD | 2337099 | >C7301 | 07/05/95 | 18:14 |
| 03 | 0400B | 2337092 | >C7302 | 07/05/95 | 19:07 |
| 04 | 0303BMS | 2337098 | >C7304 | 07/05/95 | 21:44 |
| 05 | 0405B | 2337094 | >C7305 | 07/05/95 | 22:45 |
| 06 | | | | | |
| 07 | | | | | |
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2C

# WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

| | EPA SAMPLE NO. | S1 (NBZ)# | S2 (FBP)# | S3 (TPH)# | S4 (PHL)# | S5 (2FP)# | S6 (TBP)# | OTHER | TOT OUT |
|---|---|---|---|---|---|---|---|---|---|
| 01 | SBLKWA1714 | 75 | 78 | 77 | 38 | 54 | 89 | | 0 |
| 02 | 171WALCS | 86 | 85 | 88 | 43 | 61 | 108 | | 0 |
| 03 | 171WALCSD | 91 | 85 | 92 | 42 | 60 | 103 | | 0 |
| 04 | 171WAUS | 88 | 86 | 73 | 43 | 62 | 103 | | 0 |
| 05 | 171WAMS | 93 | 88 | 92 | 44 | 64 | 106 | | 0 |
| 06 | 171WAMSD | 85 | 83 | 94 | 41 | 58 | 106 | | 0 |
| 07 | SEDFB | 81 | 83 | 80 | 37 | 56 | 81 | | 0 |
| 08 | SDFB2 | 79 | 81 | 76 | 37 | 58 | 78 | | 0 |
| 09 | NVBRM | 59 | 80 | 70 | 39 | 59 | 90 | | 0 |
| 10 | 2HP6- | 80 | 85 | 74 | 38 | 59 | 77 | | 0 |
| 11 | | | | | | | | | |
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| 30 | | | | | | | | | |

| | QC LIMITS |
|---|---|
| S1 (NBZ) = Nitrobenzene-d5 | (35-114) |
| S2 (FBP) = 2-Fluorobiphenyl | (43-116) |
| S3 (TPH) = Terphenyl-d14 | (33-141) |
| S4 (PHL) = Phenol-d6 | (10-94) |
| S5 (2FP) = 2-Fluorophenol | (21-100) |
| S6 (TBP) = 2,4,6-Tribromophenol | (10-123) |

# Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

Lab File ID: >D3750 Lab Sample ID:SBLKWA171

Date Extracted: 06/20/95 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 06/21/95 Time Analyzed: 13:00

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: HP03301

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

| | EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|---|
| 01 | 171WALCS | 171WALCS | >D3751 | 06/21/95 |
| 02 | 171WALCSD | 171WALCSD | >D3752 | 06/21/95 |
| 03 | 171WAUS | 171WAUS | >D3753 | 06/21/95 |
| 04 | 171WAMS | 171WAMS | >D3754 | 06/21/95 |
| 05 | 171WAMSD | 171WAMSD | >D3755 | 06/21/95 |
| 06 | SEDFB | 2329395 | >D3801 | 06/22/95 |
| 07 | SDFB2 | 2330033 | >D3802 | 06/22/95 |
| 08 | NVBRM | 2325395 | >D3803 | 06/22/95 |
| 09 | 2HP6- | 2330176 | >D3804 | 06/22/95 |

COMMENTS: _____

1B

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKWA1714

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

Matrix: (soil/water) WATER Lab Sample ID: SBLKWA171

Sample wt/vol: 1000 (g/mL) ML Lab File ID: >D3750

Level: (low/med) LOW Date Received:

% Moisture: not dec. _____. dec. _____. Date Extracted: 06/20/95

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/95

GPC Cleanup: (Y/N) N pH: _____. Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 110-86-1 | Pyridine | 10 | U |
| 62-75-9 | N-Nitrosodimethylamine | 10 | U |
| 108-95-2 | Phenol | 10 | U |
| 111-44-4 | bis(2-Chloroethyl)ether | 10 | U |
| 95-57-8 | 2-Chlorophenol | 10 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10 | U |
| 95-48-7 | 2-Methylphenol | 10 | U |
| 108-60-1 | bis(2-Chloroisopropyl)ether | 10 | U |
| 65794-96-9 | 3 or 4-Methylphenol | 10 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | 10 | U |
| 67-72-1 | Hexachloroethane | 10 | U |
| 98-95-3 | Nitrobenzene | 10 | U |
| 78-59-1 | Isophorone | 10 | U |
| 88-75-5 | 2-Nitrophenol | 10 | U |
| 105-67-9 | 2,4-Dimethylphenol | 10 | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10 | U |
| 120-83-2 | 2,4-Dichlorophenol | 10 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10 | U |
| 91-20-3 | Naphthalene | 10 | U |
| 87-68-3 | Hexachlorobutadiene | 10 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 10 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 10 | U |
| 91-58-7 | 2-Chloronaphthalene | 10 | U |
| 131-11-3 | Dimethylphthalate | 10 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10 | U |
| 208-96-8 | Acenaphthylene | 10 | U |
| 83-32-9 | Acenaphthene | 10 | U |
| 51-28-5 | 2,4-Dinitrophenol | 25 | U |
| 100-02-7 | 4-Nitrophenol | 25 | U |

1C

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLKWA1714

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

Matrix: (soil/water) WATER Lab Sample ID: SBLKWA171

Sample wt/vol: 1000 (g/mL) ML Lab File ID: >D3750

Level: (low/med) LOW Date Received:

% Moisture: not dec. _____. dec. _____. Date Extracted: 06/20/95

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 06/21/95

GPC Cleanup: (Y/N) N pH: _____. Dilution Factor: 1.0

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L | Q |
|---|---|---|---|
| 121-14-2 | 2,4-Dinitrotoluene | 10 | U |
| 84-66-2 | Diethylphthalate | 10 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10 | U |
| 86-73-7 | Fluorene | 10 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 25 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10 | U |
| 122-66-7 | 1,2-Diphenylhydrazine | 10 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10 | U |
| 118-74-1 | Hexachlorobenzene | 10 | U |
| 87-86-5 | Pentachlorophenol | 25 | U |
| 85-01-8 | Phenanthrene | 10 | U |
| 120-12-7 | Anthracene | 10 | U |
| 84-74-2 | Di-n-butylphthalate | 10 | U |
| 206-44-0 | Fluoranthene | 10 | U |
| 92-87-5 | Benzidine | 50 | U |
| 129-00-0 | Pyrene | 10 | U |
| 85-68-7 | Butylbenzylphthalate | 10 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 20 | U |
| 56-55-3 | Benzo(a)anthracene | 10 | U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 10 | U |
| 218-01-9 | Chrysene | 10 | U |
| 117-84-0 | Di-n-octylphthalate | 10 | U |
| 205-99-2 | Benzo(b)fluoranthene | 10 | U |
| 207-08-9 | Benzo(k)fluoranthene | 10 | U |
| 50-32-8 | Benzo(a)pyrene | 10 | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10 | U |
| 53-70-3 | Dibenz(a,h)anthracene | 10 | U |
| 191-24-2 | Benzo(g,h,i)perylene | 10 | U |

(1) - Cannot be separated from Diphenylamine

3C

# WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____.SAS No: _____. SDG No.: _____.

Matrix Spike - EPA Sample No.: SW-04

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC # | QC LIMITS REC. |
|---|---|---|---|---|---|
| Phenol | 75.00 | 0.00 | 53.16 | 71 | 12-110 |
| 2-Chlorophenol | 75.00 | 0.00 | 52.35 | 70 | 27-123 |
| 1,4-Dichlorobenzene | 50.00 | 0.00 | 32.87 | 66 | 36- 97 |
| N-Nitroso-di-n-prop.(1) | 50.00 | 0.00 | 32.76 | 66 | 41-116 |
| 1,2,4-Trichlorobenzene | 50.00 | 0.00 | 33.89 | 68 | 39- 98 |
| 4-Chloro-3-methylphenol | 75.00 | 0.00 | 46.96 | 63 | 23- 97 |
| Acenaphthene | 50.00 | 0.00 | 35.00 | 70 | 46-118 |
| 4-Nitrophenol | 75.00 | 0.00 | 55.06 | 73 | 10- 80 |
| 2,4-Dinitrotoluene | 50.00 | 0.00 | 37.31 | 75 | 24- 96 |
| Pentachlorophenol | 75.00 | 0.00 | 63.71 | 85 | 9-103 |
| Pyrene | 50.00 | 0.00 | 39.72 | 79 | 26-127 |

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Phenol | 75.00 | 49.33 | 66 | 7 | 42 | 12-110 |
| 2-Chlorophenol | 75.00 | 48.42 | 65 | 7 | 40 | 27-123 |
| 1,4-Dichlorobenzene | 50.00 | 29.99 | 60 | 10 | 28 | 36- 97 |
| N-Nitroso-di-n-prop.(1) | 50.00 | 30.13 | 60 | 10 | 38 | 41-116 |
| 1,2,4-Trichlorobenzene | 50.00 | 31.40 | 63 | 8 | 28 | 39- 98 |
| 4-Chloro-3-methylphenol | 75.00 | 44.71 | 60 | 5 | 42 | 23- 97 |
| Acenaphthene | 50.00 | 32.25 | 65 | 7 | 31 | 46-118 |
| 4-Nitrophenol | 75.00 | 58.37 | 78 | 7 | 50 | 10- 80 |
| 2,4-Dinitrotoluene | 50.00 | 35.96 | 72 | 4 | 38 | 24- 96 |
| Pentachlorophenol | 75.00 | 64.38 | 86 | 1 | 50 | 9-103 |
| Pyrene | 50.00 | 39.34 | 79 | 0 | 31 | 26-127 |

(1) N-Nitroso-di-n-propylamine

# Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits

COMMENTS: _____.
_____.

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY

Lab Name: LANCASTER LABS  Lab Code: LANCAS  Instrument: HP03301

SW846 METHOD 8270  SPIKE LEVEL: 100 UG/ML  AMT USED: 1000.

SAMPLE SPIKE LEVEL: 100.UG/L  % MOISTURE 0.  DILUTION: 1

US SAMPLE: 171WAUS 171WAUS  MS SAMPLE: 171WAMS 171WAMS  MSD SAMPLE: 171WAMSD 171WAMSD

| COMPOUND NAME | US CONC UG/L | MS CONC UG/L | MSD CONC UG/L | MS REC % | MSD REC % | RPD % | RANGE LOWER-UPPER | IN SPEC |
|---|---|---|---|---|---|---|---|---|
| N-Nitrosodimethylamine | 0.00 | 71.19 | 63.55 | 71 | 64 | 11.00 | 35.0-100.8 | YES |
| Phenol | 0.00 | 50.36 | 47.69 | 50 | 48 | 5.00 | 5.0-112.0 | YES |
| bis(2-Chloroethyl)ether | 0.00 | 91.95 | 85.37 | 92 | 85 | 7.00 | 12.0-158.0 | YES |
| 2-Chlorophenol | 0.00 | 93.27 | 87.54 | 93 | 88 | 6.00 | 23.0-134.0 | YES |
| 1,3-Dichlorobenzene | 0.00 | 87.92 | 79.61 | 88 | 80 | 10.00 | 1.0-172.0 | YES |
| 1,4-Dichlorobenzene | 0.00 | 89.59 | 81.76 | 90 | 82 | 9.00 | 20.0-124.0 | YES |
| 1,2-Dichlorobenzene | 0.00 | 92.62 | 84.48 | 93 | 84 | 9.00 | 32.0-129.0 | YES |
| bis(2-Chloroisopropyl)ether | 0.00 | 98.40 | 92.17 | 98 | 92 | 7.00 | 36.0-166.0 | YES |
| N-Nitroso-di-n-propylamine | 0.00 | 110.79 | 104.31 | 111 | 104 | 6.00 | 1.0-230.0 | YES |
| Hexachloroethane | 0.00 | 80.42 | 73.16 | 80 | 73 | 9.00 | 40.0-113.0 | YES |
| Nitrobenzene | 0.00 | 100.44 | 93.63 | 100 | 94 | 7.00 | 35.0-180.0 | YES |
| Isophorone | 0.00 | 91.13 | 86.68 | 91 | 87 | 5.00 | 21.0-196.0 | YES |
| 2-Nitrophenol | 0.00 | 97.51 | 94.45 | 98 | 94 | 3.00 | 29.0-182.0 | YES |
| 2,4-Dimethylphenol | 0.00 | 84.53 | 77.29 | 84 | 77 | 9.00 | 32.0-119.0 | YES |
| bis(2-Chloroethoxy)methane | 0.00 | 89.50 | 84.21 | 89 | 84 | 6.00 | 33.0-184.0 | YES |
| 2,4-Dichlorophenol | 0.00 | 95.88 | 91.26 | 96 | 91 | 5.00 | 39.0-135.0 | YES |
| 1,2,4-Trichlorobenzene | 0.00 | 89.02 | 82.33 | 89 | 82 | 8.00 | 44.0-142.0 | YES |
| Naphthalene | 0.00 | 90.10 | 83.34 | 90 | 83 | 8.00 | 21.0-133.0 | YES |
| Hexachlorobutadiene | 0.00 | 82.27 | 73.61 | 82 | 74 | 11.00 | 24.0-116.0 | YES |
| 4-Chloro-3-methylphenol | 0.00 | 97.77 | 95.61 | 98 | 96 | 2.00 | 22.0-147.0 | YES |
| Hexachlorocyclopentadiene | 0.00 | 138.52 | 88.83 | 69 | 44 | 44.00 | 1.0-100.0 | YES |
| 2,4,6-Trichlorophenol | 0.00 | 97.75 | 92.93 | 98 | 93 | 5.00 | 37.0-144.0 | YES |
| 2-Chloronaphthalene | 0.00 | 89.52 | 85.35 | 90 | 85 | 5.00 | 60.0-118.0 | YES |
| Dimethylphthalate | 0.00 | 90.86 | 87.84 | 91 | 88 | 3.00 | 1.0-112.0 | YES |
| 2,6-Dinitrotoluene | 0.00 | 86.36 | 84.61 | 86 | 85 | 2.00 | 50.0-158.0 | YES |
| Acenaphthylene | 0.00 | 90.55 | 85.28 | 90 | 85 | 6.00 | 33.0-145.0 | YES |
| Acenaphthene | 0.00 | 89.05 | 85.24 | 89 | 85 | 4.00 | 47.0-145.0 | YES |
| 2,4-Dinitrophenol | 0.00 | 94.45 | 92.15 | 94 | 92 | 2.00 | 1.0-191.0 | YES |
| 4-Nitrophenol | 0.00 | 47.71 | 46.64 | 48 | 47 | 2.00 | 1.0-132.0 | YES |
| 2,4-Dinitrotoluene | 0.00 | 103.67 | 102.08 | 104 | 102 | 2.00 | 39.0-139.0 | YES |
| 1-Naphthylamine | 0.00 | 41.80 | 36.84 | 42 | 37 | 13.00 | 1.0-100.0 | YES |
| 2-Naphthylamine | 0.00 | 55.40 | 44.65 | 55 | 45 | 22.00 | 1.0-100.0 | YES |
| Diethylphthalate | 0.00 | 95.85 | 93.03 | 96 | 93 | 3.00 | 1.0-114.0 | YES |
| 4-Chlorophenyl-phenylether | 0.00 | 92.22 | 88.60 | 92 | 88 | 4.00 | 25.0-158.0 | YES |
| Fluorene | 0.00 | 90.96 | 87.93 | 91 | 88 | 3.00 | 59.0-121.0 | YES |
| 4,6-Dinitro-2-methylphenol | 0.00 | 88.46 | 86.50 | 88 | 86 | 2.00 | 1.0-181.0 | YES |
| N-Nitrosodiphenylamine | 0.00 | 86.53 | 83.21 | 86 | 83 | 4.00 | 37.8-147.0 | YES |
| 1,2-Diphenylhydrazine | 0.00 | 86.10 | 82.37 | 86 | 82 | 4.00 | 25.7-124.9 | YES |
| 4-Bromophenyl-phenylether | 0.00 | 92.83 | 88.97 | 93 | 89 | 4.00 | 53.0-127.0 | YES |

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE SAMPLE RECOVERY

Lab Name: LANCASTER LABS  Lab Code: LANCAS  Instrument: HP03301

SW846 METHOD 8270  SPIKE LEVEL: 100 UG/ML  AMT USED: 1000.

SAMPLE SPIKE LEVEL: 100.UG/L  % MOISTURE 0.  DILUTION: 1

US SAMPLE: 171WAUS 171WAUS  MS SAMPLE: 171WAMS 171WAMS  MSD SAMPLE: 171WAMSD 171WAMSD

| COMPOUND NAME | US CONC UG/L | MS CONC UG/L | MSD CONC UG/L | MS REC % | MSD REC % | RPD % | RANGE LOWER-UPPER | IN SPEC |
|---|---|---|---|---|---|---|---|---|
| Hexachlorobenzene | 0.00 | 93.90 | 90.89 | 94 | 91 | 3.00 | 1.0-152.0 | YES |
| Pentachlorophenol | 0.00 | 71.04 | 78.11 | 71 | 78 | -9.00 | 14.0-176.0 | YES |
| Phenanthrene | 0.00 | 89.59 | 85.11 | 90 | 85 | 5.00 | 54.0-120.0 | YES |
| Anthracene | 0.00 | 88.13 | 84.06 | 88 | 84 | 5.00 | 27.0-133.0 | YES |
| Di-n-butylphthalate | 0.00 | 97.28 | 90.78 | 97 | 91 | 7.00 | 1.0-118.0 | YES |
| Fluoranthene | 0.00 | 97.82 | 92.76 | 98 | 93 | 5.00 | 26.0-137.0 | YES |
| Benzidine | 0.00 | 409.22 | 309.00 | 82 | 62 | 28.00 | 1.0-155.0 | YES |
| Pyrene | 0.00 | 86.40 | 89.91 | 86 | 90 | -4.00 | 52.0-115.0 | YES |
| Butylbenzylphthalate | 0.00 | 94.76 | 93.22 | 95 | 93 | 2.00 | 1.0-152.0 | YES |
| 3,3'-Dichlorobenzidine | 0.00 | 95.40 | 87.15 | 95 | 87 | 9.00 | 1.0-262.0 | YES |
| Benzo(a)anthracene | 0.00 | 89.52 | 86.79 | 90 | 87 | 3.00 | 33.0-143.0 | YES |
| bis(2-Ethylhexyl)phthalate | 0.00 | 94.36 | 92.14 | 94 | 92 | 2.00 | 8.0-158.0 | YES |
| Chrysene | 0.00 | 91.49 | 90.70 | 91 | 91 | 1.00 | 17.0-168.0 | YES |
| Di-n-octylphthalate | 0.00 | 90.04 | 93.87 | 90 | 94 | -4.00 | 4.0-146.0 | YES |
| Benzo(b)fluoranthene | 0.00 | 88.77 | 89.34 | 89 | 89 | -1.00 | 24.0-159.0 | YES |
| Benzo(k)fluoranthene | 0.00 | 90.41 | 89.11 | 90 | 89 | 1.00 | 11.0-163.0 | YES |
| Benzo(a)pyrene | 0.00 | 89.68 | 86.37 | 90 | 86 | 4.00 | 17.0-163.0 | YES |
| Indeno(1,2,3-cd)pyrene | 0.00 | 88.00 | 81.41 | 88 | 81 | 8.00 | 1.0-171.0 | YES |
| Dibenz(a,h)anthracene | 0.00 | 86.73 | 81.84 | 87 | 82 | 6.00 | 1.0-227.0 | YES |
| Benzo(g,h,i)perylene | 0.00 | 86.02 | 79.43 | 86 | 79 | 8.00 | 1.0-219.0 | YES |

COMMENTS:

WATER SEMIVOLATILE QUALITY CONTROL REFERENCE SAMPLE RECOVERY

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP03301

SW846 METHOD 8270 SPIKE LEVEL: 100 UG/L

LCS SAMPLE NO: 171WALCS 171WALCS

| COMPOUND NAME | EXTRACT CONC UG/L | QCREF REC % | RANGE LOWER-UPPER | IN SPEC |
|---|---|---|---|---|
| N-Nitrosodimethylamine | 68.92 | 69 | 35.0- 100.8 | YES |
| Phenol | 48.72 | 49 | 5.0- 112.0 | YES |
| bis(2-Chloroethyl)ether | 94.39 | 94 | 12.0- 158.0 | YES |
| 2-Chlorophenol | 92.50 | 92 | 23.0- 134.0 | YES |
| 1,3-Dichlorobenzene | 85.86 | 86 | 1.0- 172.0 | YES |
| 1,4-Dichlorobenzene | 88.26 | 88 | 20.0- 124.0 | YES |
| 1,2-Dichlorobenzene | 91.46 | 91 | 32.0- 129.0 | YES |
| bis(2-Chloroisopropyl)ether | 101.78 | 102 | 36.0- 166.0 | YES |
| N-Nitroso-di-n-propylamine | 110.79 | 111 | 1.0- 230.0 | YES |
| Hexachloroethane | 74.98 | 75 | 40.0- 113.0 | YES |
| Nitrobenzene | 99.22 | 99 | *35.0- 180.0* | *YES* |
| Isophorone | 92.80 | 93 | 21.0- 196.0 | YES |
| 2-Nitrophenol | 91.79 | 92 | 29.0- 182.0 | YES |
| 2,4-Dimethylphenol | 80.92 | 81 | 32.0- 119.0 | YES |
| bis(2-Chloroethoxy)methane | 90.28 | 90 | 33.0- 184.0 | YES |
| 2,4-Dichlorophenol | 93.31 | 93 | 39.0- 135.0 | YES |
| 1,2,4-Trichlorobenzene | 84.99 | 85 | 44.0- 142.0 | YES |
| Naphthalene | 88.58 | 88 | 21.0- 133.0 | YES |
| Hexachlorobutadiene | 71.61 | 72 | 24.0- 116.0 | YES |
| 4-Chloro-3-methylphenol | 96.46 | 96 | 22.0- 147.0 | YES |
| Hexachlorocyclopentadiene | 115.53 | 58 | 1.0- 100.0 | YES |
| 2,4,6-Trichlorophenol | 93.96 | 94 | 37.0- 144.0 | YES |
| 2-Chloronaphthalene | 88.09 | 88 | 60.0- 118.0 | YES |
| Dimethylphthalate | 86.59 | 86 | 1.0- 112.0 | YES |
| 2,6-Dinitrotoluene | 87.41 | 87 | 50.0- 158.0 | YES |
| Acenaphthylene | 87.90 | 88 | 33.0- 145.0 | YES |
| Acenaphthene | 87.91 | 88 | 47.0- 145.0 | YES |
| 2,4-Dinitrophenol | 99.86 | 100 | 1.0- 191.0 | YES |
| 4-Nitrophenol | 47.64 | 48 | 1.0- 132.0 | YES |
| 2,4-Dinitrotoluene | 104.96 | 105 | 39.0- 139.0 | YES |
| 1-Naphthylamine | 40.76 | 41 | 1.0- 100.0 | YES |
| 2-Naphthylamine | 52.41 | 52 | 1.0- 100.0 | YES |
| Diethylphthalate | 96.64 | 97 | 1.0- 114.0 | YES |
| 4-Chlorophenyl-phenylether | 91.82 | 92 | 25.0- 158.0 | YES |
| Fluorene | 91.73 | 92 | 59.0- 121.0 | YES |
| 4,6-Dinitro-2-methylphenol | 88.46 | 88 | 1.0- 181.0 | YES |
| N-Nitrosodiphenylamine | 82.97 | 83 | 37.8- 147.0 | YES |
| 1,2-Diphenylhydrazine | 87.54 | 88 | 25.7- 124.9 | YES |
| 4-Bromophenyl-phenylether | 92.08 | 92 | 53.0- 127.0 | YES |

WATER SEMIVOLATILE QUALITY CONTROL REFERENCE SAMPLE RECOVERY

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP03301

SW846 METHOD 8270 SPIKE LEVEL: 100 UG/L

LCS SAMPLE NO: 171WALCS 171WALCS

| COMPOUND NAME | EXTRACT CONC UG/L | QCREF REC % | RANGE LOWER-UPPER | IN SPEC |
|---|---|---|---|---|
| Hexachlorobenzene | 94.46 | 94 | 1.0- 152.0 | YES |
| Pentachlorophenol | 79.44 | 79 | 14.0- 176.0 | YES |
| Phenanthrene | 88.96 | 89 | 54.0- 120.0 | YES |
| Anthracene | 89.44 | 89 | 27.0- 133.0 | YES |
| Di-n-butylphthalate | 98.70 | 99 | 1.0- 118.0 | YES |
| Fluoranthene | 101.20 | 101 | 26.0- 137.0 | YES |
| Benzidine | 319.00 | 64 | 1.0- 155.0 | YES |
| Pyrene | 85.98 | 86 | 52.0- 115.0 | YES |
| Butylbenzylphthalate | 94.12 | 94 | 1.0- 152.0 | YES |
| 3,3'-Dichlorobenzidine | 91.48 | 91 | 1.0- 262.0 | YES |
| Benzo(a)anthracene | 91.01 | 91 | 33.0- 143.0 | YES |
| bis(2-Ethylhexyl)phthalate | 95.20 | 95 | 8.0- 158.0 | YES |
| Chrysene | 92.76 | 93 | 17.0- 168.0 | YES |
| Di-n-octylphthalate | 95.22 | 95 | 4.0- 146.0 | YES |
| Benzo(b)fluoranthene | 92.11 | 92 | 24.0- 159.0 | YES |
| Benzo(k)fluoranthene | 92.30 | 92 | 11.0- 163.0 | YES |
| Benzo(a)pyrene | 86.47 | 86 | 17.0- 163.0 | YES |
| Indeno(1,2,3-cd)pyrene | 87.25 | 87 | 1.0- 171.0 | YES |
| Dibenz(a,h)anthracene | 87.06 | 87 | 1.0- 227.0 | YES |
| Benzo(g,h,i)perylene | 84.92 | 85 | 1.0- 219.0 | YES |

COMMENTS:

WATER SEMIVOLATILE LABORATORY CONTROL/LABORATORY CONTROL DUPLICATE SAMPLE RECOVERY

Lab Name: LANCASTER LABS  Lab Code: LANCAS  Instrument: HP03301

SW846 METHOD 8270  SPIKE LEVEL: 100 UG/ML  AMT USED: 1000.

SAMPLE SPIKE LEVEL: 100.UG/L  % MOISTURE 0. DILUTION: 1

LCS SAMPLE: 171WALCS 171WALCS  LCSD SAMPLE: 171WALCSD 171WALCSD

| COMPOUND NAME | LCS CONC UG/L | LCSD CONC UG/L | LCS REC % | LCSD REC % | RANGE LOWER-UPPER | IN SPEC | RPD % | RPD MAX | RPD IN SPEC |
|---|---|---|---|---|---|---|---|---|---|
| N-Nitrosodimethylamine | 68.92 | 67.34 | 69 | 67 | 35.0-100.8 | YES | 2.00 | 30.0 | YES |
| Phenol | 48.72 | 48.17 | 49 | 48 | 5.0-112.0 | YES | 1.00 | 30.0 | YES |
| bis(2-Chloroethyl)ether | 94.39 | 92.54 | 94 | 92 | 12.0-158.0 | YES | 2.00 | 30.0 | YES |
| 2-Chlorophenol | 92.50 | 92.00 | 92 | 92 | 23.0-134.0 | YES | 1.00 | 30.0 | YES |
| 1,3-Dichlorobenzene | 85.86 | 83.63 | 86 | 84 | 1.0-172.0 | YES | 3.00 | 30.0 | YES |
| 1,4-Dichlorobenzene | 88.26 | 85.65 | 88 | 86 | 20.0-124.0 | YES | 3.00 | 30.0 | YES |
| 1,2-Dichlorobenzene | 91.46 | 90.83 | 91 | 91 | 32.0-129.0 | YES | 1.00 | 30.0 | YES |
| bis(2-Chloroisopropyl)ether | 101.78 | 103.45 | 102 | 103 | 36.0-166.0 | YES | -2.00 | 30.0 | YES |
| N-Nitroso-di-n-propylamine | 110.79 | 113.39 | 111 | 113 | 1.0-230.0 | YES | -2.00 | 30.0 | YES |
| Hexachloroethane | 74.98 | 77.08 | 75 | 77 | 40.0-113.0 | YES | -3.00 | 30.0 | YES |
| Nitrobenzene | 99.22 | 103.20 | 99 | 103 | 35.0-180.0 | YES | -4.00 | 30.0 | YES |
| Isophorone | 92.80 | 95.98 | 93 | 96 | 21.0-196.0 | YES | -3.00 | 30.0 | YES |
| 2-Nitrophenol | 91.79 | 97.94 | 92 | 98 | 29.0-182.0 | YES | -6.00 | 30.0 | YES |
| 2,4-Dimethylphenol | 80.92 | 83.22 | 81 | 83 | 32.0-119.0 | YES | -3.00 | 30.0 | YES |
| bis(2-Chloroethoxy)methane | 90.28 | 91.85 | 90 | 92 | 33.0-184.0 | YES | -2.00 | 30.0 | YES |
| 2,4-Dichlorophenol | 93.31 | 95.20 | 93 | 95 | 39.0-135.0 | YES | -2.00 | 30.0 | YES |
| 1,2,4-Trichlorobenzene | 84.99 | 85.82 | 85 | 86 | 44.0-142.0 | YES | -1.00 | 30.0 | YES |
| Naphthalene | 88.58 | 89.05 | 88 | 89 | 21.0-133.0 | YES | -1.00 | 30.0 | YES |
| Hexachlorobutadiene | 71.61 | 73.95 | 72 | 74 | 24.0-116.0 | YES | -3.00 | 30.0 | YES |
| 4-Chloro-3-methylphenol | 96.46 | 97.65 | 96 | 98 | 22.0-147.0 | YES | -1.00 | 30.0 | YES |
| Hexachlorocyclopentadiene | 115.53 | 117.21 | 58 | 59 | 1.0-100.0 | YES | -1.00 | 30.0 | YES |
| 2,4,6-Trichlorophenol | 93.96 | 95.71 | 94 | 96 | 37.0-144.0 | YES | -2.00 | 30.0 | YES |
| 2-Chloronaphthalene | 88.09 | 87.54 | 88 | 88 | 60.0-118.0 | YES | 1.00 | 30.0 | YES |
| Dimethylphthalate | 86.59 | 82.05 | 86 | 82 | 1.0-112.0 | YES | 5.00 | 30.0 | YES |
| 2,6-Dinitrotoluene | 87.41 | 88.29 | 87 | 88 | 50.0-158.0 | YES | -1.00 | 30.0 | YES |
| Acenaphthylene | 87.90 | 88.61 | 88 | 89 | 33.0-145.0 | YES | -1.00 | 30.0 | YES |
| Acenaphthene | 87.91 | 89.00 | 88 | 89 | 47.0-145.0 | YES | -1.00 | 30.0 | YES |
| 2,4-Dinitrophenol | 99.86 | 99.50 | 100 | 99 | 1.0-191.0 | YES | 0.00 | 30.0 | YES |
| 4-Nitrophenol | 47.64 | 47.72 | 48 | 48 | 1.0-132.0 | YES | 0.00 | 30.0 | YES |
| 2,4-Dinitrotoluene | 104.96 | 104.01 | 105 | 104 | 39.0-139.0 | YES | 1.00 | 30.0 | YES |
| 1-Naphthylamine | 40.76 | 40.49 | 41 | 40 | 1.0-100.0 | YES | 1.00 | 30.0 | YES |
| 2-Naphthylamine | 52.41 | 52.32 | 52 | 52 | 1.0-100.0 | YES | 0.00 | 30.0 | YES |
| Diethylphthalate | 96.64 | 94.19 | 97 | 94 | 1.0-114.0 | YES | 3.00 | 30.0 | YES |
| 4-Chlorophenyl-phenylether | 91.82 | 89.00 | 92 | 89 | 25.0-158.0 | YES | 3.00 | 30.0 | YES |
| Fluorene | 91.73 | 89.46 | 92 | 89 | 59.0-121.0 | YES | 3.00 | 30.0 | YES |
| 4,6-Dinitro-2-methylphenol | 88.46 | 91.66 | 88 | 92 | 1.0-181.0 | YES | -4.00 | 30.0 | YES |
| N-Nitrosodiphenylamine | 82.97 | 85.90 | 83 | 86 | 37.8-147.0 | YES | -3.00 | 30.0 | YES |
| 1,2-Diphenylhydrazine | 87.54 | 91.10 | 88 | 91 | 25.7-124.9 | YES | -4.00 | 30.0 | YES |
| 4-Bromophenyl-phenylether | 92.08 | 93.00 | 92 | 93 | 53.0-127.0 | YES | -1.00 | 30.0 | YES |

WATER SEMIVOLATILE LABORATORY CONTROL/LABORATORY CONTROL DUPLICATE SAMPLE RECOVERY

Lab Name: LANCASTER LABS  Lab Code: LANCAS  Instrument: HP03301

SW846 METHOD 8270  SPIKE LEVEL: 100 UG/ML  AMT USED: 1000.

SAMPLE SPIKE LEVEL: 100.UG/L  % MOISTURE 0.  DILUTION: 1

LCS SAMPLE: 171WALCS 171WALCS  LCSD SAMPLE: 171WALCSD 171WALCSD

| COMPOUND NAME | LCS CONC UG/L | LCSD CONC UG/L | LCS REC % | LCSD REC % | RANGE LOWER-UPPER | IN SPEC | RPD % | RPD MAX | RPD IN SPEC |
|---|---|---|---|---|---|---|---|---|---|
| Hexachlorobenzene | 94.46 | 94.31 | 94 | 94 | 1.0-152.0 | YES | 0.00 | 30.0 | YES |
| Pentachlorophenol | 79.44 | 75.58 | 79 | 76 | 14.0-176.0 | YES | 5.00 | 30.0 | YES |
| Phenanthrene | 88.96 | 89.45 | 89 | 89 | 54.0-120.0 | YES | -1.00 | 30.0 | YES |
| Anthracene | 89.44 | 88.62 | 89 | 89 | 27.0-133.0 | YES | 1.00 | 30.0 | YES |
| Di-n-butylphthalate | 98.70 | 95.42 | 99 | 95 | 1.0-118.0 | YES | 3.00 | 30.0 | YES |
| Fluoranthene | 101.20 | 95.34 | 101 | 95 | 26.0-137.0 | YES | 6.00 | 30.0 | YES |
| Benzidine | 319.00 | 361.12 | 64 | 72 | 1.0-155.0 | YES | -12.00 | 30.0 | YES |
| Pyrene | 85.98 | 89.75 | 86 | 90 | 52.0-115.0 | YES | -4.00 | 30.0 | YES |
| Butylbenzylphthalate | 94.12 | 93.46 | 94 | 93 | 1.0-152.0 | YES | 1.00 | 30.0 | YES |
| 3,3'-Dichlorobenzidine | 91.48 | 92.89 | 91 | 93 | 1.0-262.0 | YES | -2.00 | 30.0 | YES |
| Benzo(a)anthracene | 91.01 | 89.61 | 91 | 90 | 33.0-143.0 | YES | 2.00 | 30.0 | YES |
| bis(2-Ethylhexyl)phthalate | 95.20 | 95.00 | 95 | 95 | 8.0-158.0 | YES | 0.00 | 30.0 | YES |
| Chrysene | 92.76 | 90.72 | 93 | 91 | 17.0-168.0 | YES | 2.00 | 30.0 | YES |
| Di-n-octylphthalate | 95.22 | 96.92 | 95 | 97 | 4.0-146.0 | YES | -2.00 | 30.0 | YES |
| Benzo(b)fluoranthene | 92.11 | 91.07 | 92 | 91 | 24.0-159.0 | YES | 1.00 | 30.0 | YES |
| Benzo(k)fluoranthene | 92.30 | 92.67 | 92 | 93 | 11.0-163.0 | YES | 0.00 | 30.0 | YES |
| Benzo(a)pyrene | 86.47 | 86.77 | 86 | 87 | 17.0-163.0 | YES | 0.00 | 30.0 | YES |
| Indeno(1,2,3-cd)pyrene | 87.25 | 88.82 | 87 | 89 | 1.0-171.0 | YES | -2.00 | 30.0 | YES |
| Dibenz(a,h)anthracene | 87.06 | 88.33 | 87 | 88 | 1.0-227.0 | YES | -1.00 | 30.0 | YES |
| Benzo(g,h,i)perylene | 84.92 | 86.97 | 85 | 87 | 1.0-219.0 | YES | -2.00 | 30.0 | YES |

COMMENTS:

8B

# SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

Lab File ID (Standard): >Z7301 Date Analyzed: 07/05/95

Instrument ID: HP02550 Time Analyzed: 16:08

| | | IS1(DCB) AREA # | RT | IS2(NPT) AREA # | RT | IS3(ANT) AREA # | RT |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 41975 | 11.65 | 146677 | 15.00 | 76661 | 19.81 |
| | UPPER LIMIT | 83950 | 12.15 | 293354 | 15.50 | 153322 | 20.31 |
| | LOWER LIMIT | 20988 | 11.15 | 73339 | 14.50 | 38331 | 19.31 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | 0303BMSD | 43212 | 11.66 | 147781 | 15.01 | 77687 | 19.81 |
| 02 | 0400B | 44648 | 11.67 | 148989 | 15.01 | 77461 | 19.81 |
| 03 | 0303BMS | 41859 | 11.67 | 147450 | 15.01 | 79313 | 19.81 |
| 04 | 0405B | 40183 | 11.66 | 137070 | 15.01 | 73874 | 19.81 |
| 05 | | | | | | | |
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| 22 | | | | | | | |

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8C

# SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

Lab File ID (Standard): >Z7301 Date Analyzed: 07/05/95

Instrument ID: HP02550 Time Analyzed: 16:08

| | | IS4(PHN) AREA # | RT | IS5(CRY) AREA # | RT | IS6(PRY) AREA # | RT |
|---|---|---|---|---|---|---|---|
| | 12 HOUR STD | 113834 | 23.91 | 104503 | 30.73 | 48838 | 35.61 |
| | UPPER LIMIT | 227668 | 24.41 | 209006 | 31.23 | 97676 | 36.11 |
| | LOWER LIMIT | 56917 | 23.41 | 52252 | 30.23 | 24419 | 35.11 |
| | EPA SAMPLE NO. | | | | | | |
| 01 | 0303BMSD | 119527 | 23.93 | 68256 | 30.71 | 28576 | 35.62 |
| 02 | 0400B | 120999 | 23.92 | 72241 | 30.71 | 27091 | 35.61 |
| 03 | 0303BMS | 122200 | 23.93 | 71578 | 30.72 | 26418 | 35.62 |
| 04 | 0405B | 109187 | 23.93 | 56771 | 30.72 | 25260 | 35.63 |
| 05 | | | | | | | |
| 06 | | | | | | | |
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| 21 | | | | | | | |
| 22 | | | | | | | |

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12
AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

# Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____.SAS No.: _____. SDG No.: _____.

Instrument ID: HP03189 Calibration Date(s): 06/27/95 06/28/95

___.

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF5 = >V6255 RRF50 = >V6253
RRF80 = >V6254 RRF120= >V6252 RRF160= >V6251

| COMPOUND | RRF5 | RRF50 | RRF80 | RRF120 | RRF160 | RRF | % RSD | CAL. METHOD | |
|---|---|---|---|---|---|---|---|---|---|
| Pyridine | 2.209 | 2.342 | 2.408 | 2.388 | 2.237 | 2.317 | 3.9 | AVG | |
| N-Nitrosodimethylamine | 1.364 | 1.415 | 1.410 | 1.407 | 1.337 | 1.387 | 2.5 | AVG | |
| 2-Picoline | 1.926 | 2.008 | 2.036 | 2.130 | 2.058 | 2.032 | 3.7 | AVG | |
| Phenol | 2.829 | 2.495 | 2.447 | 2.372 | 2.184 | 2.465 | 9.5 | AVG | * |
| Aniline | 3.094 | 2.723 | 2.510 | 2.507 | 2.377 | 2.642 | 10.7 | AVG | |
| bis(2-Chloroethyl)ether | 1.993 | 1.711 | 1.645 | 1.508 | 1.364 | 1.644 | 14.4 | AVG | |
| 2-Chlorophenol | 2.142 | 2.017 | 1.983 | 1.899 | 1.722 | 1.953 | 8.0 | AVG | |
| 1,3-Dichlorobenzene | 2.598 | 2.319 | 2.291 | 2.140 | 1.982 | 2.266 | 10.1 | AVG | |
| 1,4-Dichlorobenzene | 2.597 | 2.332 | 2.315 | 2.141 | 1.987 | 2.274 | 10.1 | AVG | * |
| Benzyl alcohol | 1.026 | 1.024 | 1.034 | 1.011 | .964 | 1.012 | 2.7 | AVG | |
| 1,2-Dichlorobenzene | 2.410 | 2.017 | 1.933 | 1.749 | 1.546 | 1.931 | 16.7 | 2NDDEG | |
| 2-Methylphenol | 1.710 | 1.633 | 1.661 | 1.621 | 1.546 | 1.634 | 3.7 | AVG | |
| 2,2'-oxybis(1-Chloropropane) | 4.554 | 4.381 | 4.436 | 4.318 | 3.919 | 4.322 | 5.6 | AVG | |
| bis(2-Chloroisopropyl)ether | 4.554 | 4.381 | 4.436 | 4.318 | 3.919 | 4.322 | 5.6 | AVG | |
| 4-Methylphenol | 2.047 | 1.659 | 1.515 | 1.329 | 1.176 | 1.545 | 21.7 | 2NDDEG | |
| 3 or 4-Methylphenol | 2.047 | 1.659 | 1.515 | 1.329 | 1.176 | 1.545 | 21.7 | 2NDDEG | |
| Acetophenone | 6.825 | 5.536 | 5.590 | 5.364 | 4.908 | 5.645 | 12.6 | AVG | |
| N-Nitroso-di-n-propylamine | 1.652 | 1.502 | 1.466 | 1.243 | .922 | 1.357 | 20.9 | 2NDDEG | # |
| o-Toluidine | 4.277 | 3.462 | 3.154 | 3.247 | 2.841 | 3.396 | 15.9 | 2NDDEG | |
| Hexachloroethane | .982 | .991 | 1.008 | .971 | .878 | .966 | 5.3 | AVG | |
| Nitrobenzene | .629 | .672 | .677 | .677 | .637 | .658 | 3.6 | AVG | |
| Isophorone | 1.110 | 1.151 | 1.177 | 1.205 | 1.177 | 1.164 | 3.1 | AVG | |
| 2-Nitrophenol | .251 | .336 | .335 | .347 | .327 | .319 | 12.2 | AVG | * |
| 2,4-Dimethylphenol | .594 | .599 | .603 | .455 | .581 | .566 | 11.1 | AVG | |
| Benzoic acid | .313 | .367 | .418 | .454 | .455 | .401 | 15.2 | 2NDDEG | |
| bis(2-Chloroethoxy)methane | .703 | .669 | .671 | .685 | .657 | .677 | 2.6 | AVG | |
| 2,4-Dichlorophenol | .488 | .501 | .494 | .489 | .466 | .488 | 2.7 | AVG | * |
| 1,2,4-Trichlorobenzene | .582 | .575 | .561 | .553 | .509 | .556 | 5.2 | AVG | |
| Naphthalene | 1.631 | 1.540 | 1.540 | 1.457 | 1.320 | 1.498 | 7.8 | AVG | |
| 4-Chloroaniline | .703 | .692 | .704 | .688 | .644 | .686 | 3.6 | AVG | |
| Hexachlorobutadiene | .378 | .376 | .377 | .380 | .328 | .368 | 6.1 | AVG | * |
| 4-Chloro-3-methylphenol | .454 | .517 | .536 | .516 | .470 | .499 | 7.0 | AVG | * |
| 2-Methylnaphthalene | 1.056 | .971 | .979 | .916 | .842 | .953 | 8.3 | AVG | |
| Hexachlorocyclopentadiene | .473 | .717 | .808 | .896 | .877 | .754 | 22.8 | 2NDDEG | # |
| 2,4,6-Trichlorophenol | .646 | .710 | .764 | .805 | .814 | .748 | 9.4 | AVG | * |
| 2,4,5-Trichlorophenol | .688 | .768 | .806 | .832 | .800 | .779 | 7.2 | AVG | |
| 2-Chloronaphthalene | 2.025 | 1.878 | 1.968 | 1.986 | 1.928 | 1.957 | 2.9 | AVG | |
| 2-Nitroaniline | .587 | .810 | .886 | .918 | .917 | .824 | 16.9 | 2NDDEG | |

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____.SAS No.: _____. SDG No.: _____.

Instrument ID: HP03189 Calibration Date(s): 06/27/95 06/28/95

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF5 = >V6255 RRF50 = >V6253
RRF80 = >V6254 RRF120= >V6252 RRF160= >V6251

| COMPOUND | RRF5 | RRF50 | RRF80 | RRF120 | RRF160 | $\overline{RRF}$ | % RSD | CAL. METHOD | |
|---|---|---|---|---|---|---|---|---|---|
| Dimethylphthalate | 2.261 | 2.254 | 2.330 | 2.273 | 2.270 | 2.278 | 1.3 | AVG | |
| 2,6-Dinitrotoluene | .349 | .519 | .539 | .518 | .501 | .485 | 15.9 | 2NDDEG | |
| Acenaphthylene | 3.176 | 3.027 | 3.096 | 3.021 | 2.837 | 3.032 | 4.1 | AVG | |
| 3-Nitroaniline | .430 | .579 | .588 | .575 | .580 | .550 | 12.2 | AVG | |
| Acenaphthene | * 2.043 | 1.911 | 1.934 | 1.941 | 1.836 | 1.933 | 3.8 | AVG | * |
| 2,4-Dinitrophenol | # .200 | .255 | .319 | .342 | .350 | .293 | 21.9 | 2NDDEG | # |
| 4-Nitrophenol | # .247 | .330 | .356 | .329 | .305 | .313 | 13.1 | AVG | # |
| Dibenzofuran | 2.965 | 2.634 | 2.573 | 2.472 | 2.302 | 2.589 | 9.5 | AVG | |
| 2,4-Dinitrotoluene | .639 | .727 | .764 | .724 | .728 | .717 | 6.5 | AVG | |
| 1-Naphthylamine | 2.389 | 2.081 | 2.245 | 2.219 | 2.082 | 2.203 | 5.8 | AVG | |
| 2-Naphthylamine | 1.992 | 1.750 | 1.926 | 1.933 | 1.867 | 1.893 | 4.8 | AVG | |
| Diethylphthalate | 2.257 | 2.214 | 2.285 | 2.202 | 2.121 | 2.216 | 2.8 | AVG | |
| 4-Chlorophenyl-phenylether | 1.116 | 1.055 | 1.095 | 1.046 | 1.015 | 1.065 | 3.8 | AVG | |
| Fluorene | 2.127 | 2.066 | 2.034 | 1.971 | 1.854 | 2.011 | 5.2 | AVG | |
| 4-Nitroaniline | .340 | .523 | .559 | .551 | .558 | .506 | 18.6 | 1STDEG | |
| 4,6-Dinitro-2-methylphenol | .164 | .228 | .243 | .230 | .214 | .216 | 14.3 | AVG | |
| N-Nitrosodiphenylamine (1) | * .913 | .878 | .901 | .884 | .826 | .880 | 3.8 | AVG | * |
| 1,2-Diphenylhydrazine | 1.615 | 1.564 | 1.623 | 1.628 | 1.530 | 1.592 | 2.7 | AVG | |
| 4-Bromophenyl-phenylether | .427 | .431 | .461 | .448 | .405 | .434 | 4.9 | AVG | |
| Hexachlorobenzene | .622 | .598 | .606 | .596 | .536 | .592 | 5.5 | AVG | |
| Pentachlorophenol | * .285 | .301 | .333 | .340 | .321 | .316 | 7.1 | 2NDDEG | * |
| Phenanthrene | 2.084 | 1.809 | 1.839 | 1.727 | 1.550 | 1.802 | 10.7 | AVG | |
| Anthracene | 1.974 | 1.888 | 1.843 | 1.768 | 1.630 | 1.821 | 7.1 | AVG | |
| Carbazole | 1.611 | 1.704 | 1.696 | 1.598 | 1.453 | 1.612 | 6.3 | AVG | |
| Di-n-butylphthalate | 1.789 | 2.216 | 2.170 | 2.113 | 1.865 | 2.031 | 9.4 | AVG | |
| Fluoranthene | * 1.773 | 1.992 | 1.869 | 1.749 | 1.467 | 1.770 | 11.0 | AVG | * |
| Benzidine | 1.272 | 1.031 | 1.100 | 1.092 | 1.058 | 1.111 | 8.5 | AVG | |
| Pyrene | 2.420 | 2.464 | 3.044 | 3.047 | 2.917 | 2.779 | 11.2 | AVG | |
| Butylbenzylphthalate | .725 | 1.077 | 1.132 | 1.102 | 1.085 | 1.024 | 16.5 | 1STDEG | |
| 3,3'-Dichlorobenzidine | .527 | .638 | .732 | .774 | .820 | .698 | 16.7 | 1STDEG | |
| Benzo(a)anthracene | 1.751 | 1.797 | 1.845 | 1.953 | 1.956 | 1.861 | 4.9 | AVG | |
| bis(2-Ethylhexyl)phthalate | 1.073 | 1.442 | 1.470 | 1.452 | 1.445 | 1.376 | 12.4 | AVG | |
| Chrysene | 1.782 | 1.738 | 1.798 | 1.880 | 1.888 | 1.817 | 3.6 | AVG | |
| Di-n-octylphthalate | * 2.921 | 3.449 | 3.004 | 3.320 | 3.296 | 3.198 | 7.0 | 2NDDEG | * |
| 7,12-Dimethylbenz[a]anthrace | 1.302 | 1.273 | 1.261 | 1.359 | 1.288 | 1.297 | 3.0 | AVG | |
| Benzo(b)fluoranthene | 2.863 | 2.440 | 2.659 | 2.620 | 2.739 | 2.664 | 5.9 | AVG | |
| Benzo(k)fluoranthene | 2.657 | 2.473 | 2.469 | 2.609 | 2.304 | 2.502 | 5.5 | AVG | |

(1) Cannot be separated from Diphenylamine

6C Cont.

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____.SAS No.: _____. SDG No.: _____.

Instrument ID: HP03189 Calibration Date(s): 06/27/95 06/28/95

___.

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF5 = >V6255 RRF50 = >V6253
RRF80 = >V6254 RRF120= >V6252 RRF160= >V6251

| COMPOUND | RRF5 | RRF50 | RRF80 | RRF120 | RRF160 | RRF | % RSD | CAL. METHOD |
|---|---|---|---|---|---|---|---|---|
| Benzo(a)pyrene * | 2.221 | 2.245 | 2.371 | 2.380 | 2.215 | 2.286 | 3.6 | AVG * |
| Indeno(1,2,3-cd)pyrene | 1.379 | 1.900 | 1.747 | 1.782 | 1.630 | 1.687 | 11.7 | AVG |
| Dibenz(a,h)anthracene | 1.399 | 1.881 | 1.686 | 1.749 | 1.631 | 1.669 | 10.6 | AVG |
| Benzo(g,h,i)perylene | 1.290 | 1.854 | 1.643 | 1.669 | 1.530 | 1.597 | 13.0 | AVG |
| 2-Fluorophenol | 1.820 | 1.850 | 1.874 | 1.832 | 1.734 | 1.822 | 2.9 | AVG |
| Phenol-d5 | 2.400 | 2.227 | 2.123 | 2.048 | 1.895 | 2.139 | 8.9 | AVG |
| Phenol-d6 | 2.400 | 2.227 | 2.123 | 2.048 | 1.895 | 2.139 | 8.9 | AVG |
| Nitrobenzene-d5 | .572 | .634 | .655 | .672 | .638 | .634 | 6.0 | AVG |
| 2-Fluorobiphenyl | 2.316 | 2.138 | 2.205 | 2.181 | 2.162 | 2.200 | 3.2 | AVG |
| 2,4,6-Tribromophenol | .435 | .518 | .586 | .553 | .524 | .523 | 10.8 | AVG |
| Terphenyl-d14 | 1.380 | 1.658 | 1.996 | 1.897 | 1.808 | 1.748 | 13.7 | AVG |



4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/uL in the 5 standard.
2,4-Dinitrophenol and 2 or 4-Chloronitrobenzene levels are 40 and 100 ng/uL respectively in the 5 standard.
Benzoic acid and Pentachlorophenol are at 20 ng/uL in the 5 standard.
Benzidine levels in the 5,50,80,120,160 standards are 95,200,320,480 and 640 ng/uL respectively.

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: HP03189

Contractor: LANCASTER LABS Calibration Date: 06/28/95

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30.0%

| Laboratory ID: | >V6255 | >V6253 | >V6254 | >V6252 | >V6251 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Compound | RF 5.00 | RF 50.00 | RF 80.00 | RF 120.00 | RF 160.00 | $\overline{RRT}$ | $\overline{RF}$ | % RSD | CORR1 | CORR2 | CCC | SPCC |
| Pyridine | 1.38088 | 1.46399 | 1.50487 | 1.49281 | 1.39794 | .259 | 1.44810 | 3.862 | .998279 | .999317 | | |
| 2-Picoline | 1.20375 | 1.25487 | 1.27265 | 1.33115 | 1.28612 | .463 | 1.26971 | 3.657 | .999470 | .999473 | | |
| N-Nitrosodimethylamine | .85223 | .88437 | .88145 | .87966 | .83543 | .256 | .86663 | 2.505 | .999003 | .999694 | | |
| 3-Chloropropionitrile | - | - | - | - | - | - | - | - | - | - | | |
| Methyl methanesulfonate | - | - | - | - | - | - | - | - | - | - | | |
| Phenol | 1.76798 | 1.55918 | 1.52924 | 1.48261 | 1.36499 | .912 | 1.54080 | 9.537 | .996933 | .999390 | * | |
| Aniline | 1.93389 | 1.70183 | 1.56847 | 1.56675 | 1.48548 | .907 | 1.65128 | 10.659 | .998645 | .999650 | | |
| bis(2-Chloroethyl)ether | 1.24564 | 1.06949 | 1.02811 | .94230 | .85281 | .934 | 1.02767 | 14.361 | .992803 | .999484 | | |
| 2-Chlorophenol | 1.33872 | 1.26047 | 1.23940 | 1.18673 | 1.07652 | .939 | 1.22037 | 7.966 | .995277 | .999092 | | |
| 1,3-Dichlorobenzene | 1.62398 | 1.44936 | 1.43212 | 1.33748 | 1.23856 | .982 | 1.41630 | 10.127 | .995980 | .999667 | | |
| 1,4-Dichlorobenzene | 1.62289 | 1.45768 | 1.44714 | 1.33786 | 1.24186 | 1.005 | 1.42148 | 10.059 | .995689 | .999672 | * | |
| Benzyl alcohol | .64116 | .63989 | .64618 | .63211 | .60274 | 1.049 | .63242 | 2.742 | .998922 | .999794 | | |
| 1,2-Dichlorobenzene | 1.50654 | 1.26080 | 1.20831 | 1.09342 | .96645 | 1.047 | 1.20710 | 16.743 | .989268 | .998784 | | |
| 2-Methylphenol | 1.06906 | 1.02068 | 1.03824 | 1.01341 | .96625 | 1.089 | 1.02153 | 3.682 | .998915 | .999754 | | |
| 2,2'-oxybis(1-Chloropropane) | 2.84608 | 2.73835 | 2.77272 | 2.69897 | 2.44925 | 1.093 | 2.70107 | 5.583 | .995947 | .998684 | | |
| bis(2-Chloroisopropyl)ether | 2.84608 | 2.73835 | 2.77272 | 2.69897 | 2.44925 | 1.093 | 2.70107 | 5.583 | .995947 | .998684 | | |
| 4-Methylphenol | 1.27931 | 1.03681 | .94716 | .83044 | .73515 | 1.135 | .96577 | 21.670 | .985430 | .999485 | | |
| 3 or 4-Methylphenol | 1.27931 | 1.03681 | .94716 | .83044 | .73515 | 1.135 | .96577 | 21.670 | .985430 | .999485 | | |
| N-Methylaniline | - | - | - | - | - | - | - | - | - | - | | |
| Acetophenone | 4.26555 | 3.45993 | 3.49401 | 3.35231 | 3.06730 | 1.127 | 3.52782 | 12.620 | .996392 | .999046 | | |
| N-Nitroso-di-n-propylamine | 1.03265 | .93870 | .91620 | .77714 | .57599 | 1.132 | .84813 | 20.925 | .940946 | .961451 | | ** |
| o-Toluidine | 2.67333 | 2.16375 | 1.97112 | 2.02910 | 1.77576 | 1.136 | 2.12261 | 15.924 | .993679 | .996437 | | |
| Hexachloroethane | .61351 | .61966 | .62997 | .60694 | .54893 | 1.147 | .60380 | 5.271 | .995270 | .998633 | | |
| 2-Fluorophenol | 1.13750 | 1.15613 | 1.17156 | 1.14477 | 1.08383 | .636 | 1.13876 | 2.923 | .998591 | .999696 | | |
| Phenol-d5 | 1.50024 | 1.39209 | 1.32710 | 1.28028 | 1.18458 | .908 | 1.33686 | 8.869 | .996816 | .999674 | | |
| Phenol-d6 | 1.50024 | 1.39209 | 1.32710 | 1.28028 | 1.18458 | .908 | 1.33686 | 8.869 | .996816 | .999674 | | |
| Nitrobenzene | .39301 | .41991 | .42313 | .42316 | .39824 | .849 | .41149 | 3.562 | .998634 | .999481 | | |
| N,N-Dimethylaniline | - | - | - | - | - | - | - | - | - | - | | |

RF - Response Factor (Subscript is amount in ng/ul)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CORRn - Coefficient of Correlation (nth degree)

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)



RE 6/29/95

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: HP03189

Contractor: LANCASTER LABS Calibration Date: 06/28/95

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30.0%

| Laboratory ID: | >V6255 | >V6253 | >V6254 | >V6252 | >V6251 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Compound | RF 5.00 | RF 50.00 | RF 80.00 | RF 120.00 | RF 160.00 | $\overline{RRT}$ | $\overline{RF}$ | % RSD | CORR1 | CORR2 | CCC | SPCC |
| Isophorone | .69355 | .71911 | .73588 | .75335 | .73587 | .904 | .72755 | 3.098 | .999757 | .999765 | | |
| 2-Nitrophenol | .15673 | .20999 | .20927 | .21659 | .20464 | .918 | .19944 | 12.161 | .998905 | .999289 | * | |
| 2,4-Dimethylphenol | .37144 | .37436 | .37659 | .28416 | .36312 | .937 | .35394 | 11.115 | .979572 | .982405 | | |
| Benzoic acid | .19591 | .22950 | .26096 | .28403 | .28418 | .973 | .25092 | 15.160 | .999208 | .999308 | | (Conc=20. |
| bis(2-Chloroethoxy)methane | .43929 | .41809 | .41920 | .42831 | .41085 | .959 | .42315 | 2.588 | .999465 | .999608 | | |
| 1-Methyl-2-nitrobenzene | - | - | - | - | - | - | - | - | - | - | | |
| 2,4-Dichlorophenol | .30512 | .31282 | .30862 | .30573 | .29118 | .973 | .30469 | 2.672 | .999009 | .999810 | * | |
| 1,2,4-Trichlorobenzene | .36356 | .35911 | .35050 | .34562 | .31790 | .990 | .34734 | 5.153 | .997118 | .999248 | | |
| 1,3-Dimethyl-2-nitrobenzene | - | - | - | - | - | - | - | - | - | - | | |
| Naphthalene | 1.01932 | .96255 | .96279 | .91047 | .82497 | 1.005 | .93602 | 7.804 | .994744 | .998998 | | |
| 1-Methyl-3-nitrobenzene | - | - | - | - | - | - | - | - | - | - | | |
| 4-Chloroaniline | .43967 | .43258 | .44031 | .43007 | .40257 | 1.023 | .42904 | 3.601 | .998054 | .999471 | | |
| Hexachlorobutadiene | .23605 | .23527 | .23559 | .23738 | .20494 | 1.038 | .22985 | 6.067 | .992078 | .995408 | * | |
| 1-Methyl-4-nitrobenzene | - | - | - | - | - | - | - | - | - | - | | |
| 2 or 4-Choloronitrobenzene | - | - | - | - | - | - | - | - | - | - | | |
| 2-Tertbutylphenol | - | - | - | - | - | - | - | - | - | - | | |
| 1,4-Dimethyl-2-nitrobenzene | - | - | - | - | - | - | - | - | - | - | | |
| 4-Chloro-3-methylphenol | .28401 | .32316 | .33489 | .32269 | .29348 | 1.140 | .31165 | 6.972 | .995592 | .998662 | * | |
| 3 or 4-Tertbutylphenol | - | - | - | - | - | - | - | - | - | - | | |
| 2-Methylnaphthalene | .65989 | .60717 | .61176 | .57262 | .52622 | 1.164 | .59553 | 8.341 | .995542 | .999353 | | |
| Nitrobenzene-d5 | .35737 | .39655 | .40945 | .41992 | .39875 | .845 | .39641 | 5.986 | .999063 | .999292 | | |
| Hexachlorocyclopentadiene | .29573 | .44824 | .50519 | .56009 | .54839 | .858 | .47153 | 22.824 | .997953 | .998449 | | ** |
| 2,4,6-Trichlorophenol | .40358 | .44376 | .47732 | .50322 | .50866 | .879 | .46731 | 9.399 | .999136 | .999692 | * | |
| 2,4,5-Trichlorophenol | .42992 | .48022 | .50371 | .52018 | .49977 | .884 | .48676 | 7.152 | .999308 | .999354 | | |
| 2-Chloronaphthalene | 1.26531 | 1.17375 | 1.23027 | 1.24134 | 1.20491 | .910 | 1.22312 | 2.871 | .999578 | .999626 | | |
| 1,2-Dichloro-4-nitrobenzene | - | - | - | - | - | - | - | - | - | - | | |
| 1,2-Dichloro-3-nitrobenzene | - | - | - | - | - | - | - | - | - | - | | |
| 2,6-Ditertbutylphenol | - | - | - | - | - | - | - | - | - | - | | |

RF - Response Factor (Subscript is amount in ng/ul)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CORRn - Coefficient of Correlation (nth degree)

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: HP03189

Contractor: LANCASTER LABS Calibration Date: 06/28/95

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30.0%

| Laboratory ID: | >V6255 | >V6253 | >V6254 | >V6252 | >V6251 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Compound | RF 5.00 | RF 50.00 | RF 80.00 | RF 120.00 | RF 160.00 | $\overline{RRT}$ | $\overline{RF}$ | % RSD | CORR1 | CORR2 | CCC | SPCC |
| 2-Nitroaniline | .36685 | .50597 | .55398 | .57376 | .57317 | .930 | .51475 | 16.932 | .999486 | .999623 | | |
| 1,4-Naphthoquinone | - | - | - | - | - | - | - | - | - | - | | |
| Dimethylphthalate | 1.41281 | 1.40877 | 1.45645 | 1.42087 | 1.41882 | .966 | 1.42355 | 1.335 | .999865 | .999901 | | |
| 3,4-Dichloro-nitrobenzene | - | - | - | - | - | - | - | - | - | - | | |
| Acenaphthylene | 1.98511 | 1.89204 | 1.93526 | 1.88824 | 1.77331 | .976 | 1.89479 | 4.139 | .998229 | .999494 | | |
| 2,4-Ditertbutylphenol | - | - | - | - | - | - | - | - | - | - | | |
| 2,6-Dinitrotoluene | .21818 | .32428 | .33713 | .32363 | .31307 | .974 | .30326 | 15.933 | .998817 | .999823 | | |
| 3-Nitroaniline | .26895 | .36198 | .36733 | .35939 | .36245 | .999 | .34402 | 12.226 | .999889 | .999920 | | |
| 3,4-Dichloroaniline | - | - | - | - | - | - | - | - | - | - | | |
| Acenaphthene | 1.27673 | 1.19417 | 1.20874 | 1.21317 | 1.14745 | 1.006 | 1.20805 | 3.840 | .998950 | .999486 | * | |
| BHT | - | - | - | - | - | - | - | - | - | - | | |
| 2,4-Dinitrophenol | .12489 | .15954 | .19965 | .21350 | .21893 | 1.017 | .18330 | 21.865 | .999458 | .999958 | | ** (Conc=40. |
| 4-Nitrophenol | .15438 | .20623 | .22222 | .20557 | .19043 | 1.033 | .19577 | 13.140 | .994540 | .998997 | | ** (Conc=10. |
| 3,5-Ditertbutylphenol | - | - | - | - | - | - | - | - | - | - | | |
| Dibenzofuran | 1.85327 | 1.64651 | 1.60817 | 1.54503 | 1.43890 | 1.035 | 1.61838 | 9.455 | .997369 | .999712 | | |
| 2,4-Dinitrotoluene | .39948 | .45413 | .47774 | .45246 | .45529 | 1.039 | .44782 | 6.461 | .999474 | .999619 | | |
| 1-Naphthylamine | 1.49330 | 1.30071 | 1.40330 | 1.38668 | 1.30136 | 1.049 | 1.37707 | 5.838 | .998181 | .998845 | | |
| 2-Naphthylamine | 1.24483 | 1.09370 | 1.20360 | 1.20807 | 1.16657 | 1.062 | 1.18335 | 4.840 | .999073 | .999124 | | |
| Diethylphthalate | 1.41047 | 1.38369 | 1.42813 | 1.37648 | 1.32566 | 1.085 | 1.38489 | 2.821 | .999016 | .999784 | | |
| 4-Chlorophenyl-phenylether | .69726 | .65907 | .68413 | .65391 | .63413 | 1.096 | .66570 | 3.767 | .999086 | .999766 | | |
| Fluorene | 1.32926 | 1.29133 | 1.27131 | 1.23203 | 1.15895 | 1.091 | 1.25658 | 5.164 | .998082 | .999787 | | |
| 4-Nitroaniline | .21247 | .32706 | .34919 | .34412 | .34904 | 1.100 | .31638 | 18.582 | .999836 | .999840 | | |
| 2-Fluorobiphenyl | 1.44779 | 1.33640 | 1.37809 | 1.36288 | 1.35114 | .895 | 1.37526 | 3.151 | .999903 | .999920 | | |
| 2,4,6-Tribromophenol | .27188 | .32388 | .36653 | .34569 | .32748 | 1.130 | .32709 | 10.766 | .997152 | .998619 | | |
| 4,6-Dinitro-2-methylphenol | .10236 | .14261 | .15181 | .14347 | .13361 | .889 | .13477 | 14.267 | .995876 | .999298 | | (Conc=10. |
| N-Nitrosodiphenylamine | .57071 | .54875 | .56285 | .55248 | .51625 | .898 | .55021 | 3.791 | .998071 | .999336 | * | |
| 1,2-Diphenylhydrazine | 1.00912 | .97774 | 1.01429 | 1.01739 | .95595 | .902 | .99490 | 2.704 | .998583 | .999198 | | |
| 1-Nitronaphthalene | - | - | - | - | - | - | - | - | - | - | | |

RF - Response Factor (Subscript is amount in ng/ul)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CORRn - Coefficient of Correlation (nth degree)

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: Instrument ID: HP03189

Contractor: LANCASTER LABS Calibration Date: 06/28/95

Contract No:

Minimum $\overline{RF}$ for SPCC is 0.05 Maximum % RSD for CCC is 30.0%

| Laboratory ID: | >V6255 | >V6253 | >V6254 | >V6252 | >V6251 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Compound | RF 5.00 | RF 50.00 | RF 80.00 | RF 120.00 | RF 160.00 | $\overline{RRT}$ | $\overline{RF}$ | % RSD | CORR1 | CORR2 | CCC | SPCC | |
| 4-Methyl-3-nitrobenzoic acid | - | - | - | - | - | - | - | - | - | - | | | |
| 4-Bromophenyl-phenylether | .26716 | .26914 | .28797 | .28002 | .25326 | .946 | .27151 | 4.875 | .995471 | .997912 | | | |
| Hexachlorobenzene | .38890 | .37360 | .37881 | .37219 | .33499 | .949 | .36970 | 5.540 | .995545 | .998231 | | | |
| Pentachlorophenol | .17835 | .18836 | .20794 | .21264 | .20060 | .977 | .19758 | 7.150 | .998091 | .998821 | * | | (Conc=20. |
| Phenanthrene | 1.30231 | 1.13074 | 1.14906 | 1.07919 | .96863 | 1.003 | 1.12599 | 10.749 | .993780 | .998476 | | | |
| Anthracene | 1.23366 | 1.17976 | 1.15214 | 1.10502 | 1.01880 | 1.010 | 1.13787 | 7.139 | .996521 | .999554 | | | |
| Carbazole | 1.00677 | 1.06470 | 1.06005 | .99880 | .90799 | 1.035 | 1.00766 | 6.279 | .994617 | .999200 | | | |
| Di-n-butylphthalate | 1.11785 | 1.38509 | 1.35616 | 1.32072 | 1.16592 | 1.091 | 1.26915 | 9.424 | .992858 | .997819 | | | |
| Diphenyl sulfone | - | - | - | - | - | - | - | - | - | - | | | |
| Fluoranthene | 1.10814 | 1.24518 | 1.16830 | 1.09288 | .91712 | 1.161 | 1.10632 | 10.987 | .982971 | .994920 | * | | |
| Benzidine | .79530 | .64462 | .68744 | .68233 | .66132 | .878 | .69420 | 8.506 | .998910 | .998932 | | | (Conc=95. |
| Pyrene | 1.51267 | 1.54018 | 1.90263 | 1.90440 | 1.82332 | .881 | 1.73664 | 11.224 | .997316 | .997391 | | | |
| Butylbenzylphthalate | .45305 | .67294 | .70737 | .68846 | .67829 | .954 | .64002 | 16.459 | .999558 | .999854 | | | |
| 3,3'-Dichlorobenzidine | .32924 | .39869 | .45773 | .48361 | .51241 | 1.001 | .43634 | 16.749 | .997334 | .999560 | | | |
| Benzo(a)anthracene | 1.09443 | 1.12340 | 1.15327 | 1.22088 | 1.22224 | .999 | 1.16284 | 4.945 | .999403 | .999756 | | | |
| Chrysene | 1.11392 | 1.08629 | 1.12381 | 1.17478 | 1.17991 | 1.003 | 1.13574 | 3.560 | .999513 | .999833 | | | |
| bis(2-Ethylhexyl)phthalate | .67037 | .90094 | .91858 | .90758 | .90337 | 1.014 | .86017 | 12.360 | .999907 | .999982 | | | |
| Terphenyl-d14 | .86274 | 1.03648 | 1.24725 | 1.18543 | 1.12976 | .902 | 1.09233 | 13.725 | .996937 | .997799 | | | |
| Di-n-octylphthalate | 1.82533 | 2.15541 | 1.87757 | 2.07480 | 2.05971 | .952 | 1.99856 | 7.023 | .998195 | .998346 | * | | |
| 7,12-Dimethylbenz[a]anthracene | .81365 | .79566 | .78786 | .84968 | .80496 | .973 | .81036 | 2.964 | .998711 | .998713 | | | |
| Benzo(b)fluoranthene | 1.78963 | 1.52473 | 1.66213 | 1.63769 | 1.71180 | .972 | 1.66520 | 5.865 | .998972 | .999625 | | | |
| Benzo(k)fluoranthene | 1.66053 | 1.54548 | 1.54306 | 1.63048 | 1.44016 | .975 | 1.56394 | 5.524 | .995044 | .996068 | | | |
| Benzo(a)pyrene | 1.38819 | 1.40317 | 1.48194 | 1.48731 | 1.38459 | .996 | 1.42904 | 3.587 | .998038 | .998808 | * | | |
| Indeno(1,2,3-cd)pyrene | .86170 | 1.18761 | 1.09197 | 1.11352 | 1.01853 | 1.087 | 1.05466 | 11.716 | .996458 | .998741 | | | |
| Dibenz(a,h)anthracene | .87427 | 1.17539 | 1.05383 | 1.09305 | 1.01953 | 1.091 | 1.04321 | 10.628 | .997517 | .998805 | | | |
| Benzo(g,h,i)perylene | .80602 | 1.15883 | 1.02677 | 1.04306 | .95595 | 1.113 | .99813 | 13.000 | .995775 | .998692 | | | |

RF - Response Factor (Subscript is amount in ng/ul)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CORRn - Coefficient of Correlation (nth degree)

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

# SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

Instrument ID: HP03189 Calibration Date: 06/28/95 Time: 13:03

Lab File ID: >V6303 Init. Calib. Date(s): 06/27/95 06/28/95

Min RRF50 for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20.0%

| COMPOUND | | RRF | RRF80 | ACTUAL CONC | TRUE CONC | % DRIFT |
|---|---|---|---|---|---|---|
| Pyridine | | 2.317 | 1.488 | 82.20 | 80.0 | -2.8 |
| N-Nitrosodimethylamine | | 1.387 | .878 | 81.02 | 80.0 | -1.3 |
| 2-Picoline | | 2.032 | 1.292 | 81.41 | 80.0 | -1.8 |
| Phenol | * | 2.465 | 1.514 | 78.60 | 80.0 | 1.8* |
| Aniline | | 2.642 | 1.580 | 76.53 | 80.0 | 4.3 |
| bis(2-Chloroethyl)ether | | 1.644 | .969 | 75.43 | 80.0 | 5.7 |
| 2-Chlorophenol | | 1.953 | 1.238 | 81.18 | 80.0 | -1.5 |
| 1,3-Dichlorobenzene | | 2.266 | 1.408 | 79.53 | 80.0 | .6 |
| 1,4-Dichlorobenzene | * | 2.274 | 1.404 | 78.99 | 80.0 | 1.3* |
| Benzyl alcohol | | 1.012 | .635 | 80.30 | 80.0 | -.4 |
| 1,2-Dichlorobenzene | | 1.931 | 1.153 | 76.10 | 80.0 | 4.9 |
| 2-Methylphenol | | 1.634 | 1.039 | 81.38 | 80.0 | -1.7 |
| 2,2'-oxybis(1-Chloropropane) | | 4.322 | 2.682 | 79.45 | 80.0 | .7 |
| bis(2-Chloroisopropyl)ether | | 4.322 | 2.682 | 79.45 | 80.0 | .7 |
| 4-Methylphenol | | 1.545 | .885 | 73.51 | 80.0 | 8.1 |
| 3 or 4-Methylphenol | | 1.545 | .885 | 73.51 | 80.0 | 8.1 |
| Acetophenone | | 5.645 | 3.435 | 77.89 | 80.0 | 2.6 |
| N-Nitroso-di-n-propylamine | # | 1.357 | .872 | 83.41 | 80.0 | -4.3# |
| o-Toluidine | | 3.396 | 1.872 | 71.74 | 80.0 | 10.3 |
| Hexachloroethane | | .966 | .606 | 80.33 | 80.0 | -.4 |
| Nitrobenzene | | .658 | .427 | 83.11 | 80.0 | -3.9 |
| Isophorone | | 1.164 | .729 | 80.17 | 80.0 | -.2 |
| 2-Nitrophenol | * | .319 | .221 | 88.47 | 80.0 | -10.6* |
| 2,4-Dimethylphenol | | .566 | .380 | 86.00 | 80.0 | -7.5 |
| Benzoic acid | | .401 | .269 | 81.38 | 80.0 | -1.7 |
| bis(2-Chloroethoxy)methane | | .677 | .423 | 79.94 | 80.0 | .1 |
| 2,4-Dichlorophenol | * | .488 | .311 | 81.53 | 80.0 | -1.9* |
| 1,2,4-Trichlorobenzene | | .556 | .357 | 82.19 | 80.0 | -2.7 |
| Naphthalene | | 1.498 | .938 | 80.19 | 80.0 | -.2 |
| 4-Chloroaniline | | .686 | .439 | 81.83 | 80.0 | -2.3 |
| Hexachlorobutadiene | * | .368 | .237 | 82.48 | 80.0 | -3.1* |
| 4-Chloro-3-methylphenol | * | .499 | .330 | 84.71 | 80.0 | -5.9* |
| 2-Methylnaphthalene | | .953 | .610 | 81.98 | 80.0 | -2.5 |
| Hexachlorocyclopentadiene | # | .754 | .534 | 83.13 | 80.0 | -3.9# |
| 2,4,6-Trichlorophenol | * | .748 | .475 | 81.27 | 80.0 | -1.6* |
| 2,4,5-Trichlorophenol | | .779 | .535 | 87.97 | 80.0 | -10.0 |
| 2-Chloronaphthalene | | 1.957 | 1.206 | 78.91 | 80.0 | 1.4 |
| 2-Nitroaniline | | .824 | .564 | 81.85 | 80.0 | -2.3 |

7C

# SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

Instrument ID: HP03189 Calibration Date: 06/28/95 Time: 13:03

Lab File ID: >V6303 Init. Calib. Date(s): 06/27/95 06/28/95

Min RRF50 for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20.0%

| COMPOUND | | RRF | RRF80 | ACTUAL CONC | TRUE CONC | % DRIFT | |
|---|---|---|---|---|---|---|---|
| Dimethylphthalate | | 2.278 | 1.441 | 81.01 | 80.0 | -1.3 | |
| 1,3-Dinitrobenzene | | 0.000 | 0.000 | 0.00 | 80.0 | 100.0 | |
| 2,6-Dinitrotoluene | | .485 | .341 | 82.33 | 80.0 | -2.9 | |
| Acenaphthylene | | 3.032 | 1.924 | 81.21 | 80.0 | -1.5 | |
| 3-Nitroaniline | | .550 | .360 | 83.65 | 80.0 | -4.6 | |
| Acenaphthene | * | 1.933 | 1.213 | 80.30 | 80.0 | -.4 | * |
| 2,4-Dinitrophenol | # | .293 | .193 | 78.49 | 80.0 | 1.9 | # |
| 4-Nitrophenol | # | .313 | .204 | 83.41 | 80.0 | -4.3 | # |
| Dibenzofuran | | 2.589 | 1.637 | 80.93 | 80.0 | -1.2 | |
| 2,4-Dinitrotoluene | | .717 | .455 | 81.37 | 80.0 | -1.7 | |
| 1-Naphthylamine | | 2.203 | 1.373 | 79.79 | 80.0 | .3 | |
| 2-Naphthylamine | | 1.893 | 1.201 | 81.17 | 80.0 | -1.5 | |
| Diethylphthalate | | 2.216 | 1.348 | 77.87 | 80.0 | 2.7 | |
| 4-Chlorophenyl-phenylether | | 1.065 | .672 | 80.73 | 80.0 | -.9 | |
| Fluorene | | 2.011 | 1.256 | 79.99 | 80.0 | .0 | |
| 4-Nitroaniline | | .506 | .319 | 74.55 | 80.0 | 6.8 | |
| 4,6-Dinitro-2-methylphenol | | .216 | .143 | 85.12 | 80.0 | -6.4 | |
| N-Nitrosodiphenylamine (1) | * | .880 | .575 | 83.66 | 80.0 | -4.6 | * |
| 1,2-Diphenylhydrazine | | 1.592 | 1.032 | 82.99 | 80.0 | -3.7 | |
| 4-Bromophenyl-phenylether | | .434 | .293 | 86.30 | 80.0 | -7.9 | |
| Hexachlorobenzene | | .592 | .380 | 82.25 | 80.0 | -2.8 | |
| Pentachlorophenol | * | .316 | .201 | 77.16 | 80.0 | 3.6 | * |
| Phenanthrene | | 1.802 | 1.116 | 79.31 | 80.0 | .9 | |
| Anthracene | | 1.821 | 1.136 | 79.86 | 80.0 | .2 | |
| Carbazole | | 1.612 | .925 | 73.44 | 80.0 | 8.2 | |
| Di-n-butylphthalate | | 2.031 | 1.136 | 71.63 | 80.0 | 10.5 | |
| Fluoranthene | * | 1.770 | .972 | 70.30 | 80.0 | 12.1 | * |
| Benzidine | | 1.111 | .615 | 283.70 | 320.0 | 11.3 | |
| Pyrene | | 2.779 | 1.520 | 70.02 | 80.0 | 12.5 | |
| Butylbenzylphthalate | | 1.024 | .617 | 72.24 | 80.0 | 9.7 | |
| 3,3'-Dichlorobenzidine | | .698 | .476 | 79.95 | 80.0 | .1 | |
| Benzo(a)anthracene | | 1.861 | 1.148 | 78.96 | 80.0 | 1.3 | |
| bis(2-Ethylhexyl)phthalate | | 1.376 | .822 | 76.45 | 80.0 | 4.4 | |
| Chrysene | | 1.817 | 1.134 | 79.85 | 80.0 | .2 | |
| Di-n-octylphthalate | * | 3.198 | 2.097 | 83.38 | 80.0 | -4.2 | * |
| 7,12-Dimethylbenz[a]anthrace | | 1.297 | .882 | 87.11 | 80.0 | -8.9 | |
| Benzo(b)fluoranthene | | 2.664 | 1.754 | 84.28 | 80.0 | -5.3 | |
| Benzo(k)fluoranthene | | 2.502 | 1.558 | 79.71 | 80.0 | .4 | |

(1) Cannot be separated from Diphenylamine

7C cont

# SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: LANCASTER LABS Contract: _____.

Lab Code: LANCAS Case No.: _____. SAS No.: _____. SDG No.: _____.

Instrument ID: HP03189 Calibration Date: 06/28/95 Time: 13:03

Lab File ID: >V6303 Init. Calib. Date(s): 06/27/95 06/28/95

Min RRF50 for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20.0%

| COMPOUND | | RRF | RRF80 | ACTUAL CONC | TRUE CONC | % DRIFT | |
|---|---|---|---|---|---|---|---|
| Benzo(a)pyrene | * | 2.286 | 1.529 | 85.57 | 80.0 | -7.0 | * |
| Indeno(1,2,3-cd)pyrene | | 1.687 | 1.088 | 82.51 | 80.0 | -3.1 | |
| Dibenz(a,h)anthracene | | 1.669 | 1.074 | 82.38 | 80.0 | -3.0 | |
| Benzo(g,h,i)perylene | | 1.597 | 1.022 | 81.89 | 80.0 | -2.4 | |
| 2-Fluorophenol | | 1.822 | 1.151 | 80.89 | 80.0 | -1.1 | |
| Phenol-d5 | | 2.139 | 1.296 | 77.58 | 80.0 | 3.0 | |
| Phenol-d6 | | 2.139 | 1.296 | 77.58 | 80.0 | 3.0 | |
| Nitrobenzene-d5 | | .634 | .421 | 84.95 | 80.0 | -6.2 | |
| 2-Fluorobiphenyl | | 2.200 | 1.367 | 79.51 | 80.0 | .6 | |
| 2,4,6-Tribromophenol | | .523 | .341 | 83.36 | 80.0 | -4.2 | |
| Terphenyl-d14 | | 1.748 | .973 | 71.24 | 80.0 | 11.0 | |

(1) Cannot be separated from Diphenylamine



Benzidine level in the 50 standard is 200 ng/uL.

1D

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

SAMPLE CODE NO.: PBLKU2

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Matrix: (soil/water) SOIL  Lab Sample ID: BLANKA

Sample wt/vol: 30.0 (g/ml) G  Lab File ID:

% Moisture:  Date Received:

Extraction: (SepF/Cont/Sonc) SONC  Date Extracted: 03/06/98

Concentrated Extract Volume 10000 (uL)  Date Analyzed: 03/18/98

Injection Volume: 1 (uL)  Dilution Factor: 1

GPC Cleanup: (Y/N) N  pH:  Sulfur Cleanup: (Y/N) N

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (UG/L or UG/KG) UG/KG | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.067 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.067 | U |
| 319-85-7 | beta-BHC | 0.067 | U |
| 319-86-8 | delta-BHC | 0.067 | U |
| 76-44-8 | Heptachlor | 0.067 | U |
| 309-00-2 | Aldrin | 0.067 | U |
| 1024-57-3 | Heptachlor epoxide | 0.067 | U |
| 72-55-9 | 4,4'-DDE | 0.13 | U |
| 959-98-8 | Endosulfan I | 0.067 | U |
| 60-57-1 | Dieldrin | 0.13 | U |
| 72-20-8 | Endrin | 0.13 | U |
| 72-54-8 | 4,4'-DDD | 0.13 | U |
| 33213-65-9 | Endosulfan II | 0.13 | U |
| 50-29-3 | 4,4'-DDT | 0.13 | U |
| 7421-93-4 | Endrin aldehyde | 0.13 | U |
| 72-43-5 | Methoxychlor | 0.67 | U |
| 1031-07-8 | Endosulfan sulfate | 0.13 | U |
| 11104-28-2 | Aroclor-1221 | 3.3 | U |
| 12674-11-2 | Aroclor-1016 | 3.3 | U |
| 11141-16-5 | Aroclor-1232 | 3.3 | U |
| 53469-21-9 | Aroclor-1242 | 3.3 | U |
| 12672-29-6 | Aroclor-1248 | 3.3 | U |
| 57-74-9 | Chlordane (Technical) | 3.3 | U |
| 11097-69-1 | Aroclor-1254 | 3.3 | U |
| 11096-82-5 | Aroclor-1260 | 3.3 | U |
| 8001-35-2 | Toxaphene | 6.7 | U |

# 2F
# SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

GC Column(1): RTX-CLP ID: 0.53 (mm)  GC Column(2): RTXCLPB ID: 0.53 (mm)

| | SAMPLE | SAMPLE CODE NO. | TCX 1 %REC # | TCX 2 %REC # | DCB 1 %REC # | DCB 2 %REC # | TOT OUT |
|---|---|---|---|---|---|---|---|
| 01 | LCSA | LCSOS | 97 | 111 | 106 | 108 | 0 |
| 02 | BLANKA | PBLKU2 | 96 | 110 | 104 | 107 | 0 |
| 03 | 2887307 | SB279 | 100 | 112 | 107 | 110 | 0 |
| 04 | 2887307 MS | SB279MS | 98 | 110 | 102 | 107 | 0 |
| 05 | 2887307 MSD | SB279MSD | 92 | 104 | 99 | 104 | 0 |
| 06 | 2887310 | SB581 | 96 | 111 | 105 | 107 | 0 |
| 07 | 2887311 | SB681 | 99 | 113 | 108 | 110 | 0 |

| | ADVISORY QC LIMITS | NOMINAL CONCENTRATION | |
|---|---|---|---|
| TCX = Tetrachloro-m-xylene | (50-120) | 13.4 | ug/Kg |
| DCB = Decachlorobiphenyl | (50-120) | 13.4 | ug/Kg |

# Column to be used to flag recovery values

* Values outside of QC limits

D Surrogate diluted out

# 3F

## SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.: LKW01

Matrix Spike - Sample Code No.: SB279

| Compound | Spike Added (ug/Kg) | Sample Concen (ug/Kg) | MS Concen (ug/Kg) | MSD Concen (ug/Kg) | MS % REC# | MSD % REC# | MS-MSD % REC Limits | % RPD # | % RPD LIM |
|---|---|---|---|---|---|---|---|---|---|
| alpha-BHC | 7.40 | 0.0939 | 7.91 | 7.40 | 106 | 99 | (48-144) | 7 | 50 |
| gamma-BHC (Lindan | 7.39 | 0 | 8.74 | 8.42 | 118 | 114 | (51-142) | 4 | 50 |
| beta-BHC | 7.40 | 0 | 7.14 | 6.66 | 96 | 90 | (34-145) | 7 | 50 |
| delta-BHC | 7.39 | 0 | 9.51 | 8.77 | 129 | 119 | (44-145) | 8 | 50 |
| Heptachlor | 7.39 | 0 | 8.29 | 7.93 | 112 | 107 | (60-137) | 4 | 50 |
| Aldrin | 7.40 | 0 | 7.57 | 7.26 | 102 | 98 | (49-145) | 4 | 50 |
| Heptachlor epoxid | 7.40 | 0 | 7.68 | 7.40 | 104 | 100 | .0008-1 | 4 | 50 |
| 4,4'-DDE | 7.40 | 0 | 8.35 | 7.94 | 113 | 107 | (61-135) | 5 | 50 |
| Endosulfan I | 7.40 | 0 | 6.70 | 6.43 | 91 | 87 | (46-135) | 4 | 50 |
| Dieldrin | 7.40 | 0 | 7.15 | 6.85 | 97 | 93 | (59-130) | 4 | 50 |
| Endrin | 7.39 | 0 | 9.18 | 8.74 | 124 | 118 | (69-152) | 5 | 50 |
| 4,4'-DDD | 7.39 | 0 | 9.29 | 8.76 | 126 | 119 | (53-141) | 6 | 50 |
| Endosulfan II | 7.40 | 0 | 7.10 | 6.55 | 96 | 89 | (48-132) | 8 | 50 |
| 4,4'-DDT | 7.40 | 0 | 9.37 | 8.82 | 127 | 119 | (60-138) | 6 | 50 |
| Endrin aldehyde | 7.39 | 0 | 4.56 | 4.19 | 62 | 57 | (28-166) | 8 | 50 |
| Methoxychlor | 7.40 | 0 | 11.9 | 11.0 | 161 | 149 | (52-174) | 8 | 50 |
| Endosulfan sulfat | 7.39 | 0 | 8.39 | 7.24 | 114 | 98 | (40-150) | 15 | 50 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 17 outside limits

Spike Recovery: 0 out of 34 outside limits

COMMENTS:

Sample No.: 2887307 Batch: 980650001A

3F

# SOIL PESTICIDE LAB CONTROL SPIKE/LAB CONTROL SPIKE DUPLICATE

Lab Name: Lancaster Laboratories Contract:

Lab Code: Case No.: SAS No.: SDG No.: LKW01

Lab Control Spike - Sample Code No.: LCSOS

| Compound | Spike Added (ug/Kg) | LCS Concen (ug/Kg) | LCSD Concen (ug/Kg) | LCS % REC# | LCSD % REC# | LCS-LCSD % REC Limits | % RPD # | % RPD LIM |
|---|---|---|---|---|---|---|---|---|
| alpha-BHC | 6.69 | 6.96 | | 104 | | (48-144) | | 50 |
| gamma-BHC (Lindan | 6.69 | 7.87 | | 118 | | (51-142) | | 50 |
| beta-BHC | 6.70 | 6.39 | | 95 | | (34-145) | | 50 |
| delta-BHC | 6.69 | 8.37 | | 125 | | (44-145) | | 50 |
| Heptachlor | 6.69 | 7.43 | | 111 | | (60-137) | | 50 |
| Aldrin | 6.69 | 6.89 | | 103 | | (49-145) | | 50 |
| Heptachlor epoxid | 6.69 | 6.9 | | 103 | | (59-136) | | 50 |
| 4,4'-DDE | 6.70 | 7.41 | | 111 | | (61-135) | | 50 |
| Endosulfan I | 6.70 | 6.04 | | 90 | | (46-135) | | 50 |
| Dieldrin | 6.69 | 6.51 | | 97 | | (59-130) | | 50 |
| Endrin | 6.69 | 8.29 | | 124 | | (69-152) | | 50 |
| 4,4'-DDD | 6.69 | 8.28 | | 124 | | (53-141) | | 50 |
| Endosulfan II | 6.70 | 6.43 | | 96 | | (48-132) | | 50 |
| 4,4'-DDT | 6.69 | 8.4 | | 126 | | (60-138) | | 50 |
| Endrin aldehyde | 6.69 | 4.41 | | 66 | | (28-166) | | 50 |
| Methoxychlor | 6.69 | 10.7 | | 160 | | (52-174) | | 50 |
| Endosulfan sulfat | 6.69 | 7.52 | | 112 | | (40-150) | | 50 |

# Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 17 outside limits

Spike Recovery: 0 out of 34 outside limits

COMMENTS:

Sample No.: LCSA Batch: 980650001A

4C

# PESTICIDE METHOD BLANK SUMMARY

SAMPLE CODE NO.

PBLKU2

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Lab Sample ID: BLANKA  Lab File ID:

Matrix: (soil/water) SOIL  Extraction: (SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N  Date Extracted: 03/06/98

Date Analyzed (1): 03/18/98  Date Analyzed (2): 03/18/98

Time Analyzed (1): 0:12  Time Analyzed (2): 0:12

Instrument ID (1): H1674A  Instrument ID (2): H1674B

GC Column (1): RTX-CLP  ID: 0.53 (mm)  GC Column (2): RTXCLPB  ID: 0.53 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD

| | SAMPLE CODE NO. | LAB SAMPLEID | DATE ANALYZED 1 | DATE ANALYZED 2 |
|---|---|---|---|---|
| 01 | LCSOS | LCSA | 03/18/98 | 03/18/98 |
| 02 | PBLKU2 | BLANKA | 03/18/98 | 03/18/98 |
| 03 | SB279 | 2887307 | 03/18/98 | 03/18/98 |
| 04 | SB279MS | 2887307 | 03/18/98 | 03/18/98 |
| 05 | SB279MSD | 2887307 | 03/18/98 | 03/18/98 |
| 06 | SB581 | 2887310 | 03/18/98 | 03/18/98 |
| 07 | SB681 | 2887311 | 03/18/98 | 03/18/98 |

COMMENTS: _____

# 6D
# PESTICIDE INITIAL CALIBRATION - RETENTION TIME SUMMARY

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674A  Calibration File: 1P6076

GC Column(1): RTX-CLP ID: 0.53 (mm)  Date(s) Analyzed: 03/17/98  03/17/98

| COMPOUND | RT OF STANDARDS | | | | | MIDPOINT | RT WINDOW | |
|---|---|---|---|---|---|---|---|---|
| | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | RT | FROM | TO |
| alpha-BHC | 3.07 | 3.07 | 3.07 | 3.07 | 3.07 | 3.07 | 3.04 | 3.10 |
| gamma-BHC (Lindane) | 3.42 | 3.42 | 3.42 | 3.42 | 3.42 | 3.42 | 3.39 | 3.45 |
| beta-BHC | 3.51 | 3.51 | 3.52 | 3.52 | 3.52 | 3.52 | 3.49 | 3.55 |
| delta-BHC | 3.72 | 3.72 | 3.72 | 3.72 | 3.72 | 3.72 | 3.69 | 3.75 |
| Heptachlor | 3.99 | 3.99 | 3.99 | 3.99 | 3.99 | 3.99 | 3.96 | 4.02 |
| Aldrin | 4.35 | 4.35 | 4.35 | 4.35 | 4.35 | 4.35 | 4.32 | 4.38 |
| Heptachlor epoxide | 5.05 | 5.05 | 5.06 | 5.06 | 5.06 | 5.06 | 5.03 | 5.09 |
| 4,4'-DDE | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.46 | 5.43 | 5.49 |
| Endosulfan I | 5.52 | 5.52 | 5.52 | 5.52 | 5.53 | 5.52 | 5.49 | 5.55 |
| Dieldrin | 5.81 | 5.81 | 5.82 | 5.82 | 5.82 | 5.82 | 5.79 | 5.85 |
| Endrin | 6.09 | 6.09 | 6.09 | 6.09 | 6.09 | 6.09 | 6.06 | 6.13 |
| 4,4'-DDD | 6.17 | 6.17 | 6.17 | 6.17 | 6.17 | 6.17 | 6.14 | 6.20 |
| Endosulfan II | 6.36 | 6.36 | 6.36 | 6.36 | 6.36 | 6.36 | 6.33 | 6.40 |
| 4,4'-DDT | 6.51 | 6.51 | 6.52 | 6.52 | 6.52 | 6.52 | 6.48 | 6.55 |
| Endrin aldehyde | 6.85 | 6.85 | 6.86 | 6.86 | 6.86 | 6.86 | 6.83 | 6.89 |
| Methoxychlor | 7.12 | 7.12 | 7.13 | 7.13 | 7.12 | 7.13 | 7.10 | 7.16 |
| Endosulfan sulfate | 7.37 | 7.37 | 7.38 | 7.38 | 7.38 | 7.38 | 7.35 | 7.41 |
| Tetrachloro-m-xylene | 2.50 | 2.51 | 2.51 | 2.51 | 2.51 | 2.51 | 2.48 | 2.54 |
| Decachlorobiphenyl | 8.99 | 8.99 | 8.99 | 8.99 | 8.99 | 8.99 | 8.96 | 9.02 |

6D

# PESTICIDE INITIAL CALIBRATION - RETENTION TIME SUMMARY

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674B  Calibration File: 1P6076B

GC Column(1): RTXCLPB ID: 0.53 (mm)  Date(s) Analyzed: 03/17/98  03/17/98

| COMPOUND | RT OF STANDARDS | | | | | MIDPOINT | RT WINDOW | |
|---|---|---|---|---|---|---|---|---|
| | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | RT | FROM | TO |
| alpha-BHC | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.96 | 3.02 |
| gamma-BHC (Lindane) | 3.39 | 3.39 | 3.39 | 3.39 | 3.39 | 3.39 | 3.36 | 3.42 |
| beta-BHC | 3.49 | 3.49 | 3.49 | 3.49 | 3.49 | 3.49 | 3.46 | 3.52 |
| delta-BHC | 3.83 | 3.83 | 3.83 | 3.83 | 3.83 | 3.83 | 3.80 | 3.86 |
| Heptachlor | 3.89 | 3.90 | 3.90 | 3.90 | 3.90 | 3.90 | 3.87 | 3.93 |
| Aldrin | 4.27 | 4.27 | 4.28 | 4.28 | 4.28 | 4.28 | 4.25 | 4.31 |
| Heptachlor epoxide | 4.96 | 4.96 | 4.96 | 4.96 | 4.96 | 4.96 | 4.93 | 4.99 |
| Endosulfan I | 5.42 | 5.43 | 5.43 | 5.43 | 5.43 | 5.43 | 5.40 | 5.46 |
| 4,4'-DDE | 5.59 | 5.59 | 5.59 | 5.59 | 5.59 | 5.59 | 5.56 | 5.62 |
| Dieldrin | 5.76 | 5.76 | 5.76 | 5.76 | 5.76 | 5.76 | 5.73 | 5.79 |
| Endrin | 6.12 | 6.12 | 6.13 | 6.13 | 6.13 | 6.13 | 6.10 | 6.16 |
| 4,4'-DDD | 6.29 | 6.29 | 6.30 | 6.30 | 6.29 | 6.30 | 6.27 | 6.33 |
| Endosulfan II | 6.38 | 6.39 | 6.39 | 6.39 | 6.39 | 6.39 | 6.36 | 6.42 |
| 4,4'-DDT | 6.67 | 6.67 | 6.67 | 6.67 | 6.67 | 6.67 | 6.64 | 6.70 |
| Endrin aldehyde | 6.80 | 6.80 | 6.80 | 6.80 | 6.80 | 6.80 | 6.77 | 6.83 |
| Endosulfan sulfate | 7.13 | 7.14 | 7.14 | 7.14 | 7.14 | 7.14 | 7.11 | 7.17 |
| Methoxychlor | 7.53 | 7.53 | 7.53 | 7.53 | 7.53 | 7.53 | 7.50 | 7.56 |
| Tetrachloro-m-xylene | 2.36 | 2.36 | 2.36 | 2.36 | 2.36 | 2.36 | 2.33 | 2.39 |
| Decachlorobiphenyl | 9.31 | 9.31 | 9.32 | 9.32 | 9.31 | 9.32 | 9.29 | 9.35 |

# 6E
# PESTICIDE INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674A  Calibration File: 1P6076

GC Column(1): RTX-CLP ID: 0.53 (mm)  Date(s) Analyzed: 03/17/98  03/17/98

| COMPOUND | CALIBRATION FACTORS | | | | | | % RSD |
|---|---|---|---|---|---|---|---|
| | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | MEAN | |
| alpha-BHC | 1.21E+03 | 1.20E+03 | 1.25E+03 | 1.51E+03 | 1.33E+03 | 1.30E+03 | 10.1 |
| gamma-BHC (Lindane) | 1.20E+03 | 1.18E+03 | 1.22E+03 | 1.46E+03 | 1.27E+03 | 1.27E+03 | 9.1 |
| beta-BHC | 5.15E+02 | 5.53E+02 | 5.80E+02 | 6.72E+02 | 5.70E+02 | 5.78E+02 | 10.0 |
| delta-BHC | 8.09E+02 | 8.23E+02 | 8.55E+02 | 1.07E+03 | 9.74E+02 | 9.07E+02 | 12.5 |
| Heptachlor | 1.33E+03 | 1.29E+03 | 1.33E+03 | 1.51E+03 | 1.29E+03 | 1.35E+03 | 7.0 |
| Aldrin | 1.22E+03 | 1.17E+03 | 1.21E+03 | 1.41E+03 | 1.21E+03 | 1.24E+03 | 7.6 |
| Heptachlor epoxide | 1.30E+03 | 1.23E+03 | 1.27E+03 | 1.43E+03 | 1.21E+03 | 1.29E+03 | 6.7 |
| 4,4'-DDE | 6.91E+02 | 6.88E+02 | 7.21E+02 | 8.62E+02 | 7.57E+02 | 7.44E+02 | 9.6 |
| Endosulfan I | 1.21E+03 | 1.24E+03 | 1.27E+03 | 1.42E+03 | 1.20E+03 | 1.27E+03 | 7.2 |
| Dieldrin | 1.03E+03 | 1.03E+03 | 1.06E+03 | 1.25E+03 | 1.08E+03 | 1.09E+03 | 8.5 |
| Endrin | 7.90E+02 | 7.62E+02 | 7.87E+02 | 9.21E+02 | 7.90E+02 | 8.10E+02 | 7.8 |
| 4,4'-DDD | 3.87E+02 | 3.77E+02 | 4.00E+02 | 5.05E+02 | 4.62E+02 | 4.26E+02 | 12.9 |
| Endosulfan II | 1.00E+03 | 9.43E+02 | 9.66E+02 | 1.12E+03 | 9.61E+02 | 9.99E+02 | 7.2 |
| 4,4'-DDT | 4.81E+02 | 5.00E+02 | 5.35E+02 | 6.67E+02 | 6.05E+02 | 5.58E+02 | 13.9 |
| Endrin aldehyde | 8.06E+02 | 7.51E+02 | 7.60E+02 | 8.39E+02 | 7.36E+02 | 7.78E+02 | 5.5 |
| Methoxychlor | 2.17E+02 | 2.26E+02 | 2.46E+02 | 2.99E+02 | 2.65E+02 | 2.50E+02 | 13.1 |
| Endosulfan sulfate | 8.43E+02 | 8.13E+02 | 8.35E+02 | 9.68E+02 | 8.29E+02 | 8.58E+02 | 7.3 |
| Tetrachloro-m-xylene | 1.05E+03 | 1.03E+03 | 1.04E+03 | 1.15E+03 | 9.44E+02 | 1.04E+03 | 7.1 |
| Decachlorobiphenyl | 1.27E+03 | 1.20E+03 | 1.17E+03 | 1.21E+03 | 9.65E+02 | 1.16E+03 | 10.0 |

Average % RSD: 9.1

# 6E
# PESTICIDE INITIAL CALIBRATION - CALIBRATION FACTOR SUMMARY

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674B  Calibration File: 1P6076B

GC Column(1): RTXCLPB ID: 0.53 (mm)  Date(s) Analyzed: 03/17/98  03/17/98

| COMPOUND | CALIBRATION FACTORS | | | | | | % RSD |
|---|---|---|---|---|---|---|---|
| | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | MEAN | |
| alpha-BHC | 4.89E+02 | 4.95E+02 | 5.60E+02 | 7.54E+02 | 7.23E+02 | 6.04E+02 | 20.9 |
| gamma-BHC (Lindane) | 4.96E+02 | 4.99E+02 | 5.63E+02 | 7.43E+02 | 7.05E+02 | 6.01E+02 | 19.3 |
| beta-BHC | 2.65E+02 | 2.52E+02 | 2.83E+02 | 3.43E+02 | 3.03E+02 | 2.89E+02 | 12.3 |
| delta-BHC | 4.13E+02 | 3.48E+02 | 3.80E+02 | 4.96E+02 | 4.70E+02 | 4.22E+02 | 14.6 |
| Heptachlor | 6.31E+02 | 6.20E+02 | 6.64E+02 | 8.02E+02 | 7.15E+02 | 6.86E+02 | 10.8 |
| Aldrin | 6.67E+02 | 6.60E+02 | 7.33E+02 | 9.47E+02 | 8.80E+02 | 7.77E+02 | 16.7 |
| Heptachlor epoxide | 6.40E+02 | 6.29E+02 | 6.95E+02 | 8.31E+02 | 7.52E+02 | 7.09E+02 | 11.8 |
| Endosulfan I | 6.84E+02 | 6.47E+02 | 6.97E+02 | 8.29E+02 | 7.45E+02 | 7.20E+02 | 9.7 |
| 4,4'-DDE | 2.61E+02 | 2.54E+02 | 2.82E+02 | 3.42E+02 | 3.18E+02 | 2.91E+02 | 12.9 |
| Dieldrin | 5.48E+02 | 5.56E+02 | 6.21E+02 | 8.12E+02 | 7.58E+02 | 6.59E+02 | 18.2 |
| Endrin | 4.00E+02 | 4.01E+02 | 4.45E+02 | 5.64E+02 | 5.16E+02 | 4.65E+02 | 15.6 |
| 4,4'-DDD | 1.60E+02 | 1.57E+02 | 1.74E+02 | 2.15E+02 | 1.97E+02 | 1.81E+02 | 13.7 |
| Endosulfan II | 5.71E+02 | 5.68E+02 | 6.13E+02 | 7.59E+02 | 6.83E+02 | 6.39E+02 | 12.8 |
| 4,4'-DDT | 1.89E+02 | 1.94E+02 | 2.18E+02 | 2.67E+02 | 2.40E+02 | 2.22E+02 | 14.7 |
| Endrin aldehyde | 4.58E+02 | 4.55E+02 | 4.85E+02 | 5.63E+02 | 5.21E+02 | 4.96E+02 | 9.2 |
| Endosulfan sulfate | 5.12E+02 | 4.95E+02 | 5.39E+02 | 6.54E+02 | 5.82E+02 | 5.56E+02 | 11.5 |
| Methoxychlor | 9.01E+01 | 8.82E+01 | 9.80E+01 | 1.14E+02 | 9.88E+01 | 9.79E+01 | 10.6 |
| Tetrachloro-m-xylene | 5.30E+02 | 5.28E+02 | 5.92E+02 | 7.41E+02 | 6.50E+02 | 6.08E+02 | 14.8 |
| Decachlorobiphenyl | 7.82E+02 | 7.28E+02 | 7.10E+02 | 7.32E+02 | 5.85E+02 | 7.07E+02 | 10.4 |

Average % RSD: 13.7

# 6F
# PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674A  Calibration File: 1P6076

GC Column(1): RTX-CLP ID: 0.53 (mm)  Date(s) Analyzed: 03/17/98  03/17/98

| COMPOUND | PEAK | RT | RT WINDOW FROM | RT WINDOW TO | CALIBRATION FACTOR | LEVEL | AMOUNT (ng) | PEAK HEIGHT | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1260 | 1 | 5.82 | 5.79 | 5.85 | 48 | 1 | 50.1 | 2555 | 8.4 |
| | | | | | | 2 | 100.2 | 5053 | |
| | | | | | | 3 | 200.4 | 10211 | |
| | | | | | | 4 | 501 | 22783 | |
| | | | | | | 5 | 1002 | 42154 | |
| | 2 | 6.14 | 6.11 | 6.17 | 49 | 1 | 50.1 | 2563 | 7.1 |
| | | | | | | 2 | 100.2 | 5128 | |
| | | | | | | 3 | 200.4 | 10282 | |
| | | | | | | 4 | 501 | 23237 | |
| | | | | | | 5 | 1002 | 43920 | |
| | 3 | 6.62 | 6.59 | 6.65 | 43 | 1 | 50.1 | 2295 | 8.2 |
| | | | | | | 2 | 100.2 | 4485 | |
| | | | | | | 3 | 200.4 | 9044 | |
| | | | | | | 4 | 501 | 20342 | |
| | | | | | | 5 | 1002 | 37760 | |
| | 4 | 6.93 | 6.90 | 6.96 | 34 | 1 | 50.1 | 1835 | 6.8 |
| | | | | | | 2 | 100.2 | 3517 | |
| | | | | | | 3 | 200.4 | 7128 | |
| | | | | | | 4 | 501 | 16592 | |
| | | | | | | 5 | 1002 | 30783 | |
| | 5 | 7.29 | 7.26 | 7.32 | 101 | 1 | 50.1 | 5297 | 5.2 |
| | | | | | | 2 | 100.2 | 10558 | |
| | | | | | | 3 | 200.4 | 20727 | |
| | | | | | | 4 | 501 | 48905 | |
| | | | | | | 5 | 1002 | 94061 | |
| | 6 | 8.39 | 8.36 | 8.42 | 27 | 1 | 50.1 | 1353 | 2.3 |
| | | | | | | 2 | 100.2 | 2774 | |
| | | | | | | 3 | 200.4 | 5405 | |
| | | | | | | 4 | 501 | 13120 | |
| | | | | | | 5 | 1002 | 26335 | |
| Aroclor-1254 | 1 | 4.82 | 4.79 | 4.85 | 41 | 1 | 100 | 4074 | |
| | 2 | 5.12 | 5.09 | 5.15 | 58 | 1 | 100 | 5798 | |
| | 3 | 5.40 | 5.37 | 5.43 | 8 | 1 | 100 | 840 | |
| | 4 | 5.45 | 5.42 | 5.48 | 25 | 1 | 100 | 2522 | |
| | 5 | 5.82 | 5.79 | 5.85 | 22 | 1 | 100 | 2166 | |
| | 6 | 5.93 | 5.90 | 5.96 | 23 | 1 | 100 | 2326 | |
| Aroclor-1221 | 1 | 2.68 | 2.65 | 2.71 | 8 | 1 | 251.25 | 2005 | |
| | 2 | 2.83 | 2.80 | 2.86 | 3 | 1 | 251.25 | 715 | |
| | 3 | 2.87 | 2.84 | 2.90 | 20 | 1 | 251.25 | 4943 | |

# 6F
# PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674A  Calibration File: 1P6076

GC Column(1): RTX-CLP ID: 0.53 (mm)  Date(s) Analyzed: 03/17/98  03/17/98

| COMPOUND | PEAK | RT | RT WINDOW FROM | RT WINDOW TO | CALIBRATION FACTOR | LEVEL | AMOUNT (ng) | PEAK HEIGHT | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1232 | 1 | 2.89 | 2.86 | 2.92 | 19 | 1 | 250 | 4780 | |
| | 2 | 3.25 | 3.22 | 3.28 | 14 | 1 | 250 | 3561 | |
| | 3 | 3.47 | 3.44 | 3.50 | 7 | 1 | 250 | 1825 | |
| | 4 | 3.76 | 3.73 | 3.79 | 14 | 1 | 250 | 3582 | |
| | 5 | 4.14 | 4.11 | 4.17 | 9 | 1 | 250 | 2126 | |
| | 6 | 4.38 | 4.35 | 4.41 | 8 | 1 | 250 | 2046 | |
| Aroclor-1248 | 1 | 3.25 | 3.22 | 3.28 | 15 | 1 | 100 | 1463 | |
| | 2 | 3.76 | 3.73 | 3.79 | 15 | 1 | 100 | 1531 | |
| | 3 | 4.14 | 4.11 | 4.17 | 34 | 1 | 100 | 3356 | |
| | 4 | 4.38 | 4.35 | 4.41 | 30 | 1 | 100 | 2997 | |
| | 5 | 4.90 | 4.87 | 4.93 | 26 | 1 | 100 | 2608 | |
| | 6 | 5.12 | 5.09 | 5.15 | 26 | 1 | 100 | 2612 | |

# 6F
# PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674A  Calibration File: 1P6076

GC Column(1): RTX-CLP ID: 0.53 (mm)  Date(s) Analyzed: 03/17/98  03/17/98

| COMPOUND | PEAK | RT | RT WINDOW FROM | RT WINDOW TO | CALIBRATION FACTOR | LEVEL | AMOUNT (ng) | PEAK HEIGHT | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | 1 | 2.87 | 2.84 | 2.90 | 15 | 1 | 50.12 | 772 | 3.5 |
| | | | | | | 2 | 100.24 | 1539 | |
| | | | | | | 3 | 200.48 | 2981 | |
| | | | | | | 4 | 501.2000 | 7336 | |
| | | | | | | 5 | 1002.400 | 14167 | |
| | 2 | 3.25 | 3.22 | 3.28 | 35 | 1 | 50.12 | 1879 | 6.9 |
| | | | | | | 2 | 100.24 | 3708 | |
| | | | | | | 3 | 200.48 | 7269 | |
| | | | | | | 4 | 501.2000 | 17063 | |
| | | | | | | 5 | 1002.400 | 31674 | |
| | 3 | 3.76 | 3.73 | 3.79 | 38 | 1 | 50.12 | 1934 | 2.1 |
| | | | | | | 2 | 100.24 | 3873 | |
| | | | | | | 3 | 200.48 | 7530 | |
| | | | | | | 4 | 501.2000 | 18821 | |
| | | | | | | 5 | 1002.400 | 36823 | |
| | 4 | 3.91 | 3.88 | 3.94 | 14 | 1 | 50.12 | 719 | 1.4 |
| | | | | | | 2 | 100.24 | 1430 | |
| | | | | | | 3 | 200.48 | 2875 | |
| | | | | | | 4 | 501.2000 | 7319 | |
| | | | | | | 5 | 1002.400 | 14756 | |
| | 5 | 4.38 | 4.35 | 4.41 | 22 | 1 | 50.12 | 1112 | 3.1 |
| | | | | | | 2 | 100.24 | 2214 | |
| | | | | | | 3 | 200.48 | 4325 | |
| | | | | | | 4 | 501.2000 | 10689 | |
| | | | | | | 5 | 1002.400 | 20560 | |
| | 6 | 4.82 | 4.79 | 4.85 | 14 | 1 | 50.12 | 705 | 4.3 |
| | | | | | | 2 | 100.24 | 1457 | |
| | | | | | | 3 | 200.48 | 3016 | |
| | | | | | | 4 | 501.2000 | 7032 | |
| | | | | | | 5 | 1002.400 | 13425 | |
| Aroclor-1242 | 1 | 2.90 | 2.87 | 2.93 | 50 | 1 | 200.8000 | 10053 | |
| | 2 | 3.25 | 3.22 | 3.28 | 28 | 1 | 200.8000 | 5674 | |
| | 3 | 3.76 | 3.73 | 3.79 | 28 | 1 | 200.8000 | 5689 | |
| | 4 | 3.91 | 3.88 | 3.94 | 11 | 1 | 200.8000 | 2141 | |
| | 5 | 4.38 | 4.35 | 4.41 | 17 | 1 | 200.8000 | 3460 | |
| | 6 | 4.90 | 4.87 | 4.93 | 14 | 1 | 200.8000 | 2761 | |

# 6F
# PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674A  Calibration File: 1P6076

GC Column(1): RTX-CLP  ID: 0.53 (mm)  Date(s) Analyzed: 03/17/98  03/17/98

| COMPOUND | PEAK | RT | RT WINDOW FROM | RT WINDOW TO | CALIBRATION FACTOR | LEVEL | AMOUNT (ng) | PEAK HEIGHT | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| Chlordane (Technical | 1 | 3.88 | 3.85 | 3.91 | 47 | 1 | 200.6000 | 9462 | |
| | 2 | 3.99 | 3.96 | 4.02 | 57 | 1 | 200.6000 | 11515 | |
| | 3 | 4.49 | 4.46 | 4.52 | 65 | 1 | 200.6000 | 13047 | |
| | 4 | 5.21 | 5.18 | 5.24 | 124 | 1 | 200.6000 | 24806 | |
| | 5 | 5.37 | 5.34 | 5.40 | 191 | 1 | 200.6000 | 38290 | |
| | 6 | 6.15 | 6.12 | 6.18 | 23 | 1 | 200.6000 | 4550 | |
| Toxaphene | 1 | 6.18 | 6.15 | 6.21 | 9 | 1 | 501.5 | 4553 | |
| | 2 | 6.33 | 6.30 | 6.36 | 17 | 1 | 501.5 | 8475 | |
| | 3 | 6.46 | 6.43 | 6.49 | 14 | 1 | 501.5 | 7141 | |
| | 4 | 6.76 | 6.73 | 6.79 | 9 | 1 | 501.5 | 4585 | |
| | 5 | 7.15 | 7.12 | 7.18 | 9 | 1 | 501.5 | 4503 | |
| | 6 | 7.27 | 7.24 | 7.30 | 16 | 1 | 501.5 | 7844 | |

# 6F
# PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674B  Calibration File: 1P6076B

GC Column(1): RTXCLPB ID: 0.53 (mm)  Date(s) Analyzed: 03/17/98  03/17/98

| COMPOUND | PEAK | RT | RT WINDOW FROM | RT WINDOW TO | CALIBRATION FACTOR | LEVEL | AMOUNT (ng) | PEAK HEIGHT | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1260 | 1 | 5.99 | 5.96 | 6.02 | 27 | 1 | 50.1 | 1412 | 5.7 |
| | | | | | | 2 | 100.2 | 2746 | |
| | | | | | | 3 | 200.4 | 5563 | |
| | | | | | | 4 | 501 | 12852 | |
| | | | | | | 5 | 1002 | 24686 | |
| | 2 | 6.24 | 6.21 | 6.27 | 23 | 1 | 50.1 | 1207 | 4.3 |
| | | | | | | 2 | 100.2 | 2403 | |
| | | | | | | 3 | 200.4 | 4850 | |
| | | | | | | 4 | 501 | 11257 | |
| | | | | | | 5 | 1002 | 22112 | |
| | 3 | 6.44 | 6.41 | 6.47 | 19 | 1 | 50.1 | 993 | 6.1 |
| | | | | | | 2 | 100.2 | 1944 | |
| | | | | | | 3 | 200.4 | 4006 | |
| | | | | | | 4 | 501 | 9154 | |
| | | | | | | 5 | 1002 | 17322 | |
| | 4 | 6.67 | 6.64 | 6.70 | 24 | 1 | 50.1 | 1214 | 4.8 |
| | | | | | | 2 | 100.2 | 2468 | |
| | | | | | | 3 | 200.4 | 4857 | |
| | | | | | | 4 | 501 | 11289 | |
| | | | | | | 5 | 1002 | 22224 | |
| | 5 | 6.78 | 6.75 | 6.81 | 25 | 1 | 50.1 | 1318 | 5.7 |
| | | | | | | 2 | 100.2 | 2614 | |
| | | | | | | 3 | 200.4 | 5356 | |
| | | | | | | 4 | 501 | 12212 | |
| | | | | | | 5 | 1002 | 23365 | |
| | 6 | 7.44 | 7.41 | 7.47 | 36 | 1 | 50.1 | 1900 | 4.9 |
| | | | | | | 2 | 100.2 | 3793 | |
| | | | | | | 3 | 200.4 | 7352 | |
| | | | | | | 4 | 501 | 17345 | |
| | | | | | | 5 | 1002 | 34194 | |
| Aroclor-1254 | 1 | 5.20 | 5.17 | 5.23 | 21 | 1 | 100 | 2149 | |
| | 2 | 5.61 | 5.58 | 5.64 | 13 | 1 | 100 | 1332 | |
| | 3 | 5.75 | 5.72 | 5.78 | 24 | 1 | 100 | 2442 | |
| | 4 | 6.24 | 6.21 | 6.27 | 11 | 1 | 100 | 1095 | |
| | 5 | 6.43 | 6.40 | 6.46 | 12 | 1 | 100 | 1244 | |
| | 6 | 6.67 | 6.64 | 6.70 | 21 | 1 | 100 | 2097 | |
| Aroclor-1221 | 1 | 2.64 | 2.61 | 2.67 | 4 | 1 | 251.25 | 1073 | |
| | 2 | 2.73 | 2.70 | 2.76 | 5 | 1 | 251.25 | 1150 | |
| | 3 | 2.85 | 2.82 | 2.88 | 9 | 1 | 251.25 | 2230 | |

# 6F
# PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674B  Calibration File: 1P6076B

GC Column(1): RTXCLPB ID: 0.53 (mm)  Date(s) Analyzed: 03/17/98  03/17/98

| COMPOUND | PEAK | RT | RT WINDOW FROM | RT WINDOW TO | CALIBRATION FACTOR | LEVEL | AMOUNT (ng) | PEAK HEIGHT | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1232 | 1 | 2.85 | 2.82 | 2.88 | 8 | 1 | 250 | 1972 | |
| | 2 | 3.29 | 3.26 | 3.32 | 7 | 1 | 250 | 1762 | |
| | 3 | 3.79 | 3.76 | 3.82 | 6 | 1 | 250 | 1507 | |
| | 4 | 3.94 | 3.91 | 3.97 | 3 | 1 | 250 | 873 | |
| | 5 | 4.48 | 4.45 | 4.51 | 4 | 1 | 250 | 1074 | |
| | 6 | 4.98 | 4.95 | 5.01 | 3 | 1 | 250 | 644 | |
| Aroclor-1248 | 1 | 3.79 | 3.76 | 3.82 | 8 | 1 | 100 | 760 | |
| | 2 | 4.48 | 4.45 | 4.51 | 16 | 1 | 100 | 1582 | |
| | 3 | 4.63 | 4.60 | 4.66 | 12 | 1 | 100 | 1205 | |
| | 4 | 4.93 | 4.90 | 4.96 | 8 | 1 | 100 | 778 | |
| | 5 | 4.98 | 4.95 | 5.01 | 13 | 1 | 100 | 1280 | |
| | 6 | 5.26 | 5.23 | 5.29 | 3 | 1 | 100 | 301 | |

# 6F
# PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674B  Calibration File: 1P6076B

GC Column(1): RTXCLPB ID: 0.53 (mm)  Date(s) Analyzed: 03/17/98  03/17/98

| COMPOUND | PEAK | RT | RT WINDOW FROM | RT WINDOW TO | CALIBRATION FACTOR | LEVEL | AMOUNT (ng) | PEAK HEIGHT | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| Aroclor-1016 | 1 | 2.85 | 2.82 | 2.88 | 7 | 1 | 50.12 | 340 | 1.0 |
| | | | | | | 2 | 100.24 | 697 | |
| | | | | | | 3 | 200.48 | 1384 | |
| | | | | | | 4 | 501.2000 | 3474 | |
| | | | | | | 5 | 1002.400 | 6979 | |
| | 2 | 3.29 | 3.26 | 3.32 | 18 | 1 | 50.12 | 923 | 3.5 |
| | | | | | | 2 | 100.24 | 1864 | |
| | | | | | | 3 | 200.48 | 3626 | |
| | | | | | | 4 | 501.2000 | 8849 | |
| | | | | | | 5 | 1002.400 | 17058 | |
| | 3 | 3.79 | 3.76 | 3.82 | 16 | 1 | 50.12 | 802 | 2.7 |
| | | | | | | 2 | 100.24 | 1638 | |
| | | | | | | 3 | 200.48 | 3224 | |
| | | | | | | 4 | 501.2000 | 8357 | |
| | | | | | | 5 | 1002.400 | 17122 | |
| | 4 | 3.94 | 3.91 | 3.97 | 10 | 1 | 50.12 | 479 | 2.8 |
| | | | | | | 2 | 100.24 | 977 | |
| | | | | | | 3 | 200.48 | 1883 | |
| | | | | | | 4 | 501.2000 | 4973 | |
| | | | | | | 5 | 1002.400 | 10080 | |
| | 5 | 4.17 | 4.14 | 4.20 | 6 | 1 | 50.12 | 294 | 2.4 |
| | | | | | | 2 | 100.24 | 601 | |
| | | | | | | 3 | 200.48 | 1131 | |
| | | | | | | 4 | 501.2000 | 2954 | |
| | | | | | | 5 | 1002.400 | 5985 | |
| | 6 | 4.63 | 4.60 | 4.66 | 9 | 1 | 50.12 | 444 | 2.3 |
| | | | | | | 2 | 100.24 | 874 | |
| | | | | | | 3 | 200.48 | 1704 | |
| | | | | | | 4 | 501.2000 | 4405 | |
| | | | | | | 5 | 1002.400 | 9073 | |
| Aroclor-1242 | 1 | 3.29 | 3.26 | 3.32 | 14 | 1 | 200.8000 | 2818 | |
| | 2 | 3.79 | 3.76 | 3.82 | 12 | 1 | 200.8000 | 2428 | |
| | 3 | 3.94 | 3.91 | 3.97 | 7 | 1 | 200.8000 | 1438 | |
| | 4 | 4.48 | 4.45 | 4.51 | 9 | 1 | 200.8000 | 1835 | |
| | 5 | 4.98 | 4.95 | 5.01 | 7 | 1 | 200.8000 | 1341 | |
| | 6 | 5.26 | 5.23 | 5.29 | 4 | 1 | 200.8000 | 889 | |

# 6F
# PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674B  Calibration File: 1P6076B

GC Column(1): RTXCLPB ID: 0.53 (mm)  Date(s) Analyzed: 03/17/98  03/17/98

| COMPOUND | PEAK | RT | RT WINDOW FROM | RT WINDOW TO | CALIBRATION FACTOR | LEVEL | AMOUNT (ng) | PEAK HEIGHT | % RSD |
|---|---|---|---|---|---|---|---|---|---|
| Chlordane (Technical | 1 | 3.90 | 3.87 | 3.93 | 29 | 1 | 200.6000 | 5732 | |
| | 2 | 4.47 | 4.44 | 4.50 | 39 | 1 | 200.6000 | 7804 | |
| | 3 | 5.19 | 5.16 | 5.22 | 85 | 1 | 200.6000 | 16974 | |
| | 4 | 5.37 | 5.34 | 5.40 | 76 | 1 | 200.6000 | 15157 | |
| | 5 | 6.24 | 6.21 | 6.27 | 15 | 1 | 200.6000 | 2960 | |
| | 6 | 6.44 | 6.41 | 6.47 | 26 | 1 | 200.6000 | 5222 | |
| Toxaphene | 1 | 5.74 | 5.71 | 5.77 | 7 | 1 | 501.5 | 3422 | |
| | 2 | 6.37 | 6.34 | 6.40 | 13 | 1 | 501.5 | 6428 | |
| | 3 | 6.49 | 6.46 | 6.52 | 20 | 1 | 501.5 | 10176 | |
| | 4 | 6.71 | 6.68 | 6.74 | 6 | 1 | 501.5 | 2951 | |
| | 5 | 6.81 | 6.78 | 6.84 | 11 | 1 | 501.5 | 5522 | |
| | 6 | 7.43 | 7.40 | 7.46 | 9 | 1 | 501.5 | 4418 | |

# 7D
# PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674A  Init. Calib. Date(s): 03/17/98  03/17/98

GC Column(1): RTX-CLP  ID: 0.53 (mm)  Date Analyzed: 03/17/98

Lab File ID: 1P6076.05R  Time Analyzed: 14:45

Lab Standard ID: PEMAA

| COMPOUND | RT | RT WINDOW FROM | TO | CALC AMOUNT (ng/ml) | NOM AMOUNT (ng/ml) | %D |
|---|---|---|---|---|---|---|
| alpha-BHC | 3.07 | 3.04 | 3.10 | 9.10 | 10.00 | -9.0 |
| gamma-BHC (Lindane) | 3.42 | 3.39 | 3.45 | 9.28 | 10.00 | -7.2 |
| beta-BHC | 3.51 | 3.49 | 3.55 | 8.54 | 10.00 | -14.6 |
| 4,4'-DDE | 5.46 | 5.43 | 5.49 | 0.91 | | |
| Endrin | 6.09 | 6.06 | 6.13 | 52.33 | 50.00 | 4.7 |
| 4,4'-DDD | 6.17 | 6.14 | 6.20 | 4.41 | | |
| 4,4'-DDT | 6.51 | 6.48 | 6.55 | 101.83 | 100.00 | 1.8 |
| Endrin aldehyde | 6.85 | 6.83 | 6.89 | 2.38 | | |
| Methoxychlor | 7.12 | 7.10 | 7.16 | 262.86 | 250.00 | 5.1 |
| Endrin ketone | 7.72 | 7.69 | 7.75 | 3.27 | | |
| Tetrachloro-m-xylene | 2.50 | 2.48 | 2.54 | 19.16 | 20.00 | -4.2 |
| Decachlorobiphenyl | 8.98 | 8.96 | 9.02 | 18.79 | 20.00 | -6.0 |

4,4'-DDT % breakdown: 4.3  Endrin % breakdown: 11.6  Combined % breakdown: 15.8

# 7D
# PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674A  Init. Calib. Date(s): 03/17/98  03/17/98

GC Column(1): RTX-CLP  ID: 0.53 (mm)  Date Analyzed: 03/18/98

Lab File ID: 1P6076.50R  Time Analyzed: 4:54

Lab Standard ID: PEMCL

| COMPOUND | RT | RT WINDOW FROM | RT WINDOW TO | CALC AMOUNT (ng/ml) | NOM AMOUNT (ng/ml) | %D |
|---|---|---|---|---|---|---|
| alpha-BHC | 3.07 | 3.04 | 3.10 | 9.85 | 10.00 | -1.5 |
| gamma-BHC (Lindane) | 3.42 | 3.39 | 3.45 | 10.06 | 10.00 | 0.6 |
| beta-BHC | 3.51 | 3.49 | 3.55 | 9.89 | 10.00 | -1.1 |
| 4,4'-DDE | 5.46 | 5.43 | 5.49 | 0.85 | | |
| Endrin | 6.08 | 6.06 | 6.13 | 55.95 | 50.00 | 11.9 |
| 4,4'-DDD | 6.17 | 6.14 | 6.20 | 6.33 | | |
| 4,4'-DDT | 6.51 | 6.48 | 6.55 | 114.45 | 100.00 | 14.5 |
| Endrin aldehyde | 6.85 | 6.83 | 6.89 | 2.06 | | |
| Methoxychlor | 7.12 | 7.10 | 7.16 | 306.62 | 250.00 | 22.6 |
| Endrin ketone | 7.72 | 7.69 | 7.75 | 3.52 | | |
| Tetrachloro-m-xylene | 2.50 | 2.48 | 2.54 | 20.77 | 20.00 | 3.8 |
| Decachlorobiphenyl | 8.98 | 8.96 | 9.02 | 21.29 | 20.00 | 6.5 |

4,4'-DDT % breakdown: 5.0  Endrin % breakdown: 10.9  Combined % breakdown: 15.8

# 7D
# PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674B  Init. Calib. Date(s): 03/17/98  03/17/98

GC Column(1): RTXCLPB ID: 0.53 (mm)  Date Analyzed: 03/17/98

Lab File ID: 1P6076B.05R  Time Analyzed: 14:45

Lab Standard ID: PEMAA

| COMPOUND | RT | RT WINDOW FROM | RT WINDOW TO | CALC AMOUNT (ng/ml) | NOM AMOUNT (ng/ml) | %D |
|---|---|---|---|---|---|---|
| alpha-BHC | 2.99 | 2.96 | 3.02 | 10.51 | 10.00 | 5.1 |
| gamma-BHC (Lindane) | 3.39 | 3.36 | 3.42 | 10.91 | 10.00 | 9.1 |
| beta-BHC | 3.49 | 3.46 | 3.52 | 10.61 | 10.00 | 6.1 |
| 4,4'-DDE | 5.59 | 5.56 | 5.62 | 1.18 | | |
| Endrin | 6.12 | 6.10 | 6.16 | 62.99 | 50.00 | 26.0 |
| 4,4'-DDD | 6.29 | 6.27 | 6.33 | 9.69 | | |
| 4,4'-DDT | 6.66 | 6.64 | 6.70 | 118.92 | 100.00 | 18.9 |
| Endrin aldehyde | 6.80 | 6.77 | 6.83 | 3.70 | | |
| Methoxychlor | 7.52 | 7.50 | 7.56 | 307.75 | 250.00 | 23.1 |
| Endrin ketone | 7.78 | 7.76 | 7.82 | 3.29 | | |
| Tetrachloro-m-xylene | 2.35 | 2.33 | 2.39 | 21.06 | 20.00 | 5.3 |
| Decachlorobiphenyl | 9.31 | 9.29 | 9.35 | 22.01 | 20.00 | 10.0 |

4,4'-DDT % breakdown: 7.2  Endrin % breakdown: 12.0  Combined % breakdown: 19.2

# 7D
# PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674B  Init. Calib. Date(s): 03/17/98  03/17/98

GC Column(1): RTXCLPB  ID: 0.53 (mm)  Date Analyzed: 03/18/98

Lab File ID: 1P6076B.50R  Time Analyzed: 4:54

Lab Standard ID: PEMCL

| COMPOUND | RT | RT WINDOW FROM | TO | CALC AMOUNT (ng/ml) | NOM AMOUNT (ng/ml) | %D |
|---|---|---|---|---|---|---|
| alpha-BHC | 2.99 | 2.96 | 3.02 | 10.38 | 10.00 | 3.8 |
| gamma-BHC (Lindane) | 3.39 | 3.36 | 3.42 | 10.81 | 10.00 | 8.1 |
| beta-BHC | 3.49 | 3.46 | 3.52 | 10.71 | 10.00 | 7.1 |
| 4,4'-DDE | 5.59 | 5.56 | 5.62 | 1.12 | | |
| Endrin | 6.12 | 6.10 | 6.16 | 61.98 | 50.00 | 24.0 |
| 4,4'-DDD | 6.29 | 6.27 | 6.33 | 11.06 | | |
| 4,4'-DDT | 6.66 | 6.64 | 6.70 | 123.39 | 100.00 | 23.4 |
| Endrin aldehyde | 6.79 | 6.77 | 6.83 | 2.85 | | |
| Methoxychlor | 7.52 | 7.50 | 7.56 | 325.80 | 250.00 | 30.3 |
| Endrin ketone | 7.78 | 7.76 | 7.82 | 3.39 | | |
| Tetrachloro-m-xylene | 2.35 | 2.33 | 2.39 | 21.52 | 20.00 | 7.6 |
| Decachlorobiphenyl | 9.31 | 9.29 | 9.35 | 22.05 | 20.00 | 10.3 |

4,4'-DDT % breakdown: 7.8  Endrin % breakdown: 11.3  Combined % breakdown: 19.1

# 7E
# PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674A  Init. Calib. Date(s): 03/17/98  03/17/98

GC Column(1): RTX-CLP  ID: 0.53 (mm)  Date Analyzed: 03/18/98

Lab File ID: 1P6076.51R  Time Analyzed: 5:13

Lab Standard ID: MIXA3AT

| COMPOUND | RT | RT WINDOW FROM | RT WINDOW TO | CALC AMOUNT (ng/ml) | NOM AMOUNT (ng/ml) | %D |
|---|---|---|---|---|---|---|
| alpha-BHC | 3.07 | 3.04 | 3.10 | 7.99 | 8.00 | -0.1 |
| gamma-BHC (Lindane) | 3.42 | 3.39 | 3.45 | 8.06 | 8.00 | 0.7 |
| beta-BHC | 3.51 | 3.49 | 3.55 | 8.64 | 8.00 | 8.0 |
| delta-BHC | 3.72 | 3.69 | 3.75 | 8.13 | 8.00 | 1.6 |
| Heptachlor | 3.99 | 3.96 | 4.02 | 8.15 | 8.00 | 1.8 |
| Aldrin | 4.35 | 4.32 | 4.38 | 7.91 | 8.00 | -1.1 |
| Heptachlor epoxide | 5.05 | 5.03 | 5.09 | 8.14 | 8.00 | 1.7 |
| 4,4'-DDE | 5.46 | 5.43 | 5.49 | 17.25 | 16.00 | 7.8 |
| Endosulfan I | 5.52 | 5.49 | 5.55 | 8.24 | 8.00 | 3.0 |
| Dieldrin | 5.81 | 5.79 | 5.85 | 15.92 | 16.00 | -0.5 |
| Endrin | 6.08 | 6.06 | 6.13 | 16.04 | 16.00 | 0.2 |
| 4,4'-DDD | 6.17 | 6.14 | 6.20 | 17.44 | 16.00 | 9.0 |
| Endosulfan II | 6.35 | 6.33 | 6.40 | 16.43 | 16.00 | 2.7 |
| 4,4'-DDT | 6.51 | 6.48 | 6.55 | 16.40 | 16.00 | 2.5 |
| Endrin aldehyde | 6.85 | 6.83 | 6.89 | 16.91 | 16.00 | 5.7 |
| Methoxychlor | 7.12 | 7.10 | 7.16 | 88.46 | 80.00 | 10.6 |
| Endosulfan sulfate | 7.37 | 7.35 | 7.41 | 16.68 | 16.00 | 4.3 |
| Tetrachloro-m-xylene | 2.50 | 2.48 | 2.54 | 16.59 | 16.00 | 3.7 |
| Decachlorobiphenyl | 8.98 | 8.96 | 9.02 | 34.21 | 32.00 | 6.9 |
| | | | | | Average of %D: | 3.8 |

# 7E
# PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674A  Init. Calib. Date(s): 03/17/98  03/17/98

GC Column(1): RTX-CLP  ID: 0.53 (mm)  Date Analyzed: 03/18/98

Lab File ID: 1P6076.52R  Time Analyzed: 5:32

Lab Standard ID: AR163ES

| COMPOUND | RT | RT WINDOW FROM | TO | CALC AMOUNT (ng/ml) | NOM AMOUNT (ng/ml) | %D |
|---|---|---|---|---|---|---|
| Aroclor-1016 | 2.87 | 2.84 | 2.90 | 214.46 | 200.48 | 7.0 |
| | 3.25 | 3.22 | 3.28 | | | |
| | 3.75 | 3.73 | 3.79 | | | |
| | 3.90 | 3.88 | 3.94 | | | |
| | 4.37 | 4.35 | 4.41 | | | |
| | 4.82 | 4.79 | 4.85 | | | |
| Aroclor-1260 | 5.81 | 5.79 | 5.85 | 220.91 | 200.40 | 10.2 |
| | 6.13 | 6.11 | 6.17 | | | |
| | 6.62 | 6.59 | 6.65 | | | |
| | 6.92 | 6.90 | 6.96 | | | |
| | 7.28 | 7.26 | 7.32 | | | |
| | 8.39 | 8.36 | 8.42 | | | |

Average of %D: 8.6

# 7E
# PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674B  Init. Calib. Date(s): 03/17/98  03/17/98

GC Column(1): RTXCLPB ID: 0.53 (mm)  Date Analyzed: 03/18/98

Lab File ID: 1P6076B.51R  Time Analyzed: 5:13

Lab Standard ID: MIXA3AT

| COMPOUND | RT | RT WINDOW FROM | RT WINDOW TO | CALC AMOUNT (ng/ml) | NOM AMOUNT (ng/ml) | %D |
|---|---|---|---|---|---|---|
| alpha-BHC | 2.99 | 2.96 | 3.02 | 8.31 | 8.00 | 3.9 |
| gamma-BHC (Lindane) | 3.39 | 3.36 | 3.42 | 8.43 | 8.00 | 5.4 |
| beta-BHC | 3.49 | 3.46 | 3.52 | 9.31 | 8.00 | 16.4 |
| delta-BHC | 3.83 | 3.80 | 3.86 | 8.47 | 8.00 | 5.8 |
| Heptachlor | 3.89 | 3.87 | 3.93 | 8.39 | 8.00 | 4.9 |
| Aldrin | 4.27 | 4.25 | 4.31 | 7.99 | 8.00 | -0.1 |
| Heptachlor epoxide | 4.96 | 4.93 | 4.99 | 8.63 | 8.00 | 7.9 |
| Endosulfan I | 5.42 | 5.40 | 5.46 | 8.33 | 8.00 | 4.1 |
| 4,4'-DDE | 5.59 | 5.56 | 5.62 | 19.02 | 16.00 | 18.9 |
| Dieldrin | 5.75 | 5.73 | 5.79 | 16.19 | 16.00 | 1.2 |
| Endrin | 6.12 | 6.10 | 6.16 | 16.69 | 16.00 | 4.3 |
| 4,4'-DDD | 6.29 | 6.27 | 6.33 | 19.81 | 16.00 | 23.8 |
| Endosulfan II | 6.38 | 6.36 | 6.42 | 16.92 | 16.00 | 5.8 |
| 4,4'-DDT | 6.66 | 6.64 | 6.70 | 18.56 | 16.00 | 16.0 |
| Endrin aldehyde | 6.80 | 6.77 | 6.83 | 17.48 | 16.00 | 9.2 |
| Endosulfan sulfate | 7.13 | 7.11 | 7.17 | 17.18 | 16.00 | 7.4 |
| Methoxychlor | 7.52 | 7.50 | 7.56 | 97.46 | 80.00 | 21.8 |
| Tetrachloro-m-xylene | 2.35 | 2.33 | 2.39 | 16.87 | 16.00 | 5.4 |
| Decachlorobiphenyl | 9.31 | 9.29 | 9.35 | 34.90 | 32.00 | 9.1 |
| | | | | | Average of %D: | 9.0 |

# 7E
# PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

Instrument: H1674B  Init. Calib. Date(s): 03/17/98  03/17/98

GC Column(1): RTXCLPB  ID: 0.53 (mm)  Date Analyzed: 03/18/98

Lab File ID: 1P6076B.52R  Time Analyzed: 5:32

Lab Standard ID: AR163ES

| COMPOUND | RT | RT WINDOW FROM | TO | CALC AMOUNT (ng/ml) | NOM AMOUNT (ng/ml) | %D |
|---|---|---|---|---|---|---|
| Aroclor-1016 | 2.85 | 2.82 | 2.88 | 222.72 | 200.48 | 11.1 |
| | 3.28 | 3.26 | 3.32 | | | |
| | 3.78 | 3.76 | 3.82 | | | |
| | 3.94 | 3.91 | 3.97 | | | |
| | 4.17 | 4.14 | 4.20 | | | |
| | 4.62 | 4.60 | 4.66 | | | |
| Aroclor-1260 | 5.98 | 5.96 | 6.02 | 226.79 | 200.40 | 13.2 |
| | 6.23 | 6.21 | 6.27 | | | |
| | 6.44 | 6.41 | 6.47 | | | |
| | 6.66 | 6.64 | 6.70 | | | |
| | 6.77 | 6.75 | 6.81 | | | |
| | 7.44 | 7.41 | 7.47 | | | |

Average of %D: 12.1

8D

# PESTICIDE ANALYTICAL SEQUENCE

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

GC Column: RTX-CLP  ID: 0.53 (mm)  Init. Calib Date(s): 03/17/98  03/17/98

Instrument: H1674A  Calibration File: 1P6076

THIS ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

SURROGATE RT FROM INITIAL CALIBRATION
TCX: 2.51  DCB: 8.99

| | SAMPLE CODE NO. | LAB SAMPLE ID | DATE ANALYZED | TIME ANALYZED | TCX RT # | DCB RT # |
|---|---|---|---|---|---|---|
| 001 | PEMAA | EVALX97C | 03/17/98 | 14:45 | 2.50 | 8.98 |
| 002 | MIXA1AA | MIXA198A | 03/17/98 | 15:04 | 2.50 | 8.99 |
| 003 | MIXA2AA | MIXA298A | 03/17/98 | 15:23 | 2.51 | 8.99 |
| 004 | MIXA3AA | MIXA398B | 03/17/98 | 15:42 | 2.51 | 8.99 |
| 005 | MIXA4AA | MIXA498A | 03/17/98 | 16:01 | 2.51 | 8.99 |
| 006 | MIXA5AA | MIXA598A | 03/17/98 | 16:20 | 2.51 | 8.99 |
| 007 | TOXAXAA | TOXAX97D | 03/17/98 | 18:32 | 2.51 | 8.99 |
| 008 | AR161AA | AR16197D | 03/17/98 | 19:10 | 2.51 | 8.99 |
| 009 | AR162AA | AR16297D | 03/17/98 | 19:29 | 2.51 | 8.99 |
| 010 | AR163AA | AR16397F | 03/17/98 | 19:48 | 2.51 | 8.99 |
| 011 | AR164AA | AR16497D | 03/17/98 | 20:07 | 2.51 | 8.99 |
| 012 | AR165AA | AR16597D | 03/17/98 | 20:26 | 2.51 | 8.99 |
| 013 | AR21XAA | AR21X98A | 03/17/98 | 20:44 | 2.50 | 8.99 |
| 014 | AR32XAA | AR32X98A | 03/17/98 | 21:03 | 2.50 | 8.99 |
| 015 | AR42XAA | AR42X97D | 03/17/98 | 21:22 | 2.50 | 8.98 |
| 016 | AR482AA | AR48297F | 03/17/98 | 21:41 | 2.51 | 8.99 |
| 017 | AR542AA | AR54297E | 03/17/98 | 22:00 | 2.51 | 8.99 |
| 018 | ZZZZZ | MDLAX97B | 03/17/98 | 22:19 | | |
| 019 | ZZZZZ | MDLEX97A | 03/17/98 | 22:37 | | |
| 020 | ZZZZZ | MD16X98A | 03/17/98 | 22:56 | | |
| 021 | ZZZZZ | MDTXX98A | 03/17/98 | 23:15 | | |
| 022 | ZZZZZ | MDCHX98A | 03/17/98 | 23:34 | | |
| 023 | ZZZZZ | BLANKC | 03/17/98 | 23:53 | 2.50 | 8.98 |
| 024 | PBLKU2 | BLANKA | 03/18/98 | 0:12 | 2.50 | 8.98 |
| 025 | LCSOS | LCSA | 03/18/98 | 0:30 | 2.50 | 8.98 |
| 026 | SB279 | 2887307 | 03/18/98 | 0:49 | 2.50 | 8.98 |
| 027 | SB279MS | 2887307 | 03/18/98 | 1:08 | 2.50 | 8.98 |
| 028 | SB279MSD | 2887307 | 03/18/98 | 1:27 | 2.50 | 8.98 |

QC LIMITS

TCX = Tetrachloro-m-xylene (2.48 -2.54 MINUTES)

DCB = Decachlorobiphenyl (8.96 -9.02 MINUTES)

# Column used to flag retention time values with asterisk.
* Values outside of QC limits.

8D

# PESTICIDE ANALYTICAL SEQUENCE

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

GC Column: RTX-CLP  ID: 0.53 (mm)  Init. Calib Date(s): 03/17/98  03/17/98

Instrument: H1674A  Calibration File: 1P6076

THIS ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

SURROGATE RT FROM INITIAL CALIBRATION
TCX: 2.51  DCB: 8.99

| | SAMPLE CODE NO. | LAB SAMPLE ID | DATE ANALYZED | TIME ANALYZED | TCX RT | # | DCB RT | # |
|---|---|---|---|---|---|---|---|---|
| 029 | SB581 | 2887310 | 03/18/98 | 1:46 | 2.50 | | 8.98 | |
| 030 | SB681 | 2887311 | 03/18/98 | 2:05 | 2.50 | | 8.98 | |
| 031 | ZZZZZ | BLANKA | 03/18/98 | 2:24 | 2.50 | | 8.98 | |
| 032 | ZZZZZ | LCSA | 03/18/98 | 2:42 | 2.50 | | 8.98 | |
| 033 | ZZZZZ | LCSDA | 03/18/98 | 3:01 | 2.50 | | 8.98 | |
| 034 | ZZZZZ | 2889357 | 03/18/98 | 3:20 | 2.50 | | 8.98 | |
| 035 | ZZZZZ | 2889357 | 03/18/98 | 3:39 | 2.50 | | 8.98 | |
| 036 | ZZZZZ | 2889357 | 03/18/98 | 3:58 | 2.50 | | 8.98 | |
| 037 | ZZZZZ | 2886442 | 03/18/98 | 4:17 | 2.50 | | 8.98 | |
| 038 | ZZZZZ | 2888130 | 03/18/98 | 4:35 | 2.50 | | 8.98 | |
| 039 | PEMCL | EVALX97C | 03/18/98 | 4:54 | 2.50 | | 8.98 | |
| 040 | MIXA3AT | MIXA398A | 03/18/98 | 5:13 | 2.50 | | 8.98 | |
| 041 | AR163ES | AR16397F | 03/18/98 | 5:32 | 2.50 | | 8.98 | |

| | QC LIMITS |
|---|---|
| TCX = Tetrachloro-m-xylene | (2.48 -2.54 MINUTES) |
| DCB = Decachlorobiphenyl | (8.96 -9.02 MINUTES) |

# Column used to flag retention time values with asterisk.
* Values outside of QC limits.



FORM VIII PEST

8D

# PESTICIDE ANALYTICAL SEQUENCE

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

GC Column: RTXCLPB ID: 0.53 (mm)  Init. Calib Date(s): 03/17/98  03/17/98

Instrument: H1674B  Calibration File: 1P6076B

THIS ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

SURROGATE RT FROM INITIAL CALIBRATION
TCX: 2.36  DCB: 9.32

| | SAMPLE CODE NO. | LAB SAMPLE ID | DATE ANALYZED | TIME ANALYZED | TCX RT # | DCB RT # |
|---|---|---|---|---|---|---|
| 001 | PEMAA | EVALX97C | 03/17/98 | 14:45 | 2.35 | 9.31 |
| 002 | MIXA1AA | MIXA198A | 03/17/98 | 15:04 | 2.36 | 9.31 |
| 003 | MIXA2AA | MIXA298A | 03/17/98 | 15:23 | 2.36 | 9.31 |
| 004 | MIXA3AA | MIXA398B | 03/17/98 | 15:42 | 2.36 | 9.32 |
| 005 | MIXA4AA | MIXA498A | 03/17/98 | 16:01 | 2.36 | 9.32 |
| 006 | MIXA5AA | MIXA598A | 03/17/98 | 16:20 | 2.36 | 9.31 |
| 007 | TOXAXAA | TOXAX97D | 03/17/98 | 18:32 | 2.36 | 9.32 |
| 008 | AR161AA | AR16197D | 03/17/98 | 19:10 | 2.36 | 9.32 |
| 009 | AR162AA | AR16297D | 03/17/98 | 19:29 | 2.36 | 9.31 |
| 010 | AR163AA | AR16397F | 03/17/98 | 19:48 | 2.36 | 9.32 |
| 011 | AR164AA | AR16497D | 03/17/98 | 20:07 | 2.36 | 9.31 |
| 012 | AR165AA | AR16597D | 03/17/98 | 20:26 | 2.35 | 9.31 |
| 013 | AR21XAA | AR21X98A | 03/17/98 | 20:44 | 2.35 | 9.31 |
| 014 | AR32XAA | AR32X98A | 03/17/98 | 21:03 | 2.35 | 9.31 |
| 015 | AR42XAA | AR42X97D | 03/17/98 | 21:22 | 2.35 | 9.31 |
| 016 | AR482AA | AR48297F | 03/17/98 | 21:41 | 2.35 | 9.31 |
| 017 | AR542AA | AR54297E | 03/17/98 | 22:00 | 2.35 | 9.32 |
| 018 | ZZZZZ | MDLAX97B | 03/17/98 | 22:19 | | |
| 019 | ZZZZZ | MDLEX97A | 03/17/98 | 22:37 | | |
| 020 | ZZZZZ | MD16X98A | 03/17/98 | 22:56 | | |
| 021 | ZZZZZ | MDTXX98A | 03/17/98 | 23:15 | | |
| 022 | ZZZZZ | MDCHX98A | 03/17/98 | 23:34 | | |
| 023 | ZZZZZ | BLANKC | 03/17/98 | 23:53 | 2.35 | 9.31 |
| 024 | PBLKU2 | BLANKA | 03/18/98 | 0:12 | 2.35 | 9.31 |
| 025 | LCSOS | LCSA | 03/18/98 | 0:30 | 2.35 | 9.31 |
| 026 | SB279 | 2887307 | 03/18/98 | 0:49 | 2.35 | 9.31 |
| 027 | SB279MS | 2887307 | 03/18/98 | 1:08 | 2.35 | 9.31 |
| 028 | SB279MSD | 2887307 | 03/18/98 | 1:27 | 2.35 | 9.31 |

QC LIMITS

TCX = Tetrachloro-m-xylene (2.33 -2.39 MINUTES)

DCB = Decachlorobiphenyl (9.29 -9.35 MINUTES)

# Column used to flag retention time values with asterisk.
* Values outside of QC limits.

8D

# PESTICIDE ANALYTICAL SEQUENCE

Lab Name: Lancaster Laboratories  Contract:

Lab Code:  Case No.:  SAS No.:  SDG No.: LKW01

GC Column: RTXCLPB ID: 0.53 (mm)  Init. Calib Date(s): 03/17/98  03/17/98

Instrument: H1674B  Calibration File: 1P6076B

THIS ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

SURROGATE RT FROM INITIAL CALIBRATION
TCX: 2.36  DCB: 9.32

| | SAMPLE CODE NO. | LAB SAMPLE ID | DATE ANALYZED | TIME ANALYZED | TCX RT # | DCB RT # |
|---|---|---|---|---|---|---|
| 029 | SB581 | 2887310 | 03/18/98 | 1:46 | 2.35 | 9.31 |
| 030 | SB681 | 2887311 | 03/18/98 | 2:05 | 2.35 | 9.31 |
| 031 | ZZZZZ | BLANKA | 03/18/98 | 2:24 | 2.35 | 9.31 |
| 032 | ZZZZZ | LCSA | 03/18/98 | 2:42 | 2.35 | 9.31 |
| 033 | ZZZZZ | LCSDA | 03/18/98 | 3:01 | 2.35 | 9.31 |
| 034 | ZZZZZ | 2889357 | 03/18/98 | 3:20 | 2.35 | 9.31 |
| 035 | ZZZZZ | 2889357 | 03/18/98 | 3:39 | 2.35 | 9.31 |
| 036 | ZZZZZ | 2889357 | 03/18/98 | 3:58 | 2.35 | 9.31 |
| 037 | ZZZZZ | 2886442 | 03/18/98 | 4:17 | 2.35 | 9.31 |
| 038 | ZZZZZ | 2888130 | 03/18/98 | 4:35 | 2.35 | 9.31 |
| 039 | PEMCL | EVALX97C | 03/18/98 | 4:54 | 2.35 | 9.31 |
| 040 | MIXA3AT | MIXA398A | 03/18/98 | 5:13 | 2.35 | 9.31 |
| 041 | AR163ES | AR16397F | 03/18/98 | 5:32 | 2.35 | 9.31 |

| | QC LIMITS |
|---|---|
| TCX = Tetrachloro-m-xylene | (2.33 -2.39 MINUTES) |
| DCB = Decachlorobiphenyl | (9.29 -9.35 MINUTES) |

# Column used to flag retention time values with asterisk.
* Values outside of QC limits.

Surrogate Recovery
Volatiles by GC - Water

| LL Sample No. | Sample Designation | Dilution Factor | S1 (1Br4ClBn) | S2 (1Br4ClBn) | | | | Other | TOTAL OUT |
|---|---|---|---|---|---|---|---|---|---|
| 2848269 | GWS-1 | 1 | 97 | 94 | | | | | |
| 2848270 | FB--1 | 1 | 94 | 93 | | | | | |
| 2848271 | TB--1 | 1 | 96 | 94 | | | | | |
| 2847740 UNSPK | SS#1- | 1 | 97 | 96 | | | | | |
| 2847740 MS | SS#1- | 5 | 105 | 102 | | | | | |
| 2847740 MSD | SS#1- | 5 | 103 | 99 | | | | | |
| BLK2016 | Method Blank | 1 | 93 | 95 | | | | | |
| BLK2019 | Method Blank | 1 | 96 | 94 | | | | | |

| | QC Limits LOW | HIGH |
|---|---|---|
| S1 (1Br4ClBn) = 1-Bromo-4-chlorobenzene (Hall Det) | 70 | 130 |
| S2 (1Br4ClBn) = 1-Bromo-4-chlorobenzene (PID Det) | 70 | 130 |

* Values outside QC limits

D Surrogates diluted out

Quality Control Summary

Method Blank
Volatiles by GC

*** BLANK INFORMATION ***

Matrix.....: Water
Batch Number.....: 97365A20
Analysis Date.....: 12/31/97
Analysis Time.....: 12:03
Blank ID Number : BLK2016
Instrument.....: 06245
Concentration Units.....: ug/l

| Sample Information | | | | Blank Contamination Information | | | | |
|---|---|---|---|---|---|---|---|---|
| LL Sample # | Sample Designation | Analysis Date | Analysis Time | CAS Number | Compound | Blank Result | LOQ | MDL |
| 2847740 UNSPK | SS#1- | 12/31/97 | 13:51 | 74-87-3 | Chloromethane | ND | 5 | 1.00 |
| 2847740 MS | SS#1- | 12/31/97 | 14:28 | 75-01-4 | Vinyl Chloride | ND | 1 | 1.00 |
| 2847740 MSD | SS#1- | 12/31/97 | 15:05 | 74-83-9 | Bromomethane | ND | 5 | 0.07 |
| | | | | 75-00-3 | Chloroethane | ND | 1 | 0.10 |
| | | | | 75-69-4 | Trichlorofluoromethane | ND | 1 | 0.10 |
| | | | | 75-35-4 | 1,1-Dichloroethene | ND | 1 | 0.05 |
| | | | | 75-09-2 | Methylene Chloride | 0.37 | 1 | 0.20 |
| | | | | 156-60-5 | trans-1,2-Dichloroethene | ND | 1 | 0.05 |
| | | | | 75-34-3 | 1,1-Dichloroethane | ND | 1 | 0.04 |
| | | | | 156-59-2 | cis-1,2-Dichloroethene | ND | 1 | 0.04 |
| | | | | 67-66-3 | Chloroform | ND | 1 | 0.07 |
| | | | | 107-06-2 | 1,2-Dichloroethane | ND | 1 | 0.04 |
| | | | | 71-55-6 | 1,1,1-Trichloroethane | ND | 1 | 0.04 |
| | | | | 56-23-5 | Carbon Tetrachloride | ND | 1 | 0.08 |
| | | | | 78-87-5 | 1,2-Dichloropropane | ND | 1 | 0.05 |
| | | | | 75-27-4 | Bromodichloromethane | ND | 1 | 0.05 |
| | | | | 10061-01-5 | cis-1,3-Dichloropropene | ND | 1 | 0.07 |
| | | | | 10061-02-6 | trans-1,3-Dichloropropene | ND | 1 | 0.03 |
| | | | | 79-00-5 | 1,1,2-Trichloroethane | ND | 1 | 0.04 |
| | | | | 124-48-1 | Dibromochloromethane | ND | 1 | 0.07 |
| | | | | 127-18-4 | Tetrachloroethene | ND | 1 | 0.05 |
| | | | | 75-25-2 | Bromoform | ND | 2 | 0.10 |
| | | | | 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 2 | 0.06 |
| | | | | 79-01-6 | Trichloroethene | ND | 1 | 0.05 |
| | | | | 108-90-7 | Chlorobenzene | ND | 1 | 0.05 |

ABBREVIATION KEY

LOQ = Limit of Quantitation
ND = None Detected
* = above detection limit

Matrix Spike/Matrix Spike Duplicate
Volatiles by GC

Unspiked Sample Number.....: 2847740 Inj. : 06
Spiked Sample Number.....: 2847740 + Spike Inj. : 07
Spiked Dup Sample Number.....: 2847740 + Spike Inj. : 08

Batch Number.....: 97365A20 Date : 12/31/97
Matrix.....: Water
Instrument.....: 06245

| This MS/MSD applies to the following samples | Compound | Spike Added (ug/l) | Sample Conc (ug/l) | MS Conc (ug/l) | MSD Conc (ug/l) | MS % REC | MSD % REC | QC Limits REC | RPD | QC Limits RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| 2848269 | Chloromethane | 100.5 | ND | 99.6 | 96.8 | 99 | 96 | 18 -134 | 2.8 | 30 |
| 2848270 | Vinyl Chloride | 100.5 | ND | 110.4 | 115.5 | 110 | 115 | 49 -145 | 4.6 | 30 |
| 2848271 | Bromomethane | 100.5 | ND | 99.9 | 101.3 | 99 | 101 | 54 -134 | 1.3 | 30 |
| BLK2016 | Chloroethane | 100.5 | ND | 113.2 | 111.1 | 113 | 111 | 50 -133 | 1.9 | 30 |
| BLK2019 | Trichlorofluoromethane | 100.5 | ND | 108.4 | 113.3 | 108 | 113 | 45 -128 | 4.4 | 30 |
| | 1,1-Dichloroethene | 100.5 | ND | 111.1 | 108.8 | 111 | 108 | 76 -135 | 2.1 | 30 |
| | Methylene Chloride | 100.0 | ND | 111.7 | 110.6 | 112 | 111 | 67 -134 | 1.0 | 30 |
| | trans-1,2-Dichloroethene | 100.0 | ND | 100.3 | 101.9 | 100 | 102 | 81 -125 | 1.6 | 30 |
| | 1,1-Dichloroethane | 100.5 | ND | 109.0 | 109.4 | 108 | 109 | 81 -127 | 0.4 | 30 |
| | cis-1,2-Dichloroethene | 100.0 | ND | 116.6 | 119.1 | 117 | 119 | 87 -132 | 2.1 | 30 |
| | Chloroform | 100.5 | ND | 110.2 | 111.8 | 110 | 111 | 82 -124 | 1.4 | 30 |
| | 1,2-Dichloroethane | 100.5 | ND | 114.7 | 114.8 | 114 | 114 | 82 -120 | 0.1 | 30 |
| | 1,1,1-Trichloroethane | 100.5 | ND | 107.3 | 108.9 | 107 | 108 | 80 -129 | 1.5 | 30 |
| | Carbon Tetrachloride | 100.5 | ND | 107.8 | 110.3 | 107 | 110 | 79 -135 | 2.3 | 30 |
| | 1,2-Dichloropropane | 100.5 | ND | 113.1 | 111.9 | 113 | 111 | 82 -121 | 1.1 | 30 |
| | Bromodichloromethane | 100.0 | ND | 109.3 | 108.8 | 109 | 109 | 74 -125 | 0.4 | 30 |
| | cis-1,3-Dichloropropene | 101.0 | ND | 111.3 | 111.1 | 110 | 110 | 79 -131 | 0.1 | 30 |
| | trans-1,3-Dichloropropene | 101.0 | ND | 112.8 | 109.9 | 112 | 109 | 64 -120 | 2.7 | 30 |
| | 1,1,2-Trichloroethane | 101.0 | ND | 120.6 | 117.2 | 119 | 116 | 81 -120 | 2.9 | 30 |
| | Dibromochloromethane | 100.0 | ND | 106.7 | 103.4 | 107 | 103 | 64 -127 | 3.2 | 30 |
| | Tetrachloroethene | 100.5 | ND | 111.6 | 106.6 | 111 | 106 | 77 -138 | 4.6 | 30 |
| | Bromoform | 100.5 | ND | 96.0 | 93.9 | 96 | 93 | 56 -139 | 2.3 | 30 |
| | 1,1,2,2-Tetrachloroethane | 100.5 | ND | 125.9 | 124.1 | 125 | 123 | 70 -135 | 1.4 | 30 |
| | Trichloroethene | 100.5 | 0.3 | 93.8 | 94.4 | 93 | 94 | 77 -132 | 0.6 | 30 |
| | Chlorobenzene | 100.5 | ND | 96.6 | 97.1 | 96 | 97 | 83 -119 | 0.5 | 30 |

ABBREVIATION KEY
MS = Matrix Spike
MSD = Matrix Spike Duplicate
ND = None Detected
RPD = Relative Percent Difference

The RPD limits are advisory and are evaluated in relation to the other QC.

Quality Control Summary

Initial Calibration

Volatiles by GC

Calibration Batch.....: 97358A20

Calibration Date.....: 12/24/97

Instrument.....: 06245

Sample Batch Number.....: 97365A20

| | Laboratory Standard ID | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Inj #04 | Inj #12 | Inj #06 | Inj #13 | Inj #08 | Inj #09 | | | Fit | | ID |
| Compound | Rf STD 1 | Rf STD 2 | Rf STD 3 | Rf STD 4 | Rf STD 5 | Rf STD 6 | AVE RF | %RSD | Type | RT | Window |
| Chloromethane | 661.03 | 580.23 | 581.51 | 531.07 | 485.78 | 474.05 | 552.28 | 12.7 | QUAD | 4.12 | +/- 0.2 min |
| Vinyl Chloride | 603.72 | 516.96 | 495.66 | 451.49 | 389.07 | 387.33 | 474.04 | 17.5 | QUAD | 4.47 | +/- 0.2 min |
| Bromomethane | 314.58 | 286.34 | 289.53 | 276.33 | 259.97 | 274.23 | 283.50 | 6.5 | AVG | 5.19 | +/- 0.2 min |
| Chloroethane | 571.57 | 503.92 | 496.28 | 467.38 | 420.24 | 446.10 | 484.25 | 10.9 | QUAD | 5.49 | +/- 0.2 min |
| Trichlorofluoromethane | 315.60 | 288.10 | 262.89 | 253.76 | 201.26 | 248.65 | 261.71 | 14.8 | QUAD | 6.73 | +/- 0.2 min |
| 1,1-Dichloroethene | 936.95 | 759.74 | 750.58 | 700.07 | 601.33 | 514.80 | 710.58 | 20.5 | QUAD | 8.09 | +/- 0.2 min |
| Methylene Chloride | 2256.54 | 1245.97 | 1115.73 | 966.07 | 831.07 | 731.40 | 1191.13 | 46.5 | QUAD | 8.57 | +/- 0.2 min |
| trans-1,2-Dichloroethene | 1283.17 | 1097.13 | 1078.71 | 1016.25 | 877.95 | 740.40 | 1015.60 | 18.5 | QUAD | 10.44 | +/- 0.2 min |
| 1,1-Dichloroethane | 1288.14 | 1086.90 | 1081.98 | 1016.92 | 874.81 | 739.19 | 1014.66 | 18.7 | QUAD | 11.11 | +/- 0.2 min |
| cis-1,2-Dichloroethene | 1480.72 | 1252.35 | 1281.24 | 1185.88 | 1033.22 | 877.05 | 1185.08 | 17.7 | QUAD | 12.70 | +/- 0.2 min |
| Chloroform | 2033.60 | 1688.06 | 1660.46 | 1483.37 | 1265.88 | 1066.94 | 1533.05 | 22.3 | QUAD | 13.28 | +/- 0.1 min |
| 1,2-Dichloroethane | 1373.51 | 1194.04 | 1252.11 | 1132.39 | 993.18 | 850.14 | 1132.56 | 16.5 | QUAD | 14.99 | +/- 0.2 min |
| 1,1,1-Trichloroethane | 1538.44 | 1248.51 | 1265.83 | 1119.12 | 951.04 | 799.23 | 1153.70 | 22.5 | QUAD | 15.24 | +/- 0.2 min |
| Carbon Tetrachloride | 2264.00 | 1860.12 | 1825.87 | 1620.66 | 1334.92 | 1102.08 | 1667.94 | 24.7 | QUAD | 16.08 | +/- 0.2 min |
| 1,2-Dichloropropane | 2332.36 | 1990.53 | 2003.11 | 1753.36 | 1529.27 | 1309.93 | 1819.76 | 20.2 | QUAD | 17.33 | +/- 0.2 min |
| Bromodichloromethane | 2839.20 | 2278.95 | 2195.59 | 1908.49 | 1678.40 | 1502.14 | 2067.13 | 23.2 | QUAD | 17.48 | +/- 0.1 min |
| cis-1,3-Dichloropropene | 2759.41 | 2384.04 | 2366.26 | 2066.97 | 1766.53 | 1514.86 | 2143.01 | 21.2 | QUAD | 18.50 | +/- 0.2 min |
| trans-1,3-Dichloropropene | 2584.71 | 2355.60 | 2328.99 | 2078.07 | 1822.55 | 1508.09 | 2113.00 | 18.7 | QUAD | 19.09 | +/- 0.1 min |
| 1,1,2-Trichloroethane | 3336.88 | 2846.11 | 2835.95 | 2444.60 | 2066.54 | 1750.38 | 2546.74 | 22.7 | QUAD | 19.24 | +/- 0.1 min |
| Dibromochloromethane | 2001.74 | 1874.28 | 1820.27 | 1695.51 | 1543.74 | 1452.46 | 1731.33 | 12.0 | QUAD | 19.79 | +/- 0.2 min |
| Tetrachloroethene | 4736.60 | 3904.36 | 3749.22 | 3231.04 | 2614.33 | 2158.83 | 3399.06 | 27.4 | QUAD | 20.26 | +/- 0.2 min |
| Bromoform | 1171.38 | 1213.50 | 1210.05 | 1182.17 | 1110.83 | 1092.10 | 1163.34 | 4.4 | AVG | 21.40 | +/- 0.2 min |
| 1,1,2,2-Tetrachloroethane | 2058.86 | 2270.49 | 2229.15 | 2001.40 | 1650.96 | 1328.60 | 1923.24 | 19.0 | QUAD | 21.68 | +/- 0.1 min |
| Trichloroethene | 0.041279 | 0.038472 | 0.038471 | 0.037770 | 0.036335 | 0.035616 | 0.037990 | 5.2 | AVG | 17.41 | +/- 0.2 min |
| Chlorobenzene | 0.105479 | 0.104735 | 0.104864 | 0.100145 | 0.096586 | 0.091207 | 0.100503 | 5.7 | AVG | 20.94 | +/- 0.2 min |

For initial calibration 12/24/97, the average response factor was used for all compounds with and RSD less than or equal to 10%.

This initial calibration applies to samples:

| | | | |
|---|---|---|---|
| 2848269 | 2847740 | UNSPK | BLK2016 |
| 2848270 | 2847740 | MS | BLK2019 |
| 2848271 | 2847740 | MSD | |

Check Standard Summary
Retention Time

Volatiles by GC

Initial Calibration Date.....: 12/24/97
Check Standard Batch.....: 97363A20
Sample Batch.....: 97365A20
Injection Number.....: 47
Injection Date.....: 12/31/97
Instrument.....: 06245

| Sample Number | Compound | Retention Time | ID Window |
|---|---|---|---|
| 2847740 UNSPK | Chloromethane | 4.11 | +/- 0.1 min. |
| 2847740 MS | Vinyl Chloride | 4.45 | +/- 0.2 min. |
| 2847740 MSD | Bromomethane | 5.13 | +/- 0.2 min. |
| BLK2016 | Chloroethane | 5.44 | +/- 0.2 min. |
| | Trichlorofluromethane | 6.67 | +/- 0.2 min. |
| | 1,1-Dichloroethene | 8.06 | +/- 0.2 min. |
| | Methylene Chloride | 8.53 | +/- 0.2 min. |
| | trans-1,2-Dichloroethene | 10.39 | +/- 0.2 min. |
| | 1,1-Dichloroethane | 11.06 | +/- 0.2 min. |
| | cis-1,2-Dichloroethene | 12.66 | +/- 0.2 min. |
| | Chloroform | 13.24 | +/- 0.1 min. |
| | 1,2-Dichloroethane | 14.96 | +/- 0.2 min. |
| | 1,1,1-Trichloroethane | 15.19 | +/- 0.2 min. |
| | Carbon Tetrachloride | 16.06 | +/- 0.2 min. |
| | 1,2-Dichloropropane | 17.31 | +/- 0.1 min. |
| | Bromodichloromethane | 17.46 | +/- 0.1 min. |
| | cis-1,3-Dichloropropene | 18.48 | +/- 0.2 min. |
| | trans-1,3-Dichloropropene | 19.07 | +/- 0.1 min. |
| | 1,1,2-Trichloroethane | 19.23 | +/- 0.1 min. |
| | Dibromochloromethane | 19.78 | +/- 0.2 min. |
| | Tetrachloroethene | 20.25 | +/- 0.2 min. |
| | Bromoform | 21.39 | +/- 0.2 min. |
| | 1,1,2,2-Tetrachloroethane | 21.68 | +/- 0.1 min. |
| | Trichloroethene | 17.40 | +/- 0.2 min. |
| | Chlorobenzene | 20.93 | +/- 0.2 min. |

Surrogate Retention Time Summary
Volatiles by GC

Initial Calibration Date .....: 12/24/97
Initial Calibration Batch.....: 97358A20
Sample Batch.....: 97365A20
Instrument.....: 06245

SURROGATE RT FROM INITIAL CALIBRATION
1Br4ClBn (Hall): 24.34 1Br4ClBn (PID): 24.34

| LL Sample No. | Sample Designation | Date Analyzed | Time Analyzed | RT (1Br4ClBn) Hall Det. | RT (1Br4ClBn) PID Det. |
|---|---|---|---|---|---|
| BLK2016 | Method Blank | 12/31/97 | 12:03 | 24.34 | 24.34 |
| 2847740 UNSPK | SS#1- | 12/31/97 | 13:51 | 24.34 | 24.34 |
| 2847740 MS | SS#1- | 12/31/97 | 14:28 | 24.34 | 24.34 |
| 2847740 MSD | SS#1- | 12/31/97 | 15:05 | 24.34 | 24.34 |
| BLK2019 | Method Blank | 01/01/98 | 07:38 | 24.33 | 24.33 |
| 2848270 | FB--1 | 01/01/98 | 11:46 | 24.33 | 24.33 |
| 2848271 | TB--1 | 01/01/98 | 12:21 | 24.33 | 24.33 |
| 2848269 | GWS-1 | 01/01/98 | 12:58 | 24.33 | 24.33 |

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Quality Control Summary

Continuing Calibration

Volatiles by GC

Check Standard Batch Number: 97363A20

Calibration Date.....: 12/24/97

Batch Number.....: 97365A20

Continuing Calibration Date...: 12/31/97

Inj #.....: 47

Concentration Units.....: ug/l

Injection Time.....: 10:23

Instrument ID.....: 06245

| | Compound | Amount Spiked | Laboratory Control Sample Result | % Recovery | Acceptance Range | Out of Range |
|---|---|---|---|---|---|---|
| 2847740 UNSPK | Chloromethane | 20.0 | 21.7 | 108.7 | 59.5 % -140.5 % | |
| 2847740 MS | Vinyl Chloride | 20.0 | 21.7 | 108.5 | 68.5 % -131.5 % | |
| 2847740 MSD | Bromomethane | 20.0 | 19.5 | 97.6 | 58.5 % -141.5 % | |
| BLK2016 | Chloroethane | 20.0 | 22.5 | 112.7 | 77.0 % -123.0 % | |
| | Trichlorofluromethane | 20.0 | 22.1 | 110.7 | 66.5 % -133.5 % | |
| | 1,1-Dichloroethene | 20.1 | 26.6 | 132.5 | 63.0 % -137.0 % | |
| | Methylene Chloride | 20.0 | 21.7 | 108.4 | 77.5 % -122.5 % | |
| | trans-1,2-Dichloroethene | 20.0 | 20.1 | 100.4 | 64.0 % -136.0 % | |
| | 1,1-Dichloroethane | 20.1 | 21.7 | 108.0 | 84.0 % -116.0 % | |
| | cis-1,2-Dichloroethene | 20.0 | 23.6 | 117.8 | 64.0 % -136.0 % | |
| | Chloroform | 20.1 | 21.9 | 109.1 | 75.0 % -125.0 % | |
| | 1,2-Dichloroethane | 20.1 | 22.7 | 112.8 | 71.5 % -128.5 % | |
| | 1,1,1-Trichloroethane | 20.1 | 22.1 | 110.1 | 71.0 % -129.0 % | |
| | Carbon Tetrachloride | 20.1 | 22.6 | 112.5 | 68.5 % -131.5 % | |
| | 1,2-Dichloropropane | 20.1 | 22.6 | 112.6 | 74.0 % -126.0 % | |
| | Bromodichloromethane | 20.0 | 21.8 | 109.1 | 76.0 % -124.0 % | |
| | cis-1,3-Dichloropropene | 20.2 | 22.1 | 109.3 | 64.0 % -136.0 % | |
| | trans-1,3-Dichloropropene | 20.2 | 21.5 | 106.4 | 64.0 % -136.0 % | |
| | 1,1,2-Trichloroethane | 20.2 | 22.8 | 113.1 | 78.5 % -121.5 % | |
| | Dibromochloromethane | 20.0 | 20.7 | 103.4 | 65.5 % -134.5 % | |
| | Tetrachloroethene | 20.1 | 22.0 | 109.5 | 70.0 % -130.0 % | |
| | Bromoform | 20.1 | 19.0 | 94.6 | 73.5 % -126.5 % | |
| | 1,1,2,2-Tetrachloroethane | 20.1 | 23.1 | 115.1 | 49.0 % -151.0 % | |
| | Trichloroethene | 20.1 | 19.6 | 97.4 | 77.0 % -123.0 % | |
| | Chlorobenzene | 20.1 | 20.2 | 100.3 | 72.0 % -128.0 % | |

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Quality Control Summary
TOTAL ORGANIC CARBON
~~Method Blank~~
Instrumental Analysis

Method Blank Analysis — Matrix: SOIL

| Method Blank Designation | LLI Sample No. | Client Designation | Method | Analysis Date | Batch Number | Blank Result | Units | LOQ |
|---|---|---|---|---|---|---|---|---|
| BLANK | 2302108 | Q17T1 | TOC | 5/04/95 | 95118-201 | < LOQ | mg/kg | 50 |
| | 2302109 | Q17T2 | | | | | | |
| | 2302110 | Q17T3 | | | | | | |
| | 2302111 | Q17T4 | | | | | | |
| | 2302112 | Q16T2 | | | | | | |
| | 2302113 | Q16T3 | | | | | | |
| | 2302114 | Q16T4 | | | | | | |
| | 2302115 | Q16T5 | | | | | | |
| | 2302116 | Q1652 | | | | | | |
| | 2302108 | SPK, DUP | | | | | | |
| BLANK | 2303628 | S20-8 | TOC | 5/04/95 | 95122-201 | < LOQ | mg/kg | 50 |
| | 2303629 | S20-9 | | | | | | |
| | 2303630 | S2010 | | | | | | |
| | 2303631 | S2011 | | | | | | |
| | 2303633 | S19S5 | | | | | | |
| BLANK | 2303632 | R19S4 | TOC | 5/18/95 | 95122-201 * | < LOQ | mg/kg | 50 |
| | 2303634 | S19S4 | | | | | | |
| | 2303635 | S1942 | | | | | | |

Comments: The blank is acceptable when the result is less than the limit of quantitation.

* The blank prepped with the repeated samples retains the original batch number.

ABBREVIATION KEY

| | |
|---|---|
| IC = Ion Chromatography | --- = Analysis Not Requested |
| D = Distillation | ND = Not Detected |
| TOC = Total Organic Carbon | AK = AlpKem |
| TOX = Total Organic Halogens | LOQ = Limit of Quantitation |
| * = Out of Specification | NA = Not Applicable |

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Quality Control Summary

~~Matrix Spike Analysis~~
Instrumental Analysis

| Sample Information | | Matrix Spike Analysis | | | | | | | | | | | Matrix: SOIL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LLI Sample No. | Client Designation | Parameter | Meth | Analysis Date | Unspiked Desig. | Unspiked Result | LOQ | Spiked Desig. | Spike Added | Spiked Result | Units | %REC | |
| 2302108 | Q17T1 | Total | | | | | | | | | | | |
| 2302109 | Q17T2 | Organic | | | | | | | | | | | |
| 2302110 | Q17T3 | Carbon | TOC | 5/04/95 | BKG | 33056 | 4000 | SPIKE | 17857 | 51843 | mg/kg | 105.2 | |
| 2302111 | Q17T4 | | | | | | | | | | | | |
| 2302112 | Q16T2 | | | | | | | | | | | | |
| 2302113 | Q16T3 | | | | | | | | | | | | |
| 2302114 | Q16T4 | | | | | | | | | | | | |
| 2302115 | Q16T5 | | | | | | | | | | | | |
| 2302116 | Q1652 | | | | | | | | | | | | |
| 2303628 | S20-8 | | | | | | | | | | | | |
| 2303629 | S20-9 | | | | | | | | | | | | |
| 2303630 | S2010 | | | | | | | | | | | | |
| 2303631 | S2011 | | | | | | | | | | | | |
| 2303632 | S19S4 | | | | | | | | | | | | |
| 2303633 | S19S5 | | | | | | | | | | | | |
| 2303634 | S19S4 | | | | | | | | | | | | |
| 2303635 | S1942 | | | | | | | | | | | | |

% Recovery Control Limit 75
% Recovery Control Limit 125

Comments:

ABBREVIATION KEY

| | |
|---|---|
| IC = Ion Chromatography | --- = Analysis Not Requested |
| D = Distillation | ND = Not Detected |
| TOC = Total Organic Carbon | AK = AlpKem |
| TOX = Total Organic Halogens | LOQ = Limit of Quantitation |
| * = Out of Specification | NA = Not Applicable |

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Quality Control Summary

~~Duplicate Analysis~~
Instrumental Analysis

| Sample Information | | Duplicate Analysis | | | | | | | | | | | Matrix: SOIL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LLI Sample No. | Client Designation | Parameter | Meth | Analysis Date | 1st Dup Desig. | 1st Dup Result | LOQ | 2nd Dup Desig. | 2nd Dup Result | Units | RPD (%) | Control Limit % | |
| 2302108 | Q17T1 | Total Organic Carbon | TOC | 5/04/95 | BKG | 32439 | 4000 | DUP | 33673 | mg/kg | 3.7 | 35 | |
| 2302109 | Q17T2 | | | | | | | | | | | | |
| 2302110 | Q17T3 | | | | | | | | | | | | |
| 2302111 | Q17T4 | | | | | | | | | | | | |
| 2302112 | Q16T2 | | | | | | | | | | | | |
| 2302113 | Q16T3 | | | | | | | | | | | | |
| 2302114 | Q16T4 | | | | | | | | | | | | |
| 2302115 | Q16T5 | | | | | | | | | | | | |
| 2302116 | Q1652 | | | | | | | | | | | | |
| 2303628 | S20-8 | | | | | | | | | | | | |
| 2303629 | S20-9 | | | | | | | | | | | | |
| 2303630 | S2010 | | | | | | | | | | | | |
| 2303631 | S2011 | | | | | | | | | | | | |
| 2303632 | S19S4 | | | | | | | | | | | | |
| 2303633 | S19S5 | | | | | | | | | | | | |
| 2303634 | S19S4 | | | | | | | | | | | | |
| 2303635 | S1942 | | | | | | | | | | | | |

Comments: If one or more sample values are less than the limit of quantitation, the RPD is not calculated.

ABBREVIATION KEY

| | |
|---|---|
| IC = Ion Chromatography | --- = Analysis Not Requested |
| D = Distillation | ND = Not Detected |
| TOC = Total Organic Carbon | AK = AlpKem |
| TOX = Total Organic Halogens | LOQ = Limit of Quantitation |
| * = Out of Specification | NA = Not Applicable |

| Sample Information | | Laboratory Control Standard | | | | | | | Matrix: SOIL |
|---|---|---|---|---|---|---|---|---|---|
| LLI Sample No. | Client Designation | Parameter | Meth | Analysis Date | True LCS Value | LCS Result | LOQ | Units | %REC |
| 2302108 | Q17T1 | Total | | | | | | | |
| 2302109 | Q17T2 | Organic | | | | | | | |
| 2302110 | Q17T3 | Carbon | TOC | 5/04/95 | 25 | 26.74 | 50 | mg/kg | 107.0 |
| 2302111 | Q17T4 | RPD= 5.1% | TOC | 5/04/95 | 25 | 28.14 | 50 | mg/kg | 112.6 |
| 2302112 | Q16T2 | | | | | | | | |
| 2302113 | Q16T3 | | | | | | | | |
| 2302114 | Q16T4 | RPD= 1.7% | TOC | 5/04/95 | 25 | 26.66 | 50 | mg/kg | 106.6 |
| 2302115 | Q16T5 | | TOC | 5/04/95 | 25 | 26.23 | 50 | mg/kg | 104.9 |
| 2302116 | Q1652 | | | | | | | | |
| 2303628 | S20-8 | RPD= 3.6% | TOC | 5/04/95 | 25 | 26.66 | 50 | mg/kg | 106.6 |
| 2303629 | S20-9 | | TOC | 5/04/95 | 25 | 26.23 | 50 | mg/kg | 104.9 |
| 2303630 | S2010 | | | | | | | | |
| 2303631 | S2011 | | | | | | | | |
| 2303632 | S19S4 | | | | | | | | |
| 2303633 | S19S5 | | | | | | | | |
| 2303634 | S19S4 | | | | | | | | |
| 2303635 | S1942 | | | | | | | | |

Comments: The recovery range for the LCS is +/- 20%.

ABBREVIATION KEY

| | |
|---|---|
| IC = Ion Chromatography | --- = Analysis Not Requested |
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| TOC = Total Organic Carbon | AK = AlpKem |
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Quality Control Summary
Initial Calibration & Linearity Check
~~Instrumental Analysis~~
TOTAL ORGANIC CARBON
Instrument Identification: 5214
Calibration Date: 5/04/95
MATRIX: SOIL

Std mass: 25.0000 ug
Scaling Factor: 0.04080 Cl mV

Batch Numbers: 95118-201

| | | | |
|---|---|---|---|
| Blank: | 41.1680 mv | Standard: | 624.385 mv |
| Blank: | 30.9270 mv | Standard: | 610.960 mv |
| Blank: | 41.3370 mv | Standard: | 602.709 mv |
| Average: | 37.8107 mv | Average: | 612.685 mv |

| This IC applies to samples: | Client Designation | Analysis # | Method Blank | ICV/ 5 | ICV/ 10 | ICV/ 25 | ICV/ 50 | ICV/ 75 | Units= ug |
|---|---|---|---|---|---|---|---|---|---|
| 2302108 | Q17T1 | 138 | 0.238 | 4.954 | 10.441 | 25.448 | 51.842 | 74.583 | |
| 2302109 | Q17T2 | | | | | | | | |
| 2302110 | Q17T3 | | | | | | | | |
| 2302111 | Q17T4 | | | | | | | | |
| 2302112 | Q16T2 | | | | | | | | |
| 2302113 | Q16T3 | | | | | | | | |
| 2302114 | Q16T4 | | | | | | | | |
| 2302115 | Q16T5 | | | | | | | | |
| 2302116 | Q1652 | | | | | | | | |
| 2302108 | SPK, DUP | | | | | | | | |
| BLANK | | | | | | | | | |
| LCSS | | | | | | | | | |
| LCSSD | | | | | | | | | |
| 2303628 | S20-8 | | | | | | | | |
| 2303629 | S20-9 | | | | | | | | |
| 2303630 | S2010 | | | | | | | | |
| 2303631 | S2011 | | | | | | | | |
| 2303633 | S19S5 | | | | | | | | |
| BLANK | | | | | | | | | |
| LCSS | | | | | | | | | |
| LCSSD | | | | | | | | | |

Continuing Calibration Dates: 5/04/95
Concentration units: mg/l

| Parameter TOC | Reference Concentration | Result Cont. Cal | % Rec. | Acceptance Range -/+ 10% | | Out of Specification |
|---|---|---|---|---|---|---|
| CCV | 25.0 | 25.623 | 102.5 | 22.5 | 27.5 | |
| CCV | 25.0 | 25.250 | 101.0 | 22.5 | 27.5 | |
| CCV | 25.0 | 26.023 | 104.1 | 22.5 | 27.5 | |
| CCV | 25.0 | 26.262 | 105.0 | 22.5 | 27.5 | |

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Quality Control Summary

Method Blank
Miscellaneous Wet Chemistry

Method Blank Analysis — Matrix:

| Method Blank Designation | LL Sample No. | Sample Code | Method | Analysis Date | Batch Number | Blank Result | Units | LOQ |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

Comments: The blank is acceptable when the result is less than the limit of quantitation.

ABBREVIATION KEY

| | |
|---|---|
| TI = Titration | ND = Not Detected |
| CO = Colorimetric | J = Estimated Value < LOQ |
| IR = Infrared Spectrophotometry | < = Less Than |
| OD = Oven Dried | LOQ = Limit of Quantitation |
| DI = Distillation | NA = Not Applicable |
| G = Gravimetric | M = Meter |
| U = Under Method Detection Limit | * = Out of Specification |

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Quality Control Summary

Matrix Spike Analysis
Miscellaneous Wet Chemistry

| Sample Information | | Matrix Spike Analysis | | | | | | | | | | | Matrix: | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LL Sample No. | Sample Code | Parameter | Meth | Analysis Date | Unspiked Desig. | Unspiked Result | LOQ | Spiked Desig. | Spike Added | Spiked Result | Units | Rec (%) | Acceptance Window (%) |
| | | | | | | | | | | | | | |

Comments: Sample values shown may be rounded to be consistent with the limit of quantitation.

ABBREVIATION KEY

| | |
|---|---|
| TI = Titration | ND = Not Detected |
| CO = Colorimetric | J = Estimated Value < LOQ |
| IR = Infrared Spectrophotometry | < = Less Than |
| OD = Oven Dried | LOQ = Limit of Quantitation |
| DI = Distillation | NA = Not Applicable |
| G = Gravimetric | M = Meter |
| U = Under Method Detection Limit | * = Out of Specification |

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Quality Control Summary

Duplicate Analysis
Miscellaneous Wet Chemistry

| Sample Information | | Duplicate Analysis | | | | | | | | | | | Matrix: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LL Sample No. | Sample Code | Parameter | Meth | Analysis Date | 1st Dup Desig. | 1st Dup Result | LOQ | 2nd Dup Desig. | 2nd Dup Result | Units | RPD (%) | Control Limit % </= |
| | | | | | | | | | | | | |

Comments: If one or more sample values are less than the limit of quantitation, the RPD is not required.

Sample values shown may be rounded to be consistent with the limit of quantitation.

ABBREVIATION KEY

| | |
|---|---|
| TI = Titration | ND = Not Detected |
| CO = Colorimetric | J = Estimated Value < LOQ |
| IR = Infrared Spectrophotometry | < = Less Than |
| OD = Oven Dried | LOQ = Limit of Quantitation |
| DI = Distillation | NA = Not Applicable |
| G = Gravimetric | M = Meter |
| U = Under Method Detection Limit | * = Out of Specification |

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Quality Control Summary

Laboratory Control Standard
Laboratory Control Standard Duplicate
Miscellaneous Wet Chemistry

| Sample Information | | Laboratory Control Standards | | | | | | | | | Matrix: | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LL Sample No. | Sample Code | Parameter | Analysis Date | True LCS/D Value | LCS Result | LCSD Result | LOQ | Units | LCS/D Acceptance Range | % RPD Result | % RPD Acceptance < / = |
| | | | | | | | | | | | |

Comments: LCS/LCSD values shown may be rounded to be consistent with the limit of quantitation.

Lancaster Laboratories
*Where quality is a science.*

Quality Control Summary

Initial Calibration
Miscellaneous Wet Chemistry
Instrument Identification:

Calibration Date:

Batch Number:

| This IC applies to samples: | Sample Code | Parameter | Blank 0.0000 | STD 1 0.1000 | STD 2 0.2000 | STD 3 0.6000 | STD 4 1.0000 | STD 5 2.0000 | STD 6 4.0000 | Corr. Coef. |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |

Calibration Date:

Batch Number:

| Parameter | Reference Concentration | Result Cont. Cal | % Rec. | Acceptance Range -/+ 10% | Out of Specification |
|---|---|---|---|---|---|
| | | | | | |

# EXHIBIT 2

## XRF Standard Operating Procedure

## DuPont Pompton Lakes Works Laboratory

# Laboratory XRF SOP

## Sample Preparation Procedures

1. Upon soil sample collection in the field, place a 6-inch soil interval in a stainless steel pan. Using a stainless steel trowel, homogenize the soil interval.
2. Place the homogenized sample in a 16-oz jar if analysis beyond XRF is to be performed; place the sample in a single-use plastic soil bag if no analysis beyond XRF is to be performed.
3. Take sample container to PLW lab.
4. Using a stainless steel scoop, remove 2-3 ounces of soil from homogenized sample and place in a disposable, plastic sample tray labeled with sample ID.
5. Dry sample in a microwave oven for at least 2 minutes, but no more than 12 minutes.
6. Place dried sample in a stainless steel cup; add stainless steel balls and pulverized the soil sample for 3 minutes using the SPEX 8000 mixing mill.
7. Place pulverized sample in a labeled, single-use plastic XRF cup; cover with Mylar® film and secure the film to the cup with a snap ring.
8. Load the XRF cup containing the sample into the XRF; analyze as described below. Following analysis, dispose of samples in accordance with the applicable Waste Management Plan.

## Spectrace QUAN X XRF QA/QC

1. Perform instrument calibration in accordance with manufacturer-supplied operating instructions.
2. Run the energy calibration daily, using copper calibration disk.
3. Following energy calibration, analyze traceable standards NIST8407, NIST8408, NIST2710 and NIST2711. Record results.
4. Compare results to known concentrations for copper, mercury and lead in the NIST standards. Results within 20% of the known standards are acceptable; results outside 20% of the known standards require re-standardization, per manufacturer's instructions.
5. Following re-standardization, reanalyze the four NIST standards and compare results to known concentrations.
6. If calibration results remain outside acceptability limits, contact the manufacturer for technical assistance.
7. Proceed with sample analysis only when calibration results meet acceptance criteria.

## Spectrace QUAN X XRF **Sample Analysis**

1. Place XRF sample cups, Mylar® film side down, in the machine's sample turntable.
2. Sample locations in the XRF turntable are numbered from 1 to 20. Following the prompt from the software, enter the sample ID assigned by the field geologist (e.g.-333-1-0) into the sample management software as it corresponds to a numbered sample location on the turntable.
3. Upon completion of sample ID entry for all samples to be analyzed, close the XRF's interlocking cover and start the analysis program.

4. The instrument software will automatically generate a paper copy of the analysis results, as well as record results on the hard drive of the computer attached to the XRF. Forward results in electronic format to Wilmington for inclusion in the DuPont CRG Corporate Environmental Database. File results in paper format along with printed laboratory reports in the project's laboratory results binder.

Revised 2/02:EHC/BCR

# DuPont Pompton Lakes Works

Environmental Analysis Laboratory
Quan X XRF Standards
Date:_____

Time:_____
Analyst:_____

| Standard | Cu | Pb | Hg |
|---|---|---|---|
| **NIST2710 Concentration** | **2950** | **5532** | N/A |
| XRF Result | | | N/A |
| % Difference | | | N/A |
| **NIST2711 Concentration** | **114** | **1162** | N/A |
| XRF Result | | | N/A |
| % Difference | | | N/A |
| **NIST8407 Concentration** | N/A | N/A | **50** |
| XRF Result | N/A | N/A | |
| % Difference | N/A | N/A | |
| **NIST8408 Concentration** | N/A | N/A | **107** |
| XRF Result | N/A | N/A | |
| % Difference | N/A | N/A | |

% Difference must be between 80 - 120%
% Difference = XRF Result/Standard Concentration X 100

# APPENDIX B—HASP

# HEALTH AND SAFETY PLAN
# FOR LAKE INEZ
# REMEDIAL INVESTIGATION
# DUPONT, POMPTON LAKES WORKS
# POMPTON LAKES, NEW JERSEY

Date: June 6, 2003

Project No: 7035
18983386

CORPORATE REMEDIATION GROUP
*An Alliance between*
*DuPont and URS Diamond*

2000 Cannonball Road
Pompton Lakes, NJ 07442


Kathryn A. Sova
URS Diamond
Regional Health and Safety Manager

Marjorie E. Vetter
URS Diamond
Project Manager

# REVISION CHECKLIST

| HASP Section | PM Initials | RHSM Initials | SSO Initials | Date | Comments |
|---|---|---|---|---|---|
| | | | | | |
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Attachment J Lyme Disease
Attachment K Unexpected Occurrence Reporting

# 1.0 PURPOSE

The purpose of this health and safety plan (HASP) is to assign responsibilities, establish personnel protection standards, specify safe operating procedures, and provide for contingencies that may arise during the Lake Inez Remedial Investigation at the DuPont, Pompton Lakes Works site in Pompton Lakes, New Jersey.

This HASP has been developed in accordance with the DuPont Corporate Remediation Group (CRG) and URS Diamond (URSD) safety and health standard operating procedures and is in compliance with requirements set forth in 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response.

The site supervisor and site safety officer (SSO) have shared responsibility for implementing and enforcing this HASP. The SSO will evaluate this HASP for continuing adequacy throughout the course of field activities to incorporate changes necessitated as a result of changes in site activities. All proposed revisions to this HASP will be reviewed and by the Regional Health and Safety Manager prior to implementation by the project team and annotated on the revision checklist provided at the beginning of this document.

All participants involved in the project will read and be afforded the opportunity to discuss this HASP. In addition, all personnel will sign the HASP Compliance Form provided in Attachment A (see Attachment A for field-related forms).

**ATTENTION CONTRACTORS: You** are responsible for compliance with this HASP and any other regulatory requirements set forth by the Occupational Safety and Health Act (OSHA) and other federal/state regulations.

# 2.0 PROJECT DESCRIPTION

## 2.1 General

| | |
|---|---|
| Plant/Facility Name: | DuPont, Pompton Lakes Works |
| Plant/Facility Address: | 2000 Cannonball Road<br>Pompton Lakes, New Jersey 07442 |
| Plant/Facility Description: | The DuPont Pompton Lakes Works (PLW) Lake Inez region encompasses approximately 187 acres south of I-287. Of those 187 acres, approximately 94 acres are relatively flat. The PLW Lake Inez region encompasses approximately 56 acres north of I-287, of which 23 acres are relatively flat. Figure 1 shows the entire Lake Inez region. |
| Project/Site History: | The site was used for explosive manufacturing form the later 1800's until 1926. During this period, the H. Julius Smith Blasting Cap Plant, which became the DuPont electric Exploder Company in 1902, operated in the southern portion of the Lake Inez region. The American Smokeless Powder Plant operated in the northern portion of the Lake Inez region.<br><br>Twenty-nine of the 202 PLW AOCs are located in the Lake Inez region. Five of the 29 AOCs have had stabilization or remedial measures. Interim remedial measures (IRM) were conducted in AOCs 192, 194 and 198 in 1996 to 1997, and interim stabilization measures were performed in AOC 193 in that same time frame. An IRM was conducted in AOC 107 in 2001. Several areas of the off-site Wanaque River flood plain have already been remediated, while one area, the Wanaque east bank flood plain, will be remediated in the second half of 2003. |

A site location map is included in Figure 1.

## 2.2 Nature of Activity

[ ] PRFI [ ] RFI [ ] Remedial Action [X] Other Remedial Investigation

Project Name: Lake Inez Remedial Investigation

| | | | |
|---|---|---|---|
| Project Number: | DuPont: 7035; URSD: 18983386 | | |
| Project Manager: | Marjorie E. Vetter | | |
| Customer Contact: | Ralph H. Sloat | Phone No. | 973-492-7733 |
| Contract Administrator: | N/A | Phone No. | N/A |

# 3.0 SCOPE OF WORK

Historical data from the Lake Inez region has been evaluated, and as a result, this remedial investigation will focus on collecting data necessary to adequately evaluate this region. The proposed investigation will be a "one-step" investigation to address existing data gaps, verify historic data, delineate the constituents of potential concern, and identify any areas that may warrant remedial action and/or stabilization.

Soil samples will be collected during the Lake Inez investigation using a GeoProbe®. The GeoProbe® will be equipped with a soil core barrel with a plastic liner. Surface samples may be collected from the 0 to 6-inch interval using a stainless steel trowel.

Sample locations will generally have one sample collected within the surface interval and two samples collected from the subsurface unless bedrock or groundwater is encountered before final depth is reached.

Because PLW historically manufactured explosive compounds and products, there are inherent dangers associated with sampling soils that may contain these constituents. DuPont may elect to perform a subsurface soil evaluation at any given location utilizing test pit or remote sampling procedures. Based on a review of the former Lake Inez region operations by site personnel and an evaluation of all the previous Lake Inez region explosive compound sample screening results, no test pits have been proposed a this time. However, if during the field investigation, DuPont determines that at discrete location explosive compounds or products are present, DuPont will discontinue the GeoProbe® sampling program and continue the subsurface investigation using a backhoe appropriately equipped to protect the operator. The backhoe will excavate a test pit to the deepest sampling interval or to four feet blow ground surface, which ever comes first. The field geologist will inspect the soils in the sidewall of the exposed excavation and perform PID screening. Soil samples form the desired sampling interval(s) will then be collected from the excavation. Samples will be collected using one of the following methods:

- ❏ Directly from the sidewall using a stainless steel sampling trowel and/or or an EnCore® sampling device if VOC sampling is needed.
- ❏ From the backhoe bucket in an area where the sample material is not in contact with the bucket using a stainless steel sampling trowel and/or VOC sampling device if VOC sampling is needed.
- ❏ From the bottom of the excavation utilizing a four-inch diameter stainless steel hand auger or trowel. No VOC samples will be collected using this method.

# 4.0 PROJECT ORGANIZATION

| | | | |
|---|---|---|---|
| CRG/URS Diamond personnel on site: | 1-2 | Maximum number: | 2 |
| Contractor personnel on site: | 1-2 | Maximum number: | 2 |
| Others on site: | N/A | Maximum number: | N/A |

## 4.1 Responsibilities

### 4.1.1 Project Manager

Marjorie E. Vetter

Responsibilities include overall coordination of site activities. The project manager has overall responsibility for the safety of operations and the health and safety of all personnel. The project manager is responsible for ensuring that the project is audited to verify compliance with the project health and safety program.

### 4.1.2 URS Diamond Regional Health and Safety Manager

Kathryn A. Sova

The health and safety manager is a resource for development of the site-specific HASP and will be consulted on all related health and safety issues that arise in the field, including any changes in the scope of work. The health and safety manager will make all final decisions regarding questions on the HASP.

### 4.1.3 Site Supervisor

Edward H. Cahill

The site supervisor is responsible for field-related activities under the direction of the project manager and for maintaining field operations in accordance with project requirements. He is responsible for enforcing daily implementation of the HASP and resolving health and safety issues with the SSO. He also will assist in conducting daily site briefings and document having done so (see Section 8.4) on the Daily Safety Briefing Log (refer to Attachment A) or in the field logbook. He will substitute for the SSO as required by project activities.

### 4.1.4 Site Safety Officer

Charles Kershaw

Responsibilities of the SSO include daily implementation of this HASP. The SSO is responsible for implementing and enforcing the HASP, overseeing the safety of daily operations, serving as the Respiratory Protection Program administrator and coordinating safety with subcontractors. In particular, the SSO will:

- ❑ Ensure that personnel are aware of the provisions of this HASP and are instructed in work practices, safety, waste management, and emergency procedures.
- ❑ Establish and ensure maintenance of site work zones.
- ❑ Monitor the work area and personal breathing zone and ensure compliance of workers relative to pre-established personal protection levels.
- ❑ Evaluate site conditions (i.e., weather, chemical, physical) and recommend any modifications to existing levels of protection.
- ❑ Ensure that daily safety briefings are conducted with assistance from the site supervisor.
- ❑ Initiate emergency response procedures with immediate communication to the project manager.
- ❑ Exercise stop-work authority in the event of imminent danger to project personnel.
- ❑ Resolve any noncompliance issues with the site supervisor.
- ❑ Conduct regular inspections to determine effectiveness of the HASP.
- ❑ Maintain the SSO logbook.
- ❑ Ensure the adequacy of the Respiratory Protection Program including proper respirator use, cleaning, inspection, and storage.
- ❑ Maintain copies of documents (e.g., training, medical, fit test).

### 4.1.5 Project Personnel

Project personnel involved in field activities are responsible for:

- ❑ Taking all reasonable precautions to prevent injury to themselves and to fellow employees.
- ❑ Conducting only those tasks that they believe they can do safely.
- ❑ Reporting all occurrences and/or unsafe conditions to the SSO or project manager.

# 5.0 HAZARD EVALUATION

## 5.1 Project Safety Analysis

A project safety analysis (PSA) is required for all projects and will be completed prior to project start-up.

## 5.2 Chemical Hazards

Based on previous soil investigations (on-site and off-site), the Constituents of Concern (COCs) are mercury, lead and copper and polynuclear aromatic hydrocarbons (PAHs). This is consistent with the Lake Inez region site history of assembly of mercury fulminate caps in buildings with lead-lined floors and use of copper shells and wire, and the decommissioning of the buildings by burning. Other metals of concern are beryllium, thallium, arsenic and mercury. A summary of the data for each of these constituents is presented below.

| Constituent | Average Concentration (mg/kg) | Maximum Concentration (mg/kg) |
|---|---|---|
| Benzo(a)pyrene | 1 | 8.5 |
| Benzo(a)fluoranthene | 1.5 | 13 |
| Beryllium | 0.9 | 3.2 |
| Thallium | 2.4 | 10 |
| Arsenic | 10.5 | 58.8 |
| Dibenzo(a,h)anthracene | 0.3 | 2 |
| Copper | 612 | 21,200 |
| Lead | 234 | 3,196 |
| Benzo(a)anthracene | 0.8 | 5.4 |
| Indeno(1,2,3-cd)pyrene | 0.6 | 5.1 |
| Mercury | 43.2 | 970.6 |

The focus of this investigation will be limited to soil. Samples collected from a bedrock groundwater well and alluvial wells have exhibited no Volatile Organic Compound (VOC) concentrations above the New Jersey groundwater standard for a Class-II-A aquifer.

Table 1 provides occupational health information regarding the constituents of concern. A lead awareness program is included in Attachment B.

The main routes of exposure include inhalation, dermal contact and ingestion. Due to the nature of the sampling method, i.e., GeoProbe® and surface soil sampling, inhalation of dusts is not a concern. A photoionization detector (PID) will be used to monitor for VOCs, and airborne mercury vapor will be monitored using a mercury vapor analyzer. Modified Level D PPE will be worn to prevent dermal contact. Good hygiene practices, including, washing hands and face before eating or drinking, will be employed to address ingestion concerns.

The Regional Health and Safety Manager must approve the use of any hazardous materials that will be brought on site to facilitate this project prior to bringing such materials on site. A material safety data sheet (MSDS) must be provided to the Site Safety Officer. MSDSs must be available on site and maintained by the SSO. All labeling and storage of hazardous materials must be in accordance with regulatory requirements.

## 5.3 Physical Hazards

The primary physical hazards are terrain, the operation of the GeoProbe®, noise and slip/trip/fall hazards. If test pits are excavated, heavy equipment operation and excavation safety are also a concern.

Procedures to be used to monitor/reduce these hazards will include the following:

- **Materials handling:** Use proper lifting techniques. Use the buddy system or mechanical lifting aids when moving heavy or bulky items. Wear gloves.
- **Drum handling:** Do not manhandle full drums. Partially fill drums to reduce weight when possible. Get help when moving drums. Use a drum cart or forklift with a drum grappler or other mechanical lifting device if possible. Wear gloves and pay close attention to the positions of hands and feet.
- **Excavations:** Consult and follow the procedures presented in CRG Standard HS-102 (see Attachment C). This standard applies whenever excavations of six inches or greater are present. The procedure does not apply for excavations that employees physically could not enter (i.e., well borehole). Soil samples may be collected directly from the sidewall of the excavation, from the backhoe bucket or from the bottom of the excavation. If a test pit is excavated, all the requirements of CRG HS-102 will be met, including the use of a Competent Person under the Standard.
- **Overhead lines:** Equipment will remain a safe distance (minimum 20 feet) from overhead power lines. See Section 5.3.1 for additional information regarding overhead hazards.
- **Buried utilities:** Underground utilities must be located before intrusive activities begin. See CRG Standard HS-163 in Attachment D for information regarding underground hazards.

- **Drill rig:** The GeoProbe® will be inspected prior to on-site use and daily throughout the project. Attachment E provides additional safety requirements including equipment safety checklists.
- **Heavy equipment:** Attachment F provides information regarding heavy equipment safety. All construction equipment will be inspected prior to arrival on site and daily throughout the project. Backup alarms must be operable on all equipment.
- **Noise:** Workers **must** wear approved hearing protection when working around equipment that produces sound levels in excess of 85 decibels, whenever signs indicate that hearing protection is required, and whenever voices must be raised to be heard at a distance of three feet or less.
- **Terrain:** Adequate site clearing and leveling should be conducted to accommodate the equipment and supplies and provide a safe working area.
- **Slip/trip/fall:** Good housekeeping practices should be employed to prevent slip/trip/fall hazards. Caution must be employed when walking to prevent slip/trip/fall hazards caused by terrain.
- **Heat/cold:** Ample breaks will be taken during hot or cold ambient conditions (see Attachment G).
- **Work over water:** Requirements for working over or near water (CRG Standard HS-107) are presented in Attachment H.
- **Pinch points:** Personnel must always be aware of limb or body position in close proximity to moving equipment to reduce pinch point hazards. Wear appropriate hand protection to protect hands.
- **Fall Protection:** Personnel working on steep slopes or 5 feet above grade must wear appropriate fall protection, i.e., full body harness with lanyard.
- **Electrical:** Power tools must be in good working order and used with ground fault circuit interrupt (GFCI) protection. All electrical cords and extension cords must be inspected prior to use. Do not overload plugs.
- **Fire/explosion:** Fueling of any gas- or diesel-powered equipment shall be performed only after the equipment is cooled. Grounding techniques will be used during transfer of fuel and/or other flammable liquids.
- **Tree Clearing and Grubbing:** See DuPont SHE procedure B-42.1 in Attachment I for information regarding personal protective equipment and other safety measures when operating weed cutters and chain saws.

### 5.3.1 Overhead Obstructions

Overhead obstructions (OHOs) include electrical and communications lines, piping, bridges, and crosswalks. Extremely hazardous OHOs are defined in Section 1.3 of CRG Standard HS-162.

| | Yes | No | |
|---|---|---|---|
| a. | | X | Are OHOs located within the confines of the project site? |
| b. | | X | Are OHOs located on accessible adjoining properties? |
| c. | | X | Will trucks with raisable beds (e.g., dumps, rolloff containers) be used on the project? |
| d. | | X | Will equipment with "high clearance" be brought on the site? |

If the response to (a) or (b) is yes, and response to (c) or (d) is yes, an OHO Work Plan must be developed.

| | Yes | No | |
|---|---|---|---|
| e. | | X | Are there any extremely hazardous OHOs present in the work area? |
| f. | | | What type(s) is(are) the expected extremely hazardous OHO(s)? N/A |
| g. | | | At what frequency will the expected extremely hazardous OHO be encountered? N/A |

If the response to (e) is yes and the response to (f) is more than one, then an OHO Work Plan must be developed. Refer to CRG Standard HS-162.

| | Yes | No | |
|---|---|---|---|
| h. | | X | Will cranes, excavators, or similar equipment be required to operate within 15 feet of OHOs on the project? |
| i. | | X | Will drilling rigs be required to operate within 20 feet of OHOs on the project? |

If the response to (h) or (i) is yes, refer to CRG Standard HS-162. A "proximity permit" must be completed before work begins.

## 5.4 Biological Hazards

Site activities will be conducted in a highly vegetated area. Biological hazards include wild animals, ticks, snakes, poisonous plants, stinging insects and mosquitoes.

Procedures to be used to monitor/reduce these hazards will include the following:

- **Snakes:** Be familiar with local venomous species of snakes; caution must be exercised when walking. Always walk in areas that are visible, not over logs or rocks, and never place hands in or on objects that are not completely visible. Use a long stick or rod to move grass and/or bushes, if necessary. Personnel should wear leg guards or rubber boots to protect the lower leg. If bitten, try to identify the snake. Ice the area and seek medical attention immediately.

- **Ticks:** Ticks are prevalent. Specific information regarding precautions and symptoms of tick bites is provided in Attachment J. Wear Tyvek® coveralls to prevent ticks from contacting clothing or skin. Consider using insect repellant containing DEET and check frequently for the presence of ticks.
- **Feral animals:** Air horns will be available to field personnel as a deterrent for wild dogs.
- **Poisonous plants:** Poisonous plants such as poison ivy are present on site. Inspect work area prior to entering. Remove coveralls and gloves from the inside out to avoid contact with potentially contaminated clothing.
- **Rabid animals:** Avoid any animal acting in an uncharacteristic manner, especially skunks, feral dogs and cats, and raccoons. If bitten by any animal, go to the hospital immediately.
- **Mosquitoes:** Mosquitoes may be present and may be carriers of malaria, yellow fever, encephalitis, West Nile Fever and other diseases. Wear mosquito repellant as necessary, especially to areas not protected by clothing. Be aware of the mosquito-borne illnesses in your area.
- **Stinging insects:** If stung by a bee, carefully removed the stinger by gently scraping with a fingernail (do not squeeze). Wash the area with soapy water and apply a cold (ice) compress to decrease absorption and spreading of the venom. If excessive swelling or redness appears, seek immediate medical attention. **(Note: Allergic reactions to bee stings can be life threatening; therefore, identify susceptible persons prior to project start-up. See form in Attachment A.)**

## 5.5 Explosives Hazards

Nitrocellulose, Ballistite and smokeless powder were manufactured in the areas of AOC 117 and 119 in the northern portion of the Lake Inez region, and the buildings were decommissioned by burning. The following raw materials were used to produce those products:

- Wood/cotton fiber
- Nitric acid
- Sulfuric acid
- Barium nitrate
- Dipheylamine
- Ethyl alcohol
- Acetone
- Urea
- Naphthalene

The New Jersey Department of Transportation (NJDOT) contracted with Day and Zimmerman in 1984 to collect and analyze soil samples on property that was previously part of the Haskell Plant of the Lake Inez region. Samples were analyzed for nitrate,

nitrite, lead, mercury, and organic explosives. There were no Soil Cleanup Criteria (SCC) exceedances.

However based on historical usage of this area, all soil samples will be field screened for organic explosives using EXPRAY® field screening kits. In general, all deep soil samples will be collected using a GeoProbe® and shallow soil samples with a trowel. If there are safety concerns because of the potential for explosives and/or explosive devices, then non-sparking sampling equipment, a remote drill rig or test pits will be used for sample collection.

# 6.0 WORKER PROTECTION

The levels of personal protection are selected by evaluating the performance characteristics of the clothing against the requirements and limitations of the site- and task-specific conditions.

## 6.1 Level of Protection

The specific PPE listed for each level of protection was selected based on potential respiratory and dermal hazards. The levels of protection to be used during project-related activities are as follows:

- ❏ Modified Level D
  - Hard hat
  - Steel toe work boots
  - Latex booties or chemical-resistant overboots
  - Safety glasses with attached rigid side shields
  - Tyvek® coveralls taped at gloves and boots
  - Leather work gloves for clean tasks
  - Nitrile outer gloves with surgical inner gloves
  - Polyethylene-coated Tyvek® coveralls and full faceshield during heavy equipment decontamination
  - Kevlar® apron and ballistic faceshield with leather bib when sampling soil in areas where explosive hazards may be present

- ❏ Level D
  - Hard hat
  - Steel toe boots
  - Safety glasses with attached rigid side shields
  - Standard work clothes (long trousers and a long sleeve shirt or cotton coveralls); wear Tyvek® coveralls for protection against ticks and poisonous plants
  - Leather work gloves (use Kevlar® gloves when working with knives, etc.)
  - Add shin protectors/leg protection, full faceshield and hearing protection when operating weed cutters
  - Add Kevlar® chaps and jackets, full faceshield and hearing protection when using a chain saw.

## 6.2 Task-specific Protection Level

Protection discussed in the paragraphs that follow will be used to initiate each task. An upgrade or downgrade to the specified level of protection will be based on airborne volatile organic concentrations and skin contact. The health and safety department will make any changes or adjustments to these levels of protection.

**Task:** Mobilization/Demobilization **Location**: All Areas
Engineering/Administrative Controls: Yes [ ] No [X]

| | **PPE Level** | **Range (ppm or mg/m$^3$)/Condition** |
|---|---|---|
| Initial Level | Level D | Background conditions |
| Downgrade Level | N/A | N/A |
| Upgrade Level | Modified Level D | If potential contact with COCs and/or biohazards present |

**Chemical/Physical Hazard Analysis:**

There are no chemical hazards anticipated for this task. If there is potential contact with the constituents of concern (COCs), or if biohazards such as ticks or poisonous plants are present, upgrade PPE to Modified Level D to provide dermal protection. Physical hazards include the use of chain saws or weed cutters, lifting, terrain, and slip/trip/fall potential. Wear appropriate PPE (see Attachment H) and follow manufacturer's instructions for operating equipment. Use proper lifting techniques and employ mechanical lifting aids as needed. Watch for low or uneven spots along with other trip hazards such as tree roots, etc. See Section 5.4 for information regarding biohazards.

**Task:** Soil Sampling **Location**: All Areas
Engineering/Administrative Controls: Yes [ ] No [X]

| | **PPE Level** | **Range (ppm or mg/m$^3$)/Condition** |
|---|---|---|
| Initial Level | Modified Level D | N/A |
| Downgrade Level | Level D | N/A |
| Upgrade Level | Level C | If total VOCs > 1 ppm and/or mercury vapor >0.0125 mg/ m$^3$, contact H&S for possible upgrade to Level C |

**Chemical/Physical Hazard Analysis:**

Work will be performed in Modified Level D to provide dermal contact. If air monitoring readings for total VOCs exceed 1 ppm in the Worker's Breathing Zone (WBZ), or if mercury vapor readings exceed 0.0125 mg/ $m^3$ in the WBZ, contact H&S personnel for possible upgrade to Level C.

Physical hazards include the operation of the GeoProbe® and possibly an excavator, excavation safety, terrain, noise and slip/trip/fall. Follow procedures outlined in Section 5.3. For protection from biohazards, see Section 5.4.

**Task:** Decontamination of heavy equipment **Location**: Decontamination Pad

Engineering/Administrative Controls: Yes [ ] No [X]

| | **PPE Level** | **Range (ppm or mg/$m^3$)/Condition** |
|---|---|---|
| Initial Level | Modified Level D | N/A |
| Downgrade Level | N/A | N/A |
| Upgrade Level | N/A | N/A |

**Chemical/Physical Hazard Analysis**:

Upgraded Modified Level D PPE will include a full faceshield over safety glasses and polyethylene-coated Tyvek® coveralls. Personnel using high-pressure washers must be trained for equipment use and follow manufacturer's and Company procedures.

# 7.0 AIR/WORKPLACE MONITORING

## 7.1 Noise Monitoring

[X] No [ ] Yes

In any area where individuals must raise their voices to communicate at a distance of three feet or less, and where posted as a mandatory hearing protection area, hearing protection is required.

## 7.2 Heat/Cold Stress Monitoring

[X] No [ ] Yes

If heat or cold stress monitoring is not conducted, protocols provided by the American Conference of Governmental Industrial Hygienists (ACGIH) will serve as guidance for dealing with heat and/or cold stress (see Attachment G).

## 7.3 Monitoring Equipment

Real time monitoring will be performed for total VOCs using a flame ignition detector or PID equipped with an 11.7 eV lamp. If airborne concentrations of total VOCs exceed 1 part per million (ppm) above background in the WBZ, work will stop and the need for respiratory protective equipment re-evaluated.

A mercury vapor analyzer will be used to monitor for airborne mercury vapor. If the action level of 0.0125 mg/ $m^3$ is exceeded in the WBZ, stop work and evaluate the need for respiratory protection.

If excavations exceed four feet in depth, air monitoring will be performed for explosive gases/vapors conditions and oxygen in accordance with CRG Standard HS-102. If any reading (%LEL) is detected, work will cease until site conditions are re-evaluated. Air contains approximately 21% oxygen. If atmospheric oxygen is below 19.5% or above 23.5%, work will cease until site conditions are re-evaluated.

Monitoring equipment will be calibrated per the manufacturer's instructions prior to first use of the day and documented in the field log book or on field and/or air monitoring data sheets (specify calibration gas/flow rates). In addition, background levels will be established before field activities begin.

# 8.0 PERSONNEL TRAINING

All personnel involved in field activities will be required to participate in a health and safety training program that complies with criteria set forth by OSHA in accordance with 29 CFR 1910.120(e).

## 8.1 Pre-assignment and Annual Refresher Training

Prior to arrival on site, each employer (contractor) will be responsible for certifying that his or her employees meet the requirements of 40/24-hour pre-assignment training. In addition, each employee must be able to document dates of attendance at annual eight-hour refresher training and three/one day(s) of fieldwork under a qualified supervisor. Failure to provide these documents will prohibit entry to the site.

## 8.2 Site Supervisor Training

Consistent with OSHA 29 CFR 1910.120(e)(4), prior to arrival on site, individuals designated as site supervisors require an additional eight hours of specialized training.

## 8.3 Site Safety Officer Training

All Site Safety Officers must meet the requirements of CRG Standard HS-1001.

## 8.4 Initial Site Briefing

In addition to 29 CFR 1910.120(e) training, all site employees will attend an initial HASP review prior to initiating field activities. This review must include the following:

- ❑ **Project Personnel Roles and Responsibilities**
  Personnel will understand the lines of authority regarding health and safety and site personnel roles and responsibilities.
- ❑ **Site-specific Health and Safety Hazards**
  Personnel will be informed of specific hazards related to the site and site operations, such as health hazards of site chemicals and specific safety hazards of process equipment.
- ❑ **Personal Protective Equipment**
  Personnel will be trained in the proper use of PPE.
- ❑ **Safe Work Practices/Engineering Controls**
  Personnel will be informed of appropriate work practices and engineering controls that will reduce risk of exposure to site hazards.
- ❑ **Communication Methods**
  Personnel will be informed of means for normal site and emergency communication.

- ❑ **Air Monitoring**
  Personnel will be informed of the frequency and types of air monitoring, personnel monitoring, and sampling techniques to be used on site.
- ❑ **Medical Surveillance Program**
  Personnel will be informed of the medical surveillance requirements, including recognition of symptoms and signs of exposure. In addition, specific biological monitoring program requirements will be explained.
- ❑ **Site Control Methods**
  Personnel will understand site methods used to reduce exposure to on- and off-site personnel.
- ❑ **Decontamination Procedures**
  Personnel will be trained in proper decontamination procedures, including decontamination of PPE, equipment, and vehicles.
- ❑ **Emergency Response**
  Personnel will be trained to respond properly in the event of an emergency.
- ❑ **Confined-space Entry/Special Hazards**
  Personnel involved in specific hazardous activities, such as confined-space entry and/or drum handling, will receive training in the appropriate techniques to employ prior to commencing these operations.

## 8.5 Daily Briefings

Daily briefings will be conducted before each work shift at a location designated by the SSO or site supervisor. All personnel will attend this briefing to participate in the in-field activities for that day. Attendance at the briefing will be documented in the daily site briefing log (see Attachment A) or SSO's field logbook.

## 8.6 Special Facility Training

| | | | | | | |
|---|---|---|---|---|---|---|
| Site Orientation | [ ] | No | [X] | Yes | If yes, specify: | PLW Site orientation |
| Area Orientation | [X] | No | [ ] | Yes | If yes, specify | |
| Other | [ ] | No | [X] | Yes | If yes, specify | HASP & PSA review |

## 8.7 Visitor Procedures

All on-site visitors will be escorted by CRG/URS Diamond site personnel and will be required to review and agree to comply with provisions of this HASP. In addition, visitors will sign in and out of the site logbook. Only visitors who meet the training and medical monitoring requirements of 29 CFR 1910.120 will be allowed to enter the Exclusion Zone or Contamination Reduction Zone.

# 9.0 MEDICAL MONITORING

All personnel involved in field activities must participate in a medical monitoring program as outlined in 29 CFR 1910.120(f).

Contractors will assume responsibility for obtaining the necessary medical monitoring for their employees and will provide a medical clearance letter to CRG as requested. In addition, personnel will complete the Medical Data Sheet included in Attachment A.

## 9.1 Biological Monitoring

Due to the nature and duration of field activities, biological monitoring is not required.

# 10.0 SITE CONTROL/ILLUMINATION

Site control measures are as follows:

- ❑ The job site is partitioned into three distinct work zones: Support Zone, Contamination Reduction Zone, and Exclusion Zone. Zones will be clearly delineated using tape, barriers, signs, or whatever means is appropriate for the site.
- ❑ Workers will enter and exit the Exclusion Zone only through the Contamination Reduction Zone. Gross decontamination will occur in the established corridor.
- ❑ Only authorized personnel are allowed to enter Exclusion Zone/Contamination Reduction Zone.
- ❑ SSO will depict the actual site layout in SSO logbook daily, and as needed thereafter.
- ❑ Appropriate containers will be used for temporary collection of contaminated clothing and articles of PPE. Site supervisor will ensure waste containers are clearly dated with contents identified and are managed in accordance with the project waste management plan.
- ❑ Communications on site will be conducted using radios. In event of an emergency, the SSO will alert all personnel to leave Exclusion Zone and await further instructions.
- ❑ The buddy system will be employed to the extent feasible to assist in event of an emergency (see CRG Standard HS-120).

## 10.1 Illumination

Hours of field operation: 7:00 AM to 5:00 PM

Describe lighting source: Natural daylight

If required, adequate artificial lighting will be provided for all activities.

# 11.0 DECONTAMINATION

## 11.1 Personnel Decontamination Procedures

Personnel decontamination procedures are as follows:

1. Equipment drop
2. Boot wash
3. Boot rinse
4. Outer glove wash
5. Outer glove rinse
6. Boot removal
7. Outer glove removal
8. Suit removal
9. Respirator removal
10. Inner glove removal

When project requirements necessitate deviations from the listed steps, deviations will be noted in the field logbook.

## 11.2 Sample Equipment Decontamination Procedures

Sampling equipment will be decontaminated in the PLW screening laboratory where rinse water is collected and sent to an approved facility for disposal.

## 11.3 Heavy Equipment Decontamination Procedures

The GeoProbe® will be cleaned after arrival on site and before departing. Operators of the GeoProbe® will provide enough equipment (macro-core barrels, tips) for at least 12 eight-foot borings. Decontamination will occur prior to that day's sampling events in the PLW screening laboratory.

**ALL EQUIPMENT WILL BE INSPECTED PRIOR TO DEPARTURE OFF-SITE. MEANS OF APPROVAL WILL BE DETERMINED BY:**

☒ Visual inspection

## 11.4 Procedure to Clean and Store Respirators

Although the use of respiratory protection is not anticipated, if respirators are used, the following procedure will be employed.

Each employee will use his or her respirator exclusively and is responsible for inspecting it prior to use and for cleaning it after use. The SSO will conduct periodic inspections to verify that respirators are being properly cleaned and stored.

Respirators will be stored on site in a way to prevent contamination (i.e., plastic bag in accordance with 29 CFR 1910.134). Respirators will be field-cleaned in the Contamination Reduction Zone (CRZ) after each use. Respirators will be washed and sanitized at the end of each week.

# 12.0 SANITATION

Sanitation facilities will be provided in accordance with 29 CFR 1910.120(n). Highest number of personnel (URS Diamond and contractors) anticipated on site: 4.

## 12.1 Potable Water

[ ] Provided by CRG [X] Provided by site [ ] Provided by contractor

All potable water will be clearly marked, tightly closed, and equipped with a tap. Provisions will be made for sanitary storage and proper disposal of cups.

## 12.2 Non-potable Water

[ ] Provided by CRG [X] Provided by site [ ] Provided by contractor

Sources of non-potable water will be segregated and clearly marked as unsafe for drinking, cooking, and washing.

## 12.3 Toilet Facilities

[ ] Provided by CRG [X] Provided by site [ ] Provided by contractor

## 12.4 Washing/Showering

Is project duration greater than six months? [ ] No [X] Yes*

Are showering facilities necessary? [X] No [ ] Yes

[ ] Provided by CRG [ ] Provided by site [ ] Provided by contractor

*Field work will take place intermittently over a 4 year period

## 12.5 Personal Hygiene

Prior to eating, drinking, or smoking, hands and face must be thoroughly washed.

Are hand washing facilities necessary? [ ] No [X] Yes

[ ] Provided by CRG [X] Provided by site [ ] Provided by contractor

# 13.0 EMERGENCY CONTINGENCY

## 13.1 Emergency Phone Numbers

| Contact | Name | Number |
|---|---|---|
| Pompton Lakes Guard House | | (973) 835-1300 |
| Police | Pompton Lakes Police Dept. | 911 |
| Fire | Pompton Lakes Fire Dept. | 911 |
| Ambulance | Pompton Lakes FA Squad | 911 |
| Hospital Name:<br>Address: | Chilton Memorial Hospital<br>97 West Parkway<br>Pompton Plains, NJ | (973) 831-5111 |
| CRG Project Director | Ralph H. Sloat | (973) 492-7733 |
| URS Diamond Project Manager | Marjorie E. Vetter | (406) 288-2200 |
| CRG Safety Manager | Mary Glowacki | (302) 992-5993 |
| URS Diamond Safety Manager | Kathryn A. Sova | (973) 492-7708 |

The evacuation route, assembly area, and alarm system will be identified by the site supervisor/SSO prior to onset of field activities and reviewed with all field personnel. A map showing the hospital route is included as Figure 2.

Directions to the hospital: Exit site on Ringwood Avenue and turn right onto Paterson Hamburg Turnpike, then left onto Newark Pompton Turnpike. Go to Route 23 south, first right at Boulevard. Right at Sunset Road, left at West Parkway. Chilton Memorial Hospital is located at 97 West Parkway in Pompton Plains, NJ.

## 13.2 Notification Procedure

In the event of an incident, follow the Unexpected Occurrence reporting procedure found in Attachment K.

## 13.3 Injury Response

In the event a person becomes ill or injured while in the Exclusion Zone, the SSO will:

- ❏ Ensure that all equipment has been shut off.
- ❏ Assess the nature of the injury.
- ❏ Phone **(973) 835-1300** or **911** for emergency assistance.
- ❏ Decontaminate the person to the maximum extent possible.
- ❏ Administer first aid (if certified to do so).
- ❏ Meet the emergency crew.
- ❏ Follow the Unexpected Occurrence reporting procedure found in Attachment K.
- ❏ Begin injury investigation.

## 13.4 Fire/Explosion Response

In the event of a fire or explosion:

- ❏ Ensure that all equipment is shut off.
- ❏ Phone (973) 835-1300 or 911 for emergency assistance.
- ❏ Rally at **designated** location and take head count.
- ❏ Secure the area until emergency assistance arrives.
- ❏ Meet emergency crew and advise fire chief of location and nature of the situation.
- ❏ Follow the Unexpected Occurrence reporting procedure found in Attachment K.

## 13.5 Spill/Release Response

In the event of a spill or leak:

- ❏ Ensure that all equipment is shut off.
- ❏ Secure the area.
- ❏ Locate and stop or contain the spill if it can be done safely (proper PPE must be worn).
- ❏ Meet spill response crew and advise them of the location and material that has spilled.
- ❏ Follow the Unexpected Occurrence reporting procedure found in Attachment K.
- ❏ Begin investigation.

## 13.6 Tornado/Earthquake Response

In the event of a tornado or earthquake:

- ❑ Sound alarm.
- ❑ Phone for assistance.
- ❑ Take head count.
- ❑ Secure immediate first aid.
- ❑ Meet emergency crews and advise of situation.
- ❑ Secure area and assess replacement needs and phone URS Diamond office to ensure client has been notified.
- ❑ Begin investigation, if applicable.

## 13.7 Flood/Hurricane Response

In the event of a flood or hurricane:

- ❑ Maintain contact with local news.
- ❑ Take precautions to protect personnel.
- ❑ Remove, shelter, or otherwise protect equipment.
- ❑ Secure all items that could be blown away.
- ❑ Fill all tanks/vessels/drums that cannot be secured to prevent floating.
- ❑ Phone office and others who must be notified.
- ❑ Secure area and leave, if at all possible.
- ❑ After public safety has been established, return and assess the situation.
- ❑ Begin investigation.

## 13.8 Volatile Organic Release

Operations will cease and site conditions reevaluated if volatile organic constituents are detected at the work area perimeter at levels exceeding the action level specified in this HASP.

## 13.9 Emergency Equipment

- ❑ First-aid kit
- ❑ Emergency eyewash
- ❑ Fire extinguisher
- ❑ Full-body harness and lifeline
- ❑ Other emergency equipment available: Spill Kit

First-aid Locations: Site Vehicles; Guard House; Main Office Bldg.

# TABLES

# TABLE 1

## Chemical Constituents

# Table 1
# Chemical Constituents

| Chemical Name<br>Synonyms (trade name)<br>(CAS No.) | OSHA PEL<br>ACGIH TLV<br>DuPont AEL<br>ACGIH STEL<br>NIOSH IDLH<br>Skin Designation | Characteristics | Route of Exposure | Symptoms of Exposure |
|---|---|---|---|---|
| **SEMI-VOLATILE ORGANIC COMPOUNDS** | | | | |
| Polynuclear aromatic hydrocarbons<br>(coal tar pitch volatiles)<br>(PAH's)<br>(65996-93-2) | PEL: 0.2 $mg/m^3$<br>TLV: 0.2 $mg/m^3$<br>AEL: N/E<br>STEL: N/E<br>IDLH: 80 $mg/m^3$ (CA)<br>Skin: Yes | The pitch of coal tar is black or dark brown amorphous residue that remains after the redistillation process.<br>Air odor threshold: UN<br>LEL: N/A UEL: N/A<br>IP: UN<br>VP: UN<br>F.I.P: UN | INH<br>CON | Direct contact or exposure to vapors may be irritating to the eyes. Direct contact can be highly irritating to the skin and produce dermatitis. Exposure to vapors may cause nausea and vomiting. A potential human carcinogen. |
| **METALS** | | | | |
| Arsenic (inorganic)<br>(7440-38-2) | PEL: 0.010 $mg/m^3$<br>TLV: 0.01 $mg/m^3$<br>AEL: N/E<br>STEL: N/E<br>IDLH: 5 $mg/m^3$(CA)<br>Skin: No | Silvery-gray or tin-white brittle, odorless solid. | INH<br>ABS<br>CON<br>ING | Symptoms include ulceration of nasal septum, gastrointestinal disturbances, respiratory irritation, and peripheral neuropathy. Potential occupational carcinogen. |
| Beryllium<br>(7440-41-7) | PEL: 0.002 $mg/m^3$<br>0.005 $mg/m^3$ (C)<br>TLV: 0.002 $mg/m^3$<br>AEL: N/E<br>STEL: 0.01 $mg/m^3$<br>IDLH: 4 $mg/m^3$(CA)<br>Skin: No | Hard brittle gray-white solid. | INH<br>CON | Inhalation causes weakness, fatigue, and weight loss. Symptoms also include chest pain, clubbing of fingers, berylliosis, cyanosis, and pulminary insufficiency. Potential occupational carcinogen. |

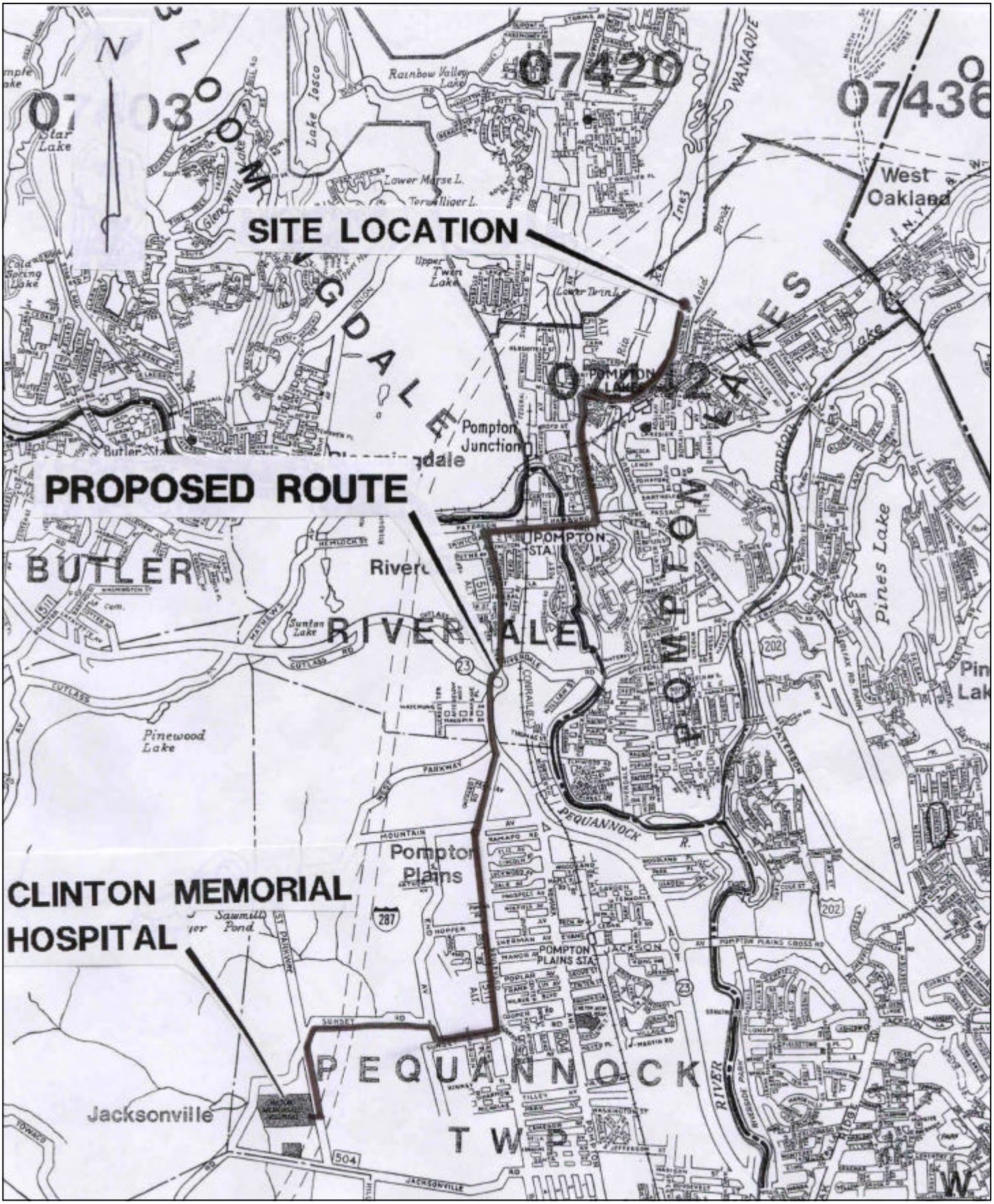
| Chemical Name<br>Synonyms (trade name)<br>(CAS No.) | OSHA PEL<br>ACGIH TLV<br>DuPont AEL<br>ACGIH STEL<br>NIOSH IDLH<br>Skin Designation | Characteristics | Route of Exposure | Symptoms of Exposure |
|---|---|---|---|---|
| Copper (dusts and mists)<br>(7440-50-8) | PEL: 1.0 mg/m$^3$<br>TLV: 1.0 mg/m$^3$<br>AEL: N/E<br>STEL: N/E<br>IDLH: 100 mg/m$^3$<br>Skin: No | Reddish, lustrous, malleable, odorless solid.<br>Air odor threshold: N/D | INH<br>ING<br>CON | Symptoms include eye and nose irritation, metallic taste in mouth, cough, chills, and dermatitis. |
| Lead<br>(Elemental & inorganic as Pb)<br>(7439-92-1) | PEL: 0.05 mg/m$^3$<br>TLV: 0.05 mg/m$^3$<br>AEL: 0.05 mg/m$^3$<br>STEL: N/E<br>IDLH: 100 mg/m$^3$<br>Skin: No | A heavy, gray ductile soft solid. | INH<br>ING<br>CON | Accumulative poison may cause weakness, insomnia, facial pallor, anorexia, malnutrition, constipation, abdominal pain, anemia, gingival lead line, paralysis of wrists and ankles, hypertension, and kidney disease. |
| Mercury<br>(Inorganic and metallic)<br>(7439-97-6) | PEL: 0.1 mg/m$^3$(C)<br>TLV: 0.025 mg/m$^3$<br>AEL: N/E<br>STEL: N/E<br>IDLH: 10 mg/m$^3$<br>Skin: Yes | Silvery-white, heavy, odorless liquid. Appearance and odor vary depending on specific compound.<br>VP: 0.0012 mm | INH<br>ABS<br>CON<br>ING | Highly toxic by skin absorption and inhalation of fume or vapor. Symptoms include irritated eyes and skin, cough, chest pain, headache, gastrointestinal distress, insomnia, bronchitis, stomatitis, and pneumonitis. |
| Thallium<br>(Elemental and soluble compounds)<br>(7440-28-0) | PEL: 0.1 mg/m$^3$<br>TLV: 0.1 mg/m$^3$<br>AEL: .05mg/m$^3$<br>STEL: N/E<br>IDLH: 15 mg/m$^3$<br>Skin: No | Appearance and odor vary depending on the specific soluble compound. | INH<br>ABS<br>ING<br>CON | Irritant to eyes, lungs, and skin. Can affect the central nervous system, liver, kidneys, and gastrointestinal tract. Can cause nausea, diarrhea, abdominal pain, vomiting, and chest pain. |

| | |
|---|---|
| OSHA PEL | Occupational Safety and Health Administration Final Rule Limits, Permissible Exposure Limit for an eight-hour, time-weighted average. |
| ACGIH TLV | American Conference of Governmental Industrial Hygienists, Threshold Limit Value for an eight-hour, time-weighted average. |
| DuPont AEL | DuPont, Acceptable Exposure Limit. |
| ACGIH STEL | American Conference of Governmental Industrial Hygienists, Short-term Exposure Limit for a 15-minute, time-weighted average. |
| NIOSH IDLH | National Institute for Occupational Safety and Health, Immediately Dangerous to Life or Health concentration. |
| ppm | Part of vapor or gas per million parts of air by volume at 25° Celsius and 760 mm Hg. |
| mg/m$^3$ | Milligram of substance per cubic meter of air. |

| | |
|---|---|
| µg/m$^3$ | Microgram of substance per cubic meter of air. |
| CAS | The Chemical Abstracts Service registry number is a numeric designation assigned by the American Chemical Society's Chemical Abstracts Service and uniquely identifies a specific chemical compound. This entry allows one to conclusively identify a substance regardless of the name or naming system used. |
| CA | NIOSH has identified numerous chemicals that it recommends be treated as potential or confirmed human carcinogens. |
| (C) | The (ceiling) concentration that should not be exceeded during any part of the working exposure. |
| Skin | The potential contribution to the overall exposure by the cutaneous route, including mucous membranes and eye, either by airborne or, more particularly, by direct contact with the substance. |
| UEL | Upper Explosive Limit—the highest concentration of a material in air that produces an explosion in fire or ignites when it contacts an ignition source. A higher concentration of the material in a smaller percentage or concentration of air may be too rich to be ignited. |
| LEL | Lower Explosive Limit—the lowest concentration of the material in air that can be detonated by spark, shock, fire, etc. |
| INH | Inhalation |
| ABS | Skin absorption |
| ING | Ingestion |
| CON | Skin and/or eye contact |
| N/E | Not Established |
| N/A | Not Applicable |
| UN | Unavailable |

| | |
|---|---|
| Polynuclear Aromatic Hydrocarbons | Includes acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, carbazole, chrysene, o-cresol, m-cresol, p-cresol, fluoranthene, fluorene, high-boiling tar acids, indene, medium-soft pitch, a-methylnaphthalene, b-methylnaphthalene, naphtha, naphthalene, phenanthrene, pyrene, tar bases, and xylenols. |

# FIGURES




CHILTON MEMORIAL HOSPITAL
97 WEST PARKWAY
POMPTON PLAINS, NEW JERSEY
Ph. (973) 831-5111

DUPONT

Corporate Remediation Group
*An Alliance between DuPont and The URS Diamond*

Barley Mill Plaza, Building 27
Wilmington, Delaware 19805

# HOSPITAL ROUTE MAP

DuPont Pompton Lakes Works
Pompton Lakes, NJ

| SCALE | DESIGNED | DRAWN | CAD FILE NO. |
|---|---|---|---|
| NTS | | DEL | HOSPIT |
| DATE | CHECKED | APPROVED | FIGURE |
| 11/23/99 | | | 1 |

# ATTACHMENTS

# ATTACHMENT A

## Project Forms

## HEALTH AND SAFETY PLAN COMPLIANCE AGREEMENT

**Project Name:** _____ **Project Number:** _____

I have read, and understand and agree with the health and safety protocols presented in the Health and Safety Plan (HASP) and the information discussed in the health and safety briefing. I also understand that noncompliance with the HASP may result in dismissal from the site.

| Printed Name | Organization | Signature | Date |
|---|---|---|---|
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Personnel Health and Safety briefing conducted by:

_____ _____ _____

Name Signature Date

# TAILGATE MEETING FORM

**Date and Time of Meeting** _____

**Prepared By:** _____

**CHECK TOPIC(S) DISCUSSED**

**First Aid**
- Facilities
- Reporting and Records
- Treatment of _____

**Personal Protective Equipment**
- Glasses, Goggles, and Shields
- Hard Hats
- Respirators
- Gloves
- Other _____

**Emergency Procedures**
- Glasses, Goggles, and Shields
- Hard Hats
- Respirators
- Gloves
- Rally/Headcount Area
- Other _____

**Special Tools / Equipment**
- Chain saws / Chop saws
- Other _____
- Other _____

**Industrial Sanitation and Hygiene**
- Drinking water
- Restrooms/Portable toilets
- Personal Cleanliness

**Housekeeping**
- Waste Containers
- Waste Materials

**Fire Prevention**
- Extinguishers
- Smoking
- Hot Work
- Explosives and Flammable Liquids
- Other _____

**Vehicles/Heavy Equipment**
- Transportation of Employees
- Operation and Inspection
- Preventative Maintenance
- Other _____

Discussion_____
_____
_____
_____

**ATTENDEES**

| **Name (Printed)** | **Signature** |
|---|---|
| | |
| | |
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| | |
| | |
| | |

# MEDICAL DATA SHEET

**Name:**

**Social Security:**

**Home Phone:**

**Home Address:**

**Whom to Notify in Case of Emergency**

**Name:**

**Daytime Phone Number:**

**Personal Physician's Name:**

**Medical Conditions:**

**Allergies:**

**Special Considerations:**

## CRG/URS DIAMOND UNEXPECTED OCCURRENCE REPORT
## REPORT NO.: UO- YY- No.

**Title:**

**Location:**

**Date and Time:**

**Description:**

(The description should be a concise statement of what happened in one to three sentences)

**Key Learnings**

**Summary of Investigation:**

(Include bullet items of the incident findings)

- ❑

**Conclusions:**

(List the cause(s) of the unexpected occurrences or the key learnings)

**Recommendations/Responsibility:**

(What should be done to prevent a recurrence or other relevant path forward items, with assignment to an individual or the team and the completion date). Be specific and concise.

# ATTACHMENT B

## Lead Awareness Program

# LEAD AWARENESS PROGRAM

## Introduction

Lead is known to be present at the site. Therefore, lead awareness for all project participants will be provided prior to the initiation of on-site tasks.

## General

- Symbol: Pb
- Characteristics: Lead is heavy, ductile, and bluish white in color.

## Training

The following program is provided to inform site personnel about lead, potential exposure to lead, the associated health effects, personal protective equipment and work practice controls.

## Health Hazards

Lead can be absorbed into the body by inhalation (breathing) and ingestion (eating). Exposure to lead is usually in the form of dust and fumes. Absorption of inorganic lead through the skin does not take place to any appreciable degree. Therefore, this exposure route does not represent a hazard. Only a few lead compounds are appreciably soluble in water, but many are dissolved by acids and most are sufficiently soluble in body fluids to be toxic, especially when inhaled in finely divided form.

- Permissible Exposure Level: 0.05 $mg/m^3$
- Threshold Limit Value: 0.05 $mg/m^3$

## Health Effects

The early signs and symptoms of lead poising are nonspecific and may resemble many diseases including influenza.

Early signs and symptoms are:

- ❏ Malaise, fatigue
- ❏ Sleep disturbance
- ❏ Constipation
- ❏ Abdominal cramps
- ❏ Anemia, hemolytic (red blood cells being destroyed) in type but not usually severe
- ❏ Irritability
- ❏ Aching muscles and bones
- ❏ Headache
- ❏ Decreased appetite
- ❏ Nausea and vomiting

These symptoms are reversible, and complete recovery is possible.

In more advanced cases of lead poisoning, the above signs and symptoms progress and frequently involve the gastrointestinal and neuromuscular systems (both nerves and muscles).

Central nervous system symptoms are:

- ❏ Brain dysfunction (encephalopathy) which may mimic bacterial meningitis. However, cerebrospinal fluid glucose level is normal. Symptoms include:
  - Fever
  - Headache
  - Stiff neck
  - Vomiting
  - Personality changes
- ❏ Tremor
- ❏ Hallucinations
- ❏ Intellectual deterioration
- ❏ Rarely, accumulation of cerebrospinal fluid within the brain (hydrocephalus)
- ❏ Blindness may occur from optical atrophy (wasting away of the optic nerves secondary to lead exposure and convulsions)

Gastrointestinal symptoms are:

- ❑ Colon spasms
- ❑ Nausea, vomiting
- ❑ Loss of appetite
- ❑ Constipation

**Medical Program**

If on-site personnel are exposed to lead levels greater than 0.03 $mg/m^3$, a biological monitoring program will be instituted prior to starting (pre) and after job completion (post). This would involve the collection of blood lead samples every 6 months with results reported to the individual. Exposure levels will be determined by performing personal sampling during on-site tasks.

**Respirators**

Respiratory protection will be required as outlined in Section 6.0. Respirators will provide protection against the inhalation of airborne dust potentially contaminated with lead as well as organic lead in the form of tetraethyl lead.

**Clothing**

On-site personnel will be required to use dermal protection as listed in Section 6.0 of the HASP.

**Hygiene and Sanitation Practices**

At no time will food, drink, tobacco products, chewing gum, etc. be stored in on-site work area. Eating, drinking (other than water), smoking shall not be permitted, except in designated areas. On-site personnel must wash their hands and face prior to doing any of the aforementioned activities. It is recommended that on-site personnel shower prior to leaving the site.

Signs and symptoms associated with the blood and blood G tissues are:

- ❏ Anemia in which the red blood cells have a reduced hemoglobin content thypochromic normocytic types
- ❏ Increased serum iron

The marrow also reveals increased production and specific structural (morphological) changes in nucleated red corpuscles (erythroblasts) such as:

- ❏ Basophilic stippling and
- ❏ Deformed nuclei

The iron content of the marrow is increased, and increases siderocytes, sideroblasts and reticuloendothelial cells are noted. Some investigators believe the basic effect lead has on the marrow is first hyper stimulation followed by delayed maturation.

Kidney (renal) symptoms are:

- ❏ An abnormal amount of uric acid in the blood (hyperuricemia)
- ❏ Inflammation (nephritis)
- ❏ The presence of glucose in the urine (glycosuria)
- ❏ An abnormal amount of amino acids in the urine (hyperaminoaciduria)
- ❏ Progressive increase in blood urea.

Additional signs and symptoms which may be present are:

- ❏ Gum lead line (black or purplish line on gum margin)
- ❏ Skin pallor (ashen gray)
- ❏ Loss of weight
- ❏ Weakness of extensor muscles (such as wrist or foot drop)

Cortical atrophy (reduction in size of brain tissue) has also been described but this is not a common finding.

# ATTACHMENT C

## Excavation

## 1.0 INTRODUCTION

### 1.1 Purpose

The purpose of this guideline is to establish general safety requirements prior to and during excavation activities; and to provide definitions, establish responsibilities, and provide technical guidance for project team members involved in these operations.

### 1.2 Key Terms

The following definitions apply to terms used in this guideline:

- **Benching or Bench System**—Excavating sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near-vertical surfaces between levels.
- **Competent Person**—A designated person who is capable of identifying both existing hazards and predictable hazards that would pose a danger to employees. This person must have authorization to take corrective measures to eliminate these dangers.
- **Excavation**—An excavation shall mean any intrusive activity below the depth of six inches. This activity may involve, but is not limited, to grading, trenching, driving sheet piles, and well drilling.
- **Registered Professional Engineer**—A person who is registered as a professional engineer in any state when approving designs for protective systems or tabulated data.
- **Excavation Permit**—Permit designed to identify hazards and provide control measures prior to and during field activities.
- **Excavation Checklist**—Checklist used by the competent person to determine soil type and conditions in and around the excavation. This information will be used to determine protective measures.
- **Shield or Shield System**—A structure, usually steel, that is able to withstand the forces imposed on it by cave-ins, thereby protecting workers.
- **Shoring or Shoring System**—A structure, such as a metal hydraulic, mechanical or timber shoring system, that supports the sides of an excavation to prevent cave-ins.
- **Sloping or Sloping System**—Method of excavating the side of an excavation away from the excavation to prevent cave-ins.
- **Soil Classifications**
  - ***Type A Soils***—Cohesive soils with an unconfined compressive strength of 1.5 tons per square foot (TSF) or greater. Examples: bedrock, clay, silty clay, sandy clay, clay loam.

- ***Type B Soils***—Cohesive soil with a unconfined compressive strength greater than 0.5 TSF, but less than 1.5 TSF. Examples are granular cohesionless soils including angular gravel, silt, silt loam, sandy loam, and in some cases, silty clay loam and sandy clay loam.

- ***Type C Soils***—Cohesive soils with an unconfined compressive strength of 0.5 TSF or less. Examples are granular soils including gravel, sand, unstable rock, and loamy sand; and any soil from which water is freely seeping. Additionally, all other materials and soils not classified above shall be considered Type C soils, (i.e., uncompacted backfill).

## 1.3 Responsibilities

- ***Project Director (PD)***—Responsible for ensuring preparation and completion of the excavation permit (Attachment 1). The PD may appoint a member of the project team to review the necessary drawings to identify underground obstructions and utilities. The PD has full responsibility for the health and safety of all employees working in and around excavations. It is also the PD's responsibility to ensure a competent person is identified for excavation activities.

- ***Site Safety Officer (SSO)—***Responsible for providing technical support to the project manager during preparation of the excavation permit. He or she is also responsible for any air monitoring and continual evaluation of hazards during the excavation process.

- ***Site Supervisor/Engineer***—Shall assist PM in preparation of the excavation permit and ensure that all safeguards are in place during excavation activities. He or she shall post the permit in an area where the operation will be conducted. He or she is responsible for locating underground electrical and process lines in the area of the excavation and communicating the exact location of any such lines to the PM.

- ***Competent Person***—Is responsible for evaluating soil conditions using the Excavation Checklist (Attachment 2). This information will be used to determine proper safeguarding measures. Additionally, the competent person shall inspect all excavations to which he or she is assigned in the frequency stated in this procedure. The competent person shall stop work in the event an unsafe condition exists.

- ***All Employees***—All employees are responsible for complying with this procedure and immediately reporting any unsafe condition or behavior to their supervisor.

## 2.0 APPLICATION

This guideline applies to all excavations as defined, conducted by DuPont Corporate Remediation Group.

## 3.0 PROCEDURE

- This procedure does not require use of a protective system (i.e., shoring, sloping) when an excavation is less than four feet deep, and a competent person has examined the ground and determined there is no indication of a potential cave-in.
- Prior to any excavation activity, an excavation permit must be completed and signed by the site supervisor, competent person, and site safety officer. CRG Health and Safety must also review and approve the excavation permit for excavations over 10 feet that personnel must physically enter.
- The competent person shall complete the excavation checklist immediately following excavation work. This activity would not be required for excavation activities that employees physically could not enter (i.e., well drilling). Based on this review, the excavation may be entered provided the conditions of the excavation permit are satisfied. The excavation checklist shall be posted near the excavation. Additionally, the competent person shall initial and date the excavation checklist each time he or she inspects the excavation.
- Soil classification shall be determined and listed on the excavation permit. Unclassified soil will be considered to be Type C soil.
- No soils for the purpose of the procedure shall meet requirements of Type A soils. Type A soils shall be safeguarded under requirements of Type B soils.
- Safeguarding systems for excavations that extend over 20 feet or below a foundation (footer) of any structure shall be designed and approved by a registered professional engineer.
- All excavations four feet in depth or greater shall be air-monitored prior to entry. This test will be conducted for percent oxygen and lower explosive limit (LEL) at a minimum and will be specified on the excavation permit. Results will be recorded in the project logbook.
- All excavations must have a stairway, ladder, or ramp secured in a safe manner every 25 feet in the excavation. When ladders are used for egress, they must extend at least three feet above the excavation.
- When a shield system (trench box) or metal hydraulic shoring system is used, at no time shall any parts be modified or installed other than to the manufacturer's exact specification. All trench box systems shall extend at least 18 inches above the excavation or the point where sloping begins.
- Excavations shall be inspected prior to entry and as described below by the competent person specified on the excavation permit. This inspection shall be recorded on a excavation checklist:
    - At the start of each shift,
    - As needed throughout the shift,
    - After heavy rains, and
    - When freezing and/or thawing temperatures occur.
- Materials, equipment, and spoils that may fall or roll into an excavation shall be located at least three feet from the edge of the excavation. A warning system (i.e., stop logs or

barricade fence) alerting mobile equipment and personal to the excavation shall be installed. Never leave an open excavation unprotected.

- ❑ Excavations five feet or greater shall be considered a confined space.

## 3.2 Special Considerations/Requirements/Equipment

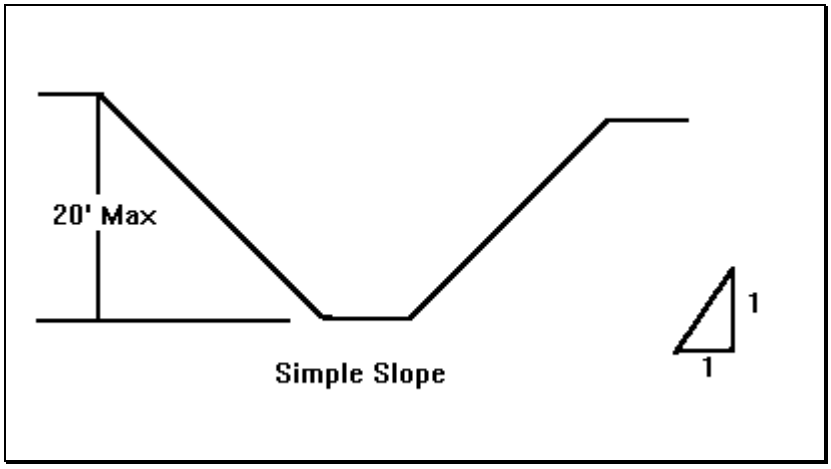
The intent of this section is to provide guidance on selection of protective systems used in excavations. This is not a complete list of all possible protective systems but does provide general information.

| Soil Type | Maximum Allowable Slopes (H:V) for Excavations Less Than 20 Feet |
|---|---|
| Type A[1] | 1:1 (45°)[2] |
| Type B | 1:1 (45°)[2] |
| Type C | 1.5:1 (34°)[2] |

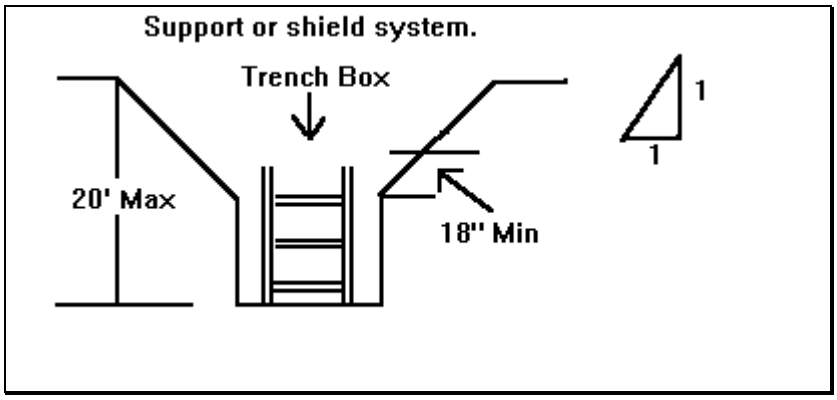
[1] Type A soil shall be safeguarded as Type B soil for the purposes of this procedure.
[2] Numbers shown in parenthesis are angles expressed in degrees from the horizontal.

## 3.3 Type B Soil Excavations

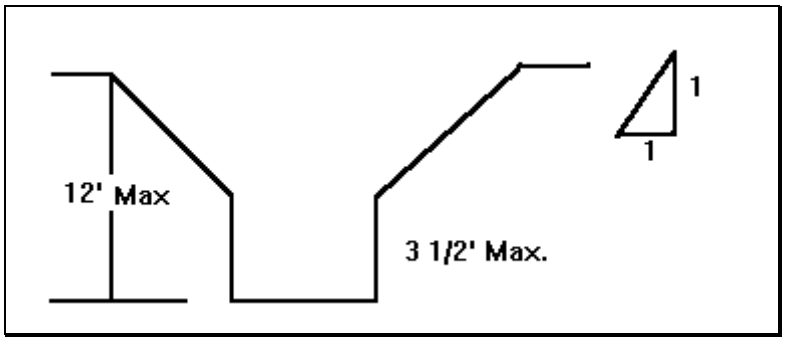
All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1:1.



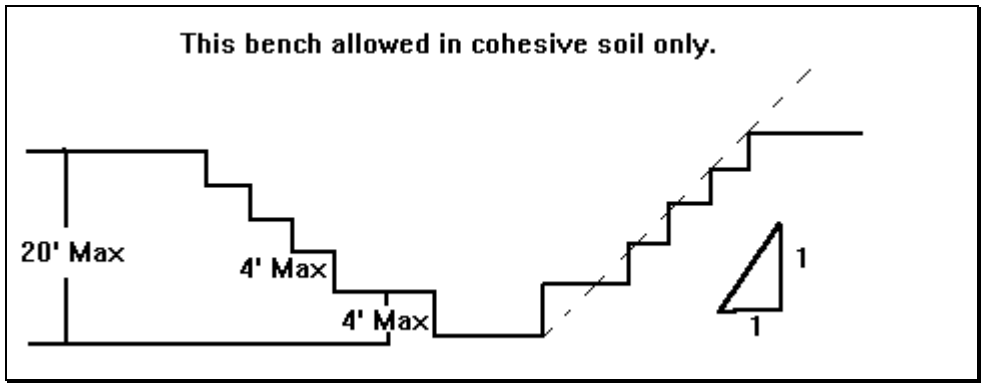
Excavations 20 feet or less in depth which have vertically-sided lower portions shall be shielded or supported to a height at least 18 inches above the top of the vertical side.




All excavations more than eight feet but not more than 12 feet in depth with unsupported vertical sided lower portions shall have maximum allowable slope of 1.1 and a maximum vertical side of 3.5 feet.

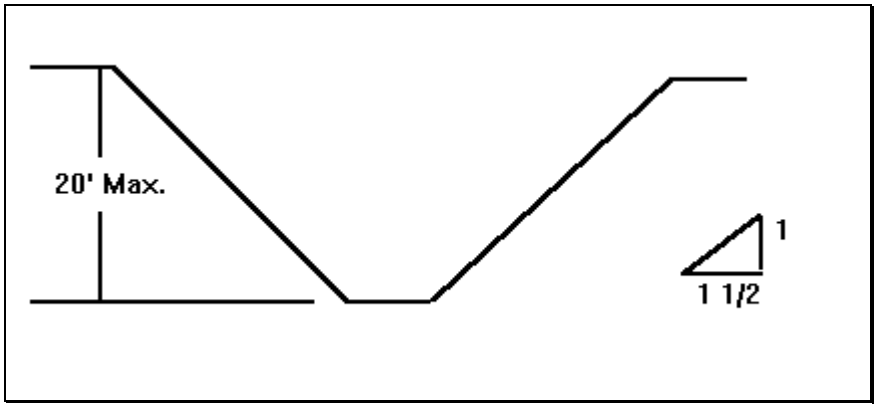



Multiple benching allowed in excavations less than 20 feet in Type B cohesive soils. Benching is not allowed in non-cohesive Type C soils.

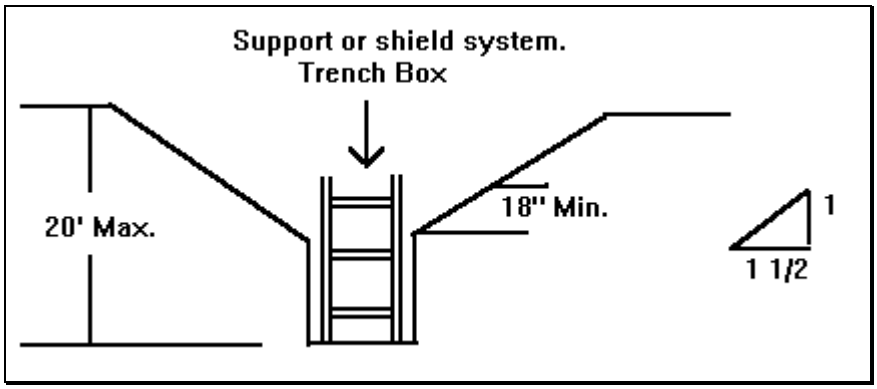


### 3.4 Type C Soil Excavations

All simple slope excavations 20 feet or less in depth shall have a maximum allowable slope of 1.5:1.




Excavations 20 feet or less in depth with a vertically-sided lower portions shall be shielded or supported to a height at least 18 inches above the top of the vertical side. All such excavations shall have a maximum allowable slope of 1.5:1.




## 4.0 REFERENCES

The following sources were used in developing this guideline:

- 29 CFR 1926.650; 29 CFR 1926.651; 29 CFR 1926.652.

## Attachment 1
## EXCAVATION PERMIT

1.0 Describe work to be conducted. _____

2.0 Specific location of work. _____

3.0 Size of excavation (LWH). _____

4.0 Number of persons to enter excavation. _____

5.0 Underground obstructions identified ☐ Yes ☐ No ☐ N/A

Describe _____

Identify precautions for working around underground obstructions ☐ Hand excavation ☐ Area marked ☐ Smooth bucket ☐ Spotter

Describe additional safeguards _____

6.0 Overhead obstructions identified ☐ Yes ☐ No ☐ N/A

Identify precautions for working around OHO. ☐ OHO ☐ Spotter ☐ Mechanical device

Describe additional safeguards _____

7.0 Vibration hazard present? ☐ Yes ☐ No ☐ N/A

Describe vibration source _____

8.0 Access and egress provided? ☐ Yes ☐ No ☐ N/A

Specify type. _____

9.0 Hazardous atmosphere testing ☐ Yes ☐ No ☐ N/A

Type of testing required ☐ % Oxygen ☐ CO ☐ $H_2S$ ☐ LEL

Additional testing required _____

Frequency of testing _____

10.0 Is the excavation a confined space? ☐ Yes ☐ No ☐ N/A

11.0 Soil type ☐ Type B ☐ Type C ☐ N/A

Describe method (i.e., shoring, sloping) of safeguarding excavation. _____

Modification or additional safeguards (requires approval of competent person or H&S). _____

_____ Competent Person Initial _____

Competent Person _____

Site Supervisor _____

Site Safety Officer _____

Note: Excavations 10 feet or greater, that employees will enter, require approval from the CRG Health and Safety.

CRG Health and Safety _____

# Attachment 2
# EXCAVATION CHECKLIST

**Job Location and Description** _____

**Date** _____ **Competent Person** _____

## Visual Tests - *One or more must be performed each time soil conditions change*

| | Yes | No |
|---|---|---|
| **1. Underground obstructions identified** | | |
| a. Telephone, electric | ☐ | ☐ |
| b. Sewer | ☐ | ☐ |
| c. Water | ☐ | ☐ |
| d. Process | ☐ | ☐ |
| **2. Particle size and consistency** | | |
| a. Fine-grained -- cohesive material | ☐ | ☐ |
| b. Clumps -- cohesive material | ☐ | ☐ |
| c. Coarse-grained -- sand and gravel | ☐ | ☐ |
| d. Breaks up easily -- granular material | ☐ | ☐ |
| **3. Observe opened excavation** | | |
| a. Crack-like openings in sides | ☐ | ☐ |
| b. Spalling in sides | ☐ | ☐ |
| c. Indications of moving ground | ☐ | ☐ |
| d. Layered systems | ☐ | ☐ |
| *If yes, visual and manual test shall be conducted on the worst-case area* | | |
| **4. Water conditions** | | |
| a. Surface water (creeks, etc.) | ☐ | ☐ |
| b. Runoff | ☐ | ☐ |
| c. Below water table | ☐ | ☐ |
| d. Water buildup | ☐ | ☐ |
| e. Pumping system working | ☐ | ☐ |
| **5. Vibration present** | | |
| a. General area (equipment, highway, etc.) | ☐ | ☐ |
| b. In excavation (equipment tools, etc.) | ☐ | ☐ |
| **6. Surface Encumbrances** | | |
| a. Vehicular traffic | ☐ | ☐ |
| b. Rocks, boulders, etc. | ☐ | ☐ |
| c. Telephone poles | ☐ | ☐ |
| d. Sidewalks | ☐ | ☐ |
| e. Buildings | ☐ | ☐ |
| **7. Access and Egress** | | |
| a. Ramps | ☐ | ☐ |
| b. Ladders | ☐ | ☐ |
| c. Barricades in place | ☐ | ☐ |
| **8. Hazardous Atmospheres** | | |
| a. Predictable hazards (gas stations, debris pits, landfills, etc.) | ☐ | ☐ |
| b. Air or contaminant testing | ☐ | ☐ |
| c. Ventilation required | ☐ | ☐ |
| **9. OSHA compliance** | | |
| a. Properly sloped | ☐ | ☐ |
| b. Shoring | ☐ | ☐ |
| c. Trench boxes | ☐ | ☐ |
| d. Excavated material two feet from edge | ☐ | ☐ |

## Manual Tests - *One or more must be performed each time soil conditions change*

| | Yes | No |
|---|---|---|
| **1. Plasticity (may be wetted to handle)** | | |
| a. Mold sample into small ball | ☐ | ☐ |
| b. Roll ball into 1/8-inch diameter | ☐ | ☐ |
| c. Pick up two-inch length by one end. If it doesn't break, soil is cohesive | ☐ | ☐ |
| **2. Plasticity (may be wetted to handle)** | | |
| a. Mold soil into 2-1/2- to 3-inch ball | ☐ | ☐ |
| b. Roll ball into 5/8-inch rope | ☐ | ☐ |
| c. Mash entire length of rope between thumb and forefinger to 1/2-inch thickness | ☐ | ☐ |
| d. If rope stays together and curls around hand, soil is cohesive | ☐ | ☐ |
| **3. Dry soil strength** | | |
| a. Type A characteristic - cohesive material | | |
| 1. Breaks into clumps | ☐ | ☐ |
| 2. Does not break into smaller clumps | ☐ | ☐ |
| 3. Clumps broken by hand with difficulty | ☐ | ☐ |
| 4. Visual indication of fissures (If YES, classify Type B) | ☐ | ☐ |
| **3. Dry soil strength (continued)** | | |
| b. Type B characteristics - cohesive material | | |
| 1. Falls into clumps | ☐ | ☐ |
| 2. Breaks into smaller clumps | ☐ | ☐ |
| 3. Smaller clumps broken by hand with difficulty | ☐ | ☐ |
| c. Type C characteristics - granular material | | |
| 1. Crumbles on its own | ☐ | ☐ |
| 2. Crumbles with moderate hand pressure | ☐ | ☐ |
| 3. Breaks into individual grains or powder | ☐ | ☐ |
| **4. Thumb penetration test[1]** | | |
| a. Type A soil (unconfined compressive strength of 1.5 TSF and higher) | ☐ | ☐ |
| 1. Cannot be readily indented by thumb | ☐ | ☐ |
| b. Type B soil (unconfined compressive strength of 0.5 to 1.5 TSF) | ☐ | ☐ |
| 1. Can be readily indented by thumb | ☐ | ☐ |
| c. Type C soil (unconfined compressive strength of 1.5 TSF and higher) | ☐ | ☐ |
| 1. Easily penetrated by several inches by thumb | ☐ | ☐ |
| 2. Molded by light finger pressure | ☐ | ☐ |

Note: Based on at least one visual and manual test, I have determined the soil to be: Type A ☐ Type B ☐ Type C ☐

Competent person _____

[1] Estimates the unconfined compressive strength of cohesive material. NOTE: These tests should be performed on a freshly excavated clump of soil without exposure to wetting influence.

# ATTACHMENT D

## Underground Obstructions

## 1.0 INTRODUCTION

### 1.1 Purpose

To assist project teams in identifying, locating, and ensuring that underground utilities are not damaged during intrusive activities.

### 1.2 Background

Recent encounters with unmarked/unidentified underground utilities has prompted the CRG to develop this procedure to reduce the potential for encountering underground utilities.

### 1.3 Key Terms

- ❑ Process Safety Analysis (PSA) A review of the project with project participants (to include contractors when appropriate) to identify key concerns and problem areas before beginning field work.

- ❑ Line Finder: Any of a number of various tools which use radio transmitters/receivers, magnetic fields, etc., to locate underground utilities. There are specific limitations and detection capabilities of each type of device.

- ❑ Underground Utilities: Electric lines, communications lines, pipe lines sewer lines etc. which are buried below the surface.

- ❑ Soft Dig: A soil removal technique which use high pressure air to loosen and remove soil without damaging underground utilities.

- ❑ Heavy equipment: Drill rigs, excavators, cone penetrometers (CPT) and other types of construction equipment able to conduct subsurface work.

- ❑ Excavation permit: Written authorization to perform subsurface work. The CRG will defer to the plants permit procedure. In the absence of plant specific procedure CRG procedure HS-102 will be followed.

### 1.4 Responsibilities

1. The Project Director is responsible for:

    a. Assuring that the project team has considered this hazard in the development of the work plan/HASP.

    b. Assuring that this procedure and required control methods are implemented.

2. The Project Manager is responsible for:

    a. Assuring that appropriate controls are put in place to prevent heavy equipment from damaging an underground utility.

    b. Assuring that this procedure and required control methods are implemented.

3. The Site Supervisor and/or Site Safety Officer are responsible for:

   a. Implementing or requiring the contractor to implement the controls required by this procedure.

   b. Auditing to assure the requirements of this procedure are implemented

## 2.0 APPLICATION

This procedure should be consulted for all work locations that CRG (to include WC/D, WC/I) manages/coordinates in which subsurface intrusive activities are being performed, and the potential for encountering underground obstructions exist.

## 3.0 PROCEDURE

### 3.1 Methodology

The flow chart provided as attachment one is a tool to identify and manage intrusive activities and heavy equipment operations on site. This flowchart can be used at several points in the project life cycle. It should be used during the PSA, and when acquiring excavation permits.

The site supervisor will review the flow chart with the plant resource when procuring the excavation permit. When on an active site the CRG will use the sites excavation permit procedure, in the absence of a plant specific procedure follow the CRG Excavation permit procedures located in HS-102.

## 4.0 References

- ❑ DuPont CRG Procedure HS-102 Excavations
- ❑ OSHA 29 CFR 1926.651, Specific Excavation Requirements

## EXCAVATION PERMIT

| | | |
|---|---|---|
| 1.0 | Describe work to be conducted. | |
| 2.0 | Specific location of work. | |
| 3.0 | Size of excavation (Area & Depth). | |
| 4.0 | Number of persons to enter excavation. | |
| 5.0 | Underground utilities identified | ☐ Yes ☐ No ☐ N/A |
| | Describe | |
| | Identify precautions for working around underground utilities | ☐ Hand excavation ☐ Area marked ☐ Smooth bucket ☐ Spotter |
| | Describe additional safeguards | |
| 6.0 | Overhead utilities identified | ☐ Yes ☐ No ☐ N/A |
| | Identify precautions for working around OHO. | ☐ OHOP ☐ Spotter ☐ Mechanical device |
| | Describe additional safeguards | |
| 7.0 | Vibration hazard present? | ☐ Yes ☐ No ☐ N/A |
| | Describe vibration source | |
| 8.0 | Access and egress provided? | ☐ Yes ☐ No ☐ N/A |
| | Specify type. | |
| 9.0 | Hazardous atmosphere testing | ☐ Yes ☐ No ☐ N/A |
| | Type of testing required | ☐ % Oxygen ☐ CO ☐ $H_2S$ ☐ LEL |
| | Additional testing required | |
| | Frequency of testing | |
| 10.0 | Is the excavation a confined space? | ☐ Yes ☐ No ☐ N/A |
| 11.0 | Soil type | ☐ Type B ☐ Type C ☐ N/A |
| | Describe method (i.e., shoring, sloping) of safeguarding excavation. | |
| | Modification or additional safeguards (requires approval of competent person or PM). | |

PM Initial _____ Competent Person Initial _____

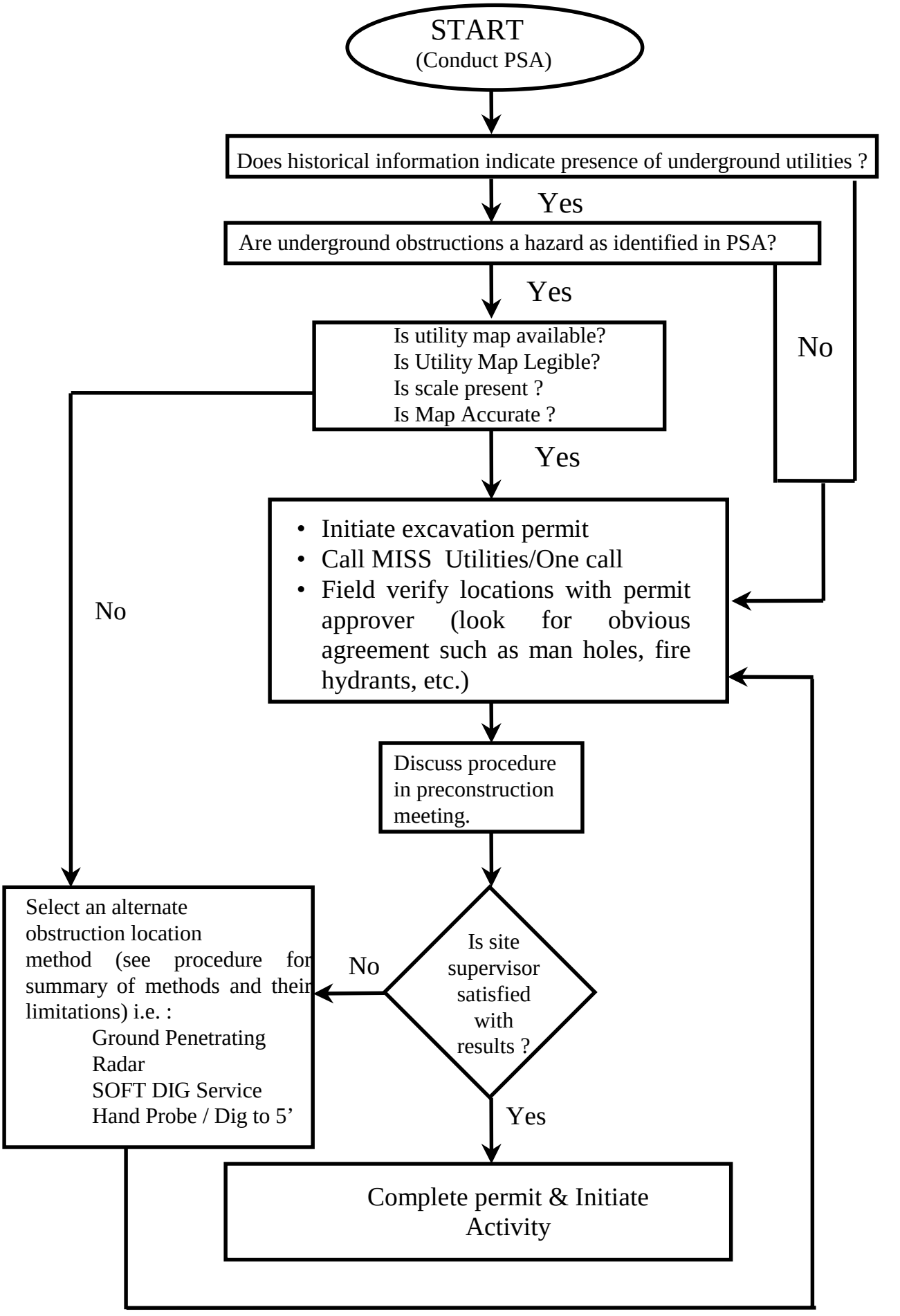
Project Manager _____ Site Supervisor _____

Competent Person _____ Site Safety Officer _____

Note: Excavations 10 feet or greater, that employees will enter, require approval from CRG Health and Safety.

CRG Health and Safety _____

# Attachment 1 - Underground Obstructions Decision Tree



# ATTACHMENT E

## Drilling Safety

## 1.0 INTRODUCTION

### 1.1 Purpose

The purpose of this procedure is to provide a pre-field work checklist and a shallow well drilling equipment checklist.

### 1.2 Background

N/A

### 1.3 Key Terms

N/A

### 1.4 Responsibilities

Roles and responsibilities for the implementation of this procedure are defined as follows:

- ❏ Project Director—responsible to have both the pre-field work and shallow well equipment checklist completed before shallow well drilling is started.

- ❏ Acting Site Safety Officer—responsibility for placing both checklists into field safety folder before shallow well drilling occurs.

## 2.0 APPLICATION

This procedure is to be followed for all shallow well drilling in CRG.

## 3.0 Procedure

### 3.1 Methodology

This procedure must be carried out in the following manner:

1. The site safety officer or another project team member must audit, fill out, and sign the two-check list: (a) pre-field work checklist; (b) shallow well drilling equipment.

2. Both regional checklists are to be placed in the field safety folder.

### 3.2 Special Considerations/Requirements/Equipment

N/A

## 4.0 REFERENCES

The following sources were used in developing this SOP:

- ❏ Drilling Safety Guide prepared by the International Drilling Federation
- ❏ Drilling Safety Inspection checklist presented in the May, 1994 issue of the Water Well Journal

# FIGURE 1

**PRE-FIELD WORK**
**CHECKLIST/AUDIT REPORT**

| | |
|---|---|
| **Types of Underground Hazards Present or Suspected in the Vicinity of the Excavation** | ❑ **Pipelines, electrical, fire loop water, sewer, telephone, process, service lines, others.** |
| | |
| **Quality/Accuracy of Site Maps** | ❑ **Map legibility**<br>❑ **Updates posted**<br>❑ **Scale present** |
| | |
| **Familiarity of Plant Contact with Underground Hazards** | ❑ **Enlist input from other long-time plant employees**<br>❑ **Plant supervisor of proper authority level** |
| | |
| **Field Review of Excavation Permit (all locations)** | ❑ **Field verification of map accuracy**<br>❑ **Plant supervisor or proper authority level** |
| | |
| **Support by Plant Area Work Supervisor** | ❑ **Notified of Intent to Excavate**<br>❑ **Reviewed Excavation Permit and Plant Maps**<br>❑ **Lock Out/Tag Out Procedures Initiated** |
| | |
| **Excavation Locations Clearly Identified** | ❑ **Do all review personnel have knowledge of all location changes?**<br>❑ **Flags, stakes, tape markers used** |
| | |
| **Remote-Sensing Techniques (geophysics, metal detection, etc.)** | ❑ **Acoustic Devices**<br>❑ **Magnetic Devices**<br>❑ **Are use, accuracy, and shortcomings of these methods taken into account?** |
| | |
| **Ability to Determine Appropriate Emergency Contacts** | ❑ **Has an appropriate contact been identified for each contingency/hazard?** |

| | |
|---|---|
| **Precautions Taken to Reduce Hazard Potential** | ❑ **De-energized lines**<br>❑ **De-pressurized lines**<br>❑ **Probing**<br>❑ **Hand digging** |
| | |
| **Hazard Potential - Based on Types of Underground Hazards Present and Control Measures Taken** | ❑ **High-energized lines, pipelines, or process lines within 10 feet of excavation** |

**_____Auditor**

**_____Others**

**_____Others**

# FIGURE 2

**SHALLOW WELL DRILLING EQUIPMENT CHECKLIST***

**Contractor:** _____

**Company Name:** _____

**Equipment Identification Number:** _____

| ITEMS | CONDITION | | REMARKS |
|---|---|---|---|
| | Good | Rejected | |
| 1. Backup Alarms | | | |
| 2. Brakes | | | |
| 3. Clutch | | | |
| 4. Control Buttons & Levers Labeled | | | |
| 5. Fuel, Fluid, & Hyd. Sys. (No leaks) | | | |
| 6. Guards | | | |
| 7. Horn | | | |
| 8. Lights/turn signals | | | |
| 9. Muffler & Exhaust Pipe | | | |
| 10. Muffler Guards | | | |
| 11. Leveling Jacks | | | |
| 12. Parking Brakes | | | |
| 13. Platform Decking (stability) | | | |
| 14. Rear and Side View Mirror | | | |
| 15. Seat Belts | | | |
| 16. Tracks, Tires, Wheels | | | |
| 17. Engine Gauges | | | |
| 18. Lifting Cables | | | |
| 19. Cable Clamps | | | |
| 20. Cable Safety Latches | | | |
| 21. Lockouts | | | |

| | | | |
|---|---|---|---|
| **22. PPE (including respirators)** | | | |
| **23. Safety Harness** | | | |
| **24. First Aid Kit** | | | |
| **25. Fire Extinguishers** | | | |
| **26. Safety Shutdowns Tested & Working** | | | |
| **27.** | | | |
| **28.** | | | |
| **29.** | | | |
| **30.** | | | |
| **31.** | | | |

**_____Auditor**

**_____Others**

**_____Others**

# DRILLING
# SAFETY HANDBOOK

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# 1.0 PRE-FIELDWORK

It is very difficult to predict all problems that may occur during drilling fieldwork activities. However, if pre-fieldwork preparations are completed thoroughly, the job will likely proceed more safely and smoothly (i.e., with less down time). This section lists some important safety items that should be performed/considered prior to initiation of actual fieldwork. The DuPont Corporate Remediation Group (CRG) personnel (or CRG representative) should review this list and determine if other pre-fieldwork activities are necessary.

- ❑ Ensure that all items are completed on the Pre-fieldwork Checklist.
- ❑ A copy of all maps showing underground equipment, lines, or hazards must be attached or accompany the excavation permit.
- ❑ Check with utility one-call service before excavating or drilling.
- ❑ Visually inspect each location in the field for underground utilities.
- ❑ Drafting maps should be checked for utilities.
- ❑ Review a site map with a plant representative (on DuPont plants this should be second layer maintenance) familiar with layout of underground hazards.
- ❑ Determine if surveying is needed to locate underground hazards.
- ❑ Obtain work permits from the plant area work supervisor.
- ❑ Obtain an excavation permit from the appropriate supervisor. Any changes in job scope will require detailed review and a new excavation permit. The excavation permit clears the excavation only.
- ❑ Markers, flags, or painted lines, etc. should be used to identify excavation boundaries and locations, or hazards beyond which excavation must not exceed.
- ❑ All dimensions, elevations, and coordinates should be viewed as approximate locations of buried equipment, lines, etc. Elevations may change due to erosion or the addition of fill. Buried cables have been found three to five feet on either side of buried protective boards and markers.
- ❑ If buried equipment, lines, etc. exist within 10 feet on either side of the excavation, these should be considered in the excavation area.
- ❑ A conscious decision should be made on whether or not to de-energize underground cables within 10 feet (overhead cables within 20 feet) of the excavation prior to excavation.
- ❑ A signal generator and portable receiver can be used to roughly locate buried underground utility lines that are made of metal. Plants usually have this equipment; otherwise, check with CRG Field Services.
- ❑ If the location of a utility line is unclear, the local utility company should be contacted for clarification of line location.

- Prior to beginning excavation, probing or hand augering to a depth of five feet is recommended. Probing and hand augering should be performed such that the area to be excavated is within the radius of the investigation.
- Excavating around process lines requires extreme caution. If any unusual odors or other signs indicating leakage are observed, the job should be shut down immediately and area supervision notified. Air quality checks must be performed to ensure adequate personnel protection is provided. Whenever possible, process lines should be depressurized before excavating.

## 2.0 MOBILIZATION

The following are safe guidelines related to on- and off-road movement of drilling equipment. Prior to mobilizing or demobilizing drilling equipment, responsible individuals should consider the following:

- ❑ Inspect the rig, using the Drilling Equipment Checklist.
- ❑ Before moving any equipment, first walk the route of travel with driller, inspecting for depressions, slumps, gullies ruts, and similar obstacles. The drill site also should be inspected for debris, plant, and animal hazards. It also should be determined if the ground is suitable for heavy equipment travel.
- ❑ Make sure bystanders and passengers are clear of equipment.
- ❑ After equipment has been moved to a new drilling site, set all brakes and/or locks. When grades are steep, block the wheels.
- ❑ Use caution when traveling on steep grades. Conservatively evaluate side-hill capability of equipment movement. Arbitrary addition of drilling tools may raise the center of mass. When possible, travel directly uphill or downhill.
- ❑ When moving up a steep grade or slope, anchor a winch line from the vehicle to a suitable object at the top of the slope.
- ❑ Attempt to cross obstacles such as small logs and small erosion channel or ditches squarely, not at an angle.
- ❑ Use the assistance of someone on the ground as a guide when lateral or overhead clearance is restricted, or when setting the drill rig on location.
- ❑ Never travel with the mast (derrick) of the drill rig in the raised or partially raised position.
- ❑ Do not raise the mast or operate the drill rig if this distance to overhead powerlines is less than 20 feet. In general, distance between the overhead power line and boom should be no less than the height of the boom. Remember to “Look Up and Live.”
- ❑ Keep in mind that both hoist lines and overhead powerlines can be moved toward each other by the wind. If strong winds are present, consider having the utility company (or plant) cover the overhead power lines.
- ❑ Prior to drilling, adequate site cleaning and leveling should be performed to accommodate the drilling rig and equipment. This provides a safe, obstacle-free working area. Drilling should not commence when tree limbs, protruding objects, unstable ground, site obstructions, or debris may cause unsafe work conditions and/or limited, awkward work spaces. An area clear of obstructions or debris should be maintained around the drilling or support activities at all times.
- ❑ Never leave equipment idling and unattended, especially on any incline or on loose material; the vibration may put the machine in motion.

## 3.0 EQUIPMENT DECONTAMINATION

Due to the presence of water, heat, pressure, and heavy equipment, decontamination activities can be very dangerous. The following are safety items to be considered during equipment decontamination:

- ❑ Obtain flame permit where required for the steam cleaner.
- ❑ Follow equipment decontamination procedures outlined in the Health and Safety Plan (HASP) or Project Work Plan.
- ❑ Chock wheels of equipment/supply trailer prior to beginning work.
- ❑ Use face shield, *Tyvek*®, and gloves, boots, etc., to prevent physical contact with potential contaminants and debris.
- ❑ Check hose for possible weakness or potential break points prior to use.
- ❑ Do not point wand toward body when in use.
- ❑ Use anti-freeze (windshield washer type) in cold weather to prevent water from freezing inside equipment.
- ❑ Regarding access/egress, safe footing, lifting hazards, slipping on plastic should be considered as potential hazards, especially inside the decontamination area.
- ❑ Beware of burrs and sharp edges when moving augers and drilling equipment.
- ❑ Practice good housekeeping at all times.
- ❑ Be aware of heat and hot water from steam cleaner.

# 4.0 SET-UP AND START-UP

## 4.1 Set-up

This information should be reviewed prior to set-up activities at each drilling location:

- ❑ If required, a barricade should be set up after defining the exclusion zone.
- ❑ When drilling near suspected underground electrical hazards, the rig should be grounded with a ground wire attached to a ground rod.
- ❑ All brakes must be set before drilling begins. If the rig is positioned on a steep grade and leveling of ground is impossible or impractical, the wheel of the transport vehicle should be blocked and other means employed to prevent the rig from moving or tipping over (e.g., level jacks on rig).
- ❑ Use sufficient blocking under rig jacks to prevent sinking.
- ❑ Inspect pulley sheaves for wear and cable/rope positioning.
- ❑ Work to be done above three feet on the mast requires the use of a safety harness, or the mast must be lowered.
- ❑ Before lifting a relatively heavy object, approach the object by bending at the knees, keeping your back vertical and straight while obtaining a firm footing. Grasp the object firmly with both hands and stand slowly and squarely while keeping your back vertical and straight. In other words, perform lifting with muscles in your legs, not muscles in your lower back. If the object is in excess of 50 pounds, request assistance.

## 4.2 Start-up

After drill set-up, the following safety items should be observed:

- ❑ All personnel should know location and use of kill switch.
- ❑ Identify potential pinch points and hazards that could injure fingers and toes.
- ❑ All drilling rig personnel and visitors should be instructed to “stand clear” of the drilling rig immediately prior to and during starting of an engine.
- ❑ Make sure all gear boxes are in neutral, all hoist levers are disengaged, all hydraulic levers are in the correct non-actuating positions, and the cathead rope is not on the cathead before starting a drilling rig engine.
- ❑ Raise the derrick a few inches in order to check the brakes and always check for overhead power lines.
- ❑ Secure and/or lock the mast in upright position if required, according to the drilling manufacturer's recommendations.
- ❑ Place the fire extinguisher in an easily accessible location away from the drilling rig.

## 5.0 DRILLING

This section concerns rotating equipment, catheads, wire ropes, and hoists (the part of the drilling rig which may cause serious injuries), and drilling techniques most commonly used during auger and rotary drilling:

- ❑ Only personnel necessary to achieve drilling objectives should remain within the exclusion zone. All others should remain outside the exclusion zone.
- ❑ Drilling personnel should not wear clothing that may be awkward or loose and get caught in rotating equipment.
- ❑ Wear protective gloves when handling augers, cable, rods, or any sharp or splintery materials.
- ❑ Proper gloves (see HASP) should always be worn when handling materials that can irritate or contaminate skin.
- ❑ When appropriate, noise protection must be worn by employees who are working when drilling equipment is operating.
- ❑ Effective communication (hand signals, etc.), especially under high noise conditions, is essential to safety. Clarify use of hand signals.
- ❑ Use tools only for the job for which they were intended.
- ❑ Do not perform maintenance or refueling while equipment is running.
- ❑ Stay clear of cables while lifting equipment or while drilling rig is under heavy strain.
- ❑ Do not operate the drilling rig in an electrical (lightening) storm. If drilling when a storm approaches, stop drilling and lower the mast, if possible. Do not stay near drilling rig if the mast cannot be lowered.
- ❑ When removing drilling string from borehole, the rod string should not exceed 1.5 times the height of the mast.
- ❑ Do not ride on hook, ropes, or other traveling lines of the rig.
- ❑ Do not climb the rig mast while equipment is running. Shut down equipment and use safety harness if climbing mast, is necessary.
- ❑ When moving or hoisting stabilizers or drill collars, tag lines should always be used. A helper should not use his hands to hold or control heavy equipment. Instead, he should loop a rope around it and hold onto both ends of the rope.
- ❑ The operator of a drilling rig should only operate the rig from the position of the controls. The operator should shut down the drilling engine before leaving the vicinity of the drilling rig.
- ❑ All hydraulic lines should be inspected periodically for integrity, and replaced as needed.

- Drilling should always proceed cautiously, especially at depths less than ten feet.
- Operation of drilling equipment should be limited to qualified personnel.

## 5.1 Auger Drilling

Auger drilling uses direct power to rotate (screw) flighted augers into the ground. Be aware of the following hazards that may be unique to this type of drilling:

- Only use the manufacturer's recommended method of securing the auger to the drill drive coupling. Do not touch the coupling or the auger with your hands, a wrench, or any other tools during rotation.
- Whenever possible, use tool hoists to handle auger sections.
- Never place hands or fingers under the bottom of an auger section when hoisting the auger over the top of the auger section in the ground, or over other hard surfaces such as the drilling rig platform.
- Never allow feet to get under the auger section that is being hoisted.
- When rotating augers, stay clear of the rotating augers and other rotating components of the drilling rig. Never reach behind or around a rotating auger for any reason whatsoever.
- Never place your hands between the drill rig and an auger, even when attempting to free damaged or bound sampling equipment from the auger.
- Never use your hands or feet to move cuttings away from the auger.
- Augers should be cleaned only when the drill rig is in neutral and the augers have stopped rotating.
- Care should be taken to ensure augers are properly stored and secured when not in use and during transport.

## 5.2 Rotary Drilling

Mud rotary is direct rotary drilling using mud slurry circulation to remove cuttings and keep the borehole wall stabilized. Be aware of the following hazards that may be unique to this type of drilling:

- Lifting heavy equipment (i.e., drill rods, etc.);
- Rotating equipment/parts; and
- Slippery or dangerous work areas caused by messy mud pits or troughs (could fall in); keep area clear.

Air rotary is direct rotary drilling using high-pressure air circulation to remove cuttings and keep the bit cool. Be aware of the following hazards that may be unique to this type of drilling:

- ❑ Rotating/lifting equipment;
- ❑ High pressure air lines;
- ❑ Air discharge of cuttings at high velocity; use a cover to control discharge of cuttings;
- ❑ Heavy drill rods being lifted;
- ❑ Very loud; wear hearing protection;
- ❑ Large drill rig and support vehicle (space limitations); and
- ❑ Dust generation in dry formations; move upwind and use a cover for dust control.

Listed below are general rotary (air and mud) drilling hazards:

- ❑ Drill rods should not be braked during lowering into the hole with drill rod chuck jaws.
- ❑ Drill rods should not be held or lowered into the hole with pipe wrenches.
- ❑ If a string of drill rods is accidentally or inadvertently released into the hole, do not attempt to grab the falling rods with your hands or a wrench.
- ❑ In the event of a plugged bit or other circulation blockage, high pressure in the piping and hose between the pump and the obstruction should be relieved or bled down before breaking the first tool joint.
- ❑ When drill rods are hoisted from the hole, they should be cleaned for safe handling with a rubber or other suitable rod wiper. Do not use your unprotected hands to clean drilling fluids from drill rods.
- ❑ If work must progress over a portable drilling fluids (mud) pit, do not attempt to stand on narrow sides or cross members. The mud pit should be equipped with a rough surface and/or cover panels of adequate strength to hold drilling rig personnel.
- ❑ Drill rods should not be lifted and leaned unsecured against the mast. Either provide some method of securing the upper ends of the drill rod sections for safe vertical storage or lay down the rods.

## 5.3 Cathead

Listed below are guidelines regarding cathead operation:

- ❑ Only drilling personnel familiar with cathead operation should be allowed to operate equipment. Keep the cathead clean and free of rust and oil and/or grease. The cathead should be cleaned with a wire brush if it becomes rusty.

- ❑ The cathead operator must operate the cathead while standing on a level surface with good, firm footing conditions, without distraction or disturbance.
- ❑ Always use a clean, dry, sound rope. A wet or oily rope may "grab" the cathead and cause drill tools or other items to be rapidly hoisted to the top of the mast. Do not operate the cathead in rain.
- ❑ Never wrap the rope from the cathead (or any other rope, wire rope, or cable on the drilling rig) around a hand, wrist, arm, foot, ankle, leg, or any other part of your body.
- ❑ Always maintain a minimum of 18 inches (driving spoon length) clearance between the operating hand and the cathead drum when driving samplers, casing, or other tools with the cathead.
- ❑ Do not use a rope that is longer than necessary. A rope that is too long can form a ground loop or otherwise become entangled with the operator's legs.
- ❑ Do not use more rope wraps than are required to hoist a load.
- ❑ Do not leave a cathead unattended with the rope wrapped on the drum.
- ❑ Position all other hoist lines to prevent contact with the operating cathead rope.
- ❑ When using the cathead and rope for driving or back-driving, make sure that all threaded pipe connections are tight and stay as far as possible from the hammer impact point.
- ❑ When stuck tools or similar loads cannot be raised with a hoist, disconnect the hoist line and connect the stuck tools directly to the feed mechanism of the drill. Do not use hydraulic leveling jacks for added pull to the hoist line or the feed mechanism of the drill.
- ❑ Should the rope "grab" the cathead or otherwise become tangled in the drum, do not attempt to release the rope. Instead, sound an appropriate alarm for all personnel to rapidly back away and stay clear. The operator should also back away and stay clear. If the rope "grabs" the cathead, and tools are hoisted to the sheaves at the top of the most, the rope often will break, releasing the tools. If the rope does not break, stay clear of the drilling rig until the operator cautiously returns to turn off the drilling rig engine and appropriate action is taken to release the tools. The operator should keep careful watch on the suspended tools and should quickly back away after turning off the engine.

## 5.4 Wire Ropes and Hoists

Listed below are guidelines regarding wire ropes and hoists:

- ❑ Replace damaged safety latches on safety hooks before using.
- ❑ Always wear the appropriate gloves when handling wire ropes.
- ❑ Minimize shock loading on wire rope; apply loads smoothly and steadily.
- ❑ Protect wire rope from sharp corners or edges.
- ❑ Do not guide wire ropes onto cable drum with your hands.
- ❑ Never leave a load suspended in the air when the hoist is unattended.
- ❑ Keep your hands away from hoist, wire rope, hoisting hooks, sheaves, and pinch points as slack is being taken up and when the load is being hoisted.
- ❑ Never hoist the load over the head, body, or feet of any person.

## 6.0 WELL CONSTRUCTION AND GENERAL HOUSEKEEPING

This section presents safety items around well construction, and general housekeeping. The following safety items should be observed:

- Before lifting a relatively heavy object, approach the object by bending at the knees, keeping your back vertical and straight while obtaining a firm footing. Grasp the object firmly with both hands and stand slowly and squarely while keeping your back vertical and straight. In other words, perform lifting with muscles in your legs, not muscles in your lower back. If the object is in excess of 50 pounds, request assistance.
- Wastewater and drilling fluids must be properly contained and labeled. Refer to the project Waste Management Plan.
- Suitable storage locations should be provided for all tools, materials, and supplies so that they can be conveniently and safely handled without falling on a member of the drill crew or a visitor, without creating tripping hazards, and without protruding at eye or head level.
- Avoid storing or transporting tools, materials, or supplies within or on the mast (derrick) of the drill rig.
- Pipe, drill rods, bit casings, augers, and similar drilling tools should be stacked in an orderly manner on racks or sills to prevent spreading, rolling, or sliding and should be secured prior to moving equipment.
- Work areas, platforms, walkways, scaffolding, and other accesses should be kept free of materials, obstructions, and substances such as ice, water, mud, excess grease, or oil that could cause a surface to become slick or otherwise hazardous. The use of additional footing safeguards (mats) should be evaluated on a case-by-case basis.
- Keep all controls, control linkages, warning, and operation lights and lenses free of oil, grease, or other substances that would decrease safe handling.
- Do not store gasoline in any portable container other than that specifically designed for the intended purpose.
- Welding gas cylinders should be stored in an upright and secured position. Protective caps should be in place when the cylinders are not in use.
- All unattended boreholes must be adequately covered or otherwise protected to prevent personnel, site visitors, or animals from falling into the hole. All open boreholes should be covered, protected, or back filled adequately and according to local and state regulations upon completion of the drilling project.
- Do not tolerate unprofessional conduct ("horse play") on the job site.

## 7.0 RIGGING DOWN AND DEMOBILIZATION

This section presents safe guidelines when rigging down at a drilling location, or demobilizing for the end of a project. The drill crew may be tired after a long field day, or in a rush to pack up and leave the site. Individuals are often less aware of their surroundings when either fatigued or in haste; which can often lead to an accident. Guidelines are listed below:

- ❑ Safety issues are similar to those in Mobilization (Section 2.0) and Set-up (Section 4.0).
- ❑ Remind crew to slow down and work safely when rigging down and demobilizing. Many injuries occur at the end of the day. Develop a safety attitude. Allow time to break down equipment.
- ❑ Review the day's activities and ensure everything is in order (e.g., field notes).
- ❑ Secure site.

# ATTACHMENT F

## Heavy Equipment

# HEAVY EQUIPMENT SAFETY

All contractors are required to comply with all local, state, and federal regulations regarding the safety operation of heavy equipment. The following items serve as guidelines for equipment operations:

- The operator will perform proper preoperational inspection on equipment prior to start-up.
- All on-site personnel will remain a safe distance from heavy equipment and maintain some type of contact with the operator.
- Prior to work start-up, adequate site clearing and leveling should be performed to accommodate the equipment and supplies and provide a safe working area.
- The operator will not raise the mast or excavator bucket near overhead utility lines if the distance is less than 15 feet or, if unknown, the minimum clearance stipulated by federal, state, and local regulations.
- Excavation equipment will not be approached until the operator places the equipment in an inoperative manner (neutral) and removes both hands and feet from the controls.

# ATTACHMENT G

## Heat and Cold Exposure

# HEAT EXPOSURE

Heat stress may pose a threat to the health and safety of site personnel based on the season of the year. Depending on the relative humidity, temperatures may create heat stress conditions, particularly when working in chemical-protective equipment. This section discusses heat-related health hazards and details DuPont Corporate Remediation Group's (CRG) heat stress program, which has been used successfully.

## Heat Stress

Heat stress is a major hazard, especially for workers wearing protective clothing. Depending on the ambient conditions and the work being performed, heat stress can occur very rapidly—within as little as 15 minutes. The key to preventing excessive heat stress is to educate personnel on the hazards associated with working in heat and the benefits of implementing proper controls and work practices.

## Heat Rash

Heat rash (prickly heat) may result from continuous exposure to heat or humid air where the skin remains wet due to lack of evaporation, sweat ducts become clogged, and a skin rash appears. This uncomfortable rash can be prevented by resting in a cool place during breaks and by practicing good daily personal hygiene.

## Heat Cramps

Heat cramps are muscular spasms that usually occur in the abdomen or limbs due to a loss of salt from profuse sweating. Drinking large quantities of water tends to dilute the body's fluids, while the body continues to lose salt.

- First Aid
  - Apply warm, moist heat and pressure to reduce pain.
  - Give electrolyte drinks by mouth (e.g., *Gatorade*®).

**Heat Exhaustion**

Caution: Persons with heart problems or on a low-sodium diet who work in hot environments should consult a physician about what to do under these conditions.

Heat exhaustion is a result of overexertion in hot or warm weather. It is highly possible for an on-site worker to experience heat exhaustion due to the use of protective coveralls, boots, gloves, and respiratory protection, even if ambient temperatures are mild.

- *Symptoms*
  - Pale, clammy skin
  - Profuse perspiration
  - Weakness
  - Headache
  - Nausea
- *First Aid*
  - Get victim into the shade or to a cooler place.
  - Immediately remove any protective clothing.
  - Encourage victim to drink plenty of fluids.
  - Make victim lie down with feet raised.
  - Fan and cool victim with wet compress.
  - Transport victim to the hospital if vomiting occurs.
  - Instruct victim to rest for a few days.
- *Prevention*
  - If possible, schedule work for early morning or evening during warm weather.
  - Have cool liquids at the Exclusion Zone border for down-range personnel to continuously replace body fluids.
  - The SSO or alternate should continually monitor personnel for signs of heat stress.

**Heat Stroke**

The body's temperature control system, which causes sweating, stops functioning correctly in the case of heat stroke. Brain damage and death may occur if the body core temperature is extremely elevated and is not reduced.

- *Symptoms*
  - Flushed, hot, dry skin
  - High body core temperature (greater than 105°F)
  - Dizziness
  - Nausea
  - Headache
  - Rapid pulse
  - Unconsciousness
- *First Aid*
  Immediately take precautions to cool the body core temperature by removing clothing and sponging the body with alcohol or cool water, or by placing the victim in a tub of cold water until his or her body temperature is reduced sufficiently (102°F). Stop cooling and observe the victim for 10 minutes. Once the temperature is controlled at a low enough level, dry the person off. Use fans or air conditioning, if available. Do not give the victim stimulants. Transfer to a medical facility.

**Heat Stress Program**

The heat stress program includes work and rest regimens employed as necessary so that personnel do not suffer adverse effects from heat stress. The SSO is responsible for monitoring heat stress throughout the day. Based on heat stress severity, the SSO will determine to what extent the elements of the heat stress program will be implemented.

Special clothing and an appropriate diet and fluid intake will be recommended to all site personnel to reduce the chance of heat-related hazards. The work and rest regimens followed by CRG were developed based on the current American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV) guidelines and on National Institute of Occupational Safety and Health (NIOSH) recommendations.

**Work Load**

The following table will be used as a guide for establishing initial work and rest regimens. It takes into account TLV wet-bulb globe temperature (WBGT) correction factors for clothing.

| Work/Rest Regimen | Work Load | | |
|---|---|---|---|
| | Light | Medium | Heavy |
| Continuous work | 76°F WBGT | 70°F WBGT | 67°F WBGT |
| 75% work<br>and 25% rest per hour | 77°F WBGT | 72°F WBGT | 68°F WBGT |
| 50% work<br>and 50% rest per hour | 79°F WBGT | 75°F WBGT | 72°F WBGT |
| 25% work<br>and 75% rest per hour | 80°F WBGT | 78°F WGBT | 76°F WBGT |

The work-load category will be established by ranking each job in light, medium, or heavy load categories based on the type of operation, as follows:

- *Light Work*
  Sitting or standing to operate machinery, performing light hand or arm work.
- *Moderate*
  Walking about with moderate amounts of lifting or pushing.
- *Heavy*
  Heavy physical labor (e.g., pick and shovel work).

# COLD EXPOSURE

## Cold Stress

Cold injury such as frostbite and hypothermia may occur during field operations. The extent of injury caused by exposure to the cold will depend on such factors as wind velocity, temperature, and humidity. To guard against such injuries, personnel must wear appropriate clothing, have immediate access to warm shelter, carefully schedule work and rest periods, monitor workers' physical conditions, and learn to recognize warning symptoms, such as reduced coordination, drowsiness, impaired judgment, fatigue, and numbing of toes and fingers.

## Frostbite

Frostbite is a localized injury that results from the freezing of tissue. It is most common to the fingers and toes (due to reduced circulation in the extremities), and on the face and ear (most commonly exposed to the weather).

For frostbite to occur, there must be subfreezing temperatures. It is most prevalent in very cold temperatures (20°F or less) or when cold temperatures are exacerbated by the wind (wind chill).

- *Symptoms*
  - Prefrostbite
    The affected area feels painfully cold, but is usually flushed (rosy-red in color)
  - First-Degree Frostbite (Frost Nip)
    Crystallization occurs in superficial tissues. The affected area no longer feels cold, is completely numb, and shows as a small white or grayish-yellow waxy patch. Immediate treatment will completely reverse the condition with no ill effects.
  - Second-Degree Frostbite (Deep)
    A deep freezing of the fluids in the underlying soft tissues. Symptoms and treatment are the same as for first-degree frostbite. It usually results in the death of tissue (e.g., blistering black skin or a loss of toes) with possible complications from gangrene.

- *First Aid*
  - Cover and protect the affected area.
  - Provide extra clothes.
  - Bring the victim indoors as soon as possible.
  - Give the victim warm drink
  - Rewarm frozen tissue quickly by immersing it in warm water (if thawed and refrozen, warm at room temperature).
  - Do not rub; rubbing causes death of tissue.
  - Do not apply heat.
  - Do not break blisters.
  - Do not allow victim to walk after feet thaw.
  - Discontinue warming as soon as the frostbitten body part becomes flushed.
  - Exercise the thawed body part.
  - Separate fingers and toes with sterile gauze.
  - Elevate frostbitten parts.
  - Seek medical attention because of chance of infection or gangrene.

**Hypothermia**

Hypothermia is a systemic lowering of the body temperature. Extreme cases (core temperature below 90°F) result in death. Hypothermia is the most common cause of death for persons involved in outdoor/wilderness activities. It does not require freezing temperatures and can occur in ambient air temperatures as high as 70°F. Wind and wetness greatly accentuate hypothermia by causing increased cooling. An example of a hypothermic condition is a rainy, windy day with 50°F air temperatures.

- *Symptoms*
  - First Stage—"goose bumps," shivering, feeling chilly
  - Second Stage—violent shivering, blue lips, pale complexion, feeling extremely cold
  - Third Stage—no longer feeling cold, lack of coordination, mild unresponsiveness, drowsiness, stumbling
  - Fourth Stage—failing eyesight, almost total lack of responsiveness, inability to speak, inability to walk
  - Fifth Stage—coma or rapid death

- *Treatment*

  For all levels, remove wet, frozen, or restrictive clothing. Dry and rewarm the victim using an external heat source that completely envelops the victim (e.g., placing the victim in a warm vehicle, a warm room, a tub of warm water, or a sleeping bag with another person). Do not use a source of radiant heat that will warm only one side of the victim. Be prepared to administer cardiopulmonary resuscitation (CPR). Do not give the victim alcohol.

  - First Stage
    Put additional clothing on the victim such as a hat, shirt, or windbreaker; give food and drink; exercise tense muscles.
  - Second Stage
    Follow the same steps listed for the first stage, only more so; give warm drinks and provide means of rewarming if possible.
  - Third Stage
    Rewarm the victim; give warm food and drink. **Note: In hypothermia beyond the second stage, the victim can no longer warm himself and must have an external heat source.**
  - Fourth Stage
    Remove wet or cold clothing and gradually rewarm the victim so that blood trapped in extremities is rewarmed before it is circulated back into the inner body, in order to prevent *afterdrop*. Afterdrop is a further lowering of the body core temperature that results from recirculation of cold blood. Avoid hot, radiant heat sources that will warm surface blood before the inner blood has been warmed. Do not give warm drinks that can fool the body internally into feeling it is warm. Fourth stage hypothermia victims are best treated by supervised, experienced medical help because complications can cause death. Place the victim in a warm vehicle and evacuate immediately to a medical facility.
  - Fifth Stage
    Gradually rewarm the victim. Requires sophisticated medical help to prevent death from *aftershock* (a recirculation of chilled blood causing heart fibrillation).

# ATTACHMENT H

## Working over or near Water

# 1.0 INTRODUCTION

## 1.1 Purpose

The purpose of this SOP is to describe the minimum safety requirements for working over, in or near bodies of water, where the danger of drowning exists.

## 1.2 Background

See HS-117 for additional information on Boating Safety.

## 1.3 Key Terms

The following definitions apply to terms used in this procedure:

- Life Jackets—A U.S. Coast Guard approved device that will support an unconscious person's head above water.
- Ring Buoys—A U.S. Coast Guard approved 30-inch diameter buoy with at least soft 600-pound (or greater) capacity line.
- Rescue Plan—A written plan which will be included as an Appendix to the site-specific HASP whenever significant water hazards exist.

## 1.4 Responsibilities

Roles and responsibilities for the implementation of this SOP are defined as follows:

- Project Director—Responsible for evaluating the feasibility and safety of any proposed work where the danger of drowning exists. Project Director is also responsible to ensure that the proper specialized safety equipment is available onsite.
- Site Safety Officer—Responsible for ensuring that onsite personnel receive adequate training on the use of safety equipment required by this procedure.
- All Personnel—All employees working over, in, or near bodies of water are responsible for complying with this procedure and any additional requirements included in the site-specific health and safety plan.
- CRG H&S —Review and approve the Rescue Plan.

## 2.0 PROCEDURE

### 2.1 Methodology

This procedure must be carried out in the following manner:

- ❑ The Buddy System is required whenever the danger of drowning exists.
- ❑ Personnel working over, in, or near a body of water, where the danger of drowning exists, shall have a life jacket available.
- ❑ Prior to use, each life jacket must be inspected to ensure it has no defects which could impair its performance.
- ❑ Ring buoys shall be provided and be readily available for emergency rescue operations. The distance between ring buoys shall not exceed 200 feet.
- ❑ A rescue boat must be provided and be readily accessible at all times, and one or more employees must be trained in its use, or arrangements for an emergency service must be made before work commences.
- ❑ A Standby Person shall be available at all times while personnel are working in a boat (See HS-117). The Standby Person shall maintain a verbal or visual form of communication with the personnel performing the over-water work
- ❑ Additional personal protective equipment must be worn as appropriate for other hazards involved (e.g., splash protection or gloves).
- ❑ If the ambient air temperature is below 60 degrees Fahrenheit, the hazard of hypothermia must be addressed before working in, on, or near a body of water.

## 3.0 REFERENCES

The following sources were used in developing this SOP:

- ❑ OSHA 29 CFR 1926.106, *Working On or Near Water.*
- ❑ DuPont Engineering SHE B-11.1, *Working On or Near Water.*

# ATTACHMENT I

## Lawn Mowers, Weed Cutters and Chain Saws

# LAWN MOWERS, WEED CUTTERS, AND CHAIN SAWS

## 1.0 SCOPE

This procedure explains how to inspect and safely operate lawn mowers, weed cutters (with string blades or other attachments), and chain saws.

This procedure does not cover riding lawn mowers, which are covered in SHE C-8.1.

## 2.0 DEFINITIONS

**Dead Man Switch (Interlock) –** A switch that de-activates or de-energizes equipment when the operator releases his or her grip on the controls or when the operator leaves the equipment.

**Engineer –** The person who requests the work and is responsible for the safety, quality, and timing of the work requested.

**Kick-back –** An action occurring when the chain of a chain saw is caught by the material being cut, causing the chain saw to jerk back towards the operator.

**Push Pole –** A piece of lumber or a tree limb that has a notch or fork, used to push against a small tree to force the tree to fall in a certain direction.

**Qualified Inspector –** An experienced craftsperson or engineer (Du Pont or contractor) who has demonstrated his or her ability or competency to inspect equipment to the site manager and/or the Du Pont Fleet Operations designee.

## 3.0 GENERAL

Lawn mowers, weed cutters, and chain saws are becoming “tools of the trade” for site maintenance work. Before operating this equipment, review the manufacturers’ manuals and operating instructions.

### 3.1 Inspection

A qualified inspector must inspect all lawn mowers, weed cutters, and chain saws prior to their use on site and at least quarterly thereafter. At a minimum, the quarterly inspection should include the following:

– Checking the fuel system for leaks, which can develop frequently due to vibration. (If leaks are found, the equipment must be repaired or removed from use.)

– Checking all equipment to ensure it is equipped with a dead man switch (interlock), which must be in good working condition. (Any tool with a defective interlock must be repaired or removed from use.)

– Checking the mechanical components of the equipment for wear and stability. (Mechanical parts such as mower blades, weed cutter heads, and chain saw cutting chains, if worn or unstable, could become airborne during operation.)

### 3.2 Operator Qualifications

The operator must understand the safety features of the equipment and know how to properly operate it according to the manufacturer’s operating instructions.

The qualified inspector must verify that the operator of the equipment has the proper qualifications.

### 3.3 Protective Equipment

Operators of lawn mowers should wear safety glasses, steel-toe shoes, and shin protectors/ leg protection.

Operators of weed cutters should wear safety glasses, steel-toe shoes, shin protectors/leg protection, work gloves, and a full-face shield.

Operators of chain saws should wear safety glasses, steel-toe shoes, Kevlar® chaps and jackets, work gloves, and a full-face shield. For more information on use, issue, or purchase of personal protective equipment (PPE), see SHE F-1.1 and F-2.1.

Lawn mowers, weed cutters, and chain saws often generate a high level of noise. The safety specialist, engineer, or designee must take noise level samples and provide an appropriate hearing protection program, including a periodic audit for compliance with the program. For more information on hearing protection, see SHE E-6.1.

The safety specialist and engineer should review the types of PPE worn while operating lawn mowers, weed cutters, and chain saws to ensure that they provide adequate protection. Any additions or deletions of the requirements for PPE must be reviewed for approval.

### 3.4 Planning the Work and Operating the Equipment

While planning and administering the work, the engineer must do the following, at a minimum:

- Review the work area to identify any hazards, and provide a plan for executing the work. Possible hazards include steep banks, exposed electrical lines at ground level, and loose gravel in grassy areas.
- Involve the electrical consultant in planning the use of equipment around substations, exposed cables, lines, and other types of electrical equipment.
- Consider flammable and explosive environmental classifications before using the equipment in a plant area. For more information on classifications, see SHE A-21.1.
- Avoid assigning individuals to work alone in remote areas. If an individual must work alone in a remote area, the site must have a procedure in place to deal with communications, transportation, and immediate first-aid treatment for this person.

At a minimum, operators and mechanics must adhere to the following guidelines while operating and maintaining lawn mowers, weed cutters, and chain saws. These guidelines should also be considered while planning work involving this type of equipment:

- Do not remove or bypass interlocks or any other safety mechanisms or devices to run the equipment.
- Check the work area for debris, obstacles, or hazards that may have been placed in the work area since the last activity. The area must also be free from natural hazards such as snakes, wasp nests, and hornet nests.
- Because lawn mowers, weed cutters, and chain saws are fueled by flammable/combustible liquids or gases, have a fire extinguisher present while refueling the equipment.
- Shut off the equipment and allow it to cool before refueling it. Use funnels or extended nozzles to avoid spilling fuel onto the equipment.

**3.4.1 Lawn Mowers –** Operators should take the following minimum safety precautions while operating lawn mowers:

- Do not use lawn mowers on steep inclines, drainage ditches, or areas where the mower may overturn or roll back on the operator.
- Keep other personnel a minimum of 25 feet (7.5 meters) away from a mower while it is running.
- Do not put your hands or feet anywhere on a mower while it is running, other than on the surfaces designed for operating the mower. (This precaution also applies to mechanics.)

**3.4.2 Weed Cutters –** Operators should take the following minimum safety precautions while operating weed cutters:

- Be careful when using weed cutters close to objects subject to damage, because the cutting radius of a weed cutter is difficult to determine and maintain during operation. An object may be damaged or become airborne if the weed cutter contacts it.
- Do not operate weed cutters closer than 25 feet (7.5 meters) to other personnel or in restrictive spaces.

**3.4.3 Chain Saws –** Operators should take the following minimum safety precautions while operating chain saws:

- Before cutting the material, inspect and clear it of foreign objects such as nails, wire, and rocks.
- Keep other personnel (other than those assisting in felling the object) at least 10 feet (3 meters) away from a chain saw while it is being used, or outside the radius equal to the height or length of the object to be cut, whichever is more restrictive. Use ropes or push poles to allow assisting personnel to keep at least a 5-foot (1.5-meter) distance.
- Do not use the tip of a chain saw for cutting or allow it to touch inadvertently a limb that is not being cut.
- To avoid kick-back, be extremely cautious when cutting small limbs.

## 4.0 REFERENCES

4.1 SHE A-21.1, *Planning Work in Plant Areas*

SHE C-8.1, *Farm Tractors and Maintenance and Landscaping Equipment*

SHE E-6.1, *Noise Measurement and Hearing Conservation*

SHE F-1.1, *Personal Protective Equipment*

SHE F-2.1, *Eye and Face Protection*

# ATTACHMENT J

## Lyme Disease

# LYME DISEASE

Lyme disease is an identified hazard in the United States. The following information is provided to protect personnel.

- *Exposure*
  Lyme disease is a bacterial infection transmitted by the bite of a deer tick, found on all types of vegetation and animals, especially in the woods. The deer tick is most active in the spring and fall, but remains present throughout the summer.
- *Precaution*
  Personnel should wear long sleeves and pants. An insect repellent can help repel ticks. Clothing should be brushed off before going inside. Personnel should carefully check their bodies for ticks as well. An attached tick should be removed at once with fine-jawed tweezers by grasping the tick's head as closely to the skin as possible and gently pulling it straight out. Care must be taken not to squeeze the tick's body because this may cause it to inject fluid into the wound. The bite area should be washed and cleansed with antiseptic.
- *Symptoms*
  A ring-shaped rash may occur within four to 20 days after a bite. Symptoms may include fever, chills, headache, stiffness in joints, weakness, and fatigue. Common symptoms of Lyme disease may mimic arthritis. In some cases, no symptoms occur.
- *Diagnosis*
  A doctor should be contacted if Lyme disease is suspected.
- *Treatment*
  If detected early, Lyme disease is usually treatable with antibiotics.

# ATTACHMENT K

## Unexpected Occurrence Reporting

# Unexpected Occurrence Reporting

**Note: You must follow this procedure when reporting unexpected occurrences!**

## Unexpected Occurrence Defined

A UO is any unplanned event or action which could cause: injury or illness, property damage, an environmental release*, work interruption, or occurrences indicative of a pattern. We report and investigate UOs so that we can prevent similar incidents, promote safety awareness, communicate learnings, and to collect data for trend analysis. There are several key elements of the Reporting Unexpected Occurrences SOP HS-500 that you must be aware of. These are as follows:

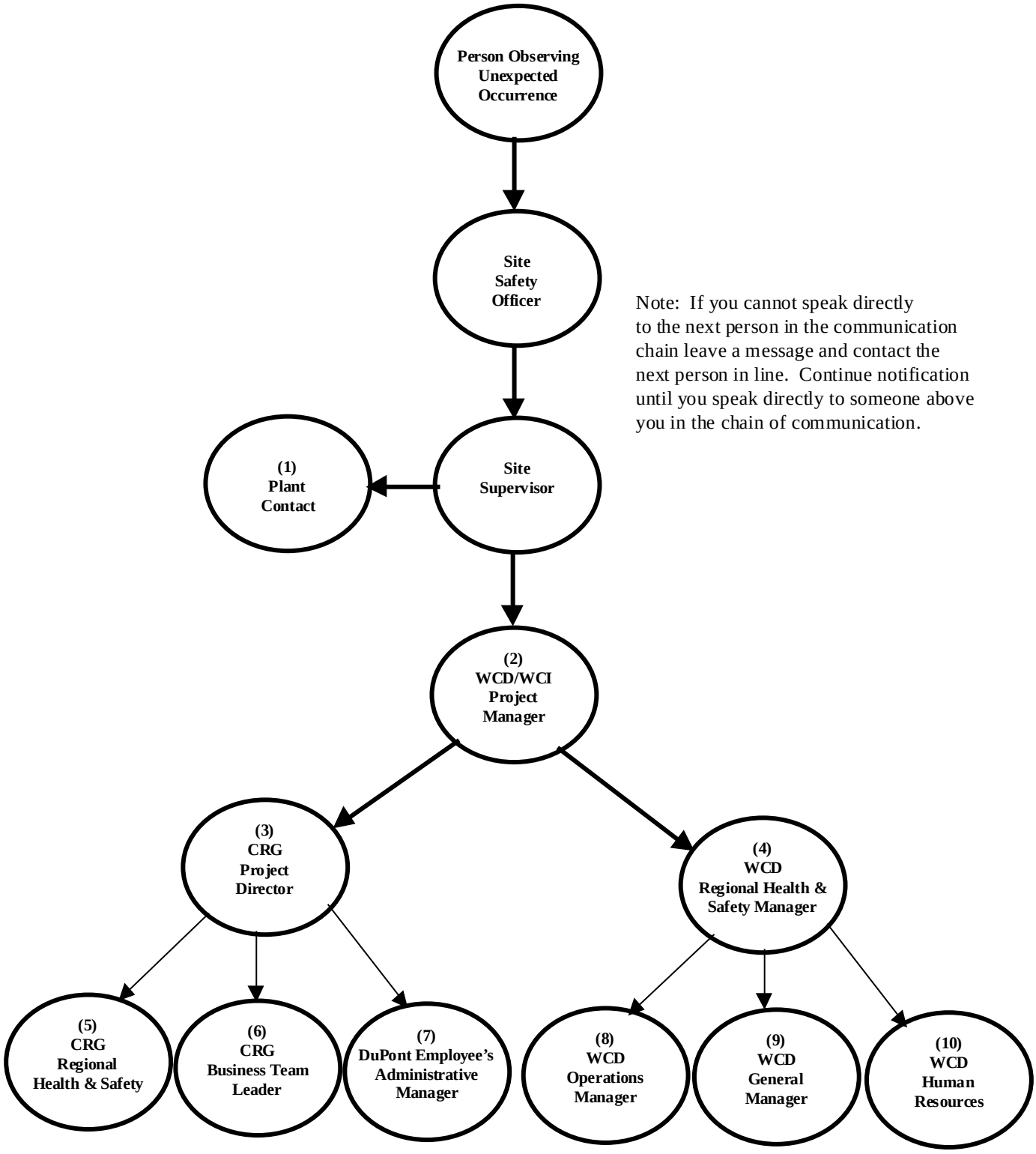
- For all project related occurrences, each employee, including contractors and subcontractors, are responsible for reporting any unexpected occurrence in which they are involved to the Site Supervisor (SS) as soon as practical. As per the SOP, the SS must contact the Project Director (PD) and the Project Manager (PM).
- The PD is responsible for contacting the CRG Health and Safety Manager (HSM) (i.e., Mary Glowacki or Brian Ambrose if Mary is not readily available), the Business Team Leader (BTL) and the affected employee's Administrative Manager (AM) as soon as feasible subsequent to the occurrence.
- The CRG HSM (along with the project team) will decide if company-wide reporting is needed and assign a tracking number.
- A preliminary communication (concise statement of what happened) must be communicated by the PD to the organization within 8 hours. The CRG HSM can assist on the proper wording of the communication.
- The PD will ensure that a final draft of the report is forwarded to the CRG HSM with sufficient lead time for review and issuance of the report within one week.

## Call-Up Procedure

- Reporting within the DMT shall be as follows: The Site Supervisor notifies the PM. The PM, after contacting the PD, should also contact the WCD Regional Health and Safety Manager (Kathy Sova or Lisa Edwin, as appropriate). The WCD RHSM will then notify Peter Jacobson or Peggy Llewellyn, Ed Andrechak, and Elsie Papanastasiou.
- In the event that it is not possible to readily contact the next person in the chain (CRG and/or DMT), leave a message in the best manner possible, and contact the next person up the chain. Continue in this manner until you have had verbal communication and/or other confirmation that the message has been delivered upwards. See attached reporting chain.

* Please note that there may be additional reporting requirements for environmental incidents.

# Unexpected Occurrence Reporting Chain




Note: If you cannot speak directly to the next person in the communication chain leave a message and contact the next person in line. Continue notification until you speak directly to someone above you in the chain of communication.

# Attachment K
# Unexpected Occurrence Reporting

| | Title | Name | Phone Number | Alternate Numbers |
|---|---|---|---|---|
| (1) | Site Contact | Ralph H. Sloat | (973) 492-7733 | |
| (2) | URS Diamond Project Manager | Marjorie E. Vetter | (406) 288-2200 | |
| (3) | CRG Project Director | Ralph H. Sloat | (973) 492-7733 | |
| (4) | URS Diamond<br>Regional Health & Safety Manager | Kathy Sova<br>or<br>Lisa Edwin | (973) 492-7708<br><br>(281) 586-5636 | <br><br>(Home)<br>(936) 258-8717<br>(Cell)<br>(713) 557-2923 |
| (5) | CRG Health & Safety | Mary Glowacki<br>or<br><br>Brian Ambrose | (302) 992-5993<br><br><br>(302) 992-5869 | (Glowacki Pager)<br>(800) 225-0256<br>PIN 6022949<br>(Ambrose Pager)<br>(800) 225-0256<br>PIN 6030305 |
| (6) | CRG Business Team Leader | Sheryl A. Telford | (302) 892-1361 | |
| (7) | DuPont Employee's Administrative Manager | Sheryl A. Telford | (302) 892-1361 | |
| (8) | URS Diamond Operations Manager | Peter Jacobson | (302) 892-7174 | |
| (9) | URS Diamond General Manager | Edward Andrechak | (302) 892-7613 | (Cheryl Greiser)<br>(302) 892-0615<br>or (Pager)<br>(800) 509-1075 |
| (10) | URS Diamond Human Resources | Elsie Papanastasiou | (302) 992-6924 | (Cheryl Greiser)<br>(302) 892-0615 |

**Note:** If you cannot speak directly to the next person in the communication chain leave a message and contact the next person in line. Continue notification until you speak directly to someone above you in the chain of communication.

# APPENDIX C

## Explosives Screening Procedures

# APPENDIX C-EXPLOSIVES SCREENING PROCEDURES

Date: June 12, 2003

Project No.: 7035
18983386.00001

CORPORATE REMEDIATION GROUP
*An Alliance between*
*DuPont and URS Diamond*

2000 Cannonball Road
Pompton Lakes, NJ 07442

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**Figures**

Figure 1 Explosives Screening Flow Diagram

# 1.0 THERMAL REACTIVITY PROCEDURE

The thermal reactivity procedure is the primary screening tool for all north plant samples. A flow diagram showing the steps necessary to complete the explosives screening process is included as Figure 1 at the end of Appendix C. The individual performing the procedure is referred to as "analyst" in the following sections. The soil tested using this procedure is referred to as the "sample" in the following sections.

## 1.1 Special Considerations

- ❏ Subjecting soil impacted with copper, lead or mercury to the thermal reactivity procedure may produce noxious fumes. All burning will be performed in a well-ventilated area.
- ❏ The thermal reactivity procedure will be performed in a controlled portion of the work area. Only field personnel equipped with the specified Personal Protection Equipment (PPE) for the task will be allowed into this area. The field geologist is responsible for site control.
- ❏ Some of the primary explosives are sensitive to static, friction, heat, or any combination of these qualities. Energetic material becomes more sensitive when it is contaminated with other material, especially those with abrasive qualities, such as soils.
- ❏ No more soil than is necessary to conduct the thermal reactivity procedure will be collected. Following a negative result, additional soil for laboratory analysis will be collected.
- ❏ Soils will be disposed of in accordance with the project-specific Waste Management Plan (WMP).
- ❏ A flame permit will be obtained daily for the duration of the North Plant Remedial Investigation. The field geologist is responsible for meeting all requirements contained in the permit. Two methods of fire control will be kept in the testing area at all times.
- ❏ If you are unsure about any aspect of this procedure, contact the project technical lead, as defined in Section 6.0 of the RIWP, for guidance.

## 1.2 Equipment

- ❏ Fire extinguisher
- ❏ One half bucket of sand
- ❏ Hard hat with attached heavy duty face shield and leather throat protection
- ❏ Kevlar® apron (ballistic grade Kevlar®)
- ❏ Heavy leather gloves with gauntlets
- ❏ Hearing protection

- ❏ Clean, flame retardant, cotton coveralls. Nomex® coveralls, which are a static generator, will not be used.
- ❏ Stainless steel trowel
- ❏ Stainless steel mixing pan
- ❏ Non-static producing container for sample (Velostat® if available)
- ❏ Long-reach butane lighter

## 1.3 Screening Procedure

Perform all steps as written, in the specified order.

- ❏ Following the extrusion of the plastic soil tube, the analyst will don the appropriate PPE for the thermal reactivity procedure.
- ❏ The analyst will open the tube, and remove a small (no more than 5 grams) portion of the soils to the non-static generating transport container
- ❏ The analyst will return to the controlled portion of the work area designated for explosives screening.
- ❏ The soil will be transferred to the stainless steel mixing pan, and spread out in a thin layer to maximize surface area available to the flame.
- ❏ The sample will be heated evenly and slowly for 15-30 seconds using the long reach lighter. During this time, the analyst will look for signs of reactivity, which may include fuming, deflagration, or detonation.
- ❏ The analyst will extinguish the flame, and place the device in a designated storage location.
- ❏ When the soils have cooled, they will be disposed of in accordance with the WMP.
- ❏ Soils that do not indicate any sign of reactivity will be processed for laboratory analysis as specified in Section 7.0 of the RIWP following colorimetric screening. Soils that indicate reactivity will be disposed of according to the WMP.

# 2.0 ORGANIC EXPLOSIVES SCREENING PROCEDURE

The organic explosives that may be encountered during the Lake Inez Region Remedial Investigation are ballistite, smokeless powder, and other nitrate-based organic explosives. Following thermal reactivity screening, the analyst will remove a small (no more than 5 grams) portion of the soils to the non-static generating transport container. This sample will be screened using organic explosives screening procedure as detailed below. The individual performing the procedure is referred to as "analyst" in the following sections. The soil tested using this procedure is referred to as the "sample" in the following sections

## 2.1 Special Considerations

- ❏ Material Safety Data Sheets (MSDSs) for all reagents are located in the PLW screening lab, stall 3 where the reagents are stored, as well as FA-568, main office building. All MSDSs will be reviewed prior to the use of any reagent. The MSDS is to be used as a guide for the safe use of the reagent.
- ❏ Appropriate PPE for the organic explosives screening procedure will be worn at all times by the analyst.
- ❏ Know the location of fire extinguishers, eyewash, and laboratory safety shower prior to utilizing this procedure.
- ❏ Some of the organic explosives are sensitive to static, friction, heat, or any combination of these qualities. Energetic material becomes more sensitive when it is contaminated with other material, especially those with abrasive qualities, such as soils.
- ❏ No more soil than is necessary to conduct the organic explosive screening procedure will be collected. Following a negative result, additional soil for laboratory analysis will be collected.
- ❏ Because the reagents are dispensed from an aerosol can in spray form, the analyst will perform the screening procedure in a well-ventilated area, up wind from the reagent spray.
- ❏ Read and understand the manufacturer's instructions prior beginning this procedure. If you are unsure about any aspect of the instructions or this procedure, contact the project technical lead, as defined in Section 6.0 of the RIWP, for guidance.
- ❏ Soils and testing materials will be disposed of in accordance with the project-specific Waste Management Plan (WMP)

## 2.2 Equipment

- ❏ Fire extinguisher
- ❏ One half bucket of sand

- ❑ Hard hat with attached heavy duty face shield and leather throat protection
- ❑ Kevlar® apron (ballistic grade Kevlar®)
- ❑ Heavy leather gloves with gauntlets
- ❑ Hearing protection
- ❑ Clean, flame retardant, cotton coveralls. Nomex® coveralls, which are a static generator, will not be used.
- ❑ *Expray*® test kit

## 2.3 Screening Procedure

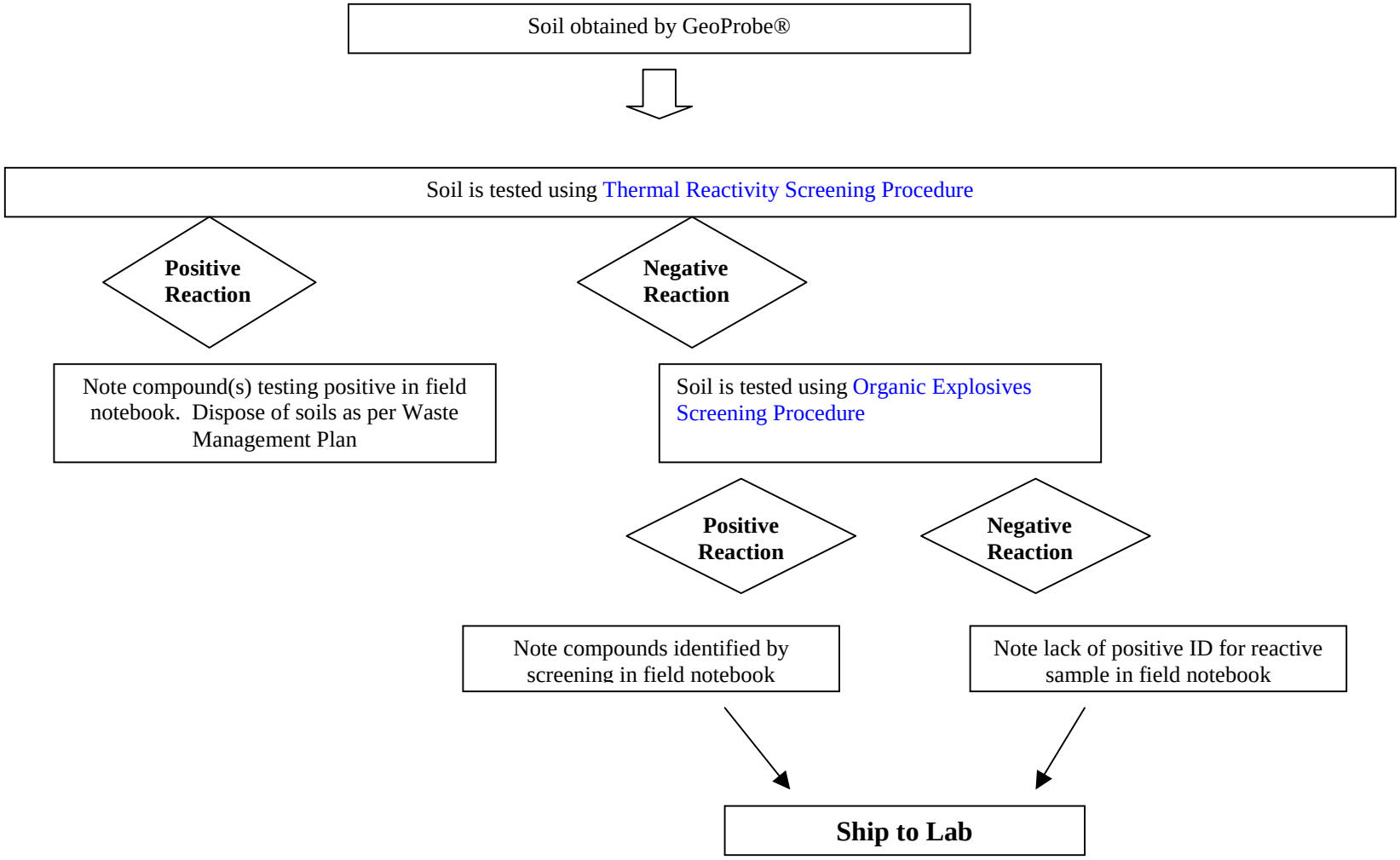
- ❑ The analyst will verify that spray cans are not past expiration date on bottom of can.
- ❑ The analyst will release test paper from dispenser and remove protective coating.
- ❑ Wipe the material to be tested using only the plastic coated side.
- ❑ Spray the paper with reagent E (Expray-1). An immediate change to a violet color indicates the presence of TNT.
- ❑ Spray the paper with reagent X (Expray-2). An immediate change to a pink color indicates the presence of base explosives, like PETN.
- ❑ Spray the paper with reagent I (Expray-3). An immediate change to a pink color indicates the presence of nitrogen containing compounds, like nitroglycerine.
- ❑ After a short period of time (5-10 minutes), the test paper will display a pink-purple color. This is due to a reaction with atmospheric nitrogen, and should not be confused with a positive indication of nitrate-based explosives. Color reactions when using any of the three aerosolized reagents will be immediate.
- ❑ All soil and testing materials will be disposed of in accordance with the WMP.

# FIGURES

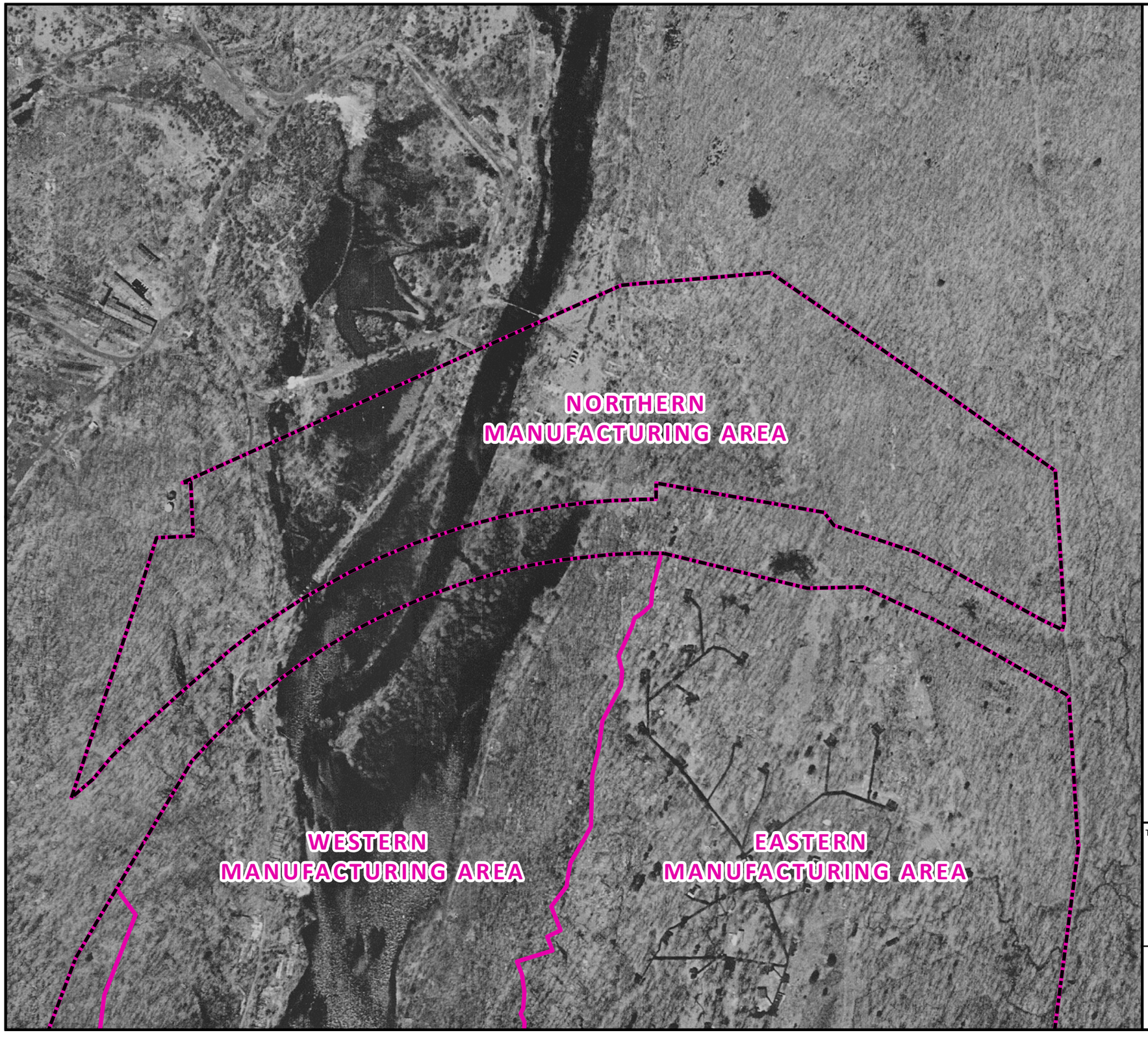
# FIGURE 1

**Explosives Screening Flow Diagram**

# Explosives Screening Procedure Flow Diagram



# APPENDIX B
# HISTORICAL AERIAL PHOTOGRAPHS




Property Boundary

Site Regions

N

0 200 400 800 Feet

TITLE:

FIGURE 1
4/28/1940 AERIAL PHOTO
NORTHERN MANUFACTURING AREA
DUPONT POMPTON LAKES WORKS
POMPTON LAKES, NJ

PARSONS
200 COTTONTAIL LANE SOUTH
SOMERSET, NJ 08873

| | |
|---|---|
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| CHECKED BY: | APPD BY: DJS |
| JOB NUMBER: 445298.01005 | |
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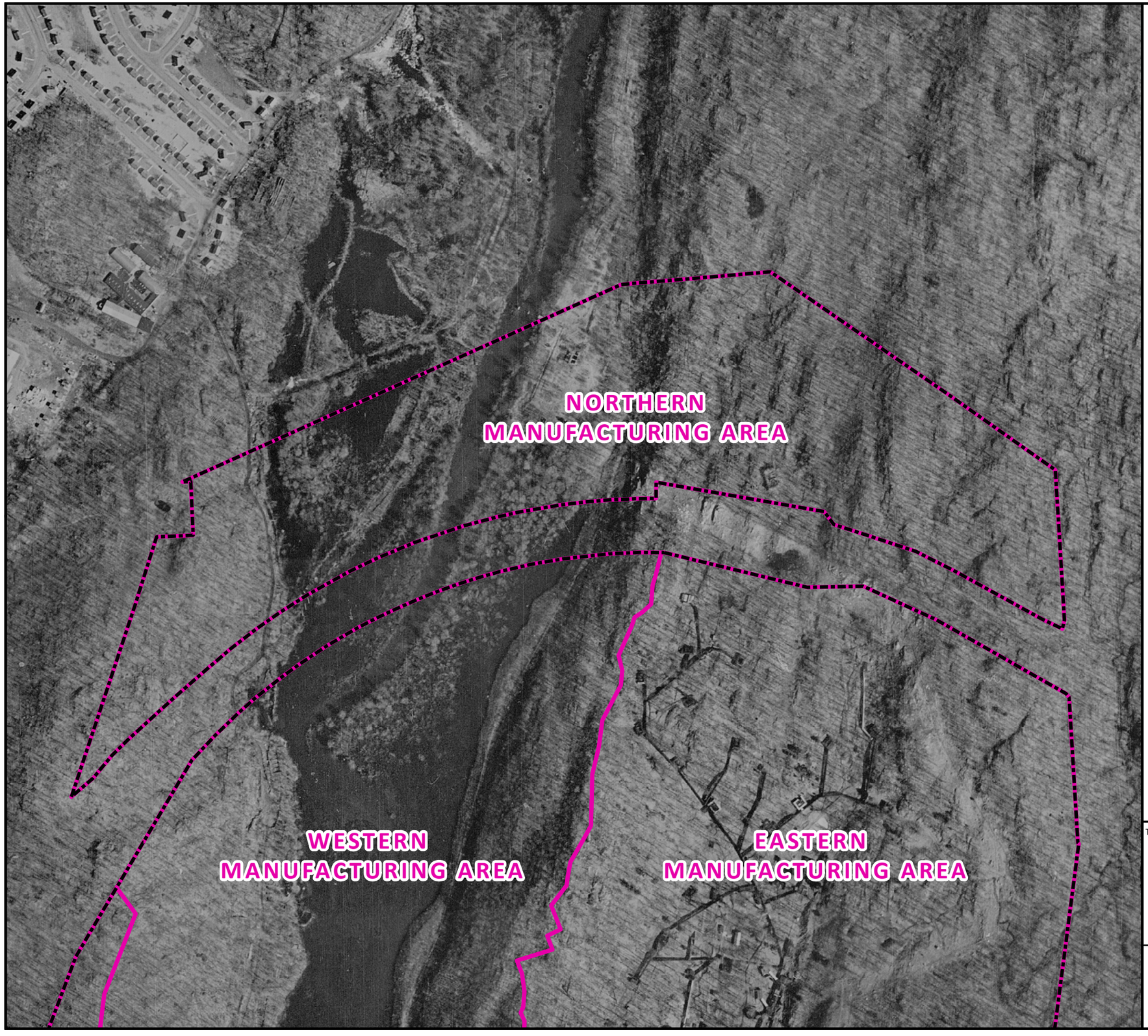



Property Boundary

Site Regions

N

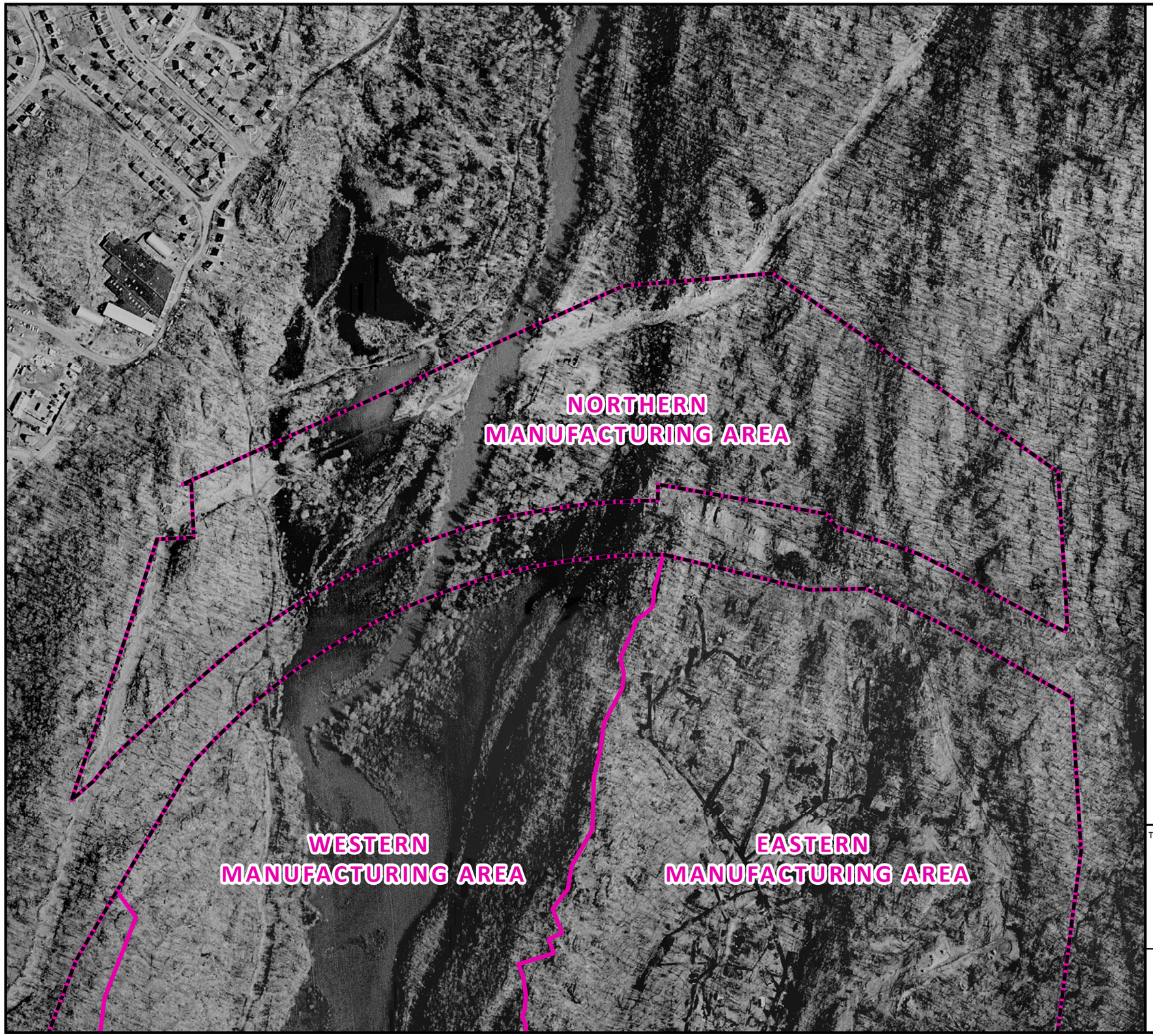
0 200 400 800 Feet

TITLE:

FIGURE 2
4/7/1951 AERIAL PHOTO
NORTHERN MANUFACTURING AREA
DUPONT POMPTON LAKES WORKS
POMPTON LAKES, NJ

PARSONS
200 COTTONTAIL LANE SOUTH
SOMERSET, NJ 08873

| | |
|---|---|
| CREATED BY: MTK | DATE: 6/4/2010 |
| CHECKED BY: | APPD BY: DJS |
| JOB NUMBER: 445298.01005 | |
| FILE NAME: NMA_1951_Historic_Aerial.mxd | |




Property Boundary

Site Regions

N

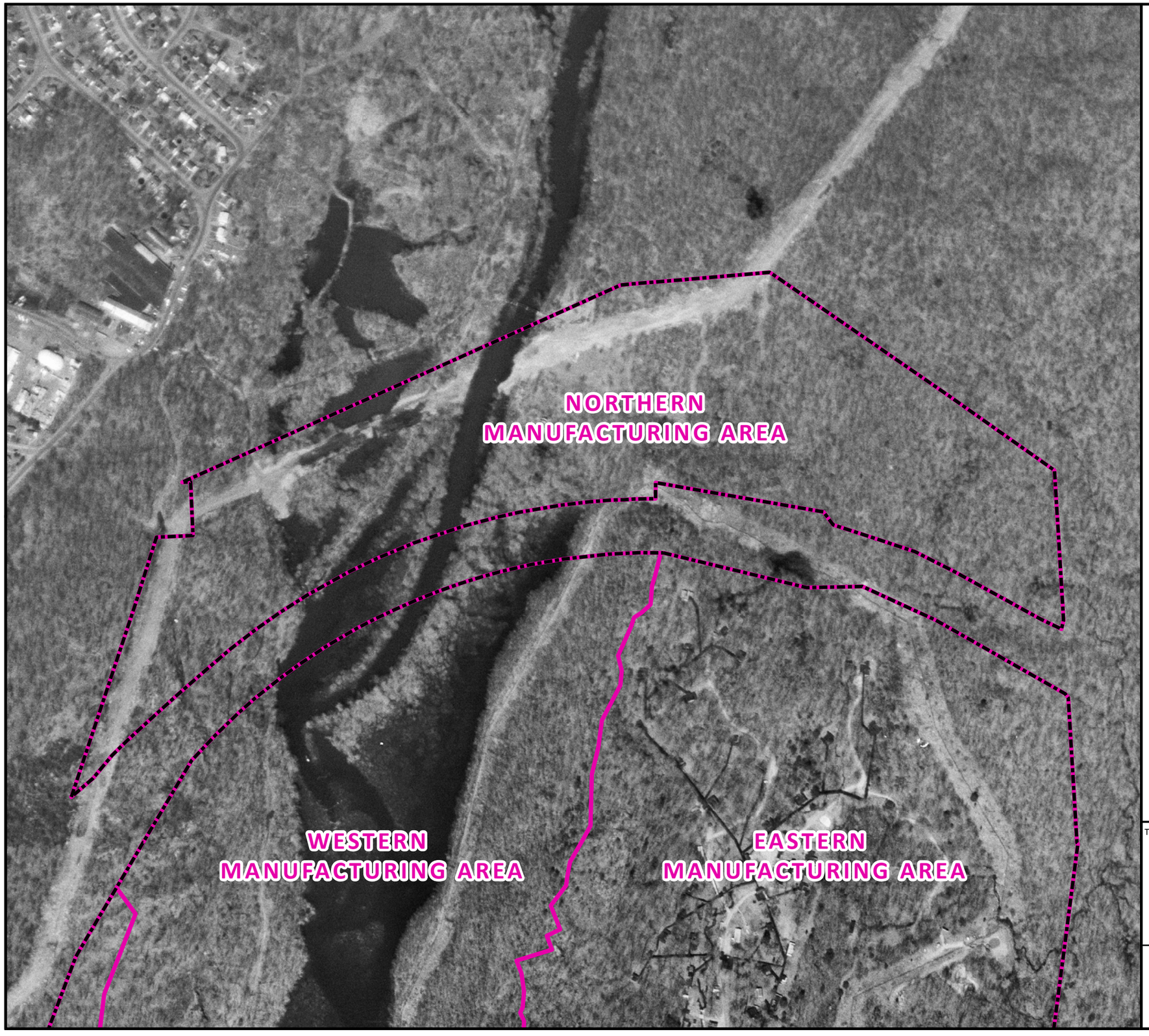
0 200 400 800 Feet

TITLE:

FIGURE 3
4/17/1961 AERIAL PHOTO
NORTHERN MANUFACTURING AREA
DUPONT POMPTON LAKES WORKS
POMPTON LAKES, NJ

PARSONS
200 COTTONTAIL LANE SOUTH
SOMERSET, NJ 08873

| | |
|---|---|
| CREATED BY: MTK | DATE: 6/4/2010 |
| CHECKED BY: | APPD BY: DJS |
| JOB NUMBER: 445298.01005 | |
| FILE NAME: NMA_1961_Historic_Aerial.mxd | |




Property Boundary

Site Regions

N

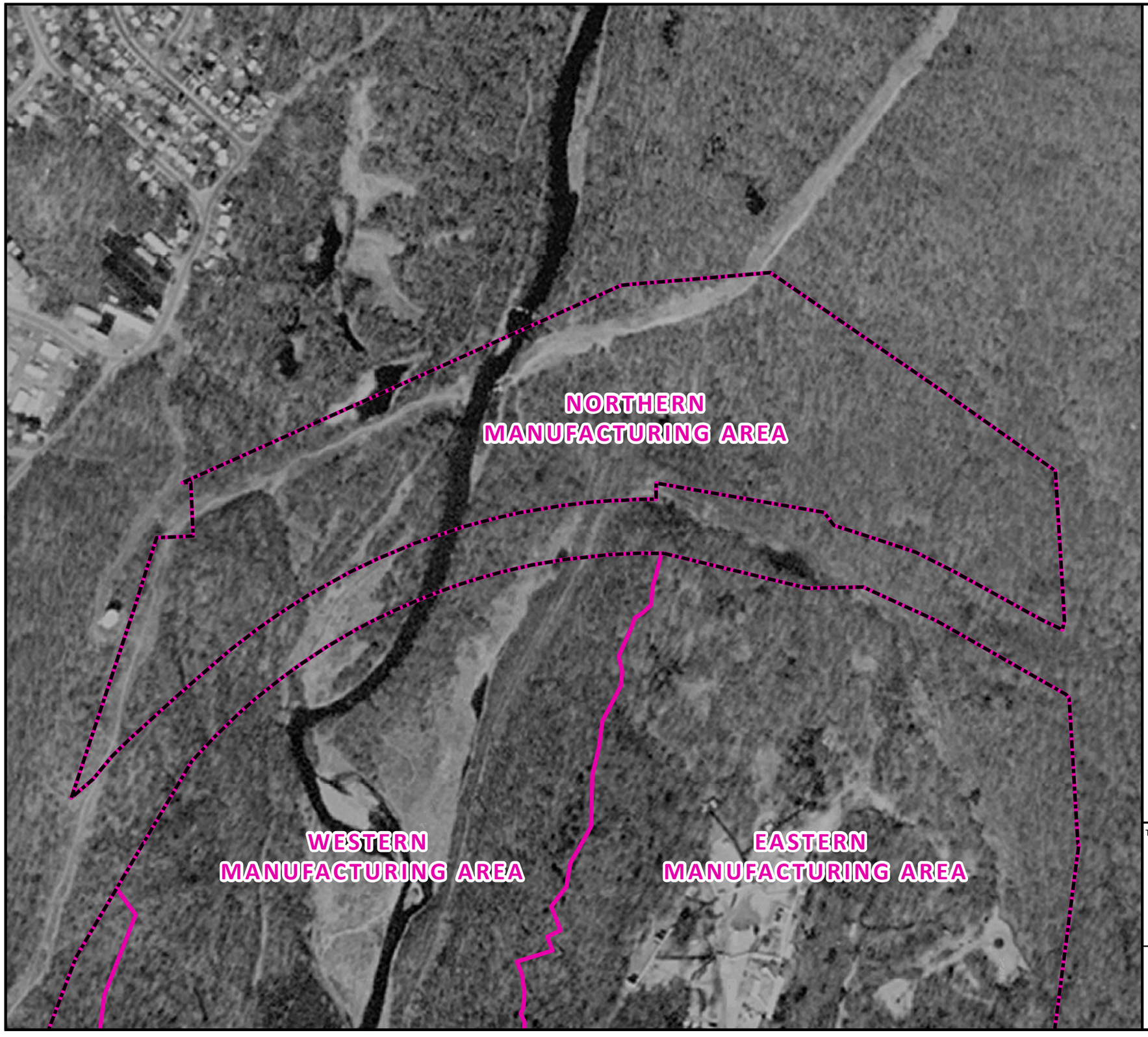
0 200 400 800 Feet

TITLE:

FIGURE 4
4/12/1971 AERIAL PHOTO
NORTHERN MANUFACTURING AREA
DUPONT POMPTON LAKES WORKS
POMPTON LAKES, NJ

PARSONS
200 COTTONTAIL LANE SOUTH
SOMERSET, NJ 08873

| | |
|---|---|
| CREATED BY: MTK | DATE: 6/4/2010 |
| CHECKED BY: | APPD BY: DJS |
| JOB NUMBER: 445298.01005 | |
| FILE NAME: NMA_1971_Historic_Aerial.mxd | |




Property Boundary

Site Regions

N

0 200 400 800 Feet

TITLE:

FIGURE 5
3/3/1986 AERIAL PHOTO
NORTHERN MANUFACTURING AREA
DUPONT POMPTON LAKES WORKS
POMPTON LAKES, NJ

PARSONS
200 COTTONTAIL LANE SOUTH
SOMERSET, NJ 08873

| | |
|---|---|
| CREATED BY: MTK | DATE: 6/4/2010 |
| CHECKED BY: | APPD BY: DJS |
| JOB NUMBER: 445298.01005 | |
| FILE NAME: NMA_1986_Historic_Aerial.mxd | |

# APPENDIX C
# SUMMARY OF SURFACE SOIL SAMPLES/ BORING LOGS

## Appendix C
## Near Surface Soil Sample Collection Log

| Boring ID | Date | Sample Interval | Soil Description | Analytes Sampled |
|---|---|---|---|---|
| 334- 186 | 9/8/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 187 | 9/8/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 188 | 9/8/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 189 | 9/8/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 190 | 9/8/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 191 | 9/8/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 192 | 9/9/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 193 | 9/9/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 194 | 9/9/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 195 | 9/9/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 196 | 9/9/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 197 | 9/9/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 198 | 9/9/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 199 | 9/9/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 200 | 9/9/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 170 | 9/14/2005 | 0-0.5 | Not Recorded | Arsenic |
| 334- 171 | 9/14/2005 | 0-0.5 | Not Recorded | Arsenic |
| 334- 172 | 9/14/2005 | 0-0.5 | Not Recorded | Arsenic |
| 334- 173 | 9/14/2005 | 0-0.5 | Not Recorded | Arsenic |
| 334- 162 | 9/14/2005 | 0-0.5 | Not Recorded | Arsenic, Lead |
| 334- 163 | 9/14/2005 | 0-0.5 | Not Recorded | Arsenic, Lead |
| 334- 164 | 9/14/2005 | 0-0.5 | Not Recorded | Arsenic, Lead |
| 334- 165 | 9/14/2005 | 0-0.5 | Not Recorded | Arsenic, Lead |
| 334- 166 | 9/14/2005 | 0-0.5 | Reddish Brown, dry, silty CLAY | Arsenic |
| 334- 167 | 9/14/2005 | 0-0.5 | Reddish Brown, dry, silty CLAY | Arsenic |
| 334- 168 | 9/14/2005 | 0-0.5 | Reddish Brown, dry, silty CLAY | Arsenic |
| 334- 169 | 9/14/2005 | 0-0.5 | Reddish Brown, dry, silty CLAY | Arsenic |
| 334- 150 | 9/14/2005 | 0-0.5 | Dark Brown, dry, SLAG with silty Sand | Arsenic |
| 334- 151 | 9/14/2005 | 0-0.5 | Dark Brown, dry, SLAG with silty Sand | Arsenic |
| 334- 152 | 9/14/2005 | 0-0.5 | Dark Brown, dry, SLAG with silty Sand | Arsenic |
| 334- 153 | 9/14/2005 | 0-0.5 | Dark Brown, dry, SLAG with silty Sand | Arsenic |
| 334- 154 | 9/14/2005 | 0-0.5 | Dark Brown, dry, fine sandy SILT, trace fine gravel | Arsenic |
| 334- 155 | 9/14/2005 | 0-0.5 | Dark Brown, dry, fine sandy SILT, trace fine gravel | Arsenic |
| 334- 156 | 9/14/2005 | 0-0.5 | Dark Brown, dry, fine sandy SILT, trace fine gravel | Arsenic |
| 334- 157 | 9/14/2005 | 0-0.5 | Dark Brown, dry, fine sandy SILT, trace fine gravel | Arsenic |
| 334- 158 | 9/14/2005 | 0-0.5 | Dark Brown, dry, fine sandy SILT, trace slag/cinders | Arsenic, Lead |
| 334- 159 | 9/14/2005 | 0-0.5 | Dark Brown, dry, fine sandy SILT, trace slag/cinders | Arsenic, Lead |
| 334- 160 | 9/14/2005 | 0-0.5 | Dark Brown, dry, fine sandy SILT, trace slag/cinders | Arsenic, Lead |
| 334- 161 | 9/14/2005 | 0-0.5 | Dark Brown, dry, fine sandy SILT, trace slag/cinders | Arsenic, Lead |
| 334- 126 | 9/19/2005 | 0-0.5 | Dark Brown, moist, loamy SILT (litter Material) | Thallium |
| 334- 127 | 9/19/2005 | 0-0.5 | Dark Brown, moist, loamy SILT (litter Material) | Thallium |
| 334- 128 | 9/19/2005 | 0-0.5 | Dark Brown, moist, loamy SILT (litter Material) | Thallium |
| 334- 129 | 9/19/2005 | 0-0.5 | Dark Brown, moist, loamy SILT (litter Material) | Thallium |
| 334- 130 | 9/19/2005 | 0-0.5 | Brown-Dark Brown, loamy SILT and fine SAND | Thallium |
| 334- 131 | 9/19/2005 | 0-0.5 | Brown-Dark Brown, loamy SILT and fine SAND | Thallium |
| 334- 132 | 9/19/2005 | 0-0.5 | Brown-Dark Brown, loamy SILT and fine SAND | Thallium |
| 334- 133 | 9/19/2005 | 0-0.5 | Brown-Dark Brown, loamy SILT and fine SAND | Thallium |
| 334- 122 | 9/19/2005 | 0-0.5 | Dark Brown-Brown, moist, loamy sandy SILT | Thallium |
| 334- 123 | 9/19/2005 | 0-0.5 | Dark Brown-Brown, moist, loamy sandy SILT | Thallium |
| 334- 124 | 9/19/2005 | 0-0.5 | Dark Brown-Brown, moist, loamy sandy SILT | Thallium |
| 334- 125 | 9/19/2005 | 0-0.5 | Dark Brown-Brown, moist, loamy sandy SILT | Thallium |

## Appendix C
## Near Surface Soil Sample Collection Log

| Boring ID | Date | Sample Interval | Soil Description | Analytes Sampled |
|---|---|---|---|---|
| 334- 138 | 9/19/2005 | 0-0.5 | Not Recorded | Thallium (MS/MSD Collected) |
| 334- 139 | 9/19/2005 | 0-0.5 | Not Recorded | Thallium |
| 334- 140 | 9/19/2005 | 0-0.5 | Not Recorded | Thallium (DUP Collected) |
| 334- 141 | 9/19/2005 | 0-0.5 | Not Recorded | Thallium |
| 334- 196 | 9/22/2005 | 0-0.5 | Brown, moist, LOAM and silty medium SAND | Lead |
| 334- 201 | 9/22/2005 | 0-0.5 | Brown, moist, LOAM and silty medium SAND | Lead |
| 334- 202 | 9/22/2005 | 0-0.5 | Brown, moist, LOAM and silty medium SAND | Lead |
| 334- 203 | 9/22/2005 | 0-0.5 | Brown, moist, LOAM and silty medium SAND | Lead |
| 334- 204 | 9/22/2005 | 0-0.5 | Brown, dry, medium to fine silty SAND, trace fine gravel | Lead |
| 334- 205 | 9/22/2005 | 0-0.5 | Brown, dry, medium to fine silty SAND, trace fine gravel | Lead |
| 334- 206 | 9/22/2005 | 0-0.5 | Brown, dry, medium to fine silty SAND, trace fine gravel | Lead |
| 334- 207 | 9/22/2005 | 0-0.5 | Brown, dry, medium to fine silty SAND, trace fine gravel | Lead |
| 334- 208 | 9/22/2005 | 0-0.5 | Dark Brown-Brown, moist, medium to fine silty SAND and LOAM | Lead |
| 334- 209 | 9/22/2005 | 0-0.5 | Dark Brown-Brown, moist, medium to fine silty SAND and LOAM | Lead |
| 334- 210 | 9/22/2005 | 0-0.5 | Dark Brown-Brown, moist, medium to fine silty SAND and LOAM | Lead |
| 334- 211 | 9/22/2005 | 0-0.5 | Brown, dry, silty medium to fine SAND | Lead |
| 334- 212 | 9/22/2005 | 0-0.5 | Brown, dry, SILT, trace fine sand, trace clay | Lead |
| 334- 213 | 9/22/2005 | 0-0.5 | Brown, dry, moist, medium to fine silty SAND, some fine to medium gravel | Lead |
| 334- 214 | 9/22/2005 | 0-0.5 | Brown, dry, moist, medium to fine silty SAND, some fine to medium gravel | Lead |
| 334- 215 | 9/22/2005 | 0-0.5 | Brown, dry, moist, medium to fine silty SAND, some fine to medium gravel | Lead |
| 334- 216 | 9/22/2005 | 0-0.5 | Brown, dry, medium to fine silty SAND, trace medium gravel, trace clay | Lead |
| 334- 217 | 9/22/2005 | 0-0.5 | Brown, dry, medium to fine silty SAND, trace medium gravel, trace clay | Lead |
| 334- 218 | 9/22/2005 | 0-0.5 | Brown, dry, medium to fine silty SAND, trace medium gravel, trace clay | Lead |
| 334- 219 | 9/22/2005 | 0-0.5 | Dark Brown, dry, silty LOAM and fine SAND | Lead |
| 334- 220 | 9/22/2005 | 0-0.5 | Dark Brown, dry, silty LOAM and fine SAND | Lead |
| 334- 221 | 9/22/2005 | 0-0.5 | Dark Brown, dry, silty LOAM and fine SAND | Lead |
| 334- 222 | 9/22/2005 | 0-0.5 | Dark Brown, dry, silty LOAM and fine SAND | Lead |
| 334- 223 | 9/22/2005 | 0-0.5 | Brown, dry, fine sandy SILT, trace medium gravel | Lead |
| 334- 224 | 9/22/2005 | 0-0.5 | Brown, dry, fine sandy SILT, trace medium gravel | Lead |
| 334- 226 | 9/22/2005 | 0-0.5 | Dark Brown, dry to moist, silty SAND with slag and cinders | Lead |
| 334- 227 | 9/22/2005 | 0-0.5 | Dark Brown, dry to moist, silty SAND with slag and cinders | Lead |
| 334- 228 | 9/22/2005 | 0-0.5 | Dark Brown, dry to moist, silty SAND with slag and cinders | Lead |
| 334- 229 | 9/22/2005 | 0-0.5 | Brown, dry, medium to fine sandy SILT, some organics-Loam | Lead |
| 334- 230 | 9/22/2005 | 0-0.5 | Brown, dry, medium to fine sandy SILT, some organics-Loam | Lead |
| 334- 231 | 9/22/2005 | 0-0.5 | Brown, dry, medium to fine sandy SILT, some organics-Loam | Lead |
| 334- 232 | 9/27/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 233 | 9/27/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 234 | 9/27/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 235 | 9/27/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 236 | 9/27/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 237 | 9/27/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 238 | 9/30/2005 | 0-0.5 | Dark Brown, moist, LOAM and silty medium to fine SAND, some fine gravel and concrete fragments | Lead |
| 334- 239 | 9/30/2005 | 0-0.5 | Dark Brown, moist, LOAM and silty medium to fine SAND, some fine gravel and concrete fragments | Lead |
| 334- 240 | 9/30/2005 | 0-0.5 | Dark Brown, moist, LOAM and silty medium to fine SAND, some fine gravel and concrete fragments | Lead |
| 334- 241 | 9/30/2005 | 0-0.5 | Dark Brown, moist, LOAM and silty medium to fine SAND, some fine gravel and concrete fragments | Lead |
| 334- 242 | 9/30/2005 | 0-0.5 | Dark Brown, dry to moist, medium to fine silty SAND, trace fine gravel, trace ash | Lead |

## Appendix C
## Near Surface Soil Sample Collection Log

| Boring ID | Date | Sample Interval | Soil Description | Analytes Sampled |
|---|---|---|---|---|
| 334- 243 | 9/30/2005 | 0-0.5 | Dark Brown, dry to moist, medium to fine silty SAND, trace fine gravel, | Lead |
| 334- 244 | 9/30/2005 | 0-0.5 | Brown, dry, medium to fine silty SAND, trace fine gravel, trace clay | Lead |
| 334- 245 | 9/30/2005 | 0-0.5 | Brown, dry to moist, fine to medium silty SAND, trace fine gravel, trace sand, trace clay (near brick rubble) | Lead |
| 334- 246 | 9/30/2005 | 0-0.5 | Brown, dry to moist, fine to medium silty SAND, trace fine gravel, trace sand, trace clay | Lead |
| 334- 247 | 9/30/2005 | 0-0.5 | Brown, dry to moist, fine to medium silty SAND, trace fine gravel, trace sand, trace clay | Lead |
| 334- 248 | 9/30/2005 | 0-0.5 | Brown, dry to moist, fine to medium silty SAND, trace fine gravel, trace sand, trace clay | Lead |
| 334- 249 | 9/30/2005 | 0-0.5 | Brown, dry, medium to fine silty SAND, trace fine gravel, trace clay | Lead |
| 334- 250 | 9/30/2005 | 0-0.5 | Brown, dry, loamy, silty fine to medium SAND, trace fine gravel | Lead |
| 334- 251 | 9/30/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 252 | 9/30/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 253 | 9/30/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 254 | 9/30/2005 | 0-0.5 | Not Recorded | Lead |
| 334- 255 | 9/30/2005 | 0-0.5 | Brown-Dark Brown, moist to dry, loamy SILT (inside foundation) | Lead |
| 334- 256 | 9/30/2005 | 0-0.5 | Brown-Dark Brown, moist to dry, medium to fine sandy SILT, trace cinders and ash | Lead |
| 334- 257 | 9/30/2005 | 0-0.5 | Brown-Dark Brown, moist to dry, medium to fine sandy SILT, trace cinders and ash | Lead |
| 334- 258 | 9/30/2005 | 0-0.5 | Brown-Dark Brown, moist to dry, medium to fine sandy SILT, trace cinders and ash | Lead |
| 334- 259 | 9/30/2005 | 0-0.5 | Brown, dry to moist, gravelly SAND | Lead |
| 334- 260 | 9/30/2005 | 0-0.5 | Brown, dry, silty medium to fine SAND, trace gravel | Lead |
| 334- 261 | 9/30/2005 | 0-0.5 | Brown, dry, silty medium to fine SAND, trace gravel | Lead |
| 334- 262 | 10/3/2005 | 0-0.5 | Brown, moist, silty medium to fine SAND, trace clay, trace gravel | Lead |
| 334- 263 | 10/3/2005 | 0-0.5 | Brown, moist, silty medium to fine SAND, trace clay, trace gravel | Lead |
| 334- 264 | 10/3/2005 | 0-0.5 | Brown, moist, silty medium to fine SAND, trace clay, trace gravel | Lead |
| 334- 265 | 10/3/2005 | 0-0.5 | Brown, moist, silty medium to fine SAND, trace clay, trace gravel | Lead |
| 334- 266 | 10/3/2005 | 0-0.5 | Brown, dry, fine sandy SILT, some clay, trace fine gravel | Lead |
| 334- 267 | 10/3/2005 | 0-0.5 | Brown, dry, fine sandy SILT, some clay, trace fine gravel | Lead |
| 334- 268 | 10/3/2005 | 0-0.5 | Brown, dry, fine sandy SILT, some clay, trace fine gravel | Lead |
| 334- 269 | 10/3/2005 | 0-0.5 | Brown, dry, fine sandy SILT, some clay, trace fine gravel | Lead |
| 334- 270 | 10/3/2005 | 0-0.5 | Brown, dry, PEAT, trace silt | Arsenic |
| 334- 271 | 10/3/2005 | 0-0.5 | Brown, dry, PEAT, trace silt | Arsenic (MS, MSD Collected) |
| 334- 272 | 10/3/2005 | 0-0.5 | Brown, dry, PEAT, trace silt | Arsenic (Dup Collected) |
| 334- 273 | 10/3/2005 | 0-0.5 | Brown, dry, PEAT, trace silt | Lead, Arsenic |
| 334- 274 | 10/3/2005 | 0-0.5 | Brown, dry, peaty SILT, some fine sand, trace gravel | Lead |
| 334- 275 | 10/3/2005 | 0-0.5 | Brown, dry, peaty SILT, some fine sand, trace gravel | Lead, Arsenic |
| 334- 276 | 10/3/2005 | 0-0.5 | Brown, dry, peaty SILT, some fine sand, trace gravel | Lead |
| 334- 277 | 10/3/2005 | 0-0.5 | Brown, dry, gravelly SILT, some fine sand | Lead |
| 334- 278 | 10/3/2005 | 0-0.5 | Brown, dry, fine sandy SILT, trace fine gravel | Lead |
| 334- 279 | 10/3/2005 | 0-0.5 | Brown, dry, fine sandy SILT, trace fine gravel, trace cinders/slag | Lead |
| 334- 280 | 10/3/2005 | 0-0.5 | Brown, dry, fine sandy SILT, trace fine gravel, trace cinders/slag | Lead |
| 334- 281 | 10/3/2005 | 0-0.5 | Brown, dry, fine sandy SILT, trace fine gravel | Lead |
| 334- 282 | 10/4/2005 | 0-0.5 | Brown-Black, dry to moist, fine sandy SILT, trace gravel | Lead |
| 334- 283 | 10/5/2005 | 0-0.5 | Brown-Black, dry to moist, fine sandy SILT, trace gravel | Lead |
| 334- 286 | 10/5/2005 | 0-0.5 | Brown-Black, dry fine sandy SLAG with cinders and ash | Lead |
| 334- 287 | 10/5/2005 | 0-0.5 | Brown-Black, dry, fine sandy SILT with cinders ash and slag | Lead |
| 334- 288 | 10/5/2005 | 0-0.5 | Brown-Black, dry, fine sandy SILT with cinders ash and gravel | Lead |
| 334- 289 | 10/5/2005 | 0-0.5 | Brown-Black, dry, fine sandy SILT with cinders, ash and gravel | Lead |
| 334- 290 | 10/5/2005 | 0-0.5 | Dark Brown, dry, fine sandy SILT | Lead |
| 334- 291 | 10/5/2005 | 0-0.5 | Dark Brown-Black, dry, fine sandy SILT | Lead |

## Appendix C
## Near Surface Soil Sample Collection Log

| Boring ID | Date | Sample Interval | Soil Description | Analytes Sampled |
|---|---|---|---|---|
| 334- 292 | 10/5/2005 | 0-0.5 | Dark Brown-Black, dry, fine sandy SILT | Lead |
| 334- 293 | 10/5/2005 | 0-0.5 | Brown, dry, peaty SILT, some fine sand | Lead |
| 334- 294 | 10/5/2005 | 0-0.5 | Brown, dry, peaty SILT, some fine sand | Lead |
| 334- 295 | 10/5/2005 | 0-0.5 | Brown, dry, peaty SILT, some fine sand | Lead |
| 334- 296 | 10/5/2005 | 0-0.5 | Brown, dry, gravelly SILT, some fine sand | Lead |
| 334- 297 | 10/5/2005 | 0-0.5 | Brown, moist, silty medium to fine SAND, trace clay, trace gravel | Lead |
| 334- 298 | 10/5/2005 | 0-0.5 | Brown, moist, silty medium to fine SAND, trace clay, trace gravel | Lead |
| 334- 284 | 10/6/2005 | 0-0.5 | Brown-Black, dry to moist, fine sandy SILT, trace gravel, (collected on cinder/ash pile) | Lead |
| 334- 299 | 10/6/2005 | 0-0.5 | Brown, dry, fine sandy SILT with cinders, ash and slag | Lead |
| 334- 300 | 10/6/2005 | 0-0.5 | Brown Black, dry, fine sandy SILT, with ash, slag, cinders | Lead |
| 334- 301 | 10/6/2005 | 0-0.5 | Brown Black, dry, fine sandy SILT, with ash, slag, cinders | Lead |
| 334- 302 | 10/6/2005 | 0-0.5 | Black Brown, dry, sandy SILT, cinders, ash, slag | Lead |
| 334- 303 | 10/6/2005 | 0-0.5 | Black, dry, fine sandy SILT, with cinders, ash slag | Lead |
| 334- 304 | 10/6/2005 | 0-0.5 | Brown, moist, silty medium to fine SAND, trace clay, trace gravel | Lead |
| 334- 305 | 10/6/2005 | 0-0.5 | Brown, dry, peaty SILT, some fine sand | Lead |
| 334- 306 | 10/6/2005 | 0-0.5 | Brown, dry, peaty SILT, some fine sand | Lead |
| 334- 307 | 10/6/2005 | 0-0.5 | Brown, dry, peaty SILT, some fine sand | Lead |
| 334- 308 | 10/6/2005 | 0-0.5 | Brown, dry, peaty SILT, witth some fine sand | Lead |
| 334- 309 | 10/6/2005 | 0-0.5 | Dark Brown-Black, peaty SILT with some fine sand | Lead |
| 334- 285 | 10/7/2005 | 0-0.5 | Brown-Black, dry to moist, fine sandy SILT, trace gravel | Lead |
| 334- 310 | 10/7/2005 | 0-0.5 | Brown, moist, silty SAND, some gravel | Lead |
| 334- 311 | 10/7/2005 | 0-0.5 | Dark Brown-Black, moist, silty SAND, trace gravel | Lead |
| 334- 312 | 10/7/2005 | 0-0.5 | Brown Black, dry, fine sandy SILT, some gravel | Lead |
| 334- 313 | 10/7/2005 | 0-0.5 | Brown, moist, silty, medium to fine sand, trace clay, trace gravel | Lead |
| 334- 314 | 10/7/2005 | 0-0.5 | Brown, dry, peaty SILT, some fine sand, cinders, ash | Lead |
| 334- 315 | 10/7/2005 | 0-0.5 | Dark Brown-Black, silty SAND, trace gravel | Lead |
| 334- 316 | 10/7/2005 | 0-0.5 | Dark Brown, moist, silty SAND with fine gravel | Lead |
| 334- 317 | 10/7/2005 | 0-0.5 | Black, peaty SILT with some fine sand, trace gravel | Lead |
| 334- 330 | 10/10/2005 | 0-0.5 | Brown, moist, loamy SAND | Arsenic |
| 334- 106 | 10/10/2005 | 0.5-1.0 | Brown, moist, loamy SAND | Lead |
| 334- 320 | 10/10/2005 | 0-0.5 | Dark Brown, moist, loamy SAND, some ash/cinders | Lead |
| 334- 321 | 10/10/2005 | 0-0.5 | Brown, moist, loamy SAND | Lead |
| 334- 324 | 10/10/2005 | 0-0.5 | Brown, moist, loamy SAND | Lead |
| 334- 307 | 10/10/2005 | 0.5-1.0 | Brown, moist, loamy SAND | Lead |
| 334- 322 | 10/10/2005 | 0-0.5 | Brown, moist, loamy SAND | Lead |
| 334- 323 | 10/10/2005 | 0-0.5 | Brown, moist, loamy SAND | Lead |
| 334- 231 | 10/10/2005 | 0.5-1.0 | Brown, moist, loamy SAND | Lead |
| 334- 226 | 10/10/2005 | 0.5-1.0 | Brown, moist, loamy SAND, trace fine to coarse gravel, trace ash/cinders | Lead |
| 334- 318 | 10/10/2005 | 0-0.5 | Brown, moist, peaty, SAND | Lead |
| 334- 319-E | 10/11/2005 | 0-0.5 | Dark Brown, moist, loamy SAND | Lead |
| 334- 320-E | 10/11/2005 | 0-0.5 | Dark Brown, moist, SAND and ORGANICS | Lead |
| 334- 321-E | 10/11/2005 | 0-0.5 | Brown, moist, loamy SAND | Lead |
| 334- 322-E | 10/11/2005 | 0-0.5 | Brown, moist, loamy SAND | Lead |
| 334- 324-E | 10/11/2005 | 0-0.5 | Brown, moist, loamy SAND | Lead |
| 334- 323-E | 10/11/2005 | 0-0.5 | Brown, moist, loamy SAND | Lead |
| 334- 325-E | 10/11/2005 | 0-0.5 | Dark Brown, wet, silty SAND | Lead |
| 334- 326-E | 10/11/2005 | 0-0.5 | Dark Brown, moist, silty SAND | Lead |
| 334- 327-E | 10/11/2005 | 0-0.5 | Brown, very-moist, silty SAND, some organics | Lead |
| 334- 328-E | 10/11/2005 | 0-0.5 | Dark Brown, very moist, silty SAND | Lead |
| 334- 329-E | 10/11/2005 | 0-0.5 | Brown, moist, loamy SAND | Lead |
| 334- 330-E | 10/11/2005 | 0-0.5 | Brown, moist, loamy SAND, with ash/cinders | Lead |

## Appendix C
## Near Surface Soil Sample Collection Log

| Boring ID | Date | Sample Interval | Soil Description | Analytes Sampled |
|---|---|---|---|---|
| 334- 331-E | 10/11/2005 | 0-0.5 | Brown, moist, loamy SAND | Lead |
| 334- 332-E | 10/11/2005 | 0-0.5 | Brown, moist, SAND with organics ash /cinders | Lead |
| 334- 334-E | 10/11/2005 | 0-0.5 | Dark Brown, moist, loamy SAND | Lead |
| 334- 335-E | 10/11/2005 | 0-0.5 | Dark Brown, moist, loamy SAND, trace ash/cinders, trace fine gravel | Lead |
| 334- 336-E | 10/11/2005 | 0-0.5 | Dark Brown, moist, loamy SAND, trace ash/cinders, trace fine gravel | Lead |
| 334- 333-E | 10/11/2005 | 0-0.5 | Dark Brown, moist, loamy SAND, trace ash/cinders, trace fine gravel | Lead |
| 334- 337-E | 10/11/2005 | 0-0.5 | Brown, moist, SAND, trace fine gravel | Lead |
| 334- 338-E | 10/11/2005 | 0-0.5 | Brown, moist, loamy, silty SAND | Lead |
| 334- 339-E | 10/11/2005 | 0-0.5 | Brown, moist, loamy, silty SAND | Lead |
| 334- 340-E | 10/11/2005 | 0-0.5 | Dark Brown, peaty, loamy SAND | Lead |
| 334- 341-E | 10/11/2005 | 0-0.5 | Black, moist, fine to coarse SAND | Lead |
| 334- 346 | 10/17/2005 | 0-0.5 | Dark Brown-Black, loamy SAND | Lead |
| 334- 347 | 10/17/2005 | 0-0.5 | Dark Brown, moist, SAND | Lead |
| 334- 348 | 10/17/2005 | 0-0.5 | Dark Brown, moist, loamy SAND | Lead |
| 334- 349 | 10/17/2005 | 0-0.5 | Dark Brown-Black, moist, silty SAND, some fine gravel | Lead |
| 334- 350 | 10/17/2005 | 0-0.5 | Dark Brown-Black, moist, loamy SAND | Lead |
| 334- 351 | 10/17/2005 | 0-0.5 | Dark Brown-Black, loamy SAND | Lead |
| 334- 342 | 10/17/2005 | 0-0.5 | Dark Brown, wet, silty SAND | Lead |
| 334- 343 | 10/17/2005 | 0-0.5 | Dark Brown-Black, moist, silty SAND | Lead |
| 334- 344 | 10/17/2005 | 0-0.5 | Dark Brown-Black, wet, silty SAND, some cinders/ash | Lead |
| 334- 345 | 10/17/2005 | 0-0.5 | Dark Brown-Black, moist, loamy silty SAND | Lead |
| 334- 352 | 10/17/2005 | 0-0.5 | Dark Brown, moist, loamy silty SAND, some fine gravel | Lead |
| 334- 353 | 10/17/2005 | 0-0.5 | Dark Brown-Black, moist, silty SAND, some gravel | Lead |
| 334- 356 | 10/17/2005 | 0-0.5 | Dark Brown-Black, moist, silty SAND, some gravel | Lead |
| 334- 354 | 10/17/2005 | 0-0.5 | Greyish White, moist, SAND with some gravel | Lead |
| 334- 355 | 10/17/2005 | 0-0.5 | Black, moist, silty SAND | Lead |
| 334- 357 | 10/17/2005 | 0-0.5 | Dark Brown, loamy silty SAND | Lead |
| 334- 358 | 10/17/2005 | 0-0.5 | Black, moist, silty SAND | Lead |
| 334- 359 | 10/17/2005 | 0-0.5 | Black, moist, loamy silty SAND | Lead |
| 334- 225 | 10/17/2005 | 0-0.5 | Dark Brown, moist, silty SAND | Lead |
| 334- 226 | 10/18/2005 | 1.0-1.5 | Black, moist, loamy silty SAND | Lead |
| 334- 231 | 10/18/2005 | 1.0-1.5 | Black, moist, loamy silty SAND | Lead |
| 334- 319 | 10/18/2005 | 0-0.5 | Dark Brown-Black, moist, silty SAND | Lead |
| 334- 321 | 10/18/2005 | 0-0.5 | Dark Brown, moist, peaty silty SAND, trace gravel | Lead |
| 334- 324 | 10/18/2005 | 0-0.5 | Dark Brown, moist, peaty silty SAND, trace gravel/roots | Lead |
| 334- 361 | 10/18/2005 | 0-0.5 | Dark Brown, moist, peaty silty SAND | Lead |
| 334- 360 | 10/18/2005 | 0-0.5 | Black, moist, silty sSAND with gravel | Lead |
| 334- 307 | 10/18/2005 | 1.0-1.5 | Dark Brown, moist, peaty silty SAND, trace roots/gravel | Lead |
| 334- 226 | 10/19/2005 | 1.5-2.0 | Dark Brown, moist, silty fine SAND, trace clay | Lead |
| 334- 232 | 10/19/2005 | 0.5-1.0 | Dark Brown, wet, silty SAND, some roots, trace fine gravel | Lead |
| 334- 362 | 10/19/2005 | 0-0.5 | Dark Brown, moist, peaty SILT, trace fine sand | Lead |
| 334- 307 | 10/19/2005 | 1.5-2.0 | Dark Brown, moist to wet, peaty SILT, some clay, trace roots | Lead |
| 334- 363 | 10/19/2005 | 0-0.5 | Dark Brown, moist, CINDERS and ASH, trace fine to medium sand, trace silt | Lead |
| 334- 364 | 10/19/2005 | 0-0.5 | Dark Brown, moist, SILT and PEAT, trace fine sand, trace clay | Lead |
| 334- 365 | 10/20/2005 | 0-0.5 | Dark Brown, moist, fine sandy SILT, trace fine gravel | Lead |
| 334- 204 | 10/20/2005 | 0.5-1.0 | Dark Brown, moist, fine sandy SILT, trace fine gravel, trace peat | Lead |
| 334- 366 | 10/20/2005 | 0-0.5 | Dark Brown, moist, fine sandy SILT, trace fine gravel, trace clay | Lead |
| 334- 367 | 10/20/2005 | 0-0.5 | Dark Brown, moist, peaty SILT, trace fine sand, trace clay, trace fine gravel | Lead |
| 334- 368 | 10/20/2005 | 0-0.5 | Dark Brown, moist, peaty SILT, trace fine sand | Lead |
| 334- 369 | 10/20/2005 | 0-0.5 | Dark Brown, moist, fine sandy SILT, some peat, trace fine gravel | Lead |

## Appendix C
## Near Surface Soil Sample Collection Log

| Boring ID | Date | Sample Interval | Soil Description | Analytes Sampled |
|---|---|---|---|---|
| 334- 248 | 10/20/2005 | 0.5-1.0 | Dark Brown, moist, fine sandy SILT, trace gravel, trace clay | Lead |
| 334- 370 | 10/20/2005 | 0-0.5 | Dark Brown, wet, fine SAND and SILT, trace peat | Lead |
| 334- 371 | 10/20/2005 | 0-0.5 | Dark Brown, moist, fine sandy SILT, trace gravel, trace clay | Lead |
| 334- 196 | 10/20/2005 | 0.5-1.0 | Dark Brown, moist, silty medium to fine SAND, trace fine to medium gravel, trace brick/concrete | Lead |
| 334- 250 | 10/20/2005 | 0.5-1.0 | Brown, moist, medium to fine SAND, some medium to fine gravel, trace clay, trace silt | Lead |
| 334- 372 | 10/20/2005 | 0-0.5 | Dark Brown, moist, fine to medium sandy SILT, trace fine gravel | Lead |
| 334- 373 | 10/20/2005 | 0-0.5 | Dark Brown, moist, medium to fine sandy SILT, trace fine gravel | Lead |
| 334- 374 | 10/20/2005 | 0-0.5 | Dark Brown, moist, medium to fine sandy SILT, with gravel, trace clay, trace glass | Lead |
| 334- 254 | 10/20/2005 | 0.5-1.0 | Dark Brown, moist, medium to fine SAND with medium to fine gravel | Lead |
| 334- 375 | 10/20/2005 | 0-0.5 | Dark Brown, moist, silty GRAVEL, some sand | Lead |
| 334- 337-E | 10/20/2005 | 0.5-1.0 | Dark Brown-Black, moist, silty medium to fine SAND, trace nedium to fine gravel, trace clay, trace cinders/melted glass | Lead |
| 334- 376 | 10/20/2005 | 0-0.5 | Dark Brown-Black, moist, medium to fine silty SAND, trace fine gravel, trace ash | Lead |
| 334- 377 | 10/20/2005 | 0-0.5 | Dark Brown, moist, silty medium to fine SAND, trace medium to fine gravel, trace clay | Lead |
| 334- 378 | 10/20/2005 | 0-0.5 | Dark Brown, moist, silty medium to fine SAND | Lead |
| 334- 379 | 10/20/2005 | 0-0.5 | Dark Brown, moist, silty medium to fine SAND, trace fine gravel | Lead |
| 334- 148 | 10/20/2005 | 0.5-1.0 | Dark Brown, moist, CINDERS and ASH, trace medium to fine sand, trace gravel | Lead |
| 334- 219 | 10/20/2005 | 0.5-1.0 | Dark Brown, moist, medium to fine sandy SILT, trace fine gravel, trace clay | Lead |
| 334- 307 | 10/21/2005 | 2.0-2.5 | Brown, moist to wet, coarse to medium SAND, some medium to fine gravel, trace silt | Lead |
| 334- 381 | 10/21/2005 | 0-0.5 | Dark Brown, moist, peaty SILT, trace fine sand | Lead |
| 334- 380 | 10/21/2005 | 0-0.5 | Dark brown, moist, peaty, SILT, trace fine sand, trace fine gravel | Lead |
| 334- 232 | 10/21/2005 | 1.0-1.5 | Brown, moist, fine SAND and SILT | Lead |
| 334- 226 | 10/21/2005 | 2.0-2.5 | Brown-Light Brown, moist, silty fine SAND, some clay | Lead |
| 334- 383 | 10/24/2005 | 0-0.5 | Dark Brown, moist, peaty SILT, trace fine sand, trace roots | Lead |
| 334- 382 | 10/24/2005 | 0-0.5 | Dark Brown, dry to moist, fine sandy SILT | Lead |
| 334- 384 | 10/25/2005 | 0-0.5 | Dark Brown, moist, peaty SILT, trace roots, trace fine sand | Lead |
| 334- 274 | 10/25/2005 | 0.5-1.0 | Dark Brown, moist, fine sandy SILT, trace fine gravel | Lead |
| 334- 386 | 10/27/2005 | 0-0.5 | Dark Brown, very wet, fine to medium Sandy SILT, fine Gravel | Lead |
| 334- 240 | 10/27/2005 | 0.5-1.0 | Dark Brown, wet, medium to fine SAND with Silt, trace fine gravel | Lead |
| 334- 387 | 10/27/2005 | 0-0.5 | Brown, moist, medium to fine silty SAND, trace, fine gravel, Area very rocky | Lead |
| 334- 204 | 10/27/2005 | 1.0-1.5 | Brown, moist, medium to fine SAND, some Silt, trace fine gravel | Lead |
| 334- 388 | 10/27/2005 | 0-0.5 | Dark Brown, moist, peaty SILT, trace fine sand | Lead |
| 334- 389 | 10/27/2005 | 0-0.5 | Dark Brown, moist, silty PEAT | Lead |
| 334- 196 | 10/27/2005 | 1-1.3 | Dark Brown, medium to fine sandy SILT, trace clay, trace fine gravel | Lead |
| 334- 198 | 10/27/2005 | 0-0.5 | Dark Brown, medium-fine SAND, trace fine gravel, trace silt | Lead |
| 334- 391 | 10/27/2005 | 0-0.5 | Dark Brown, moist, fine sandy SILT, trace fine gravel, trace clay | Lead |
| 334- 392 | 10/27/2005 | 0-0.5 | Dark Brown, moist, medium to fine sandy SILT and medium to fine GRAVEL | Lead |
| 334- 254 | 10/27/2005 | 1-1.5 | Light Brown, moist, medium to fine SAND, with medium gravel, trace clay. | Lead |
| 334- 337-E | 10/27/2005 | 1-1.5 | Dark Brown, medium to fine silty SAND, trace fine gravel, trace Ashm trace Clay | Lead |
| 334- 148 | 10/27/2005 | 1-1.5 | Light Brown, moist, silty medium to fine SAND, trace clay, trace fine gravel | Lead |
| 334- 393 | 10/27/2005 | 0-0.5 | Dark Brown, moist, peaty SILT | Lead |
| 334- 394 | 10/27/2005 | 0-0.5 | Dark Brown, moist, silty medium to fine SAND, some medium to fine gravel | Lead |

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## Near Surface Soil Sample Collection Log

| Boring ID | Date | Sample Interval | Soil Description | Analytes Sampled |
|---|---|---|---|---|
| 334- 395 | 10/27/2005 | 0-0.5 | Dark Brown, moist, medium SAND with silt, trace fine gravel | Lead |
| 334- 396 | 10/27/2005 | 0-0.5 | Dark Brown , moist, medium to fine SAND with medium to fine gravel, trace silt | Lead |
| 334- 219 | 10/27/2005 | 1-1.5 | Light Brown, moist, fine SAND, some silt | Lead |
| 334- 397 | 10/27/2005 | 0-0.5 | Dark Brown, moist, peaty SILT, trace fine sand | Lead |
| 334- 398 | 10/28/2005 | 0-0.5 | Dark Brown , moist, peaty SILT, trace fine sand | Lead |
| 334- 399 | 10/28/2005 | 0-0.5 | Dark Brown, PEAT and SILT | Lead |
| 334- 400 | 10/31/2005 | 0-0.5 | Dark Brown, moist, peaty SILT, trace fine sand | Lead |
| 334- 401 | 10/31/2005 | 0-0.5 | Brown, moist, fine sandy SILT | Lead |
| 334- 204 | 10/31/2005 | 1.5-1.8 | Dark Brown, moist, silty medium to fine SAND, trace fine gravel, trace clay | Lead |
| 334- 402 | 10/31/2005 | 0-0.5 | Dark Brown, moist to wet, SILT and SAND | Lead |
| 334- 240 | 10/31/2005 | 1-1.5 | Dark Brown to Black, moist to wet, SILT and medium to fine SAND, trace fine gravel | Lead |
| 334- 196 | 10/31/2005 | 1.5-2.0 | Dark to Light Brown, moist, medium to fine, silty SAND, trace fine gravel, trace clay | Lead |
| 334- 403 | 10/31/2005 | 0-0.5 | Dark Brown, moist, medium to fine sandy SILT, trace fine GRAVEL | Lead |
| 334- 404 | 10/31/2005 | 0-0.5 | Dark Brown,moist, fine sandy SILT, trace fine gravel | Lead |
| 334- 337-E | 10/31/2005 | 1.5-2.0 | Dark Brown, moist, fine sandy SILT, trace fine gravel | Lead |
| 334- 405 | 10/31/2005 | 0-0.5 | Dark Brown, moist, fine sandy SILT, trace fine gravel | Lead |
| 334- 406 | 10/31/2005 | 0-0.5 | Dark Brown, moist, sandy SILT, trace fine gravel | Lead |
| 334- 407 | 10/31/2005 | 0-0.5 | Brown, moist, medium to fine SAND, some Silt, trace fine gravel | Lead |
| 334- 408 | 11/1/2005 | 0-0.5 | Dark Brown, moist, peaty SILT | Lead |
| 334- 409 | 11/1/2005 | 0-0.5 | Dark Brown, moist, medium to fine sandy SILT, some fine gravel, trace red brick | Lead |
| 334- 410 | 11/1/2005 | 0-0.5 | Dark Brown, moist, fine sandy SILT, trace gravel | Lead |
| 334- 411 | 11/1/2005 | 0-0.5 | Dark Brown, dry, medium to fine sandy SILT, trace fine gravel | Lead |
| 334- 337-E | 11/1/2005 | 2-2.5 | Light Brown, moist, clayey fine SAND, some Silt | Lead |
| 334- 412 | 11/1/2005 | 0-0.5 | Dark Brown, moist, sandy SILT, trace fine gravel | Lead |
| 334- 413 | 11/1/2005 | 0-0.5 | Dark Brown, moist, fine sandy SILT, trace fine gravel | Lead |
| 334- 414 | 11/1/2005 | 0-0.5 | Dark Brown, moist, peaty SILT | Lead |
| 334- 240 | 11/2/2005 | 1.5-2.0 | Light Brown, moist to wet, clayey SILT, trace fine sand | Lead |
| 334- 415 | 11/2/2005 | 0-0.5 | Dark Brown, moist, fine sandy SILT, trace fine gravel | Lead |
| 334- 416 | 11/2/2005 | 0-0.5 | Dark Brown, dry, sandy SILT, trace fine gravel | Lead |
| 334- 417 | 11/2/2005 | 0-0.5 | Dark Brown, dry, sandy, SILT, some medium to fine gravel | Lead |
| 334- 418 | 11/2/2005 | 0-0.5 | Dark Brown to Black, moist, silty SAND, trace fine gravel | Lead |
| 334- 254 | 11/2/2005 | 1.5-2.0 | Light Brown, moist to dry, course to fine SAND with gravel | Lead |
| 334- 240 | 11/3/2005 | 2-2.5 | Light Brown, wet, clayey medium to fine SAND, some Silt, trace course sand, trace fine gravel | Lead |
| 334- 419 | 11/3/2005 | 0-0.5 | Dark Brown, mosit, medium to fine sandy SILT | Lead |
| 334- 420 | 11/9/2005 | 0-0.5 | Dark Brown, moist to dry, fine sandy SILT, trace fine gravel | Lead |
| 334- 421 | 1/12/2006 | 0-0.5 | Dark Brown, moist, fine to medium sandy SILT, trace roots, trace fine gravel | Lead |
| 334- 422 | 1/12/2006 | 0-0.5 | Dark Brown, moist, medium to fine SAND, some Silt, trace fine to medium gravel | Lead |
| 334- 423 | 1/12/2006 | 0-0.5 | Dark Brown, wet, fine sandy SILT, trace gravel | Lead |
| 334- 424 | 2/7/2006 | 0-0.5 | Dark Brown, wet, medium to fine sandy SILT, trace fine gravel | Arsenic |
| 334- 425 | 2/7/2006 | 0-0.5 | Dark Brown, wet, medium to fine sandy SILT, trace fine gravel | Arsenic |
| 334- 426 | 2/7/2006 | 0-0.5 | Dark Brown, moist, clayey SILT | Arsenic |
| 334- 427 | 2/7/2006 | 0-0.5 | Dark Brown, medium to fine, sandy SILT, trace clay | Arsenic |
| 334- 428 | 2/7/2006 | 0-0.5 | Dark Brown, moist, medium to fine sandy SILT, trace fine gravel | Arsenic |
| 334- 429 | 2/7/2006 | 0-0.5 | Dark Brown, moist, medium to fine sandy SILT, trace fine gravel | Arsenic |
| 334- 430 | 2/7/2006 | 0-0.5 | Dark Brown, moist, medium to fine sandy SILT, trace fine gravel | Arsenic |
| 334- 431 | 2/7/2006 | 0-0.5 | Dark Brown, moist, medium to fine sandy SILT, trace fine gravel | Arsenic |

## Appendix C
## Near Surface Soil Sample Collection Log

| Boring ID | Date | Sample Interval | Soil Description | Analytes Sampled |
|---|---|---|---|---|
| 334- 432 | 2/7/2006 | 0-0.5 | Dark Brown, moist, medium to fine sandy SILT, trace gravel | Arsenic |
| 334- 433 | 2/7/2006 | 0-0.5 | Dark Brown, moist, medium to fine, sandy SILT, trace concrete fragments | Arsenic |
| 334- 434 | 2/7/2006 | 0-0.5 | Black, moist, medium to fine sandy SILT with medium to fine rock fragments | Arsenic |
| 334- 435 | 2/7/2006 | 0-0.5 | Black, moist, medium to fine sandy SILT, some concrete fragments and red brick | Arsenic |
| 334- 436 | 2/16/2006 | 0-0.5 | Dark Brown, moist to wet, clayey SILT, trace fine to medium sand | Arsenic, Selenium |
| 334- 437 | 2/16/2006 | 0-0.5 | Dark Brown, moist to wet, clayey SILT, trace fine sand | Arsenic, Selenium |
| 334- 438 | 2/16/2006 | 0-0.5 | Dark Brown, wet to moist, clayey SILT, trace fine sand | Arsenic, Selenium |
| 334- 439 | 2/16/2006 | 0-0.5 | Dark Brown, moist to wet, clayey SILT, trace fine sand, trace root mass | Arsenic, Selenium |
| 334- 440 | 3/1/2006 | 0-0.5 | Dark Brown, moist to frozen, clayey SILT, trace fine sand | Arsenic, Selenium |
| 334- 441 | 3/1/2006 | 0-0.5 | Dark Brown, moist to frozen, SILT, trace Clay, trace fine sand, trace fine gravel | Arsenic, Selenium |
| 334- 442 | 3/1/2006 | 0-0.5 | Dark Brown, moist, clayey SILT, trace fine sand, trace fine gravel | Arsenic, Selenium |
| 334- 443 | 3/1/2006 | 0-0.5 | Black to Dark Brown, moist, clayey Silt, trace fine sand, trace fine gravel | Arsenic, Selenium |
| 334- 444 | 3/10/2006 | 0-0.5 | Medium Brown, moist to frozen, organic sandy SILT | Arsenic |
| 334- 445 | 3/10/2006 | 0-0.5 | Dark Brown, moist, organic sandy SILT | Arsenic, Selenium |
| 334- 446 | 3/10/2006 | 0-0.5 | Brown, moist, organic silty SAND | Arsenic, Selenium |
| 334- 447 | 3/10/2006 | 0-0.5 | Dark Brown, Moist, mediun silty SAND, some fine to medium gravel, trace clay | Arsenic, Selenium |
| 334- 182 | 3/15/2006 | 0-0.5 | Dark Brown, moist, peaty SILT | Lead |
| 334- 183 | 3/15/2006 | 0-0.5 | Dark Brown, moist silty PEAT | Lead |
| 334- 184 | 3/15/2006 | 0-0.5 | Dark Brown, moist, peaty SILT, trace clay, trace fine sand | Lead |
| 334- 185 | 3/15/2006 | 0-0.5 | Dark Brown, moist, fine sandy SILT, trace clay | Lead |
| 334- 448 | 3/21/2006 | 0-0.5 | Dark Brown, moist, clayey SILT | Arsenic, Selenium |
| 334- 449 | 3/21/2006 | 0-0.5 | Dark Brown, moist, clayey SILT, trace fine sand | Arsenic, Selenium |
| 334- 450 | 3/21/2006 | 0-0.5 | Dark Brown, moist, peaty SILT, trace fine gravel | Arsenic, Selenium |
| 334- 182 | 3/21/2006 | 0-0.5 | Dark Brown, moist, peaty SILT | Arsenc |
| 334- 183 | 3/21/2006 | 0-0.5 | Dark Brown, moist silty PEAT | Arsenc |
| 334- 184 | 3/21/2006 | 0-0.5 | Dark Brown, moist, peaty SILT, trace clay, trace fine sand | Arsenc |
| 334- 185 | 3/21/2006 | 0-0.5 | Dark Brown, moist, fine sandy SILT, trace clay | Arsenc |
| 334- 451 | 3/29/2006 | 0-0.5 | Dark Brown, moist, SILT, trace clay, trace fine gravel, trace fine sand | Arsenic, Selenium |
| 334- 452 | 3/29/2006 | 0-0.5 | Dark Brown, moist, SILT, trace fine sand, trace clay | Arsenic, Selenium |
| 334- 453 | 4/6/2006 | 0-0.5 | Light Brown to Orange, wet to moist, SILT, some medium sand, trace clay | Arsenic, Selenium |
| 334- 454 | 4/6/2006 | 0-0.5 | Dark Brown, moist, SILT, some clay, trace fine to medium sand | Arsenic, Selenium |
| 334- 454-E | 4/7/2006 | 0-0.5 | Dark Brown, moist, silty SAND, some medium to fine gravel | Lead |
| 334- 455 | 4/7/2006 | 0-0.5 | Black, moist, gavelly SILT, trace medium to fine sand, trace clay | Lead |
| 334- 456 | 4/14/2006 | 0-0.5 | Dark Brown, moist, fine sandy SILT, some clay (some orange fine sandy SILT) | Arsenic, Selenium |
| 334- 457 | 4/14/2006 | 0-0.5 | Dark Brown, moist, SILT, trace clay, trace fine sand | Arsenic, Selenium |
| 334- 458 | 4/19/2006 | 0-0.5 | Black, moist, fine dandy SILT, some Ash (wood) | Lead |
| 334- 459 | 4/19/2006 | 0-0.5 | Dark Brown, moist, clayey SILT | Lead |
| 334- 460 | 4/25/2006 | 0-0.5 | Dark Brown, moist to wet, SILT, trace clay, trace fine sand | Arsenic, Selenium |
| 334- 461 | 4/25/2006 | 0-0.5 | Dark Brown, moist, SILT | Arsenic, Selenium |
| 334- 462 | 5/3/2006 | 0-0.5 | Dark Brown to Orange, moist, SILT, come clay | Arsenic, Selenium |
| 334- 463 | 5/3/2006 | 0-0.5 | Dark Brown, moist to dry, SILT, trace fine sand, trace peat (little material) | Arsenic, Selenium |
| 334- 464 | 5/15/2006 | 0-0.5 | Brown, moist, clayey SILT, some medium to course light orange brick fragments, trace orange clay | Arsenic, Selenium |
| 334- 465 | 5/15/2006 | 0-0.5 | Brown, moist, fine sandy SILT, some peat humus | Selenium |
| 334- 466 | 5/15/2006 | 0-0.5 | Brown, wet, fine to medium SAND, some Silt, little fine to course gravel | Lead |
| 334- 467 | 6/2/2006 | 0-0.5 | Brown, moist, silty SAND, trace clay, trace medium to fine gravel | Lead |
| 334- 468 | 6/2/2006 | 0-0.5 | Brown to Red Brown, moist, fine sandy, SILT, trace red-brown fragments, trace clay | Lead |

## Appendix C
## Near Surface Soil Sample Collection Log

| Boring ID | Date | Sample Interval | Soil Description | Analytes Sampled |
|---|---|---|---|---|
| 334- 469 | 6/6/2006 | 0-0.5 | Brown, moist to wet, silty fine SAND, trace clay | Lead |
| 334- 470 | 6/13/2006 | 0-0.5 | Light Brown to Orange Brown/White, wet, medium to fine sandy SILT, trace course sand, trace orange brown fragments | Arsenic, Selenium |
| 334- 471 | 6/22/2006 | 0-0.5 | Brown, moist, fine sandy SILT, trace clay | Arsenic, Selenium |
| 334- 472 | 6/28/2006 | 0-0.5 | Brown, fine sandy SILT, trace clay | Arsenic, Selenium |
| 334- 473 | 6/29/2006 | 0-0.5 | Dark Brown, moist, silty fine to medium SAND, some fine to medium Gravel, trace course to fine sand | Arsenic, Selenium |
| 334- 474 | 8/18/2006 | 0-0.5 | Light Brown-Tan, moist, fine sandy SILT, trace clay | Arsenic, Selenium |
| 334- 475 | 8/18/2006 | 0-0.5 | Brown, dry, silty fine SAND, trace fine gravel, some organics (roots) | Arsenic, Selenium |
| 334- 476 | 8/18/2006 | 0-0.5 | Brown to Orange Brown, moist, clayey SILT, trace fine gravel | Arsenic, Selenium |
| 334- 477 | 8/18/2006 | 0-0.5 | Brown, moist to dry, SILT and fine SAND, trace gravel, roots | Arsenic, Selenium |
| 334- 478 | 9/18/2006 | 0-0.5 | Brown to Orange, wet to moist, fine sandy SILT | Arsenic, Selenium |
| 334- 479 | 9/18/2006 | 0-0.5 | Brown, moist, SILT, trace organincs, tracde fine sand | Arsenic, Selenium |
| 334- 480 | 9/18/2006 | 0-0.5 | Brown to Light Brown, moist, SILT, trace fine sand | Arsenic, Selenium |
| 334- 481 | 9/18/2006 | 0-0.5 | Brown moist, SILT, trace medium to fine sand, trace fime to medium gravel | Arsenic, Selenium |
| 334- 482 | 10/6/2006 | 0-0.5 | Dark Brown, moist, fine sandy SILT | Arsenic |
| 334- 483 | 10/6/2006 | 0-0.5 | Dark Brown, moist, SILT, trace fine sand | Arsenic, Selenium |
| 334- 484 | 10/6/2006 | 0-0.5 | Dark Brown, moist | Arsenic, Selenium |
| 334- 485 | 10/23/2006 | 0-0.5 | Dark Brown, moist, sandy SILT, trace fine gravel, trace foncrete fragments | Arsenic, Selenium |
| 334- 486 | 10/23/2006 | 0-0.5 | Dark Brown, moist, sandy SILT, trace course sand,trace fine gravel | Arsenic |
| 334- 487 | 10/23/2006 | 0-0.5 | Dark Brown, moist to dry, SILT, some organics (peat humus), trace fine to medium sand | Arsenic, Selenium |
| 334- 488 | 11/3/2006 | 0-0.5 | Dark Brown, moist, sandy SILT, trace fine gravel | Arsenic |
| 334- 489 | 11/3/2006 | 0-0.5 | Dark Brown to Light Brown, moist sandy SILT, trace fine gravel | Arsenic, Selenium |
| 334- 490 | 11/3/2006 | 0-0.5 | Dark Brown, moist, fine to course SAND, trace silt, some fine to medium gravel | Arsenic, Selenium |
| 334- 492 | 11/10/2006 | 0-0.5 | Black to Dark Brown, very moist, fine sandy SILT, fome Clay | Arsenic |
| 334- 493 | 11/17/2006 | 0-0.5 | Black to Dark Brown, dry, medium to fine SAND, some silt, trace Ash | Lead |
| 334- 494 | 11/17/2006 | 0-0.5 | Dark Brown, moist, medium to fine SAND and SILT, trace fine to medium gravel | Lead |
| 334- 495 | 11/17/2006 | 0-0.5 | Dark Brown, very moist to wet, SILT, trace fine sand | Lead |
| 334- 496 | 11/17/2006 | 0-0.5 | Dark Brown, very moist, fine to medium SAND and SILT, trace fine to medium gravel | Lead |
| 334- 497 | 11/17/2006 | 0-0.5 | Dark Brown, very moist, SILT, some clay, trace fine sand | Arsenic |
| 334- 498 | 12/1/2006 | 0-0.5 | Dark Brown, moist, SILT, some medium to fine sand, trace fine to medium gravel | Lead |
| 334- 499 | 12/2/2006 | 0-0.5 | Brown to Grey Brown, moist, SILT, some clay, and fine sand | Arsenic |
| 334- 500 | 12/3/2006 | 0-0.5 | Dark Brown, moist, fine romedium SAND, trace gravel, Fill-glass | Arsenic, Selenium |
| 334- 501 | 12/8/2006 | 0-0.5 | Grey to Brown, moist, fine to medium SAND and SILT, little clay, trace fine gravel | Arsenic |
| 334- 502 | 12/15/2006 | 0-0.5 | Dark Brown, very moist, SILT, some clay, trace fine sand | Arsenic |
| 334- 503 | 12/15/2006 | 0-0.5 | Dark Brown to Black, moist, medium to fine SAND, some fine to medium gravel, some silt | Arsenic, Selenium |
| 334- 504 | 12/22/2006 | 0-0.5 | Brown, moist, SILT, some Clay, trace fine to medium gravel, trace fine sand | Arsenic |
| 334- 506 | 1/26/2007 | 0-0.5 | Brown, moist to dry, SILT, some Clay, trace medium to fine gravel, trace fine to medium sand | Arsenic |
| 334- 505 | 1/27/2007 | 0-0.5 | Brown, dry, SILT, some Clay, trace fine to medium sand, | Arsenic, Selenium |
| 334- 507 | 2/12/2007 | 0-0.5 | Dark Brown, frozen-dry, SILT, trace fine sand ,trace clay | Arsenic, Selenium |
| 334- 508 | 3/23/2007 | 0-0.5 | Dark Brown, frozen, fine sandy SILT, trace medium sand, trace fine gravel | Arsenic, Selenium |
| 334- 509 | 5/4/2007 | 0-0.5 | Dark Brown, very moist, SILT and CLAY, trace medium to fine sand | Arsenic, Selenium |
| 334- 510 | 5/22/2007 | 0-0.5 | Dark Brown, moist to wet, fine to medium sandy SILT, trace clay, trace fine to medium gravel | Arsenic, Selenium |

## Appendix C
## Near Surface Soil Sample Collection Log

| Boring ID | Date | Sample Interval | Soil Description | Analytes Sampled |
|---|---|---|---|---|
| 334- 511 | 8/15/2007 | 0-0.5 | Dark Brown, moist, SILT and GRAVEL (cinder and slag), some fine to medium sand | Arsenic, Selenium |
| 334- 512 | 8/15/2007 | 0-0.5 | Dark Brown, moist, fine to medium SAND, some Silt, trace concrete fragments | Arsenic, Selenium |
| 334- 513 | 8/15/2007 | 0-0.5 | Brown, dry, fine sandy SILT, trace fine gravel | Arsenic, Selenium |
| 334- 514 | 8/15/2007 | 0-0.5 | Dark Brown, moist, silty fine SAND, trace (concrete, ash, slag), white chips (unknown) | Arsenic, Selenium |
| 334- 515 | 8/15/2007 | 0-0.5 | Dark Brown, moist, fine sandy SILT, trace fine gravel | Arsenic, Selenium |
| 334- 516 | 9/14/2007 | 0-0.5 | Dark Brown to Black, moist, ASH, some medium to fine sand, trace slag | Arsenic, Selenium |
| 334- 517 | 9/14/2007 | 0-0.5 | Brown, moist, silty SAND, trace clay, trace fine gravel | Arsenic, Selenium |
| 334- RB-1 | 12/12/2007 | 0-2.0 | Black-Light Grey, moist, FILL (Brick, Ash, Slag, Cinders) | PPL Metals, PAHs |
| 334- RB-2 | 12/13/2007 | 0-1.4 | Black to Light Grey, moist to dry, Fill Iash, Cinder, Slag) | PPL Metals, PAHs |
| 334- RB-2 | 12/13/2007 | 1.4-1.5 | Brown, moist, clayey SILT | PPL Metals, PAHs |
| 334- RB-3 | 12/13/2007 | 0-3.3 | Black to Light Grey, moist to dry, Fill Iash, Cinder, Slag) | PPL Metals, PAHs |
| 334- RB-3 | 12/13/2007 | 3.3-3.4 | Brown, moist, fine sandy SILT, some Clay, trace gravel | PPL Metals, PAHs |
| 334- RB-4 | 12/13/2007 | 0-1.3 | Black to Light Grey, moist to dry, Fill Iash, Cinder, Slag) | PPL Metals, PAHs |
| 334- RB-4 | 12/13/2007 | 1.3-1.5 | Brown, moist to dry, SILT, trace fine sand, trace clay | PPL Metals, PAHs |
| 334- RB-5 | 12/14/2007 | 0-1.7 | Black to Light Grey, moist to dry, Fill Iash, Cinder, Slag) | PPL Metals, PAHs |
| 334- RB-5 | 12/14/2007 | 1.7-1.9 | Brown, moist SILT, trace fine sand, trace clay | PPL Metals, PAHs |
| 334- RB-6 | 12/14/2007 | 0-1.2 | Black to Light Grey, moist to dry, Fill Iash, Cinder, Slag) | PPL Metals, PAHs |
| 334- RB-6 | 12/14/2007 | 1.2-1.4 | Brown, moist, SILT, trace fine sand, trace clay | PPL Metals, PAHs |
| 334- RB-7 | 12/14/2007 | 0-1.4 | Black to Light Grey, moist to dry, Fill Iash, Cinder, Slag) | PPL Metals, PAHs |
| 334- RB-7 | 12/14/2007 | 1.4-1.5 | Brown, moist, SILT, trace fine sand, trace clay | PPL Metals, PAHs |

# LOG OF BORING 334-B1s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/31/08 | Survey ID | : B-1 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798193.19 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550640.20 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B1 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | ML | | | 1 | SILT, brown, moist, trace fine Sand and Organics | Pb | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | MS | | | 2 | fine Sandy SILT, brown (grey mottling), moist, trace Organics | Pb | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B2s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/31/08 | Survey ID | : B-2 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798918.55 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550677.35 |
| Driller | : URS | Elevation | : 208 |
| Boring ID | : 334-B2 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 208 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 208 | | | | | | | Bore hole B-2 was sampled 8 1/2 ft. North of surveyed location.<br><br>Actual survey location was on a large concrete slab.<br><br>Multiple attempts were made to dig to a 2.5 ft depth. |
| .5 | 207.5 | | | | | | | |
| 1 | 207 | MC | | | 1 | Clayed SILT, brown (reddish-brown mottling), moist to very moist, little fine Sand, trace Organics | Pb | |
| 1.5 | 206.5 | | | | | | | |
| 2 | 206 | MC | | | 2 | Clayey SILT, brown (grey & red mottling), very moist, some Organics (red), little fine Sand | Pb | |
| 2.5 | 205.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B4s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/15/08 | Survey ID | : B-4 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799339.90 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550914.43 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B4 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | |
| | | ML/CL | | | | SILT & CLAY, brown, very moist, some fine to coarse Gravel, trace fine Sand and organics | | |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | | | | 1 | | Pb, As, MS, MSD, DUP | |
| 1.5 | 205.5 | | | | | | | |
| | | GM/GC | | | | SILT & CLAY & fine to coarse GRAVEL, br, moist, trace fine Sand and organics | | |
| 2 | 205 | | | | 2 | | Pb, As | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B5s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/8/08 | Survey ID | : B-5 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799508.63 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551112.65 |
| Driller | : URS | Elevation | : 208 |
| Boring ID | : 334-B5 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 208 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 208 | FIL | | | 1 | ASH / CINDER / SLAG, black, moist, some org, trace pieces of brick and concrete | Pb | |
| .5 | 207.5 | | | | | | | |
| 1 | 207 | | | | | | | |
| 1.5 | 206.5 | ML | | | | SILT, brown, slightly moist, some fine to coarse Sand, trace fine to coarse Gravel, trace org, trace pieces of brick and concrete | | |
| 2 | 206 | CM | | | 2 | Silty CLAY, dark brown, moist, trace org | Pb | |
| 2.5 | 205.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B6s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/8/08 | Survey ID | : B-6 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799483.38 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551119.92 |
| Driller | : URS | Elevation | : 209 |
| Boring ID | : 334-B6 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 209 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 209 | SOL | | | | Silty SOIL, black, moist, some org | | |
| .5 | 208.5 | ML | | | | SILT, dark brown, slightly moist, some Clay, little fine Sand, little org | | |
| 1 | 208 | | | | 1 | | Pb | |
| 1.5 | 207.5 | MC/SM | | | | Clayey SILT, red / brown, slightly moist, trace fine Sand, trace org (coarsening down to a Silty fine SAND) | | |
| 2 | 207 | | | | 2 | | Pb | |
| 2.5 | 206.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B7s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/8/08 | Survey ID | : B-7 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799483.56 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551095.76 |
| Driller | : URS | Elevation | : 209 |
| Boring ID | : 334-B7 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 209 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 209 | FIL | | | 1 | fine to coarse Sandy / Gravely ASH/CINDER/SLAG, black, slightly moist | Pb | |
| .5 | 208.5 | | | | | | | |
| 1 | 208 | | | | | | | |
| 1.5 | 207.5 | SP | | | | fine to coarse SAND, brown, slightly moist, little fine to med Gravel (cave in ash / cinder / slag mix) | | |
| 2 | 207 | FIL | | | 2 | fine to coarse Sandy / Gravely ASH / CINDER / SLAG, black, dry | Pb | |
| 2.5 | 206.5 | MC | | | | Clayey SILT, red / brown, moist | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B8s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/8/08 | Survey ID | : B-8 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799486.30 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551086.67 |
| Driller | : URS | Elevation | : 208 |
| Boring ID | : 334-B8 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 208 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 208 | | | | | | | |
| | | FIL | | | 1 | fine to coarse Sandy and fine to coarse Gravely ASH/CINDER/SLAG, black, slightly moist, little organics | As, Pb | |
| .5 | 207.5 | | | | | | | |
| 1 | 207 | | | | | | | |
| 1.5 | 206.5 | MC | | | | Clayey SILT, red / brown, dry, little fine to med Sand, trace org (coarsening downward to a Silty fine Sand) | | |
| 2 | 206 | MC | | | 2 | Clayey SILT, red / brown, moist, little fine to med Sand, trace org (coarsening downward to a Silty fine Sand) | As, Pb | |
| 2.5 | 205.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B9s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/9/08 | Survey ID | : B-9 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799318.01 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550691.99 |
| Driller | : URS | Elevation | : 210 |
| Boring ID | : 334-B9 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 208 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 208 | | | | | | | |
| | | SM | | | | Silty fine to med SAND, black, moist, some ash / cinder / slag, little fine to coarse Gravel, trace org | | |
| .5 | 207.5 | | | | | | | |
| 1 | 207 | | | | 1 | | | |
| | | SM | | | | SIlty fine to med SAND, light brown, moist, some fine to coarse Gravel, trace organics | Pb | |
| 1.5 | 206.5 | | | | | | | |
| 2 | 206 | | | | 2 | | Pb | |
| 2.5 | 205.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B10s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/9/08 | Survey ID | : B-10 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799318.50 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550722.21 |
| Driller | : URS | Elevation | : 209 |
| Boring ID | : 334-B10 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 209 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 209 | SM | | | | Silty fine to med SAND, black, moist, some fine to coarse Gravel, trace org | | |
| .5 | 208.5 | | | | | | | |
| 1 | 208 | | | | 1 | | | |
| 1.5 | 207.5 | SM | | | | SIlty fine to coarse SAND, light reddish brown, moist, trace fine to med Gravel, trace organics | Pb | |
| 2 | 207 | | | | 2 | | Pb | |
| 2.5 | 206.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B11s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/8/08 | Survey ID | : B-11 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799317.76 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550751.88 |
| Driller | : URS | Elevation | : 208 |
| Boring ID | : 334-B11 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 208 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 208 | SOL | | | | Organic SOIL, black, moist | | |
| .5 | 207.5 | SP | | | | fine to med SAND, brown, moist, some fine to coarse Gravel | | |
| 1 | 207 | | | | 1 | | Pb | |
| 1.5 | 206.5 | SP/GP | | | | fine to coarse SAND and fine to coarse GRAVEL, light brown, moist | | |
| 2 | 206 | | | | 2 | | Pb | |
| 2.5 | 205.5 | | | | | | | |
| 3 | | | | | | | | |

06-07-2010 \\Somersetfs01\dupont$\Pompton Lakes Works\Northern Manufacturing RIR\Quicklog Boring Logs\2008\334-B11s.bor

# LOG OF BORING 334-B12s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/9/08 | Survey ID | : B-12 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799318.51 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550782.33 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B12 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | SOL | | | | SOIL, black, moist, some org | | |
| .5 | 206.5 | SM | | | 1 | Silty fine to med SAND, brown, little org | Pb | |
| 1.5 | 205.5 | SM | | | 2 | Silty fine to med SAND, reddish brown, trace org | Pb | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

06-07-2010 \\Somersetfs01\dupont$\Pompton Lakes Works\Northern Manufacturing RIR\Quicklog Boring Logs\2008\334-B12s.bor

# LOG OF BORING 334-B13s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/9/08 | Survey ID | : B-13 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799317.76 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550812.02 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B13 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | CL/ML | | | 1 | CLAY and SILT, dark brown, moist, some fine to med Sand, little fine to coarse Gravel, trace org | Pb | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | | | | | | | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | CL/SP | | | 2 | CLAY and fine SAND, gray and orange / brown (respectively), mottled, reddish orange specs in both layers (coarsening downwards) | Pb | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

06-07-2010 \\Somersetfs01\dupont$\Pompton Lakes Works\Northern Manufacturing RIR\Quicklog Boring Logs\2008\334-B13s.bor

# LOG OF BORING 334-B14s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/8/08 | Survey ID | : B-14 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799309.62 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550755.57 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B14 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | SOL | | | | Organic SOIL, black, moist | | |
| | | | | | | fine to med SAND, reddish brown, moist, trace org | | |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | SP | | | 1 | | Pb | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | | | | 2 | | Pb | |
| | | SP | | | | fine to med SAND, red / brown, moist, some fine to med Gravel | | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

06-07-2010 \\Somersetfs01\dupont$\Pompton Lakes Works\Northern Manufacturing RIR\Quicklog Boring Logs\2008\334-B14s.bor

# LOG OF BORING 334-B15s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/15/08 | Survey ID | : B-15 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799287.97 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550721.82 |
| Driller | : URS | Elevation | : 208 |
| Boring ID | : 334-B15 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 208 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 208 | | | | | | | |
| .5 | 207.5 | | | | | | | |
| 1 | 207 | SP | | | 1 | fine to med SAND, dark brown, moist, some Silt, little organics | Pb | |
| 1.5 | 206.5 | | | | | | | |
| 2 | 206 | SP | | | 2 | fine to med SAND, brown, moist, trace coarse Gravel | Pb | |
| 2.5 | 205.5 | | | | | | | |
| 3 | | | | | | | | |

06-07-2010 \\Somersetfs01\dupont$\Pompton Lakes Works\Northern Manufacturing RIR\Quicklog Boring Logs\2008\334-B15s.bor

# LOG OF BORING 334-B16s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/15/08 | Survey ID | : B-16 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799288.32 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550752.00 |
| Driller | : URS | Elevation | : 208 |
| Boring ID | : 334-B16 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 208 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 208 | SP | | | 1 | fine to med SAND, brown, moist, little fine to coarse Gravel | Pb | |
| .5 | 207.5 | | | | | | | |
| 1 | 207 | | | | | | | |
| 1.5 | 206.5 | SP | | | 2 | fine to med SAND, light brown, moist, some fine Gravel, trace coarse Sand, and med to coarse Gravel | Pb | |
| 2 | 206 | | | | | | | |
| 2.5 | 205.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B17s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/15/08 | Survey ID | : B-17 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799288.34 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550782.08 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B17 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | SM | | | 1 | Silty fine SAND, brown, very moist, little med Sand, trace fine to med Gravel | Pb | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | SP | | | 2 | med SAND, brown, moist, little fine and coarse Sand | Pb | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B18s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/8/08 | Survey ID | : B-18 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799288.07 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550811.86 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B18 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | SP | | | 1 | fine to med SAND, brown, moist, little fine to coarse Gravel, trace Silt, trace org | Pb | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | | | | | | | |
| 1.5 | 204.5 | SP | | | | fine to med SAND, grey / brown, moist, trace coarse Gravel, trace org | | |
| 2 | 204 | SP/GP | | | 2 | fine to coarse SAND, and coarse GRAVEL, greyish black, very moist | Pb | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B19s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/15/08 | Survey ID | : B-19 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799263.94 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550890.75 |
| Driller | : URS | Elevation | : 208 |
| Boring ID | : 334-B19 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 208 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 208 | | | | | | | |
| | | FIL | | | 1 | CINDER / ASH / SLAG, black, moist, some fine to coarse Sand | As | |
| .5 | 207.5 | | | | | | | |
| 1 | 207 | | | | | | | |
| 1.5 | 206.5 | | | | | | | |
| | | MS | | | 2 | fine Sandy SILT, red / brown | As | |
| 2 | 206 | | | | | | | |
| 2.5 | 205.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B20s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/15/08 | Survey ID | : B-20 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799283.92 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550696.82 |
| Driller | : URS | Elevation | : 209 |
| Boring ID | : 334-B20 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 209 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 209 | | | | | | | |
| | | MS | | | 1 | fine to coarse Sandy SILT, brown, moist, some fine to coarse Gravel, little organics | As | |
| .5 | 208.5 | | | | | | | |
| 1 | 208 | | | | | | | |
| 1.5 | 207.5 | SP/GP | | | 2 | fine to coarse SAND & fine to coarse GRAVEL, brown, moist, trace Silt | As | |
| 2 | 207 | | | | | | | |
| 2.5 | 206.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B21s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/5/08 | Survey ID | : B-21 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799191.33 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550629.83 |
| Driller | : URS | Elevation | : 208 |
| Boring ID | : 334-B21 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 208 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 208 | | | | | | | |
| .5 | 207.5 | | | | | | | |
| 1 | 207 | SM | | | 1 | Silty fine to med SAND, brown, moist, some coarse Sand and fine to coarse Gravel, trace Organics | Pb | |
| 1.5 | 206.5 | | | | | | | |
| 2 | 206 | SP/GP | | | 2 | fine to coarse SAND and fine to coarse Gravel, light brown, moist | Pb | |
| 2.5 | 205.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B22s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/31/08 | Survey ID | : B-22 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799179.87 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550618.27 |
| Driller | : URS | Elevation | : 208 |
| Boring ID | : 334-B22 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 208 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 208 | | | | | | | |
| .5 | 207.5 | | | | | | | |
| 1 | 207 | SM | | | 1 | Silty fine SAND, dark brown / black, moist, trace med to coarse Sand and Organics | Pb, DUP, MS, MSD | |
| 1.5 | 206.5 | | | | | | | |
| 2 | 206 | CM/CS/CG | | | 2 | Silty, fine to coarse Sandy, fine to coarse Gravely CLAY, brown, very moist | Pb | |
| 2.5 | 205.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B23s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/17/08 | Survey ID | : B-23 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799147.23 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550591.22 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B23 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | CH | | | 1 | CLAY, grey, wet, little fine Sand & Silt, slight orange mottling | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | | | | | | | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B24s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/17/08 | Survey ID | : B-24 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799146.76 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550620.94 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B24 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | CH | | | 1 | CLAY, grey, mosit, little Silt, trace fine Sand & organics | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | CM | | | 2 | Silty CLAY, grey, moist (wet in the hole), trace fine Sand, orange / brown mottling | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B25s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/17/08, 11/20/08 | Survey ID | : B-25 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799146.99 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550651.14 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B25 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | Sample 3 taken on 11/18/08<br>Sample 4 taken on 11/20/08 |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | MC | | | 1 | Clayey SILT, dark grey / brown, moist, some fine to coarse Sand & fine to coarse Gravel | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SM | | | 2 | Silty fine to coarse SAND, dark brown, wet, some fine to coarse Gravel | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | 203 | SC | | | 3 | Clayey medium to coarse SAND, dark grey / brown, wet, some fine to coarse Gravel & Cobble | As | |
| 3.5 | 202.5 | | | | | | | |
| 4 | 202 | SP/GP | | | 4 | fine to coarse SAND & fine to coarse GRAVEL, dark brown, wet, some Silt | As | |
| 4.5 | 201.5 | | | | | | | |
| 5 | | | | | | | | |

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# LOG OF BORING 334-B26s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/16/08 | Survey ID | : B-26 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799146.99 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550681.57 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B26 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | SP/GP | | | 1 | med SAND & fine to coarse GRAVEL, brown, moist, trace fine & coarse Sand | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SM | | | 2 | Silty fine to med SAND, brown, very moist, some coarse Sand & fine to coarse Gravel, trace organics | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B28s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/17/08 | Survey ID | : B-28 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799117.09 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550591.46 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B28 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | MC | | | 1 | Clayey SILT, grey, moist, some fine Sand, orange mottling | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SC/MC | | | 2 | Clayey fine SAND & SILT, grey / orange, moist, mottled | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B29s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/17/08 | Survey ID | : B-29 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799117.15 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550621.38 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B29 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | SC/MC | | | 1 | Clayey fine SAND & SILT, grey, moist, orange mottling | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | MC | | | 2 | Silty CLAY, grey, slightly moist, tight, little fine Sand, orange mottling | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B30s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/16/08 | Survey ID | : B-30 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799117.08 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550651.46 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B30 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | CL | | | 1 | CLAY, grey, moist / wet @ 1' | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | CL | | | 2 | CLAY, grey, wet, orange / brown mottling | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B31s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/16/08 | Survey ID | : B-31 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799117.09 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550681.46 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B31 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | SP/CL | | | 1 | fine to med SAND & CLAY, brown, very moist | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SM | | | 2 | Silty fine to coarse SAND, brown, moist, trace Clay (tight) | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

06-07-2010 \\Somersetfs01\dupont$\Pompton Lakes Works\Northern Manufacturing RIR\Quicklog Boring Logs\2008\334-B31s.bor

# LOG OF BORING 334-B32s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/16/08 | Survey ID | : B-32 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799117.27 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550711.05 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B32 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | ML/CL | | | 1 | SILT & CLAY, brown, moist, trace organics | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SP | | | 2 | fine to med SAND, grey / brown, moist, trace Silt | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B33s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/17/08 | Survey ID | : B-33 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799087.09 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550591.46 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B33 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | SP | | | 1 | fine SAND, brown, moist, some Silt and med Sand, trace organic | As | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | SP | | | 2 | fine SAND, light brown / orange, slightly mottles | As | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B34s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/17/08, 11/18/08 | Survey ID | : B-34 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799087.09 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550621.45 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B34 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | SC/MC | | | 1 | Clayey fine SAND & SILT, grey, moist, orange mottling | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SP | | | 2 | fine to med SAND, grey, very moist, trace Silt and Clay, orange mottling | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | 203 | SC | | | 3 | Clayey fine SAND, grey and brown, very moist, trace medium to coarse Sand | As | |
| 3.5 | 202.5 | | | | | | | |
| 4 | | | | | | | | |

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# LOG OF BORING 334-B35s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/16/08 | Survey ID | : B-35 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799087.09 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550651.47 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B35 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | CL | | | 1 | CLAY, grey, moist, some fine Sand & orange / brown mottling | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SM | | | 2 | Silty fine SAND, grey, moist, orange mottling | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B36s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/16/08 | Survey ID | : B-36 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799086.61 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550681.10 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B36 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | CS | | | 1 | fine Sandy CLAY, moist, grey, some Silt, orange mottling | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SC | | | 2 | Clayey fine SAND, grey / orange (mottled), some Silt | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B37s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/16/08 | Survey ID | : B-37 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799087.08 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550711.46 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B37 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | MC | | | 1 | Clayey SILT, dark brown, moist, trace fine to coarse Sand and Org | As, DUP, MS, MSD | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | MC | | | 2 | Clayey SILT, dark brown, moist, trace fine to coarse Sand and Org | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B38s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/22/08 | Survey ID | : B-38 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799057.09 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550591.46 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B38 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | SP | | | 1 | fine SAND, brown, moist, little med Sand and Silt, trace organics | As | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | SP | | | 2 | fine SAND, brown, moist, little med Sand and Silt, trace organics | As | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B39s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/23/08 | Survey ID | : B-39 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799057.08 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550621.46 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B39 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | SP | | | 1 | fine SAND, brown / grey, moist, some med Sand and Silt, slightly mottled | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SM | | | 2 | fine SAND, reddish brown (little grey), moist, some Silt. | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B40s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/18/08 | Survey ID | : B-40 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799057.09 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550651.46 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B40 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | MC | | | 1 | Clayey SILT, brown / grey, moist, some fine Sand, trace organics | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SC | | | 2 | Clayey fine SAND, brown, moist, some Silt, trace organics, slight orange / grey mottling | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B41s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/18/08 | Survey ID | : B-41 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799057.10 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550681.46 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B41 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | SP/MC | | | 1 | fine SAND & Clayey SILT, orange / brown, moist, trace med coarse Sand | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SM | | | 2 | Silty fine to med SAND, brown, moist, little fine to coarse Gravel, trace Clay | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B42s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/18/08 | Survey ID | : B-42 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799057.08 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550711.47 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B42 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | SM | | | 1 | Silty fine SAND, dark brown, moist, little med Sand, trace organics | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | MC | | | 2 | Clayey SILT, dark brown, moist, some fine Sand, trace organics, grey mottling | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B43s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/22/08 | Survey ID | : B-43 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799027.09 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550591.45 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B43 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | SP/ML | | | 1 | fine SAND & SILT, dark black, moist, trace organics | As | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | SM | | | 2 | Silty fine SAND, brown, moist, some Clay, small grey clasts | As | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B44s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/22/08 | Survey ID | : B-44 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799027.08 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550621.46 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B44 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | SP | | | 1 | fine SAND, brown, moist, little med Sand and Silt, trace organics | As, MS, MSD, DUP | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | MC | | | 2 | Clayey SILT, light-brown / orange-brown, moist, little fine Sand | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B45s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/18/08 | Survey ID | : B-45 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799027.09 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550651.45 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B45 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | SP | | | 1 | fine SAND, brown, moist, some med Sand, trace Silt and Clay | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SM | | | 2 | Silty fine SAND, light brown, moist, trace organics | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B46s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/18/08, 11/21/08 | Survey ID | : B-46 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799027.08 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550681.46 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B46 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | Sample 3 taken on 11/18/08 (not sent to lab, screened with XRF)<br><br>Sample 4 taken on 11/21/08 |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | MC | | | 1 | Clayey SILT, brown, moist, some fine Sand, trace organics | As, DUP, MS, MSD | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SC | | | 2 | Clayey fine SAND, grey / brown, wet, little Silt, trace organics | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | 203 | SM | | | 3 | Silty fine SAND, brown & light grey-brown, wet, trace Clay & medium Sand & Organics | As | |
| 3.5 | 202.5 | | | | | | | |
| 4 | 202 | SM/GP | | | 4 | Silty fine to coarse SAND & fine to coarse GRAVEL, brown, wet, trace Silt | As | |
| 4.5 | 201.5 | | | | | | | |
| 5 | | | | | | | | |

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# LOG OF BORING 334-B47s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/23/08, 11/20/08 | Survey ID | : B-47 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799027.09 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550711.46 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B47 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | Sample 3 taken on 11/20/08<br>Sample 4 taken on 11/21/08 |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | SP | | | 1 | fine SAND, brown, moist, little Silt and organics, little grey mottling | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SM | | | 2 | fine to med SAND, reddish brown (grey clasts), slightly moist, trace Silt. | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | 203 | SP | | | 3 | fine to medium SAND, red-brown, moist, little Silt, trace coarse Sand | As | |
| 3.5 | 202.5 | | | | | | | |
| 4 | 202 | | | | | | | |
| 4.5 | 201.5 | SM | | | 4 | Silty fine to medium SAND, brown & dark brown, very moist, little Clay, trace Organics | As | |
| 5 | | | | | | | | |

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# LOG OF BORING 334-B48s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/23/08 | Survey ID | : B-48 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798997.08 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550591.46 |
| Driller | : URS | Elevation | : 208 |
| Boring ID | : 334-B48 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 208 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 208 | | | | | | | X-spray tested positive on spray bottle 2 (Pink coloration) indicating possible nitro-amines.<br><br>Sample tested negative on flame test. |
| .5 | 207.5 | | | | | | | |
| 1 | 207 | CM | | | 1 | Silty CLAY, dark brown / dark red (mottled), moist, some fine to med Sand, trace Ash / Cinder / Slag | As | |
| 1.5 | 206.5 | | | | | | | |
| 2 | 206 | MS | | | 2 | fine Sandy SILT, brown, moist, trace organics | As | |
| 2.5 | 205.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B49s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/22/08, 11/20/18 | Survey ID | : B-49 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798997.08 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550621.45 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B49 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | Sample 3 taken on 11/20/08 |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | SM | | | 1 | Silty fine to med SAND, brown, moist | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SP | | | 2 | fine SAND, brown, moist, some med Sand and Silt | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | 203 | SC | | | 3 | Clayey fine SAND, grey / brown, slightly moist, trace Organics | As | |
| 3.5 | 202.5 | | | | | | | |
| 4 | | | | | | | | |

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# LOG OF BORING 334-B50s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/22/08 | Survey ID | : B-50 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798997.09 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550651.46 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-B50 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | SM | | | 1 | Silty fine SAND, red / brown, moist, trace med Sand | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SP | | | 2 | fine SAND, brown, moist, little med Sand and Silt | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B51s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/23/08 | Survey ID | : B-51 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798997.09 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550681.47 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B51 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | MS | | | 1 | fine Sandy SILT, grey (brown mottling), very moist, some Clay | As | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | MC | | | 2 | Clayey SILT, grey / brown (mottled), slightly moist, trace fine Sand (tight) | As | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B52s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/23/08 | Survey ID | : B-52 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798997.10 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550711.45 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B52 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | Hole located 1 ft west of surveyed point |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | SM | | | 1 | Silty fine SAND, brown, moist, some Clay, trace organics (grey mottling) | As | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | SP | | | 2 | fine to med SAND, reddish brown moist | As | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B53s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/31/08 | Survey ID | : B-53 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798967.09 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550621.46 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B53 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | MS | | | 1 | fine Sandy SILT, light brown, moist | As | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | SP | | | 2 | fine SAND, light brown, moist, some Silt, trace Organics | As | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B54s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 4/3/08 | Survey ID | : B-54 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798967.10 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550651.46 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B54 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | ML | | | 1 | SILT, brown (reddish), moist, little organics, trace fine Sand (tight) | As | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | MS | | | 2 | fine Sandy SILT, light brown, moist, trace organics (tight) | As | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B55s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/31/08, 11/18/08 | Survey ID | : B-55 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798967.10 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550681.46 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B55 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | MC | | | 1 | Clayey SILT, brown / grey, moist, some fine Sand, trace organics | As | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | ML | | | 2 | SILT, light brown, moist, some Clay, trace fine Sand | As | |
| 2.5 | 204.5 | | | | | | | |
| 3 | 204 | SP | | | 3 | fine to medium SAND, grey-brown, very moist | As | |
| 3.5 | 203.5 | | | | | | | |
| 4 | | | | | | | | |

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# LOG OF BORING 334-B56s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/31/08 | Survey ID | : B-56 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798967.09 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550711.46 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B56 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | SP/FIL | | | 1 | fine to coarse SAND / ASH / CINDER / SLAG, grey/black, slightly moist, some fine to coarse Gravel | As | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | MC | | | 2 | Clayey SILT, brown (grey mottling), moist, some fine to med Sand | As | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B57s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/30/08 | Survey ID | : B-57 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798937.09 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550621.46 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B57 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | SC/F47 | | | 1 | Clayey fine SAND and SILT, brown, moist, trace organics | As | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | SM | | | 2 | Silty fine SAND, brown (grey mottling), moist, trace Clay | As | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B58s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/30/08 | Survey ID | : B-58 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798937.10 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550651.46 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B58 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | MC | | | 1 | Clayey SILT, brown, moist, some fine Sand | As | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | SM | | | 2 | Silty fine SAND, brown, moist | As | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B59s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/31/08, 11/20/08 | Survey ID | : B-59 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798937.09 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550681.46 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-B59 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | Sample 3 taken on 11/20/08 |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | MC | | | 1 | Clayey SILT, brown (grey mottling), moist, some fine to med Sand (light brown) | As | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | MC | | | 2 | Clayey SILT, brown, moist, trace fine Sand and Organics | As, DUP, MS, MSD | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B60s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/31/08, 11/18/08 | Survey ID | : B-60 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798937.08 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550711.45 |
| Driller | : URS | Elevation | : 208 |
| Boring ID | : 334-B60 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 208 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 208 | | | | | | | |
| .5 | 207.5 | | | | | | | |
| 1 | 207 | SG/FIL | | | 1 | fine to coarse SAND and fine to coarse Gravely ASH / CINDER / SLAG, trace Organics | As | |
| 1.5 | 206.5 | | | | | | | |
| 2 | 206 | SG/FIL | | | 2 | fine to coarse SAND and fine to coarse Gravely ASH / CINDER / SLAG, trace Organics | As | |
| 2.5 | 205.5 | | | | | | | |
| 3 | 205 | MC | | | 3 | Clayey SILT, grey-brown to brown, moist, some fine Sand, trace Organics | As | |
| 3.5 | 204.5 | | | | | | | |
| 4 | | | | | | | | |

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# LOG OF BORING 334-B61s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/15/08 | Survey ID | : B-61 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798740.33 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550427.75 |
| Driller | : URS | Elevation | : 247 |
| Boring ID | : 334-B61 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 247 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 247 | | | | | | | |
| | | SM | | | 1 | Silty fine SAND, brown, moist, trace med Sand & Clay & organics | As | |
| .5 | 246.5 | | | | | | | |
| 1 | 246 | | | | | | | |
| 1.5 | 245.5 | | | | | | | |
| 2 | 245 | SP | | | 2 | fine SAND, brown, wet, little organics | As | |
| 2.5 | 244.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B64s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 3/27/08 | Survey ID | : B-64 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799695.32 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551560.37 |
| Driller | : URS | Elevation | : 227 |
| Boring ID | : 334-B64 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 227 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 227 | | | | | | | |
| .5 | 226.5 | | | | | | | |
| 1 | 226 | SP/ML | | | 1 | SILT & fine to med SAND, brown, moist, little med to coarse Gravel, trace organics & coarse Sand | Pb | |
| 1.5 | 225.5 | | | | | | | |
| 2 | 225 | ML | | | 2 | SILT, brown, very moist, little organics, trace Clay & fine to coarse Gravel | Pb | |
| 2.5 | 224.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B65s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 3/4/08 | Survey ID | : B-65 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799684.46 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551588.17 |
| Driller | : URS | Elevation | : 228 |
| Boring ID | : 334-B65 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 228 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 228 | | | | | | | |
| .5 | 227.5 | | | | | | | |
| 1 | 227 | SP/GP | | | 1 | med to coarse SAND and fine to coarse GRAVEL, brown, very moist, trace Organics | Pb | |
| 1.5 | 226.5 | | | | | | | |
| 2 | 226 | ML | | | 2 | SILT, dark brown, moist, some med to coarse Gravel, trace Organics | Pb | |
| 2.5 | 225.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B67s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 3/27/08 | Survey ID | : B-67 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799661.96 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551643.80 |
| Driller | : URS | Elevation | : 230 |
| Boring ID | : 334-B67 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 230 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 230 | | | | | | | |
| .5 | 229.5 | | | | | | | |
| 1 | 229 | MS | | | 1 | fine Sandy SILT (soil), dark brown / black, moist, some organics, trace coarse Sand & fine to coarse Gravel | Pb | |
| 1.5 | 228.5 | | | | | | | |
| 2 | 228 | SP/GP | | | 2 | med to coarse SAND & fine to coarse GRAVEL, brown, moist, trace organics & fine Sand | Pb | |
| 2.5 | 227.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B70s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 3/27/08 | Survey ID | : B-70 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799634.17 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551632.58 |
| Driller | : URS | Elevation | : 229 |
| Boring ID | : 334-B70 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 229 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 229 | | | | | | | |
| .5 | 228.5 | | | | | | | |
| 1 | 228 | MS | | | 1 | fine Sandy SILT (soil), dark brown, moist, some organics & med Gravel, trace fine and coarse Gravel & med Sand | Pb | |
| 1.5 | 227.5 | | | | | | | |
| 2 | 227 | MS | | | 2 | fine Sandy SILT (soil), dark brown / brown, moist, little coarse Sand & fine to coarse Gravel, trace organics | Pb | |
| 2.5 | 226.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B71s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/12/08 | Survey ID | : B-71 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799640.06 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551537.88 |
| Driller | : URS | Elevation | : 227 |
| Boring ID | : 334-B71 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 227 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 227 | | | | | | | |
| .5 | 226.5 | | | | | | | |
| 1 | 226 | SM/GP | | | 1 | Silty fine SAND and med to coarse GRAVEL, dark brown, moist, trace med to coarse Sand and Organics | Pb | |
| 1.5 | 225.5 | | | | | | | |
| 2 | 225 | MC/GC | | | 2 | Clayey SILT and COBBLE, brown, very moist, trace fine to med Sand, fine to coarse Gravel, and Organics | Pb | |
| 2.5 | 224.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B72s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 3/4/08 | Survey ID | : B-72 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799628.81 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551565.70 |
| Driller | : URS | Elevation | : 229 |
| Boring ID | : 334-B72 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 229 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 229 | | | | | | | |
| .5 | 228.5 | | | | | | | |
| 1 | 228 | SM/GM | | | 1 | Silty fine SAND and fine to coarse GRAVEL, brown, very moist, trace Organics | Pb | |
| 1.5 | 227.5 | | | | | | | |
| 2 | 227 | | | | | | | |
| 2.5 | 226.5 | | | | | | | |
| 3 | | | | | | | | |

06-07-2010 \\Somersetfs01\dupont$\Pompton Lakes Works\Northern Manufacturing RIR\Quicklog Boring Logs\2008\334-B72s.bor

# LOG OF BORING 334-B73s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/15/08 | Survey ID | : B-73 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799617.58 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551593.52 |
| Driller | : URS | Elevation | : 229 |
| Boring ID | : 334-B73 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 229 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 229 | | | | | | | |
| .5 | 228.5 | | | | | | | |
| 1 | 228 | MC | | | 1 | Clayey SILT, brown, moist, some Sand, little med to coarse Sand, trace fine Gravel and Organics | Pb | |
| 1.5 | 227.5 | | | | | | | |
| 2 | 227 | MS | | | 2 | fine to coarse Sandy SILT, brown, moist, some med to coarse Gravel and Organics | Pb | |
| 2.5 | 226.5 | | | | | | | |
| 3 | | | | | | | | |

06-07-2010 \\Somersetfs01\dupont$\Pompton Lakes Works\Northern Manufacturing RIR\Quicklog Boring Logs\2008\334-B73s.bor

# LOG OF BORING 334-B74s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 3/4/08 | Survey ID | : B-74 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799606.34 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551621.34 |
| Driller | : URS | Elevation | : 229 |
| Boring ID | : 334-B74 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 229 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 229 | | | | | | | |
| .5 | 228.5 | | | | | | | |
| 1 | 228 | SM/GM | | | 1 | Silty fine to coarse SAND and fine to coarse GRAVEL, brown / black, very moist, little Cobble, trace Organics | Pb | |
| 1.5 | 227.5 | | | | | | | |
| 2 | 227 | SP/GP | | | 2 | fine to coarse SAND and fine to coarse GRAVEL, brown, very moist | Pb | |
| 2.5 | 226.5 | | | | | | | |
| 3 | | | | | | | | |

06-07-2010 \\Somersetfs01\dupont$\Pompton Lakes Works\Northern Manufacturing RIR\Quicklog Boring Logs\2008\334-B74s.bor

# LOG OF BORING 334-B75s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/12/08 | Survey ID | : B-75 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799601.00 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551554.47 |
| Driller | : URS | Elevation | : 228 |
| Boring ID | : 334-B75 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 228 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 228 | | | | | | | |
| .5 | 227.5 | | | | | | | |
| 1 | 227 | MS | | | 1 | fine Sandy SILT, brown, moist, some fine to coarse Gravel, trace med to coarse Sand and Organics | Pb | |
| 1.5 | 226.5 | | | | | | | |
| 2 | 226 | MS/CS | | | 2 | fine to coarse Sandy SILT and CLAY, brown, moist, some med to coarse Gravel, trace Organics | Pb | |
| 2.5 | 225.5 | | | | | | | |
| 3 | | | | | | | | |

06-07-2010 \\Somersetfs01\dupont$\Pompton Lakes Works\Northern Manufacturing RIR\Quicklog Boring Logs\2008\334-B75s.bor

# LOG OF BORING 334-B76s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/15/08 | Survey ID | : B-76 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799589.76 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551582.29 |
| Driller | : URS | Elevation | : 228 |
| Boring ID | : 334-B76 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 228 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 228 | | | | | | | |
| .5 | 227.5 | | | | | | | |
| 1 | 227 | MS | | | 1 | fine Sandy SILT, brown, moist, some med to coarse Sand and coarse Gravel, trace Organics | Pb, MS, MSD, DUP | |
| 1.5 | 226.5 | | | | | | | |
| 2 | 226 | SP/GP | | | 2 | fine to coarse SAND and fine to coarse GRAVEL, brown, moist, trace Organics | Pb | |
| 2.5 | 225.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B77s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/7/08 | Survey ID | : B-77 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799578.52 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551610.10 |
| Driller | : URS | Elevation | : 228 |
| Boring ID | : 334-B77 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 228 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 228 | | | | | | | |
| .5 | 227.5 | | | | | | | |
| 1 | 227 | SP/GP | | | 1 | fine to med SAND and med to coarse GRAVEL, brown, moist, little coarse Sand and fine Gravel, trace Silt and Organics | Pb | |
| 1.5 | 226.5 | | | | | | | |
| 2 | 226 | SP/GP | | | 2 | fine to med SAND and fine to coarse GRAVEL, light brown, very moist, trace Silt | Pb | |
| 2.5 | 225.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B78s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/8/08 | Survey ID | : B-78 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799583.32 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551572.30 |
| Driller | : URS | Elevation | : 228 |
| Boring ID | : 334-B78 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 228 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 228 | | | | | | | Samples collected 1 ft West of surveyed location. |
| .5 | 227.5 | | | | | | | |
| 1 | 227 | MC | | | 1 | Clayey SILT, brown, moist, some fine to med Sand and coarse Gravel, trace Organics | Pb | |
| 1.5 | 226.5 | | | | | | | |
| 2 | 226 | SP/GP | | | 2 | fine to med SAND and coarse GRAVEL, brown, moist, little fine to med Gravel and Silt, trace Organics | Pb | |
| 2.5 | 225.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B79s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/7/08 | Survey ID | : B-79 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799572.07 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551600.12 |
| Driller | : URS | Elevation | : 228 |
| Boring ID | : 334-B79 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 228 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 228 | | | | | | | |
| .5 | 227.5 | | | | | | | |
| 1 | 227 | SM | | | 1 | Silty fine SAND, brown, very moist, some med to coarse Gravel and Cobbles, trace med Sand and Organics | Pb | |
| 1.5 | 226.5 | | | | | | | |
| 2 | 226 | SP/GP | | | 2 | fine to med SAND and med coarse GRAVEL, brown, very moist, some fine Gravel and Cobbles, trace coarse Sand | Pb | |
| 2.5 | 225.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B80s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/8/08 | Survey ID | : B-80 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799555.50 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551561.04 |
| Driller | : URS | Elevation | : 228 |
| Boring ID | : 334-B80 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 228 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 228 | | | | | | | |
| .5 | 227.5 | | | | | | | |
| 1 | 227 | MS/GP | | | 1 | fine to coarse Sandy SILT and med to coarse Gravel, brown, moist, trace Organics | Pb | |
| 1.5 | 226.5 | | | | | | | |
| 2 | 226 | MS/GP | | | 2 | fine to med Sandy SILT and coarse Gravel, brown, moist, little fine to med Gravel | Pb | |
| 2.5 | 225.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B81s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/7/08 | Survey ID | : B-81 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799544.28 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551588.87 |
| Driller | : URS | Elevation | : 228 |
| Boring ID | : 334-B81 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 228 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 228 | | | | | | | |
| .5 | 227.5 | | | | | | | |
| 1 | 227 | MS | | | 1 | fine Sandy SILT, brown, moist, trace med Sand and Organics | Pb | |
| 1.5 | 226.5 | | | | | | | |
| 2 | 226 | SP/GP | | | 2 | fine to coarse SAND and fine GRAVEL, brown, slightly moist, little med to coarse Gravel | Pb | |
| 2.5 | 225.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B82s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/8/08 | Survey ID | : B-82 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799527.66 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551549.76 |
| Driller | : URS | Elevation | : 227 |
| Boring ID | : 334-B82 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 227 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 227 | | | | | | | Samples collected 1 ft South of surveyed location. |
| .5 | 226.5 | | | | | | | |
| 1 | 226 | MS | | | 1 | fine Sandy SILT, brown, very moist, med to coarse Gravel, little coarse Sand | Pb | |
| 1.5 | 225.5 | | | | | | | |
| 2 | 225 | MS/GP | | | 2 | fine Sandy SILT and fine to coarse Gravel, brown, moist, some coarse Sand, trace Organics | Pb | |
| 2.5 | 224.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B83s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/7/08 | Survey ID | : B-83 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799516.46 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551577.63 |
| Driller | : URS | Elevation | : 227 |
| Boring ID | : 334-B83 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 227 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 227 | | | | | | | |
| .5 | 226.5 | | | | | | | |
| 1 | 226 | SP/GP | | | 1 | fine to med SAND and coarse GRAVEL, brown, moist, little coarse Sand, trace fine to med Gravel | Pb | |
| 1.5 | 225.5 | | | | | | | |
| 2 | 225 | SP/GP | | | 2 | med SAND and coarse GRAVEL, brown, moist, trace fine and coarse Sand and med Gravel | Pb | |
| 2.5 | 224.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B84s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/7/08 | Survey ID | : B-84 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799499.88 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551538.57 |
| Driller | : URS | Elevation | : 223 |
| Boring ID | : 334-B84 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 223 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 223 | | | | | | | |
| .5 | 222.5 | | | | | | | |
| 1 | 222 | SP/GP | | | 1 | fine SAND and coarse GRAVEL, brown, moist, little med to coarse Sand and fine to med Gravel, trace Silt and Organics | Pb | |
| 1.5 | 221.5 | | | | | | | |
| 2 | 221 | SP | | | 2 | med SAND, brown, slightly moist, some fine and coarse Sand, little fine to coarse Gravel | Pb | |
| 2.5 | 220.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B85s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/7/08 | Survey ID | : B-85 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799488.64 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551566.40 |
| Driller | : URS | Elevation | : 219 |
| Boring ID | : 334-B85 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 219 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 219 | | | | | | | |
| .5 | 218.5 | | | | | | | |
| 1 | 218 | MS/GP | | | 1 | fine to med Sandy SILT and coarse GRAVEL, brown, moist, some fine to med Gravel, trace Organics | Pb | |
| 1.5 | 217.5 | | | | | | | |
| 2 | 217 | SP/GP | | | 2 | fine to coarse SAND and coarse GRAVEL, brown, slightly moist, little fine to med Gravel, trace Organics | Pb | |
| 2.5 | 216.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B86s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/12/08 | Survey ID | : B-86 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799472.06 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551527.35 |
| Driller | : URS | Elevation | : 214 |
| Boring ID | : 334-B86 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 214 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 214 | | | | | | | |
| .5 | 213.5 | | | | | | | |
| 1 | 213 | SP/GP | | | 1 | fine to med SAND and fine to coarse GRAVEL, brown, slightly moist, little coarse Sand, trace Organics | Pb | |
| 1.5 | 212.5 | | | | | | | |
| 2 | 212 | SP/GP | | | 2 | fine to med SAND and fine to coarse GRAVEL, brown, slightly moist, trace coarse Sand and Silt | Pb | |
| 2.5 | 211.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B87s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/8/08 | Survey ID | : B-87 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799460.83 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551555.16 |
| Driller | : URS | Elevation | : 210 |
| Boring ID | : 334-B87 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 210 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 210 | | | | | | | |
| .5 | 209.5 | | | | | | | |
| 1 | 209 | SM | | | 1 | Silty fine SAND, black, moist, some med to coarse Gravel, trace med Sand and Organics | Pb | |
| 1.5 | 208.5 | | | | | | | |
| 2 | 208 | SM | | | 2 | Silty fine SAND, brown, moist, some med to coarse Gravel, trace med Sand and Organics | Pb | |
| 2.5 | 207.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B88s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/8/08 | Survey ID | : B-88 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799531.73 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551512.86 |
| Driller | : URS | Elevation | : 225 |
| Boring ID | : 334-B88 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 225 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 225 | | | | | | | |
| .5 | 224.5 | | | | | | | |
| 1 | 224 | SM/GP | | | 1 | Silty fine SAND and coarse GRAVEL, brown, moist, some fine to med Gravel, little med to coarse Sand, trace Organics | Pb | |
| 1.5 | 223.5 | | | | | | | |
| 2 | 223 | SP/GP | | | 2 | med to coarse SAND and coarse GRAVEL, brown, moist, little fine Sand, Silt, and fine to med Gravel, trace Organics | Pb | |
| 2.5 | 222.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B89s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 3/27/08 | Survey ID | : B-89 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799469.28 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551704.45 |
| Driller | : URS | Elevation | : 227 |
| Boring ID | : 334-B89 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 227 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 227 | | | | | | | |
| .5 | 226.5 | | | | | | | |
| 1 | 226 | SP | | | 1 | fine to med SAND, dark brown, moist, some coarse Sand & fine to coarse Gravel, trace organics & Silt | Pb | |
| 1.5 | 225.5 | | | | | | | |
| 2 | 225 | SP/GP | | | 2 | med to coarse SAND & med to coarse GRAVEL, brown, moist, little fine Sand & fine Gravel | Pb | |
| 2.5 | 224.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B90s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 3/27/08 | Survey ID | : B-90 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799461.47 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551725.94 |
| Driller | : URS | Elevation | : 227 |
| Boring ID | : 334-B90 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 227 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 227 | | | | | | | |
| .5 | 226.5 | | | | | | | |
| 1 | 226 | SP/GP | | | 1 | fine to coarse SAND & fine to coarse GRAVEL (poorly sorted), brown, slightly moist, trace organics | Pb | |
| 1.5 | 225.5 | | | | | | | |
| 2 | 225 | SP/GP | | | 2 | fine to coarse SAND & fine to coarse GRAVEL (poorly sorted), brown, slightly moist | Pb | |
| 2.5 | 224.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B91s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 4/3/08 | Survey ID | : B-91 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799585.39 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551991.16 |
| Driller | : URS | Elevation | : 252 |
| Boring ID | : 334-B91 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 252 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 252 | | | | | | | Sample taken 5 ft northwest of surveryed location. |
| .5 | 251.5 | | | | | | | |
| 1 | 251 | ML | | | 1 | SILT, brown, moist, trace organics & fine Sand | Pb | |
| 1.5 | 250.5 | | | | | | | |
| 2 | 250 | | | | | | | |
| 2.5 | 249.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B92s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 4/3/08 | Survey ID | : B-92 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799494.71 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 552273.67 |
| Driller | : URS | Elevation | : 302 |
| Boring ID | : 334-B92 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 302 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 302 | | | | | | | Sample taken 10 ft west of surveyed location. |
| .5 | 301.5 | | | | | | | |
| 1 | 301 | CM | | | 1 | Silty CLAY, gray / brown, very moist to wet, some fine Sand, trace coarse Gravel, organics | Pb | |
| 1.5 | 300.5 | | | | | | | |
| 2 | 300 | MS | | | 2 | fine Sandy SILT, light brown (gray mottling), very moist, little Clay, trace med Sand | Pb | |
| 2.5 | 299.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B93s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 4/3/08 | Survey ID | : B-93 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799491.75 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 552315.98 |
| Driller | : URS | Elevation | : 303 |
| Boring ID | : 334-B93 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 303 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 303 | | | | | | | |
| .5 | 302.5 | | | | | | | |
| 1 | 302 | MS | | | 1 | fine to med Sandy SILT, light brown, very moist, trace organics & fine to coarse Gravel | Pb | |
| 1.5 | 301.5 | | | | | | | |
| 2 | 301 | | | | | | | |
| 2.5 | 300.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B94s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 4/3/08 | Survey ID | : B-94 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799475.05 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 552250.99 |
| Driller | : URS | Elevation | : 302 |
| Boring ID | : 334-B94 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 302 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 302 | | | | | | | Sample taken 6 ft south of surveyed location. |
| .5 | 301.5 | | | | | | | |
| 1 | 301 | MS | | | 1 | fine Sandy SILT, light brown, moist, little Clay, trace organics & coarse Gravel | Pb | |
| 1.5 | 300.5 | | | | | | | |
| 2 | 300 | MS | | | 2 | fine Sandy SILT, light brown, moist, little Clay, trace organics & coarse Gravel & brick | Pb | |
| 2.5 | 299.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B95s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 4/3/08, 11/17/08 | Survey ID | : B-95 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799472.42 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 552293.21 |
| Driller | : URS | Elevation | : 305 |
| Boring ID | : 334-B95 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 305 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 305 | | | | | | | |
| .5 | 304.5 | | | | | | | |
| 1 | 304 | MS | | | 1 | fine Sandy SILT, light brown & black, moist, little fine to coarse Gravel, trace organics | Pb | |
| 1.5 | 303.5 | | | | | | | |
| 2 | 303 | ML | | | 2 | SILT, light brown, very moist / wet (mucky), little fine Sand & organics, trace coarse Gravel | Pb | |
| 2.5 | 302.5 | | | | | | | |
| 3 | 302 | SM | | | 3 | Silty fine to coarse SAND, grey, wet, litte coarse Gravel and Cobble | Pb | |
| 3.5 | 301.5 | | | | | Refusal on Bedrock | | |
| 4 | | | | | | | | |

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# LOG OF BORING 334-B96s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 4/3/08 | Survey ID | : B-96 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799452.44 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 552270.71 |
| Driller | : URS | Elevation | : 305 |
| Boring ID | : 334-B96 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 305 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 305 | | | | | | | Sample taken 12 ft east of surveyed location. |
| .5 | 304.5 | | | | | | | |
| 1 | 304 | MS | | | 1 | fine Sandy SILT, light brown, moist, trace organics & fine to coarse Gravel | Pb | |
| 1.5 | 303.5 | | | | | | | |
| 2 | 303 | MS | | | 2 | fine Sandy SILT, light brown, moist, fine to coarse Gravel | Pb | |
| 2.5 | 302.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B97s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 4/3/08 | Survey ID | : B-97 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799449.52 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 552313.02 |
| Driller | : URS | Elevation | : 307 |
| Boring ID | : 334-B97 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 307 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 307 | | | | | | | Sample taken 1 ft north of surveyed location. |
| .5 | 306.5 | | | | | | | |
| 1 | 306 | ML | | | 1 | SILT, light brown, moist, trace organics & fine Sand & coarse Gravel | Pb | |
| 1.5 | 305.5 | | | | | | | |
| 2 | 305 | ML | | | 2 | SILT, light brown, moist, little Clay, trace organics & fine Sand & coarse Gravel (tight) | Pb | |
| 2.5 | 304.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B98s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 4/3/08 | Survey ID | : B-98 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799429.79 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 552290.36 |
| Driller | : URS | Elevation | : 309 |
| Boring ID | : 334-B98 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 309 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 309 | | | | | | | Sample taken 1 ft south of surveyed location. |
| .5 | 308.5 | | | | | | | |
| 1 | 308 | SM | | | 1 | Silty fine to med SAND, brown, moist, little med to coarse Gravel, trace organics & Clay | Pb, MS, MSD, DUP | |
| 1.5 | 307.5 | | | | | | | |
| 2 | 307 | SM | | | 2 | Silty fine to coarse SAND, brown, moist, little fine to coarse Gravel, trace organics | Pb | |
| 2.5 | 306.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B99s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 3/26/08 | Survey ID | : B-99 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799354.29 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 552444.73 |
| Driller | : URS | Elevation | : 324 |
| Boring ID | : 334-B99 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 324 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 324 | | | | | | | Sample taken 10 ft East of surveyed location. |
| .5 | 323.5 | | | | | | | |
| 1 | 323 | SM | | | 1 | Silty fine to med SAND, brown, moist, trace med to coarse Gravel | Pb | |
| 1.5 | 322.5 | | | | | | | |
| 2 | 322 | SM | | | 2 | Silty fine to med SAND, brown, moist, trace med to coarse Gravel | Pb | |
| 2.5 | 321.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B100s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 3/26/08, 11/17/08 | Survey ID | : B-100 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799324.72 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 552434.87 |
| Driller | : URS | Elevation | : 327 |
| Boring ID | : 334-B100 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 327 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 327 | | | | | | | |
| .5 | 326.5 | | | | | | | |
| 1 | 326 | SM | | | 1 | Silty fine SAND, brown / black, moist, trace organics & coarse Gravel & pieces of brick | Pb | |
| 1.5 | 325.5 | | | | | | | |
| 2 | 325 | MS | | | 2 | fine Sandy SILT, brown / black (slightly mottled), very moist, trace med Sand & coarse Gravel | Pb | |
| 2.5 | 324.5 | | | | | | | |
| 3 | 324 | ML | | | 3 | SILT, brown, moist, some fine Sand, trace Organics and medium to coarse Sand | Pb | |
| 3.5 | 323.5 | | | | | | | |
| 4 | | | | | | | | |

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# LOG OF BORING 334-B101s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 3/26/08 | Survey ID | : B-101 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799787.75 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 552234.08 |
| Driller | : URS | Elevation | : 305 |
| Boring ID | : 334-B101 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 305 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 305 | | | | | | | Sample taken 2 ft East of surveyed location |
| .5 | 304.5 | | | | | | | |
| 1 | 304 | MS | | | 1 | fine Sandy SILT, dark brown, wet (saturated), trace med Sand & organics | Pb | |
| 1.5 | 303.5 | | | | | | | |
| 2 | 303 | | | | | | | |
| 2.5 | 302.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B102s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 3/26/08 | Survey ID | : B-102 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799798.50 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 552262.16 |
| Driller | : URS | Elevation | : 306 |
| Boring ID | : 334-B102 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 306 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 306 | | | | | | | |
| .5 | 305.5 | | | | | | | |
| 1 | 305 | MS | | | 1 | fine Sandy SILT, brown, wet (saturated / mucky), some cobble / coarse Gravel | Pb | |
| 1.5 | 304.5 | | | | | | | |
| 2 | 304 | | | | | | | |
| 2.5 | 303.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B103s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 3/26/08 | Survey ID | : B-103 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799770.03 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 552283.80 |
| Driller | : URS | Elevation | : 319 |
| Boring ID | : 334-B103 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 319 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 319 | | | | | | | |
| .5 | 318.5 | | | | | | | |
| 1 | 318 | MS | | | 1 | fine Sandy SILT, brown (red / light brown clasts), very moist, trace Clay & fine Gravel & organics | Pb, MS, MSD, DUP | |
| 1.5 | 317.5 | | | | | | | |
| 2 | 317 | SP/ML | | | 2 | SILT & fine SAND, brown, very moist to wet, some med Sand, trace organics & Clay & fine to coarse Gravel | Pb | |
| 2.5 | 316.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B104s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 3/26/08, 11/20/08 | Survey ID | : B-104 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799760.34 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 552244.03 |
| Driller | : URS | Elevation | : 308 |
| Boring ID | : 334-B104 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 308 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 308 | | | | | | | Sample 3 taken on 11/17/08<br>Sample 4 taken on 11/21/08 |
| .5 | 307.5 | | | | | | | |
| 1 | 307 | SP/ML | | | 1 | fine SAND & SILT, brown, very moist, trace organics & coarse Gravel | Pb | |
| 1.5 | 306.5 | | | | | | | |
| 2 | 306 | SP | | | 2 | fine to med SAND, brown (black layer), very moist to wet, trace organics | Pb | |
| 2.5 | 305.5 | | | | | | | |
| 3 | 305 | SM | | | 3 | fine Sandy SILT, brown, very moist to wet, some Clay, little med to coarse Sand and Organics | Pb | |
| 3.5 | 304.5 | SM | | | 4 | Silty fine to coarse SAND (Muckey), brown, wet, little coarse Gravel & Organics | Pb | |
| 4 | | | | | | | | |

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# LOG OF BORING 334-B105s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 11/20/08 | Survey ID | : B-105 |
| Drilling Method | : Hand Auger | Northing Coord. | : |
| Sampling Method | : Trowel / Pan | Easting Coord. | : |
| Driller | : URS | Elevation | : |
| Boring ID | : 334-B105 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | | SM | | | 1 | Silty fine to coarse SAND (top soil), dark brown, moist, trace Organics | As | |
| .5 | | | | | | | | |
| 1 | | | | | | | | |
| 1.5 | | | | | | | | |
| 2 | | | | | | | | |
| 2.5 | | | | | | | | |
| 3 | | | | | | | | |
| 3.5 | | | | | | | | |
| 4 | | | | | | | | |

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# LOG OF BORING 334-B106s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 11/20/08 | Survey ID | : B-106 |
| Drilling Method | : Hand Auger | Northing Coord. | : |
| Sampling Method | : Trowel / Pan | Easting Coord. | : |
| Driller | : URS | Elevation | : |
| Boring ID | : 334-B106 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | | SP/F43 | | | 1 | fine to coarse SAND / ASH / SLAG / CINDER, black, slightly moist, little Organics & fine to coarse Gravel | As | |
| .5 | | | | | | | | |
| 1 | | | | | | | | |
| 1.5 | | | | | | | | |
| 2 | | | | | | | | |
| 2.5 | | | | | | | | |
| 3 | | | | | | | | |
| 3.5 | | | | | | | | |
| 4 | | | | | | | | |

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# LOG OF BORING 334-B107s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 11/20/08 | Survey ID | : B-107 |
| Drilling Method | : Hand Auger | Northing Coord. | : |
| Sampling Method | : Trowel / Pan | Easting Coord. | : |
| Driller | : URS | Elevation | : |
| Boring ID | : 334-B107 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | SP/ASH | | | 1 | fine to coarse SAND / ASH / SLAG / CINDER, black, slightly moist | As | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | | | | | | | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | | | | | | | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-B108s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 11/20/08 | Survey ID | : B-108 |
| Drilling Method | : Hand Auger | Northing Coord. | : |
| Sampling Method | : Trowel / Pan | Easting Coord. | : |
| Driller | : URS | Elevation | : |
| Boring ID | : 334-B108 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | | MS | | | 1 | fine Sandy SILT (with Organic top-soil), brown, slightly moist, some Organics, little medium Sand, trace coarse Sand | As | |
| .5 | | | | | | | | |
| 1 | | | | | | | | |
| 1.5 | | | | | | | | |
| 2 | | | | | | | | |
| 2.5 | | | | | | | | |
| 3 | | | | | | | | |
| 3.5 | | | | | | | | |
| 4 | | | | | | | | |

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# LOG OF BORING 334-B109s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 11/17/08, 11/21/08 | Survey ID | : B-109 |
| Drilling Method | : Hand Auger | Northing Coord. | : |
| Sampling Method | : Trowel / Pan | Easting Coord. | : |
| Driller | : URS | Elevation | : |
| Boring ID | : 334-B109 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | | ML | | | 1 | SILT, brown, moist, little Clay & Organics, trace fine to medium Sand | Pb | Step off 22 ft from B-100 |
| .5 | | | | | | | | |
| 1 | | | | | | | | |
| 1.5 | | | | | | | | |
| 2 | | | | | | | | |
| 2.5 | | | | | | | | |
| 3 | | | | | | | | |
| 3.5 | | | | | | | | |
| 4 | | | | | | | | |

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# LOG OF BORING 334-B110s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 11/21/08 | Survey ID | : B-110 |
| Drilling Method | : Hand Auger | Northing Coord. | : |
| Sampling Method | : Trowel / Pan | Easting Coord. | : |
| Driller | : URS | Elevation | : |
| Boring ID | : 334-B110 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | | MH | | | 1 | Organic SILT (topsoil), black, slightly moist, trace medium to coarse Sand | Pb | Step off from B-100 |
| .5 | | | | | | | | |
| 1 | | | | | | | | |
| 1.5 | | | | | | | | |
| 2 | | | | | | | | |
| 2.5 | | | | | | | | |
| 3 | | | | | | | | |
| 3.5 | | | | | | | | |
| 4 | | | | | | | | |

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# LOG OF BORING 334-P1s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/15/08, 1/21/08 | Survey ID | : P-1 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799287.87 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550705.80 |
| Driller | : URS | Elevation | : 209 |
| Boring ID | : 334-P1 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 209 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 209 | | | | | | | |
| | | SP | | | 1 | fine to med SAND, grey, moist, trace coarse Sand and organics | Pb | Sample 2 taken on 11/20/08<br>Sample 3 taken on 11/21/08 |
| .5 | 208.5 | | | | | | | |
| 1 | 208 | SM | | | 2 | Silty fine SAND, brown, moist, little medium Sand & Organics & medium to coarse Gravel | Pb | |
| 1.5 | 207.5 | | | | | | | |
| 2 | 207 | | | | | | | |
| 2.5 | 206.5 | | | | | | | |
| 3 | 206 | | | | | | | |
| 3.5 | 205.5 | SP/GP | | | 3 | medium SAND & medium to coarse GRAVEL, brown, wet to very moist, trace fine and coarse Sand & fine Gravel | Pb | |
| 4 | | | | | | | | |

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# LOG OF BORING 334-P2s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/5/08, 11/20/08 | Survey ID | : P-2 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799268.16 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550785.25 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-P2 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | |
| | | OL | | | 1 | Organic SILT (soil), dark brown / black, trace fine Sand | Pb | Sample 2 taken on 11/20/08 |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | SM | | | 2 | Silty fine SAND, brown, moist to very moist, some Organics, trace medium to coarse Sand | Pb | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | | | | | | | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-P3s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/5/08 | Survey ID | : P-3 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799168.33 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550659.00 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-P3 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | | | | | | | |
| | | OL | | | 1 | Organic SILT, dark brown / black, moist, trace fine Sand | As | |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | | | | | | | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | | | | | | | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-P4s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/5/08, 11/18/08 | Survey ID | : P-4 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799120.84 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550726.41 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-P4 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| | | SM | | | 1 | Silty fine SAND, reddish brown, moist, little med to coarse Sand and Organics | As | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | SM | | | 2 | Silty fine to medium SAND, grey-brown & dark brown, very moist, little Organics, trace Clay and coarse Sand | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | | | | | | | |
| 2.5 | 203.5 | | | | | | | |
| 3 | 203 | SP | | | 3 | fine to coarse SAND, light brown to brown, trace Silt | As | |
| 3.5 | 202.5 | | | | | | | |
| 4 | | | | | | | | |

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# LOG OF BORING 334-P5s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/5/08, 11/20/08 | Survey ID | : P-5 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799040.37 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550717.61 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-P5 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | ML/SP | | | 1 | SILT and fine SAND (soil), dark grey / brown, moist, little Organics | As | Sample 2 taken on 11/17/08<br>Sample 3 taken on 11/20/08<br>Sample 4 taken on 11/21/08<br>Sample 5 taken on 11/21/08 |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | SC | | | 2 | Clayey fine to medium SAND, brown, moist, trace coarse Sand and Organics | As | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | SP | | | 3 | fine to medium SAND, brown / red-brown, moist, little fine to coarse Gravel, trace coarse Sand & Silt & Organics | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | 203 | SP/GP | | | 4 | fine to moist SAND & fine to coarse GRAVEL, brown / red-brown, very moist, trace Silt & coarse Sand | As | |
| 3.5 | 202.5 | | | | | | | |
| 4 | 202 | SP/GP | | | 5 | fine to coarse SAND and fine to coarse GRAVEL, dark brown, very moist, little Silt & fine Gravel | As | |
| 4.5 | 201.5 | | | | | Refusal on Gravel / Cobble | | |
| 5 | | | | | | | | |

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# LOG OF BORING 334-P6s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/5/08, 11/21/08 | Survey ID | : P-6 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798924.15 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550673.81 |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-P6 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| | | OL | | | 1 | Organic SILT, dark brown / black, very moist, little fine Sand | As | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | | | | | | | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | MH | | | 2 | fine Sandy Organic SILT, tr fine to medium Sand & fine to coarse Gravel & Clay | As | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

06-07-2010 \\Somersetfs01\dupont$\Pompton Lakes Works\Northern Manufacturing RIR\Quicklog Boring Logs\2008\334-P6s.bor

# LOG OF BORING 334-P7s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/5/08 | Survey ID | : P-7 |
| Drilling Method | : Hand Auger | Northing Coord. | : 798959.39 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550597.73 |
| Driller | : URS | Elevation | : 208 |
| Boring ID | : 334-P7 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 208 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 208 | SM | | | 1 | Silty fine to med SAND, brown, wet, some coarse Sand and Gravel, trace Organics | As | |
| .5 | 207.5 | | | | | | | |
| 1 | 207 | | | | | | | |
| 1.5 | 206.5 | | | | | | | |
| 2 | 206 | | | | | | | |
| 2.5 | 205.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-P8s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/5/08, 11/18/08 | Survey ID | : P-8 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799140.24 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 550575.95 |
| Driller | : URS | Elevation | : 207 |
| Boring ID | : 334-P8 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 207 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 207 | MS | | | 1 | fine Sandy SILT, dark brown / black, moist, little med to coarse Sand and Ash / Cinder / Slag | As | |
| .5 | 206.5 | | | | | | | |
| 1 | 206 | MH | | | 2 | SILT (Organic & Muddy), black, wet, trace fine to medium Sand | As | |
| 1.5 | 205.5 | | | | | | | |
| 2 | 205 | | | | | | | |
| 2.5 | 204.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-P9s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/6/08 | Survey ID | : P-9 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799702.59 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551542.65 |
| Driller | : URS | Elevation | : 224 |
| Boring ID | : 334-P9 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 224 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 224 | | | | | | | |
| | | SP/GP | | | 1 | fine to med SAND and fine to med GRAVEL, brown, very moist, some coarse Gravel, trace coarse Sand and Organics | Pb | |
| .5 | 223.5 | | | | | | | |
| 1 | 223 | | | | | | | |
| 1.5 | 222.5 | | | | | | | |
| 2 | 222 | | | | | | | |
| 2.5 | 221.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-P10s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/6/08 | Survey ID | : P-10 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799670.35 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551636.73 |
| Driller | : URS | Elevation | : 229 |
| Boring ID | : 334-P10 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 229 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 229 | | | | | | | |
| | | SP/GP | | | 1 | fine to med SAND and fine to med GRAVEL, dark brown, very moist, some coarse Gravel, trace coarse Sand, Silt, and Organics | Pb | |
| .5 | 228.5 | | | | | | | |
| 1 | 228 | | | | | | | |
| 1.5 | 227.5 | | | | | | | |
| 2 | 227 | | | | | | | |
| 2.5 | 226.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-P11s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 2/7/08, 11/18/08 | Survey ID | : P-11 |
| Drilling Method | : Hand Auger | Northing Coord. | : 799545.30 |
| Sampling Method | : Trowel / Pan | Easting Coord. | : 551606.17 |
| Driller | : URS | Elevation | : 228 |
| Boring ID | : 334-P11 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 228 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 228 | | | | | | | |
| | | SM | | | 1 | Silty fine SAND (soil), dark brown, moist, some med to coarse Sand, little fine to coarse Gravel, trace Organics | Pb | |
| .5 | 227.5 | | | | | | | |
| 1 | 227 | SM | | | 2 | Silty fine to coarse SAND, reddish-brown, moist, little fine to coarse Gravel & Cobble, trace Organics | Pb, MS, MSD, DUP | |
| 1.5 | 226.5 | | | | | | | |
| 2 | 226 | | | | | | | |
| 2.5 | 225.5 | | | | | | | |
| 3 | | | | | | | | |

06-07-2010 \\Somersetfs01\dupont$\Pompton Lakes Works\Northern Manufacturing RIR\Quicklog Boring Logs\2008\334-P11s.bor

# LOG OF BORING 334-P12s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 11/20/08 | Survey ID | : P-12 |
| Drilling Method | : Hand Auger | Northing Coord. | : |
| Sampling Method | : Trowel / Pan | Easting Coord. | : |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-P12 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | MH | | | 1 | Organic SILT (topsoil), dark brown, slightly moist, some fine Sand, trace medium to coarse Sand & coarse Gravel | Pb | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | | | | | | | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | | | | | | | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-P13s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 11/18/08 | Survey ID | : P-13 |
| Drilling Method | : Hand Auger | Northing Coord. | : |
| Sampling Method | : Trowel / Pan | Easting Coord. | : |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-P13 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | ML | | | 1 | SILT (Organic Topsoil), black, slightly moist, trace fine to medium Sand and medium Gravel | As | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | | | | | | | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | | | | | | | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-P14s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 11/21/08 | Survey ID | : P-14 |
| Drilling Method | : Hand Auger | Northing Coord. | : |
| Sampling Method | : Trowel / Pan | Easting Coord. | : |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-P14 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | MH | | | 1 | Organic SILT, dark brown to black, some fine Sand | As | Sample collected about 70 ft. East of 334-B4 |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | | | | | | | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | | | | | | | |
| 2.5 | 203.5 | | | | | | | |
| 3 | 203 | | | | | | | |
| 3.5 | 202.5 | | | | | | | |
| 4 | | | | | | | | |

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# LOG OF BORING 334-P15s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/15/09 | Survey ID | : P-15 |
| Drilling Method | : Hand Auger | Northing Coord. | : |
| Sampling Method | : Trowel / Pan | Easting Coord. | : |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-P15 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | SP/GP | | | 1 | fine to coarse SAND & fine to coarse GRAVEL / ASH / CINDER / SLAG, black, little Organics | As | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | | | | | | | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | | | | | | | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# LOG OF BORING 334-P16s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
NRD
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 1/15/09 | Survey ID | : P-16 |
| Drilling Method | : Hand Auger | Northing Coord. | : |
| Sampling Method | : Trowel / Pan | Easting Coord. | : |
| Driller | : URS | Elevation | : |
| Boring ID | : 334-P16 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | | ML | | | 1 | SILT, brown, very moist, some Organics, little fine to medium Sand, trace coarse Sand & fine to coarse Gravel | As | |
| .5 | | | | | | | | |
| 1 | | | | | | | | |
| 1.5 | | | | | | | | |
| 2 | | | | | | | | |
| 2.5 | | | | | | | | |
| 3 | | | | | | | | |
| 3.5 | | | | | | | | |
| 4 | | | | | | | | |

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# LOG OF BORING 334-P17s



DuPont Pompton Lakes Works
Pompton Lakes, New Jersey 07442
Lake Inez
Project No. 18984480

| | | | |
|---|---|---|---|
| Date | : 11/18/08 | Survey ID | : P-17 |
| Drilling Method | : Hand Auger | Northing Coord. | : |
| Sampling Method | : Trowel / Pan | Easting Coord. | : |
| Driller | : URS | Elevation | : 206 |
| Boring ID | : 334-P17 | Geologist | : N Shorkey |

| Depth in Feet | Surf. Elev. 206 | USCS | GRAPHIC | Water Level | Samples | DESCRIPTION | Analysis | REMARKS |
|---|---|---|---|---|---|---|---|---|
| 0 | 206 | | | | | | | |
| | | SP/GP | | | 1 | fine to coarse SAND and fine GRAVEL, black, slightly moist, some medium to coarse Gravel & Cobble & Organics | As | |
| .5 | 205.5 | | | | | | | |
| 1 | 205 | | | | | | | |
| 1.5 | 204.5 | | | | | | | |
| 2 | 204 | | | | | | | |
| 2.5 | 203.5 | | | | | | | |
| 3 | | | | | | | | |

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# APPENDIX D
# BASELINE ECOLOGICAL EVALUATION

# NORTHERN MANUFACTURING AREA BASELINE ECOLOGICAL EVALUATION DUPONT POMPTON LAKES WORKS POMPTON LAKES, NEW JERSEY

Date: June 2010

Project No.: 18985563.00003

URS Corporation

335 Commerce Drive
Fort Washington, PA 19034

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Figure 2 Locations of Lots and AOCs

Figure 3 BEE Soil Sampling Locations

# Executive Summary

A baseline ecological evaluation (BEE) was conducted in Lots 3 and 4 of the Northern Manufacturing Area (NMA) at the DuPont Pompton Lakes Works site to determine whether additional ecological investigation or evaluations of remedial alternatives are warranted. The BEE was conducted in accordance with the requirements of the New Jersey Department of Environmental Protection (NJDEP) Technical Requirements for Site Remediation (NJTRSR) and ecological risk assessment guidance (USEPA, 1997).

The scope of the BEE places the assessment of potential ecological risk in the context of remedial strategies for the project area and satisfies the requirements of N.J.A.C. 7:26E-3:11 (NJDEP, 2010). The specific scope of work for the BEE includes identifying the co-occurrence of the following:

- Site-specific contaminants of potential ecological concern (COPECs);
- Environmentally sensitive natural resources (ESNRs) on or in the vicinity of the site; and
- Potential contaminant migration pathways to ESNRs.

The primary objective of the BEE is to evaluate existing information and analytical data for the site to determine whether additional ecological investigation or evaluations of remedial alternatives are warranted.

The project area is contained entirely within the New Jersey Highlands Preservation Area. Deciduous forests are the predominant covertype and comprise the matrix habitat within which all other habitat types exist. Other terrestrial/wetland habitats that exist within the forest matrix include mixed forested/scrub-shrub habitat on the floodplain of the Wanaque River and emergent, forested and/or riverine wetlands.

The baseline ecological evaluation of existing information and analytical data indicated that COPECs, ESNRs, and contaminant migration pathways co-occur in the project area. The primary contaminant migration pathway to ESNRs is the migration of COPECs from the decommissioning and remnants of facility structures to adjacent soils. As a result, the primary ecological exposure medium is soils adjacent to the remnants of former facility structures. COPECs identified in surficial soils adjacent to these structures include arsenic, copper, lead, mercury, selenium, zinc, and HMW PAHs. Further evaluation of remedial alternatives for the NMA should address potential ecological exposure to the COPECs identified in the BEE.

# Acronyms

| Acronym/Abbreviation | Definition |
|---|---|
| AMSL | Above mean sea level |
| AOC | Area of Concern |
| BEE | Baseline Ecological Evaluation |
| COPEC | Contaminants of Potential Ecological Concern |
| Eco-SSL | Ecological Soil Screening Level |
| ESL | Ecological Screening Level |
| ESNR | Environmentally Sensitive Natural Resource |
| GWIIA | New Jersey II-A groundwater standards |
| HMW PAHs | High molecular weight polynuclear aromatic hydrocarbons |
| LMW PAHs | Low molecular weight polynuclear aromatic hydrocarbons |
| NJDEP | New Jersey Department of Environmental Protection |
| NJRDCSCC | New Jersey Residential Direct Contact Soil Cleanup Criteria |
| NJRDCSRS | New Jersey Residential Direct Contact Soil Remediation Standards |
| NJTRSR | New Jersey Technical Requirements for Site Remediation |
| NMA | Northern Manufacturing Area |
| ORNL | Oak Ridge National Laboratory |
| PAH | Polynuclear Aromatic Hydrocarbons |
| PLW | Pompton Lakes Works |
| USEPA | U.S. Environmental Protection Agency |

# 1.0 Introduction

The New Jersey Department of Environmental Protection (NJDEP) Technical Requirements for Site Remediation (NJTRSR) requires that a Baseline Ecological Evaluation (BEE) be performed for contaminated sites in New Jersey consistent with Section 7:26E-3:11 of the regulations. The purpose of this evaluation is to ensure that the potential for ecological effects are investigated and addressed as part of the remediation process for the Northern Manufacturing Area (NMA) at the DuPont Pompton Lakes Works (PLW), located in Pompton Lakes, New Jersey (Figure 1).

As part of a Compensatory Restoration Administrative Consent Order "Natural Resource Damage Settlement" with the NJDEP effective June 30, 2005, E.I. DuPont de Nemours and Company (DuPont) will be donating two (2) parcels of property formerly associated with the PLW to the State of New Jersey. The parcels consist of Block 479, Lots 3, 4, and 5, are located in Passaic County, north of Interstate 287 (I-287) in the Borough of Wanaque (Figure 2). The total acreage of the 2 parcels is approximately 70 acres.

This report addresses Lots 3 and 4 (55 acres), hereafter referred to as the project area, where smokeless powder was manufactured between 1902 and the early 1920s. Lot 5 (15 acres) was used as buffer land and is not included in the evaluation, as no manufacturing took place in this area.

## 1.1 Scope and Objective

The scope of the BEE places the assessment of potential ecological risk in the context of remedial strategies for the project area and satisfies the requirements of N.J.A.C. 7:26E-3:11 (NJDEP, 2010). The specific scope of work for the BEE includes identifying the co-occurrence of the following:

- Site-specific contaminants of potential ecological concern (COPECs);
- Environmentally sensitive natural resources (ESNRs) on or in the vicinity of the site; and
- Potential contaminant migration pathways to ESNRs.

The primary objective of the BEE is to evaluate existing information and analytical data for the site to determine whether additional ecological investigation or evaluations of remedial alternatives are warranted.

# 2.0 Site Background

The following sections provide a detailed characterization of the project area, including a description of the physical setting and historical operations.

## 2.1 Physical Setting

The project area is located north of the I-287 Bridge over the Wanaque River, in the Borough of Wanaque, Passaic County New Jersey. The project area is within the Highlands Preservation Area. The Ramapo State Forest borders the project area on the east side, with commercial and residential land use to the north and west. Topography can be characterized as an incised river valley, with the lowest area being the Wanaque River at approximately 200 feet above mean sea level (amsl) where it bisects Lot 3. A broad floodway (500-700 feet wide) on either side of the river rises gradually to approximately 214 feet amsl, where it meets bedrock outcroppings. Bedrock rises abruptly to nearly 400 feet amsl on the east and west side of the river. Both the river valley and upland areas are heavily vegetated, with the exception of the areas immediately under the I-287 Bridge.

## 2.2 Historical Operations

Explosives manufacturing operations in the portion of the Wanaque River Valley (former Lake Inez Valley) being addressed pre-date the DuPont operating history. As described in the 1989 CH2MHILL *Operational History, Pompton Lakes Works*, the manufacturing of explosive products can be traced back to late 1800s (CH2MHILL, 1989). Detailed histories of this area are contained in the aforementioned report, as well as the 1994 *Former Operating Area Preliminary Assessment Report* (DuPont Environmental Remediation Services, 1994). A summary of these histories as it pertains to the project area is as follows:

- 1894-American Smokeless Powder Company opens and begins production on property purchased from H. Julius Smith in the north/northwestern area of the Lake Inez Valley.
- 1902-DuPont purchases the American Smokeless Powder Company plant, and continues production of smokeless powder (trade name Ballistite).
- 1926-DuPont ceases all operations and production in the Lake Inez Valley. A pumping station is maintained to supply water to the expanding production in the adjacent Acid Brook Valley.
- 1984-The Lake Inez dam is removed, draining the lake. North of the dam is no longer Lake Inez, and the region is now referred to as the Wanaque River Valley. The pumping station is decommissioned.
- 1988-DuPont and the NJDEP agree to investigate the impacts of manufacturing in the Wanaque River Valley.

- 1990-2004-Site investigation activities demonstrate lead and arsenic in soil in and around structures in Lots 3 and 4, Borough of Wanaque.
- 2005-DuPont agrees to donate lots 3, 4, and 5 to the state of New Jersey following demolition of existing structures and remediation of impacted soil in Lots 3 and 4 to unrestricted use standards.
- 2005 through 2009 – DuPont focuses investigation on Lots 3 and 4 where historic manufacturing operations had occurred. Samples are collected based on a 200-foot grid; with subsequent sampling designed to delineate impacted soils around grid nodes. Additional sampling is conducted downgradient of former structures and as needed to complete the delineation of AOCs 117 and 119.

Historic operations in the project area are generally contained within areas of concern (AOCs) 117 and 119 (Figure 2). A 9.1-acre portion of AOC 117 is located to the east of the Wanaque River and a 6.6-acre portion of AOC 117 is located west of the river. AOC 119 is approximately 0.6 acres and is located west of the river.

# 3.0 Environmental Setting

The following sections describe the environmental setting of the project area. As indicated in Section 2.1, the project area is located within the New Jersey Highlands Preservation Area. Descriptions of the habitats within the project area are based on observations made by experienced ecologists during a January 2006 reconnaissance of the site and a September 2005 delineation of jurisdictional wetlands.

## 3.1 Terrestrial and Wetland Areas

Deciduous forests are the predominant covertype and comprise the matrix habitat within which other habitat types exist. Other terrestrial/wetland habitats that exist within the forest matrix include mixed forested/scrub-shrub habitat on the floodplain of the Wanaque River and emergent, forested and/or riverine wetlands.

Deciduous forests characterize the hill slopes and ridge tops within the project area. Steep slopes and numerous bedrock outcroppings characterize these deciduous forested habitats. Common tree species include white oak (*Quercus alba*), red oak (*Quercus rubra*), chestnut oak (*Quercus prinus*), red maple (*Acer rubrum*), and American beech (*Fagus grandifolia*). These species are widespread from the bottom of the slope to the tops of the ridges; at the tops of the ridges, mountain laurel (*Kalmia latifolia*) is a common understory species. The Wanaque River floodplain is a mix of forested and scrub-shrub habitats. Canopy species in the floodplain include primarily red maple, with some green ash (*Fraxinus pennsylvanica*).

A wetland survey was conducted in September 2005 to delineate jurisdictional wetland resources in the project area. The survey identified 15 wetlands in the project area, including an intermittent channel (Figure 3). Wetlands identified in the project area were classified as emergent, forested and/or riverine. Five of 15 wetlands were classified by dominant emergent vegetation including Japanese stiltgrass (*Microstegium vimineum*), mild water pepper (*Polygonum hydropiperoides*), false nettle (*Boehmeria cylindrical*), and arrow-leaved tearthumb (*Polygonum sagittatum*). Dominant species in forested wetlands included red maple and Japanese stiltgrass. In addition to red maple and various emergent species, riverine wetlands were dominated by river birch (*Betula nigra*), ironwood (*Carpinus caroliniana*), pickerel weed (*Pontederia cordata*), and arrow arum (*Peltandra virginica*).

Terrestrial and wetland habitats likely support similar wildlife species. The deciduous forest, floodplain, and wetland habitats likely support communities of passerine birds, small and large birds and mammals, reptiles, and amphibians. Some wetlands may provide breeding habitats for amphibians. Species observed during site visits include box turtle (*Terrapene carolina*), wood frog (*Rana sylvatica*), pickerel frog (*Rana palustris*), signs of white-tailed deer (*Odocoileus virginianus*), and various passerine bird species.

## 3.2 Surface Water Bodies

The Wanaque River bisects the project area, flowing from north to south. The river originates from the Wanaque Reservoir, approximately 2.5 miles due north of Pompton Lake and discharges into the Pequannock River at the Riverdale-Pompton Lakes municipal boundary. The river was formerly dammed downstream of the project area to create Lake Inez; however, the dam was removed in 1984 and the river returned to its channel. In the project area, the Wanaque River is approximately 80 feet wide and is seasonably wadeable. The river likely supports permanent fish, benthic invertebrate, and amphibian communities.

## 3.3 Groundwater

Groundwater in the Lake Inez region of the PLW site is encountered at a depth of between 8 and 19 feet below ground surface (DuPont CRG, 2004). The thickness of the saturated alluvial zone varies from approximately 32 feet in the mid-valley to 47 feet near the former Lake Inez dam. The groundwater flow direction in the alluvium is generally south and the approximate horizontal gradient is 0.001 ft/ft.

# 4.0 Baseline Ecological Evaluation

This section evaluates existing information and analytical data collected in environmental media within the project area to determine whether additional ecological investigation may be appropriate. Consistent with N.J.A.C. 7:26E-3.11, additional ecological investigation or evaluation of remedial alternatives will be conducted if following conditions co-occur within the project area:

- Site-specific contaminants of potential ecological concern (COPECs);
- Environmentally sensitive natural resources (ESNRs) on or in the vicinity of the site; and
- Potential contaminant migration pathways to ESNRs.

## 4.1 Constituents of Potential Ecological Concern

The following sections describe the selection of COPECs in environmental media based on available data.

### 4.1.1 Soil

Extensive investigation has been conducted in the project area to characterize and delineate concentrations of a select group of constituents in soil that were related to the historic manufacturing operations. The data evaluation included samples from two surficial soil datasets collected in the project area:

- Random grid samples: Collected from a random 100-foot to 200-foot grid sampling design; and
- Delineation samples: Collected along transects delineating exceedances of current New Jersey Residential Direct Contact Soil Remediation Standards (NJRDCSRS).

In 2003, 38 samples were collected from 20 locations selected from a random grid sampling design and analyzed for:

- 100% Field screening for organic explosives (EXPRAY)
- 10% Nitroaromatics-Nitroamines (NJ certified lab)
- 10% Nitrate/Nitrite (NJ certified lab)
- 33% Polynuclear aromatic hydrocarbons (PAHs), one sample from each boring (NJ certified lab)
- 100% Copper, lead, mercury (PLW on-site laboratory by x-ray fluorescence [XRF])
- 100% Arsenic (NJ certified lab)
- 10% PP Metals (NJ certified lab)

During 2004 and 2005, another 329 soil samples were collected to delineate the extent of exceedances of New Jersey Residential Direct Contact Soil Cleanup Criteria (NJRDCSCC) for lead, arsenic, and thallium; additional samples were collected from 2006 through 2009 to complete the delineation of select areas, including former

structures and a road bed within AOC 117 and grid nodes in AOC 119 (Parsons, 2010). Further detail regarding data collection in the NMA, including an assessment of data quality is provided in the NMA Remedial Investigation Report (RIR; Parsons, 2010).

The following sections describe the evaluation of soil data to identify COPECs that may exist in the project area.

## Data Evaluation

Surficial soil data (primarily 0 to 0.5 feet) were evaluated to identify COPECs in the project area. The data evaluation incorporated data collected in the project area, which included both delineation samples and random grid samples.

Because the primary objectives of the sampling investigations were to delineate the extent of site-specific contamination, soil samples were generally analyzed for a subset of targeted constituents, particularly lead and arsenic. The on-site XRF was used to analyze copper, lead, and mercury in soil, with 10 percent of XRF sample results confirmed by analyses performed by a NJ certified laboratory. If laboratory and XRF data were available, laboratory data were used in the BEE screening process. If only XRF data were available, these data were used in the screening process. Additionally, the bottom of the sampling interval was greater than 0.5 feet below ground surface for some samples (for example 0 to 1.4 feet or 0 to 3.3 feet); these samples were also included in the screening process. The following sections present a description of ecological benchmark concentrations used to evaluate constituent concentrations and a summary of COPECs identified in surficial soil datasets.

## Ecological Benchmark Concentrations

Surficial soil data were evaluated based on conservative ecological benchmark concentrations. Benchmark concentrations were selected in the following order of preference:

1. Minimum ecological soil screening level (Eco-SSL) reported for birds, mammals, plants or soil invertebrates (USEPA, 2005);
2. Minimum screening value reported for plants or earthworms developed by the Oak Ridge National Laboratory (ORNL) (Efroymson, 1997a and Efroymson, 1997b); or
3. USEPA Region 5 Ecological Screening Levels (ESLs) for soil (USEPA, 2003).

Table 1 provides a summary of ecological benchmarks selected to evaluate soil constituent concentrations in the BEE.

## Identification of COPECs

COPECs were identified if the maximum detected concentration of the constituent exceeded the conservative ecological benchmark concentrations. Consideration was also given to frequency of detection, background (ambient) concentrations, and whether the constituent was related to site manufacturing activities. Non-detected constituents and their corresponding detection limits for surficial soil samples are not included in the evaluation; these data are provided in the NMA RIR (Parsons, 2010). The following section summarizes the COPECs identified from the delineation and random grid samples described above.

Maximum detected concentrations of ten metals and total HMW PAHs exceeded conservative soil benchmark concentrations in delineation and random grid samples and were identified as COPECs for the project area (Table 2). Maximum detected concentrations of beryllium, nickel, silver, nitrate, and total low molecular weight (LMW) PAHs were lower than conservative ecological benchmark concentrations and are not identified as COPECs.

Potential exposures to antimony, cadmium, chromium, and thallium do not warrant further ecological investigation due to limited detection frequency and maximum concentrations relative to ambient soil concentrations (Table 2). Antimony was detected in only one of 15 samples at a concentration slightly exceeding the conservative ecological benchmark concentration. Maximum concentrations of cadmium and chromium slightly exceeded ecological benchmark concentrations that were comparable to 90$^{th}$ percentile ambient soil concentrations for the New Jersey Highlands Province (Sanders, 2003). In initial soil sampling, thallium was analyzed with EPA Method 6010 and concentrations in six samples were detected above the conservative ecological benchmark concentration (1 mg/kg). However, subsequent thallium delineation samples analyzed with Method 6020, which achieves a lower method detection limit, did not have detectable concentrations of thallium above 1 mg/kg. Since thallium was not used in any operations of the DuPont site, and the original detections could not be confirmed, thallium was not evaluated further.

### 4.1.2 Groundwater

Groundwater itself does not present a potential exposure point for ecological receptors. However, if contaminated groundwater is discharging to a surface water body or other points where ecological receptors may come into contact with contaminants, then this potential exposure pathway should be evaluated.

There are no groundwater data in the NMA. However, Wanaque River Valley wells are located in the lower portion of the valley. Data from these wells are presented and discussed in the NMA RIR. Copper was the only constituent detected above Class IIA Groundwater Quality Criteria (GWIIA). Copper was believed to be associated with copper wire found in AOC 192. The copper exceedence was delineated in groundwater and found to be of limited extent; it was also determined that copper was not migrating with groundwater (Parsons, 2010). Therefore, the groundwater migration pathway is not complete and no further evaluation of groundwater is warranted.

## 4.2 Environmentally Sensitive Natural Resources

Environmentally sensitive natural resources (ESNRs) were identified at the site based on the definition provided in N.J.A.C. 7:26E-1.8. As described in Section 3.0, the entire project area is located in the New Jersey Highlands Preservation Area and, thus is considered an ESNR. In addition, pursuant to 2010 amendments to N.J.A.C. 7:26E-1.8, groundwater in the project area is also considered and ESNR. Three habitat types are present within the project area that would also be considered ESNRs under N.J.A.C. 7:26E-1.8:

- Forested areas, as described in Section 3.1, are the predominant habitat in the project area and represent the matrix within which all other ESNRs are located;
- Fifteen jurisdictional wetlands and wetland transitional areas identified within the forest matrix (Section 3.1); and
- The Wanaque River is identified as a surface water body ESNR for the project area (Section 3.2).

A detailed evaluation of the Wanaque River ESNR will be provided in a separate BEE to address exposure to ecological receptors in the Wanaque River.

## 4.3 Contaminant Migration Pathways

The primary contaminant migration pathway in the NMA area is associated with the migration of COPECs from the decommissioning and remnants of facility structures to adjacent soils. COPECs are likely transported from sources areas to adjacent forest and wetland ESNRs via surface runoff and other erosive mechanisms. Sampling transects to delineate the extent of NJRDCSRS exceedances extend downgradient from the remnants of facility structures to address this contaminant migration pathway. As presented in Section 4.1.2, groundwater migration is not a potential contaminant migration pathway of concern for the NMA.

# 5.0 Conclusions

An evaluation of existing information and analytical data indicated that COPECs, ESNRs, and contaminant migration pathways co-occur in the project area. The primary contaminant migration pathway to ESNRs is the migration of COPECs from the decommissioning and remnants of facility structures to adjacent soils. As a result, the primary ecological exposure medium is soils adjacent to the remnants of former facility structures. COPECs identified in surficial soils adjacent to these structures include arsenic, copper, lead, mercury, selenium, zinc, and HMW PAHs. Further evaluation of remedial alternatives for the NMA should address potential ecological exposure to the COPECs identified in the BEE.

# 6.0 References

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# Tables

**TABLE 2**
**IDENTIFICATION OF COPECs**
**BASELINE ECOLOGICAL EVALUATION**
**NORTHERN MANUFACTURING AREA**
**DUPONT POMPTON LAKES WORKS**
**POMPTON LAKES, NEW JERSEY**

| Analyte (mg/kg) | Number of Samples | Number of Detections | Maximum Detected Concentration | New Jersey Highlands Province (Sanders 2003) 90th Percentile | Ecological Benchmark Concentration | Source | Exceeds Ecological Benchmark And Ambient Soil Concentrations[1] |
|---|---|---|---|---|---|---|---|
| **Metals** | | | | | | | |
| ANTIMONY | 15 | 1 | 1.2 | <DL | 0.27 | 4 | Yes |
| ARSENIC | 162 | 162 | 270 | 9.96 | 18 | 2 | **Yes** |
| BERYLLIUM | 15 | 15 | 0.97 | 1.08 | 21 | 4 | No |
| CADMIUM | 15 | 8 | 0.4 | 0.32 | 0.36 | 4 | Yes |
| CHROMIUM | 15 | 15 | 31.2 | 26.64 | 26 | 3 | Yes |
| COPPER | 38 | 38 | 392.09 | 28.96 | 28 | 3 | **Yes** |
| LEAD | 309 | 309 | 94701.75 | 59.02 | 11 | 3 | **Yes** |
| MERCURY | 38 | 29 | 4.559 | 0.18 | 0.1 | 6,7 | **Yes** |
| NICKEL | 15 | 15 | 18.3 | 19.04 | 38 | 2 | No |
| SELENIUM | 73 | 69 | 8.91 | 0.99 | 0.52 | 2 | **Yes** |
| SILVER | 15 | 6 | 0.367 | 0.21 | 4.2 | 3 | No |
| THALLIUM | 31 | 30 | 3.89 | <DL | 1 | 5 | Yes |
| ZINC | 19 | 19 | 516 | 111.6 | 46 | 3 | **Yes** |
| **PAHs** | | | | | | | |
| Total Low Molecular Weight (LMW) PAHs | 27 | -- | 1.53 | -- | 29 | 1 | No |
| Total High Molecular Weight (HMW) PAHs | 27 | -- | 3.63 | -- | 1.1 | 4 | **Yes** |
| ACENAPHTHENE | 27 | 1 | 0.045 | -- | 682 | 5 | No |
| ACENAPHTHYLENE | 27 | 2 | 0.12 | -- | 682 | 7 | No |
| ANTHRACENE | 27 | 6 | 0.16 | -- | 1480 | 7 | No |
| BENZO(A)ANTHRACENE | 27 | 14 | 0.33 | -- | 5.21 | 7 | No |
| BENZO(B)FLUORANTHENE | 27 | 16 | 0.6 | -- | 59.8 | 7 | No |
| BENZO(G,H,I)PERYLENE | 27 | 14 | 0.31 | -- | 119 | 7 | No |
| BENZO(K)FLUORANTHENE | 27 | 9 | 0.23 | -- | 148 | 7 | No |
| BENZO[A]PYRENE | 27 | 15 | 0.38 | -- | 1.52 | 7 | No |
| CHRYSENE | 27 | 17 | 0.52 | -- | 4.73 | 7 | No |
| DIBENZ(A,H)ANTHRACENE | 27 | 9 | 0.12 | -- | 18.4 | 7 | No |
| FLUORANTHENE | 27 | 17 | 0.63 | -- | 122 | 7 | No |
| FLUORENE | 27 | 1 | 0.055 | -- | 30 | 6 | No |
| INDENO (1,2,3-CD) PYRENE | 27 | 15 | 0.37 | -- | 109 | 7 | No |
| NAPHTHALENE | 27 | 1 | 0.064 | -- | 0.0994 | 7 | No |
| PHENANTHRENE | 27 | 16 | 0.62 | -- | 45.7 | 7 | No |
| PYRENE | 27 | 19 | 0.96 | -- | 78.5 | 7 | No |
| **Other Parameters** | | | | | | | |
| NITRATE | 8 | 7 | 25.5 | -- | 4478 | 8 | No |

**Notes:**
1, Bold text indicates constituent is a COPEC requiring further evaluation

**Sources:**
1, ECO-SSL: Soil Invertebrates
2, ECO-SSL: Plants
3, ECO-SSL: Avian
4, ECO-SSL: Mammalian
5, ORNL Plants
6, ORNL Earthworms
7, USEPA Region V ESL
8, NOAEL ESL for most sensitive mammalian receptor (deer mouse) evaluated in ecological risk assessment of the Rocky Flats Environmental Technology Site (USDOE 2006

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**DUPONT POMPTON LAKES WORKS**
**POMPTON LAKES, NEW JERSEY**

| Analyte (mg/kg) | Number of Samples | Number of Detections | Maximum Detected Concentration | New Jersey Highlands Province (Sanders 2003) 90th Percentile | Ecological Benchmark Concentration | Source | Exceeds Ecological Benchmark And Ambient Soil Concentrations[1] |
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| BERYLLIUM | 15 | 15 | 0.97 | 1.08 | 21 | 4 | No |
| CADMIUM | 15 | 8 | 0.4 | 0.32 | 0.36 | 4 | Yes |
| CHROMIUM | 15 | 15 | 31.2 | 26.64 | 26 | 3 | Yes |
| COPPER | 38 | 38 | 392.09 | 28.96 | 28 | 3 | **Yes** |
| LEAD | 309 | 309 | 94701.75 | 59.02 | 11 | 3 | **Yes** |
| MERCURY | 38 | 29 | 4.559 | 0.18 | 0.1 | 6,7 | **Yes** |
| NICKEL | 15 | 15 | 18.3 | 19.04 | 38 | 2 | No |
| SELENIUM | 73 | 69 | 8.91 | 0.99 | 0.52 | 2 | **Yes** |
| SILVER | 15 | 6 | 0.367 | 0.21 | 4.2 | 3 | No |
| THALLIUM | 31 | 30 | 3.89 | <DL | 1 | 5 | Yes |
| ZINC | 19 | 19 | 516 | 111.6 | 46 | 3 | **Yes** |
| **PAHs** | | | | | | | |
| Total Low Molecular Weight (LMW) PAHs | 27 | -- | 1.53 | -- | 29 | 1 | No |
| Total High Molecular Weight (HMW) PAHs | 27 | -- | 3.63 | -- | 1.1 | 4 | **Yes** |
| ACENAPHTHENE | 27 | 1 | 0.045 | -- | 682 | 5 | No |
| ACENAPHTHYLENE | 27 | 2 | 0.12 | -- | 682 | 7 | No |
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| BENZO(K)FLUORANTHENE | 27 | 9 | 0.23 | -- | 148 | 7 | No |
| BENZO[A]PYRENE | 27 | 15 | 0.38 | -- | 1.52 | 7 | No |
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| INDENO (1,2,3-CD) PYRENE | 27 | 15 | 0.37 | -- | 109 | 7 | No |
| NAPHTHALENE | 27 | 1 | 0.064 | -- | 0.0994 | 7 | No |
| PHENANTHRENE | 27 | 16 | 0.62 | -- | 45.7 | 7 | No |
| PYRENE | 27 | 19 | 0.96 | -- | 78.5 | 7 | No |
| **Other Parameters** | | | | | | | |
| NITRATE | 8 | 7 | 25.5 | -- | 4478 | 8 | No |

**Notes:**
1, Bold text indicates constituent is a COPEC requiring further evaluation

**Sources:**
1, ECO-SSL: Soil Invertebrates
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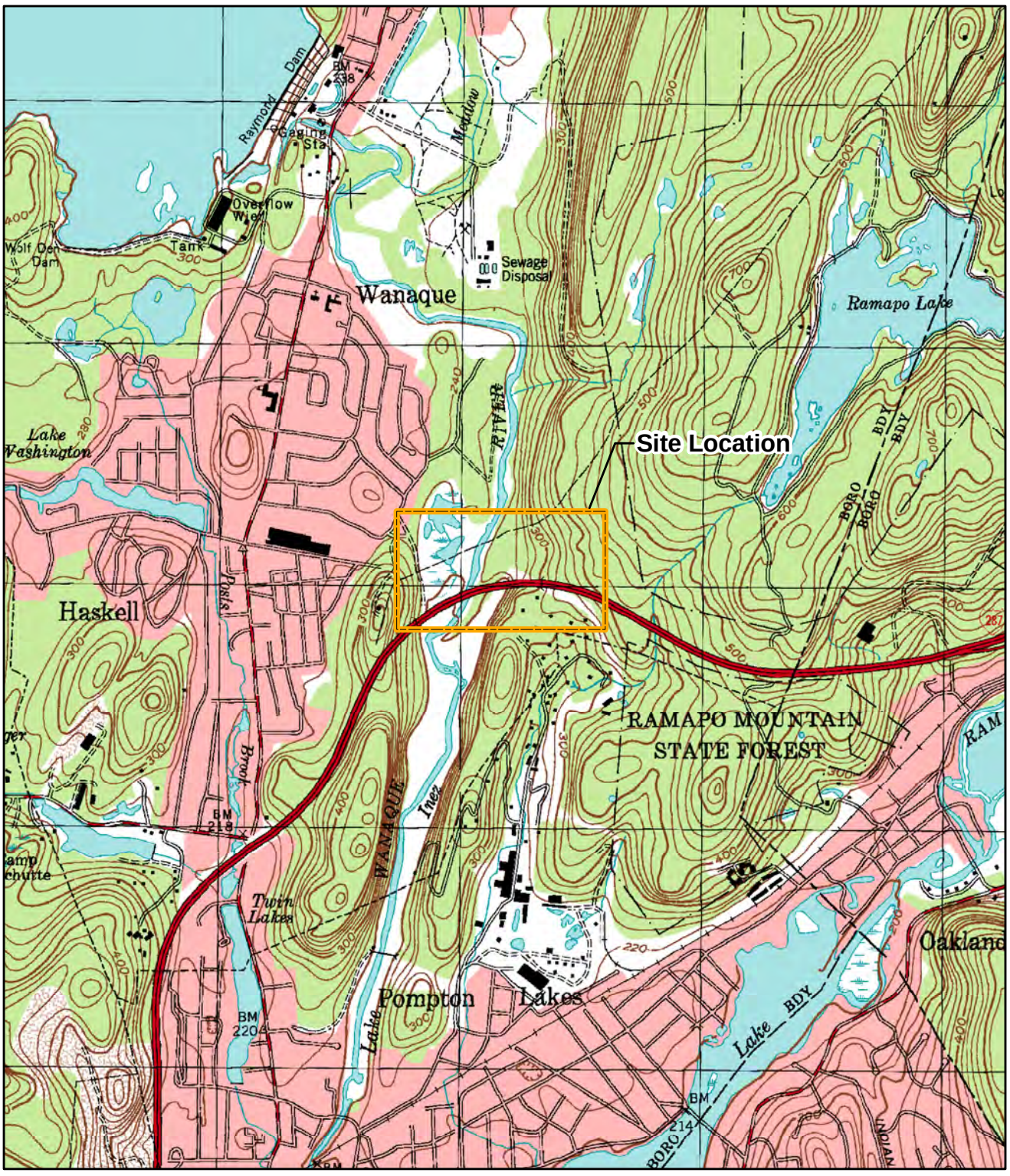
3, ECO-SSL: Avian
4, ECO-SSL: Mammalian
5, ORNL Plants
6, ORNL Earthworms
7, USEPA Region V ESL
8, NOAEL ESL for most sensitive mammalian receptor (deer mouse) evaluated in ecological risk assessment of the Rocky Flats Environmental Technology Site (USDOE 2006

# Figures

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| | |
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| Job: 18985563.00003 | |
| Prepared by: RRM III | |
| Checked by: DR | |
| Date: 06/07/2010 | |

Figure 1
Site Location Map
Baseline Ecological Evaluation
Northern Manufacturing Area
DuPont Pompton Lakes Works
Pompton Lakes, New Jersey

Q:\GIS_Data\DUPONT\PMPTNLKS\Projects\DuPont Pompton Lakes BEE Figure 1.mxd

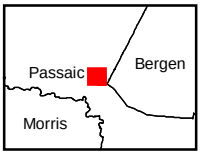
Reference: ESRI NGS Topo US 2D

**Legend**

Areas of Concern

0 250 500 1,000 Feet

1 inch = 500 feet

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| | |
|---|---|
| Job: | 18985563.00003 |
| Prepared by: | RRM III |
| Checked by: | DR |
| Date: | 06/07/2010 |

Figure 2
AOC Boundaries
Baseline Ecological Evaluation
Northern Manufacturing Area
DuPont Pompton Lakes Works
Pompton Lakes, New Jersey

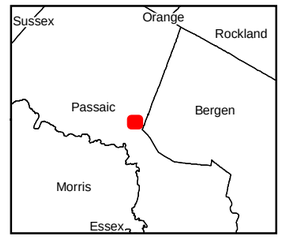
Q:\GIS_Data\DUPONT\PMPTNLKS\Projects\DuPont Pompton Lakes BEE Figure 2 AOC.mxd

## Legend

- Delineation Sample
- Node Sample
- Structure

**Wetlands**

- Transition
- Wetland




*Key Map*
*Not to Scale*

N

NAD 1983 StatePlane New Jersey
Projection: Lambert Conformal Conic
Linear Unit: US Foot

New Jersey 2002 High
Resolution Orthophotography

0 125 250 500
Feet

URS

**Figure 3**
**BEE Sample Locations**
**Baseline Ecological Evaluation**
**Northern Manufacturing Area**
**DuPont Pompton Lakes Works**
**Pompton Lakes, New Jersey**

| | |
|---|---|
| Prepared By: RRM III | Checked By: DR |
| Job: 18985155.00002 | Map: \\GIS_Data\DUPONT\PMPTNLKS\Projects\WanaqueValley_Soil Exceedences.mxd |

Q:\GIS_Data\DUPONT\PMPTNLKS\Projects\DuPont Pompton Lakes BEE Figure 3 SMPLOC.mxd