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CUMMINGS RITER CONSULTANTS, INC.

VOLUME I OF II

REMEDIAL ACTION REPORT
INDUSTRIAL DRAINAGEWAY
KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

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TABLE OF CONTENTS

PAGE

LIST OF TABLES iii
LIST OF FIGURES iv

VOLUME I

1.0 INTRODUCTION 1
- 1.1 PROJECT FIELD TEAM 1
- 1.2 REPORT ORGANIZATION 2

2.0 REMEDIAL CONSTRUCTION ACTIVITIES 3
- 2.1 EXCAVATION DELINEATION 3
- 2.2 BYPASS PUMPING AND EXCAVATION 4
- 2.3 POST-EXCAVATION SOIL SAMPLING 8
- 2.4 DISPOSAL 12
- 2.5 DECONTAMINATION 13
- 2.6 HEALTH AND SAFETY 13
- 2.7 BACKFILL AND RESTORATION 14
- 2.8 SEEDING AND MULCHING 15
- 2.9 PRE-FINAL AND FINAL INSPECTIONS 15
- 2.10 SUMMARY OF COSTS 16
- 2.11 PROJECT CHANGES/UNUSUAL OBSERVATIONS 16

3.0 SUPPLEMENTAL SOIL REMEDIATION 20
- 3.1 SOIL SAMPLING 20
- 3.2 SOIL REMOVAL 21
  - 3.2.1 Excavation 22
  - 3.2.2 Disposal 23
- 3.3 ROCK CHANNEL PROTECTION 23

4.0 CERTIFICATION OF WORK 24

TABLES
FIGURES
APPENDIX A: RECORD DRAWINGS
APPENDIX B: POST-EXCAVATION VERIFICATION AND POST-CONSTRUCTION BACKGROUND SOIL SAMPLE LABORATORY RESULTS (ELECTRONIC DATA)
APPENDIX C: SAMPLING MEMORANDUM
APPENDIX D DATA VALIDATION REPORT

VOLUME II

APPENDIX E: PERSONAL AIR MONITORING DATA
APPENDIX F: BACKFILL CHEMICAL AND GEOTECHNICAL TESTING RESULTS

TABLE OF CONTENTS
(CONTINUED)

PAGE

APPENDIX G:	FIELD DESIGN CHANGE REQUEST FORMS
APPENDIX H:	HAZARDOUS WASTE MANIFESTS
APPENDIX I:	NON-HAZARDOUS WASTE BILLS OF LADING
APPENDIX J:	NYSDEC GEOPROBE® SAMPLE DATA, SUPPLEMENTAL SOIL INVESTIGATION
APPENDIX K:	POST-EXCAVATION VERIFICATION DATA, SUPPLEMENTAL SOIL REMEDIATION
APPENDIX L:	NON-HAZARDOUS WASTE BILLS OF LADING, SUPPLEMENTAL SOIL REMEDIATION

LIST OF TABLES

TABLE NO.	TITLE
1	SUMMARY OF ANALYTICAL RESULTS, POST-EXCAVATION SOIL SAMPLES
2	SUMMARY OF ANALYTICAL RESULTS, PRE- AND POST-CONSTRUCTION BACKGROUND SOIL SAMPLES
3	SUMMARY OF ANALYTICAL RESULTS, DISPOSAL CHARACTERIZATION SAMPLES
4	SUMMARY OF APPROXIMATE COSTS
5	AREA 23, SUMMARY OF GEOPROBE SAMPLING AND ANALYSES, SUPPLEMENTAL SOIL REMEDIATION
6	AREA N, SUMMARY OF GEOPROBE SAMPLING AND ANALYSES, SUPPLEMENTAL SOIL REMEDIATION
7	SUMMARY OF POST-EXCAVATION CONFIRMATORY SAMPLING DATA, SUPPLEMENTAL SOIL REMEDIATION

LIST OF FIGURES

FIGURE NO.	TITLE
1	SITE LOCATION MAP
2	EXCAVATION RECORD DRAWING
3	SOIL SAMPLE LOCATION MAP
4	SUPPLEMENTAL SOIL REMEDIATION, AREAS N AND 23

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REMEDIAL ACTION REPORT
INDUSTRIAL DRAINAGEWAY
KENTUCKY AVENUE WELLFIELD SITE
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1.0 INTRODUCTION

Cummings/Riter Consultants, Inc. (Cummings/Riter), on behalf of Viacom Inc. (Viacom), successor by corporate merger to CBS Corporation, has prepared this Remedial Action Report for remedial construction activities at the Industrial Drainageway portion of the Kentucky Avenue Wellfield site in Horseheads, New York (Figure 1). This report summarizes the remedial construction activities undertaken by Viacom to comply with the requirements of a Consent Decree, Civil Action No. 97-CV-6555T, entered between CBS Corporation and the U.S. Environmental Protection Agency (USEPA), on March 2, 1998 (the Consent Decree). The remedial construction was undertaken as described in the USEPA-approved Supplemental Design Report (Cummings/Riter, April 19, 2001) and the Remedial Action Work Plan for Industrial Drainageway Remediation (RAWP), as amended (Cummings/Riter, August 15, 2001; April 24, 2002). This report also describes Viacom's supplementary work effort conducted in August and September 2004 to address certain floodplain soils associated with the Industrial Drainageway.

1.1 PROJECT FIELD TEAM

The project field team for remedial construction consisted of the supervising contractor, the quality assurance (QA) team, the remedial action contractor, and USEPA representatives. Mr. Leo M. Brausch acted as the supervising contractor on behalf of Viacom. Fagan Engineers, PC, of Elmira, New York (Fagan) and Cummings/Riter served as Viacom site representatives and the independent QA team during construction. CDM Federal Programs Corporation represented USEPA and provided full-time regulatory oversight. Viacom retained AAA Environmental, Inc. of Syracuse, New York (AAA) as the primary remedial action contractor to implement the remedial action.

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1.2 REPORT ORGANIZATION

Section 2.0 of this report describes the Industrial Drainageway remedial construction activities. Section 3.0 of this report describes the supplemental remediation of floodplain soils. Section 4.0 is a request for certification of Industrial Drainageway remedial construction.

The appendices include record drawings (Appendix A), post-excavation soil sample laboratory reports in electronic format (Appendix B), sampling memoranda (Appendix C), the data validation report (Appendix D), personal air monitoring data (Appendix E), backfill chemical and geotechnical testing results (Appendix F), Field Design Change Request Forms (Appendix G), and copies of waste manifests and bills of lading (Appendices H and I, respectively). Appendix J provides New York State Department of Environmental Conservation (NYSDEC) Geoprobe® sample data related to the supplemental investigation of floodplain soils, and Appendices K and L provide additional backup documentation related to the supplemental investigation and remediation of floodplain soils.

2.0 REMEDIAL CONSTRUCTION ACTIVITIES

This section of the Remedial Action Report describes the construction activities performed to implement the remedial design described in the RAWP and the Revised Addendum to the RAWP (Cummings/Riter, April 24, 2002).

Construction activities were initiated September 4, 2001, and were suspended September 25, 2001 due to inability to gain access to properties owned by Norfolk Southern Railway Company (Norfolk Southern) and Hardinge, Inc. (Hardinge). At the request of USEPA, an addendum to the RAWP (Cummings/Riter, March 11, 2002) was drafted to address temporary flow diversion and construction sequencing as related to erosion and sedimentation control to facilitate property access with Hardinge. A Revised Addendum to the RAWP was issued April 24, 2002 to address comments received from the USEPA via letter dated March 27, 2002. Construction activities resumed August 19, 2002, and demobilization was completed January 27, 2003. Final site restoration activities (e.g., fine grading, seeding, and mulching) were completed in the spring of 2003.

In accordance with the approved remedial design, the remedial action included the excavation and off-site disposal of sediment and bank soils exceeding 1.0 milligram per kilogram (mg/kg) of polychlorinated biphenyls (PCBs). In addition to excavation and off-site disposal, construction activities included bypass pumping, on-site stabilization/solidification, post-excavation confirmatory sampling, excavation backfilling, seeding and mulching, and demobilization. The following sections describe construction activities.

2.1 EXCAVATION DELINEATION

In its September 30, 1996 Record of Decision (ROD) for Operable Unit No. 3 of the Kentucky Avenue Wellfield Superfund site, which dealt with remediation of the Industrial Drainageway, USEPA established a remedial action objective (RAO) for PCBs in drainageway sediments of 1.0 mg/kg. As described in the ROD, USEPA established this RAO to address potential unacceptable human health risks associated with direct contact with PCBs in drainageway sediments (i.e., while wading in the stream) and to

reduce the potential exposure of aquatic organisms to PCBs in sediment. Concerns regarding aquatic organisms related both to the protection of potential ecological receptors and potentially unacceptable human health risk from consumption of fish containing elevated PCB concentrations.

The design for the Industrial Drainageway remedial action was based on the results of the supplemental pre-design investigation performed by Cummings/Riter in February 2001, and documented in the Supplemental Design Report. A total of 263 sediment and bank soil samples were collected from 83 locations in and adjacent to the Industrial Drainageway and analyzed for PCBs. The results of the systematic sampling and analysis performed during the supplemental pre-design investigation were used to horizontally and vertically delineate sediment and bank soil exceeding the RAO of 1.0 mg/kg PCBs. Initial excavation limits were presented in the RAWP, and were located by survey and marked with wooden stakes before excavation.

2.2 Bypass Pumping and Excavation

AAA mobilized September 4, 2001 and began setup of temporary utilities, construction of a decontamination pad, construction of a polyethylene-lined stabilization/solidification cell, and site clearing. Without access to Norfolk Southern property, AAA prepared for excavation activities downstream of Culvert 2 (Figure 1), where the stream passes beneath a Norfolk Southern spur track. An earthen dam was constructed at Station 16+25, and an 8-inch diesel pump was located at the dam to bypass flow around designated excavation areas at Stations 17+00 and 18+00. A combination of 8-inch diameter aluminum pipe and collapsible hose was used to convey the flow to the discharge point near Station 20+00 along the east side of the Industrial Drainageway. A 15-foot long, 12-inch diameter aluminum manifold with four, six-inch diameter outlets was attached to the discharge end of the pipe as an energy dissipator. The energy dissipator was placed within a bed of nominal four-inch diameter stone enveloped in non-woven geotextile.

Excavation activities commenced September 20, 2001 with the partial removal of designated bank soil between Industrial Drainageway Station 17+75 and Station 18+25

(Figure 2). Excavated soil was placed in the nearby stabilization/solidification cell, mixed with lime kiln dust, and analyzed for disposal parameters. The approximate 10-percent by weight lime kiln dust addition, which was based on bench-scale testing conducted by AAA during the preparation of its bid for the remedial construction work, was aimed at solidifying wet materials and eliminating free liquids to the extent required by the disposal facilities. The lime kiln dust was supplied by Special Minerals, Inc. of Adams, Massachusetts.

For the work conducted in September 2001, the 10-percent lime kiln dust addition effectively solidified the excavated soils, and analytical results for the excavated and solidified material were used to obtain approval for disposal as non-hazardous waste at Waste Management, Inc. (WMI) Subtitle D landfills in Erie, Pennsylvania (Lakeview Landfill) and in Fairport, New York (High Acres Landfill). Approximately 10 tons of bank soil were removed before construction activities were suspended on September 24, 2001, due primarily to insufficient capacity of the temporary pumping scheme. Upon suspension of construction activities, the excavation was lined with geotextile, and gravel was placed over the geotextile to help stabilize the channel bank.

Upon remobilization in August 2002, AAA began with setup of temporary facilities, additional site clearing, and general site cleanup. As a component of the full-scale bypass pumping setup, AAA installed butt-fusion welded, 16-inch diameter high-density polyethylene (HDPE) pipe from the Industrial Drainageway outfall, through Culvert 1 to the inlet of Culvert 2. A second length of HDPE pipe was installed from the outlet of Culvert 2 to a discharge location at the northwest portion of Koppers Pond on property owned by the Elmira Water Board (EWB). The HDPE pipe was placed along the west side of the Industrial Drainageway to Culvert 2, and then along the west side of the Industrial Drainageway from Culvert 2 to Koppers Pond (Figure 2). In accordance with the approved Revised Addendum to the RAWP, AAA installed a rock apron energy dissipator at the discharge end of the HDPE pipe to help prevent scour from the flow discharge. The full-scale bypass pumping design called for placement of the HDPE pipe through Culvert 2 because Norfolk Southern would not allow the pipe to be placed over the rail spur or through the ballast.

Excavation activities resumed September 5, 2002 with the removal of sediment via vacuum truck from Culvert 2 to accommodate the 16-inch HDPE pipe for bypass pumping. The flow through the culvert was captured and temporarily conveyed to a discharge point downstream of Culvert 2 to eliminate normal flow through the culvert during cleaning operations. Flow was temporarily pumped by an 8-inch diesel pump from a sump excavated at Station 12+00 through an 8-inch diameter collapsible hose to the HDPE pipe immediately downstream of Culvert 2. A filter bag was attached to the outlet end of the HDPE pipe at the rock apron during the temporary flow diversion. The solids removed from the culvert with the vacuum truck were placed in a polyethylene-lined storage cell for solidification with lime kiln dust (i.e., remaining lime kiln dust from that delivered to the site in September 2001). Vacuumed liquids were processed through the construction water treatment system, consisting of two 500-gallon HDPE tanks and a series of filters down to one-micron opening size, and then discharged to the Industrial Drainageway.

AAA installed a row of silt fence across the channel downstream of Culvert 2 to capture solids potentially suspended by the installation of the temporary sump and the earthen dam used for full-scale bypass pumping. The silt fence was enveloped with 2-to 4-inch diameter stone for stability. The purpose of the check dam was to mitigate potential suspended solids in Industrial Drainageway flow before initiating full-scale bypass pumping. The principal source of suspended solids related to remediation activities was vehicular traffic crossing the Industrial Drainageway immediately downstream of Culvert 2 to access the contractor trailer area. Sediment samples collected from the traffic crossing area as part of supplemental pre-design activities met the performance standard. This source of suspended solids was eliminated upon initiation of full-scale bypass pumping.

After cleaning Culvert 2, the 8-inch diesel pump was relocated from the temporary sump at Station 12+00 to the Industrial Drainageway outfall at Station 0+00. A sump was excavated at approximately Station 00+15, and an earthen dam was constructed at approximately Station 00+25. The dam was covered with polyethylene sheeting secured with nominal 12-inch size riprap. Full-scale bypass pumping of the Industrial Drainageway flow began September 11, 2002 with the 8-inch diameter pump. A 12-inch

diameter pump was mobilized to the outfall area as a backup pump for high-flow events and manifolded with the 8-inch pump. A level controller was installed in the sump to activate the 12-inch pump when the water level exceeded a set point.

Excavation of sediments and bank soil near Station 0+00 commenced on September 14, 2002. By October 21, 2002, AAA had excavated an estimated 1,750 cubic yards (CY) of sediment and bank soil, an excavation rate of approximately 43 CY/day. By that time, it had become apparent that the extent of PCB-impacted materials subject to removal was significantly greater than had been predicted in the remedial design.

The excavation effort was then accelerated so that, by the end of November 2002, AAA had excavated an estimated 5,962 CY of material, representing an excavation rate of more than 105 CY/day after October 21, 2002. By the time the excavation was completed on December 10, 2002, AAA had removed an estimated 6,077 CY of sediment, bank soil, and other floodplain soil. This quantity was more than twice what was envisioned in the remedial design (based on the extensive predesign sampling) and almost six times what was described in the ROD.

Excavated sediment, bank soil, and other floodplain soils were placed in rolloff boxes or polyethylene-lined basins for solidification/stabilization mixing. Based on the results of its initial bench-scale treatability testing, AAA had planned to use a 5- to 10-percent Portland cement addition to chemically stabilize sediments and bank soils exhibiting a cadmium concentration greater than 1.0 milligram per liter (mg/l) in toxicity characteristic leaching procedure (TCLP) testing. AAA's bench scale testing showed that stabilizing with Portland cement would reduce TCLP cadmium concentrations to less than 1.0 mg/l and allow off-site disposal of the stabilized material in a Subtitle D landfill. Instead, AAA was able to chemically stabilize cadmium-impacted soils using a 5- to 10-percent addition of Portland cement kiln dust rather than Portland cement. The cement kiln dust was purchased from Pozament Corporation of Milford, Connecticut.

After exhausting its previously delivered supply of lime kiln dust, AAA used cement kiln dust almost exclusively to both solidify and stabilize excavated materials. By using cement kiln dust to treat all excavated materials, AAA did not need to segregate cadmium-impacted materials from other excavated materials. Over the course of the

project, AAA used approximately 870 tons of cement kiln dust and 90 tons of lime kiln dust to stabilize/solidify the estimated 11,849 tons of excavated sediment and soils, an average agent addition rate of 8.1 percent.[1] The materials stabilized in rolloff boxes were then transferred to polyethylene-lined storage cells and sampled for disposal parameters. Solidified/stabilized materials were staged in the storage cells until treatment sample verification results were obtained for disposal approval.

2.3 POST-EXCAVATION SOIL SAMPLING

Following excavation of sediment and bank soils to the design limits, post-excavation samples were collected from excavation sidewalls and bottoms for PCB analysis to demonstrate that remaining bank soil and sediment met the performance standard. Additional sediment and bank soil and, as described above, other floodplain soils were removed where representative post-excavation sample results failed to meet the 1.0 mg/kg PCB concentration applied by USEPA as the cleanup standard. A total of 208 post-excavation samples were collected and submitted for laboratory analysis.

AAA performed post-excavation sampling, and Friend Laboratory Inc. (FLI) of Waverly, New York, performed laboratory analysis. Samples were collected with USEPA oversight.

AAA initially attempted to use Dexsil L2000DX field screening kits to aid in the evaluation of excavation limits prior to collection of samples for laboratory analysis. The Dexsil results proved to correlate poorly to laboratory results, possibly due to matrix interference. AAA then switched to using Ensys, Inc. (Ensys) PCB field screening test kits and achieved better results. Post-excavation soil sample laboratory analytical results are provided on a dry-weight basis and are summarized in Table 1. Sample locations are shown on the record drawings included as Appendix A. Laboratory analytical reports for post-excavation samples are provided as Appendix B in electronic format.

[1] The total quantity of 11,849 tons includes material generated in cleanup (i.e., over-excavation) of areas use in waste stabilization and on-site stockpiling. The 6,077 CY survey volume of material removed from the drainageway equates to an estimated 10,500 tons. On this basis, the cement kiln dust addition rate calculates to 9.1 percent.

Sidewall samples were collected at a frequency of one sample per 200 square feet of exposed sidewall, with a minimum of one sample for each sidewall in each discrete excavation. Bottom samples were collected at a frequency of one sample per 900 square feet of excavation, with a minimum of one bottom sample for each discrete excavation. Sidewall and bottom samples were collected as composite samples consisting of three to five equal volume aliquots distributed evenly throughout the sidewall or bottom surface, respectively, from zero to six inches in the direction perpendicular to the sample surface. The number of aliquots varied according to the surface area for each composite sample.

Based on the expectation that removal was to be limited to sediment and bank soils, the RAWP (Cummings/Riter, August 15, 2001) called for the collection of sidewall samples for each two-foot depth increment. During remedial construction activities, however, sampling was focused on surface versus subsurface soils in the floodplain along the drainageway. Accordingly, sidewall soil samples were collected from two zones: zero to two feet (surface soil) and greater than two feet (subsurface soil) at the prescribed frequency. The field change was approved by USEPA and documented in a memorandum (Appendix C) issued by Cummings/Riter dated September 16, 2002. The memorandum was prepared at the request of USEPA to clarify post-excavation sampling requirements. Sidewall samples were generally collected at mid-height within the sample depth interval.

The sample labeling scheme was modified with USEPA approval from the Sampling and Analysis Plan (Appendix B of the RAWP, Cummings/Riter, August 16, 2001) to help track sample locations. Samples were labeled with a series of four letters followed by a sample number, as follows:

A-B-S-N-001

where,

- first letter: Industrial Drainageway stationing: A = STA. 0+00 to 1+00, etc.
- second letter: B = bank sample or C = channel sample,
- third letter: surface (S, less than two feet deep) or subsurface (SS, greater than two feet deep) sample,
- fourth letter: compass direction (north, south, east, or west) for sidewall samples, or B = bottom samples, and
- number indicates the order of sample collection.

Analytical results for confirmatory samples were reported as Level IV data to facilitate validation by an independent validation service in accordance with USEPA National Functional Guidelines. Because the samples were composite samples and, therefore, not truly Level IV data, full data validation was not performed. Rather, a data usability and completeness review was performed on a representative portion of the data to determine analytical limitations of the data based on specific quality control criteria. Twelve percent of the laboratory sample delivery groups were verified as part of the validation. The data validation report is included as Appendix D.

In addition to post-excavation sampling, samples collected from contractor staging areas after construction were analyzed for PCBs to show that remediation activities did not result in migration of constituents of interest. Samples were collected from areas used for solidification/stabilization operations and staging areas. Post-construction background staging area results are summarized in Table 2. Sample locations on the Village of Horseheads property are shown on Figure 3.

In some sections of the Industrial Drainageway, especially portions upstream of Culvert 2, sediments containing PCBs at levels above the performance standard correlated to the presence of a gray, clay-like material. In areas where the gray material was encountered, the typical excavation scenario consisted of removing sediment and bank soils to initial design limits, sampling and analyzing for PCBs, and, if sample results exceeded the performance standard, removing the gray material before re-sampling. As confidence in the Ensys test kits grew, field testing with the Ensys kits was used to evaluate whether or not to expand an excavation before collecting post-excavation samples for laboratory analysis.

In general, if post-excavation channel and bank sample analytical results exceeded the performance standard, additional material away from the channel was removed, as specified by USEPA, and the excavation was re-sampled. This process was repeated until samples at the limits of the excavation exhibited less than 1.0 mg/kg PCBs. Post-excavation Sample N-B-S-E-004 (5.9 mg/kg PCBs) did not achieve the 1.0 mg/kg PCBs level along the east sidewall of the excavation between Stations 12+75 and 13+75. The

excavation at this portion of the Industrial Drainageway was expanded beyond design limits into floodplain soils along the east bank (Chemung County property) for three iterations in attempts to remove material with PCB concentrations exceeding 1.0 mg/kg. Viacom submitted Field Design Change Request 004 (Appendix G) to USEPA regarding the post-excavation sample results and the limits of excavation in this area.

The only portion of the Industrial Drainageway other than the east sidewall between Stations 12+75 and 13+75 where post-excavation samples did not achieve 1.0 mg/kg PCBs is between Stations 16+75 and 17+25. The inactive Village of Horseheads municipal waste landfill lies immediately adjacent to this portion of the channel. Results for samples collected in the direction longitudinal to flow meet the performance standard; however, levels of PCBs in the northeast sidewall of the excavation (Sample W-B-S-E-003 [1.8 mg/kg PCBs]) at this location exceeded the performance standard. The excavation was expanded twice in the northeast direction in attempts to remove bank soil with PCB concentrations exceeding the performance standard; however, these efforts were terminated when landfill waste (including glass and plastic garbage bags) was encountered. Remaining impacted materials are beyond the flow line of the channel. Viacom submitted Field Design Change Request 003 (Appendix G) to USEPA to address the post-excavation sample results and the limits of excavation in this area.

As part of the supplemental pre-design investigation, samples were collected from a low-lying area to the southwest of Industrial Drainageway Station 16+75 that occasionally floods during high-flow events, typically during the spring thaw (Sample Point 23). An investigation sample collected from a depth interval of one to two feet from Sample Point 23 contained 13 mg/kg PCBs. Following excavation to the design limits, analytical results for five of six sidewall post-excavation verification samples, and one of two bottom samples, indicated levels of PCBs in excess of the performance standard. The excavation was expanded laterally and vertically, and additional samples were collected. Concentrations of PCBs in samples from the remaining south and west sidewalls (Samples 23-B-S-S-100 [3.1 mg/kg PCBs] and 23-B-S-W-100 [2.2 mg/kg PCBs]) exceed 1.0 mg/kg PCBs. Viacom submitted Field Design Change Request 002 (Appendix G) to USEPA to address the post-excavation sample results and limits of excavation in this area.

2.4 DISPOSAL

Prior to contractor mobilization, disposal characterization samples were composited from supplemental pre-design sediment and bank soil samples with concentrations of PCBs exceeding the performance standard. The composited samples were analyzed using the TCLP testing for metals regulated by the Resource Conservation and Recovery Act (RCRA). The disposal characterization sample results identified cadmium as the only RCRA metal present at concentrations exceeding the threshold for classification as hazardous waste.

Sediment and bank soil identified from supplemental pre-design investigation samples as exceeding 35 mg/kg PCBs were classified for disposal purposes as Toxic Substances Control Act (TSCA) and NYSDEC hazardous waste. Soil and sediment containing less than 35 mg/kg PCBs were designated for disposal as non-hazardous waste following demonstration of effective solidification/stabilization of cadmium. Materials classified as TSCA waste were disposed of at CWM Chemical Services, LLC, in Model City, New York. Non-TSCA materials were disposed of at High Acres Landfill, in Fairport, New York. Approximately 372 tons of material were disposed of in Model City, and approximately 12,437 tons of excavated materials were disposed of at High Acres Landfill. The total quantity of material sent off site for disposal was nearly four times that calculated from the predesign investigation data and more than 10 times that described in the ROD. Appendices H and I provide copies of hazardous waste manifests and nonhazardous waste bills of lading, respectively.

In accordance with disposal facility requirements, samples of staged materials from each storage cell were collected for analysis of cadmium by TCLP and PCBs at a minimum frequency of one sample per 250 CY. Disposal characterization results for samples of staged materials were used to verify that materials were non-TSCA and to verify effective solidification/stabilization of cadmium. None of the disposal characterization samples indicated that excavated materials were TSCA-regulated, and PCB levels were typically less than 5 mg/kg. If sampling indicated a TCLP cadmium concentration

greater than 1.0 mg/l, further cement kiln dust addition and mixing were conducted on the corresponding stockpile. Re-sampling was performed after the supplemental treatment to confirm that the affected stockpiled could be disposed of in a Subtitle D landfill.

The process of solidification/stabilization and characterization sample analysis was repeated until effective de-classification could be demonstrated. Samples from stockpiles that failed Land Disposal Requirements were mixed with additional reagent and were analyzed for cadmium by TCLP. Table 3 summarizes disposal characterization sample results.

2.5 DECONTAMINATION

Before handling backfill materials, the excavator buckets used to remove and stabilize/solidify excavated materials were mechanically cleaned (shovel and brush) to remove clinging soil, and then pressure-washed/steam-cleaned over one of the excavated materials stockpiles.

Rolloff boxes were cleaned prior to demobilization by mechanical (shovel) removal of clinging soil and pressure washing/steam-cleaning. Decontamination water was collected from the rolloffs via vacuum truck and transferred to one of the treatment cells for mixing with staged materials and solidification reagent prior to off-site disposal.

Following the disposal of staged materials, and excavation and disposal of soil below the staging areas, the decontamination pad material was loaded out with other staged soil. The final excavator decontamination consisted of brush-scrubbing the excavator bucket over the last load to High Acres Landfill, and dry-wiping the excavator bucket with cloth rags. Rags were disposed of with the last load of material destined for High Acres Landfill.

2.6 HEALTH AND SAFETY

In accordance with the RAWP, AAA prepared a Health, Safety and Contingency Plan (HSCP) prior to mobilization. The HSCP included provisions for a daily tailgate safety meeting, personnel air monitoring, and perimeter air monitoring.

In accordance with the HSCP, personal air pump samples were to be collected on the first day of intrusive activities, and on the first day of excavation of TSCA-designated sediments. Personal air pumps were not deployed on the first day of excavation in September 2001 due to rain. However, personal air monitoring samples were collected for PCB analysis on both the first day of intrusive activities and on the first day of excavation of TSCA-designated sediments upon resumption of activities in September 2002. Based on the results of personal air monitoring showing no detectable levels of PCBs, soil removal activities were performed using Level D personal protective equipment, unless dust monitoring results warranted upgrades in respiratory protection. Personal air monitoring sample results are provided as Appendix E. A work-zone action level of 0.05 milligrams per cubic meter (mg/m^3) was established in the HSCP for workers to don Level C protection. Dust levels exceeding action levels that were considered by the contractor's health and safety officer to be brief transients (e.g., caused by approaching or moving the dust monitor) were annotated in the logbook, and were not regarded as meaningful data.

During the removal of sediment and bank soil with concentrations of PCBs exceeding the performance standard, dust monitoring was performed at the work zone perimeter in accordance with the Community Air Monitoring Plan. Dust monitors were not deployed during precipitation events to avoid instrument damage, or when the ground surface was saturated from recent precipitation. The level of 0.05 mg/m^3 was also used as the work-zone perimeter action level for the contractor to implement dust suppression measures for community protection. On those occasions that the work zone perimeter action level was exceeded, AAA used a water truck to spray water for dust suppression.

2.7 BACKFILL AND RESTORATION

On October 18, 2002, AAA mobilized a Caterpillar D6C bulldozer for backfill placement. Prior to delivery of backfill soil to the site from Porter Concrete Service of Waverly, New York, and in accordance with the RAWP, AAA submitted the required advanced testing results to Cummings/Riter for review and approval. Parameters for advance testing consisted of the most recent Target Compound List/Target Analyte List for each type of backfill (general fill and gravel fill), and engineering classification in accordance with American Society for Testing of Materials (ASTM) D2487. Backfill

analytical results and sieve analyses are provided as Appendix F. General fill (denoted as "vegetative fill"), consisting of a well-graded sand with gravel, was placed to within six inches of final grade. Gravel fill (denoted as "bank run gravel") consisted of a well-graded gravel with approximately 30 percent sand-sized particles and approximately 10 percent silt/clay-sized particles. General fill was covered with six inches of gravel fill for channel stabilization. Approximately 4,250 tons (about 2,600 CY) of general fill and 7,130 tons (about 4,700 CY) of gravel fill were placed on site to restore the channel and staging areas. The final restoration elevations are shown on Sheet 3 of 3 of the record drawings (Appendix A).

2.8 SEEDING AND MULCHING

Seed was applied over the disturbed area at the bypass pumping discharge location using a mechanical spreader. The seed was comprised of a mixture of annual ryegrass, birdsfoot trefoil, white clover, and red fescue and was applied at a rate of 30 pounds per 10,000 square feet (s.f.). The seed mix for the disturbed area at the pump intake was restored with a mixture of perennial ryegrass, blue grass and red fescue applied at a rate of 60 pounds per 10,000 s.f. Straw mulch was applied to all seeded areas.

2.9 PRE-FINAL AND FINAL INSPECTIONS

With the restoration of the drainageway channel completed, a pre-final inspection was held on December 6, 2002 with representatives of USEPA, Viacom, Fagan, and AAA. Removal of the dam, dismantling of the bypass pumping system, and off-site disposal of excavated sediment and bank soil were completed after that inspection. A subsequent inspection was conducted on September 22, 2003 and consisted of a walk-through of the project to determine the completeness of the remedial action and its consistency with design documents and the ROD. In accordance with the Statement of Work (SOW) under the Consent Decree, advance notification of this inspection was provided to NYSDEC. A final inspection of the project, including the supplemental soil remediation (Section 3.0), was made on September 23, 2004. Representatives of Viacom, USEPA, and NYSDEC conducted this final inspection.

2.10 SUMMARY OF COSTS

In accordance with the requirements of the SOW, a summary of approximate remedial design and remedial construction costs for Industrial Drainageway has been provided in Table 4. The costs presented in Table 4 include costs associated with the supplemental soil remediation (Section 3.0).

2.11 PROJECT CHANGES/UNUSUAL OBSERVATIONS

Viacom submitted four field design change requests to USEPA for approval to address post-excavation conditions for specific areas of the Industrial Drainageway and floodplain. These change requests were initiated following discussions and a conference call on October 16, 2002, among Ms. Isabel Rodrigues of USEPA, Mr. Michael Miner of CDM Federal Programs Corporation, Mr. Leo Brausch of Viacom, and Mr. Stan Criss of Fagan. The first three field design change requests were prepared by Mr. Criss and submitted to the above-listed parties on October 24, 2002. On January 10, 2003, summarized reports stating the changes that were made related to each request were submitted to these same parties. To maintain continuity, a fourth change request has been added to this report and included in Appendix G to clarify results for a post-excavation sample that had been taken from the east bank of the Industrial Drainageway between Station 12+75 and Station 13+75.

Field Design Change Request 001 addressed the excavation and subsequent restoration on the east side of a small peninsula near Station 15+25 aligned parallel to flow along the west bank of the Industrial Drainageway. The change was made to connect drainage from an unnamed culvert (Culvert 3) to the Industrial Drainageway, and describes stabilization of the excavation with geotextile and a one-foot layer of nominal one- to three-inch diameter stone. The excavations were made per the design from Stations 14+00 to 15+42 on the west bank, and included an excavation to Culvert 3. Post-excavation results indicate that remaining sediments in this area meet the performance standard.

Field Design Change Request 002 addressed the lateral extent of excavation of a small, low-lying area approximately 30 feet south of the Industrial Drainageway at Station 17+00, known from the predesign sample location as Area 23. This area was separated

from the drainageway channel by a stabilized bank, which was overgrown with poplar trees. The request was to limit the excavation to the dimensions as of October 24, 2002, to avoid impairment of the vegetative stabilization. Based on results for post-excavation samples from the bank sidewalls, the bank was excavated, and a replacement berm was built and armored with nominal one-to three-inch diameter stone. Post-excavation samples (labeled with 23/W identifiers) from the excavated bank area indicate that remaining soils along the bank met the performance standard.

Several expansions of the Area 23 excavation were made in the southerly and western directions, but PCB concentrations in two post-excavation samples (23-B-S-S-100 and 23-B-S-W-100) continued to show exceedance of the performance standard (3.1 mg/kg and 2.2 mg/kg, respectively). In submitting Field Design Change Request 002, Viacom believed that the area was not part of the drainageway channel (the excavation had already been expanded more than 70 feet from the drainageway) and that further excavation would provide only minimal improvement to what is already significantly below the subsurface cleanup level of 10 mg/kg per NYSDEC *Technical Administrative Guidance Memorandum on Determination of Soil Cleanup Objectives and Cleanup Levels* (TAGM) 4046.[2] The Area 23 excavation was lined with geotextile and backfilled with bank run gravel. Viacom subsequently agreed to remove additional floodplain soils in Area N, as described in Section 3.2.

Field Design Change Request 003 was to limit the excavation between Stations 16+75 and 17+25 to the dimensions as of October 24, 2002. The request was made to limit extension of the east sidewall excavation further into the garbage of the closed Village of Horseheads landfill, and to leave the bank in place between the drainageway channel and the Area 23 excavation. As stated above, it was decided to remove the common bank between the drainageway and Area 23 due to post-excavation sample results. The east bank excavation was excavated to design limits, and expanded twice in two-foot increments. Garbage, plastic bags, and various wastes were encountered in the first two-foot extension of the excavation, and a combination of garbage intermingled with cover soil was encountered in the second two-foot excavation extension. The composite

[2] Although, the sidewall confirmation samples are designated as surface samples, they are comprised of aliquots taken from the top two feet of the excavation. Under NYSDEC TAGM 4046, the surface refers to the top six inches or less of soils.

sample of east bank soils following the second extension showed a 1.7 mg/kg PCB concentration. Because the excavation of the east sidewall was well within the limits of the Village of Horseheads landfill, and the PCB concentration was below the TAGM levels for clean subsurface soils, no additional excavation of the east sidewall was done. The east sidewall was covered with a geotextile, bank run gravel, and armored with nominal one- to three-inch diameter stone for erosion protection. Viacom subsequently provided additional rock channel protection in this area, as described in Section 3.3.

Viacom submitted Field Design Change Request 004 to document the limits of excavation of the east bank of the Industrial Drainageway from Station 12+75 to Station 13+75 in the Chemung County Department of Public Works yard (Area N). The east sidewall in Area N was extended 25 feet east of design limits from approximately Station 13+20 to Station 13+60. Additional expansion would be into large cinder, metal debris, and soil stockpiles. The PCB concentration in the post-excavation sidewall sample (N-B-S-E-004) was 5.9 mg/kg; Sample N-B-S-E-004 was of subsurface soils and was below the cleanup level as per NYSDEC TAGM 4046. Viacom subsequently agreed to remove additional floodplain soils in Area N, as described in Section 3.2.

In summary, through the course of the Industrial Drainageway remediation, sediments, bank soils, and floodplain soils exhibiting PCB concentrations greater than 1.0 mg/kg were removed, with the following exceptions:

- The north and west sidewalls of the excavation near pre-design investigation Sample Point 23 (2.2 mg/kg and 3.1 mg/kg PCBs, respectively), as described in Field Design Change Request No. 2 (Appendix G);
- The northeast sidewall cutting into the old Village of Horseheads landfill between Stations 16+75 and 17+25 (1.8 mg/kg PCBs), as described in Field Design Change Request No. 3 (Appendix G); and
- East of the drainageway in the Chemung County yard between Stations 12+75 and 13+75 (5.9 mg/kg PCBs), as described in Field Design Change Request No. 4 (Appendix G).

Subsequent work to address these areas is discussed in Section 3.0.

The location of the bypass pumping discharge was changed from the location shown in the Revised Addendum to the RAWP. The pump discharge was relocated to the northwest portion of Koppers Pond on EWB property from approximately Station 19+00. The reason for the relocation was to discharge downstream of sediments designated for excavation on Hardinge property. Natural revegetation of this area is expected to readily occur by native plant species.

AAA had proposed using Dexsil field screening kits for evaluation of PCB concentrations prior to collection of post-excavation samples for laboratory analysis. An evaluation of the correlation between laboratory analytical results and Dexsil field screening results for the same samples indicated that the Dexsil results were unreliable. Consequently, AAA substituted Ensys test kits, which are less susceptible to interference from non-PCB chlorinated compounds, for the Dexsil test kits.

3.0 SUPPLEMENTAL SOIL REMEDIATION

With completion of the activities described in Section 2.0, Viacom believed that the Industrial Drainageway remedial construction had been completed in conformance with the design concept as presented in RAWP, the Remedial Design Report, the ROD, and the Consent Decree. Via letter dated June 16, 2004, however, USEPA requested that Viacom conduct additional remedial activities to address floodplain soils in three locations:

- The sidewalls of the excavation near pre-design investigation Sample Point 23 (Area 23);
- East of the drainageway in the Chemung County yard between Stations 12+75 and 13+75 (Area N); and
- The northeast sidewall cutting into the old Village of Horseheads landfill between Stations 16+75 and 17+25.

As described in its response of August 3, 2004, Viacom agreed to conduct supplemental sampling of floodplain soils and implemented this sampling in August 2004. Based on the results of that sampling, USEPA requested, via letter dated September 16, 2004, that Viacom remove certain floodplain soils in Area 23 and Area N, and provide additional documentation regarding the rock channel protection where the drainageway encountered the Village of Horseheads landfill. Viacom agreed to conduct the scope of work defined by USEPA's letter of September 16, 2004 and has completed this work. These activities are briefly summarized in the following paragraphs.

3.1 SOIL SAMPLING

On August 11, 2004, Fagan conducted, on behalf of Viacom, Geoprobe® sampling of floodplain soils located in Area N and Area 23. This sampling focused on delineating the extent of floodplain soils exhibiting PCB concentrations above 1.0 mg/kg in these two areas.

In this effort, 19 Geoprobe® borings were advanced in Area N, and 12 borings were advanced at locations in Area 23. Based on the results of this sampling, Fagan conducted further Geoprobe® sampling in Area N on August 19, 2004, at which time an additional 10 borings were advanced. Figure 4 shows the sampling locations from the work conducted on August 11 and 19, 2004 in Area N and Area 23.

Geoprobe® sampling was conducted using 2-inch diameter Macrocore samplers fitted with acetate sleeves. At each location, the probe was pushed to a depth below the target zone, and the cores were withdrawn and inspected. In Area N, the Geoprobe® borings were advanced to depths of 6 to 8 feet below ground surface (bgs); in Area 23, the Geoprobe® borings were advanced to a depth of 4 feet bgs. Tables 5 and 6 include the lithology encountered the Geoprobe® borings from Area 23 and Area N, respectively.

At each boring, samples of materials suspected of containing PCBs were collected for analysis. Such materials were selected based on their color and texture, and included a black and brown clay and a gray clay at Area N and a gray clay and black silt at Area 23. These impacted materials were generally found in thin layers between depths of 3 to 4.5 feet bgs in Area N and between 1.5 and 3.5 feet bgs in Area 23.

Sampled materials were screened for PCBs using RapidAssay® immunoassay testing kits. The NYSDEC on-site representative also collected samples for laboratory analysis of PCBs. Because the suspected materials were often present only in a very thin layer, many of the NYSDEC samples were not "split samples," but samples of related materials encountered in the borings. Tables 5 and 6 include the results of the RapidAssay® screening for samples collected from Area 23 and Area N, respectively. Appendix J includes the NYSDEC laboratory data uncorrected for dry weight.

3.2 SOIL REMOVAL

Based on the results of the delineation sampling, and in accordance with USEPA's letter of September 16, 2004, Viacom agreed to remove floodplain soils found to contain PCB concentrations greater than 1 mg/kg in Area 23 and floodplain soils found to contain PCB concentrations greater than 10 mg/kg in Area N.

3.2.1 Excavation

This excavation effort was initiated on September 16, 2004 and completed on September 27, 2004. Fagan conducted this work on behalf of Viacom, using Gary Dyer Excavating as a subcontractor.

Fagan first laid out the excavation areas in the field based on the results of the delineation samples. Three distinct excavations were marked in Area N and two were defined in Area 23. These excavation limits are shown on Figure 4.

The excavations first involved removing and stockpiling clean overburden soils from atop the target removal zone. In Area N, the overburden thickness was approximately 2.5 feet, and the overburden was approximately 1.0 foot in Area 23. Segregation of the overburden from underlying impacted materials was practical because the target impacted soils are visibly distinguishable from overburden. The limits of overburden removal were closely monitored in the field to avoid mixing of these materials from underlying impacted soils.

The underlying impacted soils were then excavated and placed in prepared containment areas. These containment areas were lined with polyethylene sheeting and encircled by an earthen berm. Separate containments were constructed for Area N and Area 23.

In Area N, impacted soils were removed to a final depth of 5.0 feet bgs where a visibly distinguishable brown sand and gravel was encountered. In Area 23, the west side excavation was taken to a depth of 3.0 feet bgs; the south side excavation was taken to a depth of 4.0 feet bgs. In both excavations, the residual bottom was a visibly distinguishable brown clay.

After removing soils to the delineated limits, Fagan collected soil samples at the bottom of each excavation area. One soil sample was collected for each 900 square feet of excavation area. In Area N, the confirmatory bottom samples were taken at discrete locations. The confirmatory samples in Area 23 were composites of the encountered

bottom soils. These samples were field screened for PCBs using RapidAssay® test kits, and splits were sent to FLI for laboratory analysis in accordance with the approved Quality Assurance Project Plan.

Excavations were then backfilled with clean imported soil. This imported soil was a bank-run gravel from Porter Sand and Gravel, a New York State permitted gravel quarry. The disturbed areas were then mulched and seeded with common grasses and foils.

Table 7 provides the results of confirmatory soil sampling for the September 2004 excavation activities. Laboratory data for these samples are provided in Appendix K. All final confirmation samples showed attainment of the specified cleanup level of 10 mg/kg, consistent with NYSDEC TAGM 4046.

3.2.2 Disposal

Within the containment areas, impacted soils were mixed with hydrated lime at a nominal lime addition rate of 10 percent by weight. Enviroblend®, a proprietary buffered phosphate compound, was also added to the soils removed from Area 23 at an approximate 5-percent rate to chemically stabilize heavy metals present in this material. Samples of the mixed materials were collected and sent to FLI for analysis of PCBs and TCLP SVOCs and metals. These data were needed for waste characterization and acceptance by WMI. Disposal was at the High Acres Landfill. In this effort, 422.45 tons of stabilized soil were sent off site for disposal. Appendix L provides shipping records.

3.3 Rock Channel Protection

Figure 4 shows the as-built rock-protected slope on the bank of the Industrial Drainageway between Stations 16+75 and 17+25. This bank has been protected with riprap to minimize the potential from streambank erosion into the adjacent Village of Horseheads landfill. The bank slope at this location is approximately 4 horizontal to 1 vertical. At this slope, the rock channel protection is stable and not subject to excessive scour.

In the supplemental work conducted in September 2004, Viacom added approximately 40 tons of 3- to 6-inch riprap.

4.0 CERTIFICATION OF WORK

Cummings/Riter certifies that this document has been prepared in conformance with the requirements of the Consent Decree, Civil Action No. 97-CV-6555T, between CBS Corporation and USEPA for implementation of the RAWP for Industrial Drainageway Remediation, as amended (Cummings/Riter, August 15, 2001; April 24, 2002).

For the purpose of this Remedial Action Report, "certify" means to state or declare a professional opinion of conditions whose true properties cannot be known at the time such certification was made, despite appropriate professional evaluation. We have accurately reported information provided by others identified in Section 1.1. Certification of work in no way relieves any other party from meeting requirements imposed by contract or other means, including commonly accepted industry practices. Certification does not guarantee construction, nor should our work or this Remedial Action Report be construed as relieving AAA, its subcontractors, and other project participants of their responsibility to have performed the work in accordance with the contract drawings and technical specifications.

Respectfully submitted,
Cummings/Riter Consultants, Inc.

Bruce Geno
Project Manager

I hereby certify that to the best of my knowledge, the Remedial Action for Industrial Drainageway sediments was implemented and all construction activities were completed, unless so noted, in accordance with the USEPA-approved RAWP for Industrial Drainageway Remediation, the USEPA-approved Supplemental Design Report, the ROD, and Consent Decree under my stamp and signature as a Professional Engineer in the State of New York.

STATE OF NEW YORK * WILLIAM C. SMITH * 075625 LICENSED PROFESSIONAL ENGINEER

11/16/04

William C. Smith, P.E.
Senior Project Manager
New York State P.E. No. 075625

Date

TABLES

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
POST-EXCAVATION SOIL SAMPLES
INDUSTRIAL DRAINAGEWAY
KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

Interval	Sample ID	Date Sampled	Total PCB (mg/kg)[a]	Pass/ Fail[b]	Tracked with Sample ID	Date Sampled	Total PCB (mg/kg)	Pass/ Fail	Tracked with Sample ID	Date Sampled	Total PCB (mg/kg)	Pass/ Fail
0+00	PRE-DAM-S/SS-W-001	12/11/2002	0.140	P								
	ROCKY MIX (BOTTOM)	9/14/2002	<0.440	P								
0+30	A-B-S-W-001	9/16/2002	0.480	P								
	A-B-SS-W-001	9/16/2002	0.580	P								
	A-B-S-E-B-001	9/26/2002	0.180	P								
	A-B-S-E-001	9/16/2002	2.200	F	A-B-S-E-R-002	9/26/2002	0.730	P				
	A-B-SS-E-001	9/16/2002	13.000	F	A-B-SS-E-R-002	9/26/2002	5.300	F	A-B-SS-E-R-003	10/5/2002	0.78/<0.32[c]	P
	A-C-SS-B-001	10/11/2002	0.730	P								
0+80	A-B-SS-B-001	9/16/2002	0.098	P								
0+80	B-B-S-W-001	9/24/2002	0.270	P								
	B-B-SS-W-001A	9/24/2002	0.220	P								
	B-B-SS-W-001B	9/24/2002	0.260	P								
	B-B-S-E-001	9/24/2002	1.100	F	B-B-S-E-B-002	10/5/2002	0.580	P				
					B-B-S-E-R-002	10/5/2002	0.260	P	<-also tracked B-B-S-E-001			
	B-B-SS-E-001	9/24/2002	0.490	P								
1+80	B-C-S-B-001	9/24/2002	1.000	P								
2+50	C-B-S-W-001	9/30/2002	0.280	P								
	C-B-SS-W-001	9/30/2002	4.100	F	C-B-SS-W-002	11/2/2002	0.120	P				
	C-C-S-B-001	9/30/2002	6.800	F	C-C-S-B-002	11/2/2002	0.260	P	<-also tracked C-B-SS-B-001			
	C-B-SS-B-001	9/30/2002	1.600	F	see C-C-S-B-002							
	C-C-SS-B-001	9/30/2002	0.220	P								
	C-B-S-E-001	9/30/2002	0.310	P								
3+75	C-B-SS-E-001	9/30/2002	3.100	F	C-B-SS-E-002	11/2/2002	0.620	P				
3+75	D-B-S-W-001	10/2/2002	0.250	P								
	D-B-SS-W-001	10/2/2002	2.000	F	D-B-SS-W-006	11/7/2002	<0.210	P				
(bottom)	D-C-S-001	10/2/2002	3.100	F	D-C-S-B-002	11/2/2002	<0.220	P				
(bottom)	D-C-SS-001	10/2/2002	0.240	P								
	D-B-S-E-001	10/2/2002	0.540	P								
4+75	D-B-SS-E-001	10/2/2002	0.460	P								
4+75	E-C-S-W1-001	10/9/2002	0.590	P								
	E-C-SS-W1-001	10/9/2002	0.700	P								
	E-C-S-W2-001	10/9/2002	0.450	P								
	E-C-SS-W4-001	10/9/2002	1.600	F	E-B-S-W-002	11/5/2002	<0.150	P				
					E-B-SS-WB-001	11/5/2002	<0.110	P				
					E-B-SS-W-002	11/5/2002	0.160	P				

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	E-C-SS-W2-001	10/9/2002	5.200	F	E-B-S-W-002	11/5/2002	<0.150	P				
					E-B-SS-WB-001	11/5/2002	<0.110	P				
					E-B-SS-W-002	11/5/2002	0.160	P				
	E-C-S-W3-001	10/9/2002	0.360	P								
	E-C-SS-W3-001	10/9/2002	0.410	P								
	E-C-S-W4-001	10/9/2002	0.390	P								
	E-C-S-E-001	10/9/2002	1.200	F	E-C-S-E-002	11/5/2002	0.330	P				
	E-C-SS-E-001	10/9/2002	1.500	F	E-C-SS-E-002	11/5/2002	0.450	P				
5+11	E-C-SS-B-001	10/9/2002	0.300	P								
5+11	F-C-S-W1-001	10/9/2002	0.470	P								
	F-C-SS-W1-001	10/9/2002	1.600	F	F-B-SS-W-001	11/5/2002	0.210	P				
					F-B-SS-WB-001	11/5/2002	<0.110	P				
	F-C-S-W2-001	10/9/2002	0.300	P								
	F-C-SS-W2-001	10/9/2002	1.400	F	F-B-SS-W-001	11/5/2002	0.210	P				
					F-B-SS-WB-001	11/5/2002	<0.110	P				
	F-C-S-W3-001	10/9/2002	0.460	P								
	F-C-SS-W3-001	10/9/2002	0.450	P								
	F-C-S-W4-001	10/9/2002	0.280	P								
	F-C-SS-W4-001	10/9/2002	1.600	F	F-B-SS-W-001	11/5/2002	0.210	P				
					F-B-SS-WB-001	11/5/2002	<0.110	P				
	F-C-S-W5-001	10/9/2002	0.430	P								
	F-C-SS-W5-001	10/9/2002	1.4/1.4	F	F-B-SS-W-001	11/5/2002	0.210	P				
					F-B-SS-WB-001	11/5/2002	<0.110	P				
	F-C-S-E-001	10/9/2002	1.300	F	F-C-S-E-003	11/7/2002	<0.110	P				
					F-B-SS-W-002	11/7/2002	0.370	P				
					F-C-S-B-001	11/7/2002	<0.110	P				
	F-C-SS-E-001	10/9/2002	0.280	P								
5+75	F-C-SS-B-001	10/9/2002	0.710	P								
5+75	G-C-S-W-001	10/10/2002	0.310	P								
	G-B-S-W1-001	10/10/2002	3.100	F	G-B-S-W1-004	10/29/2002	<0.130	P				
	G-B-S-W-001	10/10/2002	1.700	F	G-B-S-W-003	10/29/2002	<0.110	P				
	G-C-S-E-001	10/10/2002	0.710	P								
	G-B-S-E1-001	10/10/2002	1.200	F	G-B-S-E1-004	10/29/2002	0.160	P				
	G-B-SS-E1-001	10/10/2002	6.300	F	G-B-SS-E1-003	10/29/2002	0.170	P				
	G-B-S-E2-001	10/10/2002	0.810	P								
	G-B-SS-E2-001	10/10/2002	3.600	F	G-B-SS-E2-003	10/29/2002	<0.110	P				
	G-B-S-N-001	10/10/2002	0.610	P								

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	G-B-SS-N-001	10/10/2002	6.900	F	G-C-S-W-002	11/8/2002	<0.200	P				
					G-C-S-E-002	11/8/2002	<0.140	P				
	G-C-S-B-001	10/11/2002	1.000	P	G-C-S-B-002	11/8/2002	<0.110	P				
	G-C-SS-B-001	10/10/2002	1.400	F	G-C-SS-B-003	10/29/2002	<0.110	P				
7+25	G-C-SS-B2-001	10/10/2002	0.840	P								
7+25	H-B-S-W-001	10/14/2002	0.310	P								
	H-B-SS-W-001	10/14/2002	0.420	P								
	H-C-SS-B1-001	10/14/2002	0.360	P								
	H-B-S-E-001	10/14/2002	0.360	P								
	(H-I)-B-SB-001	11/7/2002	0.390	P								
	H-B-SS-E-001	10/14/2002	2.200/0.54	F	H-B-SS-E-002	10/28/2002	0.680	P				
					H-B-SS-E-003	10/29/2002	<0.23	P				
8+25	H-C-SS-B2-001	10/14/2002	0.250	P								
8+25	I-C-SS-B2-001	10/21/2002	0.380	P								
	I-B-S-E-001	10/21/2002	1.300	F	I-B-S-E-004	11/1/2002	<0.13/<0.13	P				
	I-B-S-W-001	10/21/2002	0.630	P								
	I-C-SS-B1-001	10/21/2002	0.16/0.26	P								
	(H-I)-B-SB-001	11/7/2002	0.390	P								
	I-B-SS-W-001	10/21/2002	3.300	F	I-B-SS-W-002	10/30/2002	<0.120	P				
9+25	I-B-SS-E-001	10/21/2002	2.000	F	I-B-SS-E-002	10/30/2002	<0.120	P				
9+25	J-B-S-W-001	10/30/2002	<0.170	P								
	J-C-SS-B1-001	10/30/2002	<0.099	P								
	J-C-SS-B2-001	10/30/2002	<0.110	P								
	J-B-S-E-002	11/1/2002	<0.130	P								
	J-B-SS-E-001	11/1/2002	<0.110	P								
10+25	J-B-SS-W-002	11/1/2002	0.380	P								
10+25	K-C-SS-B1-001	11/13/2002	<0.100	P								
	K-C-SS-B2-001	11/13/2002	<0.100	P								
	K-C-SS-B3-001	11/13/2002	0.330	P								
	K-B-S-E-002	11/16/2002	0.270	P								
	K-B-SS-W-003	11/11/2002	1.100	F	K-B-SS-W-005	11/20/2002	<0.100	P				
	K-B-SS-E-003	11/20/2002	<0.100	P								
11+25	K-B-S-W-004	11/13/2002	<0.130	P								
11+25	L-C-SS-B1-001	11/16/2002	0.470	P								
	L-C-SS-B2-001	11/16/2002	<0.092	P								
	L-C-SS-B3-001	11/16/2002	<0.130	P								
	L-B-S-W-002	11/20/2002	<0.130	P								
	L-B-SS-E-002	11/20/2002	<0.120	P								

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
POST-EXCAVATION SOIL SAMPLES
INDUSTRIAL DRAINAGEWAY
KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

Interval	Sample ID	Date Sampled	Total PCB (mg/kg)[a]	Pass/ Fail[b]	Tracked with Sample ID	Date Sampled	Total PCB (mg/kg)	Pass/ Fail	Tracked with Sample ID	Date Sampled	Total PCB (mg/kg)	Pass/ Fail
	L-B-SS-W-004	11/21/2002	<0.110	P								
12+25	L-B-S-E-004	11/21/2002	<0.110	P								
12+25	M-C-SS-B1-001	11/16/2002	<0.110/<0.110	P								
	M-C-SS-B2-001	11/16/2002	<0.100	P								
	M-C-SS-E-001	11/16/2002	<0.120	P								
	M-B-S-E-001	11/16/2002	0.190	P								
	M-B-SS-W-001	11/16/2002	0.390	P								
12+75	M-B-S-W-001	11/16/2002	<0.250	P								
12+75	N-B-S-W-001	11/20/2002	<0.120	P								
	N-B-SS-W-001	11/20/2002	<0.120	P								
	N-C-SS-B1-001	11/20/2002	<0.110	P								
	N-C-SS-B2-001	11/20/2002	0.480	P								
	N-B-S-E-004	12/2/2002	5.900	F								
	N-B-SS-E-004	12/2/2002	0.580	P								
13+75	N-C-SS-B3-001	11/20/2002	<0.110	P								
13+75	O-C-SS-B3-002	11/29/2002	<0.110	P								
	O-B-SS-W-001	11/27/2002	0.130	P								
	O-B-SS-E-003	11/30/2002	0.120	P								
	O-C-SS-B2-002	11/29/2002	<0.100	P								
	O-B-S-W-001	11/29/2002	0.190	P								
	O-B-S-E-002	11/29/2002	0.140	P								
14+75	O-C-SS-B1-002	11/29/2002	<0.110	P								
14+75	P-B-SS-W-001	11/21/2002	<0.120	P								
	P-B-S-E-001	11/21/2002	<0.130	P								
	P-C-SS-B-001	11/21/2002	<0.140	P								
	P-B-S1-W-001	11/21/2002	<0.140	P								
	P-Bsub-S-N-001	11/21/2002	<0.130	P								
	P-Bsub-S-S-001	11/21/2002	<0.120	P								
	P-B-SS-E-001	11/21/2002	<0.130	P								
15+42	P-B-S2-W-001	11/21/2002	<0.130	P								
AREA 23	23-B-S-E-001	10/14/2002	2.600	F	23-B-S-E-100	1/20/2003	0.860	P	23-B-S-E-100	1/20/2003	0.860	P
AREA 23	23-B-S-W-001	10/14/2002	2.300	F	23-B-S-W-100	1/20/2003	2.200	F	23-B-S-W-100	1/20/2003	2.200	F
AREA 23	23-C-S-E-B-001	10/14/2002	1.600	F	23-C-S-E-B-002	10/18/2002	0.160	P				
AREA 23	23-C-S-E-B-002	10/18/2002	0.160	P								
AREA 23	23-B-S-SE-003	10/23/2002	0.750	P								
AREA 23	23-B-S-SW-003	10/24/2002	7.100	F	23-B-S-S-100	1/20/2003	3.100	F				
AREA 23	23-B-S-NE-003	10/24/2002	14.000	F	23/W-B-S-S-001	12/4/2002	0.550	P				
AREA 23	23-B-S-NW-003	10/24/2002	1.600	F	23/W-B-S-N-001	12/4/2002	<0.150	P				

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
POST-EXCAVATION SOIL SAMPLES
INDUSTRIAL DRAINAGEWAY
KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

Interval	Sample ID	Date Sampled	Total PCB (mg/kg)[a]	Pass/ Fail[b]	Tracked with Sample ID	Date Sampled	Total PCB (mg/kg)	Pass/ Fail	Tracked with Sample ID	Date Sampled	Total PCB (mg/kg)	Pass/ Fail
AREA 23	23-C-S-W-B-001	10/14/2002	0.190	P								
BERM	23/W-C-SS-B-001	12/4/2002	<0.120	P								
BERM	23/W-B-S-S-001	12/4/2002	0.550	P								
BERM	23/W-B-S-N-001	12/4/2002	<0.150	P								
16+75	W-C-S-B-001	10/15/2002	<0.120	P								
	W-B-S-E-001	10/15/2002	1.700	F	W-B-S-E-003	10/23/2002	1.800	F				
	W-B-S-W-001	10/15/2002	2.000	F	W-B-S-W-002	10/23/2002	2.100	F	Bank Removed - tracked with 23/W-B-S-S-001,			
	W-C-S-S-001	10/15/2002	0.920	P					23/W-B-S-N-001, AND 23/W-C-SS-B-001			
17+25	W-C-S-N-001	10/15/2002	<0.120	P								
17+75	X-B-S-E-001	10/15/2002	0.460	P								
	X-B-S-B-001	10/15/2002	0.170	P								
	X-B-S-W-001	10/15/2002	0.910	P								
	X-B-S-N-001	10/15/2002	0.950	P								
18+25	X-B-S-S-001	10/15/2002	0.550	P								
21+75	Y-B-SS-B-001	10/18/2002	<0.120	P								
	Y-B-SS-N-001	10/18/2002	<0.190	P								
	Y-B-SS-S-001	10/21/2002	<0.180	P								
	Y-B-S-E-001	10/18/2002	0.470	P								
	Y-B-SS-E-001	10/18/2002	0.230	P								
	Y-B-S-W-001	10/18/2002	<0.310	P								
22+30	Y-B-SS-W-001	10/18/2002	<0.120	P								
22+60	Z-B-S-E-002	12/4/2002	<0.210	P								
	Z-B-S-W-002	12/4/2002	<0.160	P								
	Z-C-SS-B-001	12/3/2002	<0.130	P								
	Z-B-S-S-001	12/3/2002	<0.160	P								
	Z-B-S-N-001	12/3/2002	<0.160	P								

Notes:

a. mg/kg = milligrams per kilogram.

b. P/F = Pass/Fail. Threshold for Resource Conservation and Recovery Act classification as hazardous waste is 1.0 mg/l for cadmium using Toxicity Characteristic Leachate Procedure (TCLP).

c. " / " = results of sample analysis / results of duplicate sample analysis.

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
PRE- AND POST-CONSTRUCTION BACKGROUND SOIL SAMPLES
INDUSTRIAL DRAINAGEWAY
KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

Location	Sample I.D.	Sample Date	PCBs (mg/kg)	Comments
Village of Horseheads	PRE-HV1	9/17/2001	<0.036	Pre-construction grab sample from Village of Horseheads property near contractor staging area
Village of Horseheads	PRE-HV2	9/17/2001	<0.036	Pre-construction grab sample from Village of Horseheads property near contractor staging area
Village of Horseheads	PRE-HV3	9/17/2001	<0.036	Pre-construction grab sample from Village of Horseheads property near contractor staging area
Village of Horseheads	POST HV-1	3/19/2003	<0.12	Post-construction grab sample from Village of Horseheads property from same location as PRE-HV1
Village of Horseheads	POST HV-2	3/19/2003	<0.13	Post-construction grab sample from Village of Horseheads property from same location as PRE-HV2
Village of Horseheads	POST HV-3	3/19/2003	<0.15	Post-construction grab sample from Village of Horseheads property from same location as PRE-HV3
Chemung Co. Yard	DPW - DECON PAD AREA PRE	9/4/2002	<0.21/<0.21	Pre-construction composite sample collected from decontamination pad area (later used for staging cell 13)
Chemung Co. Yard	DPW - STAGING AREA PRE-SPL	9/4/2002	<0.20/<0.19	Pre-construction composite sample collected from staging cell 1 area
Chemung Co. Yard	CELLS 10, 14	1/21/2003	<0.24	Composite sample collected from restored locations of staging cells 10 and 14
Chemung Co. Yard	CELLS 12, 1	1/21/2003	<0.24	Composite sample collected from restored locations of staging cells 1 and 12
Chemung Co. Yard	CELLS 11 (4,5), 8, 9	1/21/2003	<0.24	Composite sample collected from restored locations of staging cells 4 and 5 (removed and subsequently rebuilt as staging cell 11), 8, and 9
Chemung Co. Yard	CELL 13	1/21/2003	<0.24	Composite sample collected from restored location of staging cell 13 (decontamination pad area)

TABLE 3
SUMMARY OF ANALYTICAL RESULTS
DISPOSAL CHARACTERIZATION SAMPLES
INDUSTRIAL DRAINAGEWAY
KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

Cell/Rolloff	Sample I.D.	Sample Date	PCB (mg/kg)[a]	TCLP Cd (mg/L)[b]	P/F[c]	Sample I.D.	Sample Date	TCLP Cd (mg/L)	P/F	Sample I.D.	Sample Date	TCLP Cd (mg/L)	P/F	Sample I.D.	Sample Date	TCLP Cd (mg/L)	P/F
Rolloff	RO001	9/21/2002	1.50	0.367	P												
Rolloff	RO002	9/21/2002	0.93	0.324	P												
Rolloff	RO003	9/21/2002	0.72	0.546	P												
Rolloff	RO004	9/21/2002	1.10	0.489	P												
Rolloff	RO005	9/21/2002	1.10	0.907	P												
Rolloff	RO006	9/21/2002	0.89	0.431	P												
1	RO038, 39/41-44	10/14/2002	2.60	0.996	P												
1	CELL #1 TSCA MAT'L	11/19/2002	--	1.060	F	TSCA, CELL #1	11/25/2002	0.114	P								
2	RO007 SN N/A POST-CKD	9/23/2002	--	0.293	P												
2	RO008 200-430 POST-CKD	9/24/2002	--	0.306	P												
2	RO009 SN 200-609 POST-CKD	9/24/2002	--	0.825	P												
2	RO010 SN 200-436 POST-CKD	9/23/2002	--	0.229	P												
3	RO0025	10/1/2002	0.53	0.283	P												
3	RO040 SEVERAL ROLLOFFS	10/9/2002	0.78	1.04	F	RO040A, RESAMPLE CELL 3	10/15/2002	2.320	F	RO040B, CELL#3 RESAMPLE	10/21/2002	0.859	P				
4	RO045-49/58-60 CELL#4	10/14/2002	1.40	0.540	P												
5	69/71/76-78/80 COMPOSITE	10/18/2002	0.43	2.300	F	CELL #5	10/23/2002	0.701	P								
6	RO050-060 CELL #6	10/14/2002	3.70	4.930	F	CELL #6 10 ROLLOFFS	10/23/2002	5.25	F	2-6-TRAILER	12/17/2002	1.6	F	3-6-CHEMUNG	12/30/2002	<0.05	P
6										2-6-CENTER	12/17/2002	0.192	P	3-6-CENTER	12/30/2002	<0.05	P
6										2-6-CHEMUNG	12/17/2002	1.38	F	3-6-TRAILER	12/30/2002	0.065	P
7	CELL #7 INITIAL RUN	10/24/2002	<0.250	4.070	F	2-7-TRAILER	12/17/2002	0.32	P								
7						2-7-CENTER	12/17/2002	1.07	F	3-7-CENTER	12/30/2002	0.072	P				
7						2-7-CHEMUNG	12/17/2002	0.305	P								

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TABLE 3
SUMMARY OF ANALYTICAL RESULTS
DISPOSAL CHARACTERIZATION SAMPLES
INDUSTRIAL DRAINAGEWAY
KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

Cell/Rolloff	Sample I.D.	Sample Date	PCB (mg/kg)[a]	TCLP Cd (mg/L)[b]	P/F[c]	Sample I.D.	Sample Date	TCLP Cd (mg/L)	P/F	Sample I.D.	Sample Date	TCLP Cd (mg/L)	P/F	Sample I.D.	Sample Date	TCLP Cd (mg/L)	P/F
8 (1ST CONSTRUCTION)	CELL #8 BOTTOM OF PILE	10/28/2002	<0.310	4.180	F	8 EAST	11/1/2002	2.38	F	8P	11/11/2002	<0.50	P				
8 (1ST CONSTRUCTION)	CELL #8B TRENCH MIXED	10/28/2002	<0.29	3.760	F	8 CENTRAL	11/1/2002	2.53	F	8C	11/11/2002	<050	P				
8 (1ST CONSTRUCTION)	CELL #8C WEST PORTION	10/28/2002	0.44	3.340	F	8 MOUNTAIN	11/1/2002	2.13	F	8E	11/11/2002	0.352	P				
8 (1ST CONSTRUCTION)	CELL #8D EAST PORTION	10/28/2002	0.81	2.990	F	8 PACIFIC	11/1/2002	1.75	F	CELL # 8 SPLIT IN 3 SECTIONS MEETS TESTING FREQ							
8 (2ND CONSTRUCTION)	2#8E	11/26/2002	<0.250	2.330	F	3-8-E	12/5/2002	<0.05	P								
8 (2ND CONSTRUCTION)	2#8C	11/26/2002	<0.250	1.840	F	3-8-C	12/5/2002	<0.05	P								
8 (2ND CONSTRUCTION)	2#8M	11/26/2002	<0.300	2.610	F	SAMPLE OMITTED -MEETS TESTING FREQUENCY											
8 (2ND CONSTRUCTION)	2#8P	11/26/2002		2.580	F	3-8-P	12/5/2002	<0.05	P								
9 (1ST CONSTRUCTION)	CELL #9NE	10/29/2002	0.23	2.360	F	CELL#9E	11/5/2002	1.43	F	9E	11/11/2002	2.11	F	CELL REFILLED			
9 (1ST CONSTRUCTION)	CELL #9SW	10/29/2002	0.57	2.760	F	CELL#9C	11/5/2002	1.79	F	9C	11/11/2002	1.44	F	AND REMIXED			
9 (1ST CONSTRUCTION)	CELL #9NW	10/29/2002	0.72	2.030	F	CELL#9M	11/5/2002	0.755	P								
9 (1ST CONSTRUCTION)	CELL #9SE	10/29/2002	1.20	1.760	F	CELL#9P	11/5/2002	0.435	P								
9 (2ND CONSTRUCTION)	2-#9-R	12/9/2002	0.80	1.320	F	2-#9-R2	12/17/2002	<0.05	P								
9 (2ND CONSTRUCTION)	2-#9-C	12/9/2002	0.83	1.230	F	2-#9-C2	12/17/2002	<0.05	P								
9 (2ND CONSTRUCTION)	2-#9-L	12/9/2002	0.98	1.430	F	2-#9-L2	12/17/2002	<0.05	P								
10 (1ST CONSTRUCTION)	10S	11/11/2002	2.80	0.938	P												
10 (1ST CONSTRUCTION)	10SN	11/11/2002	1.70	2.250	F	10SN1	11/14/2002	0.709	P								
10 (1ST CONSTRUCTION)	10NN	11/11/2002	0.93	0.054	P												
10 (1ST CONSTRUCTION)	10N	11/11/2002	1.10	<0.05	P												
10 (2ND CONSTRUCTION	2-10-L	12/5/2002	0.68	<0.05	P												
10 (2ND CONSTRUCTION	2-10-C	12/5/2002	0.56	<0.05	P												
10 (2ND CONSTRUCTION	2-10-R	12/5/2002	1.90	0.863	P												
11 (1ST CONSTRUCTION)	CELL#11E	11/6/2002	<0.25	1.530	F	11E1	11/14/2002	<0.05	P								
11 (1ST CONSTRUCTION)	CELL#11C	11/6/2002	0.21	4.580	F	11C1	11/14/2002	<0.05	P								
11 (1ST CONSTRUCTION)	CELL#11M	11/6/2002	0.26	3.460	F	11M1	11/14/2002	<0.05	P								
11 (1ST CONSTRUCTION)	CELL#11P	11/6/2002	<0.27	<0.05	P												
11 (2ND CONSTRUCTION	2-#11-P	12/9/2002	<0.24	1.040	F	2-#11-P2	12/17/2002	0.074	P								
11 (2ND CONSTRUCTION	2-#11-M	12/9/2002	<0.28	1.370	F	2-#11-M2	12/17/2002	0.339	P								
11 (2ND CONSTRUCTION	2-#11-C	12/9/2002	<0.26	1.820	F	2-#11-C2	12/17/2002	0.101	P								
11 (2ND CONSTRUCTION	2-#11-E	12/9/2002	<0.27	1.170	F	2-#11-E2	12/17/2002	0.067	P								
12	12E	11/11/2002	0.99	1.520	F	12E1	11/25/2002	1.73	F	12E2	12/2/2002	0.081	P				
12	12C	11/11/2002	1.20	1.580	F	12C1	11/25/2002	1.34	F	12C2	12/2/2002	0.141	P				
12	12M	11/11/2002	1.10	<0.05	P	12Z1	11/25/2002	0.93	P	12Z2	12/2/2002	<0.05	P				
12	12P	11/11/2002	1.00	0.628	P												
13	1-13-NORTH	12/30/2002	0.78	0.291	P												
13	1-13-CENTER	12/30/2002	<0.27	0.912	P												
13	1-13-SOUTH	12/30/2002	0.90	<0.05	P												

TABLE 3
SUMMARY OF ANALYTICAL RESULTS
DISPOSAL CHARACTERIZATION SAMPLES
INDUSTRIAL DRAINAGEWAY
KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

Cell/Rolloff	Sample I.D.	Sample Date	PCB (mg/kg)[a]	TCLP Cd (mg/L)[b]	P/F[c]	Sample I.D.	Sample Date	TCLP Cd (mg/L)	P/F	Sample I.D.	Sample Date	TCLP Cd (mg/L)	P/F	Sample I.D.	Sample Date	TCLP Cd (mg/L)	P/F
14 (1ST CONSTRUCTION)	14E	11/14/2002	0.36	<0.05	P												
14 (1ST CONSTRUCTION)	14C	11/14/2002	0.63	0.135	P												
14 (1ST CONSTRUCTION)	14P	11/14/2002	0.58	0.238	P												
14 (2ND CONSTRUCTION	2-14-L	12/5/2002	1.10	0.480	P												
14 (2ND CONSTRUCTION	2-14-C	12/5/2002	1.10	0.096	P												
14 (2ND CONSTRUCTION	2-14-R	12/5/2002	0.77	<0.05	P												
15	15 ROAD	12/10/2002	0.75	1.620	F	2-15-CREEK	12/18/2002	<0.05	P								
15	15 CENTER	12/10/2002	0.77	1.230	F	2-15-ROAD	12/18/2002	<0.05	P								
15	15 CREEK	12/10/2002	1.10	1.710	F	2-15-CENTER	12/18/2002	0.073	P								
16	16 CREEK	12/17/2002	0.39	<0.05	P	2-16-CREEK	12/30/2002	<0.05	P								
16	16 CENTER	12/17/2002	1.20	1.630	F	2-16-CENTER	12/30/2002	<0.05	P								
16	16 ROAD	12/17/2002	0.38	1.180	F	2-16-ROAD	12/30/2002	<0.05	P								

Notes:

a. mg/kg = milligrams per kilogram.
b. mg/L = milligrams per kilogram.
c. P/F = pass/fail. Threshold for Resource Conservation and Recovery Act classification as hazardous waste is 1.0 mg/l for cadmium using Toxicity Characteristic Leachate Procedure (TCLP).

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TABLE 4
SUMMARY OF APPROXIMATE COSTS
INDUSTRIAL DRAINAGEWAY
KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

Cost Component	Amount ($)
RD/RA Project Management	$ 30,000
Remedial Design and Construction Management	
Investigations and Engineering	80,000
Laboratory Analyses	25,000
Data Validation	5,000
Construction Management and Quality Assurance	160,000
Remedial Design Total	270,000
Remedial Action	
Site Work	946,000
Nonhazardous Waste Disposal	724,000
TSCA/Hazardous Waste Disposal	41,000
Supplemental Site Restoration	9,000
Supplemental Soil Investigation and Remediation	100,000
Remedial Action Total	1,820,000
RD/RA Total	$ 2,120,000

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TABLE 5
AREA 23
SUMMARY OF GEOPROBE SAMPLING AND ANALYSES
SUPPLEMENTAL SOIL REMEDIATION
INDUSTRIAL DRAINAGEWAY
KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

Sample Number	Location From SW Corner of Area 23 Excavation (N/S) x (E/W) in ft.	Sampling Inteval in ft. bgs	Rapid Assay PCB in ppm	Interval Depth in ft. bgs	Lithology
S-1	0 x 0	1.8 - 2.6	ND	1 - 1.8 1.8 - 2.6 2.6 - 4.0 4.0 - 8.0	Br - Slt w Stone Bl - Sd Slt Br - Cl w Slt Br - Sd Gr
S-2	30 S x 0	2.6 - 2.9	0.9	0 - 2.6 2.6 - 2.9 2.9 - 4.0	Br - Slt w Stone Bl - Sd Slt Br - Cl Slt
S-3	30 S x 20 E	1.3 - 2.1	ND	0 - 1.3 1.3 - 2.1 2.1 - 4.0	Br - Cl w Slt Bl - Slt Br - Cl w Slt
S-4	30 S x 40 E	1.3 - 1.8	ND	0 - 1.3 1.3 - 1.8 1.8 - 4.0	Br - Sd Slt Gr Bl - Slt Br - Cl
S-5	30 S x 58 E	1.4 - 1.9	ND	0 - 1.4 1.4 - 1.9 1.9 - 4.0	Br - Sd Slt Gr Bl - Slt Gr/Br - Cl
S-6	35 N x 0	1.3 - 1.9	1.71	0 - 1.3 1.3 - 1.9 1.9 - 4.0	Br - Cl Bl - Slt Br - Cl Sd Gr
S-7	67 N x 0	0.9 - 1.9	1.26	0 - 0.5 0.5 - 0.9 0.9 - 1.9 1.9 - 3.5	Br - Gr Slt Gr - Cl Bl - Slt Br - Sd Cl
S-8	67 N x 15 W	1.2 - 2.6 2.6 - 3.2	0.53 ND	0 - 1.2 1.2 - 2.6 2.6 - 3.2 3.2 - 8.0	Br Gr Gr - Cl Slt Bl - Slt Br - Sl Sd Gr
S-9	35 N x 15 W	1.6 - 2.1	ND	0 - 1.3 1.3 - 1.6 1.6 - 2.1 2.1 - 4.0	Br - Gr Slt Gr - Cl Bl - Slt Gr - Cl Gr
S-10	0 x 15 W	1.8 - 2.7	Lost	0 - 1.8 1.8 - 2.7 2.7 - 4.0	Br Gr Sd Bl - Slt Br - Slt Sd Cl
S-11	30 S x 15W	1.6 - 2.1	ND	0 - 1.6 1.6 - 2.1 2.1 - 4.0	Br - Sd Gr Bl/Br - Sl Sd Br - Sl Cl w Gr
S-12	60 S x 20 E	0.7 - 0.9	ND	0 - 0.7 0.7 - 0.9 0.9 - 4.0	Br - Sd Slt Bl / Br - Sd Slt Br - Cl Sd w Gr

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TABLE 5
AREA 23
SUMMARY OF GEOPROBE SAMPLING AND ANALYSES
SUPPLEMENTAL SOIL REMEDIATION
INDUSTRIAL DRAINAGEWAY
KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

Sample Number	Location From SW Corner of Area 23 Excavation (N/S) x (E/W) in ft.	Sampling Inteval in ft. bgs	Rapid Assay PCB in ppm	Interval Depth in ft. bgs	Lithology
S-13	15 S x 15 E	1.2 - 1.7 1.7 - 2.5	ND ND	0 - 0.7 0.7 - 1.2 1.2 - 1.7 1.7 - 2.5 2.5 - 2.8	Br - Sd Gr Bl/Br - Cl w Slt Gr Lt Gr - Cl Bl - Slt Br - Cl
S-14	25 N x 5 W	1.1 - 1.8 1.8 - 2.8	0.27 ND	0 - 1.1 1.1 - 1.8 1.8 - 2.8 2.8 - 3.5	Br - Sd Gr w Slt Lt Gr - Cl Bl - Slt Br - Cl Slt w Gr
S-15	50 N x 5 W	1.1 - 1.6	0.51	0 - 0.8 0.8 - 1.4 1.4 - 2.1 2.1 - 3.4	Br - Sd Gr Slt Bl/Br - Cl w Gr Sd Bl - Slt Br - Sd Gr w Cl
S-16	75 N x 5 W	1.0 - 1.9	3.24	0 - 0.8 0.8 - 1.5 1.5 - 1.7 1.7 - 2.3 2.3 - 3.3	Br - Sd Gr w Slt Br - Cl w Slt Lt Gr - Cl Bl - Slt Br - Slt Sd & Gr w Cl
S-17	15 S x 30 E	1.2 - 1.8 1.8 - 2.1	0.62 2.35	0 - 1.2 1.2 - 1.8 1.8 - 2.1 2.1 - 2.4 2.4 - 3.7	Br - Slt Sd & Gr Br/Bl - Slt Bl - Slt & Lt Gr - Cl Bl - Slt & Lt Gr - Cl Br - Cl
S-18	15 S x 60 E	1.0 - 1.5 1.5 - 2.0	ND 6.26	0 - 1.0 1.0 - 1.5 1.5 - 1.8 1.8 - 2.6 2.6 - 3.6	Br - Gr Lt Gr - Cl Bl/Br - Slt Bl - Slt Br - Cl

TABLE 6
AREA N
SUMMARY OF GEOPROBE SAMPLING AND ANALYSES
SUPPLEMENTAL SOIL REMEDIATION
INDUSTRIAL DRAINAGEWAY
KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

Sample Number	Station Location of Drainageway	Distance Back From Excavation Limit in ft.	Sampling Interval in ft. bgs	Rapid Assay PCB in ppm	Interval Depth in ft. bgs	Lithology
S-1	13+75	20	2.0 - 3.0 3.0 to 4.3	ND 7.2	0 - 2.2 2.2 - 3.0 3.0 - 4.3 4.3 - 6.1	Bl - Cndrs & Gr Br Sd w Gr Br - Sd Gr w Slt Gr - Cl w Bl Slt Gr Br - Slt Sd & Gr
S-2	13+75	30	3.5 - 4.2	2.29	0 - 1.2 1.2 - 2.5 2.5 - 3.5 3.5 - 4.2 4.2 - 5. 9	Br - Sd & Gr Bl - Cndrs Br - Sd Gr w Slt Br - Cl w Gr Br - Slt Sd & Gr
S-3	13+75	10	3.0 - 3.5	11.95	0 - 2.1 2.1 - 3.3 3.3 - 4.4 4.4 - 6.0	Gr - Gr w Sd Bl - Sd Cinders Gr - Cl Br - Slty Sd & Gr
S-4	13+50	20	2.5 - 3.5	3.42	0 - 2.0 2.0 - 2.5 2.5 - 3.5 3.5 - 6.0	Gr - Gr & Sd Br - Cl w Cndrs Bl / Br - Cndrs w Cl Br - Slty Sd & Gr
S-5	13+50	10	2.7 - 3.0 4.0 - 4.5	ND ND	0 - 2.7 2.7 - 3.0 3.0 - 4.0 4.0 - 4.5 4.5 - 6.1	Bl / Gr - Sd & Gr Lt Gr - Cl Br - Cl w Sd Gr /Bl Cndrs Br - Cl w Sd & Gr Br - Slty Sd w Gr
S-6	13+25	10	0 - 3.0 Poor Recovery	ND	0 - 3.0 3.0 - 6.0	Bl / Br - Gr Sd Br - Slt Sd / Gr
S-7	13+25	10	2.9 - 3.7	ND	0 - 1.5 1.5 - 2.2 2.2 - 2.8 2.8 - 4.0 4.0 - 6.0	Cndrs Br - Sd & Gr Br - Sd Gr Slt Gr - Cl; Blk - Slt Sd Gr Br - Slt Sd Gr
S-8	13+00	20	3.6 - 4.2	0.79	0 - 1.5 1.5 - 2.7 2.7 - 4.5 4.5 - 5.0 5.0 - 6.0	Cndrs Br / Bl - Slt Sd Gr Gr - Slty Cl Gr Br - Cl Br - Slt Gr
S-9	12+75	20	3.0 - 3.5	1.47	0 - 1.9 1.9 - 3.0 3.0 - 3.5 3.5 - 8.0	Cndrs Gr Bl / Br - Cl Br - Sd w Gr
S-10	14+00	10	3.1 - 4.5	4.52	0 - 3.1 3.1 - 4.0 4.0 - 4.5 4.5 - 6.0	Br - Sd Gr Gr - Cl Bl Stain Bl - Sd Gr Br to Gr - Cl
S-11	14+00	20	3.1 - 4.7	3.54	0 - 2.7 2.7 - 3.5 3.5 - 4.2 4.2 - 4.7 4.7 - 6.0	Cndrs Bl - Sd Gr Gr - Cl Bl - Sd Gr Br - Gr w Sd

TABLE 6
AREA N
SUMMARY OF GEOPROBE SAMPLING AND ANALYSES
SUPPLEMENTAL SOIL REMEDIATION
INDUSTRIAL DRAINAGEWAY
KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

Sample Number	Station Location of Drainageway	Distance Back From Excavation Limit in ft.	Sampling Interval in ft. bgs	Rapid Assay PCB in ppm	Interval Depth in ft. bgs	Lithology
S-12	14+00	30	3.1 - 4.4	4.89	0 - 3.1	Cndrs
					3.1 - 3.3	Bl - Sd Gr
					3.3 - 3.5	Gr - Cl
					3.5 - 4.4	Bl - Sd Gr
					4.4 - 6.0	Br - Sd Gr
S-13	14+25	30	3.5 - 4.0	ND	0 - 1.9	Cndrs
					1.9 - 4.0	Br / Gr - Cl Gr
S-14	14+25	10	4.2 - 5.0	10.48	0 - 1.3	Bl - Cndrs
					1.3 - 3.1	Cly Sd Gr
					3.1 - 4.0	Br/Gr - Cl Slt
					4.0 - 5.2	Bl - Cl Sd
					5.2 - 7.0	Br - Cl Sd Gr
S-15	13+90	30	3.9 - 4.6	12.75	0 - 3.9	Cndrs Fill
					3.9 - 4.6	Bl - Slt & Cl
					4.6 - 5.2	Br - Cl Slt w Sd
					5.2 - 7.0	Br -Slt Sd Gr
S-16	13+75	0	3.0 - 3.3	ND	0 -1.0	Bl -Cndrs
					1.0 - 2.0	Lt Tn - Slt Sd & Gr
					2.0 - 7.0	Br - Slty Sd & Cl
					7.0 - 8.0	Br -Sd Gr
S-17	13+75	40	4.2 - 4.7	6.9	0 - 2.5	Bl - Sd & Cndrs
					2.5 - 4.2	Tn / Bl - Sd Gr
					4.2 - 4.7	Cl /Gr w Bl - Slt
					4.7+	Br - Cl Sd Gr
S-18	14+25	20	2.1 - 2.6	0.96	0 - 0.9	Bl - Cndrs
					0.9 - 2.1	Dark Br - Slty Cl
					2.1 - 2.3	Gr - Cl
					2.3 - 2.6	Bl - Slty
					2.6 - 8	Br - Slty Sd Gr
S-19	14+25	0	4.0 - 4.6	19.5	0.7 - 1.4	Br - Slty Gr
			4.6 - 5.1	ND	1.4 - 4.0	Br - Slty Cl
					4.0 - 4.7	Gr - Cl
					4.7 - 5.1	Bl - Slt
					5.1 - 5.6	Gr/ Br - Cl
					5.6 -	Br - Sd Gr
S-20	14+75	20	4.3 - 4.4	ND	1.5 - 2.6	Bl - Gr Sd w Cndrs
					2.6 - 3.7	Bl - Cl Slt Sd
					3.7 - 4.3	Gr - Br Gr w Slt Sd
					.43 - 4.4	Gr - Cl
					4.4 - 5.8	Br - Gr Gr Slt Sd
S-21	15+00	15	3.3 - 3.9	ND	2.5 - 3.3	Br - Bl Sd Gr Fill
					3.3 - 3.5	Bl - Cl Sd
					3.5 - 3.7	Gr - Cl
					3.7 - 3.9	Bl - Sd Cl Slt
S-22	14+75	0	2.5 - 3.1	ND	0 - 2	No Sample
					2.0 - 2.5	Br - Sd Cl & Gr
					2.5 - 2.8	Bl -Gr Cl
					2.8 - 3.1	Bl - Gr Cl
					3.1 - 3.7	Br - Sd Gr Slt

TABLE 6
AREA N
SUMMARY OF GEOPROBE SAMPLING AND ANALYSES
SUPPLEMENTAL SOIL REMEDIATION
INDUSTRIAL DRAINAGEWAY
KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

Sample Number	Station Location of Drainageway	Distance Back From Excavation Limit in ft.	Sampling Interval in ft. bgs	Rapid Assay PCB in ppm	Interval Depth in ft. bgs	Lithology
S-23	14+75	10	2.3 - 2.8	ND	0 - 2	No Sample
					2.0 - 2.3	Br - Sd Gr
					2.3 - 2.8	Bl - Slt
					2.8 - 3.7	Br - Sd Gr
S-24	14+50	0	No Sample		3.0 - 3.5	Br/Bl - Gr w Sd
					3.5 - 4.0	Br - Gr w Cl
					4.0 - 5.2	Gr/Br - Sd Gr
S-25	14+50	10	1.9 - 3.1	ND	0 - 1.9	Bl - Slt w Gr
			3.0 - 3.5	ND	1.9 - 3.0	Bl/Gr - Cl w Sd Slt
					3.0 - 3.5	Bl - Cl Slt
					3.5 - 4.3	Br - Cl Gr w Slt
					4.3 - 6.0	Gr - Sd Gr
S-26	14+50	20	2.0 - 3.4	ND	0 - 2.0	Gr /Bl - Gr Sd w Cl
			3.2 - 3.8	ND	2.0 - 3.4	Bl - Slt w Gr
					3.4 - 4.1	Br - Slt w Gr
					4.1 - 5.5	Br /Gr - Sd w Gr
S-27	13+75	60	2.0 - 2.5	ND	0 - 2	No Sample
			3.3 - 3.8	ND	2.0 - 2.5	Bl - Sd Slt w Cl
			3.8 - 4.3	ND	2.5 - 3.6	Bl - Cl Slt w Gr
					3.6 - 3.8	Gr - Cl
					3.8 - 4.2	Bl - Slt w Sd
					4.2 - 6.0	Br - Cl w Slt
S-28	13+75	50	2.9 - 3.6	ND	0 - 2.0	No Sample
					2.0 - 2.6	Bl - Sd Slt
					2.6 - 2.9	Gr - Gr w Sd
					2.9 - 3.6	Bl - Slt
					3.6 - 6.0	Br - Cl w Gr
S-29	13+50	80	4.8 - 5.2	ND	0 - 2.0	No Sample
			5.2 - 6.0	ND	2.0 - 2.7	Bl - Sd Slt
					2.7 - 3.6	Bl - Cl Gr
					3.6 - 4.5	Bl - Slt Sd Gr Fine
					4.5 - 5.2	Gr - Cl
					5.2 - 6.0	Bl - Slt
					6.0 - 8.0	Br - Slt Sd Cl w Gr

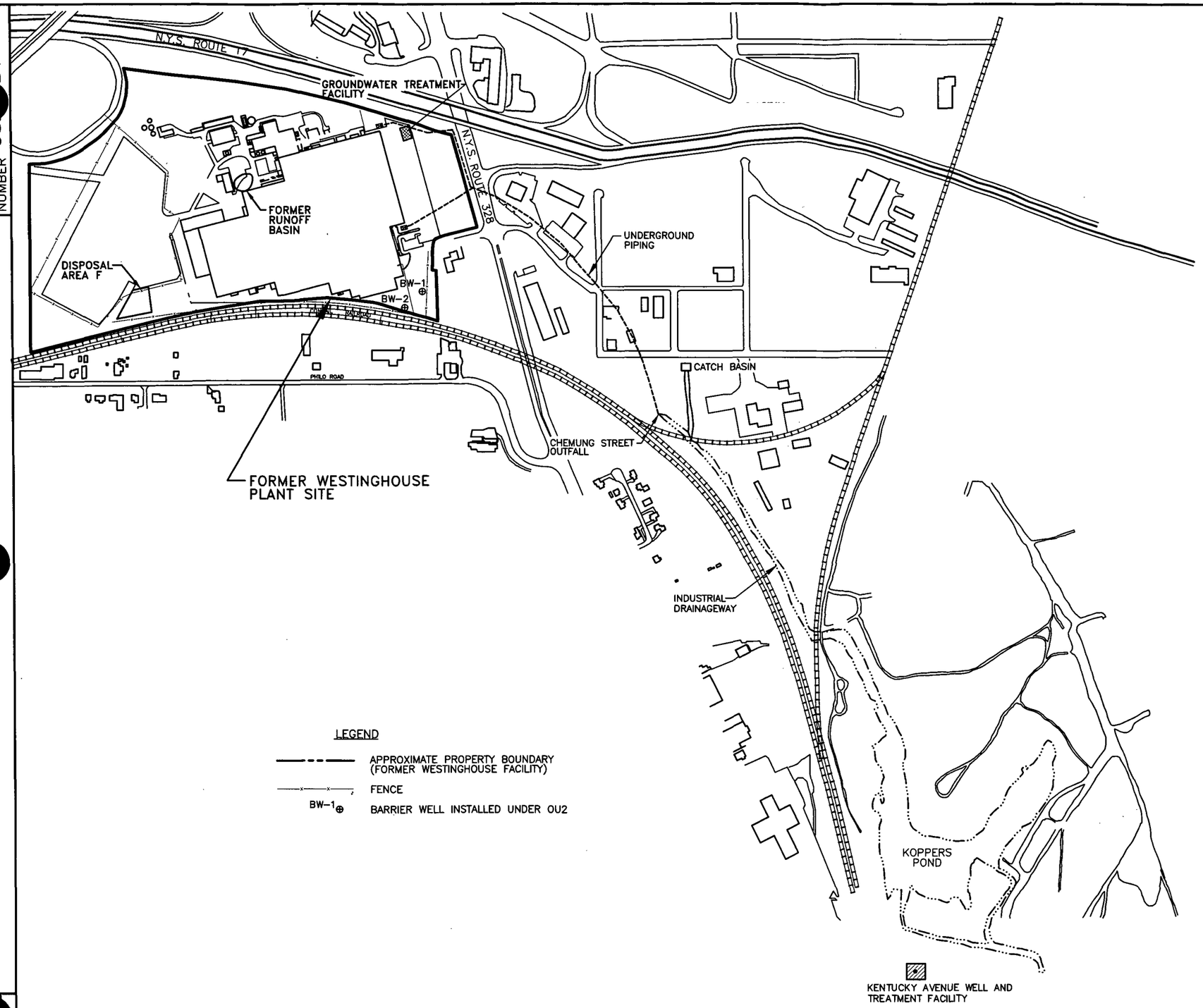
TABLE 7
SUMMARY OF POST-EXCAVATION CONFIRMATORY SAMPLING DATA
SUPPLEMENTAL SOIL REMEDIATION
INDUSTRIAL DRAINAGEWAU
KENTUCKY AVENUE WELLFIELD SITE
HORSEHEADS, NEW YORK

Excavated Area	Location	Sample Number	Date Sampled	Total PCB Concentration (mg/kg)	
				Grab	Composite
Area N	East of 13+60 to 13+90	13+50S	9/20/2004	0.12	
Area N	East of 13+90	13+90	9/20/2004	0.23	
Area N	East of 14+10 to 14+40	14+25	9/20/2004	3.0	
Area 23	West of Original Excavation	Area 23 West	9/17/2004		0.98
Area 23	South of Original Excavation	Area 23 South	9/23/2004		ND

CUMMINGS RITER

FIGURES

DRAWING NUMBER 98245B1



LEGEND

- APPROXIMATE PROPERTY BOUNDARY (FORMER WESTINGHOUSE FACILITY)
- FENCE
- BW-1 ⊕ BARRIER WELL INSTALLED UNDER OU2

SCALE

400 0 400 800 FEET

FIGURE 1

SITE PLAN

KENTUCKY AVENUE WELLFIELD SITE – OU3
HORSEHEADS, NEW YORK

PREPARED FOR
VIACOM INC.
PITTSBURGH, PENNSYLVANIA

CUMMINGS RITER CONSULTANTS, INC.

DRAWING NUMBER 98245B1

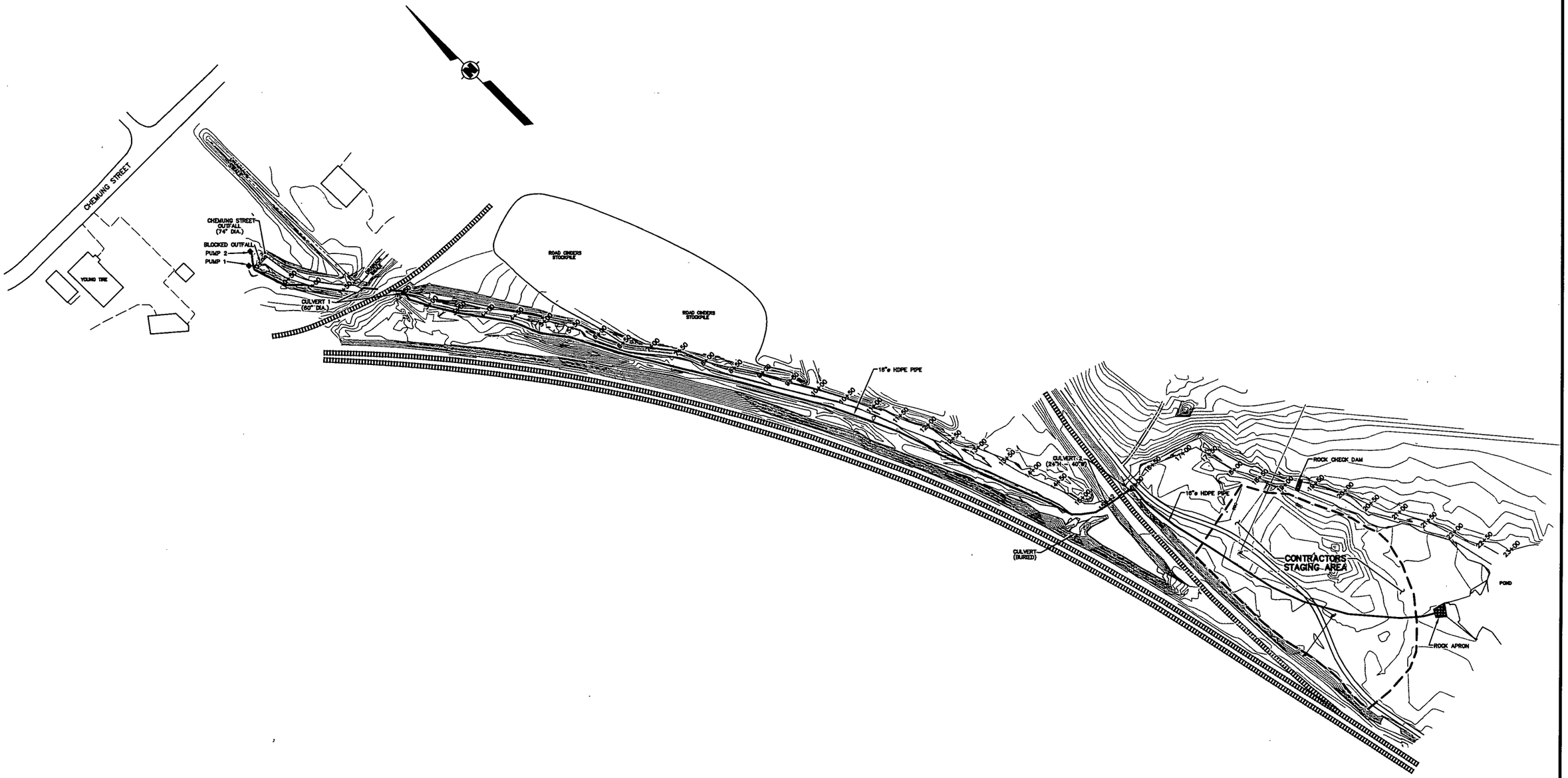
REFERENCE:

BASE MAP PROVIDED BY PHILLIP ENVIRONMENTAL SERVICES CORPORATION
DRAWING NUMBER 427100BV, TITLED "STUDY AREA BASE MAP", DATED 8-31-95.

REVISION	DATE	DESCRIPTION		
			DRAWN BY: T.E. McKee	DATE: 3-5-98
			CHECKED BY: B. Geno	DATE: 3-19-98
			APPROVED BY: W. Smith	DATE: 3-19-98

PLOT SCALE: 1=

DRAWING NUMBER 98245E20



SCALE
80 0 80 160 FEET

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

CUMMINGS RITER CONSULTANTS, INC.
CORPORATE HEADQUARTERS
339 Haymaker Road
Parkway Building, Suite 201
Monroeville, PA 15146
(412) 373-5240
Fax: (412) 373-5242

FIGURE 2

INDUSTRIAL DRAINAGWAY
LAYOUT PUMPING PLAN

KENTUCKY AVENUE WELLFIELD SITE - OU3
HORSEHEADS, NEW YORK

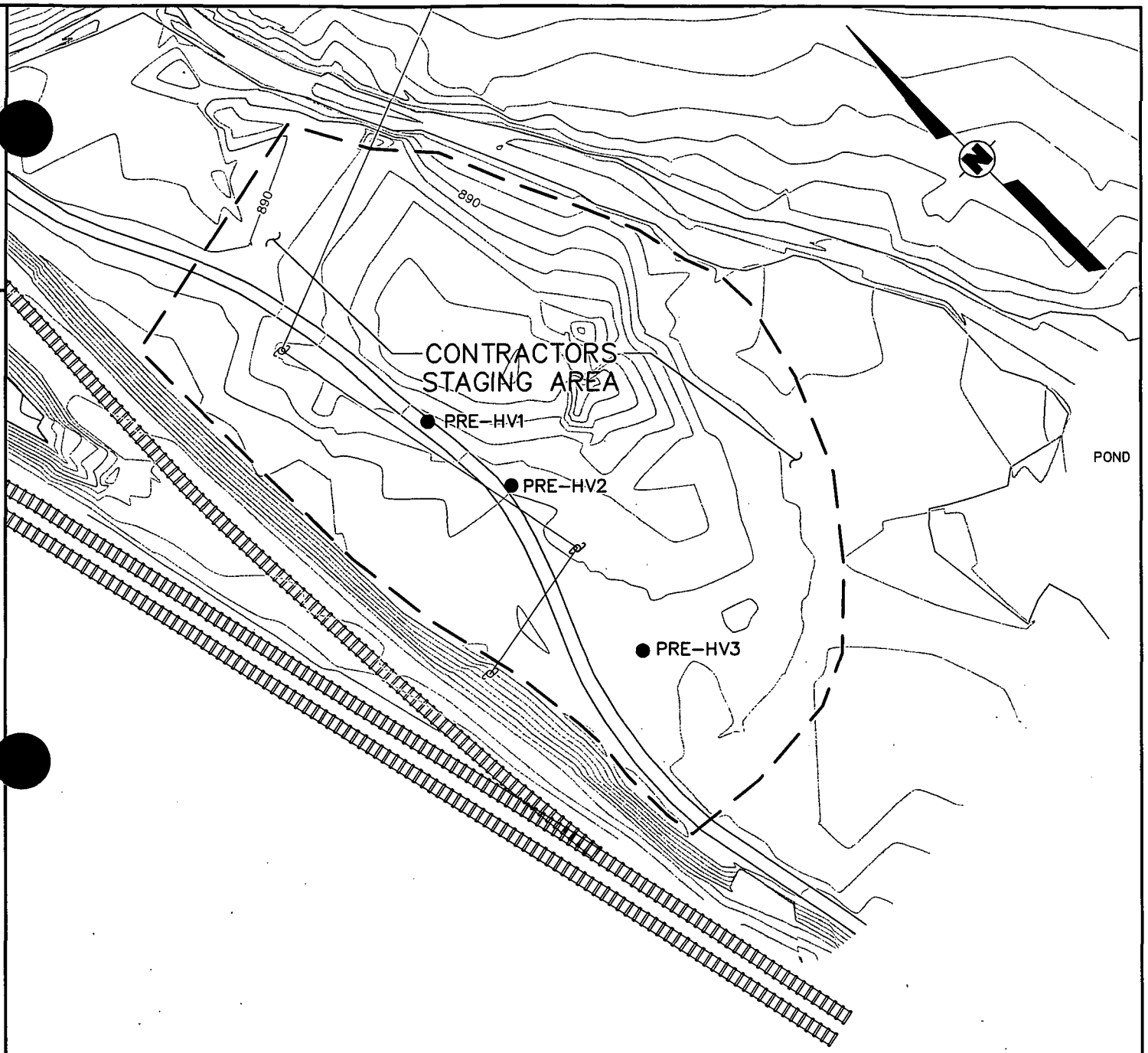
PREPARED FOR
VIACOM INC.
PITTSBURGH, PENNSYLVANIA

SIZE	SCALE	REV.	DRAWING NUMBER
E	SCALE: 1" = 80'	X	98245E20

DRAWN BY:	T.N. Fitzroy	DATE: 3-25-03
CHECKED BY:		DATE:
APPROVED BY:		DATE:

PLOT SCALE: 1=1

DRAWING NUMBER 98245A1



SCALE

0 80 160 FEET

LEGEND

PRE-HV3 ● APPROXIMATE LOCATION OF PRE-CONSTRUCTION SOIL SAMPLE

UTILITY POLE

FIGURE 3

VILLAGE OF HORSEHEADS PRE-CONSTRUCTION SOIL SAMPLE LOCATIONS

KENTUCKY AVENUE WELLFIELD SITE – OU3
HORSEHEADS, NEW YORK

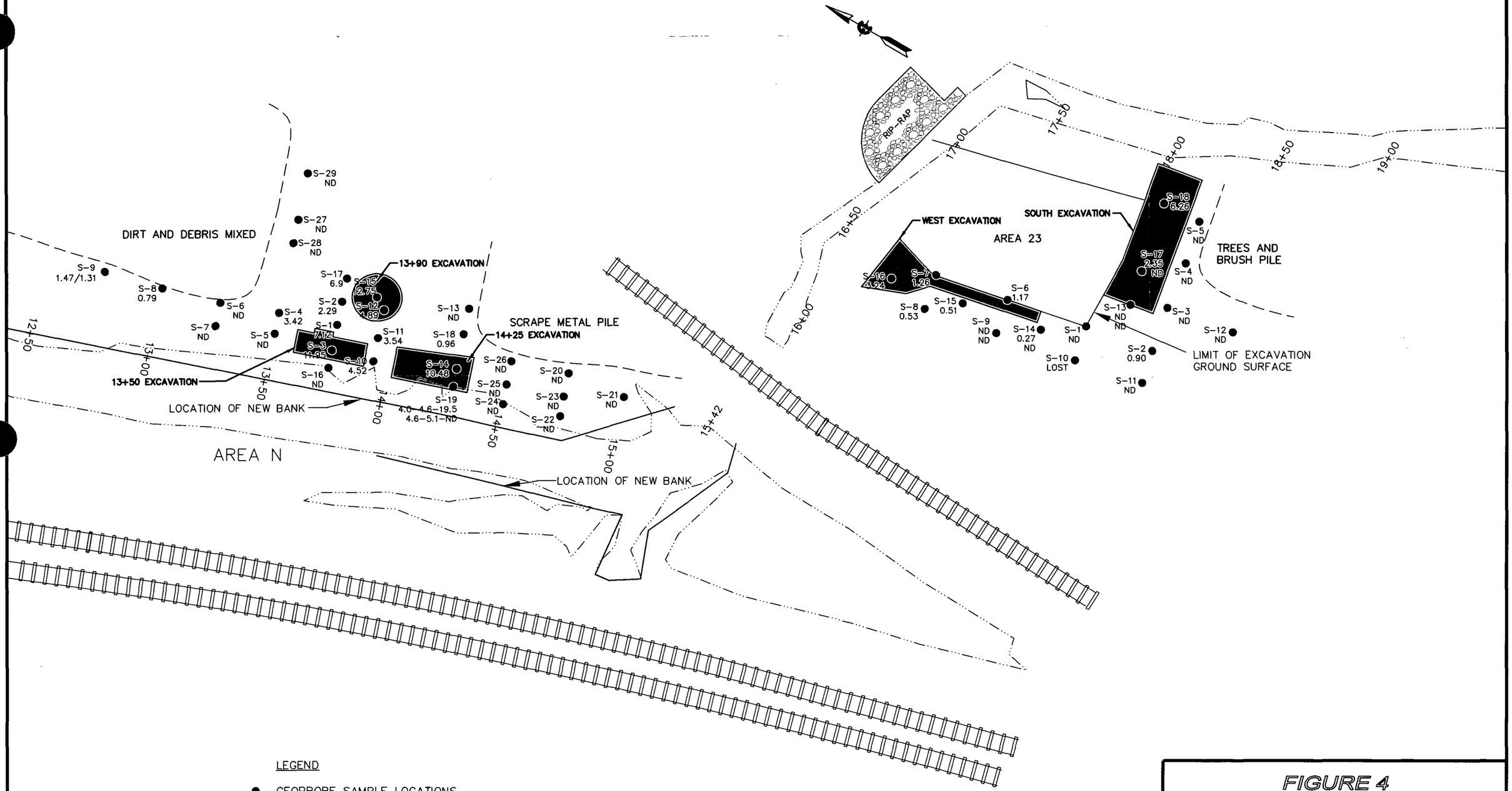
PREPARED FOR
VIACOM INC.
PITTSBURGH, PENNSYLVANIA

CUMMINGS RITER CONSULTANTS, INC.

DRAWING NUMBER 98245A1

REVISION	DATE	DESCRIPTION

DRAWN BY:	T.N. Fitzroy	DATE:	8-26-02
CHECKED BY:	W.C. Smith	DATE:	8-27-02
APPROVED BY:	W.C. Smith	DATE:	8-27-02



LEGEND

- ● GEOPROBE SAMPLE LOCATIONS
- S-18 0.96 ASSAY RESULTS (SEE TABLES 5 AND 6)
- ■ SUPPLEMENTAL SOIL REMEDIATION AREA

FIGURE 4
SUPPLEMENTAL SOIL REMEDIATION AREAS N AND 23

SCALE : 1"=40' SEPTEMBER 2004

FAGAN ENGINEERS
Environmental Consultants

JOB # 98.028

APPENDIX A

APPENDIX A

RECORD DRAWINGS

CUMMINGS RITER

SEE BELOW

MATCH LINE

SEE ABOVE

MATCH LINE

ACCESS TO BLOSTEIN BLVD.

ACCESS THROUGH COUNTY PROPERTY

AREA A · AREA B · AREA C · AREA D · AREA E · AREA F · AREA G · AREA H · AREA I · AREA J · AREA K · AREA L · AREA M · AREA N · AREA O · AREA P · AREA W · AREA X · AREA Y · AREA Z

By Violation Of The New York Education Law, Article 145, Section 7209, For Any Person, Unless He Is Acting Under The Direction Of A Licensed Professional Engineer Or Land Surveyor To Alter An Item In Any Way. If An Item Bearing The Seal Of An Engineer Or Land Surveyor Is Altered, The Altering Engineer Or Land Surveyor Shall Affix To The Item His Seal And The Notation "Altered By" Followed By His Signature And The Date Of Such Alteration, And A Specific Description Of The Alteration.

NEW YORK STATE OF NEW YORK DEPARTMENT OF STATE LICENSED PROFESSIONAL ENGINEER

REVISIONS		
DATE	NO.	

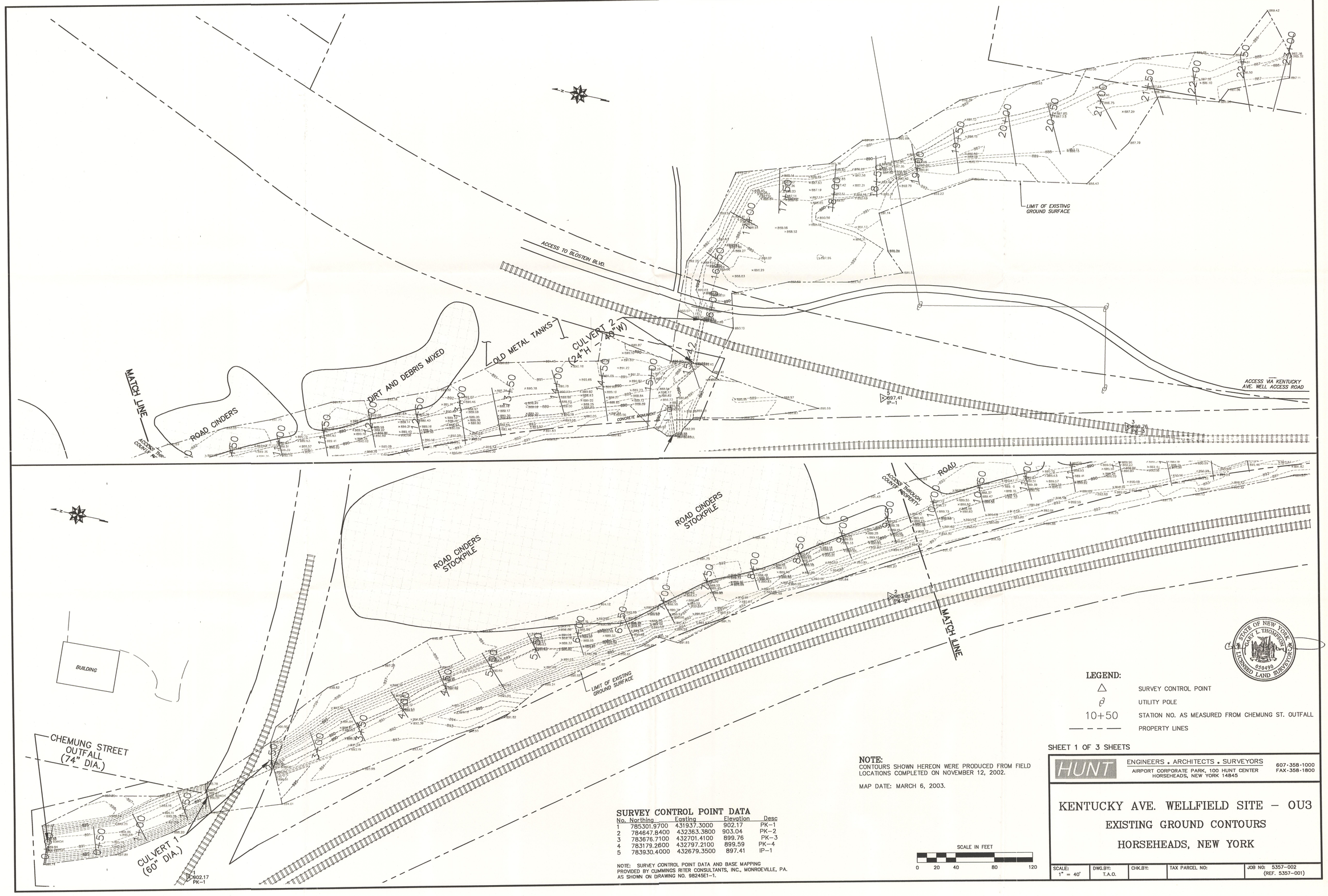
CBS/WESTINGHOUSE HORSEHEADS
KENTUCKY AVENUE
WELLFIELD - OU3
TOWN OF HORSEHEADS, CHEMUNG COUNTY, NEW YORK

INDUSTRIAL DRAINAGE WAY CONFIRMATORY SAMPLE ID RESULT

DRAFT: 3/2003
SCALE: 1"=40'
REVISED: ---
CHECKED: C.E.I.
R.S.N.
APPROVED: D.A.F.

FAGAN ENGINEERS
Environmental Consultants
113 East Chemung Place
Elmira N.Y. 14904
(607) 734-2165

PROJECT NUMBER: 98128
CAMP/FILE NUMBER: 8928S
SHEET NUMBER: 1



LEGEND:

△	SURVEY CONTROL POINT
	UTILITY POLE
10+50	STATION NO. AS MEASURED FROM CHEMUNG ST. OUTFALL
— — —	PROPERTY LINES

STATE OF NEW YORK — TIMOTHY L. THOMPSON — 050490 — LICENSED LAND SURVEYOR

SHEET 1 OF 3 SHEETS

NOTE:
CONTOURS SHOWN HEREON WERE PRODUCED FROM FIELD LOCATIONS COMPLETED ON NOVEMBER 12, 2002.

MAP DATE: MARCH 6, 2003.

SURVEY CONTROL POINT DATA

No.	Northing	Easting	Elevation	Desc
1	785301.9700	431937.3000	902.17	PK-1
2	784647.8400	432363.3800	903.04	PK-2
3	783676.7100	432701.4100	899.76	PK-3
4	783179.2600	432797.2100	899.59	PK-4
5	783930.4000	432679.3500	897.41	IP-1

NOTE: SURVEY CONTROL POINT DATA AND BASE MAPPING PROVIDED BY CUMMINGS RITER CONSULTANTS, INC., MONROEVILLE, PA. AS SHOWN ON DRAWING NO. 98245E1-1.

SCALE IN FEET

0 20 40 80 120

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HORSEHEADS, NEW YORK 14845
607·358·1000
FAX·358·1800

KENTUCKY AVE. WELLFIELD SITE – OU3
EXISTING GROUND CONTOURS
HORSEHEADS, NEW YORK

SCALE:	DWG.BY:	CHK.BY:	TAX PARCEL NO:	JOB NO:
1" = 40'	T.A.O.			5357-002 (REF. 5357-001)

SITE VOLUME TABLE
EXCAVATION VOLUME

SURFACE1	SURFACE2	CUT(CU. YDS.)	FILL(CU. YDS.)	NET(CU. YDS.)	METHOD
EX. GRD.	EXCA.	6314	18	6296	COMPOSITE

ACCESS TO BLOSTEIN BLVD.

LIMIT OF EXCAVATED GROUND SURFACE

ACCESS VIA KENTUCKY AVE. WELL ACCESS ROAD

MATCH LINE

ACCESS THROUGH COUNTY PROPERTY

ROAD CINDERS

DIRT AND DEBRIS MIXED

OLD METAL TANKS

CULVERT 2 (24"H - 40"W)

CONCRETE MONUMENT

CULVERT

IP-1 897.41

PK-5 890.76

ROAD CINDERS STOCKPILE

ROAD

ACCESS THROUGH COUNTY PROPERTY

PK-2 903.04

MATCH LINE

BUILDING

CHEMUNG STREET OUTFALL (74" DIA.)

CULVERT 1 (60" DIA.)

PK-1 902.17

LIMIT OF EXCAVATED GROUND SURFACE

SURVEY CONTROL POINT DATA

No.	Northing	Easting	Elevation	Desc
1	785301.9700	431937.3000	902.17	PK-1
2	784647.8400	432363.3800	903.04	PK-2
3	783676.7100	432701.4100	899.76	PK-3
4	783179.2600	432797.2100	899.59	PK-4
5	783930.4000	432679.3500	897.41	IP-1

NOTE: SURVEY CONTROL POINT DATA AND BASE MAPPING PROVIDED BY CUMMINGS RITER CONSULTANTS, INC., MONROEVILLE, PA. AS SHOWN ON DRAWING NO. 98245E1-1.

NOTE:
CONTOURS SHOWN HEREON WERE PRODUCED FROM FIELD LOCATIONS COMPLETED ON JANUARY 20, 2003.

MAP DATE: MARCH 7, 2003.

SCALE IN FEET
0 20 40 80 120

STATE OF NEW YORK · GARY L. THOMPSON · 050490 · LICENSED LAND SURVEYOR

LEGEND:

- △ SURVEY CONTROL POINT
- UTILITY POLE
- 10+50 STATION NO. AS MEASURED FROM CHEMUNG ST. OUTFALL
- PROPERTY LINES

SHEET 2 OF 3 SHEETS

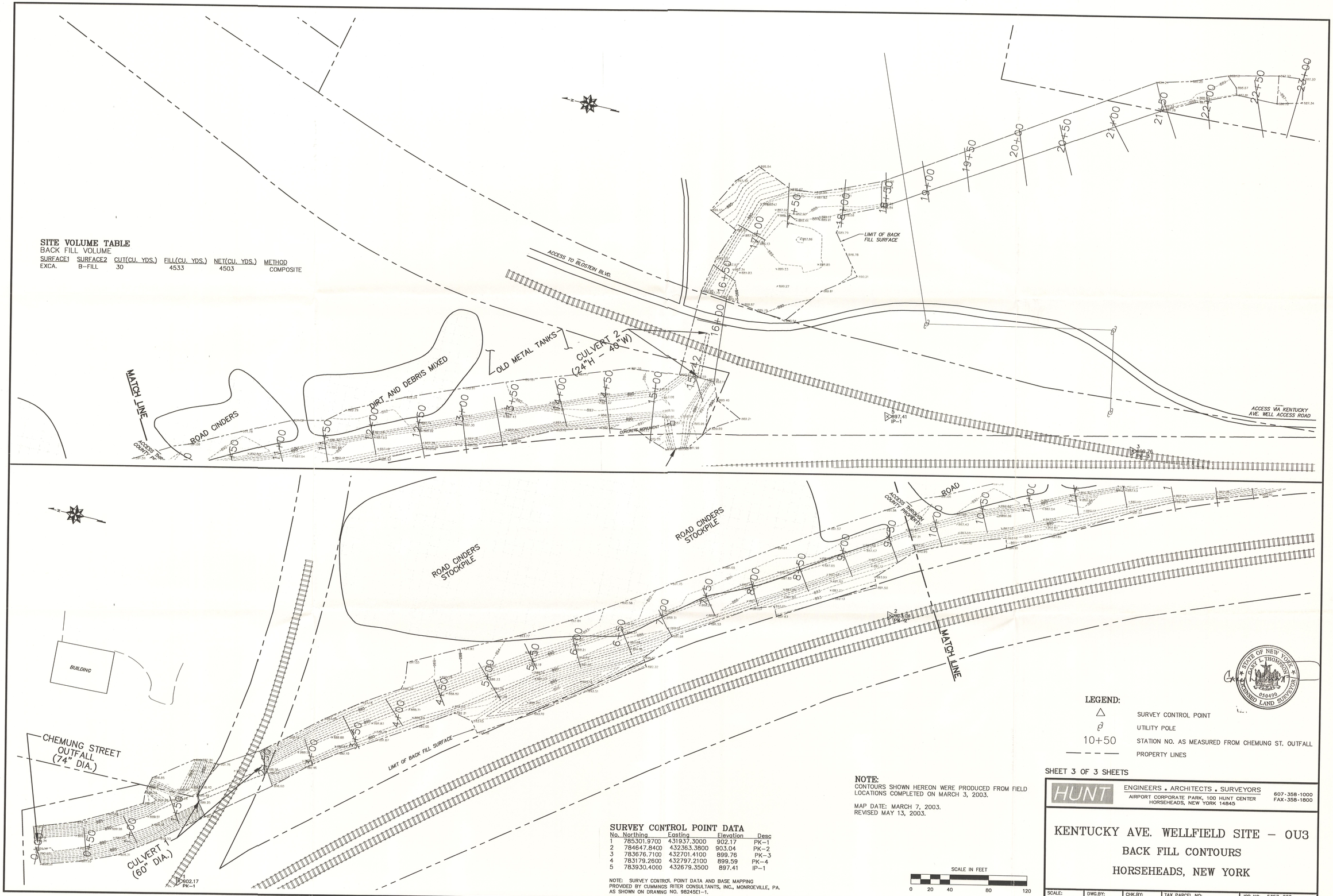
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HORSEHEADS, NEW YORK 14845
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FAX·358·1800

KENTUCKY AVE. WELLFIELD SITE – OU3
EXCAVATED GROUND CONTOURS
HORSEHEADS, NEW YORK

SCALE:	DWG.BY:	CHK.BY:	TAX PARCEL NO:	JOB NO:
1" = 40'	T.A.O.			5357-002 (REF. 5357-001)

SITE VOLUME TABLE
BACK FILL VOLUME

SURFACE1	SURFACE2	CUT(CU. YDS.)	FILL(CU. YDS.)	NET(CU. YDS.)	METHOD
EXCA.	B-FILL	30	4533	4503	COMPOSITE



SURVEY CONTROL POINT DATA

No.	Northing	Easting	Elevation	Desc
1	785301.9700	431937.3000	902.17	PK-1
2	784647.8400	432363.3800	903.04	PK-2
3	783676.7100	432701.4100	899.76	PK-3
4	783179.2600	432797.2100	899.59	PK-4
5	783930.4000	432679.3500	897.41	IP-1

NOTE: SURVEY CONTROL POINT DATA AND BASE MAPPING PROVIDED BY CUMMINGS RITER CONSULTANTS, INC., MONROEVILLE, PA. AS SHOWN ON DRAWING NO. 98245E1-1.

NOTE:
CONTOURS SHOWN HEREON WERE PRODUCED FROM FIELD LOCATIONS COMPLETED ON MARCH 3, 2003.

MAP DATE: MARCH 7, 2003.
REVISED MAY 13, 2003.

SCALE IN FEET
0 20 40 80 120

LEGEND:
- △ SURVEY CONTROL POINT
- UTILITY POLE
- 10+50 STATION NO. AS MEASURED FROM CHEMUNG ST. OUTFALL
- PROPERTY LINES

STATE OF NEW YORK · GARY L. THOMPSON · 050490 · LICENSED LAND SURVEYOR

SHEET 3 OF 3 SHEETS

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FAX-358-1800

KENTUCKY AVE. WELLFIELD SITE - OU3
BACK FILL CONTOURS
HORSEHEADS, NEW YORK

SCALE:	DWG.BY:	CHK.BY:	TAX PARCEL NO:	JOB NO:
1" = 40'	T.A.O.			5357-002 (REF. 5357-001)

APPENDIX B

APPENDIX B

POST-EXCAVATION VERIFICATION AND POST-CONSTRUCTION BACKGROUND SOIL SAMPLE LABORATORY RESULTS (ELECTRONIC DATA)

CUMMINGS RITER

AAA Environmental
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Project:				
Sampled:		14-Sep-02		
Source:	VIACOM/HORSEHEADS #19208		Origin:	
Lab ID:	L94080-1			
Analysis	Result			Units
Total Solids		56.9		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		1200		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		78		%
Decachlorobiphenyl		87		%

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Project:				
Sampled:		14-Sep-02		
Source:	VIACOM/HORSEHEADS #19208		Origin:	
Lab ID:	L94080-2			
Analysis	Result			Units
Total Solids		10.8		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		71		%
Decachlorobiphenyl		97		%

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Project:				
Sampled:		14-Sep-02		
Source:	VIACOM/HORSEHEADS #19208		Origin:	
Lab ID:	L94080-3			
Analysis	Result			Units
Total Solids		55.5		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		280		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		79		%
Decachlorobiphenyl		99		%

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Project:				
Sampled:		16-Sep-02		
Source:	VIACOM/HORSEHEADS #19208		Origin:	
Lab ID:	L94080-4			
Analysis	Result			Units
Total Solids		84.7		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		78		%
Decachlorobiphenyl		104		%

GRAY SILTS #1

	RDL	Analyzed	Method
		17-Sep-02	CLP 3.0
	87	19-Sep-02	EPA 8082
	170	19-Sep-02	EPA 8082
	87	19-Sep-02	EPA 8082
	87	19-Sep-02	EPA 8082
	87	19-Sep-02	EPA 8082
	87	19-Sep-02	EPA 8082
	87	19-Sep-02	EPA 8082
		19-Sep-02	EPA 8082
		19-Sep-02	EPA 8082

BOTTOM OF CHANNEL #2

	RDL	Analyzed	Method
		17-Sep-02	CLP 3.0
	440	18-Sep-02	EPA 8082
	890	18-Sep-02	EPA 8082
	440	18-Sep-02	EPA 8082
	440	18-Sep-02	EPA 8082
	440	18-Sep-02	EPA 8082
	440	18-Sep-02	EPA 8082
	440	18-Sep-02	EPA 8082
		18-Sep-02	EPA 8082
		18-Sep-02	EPA 8082

0-2' BANK #3

	RDL	Analyzed	Method
		17-Sep-02	CLP 3.0
	88	19-Sep-02	EPA 8082
	180	19-Sep-02	EPA 8082
	88	19-Sep-02	EPA 8082
	88	19-Sep-02	EPA 8082
	88	19-Sep-02	EPA 8082
	88	19-Sep-02	EPA 8082
	88	19-Sep-02	EPA 8082
		19-Sep-02	EPA 8082
		19-Sep-02	EPA 8082

FILL DIRT USE ON SITE #4

	RDL	Analyzed	Method
		17-Sep-02	CLP 3.0
	58	18-Sep-02	EPA 8082
	120	18-Sep-02	EPA 8082
	58	18-Sep-02	EPA 8082
	58	18-Sep-02	EPA 8082
	58	18-Sep-02	EPA 8082
	58	18-Sep-02	EPA 8082
	58	18-Sep-02	EPA 8082
		18-Sep-02	EPA 8082
		18-Sep-02	EPA 8082

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Project:				
Sampled:		16-Sep-02		
Source:	VIACOM/HORSEHEADS #19208		Origin:	
Lab ID:	L94081-1			
Analysis	Result			Units
Total Solids		79.2		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		98		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		78		%
Decachlorobiphenyl		94		%

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Project:				
Sampled:		16-Sep-02		
Source:	VIACOM/HORSEHEADS #19208		Origin:	
Lab ID:	L94081-2			
Analysis	Result			Units
EPA 8082				
PCB 1016		145		%
PCB 1260		153		%
Tetrachloro-m-xylene		83		%
Decachlorobiphenyl		105		%

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Project:				
Sampled:		16-Sep-02		
Source:	VIACOM/HORSEHEADS #19208		Origin:	
Lab ID:	L94081-3			
Analysis	Result			Units

EPA 8082				
PCB 1016		15		%
PCB 1260		16		%
Tetrachloro-m-xylene		16		%
Decachlorobiphenyl		17		%

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Project:				
Sampled:		16-Sep-02		
Source:	VIACOM/HORSEHEADS #19208		Origin:	
Lab ID:	L94081-4			
Analysis	Result			Units
Total Solids		68.6		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		480		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		81		%
Decachlorobiphenyl		90		%

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Project:				
Sampled:		16-Sep-02		
Source:	VIACOM/HORSEHEADS #19208		Origin:	
Lab ID:	L94081-5			
Analysis	Result			Units
Total Solids		88.9		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		580		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		72		%
Decachlorobiphenyl		88		%

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Project:				
Sampled:		16-Sep-02		
Source:	VIACOM/HORSEHEADS #19208		Origin:	
Lab ID:	L94081-6			
Analysis	Result			Units
Total Solids		68.7		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		2200		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		68		%
Decachlorobiphenyl		85		%

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Project:				
Sampled:		16-Sep-02		
Source:	VIACOM/HORSEHEADS #19208		Origin:	
Lab ID:	L94081-7			
Analysis	Result			Units
Total Solids		72.4		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		13000		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		95		%
Decachlorobiphenyl		110		%

A-B-SS-B-001

	RDL	Analyzed	Method
		17-Sep-02	CLP 3.0
	63	19-Sep-02	EPA 8082
	130	19-Sep-02	EPA 8082
	63	19-Sep-02	EPA 8082
	63	19-Sep-02	EPA 8082
	63	19-Sep-02	EPA 8082
	63	19-Sep-02	EPA 8082
	63	19-Sep-02	EPA 8082
		19-Sep-02	EPA 8082
		19-Sep-02	EPA 8082

L94081-1MS, A-B-SS-B-001

	RDL	Analyzed	Method
		19-Sep-02	EPA 8082
		19-Sep-02	EPA 8082
		19-Sep-02	EPA 8082
		19-Sep-02	EPA 8082

L94081-1MSD/DUP,A-BSSB001

	RDL	Analyzed	Method

19-Sep-02	EPA 8082	
19-Sep-02	EPA 8082	
19-Sep-02	EPA 8082	
19-Sep-02	EPA 8082	

A-B-S-W-001

RDL	Analyzed	Method
	17-Sep-02	CLP 3.0
71	19-Sep-02	EPA 8082
140	19-Sep-02	EPA 8082
71	19-Sep-02	EPA 8082
71	19-Sep-02	EPA 8082
71	19-Sep-02	EPA 8082
71	19-Sep-02	EPA 8082
71	19-Sep-02	EPA 8082
	19-Sep-02	EPA 8082
	19-Sep-02	EPA 8082

A-B-SS-W-001

RDL	Analyzed	Method
	17-Sep-02	CLP 3.0
51	19-Sep-02	EPA 8082
100	19-Sep-02	EPA 8082
51	19-Sep-02	EPA 8082
51	19-Sep-02	EPA 8082
51	19-Sep-02	EPA 8082
51	19-Sep-02	EPA 8082
51	19-Sep-02	EPA 8082
	19-Sep-02	EPA 8082
	19-Sep-02	EPA 8082

A-B-S-E-001

	RDL	Analyzed	Method
		17-Sep-02	CLP 3.0
	68	19-Sep-02	EPA 8082
	140	19-Sep-02	EPA 8082
	68	19-Sep-02	EPA 8082
	68	19-Sep-02	EPA 8082
	68	19-Sep-02	EPA 8082
	68	19-Sep-02	EPA 8082
	68	19-Sep-02	EPA 8082
		19-Sep-02	EPA 8082
		19-Sep-02	EPA 8082

A-B-SS-E-001

	RDL	Analyzed	Method
		17-Sep-02	CLP 3.0
	330	19-Sep-02	EPA 8082
	670	19-Sep-02	EPA 8082
	330	19-Sep-02	EPA 8082
	330	19-Sep-02	EPA 8082
	330	19-Sep-02	EPA 8082
	330	19-Sep-02	EPA 8082
	330	19-Sep-02	EPA 8082
		19-Sep-02	EPA 8082
		19-Sep-02	EPA 8082

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Project:			
Sampled:		19-Sep-02	
Source:	PORTERS SAND & GRAVEL	Origin:	
Lab ID:	L94321-1		
Analysis	Result		Units
Cyanide, Total	U		mg/kg
Total Solids		89.4	%
Aluminum		13600	mg/kg
Antimony	U		mg/kg
Arsenic		6.43	mg/kg
Barium		140	mg/kg
Beryllium		0.709	mg/kg
Cadmium	U		mg/kg
Calcium		1350	mg/kg
Chromium		12.4	mg/kg
Cobalt		9.81	mg/kg
Copper		11.6	mg/kg
Iron		23200	mg/kg
Lead		15.7	mg/kg
Magnesium		3010	mg/kg
Manganese		740	mg/kg
Mercury	U		mg/kg
Nickel		22.6	mg/kg
Potassium		1370	mg/kg
Selenium	U		mg/kg
Silver	U		mg/kg
Sodium	U		mg/kg
Thallium	U		mg/kg
Vanadium		18.5	mg/kg
Zinc		70.5	mg/kg
EPA 8260			
Chloromethane	U		ug/kg
Vinyl chloride	U		ug/kg
Chloroethane	U		ug/kg
Bromomethane	U		ug/kg
1,1-Dichloroethene	U		ug/kg
Acetone	U		ug/kg
Carbon disulfide	U		ug/kg
Methylene chloride	U		ug/kg
trans-1,2-Dichloroethene	U		ug/kg
1,1-Dichloroethane	U		ug/kg
cis-1,2-Dichloroethene	U		ug/kg
MEK(2-Butanone)	U		ug/kg
Chloroform	U		ug/kg
1,1,1-Trichloroethane	U		ug/kg

Carbon tetrachloride	U		ug/kg
Benzene	U		ug/kg
1,2-Dichloroethane	U		ug/kg
Trichloroethene	U		ug/kg
1,2-Dichloropropane	U		ug/kg
Bromodichloromethane	U		ug/kg
cis-1,3-Dichloropropene	U		ug/kg
MIBK(4-Methyl-2-pentanone)	U		ug/kg
Toluene	U		ug/kg
trans-1,3-Dichloropropene	U		ug/kg
1,1,2-Trichloroethane	U		ug/kg
Tetrachloroethene	U		ug/kg
2-Hexanone	U		ug/kg
Dibromochloromethane	U		ug/kg
Chlorobenzene	U		ug/kg
Ethylbenzene	U		ug/kg
p-Xylene/m-Xylene	U		ug/kg
o-Xylene	U		ug/kg
Styrene	U		ug/kg
Bromoform	U		ug/kg
1,1,2,2-Tetrachloroethane	U		ug/kg
Dibromofluoromethane		99	%
Toluene-d8		111	%
4-Bromofluorobenzene		130	%
1,2-Dichloroethane-d4		108	%
EPA 8081			
alpha-BHC	U		ug/kg
beta-BHC	U		ug/kg
Lindane (gamma-BHC)	U		ug/kg
delta-BHC	U		ug/kg
Heptachlor	U		ug/kg
Aldrin	U		ug/kg
Heptachlor epoxide	U		ug/kg
alpha-Chlordane	U		ug/kg
Endosulfan I	U		ug/kg
gamma-Chlordane	U		ug/kg
4,4'-DDE	U		ug/kg
Dieldrin	U		ug/kg
Endrin	U		ug/kg
Endosulfan II	U		ug/kg
4,4'-DDD	U		ug/kg
Endrin ketone	U		ug/kg
Endrin aldehyde	U		ug/kg
Endosulfan sulfate	U		ug/kg
4,4'-DDT	U		ug/kg
Methoxychlor	U		ug/kg
Toxaphene	U		ug/kg
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg

PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Decachlorobiphenyl		122	%
Tetrachloro-m-xylene		97	%
EPA 8270			
Bis(2-chloroethylether)	U		ug/kg
Phenol	U		ug/kg
2-Chlorophenol	U		ug/kg
1,3-Dichlorobenzene	U		ug/kg
1,4-Dichlorobenzene	U		ug/kg
1,2-Dichlorobenzene	U		ug/kg
Bis(2-chloroisopropylether)	U		ug/kg
2-Methylphenol	U		ug/kg
Hexachloroethane	U		ug/kg
N-Nitrosodi-N-propylamine	U		ug/kg
3-Methylphenol/4-Methylphenol	U		ug/kg
Nitrobenzene	U		ug/kg
Isophorone	U		ug/kg
2-Nitrophenol	U		ug/kg
2,4-Dimethylphenol	U		ug/kg
Bis(2-chloroethoxymethane)	U		ug/kg
2,4-Dichlorophenol	U		ug/kg
1,2,4-Trichlorobenzene	U		ug/kg
Naphthalene	U		ug/kg
4-Chloroaniline	U		ug/kg
Hexachlorobutadiene	U		ug/kg
4-Chloro-3-methylphenol	U		ug/kg
2-Methylnaphthalene	U		ug/kg
Hexachlorocyclopentadiene	U		ug/kg
2,4,6-Trichlorophenol	U		ug/kg
2,4,5-Trichlorophenol	U		ug/kg
2-Chloronaphthalene	U		ug/kg
2-Nitroaniline	U		ug/kg
Dimethyl phthalate	U		ug/kg
Acenaphthylene	U		ug/kg
2,6-Dinitrotoluene	U		ug/kg
3-Nitroaniline	U		ug/kg
Acenaphthene	U		ug/kg
2,4-Dinitrophenol	U		ug/kg
Dibenzofuran	U		ug/kg
2,4-Dinitrotoluene	U		ug/kg
4-Nitrophenol	U		ug/kg
Diethyl phthalate	U		ug/kg
Fluorene	U		ug/kg
4-Chlorophenylphenylether	U		ug/kg
4-Nitroaniline	U		ug/kg
2-Methyl-4,6-dinitrophenol	U		ug/kg
N-Nitrosodiphenylamine	U		ug/kg
4-Bromophenylphenylether	U		ug/kg
Hexachlorobenzene	U		ug/kg

Pentachlorophenol	U		ug/kg
Phenanthrene	U		ug/kg
Anthracene	U		ug/kg
Carbazole	U		ug/kg
Di-n-butyl phthalate	U		ug/kg
Fluoranthene	U		ug/kg
Pyrene	U		ug/kg
Butylbenzyl phthalate	U		ug/kg
Benzo(a)anthracene	U		ug/kg
3,3-Dichlorobenzidine	U		ug/kg
Chrysene	U		ug/kg
Bis-2-ethylhexyl phthalate	U		ug/kg
Di-n-octyl phthalate	U		ug/kg
Benzo(b)fluoranthene	U		ug/kg
Benzo(k)fluoranthene	U		ug/kg
Benzo(a)pyrene	U		ug/kg
Indeno(1,2,3-cd)pyrene	U		ug/kg
Dibenzo(a,h)anthracene	U		ug/kg
Benzo(g,h,i)perylene	U		ug/kg

Terphenyl-d14	72	%
2-Fluorophenol	62	%
Phenol-d5	68	%
2,4,6-Tribromophenol	63	%
Nitrobenzene-d5	70	%
2-Fluorobiphenyl	72	%

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Project:
Sampled: 19-Sep-02
Source: PORTERS SAND & GRAVEL Origin:
Lab ID: L94321-2

Analysis	Result	Units
Cyanide, Total	5.17	mg/kg
Antimony	50.7	mg/kg
Arsenic	17.1	mg/kg
Barium	339	mg/kg
Beryllium	5.7	mg/kg
Cadmium	5.01	mg/kg
Chromium	22.3	mg/kg
Cobalt	61.3	mg/kg
Copper	36.4	mg/kg
Lead	25.2	mg/kg
Manganese	853	mg/kg
Mercury	0.225	mg/kg
Nickel	72.8	mg/kg
Selenium	10.7	mg/kg
Silver	3.97	mg/kg

Thallium		9.24	mg/kg
Vanadium		69.2	mg/kg
Zinc		120	mg/kg
EPA 8260			
Chloromethane	U		ug/kg
Vinyl chloride	U		ug/kg
Chloroethane	U		ug/kg
Bromomethane	U		ug/kg
1,1-Dichloroethene		83	ug/kg
Acetone	U		ug/kg
Carbon disulfide	U		ug/kg
Methylene chloride	U		ug/kg
trans-1,2-Dichloroethene	U		ug/kg
1,1-Dichloroethane	U		ug/kg
cis-1,2-Dichloroethene	U		ug/kg
MEK(2-Butanone)	U		ug/kg
Chloroform	U		ug/kg
1,1,1-Trichloroethane	U		ug/kg
Carbon tetrachloride	U		ug/kg
Benzene		85	ug/kg
1,2-Dichloroethane	U		ug/kg
Trichloroethene		85	ug/kg
1,2-Dichloropropane	U		ug/kg
Bromodichloromethane	U		ug/kg
cis-1,3-Dichloropropene	U		ug/kg
MIBK(4-Methyl-2-pentanone)	U		ug/kg
Toluene		86	ug/kg
trans-1,3-Dichloropropene	U		ug/kg
1,1,2-Trichloroethane	U		ug/kg
Tetrachloroethene	U		ug/kg
2-Hexanone	U		ug/kg
Dibromochloromethane	U		ug/kg
Chlorobenzene		80	ug/kg
Ethylbenzene	U		ug/kg
p-Xylene/m-Xylene	U		ug/kg
o-Xylene	U		ug/kg
Styrene	U		ug/kg
Bromoform	U		ug/kg
1,1,2,2-Tetrachloroethane	U		ug/kg
Dibromofluoromethane		100	%
Toluene-d8		109	%
4-Bromofluorobenzene		131	%
1,2-Dichloroethane-d4		99	%
EPA 8270			
Bis(2-chloroethylether)		1700	ug/kg
Phenol		3600	ug/kg
2-Chlorophenol		3500	ug/kg
1,3-Dichlorobenzene		1400	ug/kg
1,4-Dichlorobenzene		1500	ug/kg
1,2-Dichlorobenzene		1500	ug/kg
Bis(2-chloroisopropylether)		1800	ug/kg

2-Methylphenol		1900	ug/kg
Hexachloroethane		1500	ug/kg
N-Nitrosodi-N-propylamine		1800	ug/kg
3-Methylphenol/4-Methylphenol		2000	ug/kg
Nitrobenzene		1700	ug/kg
Isophorone		1600	ug/kg
2-Nitrophenol		3600	ug/kg
2,4-Dimethylphenol		3300	ug/kg
Bis(2-chloroethoxymethane)		1800	ug/kg
2,4-Dichlorophenol		4200	ug/kg
1,2,4-Trichlorobenzene		1700	ug/kg
Naphthalene		1700	ug/kg
4-Chloroaniline	310 J		ug/kg
Hexachlorobutadiene		1500	ug/kg
4-Chloro-3-methylphenol		4400	ug/kg
2-Methylnaphthalene		1800	ug/kg
Hexachlorocyclopentadiene		1000	ug/kg
2,4,6-Trichlorophenol		4400	ug/kg
2,4,5-Trichlorophenol		2300	ug/kg
2-Chloronaphthalene		1800	ug/kg
2-Nitroaniline		2000	ug/kg
Dimethyl phthalate		2000	ug/kg
Acenaphthylene		1800	ug/kg
2,6-Dinitrotoluene		1900	ug/kg
3-Nitroaniline	880 J		ug/kg
Acenaphthene		1900	ug/kg
2,4-Dinitrophenol		4400	ug/kg
Dibenzofuran		1900	ug/kg
2,4-Dinitrotoluene		1900	ug/kg
4-Nitrophenol		3500	ug/kg
Diethyl phthalate	U		ug/kg
Fluorene		2000	ug/kg
4-Chlorophenylphenylether		2100	ug/kg
4-Nitroaniline		1600	ug/kg
2-Methyl-4,6-dinitrophenol		4500	ug/kg
N-Nitrosodiphenylamine		1800	ug/kg
4-Bromophenylphenylether		2100	ug/kg
Hexachlorobenzene		2000	ug/kg
Pentachlorophenol		4600	ug/kg
Phenanthrene		2000	ug/kg
Anthracene		1900	ug/kg
Carbazole	U		ug/kg
Di-n-butyl phthalate		1900	ug/kg
Fluoranthene		2200	ug/kg
Pyrene		1900	ug/kg
Butylbenzyl phthalate		1800	ug/kg
Benzo(a)anthracene		1900	ug/kg
3,3-Dichlorobenzidine	230 J		ug/kg
Chrysene		2000	ug/kg
Bis-2-ethylhexyl phthalate		1900	ug/kg
Di-n-octyl phthalate		2300	ug/kg
Benzo(b)fluoranthene		2500	ug/kg

Benzo(k)fluoranthene		2400	ug/kg
Benzo(a)pyrene		2000	ug/kg
Indeno(1,2,3-cd)pyrene		1300	ug/kg
Dibenzo(a,h)anthracene		1200	ug/kg
Benzo(g,h,i)perylene		1300	ug/kg
Terphenyl-d14		77	%
2-Fluorophenol		62	%
Phenol-d5		68	%
2,4,6-Tribromophenol		85	%
Nitrobenzene-d5		68	%
2-Fluorobiphenyl		74	%

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:
Sampled: 19-Sep-02
Source: PORTERS SAND & GRAVEL Origin:
Lab ID: L94321-3

Analysis	Result		Units
Cyanide, Total	U		mg/kg
Aluminum		12500	mg/kg
Antimony	U		mg/kg
Arsenic		6.64	mg/kg
Barium		135	mg/kg
Beryllium		0.634	mg/kg
Cadmium	U		mg/kg
Calcium		1280	mg/kg
Chromium		12.7	mg/kg
Cobalt		9.23	mg/kg
Copper		11.7	mg/kg
Iron		22500	mg/kg
Lead		16.5	mg/kg
Magnesium		2850	mg/kg
Manganese		710	mg/kg
Mercury	U		mg/kg
Nickel		21	mg/kg
Potassium		1200	mg/kg
Selenium	U		mg/kg
Silver	U		mg/kg
Sodium	U		mg/kg
Thallium	U		mg/kg
Vanadium		17.1	mg/kg
Zinc		67	mg/kg
EPA 8260			
Chloromethane	U		ug/kg
Vinyl chloride	U		ug/kg
Chloroethane	U		ug/kg
Bromomethane	U		ug/kg

1,1-Dichloroethene		81	ug/kg
Acetone	U		ug/kg
Carbon disulfide	U		ug/kg
Methylene chloride	U		ug/kg
trans-1,2-Dichloroethene	U		ug/kg
1,1-Dichloroethane	U		ug/kg
cis-1,2-Dichloroethene	U		ug/kg
MEK(2-Butanone)	U		ug/kg
Chloroform	U		ug/kg
1,1,1-Trichloroethane	U		ug/kg
Carbon tetrachloride	U		ug/kg
Benzene		85	ug/kg
1,2-Dichloroethane	U		ug/kg
Trichloroethene		81	ug/kg
1,2-Dichloropropane	U		ug/kg
Bromodichloromethane	U		ug/kg
cis-1,3-Dichloropropene	U		ug/kg
MIBK(4-Methyl-2-pentanone)	U		ug/kg
Toluene		86	ug/kg
trans-1,3-Dichloropropene	U		ug/kg
1,1,2-Trichloroethane	U		ug/kg
Tetrachloroethene	U		ug/kg
2-Hexanone	U		ug/kg
Dibromochloromethane	U		ug/kg
Chlorobenzene		75	ug/kg
Ethylbenzene	U		ug/kg
p-Xylene/m-Xylene	U		ug/kg
o-Xylene	U		ug/kg
Styrene	U		ug/kg
Bromoform	U		ug/kg
1,1,2,2-Tetrachloroethane	U		ug/kg
Dibromofluoromethane		93	%
Toluene-d8		109	%
4-Bromofluorobenzene		132	%
1,2-Dichloroethane-d4		89	%
EPA 8270			
Bis(2-chloroethylether)		2100	ug/kg
Phenol		3800	ug/kg
2-Chlorophenol		3900	ug/kg
1,3-Dichlorobenzene		1700	ug/kg
1,4-Dichlorobenzene		1800	ug/kg
1,2-Dichlorobenzene		1800	ug/kg
Bis(2-chloroisopropylether)		2100	ug/kg
2-Methylphenol		2100	ug/kg
Hexachloroethane		1800	ug/kg
N-Nitrosodi-N-propylamine		2000	ug/kg
3-Methylphenol/4-Methylphenol		2100	ug/kg
Nitrobenzene		2000	ug/kg
Isophorone		1700	ug/kg
2-Nitrophenol		4000	ug/kg
2,4-Dimethylphenol		3600	ug/kg

Bis(2-chloroethoxymethane)		1900	ug/kg
2,4-Dichlorophenol		4200	ug/kg
1,2,4-Trichlorobenzene		2000	ug/kg
Naphthalene		2000	ug/kg
4-Chloroaniline		620	ug/kg
Hexachlorobutadiene		1800	ug/kg
4-Chloro-3-methylphenol		4100	ug/kg
2-Methylnaphthalene		1900	ug/kg
Hexachlorocyclopentadiene		1400	ug/kg
2,4,6-Trichlorophenol		4200	ug/kg
2,4,5-Trichlorophenol		2200	ug/kg
2-Chloronaphthalene		1800	ug/kg
2-Nitroaniline		1900	ug/kg
Dimethyl phthalate		1900	ug/kg
Acenaphthylene		1800	ug/kg
2,6-Dinitrotoluene		1800	ug/kg
3-Nitroaniline	940 J		ug/kg
Acenaphthene		1900	ug/kg
2,4-Dinitrophenol		3400	ug/kg
Dibenzofuran		1900	ug/kg
2,4-Dinitrotoluene		1800	ug/kg
4-Nitrophenol		2800	ug/kg
Diethyl phthalate	U		ug/kg
Fluorene		2000	ug/kg
4-Chlorophenylphenylether		2100	ug/kg
4-Nitroaniline		1300	ug/kg
2-Methyl-4,6-dinitrophenol		3600	ug/kg
N-Nitrosodiphenylamine		1700	ug/kg
4-Bromophenylphenylether		2000	ug/kg
Hexachlorobenzene		1900	ug/kg
Pentachlorophenol		4000	ug/kg
Phenanthrene		1900	ug/kg
Anthracene		1800	ug/kg
Carbazole	U		ug/kg
Di-n-butyl phthalate		1800	ug/kg
Fluoranthene		2000	ug/kg
Pyrene		1800	ug/kg
Butylbenzyl phthalate		1700	ug/kg
Benzo(a)anthracene		1800	ug/kg
3,3-Dichlorobenzidine	300 J		ug/kg
Chrysene		1900	ug/kg
Bis-2-ethylhexyl phthalate		2000	ug/kg
Di-n-octyl phthalate		2300	ug/kg
Benzo(b)fluoranthene		2300	ug/kg
Benzo(k)fluoranthene		2600	ug/kg
Benzo(a)pyrene		2000	ug/kg
Indeno(1,2,3-cd)pyrene		1300	ug/kg
Dibenzo(a,h)anthracene		1300	ug/kg
Benzo(g,h,i)perylene		1400	ug/kg
Terphenyl-d14		72	%
2-Fluorophenol		70	%

Phenol-d5	73	%
2,4,6-Tribromophenol	79	%
Nitrobenzene-d5	77	%
2-Fluorobiphenyl	74	%

BF-TS

RDL	Analyzed	Method
0.266	23-Sep-02	EPA 335.3
	21-Sep-02	CLP 3.0
7.63	25-Sep-02	EPA 6010
5.09	25-Sep-02	EPA 6010
0.549	26-Sep-02	EPA 6020
1.63	25-Sep-02	EPA 6010
0.204	25-Sep-02	EPA 6010
0.509	25-Sep-02	EPA 6010
50.9	25-Sep-02	EPA 6010
1.1	26-Sep-02	EPA 6020
1.02	25-Sep-02	EPA 6010
1.73	25-Sep-02	EPA 6010
81.4	25-Sep-02	EPA 6010
0.33	26-Sep-02	EPA 6020
50.9	25-Sep-02	EPA 6010
0.509	25-Sep-02	EPA 6010
0.049	24-Sep-02	EPA 7470
1.22	25-Sep-02	EPA 6010
50.9	25-Sep-02	EPA 6010
0.549	26-Sep-02	EPA 6020
1.02	25-Sep-02	EPA 6010
20.4	25-Sep-02	EPA 6010
0.549	26-Sep-02	EPA 6020
1.02	25-Sep-02	EPA 6010
2.04	25-Sep-02	EPA 6010
6	26-Sep-02	EPA 8260
2	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
28	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
28	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260

6	26-Sep-02	EPA 8260
0.8	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
11	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8260
11	26-Sep-02	EPA 8260
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	26-Sep-02	EPA 8260
6	26-Sep-02	EPA 8081
6	26-Sep-02	EPA 8081
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6	26-Sep-02	EPA 8081
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6	26-Sep-02	EPA 8081
56	26-Sep-02	EPA 8081
11	26-Sep-02	EPA 8081
22	26-Sep-02	EPA 8081
11	26-Sep-02	EPA 8081
11	26-Sep-02	EPA 8081

11	26-Sep-02	EPA 8081
11	26-Sep-02	EPA 8081
11	26-Sep-02	EPA 8081
	26-Sep-02	EPA 8081
	26-Sep-02	EPA 8081
270	25-Sep-02	EPA 8270
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1100	25-Sep-02	EPA 8270
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1100	25-Sep-02	EPA 8270
1100	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270

1100	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
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270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
540	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
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	25-Sep-02	EPA 8270
	25-Sep-02	EPA 8270
	25-Sep-02	EPA 8270
	25-Sep-02	EPA 8270

L94321-1MS, BF-TS

RDL	Analyzed	Method
0.267	23-Sep-02	EPA 335.3
5.13	25-Sep-02	EPA 6010
0.549	26-Sep-02	EPA 6020
1.64	25-Sep-02	EPA 6010
0.206	25-Sep-02	EPA 6010
0.513	25-Sep-02	EPA 6010
1.1	26-Sep-02	EPA 6020
1.03	25-Sep-02	EPA 6010
1.74	25-Sep-02	EPA 6010
0.33	26-Sep-02	EPA 6020
0.513	25-Sep-02	EPA 6010
0.049	24-Sep-02	EPA 7470
1.23	25-Sep-02	EPA 6010
0.549	26-Sep-02	EPA 6020
1.03	25-Sep-02	EPA 6010

0.549	26-Sep-02	EPA 6020
1.03	25-Sep-02	EPA 6010
2.05	25-Sep-02	EPA 6010
8	26-Sep-02	EPA 8260
3	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
38	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
38	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
1	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
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8	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
15	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
8	26-Sep-02	EPA 8260
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280	26-Sep-02	EPA 8270
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1100	26-Sep-02	EPA 8270
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280	26-Sep-02	EPA 8270
280	26-Sep-02	EPA 8270
550	26-Sep-02	EPA 8270
280	26-Sep-02	EPA 8270
280	26-Sep-02	EPA 8270
280	26-Sep-02	EPA 8270
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	26-Sep-02	EPA 8270
	26-Sep-02	EPA 8270
	26-Sep-02	EPA 8270
	26-Sep-02	EPA 8270

L94321-1MSD/DUP, BF-TS

RDL	Analyzed	Method
0.276	23-Sep-02	EPA 335.3
7.62	25-Sep-02	EPA 6010
5.08	25-Sep-02	EPA 6010
0.548	26-Sep-02	EPA 6020
1.62	25-Sep-02	EPA 6010
0.204	25-Sep-02	EPA 6010
0.508	25-Sep-02	EPA 6010
50.8	25-Sep-02	EPA 6010
1.1	26-Sep-02	EPA 6020
1.01	25-Sep-02	EPA 6010
1.72	25-Sep-02	EPA 6010
81.2	25-Sep-02	EPA 6010
0.329	26-Sep-02	EPA 6020
50.8	25-Sep-02	EPA 6010
0.508	25-Sep-02	EPA 6010
0.049	24-Sep-02	EPA 7470
1.22	25-Sep-02	EPA 6010
50.8	25-Sep-02	EPA 6010
0.548	26-Sep-02	EPA 6020
1.01	25-Sep-02	EPA 6010
20.2	25-Sep-02	EPA 6010
0.548	26-Sep-02	EPA 6020
1.01	25-Sep-02	EPA 6010
2.02	25-Sep-02	EPA 6010
9	26-Sep-02	EPA 8260
3	26-Sep-02	EPA 8260
9	26-Sep-02	EPA 8260
9	26-Sep-02	EPA 8260

9	26-Sep-02	EPA 8260
43	26-Sep-02	EPA 8260
9	26-Sep-02	EPA 8260
9	26-Sep-02	EPA 8260
9	26-Sep-02	EPA 8260
9	26-Sep-02	EPA 8260
9	26-Sep-02	EPA 8260
43	26-Sep-02	EPA 8260
9	26-Sep-02	EPA 8260
9	26-Sep-02	EPA 8260
9	26-Sep-02	EPA 8260
1	26-Sep-02	EPA 8260
9	26-Sep-02	EPA 8260
9	26-Sep-02	EPA 8260
9	26-Sep-02	EPA 8260
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9	26-Sep-02	EPA 8260
17	26-Sep-02	EPA 8260
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270	26-Sep-02	EPA 8270
540	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
540	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
1100	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
1100	26-Sep-02	EPA 8270
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1100	26-Sep-02	EPA 8270
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270	26-Sep-02	EPA 8270
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270	26-Sep-02	EPA 8270
1100	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
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270	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
540	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
270	26-Sep-02	EPA 8270
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26-Sep-02	EPA 8270
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26-Sep-02	EPA 8270

AAA Environmental
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Project:			
Sampled:		21-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94362-1		
Analysis	Result		Units
Cyanide, Total	U		mg/kg
Total Solids		93	%
Aluminum		9200	mg/kg
Antimony	U		mg/kg
Arsenic		5.03	mg/kg
Barium		53.7	mg/kg
Beryllium		0.378	mg/kg
Cadmium	U		mg/kg
Calcium		21100	mg/kg
Chromium		10.6	mg/kg
Cobalt		8.68	mg/kg
Copper		22.8	mg/kg
Iron		21100	mg/kg
Lead		10.8	mg/kg
Magnesium		7220	mg/kg
Manganese		510	mg/kg
Mercury	U		mg/kg
Nickel		21.9	mg/kg
Potassium		956	mg/kg
Selenium		0.498	mg/kg
Silver	U		mg/kg
Sodium		43.6	mg/kg
Thallium	U		mg/kg
Vanadium		14	mg/kg
Zinc		71.9	mg/kg
EPA 8260			
Chloromethane	U		ug/kg
Vinyl chloride	U		ug/kg
Chloroethane	U		ug/kg
Bromomethane	U		ug/kg
1,1-Dichloroethene	U		ug/kg
Acetone	U		ug/kg
Carbon disulfide	U		ug/kg
Methylene chloride	U		ug/kg
trans-1,2-Dichloroethene	U		ug/kg
1,1-Dichloroethane	U		ug/kg
cis-1,2-Dichloroethene	U		ug/kg
MEK(2-Butanone)	U		ug/kg
Chloroform	U		ug/kg
1,1,1-Trichloroethane	U		ug/kg

Carbon tetrachloride	U		ug/kg
Benzene	U		ug/kg
1,2-Dichloroethane	U		ug/kg
Trichloroethene	U		ug/kg
1,2-Dichloropropane	U		ug/kg
Bromodichloromethane	U		ug/kg
cis-1,3-Dichloropropene	U		ug/kg
MIBK(4-Methyl-2-pentanone)	U		ug/kg
Toluene	U		ug/kg
trans-1,3-Dichloropropene	U		ug/kg
1,1,2-Trichloroethane	U		ug/kg
Tetrachloroethene	U		ug/kg
2-Hexanone	U		ug/kg
Dibromochloromethane	U		ug/kg
Chlorobenzene	U		ug/kg
Ethylbenzene	U		ug/kg
p-Xylene/m-Xylene	U		ug/kg
o-Xylene	U		ug/kg
Styrene	U		ug/kg
Bromoform	U		ug/kg
1,1,2,2-Tetrachloroethane	U		ug/kg
Dibromofluoromethane		101	%
Toluene-d8		98	%
4-Bromofluorobenzene		103	%
1,2-Dichloroethane-d4		107	%
EPA 8081			
alpha-BHC	U		ug/kg
beta-BHC	U		ug/kg
Lindane (gamma-BHC)	U		ug/kg
delta-BHC	U		ug/kg
Heptachlor	U		ug/kg
Aldrin	U		ug/kg
Heptachlor epoxide	U		ug/kg
alpha-Chlordane	U		ug/kg
Endosulfan I	U		ug/kg
gamma-Chlordane	U		ug/kg
4,4'-DDE	U		ug/kg
Dieldrin	U		ug/kg
Endrin	U		ug/kg
Endosulfan II	U		ug/kg
4,4'-DDD	U		ug/kg
Endrin ketone	U		ug/kg
Endrin aldehyde	U		ug/kg
Endosulfan sulfate	U		ug/kg
4,4'-DDT	U		ug/kg
Methoxychlor	U		ug/kg
Toxaphene	U		ug/kg
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg

PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Decachlorobiphenyl		125	%
Tetrachloro-m-xylene		106	%
EPA 8270			
Bis(2-chloroethylether)	U		ug/kg
Phenol	U		ug/kg
2-Chlorophenol	U		ug/kg
1,3-Dichlorobenzene	U		ug/kg
1,4-Dichlorobenzene	U		ug/kg
1,2-Dichlorobenzene	U		ug/kg
Bis(2-chloroisopropylether)	U		ug/kg
2-Methylphenol	U		ug/kg
Hexachloroethane	U		ug/kg
N-Nitrosodi-N-propylamine	U		ug/kg
3-Methylphenol/4-Methylphenol	U		ug/kg
Nitrobenzene	U		ug/kg
Isophorone	U		ug/kg
2-Nitrophenol	U		ug/kg
2,4-Dimethylphenol	U		ug/kg
Bis(2-chloroethoxymethane)	U		ug/kg
2,4-Dichlorophenol	U		ug/kg
1,2,4-Trichlorobenzene	U		ug/kg
Naphthalene	U		ug/kg
4-Chloroaniline	U		ug/kg
Hexachlorobutadiene	U		ug/kg
4-Chloro-3-methylphenol	U		ug/kg
2-Methylnaphthalene	U		ug/kg
Hexachlorocyclopentadiene	U		ug/kg
2,4,6-Trichlorophenol	U		ug/kg
2,4,5-Trichlorophenol	U		ug/kg
2-Chloronaphthalene	U		ug/kg
2-Nitroaniline	U		ug/kg
Dimethyl phthalate	U		ug/kg
Acenaphthylene	U		ug/kg
2,6-Dinitrotoluene	U		ug/kg
3-Nitroaniline	U		ug/kg
Acenaphthene	U		ug/kg
2,4-Dinitrophenol	U		ug/kg
Dibenzofuran	U		ug/kg
2,4-Dinitrotoluene	U		ug/kg
4-Nitrophenol	U		ug/kg
Diethyl phthalate	U		ug/kg
Fluorene	U		ug/kg
4-Chlorophenylphenylether	U		ug/kg
4-Nitroaniline	U		ug/kg
2-Methyl-4,6-dinitrophenol	U		ug/kg
N-Nitrosodiphenylamine	U		ug/kg
4-Bromophenylphenylether	U		ug/kg
Hexachlorobenzene	U		ug/kg

Pentachlorophenol	U		ug/kg
Phenanthrene	U		ug/kg
Anthracene	U		ug/kg
Carbazole	U		ug/kg
Di-n-butyl phthalate	U		ug/kg
Fluoranthene	U		ug/kg
Pyrene	U		ug/kg
Butylbenzyl phthalate	U		ug/kg
Benzo(a)anthracene	U		ug/kg
3,3-Dichlorobenzidine	U		ug/kg
Chrysene	U		ug/kg
Bis-2-ethylhexyl phthalate	U		ug/kg
Di-n-octyl phthalate	U		ug/kg
Benzo(b)fluoranthene	U		ug/kg
Benzo(k)fluoranthene	U		ug/kg
Benzo(a)pyrene	U		ug/kg
Indeno(1,2,3-cd)pyrene	U		ug/kg
Dibenzo(a,h)anthracene	U		ug/kg
Benzo(g,h,i)perylene	U		ug/kg

Terphenyl-d14	80	%
2-Fluorophenol	68	%
Phenol-d5	72	%
2,4,6-Tribromophenol	62	%
Nitrobenzene-d5	75	%
2-Fluorobiphenyl	76	%

PORTERS WAVERLY W-B/R

RDL	Analyzed	Method
0.211	23-Sep-02	EPA 335.3
	24-Sep-02	CLP 3.0
6.78	25-Sep-02	EPA 6010
4.52	25-Sep-02	EPA 6010
0.437	26-Sep-02	EPA 6020
1.45	25-Sep-02	EPA 6010
0.181	25-Sep-02	EPA 6010
0.452	25-Sep-02	EPA 6010
45.2	25-Sep-02	EPA 6010
0.874	26-Sep-02	EPA 6020
0.904	25-Sep-02	EPA 6010
1.54	25-Sep-02	EPA 6010
18.1	25-Sep-02	EPA 6010
1.31	26-Sep-02	EPA 6020
45.2	25-Sep-02	EPA 6010
0.452	25-Sep-02	EPA 6010
0.041	24-Sep-02	EPA 7470
1.08	25-Sep-02	EPA 6010
45.2	25-Sep-02	EPA 6010
0.437	26-Sep-02	EPA 6020
0.904	25-Sep-02	EPA 6010
18.1	25-Sep-02	EPA 6010
2.19	26-Sep-02	EPA 6020
0.904	25-Sep-02	EPA 6010
1.81	25-Sep-02	EPA 6010
5	26-Sep-02	EPA 8260
2	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260
24	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260
24	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260

5	26-Sep-02	EPA 8260
0.7	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260
10	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8260
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	26-Sep-02	EPA 8260
	26-Sep-02	EPA 8260
	26-Sep-02	EPA 8260
	26-Sep-02	EPA 8260
5	26-Sep-02	EPA 8081
5	26-Sep-02	EPA 8081
5	26-Sep-02	EPA 8081
5	26-Sep-02	EPA 8081
5	26-Sep-02	EPA 8081
5	26-Sep-02	EPA 8081
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5	26-Sep-02	EPA 8081
5	26-Sep-02	EPA 8081
5	26-Sep-02	EPA 8081
5	26-Sep-02	EPA 8081
51	26-Sep-02	EPA 8081
10	26-Sep-02	EPA 8081
21	26-Sep-02	EPA 8081
10	26-Sep-02	EPA 8081
10	26-Sep-02	EPA 8081

10	26-Sep-02	EPA 8081
10	26-Sep-02	EPA 8081
10	26-Sep-02	EPA 8081
	26-Sep-02	EPA 8081
	26-Sep-02	EPA 8081
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
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270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
530	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
530	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
1100	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
1100	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
1100	25-Sep-02	EPA 8270
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1100	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
1100	25-Sep-02	EPA 8270
1100	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270

1100	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
530	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
270	25-Sep-02	EPA 8270
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	25-Sep-02	EPA 8270
	25-Sep-02	EPA 8270
	25-Sep-02	EPA 8270

AAA Environmental
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Project:				
Sampled:		21-Sep-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L94363-1			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		0.367		mg/l

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Project:				
Sampled:		21-Sep-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L94363-2			
Analysis	Result			Units
Total Solids		80.4		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		1500		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		120		%
Decachlorobiphenyl		168		%

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Project:				
Sampled:		21-Sep-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L94363-3			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		0.324		mg/l

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Project:				
Sampled:		21-Sep-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L94363-4			
Analysis	Result			Units
Total Solids		81.5		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		930		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		105		%
Decachlorobiphenyl		121		%

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Project:				
Sampled:		21-Sep-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L94363-5			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		0.546		mg/l

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Project:				
Sampled:		21-Sep-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L94363-6			
Analysis	Result			Units
Total Solids		86.3		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg

PCB 1254		720	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		106	%
Decachlorobiphenyl		117	%

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Project:
Sampled: 21-Sep-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L94363-7

Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		0.489	mg/l

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Project:
Sampled: 21-Sep-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L94363-8

Analysis	Result		Units
Total Solids		86.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1100	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		108	%
Decachlorobiphenyl		125	%

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Project:
Sampled: 21-Sep-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L94363-9

Analysis	Result		Units

Paint Filter	U		ml/kg
Cadmium		0.907	mg/l

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Project:			
Sampled:		21-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94363-10		
Analysis	Result		Units
Total Solids		78	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1100	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		105	%
Decachlorobiphenyl		116	%

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Project:			
Sampled:		21-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94363-11		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		0.431	mg/l

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Project:			
Sampled:		21-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94363-12		
Analysis	Result		Units
Total Solids		84.9	%
EPA 8082			
PCB 1016	U		ug/kg

PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		890	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		107	%
Decachlorobiphenyl		129	%

RO001 STAGING AREA SOIL

RDL	Analyzed	Method
1	24-Sep-02	EPA 9095
0.05	25-Sep-02	EPA 6010 TCLP

RO001 STAGING AREA SOIL

RDL	Analyzed	Method
	24-Sep-02	CLP 3.0
110	25-Sep-02	EPA 8082
230	25-Sep-02	EPA 8082
110	25-Sep-02	EPA 8082
110	25-Sep-02	EPA 8082
110	25-Sep-02	EPA 8082
110	25-Sep-02	EPA 8082
110	25-Sep-02	EPA 8082
	25-Sep-02	EPA 8082
	25-Sep-02	EPA 8082

RO002 STAGING AREA SOIL

RDL	Analyzed	Method
1	24-Sep-02	EPA 9095
0.05	25-Sep-02	EPA 6010 TCLP

RO002 STAGING AREA SOIL

RDL	Analyzed	Method
	24-Sep-02	CLP 3.0
120	25-Sep-02	EPA 8082
240	25-Sep-02	EPA 8082
120	25-Sep-02	EPA 8082
120	25-Sep-02	EPA 8082
120	25-Sep-02	EPA 8082
120	25-Sep-02	EPA 8082
120	25-Sep-02	EPA 8082
	25-Sep-02	EPA 8082
	25-Sep-02	EPA 8082

RO003 STAGING AREA SOIL

RDL	Analyzed	Method
1	24-Sep-02	EPA 9095
0.05	25-Sep-02	EPA 6010 TCLP

RO003 STAGING AREA SOIL

RDL	Analyzed	Method
	24-Sep-02	CLP 3.0
110	25-Sep-02	EPA 8082
230	25-Sep-02	EPA 8082
110	25-Sep-02	EPA 8082
110	25-Sep-02	EPA 8082
110	25-Sep-02	EPA 8082

110	25-Sep-02	EPA 8082
110	25-Sep-02	EPA 8082
	25-Sep-02	EPA 8082
	25-Sep-02	EPA 8082

RO004 STAGING AREA SOIL

RDL	Analyzed	Method
1	24-Sep-02	EPA 9095
0.05	25-Sep-02	EPA 6010 TCLP

RO004 STAGING AREA SOIL

RDL	Analyzed	Method
	24-Sep-02	CLP 3.0
110	25-Sep-02	EPA 8082
210	25-Sep-02	EPA 8082
110	25-Sep-02	EPA 8082
110	25-Sep-02	EPA 8082
110	25-Sep-02	EPA 8082
110	25-Sep-02	EPA 8082
110	25-Sep-02	EPA 8082
	25-Sep-02	EPA 8082
	25-Sep-02	EPA 8082

RO005 STAGING AREA SOIL

RDL	Analyzed	Method

1	24-Sep-02	EPA 9095
0.05	25-Sep-02	EPA 6010 TCLP

RO005 STAGING AREA SOIL

RDL	Analyzed	Method
	24-Sep-02	CLP 3.0
130	25-Sep-02	EPA 8082
250	25-Sep-02	EPA 8082
130	25-Sep-02	EPA 8082
130	25-Sep-02	EPA 8082
130	25-Sep-02	EPA 8082
130	25-Sep-02	EPA 8082
130	25-Sep-02	EPA 8082
	25-Sep-02	EPA 8082
	25-Sep-02	EPA 8082

RO006 STAGING AREA SOIL

RDL	Analyzed	Method
1	24-Sep-02	EPA 9095
0.05	25-Sep-02	EPA 6010 TCLP

RO006 STAGING AREA SOIL

RDL	Analyzed	Method
	24-Sep-02	CLP 3.0
120	25-Sep-02	EPA 8082

230	25-Sep-02	EPA 8082
120	25-Sep-02	EPA 8082
120	25-Sep-02	EPA 8082
120	25-Sep-02	EPA 8082
120	25-Sep-02	EPA 8082
120	25-Sep-02	EPA 8082
	25-Sep-02	EPA 8082
	25-Sep-02	EPA 8082

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Project:				
Sampled:		23-Sep-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L94471-1			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		0.293		mg/l

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Project:				
Sampled:		23-Sep-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L94471-2			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		0.229		mg/l

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Project:				
Sampled:		24-Sep-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L94471-3			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		0.825		mg/l

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Project:				
Sampled:		24-Sep-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L94471-4			
Analysis	Result			Units
Paint Filter	U			ml/kg

Cadmium	0.306	mg/l

RO007 SN N/A POST-CKD

RDL	Analyzed	Method
1	26-Sep-02	EPA 9095
0.05	26-Sep-02	EPA 6010 TCLP

RO010 SN 200-436 POST-CKD

RDL	Analyzed	Method
1	26-Sep-02	EPA 9095
0.05	26-Sep-02	EPA 6010 TCLP

RO009 SN 200-609 POST-CKD

RDL	Analyzed	Method
1	26-Sep-02	EPA 9095
0.05	26-Sep-02	EPA 6010 TCLP

RO008 200-430 POST CKD

RDL	Analyzed	Method
1	26-Sep-02	EPA 9095

0.05	26-Sep-02	EPA 6010 TCLP	

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Project:			
Sampled:		24-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94538-1		
Analysis	Result		Units
Total Solids		69.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		260	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		75	%
Decachlorobiphenyl		83	%

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Project:			
Sampled:		24-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94538-2		
Analysis	Result		Units
Total Solids		87.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		490	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		85	%
Decachlorobiphenyl		114	%

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Project:			
Sampled:		24-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94538-3		
Analysis	Result		Units
EPA 8082			
PCB 1016		127	%
PCB 1260		140	%
Tetrachloro-m-xylene		79	%
Decachlorobiphenyl		98	%

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Project:			
Sampled:		24-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94538-4		
Analysis	Result		Units
EPA 8082			
PCB 1016		118	%
PCB 1260		130	%
Tetrachloro-m-xylene		78	%
Decachlorobiphenyl		103	%

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Project:			
Sampled:		24-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94538-5		
Analysis	Result		Units
Total Solids		45.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1100	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		87	%
Decachlorobiphenyl		114	%

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Project:
Sampled: 24-Sep-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L94538-6

Analysis	Result		Units
Total Solids		81.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		220	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		90	%
Decachlorobiphenyl		110	%

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Project:
Sampled: 24-Sep-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L94538-7

Analysis	Result		Units
Total Solids		80.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1000	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		96	%
Decachlorobiphenyl		141	%

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Project:

Sampled:		24-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94538-8		
Analysis	Result		Units
Total Solids		86.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		270	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		103	%
Decachlorobiphenyl		137	%

B-B-SS-W-001 (B)

	RDL	Analyzed	Method
		25-Sep-02	CLP 3.0
	140	26-Sep-02	EPA 8082
	280	26-Sep-02	EPA 8082
	140	26-Sep-02	EPA 8082
	140	26-Sep-02	EPA 8082
	140	26-Sep-02	EPA 8082
	140	26-Sep-02	EPA 8082
	140	26-Sep-02	EPA 8082
		26-Sep-02	EPA 8082
		26-Sep-02	EPA 8082

B-B-SS-E-001

	RDL	Analyzed	Method
		25-Sep-02	CLP 3.0
	100	26-Sep-02	EPA 8082
	210	26-Sep-02	EPA 8082
	100	26-Sep-02	EPA 8082
	100	26-Sep-02	EPA 8082
	100	26-Sep-02	EPA 8082
	100	26-Sep-02	EPA 8082
	100	26-Sep-02	EPA 8082
		26-Sep-02	EPA 8082
		26-Sep-02	EPA 8082

L94538-2MS,B-B-SS-E-001

	RDL	Analyzed	Method
		26-Sep-02	EPA 8082
		26-Sep-02	EPA 8082
		26-Sep-02	EPA 8082
		26-Sep-02	EPA 8082

L94538-2MSD/DUP,B-B-SS-E

	RDL	Analyzed	Method
		26-Sep-02	EPA 8082
		26-Sep-02	EPA 8082
		26-Sep-02	EPA 8082
		26-Sep-02	EPA 8082

B-B-S-E-001

	RDL	Analyzed	Method
		25-Sep-02	CLP 3.0
	200	26-Sep-02	EPA 8082
	400	26-Sep-02	EPA 8082
	200	26-Sep-02	EPA 8082
	200	26-Sep-02	EPA 8082
	200	26-Sep-02	EPA 8082
	200	26-Sep-02	EPA 8082
	200	26-Sep-02	EPA 8082
		26-Sep-02	EPA 8082
		26-Sep-02	EPA 8082

B-B-SS-W-001 (A)

	RDL	Analyzed	Method
		25-Sep-02	CLP 3.0
	110	26-Sep-02	EPA 8082
	230	26-Sep-02	EPA 8082
	110	26-Sep-02	EPA 8082
	110	26-Sep-02	EPA 8082
	110	26-Sep-02	EPA 8082
	110	26-Sep-02	EPA 8082
	110	26-Sep-02	EPA 8082
		26-Sep-02	EPA 8082
		26-Sep-02	EPA 8082

B-C-S-B-001

	RDL	Analyzed	Method
		25-Sep-02	CLP 3.0
	120	26-Sep-02	EPA 8082
	240	26-Sep-02	EPA 8082
	120	26-Sep-02	EPA 8082
	120	26-Sep-02	EPA 8082
	120	26-Sep-02	EPA 8082
	120	26-Sep-02	EPA 8082
	120	26-Sep-02	EPA 8082
		26-Sep-02	EPA 8082
		26-Sep-02	EPA 8082

B-B-S-W-001

RDL	Analyzed	Method
	25-Sep-02	CLP 3.0
110	26-Sep-02	EPA 8082
210	26-Sep-02	EPA 8082
110	26-Sep-02	EPA 8082
110	26-Sep-02	EPA 8082
110	26-Sep-02	EPA 8082
110	26-Sep-02	EPA 8082
110	26-Sep-02	EPA 8082
	26-Sep-02	EPA 8082
	26-Sep-02	EPA 8082

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Project:
Sampled: 26-Sep-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L94662-1

Analysis	Result		Units
Total Solids		56.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		730	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		91	%
Decachlorobiphenyl		117	%

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Project:
Sampled: 26-Sep-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L94662-2

Analysis	Result		Units
Total Solids		68	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		5300	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		100	%
Decachlorobiphenyl		123	%

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Project:			
Sampled:		26-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94662-3		
Analysis	Result		Units
Total Solids		80.1	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		180	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		81	%
Decachlorobiphenyl		90	%

A-B-S-E-R-002

	RDL	Analyzed	Method
		1-Oct-02	CLP 3.0
	170	1-Oct-02	EPA 8082
	330	1-Oct-02	EPA 8082
	170	1-Oct-02	EPA 8082
	170	1-Oct-02	EPA 8082
	170	1-Oct-02	EPA 8082
	170	1-Oct-02	EPA 8082
	170	1-Oct-02	EPA 8082
		1-Oct-02	EPA 8082
		1-Oct-02	EPA 8082

A-B-SS-E-R-002

	RDL	Analyzed	Method
		1-Oct-02	CLP 3.0
	130	1-Oct-02	EPA 8082
	270	1-Oct-02	EPA 8082
	130	1-Oct-02	EPA 8082
	130	1-Oct-02	EPA 8082
	130	1-Oct-02	EPA 8082
	130	1-Oct-02	EPA 8082
	130	1-Oct-02	EPA 8082
		1-Oct-02	EPA 8082
		1-Oct-02	EPA 8082

A-B-S-E-B-001

	RDL	Analyzed	Method
		1-Oct-02	CLP 3.0
	110	1-Oct-02	EPA 8082
	220	1-Oct-02	EPA 8082
	110	1-Oct-02	EPA 8082
	110	1-Oct-02	EPA 8082
	110	1-Oct-02	EPA 8082
	110	1-Oct-02	EPA 8082
	110	1-Oct-02	EPA 8082
		1-Oct-02	EPA 8082
		1-Oct-02	EPA 8082

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Project:			
Sampled:		30-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94773-1		
Analysis	Result		Units
Total Solids		56.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		280	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		82	%
Decachlorobiphenyl		96	%

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Project:			
Sampled:		30-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94773-2		
Analysis	Result		Units
Total Solids		55.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		4100	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		80	%
Decachlorobiphenyl		97	%

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Project:			
Sampled:		30-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94773-3		
Analysis	Result		Units
EPA 8082			
PCB 1016		220	%
PCB 1260		200	%
Tetrachloro-m-xylene		70	%
Decachlorobiphenyl		100	%

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Project:			
Sampled:		30-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94773-4		
Analysis	Result		Units
EPA 8082			
PCB 1016		260	%
PCB 1260		210	%
Tetrachloro-m-xylene		72	%
Decachlorobiphenyl		91	%

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Project:			
Sampled:		30-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94773-5		
Analysis	Result		Units
Total Solids		56.1	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		6800	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		98	%
Decachlorobiphenyl		135	%

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Project:
Sampled: 30-Sep-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L94773-6

Analysis	Result		Units
Total Solids		85	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		220	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		73	%
Decachlorobiphenyl		87	%

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Project:
Sampled: 30-Sep-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L94773-7

Analysis	Result		Units
Total Solids		69.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1600	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		78	%
Decachlorobiphenyl		96	%

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Project:

Sampled:		30-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94773-8		
Analysis	Result		Units
Total Solids		62.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		3100	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		92	%
Decachlorobiphenyl		115	%

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Project:			
Sampled:		30-Sep-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94773-9		
Analysis	Result		Units
Total Solids		56.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		310	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		86	%
Decachlorobiphenyl		93	%

C-B-S-W-001

	RDL	Analyzed	Method
		1-Oct-02	CLP 3.0
	170	4-Oct-02	EPA 8082
	350	4-Oct-02	EPA 8082
	170	4-Oct-02	EPA 8082
	170	4-Oct-02	EPA 8082
	170	4-Oct-02	EPA 8082
	170	4-Oct-02	EPA 8082
	170	4-Oct-02	EPA 8082
		4-Oct-02	EPA 8082
		4-Oct-02	EPA 8082

C-B-SS-W-001

	RDL	Analyzed	Method
		1-Oct-02	CLP 3.0
	160	4-Oct-02	EPA 8082
	330	4-Oct-02	EPA 8082
	160	4-Oct-02	EPA 8082
	160	4-Oct-02	EPA 8082
	160	4-Oct-02	EPA 8082
	160	4-Oct-02	EPA 8082
	160	4-Oct-02	EPA 8082
		4-Oct-02	EPA 8082
		4-Oct-02	EPA 8082

L94773-2MS, C-B-SS-W-001

	RDL	Analyzed	Method
		8-Oct-02	EPA 8082
		8-Oct-02	EPA 8082
		8-Oct-02	EPA 8082
		8-Oct-02	EPA 8082

L94773-2MSD/DUP,C-B-SS-W

	RDL	Analyzed	Method
		8-Oct-02	EPA 8082
		8-Oct-02	EPA 8082
		8-Oct-02	EPA 8082
		8-Oct-02	EPA 8082

C-C-S-B-001

	RDL	Analyzed	Method
		1-Oct-02	CLP 3.0
	170	4-Oct-02	EPA 8082
	330	4-Oct-02	EPA 8082
	170	4-Oct-02	EPA 8082
	170	4-Oct-02	EPA 8082
	170	4-Oct-02	EPA 8082
	170	4-Oct-02	EPA 8082
	170	4-Oct-02	EPA 8082
		4-Oct-02	EPA 8082
		4-Oct-02	EPA 8082

C-C-SS-B-001

	RDL	Analyzed	Method
		1-Oct-02	CLP 3.0
	110	4-Oct-02	EPA 8082
	230	4-Oct-02	EPA 8082
	110	4-Oct-02	EPA 8082
	110	4-Oct-02	EPA 8082
	110	4-Oct-02	EPA 8082
	110	4-Oct-02	EPA 8082
	110	4-Oct-02	EPA 8082
		4-Oct-02	EPA 8082
		4-Oct-02	EPA 8082

C-B-SS-B-001

	RDL	Analyzed	Method
		1-Oct-02	CLP 3.0
	140	4-Oct-02	EPA 8082
	270	4-Oct-02	EPA 8082
	140	4-Oct-02	EPA 8082
	140	4-Oct-02	EPA 8082
	140	4-Oct-02	EPA 8082
	140	4-Oct-02	EPA 8082
	140	4-Oct-02	EPA 8082
		4-Oct-02	EPA 8082
		4-Oct-02	EPA 8082

C-B-SS-E-001

	RDL	Analyzed	Method
		1-Oct-02	CLP 3.0
	160	4-Oct-02	EPA 8082
	320	4-Oct-02	EPA 8082
	160	4-Oct-02	EPA 8082
	160	4-Oct-02	EPA 8082
	160	4-Oct-02	EPA 8082
	160	4-Oct-02	EPA 8082
	160	4-Oct-02	EPA 8082
		4-Oct-02	EPA 8082
		4-Oct-02	EPA 8082

C-B-S-E-001

	RDL	Analyzed	Method
		1-Oct-02	CLP 3.0
	170	4-Oct-02	EPA 8082
	350	4-Oct-02	EPA 8082
	170	4-Oct-02	EPA 8082
	170	4-Oct-02	EPA 8082
	170	4-Oct-02	EPA 8082
	170	4-Oct-02	EPA 8082
	170	4-Oct-02	EPA 8082
		4-Oct-02	EPA 8082
		4-Oct-02	EPA 8082

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Project:				
Sampled:		1-Oct-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L94859-1			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		0.283		mg/l

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Project:				
Sampled:		1-Oct-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L94859-2			
Analysis	Result			Units
Cadmium		1.25		mg/l

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Project:				
Sampled:		1-Oct-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L94859-3			
Analysis	Result			Units
Paint Filter	U			ml/kg

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Project:				
Sampled:		1-Oct-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L94859-4			
Analysis	Result			Units
Total Solids		61.4		%
EPA 8082				
PCB 1016	U			ug/kg

PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		530	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		91	%
Decachlorobiphenyl		110	%

R0025

	RDL	Analyzed	Method
	1	2-Oct-02	EPA 9095
	0.05	4-Oct-02	EPA 6010 TCLP

L94859-1MS, R0025

	RDL	Analyzed	Method
	0.05	4-Oct-02	EPA 6010 TCLP

L94859-1MSD/DUP, R0025

	RDL	Analyzed	Method
	1	2-Oct-02	EPA 9095

R0025

	RDL	Analyzed	Method
		5-Oct-02	CLP 3.0
	150	7-Oct-02	EPA 8082

300	7-Oct-02	EPA 8082
150	7-Oct-02	EPA 8082
150	7-Oct-02	EPA 8082
150	7-Oct-02	EPA 8082
150	7-Oct-02	EPA 8082
150	7-Oct-02	EPA 8082
	7-Oct-02	EPA 8082
	7-Oct-02	EPA 8082

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Project:			
Sampled:		2-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94910-1		
Analysis	Result		Units
Total Solids		83.1	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		240	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		79	%
Decachlorobiphenyl		105	%

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Project:			
Sampled:		2-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94910-2		
Analysis	Result		Units
Total Solids		51.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		3100	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		73	%
Decachlorobiphenyl		99	%

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Project:			
Sampled:		2-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94910-3		
Analysis	Result		Units
Total Solids		66.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		460	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		89	%
Decachlorobiphenyl		124	%

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Project:			
Sampled:		2-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94910-4		
Analysis	Result		Units
Total Solids		58.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		2000	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		67	%
Decachlorobiphenyl		94	%

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Project:			
Sampled:		2-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94910-5		
Analysis	Result		Units

Total Solids		75.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		540	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		75	%
Decachlorobiphenyl		96	%

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Project:			
Sampled:		2-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L94910-6		
Analysis	Result		Units
Total Solids		58	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		250	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		58	%
Decachlorobiphenyl		81	%

D-C-SS-001

	RDL	Analyzed	Method
		5-Oct-02	CLP 3.0
	120	7-Oct-02	EPA 8082
	230	7-Oct-02	EPA 8082
	120	7-Oct-02	EPA 8082
	120	7-Oct-02	EPA 8082
	120	7-Oct-02	EPA 8082
	120	7-Oct-02	EPA 8082
	120	7-Oct-02	EPA 8082
		7-Oct-02	EPA 8082
		7-Oct-02	EPA 8082

D-C-S-001

	RDL	Analyzed	Method
		5-Oct-02	CLP 3.0
	190	7-Oct-02	EPA 8082
	380	7-Oct-02	EPA 8082
	190	7-Oct-02	EPA 8082
	190	7-Oct-02	EPA 8082
	190	7-Oct-02	EPA 8082
	190	7-Oct-02	EPA 8082
	190	7-Oct-02	EPA 8082
		7-Oct-02	EPA 8082
		7-Oct-02	EPA 8082

D-B-SS-E-001

	RDL	Analyzed	Method
		5-Oct-02	CLP 3.0
	140	7-Oct-02	EPA 8082
	280	7-Oct-02	EPA 8082
	140	7-Oct-02	EPA 8082
	140	7-Oct-02	EPA 8082
	140	7-Oct-02	EPA 8082
	140	7-Oct-02	EPA 8082
	140	7-Oct-02	EPA 8082
		7-Oct-02	EPA 8082
		7-Oct-02	EPA 8082

D-B-SS-W-001

	RDL	Analyzed	Method
		5-Oct-02	CLP 3.0
	170	7-Oct-02	EPA 8082
	340	7-Oct-02	EPA 8082
	170	7-Oct-02	EPA 8082
	170	7-Oct-02	EPA 8082
	170	7-Oct-02	EPA 8082
	170	7-Oct-02	EPA 8082
	170	7-Oct-02	EPA 8082
		7-Oct-02	EPA 8082
		7-Oct-02	EPA 8082

D-B-S-E-001

	RDL	Analyzed	Method

	5-Oct-02	CLP 3.0
130	7-Oct-02	EPA 8082
260	7-Oct-02	EPA 8082
130	7-Oct-02	EPA 8082
130	7-Oct-02	EPA 8082
130	7-Oct-02	EPA 8082
130	7-Oct-02	EPA 8082
130	7-Oct-02	EPA 8082
	7-Oct-02	EPA 8082
	7-Oct-02	EPA 8082

D-B-S-W-001

RDL	Analyzed	Method
	5-Oct-02	CLP 3.0
160	7-Oct-02	EPA 8082
330	7-Oct-02	EPA 8082
160	7-Oct-02	EPA 8082
160	7-Oct-02	EPA 8082
160	7-Oct-02	EPA 8082
160	7-Oct-02	EPA 8082
160	7-Oct-02	EPA 8082
	7-Oct-02	EPA 8082
	7-Oct-02	EPA 8082

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Project:			
Sampled:		5-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95095-1		
Analysis	Result		Units
Total Solids		66.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		260	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		79	%
Decachlorobiphenyl		107	%

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Project:			
Sampled:		5-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95095-2		
Analysis	Result		Units
Total Solids		65.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		580	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		82	%
Decachlorobiphenyl		102	%

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Project:			
Sampled:		5-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95095-3		
Analysis	Result		Units
EPA 8082			
PCB 1016		12.71	%
PCB 1260		16	%
Tetrachloro-m-xylene		127	%
Decachlorobiphenyl		160	%

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Project:			
Sampled:		5-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95095-4		
Analysis	Result		Units
EPA 8082			
PCB 1016		116.6	%
PCB 1260		125.8	%
Tetrachloro-m-xylene		73	%
Decachlorobiphenyl		95	%

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Project:			
Sampled:		5-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95095-5		
Analysis	Result		Units
Total Solids		80.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		780	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		83	%
Decachlorobiphenyl		111	%

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Project:				
Sampled:		5-Oct-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L95095-6			
Analysis	Result			Units
Total Solids		61.8		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		81		%
Decachlorobiphenyl		103		%

B-B-S-E-R-002

RDL	Analyzed	Method
	8-Oct-02	CLP 3.0
150	8-Oct-02	EPA 8082
300	8-Oct-02	EPA 8082
150	8-Oct-02	EPA 8082
150	8-Oct-02	EPA 8082
150	8-Oct-02	EPA 8082
150	8-Oct-02	EPA 8082
150	8-Oct-02	EPA 8082
	8-Oct-02	EPA 8082
	8-Oct-02	EPA 8082

B-B-S-E-B-002

RDL	Analyzed	Method
	8-Oct-02	CLP 3.0
150	8-Oct-02	EPA 8082
300	8-Oct-02	EPA 8082
150	8-Oct-02	EPA 8082
150	8-Oct-02	EPA 8082
150	8-Oct-02	EPA 8082
150	8-Oct-02	EPA 8082
150	8-Oct-02	EPA 8082
	8-Oct-02	EPA 8082
	8-Oct-02	EPA 8082

L95095-2MS, B-B-S-E-B-002

	RDL	Analyzed	Method
		8-Oct-02	EPA 8082
		8-Oct-02	EPA 8082
		8-Oct-02	EPA 8082
		8-Oct-02	EPA 8082

L95095-2MSD/DUP,B-B-S-E-B

	RDL	Analyzed	Method
		8-Oct-02	EPA 8082
		8-Oct-02	EPA 8082
		8-Oct-02	EPA 8082
		8-Oct-02	EPA 8082

A-B-SS-E-R-003

	RDL	Analyzed	Method
		8-Oct-02	CLP 3.0
	120	8-Oct-02	EPA 8082
	230	8-Oct-02	EPA 8082
	120	8-Oct-02	EPA 8082
	120	8-Oct-02	EPA 8082
	120	8-Oct-02	EPA 8082
	120	8-Oct-02	EPA 8082
	120	8-Oct-02	EPA 8082
		8-Oct-02	EPA 8082
		8-Oct-02	EPA 8082

DUPLICATE

	RDL	Analyzed	Method
		8-Oct-02	CLP 3.0
	160	8-Oct-02	EPA 8082
	320	8-Oct-02	EPA 8082
	160	8-Oct-02	EPA 8082
	160	8-Oct-02	EPA 8082
	160	8-Oct-02	EPA 8082
	160	8-Oct-02	EPA 8082
	160	8-Oct-02	EPA 8082
		8-Oct-02	EPA 8082
		8-Oct-02	EPA 8082

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Project:
Sampled: 4-Oct-02
Source: VIACOM/HORSEHEADS Origin:
Lab ID: L95096-1

Analysis	Result		Units
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		3100	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		51	%
Decachlorobiphenyl		55	%

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Project:
Sampled: 4-Oct-02
Source: VIACOM/HORSEHEADS Origin:
Lab ID: L95096-2

Analysis	Result		Units
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1200	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		55	%
Decachlorobiphenyl		63	%

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Project:
Sampled: 4-Oct-02

Source:	VIACOM/HORSEHEADS	Origin:	
Lab ID:	L95096-3		
Analysis	Result		Units
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		170	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		70	%
Decachlorobiphenyl		83	%

DSUB-B-SS-W-WING-001 LOW

	RDL	Analyzed	Method
	98	7-Oct-02	EPA 8082
	200	7-Oct-02	EPA 8082
	98	7-Oct-02	EPA 8082
	98	7-Oct-02	EPA 8082
	98	7-Oct-02	EPA 8082
	98	7-Oct-02	EPA 8082
	98	7-Oct-02	EPA 8082
D		7-Oct-02	EPA 8082
D		7-Oct-02	EPA 8082

DSUB-B-SS-W-WING-001 MID

	RDL	Analyzed	Method
	94	7-Oct-02	EPA 8082
	190	7-Oct-02	EPA 8082
	94	7-Oct-02	EPA 8082
	94	7-Oct-02	EPA 8082
	94	7-Oct-02	EPA 8082
	94	7-Oct-02	EPA 8082
	94	7-Oct-02	EPA 8082
D		7-Oct-02	EPA 8082
D		7-Oct-02	EPA 8082

DSUB-B-S-W-WING-001 TOP

	RDL	Analyzed	Method
	99	7-Oct-02	EPA 8082
	200	7-Oct-02	EPA 8082
	99	7-Oct-02	EPA 8082
	99	7-Oct-02	EPA 8082
	99	7-Oct-02	EPA 8082
	99	7-Oct-02	EPA 8082
	99	7-Oct-02	EPA 8082
		7-Oct-02	EPA 8082
		7-Oct-02	EPA 8082

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Project:			
Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95252-1		
Analysis	Result		Units
Total Solids		57.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1600	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		109	%
Decachlorobiphenyl		143	%

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Project:			
Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95252-2		
Analysis	Result		Units
Total Solids		88.1	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		410	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		109	%
Decachlorobiphenyl		150	%

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Project:			
Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95252-3		
Analysis	Result		Units
Total Solids		57.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1200	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		107	%
Decachlorobiphenyl		165	%

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Project:			
Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95252-4		
Analysis	Result		Units
Total Solids		62.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		590	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		110	%
Decachlorobiphenyl		151	%

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Project:			
Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95252-5		
Analysis	Result		Units

Total Solids		71.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		700	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		107	%
Decachlorobiphenyl		147	%

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Project:
Sampled: 9-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95252-6

Analysis	Result		Units
Total Solids		58.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		450	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		116	%
Decachlorobiphenyl		153	%

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Project:
Sampled: 9-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95252-7

Analysis	Result		Units
Total Solids		82.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg

PCB 1248	U		ug/kg
PCB 1254		300	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		101	%
Decachlorobiphenyl		119	%

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Project:			
Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95252-8		
Analysis	Result		Units
Total Solids		56.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		390	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		99	%
Decachlorobiphenyl		120	%

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Project:			
Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95252-9		
Analysis	Result		Units
Total Solids		54.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		5200	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		103	%
Decachlorobiphenyl		119	%

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Project:				
Sampled:		9-Oct-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L95252-10			
Analysis	Result			Units
Total Solids		76.6		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		360		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		103		%
Decachlorobiphenyl		134		%

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Project:				
Sampled:		9-Oct-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L95252-11			
Analysis	Result			Units
Total Solids		66.4		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		1500		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		108		%
Decachlorobiphenyl		141		%

E-C-SS-W4-001

RDL	Analyzed	Method
	10-Oct-02	CLP 3.0
160	10-Oct-02	EPA 8082
330	10-Oct-02	EPA 8082
160	10-Oct-02	EPA 8082
160	10-Oct-02	EPA 8082
160	10-Oct-02	EPA 8082
160	10-Oct-02	EPA 8082
160	10-Oct-02	EPA 8082
	10-Oct-02	EPA 8082
	10-Oct-02	EPA 8082

E-C-SS-W3-001

RDL	Analyzed	Method
	10-Oct-02	CLP 3.0
110	10-Oct-02	EPA 8082
220	10-Oct-02	EPA 8082
110	10-Oct-02	EPA 8082
110	10-Oct-02	EPA 8082
110	10-Oct-02	EPA 8082
110	10-Oct-02	EPA 8082
110	10-Oct-02	EPA 8082
	10-Oct-02	EPA 8082
	10-Oct-02	EPA 8082

E-C-S-E-001

	RDL	Analyzed	Method
		10-Oct-02	CLP 3.0
	170	10-Oct-02	EPA 8082
	350	10-Oct-02	EPA 8082
	170	10-Oct-02	EPA 8082
	170	10-Oct-02	EPA 8082
	170	10-Oct-02	EPA 8082
	170	10-Oct-02	EPA 8082
	170	10-Oct-02	EPA 8082
		10-Oct-02	EPA 8082
*		10-Oct-02	EPA 8082

E-C-S-W1-001

	RDL	Analyzed	Method
		10-Oct-02	CLP 3.0
	160	10-Oct-02	EPA 8082
	310	10-Oct-02	EPA 8082
	160	10-Oct-02	EPA 8082
	160	10-Oct-02	EPA 8082
	160	10-Oct-02	EPA 8082
	160	10-Oct-02	EPA 8082
	160	10-Oct-02	EPA 8082
		10-Oct-02	EPA 8082
		10-Oct-02	EPA 8082

E-C-SS-W1-001

	RDL	Analyzed	Method

		10-Oct-02	CLP 3.0
	140	10-Oct-02	EPA 8082
	280	10-Oct-02	EPA 8082
	140	10-Oct-02	EPA 8082
	140	10-Oct-02	EPA 8082
	140	10-Oct-02	EPA 8082
	140	10-Oct-02	EPA 8082
	140	10-Oct-02	EPA 8082
		10-Oct-02	EPA 8082
		10-Oct-02	EPA 8082

E-C-S-W2-001

RDL		Analyzed	Method
		10-Oct-02	CLP 3.0
	160	10-Oct-02	EPA 8082
	320	10-Oct-02	EPA 8082
	160	10-Oct-02	EPA 8082
	160	10-Oct-02	EPA 8082
	160	10-Oct-02	EPA 8082
	160	10-Oct-02	EPA 8082
	160	10-Oct-02	EPA 8082
		10-Oct-02	EPA 8082
*		10-Oct-02	EPA 8082

E-C-SS-B-001

RDL		Analyzed	Method
		10-Oct-02	CLP 3.0
	110	10-Oct-02	EPA 8082
	230	10-Oct-02	EPA 8082
	110	10-Oct-02	EPA 8082
	110	10-Oct-02	EPA 8082

110	10-Oct-02	EPA 8082
110	10-Oct-02	EPA 8082
110	10-Oct-02	EPA 8082
	10-Oct-02	EPA 8082
	10-Oct-02	EPA 8082

E-C-S-W4-001

RDL	Analyzed	Method
	10-Oct-02	CLP 3.0
180	10-Oct-02	EPA 8082
350	10-Oct-02	EPA 8082
180	10-Oct-02	EPA 8082
180	10-Oct-02	EPA 8082
180	10-Oct-02	EPA 8082
180	10-Oct-02	EPA 8082
180	10-Oct-02	EPA 8082
	10-Oct-02	EPA 8082
	10-Oct-02	EPA 8082

E-C-SS-W2-001

RDL	Analyzed	Method
	10-Oct-02	CLP 3.0
180	10-Oct-02	EPA 8082
350	10-Oct-02	EPA 8082
180	10-Oct-02	EPA 8082
180	10-Oct-02	EPA 8082
180	10-Oct-02	EPA 8082
180	10-Oct-02	EPA 8082
180	10-Oct-02	EPA 8082
	10-Oct-02	EPA 8082
	10-Oct-02	EPA 8082

E-C-S-W3-001

	RDL	Analyzed	Method
		10-Oct-02	CLP 3.0
	130	10-Oct-02	EPA 8082
	260	10-Oct-02	EPA 8082
	130	10-Oct-02	EPA 8082
	130	10-Oct-02	EPA 8082
	130	10-Oct-02	EPA 8082
	130	10-Oct-02	EPA 8082
	130	10-Oct-02	EPA 8082
		10-Oct-02	EPA 8082
		10-Oct-02	EPA 8082

E-C-SS-E-001

	RDL	Analyzed	Method
		10-Oct-02	CLP 3.0
	150	10-Oct-02	EPA 8082
	300	10-Oct-02	EPA 8082
	150	10-Oct-02	EPA 8082
	150	10-Oct-02	EPA 8082
	150	10-Oct-02	EPA 8082
	150	10-Oct-02	EPA 8082
	150	10-Oct-02	EPA 8082
		10-Oct-02	EPA 8082
		10-Oct-02	EPA 8082

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Project:			
Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95272-1		
Analysis	Result		Units
Total Solids		81	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		710	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		73	%
Decachlorobiphenyl		101	%

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Project:			
Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95272-2		
Analysis	Result		Units
Total Solids		80	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1300	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		68	%
Decachlorobiphenyl		90	%

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Project:			
Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95272-3		
Analysis	Result		Units
Total Solids		85.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		280	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		88	%
Decachlorobiphenyl		118	%

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Project:			
Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95272-4		
Analysis	Result		Units
Total Solids		61.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		470	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		73	%
Decachlorobiphenyl		102	%

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Project:			
Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95272-5		
Analysis	Result		Units

Total Solids		65.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1600	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		85	%
Decachlorobiphenyl		99	%

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Project:
Sampled: 9-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95272-6

Analysis	Result		Units
Total Solids		58.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		300	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		70	%
Decachlorobiphenyl		105	%

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Project:
Sampled: 9-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95272-7

Analysis	Result		Units
Total Solids		51	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg

PCB 1248	U		ug/kg
PCB 1254		1400	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		71	%
Decachlorobiphenyl		86	%

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Project:			
Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95272-8		
Analysis	Result		Units
Total Solids		50.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		460	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		90	%
Decachlorobiphenyl		137	%

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Project:			
Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95272-9		
Analysis	Result		Units
Total Solids		61.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		450	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		91	%
Decachlorobiphenyl		118	%

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Project:
Sampled: 9-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95272-10

Analysis	Result		Units
Total Solids		55.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		280	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		84	%
Decachlorobiphenyl		124	%

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Project:
Sampled: 9-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95272-11

Analysis	Result		Units
Total Solids		55.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1600	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		80	%
Decachlorobiphenyl		122	%

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Project:

Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95272-12		
Analysis	Result		Units
Total Solids		56.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		430	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		89	%
Decachlorobiphenyl		134	%

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Project:

Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95272-13		
Analysis	Result		Units
Total Solids		52.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1400	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		87	%
Decachlorobiphenyl		116	%

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Project:

Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95272-14		
Analysis	Result		Units
EPA 8082			

PCB 1016		230	%
PCB 1260		211	%
Tetrachloro-m-xylene		85	%
Decachlorobiphenyl		126	%

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Project:			
Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95272-15		
Analysis	Result		Units
EPA 8082			
PCB 1016		257	%
PCB 1260		210	%
Tetrachloro-m-xylene		77	%
Decachlorobiphenyl		111	%

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Project:			
Sampled:		9-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95272-16		
Analysis	Result		Units
Total Solids		68.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		780	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		82	%
Decachlorobiphenyl		110	%

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Project:			
Sampled:		9-Oct-02	

Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L95272-17			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		1.04		mg/l

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Project:				
Sampled:		9-Oct-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L95272-18			
Analysis	Result			Units
Cadmium		2.01		mg/l

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Project:				
Sampled:		9-Oct-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L95272-19			
Analysis	Result			Units
Paint Filter	U			ml/kg

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Project:				
Sampled:		9-Oct-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L95272-20			
Analysis	Result			Units
Total Solids		70.3		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		1400		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		73		%

Decachlorobiphenyl	120	%

F-C-SS-B-001

	RDL	Analyzed	Method
		10-Oct-02	CLP 3.0
	120	11-Oct-02	EPA 8082
	240	11-Oct-02	EPA 8082
	120	11-Oct-02	EPA 8082
	120	11-Oct-02	EPA 8082
	120	11-Oct-02	EPA 8082
	120	11-Oct-02	EPA 8082
	120	11-Oct-02	EPA 8082
		11-Oct-02	EPA 8082
		11-Oct-02	EPA 8082

F-C-S-E-001

	RDL	Analyzed	Method
		10-Oct-02	CLP 3.0
	120	11-Oct-02	EPA 8082
	250	11-Oct-02	EPA 8082
	120	11-Oct-02	EPA 8082
	120	11-Oct-02	EPA 8082
	120	11-Oct-02	EPA 8082
	120	11-Oct-02	EPA 8082
	120	11-Oct-02	EPA 8082
		11-Oct-02	EPA 8082
		11-Oct-02	EPA 8082

F-C-SS-E-001

	RDL	Analyzed	Method
		10-Oct-02	CLP 3.0
	110	11-Oct-02	EPA 8082
	220	11-Oct-02	EPA 8082
	110	11-Oct-02	EPA 8082
	110	11-Oct-02	EPA 8082
	110	11-Oct-02	EPA 8082
	110	11-Oct-02	EPA 8082
	110	11-Oct-02	EPA 8082
		11-Oct-02	EPA 8082
		11-Oct-02	EPA 8082

F-C-S-W1-001

	RDL	Analyzed	Method
		10-Oct-02	CLP 3.0
	150	11-Oct-02	EPA 8082
	310	11-Oct-02	EPA 8082
	150	11-Oct-02	EPA 8082
	150	11-Oct-02	EPA 8082
	150	11-Oct-02	EPA 8082
	150	11-Oct-02	EPA 8082
	150	11-Oct-02	EPA 8082
		11-Oct-02	EPA 8082
		11-Oct-02	EPA 8082

F-C-SS-W1-001

	RDL	Analyzed	Method

	10-Oct-02	CLP 3.0
140	11-Oct-02	EPA 8082
280	11-Oct-02	EPA 8082
140	11-Oct-02	EPA 8082
140	11-Oct-02	EPA 8082
140	11-Oct-02	EPA 8082
140	11-Oct-02	EPA 8082
140	11-Oct-02	EPA 8082
	11-Oct-02	EPA 8082
	11-Oct-02	EPA 8082

F-C-S-W2-001

RDL	Analyzed	Method
	10-Oct-02	CLP 3.0
160	11-Oct-02	EPA 8082
330	11-Oct-02	EPA 8082
160	11-Oct-02	EPA 8082
160	11-Oct-02	EPA 8082
160	11-Oct-02	EPA 8082
160	11-Oct-02	EPA 8082
160	11-Oct-02	EPA 8082
	11-Oct-02	EPA 8082
	11-Oct-02	EPA 8082

F-C-SS-W2-001

RDL	Analyzed	Method
	10-Oct-02	CLP 3.0
190	11-Oct-02	EPA 8082
390	11-Oct-02	EPA 8082
190	11-Oct-02	EPA 8082
190	11-Oct-02	EPA 8082

190	11-Oct-02	EPA 8082
190	11-Oct-02	EPA 8082
190	11-Oct-02	EPA 8082
	11-Oct-02	EPA 8082
	11-Oct-02	EPA 8082

F-C-S-W3-001

RDL	Analyzed	Method
	10-Oct-02	CLP 3.0
190	11-Oct-02	EPA 8082
380	11-Oct-02	EPA 8082
190	11-Oct-02	EPA 8082
190	11-Oct-02	EPA 8082
190	11-Oct-02	EPA 8082
190	11-Oct-02	EPA 8082
190	11-Oct-02	EPA 8082
	11-Oct-02	EPA 8082
	11-Oct-02	EPA 8082

F-C-SS-W3-001

RDL	Analyzed	Method
	10-Oct-02	CLP 3.0
160	11-Oct-02	EPA 8082
320	11-Oct-02	EPA 8082
160	11-Oct-02	EPA 8082
160	11-Oct-02	EPA 8082
160	11-Oct-02	EPA 8082
160	11-Oct-02	EPA 8082
160	11-Oct-02	EPA 8082
	11-Oct-02	EPA 8082
	11-Oct-02	EPA 8082

F-C-S-W4-001

	RDL	Analyzed	Method
		10-Oct-02	CLP 3.0
	180	11-Oct-02	EPA 8082
	350	11-Oct-02	EPA 8082
	180	11-Oct-02	EPA 8082
	180	11-Oct-02	EPA 8082
	180	11-Oct-02	EPA 8082
	180	11-Oct-02	EPA 8082
	180	11-Oct-02	EPA 8082
		11-Oct-02	EPA 8082
		11-Oct-02	EPA 8082

F-C-SS-W4-001

	RDL	Analyzed	Method
		10-Oct-02	CLP 3.0
	170	11-Oct-02	EPA 8082
	350	11-Oct-02	EPA 8082
	170	11-Oct-02	EPA 8082
	170	11-Oct-02	EPA 8082
	170	11-Oct-02	EPA 8082
	170	11-Oct-02	EPA 8082
	170	11-Oct-02	EPA 8082
		11-Oct-02	EPA 8082
		11-Oct-02	EPA 8082

F-C-S-W5-001

	RDL	Analyzed	Method
		10-Oct-02	CLP 3.0
	160	11-Oct-02	EPA 8082
	330	11-Oct-02	EPA 8082
	160	11-Oct-02	EPA 8082
	160	11-Oct-02	EPA 8082
	160	11-Oct-02	EPA 8082
	160	11-Oct-02	EPA 8082
	160	11-Oct-02	EPA 8082
		11-Oct-02	EPA 8082
		11-Oct-02	EPA 8082

F-C-SS-W5-001

	RDL	Analyzed	Method
		10-Oct-02	CLP 3.0
	190	11-Oct-02	EPA 8082
	370	11-Oct-02	EPA 8082
	190	11-Oct-02	EPA 8082
	190	11-Oct-02	EPA 8082
	190	11-Oct-02	EPA 8082
	190	11-Oct-02	EPA 8082
	190	11-Oct-02	EPA 8082
		11-Oct-02	EPA 8082
		11-Oct-02	EPA 8082

L95272-13MS,F-C-SS-W5-001

	RDL	Analyzed	Method

11-Oct-02	EPA 8082
11-Oct-02	EPA 8082
11-Oct-02	EPA 8082
11-Oct-02	EPA 8082

L95272-13MSD/DUP,F-C-SS-W

RDL	Analyzed	Method
11-Oct-02	EPA 8082
11-Oct-02	EPA 8082
11-Oct-02	EPA 8082
11-Oct-02	EPA 8082

R0040 SEVERAL ROLL OFFS

RDL	Analyzed	Method
	10-Oct-02	CLP 3.0
140	11-Oct-02	EPA 8082
270	11-Oct-02	EPA 8082
140	11-Oct-02	EPA 8082
140	11-Oct-02	EPA 8082
140	11-Oct-02	EPA 8082
140	11-Oct-02	EPA 8082
140	11-Oct-02	EPA 8082
11-Oct-02	EPA 8082
11-Oct-02	EPA 8082

R0040 SEVERAL ROLL OFFS

RDL	Analyzed	Method
1	11-Oct-02	EPA 9095
0.05	11-Oct-02	EPA 6010 TCLP

L95272-17MS, R0040

RDL	Analyzed	Method
0.05	11-Oct-02	EPA 6010 TCLP

L95272-17MSD/DUP, R0040

RDL	Analyzed	Method
1	11-Oct-02	EPA 9095

DUPLICATE

RDL	Analyzed	Method
	10-Oct-02	CLP 3.0
140	11-Oct-02	EPA 8082
280	11-Oct-02	EPA 8082
140	11-Oct-02	EPA 8082
140	11-Oct-02	EPA 8082
140	11-Oct-02	EPA 8082
140	11-Oct-02	EPA 8082
140	11-Oct-02	EPA 8082
	11-Oct-02	EPA 8082

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Project:			
Sampled:		10-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95346-1		
Analysis	Result		Units
Total Solids		64.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		630	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		85	%
Decachlorobiphenyl		110	%

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Project:			
Sampled:		10-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95346-2		
Analysis	Result		Units
Total Solids		54.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		710	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		69	%
Decachlorobiphenyl		87	%

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Project:			
Sampled:		10-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95346-3		
Analysis	Result		Units
Total Solids		66	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		810	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		76	%
Decachlorobiphenyl		100	%

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Project:			
Sampled:		10-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95346-4		
Analysis	Result		Units
Total Solids		77.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		6900	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		78	%
Decachlorobiphenyl		105	%

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Project:			
Sampled:		10-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95346-5		
Analysis	Result		Units

Total Solids		54.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		310	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		71	%
Decachlorobiphenyl		92	%

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Project:
Sampled: 10-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95346-6

Analysis	Result		Units
Total Solids		58.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		3100	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		76	%
Decachlorobiphenyl		85	%

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Project:
Sampled: 10-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95346-7

Analysis	Result		Units
Total Solids		62	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg

PCB 1248	U		ug/kg
PCB 1254		1200	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		79	%
Decachlorobiphenyl		110	%

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Project:
Sampled: 10-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95346-8

Analysis	Result		Units
Total Solids		58.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		3600	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		75	%
Decachlorobiphenyl		101	%

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Project:
Sampled: 10-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95346-9

Analysis	Result		Units
Total Solids		92.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		840	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		72	%
Decachlorobiphenyl		103	%

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Project:
Sampled: 10-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95346-10

Analysis	Result		Units
Total Solids		50.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1700	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		73	%
Decachlorobiphenyl		89	%

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Project:
Sampled: 10-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95346-11

Analysis	Result		Units
Total Solids		82	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1400	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		79	%
Decachlorobiphenyl		117	%

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Project:

Sampled:		10-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95346-12		
Analysis	Result		Units
Total Solids		54.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		6300	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		79	%
Decachlorobiphenyl		91	%

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Project:			
Sampled:		11-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95346-13		
Analysis	Result		Units
Total Solids		79	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		730	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		75	%
Decachlorobiphenyl		94	%

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Project:			
Sampled:		11-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95346-14		
Analysis	Result		Units
Total Solids		60.7	%

EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1000	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		84	%
Decachlorobiphenyl		113	%

G-B-S-N-001

	RDL	Analyzed	Method
		12-Oct-02	CLP 3.0
	150	15-Oct-02	EPA 8082
	310	15-Oct-02	EPA 8082
	150	15-Oct-02	EPA 8082
	150	15-Oct-02	EPA 8082
	150	15-Oct-02	EPA 8082
	150	15-Oct-02	EPA 8082
	150	15-Oct-02	EPA 8082
		15-Oct-02	EPA 8082
		15-Oct-02	EPA 8082

G-C-S-E-001

	RDL	Analyzed	Method
		12-Oct-02	CLP 3.0
	180	15-Oct-02	EPA 8082
	360	15-Oct-02	EPA 8082
	180	15-Oct-02	EPA 8082
	180	15-Oct-02	EPA 8082
	180	15-Oct-02	EPA 8082
	180	15-Oct-02	EPA 8082
	180	15-Oct-02	EPA 8082
		15-Oct-02	EPA 8082
		15-Oct-02	EPA 8082

G-B-S-E2-001

	RDL	Analyzed	Method
		12-Oct-02	CLP 3.0
	140	15-Oct-02	EPA 8082
	280	15-Oct-02	EPA 8082
	140	15-Oct-02	EPA 8082
	140	15-Oct-02	EPA 8082
	140	15-Oct-02	EPA 8082
	140	15-Oct-02	EPA 8082
	140	15-Oct-02	EPA 8082
		15-Oct-02	EPA 8082
		15-Oct-02	EPA 8082

G-B-SS-N-001

	RDL	Analyzed	Method
		12-Oct-02	CLP 3.0
	120	15-Oct-02	EPA 8082
	250	15-Oct-02	EPA 8082
	120	15-Oct-02	EPA 8082
	120	15-Oct-02	EPA 8082
	120	15-Oct-02	EPA 8082
	120	15-Oct-02	EPA 8082
	120	15-Oct-02	EPA 8082
		15-Oct-02	EPA 8082
		15-Oct-02	EPA 8082

G-C-S-W-001

	RDL	Analyzed	Method

	12-Oct-02	CLP 3.0
170	15-Oct-02	EPA 8082
330	15-Oct-02	EPA 8082
170	15-Oct-02	EPA 8082
170	15-Oct-02	EPA 8082
170	15-Oct-02	EPA 8082
170	15-Oct-02	EPA 8082
170	15-Oct-02	EPA 8082
	15-Oct-02	EPA 8082
	15-Oct-02	EPA 8082

G-B-S-W1-001

RDL	Analyzed	Method
	12-Oct-02	CLP 3.0
170	15-Oct-02	EPA 8082
330	15-Oct-02	EPA 8082
170	15-Oct-02	EPA 8082
170	15-Oct-02	EPA 8082
170	15-Oct-02	EPA 8082
170	15-Oct-02	EPA 8082
170	15-Oct-02	EPA 8082
	15-Oct-02	EPA 8082
	15-Oct-02	EPA 8082

G-B-S-E1-001

RDL	Analyzed	Method
	12-Oct-02	CLP 3.0
160	15-Oct-02	EPA 8082
320	15-Oct-02	EPA 8082
160	15-Oct-02	EPA 8082
160	15-Oct-02	EPA 8082

160	15-Oct-02	EPA 8082
160	15-Oct-02	EPA 8082
160	15-Oct-02	EPA 8082
	15-Oct-02	EPA 8082
	15-Oct-02	EPA 8082

G-B-SS-E2-001

RDL	Analyzed	Method
	12-Oct-02	CLP 3.0
160	15-Oct-02	EPA 8082
330	15-Oct-02	EPA 8082
160	15-Oct-02	EPA 8082
160	15-Oct-02	EPA 8082
160	15-Oct-02	EPA 8082
160	15-Oct-02	EPA 8082
160	15-Oct-02	EPA 8082
	15-Oct-02	EPA 8082
	15-Oct-02	EPA 8082

G-C-SS-B2-001

RDL	Analyzed	Method
	12-Oct-02	CLP 3.0
100	17-Oct-02	EPA 8082
200	17-Oct-02	EPA 8082
100	17-Oct-02	EPA 8082
100	17-Oct-02	EPA 8082
100	17-Oct-02	EPA 8082
100	17-Oct-02	EPA 8082
100	17-Oct-02	EPA 8082
	17-Oct-02	EPA 8082
*	17-Oct-02	EPA 8082

G-B-S-W-001

	RDL	Analyzed	Method
		12-Oct-02	CLP 3.0
	180	15-Oct-02	EPA 8082
	370	15-Oct-02	EPA 8082
	180	15-Oct-02	EPA 8082
	180	15-Oct-02	EPA 8082
	180	15-Oct-02	EPA 8082
	180	15-Oct-02	EPA 8082
	180	15-Oct-02	EPA 8082
		15-Oct-02	EPA 8082
		15-Oct-02	EPA 8082

G-C-SS-B-001

	RDL	Analyzed	Method
		12-Oct-02	CLP 3.0
	120	17-Oct-02	EPA 8082
	240	17-Oct-02	EPA 8082
	120	17-Oct-02	EPA 8082
	120	17-Oct-02	EPA 8082
	120	17-Oct-02	EPA 8082
	120	17-Oct-02	EPA 8082
	120	17-Oct-02	EPA 8082
		17-Oct-02	EPA 8082
*		17-Oct-02	EPA 8082

G-B-SS-E1-001

	RDL	Analyzed	Method
		12-Oct-02	CLP 3.0
	170	15-Oct-02	EPA 8082
	330	15-Oct-02	EPA 8082
	170	15-Oct-02	EPA 8082
	170	15-Oct-02	EPA 8082
	170	15-Oct-02	EPA 8082
	170	15-Oct-02	EPA 8082
	170	15-Oct-02	EPA 8082
		15-Oct-02	EPA 8082
		15-Oct-02	EPA 8082

A-C-SS-B-001

	RDL	Analyzed	Method
		12-Oct-02	CLP 3.0
	130	15-Oct-02	EPA 8082
	250	15-Oct-02	EPA 8082
	130	15-Oct-02	EPA 8082
	130	15-Oct-02	EPA 8082
	130	15-Oct-02	EPA 8082
	130	15-Oct-02	EPA 8082
	130	15-Oct-02	EPA 8082
		15-Oct-02	EPA 8082
		15-Oct-02	EPA 8082

G-C-S-W-001

	RDL	Analyzed	Method
		12-Oct-02	CLP 3.0

160	16-Oct-02	EPA 8082
310	16-Oct-02	EPA 8082
160	16-Oct-02	EPA 8082
160	16-Oct-02	EPA 8082
160	16-Oct-02	EPA 8082
160	16-Oct-02	EPA 8082
160	16-Oct-02	EPA 8082
	16-Oct-02	EPA 8082
	16-Oct-02	EPA 8082

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Project:			
Sampled:		14-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95420-1		
Analysis	Result		Units
Total Solids		64.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		3700	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		84	%
Decachlorobiphenyl		116	%

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Project:			
Sampled:		14-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95420-2		
Analysis	Result		Units
EPA 8082			
PCB 1016		472	%
PCB 1260		432	%
Tetrachloro-m-xylene		87	%
Decachlorobiphenyl		112	%

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Project:			
Sampled:		14-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95420-3		
Analysis	Result		Units

EPA 8082			
PCB 1016		571	%
PCB 1260		536	%
Tetrachloro-m-xylene		94	%
Decachlorobiphenyl		134	%

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Project:			
Sampled:		14-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95420-4		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		4.93	mg/l

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Project:			
Sampled:		14-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95420-5		
Analysis	Result		Units
Cadmium		5.78	mg/l

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Project:			
Sampled:		14-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95420-6		
Analysis	Result		Units
Paint Filter	U		ml/kg

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Project:			
Sampled:		14-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95420-7		

Analysis	Result		Units
Total Solids		70.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		2600	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		80	%
Decachlorobiphenyl		114	%

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Project:
Sampled: 14-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95420-8

Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		0.996	mg/l

R0050-060 CELL #6

	RDL	Analyzed	Method
		15-Oct-02	CLP 3.0
	150	17-Oct-02	EPA 8082
	300	17-Oct-02	EPA 8082
	150	17-Oct-02	EPA 8082
	150	17-Oct-02	EPA 8082
	150	17-Oct-02	EPA 8082
	150	17-Oct-02	EPA 8082
	150	17-Oct-02	EPA 8082
		17-Oct-02	EPA 8082
*		17-Oct-02	EPA 8082

L95420-1MS, R0050-060

	RDL	Analyzed	Method
		17-Oct-02	EPA 8082
		17-Oct-02	EPA 8082
		17-Oct-02	EPA 8082
*		17-Oct-02	EPA 8082

L95420-1MSD/DUP,R0050-060

	RDL	Analyzed	Method

		17-Oct-02	EPA 8082
		17-Oct-02	EPA 8082
		17-Oct-02	EPA 8082
*		17-Oct-02	EPA 8082

R0050-060 CELL #6

	RDL	Analyzed	Method
	1	14-Oct-02	EPA 9095
	0.05	16-Oct-02	EPA 6010 TCLP

L95420-4MS, R0050-060

	RDL	Analyzed	Method
	0.05	16-Oct-02	EPA 6010 TCLP

L95420-4MSD/DUP,R0050-060

	RDL	Analyzed	Method
	1	14-Oct-02	EPA 9095

R0038,39/41-44 CELL #1

	RDL	Analyzed	Method
		15-Oct-02	CLP 3.0
	140	17-Oct-02	EPA 8082
	280	17-Oct-02	EPA 8082
	140	17-Oct-02	EPA 8082
	140	17-Oct-02	EPA 8082
	140	17-Oct-02	EPA 8082
	140	17-Oct-02	EPA 8082
	140	17-Oct-02	EPA 8082
		17-Oct-02	EPA 8082
*		17-Oct-02	EPA 8082

R0038,39/41-44 CELL #1

RDL	Analyzed	Method
1	14-Oct-02	EPA 9095
0.05	16-Oct-02	EPA 6010 TCLP

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Project:
Sampled: 14-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95433-1

Analysis	Result		Units
Total Solids		92	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		360	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		82	%
Decachlorobiphenyl		106	%

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Project:
Sampled: 14-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95433-2

Analysis	Result		Units
Total Solids		91.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		250	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		92	%
Decachlorobiphenyl		143	%

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Project:			
Sampled:		14-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95433-3		
Analysis	Result		Units
Total Solids		62.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		310	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		85	%
Decachlorobiphenyl		112	%

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Project:			
Sampled:		14-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95433-4		
Analysis	Result		Units
Total Solids		56.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		420	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		102	%
Decachlorobiphenyl		141	%

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Project:			
Sampled:		14-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95433-5		
Analysis	Result		Units

Total Solids		75	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		360	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		83	%
Decachlorobiphenyl		109	%

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Project:
Sampled: 14-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95433-6

Analysis	Result		Units
Total Solids		56	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		2200	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		86	%
Decachlorobiphenyl		112	%

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Project:
Sampled: 14-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95433-7

Analysis	Result		Units
Total Solids		56.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg

PCB 1248	U		ug/kg
PCB 1254		540	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		95	%
Decachlorobiphenyl		141	%

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Project:			
Sampled:		14-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95433-8		
Analysis	Result		Units
Total Solids		70.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		190	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		88	%
Decachlorobiphenyl		109	%

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Project:			
Sampled:		14-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95433-9		
Analysis	Result		Units
Total Solids		73.1	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1600	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		78	%
Decachlorobiphenyl		96	%

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Project:
Sampled: 14-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95433-10

Analysis	Result		Units
Total Solids		52.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		2600	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		74	%
Decachlorobiphenyl		100	%

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Project:
Sampled: 14-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95433-11

Analysis	Result		Units
Total Solids		61.1	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		2300	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		86	%
Decachlorobiphenyl		112	%

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Project:

Sampled:		14-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95433-12		
Analysis	Result		Units
Total Solids		64.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1400	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		81	%
Decachlorobiphenyl		123	%

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Project:			
Sampled:		14-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95433-13		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		0.54	mg/l

H-C-SS-B1-001

	RDL	Analyzed	Method
		15-Oct-02	CLP 3.0
	100	16-Oct-02	EPA 8082
	200	16-Oct-02	EPA 8082
	100	16-Oct-02	EPA 8082
	100	16-Oct-02	EPA 8082
	100	16-Oct-02	EPA 8082
	100	16-Oct-02	EPA 8082
	100	16-Oct-02	EPA 8082
		16-Oct-02	EPA 8082
		16-Oct-02	EPA 8082

H-C-SS-B2-001

	RDL	Analyzed	Method
		15-Oct-02	CLP 3.0
	110	16-Oct-02	EPA 8082
	220	16-Oct-02	EPA 8082
	110	16-Oct-02	EPA 8082
	110	16-Oct-02	EPA 8082
	110	16-Oct-02	EPA 8082
	110	16-Oct-02	EPA 8082
	110	16-Oct-02	EPA 8082
		16-Oct-02	EPA 8082
		16-Oct-02	EPA 8082

H-B-S-W-001

	RDL	Analyzed	Method
		15-Oct-02	CLP 3.0
	160	16-Oct-02	EPA 8082
	310	16-Oct-02	EPA 8082
	160	16-Oct-02	EPA 8082
	160	16-Oct-02	EPA 8082
	160	16-Oct-02	EPA 8082
	160	16-Oct-02	EPA 8082
	160	16-Oct-02	EPA 8082
		16-Oct-02	EPA 8082
		16-Oct-02	EPA 8082

H-B-SS-W-001

	RDL	Analyzed	Method
		15-Oct-02	CLP 3.0
	160	16-Oct-02	EPA 8082
	330	16-Oct-02	EPA 8082
	160	16-Oct-02	EPA 8082
	160	16-Oct-02	EPA 8082
	160	16-Oct-02	EPA 8082
	160	16-Oct-02	EPA 8082
	160	16-Oct-02	EPA 8082
		16-Oct-02	EPA 8082
		16-Oct-02	EPA 8082

H-B-S-E-001

	RDL	Analyzed	Method

	15-Oct-02	CLP 3.0
130	16-Oct-02	EPA 8082
250	16-Oct-02	EPA 8082
130	16-Oct-02	EPA 8082
130	16-Oct-02	EPA 8082
130	16-Oct-02	EPA 8082
130	16-Oct-02	EPA 8082
130	16-Oct-02	EPA 8082
	16-Oct-02	EPA 8082
	16-Oct-02	EPA 8082

H-B-SS-E-001

RDL	Analyzed	Method
	15-Oct-02	CLP 3.0
160	16-Oct-02	EPA 8082
330	16-Oct-02	EPA 8082
160	16-Oct-02	EPA 8082
160	16-Oct-02	EPA 8082
160	16-Oct-02	EPA 8082
160	16-Oct-02	EPA 8082
160	16-Oct-02	EPA 8082
	16-Oct-02	EPA 8082
	16-Oct-02	EPA 8082

DUPLICATE

RDL	Analyzed	Method
	15-Oct-02	CLP 3.0
170	16-Oct-02	EPA 8082
350	16-Oct-02	EPA 8082
170	16-Oct-02	EPA 8082
170	16-Oct-02	EPA 8082

170	16-Oct-02	EPA 8082
170	16-Oct-02	EPA 8082
170	16-Oct-02	EPA 8082
	16-Oct-02	EPA 8082
	16-Oct-02	EPA 8082

23-C-S-W-B-001

RDL	Analyzed	Method
	15-Oct-02	CLP 3.0
130	16-Oct-02	EPA 8082
270	16-Oct-02	EPA 8082
130	16-Oct-02	EPA 8082
130	16-Oct-02	EPA 8082
130	16-Oct-02	EPA 8082
130	16-Oct-02	EPA 8082
130	16-Oct-02	EPA 8082
	16-Oct-02	EPA 8082
	16-Oct-02	EPA 8082

23-C-S-E-B-001

RDL	Analyzed	Method
	15-Oct-02	CLP 3.0
140	16-Oct-02	EPA 8082
270	16-Oct-02	EPA 8082
140	16-Oct-02	EPA 8082
140	16-Oct-02	EPA 8082
140	16-Oct-02	EPA 8082
140	16-Oct-02	EPA 8082
140	16-Oct-02	EPA 8082
	16-Oct-02	EPA 8082
	16-Oct-02	EPA 8082

23-B-S-E-001

	RDL	Analyzed	Method
		15-Oct-02	CLP 3.0
	180	16-Oct-02	EPA 8082
	360	16-Oct-02	EPA 8082
	180	16-Oct-02	EPA 8082
	180	16-Oct-02	EPA 8082
	180	16-Oct-02	EPA 8082
	180	16-Oct-02	EPA 8082
	180	16-Oct-02	EPA 8082
		16-Oct-02	EPA 8082
		16-Oct-02	EPA 8082

23-B-S-W-001

	RDL	Analyzed	Method
		15-Oct-02	CLP 3.0
	160	16-Oct-02	EPA 8082
	320	16-Oct-02	EPA 8082
	160	16-Oct-02	EPA 8082
	160	16-Oct-02	EPA 8082
	160	16-Oct-02	EPA 8082
	160	16-Oct-02	EPA 8082
	160	16-Oct-02	EPA 8082
		16-Oct-02	EPA 8082
		16-Oct-02	EPA 8082

R0045-49/58-60 CELL #4

RDL	Analyzed	Method
	15-Oct-02	CLP 3.0
140	16-Oct-02	EPA 8082
290	16-Oct-02	EPA 8082
140	16-Oct-02	EPA 8082
140	16-Oct-02	EPA 8082
140	16-Oct-02	EPA 8082
140	16-Oct-02	EPA 8082
140	16-Oct-02	EPA 8082
	16-Oct-02	EPA 8082
	16-Oct-02	EPA 8082

R0045-49/58-60 CELL #4

RDL	Analyzed	Method
1	14-Oct-02	EPA 9095
0.05	16-Oct-02	EPA 6010 TCLP

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Project:			
Sampled:		15-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95483-1		
Analysis	Result		Units
Total Solids		48.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		460	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		83	%
Decachlorobiphenyl		143	%

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Project:			
Sampled:		15-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95483-2		
Analysis	Result		Units
EPA 8082			
PCB 1016		84	%
PCB 1260		106	%
Tetrachloro-m-xylene		89	%
Decachlorobiphenyl		137	%

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Project:			
Sampled:		15-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95483-3		
Analysis	Result		Units

EPA 8082			
PCB 1016		82	%
PCB 1260		117	%
Tetrachloro-m-xylene		91	%
Decachlorobiphenyl		159	%

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Project:			
Sampled:		15-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95483-4		
Analysis	Result		Units
Total Solids		69.1	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		170	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		79	%
Decachlorobiphenyl		115	%

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Project:			
Sampled:		15-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95483-5		
Analysis	Result		Units
Total Solids		51.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		910	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		81	%
Decachlorobiphenyl		141	%

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Project:
Sampled: 15-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95483-6

Analysis	Result		Units
Total Solids		45.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		950	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		85	%
Decachlorobiphenyl		153	%

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Project:
Sampled: 15-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95483-7

Analysis	Result		Units
Total Solids		68.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		550	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		79	%
Decachlorobiphenyl		119	%

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Project:

Sampled:		15-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95483-8		
Analysis	Result		Units
Total Solids		75.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		89	%
Decachlorobiphenyl		153	%

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Project:			
Sampled:		15-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95483-9		
Analysis	Result		Units
Total Solids		65.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1700	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		80	%
Decachlorobiphenyl		126	%

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Project:			
Sampled:		15-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95483-10		
Analysis	Result		Units
Total Solids		50.6	%

EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		2000	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		86	%
Decachlorobiphenyl		141	%

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Project:			
Sampled:		15-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95483-11		
Analysis	Result		Units
Total Solids		58.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		920	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		73	%
Decachlorobiphenyl		107	%

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Project:			
Sampled:		15-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95483-12		
Analysis	Result		Units
Total Solids		76.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg

PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		88	%
Decachlorobiphenyl		148	%

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Project:			
Sampled:		15-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95483-13		
Analysis	Result		Units
Cadmium		2.32	mg/l

X-B-S-E-001

	RDL	Analyzed	Method
		17-Oct-02	CLP 3.0
	190	18-Oct-02	EPA 8082
	380	18-Oct-02	EPA 8082
	190	18-Oct-02	EPA 8082
	190	18-Oct-02	EPA 8082
	190	18-Oct-02	EPA 8082
	190	18-Oct-02	EPA 8082
	190	18-Oct-02	EPA 8082
		18-Oct-02	EPA 8082
*		18-Oct-02	EPA 8082

L95483-1MS, X-B-S-E-001

	RDL	Analyzed	Method
		18-Oct-02	EPA 8082
		18-Oct-02	EPA 8082
		18-Oct-02	EPA 8082
*		18-Oct-02	EPA 8082

L95483-1MSD/DUP,X-B-SE001

	RDL	Analyzed	Method

		18-Oct-02	EPA 8082
		18-Oct-02	EPA 8082
		18-Oct-02	EPA 8082
*		18-Oct-02	EPA 8082

X-B-S-B-001

	RDL	Analyzed	Method
		17-Oct-02	CLP 3.0
	130	18-Oct-02	EPA 8082
	270	18-Oct-02	EPA 8082
	130	18-Oct-02	EPA 8082
	130	18-Oct-02	EPA 8082
	130	18-Oct-02	EPA 8082
	130	18-Oct-02	EPA 8082
	130	18-Oct-02	EPA 8082
		18-Oct-02	EPA 8082
*		18-Oct-02	EPA 8082

X-B-S-W-001

	RDL	Analyzed	Method
		17-Oct-02	CLP 3.0
	190	18-Oct-02	EPA 8082
	380	18-Oct-02	EPA 8082
	190	18-Oct-02	EPA 8082
	190	18-Oct-02	EPA 8082
	190	18-Oct-02	EPA 8082
	190	18-Oct-02	EPA 8082
	190	18-Oct-02	EPA 8082
		18-Oct-02	EPA 8082
*		18-Oct-02	EPA 8082

X-B-S-N-001

	RDL	Analyzed	Method
		17-Oct-02	CLP 3.0
	210	18-Oct-02	EPA 8082
	420	18-Oct-02	EPA 8082
	210	18-Oct-02	EPA 8082
	210	18-Oct-02	EPA 8082
	210	18-Oct-02	EPA 8082
	210	18-Oct-02	EPA 8082
	210	18-Oct-02	EPA 8082
		18-Oct-02	EPA 8082
*		18-Oct-02	EPA 8082

X-B-S-S-001

	RDL	Analyzed	Method
		17-Oct-02	CLP 3.0
	140	18-Oct-02	EPA 8082
	280	18-Oct-02	EPA 8082
	140	18-Oct-02	EPA 8082
	140	18-Oct-02	EPA 8082
	140	18-Oct-02	EPA 8082
	140	18-Oct-02	EPA 8082
	140	18-Oct-02	EPA 8082
		18-Oct-02	EPA 8082
*		18-Oct-02	EPA 8082

W-C-S-B-001

	RDL	Analyzed	Method
		17-Oct-02	CLP 3.0
	120	18-Oct-02	EPA 8082
	240	18-Oct-02	EPA 8082
	120	18-Oct-02	EPA 8082
	120	18-Oct-02	EPA 8082
	120	18-Oct-02	EPA 8082
	120	18-Oct-02	EPA 8082
	120	18-Oct-02	EPA 8082
		18-Oct-02	EPA 8082
*		18-Oct-02	EPA 8082

W-B-S-E-001

	RDL	Analyzed	Method
		17-Oct-02	CLP 3.0
	150	18-Oct-02	EPA 8082
	300	18-Oct-02	EPA 8082
	150	18-Oct-02	EPA 8082
	150	18-Oct-02	EPA 8082
	150	18-Oct-02	EPA 8082
	150	18-Oct-02	EPA 8082
	150	18-Oct-02	EPA 8082
		18-Oct-02	EPA 8082
*		18-Oct-02	EPA 8082

W-B-S-W-001

	RDL	Analyzed	Method
		17-Oct-02	CLP 3.0

	190	18-Oct-02	EPA 8082
	370	18-Oct-02	EPA 8082
	190	18-Oct-02	EPA 8082
	190	18-Oct-02	EPA 8082
	190	18-Oct-02	EPA 8082
	190	18-Oct-02	EPA 8082
	190	18-Oct-02	EPA 8082
		18-Oct-02	EPA 8082
*		18-Oct-02	EPA 8082

W-C-S-S-001

	RDL	Analyzed	Method
		17-Oct-02	CLP 3.0
	160	18-Oct-02	EPA 8082
	310	18-Oct-02	EPA 8082
	160	18-Oct-02	EPA 8082
	160	18-Oct-02	EPA 8082
	160	18-Oct-02	EPA 8082
	160	18-Oct-02	EPA 8082
	160	18-Oct-02	EPA 8082
		18-Oct-02	EPA 8082
*		18-Oct-02	EPA 8082

W-C-S-N-001

	RDL	Analyzed	Method
		17-Oct-02	CLP 3.0
	120	18-Oct-02	EPA 8082
	240	18-Oct-02	EPA 8082
	120	18-Oct-02	EPA 8082
	120	18-Oct-02	EPA 8082
	120	18-Oct-02	EPA 8082

	120	18-Oct-02	EPA 8082
	120	18-Oct-02	EPA 8082
		18-Oct-02	EPA 8082
*		18-Oct-02	EPA 8082

R0040A CELL #3 RESAMPLE

RDL	Analyzed	Method
0.05	17-Oct-02	EPA 6010 TCLP

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Project:				
Sampled:		18-Oct-02		
Source:	19208 VIACOM/HORSEHEADS		Origin:	
Lab ID:	L95674-1			
Analysis	Result			Units
Total Solids		83.6		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		160		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		80		%
Decachlorobiphenyl		106		%

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Project:				
Sampled:		18-Oct-02		
Source:	19208 VIACOM/HORSEHEADS		Origin:	
Lab ID:	L95674-2			
Analysis	Result			Units

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Project:				
Sampled:		18-Oct-02		
Source:	19208 VIACOM/HORSEHEADS		Origin:	
Lab ID:	L95674-3			
Analysis	Result			Units

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Project:

Sampled:		18-Oct-02		
Source:	19208 VIACOM/HORSEHEADS		Origin:	
Lab ID:	L95674-4			
Analysis	Result			Units
Cadmium		2.3		mg/l

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Project:				
Sampled:		18-Oct-02		
Source:	19208 VIACOM/HORSEHEADS		Origin:	
Lab ID:	L95674-5			
Analysis	Result			Units
Paint Filter	U			ml/kg
Total Solids		64.1		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		430		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		89		%
Decachlorobiphenyl		111		%

23-C-S-E-B-002

	RDL	Analyzed	Method
		19-Oct-02	CLP 3.0
	120	23-Oct-02	EPA 8082
	240	23-Oct-02	EPA 8082
	120	23-Oct-02	EPA 8082
	120	23-Oct-02	EPA 8082
	120	23-Oct-02	EPA 8082
	120	23-Oct-02	EPA 8082
	120	23-Oct-02	EPA 8082
		23-Oct-02	EPA 8082
		23-Oct-02	EPA 8082

23-B-S-W-002

	RDL	Analyzed	Method

23-B-S-E-002

	RDL	Analyzed	Method

R0063-64/66-69/71/76-7880

RDL	Analyzed	Method
0.05	22-Oct-02	EPA 6010 TCLP

R0063-64/66-69/71/76-7880

RDL	Analyzed	Method
1	23-Oct-02	EPA 9095
	19-Oct-02	CLP 3.0
140	23-Oct-02	EPA 8082
290	23-Oct-02	EPA 8082
140	23-Oct-02	EPA 8082
140	23-Oct-02	EPA 8082
140	23-Oct-02	EPA 8082
140	23-Oct-02	EPA 8082
140	23-Oct-02	EPA 8082
	23-Oct-02	EPA 8082
	23-Oct-02	EPA 8082

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Project:			
Sampled:		18-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95687-1		
Analysis	Result		Units
Total Solids		78.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		78	%
Decachlorobiphenyl		108	%

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Project:			
Sampled:		18-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95687-2		
Analysis	Result		Units
EPA 8082			
PCB 1016		88	%
PCB 1260		138	%
Tetrachloro-m-xylene		88	%
Decachlorobiphenyl		127	%

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Project:			
Sampled:		18-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95687-3		
Analysis	Result		Units

EPA 8082			
PCB 1016		78	%
PCB 1260		129	%
Tetrachloro-m-xylene		76	%
Decachlorobiphenyl		97	%

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Project:			
Sampled:		18-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95687-4		
Analysis	Result		Units
Total Solids		50.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		76	%
Decachlorobiphenyl		86	%

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Project:			
Sampled:		18-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95687-5		
Analysis	Result		Units
Total Solids		78.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		230	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		81	%
Decachlorobiphenyl		111	%

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Project:
Sampled: 18-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95687-6

Analysis	Result		Units
Total Solids		51.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		470	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		68	%
Decachlorobiphenyl		84	%

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Project:
Sampled: 18-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95687-7

Analysis	Result		Units
Total Solids		31.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		76	%
Decachlorobiphenyl		108	%

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Project:

Sampled:		18-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95687-8		
Analysis	Result		Units
Total Solids		77.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		79	%
Decachlorobiphenyl		110	%

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Project:			
Sampled:		21-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95687-9		
Analysis	Result		Units
Total Solids		55	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		77	%
Decachlorobiphenyl		104	%

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Project:			
Sampled:		21-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95687-10		
Analysis	Result		Units
Total Solids		80.9	%

EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		380	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		66	%
Decachlorobiphenyl		79	%

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Project:			
Sampled:		21-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95687-11		
Analysis	Result		Units
Total Solids		65.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1300	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		74	%
Decachlorobiphenyl		107	%

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Project:			
Sampled:		21-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95687-12		
Analysis	Result		Units
Total Solids		81.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg

PCB 1254		260	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		86	%
Decachlorobiphenyl		122	%

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Project:
Sampled: 21-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95687-13

Analysis	Result		Units
Total Solids		57	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		630	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		68	%
Decachlorobiphenyl		93	%

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Project:
Sampled: 21-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95687-14

Analysis	Result		Units
Total Solids		81.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		160	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		78	%
Decachlorobiphenyl		110	%

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Project:			
Sampled:		21-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95687-15		
Analysis	Result		Units
Total Solids		60	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		3300	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		84	%
Decachlorobiphenyl		113	%

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Project:			
Sampled:		21-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95687-16		
Analysis	Result		Units
Total Solids		52.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		2000	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		75	%
Decachlorobiphenyl		95	%

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Project:			
Sampled:		21-Oct-02	

Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95687-17		
Analysis	Result		Units
Cadmium	0.859		mg/l

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Project:			
Sampled:	21-Oct-02		
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95687-18		
Analysis	Result		Units
Cadmium	1.96		mg/l

Y-B-SS-W-001

	RDL	Analyzed	Method
		22-Oct-02	CLP 3.0
	120	23-Oct-02	EPA 8082
	250	23-Oct-02	EPA 8082
	120	23-Oct-02	EPA 8082
	120	23-Oct-02	EPA 8082
	120	23-Oct-02	EPA 8082
	120	23-Oct-02	EPA 8082
	120	23-Oct-02	EPA 8082
		23-Oct-02	EPA 8082
		23-Oct-02	EPA 8082

L95687-1MS, Y-B-SS-W-001

	RDL	Analyzed	Method
		24-Oct-02	EPA 8082
		24-Oct-02	EPA 8082
		24-Oct-02	EPA 8082
		24-Oct-02	EPA 8082

L95687-1MSD/DUP,YBSSW001

	RDL	Analyzed	Method

24-Oct-02	EPA 8082	
24-Oct-02	EPA 8082	
24-Oct-02	EPA 8082	
24-Oct-02	EPA 8082	

Y-N-SS-N-001

RDL	Analyzed	Method
	22-Oct-02	CLP 3.0
190	23-Oct-02	EPA 8082
380	23-Oct-02	EPA 8082
190	23-Oct-02	EPA 8082
190	23-Oct-02	EPA 8082
190	23-Oct-02	EPA 8082
190	23-Oct-02	EPA 8082
190	23-Oct-02	EPA 8082
	23-Oct-02	EPA 8082
	23-Oct-02	EPA 8082

Y-B-SS-E-001

RDL	Analyzed	Method
	22-Oct-02	CLP 3.0
120	23-Oct-02	EPA 8082
250	23-Oct-02	EPA 8082
120	23-Oct-02	EPA 8082
120	23-Oct-02	EPA 8082
120	23-Oct-02	EPA 8082
120	23-Oct-02	EPA 8082
120	23-Oct-02	EPA 8082
	23-Oct-02	EPA 8082
	23-Oct-02	EPA 8082

Y-B-S-E-001

	RDL	Analyzed	Method
		22-Oct-02	CLP 3.0
	180	23-Oct-02	EPA 8082
	360	23-Oct-02	EPA 8082
	180	23-Oct-02	EPA 8082
	180	23-Oct-02	EPA 8082
	180	23-Oct-02	EPA 8082
	180	23-Oct-02	EPA 8082
	180	23-Oct-02	EPA 8082
		23-Oct-02	EPA 8082
		23-Oct-02	EPA 8082

Y-B-S-W-001

	RDL	Analyzed	Method
		22-Oct-02	CLP 3.0
	310	24-Oct-02	EPA 8082
	630	24-Oct-02	EPA 8082
	310	24-Oct-02	EPA 8082
	310	24-Oct-02	EPA 8082
	310	24-Oct-02	EPA 8082
	310	24-Oct-02	EPA 8082
	310	24-Oct-02	EPA 8082
		24-Oct-02	EPA 8082
		24-Oct-02	EPA 8082

Y-B-SS-B-001

	RDL	Analyzed	Method
		22-Oct-02	CLP 3.0
	120	24-Oct-02	EPA 8082
	230	24-Oct-02	EPA 8082
	120	24-Oct-02	EPA 8082
	120	24-Oct-02	EPA 8082
	120	24-Oct-02	EPA 8082
	120	24-Oct-02	EPA 8082
	120	24-Oct-02	EPA 8082
		24-Oct-02	EPA 8082
		24-Oct-02	EPA 8082

Y-B-SS-S-001

	RDL	Analyzed	Method
		22-Oct-02	CLP 3.0
	180	24-Oct-02	EPA 8082
	360	24-Oct-02	EPA 8082
	180	24-Oct-02	EPA 8082
	180	24-Oct-02	EPA 8082
	180	24-Oct-02	EPA 8082
	180	24-Oct-02	EPA 8082
	180	24-Oct-02	EPA 8082
		24-Oct-02	EPA 8082
		24-Oct-02	EPA 8082

I-C-SS-B2-001

	RDL	Analyzed	Method
		22-Oct-02	CLP 3.0

120	24-Oct-02	EPA 8082
240	24-Oct-02	EPA 8082
120	24-Oct-02	EPA 8082
120	24-Oct-02	EPA 8082
120	24-Oct-02	EPA 8082
120	24-Oct-02	EPA 8082
120	24-Oct-02	EPA 8082
	24-Oct-02	EPA 8082
	24-Oct-02	EPA 8082

I-B-S-E-001

RDL	Analyzed	Method
	22-Oct-02	CLP 3.0
150	24-Oct-02	EPA 8082
300	24-Oct-02	EPA 8082
150	24-Oct-02	EPA 8082
150	24-Oct-02	EPA 8082
150	24-Oct-02	EPA 8082
150	24-Oct-02	EPA 8082
150	24-Oct-02	EPA 8082
	24-Oct-02	EPA 8082
	24-Oct-02	EPA 8082

DUPLICATE

RDL	Analyzed	Method
	22-Oct-02	CLP 3.0
120	24-Oct-02	EPA 8082
240	24-Oct-02	EPA 8082
120	24-Oct-02	EPA 8082
120	24-Oct-02	EPA 8082
120	24-Oct-02	EPA 8082

120	24-Oct-02	EPA 8082
120	24-Oct-02	EPA 8082
	24-Oct-02	EPA 8082
	24-Oct-02	EPA 8082

I-B-S-W-001

RDL	Analyzed	Method
	22-Oct-02	CLP 3.0
170	23-Oct-02	EPA 8082
330	23-Oct-02	EPA 8082
170	23-Oct-02	EPA 8082
170	23-Oct-02	EPA 8082
170	23-Oct-02	EPA 8082
170	23-Oct-02	EPA 8082
170	23-Oct-02	EPA 8082
	23-Oct-02	EPA 8082
	23-Oct-02	EPA 8082

I-C-SS-B1-001

RDL	Analyzed	Method
	22-Oct-02	CLP 3.0
120	23-Oct-02	EPA 8082
230	23-Oct-02	EPA 8082
120	23-Oct-02	EPA 8082
120	23-Oct-02	EPA 8082
120	23-Oct-02	EPA 8082
120	23-Oct-02	EPA 8082
120	23-Oct-02	EPA 8082
	23-Oct-02	EPA 8082
	23-Oct-02	EPA 8082

I-B-SS-W-001

	RDL	Analyzed	Method
		22-Oct-02	CLP 3.0
	160	23-Oct-02	EPA 8082
	330	23-Oct-02	EPA 8082
	160	23-Oct-02	EPA 8082
	160	23-Oct-02	EPA 8082
	160	23-Oct-02	EPA 8082
	160	23-Oct-02	EPA 8082
	160	23-Oct-02	EPA 8082
		23-Oct-02	EPA 8082
		23-Oct-02	EPA 8082

I-B-SS-E-001

	RDL	Analyzed	Method
		22-Oct-02	CLP 3.0
	180	23-Oct-02	EPA 8082
	360	23-Oct-02	EPA 8082
	180	23-Oct-02	EPA 8082
	180	23-Oct-02	EPA 8082
	180	23-Oct-02	EPA 8082
	180	23-Oct-02	EPA 8082
	180	23-Oct-02	EPA 8082
		23-Oct-02	EPA 8082
		23-Oct-02	EPA 8082

R0040B CELL #3 RE-SAMPLE2

	RDL	Analyzed	Method
	0.05	22-Oct-02	EPA 6010 TCLP

L95687-17MS,R0040B CELL#3

	RDL	Analyzed	Method
	0.05	22-Oct-02	EPA 6010 TCLP

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Project:
Sampled: 23-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95812-1

Analysis	Result		Units
Total Solids		66.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		750	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		50	%
Decachlorobiphenyl		117	%

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Project:
Sampled: 23-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L95812-2

Analysis	Result		Units
Total Solids		55.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		2100	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		43	%
Decachlorobiphenyl		116	%

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Project:			
Sampled:		23-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95812-3		
Analysis	Result		Units
Total Solids		75.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1800	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		38	%
Decachlorobiphenyl		91	%

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Project:			
Sampled:		23-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95812-4		
Analysis	Result		Units
Total Solids		56.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		980	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		68	%
Decachlorobiphenyl		146	%

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Project:			
Sampled:		23-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95812-5		
Analysis	Result		Units

Paint Filter	U		ml/kg
Cadmium		5.25	mg/l

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Project:			
Sampled:		23-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95812-6		
Analysis	Result		Units
Total Solids		69.1	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		2500	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		80	%
Decachlorobiphenyl		143	%

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Project:			
Sampled:		23-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95812-7		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		0.701	mg/l

23-B-S-SE-003

	RDL	Analyzed	Method
		24-Oct-02	CLP 3.0
	140	30-Oct-02	EPA 8082
	290	30-Oct-02	EPA 8082
	140	30-Oct-02	EPA 8082
	140	30-Oct-02	EPA 8082
	140	30-Oct-02	EPA 8082
	140	30-Oct-02	EPA 8082
	140	30-Oct-02	EPA 8082
		30-Oct-02	EPA 8082
*		30-Oct-02	EPA 8082

W-B-S-W-003

	RDL	Analyzed	Method
		24-Oct-02	CLP 3.0
	170	30-Oct-02	EPA 8082
	340	30-Oct-02	EPA 8082
	170	30-Oct-02	EPA 8082
	170	30-Oct-02	EPA 8082
	170	30-Oct-02	EPA 8082
	170	30-Oct-02	EPA 8082
	170	30-Oct-02	EPA 8082
		30-Oct-02	EPA 8082
*		30-Oct-02	EPA 8082

W-B-S-E-003

	RDL	Analyzed	Method
		24-Oct-02	CLP 3.0
	130	30-Oct-02	EPA 8082
	260	30-Oct-02	EPA 8082
	130	30-Oct-02	EPA 8082
	130	30-Oct-02	EPA 8082
	130	30-Oct-02	EPA 8082
	130	30-Oct-02	EPA 8082
	130	30-Oct-02	EPA 8082
		30-Oct-02	EPA 8082
*		30-Oct-02	EPA 8082

CELL #6 10 ROLL-OFFS

	RDL	Analyzed	Method
		24-Oct-02	CLP 3.0
	170	30-Oct-02	EPA 8082
	340	30-Oct-02	EPA 8082
	170	30-Oct-02	EPA 8082
	170	30-Oct-02	EPA 8082
	170	30-Oct-02	EPA 8082
	170	30-Oct-02	EPA 8082
	170	30-Oct-02	EPA 8082
		30-Oct-02	EPA 8082
*		30-Oct-02	EPA 8082

CELL #6 10 ROLL-OFFS

	RDL	Analyzed	Method

1	28-Oct-02	EPA 9095
0.05	25-Oct-02	EPA 6010 TCLP

CELL #5

RDL	Analyzed	Method
	24-Oct-02	CLP 3.0
140	30-Oct-02	EPA 8082
280	30-Oct-02	EPA 8082
140	30-Oct-02	EPA 8082
140	30-Oct-02	EPA 8082
140	30-Oct-02	EPA 8082
140	30-Oct-02	EPA 8082
140	30-Oct-02	EPA 8082
	30-Oct-02	EPA 8082
*	30-Oct-02	EPA 8082

CELL #5

RDL	Analyzed	Method
1	28-Oct-02	EPA 9095
0.05	25-Oct-02	EPA 6010 TCLP

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Project:			
Sampled:		24-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95916-1		
Analysis	Result		Units
Total Solids		53.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		14000	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		99	%
Decachlorobiphenyl		100	%

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Project:			
Sampled:		24-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95916-2		
Analysis	Result		Units
Total Solids		57.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		7100	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		102	%
Decachlorobiphenyl		112	%

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Project:			
Sampled:		24-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95916-3		
Analysis	Result		Units
Total Solids		61.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1600	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		89	%
Decachlorobiphenyl		101	%

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Project:			
Sampled:		24-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95916-4		
Analysis	Result		Units
Total Solids		75.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		91	%
Decachlorobiphenyl		104	%

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Project:			
Sampled:		24-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L95916-5		
Analysis	Result		Units

Paint Filter	U		ml/kg
Cadmium		4.07	mg/l

23-B-S-NE-003

RDL	Analyzed	Method
	25-Oct-02	CLP 3.0
180	29-Oct-02	EPA 8082
360	29-Oct-02	EPA 8082
180	29-Oct-02	EPA 8082
180	29-Oct-02	EPA 8082
180	29-Oct-02	EPA 8082
180	29-Oct-02	EPA 8082
180	29-Oct-02	EPA 8082
	29-Oct-02	EPA 8082
	29-Oct-02	EPA 8082

23-B-SW-003

RDL	Analyzed	Method
	25-Oct-02	CLP 3.0
170	29-Oct-02	EPA 8082
340	29-Oct-02	EPA 8082
170	29-Oct-02	EPA 8082
170	29-Oct-02	EPA 8082
170	29-Oct-02	EPA 8082
170	29-Oct-02	EPA 8082
170	29-Oct-02	EPA 8082
	29-Oct-02	EPA 8082
	29-Oct-02	EPA 8082

23-B-S-NW-003

	RDL	Analyzed	Method
		25-Oct-02	CLP 3.0
	160	29-Oct-02	EPA 8082
	320	29-Oct-02	EPA 8082
	160	29-Oct-02	EPA 8082
	160	29-Oct-02	EPA 8082
	160	29-Oct-02	EPA 8082
	160	29-Oct-02	EPA 8082
	160	29-Oct-02	EPA 8082
		29-Oct-02	EPA 8082
		29-Oct-02	EPA 8082

CELL #7 INITIAL RUN

	RDL	Analyzed	Method
		25-Oct-02	CLP 3.0
	130	29-Oct-02	EPA 8082
	250	29-Oct-02	EPA 8082
	130	29-Oct-02	EPA 8082
	130	29-Oct-02	EPA 8082
	130	29-Oct-02	EPA 8082
	130	29-Oct-02	EPA 8082
	130	29-Oct-02	EPA 8082
		29-Oct-02	EPA 8082
		29-Oct-02	EPA 8082

CELL #7 INITIAL RUN

	RDL	Analyzed	Method

1	28-Oct-02	EPA 9095
0.05	29-Oct-02	EPA 6010 TCLP

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Project:				
Sampled:		28-Oct-02		
Source:	VIACOM/HORSEHEADS		Origin:	
Lab ID:	L95958-1			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		4.18		mg/l

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Project:				
Sampled:		28-Oct-02		
Source:	VIACOM/HORSEHEADS		Origin:	
Lab ID:	L95958-2			
Analysis	Result			Units
Total Solids		62.7		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		84		%
Decachlorobiphenyl		98		%

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Project:				
Sampled:		28-Oct-02		
Source:	VIACOM/HORSEHEADS		Origin:	
Lab ID:	L95958-3			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		3.76		mg/l

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Project:				
Sampled:		28-Oct-02		
Source:	VIACOM/HORSEHEADS		Origin:	
Lab ID:	L95958-4			
Analysis	Result			Units
Total Solids		66.8		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		89		%
Decachlorobiphenyl		103		%

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Project:				
Sampled:		28-Oct-02		
Source:	VIACOM/HORSEHEADS		Origin:	
Lab ID:	L95958-5			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		3.34		mg/l

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Project:				
Sampled:		28-Oct-02		
Source:	VIACOM/HORSEHEADS		Origin:	
Lab ID:	L95958-6			
Analysis	Result			Units
Total Solids		70.5		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg

PCB 1254		440		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		93		%
Decachlorobiphenyl		105		%

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Project:				
Sampled:		28-Oct-02		
Source:	VIACOM/HORSEHEADS		Origin:	
Lab ID:	L95958-7			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		2.99		mg/l

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Project:				
Sampled:		28-Oct-02		
Source:	VIACOM/HORSEHEADS		Origin:	
Lab ID:	L95958-8			
Analysis	Result			Units
Cadmium		3.92		mg/l

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Project:				
Sampled:		28-Oct-02		
Source:	VIACOM/HORSEHEADS		Origin:	
Lab ID:	L95958-9			
Analysis	Result			Units
Paint Filter	U			ml/kg

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Project:				
Sampled:		28-Oct-02		
Source:	VIACOM/HORSEHEADS		Origin:	
Lab ID:	L95958-10			
Analysis	Result			Units

Total Solids		74	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		810	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		95	%
Decachlorobiphenyl		109	%

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Project:
Sampled: 28-Oct-02
Source: VIACOM/HORSEHEADS Origin:
Lab ID: L95958-11

Analysis	Result		Units
EPA 8082			
PCB 1254		250	ug/kg
Tetrachloro-m-xylene		86	%
Decachlorobiphenyl		104	%

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Project:
Sampled: 28-Oct-02
Source: VIACOM/HORSEHEADS Origin:
Lab ID: L95958-12

Analysis	Result		Units
EPA 8082			
PCB 1016		204	%
PCB 1260		218	%
Tetrachloro-m-xylene		94	%
Decachlorobiphenyl		110	%

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Project:

Sampled:		28-Oct-02	
Source:	VIACOM/HORSEHEADS	Origin:	
Lab ID:	L95958-13		
Analysis	Result		Units
Total Solids		67.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		680	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		100	%
Decachlorobiphenyl		113	%

CELL #8 BOTTOM OF PILE

RDL	Analyzed	Method
1	28-Oct-02	EPA 9095
0.05	29-Oct-02	EPA 6010 TCLP

CELL #8 BOTTOM OF PILE

RDL	Analyzed	Method
	28-Oct-02	CLP 3.0
160	30-Oct-02	EPA 8082
310	30-Oct-02	EPA 8082
160	30-Oct-02	EPA 8082
160	30-Oct-02	EPA 8082
160	30-Oct-02	EPA 8082
160	30-Oct-02	EPA 8082
160	30-Oct-02	EPA 8082
	30-Oct-02	EPA 8082
	30-Oct-02	EPA 8082

CELL #8B TRENCH/MIXED

RDL	Analyzed	Method
1	28-Oct-02	EPA 9095
0.05	29-Oct-02	EPA 6010 TCLP

CELL #8B TRENCH/MIXED

RDL	Analyzed	Method
	28-Oct-02	CLP 3.0
150	30-Oct-02	EPA 8082
290	30-Oct-02	EPA 8082
150	30-Oct-02	EPA 8082
150	30-Oct-02	EPA 8082
150	30-Oct-02	EPA 8082
150	30-Oct-02	EPA 8082
150	30-Oct-02	EPA 8082
	30-Oct-02	EPA 8082
	30-Oct-02	EPA 8082

CELL #8C WEST PORTION

RDL	Analyzed	Method
1	28-Oct-02	EPA 9095
0.05	29-Oct-02	EPA 6010 TCLP

CELL #8C WEST PORTION

RDL	Analyzed	Method
	28-Oct-02	CLP 3.0
130	30-Oct-02	EPA 8082
260	30-Oct-02	EPA 8082
130	30-Oct-02	EPA 8082
130	30-Oct-02	EPA 8082
130	30-Oct-02	EPA 8082

	130	30-Oct-02	EPA 8082
	130	30-Oct-02	EPA 8082
		30-Oct-02	EPA 8082
		30-Oct-02	EPA 8082

CELL #8D EAST PORTION

	RDL	Analyzed	Method
	1	28-Oct-02	EPA 9095
	0.05	29-Oct-02	EPA 6010 TCLP

L95958-7MS, CELL #8D

	RDL	Analyzed	Method
	0.05	29-Oct-02	EPA 6010 TCLP

L95958-7MSD/DUP, CELL#8D

	RDL	Analyzed	Method
	1	28-Oct-02	EPA 9095

CELL #8D EAST PORTION

	RDL	Analyzed	Method

		28-Oct-02	CLP 3.0
	130	30-Oct-02	EPA 8082
	270	30-Oct-02	EPA 8082
	130	30-Oct-02	EPA 8082
	130	30-Oct-02	EPA 8082
	130	30-Oct-02	EPA 8082
	130	30-Oct-02	EPA 8082
	130	30-Oct-02	EPA 8082
		30-Oct-02	EPA 8082
		30-Oct-02	EPA 8082

L95958-10MS, CELL #8D

	RDL	Analyzed	Method
		30-Oct-02	EPA 8082
		30-Oct-02	EPA 8082
		30-Oct-02	EPA 8082

L95958-10MSD/DUP, CELL#8D

	RDL	Analyzed	Method
		30-Oct-02	EPA 8082
		30-Oct-02	EPA 8082
		30-Oct-02	EPA 8082
		30-Oct-02	EPA 8082

H-B-SS-E-002

	RDL	Analyzed	Method
		28-Oct-02	CLP 3.0
	140	30-Oct-02	EPA 8082
	280	30-Oct-02	EPA 8082
	140	30-Oct-02	EPA 8082
	140	30-Oct-02	EPA 8082
	140	30-Oct-02	EPA 8082
	140	30-Oct-02	EPA 8082
	140	30-Oct-02	EPA 8082
		30-Oct-02	EPA 8082
		30-Oct-02	EPA 8082

AAA Environmental
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Project:				
Sampled:		29-Oct-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96043-1			
Analysis	Result			Units
Total Solids		88		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		170		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		96		%
Decachlorobiphenyl		114		%

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Project:				
Sampled:		29-Oct-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96043-2			
Analysis	Result			Units
Total Solids		92.6		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		94		%
Decachlorobiphenyl		106		%

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Project:				
Sampled:		29-Oct-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96043-3			
Analysis	Result			Units
Total Solids		87.7		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		89		%
Decachlorobiphenyl		122		%

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Project:				
Sampled:		29-Oct-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96043-4			
Analysis	Result			Units
Total Solids		91.6		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		86		%
Decachlorobiphenyl		99		%

G-B-SS-E1-003

	RDL	Analyzed	Method
		29-Oct-02	CLP 3.0
	110	31-Oct-02	EPA 8082
	210	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
		31-Oct-02	EPA 8082
*		31-Oct-02	EPA 8082

G-C-SS-B-003

	RDL	Analyzed	Method
		29-Oct-02	CLP 3.0
	110	31-Oct-02	EPA 8082
	210	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
		31-Oct-02	EPA 8082
*		31-Oct-02	EPA 8082

G-B-S-W-003

	RDL	Analyzed	Method
		29-Oct-02	CLP 3.0
	110	31-Oct-02	EPA 8082
	220	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
		31-Oct-02	EPA 8082
*		31-Oct-02	EPA 8082

G-B-SS-E2-003

	RDL	Analyzed	Method
		29-Oct-02	CLP 3.0
	110	31-Oct-02	EPA 8082
	210	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
	110	31-Oct-02	EPA 8082
		31-Oct-02	EPA 8082
*		31-Oct-02	EPA 8082

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Project:			
Sampled:		29-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96072-1		
Analysis	Result		Units
Total Solids		74.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		98	%
Decachlorobiphenyl		105	%

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Project:			
Sampled:		29-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96072-2		
Analysis	Result		Units
Total Solids		92.1	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		160	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		81	%
Decachlorobiphenyl		126	%

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Project:			
Sampled:		29-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96072-3		
Analysis	Result		Units
Total Solids		86.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		77	%
Decachlorobiphenyl		99	%

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Project:			
Sampled:		29-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96072-4		
Analysis	Result		Units
Total Solids		70.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		230	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		99	%
Decachlorobiphenyl		124	%

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Project:			
Sampled:		29-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96072-5		
Analysis	Result		Units

Paint Filter	U		ml/kg
Cadmium		2.36	mg/l

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Project:			
Sampled:		29-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96072-6		
Analysis	Result		Units
Total Solids		72.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		570	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		89	%
Decachlorobiphenyl		108	%

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Project:			
Sampled:		29-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96072-7		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		2.76	mg/l

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Project:			
Sampled:		29-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96072-8		
Analysis	Result		Units
Total Solids		75.1	%
EPA 8082			
PCB 1016	U		ug/kg

PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		720	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		97	%
Decachlorobiphenyl		147	%

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Project:
Sampled: 29-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96072-9

Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		2.03	mg/l

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Project:
Sampled: 29-Oct-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96072-10

Analysis	Result		Units
Total Solids		72.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1200	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		79	%
Decachlorobiphenyl		103	%

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Project:
Sampled: 29-Oct-02

Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96072-11		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		1.76	mg/l

G-B-S-W1-004

	RDL	Analyzed	Method
		30-Oct-02	CLP 3.0
	130	1-Nov-02	EPA 8082
	260	1-Nov-02	EPA 8082
	130	1-Nov-02	EPA 8082
	130	1-Nov-02	EPA 8082
	130	1-Nov-02	EPA 8082
	130	1-Nov-02	EPA 8082
	130	1-Nov-02	EPA 8082
		1-Nov-02	EPA 8082
*		1-Nov-02	EPA 8082

G-B-S-E1-004

	RDL	Analyzed	Method
		30-Oct-02	CLP 3.0
	100	1-Nov-02	EPA 8082
	200	1-Nov-02	EPA 8082
	100	1-Nov-02	EPA 8082
	100	1-Nov-02	EPA 8082
	100	1-Nov-02	EPA 8082
	100	1-Nov-02	EPA 8082
	100	1-Nov-02	EPA 8082
		1-Nov-02	EPA 8082
*		1-Nov-02	EPA 8082

H-B-SS-E-003

	RDL	Analyzed	Method
		30-Oct-02	CLP 3.0
	110	1-Nov-02	EPA 8082
	230	1-Nov-02	EPA 8082
	110	1-Nov-02	EPA 8082
	110	1-Nov-02	EPA 8082
	110	1-Nov-02	EPA 8082
	110	1-Nov-02	EPA 8082
	110	1-Nov-02	EPA 8082
		1-Nov-02	EPA 8082
*		1-Nov-02	EPA 8082

CELL #9 NE

	RDL	Analyzed	Method
		30-Oct-02	CLP 3.0
	130	1-Nov-02	EPA 8082
	270	1-Nov-02	EPA 8082
	130	1-Nov-02	EPA 8082
	130	1-Nov-02	EPA 8082
	130	1-Nov-02	EPA 8082
	130	1-Nov-02	EPA 8082
	130	1-Nov-02	EPA 8082
		1-Nov-02	EPA 8082
*		1-Nov-02	EPA 8082

CELL #9 NE

	RDL	Analyzed	Method

1	30-Oct-02	EPA 9095
0.05	1-Nov-02	EPA 6010 TCLP

CELL #9 SW

RDL	Analyzed	Method
	30-Oct-02	CLP 3.0
140	1-Nov-02	EPA 8082
270	1-Nov-02	EPA 8082
140	1-Nov-02	EPA 8082
140	1-Nov-02	EPA 8082
140	1-Nov-02	EPA 8082
140	1-Nov-02	EPA 8082
140	1-Nov-02	EPA 8082
	1-Nov-02	EPA 8082
*	1-Nov-02	EPA 8082

CELL #9 SW

RDL	Analyzed	Method
1	30-Oct-02	EPA 9095
0.05	1-Nov-02	EPA 6010 TCLP

CELL #9 NW

RDL	Analyzed	Method
	30-Oct-02	CLP 3.0
130	1-Nov-02	EPA 8082

	270	1-Nov-02	EPA 8082
	130	1-Nov-02	EPA 8082
	130	1-Nov-02	EPA 8082
	130	1-Nov-02	EPA 8082
	130	1-Nov-02	EPA 8082
	130	1-Nov-02	EPA 8082
		1-Nov-02	EPA 8082
*		1-Nov-02	EPA 8082

CELL #9 NW

RDL	Analyzed	Method
1	30-Oct-02	EPA 9095
0.05	1-Nov-02	EPA 6010 TCLP

CELL #9 SE

RDL	Analyzed	Method
	30-Oct-02	CLP 3.0
140	1-Nov-02	EPA 8082
270	1-Nov-02	EPA 8082
140	1-Nov-02	EPA 8082
140	1-Nov-02	EPA 8082
140	1-Nov-02	EPA 8082
140	1-Nov-02	EPA 8082
140	1-Nov-02	EPA 8082
	1-Nov-02	EPA 8082
*	1-Nov-02	EPA 8082

CELL #9 SE

RDL	Analyzed	Method
1	30-Oct-02	EPA 9095
0.05	1-Nov-02	EPA 6010 TCLP

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Project:			
Sampled:		30-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96192-1		
Analysis	Result		Units
Total Solids		56.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		95	%
Decachlorobiphenyl		93	%

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Project:			
Sampled:		30-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96192-2		
Analysis	Result		Units
Total Solids		96.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		87	%
Decachlorobiphenyl		105	%

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Project:			
Sampled:		30-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96192-3		
Analysis	Result		Units
EPA 8082			
PCB 1016		113	%
PCB 1260		88	%
Tetrachloro-m-xylene		95	%
Decachlorobiphenyl		122	%

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Project:			
Sampled:		30-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96192-4		
Analysis	Result		Units
EPA 8082			
PCB 1016		119	%
PCB 1260		85	%
Tetrachloro-m-xylene		95	%
Decachlorobiphenyl		118	%

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Project:			
Sampled:		30-Oct-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96192-5		
Analysis	Result		Units
Total Solids		90.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		72	%
Decachlorobiphenyl		75	%

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Project:				
Sampled:		30-Oct-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96192-6			
Analysis	Result			Units
Total Solids		82.6		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		83		%
Decachlorobiphenyl		96		%

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Project:				
Sampled:		30-Oct-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96192-7			
Analysis	Result			Units
Total Solids		85.3		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		95		%
Decachlorobiphenyl		109		%

J-B-S-W-001

RDL	Analyzed	Method
	2-Nov-02	CLP 3.0
170	4-Nov-02	EPA 8082
330	4-Nov-02	EPA 8082
170	4-Nov-02	EPA 8082
170	4-Nov-02	EPA 8082
170	4-Nov-02	EPA 8082
170	4-Nov-02	EPA 8082
170	4-Nov-02	EPA 8082
	4-Nov-02	EPA 8082
	4-Nov-02	EPA 8082

J-C-SS-B1-001

RDL	Analyzed	Method
	2-Nov-02	CLP 3.0
99	4-Nov-02	EPA 8082
200	4-Nov-02	EPA 8082
99	4-Nov-02	EPA 8082
99	4-Nov-02	EPA 8082
99	4-Nov-02	EPA 8082
99	4-Nov-02	EPA 8082
99	4-Nov-02	EPA 8082
	4-Nov-02	EPA 8082
	4-Nov-02	EPA 8082

L96192-2MS,J-C-SS-B1-001

	RDL	Analyzed	Method
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082

L96192-2MSD/DUP,SS-B1-001

	RDL	Analyzed	Method
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082

J-C-SS-B2-001

	RDL	Analyzed	Method
		2-Nov-02	CLP 3.0
	110	4-Nov-02	EPA 8082
	220	4-Nov-02	EPA 8082
	110	4-Nov-02	EPA 8082
	110	4-Nov-02	EPA 8082
	110	4-Nov-02	EPA 8082
	110	4-Nov-02	EPA 8082
	110	4-Nov-02	EPA 8082
		4-Nov-02	EPA 8082
		4-Nov-02	EPA 8082

I-B-SS-E-002

	RDL	Analyzed	Method
		2-Nov-02	CLP 3.0
	120	4-Nov-02	EPA 8082
	240	4-Nov-02	EPA 8082
	120	4-Nov-02	EPA 8082
	120	4-Nov-02	EPA 8082
	120	4-Nov-02	EPA 8082
	120	4-Nov-02	EPA 8082
	120	4-Nov-02	EPA 8082
		4-Nov-02	EPA 8082
		4-Nov-02	EPA 8082

I-B-SS-W-002

	RDL	Analyzed	Method
		2-Nov-02	CLP 3.0
	120	5-Nov-02	EPA 8082
	230	5-Nov-02	EPA 8082
	120	5-Nov-02	EPA 8082
	120	5-Nov-02	EPA 8082
	120	5-Nov-02	EPA 8082
	120	5-Nov-02	EPA 8082
	120	5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082

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Project:
Sampled: 1-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96208-1

Analysis	Result	Units
Cadmium	2.38	mg/l

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Project:
Sampled: 1-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96208-2

Analysis	Result	Units
Cadmium	2.53	mg/l

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Project:
Sampled: 1-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96208-3

Analysis	Result	Units
Cadmium	2.13	mg/l

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Project:
Sampled: 1-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96208-4

Analysis	Result	Units
Cadmium	1.75	mg/l

8 EAST

RDL	Analyzed	Method
0.05	5-Nov-02	EPA 6010 TCLP

8 CENTRAL

RDL	Analyzed	Method
0.05	5-Nov-02	EPA 6010 TCLP

8 MOUNTAIN

RDL	Analyzed	Method
0.05	5-Nov-02	EPA 6010 TCLP

8 PACIFIC

RDL	Analyzed	Method
0.05	5-Nov-02	EPA 6010 TCLP

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Project:
Sampled: 2-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96307-1

Analysis	Result		Units
Total Solids		88.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		120	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		96	%
Decachlorobiphenyl		102	%

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Project:
Sampled: 2-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96307-2

Analysis	Result		Units
Total Solids		91.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		260	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		104	%
Decachlorobiphenyl		130	%

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Project:			
Sampled:		2-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96307-3		
Analysis	Result		Units
EPA 8082			
PCB 1016		85	%
PCB 1260		82	%
Tetrachloro-m-xylene		96	%
Decachlorobiphenyl		120	%

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Project:			
Sampled:		2-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96307-4		
Analysis	Result		Units
EPA 8082			
PCB 1016		90	%
PCB 1260		80	%
Tetrachloro-m-xylene		93	%
Decachlorobiphenyl		118	%

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Project:			
Sampled:		2-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96307-5		
Analysis	Result		Units
Total Solids		83	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		620	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		79	%
Decachlorobiphenyl		93	%

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Project:
Sampled: 2-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96307-6

Analysis	Result		Units
Total Solids		92	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		96	%
Decachlorobiphenyl		117	%

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Project:
Sampled: 1-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96307-7

Analysis	Result		Units
Total Solids		90.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		380	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		96	%
Decachlorobiphenyl		103	%

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Project:

Sampled:		1-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96307-8		
Analysis	Result		Units
Total Solids		70.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		96	%
Decachlorobiphenyl		109	%

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Project:			
Sampled:		1-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96307-9		
Analysis	Result		Units
Total Solids		85.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		100	%
Decachlorobiphenyl		118	%

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Project:			
Sampled:		1-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96307-10		
Analysis	Result		Units
Total Solids		75.6	%

EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		94	%
Decachlorobiphenyl		91	%

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Project:			
Sampled:		1-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96307-11		
Analysis	Result		Units
Total Solids		76.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		96	%
Decachlorobiphenyl		108	%

C-B-SS-W-002

	RDL	Analyzed	Method
		5-Nov-02	CLP 3.0
	110	5-Nov-02	EPA 8082
	220	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082

C-C-S-B-002

	RDL	Analyzed	Method
		5-Nov-02	CLP 3.0
	110	5-Nov-02	EPA 8082
	220	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082

L96307-2MS, C-C-S-B-002

	RDL	Analyzed	Method
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082

L96307-2MSD/DUP,C-C-SB002

	RDL	Analyzed	Method
		6-Nov-02	EPA 8082
		6-Nov-02	EPA 8082
		6-Nov-02	EPA 8082
		6-Nov-02	EPA 8082

C-B-SS-E-002

	RDL	Analyzed	Method
		5-Nov-02	CLP 3.0
	120	5-Nov-02	EPA 8082
	240	5-Nov-02	EPA 8082
	120	5-Nov-02	EPA 8082
	120	5-Nov-02	EPA 8082
	120	5-Nov-02	EPA 8082
	120	5-Nov-02	EPA 8082
	120	5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082

D-C-S-B-002

	RDL	Analyzed	Method
		5-Nov-02	CLP 3.0
	110	5-Nov-02	EPA 8082
	220	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082

J-B-SS-W-002

	RDL	Analyzed	Method
		5-Nov-02	CLP 3.0
	110	5-Nov-02	EPA 8082
	220	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082

J-B-S-E-002

	RDL	Analyzed	Method
		5-Nov-02	CLP 3.0
	130	5-Nov-02	EPA 8082
	270	5-Nov-02	EPA 8082
	130	5-Nov-02	EPA 8082
	130	5-Nov-02	EPA 8082
	130	5-Nov-02	EPA 8082
	130	5-Nov-02	EPA 8082
	130	5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082

J-B-SS-E-002

	RDL	Analyzed	Method
		5-Nov-02	CLP 3.0
	110	5-Nov-02	EPA 8082
	220	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
	110	5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082
		5-Nov-02	EPA 8082

I-B-S-E-004

	RDL	Analyzed	Method
		5-Nov-02	CLP 3.0

130	5-Nov-02	EPA 8082
260	5-Nov-02	EPA 8082
130	5-Nov-02	EPA 8082
130	5-Nov-02	EPA 8082
130	5-Nov-02	EPA 8082
130	5-Nov-02	EPA 8082
130	5-Nov-02	EPA 8082
	5-Nov-02	EPA 8082
	5-Nov-02	EPA 8082

DUP

RDL	Analyzed	Method
	5-Nov-02	CLP 3.0
130	5-Nov-02	EPA 8082
260	5-Nov-02	EPA 8082
130	5-Nov-02	EPA 8082
130	5-Nov-02	EPA 8082
130	5-Nov-02	EPA 8082
130	5-Nov-02	EPA 8082
130	5-Nov-02	EPA 8082
	5-Nov-02	EPA 8082
	5-Nov-02	EPA 8082

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Project:			
Sampled:		5-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96390-1		
Analysis	Result		Units
Cadmium		1.43	mg/l

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Project:			
Sampled:		5-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96390-2		
Analysis	Result		Units
Cadmium		1.79	mg/l

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Project:			
Sampled:		5-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96390-3		
Analysis	Result		Units
Cadmium		0.755	mg/l

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Project:			
Sampled:		5-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96390-4		
Analysis	Result		Units
Cadmium		0.435	mg/l

CELL #9E

RDL	Analyzed	Method
0.05	8-Nov-02	EPA 6010 TCLP

CELL #9C

RDL	Analyzed	Method
0.05	8-Nov-02	EPA 6010 TCLP

CELL #9M

RDL	Analyzed	Method
0.05	8-Nov-02	EPA 6010 TCLP

CELL #9P

RDL	Analyzed	Method
0.05	8-Nov-02	EPA 6010 TCLP

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Project:			
Sampled:		5-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96423-1		
Analysis	Result		Units
Total Solids		88.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		330	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		91	%
Decachlorobiphenyl		108	%

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Project:			
Sampled:		5-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96423-2		
Analysis	Result		Units
Total Solids		90.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		450	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		93	%
Decachlorobiphenyl		113	%

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Project:			
Sampled:		5-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96423-3		
Analysis	Result		Units
Total Solids		86.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		83	%
Decachlorobiphenyl		112	%

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Project:			
Sampled:		5-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96423-4		
Analysis	Result		Units
Total Solids		84.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		160	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		93	%
Decachlorobiphenyl		122	%

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Project:			
Sampled:		5-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96423-5		
Analysis	Result		Units

Total Solids		61.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		107	%
Decachlorobiphenyl		128	%

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Project:
Sampled: 5-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96423-6

Analysis	Result		Units
Total Solids		89.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		106	%
Decachlorobiphenyl		144	%

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Project:
Sampled: 5-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96423-7

Analysis	Result		Units
Total Solids		50.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg

PCB 1248	U		ug/kg
PCB 1254		210	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		115	%
Decachlorobiphenyl		132	%

E-C-S-E-002

RDL	Analyzed	Method
	6-Nov-02	CLP 3.0
110	7-Nov-02	EPA 8082
220	7-Nov-02	EPA 8082
110	7-Nov-02	EPA 8082
110	7-Nov-02	EPA 8082
110	7-Nov-02	EPA 8082
110	7-Nov-02	EPA 8082
110	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082

E-C-SS-E-002

RDL	Analyzed	Method
	6-Nov-02	CLP 3.0
100	7-Nov-02	EPA 8082
210	7-Nov-02	EPA 8082
100	7-Nov-02	EPA 8082
100	7-Nov-02	EPA 8082
100	7-Nov-02	EPA 8082
100	7-Nov-02	EPA 8082
100	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082

E-B-SS-W-B-001

	RDL	Analyzed	Method
		6-Nov-02	CLP 3.0
	110	7-Nov-02	EPA 8082
	230	7-Nov-02	EPA 8082
	110	7-Nov-02	EPA 8082
	110	7-Nov-02	EPA 8082
	110	7-Nov-02	EPA 8082
	110	7-Nov-02	EPA 8082
	110	7-Nov-02	EPA 8082
		7-Nov-02	EPA 8082
		7-Nov-02	EPA 8082

E-B-SS-W-002

	RDL	Analyzed	Method
		6-Nov-02	CLP 3.0
	120	7-Nov-02	EPA 8082
	230	7-Nov-02	EPA 8082
	120	7-Nov-02	EPA 8082
	120	7-Nov-02	EPA 8082
	120	7-Nov-02	EPA 8082
	120	7-Nov-02	EPA 8082
	120	7-Nov-02	EPA 8082
		7-Nov-02	EPA 8082
		7-Nov-02	EPA 8082

E-B-S-W-002

	RDL	Analyzed	Method

	6-Nov-02	CLP 3.0
150	7-Nov-02	EPA 8082
310	7-Nov-02	EPA 8082
150	7-Nov-02	EPA 8082
150	7-Nov-02	EPA 8082
150	7-Nov-02	EPA 8082
150	7-Nov-02	EPA 8082
150	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082

F-B-SS-WB-001

RDL	Analyzed	Method
	6-Nov-02	CLP 3.0
110	7-Nov-02	EPA 8082
220	7-Nov-02	EPA 8082
110	7-Nov-02	EPA 8082
110	7-Nov-02	EPA 8082
110	7-Nov-02	EPA 8082
110	7-Nov-02	EPA 8082
110	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082

F-B-SS-W-001

RDL	Analyzed	Method
	6-Nov-02	CLP 3.0
200	7-Nov-02	EPA 8082
390	7-Nov-02	EPA 8082
200	7-Nov-02	EPA 8082
200	7-Nov-02	EPA 8082

200	7-Nov-02	EPA 8082
200	7-Nov-02	EPA 8082
200	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082

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Project:				
Sampled:		6-Nov-02		
Source:	VIACOM/HORSEHEADS		Origin:	
Lab ID:	L96479-1			
Analysis	Result			Units
Total Solids		76.9		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		96		%
Decachlorobiphenyl		136		%

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Project:				
Sampled:		6-Nov-02		
Source:	VIACOM/HORSEHEADS		Origin:	
Lab ID:	L96479-2			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		1.53		mg/l

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Project:				
Sampled:		6-Nov-02		
Source:	VIACOM/HORSEHEADS		Origin:	
Lab ID:	L96479-3			
Analysis	Result			Units
Total Solids		79.9		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg

PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		210	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		111	%
Decachlorobiphenyl		134	%

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Project:			
Sampled:		6-Nov-02	
Source:	VIACOM/HORSEHEADS	Origin:	
Lab ID:	L96479-4		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		4.58	mg/l

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Project:			
Sampled:		6-Nov-02	
Source:	VIACOM/HORSEHEADS	Origin:	
Lab ID:	L96479-5		
Analysis	Result		Units
Total Solids		79.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		260	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		100	%
Decachlorobiphenyl		128	%

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Project:			
Sampled:		6-Nov-02	
Source:	VIACOM/HORSEHEADS	Origin:	

Lab ID:	L96479-6			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		3.46		mg/l

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Project:				
Sampled:		6-Nov-02		
Source:	VIACOM/HORSEHEADS		Origin:	
Lab ID:	L96479-7			
Analysis	Result			Units
Total Solids		71.8		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		85		%
Decachlorobiphenyl		108		%

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Project:				
Sampled:		6-Nov-02		
Source:	VIACOM/HORSEHEADS		Origin:	
Lab ID:	L96479-8			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium	U			mg/l

CELL #11E

RDL	Analyzed	Method
	7-Nov-02	CLP 3.0
120	7-Nov-02	EPA 8082
250	7-Nov-02	EPA 8082
120	7-Nov-02	EPA 8082
120	7-Nov-02	EPA 8082
120	7-Nov-02	EPA 8082
120	7-Nov-02	EPA 8082
120	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082

CELL #11E

RDL	Analyzed	Method
1	11-Nov-02	EPA 9095
0.05	8-Nov-02	EPA 6010 TCLP

CELL #11C

RDL	Analyzed	Method
	7-Nov-02	CLP 3.0
120	7-Nov-02	EPA 8082
250	7-Nov-02	EPA 8082

120	7-Nov-02	EPA 8082
120	7-Nov-02	EPA 8082
120	7-Nov-02	EPA 8082
120	7-Nov-02	EPA 8082
120	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082

CELL #11C

RDL	Analyzed	Method
1	11-Nov-02	EPA 9095
0.05	8-Nov-02	EPA 6010 TCLP

CELL #11M

RDL	Analyzed	Method
	7-Nov-02	CLP 3.0
120	7-Nov-02	EPA 8082
230	7-Nov-02	EPA 8082
120	7-Nov-02	EPA 8082
120	7-Nov-02	EPA 8082
120	7-Nov-02	EPA 8082
120	7-Nov-02	EPA 8082
120	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082

CELL #11M

RDL	Analyzed	Method
1	11-Nov-02	EPA 9095
0.05	8-Nov-02	EPA 6010 TCLP

CELL #11P

RDL	Analyzed	Method
	7-Nov-02	CLP 3.0
140	7-Nov-02	EPA 8082
270	7-Nov-02	EPA 8082
140	7-Nov-02	EPA 8082
140	7-Nov-02	EPA 8082
140	7-Nov-02	EPA 8082
140	7-Nov-02	EPA 8082
140	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082
	7-Nov-02	EPA 8082

CELL #11P

RDL	Analyzed	Method
1	11-Nov-02	EPA 9095
0.05	8-Nov-02	EPA 6010 TCLP

AAA Environmental
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6679 Moore Road
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Project:			
Sampled:		7-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96582-1		
Analysis	Result		Units
Cadmium		1.29	mg/l

AAA Environmental
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Project:			
Sampled:		7-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96582-2		
Analysis	Result		Units
Cadmium		1.93	mg/l

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Project:			
Sampled:		7-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96582-3		
Analysis	Result		Units
Cadmium		1.13	mg/l

AAA Environmental
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Project:			
Sampled:		8-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96582-4		
Analysis	Result		Units
Total Solids		47.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg

PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		79	%
Decachlorobiphenyl		98	%

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Project:
Sampled: 8-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96582-5

Analysis	Result		Units
Total Solids		72.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		94	%
Decachlorobiphenyl		119	%

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Project:
Sampled: 8-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96582-6

Analysis	Result		Units
Total Solids		92.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg

Tetrachloro-m-xylene		83	%
Decachlorobiphenyl		99	%

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Project:			
Sampled:		7-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96582-7		
Analysis	Result		Units
Total Solids		94.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		88	%
Decachlorobiphenyl		117	%

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Project:			
Sampled:		7-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96582-8		
Analysis	Result		Units
Total Solids		92.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		87	%
Decachlorobiphenyl		124	%

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Project:			
Sampled:		7-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96582-9		
Analysis	Result		Units
Total Solids		59.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		370	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		84	%
Decachlorobiphenyl		94	%

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Project:			
Sampled:		7-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96582-10		
Analysis	Result		Units
Total Solids		90	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		390	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		83	%
Decachlorobiphenyl		93	%

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Project:			
Sampled:		7-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96582-11		
Analysis	Result		Units

Total Solids		92.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		97	%
Decachlorobiphenyl		132	%

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Project:			
Sampled:		7-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96582-12		
Analysis	Result		Units
EPA 8082			
PCB 1016		68	%
PCB 1260		92	%
Tetrachloro-m-xylene		92	%
Decachlorobiphenyl		121	%

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Project:			
Sampled:		7-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96582-13		
Analysis	Result		Units
EPA 8082			
PCB 1016		74	%
PCB 1260		104	%
Tetrachloro-m-xylene		94	%
Decachlorobiphenyl		124	%

A NO CKD

RDL	Analyzed
0.05	12-Nov-02

B 10% CKD

RDL	Analyzed
0.05	12-Nov-02

C 20% CKD

RDL	Analyzed
0.05	12-Nov-02

G-C-S-W-002

RDL	Analyzed
	8-Nov-02
200	11-Nov-02
410	11-Nov-02

200	11-Nov-02
200	11-Nov-02
200	11-Nov-02
200	11-Nov-02
200	11-Nov-02
	11-Nov-02
	11-Nov-02

G-C-S-E-002

RDL	Analyzed
	8-Nov-02
140	11-Nov-02
280	11-Nov-02
140	11-Nov-02
140	11-Nov-02
140	11-Nov-02
140	11-Nov-02
140	11-Nov-02
	11-Nov-02
	11-Nov-02

G-C-S-B-002

RDL	Analyzed
	8-Nov-02
100	11-Nov-02
210	11-Nov-02
100	11-Nov-02
100	11-Nov-02
100	11-Nov-02
100	11-Nov-02
100	11-Nov-02

		11-Nov-02
		11-Nov-02

F-C-S-B-001

	RDL	Analyzed
		8-Nov-02
	110	11-Nov-02
	210	11-Nov-02
	110	11-Nov-02
	110	11-Nov-02
	110	11-Nov-02
	110	11-Nov-02
	110	11-Nov-02
		11-Nov-02
		11-Nov-02

F-C-S-E-003

	RDL	Analyzed
		8-Nov-02
	110	11-Nov-02
	220	11-Nov-02
	110	11-Nov-02
	110	11-Nov-02
	110	11-Nov-02
	110	11-Nov-02
	110	11-Nov-02
		11-Nov-02
		11-Nov-02

F-B-SS-W-002

	RDL	Analyzed
		8-Nov-02
	170	11-Nov-02
	330	11-Nov-02
	170	11-Nov-02
	170	11-Nov-02
	170	11-Nov-02
	170	11-Nov-02
	170	11-Nov-02
		11-Nov-02
		11-Nov-02

(H)(I)-B-SB-001

	RDL	Analyzed
		8-Nov-02
	110	11-Nov-02
	220	11-Nov-02
	110	11-Nov-02
	110	11-Nov-02
	110	11-Nov-02
	110	11-Nov-02
	110	11-Nov-02
		11-Nov-02
		11-Nov-02

D-B-SS-W-006

	RDL	Analyzed

		8-Nov-02
	100	11-Nov-02
	210	11-Nov-02
	100	11-Nov-02
	100	11-Nov-02
	100	11-Nov-02
	100	11-Nov-02
	100	11-Nov-02
		11-Nov-02
		11-Nov-02

L96582-11MS, D-B-SS-W-006

	RDL	Analyzed
		11-Nov-02
		11-Nov-02
		11-Nov-02
		11-Nov-02

L96582-11MSD/DUP,DBSSW006

	RDL	Analyzed
		11-Nov-02
		11-Nov-02
		11-Nov-02
		11-Nov-02

Method

EPA 6010 TCLP

Method

EPA 6010 TCLP

Method

EPA 6010 TCLP

Method

CLP 3.0

EPA 8082
EPA 8082

EPA 8082
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Method

CLP 3.0

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Method

CLP 3.0

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Method

CLP 3.0

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Method

CLP 3.0

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Method

CLP 3.0

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Method

CLP 3.0

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Method

CLP 3.0

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Method

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AAA Environmental
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Project:			
Sampled:		11-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96617-1		
Analysis	Result		Units
Cadmium	U		mg/l

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Project:			
Sampled:		11-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96617-2		
Analysis	Result		Units
Cadmium	0.352		mg/l

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Project:			
Sampled:		11-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96617-3		
Analysis	Result		Units
Cadmium	U		mg/l

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Project:			
Sampled:		11-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96617-4		
Analysis	Result		Units
Cadmium	1.44		mg/l

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Project:
Sampled: 11-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96617-5

Analysis	Result		Units
Cadmium		2.11	mg/l

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Project:
Sampled: 11-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96617-6

Analysis	Result		Units
Total Solids		78.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1100	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		89	%
Decachlorobiphenyl		111	%

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Project:
Sampled: 11-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96617-7

Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium	U		mg/l

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Project:
Sampled: 11-Nov-02

Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96617-8			
Analysis	Result			Units
Total Solids		79.2		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		930		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		100		%
Decachlorobiphenyl		139		%

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Project:				
Sampled:		11-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96617-9			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		0.054		mg/l

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Project:				
Sampled:		11-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96617-10			
Analysis	Result			Units
Total Solids		77.4		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		1700		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		81		%
Decachlorobiphenyl		111		%

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Project:				
Sampled:		11-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96617-11			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		2.25		mg/l

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Project:				
Sampled:		11-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96617-12			
Analysis	Result			Units
Total Solids		77.3		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		2800		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		84		%
Decachlorobiphenyl		91		%

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Project:				
Sampled:		11-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96617-13			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		0.938		mg/l

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Project:
Sampled: 11-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96617-14

Analysis	Result		Units
Total Solids		80.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		990	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		80	%
Decachlorobiphenyl		86	%

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Project:
Sampled: 11-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96617-15

Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		1.52	mg/l

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Project:
Sampled: 11-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96617-16

Analysis	Result		Units
Total Solids		82.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1200	ug/kg

PCB 1260	U			ug/kg
Tetrachloro-m-xylene		88		%
Decachlorobiphenyl		106		%

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Project:				
Sampled:		11-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96617-17			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		1.58		mg/l

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Project:				
Sampled:		11-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96617-18			
Analysis	Result			Units
Total Solids		81.2		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		1100		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		81		%
Decachlorobiphenyl		106		%

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Project:				
Sampled:		11-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96617-19			
Analysis	Result			Units
Paint Filter	U			ml/kg

Cadmium	U			mg/l

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Project:				
Sampled:		11-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96617-20			
Analysis	Result			Units
Total Solids		80.9		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		1000		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		71		%
Decachlorobiphenyl		102		%

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Project:				
Sampled:		11-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L96617-21			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		0.628		mg/l

8P

RDL	Analyzed	Method
0.05	12-Nov-02	EPA 6010 TCLP

8E

RDL	Analyzed	Method
0.05	12-Nov-02	EPA 6010 TCLP

8C

RDL	Analyzed	Method
0.05	12-Nov-02	EPA 6010 TCLP

9E

RDL	Analyzed	Method
0.05	12-Nov-02	EPA 6010 TCLP

9C

RDL	Analyzed	Method
0.05	12-Nov-02	EPA 6010 TCLP

10N

RDL	Analyzed	Method
	12-Nov-02	CLP 3.0
130	12-Nov-02	EPA 8082
250	12-Nov-02	EPA 8082
130	12-Nov-02	EPA 8082
130	12-Nov-02	EPA 8082
130	12-Nov-02	EPA 8082
130	12-Nov-02	EPA 8082
130	12-Nov-02	EPA 8082
	12-Nov-02	EPA 8082
	12-Nov-02	EPA 8082

10N

RDL	Analyzed	Method
1	11-Nov-02	EPA 9095
0.05	12-Nov-02	EPA 6010 TCLP

10NN

RDL	Analyzed	Method
	12-Nov-02	CLP 3.0
120	12-Nov-02	EPA 8082
250	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
	12-Nov-02	EPA 8082
	12-Nov-02	EPA 8082

10NN

RDL	Analyzed	Method
1	11-Nov-02	EPA 9095
0.05	12-Nov-02	EPA 6010 TCLP

10SN

RDL	Analyzed	Method
	12-Nov-02	CLP 3.0
120	12-Nov-02	EPA 8082
240	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
	12-Nov-02	EPA 8082
	12-Nov-02	EPA 8082

10SN

RDL	Analyzed	Method
1	11-Nov-02	EPA 9095
0.05	12-Nov-02	EPA 6010 TCLP

10S

RDL	Analyzed	Method
	12-Nov-02	CLP 3.0
130	12-Nov-02	EPA 8082
260	12-Nov-02	EPA 8082
130	12-Nov-02	EPA 8082
130	12-Nov-02	EPA 8082
130	12-Nov-02	EPA 8082
130	12-Nov-02	EPA 8082
130	12-Nov-02	EPA 8082
	12-Nov-02	EPA 8082
	12-Nov-02	EPA 8082

10S

RDL	Analyzed	Method
1	11-Nov-02	EPA 9095
0.05	12-Nov-02	EPA 6010 TCLP

12E

RDL	Analyzed	Method
	12-Nov-02	CLP 3.0
120	12-Nov-02	EPA 8082
250	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
	12-Nov-02	EPA 8082
	12-Nov-02	EPA 8082

12E

RDL	Analyzed	Method
1	11-Nov-02	EPA 9095
0.05	12-Nov-02	EPA 6010 TCLP

12C

RDL	Analyzed	Method
	12-Nov-02	CLP 3.0
120	12-Nov-02	EPA 8082
240	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082

120	12-Nov-02	EPA 8082
	12-Nov-02	EPA 8082
	12-Nov-02	EPA 8082

12C

RDL	Analyzed	Method
1	11-Nov-02	EPA 9095
0.05	12-Nov-02	EPA 6010 TCLP

12M

RDL	Analyzed	Method
	12-Nov-02	CLP 3.0
120	12-Nov-02	EPA 8082
240	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
	12-Nov-02	EPA 8082
	12-Nov-02	EPA 8082

12M

RDL	Analyzed	Method
1	11-Nov-02	EPA 9095

0.05	12-Nov-02	EPA 6010 TCLP

12P

RDL	Analyzed	Method
	12-Nov-02	CLP 3.0
120	12-Nov-02	EPA 8082
240	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
120	12-Nov-02	EPA 8082
	12-Nov-02	EPA 8082
	12-Nov-02	EPA 8082

12P

RDL	Analyzed	Method
1	11-Nov-02	EPA 9095
0.05	12-Nov-02	EPA 6010 TCLP

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Project:			
Sampled:		11-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96710-1		
Analysis	Result		Units
Total Solids		80.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1100	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		98	%
Decachlorobiphenyl		124	%

K-B-SS-W-003

	RDL	Analyzed	Method
		12-Nov-02	CLP 3.0
	120	13-Nov-02	EPA 8082
	240	13-Nov-02	EPA 8082
	120	13-Nov-02	EPA 8082
	120	13-Nov-02	EPA 8082
	120	13-Nov-02	EPA 8082
	120	13-Nov-02	EPA 8082
	120	13-Nov-02	EPA 8082
		13-Nov-02	EPA 8082
*		13-Nov-02	EPA 8082

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Project:
Sampled: 13-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96787-1

Analysis	Result		Units
Total Solids		90.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		85	%
Decachlorobiphenyl		119	%

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Project:
Sampled: 13-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96787-2

Analysis	Result		Units
EPA 8082			
PCB 1016		115	%
PCB 1260		95	%
Tetrachloro-m-xylene		93	%
Decachlorobiphenyl		110	%

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Project:
Sampled: 13-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96787-3

Analysis	Result	Units
EPA 8082		

PCB 1016		105	%
PCB 1260		107	%
Tetrachloro-m-xylene		90	%
Decachlorobiphenyl		108	%

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Project:
Sampled: 13-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96787-4

Analysis	Result		Units
Total Solids		92.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		86	%
Decachlorobiphenyl		122	%

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Project:
Sampled: 13-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96787-5

Analysis	Result		Units
Total Solids		92.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		330	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		82	%
Decachlorobiphenyl		103	%

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Project:			
Sampled:		13-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96787-6		
Analysis	Result		Units
Total Solids		74.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		84	%
Decachlorobiphenyl		119	%

K-C-SS-B1-001

	RDL	Analyzed	Method
		13-Nov-02	CLP 3.0
	100	15-Nov-02	EPA 8082
	210	15-Nov-02	EPA 8082
	100	15-Nov-02	EPA 8082
	100	15-Nov-02	EPA 8082
	100	15-Nov-02	EPA 8082
	100	15-Nov-02	EPA 8082
	100	15-Nov-02	EPA 8082
		15-Nov-02	EPA 8082
		15-Nov-02	EPA 8082

L96787-1MS, K-C-SS-B1-001

	RDL	Analyzed	Method
		18-Nov-02	EPA 8082
		18-Nov-02	EPA 8082
		18-Nov-02	EPA 8082
		18-Nov-02	EPA 8082

L96787-1MSD/DUP,KCSSB1001

	RDL	Analyzed	Method

		18-Nov-02	EPA 8082
		18-Nov-02	EPA 8082
		18-Nov-02	EPA 8082
		18-Nov-02	EPA 8082

K-C-SS-B2-001

	RDL	Analyzed	Method
		13-Nov-02	CLP 3.0
	100	15-Nov-02	EPA 8082
	210	15-Nov-02	EPA 8082
	100	15-Nov-02	EPA 8082
	100	15-Nov-02	EPA 8082
	100	15-Nov-02	EPA 8082
	100	15-Nov-02	EPA 8082
	100	15-Nov-02	EPA 8082
		15-Nov-02	EPA 8082
		15-Nov-02	EPA 8082

K-C-SS-B3-001

	RDL	Analyzed	Method
		13-Nov-02	CLP 3.0
	110	15-Nov-02	EPA 8082
	210	15-Nov-02	EPA 8082
	110	15-Nov-02	EPA 8082
	110	15-Nov-02	EPA 8082
	110	15-Nov-02	EPA 8082
	110	15-Nov-02	EPA 8082
	110	15-Nov-02	EPA 8082
		15-Nov-02	EPA 8082
		15-Nov-02	EPA 8082

K-B-S-W-004

	RDL	Analyzed	Method
		13-Nov-02	CLP 3.0
	130	15-Nov-02	EPA 8082
	260	15-Nov-02	EPA 8082
	130	15-Nov-02	EPA 8082
	130	15-Nov-02	EPA 8082
	130	15-Nov-02	EPA 8082
	130	15-Nov-02	EPA 8082
	130	15-Nov-02	EPA 8082
		15-Nov-02	EPA 8082
		15-Nov-02	EPA 8082

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Project:			
Sampled:		13-Nov-02	
Source:	HORSEHEADS 19208	Origin:	
Lab ID:	L96806-1		
Analysis	Result		Units
Cyanide, Total	U		mg/kg
Total Solids		88.2	%
Aluminum		11000	mg/kg
Antimony	U		mg/kg
Arsenic		7.4	mg/kg
Barium		71.5	mg/kg
Beryllium		0.578	mg/kg
Cadmium	U		mg/kg
Calcium		836	mg/kg
Chromium		11	mg/kg
Cobalt		9.14	mg/kg
Copper		13.9	mg/kg
Iron		20800	mg/kg
Lead		12.6	mg/kg
Magnesium		2740	mg/kg
Manganese		567	mg/kg
Mercury	U		mg/kg
Nickel		21.1	mg/kg
Potassium		1060	mg/kg
Selenium	U		mg/kg
Silver	U		mg/kg
Sodium		167	mg/kg
Thallium	U		mg/kg
Vanadium		15.7	mg/kg
Zinc		53.3	mg/kg
EPA 8260			
Chloromethane	U		ug/kg
Vinyl chloride	U		ug/kg
Chloroethane	U		ug/kg
Bromomethane	U		ug/kg
1,1-Dichloroethene	U		ug/kg
Acetone	U		ug/kg
Carbon disulfide	U		ug/kg
Methylene chloride	U		ug/kg
trans-1,2-Dichloroethene	U		ug/kg
1,1-Dichloroethane	U		ug/kg
cis-1,2-Dichloroethene	U		ug/kg
MEK(2-Butanone)	U		ug/kg
Chloroform	U		ug/kg
1,1,1-Trichloroethane	U		ug/kg
Carbon tetrachloride	U		ug/kg

Benzene	U		ug/kg
1,2-Dichloroethane	U		ug/kg
Trichloroethene	U		ug/kg
1,2-Dichloropropane	U		ug/kg
Bromodichloromethane	U		ug/kg
cis-1,3-Dichloropropene	U		ug/kg
MIBK(4-Methyl-2-pentanone)	U		ug/kg
Toluene	U		ug/kg
trans-1,3-Dichloropropene	U		ug/kg
1,1,2-Trichloroethane	U		ug/kg
Tetrachloroethene	U		ug/kg
2-Hexanone	U		ug/kg
Dibromochloromethane	U		ug/kg
Chlorobenzene	U		ug/kg
Ethylbenzene	U		ug/kg
p-Xylene/m-Xylene	U		ug/kg
o-Xylene	U		ug/kg
Styrene	U		ug/kg
Bromoform	U		ug/kg
1,1,2,2-Tetrachloroethane	U		ug/kg
Dibromofluoromethane		98	%
Toluene-d8		102	%
4-Bromofluorobenzene		109	%
1,2-Dichloroethane-d4		98	%
EPA 8081			
alpha-BHC	U		ug/kg
beta-BHC	U		ug/kg
Lindane (gamma-BHC)	U		ug/kg
delta-BHC	U		ug/kg
Heptachlor	U		ug/kg
Aldrin	U		ug/kg
Heptachlor epoxide	U		ug/kg
alpha-Chlordane	U		ug/kg
Endosulfan I	U		ug/kg
gamma-Chlordane	U		ug/kg
4,4'-DDE	U		ug/kg
Dieldrin	U		ug/kg
Endrin	U		ug/kg
Endosulfan II	U		ug/kg
4,4'-DDD	U		ug/kg
Endrin ketone	U		ug/kg
Endrin aldehyde	U		ug/kg
Endosulfan sulfate	U		ug/kg
4,4'-DDT	U		ug/kg
Methoxychlor	U		ug/kg
Toxaphene	U		ug/kg
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg

PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Decachlorobiphenyl		84	%
Decachlorobiphenyl		91	%
Tetrachloro-m-xylene		79	%
Tetrachloro-m-xylene		95	%
EPA 8270			
Bis(2-chloroethylether)	U		ug/kg
Phenol	U		ug/kg
2-Chlorophenol	U		ug/kg
1,3-Dichlorobenzene	U		ug/kg
1,4-Dichlorobenzene	U		ug/kg
1,2-Dichlorobenzene	U		ug/kg
Bis(2-chloroisopropylether)	U		ug/kg
2-Methylphenol	U		ug/kg
Hexachloroethane	U		ug/kg
N-Nitrosodi-N-propylamine	U		ug/kg
3-Methylphenol/4-Methylphenol	U		ug/kg
Nitrobenzene	U		ug/kg
Isophorone	U		ug/kg
2-Nitrophenol	U		ug/kg
2,4-Dimethylphenol	U		ug/kg
Bis(2-chloroethoxymethane)	U		ug/kg
2,4-Dichlorophenol	U		ug/kg
1,2,4-Trichlorobenzene	U		ug/kg
Naphthalene	U		ug/kg
4-Chloroaniline	U		ug/kg
Hexachlorobutadiene	U		ug/kg
4-Chloro-3-methylphenol	U		ug/kg
2-Methylnaphthalene	U		ug/kg
Hexachlorocyclopentadiene	U		ug/kg
2,4,6-Trichlorophenol	U		ug/kg
2,4,5-Trichlorophenol	U		ug/kg
2-Chloronaphthalene	U		ug/kg
2-Nitroaniline	U		ug/kg
Dimethyl phthalate	U		ug/kg
Acenaphthylene	U		ug/kg
2,6-Dinitrotoluene	U		ug/kg
3-Nitroaniline	U		ug/kg
Acenaphthene	U		ug/kg
2,4-Dinitrophenol	U		ug/kg
Dibenzofuran	U		ug/kg
2,4-Dinitrotoluene	U		ug/kg
4-Nitrophenol	U		ug/kg
Diethyl phthalate	U		ug/kg
Fluorene	U		ug/kg
4-Chlorophenylphenylether	U		ug/kg
4-Nitroaniline	U		ug/kg
2-Methyl-4,6-dinitrophenol	U		ug/kg
N-Nitrosodiphenylamine	U		ug/kg
4-Bromophenylphenylether	U		ug/kg

Hexachlorobenzene	U		ug/kg
Pentachlorophenol	U		ug/kg
Phenanthrene	U		ug/kg
Anthracene	U		ug/kg
Carbazole	U		ug/kg
Di-n-butyl phthalate	U		ug/kg
Fluoranthene	U		ug/kg
Pyrene	U		ug/kg
Butylbenzyl phthalate	U		ug/kg
Benzo(a)anthracene	U		ug/kg
3,3-Dichlorobenzidine	U		ug/kg
Chrysene	U		ug/kg
Bis-2-ethylhexyl phthalate	U		ug/kg
Di-n-octyl phthalate	U		ug/kg
Benzo(b)fluoranthene	U		ug/kg
Benzo(k)fluoranthene	U		ug/kg
Benzo(a)pyrene	U		ug/kg
Indeno(1,2,3-cd)pyrene	U		ug/kg
Dibenzo(a,h)anthracene	U		ug/kg
Benzo(g,h,i)perylene	U		ug/kg
Terphenyl-d14		74	%
2-Fluorophenol		65	%
Phenol-d5		70	%
2,4,6-Tribromophenol		60	%
Nitrobenzene-d5		69	%
2-Fluorobiphenyl		72	%

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Project:			
Sampled:		13-Nov-02	
Source:	HORSEHEADS 19208	Origin:	
Lab ID:	L96806-2		
Analysis	Result		Units
Cyanide, Total		5.28	mg/kg
Aluminum		12200	mg/kg
Antimony		28.3	mg/kg
Arsenic		17	mg/kg
Barium		263	mg/kg
Beryllium		5.7	mg/kg
Cadmium		5.6	mg/kg
Calcium		1680	mg/kg
Chromium		32	mg/kg
Cobalt		60.2	mg/kg
Copper		40	mg/kg
Iron		20900	mg/kg
Lead		21.2	mg/kg
Magnesium		3830	mg/kg

Manganese		517	mg/kg
Mercury		0.24	mg/kg
Nickel		72.1	mg/kg
Potassium		1930	mg/kg
Selenium		8.67	mg/kg
Silver		5.43	mg/kg
Sodium		1170	mg/kg
Thallium		9.74	mg/kg
Vanadium		68.7	mg/kg
Zinc		106	mg/kg
EPA 8260			
Chloromethane	U		ug/kg
Vinyl chloride	U		ug/kg
Chloroethane	U		ug/kg
Bromomethane	8 B		ug/kg
1,1-Dichloroethene		68	ug/kg
Acetone	U		ug/kg
Carbon disulfide	U		ug/kg
Methylene chloride	U		ug/kg
trans-1,2-Dichloroethene	U		ug/kg
1,1-Dichloroethane	U		ug/kg
cis-1,2-Dichloroethene	U		ug/kg
MEK(2-Butanone)	U		ug/kg
Chloroform	U		ug/kg
1,1,1-Trichloroethane	U		ug/kg
Carbon tetrachloride	U		ug/kg
Benzene		66	ug/kg
1,2-Dichloroethane	U		ug/kg
Trichloroethene		69	ug/kg
1,2-Dichloropropane	U		ug/kg
Bromodichloromethane	U		ug/kg
cis-1,3-Dichloropropene	U		ug/kg
MIBK(4-Methyl-2-pentanone)	U		ug/kg
Toluene		65	ug/kg
trans-1,3-Dichloropropene	U		ug/kg
1,1,2-Trichloroethane	U		ug/kg
Tetrachloroethene	U		ug/kg
2-Hexanone	U		ug/kg
Dibromochloromethane	U		ug/kg
Chlorobenzene		65	ug/kg
Ethylbenzene	U		ug/kg
p-Xylene/m-Xylene	U		ug/kg
o-Xylene	U		ug/kg
Styrene	U		ug/kg
Bromoform	U		ug/kg
1,1,2,2-Tetrachloroethane	U		ug/kg
Dibromofluoromethane		98	%
Toluene-d8		100	%
4-Bromofluorobenzene		107	%
1,2-Dichloroethane-d4		97	%
EPA 8081			

Lindane (gamma-BHC)		84	%
Heptachlor		99	%
Aldrin		80	%
Dieldrin		101	%
Endrin		82	%
4,4'-DDT		92	%
PCB 1016		94	%
PCB 1260		88	%
Decachlorobiphenyl		85	%
Decachlorobiphenyl		86	%
Tetrachloro-m-xylene		84	%
Tetrachloro-m-xylene		94	%
EPA 8270			
Bis(2-chloroethylether)		2300	ug/kg
Phenol		4600	ug/kg
2-Chlorophenol		4700	ug/kg
1,3-Dichlorobenzene		2000	ug/kg
1,4-Dichlorobenzene		2200	ug/kg
1,2-Dichlorobenzene		2200	ug/kg
Bis(2-chloroisopropylether)		2400	ug/kg
2-Methylphenol		2400	ug/kg
Hexachloroethane		2200	ug/kg
N-Nitrosodi-N-propylamine		2400	ug/kg
3-Methylphenol/4-Methylphenol		2500	ug/kg
Nitrobenzene		2200	ug/kg
Isophorone		2000	ug/kg
2-Nitrophenol		4700	ug/kg
2,4-Dimethylphenol		3100	ug/kg
Bis(2-chloroethoxymethane)		2300	ug/kg
2,4-Dichlorophenol		4900	ug/kg
1,2,4-Trichlorobenzene		2200	ug/kg
Naphthalene		2400	ug/kg
4-Chloroaniline	540 J		ug/kg
Hexachlorobutadiene		1900	ug/kg
4-Chloro-3-methylphenol		5000	ug/kg
2-Methylnaphthalene		2200	ug/kg
Hexachlorocyclopentadiene		550	ug/kg
2,4,6-Trichlorophenol		5400	ug/kg
2,4,5-Trichlorophenol		2800	ug/kg
2-Chloronaphthalene		2500	ug/kg
2-Nitroaniline		2800	ug/kg
Dimethyl phthalate		2700	ug/kg
Acenaphthylene		2600	ug/kg
2,6-Dinitrotoluene		2700	ug/kg
3-Nitroaniline		2200	ug/kg
Acenaphthene		2700	ug/kg
2,4-Dinitrophenol		3400	ug/kg
Dibenzofuran		2500	ug/kg
2,4-Dinitrotoluene		2700	ug/kg
4-Nitrophenol		4400	ug/kg
Diethyl phthalate		2600	ug/kg

Fluorene		2600	ug/kg
4-Chlorophenylphenylether		2600	ug/kg
4-Nitroaniline		2400	ug/kg
2-Methyl-4,6-dinitrophenol		4000	ug/kg
N-Nitrosodiphenylamine		2600	ug/kg
4-Bromophenylphenylether		2500	ug/kg
Hexachlorobenzene		2400	ug/kg
Pentachlorophenol		4400	ug/kg
Phenanthrene		2500	ug/kg
Anthracene		2500	ug/kg
Carbazole	U		ug/kg
Di-n-butyl phthalate		2500	ug/kg
Fluoranthene		2600	ug/kg
Pyrene		2900	ug/kg
Butylbenzyl phthalate		2700	ug/kg
Benzo(a)anthracene		2600	ug/kg
3,3-Dichlorobenzidine		1200	ug/kg
Chrysene		2700	ug/kg
Bis-2-ethylhexyl phthalate		2700	ug/kg
Di-n-octyl phthalate		2300	ug/kg
Benzo(b)fluoranthene		2100	ug/kg
Benzo(k)fluoranthene		2100	ug/kg
Benzo(a)pyrene		2000	ug/kg
Indeno(1,2,3-cd)pyrene		2200	ug/kg
Dibenzo(a,h)anthracene		2300	ug/kg
Benzo(g,h,i)perylene		2300	ug/kg
Terphenyl-d14		97	%
Terphenyl-d14		100	%
2-Fluorophenol		76	%
Phenol-d5		83	%
2,4,6-Tribromophenol		96	%
Nitrobenzene-d5		76	%
Nitrobenzene-d5		78	%
2-Fluorobiphenyl		82	%
2-Fluorobiphenyl		88	%

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:			
Sampled:		13-Nov-02	
Source:	HORSEHEADS 19208	Origin:	
Lab ID:	L96806-3		
Analysis	Result		Units
Cyanide, Total	U		mg/kg
Aluminum		11200	mg/kg
Antimony	U		mg/kg
Arsenic		8.08	mg/kg
Barium		50.3	mg/kg

Beryllium		0.516	mg/kg
Cadmium	U		mg/kg
Calcium		678	mg/kg
Chromium		10.1	mg/kg
Cobalt		8.62	mg/kg
Copper		14.4	mg/kg
Iron		21100	mg/kg
Lead		11.9	mg/kg
Magnesium		2740	mg/kg
Manganese		455	mg/kg
Mercury	U		mg/kg
Nickel		20.4	mg/kg
Potassium		1110	mg/kg
Selenium	U		mg/kg
Silver	U		mg/kg
Sodium		127	mg/kg
Thallium	U		mg/kg
Vanadium		15.4	mg/kg
Zinc		50.5	mg/kg
EPA 8260			
Chloromethane	U		ug/kg
Vinyl chloride	U		ug/kg
Chloroethane	U		ug/kg
Bromomethane		34	ug/kg
1,1-Dichloroethene	24 *		ug/kg
Acetone	U		ug/kg
Carbon disulfide	U		ug/kg
Methylene chloride		7	ug/kg
trans-1,2-Dichloroethene	U		ug/kg
1,1-Dichloroethane	U		ug/kg
cis-1,2-Dichloroethene	U		ug/kg
MEK(2-Butanone)	U		ug/kg
Chloroform	U		ug/kg
1,1,1-Trichloroethane	U		ug/kg
Carbon tetrachloride	U		ug/kg
Benzene	34 *		ug/kg
1,2-Dichloroethane	U		ug/kg
Trichloroethene	29 *		ug/kg
1,2-Dichloropropane	U		ug/kg
Bromodichloromethane	U		ug/kg
cis-1,3-Dichloropropene	U		ug/kg
MIBK(4-Methyl-2-pentanone)	U		ug/kg
Toluene	31 *		ug/kg
trans-1,3-Dichloropropene	U		ug/kg
1,1,2-Trichloroethane	U		ug/kg
Tetrachloroethene	U		ug/kg
2-Hexanone	U		ug/kg
Dibromochloromethane	U		ug/kg
Chlorobenzene	33 *		ug/kg
Ethylbenzene	U		ug/kg
p-Xylene/m-Xylene	U		ug/kg
o-Xylene	U		ug/kg

Styrene	U		ug/kg
Bromoform	U		ug/kg
1,1,2,2-Tetrachloroethane	U		ug/kg
Dibromofluoromethane		111	%
Toluene-d8		99	%
4-Bromofluorobenzene		164	%
1,2-Dichloroethane-d4		111	%
EPA 8081			
Lindane (gamma-BHC)		90	%
Heptachlor		105	%
Aldrin		85	%
Dieldrin		106	%
Endrin		86	%
4,4'-DDT		98	%
PCB 1016		98	%
PCB 1260		92	%
Decachlorobiphenyl		91	%
Decachlorobiphenyl		92	%
Tetrachloro-m-xylene		87	%
Tetrachloro-m-xylene		97	%
EPA 8270			
Bis(2-chloroethylether)		1500	ug/kg
Phenol		3200	ug/kg
2-Chlorophenol		3400	ug/kg
1,3-Dichlorobenzene		1600	ug/kg
1,4-Dichlorobenzene		1700	ug/kg
1,2-Dichlorobenzene		1700	ug/kg
Bis(2-chloroisopropylether)		1800	ug/kg
2-Methylphenol		1800	ug/kg
Hexachloroethane		1700	ug/kg
N-Nitrosodi-N-propylamine		1900	ug/kg
3-Methylphenol/4-Methylphenol		1900	ug/kg
Nitrobenzene		1800	ug/kg
Isophorone		1600	ug/kg
2-Nitrophenol		3900	ug/kg
2,4-Dimethylphenol		2800	ug/kg
Bis(2-chloroethoxymethane)		1700	ug/kg
2,4-Dichlorophenol		3700	ug/kg
1,2,4-Trichlorobenzene		1800	ug/kg
Naphthalene		1800	ug/kg
4-Chloroaniline		1000	ug/kg
Hexachlorobutadiene		1600	ug/kg
4-Chloro-3-methylphenol		3800	ug/kg
2-Methylnaphthalene		1700	ug/kg
Hexachlorocyclopentadiene		1100	ug/kg
2,4,6-Trichlorophenol		3800	ug/kg
2,4,5-Trichlorophenol		2000	ug/kg
2-Chloronaphthalene		1800	ug/kg
2-Nitroaniline		1900	ug/kg
Dimethyl phthalate		1900	ug/kg

Acenaphthylene		1800	ug/kg
2,6-Dinitrotoluene		1900	ug/kg
3-Nitroaniline		1500	ug/kg
Acenaphthene		1800	ug/kg
2,4-Dinitrophenol		2600	ug/kg
Dibenzofuran		1700	ug/kg
2,4-Dinitrotoluene		1900	ug/kg
4-Nitrophenol		3100	ug/kg
Diethyl phthalate		1800	ug/kg
Fluorene		1900	ug/kg
4-Chlorophenylphenylether		1900	ug/kg
4-Nitroaniline		1700	ug/kg
2-Methyl-4,6-dinitrophenol		3500	ug/kg
N-Nitrosodiphenylamine		2000	ug/kg
4-Bromophenylphenylether		2000	ug/kg
Hexachlorobenzene		1900	ug/kg
Pentachlorophenol		3600	ug/kg
Phenanthrene		1900	ug/kg
Anthracene		1800	ug/kg
Carbazole	U		ug/kg
Di-n-butyl phthalate		1800	ug/kg
Fluoranthene		1800	ug/kg
Pyrene		1800	ug/kg
Butylbenzyl phthalate		1900	ug/kg
Benzo(a)anthracene		1800	ug/kg
3,3-Dichlorobenzidine		1300	ug/kg
Chrysene		1800	ug/kg
Bis-2-ethylhexyl phthalate		1900	ug/kg
Di-n-octyl phthalate		1900	ug/kg
Benzo(b)fluoranthene		1800	ug/kg
Benzo(k)fluoranthene		1800	ug/kg
Benzo(a)pyrene		1800	ug/kg
Indeno(1,2,3-cd)pyrene		1800	ug/kg
Dibenzo(a,h)anthracene		1800	ug/kg
Benzo(g,h,i)perylene		1800	ug/kg
Terphenyl-d14		61	%
2-Fluorophenol		61	%
Phenol-d5		62	%
2,4,6-Tribromophenol		69	%
Nitrobenzene-d5		63	%
2-Fluorobiphenyl		60	%

PORTERS/BF/VEG.FILL #2

RDL	Analyzed	Method
0.239	25-Nov-02	EPA 335.3
	14-Nov-02	CLP 3.0
8.37	15-Nov-02	EPA 6010
5.58	15-Nov-02	EPA 6010
0.484	19-Nov-02	EPA 6020
1.79	15-Nov-02	EPA 6010
0.223	15-Nov-02	EPA 6010
0.558	15-Nov-02	EPA 6010
55.8	15-Nov-02	EPA 6010
1.12	15-Nov-02	EPA 6010
1.12	15-Nov-02	EPA 6010
1.9	15-Nov-02	EPA 6010
4.46	15-Nov-02	EPA 6010
1.45	19-Nov-02	EPA 6020
55.8	15-Nov-02	EPA 6010
0.558	15-Nov-02	EPA 6010
0.047	19-Nov-02	EPA 7470
1.34	15-Nov-02	EPA 6010
55.8	15-Nov-02	EPA 6010
0.484	19-Nov-02	EPA 6020
1.12	15-Nov-02	EPA 6010
22.3	15-Nov-02	EPA 6010
2.43	19-Nov-02	EPA 6020
1.12	15-Nov-02	EPA 6010
2.23	15-Nov-02	EPA 6010
5	21-Nov-02	EPA 8260
2	21-Nov-02	EPA 8260
5	21-Nov-02	EPA 8260
5	21-Nov-02	EPA 8260
5	21-Nov-02	EPA 8260
24	21-Nov-02	EPA 8260
5	21-Nov-02	EPA 8260
5	21-Nov-02	EPA 8260
5	21-Nov-02	EPA 8260
5	21-Nov-02	EPA 8260
5	21-Nov-02	EPA 8260
24	21-Nov-02	EPA 8260
5	21-Nov-02	EPA 8260
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5	21-Nov-02	EPA 8260

0.7	21-Nov-02	EPA 8260
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560	22-Nov-02	EPA 8270
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	22-Nov-02	EPA 8270
	22-Nov-02	EPA 8270
	22-Nov-02	EPA 8270
	22-Nov-02	EPA 8270

L96806-1MS,PORTERS/BF/VEG

RDL	Analyzed	Method
0.269	25-Nov-02	EPA 335.3
8.33	15-Nov-02	EPA 6010
5.56	15-Nov-02	EPA 6010
0.484	19-Nov-02	EPA 6020
1.78	15-Nov-02	EPA 6010
0.222	15-Nov-02	EPA 6010
0.556	15-Nov-02	EPA 6010
55.6	15-Nov-02	EPA 6010
1.11	15-Nov-02	EPA 6010
1.11	15-Nov-02	EPA 6010
1.89	15-Nov-02	EPA 6010
4.44	15-Nov-02	EPA 6010
1.45	21-Nov-02	EPA 6020
55.6	15-Nov-02	EPA 6010

0.556	15-Nov-02	EPA 6010
0.047	19-Nov-02	EPA 7470
1.34	15-Nov-02	EPA 6010
55.6	15-Nov-02	EPA 6010
0.484	19-Nov-02	EPA 6020
1.11	15-Nov-02	EPA 6010
22.2	15-Nov-02	EPA 6010
2.43	21-Nov-02	EPA 6020
1.11	15-Nov-02	EPA 6010
2.22	15-Nov-02	EPA 6010
7	21-Nov-02	EPA 8260
3	21-Nov-02	EPA 8260
7	21-Nov-02	EPA 8260
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33	21-Nov-02	EPA 8260
7	21-Nov-02	EPA 8260
7	21-Nov-02	EPA 8260
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33	21-Nov-02	EPA 8260
7	21-Nov-02	EPA 8260
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0.9	21-Nov-02	EPA 8260
7	21-Nov-02	EPA 8260
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	9-Dec-02	EPA 8270

L96806-1MSD/DUP,BF/VEG.

RDL	Analyzed	Method
0.273	25-Nov-02	EPA 335.3
8.42	15-Nov-02	EPA 6010
5.61	15-Nov-02	EPA 6010
0.484	19-Nov-02	EPA 6020
1.79	15-Nov-02	EPA 6010

0.224	15-Nov-02	EPA 6010
0.561	15-Nov-02	EPA 6010
56.1	15-Nov-02	EPA 6010
1.12	15-Nov-02	EPA 6010
1.12	15-Nov-02	EPA 6010
1.9	15-Nov-02	EPA 6010
4.49	15-Nov-02	EPA 6010
1.45	21-Nov-02	EPA 6020
56.1	15-Nov-02	EPA 6010
0.561	15-Nov-02	EPA 6010
0.046	19-Nov-02	EPA 7470
1.35	15-Nov-02	EPA 6010
56.1	15-Nov-02	EPA 6010
0.484	19-Nov-02	EPA 6020
1.12	15-Nov-02	EPA 6010
22.4	15-Nov-02	EPA 6010
2.41	21-Nov-02	EPA 6020
1.12	15-Nov-02	EPA 6010
2.24	15-Nov-02	EPA 6010
6	27-Nov-02	EPA 8260
2	27-Nov-02	EPA 8260
6	27-Nov-02	EPA 8260
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6	27-Nov-02	EPA 8260
6	27-Nov-02	EPA 8260
6	27-Nov-02	EPA 8260
6	27-Nov-02	EPA 8260
29	27-Nov-02	EPA 8260
6	27-Nov-02	EPA 8260
6	27-Nov-02	EPA 8260
6	27-Nov-02	EPA 8260
0.8	27-Nov-02	EPA 8260
6	27-Nov-02	EPA 8260
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6	27-Nov-02	EPA 8260
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		26-Nov-02	EPA 8081
		26-Nov-02	EPA 8081
		26-Nov-02	EPA 8081
		26-Nov-02	EPA 8081
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	550	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	550	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270
	1100	23-Nov-02	EPA 8270
	280	23-Nov-02	EPA 8270

280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
1100	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
1100	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
1100	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
1100	23-Nov-02	EPA 8270
1100	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
1100	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
550	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
280	23-Nov-02	EPA 8270
	23-Nov-02	EPA 8270
	23-Nov-02	EPA 8270
	23-Nov-02	EPA 8270
	23-Nov-02	EPA 8270
	23-Nov-02	EPA 8270
	23-Nov-02	EPA 8270

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Project:
Sampled: 14-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96835-1

Analysis	Result	Units
Cadmium	U	mg/l

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Project:
Sampled: 14-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96835-2

Analysis	Result	Units
Cadmium	U	mg/l

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Project:
Sampled: 14-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96835-3

Analysis	Result	Units
Cadmium	U	mg/l

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Project:
Sampled: 14-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96835-4

Analysis	Result	Units
Cadmium	0.709	mg/l

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Project:			
Sampled:		14-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96835-5		
Analysis	Result		Units
Total Solids		82.1	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		580	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		75	%
Decachlorobiphenyl		90	%

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Project:			
Sampled:		14-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96835-6		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		0.238	mg/l

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Project:			
Sampled:		14-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L96835-7		
Analysis	Result		Units
Total Solids		78.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		360	ug/kg
PCB 1260	U		ug/kg

Tetrachloro-m-xylene		90	%
Decachlorobiphenyl		99	%

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Project:
Sampled: 14-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96835-8

Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium	U		mg/l

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Project:
Sampled: 14-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96835-9

Analysis	Result		Units
Total Solids		77.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		630	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		76	%
Decachlorobiphenyl		99	%

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Project:
Sampled: 14-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L96835-10

Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		0.135	mg/l

1.10E+02

RDL	Analyzed	Method
0.05	15-Nov-02	EPA 6010 TCLP

11C1

RDL	Analyzed	Method
0.05	15-Nov-02	EPA 6010 TCLP

11M1

RDL	Analyzed	Method
0.05	15-Nov-02	EPA 6010 TCLP

10SN1

RDL	Analyzed	Method
0.05	15-Nov-02	EPA 6010 TCLP

14P

RDL	Analyzed	Method
	14-Nov-02	CLP 3.0
120	15-Nov-02	EPA 8082
240	15-Nov-02	EPA 8082
120	15-Nov-02	EPA 8082
120	15-Nov-02	EPA 8082
120	15-Nov-02	EPA 8082
120	15-Nov-02	EPA 8082
120	15-Nov-02	EPA 8082
	15-Nov-02	EPA 8082
	15-Nov-02	EPA 8082

14P

RDL	Analyzed	Method
1	14-Nov-02	EPA 9095
0.05	15-Nov-02	EPA 6010 TCLP

14E

RDL	Analyzed	Method
	14-Nov-02	CLP 3.0
120	15-Nov-02	EPA 8082
240	15-Nov-02	EPA 8082
120	15-Nov-02	EPA 8082
120	15-Nov-02	EPA 8082
120	15-Nov-02	EPA 8082
120	15-Nov-02	EPA 8082
120	15-Nov-02	EPA 8082

15-Nov-02	EPA 8082	
15-Nov-02	EPA 8082	

14E

RDL	Analyzed	Method
1	14-Nov-02	EPA 9095
0.05	15-Nov-02	EPA 6010 TCLP

14C

RDL	Analyzed	Method
	14-Nov-02	CLP 3.0
130	15-Nov-02	EPA 8082
250	15-Nov-02	EPA 8082
130	15-Nov-02	EPA 8082
130	15-Nov-02	EPA 8082
130	15-Nov-02	EPA 8082
130	15-Nov-02	EPA 8082
130	15-Nov-02	EPA 8082
	15-Nov-02	EPA 8082
	15-Nov-02	EPA 8082

14C

RDL	Analyzed	Method
1	14-Nov-02	EPA 9095
0.05	15-Nov-02	EPA 6010 TCLP

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Project:			
Sampled:		16-Nov-02	
Source:	VIACOM/HORSHEADS 19208	Origin:	
Lab ID:	L96984-1		
Analysis	Result		Units
Total Solids		90.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		74	%
Decachlorobiphenyl		96	%

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Project:			
Sampled:		16-Nov-02	
Source:	VIACOM/HORSHEADS 19208	Origin:	
Lab ID:	L96984-2		
Analysis	Result		Units
Total Solids		91.1	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		85	%
Decachlorobiphenyl		124	%

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Project:			
Sampled:		16-Nov-02	
Source:	VIACOM/HORSHEADS 19208	Origin:	
Lab ID:	L96984-3		
Analysis	Result		Units
Total Solids		90.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		83	%
Decachlorobiphenyl		101	%

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Project:			
Sampled:		16-Nov-02	
Source:	VIACOM/HORSHEADS 19208	Origin:	
Lab ID:	L96984-4		
Analysis	Result		Units
EPA 8082			
PCB 1016		126	%
PCB 1260		129	%
Tetrachloro-m-xylene		140	%
Decachlorobiphenyl		149	%

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Project:			
Sampled:		16-Nov-02	
Source:	VIACOM/HORSHEADS 19208	Origin:	
Lab ID:	L96984-5		
Analysis	Result		Units
EPA 8082			
PCB 1016		130	%
PCB 1260		112	%
Tetrachloro-m-xylene		124	%
Decachlorobiphenyl		136	%

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Project:
Sampled: 16-Nov-02
Source: VIACOM/HORSHEADS 19208 Origin:
Lab ID: L96984-6

Analysis	Result		Units
Total Solids		82.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		89	%
Decachlorobiphenyl		113	%

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Project:
Sampled: 16-Nov-02
Source: VIACOM/HORSHEADS 19208 Origin:
Lab ID: L96984-7

Analysis	Result		Units
Total Solids		85.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		190	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		85	%
Decachlorobiphenyl		114	%

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Project:

Sampled:		16-Nov-02	
Source:	VIACOM/HORSHEADS 19208	Origin:	
Lab ID:	L96984-8		
Analysis	Result		Units
Total Solids		67.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		390	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		86	%
Decachlorobiphenyl		101	%

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Project:

Sampled:		16-Nov-02	
Source:	VIACOM/HORSHEADS 19208	Origin:	
Lab ID:	L96984-9		
Analysis	Result		Units
Total Solids		37.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		90	%
Decachlorobiphenyl		108	%

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Project:

Sampled:		16-Nov-02	
Source:	VIACOM/HORSHEADS 19208	Origin:	
Lab ID:	L96984-10		
Analysis	Result		Units
Total Solids		73	%

EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		470	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		103	%
Decachlorobiphenyl		115	%

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Project:			
Sampled:		16-Nov-02	
Source:	VIACOM/HORSHEADS 19208	Origin:	
Lab ID:	L96984-11		
Analysis	Result		Units
Total Solids		99.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		86	%
Decachlorobiphenyl		116	%

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Project:			
Sampled:		16-Nov-02	
Source:	VIACOM/HORSHEADS 19208	Origin:	
Lab ID:	L96984-12		
Analysis	Result		Units
Total Solids		73.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg

PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		91	%
Decachlorobiphenyl		100	%

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Project:			
Sampled:		16-Nov-02	
Source:	VIACOM/HORSHEADS 19208	Origin:	
Lab ID:	L96984-13		
Analysis	Result		Units
Total Solids		72.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		270	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		91	%
Decachlorobiphenyl		106	%

M-C-SS-B1-001

	RDL	Analyzed	Method
		18-Nov-02	CLP 3.0
	110	20-Nov-02	EPA 8082
	220	20-Nov-02	EPA 8082
	110	20-Nov-02	EPA 8082
	110	20-Nov-02	EPA 8082
	110	20-Nov-02	EPA 8082
	110	20-Nov-02	EPA 8082
	110	20-Nov-02	EPA 8082
		20-Nov-02	EPA 8082
		20-Nov-02	EPA 8082

DUP

	RDL	Analyzed	Method
		18-Nov-02	CLP 3.0
	110	20-Nov-02	EPA 8082
	210	20-Nov-02	EPA 8082
	110	20-Nov-02	EPA 8082
	110	20-Nov-02	EPA 8082
	110	20-Nov-02	EPA 8082
	110	20-Nov-02	EPA 8082
	110	20-Nov-02	EPA 8082
		20-Nov-02	EPA 8082
		20-Nov-02	EPA 8082

M-C-SS-B2-001

	RDL	Analyzed	Method
		18-Nov-02	CLP 3.0
	100	20-Nov-02	EPA 8082
	210	20-Nov-02	EPA 8082
	100	20-Nov-02	EPA 8082
	100	20-Nov-02	EPA 8082
	100	20-Nov-02	EPA 8082
	100	20-Nov-02	EPA 8082
	100	20-Nov-02	EPA 8082
		20-Nov-02	EPA 8082
		20-Nov-02	EPA 8082

L96984-3MS,M-C-SS-B2-001

	RDL	Analyzed	Method
		26-Nov-02	EPA 8082
		26-Nov-02	EPA 8082
		26-Nov-02	EPA 8082
		26-Nov-02	EPA 8082

L96984-3MSD/DUP,MCSSB2001

	RDL	Analyzed	Method
		26-Nov-02	EPA 8082
		26-Nov-02	EPA 8082
		26-Nov-02	EPA 8082
		26-Nov-02	EPA 8082

M-C-SS-E-001

	RDL	Analyzed	Method
		18-Nov-02	CLP 3.0
	120	20-Nov-02	EPA 8082
	240	20-Nov-02	EPA 8082
	120	20-Nov-02	EPA 8082
	120	20-Nov-02	EPA 8082
	120	20-Nov-02	EPA 8082
	120	20-Nov-02	EPA 8082
	120	20-Nov-02	EPA 8082
		20-Nov-02	EPA 8082
		20-Nov-02	EPA 8082

M-B-S-E-001

	RDL	Analyzed	Method
		18-Nov-02	CLP 3.0
	110	20-Nov-02	EPA 8082
	230	20-Nov-02	EPA 8082
	110	20-Nov-02	EPA 8082
	110	20-Nov-02	EPA 8082
	110	20-Nov-02	EPA 8082
	110	20-Nov-02	EPA 8082
	110	20-Nov-02	EPA 8082
		20-Nov-02	EPA 8082
		20-Nov-02	EPA 8082

M-B-SS-W-001

	RDL	Analyzed	Method
		18-Nov-02	CLP 3.0
	140	20-Nov-02	EPA 8082
	280	20-Nov-02	EPA 8082
	140	20-Nov-02	EPA 8082
	140	20-Nov-02	EPA 8082
	140	20-Nov-02	EPA 8082
	140	20-Nov-02	EPA 8082
	140	20-Nov-02	EPA 8082
		20-Nov-02	EPA 8082
		20-Nov-02	EPA 8082

M-B-S-W-001

	RDL	Analyzed	Method
		18-Nov-02	CLP 3.0
	250	20-Nov-02	EPA 8082
	500	20-Nov-02	EPA 8082
	250	20-Nov-02	EPA 8082
	250	20-Nov-02	EPA 8082
	250	20-Nov-02	EPA 8082
	250	20-Nov-02	EPA 8082
	250	20-Nov-02	EPA 8082
		20-Nov-02	EPA 8082
		20-Nov-02	EPA 8082

L-C-SS-B1-001

	RDL	Analyzed	Method
		18-Nov-02	CLP 3.0

130	20-Nov-02	EPA 8082
260	20-Nov-02	EPA 8082
130	20-Nov-02	EPA 8082
130	20-Nov-02	EPA 8082
130	20-Nov-02	EPA 8082
130	20-Nov-02	EPA 8082
130	20-Nov-02	EPA 8082
	20-Nov-02	EPA 8082
	20-Nov-02	EPA 8082

L-C-SS-B2-001

RDL	Analyzed	Method
	18-Nov-02	CLP 3.0
92	20-Nov-02	EPA 8082
180	20-Nov-02	EPA 8082
92	20-Nov-02	EPA 8082
92	20-Nov-02	EPA 8082
92	20-Nov-02	EPA 8082
92	20-Nov-02	EPA 8082
92	20-Nov-02	EPA 8082
	20-Nov-02	EPA 8082
	20-Nov-02	EPA 8082

L-C-SS-B3-001

RDL	Analyzed	Method
	18-Nov-02	CLP 3.0
130	20-Nov-02	EPA 8082
270	20-Nov-02	EPA 8082
130	20-Nov-02	EPA 8082
130	20-Nov-02	EPA 8082
130	20-Nov-02	EPA 8082

130	20-Nov-02	EPA 8082
130	20-Nov-02	EPA 8082
	20-Nov-02	EPA 8082
	20-Nov-02	EPA 8082

K-B-S-E-002

RDL	Analyzed	Method
	18-Nov-02	CLP 3.0
130	20-Nov-02	EPA 8082
270	20-Nov-02	EPA 8082
130	20-Nov-02	EPA 8082
130	20-Nov-02	EPA 8082
130	20-Nov-02	EPA 8082
130	20-Nov-02	EPA 8082
130	20-Nov-02	EPA 8082
	20-Nov-02	EPA 8082
	20-Nov-02	EPA 8082

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Project:				
Sampled:		19-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97039-1			
Analysis	Result			Units
Cadmium		1.06		mg/l

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Project:				
Sampled:		19-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97039-2			
Analysis	Result			Units
Cadmium		1.99		mg/l

CELL #1 TSCA MATERIAL

	RDL	Analyzed	Method
	0.05	20-Nov-02	EPA 6010 TCLP

L97039-1MS, CELL #1

	RDL	Analyzed	Method
	0.05	20-Nov-02	EPA 6010 TCLP

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Project:
Sampled: 20-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97127-1

Analysis	Result		Units
Total Solids		76.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		105	%
Decachlorobiphenyl		115	%

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Project:
Sampled: 20-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97127-2

Analysis	Result		Units
Total Solids		78.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		102	%
Decachlorobiphenyl		100	%

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Project:				
Sampled:		20-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97127-3			
Analysis	Result			Units
Total Solids		90.5		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		91		%
Decachlorobiphenyl		87		%

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Project:				
Sampled:		20-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97127-4			
Analysis	Result			Units
Total Solids		88.1		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		480		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		121		%
Decachlorobiphenyl		149		%

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Project:				
Sampled:		20-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97127-5			
Analysis	Result			Units

Total Solids		88.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		95	%
Decachlorobiphenyl		114	%

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Project:
Sampled: 20-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97127-6

Analysis	Result		Units
Total Solids		76.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		104	%
Decachlorobiphenyl		120	%

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Project:
Sampled: 20-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97127-7

Analysis	Result		Units
Total Solids		85.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg

PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		110	%
Decachlorobiphenyl		120	%

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Project:
Sampled: 20-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97127-8

Analysis	Result		Units
Total Solids		94.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		107	%
Decachlorobiphenyl		114	%

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Project:
Sampled: 20-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97127-9

Analysis	Result		Units
EPA 8082			
PCB 1016		84	%
PCB 1260		91	%
Tetrachloro-m-xylene		107	%
Decachlorobiphenyl		126	%

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Project:

Sampled:		20-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97127-10		
Analysis	Result		Units
EPA 8082			
PCB 1016		78	%
PCB 1260		88	%
Tetrachloro-m-xylene		108	%
Decachlorobiphenyl		114	%

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Project:			
Sampled:		20-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97127-11		
Analysis	Result		Units
Total Solids		89.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		115	%
Decachlorobiphenyl		117	%

N-B-S-W-001

	RDL	Analyzed	Method
		21-Nov-02	CLP 3.0
	120	23-Nov-02	EPA 8082
	250	23-Nov-02	EPA 8082
	120	23-Nov-02	EPA 8082
	120	23-Nov-02	EPA 8082
	120	23-Nov-02	EPA 8082
	120	23-Nov-02	EPA 8082
	120	23-Nov-02	EPA 8082
		23-Nov-02	EPA 8082
		23-Nov-02	EPA 8082

N-B-SS-W-001

	RDL	Analyzed	Method
		21-Nov-02	CLP 3.0
	120	23-Nov-02	EPA 8082
	240	23-Nov-02	EPA 8082
	120	23-Nov-02	EPA 8082
	120	23-Nov-02	EPA 8082
	120	23-Nov-02	EPA 8082
	120	23-Nov-02	EPA 8082
	120	23-Nov-02	EPA 8082
		23-Nov-02	EPA 8082
		23-Nov-02	EPA 8082

N-C-SS-B1-001

	RDL	Analyzed	Method
		21-Nov-02	CLP 3.0
	110	23-Nov-02	EPA 8082
	210	23-Nov-02	EPA 8082
	110	23-Nov-02	EPA 8082
	110	23-Nov-02	EPA 8082
	110	23-Nov-02	EPA 8082
	110	23-Nov-02	EPA 8082
	110	23-Nov-02	EPA 8082
		23-Nov-02	EPA 8082
		23-Nov-02	EPA 8082

N-C-SS-B2-001

	RDL	Analyzed	Method
		21-Nov-02	CLP 3.0
	110	26-Nov-02	EPA 8082
	220	26-Nov-02	EPA 8082
	110	26-Nov-02	EPA 8082
	110	26-Nov-02	EPA 8082
	110	26-Nov-02	EPA 8082
	110	26-Nov-02	EPA 8082
	110	26-Nov-02	EPA 8082
		26-Nov-02	EPA 8082
		26-Nov-02	EPA 8082

N-C-SS-B3-001

	RDL	Analyzed	Method

	21-Nov-02	CLP 3.0
110	23-Nov-02	EPA 8082
220	23-Nov-02	EPA 8082
110	23-Nov-02	EPA 8082
110	23-Nov-02	EPA 8082
110	23-Nov-02	EPA 8082
110	23-Nov-02	EPA 8082
110	23-Nov-02	EPA 8082
	23-Nov-02	EPA 8082
	23-Nov-02	EPA 8082

L-B-S-W-002

RDL	Analyzed	Method
	21-Nov-02	CLP 3.0
130	23-Nov-02	EPA 8082
260	23-Nov-02	EPA 8082
130	23-Nov-02	EPA 8082
130	23-Nov-02	EPA 8082
130	23-Nov-02	EPA 8082
130	23-Nov-02	EPA 8082
130	23-Nov-02	EPA 8082
	23-Nov-02	EPA 8082
	23-Nov-02	EPA 8082

L-B-SS-E-002

RDL	Analyzed	Method
	21-Nov-02	CLP 3.0
120	23-Nov-02	EPA 8082
230	23-Nov-02	EPA 8082
120	23-Nov-02	EPA 8082
120	23-Nov-02	EPA 8082

120	23-Nov-02	EPA 8082
120	23-Nov-02	EPA 8082
120	23-Nov-02	EPA 8082
	23-Nov-02	EPA 8082
	23-Nov-02	EPA 8082

K-B-SS-W-005

RDL	Analyzed	Method
	21-Nov-02	CLP 3.0
100	23-Nov-02	EPA 8082
200	23-Nov-02	EPA 8082
100	23-Nov-02	EPA 8082
100	23-Nov-02	EPA 8082
100	23-Nov-02	EPA 8082
100	23-Nov-02	EPA 8082
100	23-Nov-02	EPA 8082
	23-Nov-02	EPA 8082
	23-Nov-02	EPA 8082

L97127-8MS, K-B-SS-W-005

RDL	Analyzed	Method
	23-Nov-02	EPA 8082
	23-Nov-02	EPA 8082
	23-Nov-02	EPA 8082
	23-Nov-02	EPA 8082

L97127-8MSD/DUP,KBSSW005

	RDL	Analyzed	Method
		23-Nov-02	EPA 8082
		23-Nov-02	EPA 8082
		23-Nov-02	EPA 8082
		23-Nov-02	EPA 8082

K-B-SS-E-003

	RDL	Analyzed	Method
		21-Nov-02	CLP 3.0
	100	23-Nov-02	EPA 8082
	200	23-Nov-02	EPA 8082
	100	23-Nov-02	EPA 8082
	100	23-Nov-02	EPA 8082
	100	23-Nov-02	EPA 8082
	100	23-Nov-02	EPA 8082
	100	23-Nov-02	EPA 8082
		23-Nov-02	EPA 8082
		23-Nov-02	EPA 8082

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Project:			
Sampled:		21-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97224-1		
Analysis	Result		Units
Total Solids		82.1	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		132	%
Decachlorobiphenyl		164	%

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Project:			
Sampled:		21-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97224-2		
Analysis	Result		Units
Total Solids		76.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		128	%
Decachlorobiphenyl		165	%

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Project:			
Sampled:		21-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97224-3		
Analysis	Result		Units
Total Solids		66.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		127	%
Decachlorobiphenyl		160	%

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Project:			
Sampled:		21-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97224-4		
Analysis	Result		Units
Total Solids		71.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		127	%
Decachlorobiphenyl		161	%

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Project:			
Sampled:		21-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97224-5		
Analysis	Result		Units

Total Solids		77.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		132	%
Decachlorobiphenyl		164	%

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Project:
Sampled: 21-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97224-6

Analysis	Result		Units
Total Solids		77.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		122	%
Decachlorobiphenyl		150	%

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Project:
Sampled: 21-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97224-7

Analysis	Result		Units
Total Solids		77.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg

PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		102	%
Decachlorobiphenyl		115	%

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Project:
Sampled: 21-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97224-8

Analysis	Result		Units
Total Solids		76.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		109	%
Decachlorobiphenyl		117	%

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Project:
Sampled: 21-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97224-9

Analysis	Result		Units
Total Solids		87.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		115	%
Decachlorobiphenyl		131	%

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Project:			
Sampled:		21-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97224-10		
Analysis	Result		Units
Total Solids		87.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		106	%
Decachlorobiphenyl		114	%

P-B-SS-W-001

	RDL	Analyzed	Method
		27-Nov-02	CLP 3.0
	120	26-Nov-02	EPA 8082
	240	26-Nov-02	EPA 8082
	120	26-Nov-02	EPA 8082
	120	26-Nov-02	EPA 8082
	120	26-Nov-02	EPA 8082
	120	26-Nov-02	EPA 8082
	120	26-Nov-02	EPA 8082
		26-Nov-02	EPA 8082
D		26-Nov-02	EPA 8082

P-B-S-E-001

	RDL	Analyzed	Method
		27-Nov-02	CLP 3.0
	130	26-Nov-02	EPA 8082
	250	26-Nov-02	EPA 8082
	130	26-Nov-02	EPA 8082
	130	26-Nov-02	EPA 8082
	130	26-Nov-02	EPA 8082
	130	26-Nov-02	EPA 8082
	130	26-Nov-02	EPA 8082
		26-Nov-02	EPA 8082
D		26-Nov-02	EPA 8082

P-C-SS-B-001

	RDL	Analyzed	Method
		27-Nov-02	CLP 3.0
	140	26-Nov-02	EPA 8082
	290	26-Nov-02	EPA 8082
	140	26-Nov-02	EPA 8082
	140	26-Nov-02	EPA 8082
	140	26-Nov-02	EPA 8082
	140	26-Nov-02	EPA 8082
	140	26-Nov-02	EPA 8082
		26-Nov-02	EPA 8082
D		26-Nov-02	EPA 8082

P-B-S1-W-001

	RDL	Analyzed	Method
		27-Nov-02	CLP 3.0
	140	26-Nov-02	EPA 8082
	270	26-Nov-02	EPA 8082
	140	26-Nov-02	EPA 8082
	140	26-Nov-02	EPA 8082
	140	26-Nov-02	EPA 8082
	140	26-Nov-02	EPA 8082
	140	26-Nov-02	EPA 8082
		26-Nov-02	EPA 8082
D		26-Nov-02	EPA 8082

P-BSUB-S-N-001

	RDL	Analyzed	Method

		27-Nov-02	CLP 3.0
	130	26-Nov-02	EPA 8082
	250	26-Nov-02	EPA 8082
	130	26-Nov-02	EPA 8082
	130	26-Nov-02	EPA 8082
	130	26-Nov-02	EPA 8082
	130	26-Nov-02	EPA 8082
	130	26-Nov-02	EPA 8082
		26-Nov-02	EPA 8082
D		26-Nov-02	EPA 8082

P-BSUB-S-S-001

RDL	Analyzed	Method
	27-Nov-02	CLP 3.0
120	26-Nov-02	EPA 8082
250	26-Nov-02	EPA 8082
120	26-Nov-02	EPA 8082
120	26-Nov-02	EPA 8082
120	26-Nov-02	EPA 8082
120	26-Nov-02	EPA 8082
120	26-Nov-02	EPA 8082
	26-Nov-02	EPA 8082
	26-Nov-02	EPA 8082

P-B-SS-E-001

RDL	Analyzed	Method
	27-Nov-02	CLP 3.0
130	26-Nov-02	EPA 8082
250	26-Nov-02	EPA 8082
130	26-Nov-02	EPA 8082
130	26-Nov-02	EPA 8082

130	26-Nov-02	EPA 8082
130	26-Nov-02	EPA 8082
130	26-Nov-02	EPA 8082
	26-Nov-02	EPA 8082
	26-Nov-02	EPA 8082

P-B-S2-W-001

RDL	Analyzed	Method
	27-Nov-02	CLP 3.0
130	26-Nov-02	EPA 8082
260	26-Nov-02	EPA 8082
130	26-Nov-02	EPA 8082
130	26-Nov-02	EPA 8082
130	26-Nov-02	EPA 8082
130	26-Nov-02	EPA 8082
130	26-Nov-02	EPA 8082
	26-Nov-02	EPA 8082
	26-Nov-02	EPA 8082

L-B-SS-W-004

RDL	Analyzed	Method
	27-Nov-02	CLP 3.0
110	26-Nov-02	EPA 8082
210	26-Nov-02	EPA 8082
110	26-Nov-02	EPA 8082
110	26-Nov-02	EPA 8082
110	26-Nov-02	EPA 8082
110	26-Nov-02	EPA 8082
110	26-Nov-02	EPA 8082
	26-Nov-02	EPA 8082
	26-Nov-02	EPA 8082

L-B-S-E-004

RDL	Analyzed	Method
	27-Nov-02	CLP 3.0
110	26-Nov-02	EPA 8082
220	26-Nov-02	EPA 8082
110	26-Nov-02	EPA 8082
110	26-Nov-02	EPA 8082
110	26-Nov-02	EPA 8082
110	26-Nov-02	EPA 8082
110	26-Nov-02	EPA 8082
	26-Nov-02	EPA 8082
	26-Nov-02	EPA 8082

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Project:
Sampled: 25-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97260-1

Analysis	Result	Units
Cadmium	0.114	mg/l

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Project:
Sampled: 25-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97260-2

Analysis	Result	Units
Cadmium	1.73	mg/l

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Project:
Sampled: 25-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97260-3

Analysis	Result	Units
Cadmium	1.34	mg/l

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Project:
Sampled: 25-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97260-4

Analysis	Result	Units
Paint Filter	U	ml/kg
Cadmium	0.923	mg/l

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Project:			
Sampled:		25-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97260-5		
Analysis	Result		Units
Total Solids		78.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1000	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		94	%
Decachlorobiphenyl		116	%

TSCA, CELL #1

	RDL	Analyzed	Method
	0.05	26-Nov-02	EPA 6010 TCLP

1.20E+02

	RDL	Analyzed	Method
	0.05	26-Nov-02	EPA 6010 TCLP

12C1

	RDL	Analyzed	Method
	0.05	26-Nov-02	EPA 6010 TCLP

12Z1

	RDL	Analyzed	Method
	1	25-Nov-02	EPA 9095
	0.05	26-Nov-02	EPA 6010 TCLP

12Z1

RDL	Analyzed	Method
	27-Nov-02	CLP 3.0
130	27-Nov-02	EPA 8082
250	27-Nov-02	EPA 8082
130	27-Nov-02	EPA 8082
130	27-Nov-02	EPA 8082
130	27-Nov-02	EPA 8082
130	27-Nov-02	EPA 8082
130	27-Nov-02	EPA 8082
	27-Nov-02	EPA 8082
	27-Nov-02	EPA 8082

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Project:				
Sampled:		26-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97344-1			
Analysis	Result			Units
Total Solids		73.3		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		97		%
Decachlorobiphenyl		122		%

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Project:				
Sampled:		26-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97344-2			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		2.33		mg/l

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Project:				
Sampled:		26-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97344-3			
Analysis	Result			Units
Total Solids		76.7		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg

PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		98	%
Decachlorobiphenyl		117	%

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Project:
Sampled: 26-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97344-4

Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		1.84	mg/l

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Project:
Sampled: 26-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97344-5

Analysis	Result		Units
Total Solids		64.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		104	%
Decachlorobiphenyl		105	%

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Project:
Sampled: 26-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:

Lab ID:	L97344-6			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		2.61		mg/l

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Project:				
Sampled:		26-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97344-7			
Analysis	Result			Units
Cadmium		3.63		mg/l

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Project:				
Sampled:		26-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97344-8			
Analysis	Result			Units
Paint Filter	U			ml/kg

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Project:				
Sampled:		26-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97344-9			
Analysis	Result			Units
Total Solids		66		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		240		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		122		%
Decachlorobiphenyl		139		%

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Project:				
Sampled:		26-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97344-10			
Analysis	Result			Units
EPA 8082				
PCB 1016		108		%
PCB 1260		111		%
Tetrachloro-m-xylene		120		%
Decachlorobiphenyl		129		%

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Project:				
Sampled:		26-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97344-11			
Analysis	Result			Units
EPA 8082				
PCB 1016		59		%
PCB 1260		83		%
Tetrachloro-m-xylene		109		%
Decachlorobiphenyl		137		%

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Project:				
Sampled:		26-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97344-12			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		2.58		mg/l

2-#8-E

RDL	Analyzed	Method
	27-Nov-02	CLP 3.0
130	3-Dec-02	EPA 8082
250	3-Dec-02	EPA 8082
130	3-Dec-02	EPA 8082
130	3-Dec-02	EPA 8082
130	3-Dec-02	EPA 8082
130	3-Dec-02	EPA 8082
130	3-Dec-02	EPA 8082
	3-Dec-02	EPA 8082
	3-Dec-02	EPA 8082

2-#8-E

RDL	Analyzed	Method
1	26-Nov-02	EPA 9095
0.05	2-Dec-02	EPA 6010 TCLP

2-#8-C

RDL	Analyzed	Method
	27-Nov-02	CLP 3.0
130	3-Dec-02	EPA 8082
250	3-Dec-02	EPA 8082

130	3-Dec-02	EPA 8082
130	3-Dec-02	EPA 8082
130	3-Dec-02	EPA 8082
130	3-Dec-02	EPA 8082
130	3-Dec-02	EPA 8082
	3-Dec-02	EPA 8082
	3-Dec-02	EPA 8082

2-#8-C

RDL	Analyzed	Method
1	26-Nov-02	EPA 9095
0.05	2-Dec-02	EPA 6010 TCLP

2-#8-M

RDL	Analyzed	Method
	27-Nov-02	CLP 3.0
150	3-Dec-02	EPA 8082
300	3-Dec-02	EPA 8082
150	3-Dec-02	EPA 8082
150	3-Dec-02	EPA 8082
150	3-Dec-02	EPA 8082
150	3-Dec-02	EPA 8082
150	3-Dec-02	EPA 8082
	3-Dec-02	EPA 8082
	3-Dec-02	EPA 8082

2-#8-M

	RDL	Analyzed	Method
	1	26-Nov-02	EPA 9095
	0.05	2-Dec-02	EPA 6010 TCLP

L97344-6MS, 2-#8-M

	RDL	Analyzed	Method
	0.05	2-Dec-02	EPA 6010 TCLP

L97344-6MSD/DUP, 2-#8-M

	RDL	Analyzed	Method
	1	26-Nov-02	EPA 9095

2-#8-P

	RDL	Analyzed	Method
		27-Nov-02	CLP 3.0
	150	5-Dec-02	EPA 8082
	300	5-Dec-02	EPA 8082
	150	5-Dec-02	EPA 8082
	150	5-Dec-02	EPA 8082
	150	5-Dec-02	EPA 8082
	150	5-Dec-02	EPA 8082
	150	5-Dec-02	EPA 8082
		5-Dec-02	EPA 8082
		5-Dec-02	EPA 8082

L97344-9MS,2-#8-P

	RDL	Analyzed	Method
		9-Dec-02	EPA 8082
		9-Dec-02	EPA 8082
		9-Dec-02	EPA 8082
		9-Dec-02	EPA 8082

L97344-9MSD/DUP,2-#8-P

	RDL	Analyzed	Method
		11-Dec-02	EPA 8082
		11-Dec-02	EPA 8082
		11-Dec-02	EPA 8082
		11-Dec-02	EPA 8082

2-#8-P

	RDL	Analyzed	Method
	1	26-Nov-02	EPA 9095
	0.05	2-Dec-02	EPA 6010 TCLP

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Project:			
Sampled:		25-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97358-1		
Analysis	Result		Units
Cyanide, Total	U		mg/kg
Total Solids		93.2	%
Aluminum		7960	mg/kg
Antimony	UN		mg/kg
Arsenic		3.81	mg/kg
Barium		45.7	mg/kg
Beryllium		0.388	mg/kg
Cadmium	U		mg/kg
Calcium		50700	mg/kg
Chromium		8.56	mg/kg
Cobalt		6.59	mg/kg
Copper		22.4	mg/kg
Iron		17800	mg/kg
Lead		9.53	mg/kg
Magnesium		8670	mg/kg
Manganese		463	mg/kg
Mercury	U		mg/kg
Nickel		17.7	mg/kg
Potassium		719	mg/kg
Selenium	U		mg/kg
Silver	U		mg/kg
Sodium		56.2	mg/kg
Thallium	U		mg/kg
Vanadium		12.5	mg/kg
Zinc		64.8	mg/kg
EPA 8260			
Chloromethane	U		ug/kg
Vinyl chloride	U		ug/kg
Chloroethane	U		ug/kg
Bromomethane	U		ug/kg
1,1-Dichloroethene	U		ug/kg
Acetone	U		ug/kg
Carbon disulfide	U		ug/kg
Methylene chloride	U		ug/kg
trans-1,2-Dichloroethene	U		ug/kg
1,1-Dichloroethane	U		ug/kg
cis-1,2-Dichloroethene	U		ug/kg
MEK(2-Butanone)	U		ug/kg
Chloroform	U		ug/kg
1,1,1-Trichloroethane	U		ug/kg

Carbon tetrachloride	U		ug/kg
Benzene	U		ug/kg
1,2-Dichloroethane	U		ug/kg
Trichloroethene	U		ug/kg
1,2-Dichloropropane	U		ug/kg
Bromodichloromethane	U		ug/kg
cis-1,3-Dichloropropene	U		ug/kg
MIBK(4-Methyl-2-pentanone)	U		ug/kg
Toluene	U		ug/kg
trans-1,3-Dichloropropene	U		ug/kg
1,1,2-Trichloroethane	U		ug/kg
Tetrachloroethene	U		ug/kg
2-Hexanone	U		ug/kg
Dibromochloromethane	U		ug/kg
Chlorobenzene	U		ug/kg
Ethylbenzene	U		ug/kg
p-Xylene/m-Xylene	U		ug/kg
o-Xylene	U		ug/kg
Styrene	U		ug/kg
Bromoform	U		ug/kg
1,1,2,2-Tetrachloroethane	U		ug/kg
Dibromofluoromethane		102	%
Toluene-d8		103	%
4-Bromofluorobenzene		141	%
1,2-Dichloroethane-d4		101	%
EPA 8081			
alpha-BHC	U		ug/kg
beta-BHC	U		ug/kg
Lindane (gamma-BHC)	U		ug/kg
delta-BHC	U		ug/kg
Heptachlor	U		ug/kg
Aldrin	U		ug/kg
Heptachlor epoxide	U		ug/kg
alpha-Chlordane	U		ug/kg
Endosulfan I	U		ug/kg
gamma-Chlordane	U		ug/kg
4,4'-DDE	U		ug/kg
Dieldrin	U		ug/kg
Endrin	U		ug/kg
Endosulfan II	U		ug/kg
4,4'-DDD	U		ug/kg
Endrin ketone	U		ug/kg
Endrin aldehyde	U		ug/kg
Endosulfan sulfate	U		ug/kg
4,4'-DDT	U		ug/kg
Methoxychlor	U		ug/kg
Toxaphene	U		ug/kg
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg

PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Decachlorobiphenyl		91	%
Tetrachloro-m-xylene		85	%
EPA 8270			
Bis(2-chloroethylether)	U		ug/kg
Phenol	U		ug/kg
2-Chlorophenol	U		ug/kg
1,3-Dichlorobenzene	U		ug/kg
1,4-Dichlorobenzene	U		ug/kg
1,2-Dichlorobenzene	U		ug/kg
Bis(2-chloroisopropylether)	U		ug/kg
2-Methylphenol	U		ug/kg
Hexachloroethane	U		ug/kg
N-Nitrosodi-N-propylamine	U		ug/kg
3-Methylphenol/4-Methylphenol	U		ug/kg
Nitrobenzene	U		ug/kg
Isophorone	U		ug/kg
2-Nitrophenol	U		ug/kg
2,4-Dimethylphenol	U		ug/kg
Bis(2-chloroethoxymethane)	U		ug/kg
2,4-Dichlorophenol	U		ug/kg
1,2,4-Trichlorobenzene	U		ug/kg
Naphthalene	U		ug/kg
4-Chloroaniline	U		ug/kg
Hexachlorobutadiene	U		ug/kg
4-Chloro-3-methylphenol	U		ug/kg
2-Methylnaphthalene	U		ug/kg
Hexachlorocyclopentadiene	U		ug/kg
2,4,6-Trichlorophenol	U		ug/kg
2,4,5-Trichlorophenol	U		ug/kg
2-Chloronaphthalene	U		ug/kg
2-Nitroaniline	U		ug/kg
Dimethyl phthalate	U		ug/kg
Acenaphthylene	U		ug/kg
2,6-Dinitrotoluene	U		ug/kg
3-Nitroaniline	U		ug/kg
Acenaphthene	U		ug/kg
2,4-Dinitrophenol	U		ug/kg
Dibenzofuran	U		ug/kg
2,4-Dinitrotoluene	U		ug/kg
4-Nitrophenol	U		ug/kg
Diethyl phthalate	U		ug/kg
Fluorene	U		ug/kg
4-Chlorophenylphenylether	U		ug/kg
4-Nitroaniline	U		ug/kg
2-Methyl-4,6-dinitrophenol	U		ug/kg
N-Nitrosodiphenylamine	U		ug/kg
4-Bromophenylphenylether	U		ug/kg
Hexachlorobenzene	U		ug/kg

Pentachlorophenol	U		ug/kg
Phenanthrene	U		ug/kg
Anthracene	U		ug/kg
Carbazole	U		ug/kg
Di-n-butyl phthalate	U		ug/kg
Fluoranthene	U		ug/kg
Pyrene	U		ug/kg
Butylbenzyl phthalate	U		ug/kg
Benzo(a)anthracene	U		ug/kg
3,3-Dichlorobenzidine	U		ug/kg
Chrysene	U		ug/kg
Bis-2-ethylhexyl phthalate	U		ug/kg
Di-n-octyl phthalate	U		ug/kg
Benzo(b)fluoranthene	U		ug/kg
Benzo(k)fluoranthene	U		ug/kg
Benzo(a)pyrene	U		ug/kg
Indeno(1,2,3-cd)pyrene	U		ug/kg
Dibenzo(a,h)anthracene	U		ug/kg
Benzo(g,h,i)perylene	U		ug/kg
Terphenyl-d14		77	%
2-Fluorophenol		69	%
Phenol-d5		78	%
2,4,6-Tribromophenol		73	%
Nitrobenzene-d5		76	%
2-Fluorobiphenyl		74	%

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Project:			
Sampled:		25-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97358-2		
Analysis	Result		Units
Cyanide, Total		4.95	mg/kg
Aluminum		8520	mg/kg
Antimony		28.4	mg/kg
Arsenic		14.1	mg/kg
Barium		236	mg/kg
Beryllium		5	mg/kg
Cadmium		5.17	mg/kg
Chromium		28.9	mg/kg
Cobalt		52.8	mg/kg
Copper		48.6	mg/kg
Iron		18600	mg/kg
Lead		52.6	mg/kg
Manganese		534	mg/kg
Mercury		0.243	mg/kg
Nickel		64.2	mg/kg

Selenium		9.35	mg/kg
Silver		5.04	mg/kg
Thallium		178	mg/kg
Vanadium		58.8	mg/kg
Zinc		116	mg/kg
EPA 8260			
Chloromethane	U		ug/kg
Vinyl chloride	U		ug/kg
Chloroethane	U		ug/kg
Bromomethane	6 B		ug/kg
1,1-Dichloroethene		50	ug/kg
Acetone	U		ug/kg
Carbon disulfide	U		ug/kg
Methylene chloride	U		ug/kg
trans-1,2-Dichloroethene	U		ug/kg
1,1-Dichloroethane	U		ug/kg
cis-1,2-Dichloroethene	U		ug/kg
MEK(2-Butanone)	U		ug/kg
Chloroform	U		ug/kg
1,1,1-Trichloroethane	U		ug/kg
Carbon tetrachloride	U		ug/kg
Benzene		52	ug/kg
1,2-Dichloroethane	U		ug/kg
Trichloroethene		53	ug/kg
1,2-Dichloropropane	U		ug/kg
Bromodichloromethane	U		ug/kg
cis-1,3-Dichloropropene	U		ug/kg
MIBK(4-Methyl-2-pentanone)	U		ug/kg
Toluene		56	ug/kg
trans-1,3-Dichloropropene	U		ug/kg
1,1,2-Trichloroethane	U		ug/kg
Tetrachloroethene	U		ug/kg
2-Hexanone	U		ug/kg
Dibromochloromethane	U		ug/kg
Chlorobenzene		51	ug/kg
Ethylbenzene	U		ug/kg
p-Xylene/m-Xylene	U		ug/kg
o-Xylene	U		ug/kg
Styrene	U		ug/kg
Bromoform	U		ug/kg
1,1,2,2-Tetrachloroethane	U		ug/kg
Dibromofluoromethane		100	%
Toluene-d8		104	%
4-Bromofluorobenzene		156	%
1,2-Dichloroethane-d4		108	%
EPA 8081			
Lindane (gamma-BHC)		87	%
Heptachlor		91	%
Aldrin		98	%
Dieldrin		96	%
Endrin		92	%

4,4'-DDT	157 *		%
Decachlorobiphenyl		100	%
Tetrachloro-m-xylene		91	%
EPA 8270			
Bis(2-chloroethylether)		1600	ug/kg
Phenol		3200	ug/kg
2-Chlorophenol		3300	ug/kg
1,3-Dichlorobenzene		1500	ug/kg
1,4-Dichlorobenzene		1600	ug/kg
1,2-Dichlorobenzene		1600	ug/kg
Bis(2-chloroisopropylether)		1700	ug/kg
2-Methylphenol		1600	ug/kg
Hexachloroethane		1600	ug/kg
N-Nitrosodi-N-propylamine		1800	ug/kg
3-Methylphenol/4-Methylphenol		1700	ug/kg
Nitrobenzene		1700	ug/kg
Isophorone		1500	ug/kg
2-Nitrophenol		3400	ug/kg
2,4-Dimethylphenol		2500	ug/kg
Bis(2-chloroethoxymethane)		1600	ug/kg
2,4-Dichlorophenol		3400	ug/kg
1,2,4-Trichlorobenzene		1600	ug/kg
Naphthalene		1700	ug/kg
4-Chloroaniline	300 J		ug/kg
Hexachlorobutadiene		1400	ug/kg
4-Chloro-3-methylphenol		3500	ug/kg
2-Methylnaphthalene		1700	ug/kg
Hexachlorocyclopentadiene		1100	ug/kg
2,4,6-Trichlorophenol		3500	ug/kg
2,4,5-Trichlorophenol		1700	ug/kg
2-Chloronaphthalene		1700	ug/kg
2-Nitroaniline		1700	ug/kg
Dimethyl phthalate		1800	ug/kg
Acenaphthylene		1700	ug/kg
2,6-Dinitrotoluene		1800	ug/kg
3-Nitroaniline		1900	ug/kg
Acenaphthene		1700	ug/kg
2,4-Dinitrophenol		3300	ug/kg
Dibenzofuran		1700	ug/kg
2,4-Dinitrotoluene		1800	ug/kg
4-Nitrophenol		3600	ug/kg
Diethyl phthalate	U		ug/kg
Fluorene		1800	ug/kg
4-Chlorophenylphenylether		1700	ug/kg
4-Nitroaniline		1700	ug/kg
2-Methyl-4,6-dinitrophenol		3900	ug/kg
N-Nitrosodiphenylamine		1900	ug/kg
4-Bromophenylphenylether		1700	ug/kg
Hexachlorobenzene		1700	ug/kg
Pentachlorophenol		3600	ug/kg
Phenanthrene		1700	ug/kg

Anthracene		1800	ug/kg
Carbazole	U		ug/kg
Di-n-butyl phthalate		1900	ug/kg
Fluoranthene		1800	ug/kg
Pyrene		1700	ug/kg
Butylbenzyl phthalate		1800	ug/kg
Benzo(a)anthracene		1800	ug/kg
3,3-Dichlorobenzidine		2100	ug/kg
Chrysene		1800	ug/kg
Bis-2-ethylhexyl phthalate		1900	ug/kg
Di-n-octyl phthalate		1800	ug/kg
Benzo(b)fluoranthene		1600	ug/kg
Benzo(k)fluoranthene		1700	ug/kg
Benzo(a)pyrene		1700	ug/kg
Indeno(1,2,3-cd)pyrene		1600	ug/kg
Dibenzo(a,h)anthracene		1600	ug/kg
Benzo(g,h,i)perylene		2000	ug/kg
Terphenyl-d14		63	%
2-Fluorophenol		59	%
Phenol-d5		63	%
2,4,6-Tribromophenol		63	%
Nitrobenzene-d5		64	%
2-Fluorobiphenyl		61	%

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Project:			
Sampled:		25-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97358-3		
Analysis	Result		Units
Cyanide, Total		0.8	mg/kg
Aluminum		7990	mg/kg
Antimony	U		mg/kg
Arsenic		4.38	mg/kg
Barium		46.1	mg/kg
Beryllium		0.383	mg/kg
Cadmium		0.563	mg/kg
Calcium		57700	mg/kg
Chromium		9.08	mg/kg
Cobalt		6.75	mg/kg
Copper		25.7	mg/kg
Iron		18300	mg/kg
Lead		11	mg/kg
Magnesium		7730	mg/kg
Manganese		365	mg/kg
Mercury	U		mg/kg
Nickel		18.1	mg/kg

Potassium		607	mg/kg
Selenium		0.547	mg/kg
Silver	U		mg/kg
Sodium		53.5	mg/kg
Thallium	U		mg/kg
Vanadium		12.2	mg/kg
Zinc		67.6	mg/kg
EPA 8260			
Chloromethane	U		ug/kg
Vinyl chloride	U		ug/kg
Chloroethane	U		ug/kg
Bromomethane	U		ug/kg
1,1-Dichloroethene		46	ug/kg
Acetone	U		ug/kg
Carbon disulfide	U		ug/kg
Methylene chloride	U		ug/kg
trans-1,2-Dichloroethene	U		ug/kg
1,1-Dichloroethane	U		ug/kg
cis-1,2-Dichloroethene	U		ug/kg
MEK(2-Butanone)	U		ug/kg
Chloroform	U		ug/kg
1,1,1-Trichloroethane	U		ug/kg
Carbon tetrachloride	U		ug/kg
Benzene		46	ug/kg
1,2-Dichloroethane	U		ug/kg
Trichloroethene		48	ug/kg
1,2-Dichloropropane	U		ug/kg
Bromodichloromethane	U		ug/kg
cis-1,3-Dichloropropene	U		ug/kg
MIBK(4-Methyl-2-pentanone)	U		ug/kg
Toluene		54	ug/kg
trans-1,3-Dichloropropene	U		ug/kg
1,1,2-Trichloroethane	U		ug/kg
Tetrachloroethene	U		ug/kg
2-Hexanone	U		ug/kg
Dibromochloromethane	U		ug/kg
Chlorobenzene		46	ug/kg
Ethylbenzene	U		ug/kg
p-Xylene/m-Xylene	U		ug/kg
o-Xylene	U		ug/kg
Styrene	U		ug/kg
Bromoform	U		ug/kg
1,1,2,2-Tetrachloroethane	U		ug/kg
Dibromofluoromethane		98	%
Toluene-d8		113	%
4-Bromofluorobenzene		160	%
1,2-Dichloroethane-d4		85	%
EPA 8081			
Lindane (gamma-BHC)		92	%
Heptachlor		98	%
Aldrin		103	%

Dieldrin		98	%
Endrin		94	%
4,4'-DDT	157 *		%
Decachlorobiphenyl		97	%
Tetrachloro-m-xylene		94	%
EPA 8270			
Bis(2-chloroethylether)		980	ug/kg
Phenol		2000	ug/kg
2-Chlorophenol		2000	ug/kg
1,3-Dichlorobenzene		900	ug/kg
1,4-Dichlorobenzene		960	ug/kg
1,2-Dichlorobenzene		960	ug/kg
Bis(2-chloroisopropylether)		1000	ug/kg
2-Methylphenol		1000	ug/kg
Hexachloroethane		920	ug/kg
N-Nitrosodi-N-propylamine	1000 *		ug/kg
3-Methylphenol/4-Methylphenol		1000	ug/kg
Nitrobenzene		990	ug/kg
Isophorone		890	ug/kg
2-Nitrophenol		2000	ug/kg
2,4-Dimethylphenol		1800	ug/kg
Bis(2-chloroethoxymethane)		960	ug/kg
2,4-Dichlorophenol		2100	ug/kg
1,2,4-Trichlorobenzene		980	ug/kg
Naphthalene		1000	ug/kg
4-Chloroaniline		670	ug/kg
Hexachlorobutadiene		840	ug/kg
4-Chloro-3-methylphenol		2600	ug/kg
2-Methylnaphthalene		990	ug/kg
Hexachlorocyclopentadiene		320	ug/kg
2,4,6-Trichlorophenol		2600	ug/kg
2,4,5-Trichlorophenol		1400	ug/kg
2-Chloronaphthalene		1100	ug/kg
2-Nitroaniline		1400	ug/kg
Dimethyl phthalate		1600	ug/kg
Acenaphthylene		1200	ug/kg
2,6-Dinitrotoluene		1600	ug/kg
3-Nitroaniline		2300	ug/kg
Acenaphthene		1300	ug/kg
2,4-Dinitrophenol		3100	ug/kg
Dibenzofuran		1300	ug/kg
2,4-Dinitrotoluene		1800	ug/kg
4-Nitrophenol		3400	ug/kg
Diethyl phthalate	U		ug/kg
Fluorene		1500	ug/kg
4-Chlorophenylphenylether		1400	ug/kg
4-Nitroaniline		2000	ug/kg
2-Methyl-4,6-dinitrophenol		4000	ug/kg
N-Nitrosodiphenylamine		1800	ug/kg
4-Bromophenylphenylether		1600	ug/kg
Hexachlorobenzene		1600	ug/kg

Pentachlorophenol		3800	ug/kg
Phenanthrene		1800	ug/kg
Anthracene		1700	ug/kg
Carbazole	U		ug/kg
Di-n-butyl phthalate		2100	ug/kg
Fluoranthene		1900	ug/kg
Pyrene		1800	ug/kg
Butylbenzyl phthalate		1900	ug/kg
Benzo(a)anthracene		1900	ug/kg
3,3-Dichlorobenzidine		4000	ug/kg
Chrysene		1900	ug/kg
Bis-2-ethylhexyl phthalate		2000	ug/kg
Di-n-octyl phthalate		2000	ug/kg
Benzo(b)fluoranthene		1700	ug/kg
Benzo(k)fluoranthene		1900	ug/kg
Benzo(a)pyrene		1800	ug/kg
Indeno(1,2,3-cd)pyrene		1500	ug/kg
Dibenzo(a,h)anthracene		1500	ug/kg
Benzo(g,h,i)perylene		1900	ug/kg
Terphenyl-d14		67	%
2-Fluorophenol		37	%
Phenol-d5		39	%
2,4,6-Tribromophenol		63	%
Nitrobenzene-d5		38	%
2-Fluorobiphenyl		40	%

PORTER'S BANK RUN #3

RDL	Analyzed	Method
0.216	6-Dec-02	EPA 335.3
	27-Nov-02	CLP 3.0
7.09	4-Dec-02	EPA 6010
4.73	9-Dec-02	EPA 6010
0.491	6-Dec-02	EPA 6020
1.51	4-Dec-02	EPA 6010
0.189	4-Dec-02	EPA 6010
0.473	9-Dec-02	EPA 6010
950	9-Dec-02	EPA 6010
0.945	4-Dec-02	EPA 6010
0.945	4-Dec-02	EPA 6010
1.61	4-Dec-02	EPA 6010
3.78	4-Dec-02	EPA 6010
4.16	4-Dec-02	EPA 6010
47.3	4-Dec-02	EPA 6010
0.473	4-Dec-02	EPA 6010
0.045	3-Dec-02	EPA 7470
1.13	4-Dec-02	EPA 6010
47.3	4-Dec-02	EPA 6010
0.491	6-Dec-02	EPA 6020
0.945	4-Dec-02	EPA 6010
18.9	4-Dec-02	EPA 6010
6.14	4-Dec-02	EPA 6010
0.945	4-Dec-02	EPA 6010
1.89	4-Dec-02	EPA 6010
5	9-Dec-02	EPA 8260
2	9-Dec-02	EPA 8260
5	9-Dec-02	EPA 8260
5	9-Dec-02	EPA 8260
5	9-Dec-02	EPA 8260
23	9-Dec-02	EPA 8260
5	9-Dec-02	EPA 8260
5	9-Dec-02	EPA 8260
5	9-Dec-02	EPA 8260
5	9-Dec-02	EPA 8260
5	9-Dec-02	EPA 8260
23	9-Dec-02	EPA 8260
5	9-Dec-02	EPA 8260
5	9-Dec-02	EPA 8260

	5	9-Dec-02	EPA 8260
	0.6	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	9	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	9	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
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	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
		9-Dec-02	EPA 8260
		9-Dec-02	EPA 8260
*		9-Dec-02	EPA 8260
		9-Dec-02	EPA 8260
	5	4-Dec-02	EPA 8081
	5	4-Dec-02	EPA 8081
	5	4-Dec-02	EPA 8081
	5	4-Dec-02	EPA 8081
	5	4-Dec-02	EPA 8081
	5	4-Dec-02	EPA 8081
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	5	4-Dec-02	EPA 8081
	5	4-Dec-02	EPA 8081
	5	4-Dec-02	EPA 8081
	52	4-Dec-02	EPA 8081
	10	4-Dec-02	EPA 8081
	21	4-Dec-02	EPA 8081
	10	4-Dec-02	EPA 8081
	10	4-Dec-02	EPA 8081

10	4-Dec-02	EPA 8081
10	4-Dec-02	EPA 8081
10	4-Dec-02	EPA 8081
	4-Dec-02	EPA 8081
	4-Dec-02	EPA 8081
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
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260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
520	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
520	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
1000	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
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1000	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270

1000	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
520	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270

L97358-1MS, RUN #3

RDL	Analyzed	Method
0.253	6-Dec-02	EPA 335.3
7.1	4-Dec-02	EPA 6010
4.73	9-Dec-02	EPA 6010
0.492	6-Dec-02	EPA 6020
1.51	4-Dec-02	EPA 6010
0.189	4-Dec-02	EPA 6010
0.473	9-Dec-02	EPA 6010
0.946	4-Dec-02	EPA 6010
0.946	4-Dec-02	EPA 6010
1.61	4-Dec-02	EPA 6010
3.78	4-Dec-02	EPA 6010
4.16	4-Dec-02	EPA 6010
0.473	4-Dec-02	EPA 6010
0.045	3-Dec-02	EPA 7470
1.14	4-Dec-02	EPA 6010

	0.492		6-Dec-02	EPA 6020
	0.946		4-Dec-02	EPA 6010
	6.15		4-Dec-02	EPA 6010
	0.946		4-Dec-02	EPA 6010
	1.89		4-Dec-02	EPA 6010
	5		9-Dec-02	EPA 8260
	2		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	25		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	25		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	0.7		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	10		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	10		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
	5		9-Dec-02	EPA 8260
			9-Dec-02	EPA 8260
			9-Dec-02	EPA 8260
*			9-Dec-02	EPA 8260
			9-Dec-02	EPA 8260
	0.05		4-Dec-02	EPA 8081
	0.05		4-Dec-02	EPA 8081
	0.05		4-Dec-02	EPA 8081
	0.05		4-Dec-02	EPA 8081
	0.05		4-Dec-02	EPA 8081

0.05	4-Dec-02	EPA 8081
	4-Dec-02	EPA 8081
	4-Dec-02	EPA 8081
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
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260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
530	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
530	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
1100	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
1100	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
1100	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
1100	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
1100	13-Dec-02	EPA 8270
1100	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
1100	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270

260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
530	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
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260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
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260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270

L97358-1MSD/DUP, RUN #3

RDL	Analyzed	Method
0.258	6-Dec-02	EPA 335.3
7.06	4-Dec-02	EPA 6010
4.71	9-Dec-02	EPA 6010
0.494	6-Dec-02	EPA 6020
1.51	4-Dec-02	EPA 6010
0.188	4-Dec-02	EPA 6010
0.471	9-Dec-02	EPA 6010
940	9-Dec-02	EPA 6010
0.941	4-Dec-02	EPA 6010
0.941	4-Dec-02	EPA 6010
1.6	4-Dec-02	EPA 6010
3.76	4-Dec-02	EPA 6010
4.14	4-Dec-02	EPA 6010
47.1	4-Dec-02	EPA 6010
0.471	4-Dec-02	EPA 6010
0.045	3-Dec-02	EPA 7470
1.13	4-Dec-02	EPA 6010

	47.1	4-Dec-02	EPA 6010
	0.494	6-Dec-02	EPA 6020
	0.941	4-Dec-02	EPA 6010
	18.8	4-Dec-02	EPA 6010
	6.12	4-Dec-02	EPA 6010
	0.941	4-Dec-02	EPA 6010
	1.88	4-Dec-02	EPA 6010
	5	9-Dec-02	EPA 8260
	2	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	23	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	23	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	0.6	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	9	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
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	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	9	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
	5	9-Dec-02	EPA 8260
		9-Dec-02	EPA 8260
		9-Dec-02	EPA 8260
*		9-Dec-02	EPA 8260
		9-Dec-02	EPA 8260
	0.05	4-Dec-02	EPA 8081
	0.05	4-Dec-02	EPA 8081
	0.05	4-Dec-02	EPA 8081

0.05	4-Dec-02	EPA 8081
0.05	4-Dec-02	EPA 8081
0.05	4-Dec-02	EPA 8081
	4-Dec-02	EPA 8081
	4-Dec-02	EPA 8081
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
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260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
510	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
510	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
1000	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
1000	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
1000	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
1000	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
1000	13-Dec-02	EPA 8270
1000	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270

1000	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
510	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
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260	13-Dec-02	EPA 8270
260	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270
	13-Dec-02	EPA 8270

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Project:
Sampled: 2-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97510-1

Analysis	Result	Units
Cadmium	0.081	mg/l

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Project:
Sampled: 2-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97510-2

Analysis	Result	Units
Cadmium	1.03	mg/l

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Project:
Sampled: 2-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97510-3

Analysis	Result	Units
Cadmium	0.141	mg/l

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Project:
Sampled: 2-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97510-4

Analysis	Result	Units
Cadmium	U	mg/l

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Project:			
Sampled:		29-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97510-5		
Analysis	Result		Units
Total Solids		91.4	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		67	%
Decachlorobiphenyl		108	%

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Project:			
Sampled:		29-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97510-6		
Analysis	Result		Units
EPA 8082			
PCB 1016		60	%
PCB 1260		72	%
Tetrachloro-m-xylene		54	%
Decachlorobiphenyl		98	%

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Project:			
Sampled:		29-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97510-7		
Analysis	Result		Units
EPA 8082			
PCB 1016		56	%
PCB 1260		81	%

Tetrachloro-m-xylene		67	%
Decachlorobiphenyl		98	%

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Project:			
Sampled:		29-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97510-8		
Analysis	Result		Units
Total Solids		76.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		140	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		64	%
Decachlorobiphenyl		93	%

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Project:			
Sampled:		29-Nov-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97510-9		
Analysis	Result		Units
Total Solids		74.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		190	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		72	%
Decachlorobiphenyl		103	%

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Project:				
Sampled:		29-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97510-10			
Analysis	Result			Units
Total Solids		91.1		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		59		%
Decachlorobiphenyl		94		%

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Project:				
Sampled:		30-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97510-11			
Analysis	Result			Units
Total Solids		80.8		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		120		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		74		%
Decachlorobiphenyl		107		%

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Project:				
Sampled:		27-Nov-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L97510-12			
Analysis	Result			Units

Total Solids		79.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		130	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		81	%
Decachlorobiphenyl		103	%

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Project:
Sampled: 29-Nov-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97510-13

Analysis	Result		Units
Total Solids		89.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		62	%
Decachlorobiphenyl		98	%

1.20E+03

RDL	Analyzed	Method
0.05	4-Dec-02	EPA 6010 TCLP

L97510-1MS, 12E2

RDL	Analyzed	Method
0.05	9-Dec-02	EPA 6010 TCLP

12C2

RDL	Analyzed	Method
0.05	4-Dec-02	EPA 6010 TCLP

12Z2

RDL	Analyzed	Method
0.05	4-Dec-02	EPA 6010 TCLP

O-C-SS-B1-002

	RDL	Analyzed	Method
		2-Dec-02	CLP 3.0
	110	4-Dec-02	EPA 8082
	210	4-Dec-02	EPA 8082
	110	4-Dec-02	EPA 8082
	110	4-Dec-02	EPA 8082
	110	4-Dec-02	EPA 8082
	110	4-Dec-02	EPA 8082
	110	4-Dec-02	EPA 8082
		4-Dec-02	EPA 8082
		4-Dec-02	EPA 8082

L97510-5MS, O-C-SS-B1-002

	RDL	Analyzed	Method
		4-Dec-02	EPA 8082
		4-Dec-02	EPA 8082
		4-Dec-02	EPA 8082
		4-Dec-02	EPA 8082

L97510-5MSD/DUP,OCSSB1002

	RDL	Analyzed	Method
		4-Dec-02	EPA 8082
		4-Dec-02	EPA 8082

		4-Dec-02	EPA 8082
		4-Dec-02	EPA 8082

O-B-S-E-002

	RDL	Analyzed	Method
		2-Dec-02	CLP 3.0
	130	4-Dec-02	EPA 8082
	260	4-Dec-02	EPA 8082
	130	4-Dec-02	EPA 8082
	130	4-Dec-02	EPA 8082
	130	4-Dec-02	EPA 8082
	130	4-Dec-02	EPA 8082
	130	4-Dec-02	EPA 8082
		4-Dec-02	EPA 8082
		4-Dec-02	EPA 8082

O-B-S-W-001

	RDL	Analyzed	Method
		2-Dec-02	CLP 3.0
	130	4-Dec-02	EPA 8082
	260	4-Dec-02	EPA 8082
	130	4-Dec-02	EPA 8082
	130	4-Dec-02	EPA 8082
	130	4-Dec-02	EPA 8082
	130	4-Dec-02	EPA 8082
	130	4-Dec-02	EPA 8082
		4-Dec-02	EPA 8082
		4-Dec-02	EPA 8082

O-C-SS-B2-002

	RDL	Analyzed	Method
		2-Dec-02	CLP 3.0
	100	4-Dec-02	EPA 8082
	210	4-Dec-02	EPA 8082
	100	4-Dec-02	EPA 8082
	100	4-Dec-02	EPA 8082
	100	4-Dec-02	EPA 8082
	100	4-Dec-02	EPA 8082
	100	4-Dec-02	EPA 8082
		4-Dec-02	EPA 8082
		4-Dec-02	EPA 8082

O-B-SS-E-003

	RDL	Analyzed	Method
		2-Dec-02	CLP 3.0
	120	4-Dec-02	EPA 8082
	230	4-Dec-02	EPA 8082
	120	4-Dec-02	EPA 8082
	120	4-Dec-02	EPA 8082
	120	4-Dec-02	EPA 8082
	120	4-Dec-02	EPA 8082
	120	4-Dec-02	EPA 8082
		4-Dec-02	EPA 8082
		4-Dec-02	EPA 8082

O-B-SS-W-001

	RDL	Analyzed	Method

	2-Dec-02	CLP 3.0
120	5-Dec-02	EPA 8082
240	5-Dec-02	EPA 8082
120	5-Dec-02	EPA 8082
120	5-Dec-02	EPA 8082
120	5-Dec-02	EPA 8082
120	5-Dec-02	EPA 8082
120	5-Dec-02	EPA 8082
	5-Dec-02	EPA 8082
	5-Dec-02	EPA 8082

O-C-SS-B3-002

RDL	Analyzed	Method
	2-Dec-02	CLP 3.0
110	5-Dec-02	EPA 8082
210	5-Dec-02	EPA 8082
110	5-Dec-02	EPA 8082
110	5-Dec-02	EPA 8082
110	5-Dec-02	EPA 8082
110	5-Dec-02	EPA 8082
110	5-Dec-02	EPA 8082
	5-Dec-02	EPA 8082
	5-Dec-02	EPA 8082

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Project:			
Sampled:		3-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97683-1		
Analysis	Result		Units
Total Solids		61.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		94	%
Decachlorobiphenyl		139	%

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Project:			
Sampled:		3-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97683-2		
Analysis	Result		Units
Total Solids		60.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		78	%
Decachlorobiphenyl		110	%

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Project:			
Sampled:		2-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97683-3		
Analysis	Result		Units
Total Solids		51.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		5900	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		93	%
Decachlorobiphenyl		127	%

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Project:			
Sampled:		2-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97683-4		
Analysis	Result		Units
Total Solids		79.1	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		580	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		84	%
Decachlorobiphenyl		93	%

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Project:			
Sampled:		3-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97683-5		
Analysis	Result		Units

Total Solids		72.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		86	%
Decachlorobiphenyl		125	%

Z-B-S-N-001

	RDL	Analyzed	Method
		5-Dec-02	CLP 3.0
	160	5-Dec-02	EPA 8082
	310	5-Dec-02	EPA 8082
	160	5-Dec-02	EPA 8082
	160	5-Dec-02	EPA 8082
	160	5-Dec-02	EPA 8082
	160	5-Dec-02	EPA 8082
	160	5-Dec-02	EPA 8082
		5-Dec-02	EPA 8082
		5-Dec-02	EPA 8082

Z-B-S-S-001

	RDL	Analyzed	Method
		5-Dec-02	CLP 3.0
	160	5-Dec-02	EPA 8082
	310	5-Dec-02	EPA 8082
	160	5-Dec-02	EPA 8082
	160	5-Dec-02	EPA 8082
	160	5-Dec-02	EPA 8082
	160	5-Dec-02	EPA 8082
	160	5-Dec-02	EPA 8082
		5-Dec-02	EPA 8082
		5-Dec-02	EPA 8082

N-B-S-E-004

	RDL	Analyzed	Method
		5-Dec-02	CLP 3.0
	190	9-Dec-02	EPA 8082
	380	9-Dec-02	EPA 8082
	190	9-Dec-02	EPA 8082
	190	9-Dec-02	EPA 8082
	190	9-Dec-02	EPA 8082
	190	9-Dec-02	EPA 8082
	190	9-Dec-02	EPA 8082
		9-Dec-02	EPA 8082
		9-Dec-02	EPA 8082

N-B-SS-E-004

	RDL	Analyzed	Method
		5-Dec-02	CLP 3.0
	120	7-Dec-02	EPA 8082
	230	7-Dec-02	EPA 8082
	120	7-Dec-02	EPA 8082
	120	7-Dec-02	EPA 8082
	120	7-Dec-02	EPA 8082
	120	7-Dec-02	EPA 8082
	120	7-Dec-02	EPA 8082
		7-Dec-02	EPA 8082
		7-Dec-02	EPA 8082

Z-C-SS-B-001

	RDL	Analyzed	Method

	5-Dec-02	CLP 3.0
130	5-Dec-02	EPA 8082
260	5-Dec-02	EPA 8082
130	5-Dec-02	EPA 8082
130	5-Dec-02	EPA 8082
130	5-Dec-02	EPA 8082
130	5-Dec-02	EPA 8082
130	5-Dec-02	EPA 8082
	5-Dec-02	EPA 8082
	5-Dec-02	EPA 8082

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Project:			
Sampled:		4-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97762-1		
Analysis	Result		Units
Total Solids		66.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		76	%
Decachlorobiphenyl		115	%

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Project:			
Sampled:		4-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97762-2		
Analysis	Result		Units
Total Solids		56.1	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		550	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		113	%
Decachlorobiphenyl		132	%

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Project:			
Sampled:		4-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97762-3		
Analysis	Result		Units
Total Solids		81.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		77	%
Decachlorobiphenyl		120	%

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Project:			
Sampled:		4-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97762-4		
Analysis	Result		Units
Total Solids		48	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		95	%
Decachlorobiphenyl		124	%

23/W-B-S-N-001

RDL	Analyzed	Method
	5-Dec-02	CLP 3.0
150	9-Dec-02	EPA 8082
300	9-Dec-02	EPA 8082
150	9-Dec-02	EPA 8082
150	9-Dec-02	EPA 8082
150	9-Dec-02	EPA 8082
150	9-Dec-02	EPA 8082
150	9-Dec-02	EPA 8082
	9-Dec-02	EPA 8082
	9-Dec-02	EPA 8082

23/W-B-S-S-001

RDL	Analyzed	Method
	5-Dec-02	CLP 3.0
170	9-Dec-02	EPA 8082
340	9-Dec-02	EPA 8082
170	9-Dec-02	EPA 8082
170	9-Dec-02	EPA 8082
170	9-Dec-02	EPA 8082
170	9-Dec-02	EPA 8082
170	9-Dec-02	EPA 8082
	9-Dec-02	EPA 8082
	9-Dec-02	EPA 8082

23/W-C-SS-B-001

RDL	Analyzed	Method
	5-Dec-02	CLP 3.0
120	9-Dec-02	EPA 8082
240	9-Dec-02	EPA 8082
120	9-Dec-02	EPA 8082
120	9-Dec-02	EPA 8082
120	9-Dec-02	EPA 8082
120	9-Dec-02	EPA 8082
120	9-Dec-02	EPA 8082
	9-Dec-02	EPA 8082
	9-Dec-02	EPA 8082

Z-B-S-E-002

RDL	Analyzed	Method
	5-Dec-02	CLP 3.0
210	10-Dec-02	EPA 8082
410	10-Dec-02	EPA 8082
210	10-Dec-02	EPA 8082
210	10-Dec-02	EPA 8082
210	10-Dec-02	EPA 8082
210	10-Dec-02	EPA 8082
210	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082

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Project:			
Sampled:		5-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97799-1		
Analysis	Result		Units
Total Solids		76.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1100	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		99	%
Decachlorobiphenyl		118	%

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Project:			
Sampled:		5-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97799-2		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		0.48	mg/l

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Project:			
Sampled:		5-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97799-3		
Analysis	Result		Units
Total Solids		79.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg

PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1100	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		163	%
Decachlorobiphenyl		123	%

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Project:
Sampled: 5-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97799-4

Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		0.096	mg/l

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Project:
Sampled: 5-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97799-5

Analysis	Result		Units
Total Solids		73.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		770	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		80	%
Decachlorobiphenyl		114	%

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Project:
Sampled: 5-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:

Lab ID:	L97799-6		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium	U		mg/l

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Project:			
Sampled:		5-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97799-7		
Analysis	Result		Units
Total Solids		81.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		680	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		78	%
Decachlorobiphenyl		113	%

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Project:			
Sampled:		5-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97799-8		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium	U		mg/l

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Project:			
Sampled:		5-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97799-9		
Analysis	Result		Units

Total Solids		76.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		560	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		76	%
Decachlorobiphenyl		106	%

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Project:
Sampled: 5-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97799-10

Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium	U		mg/l

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Project:
Sampled: 5-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97799-11

Analysis	Result		Units
Total Solids		85.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1900	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		80	%
Decachlorobiphenyl		97	%

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Project:			
Sampled:		5-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97799-12		
Analysis	Result		Units
EPA 8082			
PCB 1016	232 *		%
PCB 1260		119	%
Tetrachloro-m-xylene		82	%
Decachlorobiphenyl		106	%

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Project:			
Sampled:		5-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97799-13		
Analysis	Result		Units
EPA 8082			
PCB 1016	331 *		%
PCB 1260		125	%
Tetrachloro-m-xylene		69	%
Decachlorobiphenyl		94	%

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Project:			
Sampled:		5-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97799-14		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		0.863	mg/l

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Project:			
Sampled:		5-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97799-15		

Analysis	Result		Units
Cadmium		1.86	mg/l

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Project:
Sampled: 5-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97799-16

Analysis	Result	Units
Paint Filter	U	ml/kg

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Project:
Sampled: 5-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97799-17

Analysis	Result	Units
Cadmium	U	mg/l

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Project:
Sampled: 5-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97799-18

Analysis	Result	Units
Cadmium	U	mg/l

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Project:
Sampled: 5-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L97799-19

Analysis	Result	Units
Cadmium	U	mg/l

2-14-L

RDL	Analyzed	Method
	5-Dec-02	CLP 3.0
130	10-Dec-02	EPA 8082
250	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082

2-14-L

RDL	Analyzed	Method
1	5-Dec-02	EPA 9095
0.05	9-Dec-02	EPA 6010 TCLP

2-14-C

RDL	Analyzed	Method
	5-Dec-02	CLP 3.0
120	10-Dec-02	EPA 8082
240	10-Dec-02	EPA 8082

	120	10-Dec-02	EPA 8082
	120	10-Dec-02	EPA 8082
	120	10-Dec-02	EPA 8082
	120	10-Dec-02	EPA 8082
	120	10-Dec-02	EPA 8082
D		10-Dec-02	EPA 8082
		10-Dec-02	EPA 8082

2-14-C

RDL	Analyzed	Method
1	5-Dec-02	EPA 9095
0.05	9-Dec-02	EPA 6010 TCLP

2-14-R

RDL	Analyzed	Method
	5-Dec-02	CLP 3.0
130	10-Dec-02	EPA 8082
260	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082

2-14-R

RDL	Analyzed	Method
1	5-Dec-02	EPA 9095
0.05	9-Dec-02	EPA 6010 TCLP

2-10-L

RDL	Analyzed	Method
	5-Dec-02	CLP 3.0
120	10-Dec-02	EPA 8082
240	10-Dec-02	EPA 8082
120	10-Dec-02	EPA 8082
120	10-Dec-02	EPA 8082
120	10-Dec-02	EPA 8082
120	10-Dec-02	EPA 8082
120	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082

2-10-L

RDL	Analyzed	Method
1	5-Dec-02	EPA 9095
0.05	9-Dec-02	EPA 6010 TCLP

2-10-C

RDL	Analyzed	Method

	5-Dec-02	CLP 3.0
130	10-Dec-02	EPA 8082
250	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082

2-10-C

RDL	Analyzed	Method
1	5-Dec-02	EPA 9095
0.05	9-Dec-02	EPA 6010 TCLP

2-10-R

RDL	Analyzed	Method
	5-Dec-02	CLP 3.0
110	10-Dec-02	EPA 8082
220	10-Dec-02	EPA 8082
110	10-Dec-02	EPA 8082
110	10-Dec-02	EPA 8082
110	10-Dec-02	EPA 8082
110	10-Dec-02	EPA 8082
110	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082

L97799-11MS, 2-10-R

	RDL	Analyzed	Method
		10-Dec-02	EPA 8082
		10-Dec-02	EPA 8082
		10-Dec-02	EPA 8082
		10-Dec-02	EPA 8082

L97799-11MSD/DUP, 2-10-R

	RDL	Analyzed	Method
		10-Dec-02	EPA 8082
		10-Dec-02	EPA 8082
		10-Dec-02	EPA 8082
		10-Dec-02	EPA 8082

2-10-R

	RDL	Analyzed	Method
	1	5-Dec-02	EPA 9095
	0.05	9-Dec-02	EPA 6010 TCLP

L97799-14MS, 2-10-R

	RDL	Analyzed	Method
	0.05	9-Dec-02	EPA 6010 TCLP

L97799-14MSD/DUP, 2-10-R

	RDL	Analyzed	Method
	1	5-Dec-02	EPA 9095

3-8-P

	RDL	Analyzed	Method
	0.05	9-Dec-02	EPA 6010 TCLP

3-8-E

	RDL	Analyzed	Method
	0.05	9-Dec-02	EPA 6010 TCLP

3-8-C

	RDL	Analyzed	Method
	0.05	9-Dec-02	EPA 6010 TCLP

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Project:			
Sampled:		4-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-1		
Analysis	Result		Units
Total Solids		62	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		114	%
Decachlorobiphenyl		132	%

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Project:			
Sampled:		4-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-2		
Analysis	Result		Units
EPA 8082			
PCB 1016		63	%
PCB 1260		73	%
Tetrachloro-m-xylene		120	%
Decachlorobiphenyl		123	%

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Project:			
Sampled:		4-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-3		
Analysis	Result		Units

EPA 8082			
PCB 1016		89	%
PCB 1260		88	%
Tetrachloro-m-xylene		113	%
Decachlorobiphenyl		128	%

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Project:			
Sampled:		9-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-4		
Analysis	Result		Units
Total Solids		78.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		123	%
Decachlorobiphenyl		132	%

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Project:			
Sampled:		9-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-5		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		1.04	mg/l

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Project:			
Sampled:		9-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-6		
Analysis	Result		Units

Cadmium		2.1	mg/l

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Project:			
Sampled:		9-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-7		
Analysis	Result		Units
Paint Filter	U		ml/kg

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Project:			
Sampled:		9-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-8		
Analysis	Result		Units
Total Solids		71	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		85	%
Decachlorobiphenyl		107	%

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Project:			
Sampled:		9-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-9		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		1.37	mg/l

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Project:			
Sampled:		9-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-10		
Analysis	Result		Units
Total Solids		72.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		104	%
Decachlorobiphenyl		124	%

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Project:			
Sampled:		9-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-11		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		1.82	mg/l

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Project:			
Sampled:		9-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-12		
Analysis	Result		Units
Total Solids		70.2	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg

PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		77	%
Decachlorobiphenyl		121	%

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Project:			
Sampled:		9-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-13		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		1.17	mg/l

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Project:			
Sampled:		9-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-14		
Analysis	Result		Units
Total Solids		76.6	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		980	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		81	%
Decachlorobiphenyl		118	%

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Project:			
Sampled:		9-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-15		
Analysis	Result		Units

Paint Filter	U		ml/kg
Cadmium		1.43	mg/l

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Project:			
Sampled:		9-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-16		
Analysis	Result		Units
Total Solids		78	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		830	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		90	%
Decachlorobiphenyl		130	%

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Project:			
Sampled:		9-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-17		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		1.23	mg/l

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Project:			
Sampled:		9-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-18		
Analysis	Result		Units
Total Solids		76	%
EPA 8082			
PCB 1016	U		ug/kg

PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		800	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		89	%
Decachlorobiphenyl		114	%

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Project:			
Sampled:		9-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L97921-19		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		1.32	mg/l

Z-B-S-W-002

	RDL	Analyzed	Method
		9-Dec-02	CLP 3.0
	160	10-Dec-02	EPA 8082
	310	10-Dec-02	EPA 8082
	160	10-Dec-02	EPA 8082
	160	10-Dec-02	EPA 8082
	160	10-Dec-02	EPA 8082
	160	10-Dec-02	EPA 8082
	160	10-Dec-02	EPA 8082
		10-Dec-02	EPA 8082
		10-Dec-02	EPA 8082

L97921-1MS, Z-B-S-W-002

	RDL	Analyzed	Method
		10-Dec-02	EPA 8082
		10-Dec-02	EPA 8082
		10-Dec-02	EPA 8082
		10-Dec-02	EPA 8082

L97921-1MSD/DUP,ZBSW002

	RDL	Analyzed	Method

10-Dec-02	EPA 8082
10-Dec-02	EPA 8082
10-Dec-02	EPA 8082
10-Dec-02	EPA 8082

Z-#11-P

RDL	Analyzed	Method
	9-Dec-02	CLP 3.0
120	10-Dec-02	EPA 8082
240	10-Dec-02	EPA 8082
120	10-Dec-02	EPA 8082
120	10-Dec-02	EPA 8082
120	10-Dec-02	EPA 8082
120	10-Dec-02	EPA 8082
120	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082

Z-#11-P

RDL	Analyzed	Method
1	9-Dec-02	EPA 9095
0.05	11-Dec-02	EPA 6010 TCLP

L97921-5MS, Z-#11-P

RDL	Analyzed	Method

	0.05	11-Dec-02	EPA 6010 TCLP

L97921-5MSD/DUP, Z-#11-P

	RDL	Analyzed	Method
	1	9-Dec-02	EPA 9095

Z-#11-M

	RDL	Analyzed	Method
		9-Dec-02	CLP 3.0
	140	11-Dec-02	EPA 8082
	280	11-Dec-02	EPA 8082
	140	11-Dec-02	EPA 8082
	140	11-Dec-02	EPA 8082
	140	11-Dec-02	EPA 8082
	140	11-Dec-02	EPA 8082
	140	11-Dec-02	EPA 8082
*		11-Dec-02	EPA 8082
		11-Dec-02	EPA 8082

Z-#11-M

	RDL	Analyzed	Method
	1	9-Dec-02	EPA 9095
	0.05	11-Dec-02	EPA 6010 TCLP

Z-#11-C

	RDL	Analyzed	Method
		9-Dec-02	CLP 3.0
	130	11-Dec-02	EPA 8082
	260	11-Dec-02	EPA 8082
	130	11-Dec-02	EPA 8082
	130	11-Dec-02	EPA 8082
	130	11-Dec-02	EPA 8082
	130	11-Dec-02	EPA 8082
	130	11-Dec-02	EPA 8082
*		11-Dec-02	EPA 8082
		11-Dec-02	EPA 8082

Z-#11-C

	RDL	Analyzed	Method
	1	9-Dec-02	EPA 9095
	0.05	11-Dec-02	EPA 6010 TCLP

Z-#11-E

	RDL	Analyzed	Method
		9-Dec-02	CLP 3.0
	140	10-Dec-02	EPA 8082
	270	10-Dec-02	EPA 8082
	140	10-Dec-02	EPA 8082
	140	10-Dec-02	EPA 8082
	140	10-Dec-02	EPA 8082

140	10-Dec-02	EPA 8082
140	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082

Z-#11-E

RDL	Analyzed	Method
1	9-Dec-02	EPA 9095
0.05	11-Dec-02	EPA 6010 TCLP

Z-#9-L

RDL	Analyzed	Method
	9-Dec-02	CLP 3.0
130	10-Dec-02	EPA 8082
260	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
130	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082
	10-Dec-02	EPA 8082

Z-#9-L

RDL	Analyzed	Method

1	9-Dec-02	EPA 9095
0.05	11-Dec-02	EPA 6010 TCLP

Z-#9-C

RDL	Analyzed	Method
	9-Dec-02	CLP 3.0
130	11-Dec-02	EPA 8082
260	11-Dec-02	EPA 8082
130	11-Dec-02	EPA 8082
130	11-Dec-02	EPA 8082
130	11-Dec-02	EPA 8082
130	11-Dec-02	EPA 8082
130	11-Dec-02	EPA 8082
*	11-Dec-02	EPA 8082
	11-Dec-02	EPA 8082

Z-#9-C

RDL	Analyzed	Method
1	9-Dec-02	EPA 9095
0.05	11-Dec-02	EPA 6010 TCLP

Z-#9-R

RDL	Analyzed	Method
	9-Dec-02	CLP 3.0
130	11-Dec-02	EPA 8082

	260	11-Dec-02	EPA 8082
	130	11-Dec-02	EPA 8082
	130	11-Dec-02	EPA 8082
	130	11-Dec-02	EPA 8082
	130	11-Dec-02	EPA 8082
	130	11-Dec-02	EPA 8082
*		11-Dec-02	EPA 8082
		11-Dec-02	EPA 8082

Z-#9-R

RDL	Analyzed	Method
1	9-Dec-02	EPA 9095
0.05	11-Dec-02	EPA 6010 TCLP

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Project:				
Sampled:		10-Dec-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L98024-1			
Analysis	Result			Units
Total Solids		71		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		1100		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		104		%
Decachlorobiphenyl		137		%

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Project:				
Sampled:		10-Dec-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L98024-2			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		1.71		mg/l

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Project:				
Sampled:		10-Dec-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L98024-3			
Analysis	Result			Units
Total Solids		76.4		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg

PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		770	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		115	%
Decachlorobiphenyl		128	%

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Project:
Sampled: 10-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98024-4

Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		1.23	mg/l

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Project:
Sampled: 10-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98024-5

Analysis	Result		Units
Total Solids		71.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		750	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		120	%
Decachlorobiphenyl		133	%

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Project:
Sampled: 10-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:

Lab ID:	L98024-6		
Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		1.62	mg/l

15 CREEK

RDL	Analyzed	Method
	11-Dec-02	CLP 3.0
140	11-Dec-02	EPA 8082
270	11-Dec-02	EPA 8082
140	11-Dec-02	EPA 8082
140	11-Dec-02	EPA 8082
140	11-Dec-02	EPA 8082
140	11-Dec-02	EPA 8082
140	11-Dec-02	EPA 8082
	11-Dec-02	EPA 8082
	11-Dec-02	EPA 8082

15 CREEK

RDL	Analyzed	Method
1	10-Dec-02	EPA 9095
0.05	11-Dec-02	EPA 6010 TCLP

15 CENTER

RDL	Analyzed	Method
	11-Dec-02	CLP 3.0
130	12-Dec-02	EPA 8082
250	12-Dec-02	EPA 8082

130	12-Dec-02	EPA 8082
130	12-Dec-02	EPA 8082
130	12-Dec-02	EPA 8082
130	12-Dec-02	EPA 8082
130	12-Dec-02	EPA 8082
	12-Dec-02	EPA 8082
	12-Dec-02	EPA 8082

15 CENTER

RDL	Analyzed	Method
1	10-Dec-02	EPA 9095
0.05	11-Dec-02	EPA 6010 TCLP

15 ROAD

RDL	Analyzed	Method
	11-Dec-02	CLP 3.0
140	12-Dec-02	EPA 8082
270	12-Dec-02	EPA 8082
140	12-Dec-02	EPA 8082
140	12-Dec-02	EPA 8082
140	12-Dec-02	EPA 8082
140	12-Dec-02	EPA 8082
140	12-Dec-02	EPA 8082
	12-Dec-02	EPA 8082
	12-Dec-02	EPA 8082

15 ROAD

RDL	Analyzed	Method
1	10-Dec-02	EPA 9095
0.05	11-Dec-02	EPA 6010 TCLP

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Project:			
Sampled:		11-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L98205-1		
Analysis	Result		Units
Total Solids		86.9	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		140	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		108	%
Decachlorobiphenyl		144	%

PRE-DAM-S/SS-W-001

	RDL	Analyzed	Method
		16-Dec-02	CLP 3.0
	110	16-Dec-02	EPA 8082
	230	16-Dec-02	EPA 8082
	110	16-Dec-02	EPA 8082
	110	16-Dec-02	EPA 8082
	110	16-Dec-02	EPA 8082
	110	16-Dec-02	EPA 8082
	110	16-Dec-02	EPA 8082
		16-Dec-02	EPA 8082
		16-Dec-02	EPA 8082

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Project:
Sampled: 17-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98280-1

Analysis	Result	Units
Cadmium	1.6	mg/l

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Project:
Sampled: 17-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98280-2

Analysis	Result	Units
Cadmium	2.69	mg/l

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Project:
Sampled: 17-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98280-3

Analysis	Result	Units
Cadmium	0.192	mg/l

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Project:
Sampled: 17-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98280-4

Analysis	Result	Units
Cadmium	1.38	mg/l

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Project:				
Sampled:		17-Dec-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L98280-5			
Analysis	Result			Units
Cadmium		0.32		mg/l

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Project:				
Sampled:		17-Dec-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L98280-6			
Analysis	Result			Units
Cadmium		1.07		mg/l

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Project:				
Sampled:		17-Dec-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L98280-7			
Analysis	Result			Units
Cadmium		0.305		mg/l

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Project:				
Sampled:		17-Dec-02		
Source:	VIACOM/HORSEHEADS 19208		Origin:	
Lab ID:	L98280-8			
Analysis	Result			Units
Total Solids		74.3		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		390		ug/kg

PCB 1260	U			ug/kg
Tetrachloro-m-xylene		105		%
Decachlorobiphenyl		140		%

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Project:
Sampled: 17-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98280-9

Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium	U		mg/l

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Project:
Sampled: 17-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98280-10

Analysis	Result		Units
Total Solids		67.5	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		1200	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		58	%
Decachlorobiphenyl		141	%

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Project:
Sampled: 17-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98280-11

Analysis	Result		Units
Paint Filter	U		ml/kg

Cadmium		1.63	mg/l

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Project:
Sampled: 17-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98280-12

Analysis	Result		Units
Total Solids		67.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		380	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		13	%
Decachlorobiphenyl		113	%

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Project:
Sampled: 17-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98280-13

Analysis	Result		Units
Paint Filter	U		ml/kg
Cadmium		1.18	mg/l

2-6-TRAILER

RDL	Analyzed	Method
0.05	23-Dec-02	EPA 6010 TCLP

L98280-1MS, 2-6-TRAILER

RDL	Analyzed	Method
0.05	23-Dec-02	EPA 6010 TCLP

2-6-CENTER

RDL	Analyzed	Method
0.05	23-Dec-02	EPA 6010 TCLP

2-6-CHEMUNG

RDL	Analyzed	Method
0.05	23-Dec-02	EPA 6010 TCLP

2-7-TRAILER

	RDL	Analyzed	Method
	0.05	23-Dec-02	EPA 6010 TCLP

2-7-CENTER

	RDL	Analyzed	Method
	0.05	23-Dec-02	EPA 6010 TCLP

2-7-CHEMUNG

	RDL	Analyzed	Method
	0.05	23-Dec-02	EPA 6010 TCLP

16 CREEK

	RDL	Analyzed	Method
		19-Dec-02	CLP 3.0
	130	20-Dec-02	EPA 8082
	260	20-Dec-02	EPA 8082
	130	20-Dec-02	EPA 8082
	130	20-Dec-02	EPA 8082
	130	20-Dec-02	EPA 8082
	130	20-Dec-02	EPA 8082

130	20-Dec-02	EPA 8082
	20-Dec-02	EPA 8082
	20-Dec-02	EPA 8082

16 CREEK

RDL	Analyzed	Method
1	17-Dec-02	EPA 9095
0.05	23-Dec-02	EPA 6010 TCLP

16 CENTER

RDL	Analyzed	Method
	19-Dec-02	CLP 3.0
150	19-Dec-02	EPA 8082
290	19-Dec-02	EPA 8082
150	19-Dec-02	EPA 8082
150	19-Dec-02	EPA 8082
150	19-Dec-02	EPA 8082
150	19-Dec-02	EPA 8082
150	19-Dec-02	EPA 8082
	19-Dec-02	EPA 8082
	19-Dec-02	EPA 8082

16 CENTER

RDL	Analyzed	Method
1	17-Dec-02	EPA 9095

	0.05	23-Dec-02	EPA 6010 TCLP

16 ROAD

	RDL	Analyzed	Method
		19-Dec-02	CLP 3.0
	150	19-Dec-02	EPA 8082
	300	19-Dec-02	EPA 8082
	150	19-Dec-02	EPA 8082
	150	19-Dec-02	EPA 8082
	150	19-Dec-02	EPA 8082
	150	19-Dec-02	EPA 8082
	150	19-Dec-02	EPA 8082
D		19-Dec-02	EPA 8082
		19-Dec-02	EPA 8082

16 ROAD

	RDL	Analyzed	Method
	1	17-Dec-02	EPA 9095
	0.05	23-Dec-02	EPA 6010 TCLP

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Project:
Sampled: 17-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98341-1

Analysis	Result	Units
Cadmium	0.067	mg/l

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Project:
Sampled: 17-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98341-2

Analysis	Result	Units
Cadmium	0.101	mg/l

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Project:
Sampled: 17-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98341-3

Analysis	Result	Units
Cadmium	0.339	mg/l

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Project:
Sampled: 17-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98341-4

Analysis	Result	Units
Cadmium	0.074	mg/l

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Project:			
Sampled:		17-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L98341-5		
Analysis	Result		Units
Cadmium	U		mg/l

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Project:			
Sampled:		17-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L98341-6		
Analysis	Result		Units
Cadmium	U		mg/l

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Project:			
Sampled:		17-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L98341-7		
Analysis	Result		Units
Cadmium	U		mg/l

2-#11-E2

	RDL	Analyzed	Method
	0.05	23-Dec-02	EPA 6010 TCLP

2-#11-C2

	RDL	Analyzed	Method
	0.05	23-Dec-02	EPA 6010 TCLP

2-#11-M2

	RDL	Analyzed	Method
	0.05	23-Dec-02	EPA 6010 TCLP

2-#11-P2

	RDL	Analyzed	Method
	0.05	23-Dec-02	EPA 6010 TCLP

2-#9-L2

	RDL	Analyzed	Method
	0.05	23-Dec-02	EPA 6010 TCLP

2-#9-C2

	RDL	Analyzed	Method
	0.05	23-Dec-02	EPA 6010 TCLP

2-#9-R2

	RDL	Analyzed	Method
	0.05	23-Dec-02	EPA 6010 TCLP

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Project:
Sampled: 17-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98342-1

Analysis	Result		Units
NYS DOH 313-4			
PCB 1016	U		ug/wipe
PCB 1221	U		ug/wipe
PCB 1232	U		ug/wipe
PCB 1242	U		ug/wipe
PCB 1248	U		ug/wipe
PCB 1254	U		ug/wipe
PCB 1260	U		ug/wipe
Tetrachloro-m-xylene		91	%
Decachlorobiphenyl		115	%

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Project:
Sampled: 17-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98342-2

Analysis	Result		Units
NYS DOH 313-4			
PCB 1016	U		ug/wipe
PCB 1221	U		ug/wipe
PCB 1232	U		ug/wipe
PCB 1242	U		ug/wipe
PCB 1248	U		ug/wipe
PCB 1254	U		ug/wipe
PCB 1260	U		ug/wipe
Tetrachloro-m-xylene		115	%
Decachlorobiphenyl		137	%

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Project:
Sampled: 17-Dec-02

Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L98342-3		
Analysis	Result		Units
NYS DOH 313-4			
PCB 1016	U		ug/wipe
PCB 1221	U		ug/wipe
PCB 1232	U		ug/wipe
PCB 1242	U		ug/wipe
PCB 1248	U		ug/wipe
PCB 1254	U		ug/wipe
PCB 1260	U		ug/wipe
Tetrachloro-m-xylene		80	%
Decachlorobiphenyl		96	%

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Project:			
Sampled:		17-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L98342-4		
Analysis	Result		Units
NYS DOH 313-4			
PCB 1016	U		ug/wipe
PCB 1221	U		ug/wipe
PCB 1232	U		ug/wipe
PCB 1242	U		ug/wipe
PCB 1248	U		ug/wipe
PCB 1254	U		ug/wipe
PCB 1260	U		ug/wipe
Tetrachloro-m-xylene		113	%
Decachlorobiphenyl		129	%

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Project:			
Sampled:		17-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L98342-5		
Analysis	Result		Units
NYS DOH 313-4			
PCB 1016	U		ug/wipe
PCB 1221	U		ug/wipe
PCB 1232	U		ug/wipe

PCB 1242	U		ug/wipe
PCB 1248	U		ug/wipe
PCB 1254	U		ug/wipe
PCB 1260	U		ug/wipe
Tetrachloro-m-xylene		83	%
Decachlorobiphenyl		121	%

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Project:			
Sampled:		17-Dec-02	
Source:	VIACOM/HORSEHEADS 19208	Origin:	
Lab ID:	L98342-6		
Analysis	Result		Units
NYS DOH 313-4			
PCB 1016	U		ug/wipe
PCB 1221	U		ug/wipe
PCB 1232	U		ug/wipe
PCB 1242	U		ug/wipe
PCB 1248	U		ug/wipe
PCB 1254	U		ug/wipe
PCB 1260	U		ug/wipe
Tetrachloro-m-xylene		107	%
Decachlorobiphenyl		139	%

R1-200371-W

	RDL	Analyzed	Method
	1	18-Dec-02	NYS DOH 313-4
	2	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
		18-Dec-02	NYS DOH 313-4
		18-Dec-02	NYS DOH 313-4

R2-274340-W

	RDL	Analyzed	Method
	1	18-Dec-02	NYS DOH 313-4
	2	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
		18-Dec-02	NYS DOH 313-4
		18-Dec-02	NYS DOH 313-4

R3-200430-W

	RDL	Analyzed	Method
	1	18-Dec-02	NYS DOH 313-4
	2	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
		18-Dec-02	NYS DOH 313-4
		18-Dec-02	NYS DOH 313-4

R4-200606-W

	RDL	Analyzed	Method
	1	18-Dec-02	NYS DOH 313-4
	2	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4
		18-Dec-02	NYS DOH 313-4
		18-Dec-02	NYS DOH 313-4

R5-200436-W

	RDL	Analyzed	Method
	1	18-Dec-02	NYS DOH 313-4
	2	18-Dec-02	NYS DOH 313-4
	1	18-Dec-02	NYS DOH 313-4

1	18-Dec-02	NYS DOH 313-4
1	18-Dec-02	NYS DOH 313-4
1	18-Dec-02	NYS DOH 313-4
1	18-Dec-02	NYS DOH 313-4
	18-Dec-02	NYS DOH 313-4
	18-Dec-02	NYS DOH 313-4

R6-200609-W

RDL	Analyzed	Method
1	18-Dec-02	NYS DOH 313-4
2	18-Dec-02	NYS DOH 313-4
1	18-Dec-02	NYS DOH 313-4
1	18-Dec-02	NYS DOH 313-4
1	18-Dec-02	NYS DOH 313-4
1	18-Dec-02	NYS DOH 313-4
1	18-Dec-02	NYS DOH 313-4
	18-Dec-02	NYS DOH 313-4
	18-Dec-02	NYS DOH 313-4

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:
Sampled: 18-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98399-1

Analysis	Result	Units
Cadmium	U	mg/l

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:
Sampled: 18-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98399-2

Analysis	Result	Units
Cadmium	U	mg/l

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:
Sampled: 18-Dec-02
Source: VIACOM/HORSEHEADS 19208 Origin:
Lab ID: L98399-3

Analysis	Result	Units
Cadmium	0.073	mg/l

2-15-CREEK

	RDL	Analyzed	Method
	0.05	23-Dec-02	EPA 6010 TCLP

2-15-ROAD

	RDL	Analyzed	Method
	0.05	23-Dec-02	EPA 6010 TCLP

2-15-CENTER

	RDL	Analyzed	Method
	0.05	23-Dec-02	EPA 6010 TCLP

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:			
Sampled:		30-Dec-02	
Source:	HORSEHEADS 19208	Origin:	
Lab ID:	L98798-1		
Analysis	Result		Units
Cadmium		0.072	mg/l

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:			
Sampled:		30-Dec-02	
Source:	HORSEHEADS 19208	Origin:	
Lab ID:	L98798-2		
Analysis	Result		Units
Cadmium		1.17	mg/l

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:			
Sampled:		30-Dec-02	
Source:	HORSEHEADS 19208	Origin:	
Lab ID:	L98798-3		
Analysis	Result		Units
Cadmium		0.065	mg/l

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:			
Sampled:		30-Dec-02	
Source:	HORSEHEADS 19208	Origin:	
Lab ID:	L98798-4		
Analysis	Result		Units
Cadmium	U		mg/l

AAA Environmental
Peter Porter
6679 Moore Road

Syracuse, NY 13211

Project:
Sampled: 30-Dec-02
Source: HORSEHEADS 19208 Origin:
Lab ID: L98798-5

Analysis	Result	Units
Cadmium	U	mg/l

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:
Sampled: 30-Dec-02
Source: HORSEHEADS 19208 Origin:
Lab ID: L98798-6

Analysis	Result	Units
Cadmium	U	mg/l

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:
Sampled: 30-Dec-02
Source: HORSEHEADS 19208 Origin:
Lab ID: L98798-7

Analysis	Result	Units
Cadmium	U	mg/l

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:
Sampled: 30-Dec-02
Source: HORSEHEADS 19208 Origin:
Lab ID: L98798-8

Analysis	Result	Units
Cadmium	U	mg/l

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:
Sampled: 30-Dec-02

Source:	HORSEHEADS 19208	Origin:	
Lab ID:	L98798-9		
Analysis	Result		Units
Total Solids		76.7	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		780	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		84	%
Decachlorobiphenyl		120	%

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:			
Sampled:		30-Dec-02	
Source:	HORSEHEADS 19208	Origin:	
Lab ID:	L98798-10		
Analysis	Result		Units
EPA 8082			
PCB 1016		103	%
PCB 1260		122	%
Tetrachloro-m-xylene		161	%
Decachlorobiphenyl		174	%

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:			
Sampled:		30-Dec-02	
Source:	HORSEHEADS 19208	Origin:	
Lab ID:	L98798-11		
Analysis	Result		Units
EPA 8082			
PCB 1016		78	%
PCB 1260		82	%
Tetrachloro-m-xylene		146	%
Decachlorobiphenyl		167	%

AAA Environmental
Peter Porter

6679 Moore Road
Syracuse, NY 13211

Project:				
Sampled:		30-Dec-02		
Source:	HORSEHEADS 19208		Origin:	
Lab ID:	L98798-12			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		0.291		mg/l

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:				
Sampled:		30-Dec-02		
Source:	HORSEHEADS 19208		Origin:	
Lab ID:	L98798-13			
Analysis	Result			Units
Paint Filter	U			ml/kg

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:				
Sampled:		30-Dec-02		
Source:	HORSEHEADS 19208		Origin:	
Lab ID:	L98798-14			
Analysis	Result			Units
Total Solids		71.8		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		92		%
Decachlorobiphenyl		113		%

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:

Sampled:		30-Dec-02		
Source:	HORSEHEADS 19208		Origin:	
Lab ID:	L98798-15			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium		0.912		mg/l

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:				
Sampled:		30-Dec-02		
Source:	HORSEHEADS 19208		Origin:	
Lab ID:	L98798-16			
Analysis	Result			Units
Total Solids		74.4		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254		900		ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		95		%
Decachlorobiphenyl		122		%

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:				
Sampled:		30-Dec-02		
Source:	HORSEHEADS 19208		Origin:	
Lab ID:	L98798-17			
Analysis	Result			Units
Paint Filter	U			ml/kg
Cadmium	U			mg/l

3-7-CENTER

	RDL	Analyzed	Method
	0.05	3-Jan-03	EPA 6010 TCLP

L98798-1MS, 3-7-CENTER

	RDL	Analyzed	Method
	0.05	3-Jan-03	EPA 6010 TCLP

3-6-CHEMUNG

	RDL	Analyzed	Method
	0.05	3-Jan-03	EPA 6010 TCLP

3-6-CENTER

	RDL	Analyzed	Method
	0.05	3-Jan-03	EPA 6010 TCLP

3-6-TRAILER

	RDL	Analyzed	Method
	0.05	3-Jan-03	EPA 6010 TCLP

2-16-ROAD

	RDL	Analyzed	Method
	0.05	3-Jan-03	EPA 6010 TCLP

2-16-CENTER

	RDL	Analyzed	Method
	0.05	3-Jan-03	EPA 6010 TCLP

2-16-CREEK

	RDL	Analyzed	Method
	0.05	3-Jan-03	EPA 6010 TCLP

1-13-NORTH

	RDL	Analyzed	Method
		3-Jan-03	CLP 3.0
	130	2-Jan-03	EPA 8082
	260	2-Jan-03	EPA 8082
	130	2-Jan-03	EPA 8082
	130	2-Jan-03	EPA 8082
	130	2-Jan-03	EPA 8082
	130	2-Jan-03	EPA 8082
	130	2-Jan-03	EPA 8082
		2-Jan-03	EPA 8082
		2-Jan-03	EPA 8082

L98798-9MS, 1-13-NORTH

	RDL	Analyzed	Method
		2-Jan-03	EPA 8082
		2-Jan-03	EPA 8082
	D	2-Jan-03	EPA 8082
	D	2-Jan-03	EPA 8082

L98798-9MSD/DUP,1-13-NO.

	RDL	Analyzed	Method
		2-Jan-03	EPA 8082
		2-Jan-03	EPA 8082
		2-Jan-03	EPA 8082
	D	2-Jan-03	EPA 8082

1-13-NORTH

	RDL	Analyzed	Method
	1	2-Jan-03	EPA 9095
	0.05	3-Jan-03	EPA 6010 TCLP

L98798-12MSD/DUP,1-13-NO.

	RDL	Analyzed	Method
	1	2-Jan-03	EPA 9095

1-13-CENTER

	RDL	Analyzed	Method
		3-Jan-03	CLP 3.0
	130	2-Jan-03	EPA 8082
	270	2-Jan-03	EPA 8082
	130	2-Jan-03	EPA 8082
	130	2-Jan-03	EPA 8082
	130	2-Jan-03	EPA 8082
	130	2-Jan-03	EPA 8082
	130	2-Jan-03	EPA 8082
		2-Jan-03	EPA 8082
		2-Jan-03	EPA 8082

1-13-CENTER

RDL	Analyzed	Method
1	2-Jan-03	EPA 9095
0.05	3-Jan-03	EPA 6010 TCLP

1-13-SOUTH

RDL	Analyzed	Method
	3-Jan-03	CLP 3.0
130	2-Jan-03	EPA 8082
260	2-Jan-03	EPA 8082
130	2-Jan-03	EPA 8082
130	2-Jan-03	EPA 8082
130	2-Jan-03	EPA 8082
130	2-Jan-03	EPA 8082
130	2-Jan-03	EPA 8082
	2-Jan-03	EPA 8082
	2-Jan-03	EPA 8082

1-13-SOUTH

RDL	Analyzed	Method
1	2-Jan-03	EPA 9095
0.05	3-Jan-03	EPA 6010 TCLP

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:			
Sampled:		20-Jan-03	
Source:	VIACOM HORSEHEADS	Origin:	
Lab ID:	L99710-1		
Analysis	Result		Units
Total Solids		63	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		2200	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		80	%
Decachlorobiphenyl		106	%

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:			
Sampled:		20-Jan-03	
Source:	VIACOM HORSEHEADS	Origin:	
Lab ID:	L99710-2		
Analysis	Result		Units
EPA 8082			
PCB 1016		109	%
PCB 1260	162 *		%
Tetrachloro-m-xylene		76	%
Decachlorobiphenyl		92	%

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:			
Sampled:		20-Jan-03	
Source:	VIACOM HORSEHEADS	Origin:	
Lab ID:	L99710-3		
Analysis	Result		Units

EPA 8082			
PCB 1016		141	%
PCB 1260	185 *		%
Tetrachloro-m-xylene		122	%
Decachlorobiphenyl		130	%

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:			
Sampled:		20-Jan-03	
Source:	VIACOM HORSEHEADS	Origin:	
Lab ID:	L99710-4		
Analysis	Result		Units
Total Solids		52.8	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		860	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		99	%
Decachlorobiphenyl		120	%

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Project:			
Sampled:		20-Jan-03	
Source:	VIACOM HORSEHEADS	Origin:	
Lab ID:	L99710-5		
Analysis	Result		Units
Total Solids		66.1	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254		3100	ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		107	%
Decachlorobiphenyl		122	%

23-B-S-W-100

	RDL	Analyzed	Method
		23-Jan-03	CLP 3.0
	150	23-Jan-03	EPA 8082
	310	23-Jan-03	EPA 8082
	150	23-Jan-03	EPA 8082
	150	23-Jan-03	EPA 8082
	150	23-Jan-03	EPA 8082
	150	23-Jan-03	EPA 8082
	150	23-Jan-03	EPA 8082
		23-Jan-03	EPA 8082
		23-Jan-03	EPA 8082

L99710-1MS, 23-B-S-W-100

	RDL	Analyzed	Method
		23-Jan-03	EPA 8082
		23-Jan-03	EPA 8082
		23-Jan-03	EPA 8082
		23-Jan-03	EPA 8082

L99710-1MSD/DUP,23BSW100

	RDL	Analyzed	Method

23-Jan-03	EPA 8082	
23-Jan-03	EPA 8082	
23-Jan-03	EPA 8082	
23-Jan-03	EPA 8082	

23-B-S-E-100

RDL	Analyzed	Method
	23-Jan-03	CLP 3.0
180	23-Jan-03	EPA 8082
370	23-Jan-03	EPA 8082
180	23-Jan-03	EPA 8082
180	23-Jan-03	EPA 8082
180	23-Jan-03	EPA 8082
180	23-Jan-03	EPA 8082
180	23-Jan-03	EPA 8082
	23-Jan-03	EPA 8082
	23-Jan-03	EPA 8082

23-B-S-S-100

RDL	Analyzed	Method
	23-Jan-03	CLP 3.0
150	23-Jan-03	EPA 8082
300	23-Jan-03	EPA 8082
150	23-Jan-03	EPA 8082
150	23-Jan-03	EPA 8082
150	23-Jan-03	EPA 8082
150	23-Jan-03	EPA 8082
150	23-Jan-03	EPA 8082
	23-Jan-03	EPA 8082
	23-Jan-03	EPA 8082

Fagan Engineers
Stan Criss
113 East Chemung Place
Elmira, NY 14904

Project:	STAN CRISS			
Sampled:		19-Mar-03		
Source:	HORSEHEADS DRAINAGE WAY		Origin:	
Lab ID:	L102205-1			
Analysis	Result			Units
Total Solids		66.5		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		90		%
Decachlorobiphenyl		108		%

Fagan Engineers
Stan Criss
113 East Chemung Place
Elmira, NY 14904

Project:	STAN CRISS			
Sampled:		19-Mar-03		
Source:	HORSEHEADS DRAINAGE WAY		Origin:	
Lab ID:	L102205-2			
Analysis	Result			Units
Total Solids		73.3		%
EPA 8082				
PCB 1016	U			ug/kg
PCB 1221	U			ug/kg
PCB 1232	U			ug/kg
PCB 1242	U			ug/kg
PCB 1248	U			ug/kg
PCB 1254	U			ug/kg
PCB 1260	U			ug/kg
Tetrachloro-m-xylene		103		%
Decachlorobiphenyl		133		%

Fagan Engineers
Stan Criss
113 East Chemung Place
Elmira, NY 14904

Project:	STAN CRISS		
Sampled:		19-Mar-03	
Source:	HORSEHEADS DRAINAGE WAY	Origin:	
Lab ID:	L102205-3		
Analysis	Result		Units
Total Solids		85.3	%
EPA 8082			
PCB 1016	U		ug/kg
PCB 1221	U		ug/kg
PCB 1232	U		ug/kg
PCB 1242	U		ug/kg
PCB 1248	U		ug/kg
PCB 1254	U		ug/kg
PCB 1260	U		ug/kg
Tetrachloro-m-xylene		90	%
Decachlorobiphenyl		117	%

POST HV-3

	RDL	Analyzed	Method
		24-Mar-03	CLP 3.0
	150	21-Mar-03	EPA 8082
	300	21-Mar-03	EPA 8082
	150	21-Mar-03	EPA 8082
	150	21-Mar-03	EPA 8082
	150	21-Mar-03	EPA 8082
	150	21-Mar-03	EPA 8082
	150	21-Mar-03	EPA 8082
		21-Mar-03	EPA 8082
		21-Mar-03	EPA 8082

POST HV-2

	RDL	Analyzed	Method
		24-Mar-03	CLP 3.0
	130	21-Mar-03	EPA 8082
	260	21-Mar-03	EPA 8082
	130	21-Mar-03	EPA 8082
	130	21-Mar-03	EPA 8082
	130	21-Mar-03	EPA 8082
	130	21-Mar-03	EPA 8082
	130	21-Mar-03	EPA 8082
		21-Mar-03	EPA 8082
		21-Mar-03	EPA 8082

POST HV-1

	RDL	Analyzed	Method
		24-Mar-03	CLP 3.0
	120	21-Mar-03	EPA 8082
	240	21-Mar-03	EPA 8082
	120	21-Mar-03	EPA 8082
	120	21-Mar-03	EPA 8082
	120	21-Mar-03	EPA 8082
	120	21-Mar-03	EPA 8082
	120	21-Mar-03	EPA 8082
		21-Mar-03	EPA 8082
		21-Mar-03	EPA 8082

APPENDIX C

APPENDIX C

SAMPLING MEMORANDUM

MEMO

TO: Isabel Rodrigues (USEPA Region II)
Terence Chuhay (CDM Federal Programs Corp.)
Aaron Gorges (Fagan Engineers)
Peter Poter (AAA Environmental Services, Inc.)
Leo Brausch (Viacom Inc.)

September 16, 2002

FROM: Bruce Geno
Cummings/Riter Consultants, Inc.

Project No. 245.20/04

RE: POST-EXCAVATION SAMPLE DOCUMENTATION
INDUSTRIAL DRAINAGEWAY REMEDIATION - HORSEHEADS, NEW YORK

This memo provides clarification to post-excavation sampling requirements for sediment and bank soil remediation in the Industrial Drainageway.

- Sidewall samples of both sediments and bank soils will be collected at a frequency of 1 sample per 200 square feet of exposed sidewall, with a minimum of one sample for each sidewall in each discrete excavation. Sidewall samples will be collected in both the transectional and longitudinal directions.

- Bottom samples from both sediment and bank soil excavations will be collected at a frequency of 1 sample per 900 square feet of excavation, with a minimum of one bottom sample for each discrete excavation.

- Each sidewall and bottom sample will be collected as a composite sample consisting of five equal volume aliquots distributed evenly throughout the sidewall or bottom surface, respectively. There may be exceptions for small excavations, with concurrence of the USEPA oversight engineer.

- Although the Remedial Action Work Plan (Cummings/Riter Consultants, Inc., August 15, 2001) calls for the collection of additional sidewall samples for every additional two-foot depth increment, the New York State Department of Environmental Conservation *Technical Administrative Guidance Memorandum on Determination of Soil Cleanup Objectives and Cleanup Levels* (TAGM) distinguishes between surface soil (zero to two-foot depth) and subsurface soil (greater than two-foot depth). Therefore, it is consistent with the TAGM that sidewall samples be collected from two zones: zero to two feet and greater than two feet. USEPA has agreed to this practice.

CUMMINGS RITER

- With USEPA concurrence, the sample designation has been modified from the Sampling and Analysis Plan (Cummings/Riter Consultants, Inc., Remedial Action Work Plan, Appendix B) to help track sample locations. Samples will be labeled with a series of four letters followed by a sample number, as follows:

  A-B-S-N-001

  where,

  - first letter: Industrial Drainageway stationing: A = STA. 0+00 to 1+00, etc.
  - second letter: B = bank sample or C = channel sample
  - third letter: surface (S, less than two feet deep) or subsurface (SS, greater than two feet deep) sample,
  - fourth letter: compass direction (north, south, east or west) for sidewall samples, or B = bottom samples, and
  - number is numerical order of sample collected.

- Quality control requirements do not include trip blank analysis.

- Sample locations do not need to be surveyed; however, as-built drawings of completed excavations shall indicate sample locations.

- Analysis of all confirmatory samples must be reported as Level IV data.

APPENDIX D

APPENDIX D

DATA VALIDATION REPORT

RECEIVED APR 2 9 2003

Data Validation Report

Cummings-Riter Consultants, Inc.
Kentucky Avenue Wellfield Site OU3 - Horseheads, New York
SDG# 94773, 95433, 97172/97224, 94538, 94081, 94662

ECT.CON INC.

Environmental and Computer
Technology Consultants

3531 Fox Chase Drive
Imperial, PA 15126
(724) 695-8042
FAX (724) 695-2698
e-mail: ECTCONINC@aol.com

ECT.CON INC.
Environmental and Computer
Technology Consultants

Data Validation Report

SDG#	94773
Validation Report Date	April 28, 2003
Validation Guidance	USEPA Region 2 Guidelines for Data Review SW 846 Method 8082
Client Name	Cummings-Riter
Project Name	Viacom/Horseheads
Laboratory	Friend Laboratory Inc.
Method(s) Utilized	SW 846 8082
Analytical Fraction	PCBs

Samples/Matrix:

Date Sampled	Sample ID	Laboratory ID	PCBs	Matrix
9/30/02	C-B-S-W-001	94773-1	X	Solid
9/30/02	C-B-SS-W-001	94773-2	X	Solid
9/30/02	C-C-S-B-001	94773-5	X	Solid
9/30/02	C-C-SS-B-001	94773-6	X	Solid
9/30/02	C-B-SS-B-001	94773-7	X	Solid
9/30/02	C-B-SS-E-001	94773-8	X	Solid
9/30/02	C-B-S-E-001	94773-9	X	Solid

Analytical data in this report were screened to determine analytical limitations of the data based on specific quality control criteria. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of laboratory calculations has been verified as part of this validation. Specific findings on analytical limitations are presented in this report. Annotated Form 1s or spreadsheets for samples reviewed are included after the Data Assessment Findings. Form 1s for the MS/MSD samples and spreadsheets are not annotated.

SUMMARY

The sample set for Viacom/Horsehead consists of seven solid field samples. These samples were analyzed for the parameters as provided above. The findings presented in this review of the analytical data assume that the information presented by the analytical laboratory is correct. This review is identified as a false positive/false negative review, and therefore, does not include the review of some quality control (QC) items. Those included in the review are listed below.

The polychlorinated biphenyl (PCBs) findings are based upon the assessment of the following:

False Positives/False Negatives Validation

* • Data Completeness
* • Holding Times
* • Calibration and GC Performance
* • Blanks
* • Analytical Sequence Check
* • Target Compound Identification
  • Compound Quantitation and Reported Detection Limits
* • Chromatogram Quality

* Criteria were met for this evaluation item.

This evaluation was conducted in accordance with USEPA Region II SOP No. HW-23B (May 2002), USEPA CLP National Functional Guidelines for Organic Data Review and the analytical method. Findings from this evaluation should be considered when using the analytical data. This report presents a summary of the data qualifications based on the review of the aforementioned evaluation criteria. This is followed by annotated Form 1s/ spreadsheets. Finally, the worksheets used to perform the evaluation are provided.

FINDINGS

Polychlorinated Biphenyls (PCBs)

1. Compound Quantitation

The percent difference between columns exceeded the 25% quality control limit. For the following samples and compound, qualify PCB results as indicated in the table below. Samples were qualified based on SOP HW-23, Section 12.6.

Sample	Compound	% Difference	Qualifier
C-C-S-B-001	Aroclor 1254	81.1%	NJ
C-B-SS-B-001	Aroclor 1254	34.3%	J
C-B-S-E-001	Aroclor 1254	50%	J

NOTES

Polychlorinated Biphenyls (PCBs)

Completeness

The USEPA Region II SOP No. HW-23B has the following sections that are not applicable to this project because it is a false positive/false negative review:

- Surrogate Recovery (Form 2)
- Laboratory Control Sample
- Matrix Spikes (Form 3)
- Contamination
- GC Apparatus and Materials
- Extraction Techniques for Sample Preparation
- Field Duplicates

The cooler temperature upon receipt at the laboratory was 0 C. Data are not qualified upon this basis.

Calibration

The laboratory used linear regression to calculate PCB results. The use of linear regression is permissible for SW-846 methodologies. The laboratory met the acceptance criteria specified in Section 7.5.2 of Method 8000B (r value greater than or equal to 0.99).

Data summary forms (including calibration factors) for the initial and continuing calibration is not provided for the second column except for Aroclor 1254. The second column is used only for fingerprint confirmation, therefore, the laboratory does not provide the calibration factor information. Because Aroclor 1254 was identified as a constituent of concern, the data summary information for the second column is provided for the continuing calibration. Data are not qualified on this basis.

The percent difference (%D) per peak for multi-standard Aroclors are provided. For SW 846, the laboratory used the average Aroclor concentration to determine the %D. Data are not qualified because the average value is used.

Retention Time

Retention time windows are not determined by the use of three standards for single standard calibration Aroclors. The center of the retention time window is defined as the retention time of the midpoint standard from the initial calibration. For the multi-standard calibration Aroclors, the center of the retention time window is the mean of the retention time generated from each standard. The retention time windows are the mean $\pm$ 0.1 minutes. Data are not qualified on this basis.

Retention time windows are not provided for the second column except for Aroclor 1254. The second column is used only for fingerprint confirmation, therefore, the laboratory does not provide the retention time window information. Because Aroclor 1254 was identified as a constituent of concern, the retention time information for the second column is provided. Data are not qualified on this basis.

Compound Quantitation

Samples were analyzed and reported at a dilution due to the presence of target compounds. Dilutions for samples are presented below. Reporting limits were adjusted for percent solids and dilutions.

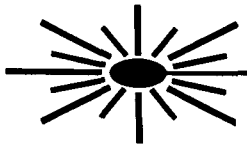
C-B-S-W-001, C-B-SS-W-001, C-C-S-B-001, C-C-SS-B-001, C-B-SS-B-001, C-B-SS-E-001, C-B-S-E-001	10x

Data Reviewer

4/28/03
Date

Glossary of Data Qualifiers

U	Not Detected.	The associated number indicates approximate sample concentration necessary to be detected.
UJ	Not Detected.	Quantitation limit may be inaccurate or imprecise.
J	Analyte Present.	Reported value may not be accurate or precise.
N	Consider Present.	Tentative identification. Special methods may be needed to confirm its presence or absence in future sampling efforts.
R	Unusable Result.	Analyte may or may not be present in the sample.
UR	Unusable Result.	Analyte may or may not be present in the sample.



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Annotated Form 1's
(Spreadsheet)

FLI
FRIEND LABORATORY
N · C

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date: 04-OCT-2002

Lab Sample ID: L94773-1

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: C-B-S-W-001
Description: COMPOSITE
Sampled On: 30-SEP-02 16:45 by CLIENT
Date Received: 01-OCT-02 09:00
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	56.6	%		01-OCT-02 00:00	CLP 3.0	02-066-79
EPA 8082						
PCB 1016	U	ug/kg	170	04-OCT-02 10:30	EPA 8082	02-004-9998
PCB 1221	U	ug/kg	350	04-OCT-02 10:30	EPA 8082	02-004-9998
PCB 1232	U	ug/kg	170	04-OCT-02 10:30	EPA 8082	02-004-9998
PCB 1242	U	ug/kg	170	04-OCT-02 10:30	EPA 8082	02-004-9998
PCB 1248	U	ug/kg	170	04-OCT-02 10:30	EPA 8082	02-004-9998
PCB 1254	280	ug/kg	170	04-OCT-02 10:30	EPA 8082	02-004-9998
PCB 1260	U	ug/kg	170	04-OCT-02 10:30	EPA 8082	02-004-9998
Extraction Information:				02-OCT-02 00:00	EPA 3550	02-044-92
Surrogate Recovery:						
Tetrachloro-m-xylene	82	%				02-004-9998
Decachlorobiphenyl	96	%				02-004-9998

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
= analyte was detected in the method or trip blank J = result estimated below the quantitation limit

rmation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost for ese services. Your samples will be discarded after 14 days unless we are advised otherwise.

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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date: 04-OCT-2002

Lab Sample ID: L94773-2

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: C-B-SS-W-001
Description: COMPOSITE
Sampled On: 30-SEP-02 16:50 by CLIENT
Date Received: 01-OCT-02 09:00
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	55.8	%		01-OCT-02 00:00	CLP 3.0	02-066-79
EPA 8082						
PCB 1016	U	ug/kg	160	04-OCT-02 13:08	EPA 8082	02-004-0004
PCB 1221	U	ug/kg	330	04-OCT-02 13:08	EPA 8082	02-004-0004
PCB 1232	U	ug/kg	160	04-OCT-02 13:08	EPA 8082	02-004-0004
PCB 1242	U	ug/kg	160	04-OCT-02 13:08	EPA 8082	02-004-0004
PCB 1248	U	ug/kg	160	04-OCT-02 13:08	EPA 8082	02-004-0004
PCB 1254	4100	ug/kg	160	04-OCT-02 13:08	EPA 8082	02-004-0004
PCB-1260	U	ug/kg	160	04-OCT-02 13:08	EPA 8082	02-004-0004
Extraction Information:				02-OCT-02 00:00	EPA 3550	02-044-92
Surrogate Recovery:						
Tetrachloro-m-xylene	80	%				02-004-0004
Decachlorobiphenyl	97	%				02-004-0004

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
= analyte was detected in the method or trip blank J = result estimated below the quantitation limit

[redacted]ormation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed [redacted]t [redacted]f these services. Your samples will be discarded after 14 days unless we are advised otherwise.

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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:04-OCT-2002

Lab Sample ID: L94773-5

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: C-C-S-B-001
Description: COMPOSITE
Sampled On: 30-SEP-02 16:50 by CLIENT
Date Received: 01-OCT-02 09:00
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	56.1	%		01-OCT-02 00:00	CLP 3.0	02-066-79
EPA 8082						
PCB 1016	U	ug/kg	170	04-OCT-02 13:39	EPA 8082	02-004-0005
PCB 1221	U	ug/kg	330	04-OCT-02 13:39	EPA 8082	02-004-0005
PCB 1232	U	ug/kg	170	04-OCT-02 13:39	EPA 8082	02-004-0005
PCB 1242	U	ug/kg	170	04-OCT-02 13:39	EPA 8082	02-004-0005
PCB 1248	U	ug/kg	170	04-OCT-02 13:39	EPA 8082	02-004-0005
PCB 1254	6800 NJ	ug/kg	170	04-OCT-02 13:39	EPA 8082	02-004-0005
PCB 1260	U	ug/kg	170	04-OCT-02 13:39	EPA 8082	02-004-0005
Extraction Information:				02-OCT-02 00:00	EPA 3550	02-044-92
Surrogate Recovery:						
Tetrachloro-m-xylene	98	%				02-004-0005
Decachlorobiphenyl	135	%				02-004-0005

DMB 4/24/03

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
= analyte was detected in the method or trip blank J = result estimated below the quantitation limit

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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date: 04-OCT-2002

Lab Sample ID: L94773-6

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: C-C-SS-B-001
Description: COMPOSITE
Sampled On: 30-SEP-02 17:00 by CLIENT
Date Received: 01-OCT-02 09:00
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	85	%		01-OCT-02 00:00	CLP 3.0	02-066-79
EPA 8082						
PCB 1016	U	ug/kg	110	04-OCT-02 11:01	EPA 8082	02-004-9999
PCB 1221	U	ug/kg	230	04-OCT-02 11:01	EPA 8082	02-004-9999
PCB 1232	U	ug/kg	110	04-OCT-02 11:01	EPA 8082	02-004-9999
PCB 1242	U	ug/kg	110	04-OCT-02 11:01	EPA 8082	02-004-9999
PCB 1248	U	ug/kg	110	04-OCT-02 11:01	EPA 8082	02-004-9999
PCB 1254	220	ug/kg	110	04-OCT-02 11:01	EPA 8082	02-004-9999
PCB 1260	U	ug/kg	110	04-OCT-02 11:01	EPA 8082	02-004-9999
Extraction Information:				02-OCT-02 00:00	EPA 3550	02-044-92
Surrogate Recovery:						
Tetrachloro-m-xylene	73	%				02-004-9999
Decachlorobiphenyl	87	%				02-004-9999

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
= analyte was detected in the method or trip blank J = result estimated below the quantitation limit

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hese services. Your samples will be discarded after 14 days unless we are advised otherwise.

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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date: 04-OCT-2002

Lab Sample ID: L94773-7

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: C-B-SS-B-001
Description: COMPOSITE
Sampled On: 30-SEP-02 16:30 by CLIENT
Date Received: 01-OCT-02 09:00
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	69.2	%		01-OCT-02 00:00	CLP 3.0	02-066-79
EPA 8082						
PCB 1016	U	ug/kg	140	04-OCT-02 12:05	EPA 8082	02-004-0002
PCB 1221	U	ug/kg	270	04-OCT-02 12:05	EPA 8082	02-004-0002
PCB 1232	U	ug/kg	140	04-OCT-02 12:05	EPA 8082	02-004-0002
PCB 1242	U	ug/kg	140	04-OCT-02 12:05	EPA 8082	02-004-0002
PCB 1248	U	ug/kg	140	04-OCT-02 12:05	EPA 8082	02-004-0002
PCB 1254	1600 J	ug/kg	140	04-OCT-02 12:05	EPA 8082	02-004-0002
PCB 1260	U	ug/kg	140	04-OCT-02 12:05	EPA 8082	02-004-0002
Extraction Information:				02-OCT-02 00:00	EPA 3550	02-044-92
Surrogate Recovery:						
Tetrachloro-m-xylene	78	%				02-004-0002
Decachlorobiphenyl	96	%				02-004-0002

TMK 4/28/03

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

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e services. Your samples will be discarded after 14 days unless we are advised otherwise.

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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date: 04-OCT-2002

Lab Sample ID: L94773-8

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: C-B-SS-E-001
Description: COMPOSITE
Sampled On: 30-SEP-02 16:35 by CLIENT
Date Received: 01-OCT-02 09:00
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	62.4	%		01-OCT-02 00:00	CLP 3.0	02-066-79
EPA 8082						
PCB 1016	U	ug/kg	160	04-OCT-02 12:37	EPA 8082	02-004-0003
PCB 1221	U	ug/kg	320	04-OCT-02 12:37	EPA 8082	02-004-0003
PCB 1232	U	ug/kg	160	04-OCT-02 12:37	EPA 8082	02-004-0003
PCB 1242	U	ug/kg	160	04-OCT-02 12:37	EPA 8082	02-004-0003
PCB 1248	U	ug/kg	160	04-OCT-02 12:37	EPA 8082	02-004-0003
PCB 1254	3100	ug/kg	160	04-OCT-02 12:37	EPA 8082	02-004-0003
PCB 1260	U	ug/kg	160	04-OCT-02 12:37	EPA 8082	02-004-0003
Extraction Information:				02-OCT-02 00:00	EPA 3550	02-044-92
Surrogate Recovery:						
Tetrachloro-m-xylene	92	%				02-004-0003
Decachlorobiphenyl	115	%				02-004-0003

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

[illegible]ormation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed [illegible]cost for these services. Your samples will be discarded after 14 days unless we are advised otherwise.

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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date: 04-OCT-2002

Lab Sample ID: L94773-9

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: C-B-S-E-001
Description: COMPOSITE
Sampled On: 30-SEP-02 16:40 by CLIENT
Date Received: 01-OCT-02 09:00
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	56.7	%		01-OCT-02 00:00	CLP 3.0	02-066-79
EPA 8082						
PCB 1016	U	ug/kg	170	04-OCT-02 11:36	EPA 8082	02-004-0001
PCB 1221	U	ug/kg	350	04-OCT-02 11:36	EPA 8082	02-004-0001
PCB 1232	U	ug/kg	170	04-OCT-02 11:36	EPA 8082	02-004-0001
PCB 1242	U	ug/kg	170	04-OCT-02 11:36	EPA 8082	02-004-0001
PCB 1248	U	ug/kg	170	04-OCT-02 11:36	EPA 8082	02-004-0001
PCB 1254	310 J	ug/kg	170	04-OCT-02 11:36	EPA 8082	02-004-0001
PCB 1260	U	ug/kg	170	04-OCT-02 11:36	EPA 8082	02-004-0001
Extraction Information:				02-OCT-02 00:00	EPA 3550	02-044-92
Surrogate Recovery:						
Tetrachloro-m-xylene	86	%				02-004-0001
Decachlorobiphenyl	93	%				02-004-0001

TMB 4/28/03

Results calculated on a dry weight basis.

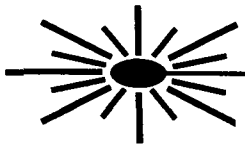
Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

Information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost for these services. Your samples will be discarded after 14 days unless we are advised otherwise.



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Support Documentation

CUSTOM[redacted] # _____

CHAIN OF [redacted]TODY RECORD

PAGE [redacted]Z

FLI
FRIEND LABORATORY I • N • C
ONE RESEARCH CIRCLE
WAVERLY NY 14892-1532
Telephone (607) 565 3500
Fax (607) 565-4083

Untreated	Sodium thiosulfate	HCl pH <2	Ascorbic acid & HCl pH <2	HNO_3 pH <2	H_2SO_4 pH <2	NaOH pH >12	NaOH & Zinc acetate pH >9	Acetic Buffer pH <3	Sodium sulfite

CLIENT: AAA ENVIRONMENTAL
ADDRESS: ONSITE DELIVERY
PHONE: 607-227-8601 FAX:

INVOICE TO:
ADDRESS:

Sample Site: VIACOM/HORSEHEADS

P.O. #

PROJECT NO. / NAME
19208
VIACOM/HORSEHEADS

COPY TO:
ADDRESS:

94773

DATE & TIME OF SAMPLE COLLECTION	SAMPLE DESCRIPTION	NUMBER OF CONTAINERS	ANALYSES / TESTS REQUESTED	SAMPLE NUMBER
9/30/02 @1645	C-B-S-W-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's IN SOIL	LAB USE ONLY -1
9/30/02 @1650	C-B-SS-W-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's IN SOIL	-2, -3, -4
9/30/02 @1650	C-C-S-B-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's IN SOIL	-5
9/30/02 @1700	CC-SS-B-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's IN SOIL	-6

RELINQUISHED BY	DATE /TIME	ACCEPTED BY	DATE/TIME	NOTES TO LABORATORY
SAMPLER A/SCHRECKENGOST RAS	9/30/02 1710		9/30/02 5:40	0°
	830		10/1/02 900	

SUSPECTED CONTAMINATION LEVEL

NONE SLIGHT MODERATE HIGH (please circle)

CUSTOMER [redacted] # _____

CHAIN OF CUSTODY RECORD

PAGE 2 of 2

FLI
FRIEND LABORATORY I • N • C
ONE RESEARCH CIRCLE
WAVERLY NY 14892-1532
Telephone (607) 565 3500
Fax (607) 565-4083

Sample Site: VIACOM/HORSEHEADS

P.O. #

Untreated | Sodium thiosulfate | HCl pH <2 | Ascorbic acid & HCl pH <2 | HNO_3 pH <2 | H_2SO_4 pH <2 | NaOH pH >12 | NaOH & Zinc acetate pH >9 | Acetic Buffer pH <3 | Sodium sulfite

CLIENT: AAA ENVIRONMENTAL
ADDRESS: ONSITE DELIVERY
PHONE: 607-227-8601 FAX:

INVOICE TO:
ADDRESS:

PROJECT NO. / NAME
19208
VIACOM/HORSEHEADS

COPY TO:
ADDRESS:

94773

DATE & TIME OF SAMPLE COLLECTION	SAMPLE DESCRIPTION	NUMBER OF CONTAINERS	ANALYSES / TESTS REQUESTED	LAB SAMPLE NUMBER
9/30/02 @1630	C-B-SS-B-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB'S IN SOIL	LAB USE ONLY -7
9/30/02 @1635	C-B-SS-E-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB'S IN SOIL	-8
9/30/02 @1640	C-B-S-E-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB'S IN SOIL	-9
		Description: Grab Composite Other Matrix: DW WW MW Soil Air Other		

RELINQUISHED BY	DATE /TIME	ACCEPTED BY	DATE/TIME	NOTES TO LABORATORY
SAMPLER A. SCHLICKENGOST TRAB	9/30/02 1710		9/30/02 540	
	830	Tom Jones	10/1/02 900	

SUSPECTED CONTAMINATION LEVEL
NONE SLIGHT MODERATE HIGH (please circle)

Laboratory Case Narrative

FLI
FRIEND LABORATORY I · N · C

Laboratory Validation and Usability Assessment

Project: **AAA Environmental**
Viacom/Horseheads 19208
Sampled September 30, October 1, 2, & 5, 2002

The data reported in this package have been reviewed for compliance with QC acceptance limits as specified in the method cited for each analysis.

These statistical limits are typically based on historical laboratory data for a given sample matrix, and will not exceed any default limits specified by the method. CLP acceptance limits are also considered.

The following Quality Control operations are considered in the validation of reported results:

Holding times, surrogate recovery, spiked sample recovery, duplicates/spiked duplicate precision, tuning criteria, internal standard variation, continuing calibration variation, reference (check) sample recovery, and instrument, method, trip and field blanks. The appropriate frequency for each operation is also considered.

Every effort has been made to report data that is compliant with the EPA methodology cited for each analysis. In cases where the laboratory was unable to meet all method requirements prior to sample expiry, either due to the nature of the sample or other technical difficulty, results are reported with qualification with the understanding that qualified results may not be suitable for compliance purposes. The internal technical review is based on the USEPA Contract Laboratory Program *National Functional Guidelines for Organic Review* (EPA 540/R-94/012, February 1994) and *National Functional Guidelines for Inorganic Review* (EPA 540/R-94/013, February 1994).

Validation

Eighteen site samples and three matrix spike/matrix spike duplicate sets were received on October 1, 2, & 7, 2002, with ice. The temperatures as received were 0°C, 9°C, 28°C, and 5°C, in order of receipt. The cooler received at 9°C had ice present at -2°C, and the cooler received at 28°C had ice present at 3°C.

PCB

Site samples were analyzed by EPA method 8082 for PCBs with a two-microliter injection volume.

RTX-CLPesticides 1 and RTX-CLPesticides 2 capillary columns, 0.32 mm ID, with purge packed inlets and electronic pressure control are used on an Hewlett-Packard 5890 series II with dual ECD and an HP 7673 autosampler with simultaneous injection. Data is collected with HP Chemstation software and processed by Thruput with Target software. If a peak is detected within the retention time window of a target compound, second-column confirmation is performed. Column RTX-CLPesticides 2 was used for the primary analysis. Column RTX-CLPesticides 1 was used to confirm only the fingerprint, not the quantitation. Form 10B's are provided in order to verify pattern recognition.

PCB 1254 was detected in each of the site samples except the Duplicate site sample. Second-column analysis confirmed the presence of these targets. No PCBs were detected in the method blanks.

Surrogate recoveries were within limits.

Site samples C-B-SS-W-001 and B-B-S-E-B-002 were spiked in duplicate. Spike recovery for PCB 1260 was within limits for the MSD of site sample B-B-S-E-B-002. All other spike recoveries were above the acceptance limits. Due to the levels of PCB 1254 detected in both site samples, overlapping peaks probably caused an elevation of the recoveries.

Precision as indicated by RPD was within acceptance limits.

Three blank spikes were associated with the site samples. Blank spike recoveries were within acceptance limits.

No other analytical difficulties were encountered.

Metals

Site sample R0025 was analyzed for TCLP Cadmium by Inductively Coupled Plasma - Optical Emission Spectrometry.

The ICP-OES instrument is an ARL 3560 with an AIM 1250 autosampler with an extension. The data is acquired with the Microactive, Australia software ICP Manager 35xx.

Site sample R0025 was spiked for TCLP Cadmium. Spike recovery was within acceptance limits.

Laboratory Control sample recovery for TCLP Cadmium was within acceptance limits.

No analytical difficulties were encountered.

Wet Chemistry

Site sample R0025 was analyzed in duplicate for paint filter by EPA method 9095. Precision as indicated by absolute difference was within the acceptance limit.

Usability Assessment

All reported data were found to be valid and usable within the EPA National Functional Validation guidelines except those that were qualified in this Laboratory Validation.

Laboratory validation and
Usability assessment conducted by: Elizabeth A Keator

Date: November 5, 2002

Elizabeth A. Keator
Quality Assurance

Worksheets

				YES	NO	N/A
C-B-S-W-001	94773-1	GB-SS-B-001	-7			
C-B-SS-W-001	-2	C-B-SS-G-001	-8			
C-C-S-B-001	-5	C-B-S-G-001	-9			
GC-SS-B-001	-6					

PACKAGE COMPLETENESS AND DELIVERABLES

CASE NUMBER: - SDG# 94773

LAB: Friend Laboratory Inc. SITE: Viacom / Horse Leads

1.0 Data Completeness and Deliverables

1.1	Has all the data been submitted in CLP deliverable format?	☑		
1.2	Have any missing deliverables been received and added to the data package?		☑	

ACTION: Call lab for explanation/resubmittal of any missing deliverables. If lab cannot provide them, note the effect on review of the data in the reviewer narrative.

2.0 Cover Letter, SDG Narrative

2.1	Is a laboratory narrative or cover letter present?	☑		
2.2	Are the case number and/or SDG number contained in the narrative or cover letter?	☑		

3.0 Data Validation Checklist

3.1 Does this data package contain:

Water data?		☑	
Waste data?		☑	
Soil/solid data?	☑		

YES NO N/A

POLYCHLORINATED BIPHENYLS

1.0 Traffic Reports and Laboratory Narrative

1.1 Are traffic report and chain-of-custody forms present for all samples? ✓ — —

ACTION: If no, contact lab for replacement of missing or illegible copies.

1.2 Do the traffic reports, chain-of-custody forms or SDG narrative indicate any problems with sample receipt, condition of the samples, analytical problems or special circumstances affecting the quality of the data? — ✓ —

Cooler Temp. 0°C.

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50%-90% water, all data should be qualified as estimated, "J." If a soil sample, other than TCLP, contains more than 90% water, non detects shall be qualified as unusable, "R."

ACTION: If samples were not iced or if the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10° C), flag all positive results "J" and all non-detects "UJ".

2.0 Holding Times

2.1 Have any PCB technical holding times, determined from date of collection to date of extraction, been exceeded? — ✓ —

Water and waste samples for PCB analysis must be extracted within 7 days of the date of collection. Extracts must be analyzed within 40 days of the date of extraction. Soils and solid samples must be extracted within 14 days of collection and analyzed within 40 days of extraction.

Collected. 9/30/02
Extracted 10/02/02
Analyzed. 10/4/02.

ACTION: If technical holding times are exceeded, flag all positive results as estimated, "J," and sample quantitation limits "UJ" and document in the narrative that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon re-analysis, the reviewer must use

	YES	NO	N/A

professional judgement to determine the reliability of the data and the effects of additional storage on the sample results. At a minimum, all the data should at least be qualified "J", but the reviewer may determine that non-detects are unusable,"R."

3.0 Surrogate Recovery (Form II) NA for Pesticide + Pesticide - review.

3.1 Were the recoveries of tetrachloro-m-xylene (TCMX) and decachlorobiphenyl (DCB) presented on CLP Surrogate Recovery Summary forms (Form II), or equivalent, for each of the following matrices?

a.	Water/Waste	[ ]	___	___ ✓
b.	Soil/Solid	[ ]	___	___ ✓

3.2 Are all the PCB samples listed on the appropriate surrogate recovery form for each of the following matrices?

a.	Water	[ ]	___	___ ✓
b.	Waste	[ ]	___	___ ✓
c.	Soil/Solid	[ ]	___	___ ✓

ACTION: Call lab for explanation/resubmittals. If missing deliverables are unavailable, document the effect in the data assessment.

3.3 Did the laboratory provide their developed in-house Surrogate recoveries? [ ] ___ ___ ✓

ACTION: If no, use 70 -130% recovery to qualify in section 3.4 below.

3.4 Were surrogate recoveries of TCMX or DCB outside of the laboratory-established upper (UCL) or lower (LCL) control limits for any sample or blank? ___ [ ] ___ ✓

ACTION: Circle all outliers in red.

ACTION: No qualification is done if surrogates are diluted out. If recovery for <u>both</u> surrogates is

YES NO N/A

below the LCL, but above 10%, flag all results for that sample "J". If recovery is < 10% for either surrogate, qualify positive results "J" and flag non-detects "R". If recovery is above the UCL for both surrogates qualify positive values "J".

Note: DCB is used when PCBs are determined as Aroclors. DCB is the internal standard when determining PCB congeners and TCMX the surrogate.

3.5 Were surrogate retention times (RT) within the windows established during the initial 5-point analysis? [ ] ___ ✓

ACTION: If the RT limits are not met, the analysis may be qualified unusable (R) for that sample on the basis of professional judgement. However, flag positive hits as estimate (J) if confirmed by GC/MS analysis.

3.6 Are there any transcription/calculation errors between raw data and Form II? ___ [ ] ✓

ACTION: If large errors exist, call lab for explanation/resubmittal. Make any necessary corrections and document the effect in data assessments.

4.0 Laboratory Control Sample NA for false + / false - review

4.1 Are raw data and percent recoveries present for all Laboratory Control samples as required by Method 8000B (section 8.5) and Method 8082 (section 8.4.2)? [ ] ___ ✓

Verify that QC check samples were extracted and analyzed by the same procedures used for the actual samples.

ACTION: If any Laboratory Control Sample data are missing, call the lab for explanation /resubmittals. Make note in the data assessment.

NOTE: For aqueous samples, an additional QC check sample must be prepared and analyzed when any analyte in a matrix spike fails the required acceptance criteria (see section 5.3 below). The additional QC check sample must contain each analyte that failed in the MS analysis.

YES NO N/A

Note: When the results for matrix spike analysis indicates a problem due to sample matrix effects, the LCS results are used to verify the laboratory can perform the analysis in a clean sample.

4.2 Were Laboratory Control Samples analyzed at the required concentration for all analytes of interest as specified in Method 8000B (sec.8.5)? [ ] ___ ✓

ACTION: If Laboratory Control Samples were not analyzed at the required concentration or the required frequency, make note in the data assessment and use professional judgement to determined the affect on the data.

4.3 Were the LCS recoveries within the laboratory's in-house per cent recoveries (if not available, use 70 - 130%) [ ] ___ ✓

4.4 If no, were Laboratory Control Samples re-analyzed? [ ] ___ ✓

Note: Corrective action must be taken when one or more of the analytes of interest fail the QC acceptance criteria (Method 8000B, section 8.7.4)

ACTION: If QC check samples were not re-analyzed, or a general system problem is indicated by repeated failure to meet the QC acceptance criteria specified in the method, make note in the data assessment and use professional judgement to determine the effect on the data.

5.0 Matrix Spikes (Form III) NA for false + / false - review

5.1 Are all data for one matrix spike and matrix duplicate (unspiked) pair (MS/Dup) or matrix spike/matric spike duplicate (MS/MSD)present and complete for each matrix Method 8082(section 8.4.1)? [ ] ___ ✓

NOTE: For soil and waste samples showing detectable amounts of organics, the lab may substitute replicate samples in place of the matrix spike (see Method 8000B-40, section 8.5.3)).

5.2 Have MS/Dup or MS/MSD results been summarized on modified CLP Form III? [ ] ___ ✓

ACTION: If any data are missing take action as specified in section 3.2 above.

5.3 Were matrix spikes analyzed at the required frequency

YES NO N/A

for each of the following matrices? (One MS/Dup, MS/MSD must be performed for every 20 samples of similar matrix or concentration level. Laboratories analyzing one to ten samples per month are required to analyze at least one MS per month (Method 8000B-39 (section 8.5)).

a. Water [ ] ___ ✓

b. Waste [ ] ___ ✓

c. Soil/Solid [ ] ___ ✓

ACTION: If any MS/Dup or MS/MSD data are missing, take the action specified in 3.2 above.

5.4 Were the 70 - 130% recoveries used to compare the matrix spike recoveries, or did the lab use the optional QC acceptance criteria discussed in Method 8000B-40(section 8.5.3.1)?

List the criteria used and make note in data assessment.

Criteria used _____

5.5 Was the matrix spike prepared at the proper spike concentration? (Method 8000B, section 8.5.1-8.5.2) [ ] ___ ✓

For aqueous organic extractable, the spike concentration should be prepared according options in: Method 8000B-40, (section 8.5.1 and 8.5.2).

ACTION: No action is taken based on MS or replicate data alone. However, using informed professional judgement, the data reviewer may use the matrix spike or laboratory replicate results in conjunction with other QC criteria and determine the need for some qualification of the data. In some instances it may be determined that only the replicate or spiked samples are affected. Alternatively, the data may suggest that the laboratory is having a systematic problem with one or more analytes, thereby affecting all associated samples.

6.0 Blanks (Form IV)

	YES	NO	N/A
6.1 Was reagent blank data reported on CLP equivalent Method Blank Summary form(s) (Form IV)?	✓		
6.2 Frequency of Analysis: Has a reagent blank been analyzed for every 20 (or less) samples of similar matrix or concentration or each extraction batch?	✓		

ACTION: If any blank data are missing, take action as specified above (section 3.2) . If blank data is not available, reject (R) all associated positive data. However, using professional judgement, the data reviewer may substitute field blank data for missing method blank data.

6.3 Chromatography: review the blank raw data - chromatograms, quant reports or data system printouts. Is the chromatographic performance (baseline stability) for each instrument acceptable for PCBs?	✓		

ACTION: Use professional judgement to determine the effect on the data.

7.0 Contamination NA for false + / false - review.

NOTE: "Water blanks", "distilled water blanks" and "drilling water blanks" are validated like any other sample and are not used to qualify the data. Do not confuse them with the other QC blanks discussed below.

7.1 Do any method/instrument/reagent/cleanup blanks have positive results for PCBs? When applied as described below, the contaminant concentration in these blanks are multiplied by the sample Dilution Factor and corrected for % moisture when necessary.		[ ]	✓
7.2 Do any field/rinse blanks have positive PCB results?		[ ]	✓

ACTION: Prepare a list of the samples associated with each of the contaminated blanks. (Attach a separate sheet.)

NOTE: All field blank results associated to a particular group of samples (may exceed one per case or one per day) may be used to qualify data.

YES NO N/A

Blanks may not be qualified because of contamination in another blank. Field blanks must be qualified for surrogate, or calibration QC problems.

ACTION: Follow the directions in the table below to qualify sample results due to contamination. Use the largest value from all the associated blanks.

Sample conc > EDL but < 5 x blank	Sample conc < EDL & is < 5 x blank value	Sample conc > EDL & > 5 x blank value
Flag sample result with a "U"	Report EDL & qualify "U"	No qualification is needed

NOTE: If gross blank contamination exists, all data in the associated samples should be qualified as unusable (R).

7.3 Are there field/rinse/equipment blanks associated with every sample? [ ] ___ ✓

ACTION: For low level samples, note in data assessment that there is no associated field/rinse/equipment blank. Exception: samples taken from a drinking water tap do not have associated field blanks.

8.0 GC Apparatus and Materials NA for false + / false - review

8.1 Was the proper gas chromatographic capillary column used for the analysis of PCBs?

Action: Check raw data, instrument logs, or contact the lab to determine what type of columns were used. (Method 8082, section 4.2) [ ] ___ ✓

8.2 Indicate the specific type of narrow bore or wide bore (.53 mm ID, fused silica GC columns, such as DB-608 and DB-1701 or equivalent).

column 1: _____

column 2: _____

ACTION: Note any changes to the suggested materials in section 8.1 above in the data assessment. Also note the impact (positive or negative) such changes have on the analytical results.

	YES	NO	N/A

9.0 Calibration and GC Performance

9.1 Are the following Gas Chromatograms and Data Systems Printouts for both columns present for all samples, blanks, MS, replicates?

a.	Samples	☑	___	___
b.	All blanks	☑	___	___
c.	Matrix spike samples	☐	___	☑
d.	5 pt. initial calibration standards	☑	___	___
e.	calibration verification standards	☑	___	___
f.	Laboratory Control samples (LCS)	☐	___	☑

NA for false+/false- review. MJB 5/28/03

ACTION: If no, take action specified in 3.2 above.

9.2 Are data summary forms (containing calibration factors or response factors) for the initial 5 pt. calibration and daily calibration verification standards present and complete for each column and each analytical sequence? ☑ ___ ___

no 2nd column for ICAL - only one for 2nd column. for suspected confirm.

Note: Calibration Aroclor mixtures other than 1016/1260 may be used (as per approved project QA plan)

NOTE: If internal standard calibration procedure is used (Method 8000B-15(section 7.4.2.2)), then response factors must be used for %RSD calculations and compound quantitation. If, external standard calibration procedures are used (Method 8000B-16 (section 7.4.2.1)), then calibration factors must be used. The internal standard approach is highly recommended for PCB congener analysis.

ACTION: If any data are missing or it cannot be determined how the laboratory calculated calibration factors or response factors, contact the lab for explanation/resubmittals. Make necessary corrections and note any problems in the data assessment.

9.3 Are there any transcription/calculation errors between raw data and data summary forms? ___ ☑ ___

ACTION: If large errors exist, call lab for

YES NO N/A

explanation/resubmittal, make necessary corrections and document the effect in data assessments.

9.4 Are standard retention time (RT) windows for each PCB peak of interest presented on modified CLP summary forms? [✓] ___ ___

ACTION: If any data are missing, or it cannot be determined how RT windows were calculated, call the lab for explanation/resubmittals. Note any problems in the data assessment.

NOTE: Retention time windows for all PCBs are established using retention times from three calibration standards analyzed during the entire analytical sequence (Method 8000B, section 7.6).

Best results are obtained using retention times which span the entire sequence; i.e., using the calibration verification/continuing calibration standards analyzed every 12 hours.

used 3pt for multi-std. used 1 closest for single std. ±0.1.

9.5 Were RT windows on the confirmation column established using three standards as described above? [ ] [✓] ___

NOTE: RT windows for the confirmation column should be established using a 3 pt. calibration, preferably spanning the entire analytical sequence as described in 9.4 above. If RT windows on one column are tighter than the other, this may result in false negatives when attempting to identify compounds in the samples.

ACTION: Note potential problems, if any, in the data assessment.

9.6 Do all standard retention times in each level of the initial 5 pt. calibrations for PCBs fall within the windows established during the initial calibration sequence? [✓] ___ ___

ACTION i: If no, all samples in the entire analytical sequence are potentially affected. Check to see if three standard spanning the entire sequence were used to obtained RT windows. If the lab used three standards from the 5 pt., RT windows may be too tight. If so, RT windows should be recalculated as per Method 8081B-15 (section 7.4.6).

ii. Alternatively, check to see if the chromatograms contain peaks

YES NO N/A

within an expanded window surrounding the expected retention times.

If no peaks are found and the surrogates are visible, non-detects are valid. If peaks are present but cannot be discerned through pattern recognition or by using revised RT windows, qualify all positive results and non-detects as unusable, "R".

9.7 Has the linearity criteria for the initial calibration standards been satisfied for both columns? (% RSD must be < 20.0% for all analytes). 70.99. [✓] ___ ___

ACTION: If no, qualify all associated positive results generated during the entire analytical sequence "J" and all non-detects "UJ". When RSD > 90%, flag all non-detect results for that analyte "R" (unusable).

9.8 Does the calibration verification/continuing Calibration standard contain the PCB peaks of interest, analyzed on each working day, prior to sample analyses (Method 8082, sections 7.6.2)? [✓] ___ ___

9.9 Has a calibration verification/continuing calibration standard been analyzed after every 10 samples and at the end of each analytical sequence (Method 8082, section 7.6.2) [✓] ___ ___

ACTION: If no, take action as specified in section 3.2 above. used avg + not peak-specific

9.10 Has the percent difference (%D) exceeded ± 15% for any PCB analyte in any calibration verification/ Continuing calibration standard? [ ] [✓] ___

9.11 Has a new 5 pt. initial calibration curve been generated for those PCB analytes which failed in the calibration verification/continuing calibration standard (8000B, section 7.7.3), and all samples which followed the out-of-control calibration verification/standard continuing calibration Standard? [ ] ___ [✓]

ACTION: If the %D for any analyte exceeded the ± 15% criterion and the instrument was not recalibrated for those analytes, qualify positive results for all associated samples (those which followed the out-of-control standard) "J" and sample quantitation limits "UJ". If the %D was > 90%

	YES	NO	N/A
for any analyte, qualify non-detects "R", unusable.			
9.12 Have retention time (RT) windows been properly calculated for each analyte of interest (Method 8000B, section 7.6), using RTs from the associated calibration verification/continuing standard?	☑		
ACTION: If no, take action specified in section 3.2 above			
9.13 Do all standard retention times for each calibration verification/continuing calibration standard fall within the windows established during the initial calibration sequence?	☑		
9.14 Do all standard retention times for each mid-concentration standard (analyzed after every 10 samples) fall within the <u>daily</u> RT windows	☑		

ACTION: If the answer to either 9.13 or 9.14 above is no, check the chromatograms of all samples which followed the last in-control standard. All samples analyzed after the last in-control standard must be re-injected, if initial analysis indicated the presence of the specific analyte that exceeded the retention time criteria. If samples were not re-analyzed, document under Contract Non-compliance in the Data Assessment.

Reviewer has two options to determine how to qualify questionable sample data. First option is to determine if possible peaks are present within daily retention time window. If no possible peaks are found, non-detects are valid. If possible peaks are found (or interference), qualify positive hits as presumptively present "NJ" and non-detects are rejected "R". Second option is to use the ratio of the retention time of the analyte over the retention time of either surrogate. The passing criteria is $\pm$ 0.06 RRT units of the RRT of the standard component. Reject "R" all questionable analytes exceeding criteria, and "NJ" all other positive hits.

For any multi-response analytes, retention time windows should be used but analyst and reviewer should rely primarily on pattern recognition or use option 2 specified in paragraph above.

9.15 Are there any transcription/calculation errors

	YES	NO	N/A
between raw data and data summary forms?	___	[✓]	___

ACTION: If large errors exists, call lab for explanation/resubmittal, make any necessary corrections and document the effect in data assessments under "Conclusions".

10.0 Analytical Sequence Check (Form VIII-PEST)

10.1 Have all samples been listed on CLP Form VIII or equivalent, and are separate forms present for each column?	[✓]	___	___

ACTION: If no, take action specified in 3.2 above.

10.2 Was the proper analytical sequence followed for each initial calibration and subsequent analyses?	[✓]	___	___

ACTION: If no, use professional judgement to determine the severity of the effect on the data and qualify it accordingly. Generally, the effect is negligible unless the sequence was grossly altered or the calibration was also out of limits.

10.3 Were the TCMX/DCB surrogate RTs for the samples within the mean surrogate RT from the initial calibration?	[✓]	___	___

Action: If no, see "Action" in section 9.14 above

11.0 Extraction Techniques for Sample Preparation NA for Jake + / false review

Method 8081B permits a variety of extraction techniques to be used for sample preparation. Which extraction procedure was used?

1. Aqueous samples:			
1. Separatory funnel (Method 3510)	[ ]	___	[✓]
2. Continuous liquid-liquid extraction (Method 3520)	[ ]	___	[✓]
3. Solid phase extraction (Method 3535)	[ ]	___	[✓]
4. Other	[ ]	___	[✓]
2. Solid samples:			
1. Soxhlet (Method 3540)	[ ]	___	[✓]

	YES	NO	N/A
2. Automated Soxhlet (Method 3541)	[ ]	___	✓
3. Pressurized fluid (Method 3545)	[ ]	___	___
4. Microwave extraction (Method 3546)	[ ]	___	___
5. Ultrasonic extraction (Method 3550)	[ ]	___	___
6. Supercritical fluid (Method 3562)	[ ]	___	___
7. Other	[ ]	___	___

11.1 Extract Cleanup - Efficiency Verification (Form IX) NA for false +/false - review

11.1.1 Method 8082 (section 7.2) references method 3660 (sulfur) and 3665A (sulfuric acid) to use for Cleaning extracts. Were one or both method used? [ ] ___ ✓

ACTION: If no, take action specified in 3.2 above. If data suggests cleanup was not performed, make note in the data assessment.

NOTE: Method 3620A, Florisil, may be used per approved project QA plan. The method does not list which analytes and surrogate(s) to use to verify column efficiency. The reviewer must check project plan to verify method used as well as the correct PCB list. If not stated or available, use the CLP listing or accept what the laboratory used.

11.2 Are all samples listed on modified CLP PCBs Florisil/Cartridge Check Form? [ ] ___ ✓

ACTION: If no, take action specified in 3.2 above.

11.3 Was GPC Cleanup (method 3640A) performed? [ ] ___ ✓

NOTE: GPC cleanup is not required and is optional. The reviewer should check Project Plan to verify requirement.

11.4 Were the same PCB analytes used in calibration used to check the efficiency of the cleanup procedures? [ ] ___ ✓

11.5 Are percent recoveries (% R) of the PCBs and surrogate compounds used to check the efficiency of the cleanup procedures within lab's in-house QC limits (use 70-130% if not available) [ ] ___ ✓

70-130% for GPC calibration? [ ] ___ ✓

YES NO N/A

Qualify only the analyte(s) which fail the recovery criteria as follows:

ACTION: If % R are < 80%, qualify positive results "J" and quantitation limits "UJ". Non-detects should be qualified "R" if zero %R was obtained for PCBs. Use professional judgement to qualify positive results if recoveries are greater than the upper limit.

12.0 PCB Identification

12.1 Has CLP Form X or equivalent, showing **retention time** data for positive results on the two GC columns, been completed for every sample in which a PCB was detected? [✓] ___ ___

ACTION: If no, take action specified in 3.2 above, or compile a list comparing the retention times for all sample hits on the two columns.

12.2 Are there any transcription/calculation errors between raw data and data summary forms (initial calibration summaries, calibration verification summaries, analytical sequence summaries, GPC and cleanup verification forms)? ___ [✓] ___

ACTION: If large errors exist, call lab for explanation/resubmittal, make necessary corrections and note error in the data assessment.

12.3 Are retention times (RT) of sample compounds within the established RT windows for both columns/analyses? [✓] ___ ___

ACTION: Qualify as unusable (R) all positive results which were not confirmed by second GC column analysis. Also qualify "R", unusable, all positive results not within RT windows unless associated standard compounds are similarly biased. The reviewer should use professional judgement to assign an appropriate quantitation limit.

12.4 Check chromatograms for false negatives, especially if RT windows on each column were established differently.
Were there any false negatives? ___ [✓] ___

YES NO N/A

ACTION: Use professional judgement to decide if the compound should be reported. If there is reason to believe that peaks outside retention RT windows should be reported, make corrections to data summary forms (Form I) and note in data assessment.

12.5 Was GC/MS confirmation provided when sample concentration was sufficient (> 10 ug/ml) in the final extract? [ ] — ✓

ACTION: Indicate with red pencil which Form I results were confirmed by GC/MS and also note in data assessment.

12.6 Is the percent difference (%D) calculated for the positive sample results on the two GC columns <25.0%? [✓] — —

NOTE: The method requires quantitation from one column. The second column is to confirm the presence of an analyte. It is the reviewer's responsibility to verify from the project plan what the lab was required to report. If the lab was required to report concentrations from both columns, continue with validation for % Difference. If required, but not reported, either contact the lab for results or calculate the concentrations from the calibration. If not required, skip this section. Document actions in Data Assessment.

5 - 125 4. 81.1%. - NT

7 - 125 4. 34.3 - J

9 - 125 4 - J. 50

ACTION: If the reviewer finds neither column shows interference for the positive hits, the data should be qualified as follows:

% Difference	Qualifier
0-25%	none
26-70%	"J"
71-100%	"NJ"
>100% *	"R"
100-200% (Interference detected)**	"NJ"
>50% (PCBs value is <CRQL)	"U"

When the reported PCBs value is <CRQL and the %D is >50%, raise the value to the CRQL and qualify with "U" (non-detect).

* Check the chromatogram. If pattern is confirmed qualify "J". If pattern is mixed, has interference, or the PCB cannot be positively determined due to weathering, qualify "JN".

YES NO N/A

If PCB can not be confirmed, qualify the PCB as "R".

** When the reported %D is 100-200% but interference is detected in either column, qualify the data with "NJ".

13.0 Compound Quantitation and Reported Detection Limits

13.1 Are there any transcription/calculation errors in Form I results? Check at least two positive values. Were any errors found? ___ ☑ ___

NOTE: Single-peak PCBs results can be checked for rough agreement between quantitative results obtained on the two GC columns. The reviewer should use professional judgement to decide whether a much larger concentration obtained on one column versus the other indicates the presence of an interfering compound. If an interference is suspected, the lower of the two values should be reported and qualified according to section 12.6 above. This necessitates a determination of an estimated concentration on the confirmation column. The narrative should indicate that the presence of interferences has led to the quantitation of the second column confirmation results.

13.2 Are the EDLs (Estimated Detection Limits) adjusted to reflect sample dilutions and, for soils, % moisture? ☑ ___ ___

ACTION: If errors are large, call lab for explanation/resubmittal, make any necessary corrections and document effect in data assessments.

ACTION: When a sample is analyzed at more than one dilution, the lowest EDLs are used (unless a QC exceedance dictates the use of the higher EDL data from the diluted sample analysis). Replace concentrations that exceed the calibration range in the original analysis by crossing out the value on the original Form I and substituting it with data from the analysis of diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form I's that should not be used, including any in the summary package.

$10 \times \frac{10}{10.175} \times .1$

$= \frac{1}{56.6 \times 10^{-5}}$

$= 1.74 \times 10^{-5}$

$= 170 \text{ ug/kg}$

	YES	NO	N/A

ACTION: EDLs affected by large, off-scale peaks should be qualified as unusable, "R". If the interference is on-scale, the reviewer can provide a modified EDL flagged "UJ" for each affected compound.

14.0 Chromatogram Quality

14.1 Were baselines stable?	[✓]	___	___
14.2 Were any electropositive displacement (negative peaks) or unusual peaks seen?	___	[✓]	___

ACTION: Note all system performance problems in the data assessment.

15.0 Field Duplicates NA for false + / false - review

15.1 Were any field duplicates submitted for PCB analysis?	[ ]	___	___

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between field duplicate results must be addressed in the reviewer narrative. However, if large differences exist, the identity of the field duplicates is questionable. An attempt should be made to determine the proper identification of field duplicates.

4 C

PESTICIDE METHOD BLANK SUMMARY

NYSDEC SAMPLE NO.

MB 92

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Lab Sample ID: MB 92 Lab File ID: E2980075

Matrix: (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N Date Extracted: 10/02/02

Date Analyzed (1) : 10/08/02 Date Analyzed (2): _____

Time Analyzed (1) : 1843 Time Analyzed (2): _____

Instrument ID (1) : HP1 Instrument ID (2): HP3

GC Column (1): RTX-CLPESTICIDES2 ID 0.32 (mm)

GC Column (2): RTX-CLPESTICIDES1 ID 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, AND MSB

	NYSDEC SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	QC 92	QC 92	10/04/02	
02	L94773-1	L94773-1	10/04/02	10/3/02
03	L94773-6	L94773-6	10/04/02	10/3/02
04	L94773-9	L94773-9	10/04/02	10/3/02
05	L94773-7	L94773-7	10/04/02	10/3/02
06	L94773-8	L94773-8	10/04/02	10/3/02
07	L94773-2	L94773-2	10/04/02	10/3/02
08	L94773-5	L94773-5	10/04/02	10/3/02
09	L94859-4	L94859-4	10/7/02	10/3/02
10	L94773-3, -2MS	L94773-3, -2MS	10/8/02	
11	L94773-4, -2MSD	L94773-4, -2MSD	10/8/02	
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

_____

_____

00011

4 C

PESTICIDE METHOD BLANK SUMMARY

NYSDEC SAMPLE NO.

MB 01

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Lab Sample ID: MB 01 Lab File ID: E2980047

Matrix: (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N Date Extracted: 10/03/02

Date Analyzed (1) :10/07/02 Date Analyzed (2): _____

Time Analyzed (1) : 1331 Time Analyzed (2): _____

Instrument ID (1) : HP1 Instrument ID (2): HP3

GC Column (1): RTX-CLPESTICIDES2 ID 0.32 (mm)

GC Column (2): RTX-CLPESTICIDES1 ID 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, AND MSB

	NYSDEC SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	QC 01	QC 01	10/07/02	
02	L94910-1	L94910-1	10/07/02	10/04/02
03	L94910-2	L94910-2	10/07/02	10/04/02
04	L94910-3	L94910-3	10/07/02	10/04/02
05	L94910-4	L94910-4	10/07/02	10/04/02
06	L94910-5	L94910-5	10/07/02	10/04/02
07	L94910-6	L94910-6	10/07/02	10/04/02
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

00012

Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956347.D
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: 250PPB 1254
Misc Info: CONFIRMATION
Analysis Date: 08-OCT-2002 19:20
Sample Matrix: WATER
File Number: 6347

==========

Dilution Factor: 1.0000
Sample Volume: 1000.0000
Final Volume: 5.0000

==========

Analytes (ug/L)

Aroclor-1254	267.54
Tetrachloro-m-xylene	0.00%
Decachlorobiphenyl	0.00%

Analyst: CPW
Report Date: 10/09/2002 10:59

Supervisor: _____
Date: _____

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB92

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1007

Matrix: (soil/water) SOIL Lab Sample ID: MB92

Sample wt/vol: 10.2 (g/mL) G Lab File ID: E2980075

% Moisture: 0 decanted: (Y/N) N Date Received: 10/01/2

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/02/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/08/2

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
12674-11-2	Aroclor-1016	10	~~0.01~~	U
1104-28-2	Aroclor-1221	20	~~0.02~~	U
11141-16-5	Aroclor-1232	10	~~0.01~~	U
53469-21-9	Aroclor-1242	10	~~0.01~~	U
11097-69-1	Aroclor-1254	10	~~0.01~~	U
11096-82-5	Aroclor-1260	10	~~0.01~~	U
----------	Aroclor-1248	10	~~0.01~~	U

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2980075.D
Lab Smp Id: MB92 Client Smp ID: MB92
Inj Date : 08-OCT-2002 18:43
Operator : CPW Inst ID: hp1.i
Smp Info : MB92
Misc Info :
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 09-Oct-2002 07:33 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	1.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.240	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	100.000	Total Solid

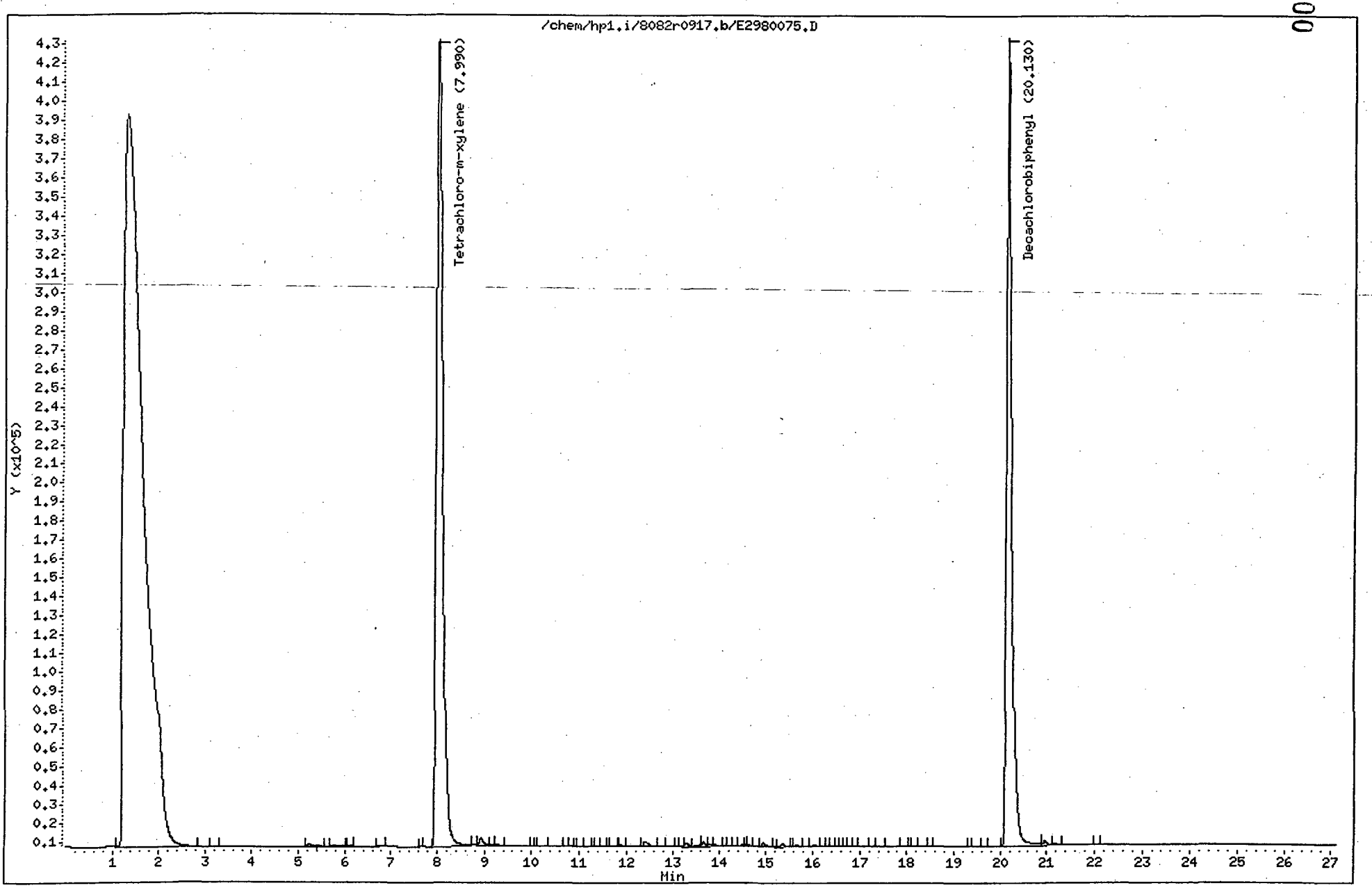
				CONCENTRATIONS ON-COL	FINAL		
	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$	1 Tetrachloro-m-xylene					CAS #:		
	7.990	7.997	-0.007	3939874	486.020	474.61		
$	29 Decachlorobiphenyl					CAS #:		
	20.130	20.130	0.000	3110160	591.812	577.92		

Data File: /chem/hp1.i/8082r0917.b/E2980075.D
[redacted] 08-OCT-2002 18:43
[redacted] ID: MB92
Sample Info: MB92
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i

Operator: CPW
Column diameter: 0.32

00319



Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2980075.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: MB92
Misc Info:
Analysis Date: 08-OCT-2002 18:43
Sample Matrix: SOIL
File Number: 0075

Dilution Factor:	1.0000
Sample Weight:	10.2404
Final Volume:	10.0000
Total Solid :	100.0000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	0.00
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	97.20%
Decachlorobiphenyl	118.36%

Analyst: CPW
Report Date: 10/09/2002 10:53

Supervisor: _____
Date: 10/9/2

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB01

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1002

Matrix: (soil/water) SOIL Lab Sample ID: MB01

Sample wt/vol: 10.0 (g/mL) G Lab File ID: E2980047

% Moisture: 0 decanted: (Y/N) N Date Received: 10/02/2

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/03/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/07/2

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	10 ~~0.01~~	U
1104-28-2	Aroclor-1221	20 ~~0.02~~	U
11141-16-5	Aroclor-1232	10 ~~0.01~~	U
53469-21-9	Aroclor-1242	10 ~~0.01~~	U
11097-69-1	Aroclor-1254	10 ~~0.01~~	U
11096-82-5	Aroclor-1260	10 ~~0.01~~	U
----------	Aroclor-1248	10 ~~0.01~~	U

JAR
11/4/02

Lab Name: FRIEND LABORATORY, INC. Contract: _____
Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA
Instrument ID: HP1
GC Column: RTX-CLPest2 ID: 0.32 (mm) Date(s) Analyzed: 09/17/02 09/17/02
File Numbers: 9827-9843

COMPOUND	Peak #	RT OF STANDARDS 10 ppb	50 ppb	100 ppb	250 ppb	500 ppb	1000 ppb	MEAN RT	RT WINDOW FROM	TO
PCB 1016	1*	10.19	10.20	10.20	10.20	10.21	10.21	10.20	10.10	10.30
	2*	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.61	10.81
	3*	11.89	11.89	11.90	11.90	11.90	11.90	11.90	11.80	12.00
	4	11.97	11.98	11.98	11.98	11.98	11.98	11.98	11.88	12.08
	5	12.67	12.68	12.68	12.68	12.69	12.69	12.68	12.58	12.78
PCB 1221	1*				8.79			8.79	8.69	8.89
	2*				9.12			9.12	9.02	9.22
	3*				9.27			9.27	9.17	9.37
PCB 1232	1*				9.27			9.27	9.17	9.37
	2*				10.20			10.20	10.10	10.30
	3*				11.19			11.19	11.09	11.29
	4				11.47			11.47	11.37	11.57
	5				11.97			11.97	11.87	12.07
PCB 1242	1*				10.20			10.20	10.10	10.30
	2*				11.19			11.19	11.09	11.29
	3*				11.47			11.47	11.37	11.57
	4				12.68			12.68	12.58	12.78
	5				13.29			13.29	13.19	13.39
PCB 1248	1*				11.19			11.19	11.09	11.29
	2*				11.90			11.90	11.80	12.00
	3*				12.68			12.68	12.58	12.78
	4				13.21			13.21	13.11	13.31
	5				13.29			13.29	13.19	13.39
PCB 1254	1*	13.67	13.67	13.67	13.67	13.67	13.67	13.67	13.57	13.77
	2*	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.46	14.66
	3*	15.01	15.01	15.01	15.01	15.00	15.00	15.01	14.91	15.11
	4	15.34	15.35	15.35	15.35	15.35	15.35	15.35	15.25	15.45
	5	16.02	16.03	16.03	16.03	16.03	16.03	16.03	15.93	16.13
PCB 1260	1*	14.93	14.93	14.94	14.94	14.94	14.94	✓ 14.94	14.84	15.04
	2*	15.34	15.34	15.35	15.35	15.35	15.35	15.35	15.25	15.45
	3*	16.19	16.19	16.20	16.20	16.20	16.21	16.20	16.10	16.30
	4	16.75	16.75	16.76	16.76	16.76	16.77	16.76	16.66	16.86
	5	17.23	17.23	17.24	17.24	17.25	17.25	17.24	17.14	17.34
Tetrachloro-m-xylene		7.97	7.99	8.00	7.99	8.00	8.00	7.99	7.89	8.09
Decachlorobiphenyl		20.11	20.12	20.13	20.13	20.13	20.13	20.13	20.03	20.23

* Denotes required peaks

Retention time windows are ± 0.1 minutes for all compounds.

$\frac{14.93+14.93+14.94+14.94+14.94+14.94}{6} = 14.94$

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA916
Instrument ID: HP1 Calibration Date(s): 09/17/2 09/17/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)
LAB FILE ID: RF10: E2989834 RF50: E2989835 RF100: E2989836
RF250: E2989843 RF500: E2989838

COMPOUND	RF10	RF50	RF100	RF250	RF500
Aroclor-1016	401.3	365.1	438.0	493.9	404.2
(2)	136.5	147.3	177.8	191.1	175.4
(3)	135.2	120.4	144.0	140.8	117.2
(4)	140.8	136.7	181.1	189.3	184.3
(5)	201.4	165.9	179.7	207.5	203.2
Aroclor-1221				86.2	
(2)				64.3	
(3)				307.9	
(4)					
(5)					
Aroclor-1232				283.3	
(2)				161.5	
(3)				221.6	
(4)				97.5	
(5)				57.9	
Aroclor-1242				352.7	
(2)				515.2	
(3)				225.6	
(4)				162.9	
(5)				195.6	
Aroclor-1254	316.9	313.4	305.2	308.2	343.4
(2)	288.2	317.8	319.7	345.8	442.7
(3)	190.1	233.8	239.2	278.8	384.7
(4)	148.5	164.1	178.0	186.5	230.4
(5)	253.9	263.2	271.9	294.5	392.1
Aroclor-1260	334.4	269.7	334.8	384.6	340.0
(2)	358.5	290.3	352.0	415.1	365.1
(3)	227.9	170.5	206.4	246.1	209.2
(4)	234.8	173.2	208.2	246.2	210.6
(5)	364.1	280.0	381.6	496.5	440.9
Aroclor-1248				278.0	
(2)				163.4	
(3)				213.4	
(4)				186.5	
(5)				304.2	
Tetrachloro-m-xylene	3613	5109	8081	7743	8808
Decachlorobiphenyl	3029	3502	5170	5257	6283

43123/500 = 86.2

Peak(2) .1254

CF10
2882/10 = 288.2

CF50
15889/50 = 317.8

CF100
31972/100 = 319.7

CF250
86463/250 = 345.8

CF500
221356/500 = 442.7

CF1000
434474/1000 = 434.5

00162

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA916
Instrument ID: HP1 Calibration Date(s): 09/17/2 09/17/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)
RF1000: E2989839

COMPOUND	RF100	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2
Aroclor-1016	366.0	LINR	-18.105188	2.688e-003	0.991
(2)	161.5	LINR	-9.4133819	6.109e-003	0.997
(3)	100.6	LINR	-18.332671	9.78e-003	0.993
(4)	162.6	LINR	-9.1394188	6.01e-003	0.995
(5)	201.8	LINR	2.94297360	4.926e-003	1.000
Aroclor-1221		LINR	0.00000000	1.159e-002	1.000
(2)		LINR	0.00000000	1.555e-002	1.000
(3)		LINR	0.00000000	3.248e-003	1.000
(4)		LINR			
(5)		LINR			
Aroclor-1232		LINR	0.00000000	3.53e-003	1.000
(2)		LINR	0.00000000	6.191e-003	1.000
(3)		LINR	0.00000000	4.512e-003	1.000
(4)		LINR	0.00000000	1.025e-002	1.000
(5)		LINR	0.00000000	1.727e-002	1.000
Aroclor-1242		LINR	0.00000000	2.835e-003	1.000
(2)		LINR	0.00000000	1.941e-003	1.000
(3)		LINR	0.00000000	4.432e-003	1.000
(4)		LINR	0.00000000	6.138e-003	1.000
(5)		LINR	0.00000000	5.111e-003	1.000
Aroclor-1254	296.1	LINR	-6.4375383	3.29e-003	0.994
(2)	434.5	LINR	16.6006465	2.262e-003	0.997
(3)	371.6	LINR	21.3460443	2.623e-003	0.995
(4)	190.9	LINR	4.45851132	5.219e-003	1.000
(5)	352.0	LINR	11.6581973	2.751e-003	0.994
Aroclor-1260	329.3	LINR	-5.1814212	3.014e-003	0.998
(2)	358.9	LINR	-3.4590831	2.769e-003	0.998
(3)	210.0	LINR	-3.5269711	4.748e-003	0.998
(4)	214.3	LINR	-2.0615020	4.659e-003	0.998
(5)	480.7	LINR	11.3530028	2.078e-003	0.998
Aroclor-1248		LINR	0.00000000	3.596e-003	1.000
(2)		LINR	0.00000000	6.12e-003	1.000
(3)		LINR	0.00000000	4.686e-003	1.000
(4)		LINR	0.00000000	5.361e-003	1.000
(5)		LINR	0.00000000	3.287e-003	1.000
Tetrachloro-m-xylene	7679	LINR	5.59456943	1.219e-004	0.991
Decachlorobiphenyl	5238	LINR	4.64742762	1.888e-004	0.999

Lab Name: FRIEND LABORATORY, INC. Contract: _____
Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA
Instrument ID: HP3
GC Column: RTX-CLPest1 ID: 0.32 (mm) Date(s) Analyzed: 10/03/02 _____
File Numbers: 6274

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
PCB 1254	250 PPB	1*	14.20	14.10	14.30	328.39
		2*	15.29	15.19	15.39	314.24
		3*	15.53	15.43	15.63	493.18
		4	15.89	15.79	15.99	262.87
		5	16.08	15.98	16.18	385.80
Tetrachloro-m-xylene	300 PPB		9.34	9.24	9.44	8579.98
Decachlorobiphenyl	300 PPB		20.92	20.82	21.02	5653.47

* Denotes required peaks

Single injections of the low standard are made to establish approximate retention times and instrument sensitivity. Five point calibrations are performed if a multipeak component is detected in a sample.
Alternate column confirmation is run if a pesticide or PCB is detected in a site sample.

Avg
$\left|\frac{250-252}{250}\right| \times 100 = 0\%$

CF
$\frac{82097}{250} = 328.39$

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254

File Name: E2989996.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 10/04/02

Analysis Time: 0927

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	13.66	13.57	13.77	283.52	250.00	13.41
Aroclor-1254	2	14.55	14.46	14.66	246.67	250.00	1.33
Aroclor-1254	3	15.00	14.91	15.11	261.59	250.00	4.64
Aroclor-1254	4	15.34	15.25	15.45	305.80	250.00	22.32
Aroclor-1254	5	16.02	15.93	16.13	261.10	250.00	4.44
Tetrachloro-m-xylene	1	7.98	7.89	8.09	314.70	300.00	4.90
Decachlorobiphenyl	1	20.12	20.03	20.23	340.26	300.00	13.42

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

$AVG. \left| \frac{272 - 252}{252} \right| \times 100 = 8.8$

00167

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254

File Name: E2980007.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 10/04/02

Analysis Time: 1441

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	13.66	13.57	13.77	277.12	250.00	10.85
Aroclor-1254	2	14.55	14.46	14.66	242.37	250.00	3.05
Aroclor-1254	3	14.99	14.91	15.11	259.16	250.00	3.66
Aroclor-1254	4	15.34	15.25	15.45	268.96	250.00	7.58
Aroclor-1254	5	16.02	15.93	16.13	244.61	250.00	2.16
Tetrachloro-m-xylene	1	7.98	7.89	8.09	295.72	300.00	1.43
Decachlorobiphenyl	1	20.12	20.03	20.23	325.72	300.00	8.57

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

Avg.

$\left|\frac{258-250}{250}\right| \times 100$

00168

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254

File Name: E3956283.D

Instrument ID: HP3.I

GC Column: RTX-CLPesticides 1 ID: 0.32 (mm)

Analysis Date: 10/03/02

Analysis Time: 2116

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	14.21	14.10	14.30	282.87	250.00	13.15
Aroclor-1254	2	15.29	15.19	15.39	293.88	250.00	17.55
Aroclor-1254	3	15.54	15.43	15.63	276.11	250.00	10.44
Aroclor-1254	4	15.90	15.79	15.99	273.35	250.00	9.34
Aroclor-1254	5	16.08	15.98	16.18	251.70	250.00	0.68
Tetrachloro-m-xylene	1	9.35	9.24	9.44	273.82	300.00	8.73
Decachlorobiphenyl	1	20.93	20.82	21.02	274.61	300.00	8.46

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

Avg.

$\left|\frac{276-250}{250}\right| \times 100 = 10.4$

CF $\frac{92893}{250} = 371.57$

00175

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254

File Name: E3956292.D

Instrument ID: HP3.I

GC Column: RTX-CLPesticides 1 ID: 0.32 (mm)

Analysis Date: 10/04/02

Analysis Time: 2033

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	14.21	14.09	14.29	239.83	250.00	4.07
Aroclor-1254	2	15.29	15.17	15.37	235.59	250.00	5.76
Aroclor-1254	3	15.53	15.41	15.61	235.86	250.00	5.66
Aroclor-1254	4	15.89	15.77	15.97	222.26	250.00	11.10
Aroclor-1254	5	16.08	15.96	16.16	235.87	250.00	5.65
Tetrachloro-m-xylene	1	9.34	9.22	9.42	269.75	300.00	10.08
Decachlorobiphenyl	1	20.92	20.81	21.01	270.42	300.00	9.86

Not for samples reviewed!

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

00176

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA916
Instrument ID: HP1 Init. Calib. Date(s): 09/17/2 09/17/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 8.00 DCB: 20.13

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	STD11660	STD11660	09/17/2	1304	7.97	20.11
02	STD21660	STD21660	09/17/2	1335	7.99	20.12
03	STD31660	STD31660	09/17/2	1406	8.00	20.13
04	STD41660	STD41660	09/17/2	1437	7.99	20.13
05	STD51660	STD51660	09/17/2	1509	8.00	20.13
06	STD61660	STD61660	09/17/2	1540	8.00	20.13
07	STD11254	STD11254	09/17/2	1643	7.98	20.12
08	STD21254	STD21254	09/17/2	1714	7.99	20.13
09	STD31254	STD31254	09/17/2	1745	8.00	20.13
10	STD41254	STD41254	09/17/2	1816	7.99	20.13
11	STD51254	STD51254	09/17/2	1848	7.98	20.13
12	STD61254	STD61254	09/17/2	1919	8.00	20.13
13	STD41248	STD41248	09/17/2	1950	7.99	20.13
14	STD41242	STD41242	09/17/2	2021	7.99	20.13
15	STD41232	STD41232	09/17/2	2052	7.99	20.13
16	STD41221	STD41221	09/17/2	2124	8.00	20.13
17	~~CC166001~~	CC166001	09/18/2	1401	8.00	20.13
18	MB82	MB82	09/18/2	1433	8.02	20.13
19	QC82	QC82	09/18/2	1507	8.02	20.13
20	L94080-1RE	L94080-1RE	09/18/2	1538	7.99	20.13
21	L94080-2	L94080-2	09/18/2	1610	7.99	20.13
22	L94080-3RE	L94080-3RE	09/18/2	1641	7.99	20.13
23	L94080-4	L94080-4	09/18/2	1712	7.98	20.13
24	CC166002	CC166002	09/18/2	1815	8.01	20.13
25	L94081-1RE	L94081-1RE	09/18/2	1846	7.98	20.13
26	L94081-4RE	L94081-4RE	09/18/2	1917	7.99	20.13
27	L94081-5RE	L94081-5RE	09/18/2	1948	8.00	20.13
28	L94081-6RE	L94081-6RE	09/18/2	2019	7.99	20.13
29	L94081-7R	L94081-7R	09/18/2	2051	7.98	20.13
30	L94081-1MSR	L94081-1MSR	09/18/2	2122	7.98	20.13
31	L94081-1MSDR	L94081-1MSDR	09/18/2	2153	7.97	20.11
32	CC166003	CC166003	09/18/2	2255	8.01	20.13
33	CC125401	CC125401	09/18/2	2327	7.99	20.13
34	CC125402	CC125402	09/19/2	1009	7.99	20.13
35	L94080-1	L94080-1	09/19/2	1038	7.99	20.13
36	L94080-3R	L94080-3R	09/19/2	1116	7.99	20.13
37	~~L94081-6~~	L94081-6	09/19/2	1148	7.98	20.13

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

lak 10/25/02
FORM VIII PCB
00178

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA1001
Instrument ID: HP1 Init. Calib. Date(s): 09/17/2 09/ /2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 8.00 DCB: 20.13

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	1254CC01	1254CC01	10/02/2	1527	7.99	20.13
02	MB92R	MB92R	10/02/2	1556	7.98	20.13
03	QC92R	QC92R	10/02/2	1628	7.93	20.12
04	L94773-2R	L94773-2R	10/02/2	1657	7.99	20.13
05	L94773-7R	L94773-7R	10/02/2	1728	7.99	20.13
06	L94773-8R	L94773-8R	10/02/2	1759	7.99	20.13
07	L94773-4R	L94773-4R	10/02/2	1831	7.99	20.12
08	1254CC02	1254CC02	10/02/2	1902	7.99	20.13
09	1254CC03	1254CC03	10/03/2	0929	7.98	20.12
10	MB92RE	MB92RE	10/03/2	1000	7.97	20.12
11	QC92RE	QC92RE	10/03/2	1032	7.98	20.12
12	L94773-2RE	L94773-2RE	10/03/2	1103	7.97	20.12
13	L94773-7RE	L94773-7RE	10/03/2	1134	7.97	20.12
14	L94773-8RE	L94773-8RE	10/03/2	1205	7.97	20.12
15	L94773-9RE	L94773-9RE	10/03/2	1237	7.98	20.12
16	L94773-1RE	L94773-1RE	10/03/2	1308	7.97	20.12
17	L94773-5RE	L94773-5RE	10/03/2	1339	7.98	20.12
18	L94773-6RE	L94773-6RE	10/03/2	1410	7.97	20.12
19	L94773-2MSRE	L94773-2MSRE	10/03/2	1441	7.97	20.12
20	L94773-2MSDR	L94773-2MSDR	10/03/2	1513	7.97	20.12
21	L94859-4RE	L94859-4RE	10/03/2	1544	7.98	20.12
22	1254CC04	1254CC04	10/03/2	1615	7.97	20.12
23	1254CC05	1254CC05	10/04/2	0927	7.98	20.12
24	QC92	QC92	10/04/2	0959	7.98	20.12
25	L94773-1	L94773-1	10/04/2	1030	7.98	20.12
26	L94773-6	L94773-6	10/04/2	1101	7.98	20.12
27	L94773-9	L94773-9	10/04/2	1136	7.98	20.12
28	L94773-7	L94773-7	10/04/2	1205	7.98	20.12
29	L94773-8	L94773-8	10/04/2	1237	7.97	20.12
30	L94773-2	L94773-2	10/04/2	1308	7.98	20.12
31	L94773-5	L94773-5	10/04/2	1339	7.97	20.12
32	1254CC06	1254CC06	10/04/2	1441	7.98	20.12
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QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

00179

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA1002
Instrument ID: HP1 Init. Calib. Date(s): 09/17/2 09/17/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 8.00 DCB: 20.13

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	1254CC02	1254CC02	10/07/2	1300	7.98	20.12
02	MB01	MB01	10/07/2	1331	7.98	20.12
03	QC01	QC01	10/07/2	1403	7.97	20.12
04	L94910-1	L94910-1	10/07/2	1434	7.97	20.11
05	L94910-2	L94910-2	10/07/2	1505	7.97	20.12
06	L94910-3	L94910-3	10/07/2	1536	7.97	20.12
07	L94910-4	L94910-4	10/07/2	1608	7.98	20.12
08	L94910-5	L94910-5	10/07/2	1639	7.98	20.12
09	L94910-6	L94910-6	10/07/2	1710	7.97	20.12
10	1254CC03	1254CC03	10/07/2	1813	7.98	20.11
11	1254CC01	1254CC01	10/07/02	0838	7.99	20.13
12	L94859-4	L94859-4RE	10/07/02	1229	7.97	20.11
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QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

00180

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA1007
Instrument ID: HP1 Init. Calib. Date(s): 09/17/2 09/17/
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 8.00 DCB: 20.13

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	1254CC01	1254CC01	10/08/2	1249	7.99	20.13
02	MB05	MB05	10/08/2	1321	8.00	20.13
03	QC05	QC05	10/08/2	1402	8.00	20.13
04	L95095-1	L95095-1	10/08/2	1431	7.99	20.13
05	L95095-2	L95095-2	10/08/2	1505	7.99	20.13
06	L95095-2MS	L95095-2MS	10/08/2	1536	7.99	20.13
07	L95095-2MSD	L95095-2MSD	10/08/2	1607	7.99	20.13
08	L95095-5	L95095-5	10/08/2	1639	7.99	20.13
09	L95095-6	L95095-6	10/08/2	1710	7.99	20.13
10	1254CC02	1254CC02	10/08/2	1812	8.00	20.13
11	MB92	MB92	10/08/2	1843	7.99	20.13
12	L94773-3MS	L94773-3MS	10/08/2	1915	7.98	20.13
13	L94773-4MSD	L94773-4MSD	10/08/2	1946	7.99	20.13
14	1254CC03	1254CC03	10/08/2	2048	7.99	20.13
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QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA1001CONFIRM
Instrument ID: HP3 Init. Calib. Date(s): 10/03/2 ~~10/03/2~~
GC Column: RTX-CLPESTICIDES 1 ID: 0.32 (mm)

eaR 11/4/02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 9.34 DCB: 20.92

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	1254LLSTD	1254LLSTD	10/03/2	1606	9.36	20.93
02	1254STD1	1254STD1	10/03/2	1636	9.34	20.92
03	L94773-2	L94773-2	10/03/2	1707	9.34	20.91
04	L94773-7	L94773-7	10/03/2	1738	9.33	20.91
05	L94773-8	L94773-8	10/03/2	1809	9.33	20.92
06	L94773-9	L94773-9	10/03/2	1840	9.32	20.91
07	L94773-1	L94773-1	10/03/2	1911	9.33	20.91
08	L94773-5	L94773-5	10/03/2	1942	9.34	20.92
09	L94773-6	L94773-6	10/03/2	2013	9.34	20.92
10	L94859-4	L94859-4	10/03/2	2045	9.34	20.92
11	1254CC01	1254CC01	10/03/2	2116	9.35	20.93
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QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

00182

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA1002 IPM
Instrument ID: HP3 Init. Calib. Date(s): ~~10/03/2~~ ~~10/03~~ 10/04/02
GC Column: RTX-CLPESTICIDES 1 ID: 0.32 (mm)

eaR 11/4/02

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: ~~9.34~~ 9.32 DCB: 2~~0.92~~ 20.91
eaR 11/4/02

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	1254CC01	1254CC01	10/04/2	1624	9.32	20.91
02	L94910-1	L94910-1	10/04/2	1655	9.34	20.92
03	L94910-2	L94910-2	10/04/2	1726	9.32	20.91
04	L94910-3	L94910-3	10/04/2	1758	9.33	20.92
05	L94910-4	L94910-4	10/04/2	1829	9.32	20.91
06	L94910-5	L94910-5	10/04/2	1900	9.33	20.92
07	L94910-6	L94910-6	10/04/2	1931	9.34	20.93
08	1254CC02	1254CC02	10/04/2	2033	9.34	20.92
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QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

00183

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA1007CONFIRM
Instrument ID: HP3 Init. Calib. Date(s): 10/08/2 10/08/2
GC Column: RTX-CLPESTICIDES 1 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 9.38 DCB: 20.95

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	1254CC01	1254CC01	10/08/2	1613	9.38	20.95
02	L95095-1	L95095-1	10/08/2	1644	9.39	20.97
03	L95095-2	L95095-2	10/08/2	1715	9.38	20.96
04	L95095-5	L95095-5	10/08/2	1746	9.38	20.96
05	[redacted]	L95095-6	10/08/2	1818	9.37	20.96
06	1254CC02	1254CC02	10/08/2	1920	9.37	20.96
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QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

10B

PESTICIDE IDENTIFICATION SUMMARY FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94773-1

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1001

Lab Sample ID: L94773-1 Date(s) Analyzed: 10/04/2 10/03/02

Instrument ID (1): HP1 Instrument ID (2): HP 3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST 1 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.65	13.57	13.77	47.42		
Aroclor-1254	2	14.54	14.46	14.66	338.15		
	3	14.92	14.90	15.10	429.61		
COLUMN 1	4	15.33	15.25	15.45	237.09		
	5	16.01	15.93	16.13	348.78	280.21	
			jmk 11/4/02 14.10				
	1	14.20	~~13.57~~	14.30	74.05		
	2	15.27	15.19	15.39	369.67		
	3	15.52	15.43	15.63	518.63		
COLUMN 2	4	15.88	15.79	15.99	343.28		
	5	16.12	15.98	16.18	272.22	315.56	12.6
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

10B

PESTICIDE IDENTIFICATION SUMMARY FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94773-2

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1001

Lab Sample ID: L94773-2 Date(s) Analyzed: 10/04/2 10/03/02

Instrument ID (1): HP1 Instrument ID (2): HP3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST 1 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.66	13.57	13.77	5007.55		
Aroclor-1254	2	14.55	14.46	14.66	4015.48		
	3	14.99	14.90	15.10	4008.44		
COLUMN 1	4	15.34	15.25	15.45	4812.77		
	5	16.01	15.93	16.13	2586.66	4086.18	
	1	14.20	14.10	14.30	3572.39		
	2	15.28	15.19	15.39	2010.49		
	3	15.53	15.43	15.63	3966.31		
COLUMN 2	4	15.89	15.79	15.99	3952.01		
	5	16.07	15.98	16.18	3552.31	3410.70	19.8
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

00186

10B

PESTICIDE IDENTIFICATION SUMMARY FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94773-3MS

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1007

Lab Sample ID: L94773-3MS Date(s) Analyzed: 10/08/2 _____

Instrument ID (1): HP1 Instrument ID (2): _____

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): _____ ID: ____

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	10.19	10.11	10.31	444.04		
Aroclor-1016	2	10.64	10.61	10.81	983.02		
	3	11.89	11.80	12.00	3436.30		
COLUMN 1	4	11.97	11.88	12.08	3068.12		
	5	12.67	12.59	12.79	1234.24	1833.14	
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1	14.94	14.84	15.04	2018.55		
Aroclor-1260	2	15.35	15.25	15.45	2617.09		
	3	16.20	16.11	16.31	1396.65		
COLUMN 1	4	16.75	16.67	16.87	1197.57		
	5	17.24	17.15	17.35	1118.61	1669.69	
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

00187

10B

PESTICIDE IDENTIFICATION SUMMARY FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94773-4MSD

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1007

Lab Sample ID: L94773-4MSD Date(s) Analyzed: 10/08/2

Instrument ID (1): HP1 Instrument ID (2): _____

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): _____ ID: ____

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	10.20	10.11	10.31	612.30		
Aroclor-1016	2	10.70	10.61	10.81	625.00		
	3	11.90	11.80	12.00	4477.19		
COLUMN 1	4	11.98	11.88	12.08	4096.55		
	5	12.67	12.59	12.79	1639.49	2290.10	
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1	14.94	14.84	15.04	2351.10		
Aroclor-1260	2	15.35	15.25	15.45	2964.90		
	3	16.20	16.11	16.31	1532.98		
COLUMN 1	4	16.75	16.67	16.87	1242.89		
	5	17.24	17.15	17.35	1150.28	1848.43	
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

00188

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94773-5

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1001

Lab Sample ID: L94773-5 Date(s) Analyzed: 10/04/2 10/03/02

Instrument ID (1): HP1 Instrument ID (2): HP3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST 1 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.66	13.57	13.77	8244.31		
Aroclor-1254	2	14.55	14.46	14.66	6193.37		
	3	14.99	14.90	15.10	6438.76		
COLUMN 1	4	15.34	15.25	15.45	9950.56		
	5	16.00	15.93	16.13	3265.79	6818.56	
	1	14.21	14.10	14.30	4309.75		
	2	15.28	15.19	15.39	1160.73		
	3	15.53	15.43	15.63	4304.11		
COLUMN 2	4	15.89	15.79	15.99	4986.88		
	5	16.08	15.98	16.18	4063.84	3765.06	81.1
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

10B

PESTICIDE IDENTIFICATION SUMMARY FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94773-6

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1001

Lab Sample ID: L94773-6 Date(s) Analyzed: 10/04/2 10/03/02

Instrument ID (1): HP1 Instrument ID (2): HP3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST 1 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.65	13.57	13.77	141.79		
Aroclor-1254	2	14.54	14.46	14.66	274.20		
	3	14.99	14.90	15.10	295.56		
COLUMN 1	4	15.33	15.25	15.45	174.70		
	5	15.99	15.93	16.13	203.79	218.01	
	1	14.21	14.10	14.30	393.38		
	2	15.28	15.19	15.39	58.63		
	3	15.54	15.43	15.63	227.80		
COLUMN 2	4	15.90	15.79	15.99	439.16		
	5	16.09	15.98	16.18	189.28	261.65	20.0
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94773-7

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1001

Lab Sample ID: L94773-7 Date(s) Analyzed: 10/04/2 10/03/02

Instrument ID (1): HP1 Instrument ID (2): HP3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST 1 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.65	13.57	13.77	2081.35		
Aroclor-1254	2	14.55	14.46	14.66	1541.13		
	3	14.99	14.90	15.10	1456.20		
COLUMN 1	4	15.33	15.25	15.45	1986.66		
	5	16.01	15.93	16.13	1072.69	1627.61	
	1	14.20	14.10	14.30	1373.18		
	2	15.28	15.19	15.39	511.64		
	3	15.52	15.43	15.63	1373.69		
COLUMN 2	4	15.89	15.79	15.99	1448.31		
	5	16.07	15.98	16.18	1354.74	1212.31	34.3
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

00191

10B

PESTICIDE IDENTIFICATION SUMMARY FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94773-8

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1001

Lab Sample ID: L94773-8 Date(s) Analyzed: 10/04/2 10/03/02

Instrument ID (1): HP1 Instrument ID (2): HP3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST 1 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.66	13.57	13.77	3127.77		
Aroclor-1254	2	14.55	14.46	14.66	2936.62		
	3	14.99	14.90	15.10	2791.77		
COLUMN 1	4	15.34	15.25	15.45	3911.00		
	5	16.01	15.93	16.13	2549.65	3063.36	
	1	14.20	14.10	14.30	2242.22		
	2	15.28	15.19	15.39	2151.25		
	3	15.53	15.43	15.63	2875.33		
COLUMN 2	4	15.89	15.79	15.99	3651.99		
	5	16.07	15.98	16.18	2699.44	2724.05	12.5
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

00192

10B

PESTICIDE IDENTIFICATION SUMMARY FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94773-9

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1001

Lab Sample ID: L94773-9 Date(s) Analyzed: 10/04/2 10/03/02

Instrument ID (1): HP1 Instrument ID (2): HP3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST1 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.65	13.57	13.77	72.67		
Aroclor-1254	2	14.54	14.46	14.66	367.09		
	3	14.99	14.90	15.10	450.68		
COLUMN 1	4	15.33	15.25	15.45	271.46		
	5	16.01	15.93	16.13	379.75	308.33	
	1	14.20	14.10	14.30	470.52		
	2	15.28	15.19	15.39	388.37		
	3	15.52	15.43	15.63	439.30		
COLUMN 2	4	15.88	15.79	15.99	742.83		
	5	16.07	15.98	16.18	270.94	462.39	50.0
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L94773-1

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1001

Matrix: (soil/water) SOIL Lab Sample ID: L94773-1

Sample wt/vol: 10.2 (g/mL) G Lab File ID: E2989998

% Moisture: ~~0~~ 43.4 decanted: (Y/N) N Date Received: 10/01/2

Extraction: (SepF/Cont/Sonc) SONC eaR 11/4/02 Date Extracted: 10/02/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/04/2

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
12674-11-2	Aroclor-1016	170	~~0.17~~	U
1104-28-2	Aroclor-1221	350	~~0.35~~	U
11141-16-5	Aroclor-1232	170	~~0.17~~	U
53469-21-9	Aroclor-1242	170	~~0.17~~	U
11097-69-1	Aroclor-1254		280.21	
11096-82-5	Aroclor-1260	170	~~0.17~~	U
----------	Aroclor-1248	170	~~0.17~~	U

eaR 11/4/02

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2989998.D
Lab Smp Id: L94773-1 Client Smp ID: L94773-1
Inj Date : 04-OCT-2002 10:30
Operator : CPW Inst ID: hp1.i
Smp Info : L94773-1
Misc Info : WG32995,02-004
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 04-Oct-2002 09:44 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.175	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	56.600	Total Solid

				CONCENTRATIONS ON-COL	FINAL		
	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1	Tetrachloro-m-xylene					CAS #:		
	7.977	7.997	-0.020	289496	40.8955	710.09		
$ 29	Decachlorobiphenyl					CAS #:		
	20.120	20.130	-0.010	228917	47.8645	831.09		
25	Aroclor-1254					CAS #: 11097-69-1		
	13.650	13.670	-0.020	2786	2.73079	47.42	80.00- 120.00	100.00(MH)
	14.540	14.563	-0.023	1270	19.4747	338.15	95.41- 135.41	45.59
	14.917	15.003	-0.086	1294	24.7421	429.61	83.91- 123.91	46.45
	15.330	15.350	-0.020	1762	13.6546	237.09	45.52- 85.52	63.23
	16.007	16.033	-0.026	3063	20.0871	348.78	82.88- 122.88	109.94
			Average of Peak Concentrations =			280.21		

C Flag Legend

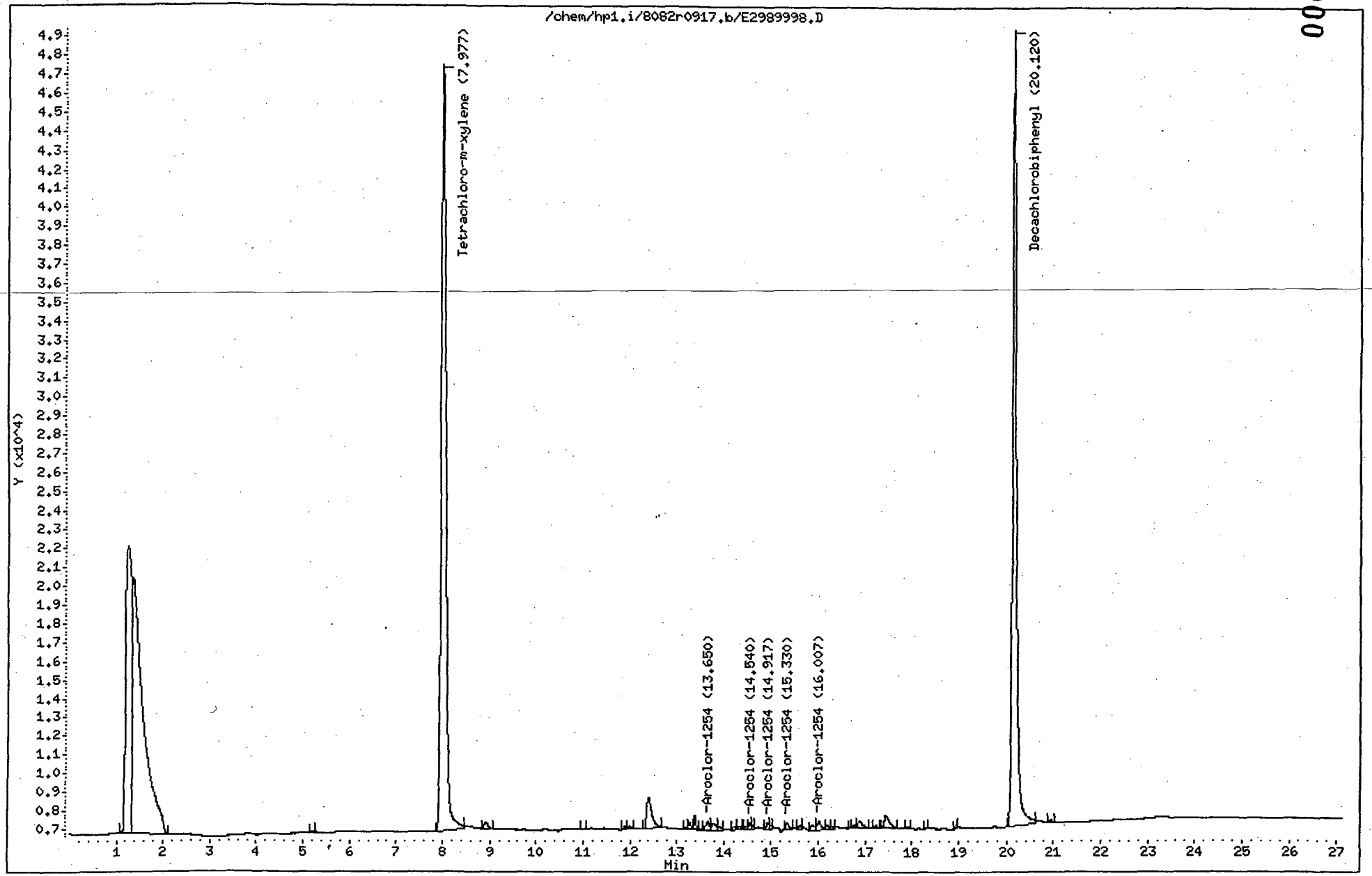
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

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Date[redacted]: 04-OCT-2002 10:30
C[redacted]ID: L94773-1
S[redacted]Info: L94773-1
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

Pag[redacted]

00018



Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

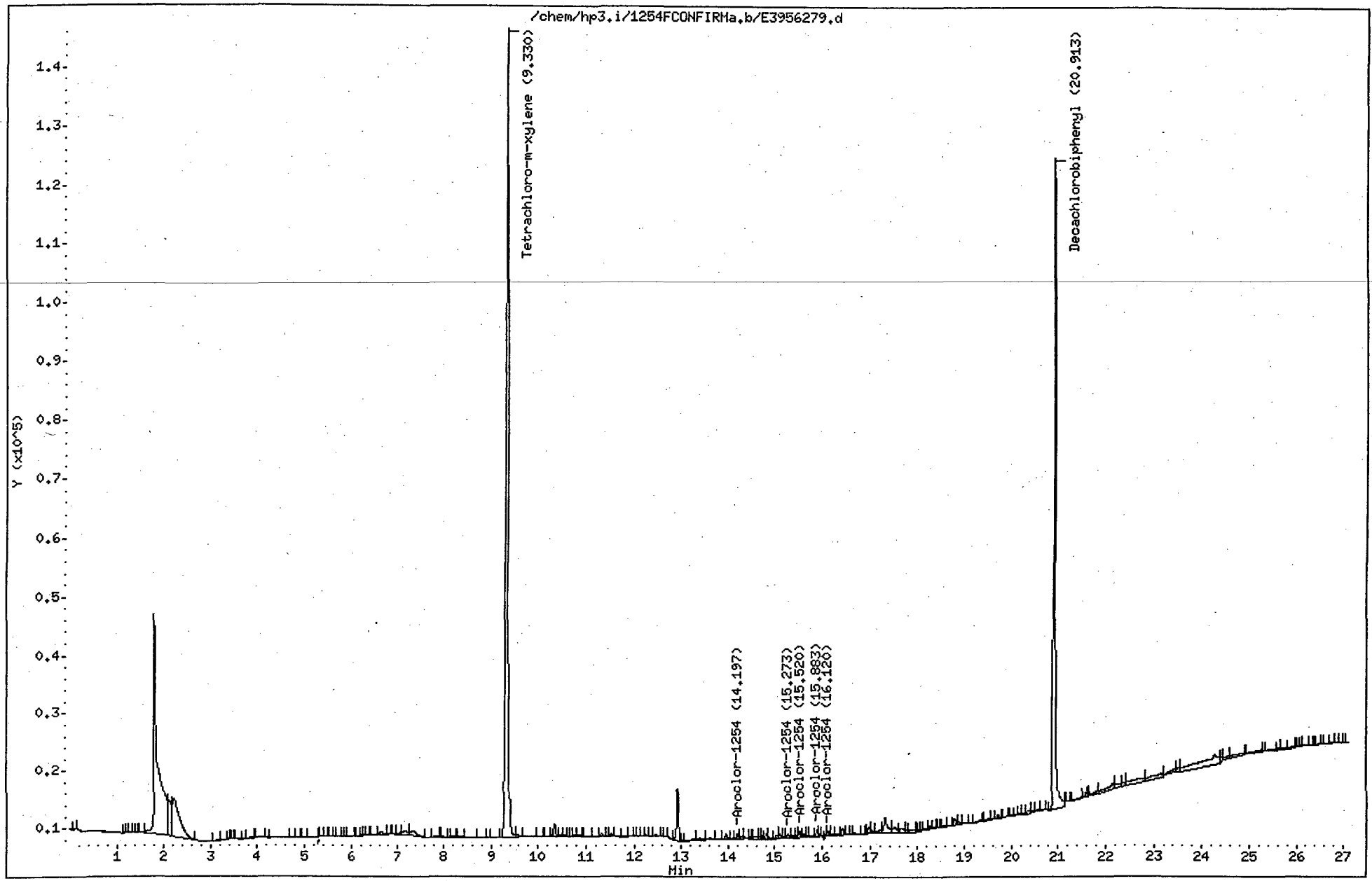
Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956279.d
: 03-OCT-2002 19:11
t ID: L94773-1
Sample Info: L94773-1
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i

Operator: CPW
Column diameter: 0.32

Page 3

00022



Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2980004.D
Lab Smp Id: L94773-2 Client Smp ID: L94773-2
Inj Date : 04-OCT-2002 13:08
Operator : CPW Inst ID: hp1.i
Smp Info : L94773-2
Misc Info : WG32995,02-004
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 04-Oct-2002 14:58 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.967	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	55.800	Total Solid

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
7.980	7.997	-0.017	280155	39.7565	649.66		
$ 29 Decachlorobiphenyl					CAS #:		
20.117	20.130	-0.013	231113	48.2790	788.93		
25 Aroclor-1254					CAS #: 11097-69-1		
13.657	13.670	-0.013	95102	306.441	5007.55	80.00- 120.00	100.00(MH)
14.550	14.563	-0.013	101298	245.731	4015.48	95.80- 135.80	106.51
14.990	15.003	-0.013	85374	245.300	4008.44	85.18- 125.18	89.77
15.337	15.350	-0.013	55580	294.522	4812.77	38.80- 78.80	58.44
16.010	16.033	-0.023	53299	158.293	2586.66	78.24- 118.24	56.04

Average of Peak Concentrations = 4086.18

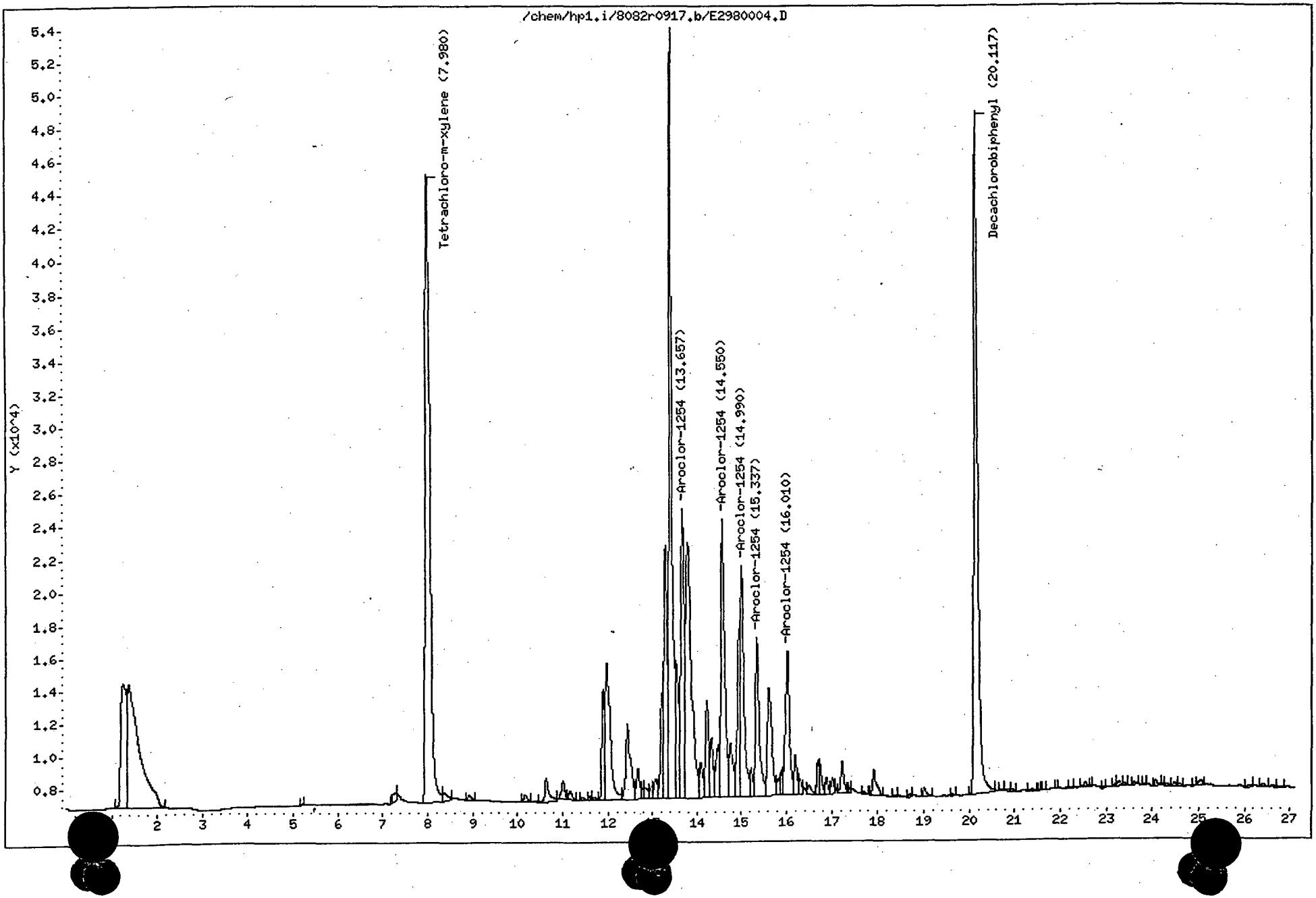
QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /chem/hp1.i/8082r0917.b/E2980004.D
Date : 04-OCT-2002 13:08
Client ID: L94773-2
Sample Info: L94773-2
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00027



Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2980004.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L94773-2
Misc Info: WG32995,02-004
Analysis Date: 04-OCT-2002 13:08
Sample Matrix: SOIL
File Number: 0004

Dilution Factor:	10.0000
Sample Weight:	10.9670
Final Volume:	10.0000
Total Solid :	55.8000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	4086.18
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	79.51%
Decachlorobiphenyl	96.56%

Analyst: CPW
Report Date: 10/04/2002 15:08

Supervisor: _____
Date: 10/4/2

Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956275.d
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: L94773-2
Misc Info: CONFIRMATION
Analysis Date: 03-OCT-2002 17:07
Sample Matrix: SOIL
File Number: 6275

Dilution Factor:	10.0000
Sample Weight:	10.9670
Final Volume:	10.0000
Total Solid :	55.8000

Analytes (ug/Kg)	
Aroclor-1254	3410.70
Tetrachloro-m-xylene	102.38%
Decachlorobiphenyl	111.65%

Analyst: CPW
Report Date: 10/04/2002 08:55

Supervisor: _____
Date: _____

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956275.d
[redacted]: 03-OCT-2002 17:07
[redacted] ID: L94773-2
Sample Info: L94773-2
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

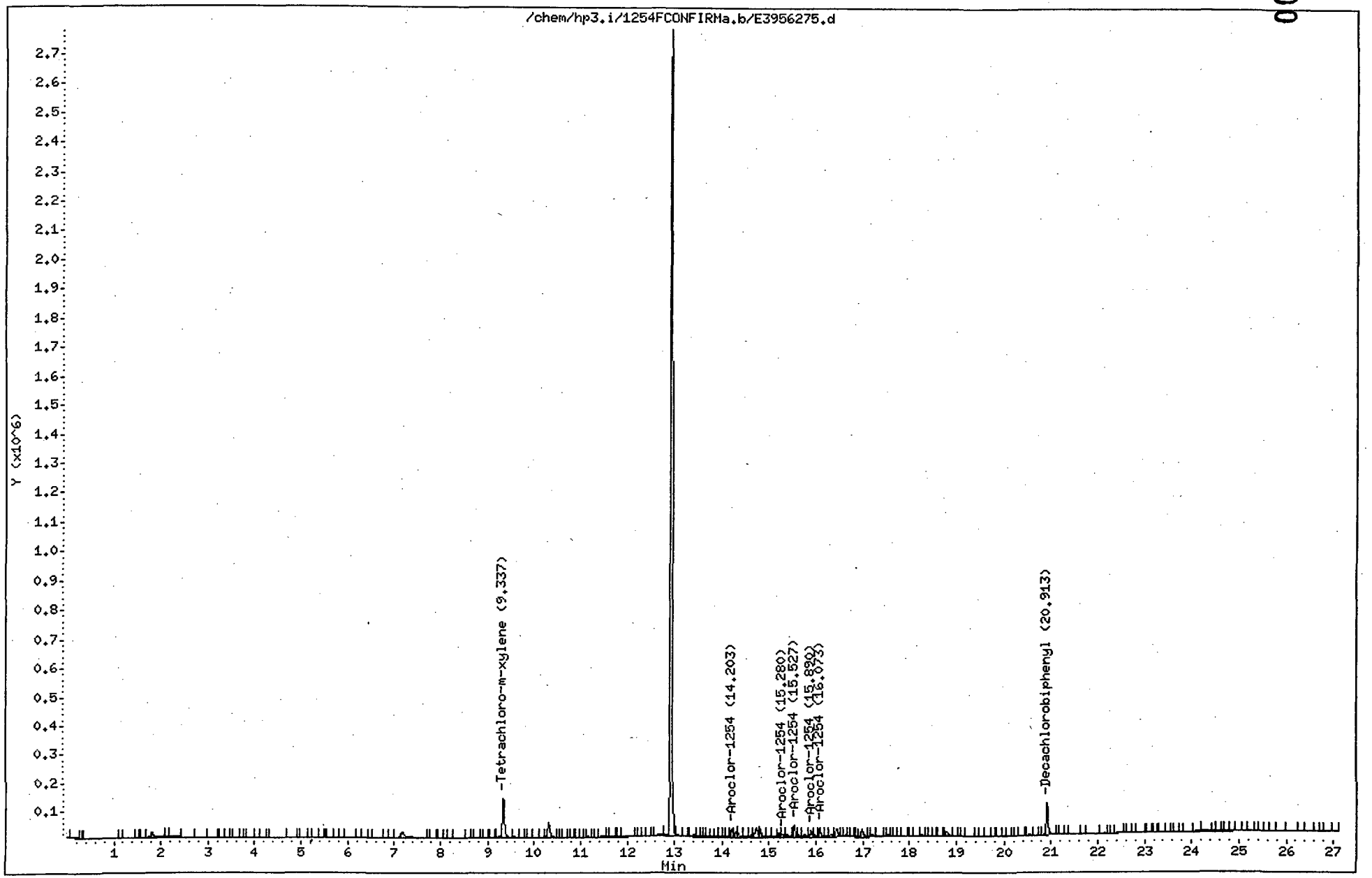
[redacted]

Instrument: hp3.i

Operator: CPW
Column diameter: 0.32

Page [redacted]

00030



Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

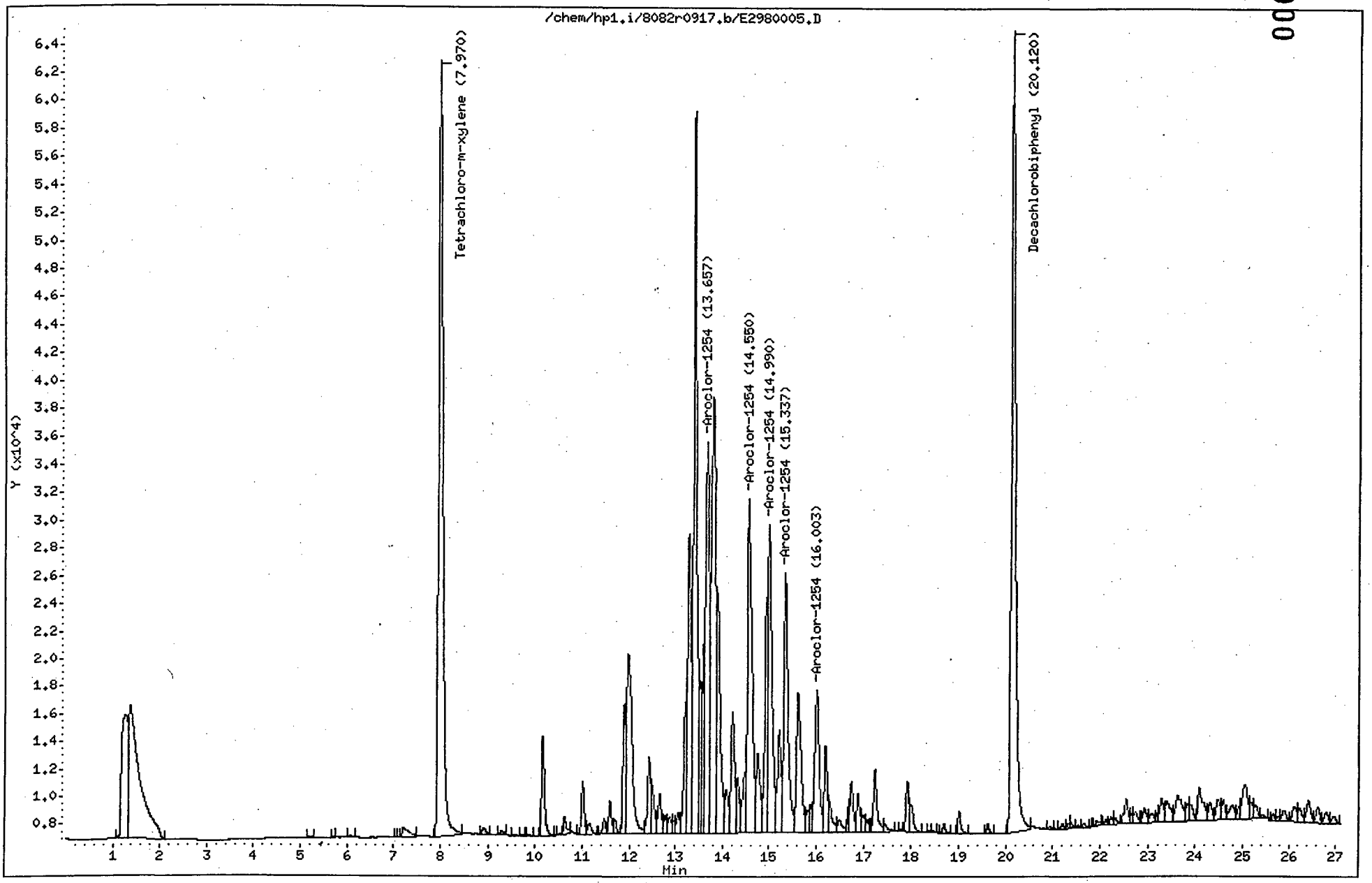
Data File: /chem/hp1.i/8082r0917.b/E2980005.D
D[redacted]04-OCT-2002 13:39
C[redacted]ID: L94773-5
Sample Info: L94773-5
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i

Operator: CPW
Column diameter: 0.32

Page [redacted]

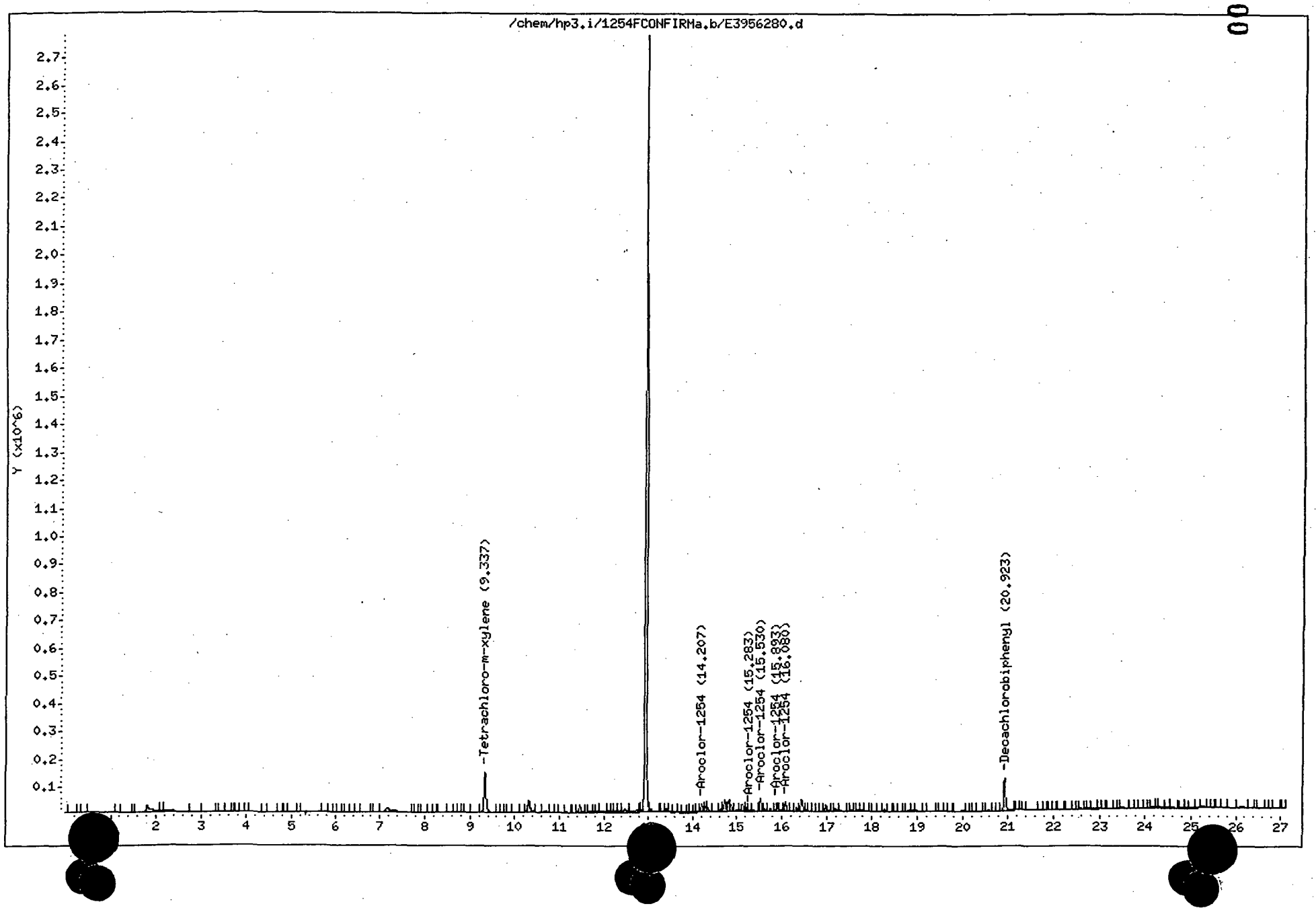
00035



Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956280.d
Date : 03-OCT-2002 19:42
Client ID: L94773-5
Sample Info: L94773-5
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i
Operator: CPW
Column diameter: 0.32

00036



Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956280.d
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: L94773-5
Misc Info: CONFIRMATION
Analysis Date: 03-OCT-2002 19:42
Sample Matrix: SOIL
File Number: 6280

Dilution Factor:	10.0000
Sample Weight:	10.7111
Final Volume:	10.0000
Total Solid :	56.1000

Analytes (ug/Kg)	
Aroclor-1254	3765.06
Tetrachloro-m-xylene	108.14%
Decachlorobiphenyl	116.04%

Analyst: CPW
Report Date: 10/04/2002 08:55

Supervisor:_____
Date:_____

Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

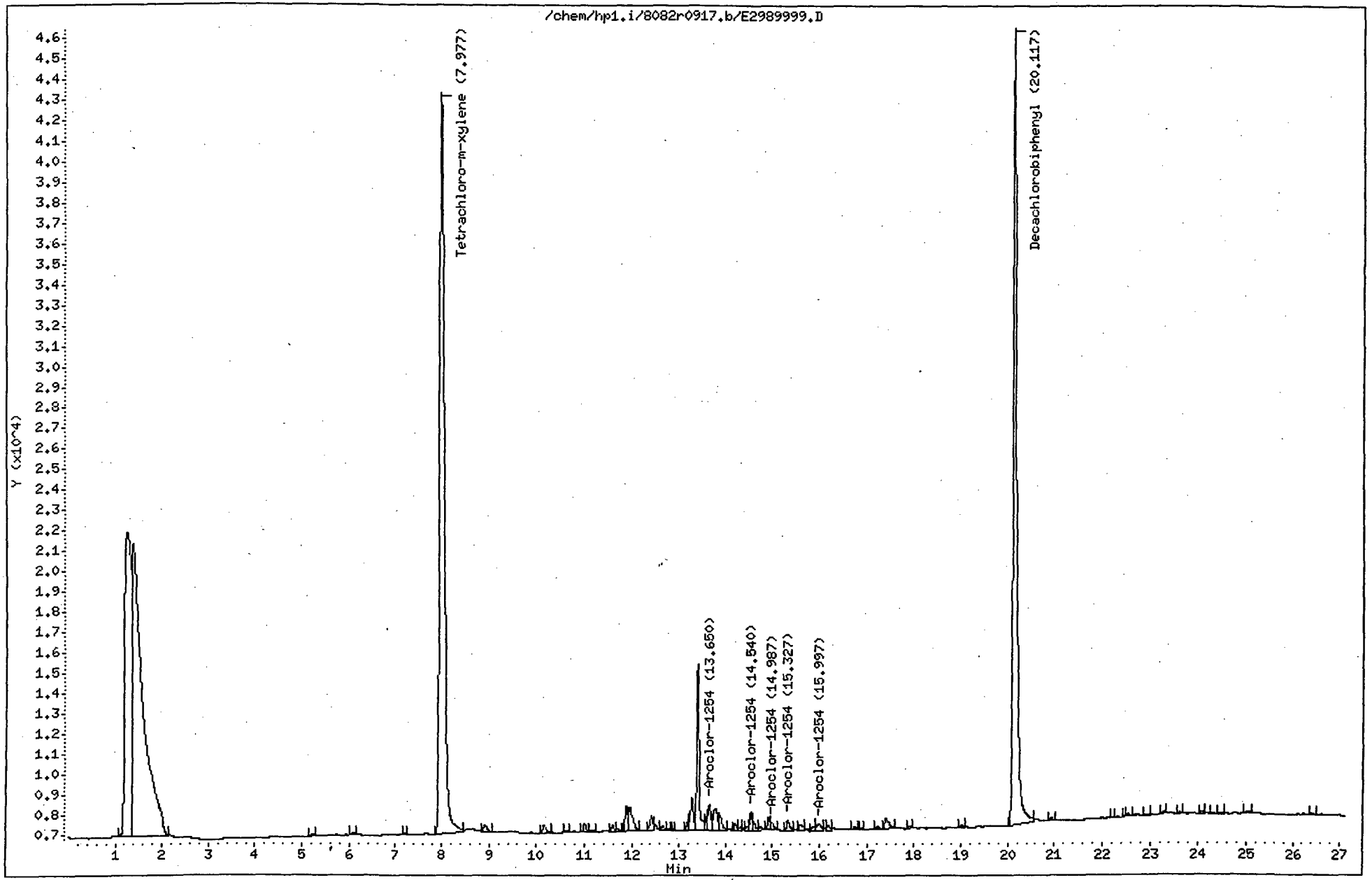
Data [redacted]: /chem/hp1.i/8082r0917.b/E2989999.D
Date: 04-OCT-2002 11:01
[redacted] ID: L94773-6
S[redacted] Info: L94773-6
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i

Operator: CPW
Column diameter: 0.32

Pag[redacted]

00043



Flag Legend

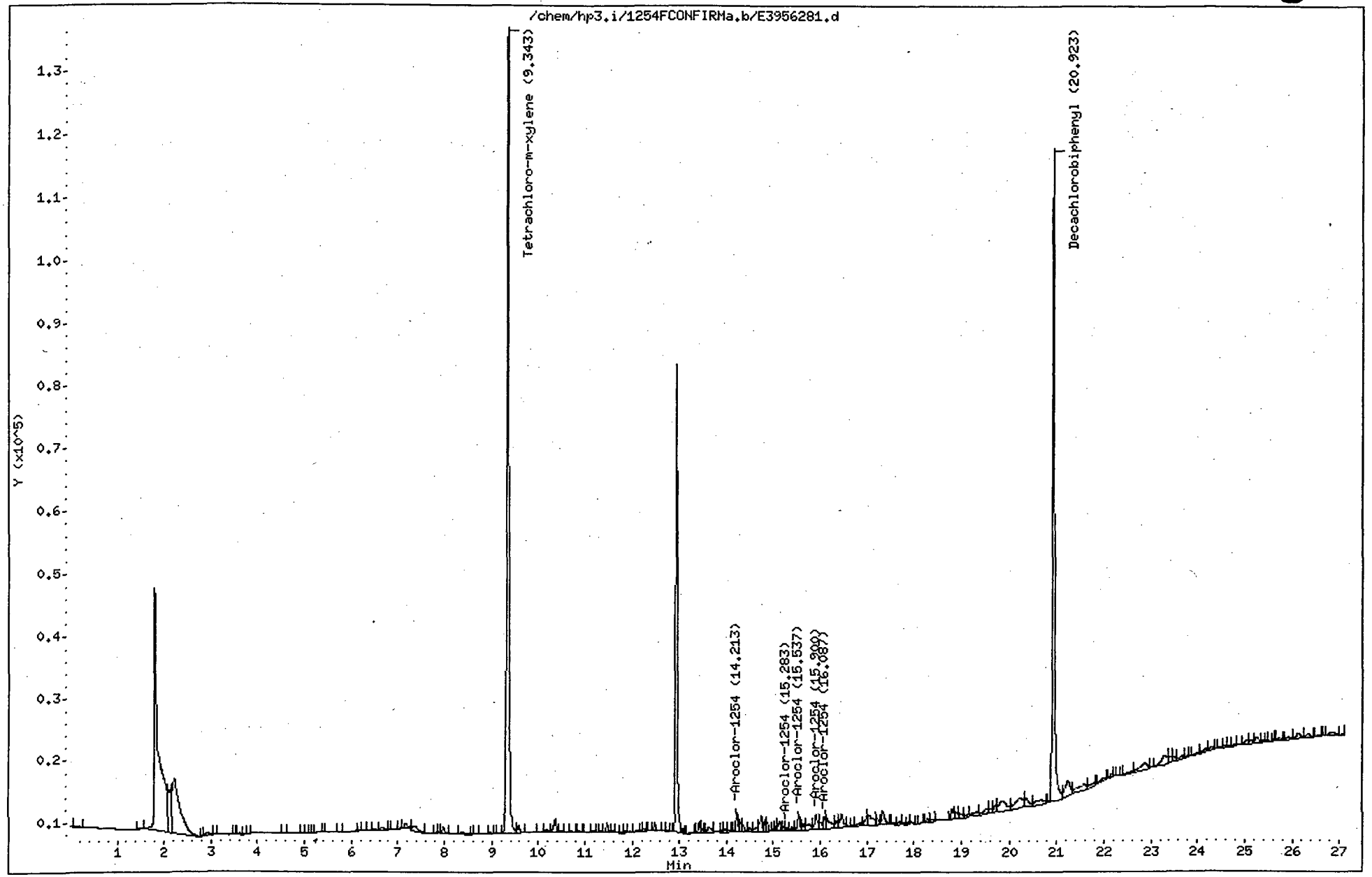
M - Compound response manually integrated.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956281.d
: 03-OCT-2002 20:13
ID: L94773-6
Sample Info: L94773-6
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i

Operator: CPW
Column diameter: 0.32

00047



1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L94773-7

Lab Name: [redacted] Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1001

Matrix: (soil/water) SOIL Lab Sample ID: L94773-7

Sample wt/vol: 10.6 (g/mL) G Lab File ID: E2980002

% Moisture: ~~0~~ 30.8 decanted: (Y/N) N Date Received: 10/01/2

ear 11/4/02

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/02/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/04/2

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	140 ~~0.14~~	U
1104-28-2	Aroclor-1221	270 ~~0.27~~	U
11141-16-5	Aroclor-1232	140 ~~0.14~~	U
53469-21-9	Aroclor-1242	140 ~~0.14~~	U
11097-69-1	Aroclor-1254	1627.61	
11096-82-5	Aroclor-1260	140 ~~0.14~~	U
----------	Aroclor-1248	140 ~~0.14~~	U

ear 11/4/02

Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956281.d
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: L94773-6
Misc Info: CONFIRMATION
Analysis Date: 03-OCT-2002 20:13
Sample Matrix: SOIL
File Number: 6281

Dilution Factor:	10.0000
Sample Weight:	10.2765
Final Volume:	10.0000
Total Solid :	85.0000

Analytes (ug/Kg)	
Aroclor-1254	261.65
Tetrachloro-m-xylene	96.48%
Decachlorobiphenyl	106.77%

Analyst: CPW
Report Date: 10/04/2002 08:55

Supervisor: _____
Date: _____

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2980002.D
Lab Smp Id: L94773-7 Client Smp ID: L94773-7
Inj Date : 04-OCT-2002 12:05
Operator : CPW Inst ID: hp1.i
Smp Info : L94773-7
Misc Info : WG32995,02-004
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 04-Oct-2002 14:58 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.585	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	69.200	Total Solid

Peak 3
Amt = 21.346 + (32524 x 2.623x10^{-3})
= 106.656

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #:		
	7.980	7.997	-0.017	275926	39.2408	535.72		
$ 29 Decachlorobiphenyl						CAS #:		
	20.117	20.130	-0.013	229948	48.0591	656.11		
25 Aroclor-1254						CAS #: 11097-69-1		
	13.653	13.670	-0.017	48297	152.457	2081.35	80.00- 120.00	100.00(MH)
	14.547	14.563	-0.016	42567	112.886	1541.13	95.80- 135.80	88.14
	14.990	15.003	-0.013	32524	106.665	1456.20	85.18- 125.18	67.34
	15.333	15.350	-0.017	27029	145.521	1986.66	38.80- 78.80	55.96
	16.010	16.033	-0.023	24322	78.5730	1072.69	78.24- 118.24	50.36
Average of Peak Concentrations =						1627.61		

Final = $106.656 \times 10 / \left(\frac{\times 10}{10.585} \times .1\right) / 69.2 \times 100$
= 1.4561×10^{-3}
= 1456 ug/kg

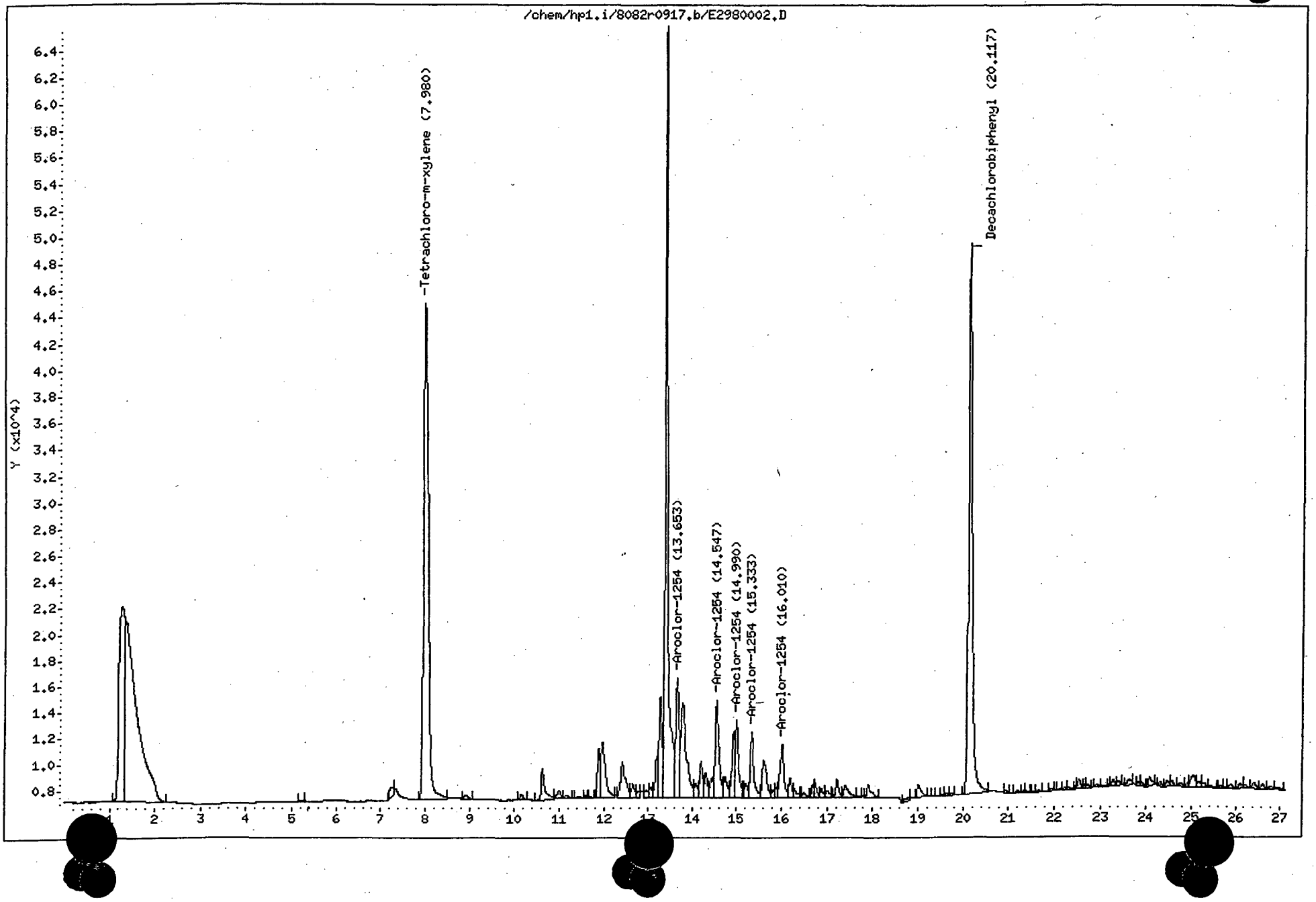
QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /chem/hp1.i/8082r0917.b/E2980002.D
Date : 04-OCT-2002 12:05
Client ID: L94773-7
Sample Info: L94773-7
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00052



Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2980002.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L94773-7
Misc Info: WG32995,02-004
Analysis Date: 04-OCT-2002 12:05
Sample Matrix: SOIL
File Number: 0002

Dilution Factor:	10.0000
Sample Weight:	10.5851
Final Volume:	10.0000
Total Solid :	69.2000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	1627.61
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	78.48%
Decachlorobiphenyl	96.12%

Analyst: CPW
Report Date: 10/04/2002 15:08

Supervisor: _____
Date: 10/4/02

Thru-Put Systems, Inc.

Data file : \chem\hp3.i\1254FCONFIRMa.b\E3956276.d
Lab Smp Id: L94773-7 Client Smp ID: L94773-7
Inj Date : 03-OCT-2002 17:38
Operator : CPW Inst ID: hp3.i
Smp Info : L94773-7
Misc Info : CONFIRMATION
Comment :
Method : \chem\hp3.i\1254FCONFIRMa.b\8082_PCBsec.M
Meth Date : 04-Oct-2002 08:42 Administra Quant Type: ESTD
Cal Date : 03-OCT-2002 16:36 Cal File: E3956274.d
Als bottle: 1
Dil Factor: 10.58510
Integrator: Falcon Compound Sublist: 1254.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

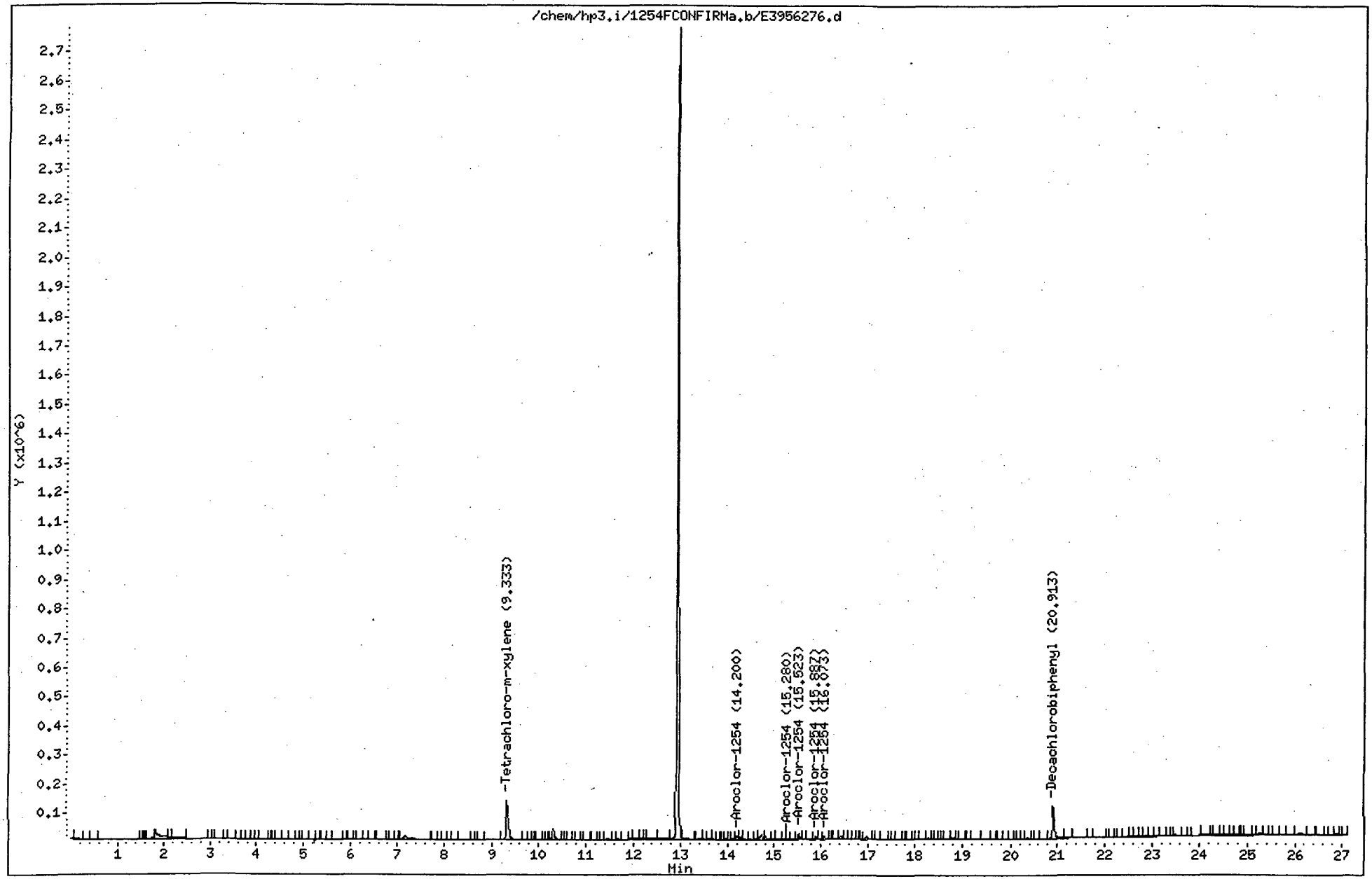
Name	Value	Description
DF	10.585	Dilution Factor
Vf	10.000	Final volume
Ws	10.585	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	69.200	Total Solid

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
9.333	9.337	-0.004	435300	50.7344	733.16		
25 Aroclor-1254					CAS #: 11097-69-1		
14.200	14.203	-0.003	31205	95.0243	1373.18	80.00- 120.00	100.00
15.280	15.287	-0.007	11126	35.4052	511.64	79.42- 119.42	35.65
15.523	15.530	-0.007	46882	95.0595	1373.69	126.59- 166.59	150.24
15.887	15.890	-0.003	26346	100.223	1448.31	57.35- 97.35	84.43
16.073	16.077	-0.004	36168	93.7479	1354.74	84.54- 124.54	115.90
Average of Peak Concentrations =					1212.31		
$ 29 Decachlorobiphenyl					CAS #:		
20.913	20.920	-0.007	317129	56.0946	810.62		

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956276.d
: 03-OCT-2002 17:38
t ID: L94773-7
Sample Info: L94773-7
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i
Operator: CPW
Column diameter: 0.32

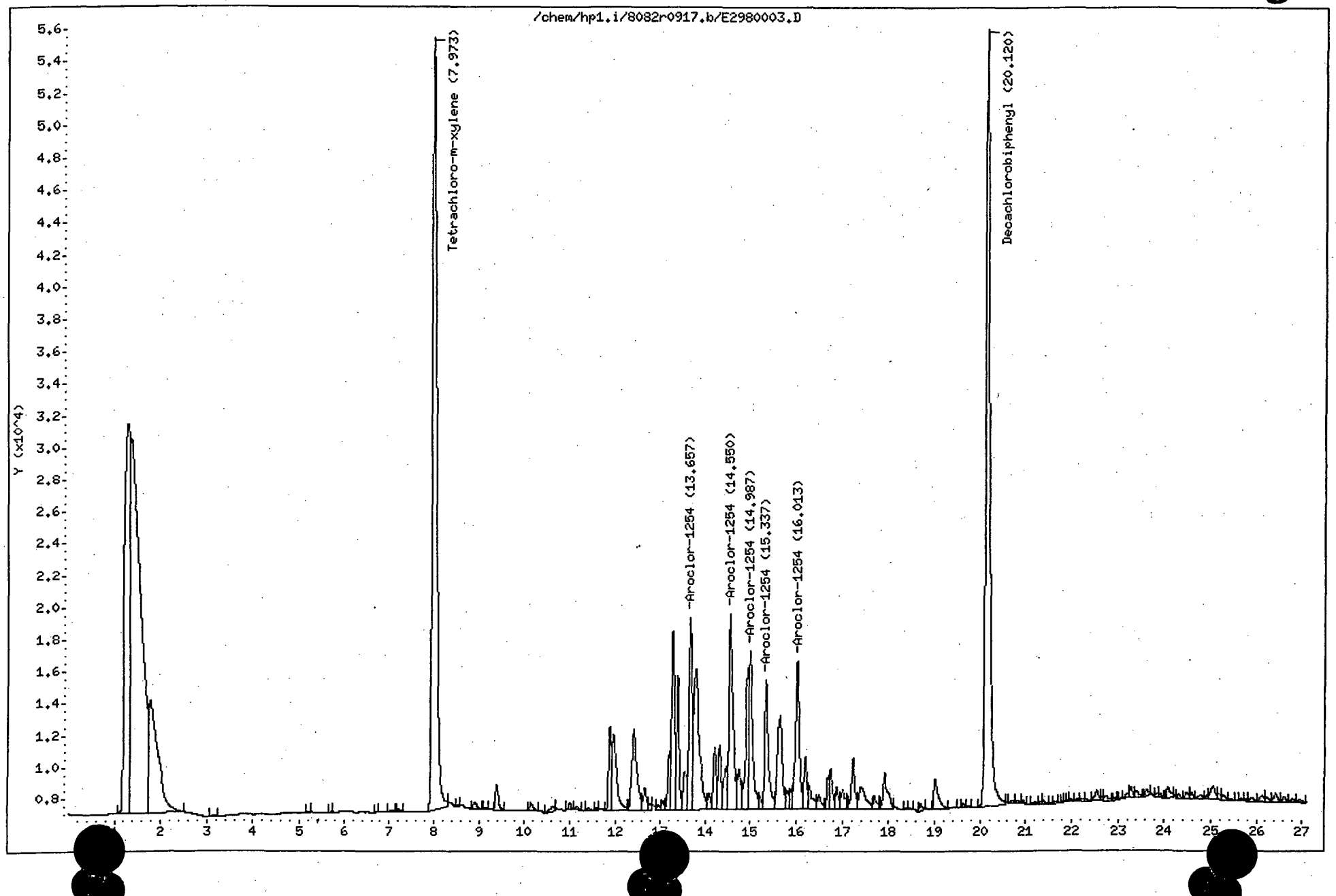
00055



Data File: /chem/hp1.i/8082r0917.b/E2980003.D
Date : 04-OCT-2002 12:37
Client ID: L94773-8
Sample Info: L94773-8
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

09000



Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2980003.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L94773-8
Misc Info: WG32995,02-004
Analysis Date: 04-OCT-2002 12:37
Sample Matrix: SOIL
File Number: 0003

Dilution Factor:	10.0000
Sample Weight:	10.0543
Final Volume:	10.0000
Total Solid :	62.4000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	3063.36
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	91.60%
Decachlorobiphenyl	114.56%

Analyst: CPW
Report Date: 10/04/2002 15:08

Supervisor: _____
Date: _____ 10/21/02

Thru-Put Systems, Inc.

Data file : \chem\hp3.i\1254FCONFIRMa.b\E3956277.d
Lab Smp Id: L94773-8 Client Smp ID: L94773-8
Inj Date : 03-OCT-2002 18:09
Operator : CPW Inst ID: hp3.i
Smp Info : L94773-8
Misc Info : CONFIRMATION
Comment :
Method : \chem\hp3.i\1254FCONFIRMa.b\8082_PCBsec.M
Meth Date : 04-Oct-2002 08:42 Administra Quant Type: ESTD
Cal Date : 03-OCT-2002 16:36 Cal File: E3956274.d
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 1254.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.054	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	62.400	Total Solid

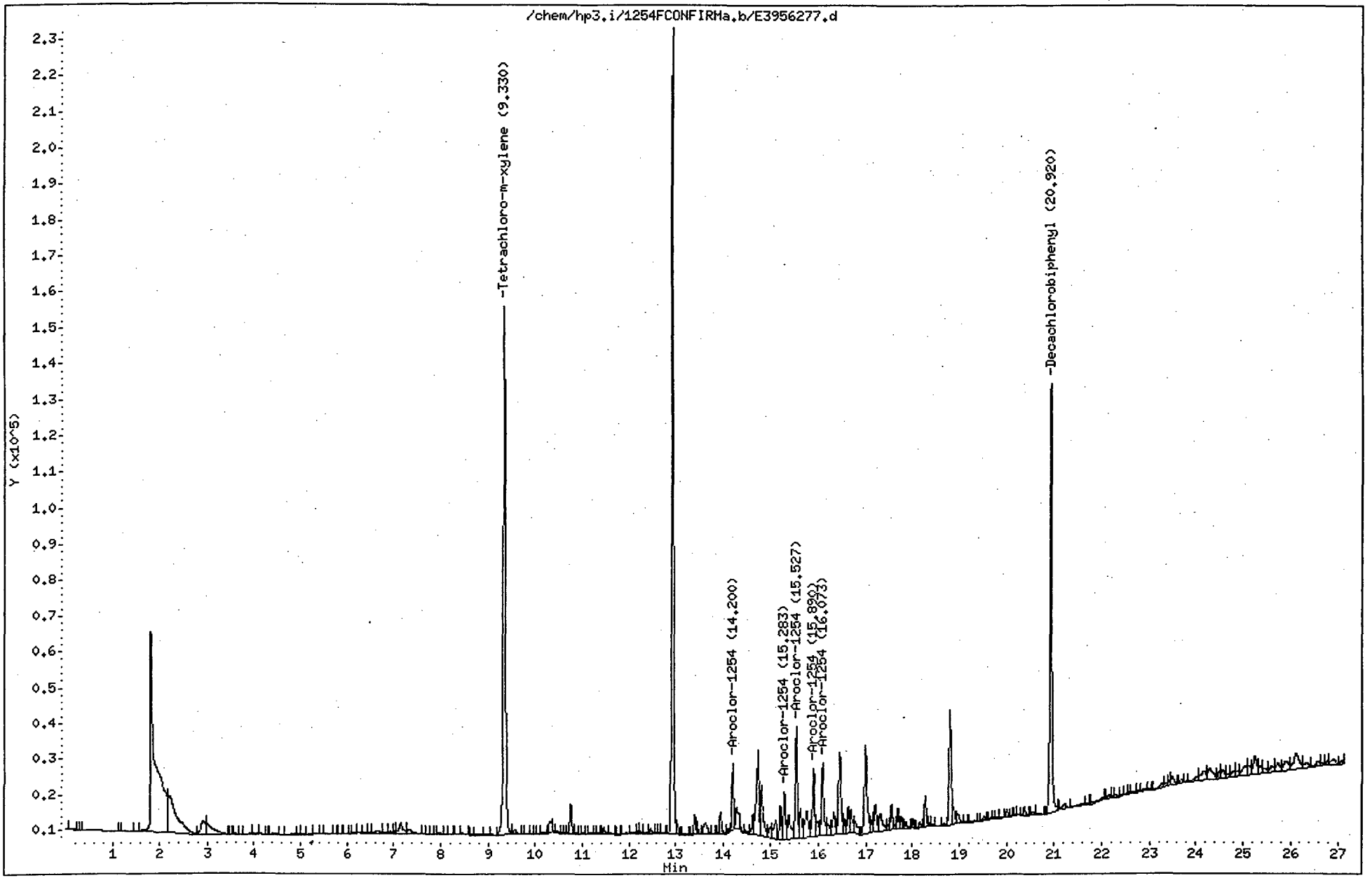
				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
9.330	9.337	-0.007	479597	55.8972	890.95		
25 Aroclor-1254					CAS #: 11097-69-1		
14.200	14.203	-0.003	46196	140.674	2242.22	80.00- 120.00	100.00
15.283	15.287	-0.004	42413	134.967	2151.25	79.42- 119.42	91.81
15.527	15.530	-0.003	88968	180.395	2875.33	126.59- 166.59	192.59
15.890	15.890	0.000	60230	229.122	3651.99	57.35- 97.35	130.38
16.073	16.077	-0.004	65339	169.359	2699.44	84.54- 124.54	141.44
Average of Peak Concentrations =					2724.05		
$ 29 Decachlorobiphenyl					CAS #:		
20.920	20.920	0.000	339425	60.0384	956.96		

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956277.d
: 03-OCT-2002 18:09
nt ID: L94773-8
Sample Info: L94773-8
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i

Operator: CPW
Column diameter: 0.32

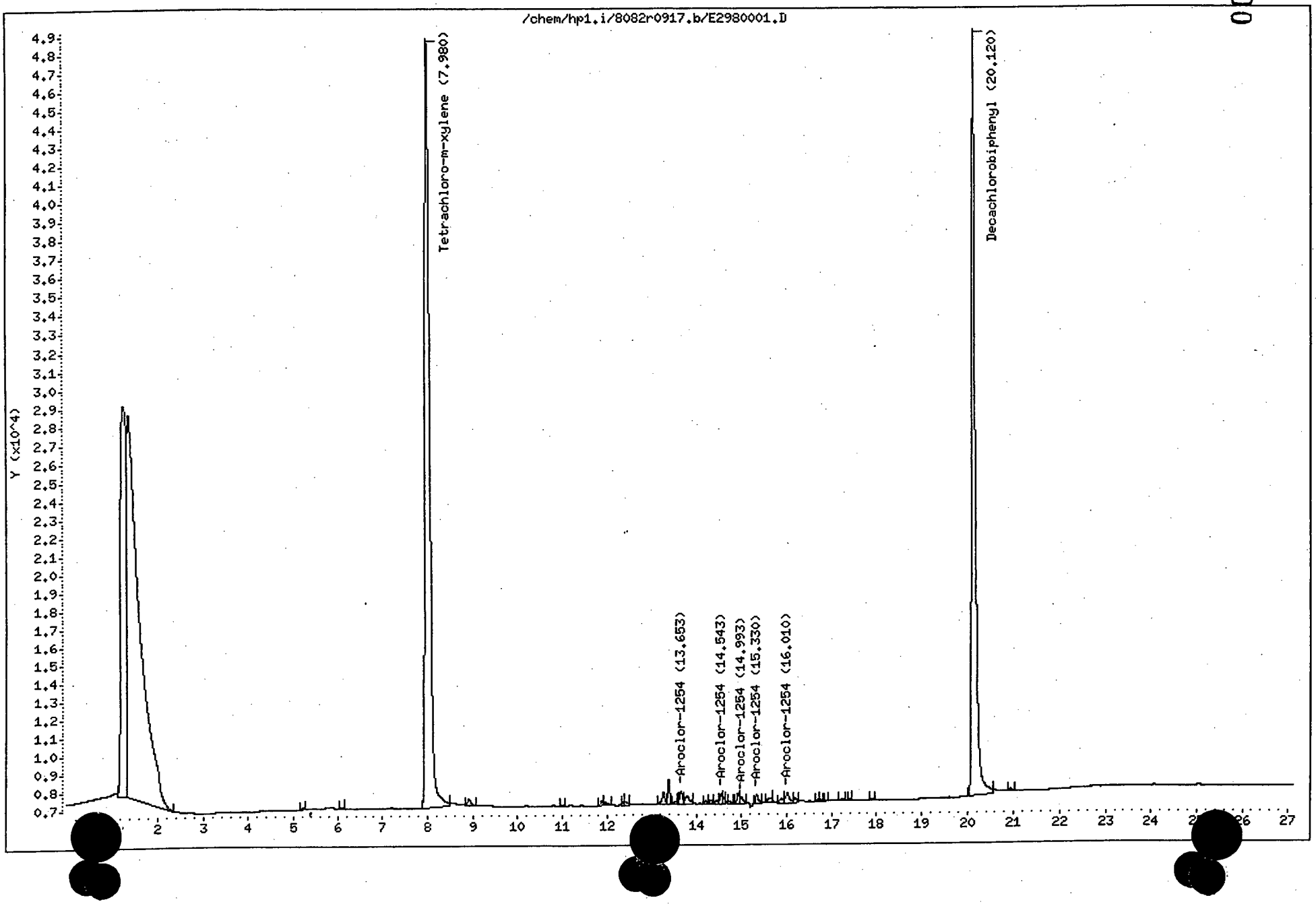
00063



Data File: /chem/hp1.i/8082r0917.b/E2980001.D
Date : 04-OCT-2002 11:36
Client ID: L94773-9
Sample Info: L94773-9
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00063



Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2980001.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L94773-9
Misc Info: WG32995,02-004
Analysis Date: 04-OCT-2002 11:36
Sample Matrix: SOIL
File Number: 0001

Dilution Factor:	10.0000
Sample Weight:	10.0965
Final Volume:	10.0000
Total Solid :	56.7000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	308.33
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	85.75%
Decachlorobiphenyl	93.00%

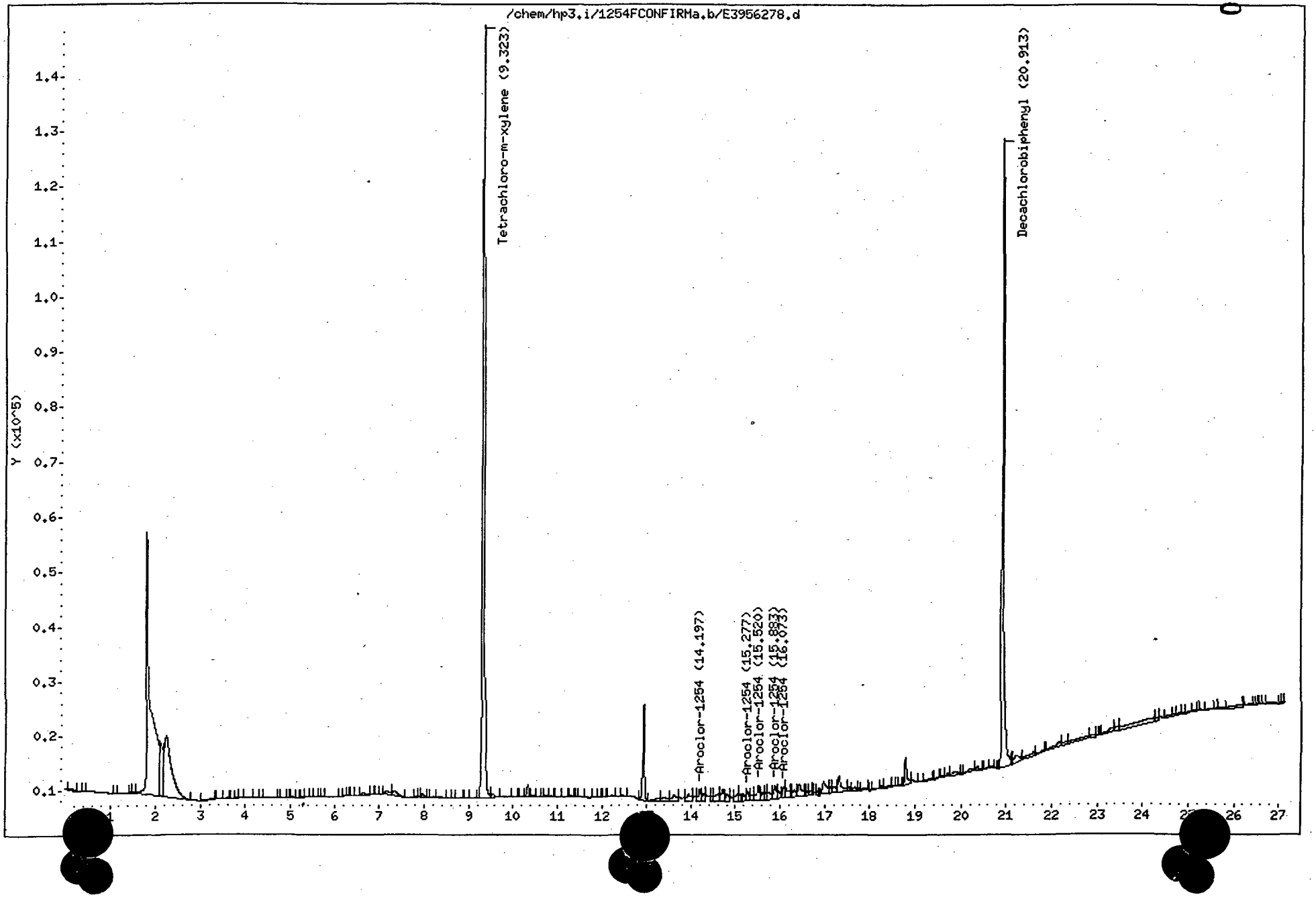
Analyst: CPW
Report Date: 10/04/2002 15:08

Supervisor:_____
Date:_____

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956278.d
Date : 03-OCT-2002 18:40
Client ID: L94773-9
Sample Info: L94773-9
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i
Operator: CPW
Column diameter: 0.32

00072



Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956278.d
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: L94773-9
Misc Info: CONFIRMATION
Analysis Date: 03-OCT-2002 18:40
Sample Matrix: SOIL
File Number: 6278

Dilution Factor:	10.0000
Sample Weight:	10.0965
Final Volume:	10.0000
Total Solid :	56.7000

Analytes (ug/Kg)	
Aroclor-1254	462.39
Tetrachloro-m-xylene	105.86%
Decachlorobiphenyl	116.25%

Analyst: CPW
Report Date: 10/04/2002 08:55

Supervisor:_____
Date:_____

Notebook : 02-066
Start Date : 01-OCT-02 12:36
End Date : 01-OCT-02 12:36

Sample I.D.	Analysis Date Time	Anal Init	Method	Dish#	Volume (mls)	Initial Weight	1st&2nd Weight	3rd&4th Weight	5th&6th Weight	7th&8th Weight	9th&10th Weight	Final Result	Rpd	Units
94626-1	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	3	6.0566	1.2443	6.8267					92.2		%
Comments :														
94626-1	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	4	5.3261	1.2489	5.706					83.7		%
Comments :														
94626-2	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	5	5.1671	1.2503	5.2409					77.2		%
Comments :														
94643-1	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	6	5.2256	1.2499	4.6867					65.8		%
Comments :														
94662-1	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	7	5.5658	1.2548	4.4105					56.7		%
Comments :														
94662-2	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	8	5.7358	1.2451	5.1445					68		%
Comments :														
94662-3	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	9	7.0602	1.24	6.8967					80.1		%
Comments :														
[redacted]	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	10	5.2742	1.2581	5.7958					86		%
Comments :														
94773-1	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	11	5.0625	1.2475	4.114					56.6		%
Comments :														
94773-2	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	12	5.8879	1.2387	4.5246					55.8	.179	%

Calculations: Final Results = $\frac{(\text{fnl wgt} - \text{initial wgt}) \times 1000000}{\text{mls of sample}}$

Analyst Signature 10/2/02 Date

10/2/2

Teresa B. Bishop Manager Signature 10/2/02 Date ✓

00364

Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2980070.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L95095-4
Misc Info: WG33079,02-004
Analysis Date: 08-OCT-2002 16:07
Sample Matrix: SOIL
File Number: 0070

Dilution Factor:	10.0000
Sample Weight:	10.0984
Final Volume:	10.0000
Total Solid :	65.2000

Analytes (ug/Kg)	
Aroclor-1016	11.66%
Aroclor-1260	12.58%
Tetrachloro-m-xylene	72.87%
Decachlorobiphenyl	94.70%

Analyst: CPW
Report Date: 10/09/2002 10:53

Supervisor: _____
Date: _____

00363

Notebook : 02-066
Start Date : 01-OCT-02 12:36
End Date : 01-OCT-02 12:36

Sample I.D.	Analysis Date Time	Anal Init	Method	Dish#	Volume (mls)	Initial Weight	1st&2nd Weight	3rd&4th Weight	5th&6th Weight	7th&8th Weight	9th&10th Weight	Final Result	Rpd	Units
Comments :														
L94773-5	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	13	5.5807	1.2456	4.3749					56.1		%
Comments :														
L94773-6	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	14	5.4511	1.24	5.8728					85		%
Comments :														
L94773-7	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	15	5.4263	1.2347	4.9915	4.9915 - 1.2347 / 5.4263 = 0.922				69.2		%
Comments :														
L94773-8	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	16	5.3659	1.2487	4.5955					62.4		%
Comments :														
L94773-9	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	17	5.6415	1.2474	4.4443					56.7		%
Comments :														
WG32965-1	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	1	1.2427	1.2426	1.2425					-.00805		%
Comments : BLANK														
WG32965-2	Start:01-OCT-02 12:36 Stop :01-OCT-02 12:36		CLP 3.0	2	5.7874	1.2375	6.6054					92.8		%
Comments : CCV														
WG32965-3	Start:01-OCT-02 14:30 Stop :		CLP 3.0	18	5.1043	1.2485	4.1013					55.9		%
Comments : 94773-2=4 Report as 94773-4 (-2 DUP) - (Don't report) BA 10/2/02														

Calculations: Final Results = (fnl wgt - initial wgt) / mls of sample x 1000000

Analyst Signature 10/2/02 Date

Teresa B. Bishop Manager Signature 10/2/02 Date

10/2/2

WET CHEMISTRY TOTAL SOLIDS NOTEBOOK

Notebook : 02-066
Start Date : 05-OCT-02 09:31
End Date : 05-OCT-02 09:31

Sample I.D.	Analysis Date Time	Anal Init	Method	Dish#	Volume (mls)	Initial Weight	1st&2nd Weight	3rd&4th Weight	5th&6th Weight	7th&8th Weight	9th&10th Weight	Final Result	Rpd	Units
L94859-4	Start:05-OCT-02 09:31 Stop :05-OCT-02 09:31		CLP3.0	3	5.1847	1.238	4.4207					61.4	5.234	%
Comments :														
[illegible]	Start:05-OCT-02 09:31 Stop :05-OCT-02 09:31		CLP3.0	4	5.9537	1.2581	6.1862					82.8		%
Comments :														
L94877-2	Start:05-OCT-02 09:31 Stop :05-OCT-02 09:31		CLP3.0	5	7.5581	1.246	7.7892					86.6		%
Comments :														
[illegible]	Start:05-OCT-02 09:31 Stop :05-OCT-02 09:31		CLP3.0	6	6.2423	1.2422	5.7766					72.6		%
Comments :														
L94910-1	Start:05-OCT-02 09:31 Stop :05-OCT-02 09:31		CLP3.0	7	5.3435	1.2452	5.6873					83.1		%
Comments :														
L94910-2	Start:05-OCT-02 09:31 Stop :05-OCT-02 09:31		CLP3.0	8	6.4459	1.2414	4.5558					51.4		%
Comments :														
L94910-3	Start:05-OCT-02 09:31 Stop :05-OCT-02 09:31		CLP3.0	9	5.723	1.248	5.0341					66.2		%
Comments :														
L94910-4	Start:05-OCT-02 09:31 Stop :05-OCT-02 09:31		CLP3.0	10	6.9196	1.246	5.2931					58.5		%
Comments :														
L94910-5	Start:05-OCT-02 09:31 Stop :05-OCT-02 09:31		CLP3.0	11	5.5516	1.2301	5.4282					75.6		%
Comments :														
L94910-6	Start:05-OCT-02 09:31 Stop :05-OCT-02 09:31		CLP3.0	12	5.1808	1.2383	4.2408					58		%

Calculations: Final Results = (fnl wgt - initial wgt) x 1000000 / mls of sample

Analyst Signature 10/7/2 Date

Manager Signature 10/7/02 Date

00366

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Data Validation Report

SDG#	95433
Validation Report Date	April 28, 2003
Validation Guidance	USEPA Region 2 Guidelines for Data Review SW 846 Method 8082
Client Name	Cummings-Riter
Project Name	Viacom/Horseheads
Laboratory	Friend Laboratory Inc.
Method(s) Utilized	SW 846 8082
Analytical Fraction	PCBs

Samples/Matrix:

Date Sampled	Sample ID	Laboratory ID	PCBs	Matrix
10/14/02	H-C-SS-B1-001	95433-1	X	Solid
10/14/02	H-C-SS-B2-001	95433-2	X	Solid
10/14/02	H-B-S-W-001	95433-3	X	Solid
10/14/02	H-B-SS-W-001	95433-4	X	Solid

Analytical data in this report were screened to determine analytical limitations of the data based on specific quality control criteria. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of laboratory calculations has been verified as part of this validation. Specific findings on analytical limitations are presented in this report. Annotated Form 1s or spreadsheets for samples reviewed are included after the Data Assessment Findings. Form 1s for the MS/MSD samples and spreadsheets are not annotated.

SUMMARY

The sample set for Viacom/Horsehead consists of four solid field samples. These samples were analyzed for the parameters as provided above. The findings presented in this review of the analytical data assume that the information presented by the analytical laboratory is correct. This review is identified as a false positive/false negative review, and therefore, does not include the review of some quality control (QC) items. Those included in the review are listed below.

The polychlorinated biphenyl (PCBs) findings are based upon the assessment of the following:

False Positives/False Negatives Validation

	• Data Completeness
	• Holding Times
*	• Calibration and GC Performance
*	• Blanks
*	• Analytical Sequence Check
*	• Target Compound Identification
	• Compound Quantitation and Reported Detection Limits
*	• Chromatogram Quality

* Criteria were met for this evaluation item.

This evaluation was conducted in accordance with USEPA Region II SOP No. HW-23B (May 2002), USEPA CLP National Functional Guidelines for Organic Data Review and the analytical method. Findings from this evaluation should be considered when using the analytical data. This report presents a summary of the data qualifications based on the review of the aforementioned evaluation criteria. This is followed by annotated Form 1s/ spreadsheets. Finally, the worksheets used to perform the evaluation are provided.

FINDINGS

Polychlorinated Biphenyls (PCBs)

1. Holding Time

The cooler temperature upon receipt by the laboratory was measured as 18 C. For the following samples, qualify positive results of all PCBs as estimated "J" and nondetected results as estimated "UJ".

H-C-SS-B1-001 H-C-SS-B2-001 H-B-S-W-001 H-B-SS-W-001

2. Compound Quantitation

The percent difference between columns exceeded the 25% quality control limit. For the following sample and compound, qualify PCB results as indicated in the table below. Samples were qualified based on SOP HW-23, Section 12.6.

Sample	Compound	% Difference	Qualifier
H-B-S-W-001	Aroclor 1254	42.3%	J

NOTES

Polychlorinated Biphenyls (PCBs)

Completeness

The USEPA Region II SOP No. HW-23B has the following sections that are not applicable to this project because it is a false positive/false negative review:

- Surrogate Recovery (Form 2)
- Laboratory Control Sample
- Matrix Spikes (Form 3)
- Contamination
- GC Apparatus and Materials
- Extraction Techniques for Sample Preparation
- Field Duplicates

Calibration

The laboratory used linear regression to calculate PCB results. The use of linear regression is permissible for SW-846 methodologies. The laboratory met the acceptance criteria specified in Section 7.5.2 of Method 8000B (r value greater than or equal to 0.99).

Data summary forms (including calibration factors) for the initial and continuing calibration is not provided for the second column except for Aroclor 1254. The second column is used only for fingerprint confirmation, therefore, the laboratory does not provide the calibration factor information. Because Aroclor 1254 was identified as a constituent of concern, the data summary information for the second column is provided for the continuing calibration. Data are not qualified on this basis.

The percent difference (%D) per peak for multi-standard Aroclors are provided. For SW 846, the laboratory used the average Aroclor concentration to determine the %D. Data are not qualified because the average value is used.

Retention Time

Retention time windows are not determined by the use of three standards for single standard calibration Aroclors. The center of the retention time window is defined as the retention time of the midpoint standard from the initial calibration. For the multi-standard calibration Aroclors, the center of the retention time window is the mean of the retention time generated from each standard. The retention time windows are the mean $\pm$ 0.1 minutes. Data are not qualified on this basis.

Retention time windows are not provided for the second column except for Aroclor 1254. The second column is used only for fingerprint confirmation, therefore, the laboratory does not provide the retention time window information. Because Aroclor 1254 was identified as a constituent of concern, the retention time information for the second column is provided. Data are not qualified on this basis.

Compound Quantitation

Samples were analyzed and reported at a dilution due to the presence of target compounds. Dilutions for samples are presented below. Reporting limits were adjusted for percent solids and dilutions.

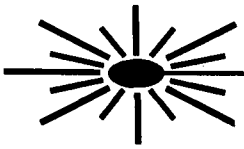
H-C-SS-B1-001, H-C-SS-B2-001, H-B-S-W-001, H-B-SS-W-001	10x

Data Reviewer

Date 7/28/03

Glossary of Data Qualifiers

U	Not Detected.	The associated number indicates approximate sample concentration necessary to be detected.
UJ	Not Detected.	Quantitation limit may be inaccurate or imprecise.
J	Analyte Present.	Reported value may not be accurate or precise.
N	Consider Present.	Tentative identification. Special methods may be needed to confirm its presence or absence in future sampling efforts.
R	Unusable Result.	Analyte may or may not be present in the sample.
UR	Unusable Result.	Analyte may or may not be present in the sample.



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Annotated Form 1's

(Spreadsheet)

FLI
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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:17-OCT-2002

Lab Sample ID: L95433-1

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: H-C-SS-B1-001
Description: COMPOSITE
Sampled On: 14-OCT-02 10:20 by CLIENT
Date Received: 14-OCT-02 15:54
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	92	%		15-OCT-02 00:00	CLP 3.0	02-066-87
EPA 8082						
PCB 1016	400 UJ	ug/kg	100	16-OCT-02 17:10	EPA 8082	02-004-0185
PCB 1221		ug/kg	200	16-OCT-02 17:10	EPA 8082	02-004-0185
PCB 1232		ug/kg	100	16-OCT-02 17:10	EPA 8082	02-004-0185
PCB 1242		ug/kg	100	16-OCT-02 17:10	EPA 8082	02-004-0185
PCB 1248		ug/kg	100	16-OCT-02 17:10	EPA 8082	02-004-0185
PCB 1254	360 J	ug/kg	100	16-OCT-02 17:10	EPA 8082	02-004-0185
PCB 1260	400 UJ	ug/kg	100	16-OCT-02 17:10	EPA 8082	02-004-0185
Extraction Information:				15-OCT-02 00:00	EPA 3550	02-090-12
Surrogate Recovery:						
Tetrachloro-m-xylene	82	%				02-004-0185
Decachlorobiphenyl	106	%				02-004-0185

TMB 4/27/03

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

rmation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost fo se services. Your samples will be discarded after 14 days unless we are advised otherwise.

FLI
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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:17-OCT-2002

Lab Sample ID: L95433-2

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: H-C-SS-B2-001
Description: COMPOSITE
Sampled On: 14-OCT-02 10:25 by CLIENT
Date Received: 14-OCT-02 15:54
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	91.4	%		15-OCT-02 00:00	CLP 3.0	02-066-87
EPA 8082						
PCB 1016	~~U~~ UJ	ug/kg	110	16-OCT-02 17:42	EPA 8082	02-004-0186
PCB 1221	U	ug/kg	220	16-OCT-02 17:42	EPA 8082	02-004-0186
PCB 1232	U	ug/kg	110	16-OCT-02 17:42	EPA 8082	02-004-0186
PCB 1242	U	ug/kg	110	16-OCT-02 17:42	EPA 8082	02-004-0186
PCB 1248	U	ug/kg	110	16-OCT-02 17:42	EPA 8082	02-004-0186
PCB 1254	250 J	ug/kg	110	16-OCT-02 17:42	EPA 8082	02-004-0186
PCB 1260	~~U~~ UJ	ug/kg	110	16-OCT-02 17:42	EPA 8082	02-004-0186
Extraction Information:				15-OCT-02 00:00	EPA 3550	02-090-12
Surrogate Recovery:						
Tetrachloro-m-xylene	92	%				02-004-0186
Decachlorobiphenyl	143	%				02-004-0186

DMB 4/27/03

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

...ormation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed ...ost for these services. Your samples will be discarded after 14 days unless we are advised otherwise.

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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date: 17-OCT-2002

Lab Sample ID: L95433-3

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: H-B-S-W-001
Description: COMPOSITE
Sampled On: 14-OCT-02 10:30 by CLIENT
Date Received: 14-OCT-02 15:54
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	62.2	%		15-OCT-02 00:00	CLP 3.0	02-066-87
EPA 8082						
PCB 1016	U U5	ug/kg	160	16-OCT-02 18:13	EPA 8082	02-004-0187
PCB 1221	U	ug/kg	310	16-OCT-02 18:13	EPA 8082	02-004-0187
PCB 1232	U	ug/kg	160	16-OCT-02 18:13	EPA 8082	02-004-0187
PCB 1242	U	ug/kg	160	16-OCT-02 18:13	EPA 8082	02-004-0187
PCB 1248	U	ug/kg	160	16-OCT-02 18:13	EPA 8082	02-004-0187
PCB 1254	310 J	ug/kg	160	16-OCT-02 18:13	EPA 8082	02-004-0187
PCB 1260	U U5	ug/kg	160	16-OCT-02 18:13	EPA 8082	02-004-0187
Extraction Information:				15-OCT-02 00:00	EPA 3550	02-090-12
Surrogate Recovery:						
Tetrachloro-m-xylene	85	%				02-004-0187
Decachlorobiphenyl	112	%				02-004-0187

DMB 4/27/03

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

Information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost of these services. Your samples will be discarded after 14 days unless we are advised otherwise.

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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:17-OCT-2002

Lab Sample ID: L95433-4

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: H-B-SS-W-001
Description: COMPOSITE
Sampled On: 14-OCT-02 10:35 by CLIENT
Date Received: 14-OCT-02 15:54
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	56.9	%		15-OCT-02 00:00	CLP 3.0	02-066-87
EPA 8082						
PCB 1016	U UJ	ug/kg	160	16-OCT-02 18:44	EPA 8082	02-004-0188
PCB 1221	U	ug/kg	330	16-OCT-02 18:44	EPA 8082	02-004-0188
PCB 1232	U	ug/kg	160	16-OCT-02 18:44	EPA 8082	02-004-0188
PCB 1242	U	ug/kg	160	16-OCT-02 18:44	EPA 8082	02-004-0188
PCB 1248	U	ug/kg	160	16-OCT-02 18:44	EPA 8082	02-004-0188
PCB 1254	420 J	ug/kg	160	16-OCT-02 18:44	EPA 8082	02-004-0188
PCB 1260	UJ	ug/kg	160	16-OCT-02 18:44	EPA 8082	02-004-0188
Extraction Information:				15-OCT-02 00:00	EPA 3550	02-090-12
Surrogate Recovery:						
Tetrachloro-m-xylene	102	%				02-004-0188
Decachlorobiphenyl	141	%				02-004-0188

MB 4/21/03

Results calculated on a dry weight basis.

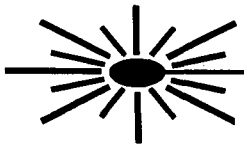
Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

Information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed cost for these services. Your samples will be discarded after 14 days unless we are advised otherwise.



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Support Documentation

CUSTOMER [redacted] # _____

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

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ONE RESEARCH CIRCLE
WAVERLY NY 14892-1532
Telephone (607) 565 3500
Fax (607) 565-4083

Untreated | Sodium thiosulfate | HCl pH <2 | Ascorbic acid & HCl pH <2 | HNO_3 pH <2 | H_2SO_4 pH <2 | NaOH pH >12 | NaOH & Zinc acetate pH >9 | Acetic Buffer pH <3 | Sodium sulfite

CLIENT: AAA ENVIRONMENTAL
ADDRESS: ONSITE DELIVERY
PHONE: 607-227-8601 FAX:

INVOICE TO:
ADDRESS:

Sample Site: VIACOM/HORSEHEADS

P.O. #

PROJECT NO. / NAME
VIACOM/HORSEHEADS
19208

COPY TO:
ADDRESS:

95433

DATE & TIME OF SAMPLE COLLECTION	SAMPLE DESCRIPTION	NUMBER OF CONTAINERS	ANALYSES / TESTS REQUESTED	SAMPLE NUMBER
10/14/02 @ 1020	H-C-SS-B1-001	X Description: Grab Composite Other Matrix: DW WW MW Soil Air Other	PCB's, SOIL	LAB USE ONLY -1
10/14/02 @ 1025	H-C-SS-B2-001	X Description: Grab Composite Other Matrix: DW WW MW Soil Air Other	PCB's, SOIL	-2
10/14/02 @ 1030	H-B-S-W-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's, SOIL	-3
10/14/02 @ 1035	H-B-SS-W-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's, SOIL	-4

RELINQUISHED BY	DATE /TIME	ACCEPTED BY	DATE/TIME	NOTES TO LABORATORY
SAMPLER A. SCHRECKENGOST	10/14/02	Eyas Baroud	3:15 10-14-02	18° ice 0°
		Tom Jones	10/14/02 3:54	
				SUSPECTED CONTAMINATION LEVEL NONE SLIGHT MODERATE HIGH (please circle)

Laboratory Case Narrative

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Laboratory Validation and Usability Assessment

Project: **AAA Environmental**
Viacom/Horseheads 19208
Sampled October 14, 2002

The data reported in this package have been reviewed for compliance with QC acceptance limits as specified in the method cited for each analysis.

These statistical limits are typically based on historical laboratory data for a given sample matrix, and will not exceed any default limits specified by the method. CLP acceptance limits are also considered.

The following Quality Control operations are considered in the validation of reported results:

Holding times, surrogate recovery, spiked sample recovery, duplicates/spiked duplicate precision, tuning criteria, internal standard variation, continuing calibration variation, reference (check) sample recovery, and instrument, method, trip and field blanks. The appropriate frequency for each operation is also considered.

Every effort has been made to report data that is compliant with the EPA methodology cited for each analysis. In cases where the laboratory was unable to meet all method requirements prior to sample expiry, either due to the nature of the sample or other technical difficulty, results are reported with qualification with the understanding that qualified results may not be suitable for compliance purposes. The internal technical review is based on the USEPA Contract Laboratory Program *National Functional Guidelines for Organic Review* (EPA 540/R-94/012, February 1994) and *National Functional Guidelines for Inorganic Review* (EPA 540/R-94/013, February 1994).

Validation

Twelve site samples were received on October 14, 2002, with ice. The temperature was 18°C, as received with ice at 0°C.

PCB

Site samples were analyzed by EPA method 8082 for PCBs with a two-microliter injection volume.

RTX-CLPesticides 1 and RTX-CLPesticides 2 capillary columns, 0.32 mm ID, with purge packed inlets and electronic pressure control are used on an Hewlett-Packard 5890 series II with dual ECD and an HP 7673 autosampler with simultaneous injection. Data is collected with HP Chemstation software and processed by Thruput with Target software. If a peak is detected within the retention time window of a target compound, second-column confirmation is performed. Column RTX-CLPesticides 2 was used for the primary analysis. Column RTX-CLPesticides 1 was used to confirm only the fingerprint, not the quantitation. Form 10B's are provided in order to verify pattern recognition.

PCB 1254 was detected in each of the site samples. Second-column analysis confirmed the presence of these targets. No PCBs were detected in the method blank.

Surrogate recoveries were within limits.

One blank spike was associated with the site samples. Blank spike recoveries were within acceptance limits.

No analytical difficulties were encountered.

Metals

Site sample R0045-49/58-60 was analyzed for TCLP Cadmium by Inductively Coupled Plasma - Optical Emission Spectrometry.

The ICP-OES instrument is an ARL 3560 with an AIM 1250 autosampler with an extension. The data is acquired with the Microactive, Australia software ICP Manager 35xx.

Laboratory Control sample recovery for TCLP Cadmium was within acceptance limits.

No analytical difficulties were encountered.

Wet Chemistry

Site sample R0045-49/58-60 was analyzed for paint filter by EPA method 9095.

No analytical difficulties were encountered.

Usability Assessment

All reported data were found to be valid and usable within the EPA National Functional Validation guidelines except those that were qualified in this Laboratory Validation.

Laboratory validation and
Usability assessment conducted by: Elizabeth A Keator

Date: December 20, 2002

Elizabeth A. Keator
Quality Assurance

Worksheets

H-C-SS-B1-001 95433-1
H-C-SS-B2-001 -2
H-B-S-W-001 -3
H-B-SS-W-001 -4

YES NO N/A

PACKAGE COMPLETENESS AND DELIVERABLES

CASE NUMBER: — SDG# 95433

LAB: Friend Laboratory Inc. SITE: Viacom / Horseleads

1.0 Data Completeness and Deliverables

		YES	NO	N/A
1.1	Has all the data been submitted in CLP deliverable format?	✓	—	—
1.2	Have any missing deliverables been received and added to the data package?		✓	—

ACTION: Call lab for explanation/resubmittal of any missing deliverables. If lab cannot provide them, note the effect on review of the data in the reviewer narrative.

2.0 Cover Letter, SDG Narrative

		YES	NO	N/A
2.1	Is a laboratory narrative or cover letter present?	✓	—	—
2.2	Are the case number and/or SDG number contained in the narrative or cover letter?	✓	—	—

3.0 Data Validation Checklist

		YES	NO	N/A
3.1	Does this data package contain:			
	Water data?		✓	—
	Waste data?		✓	—
	Soil/solid data?	✓	—	

YES NO N/A

POLYCHLORINATED BIPHENYLS

1.0 Traffic Reports and Laboratory Narrative

1.1 Are traffic report and chain-of-custody forms present for all samples? [✓] ___ ___

ACTION: If no, contact lab for replacement of missing or illegible copies.

1.2 Do the traffic reports, chain-of-custody forms or SDG narrative indicate any problems with sample receipt, condition of the samples, analytical problems or special circumstances affecting the quality of the data? ___ [✓] ___

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50%-90% water, all data should be qualified as estimated, "J." If a soil sample, other than TCLP, contains more than 90% water, non detects shall be qualified as unusable, "R."

ACTION: If samples were not iced or if the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10° C), flag all positive results "J" and all non-detects "UJ".

Cooler Temp. 18°C. +J/-UJ

2.0 Holding Times

2.1 Have any PCB technical holding times, determined from date of collection to date of extraction, been exceeded? ___ [✓] ___

Water and waste samples for PCB analysis must be extracted within 7 days of the date of collection. Extracts must be analyzed within 40 days of the date of extraction. Soils and solid samples must be extracted within 14 days of collection and analyzed within 40 days of extraction.

Collected. 10/14/02. Extracted. 10/15/02. Analyzed. 10/16/02

ACTION: If technical holding times are exceeded, flag all positive results as estimated, "J," and sample quantitation limits "UJ" and document in the narrative that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon re-analysis, the reviewer must use

	YES	NO	N/A

professional judgement to determine the reliability of the data and the effects of additional storage on the sample results. At a minimum, all the data should at least be qualified "J", but the reviewer may determine that non-detects are unusable,"R."

3.0 Surrogate Recovery (Form II) NA for false + / false - review

3.1	Were the recoveries of tetrachloro-m-xylene (TCMX) and decachlorobiphenyl (DCB) presented on CLP Surrogate Recovery Summary forms (Form II), or equivalent, for each of the following matrices?			
	a. Water/Waste	[ ]	___	✓
	b. Soil/Solid	[ ]	___	✓
3.2	Are all the PCB samples listed on the appropriate surrogate recovery form for each of the following matrices?			
	a. Water	[ ]	___	✓
	b. Waste	[ ]	___	✓
	c. Soil/Solid	[ ]	___	✓

ACTION: Call lab for explanation/resubmittals. If missing deliverables are unavailable, document the effect in the data assessment.

3.3	Did the laboratory provide their developed in-house Surrogate recoveries?	[ ]	___	✓

ACTION: If no, use 70 -130% recovery to qualify in section 3.4 below.

3.4	Were surrogate recoveries of TCMX or DCB outside of the laboratory-established upper (UCL) or lower (LCL) control limits for any sample or blank?	___	[ ]	✓

ACTION: Circle all outliers in red.

ACTION: No qualification is done if surrogates are diluted out. If recovery for <u>both</u> surrogates is

YES NO N/A

below the LCL, but above 10%, flag all results for that sample "J". If recovery is < 10% for either surrogate, qualify positive results "J" and flag non-detects "R". If recovery is above the UCL for both surrogates qualify positive values "J".

Note: DCB is used when PCBs are determined as Aroclors. DCB is the internal standard when determining PCB congeners and TCMX the surrogate.

3.5 Were surrogate retention times (RT) within the windows established during the initial 5-point analysis? [ ] ____ ✓

ACTION: If the RT limits are not met, the analysis may be qualified unusable (R) for that sample on the basis of professional judgement. However, flag positive hits as estimate (J) if confirmed by GC/MS analysis.

3.6 Are there any transcription/calculation errors between raw data and Form II? ___ [ ] ✓

ACTION: If large errors exist, call lab for explanation/resubmittal. Make any necessary corrections and document the effect in data assessments.

4.0 Laboratory Control Sample NA for Raise + 1 false - review

4.1 Are raw data and percent recoveries present for all Laboratory Control samples as required by Method 8000B (section 8.5) and Method 8082 (section 8.4.2)? [ ] ___ ✓

Verify that QC check samples were extracted and analyzed by the same procedures used for the actual samples.

ACTION: If any Laboratory Control Sample data are missing, call the lab for explanation /resubmittals. Make note in the data assessment.

NOTE: For aqueous samples, an additional QC check sample must be prepared and analyzed when any analyte in a matrix spike fails the required acceptance criteria (see section 5.3 below). The additional QC check sample must contain each analyte that failed in the MS analysis.

YES NO N/A

Note: When the results for matrix spike analysis indicates a problem due to sample matrix effects, the LCS results are used to verify the laboratory can perform the analysis in a clean sample.

4.2 Were Laboratory Control Samples analyzed at the required concentration for all analytes of interest as specified in Method 8000B (sec.8.5)? [ ] ___ ✓

ACTION: If Laboratory Control Samples were not analyzed at the required concentration or the required frequency, make note in the data assessment and use professional judgement to determined the affect on the data.

4.3 Were the LCS recoveries within the laboratory's in-house per cent recoveries (if not available, use 70 - 130%) [ ] ___ ___ ✓

4.4 If no, were Laboratory Control Samples re-analyzed? [ ] ___ ✓

Note: Corrective action must be taken when one or more of the analytes of interest fail the QC acceptance criteria (Method 8000B, section 8.7.4)

ACTION: If QC check samples were not re-analyzed, or a general system problem is indicated by repeated failure to meet the QC acceptance criteria specified in the method, make note in the data assessment and use professional judgement to determine the effect on the data.

5.0 Matrix Spikes (Form III) NA for false + / false - review

5.1 Are all data for one matrix spike and matrix duplicate (unspiked) pair (MS/Dup) or matrix spike/matric spike duplicate (MS/MSD)present and complete for each matrix Method 8082(section 8.4.1)? [ ] ___ ✓

NOTE: For soil and waste samples showing detectable amounts of organics, the lab may substitute replicate samples in place of the matrix spike (see Method 8000B-40, section 8.5.3)).

5.2 Have MS/Dup or MS/MSD results been summarized on modified CLP Form III? [ ] ___ ✓

ACTION: If any data are missing take action as specified in section 3.2 above.

5.3 Were matrix spikes analyzed at the required frequency

	YES	NO	N/A

for each of the following matrices? (One MS/Dup, MS/MSD must be performed for every 20 samples of similar matrix or concentration level. Laboratories analyzing one to ten samples per month are required to analyze at least one MS per month (Method 8000B-39 (section 8.5)).

a. Water [ ] ___ ✓

b. Waste [ ] ___ ✓

c. Soil/Solid [ ] ___ ✓

ACTION: If any MS/Dup or MS/MSD data are missing, take the action specified in 3.2 above.

5.4 Were the 70 - 130% recoveries used to compare the matrix spike recoveries, or did the lab use the optional QC acceptance criteria discussed in Method 8000B-40(section 8.5.3.1)?

List the criteria used and make note in data assessment.

Criteria used _____

5.5 Was the matrix spike prepared at the proper spike concentration? (Method 8000B, section 8.5.1-8.5.2) [ ] ___ ✓

For aqueous organic extractable, the spike concentration should be prepared according options in: Method 8000B-40, (section 8.5.1 and 8.5.2).

ACTION: No action is taken based on MS or replicate data alone. However, using informed professional judgement, the data reviewer may use the matrix spike or laboratory replicate results in conjunction with other QC criteria and determine the need for some qualification of the data. In some instances it may be determined that only the replicate or spiked samples are affected. Alternatively, the data may suggest that the laboratory is having a systematic problem with one or more analytes, thereby affecting all associated samples.

6.0 Blanks (Form IV)

	YES	NO	N/A
6.1 Was reagent blank data reported on CLP equivalent Method Blank Summary form(s) (Form IV)?	☑		
6.2 Frequency of Analysis: Has a reagent blank been analyzed for every 20 (or less) samples of similar matrix or concentration or each extraction batch?	☑		

ACTION: If any blank data are missing, take action as specified above (section 3.2) . If blank data is not available, reject (R) all associated positive data. However, using professional judgement, the data reviewer may substitute field blank data for missing method blank data.

6.3 Chromatography: review the blank raw data - chromatograms, quant reports or data system printouts. Is the chromatographic performance (baseline stability) for each instrument acceptable for PCBs?	☑		

ACTION: Use professional judgement to determine the effect on the data.

7.0 Contamination

NOTE: "Water blanks", "distilled water blanks" and "drilling water blanks" are validated like any other sample and are not used to qualify the data. Do not confuse them with the other QC blanks discussed below.

7.1 Do any method/instrument/reagent/cleanup blanks have positive results for PCBs? When applied as described below, the contaminant concentration in these blanks are multiplied by the sample Dilution Factor and corrected for % moisture when necessary.		☑	
7.2 Do any field/rinse blanks have positive PCB results? Not reviewed for Pos + / false -			✓

ACTION: Prepare a list of the samples associated with each of the contaminated blanks. (Attach a separate sheet.)

NOTE: All field blank results associated to a particular group of samples (may exceed one per case or one per day) may be used to qualify data.

YES NO N/A

Blanks may not be qualified because of contamination in another blank. Field blanks must be qualified for surrogate, or calibration QC problems.

ACTION: Follow the directions in the table below to qualify sample results due to contamination. Use the largest value from all the associated blanks.

Sample conc > EDL but < 5 x blank	Sample conc < EDL & is < 5 x blank value	Sample conc > EDL & > 5 x blank value
Flag sample result with a "U"	Report EDL & qualify "U"	No qualification is needed

NOTE: If gross blank contamination exists, all data in the associated samples should be qualified as unusable (R).

7.3 Are there field/rinse/equipment blanks associated with every sample? Reviewed for false+/false- [ ] ___ ✓

ACTION: For low level samples, note in data assessment that there is no associated field/rinse/equipment blank. Exception: samples taken from a drinking water tap do not have associated field blanks.

8.0 GC Apparatus and Materials NA for false+/false- review

8.1 Was the proper gas chromatographic capillary column used for the analysis of PCBs?

Action: Check raw data, instrument logs, or contact the lab to determine what type of columns were used. (Method 8082, section 4.2) [ ] ___ ✓

8.2 Indicate the specific type of narrow bore or wide bore (.53 mm ID, fused silica GC columns, such as DB-608 and DB-1701 or equivalent).

column 1: _____

column 2: _____

ACTION: Note any changes to the suggested materials in section 8.1 above in the data assessment. Also note the impact (positive or negative) such changes have on the analytical results.

	YES	NO	N/A

9.0 Calibration and GC Performance

9.1 Are the following Gas Chromatograms and Data Systems Printouts for both columns present for all samples, blanks, MS, replicates?

a.	Samples	[✓]	___	___
b.	All blanks	[✓]	___	___
c.	Matrix spike samples	[ ]	___	✓
d.	5 pt. initial calibration standards	[✓]	___	___
e.	calibration verification standards	[✓]	___	___
f.	Laboratory Control samples (LCS)	[ ]	___	✓

NA for Target Analytes

ACTION: If no, take action specified in 3.2 above.

not for 2nd column on ICAL.

9.2 Are data summary forms (containing calibration factors or response factors) for the initial 5 pt. calibration and daily calibration verification standards present and complete for each column and each analytical sequence? [✓] ___ ___

Note: Calibration Aroclor mixtures other than 1016/1260 may be used (as per approved project QA plan)

NOTE: If internal standard calibration procedure is used (Method 8000B-15(section 7.4.2.2)), then response factors must be used for %RSD calculations and compound quantitation. If, external standard calibration procedures are used (Method 8000B-16 (section 7.4.2.1)), then calibration factors must be used. The internal standard approach is highly recommended for PCB congener analysis.

ACTION: If any data are missing or it cannot be determined how the laboratory calculated calibration factors or response factors, contact the lab for explanation/resubmittals. Make necessary corrections and note any problems in the data assessment.

9.3 Are there any transcription/calculation errors between raw data and data summary forms? ___ [✓] ___

ACTION: If large errors exist, call lab for

YES NO N/A

explanation/resubmittal, make necessary corrections and document the effect in data assessments.

9.4 Are standard retention time (RT) windows for each PCB peak of interest presented on modified CLP summary forms? [✓] ___ ___

ACTION: If any data are missing, or it cannot be determined how RT windows were calculated, call the lab for explanation/resubmittals. Note any problems in the data assessment.

NOTE: Retention time windows for all PCBs are established using retention times from three calibration standards analyzed during the entire analytical sequence (Method 8000B, section 7.6).

Best results are obtained using retention times which span the entire sequence; i.e., using the calibration verification/continuing calibration standards analyzed every 12 hours.

Avg for multi-stnd, center for single-stnd.

9.5 Were RT windows on the confirmation column established using three standards as described above? [ ] [✓] ___

NOTE: RT windows for the confirmation column should be established using a 3 pt. calibration, preferably spanning the entire analytical sequence as described in 9.4 above. If RT windows on one column are tighter than the other, this may result in false negatives when attempting to identify compounds in the samples.

ACTION: Note potential problems, if any, in the data assessment.

9.6 Do all standard retention times in each level of the initial 5 pt. calibrations for PCBs fall within the windows established during the initial calibration sequence? [✓] ___ ___

ACTION i: If no, all samples in the entire analytical sequence are potentially affected. Check to see if three standard spanning the entire sequence were used to obtained RT windows. If the lab used three standards from the 5 pt., RT windows may be too tight. If so, RT windows should be recalculated as per Method 8081B-15 (section 7.4.6).

ii. Alternatively, check to see if the chromatograms contain peaks

	YES	NO	N/A
for any analyte, qualify non-detects "R", unusable. used ICAL			
9.12 Have retention time (RT) windows been properly calculated for each analyte of interest (Method 8000B, section 7.6), using RTs from the associated calibration verification/continuing standard?	☑		

ACTION: If no, take action specified in section 3.2 above

9.13 Do all standard retention times for each calibration verification/continuing calibration standard fall within the windows established during the initial calibration sequence?	☑		
9.14 Do all standard retention times for each mid-concentration standard (analyzed after every 10 samples) fall within the daily RT windows	☑		

ACTION: If the answer to either 9.13 or 9.14 above is no, check the chromatograms of all samples which followed the last in-control standard. All samples analyzed after the last in-control standard must be re-injected, if initial analysis indicated the presence of the specific analyte that exceeded the retention time criteria. If samples were not re-analyzed, document under Contract Non-compliance in the Data Assessment.

Reviewer has two options to determine how to qualify questionable sample data. First option is to determine if possible peaks are present within daily retention time window. If no possible peaks are found, non-detects are valid. If possible peaks are found (or interference), qualify positive hits as presumptively present "NJ" and non-detects are rejected "R". Second option is to use the ratio of the retention time of the analyte over the retention time of either surrogate. The passing criteria is ± 0.06 RRT units of the RRT of the standard component. Reject "R" all questionable analytes exceeding criteria, and "NJ" all other positive hits.

For any multi-response analytes, retention time windows should be used but analyst and reviewer should rely primarily on pattern recognition or use option 2 specified in paragraph above.

9.15 Are there any transcription/calculation errors

YES NO N/A

within an expanded window surrounding the expected retention times.

If no peaks are found and the surrogates are visible, non-detects are valid. If peaks are present but cannot be discerned through pattern recognition or by using revised RT windows, qualify all positive results and non-detects as unusable, "R".

9.7 Has the linearity criteria for the initial calibration standards been satisfied for both columns? (% RSD must be < 20.0% for all analytes). >0.99 [✓] ___ ___

ACTION: If no, qualify all associated positive results generated during the entire analytical sequence "J" and all non-detects "UJ". When RSD > 90%, flag all non-detect results for that analyte "R" (unusable).

9.8 Does the calibration verification/continuing Calibration standard contain the PCB peaks of interest, analyzed on each working day, prior to sample analyses (Method 8082, sections 7.6.2)? [✓] ___ ___

9.9 Has a calibration verification/continuing calibration standard been analyzed after every 10 samples and at the end of each analytical sequence (Method 8082, section 7.6.2) [✓] ___ ___

ACTION: If no, take action as specified in section 3.2 above.

9.10 Has the percent difference (%D) exceeded ± 15% for any PCB analyte in any calibration verification/ Continuing calibration standard? [ ] [✓] ___

used average value and per peak

9.11 Has a new 5 pt. initial calibration curve been generated for those PCB analytes which failed in the calibration verification/continuing calibration standard (8000B, section 7.7.3), and all samples which followed the out-of-control calibration verification/standard continuing calibration Standard? [ ] ___ [✓]

ACTION: If the %D for any analyte exceeded the ± 15% criterion and the instrument was not recalibrated for those analytes, qualify positive results for all associated samples (those which followed the out-of-control standard) "J" and sample quantitation limits "UJ". If the %D was > 90%

	YES	NO	N/A
between raw data and data summary forms?	___	☑	___

ACTION: If large errors exists, call lab for explanation/resubmittal, make any necessary corrections and document the effect in data assessments under "Conclusions".

10.0 Analytical Sequence Check (Form VIII-PEST)

10.1 Have all samples been listed on CLP Form VIII or equivalent, and are separate forms present for each column?	☑	___	___

ACTION: If no, take action specified in 3.2 above.

10.2 Was the proper analytical sequence followed for each initial calibration and subsequent analyses?	☑	___	___

ACTION: If no, use professional judgement to determine the severity of the effect on the data and qualify it accordingly. Generally, the effect is negligible unless the sequence was grossly altered or the calibration was also out of limits.

10.3 Were the TCMX/DCB surrogate RTs for the samples within the mean surrogate RT from the initial calibration?	☑	___	___

Action: If no, see "Action" in section 9.14 above

11.0 Extraction Techniques for Sample Preparation NA for false + / false - review

Method 8081B permits a variety of extraction techniques to be used for sample preparation. Which extraction procedure was used?

1. Aqueous samples:			
1. Separatory funnel (Method 3510)	☐	___	✓
2. Continuous liquid-liquid extraction (Method 3520)	☐	___	✓
3. Solid phase extraction (Method 3535)	☐	___	✓
4. Other	☐	___	✓
2. Solid samples:			
1. Soxhlet (Method 3540)	☐	___	✓

	YES	NO	N/A
2. Automated Soxhlet (Method 3541)	[ ]	___	✓
3. Pressurized fluid (Method 3545)	[ ]	___	✓
4. Microwave extraction (Method 3546)	[ ]	___	✓
5. Ultrasonic extraction (Method 3550)	[ ]	___	✓
6. Supercritical fluid (Method 3562)	[ ]	___	✓
7. Other	[ ]	___	✓

11.1 Extract Cleanup - Efficiency Verification (Form IX) NA for false + / false - review.

11.1.1 Method 8082 (section 7.2) references method 3660 (sulfur) and 3665A (sulfuric acid) to use for Cleaning extracts. Were one or both method used? [ ] ___ ✓

ACTION: If no, take action specified in 3.2 above. If data suggests cleanup was not performed, make note in the data assessment.

NOTE: Method 3620A, Florisil, may be used per approved project QA plan. The method does not list which analytes and surrogate(s) to use to verify column efficiency. The reviewer must check project plan to verify method used as well as the correct PCB list. If not stated or available, use the CLP listing or accept what the laboratory used.

11.2 Are all samples listed on modified CLP PCBs Florisil/Cartridge Check Form? [ ] ___ ✓

ACTION: If no, take action specified in 3.2 above.

11.3 Was GPC Cleanup (method 3640A) performed? [ ] ___ ✓

NOTE: GPC cleanup is not required and is optional. The reviewer should check Project Plan to verify requirement.

11.4 Were the same PCB analytes used in calibration used to check the efficiency of the cleanup procedures? [ ] ___ ✓

11.5 Are percent recoveries (% R) of the PCBs and surrogate compounds used to check the efficiency of the cleanup procedures within lab's in-house QC limits (use 70-130% if not available) [ ] ___ ✓

70-130% for GPC calibration? [ ] ___ ✓

YES NO N/A

Qualify only the analyte(s) which fail the recovery criteria as follows:

ACTION: If % R are < 80%, qualify positive results "J" and quantitation limits "UJ". Non-detects should be qualified "R" if zero %R was obtained for PCBs. Use professional judgement to qualify positive results if recoveries are greater than the upper limit.

12.0 PCB Identification

12.1 Has CLP Form X or equivalent, showing **retention time** data for positive results on the two GC columns, been completed for every sample in which a PCB was detected? ☑ ___ ___

ACTION: If no, take action specified in 3.2 above, or compile a list comparing the retention times for all sample hits on the two columns.

12.2 Are there any transcription/calculation errors between raw data and data summary forms (initial calibration summaries, calibration verification summaries, analytical sequence summaries, GPC and cleanup verification forms)? ___ ☑ ___

ACTION: If large errors exist, call lab for explanation/resubmittal, make necessary corrections and note error in the data assessment.

12.3 Are retention times (RT) of sample compounds within the established RT windows for both columns/analyses? ☑ ___ ___

ACTION: Qualify as unusable (R) all positive results which were not confirmed by second GC column analysis. Also qualify "R", unusable, all positive results not within RT windows unless associated standard compounds are similarly biased. The reviewer should use professional judgement to assign an appropriate quantitation limit.

12.4 Check chromatograms for false negatives, especially if RT windows on each column were established differently.
Were there any false negatives? ___ ☑ ___

YES NO N/A

ACTION: Use professional judgement to decide if the compound should be reported. If there is reason to believe that peaks outside retention RT windows should be reported, make corrections to data summary forms (Form I) and note in data assessment.

12.5 Was GC/MS confirmation provided when sample concentration was sufficient (> 10 ug/ml) in the final extract? [ ] ___ ✓

ACTION: Indicate with red pencil which Form I results were confirmed by GC/MS and also note in data assessment.

12.6 Is the percent difference (%D) calculated for the positive sample results on the two GC columns <25.0%? [✓] ___ ___

NOTE: The method requires quantitation from one column. The second column is to confirm the presence of an analyte. It is the reviewer's responsibility to verify from the project plan what the lab was required to report. If the lab was required to report concentrations from both columns, continue with validation for % Difference. If required, but not reported, either contact the lab for results or calculate the concentrations from the calibration. If not required, skip this section. Document actions in Data Assessment.

3-1254.
42.3%.
TJ.

ACTION: If the reviewer finds neither column shows interference for the positive hits, the data should be qualified as follows:

% Difference	Qualifier
0-25%	none
26-70%	"J"
71-100%	"NJ"
>100% *	"R"
100-200% (Interference detected)**	"NJ"
>50% (PCBs value is <CRQL)	"U"

When the reported PCBs value is <CRQL and the %D is >50%, raise the value to the CRQL and qualify with "U" (non-detect).

* Check the chromatogram. If pattern is confirmed qualify "J". If pattern is mixed, has interference, or the PCB cannot be positively determined due to weathering, qualify "JN".

YES NO N/A

If PCB can not be confirmed, qualify the PCB as "R".

** When the reported %D is 100-200% but interference is detected in either column, qualify the data with "NJ".

13.0 Compound Quantitation and Reported Detection Limits

13.1 Are there any transcription/calculation errors in Form I results? Check at least two positive values. Were any errors found? ___ ☑ ___

NOTE: Single-peak PCBs results can be checked for rough agreement between quantitative results obtained on the two GC columns. The reviewer should use professional judgement to decide whether a much larger concentration obtained on one column versus the other indicates the presence of an interfering compound. If an interference is suspected, the lower of the two values should be reported and qualified according to section 12.6 above. This necessitates a determination of an estimated concentration on the confirmation column. The narrative should indicate that the presence of interferences has led to the quantitation of the second column confirmation results.

13.2 Are the EDLs (Estimated Detection Limits) adjusted to reflect sample dilutions and, for soils, % moisture? ☑ ___ ___

(1).

ACTION: If errors are large, call lab for explanation/resubmittal, make any necessary corrections and document effect in data assessments.

$$10\left[\frac{\times 10}{10.82} \times .1\right] \Big/ 92 \times 1000$$

9.998×10^{-6}

$\sim 100\ \mu g/kg$.

ACTION: When a sample is analyzed at more than one dilution, the lowest EDLs are used (unless a QC exceedance dictates the use of the higher EDL data from the diluted sample analysis). Replace concentrations that exceed the calibration range in the original analysis by crossing out the value on the original Form I and substituting it with data from the analysis of diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form I's that should not be used, including any in the summary package.

YES NO N/A

ACTION: EDLs affected by large, off-scale peaks should be qualified as unusable, "R". If the interference is on-scale, the reviewer can provide a modified EDL flagged "UJ" for each affected compound.

14.0 Chromatogram Quality

14.1 Were baselines stable? [✓] ___ ___

14.2 Were any electropositive displacement (negative peaks) or unusual peaks seen? ___ [✓] ___

ACTION: Note all system performance problems in the data assessment.

15.0 Field Duplicates NA for false + false - review

15.1 Were any field duplicates submitted for PCB analysis? [ ] ___ ✓

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between field duplicate results must be addressed in the reviewer narrative. However, if large differences exist, the identity of the field duplicates is questionable. An attempt should be made to determine the proper identification of field duplicates.

4 C

PESTICIDE METHOD BLANK SUMMARY

NYSDEC SAMPLE NO.

MB 12

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Lab Sample ID: MB 12 Lab File ID: E2980182

Matrix: (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N Date Extracted: 10/15/02

Date Analyzed (1) : 10/16/02 Date Analyzed (2): _____

Time Analyzed (1) : 1536 Time Analyzed (2): _____

Instrument ID (1) : HP1 Instrument ID (2): HP3

GC Column (1): RTX-CLPESTICIDES2 ID 0.32 (mm)

GC Column (2): RTX-CLPESTICIDES1 ID 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, AND MSB

	NYSDEC SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	QC 12	QC 12	10/16/02	
02	H-C-SS-B1-001	L95433-1	10/16/02	10/16/02
03	H-C-SS-B2-001	L95433-2	10/16/02	10/16/02
04	H-B-S-W-001	L95433-3	10/16/02	10/16/02
05	H-B-SS-W-001	L95433-4	10/16/02	10/16/02
06	H-B-S-E-001	L95433-5	10/16/02	10/16/02
07	H-B-SS-E-001	L95433-6	10/16/02	10/16/02
08	DUPLICATE	L95433-7	10/16/02	10/16/02
09	23-C-S-W-B-001	L95433-8	10/16/02	10/16/02
10	23-C-S-E-B-001	L95433-9	10/16/02	10/16/02
11	23-B-S-E-001	L95433-10	10/16/02	10/16/02
12	23-B-S-W-001	L95433-11	10/16/02	10/16/02
13	R0045-49/58-60	L95433-12	10/16/02	10/16/02
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

3F
SOIL PCB BLANK SPIKE RECOVERY
SW846/8082

Lab name: FRIEND LABORATORY, INC. Reference: 02-004-0183

Lab code: 10252 Date analyzed: 10/16/02

Matrix Spike - Lab Sample No.: QC 12 Date Extracted: 10/15/02

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS % REC	#	QC LIMITS REC
PCB 1016	471	0	420	89		50-114
PCB 1260	471	0	521	111		10-127

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

_____

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB12

[redacted]b Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1014

Matrix: (soil/water) SOIL Lab Sample ID: MB12

Sample wt/vol: 10.3 (g/mL) G Lab File ID: E2980182

% Moisture: 0 decanted: (Y/N) N Date Received: 10/14/2

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/15/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/16/2

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
12674-11-2	Aroclor-1016	9.7	~~0.01~~	U
1104-28-2	Aroclor-1221	19	~~0.02~~	U
11141-16-5	Aroclor-1232	9.7	~~0.01~~	U
53469-21-9	Aroclor-1242	9.7	~~0.01~~	U
11097-69-1	Aroclor-1254	9.7	~~0.01~~	U
11096-82-5	Aroclor-1260	9.7	~~0.01~~	U
----------	Aroclor-1248	9.7	~~0.01~~	U

eqR
12/30/02

FORM I PEST

00205

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2980182.D
Lab Smp Id: MB12 Client Smp ID: MB12
Inj Date : 16-OCT-2002 15:36
Operator : CPW Inst ID: hp1.i
Smp Info : MB12
Misc Info :
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 17-Oct-2002 07:11 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

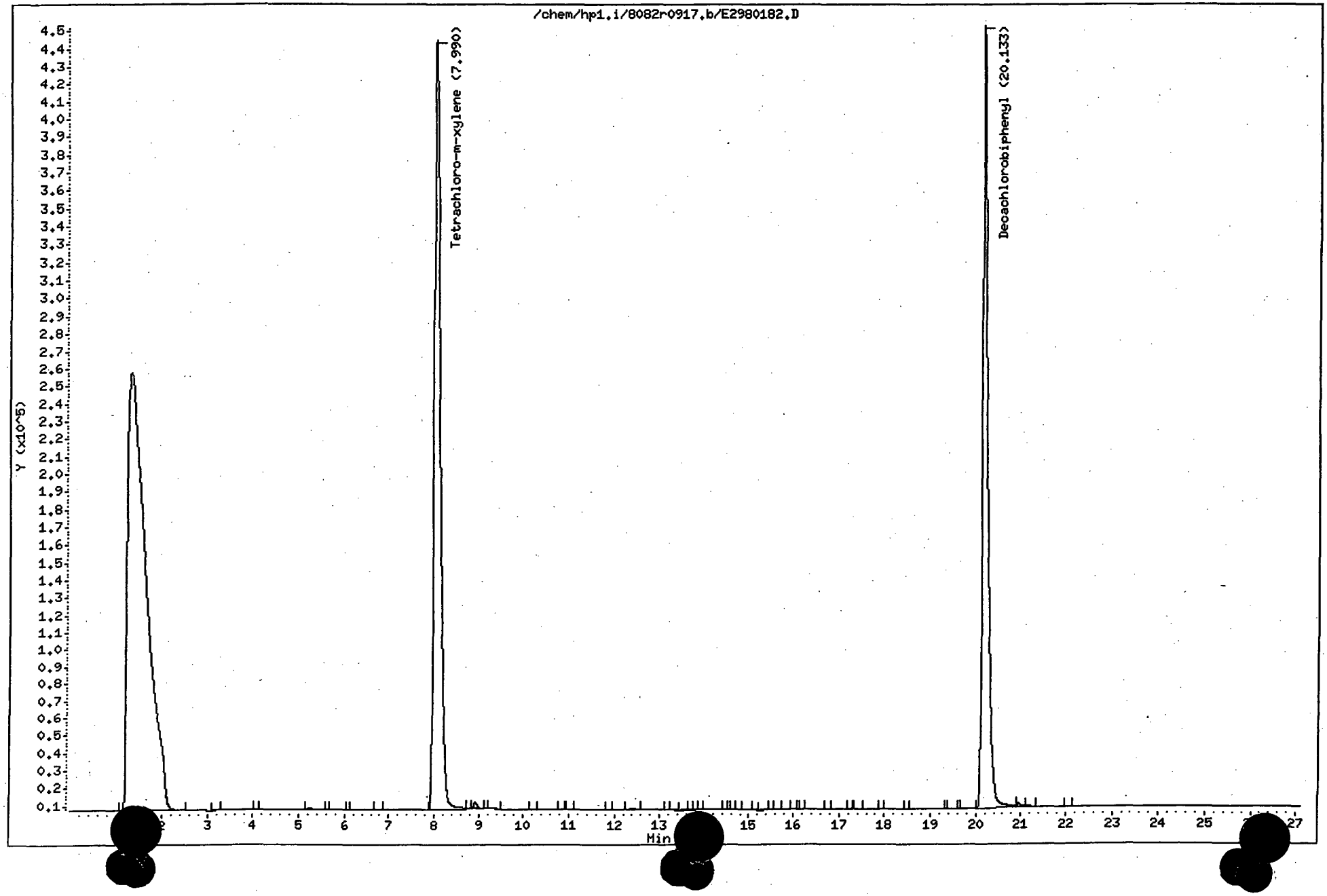
Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	1.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.268	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	100.000	Total Solid

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
7.990	7.997	-0.007	4186757	516.125	502.64		
$ 29 Decachlorobiphenyl					CAS #:		
20.133	20.130	0.003	3383203	643.359	626.55		

Data File: /chem/hp1.i/8082r0917.b/E2980182.D
Date : 16-OCT-2002 15:36
Client ID: MB12
Sample Info: MB12
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32



Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2980182.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: MB12
Misc Info:
Analysis Date: 16-OCT-2002 15:36
Sample Matrix: SOIL
File Number: 0182

Dilution Factor:	1.0000
Sample Weight:	10.2683
Final Volume:	10.0000
Total Solid :	100.0000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	0.00
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	103.22%
Decachlorobiphenyl	128.67%

Analyst: CPW
Report Date: 10/17/2002 07:45

Supervisor: _____
Date: _____ 10/17/02

01/12/02	RTX-CLPEST 1		PG ON COLUMN			IDL	UG/L IN WATER	CRDL (UG/L)
Instrument#3	Run #1	Run #2	Run #3	Average	SD	SD*6.95	IDL	
PCB 1016	99.14	100.48	98.05	99.22	1.21	8.44	0.1	1.0
PCB 1221	200.36	193.87	196.82	197.02	3.25	22.6	0.2	2.0
PCB 1232	97.97	96.72	99.17	97.95	1.22	8.51	0.1	1.0
PCB 1242	99.14	100.08	101.34	100.19	1.10	7.67	0.1	1.0
PCB 1248	101.82	101.01	99.76	100.86	1.04	7.22	0.1	1.0
PCB 1254	99.63	100.10	99.13	99.62	0.487	3.39	0.1	1.0
PCB 1260	100.74	100.76	101.10	100.87	0.199	1.39	0.1	1.0

01/12/02	RTX-CLPEST 2		PG ON COLUMN			IDL	UG/L IN WATER	CRDL (UG/L)
Instrument#3	Run #1	Run #2	Run #3	Average	SD	SD*6.95	IDL	
PCB 1016	106.01	105.20	106.90	106.04	0.850	5.91	0.1	1.0
PCB 1221	202.83	203.02	204.03	203.29	0.642	4.46	0.1	2.0
PCB 1232	105.99	105.07	104.41	105.16	0.796	5.53	0.1	1.0
PCB 1242	104.27	105.07	108.17	105.84	2.06	14.3	0.1	1.0
PCB 1248	101.79	101.90	101.19	101.63	0.379	2.64	0.1	1.0
PCB 1254	101.02	103.64	105.02	103.23	2.03	14.1	0.1	1.0
PCB 1260	102.25	102.84	103.11	102.74	0.437	3.04	0.1	1.0

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L95433-1

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1014

Matrix: (soil/water) SOIL Lab Sample ID: L95433-1

Sample wt/vol: 10.9 (g/mL) G Lab File ID: E2980185

% Moisture: 8.0 decanted: (Y/N) N Date Received: 10/14/2

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 10/15/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 10/16/2

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
12674-11-2	Aroclor-1016	100	~~0.10~~	U
1104-28-2	Aroclor-1221	200	~~0.20~~	U
11141-16-5	Aroclor-1232	100	~~0.10~~	U
53469-21-9	Aroclor-1242	100	~~0.10~~	U
11097-69-1	Aroclor-1254		364.09	
11096-82-5	Aroclor-1260	100	~~0.10~~	U
----------	Aroclor-1248	100	~~0.10~~	U

eaR
12/30/02

FORM I PEST

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2980185.D
Lab Smp Id: L95433-1 Client Smp ID: L95433-1
Inj Date : 16-OCT-2002 17:10
Operator : CPW Inst ID: hp1.i
Smp Info : L95433-1
Misc Info : WG33196,02-004
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 17-Oct-2002 07:11 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.872	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	92.000	Total Solid

Peak 3
Amt = 21.346 + (4685 x 2.203x10^{-3})
= 33.6347

Final
$33.6347 \times 10 \left[\frac{\times 10}{10.872} \times .1 \right] \frac{}{92 \times 10^{-6}}$

= 3.3627×10^{-4}
= 336.27 ug/Kg

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE	ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
8.013	7.997	0.016	291540	41.1447	411.34		
$ 29 Decachlorobiphenyl					CAS #:		
20.130	20.130	0.000	257101	53.1853	531.72		
25 Aroclor-1254					CAS #: 11097-69-1		
13.670	13.670	0.000	19700	58.3757	583.61	80.00- 120.00	100.00(MH)
14.560	14.563	-0.003	15670	52.0458	520.33	103.67- 143.67	79.54
15.003	15.003	0.000	4685	33.6379	336.29	73.24- 113.24	23.79
15.347	15.350	-0.003	3219	21.2599	212.55	41.14- 81.14	16.34
15.987	16.033	-0.046	1859	16.7726	167.68	77.22- 117.22	9.44

Average of Peak Concentrations = 364.09

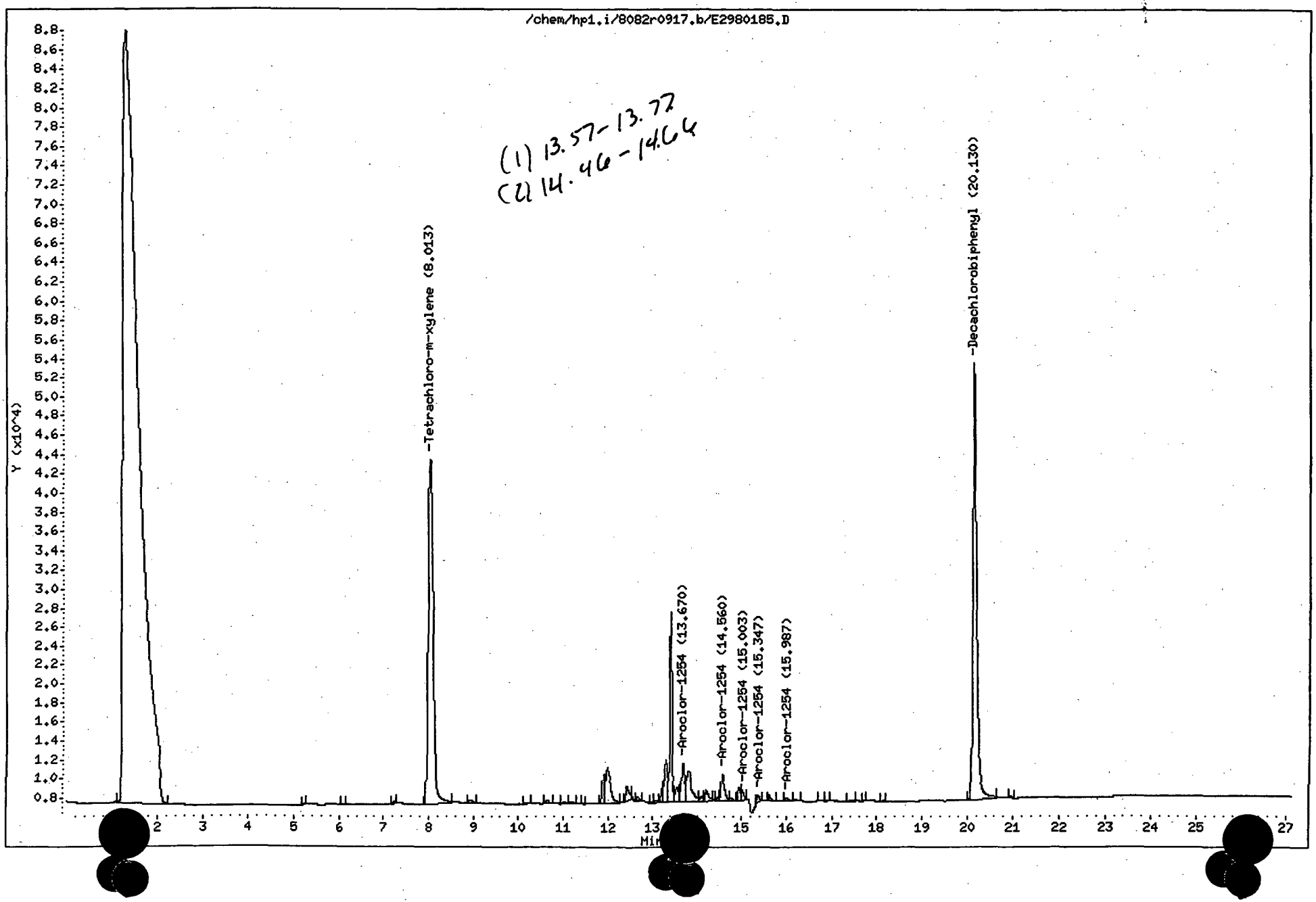
Confirmation
HP3 CL1 10/16/02
6426F
CPW
10/17/02

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /chem/hp1.i/8082r0917.b/E2980185.D
Date : 16-OCT-2002 17:10
Client ID: L95433-1
Sample Info: L95433-1
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32



00010

Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2980185.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L95433-1
Misc Info: WG33196,02-004
Analysis Date: 16-OCT-2002 17:10
Sample Matrix: SOIL
File Number: 0185

Dilution Factor:	10.0000
Sample Weight:	10.8723
Final Volume:	10.0000
Total Solid :	92.0000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	364.09
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	82.29%
Decachlorobiphenyl	106.37%

Analyst: CPW
Report Date: 10/17/2002 07:45

Supervisor: _____
Date: 10/17/02

Thru-Put Systems, Inc.

Data file : \chem\hp3.i\1254FCONFIRMIIIa.b\E3956426.D
Lab Smp Id: L95433-1 Client Smp ID: L95433-1
Inj Date : 16-OCT-2002 01:50
Operator : CPW Inst ID: hp3.i
Smp Info : L95433-1
Misc Info : CONFIRMATION
Comment :
Method : \chem\hp3.i\1254FCONFIRMIIIa.b\8082_PCBsec.M
Meth Date : 16-Oct-2002 12:27 Administra Quant Type: ESTD
Cal Date : 16-OCT-2002 01:19 Cal File: E3956425.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 1254.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

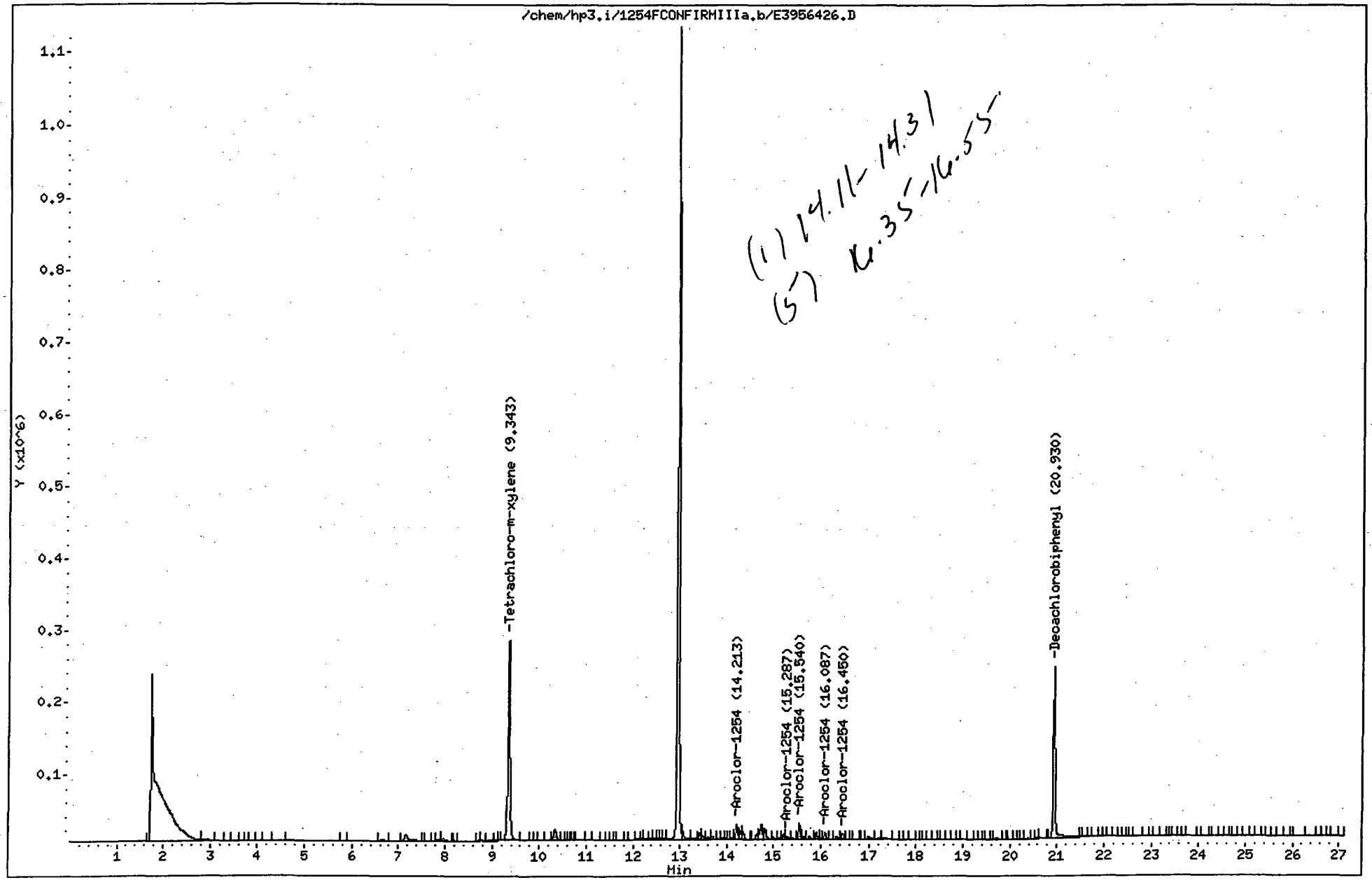
Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.872	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	92.000	Total Solid

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1	Tetrachloro-m-xylene					CAS #:		
	9.343	9.337	0.006	895741	58.8131	587.98		
25	Aroclor-1254					CAS #: 11097-69-1		
	14.213	14.213	0.000	54424	84.1565	841.35	80.00- 120.00	100.00
	15.287	15.297	-0.010	7695	11.5089	115.06	83.82- 123.82	14.14
	15.540	15.537	0.003	60374	58.9038	588.89	136.90- 176.90	110.93
	16.087	16.087	0.000	26892	32.0221	320.14	111.13- 151.13	49.41
	16.450	16.447	0.003	30197	33.4508	334.42	119.15- 159.15	55.48
			Average of Peak Concentrations =			439.97		
$ 29	Decachlorobiphenyl					CAS #:		
	20.930	20.927	0.003	693518	63.9260	639.10		

Data File: /chem/hp3.i/1254FCONFIRMIIIa.b/E3956426.D
Date: OCT-2002 01:50
Client ID: L95433-1
Sample Info: L95433-1
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i
Operator: CPW
Column diameter: 0.32

00013



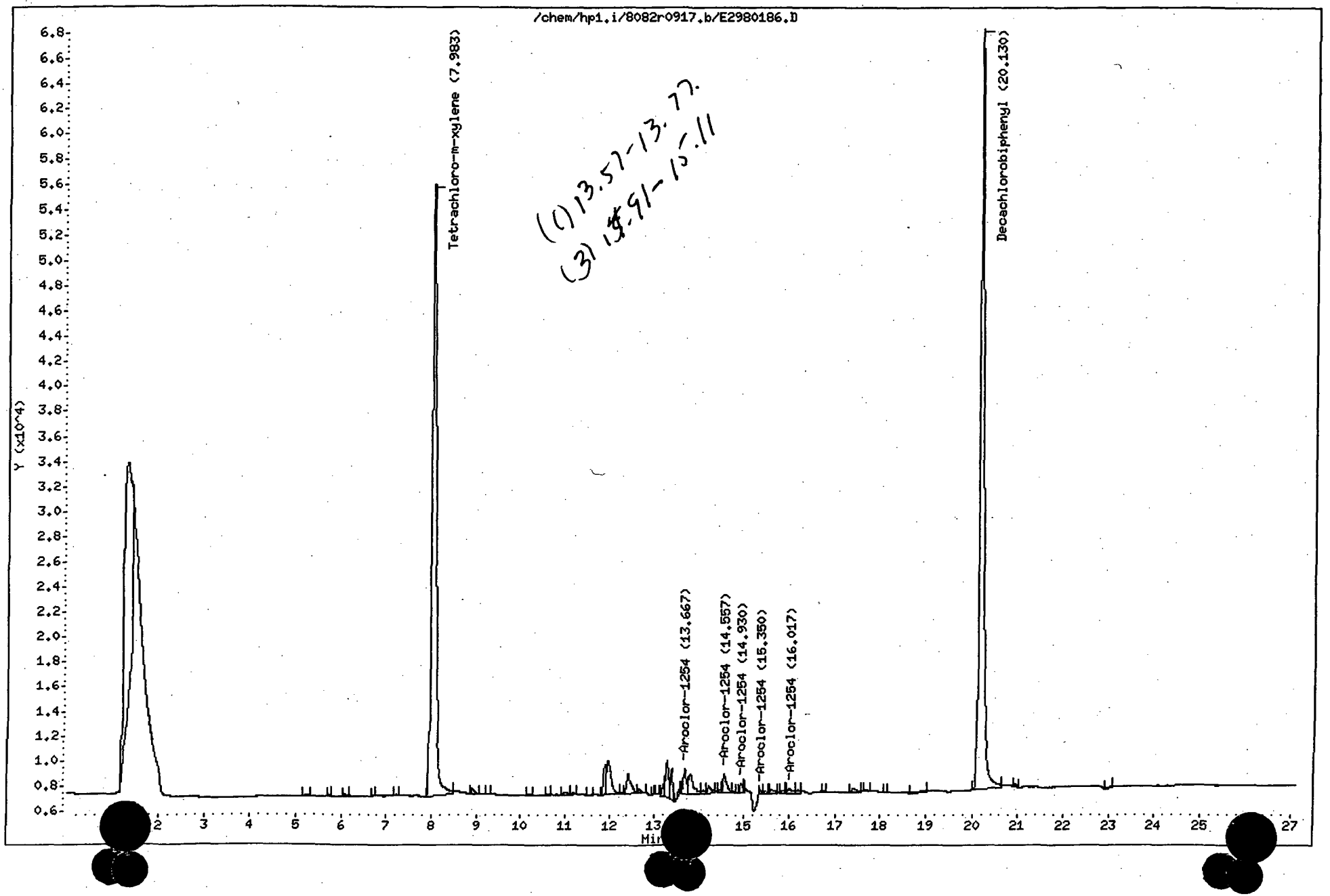
(1) 14.11-14.31
(5) 16.35-16.55

00018

Data File: /chem/hp1.i/8082r0917.b/E2980186.D
Date : 16-OCT-2002 17:42
Client ID: L95433-2
Sample Info: L95433-2
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i

Operator: CPW
Column diameter: 0.32



Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2980186.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L95433-2
Misc Info: WG33196,02-004
Analysis Date: 16-OCT-2002 17:42
Sample Matrix: SOIL
File Number: 0186

Dilution Factor:	10.0000
Sample Weight:	10.1400
Final Volume:	10.0000
Total Solid :	91.4000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	252.39
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	92.23%
Decachlorobiphenyl	142.82%—out high upper limit 150%

Analyst: CPW
Report Date: 10/17/2002 07:45

Supervisor: _____
Date: 10/17/02

Thru-Put Systems, Inc.

Data file : \chem\hp3.i\1254FCONFIRMIIIa.b\E3956427.D
Lab Smp Id: L95433-2 Client Smp ID: L95433-2
Inj Date : 16-OCT-2002 02:22
Operator : CPW Inst ID: hp3.i
Smp Info : L95433-2
Misc Info : CONFIRMATION
Comment :
Method : \chem\hp3.i\1254FCONFIRMIIIa.b\8082_PCBsec.M
Meth Date : 16-Oct-2002 12:27 Administra Quant Type: ESTD
Cal Date : 16-OCT-2002 01:19 Cal File: E3956425.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 1254.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

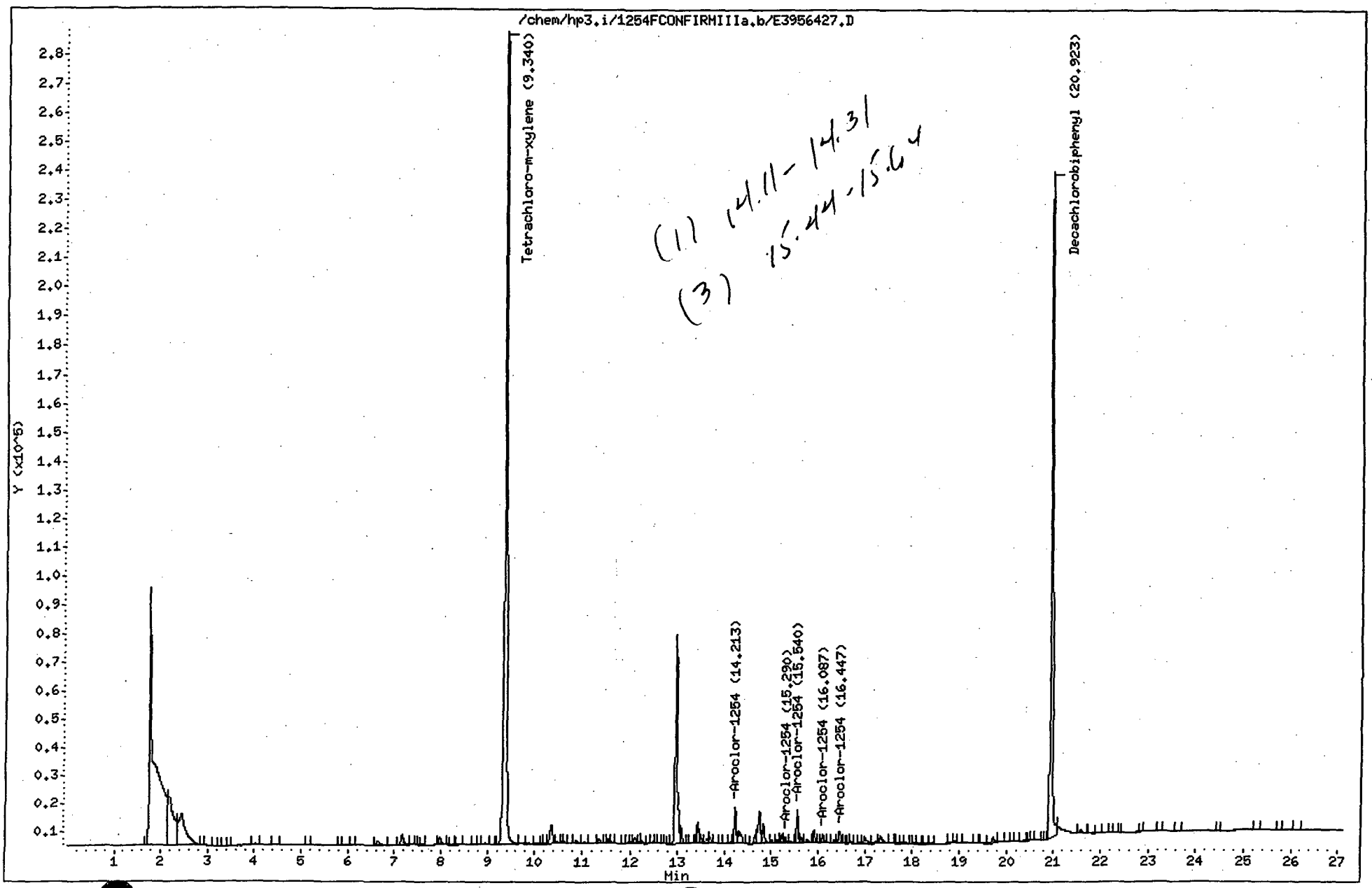
Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.140	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	91.400	Total Solid

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
9.340	9.337	0.003	916638	60.1852	649.39		
25 Aroclor-1254					CAS #: 11097-69-1		
14.213	14.213	0.000	35096	54.2694	585.56	80.00- 120.00	100.00
15.290	15.297	-0.007	5428	8.11831	87.60	83.82- 123.82	15.47
15.540	15.537	0.003	29890	29.1621	314.66	136.90- 176.90	85.17
16.087	16.087	0.000	8434	10.0429	108.36	111.13- 151.13	24.03
16.447	16.447	0.000	13818	15.3069	165.16	119.15- 159.15	39.37
Average of Peak Concentrations =					252.27		
$ 29 Decachlorobiphenyl					CAS #:		
20.923	20.927	-0.004	630169	58.0867	626.75		

00021

Data Fi[redacted] /chem/hp3.i/1254FCONFIRMIIIa.b/E3956427.D
Date [redacted]T-2002 02:22
Client [redacted]L95433-2
Sample Info: L95433-2
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

[redacted]trument: hp3.i
Operator: CPW
Column diameter: 0.32

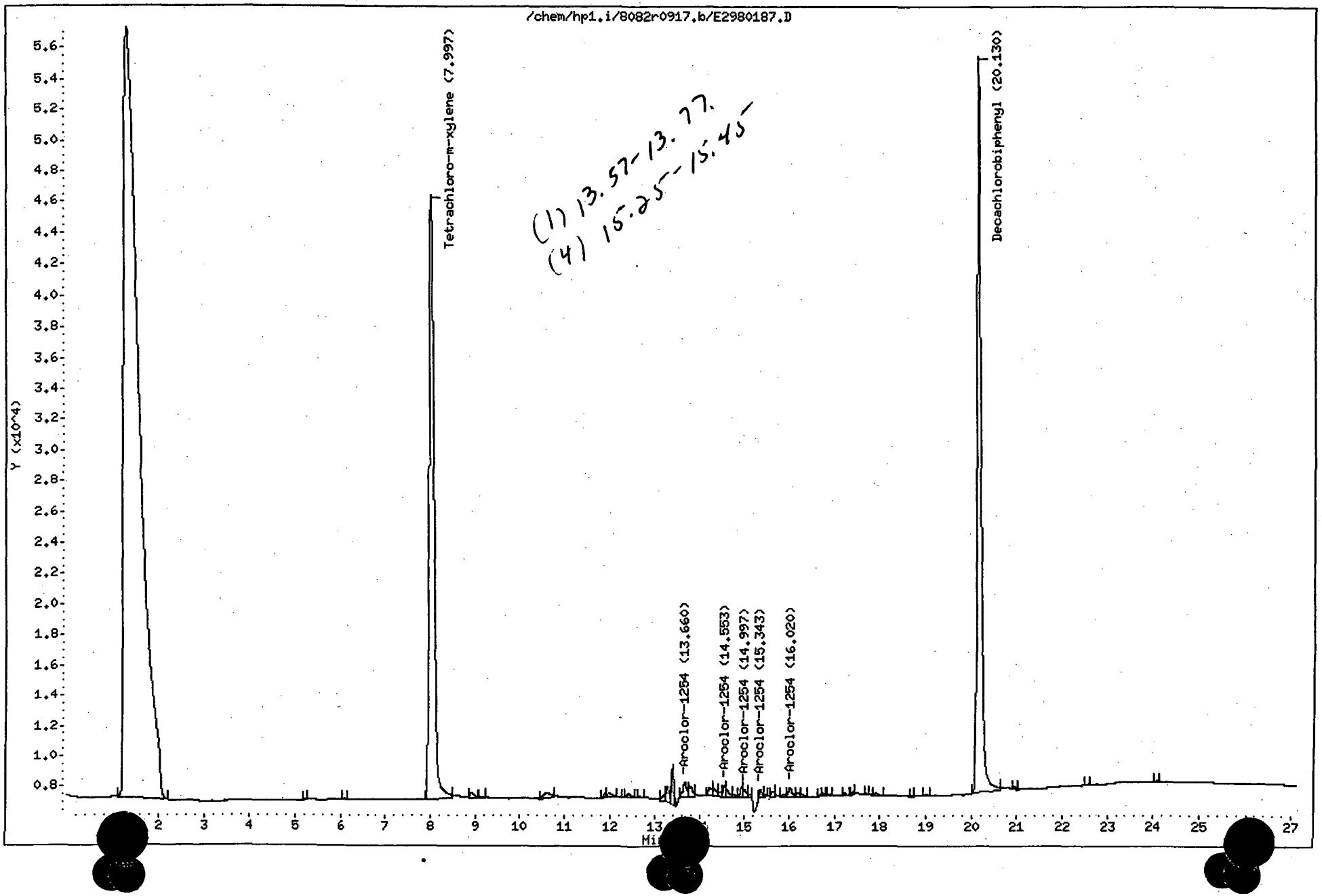


(1) 14.11 - 14.31
(3) 15.44 - 15.64

00026

Data File: /chem/hp1.i/8082r0917.b/E2980187.D
Date : 16-OCT-2002 18:13
Client ID: L95433-3
Sample Info: L95433-3
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32



(1) 13.57-13.77
(4) 15.25-15.45

Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2980187.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L95433-3
Misc Info: WG33196,02-004
Analysis Date: 16-OCT-2002 18:13
Sample Matrix: SOIL
File Number: 0187

Dilution Factor:	10.0000
Sample Weight:	10.2286
Final Volume:	10.0000
Total Solid :	62.2000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	313.10
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	84.88%
Decachlorobiphenyl	112.26%

Analyst: CPW
Report Date: 10/17/2002 07:45

Supervisor: _____
Date: 10/17/02

Thru-Put Systems, Inc.

Data file : \chem\hp3.i\1254FCONFIRMIIIa.b\E3956428.D
Lab Smp Id: L95433-3 Client Smp ID: L95433-3
Inj Date : 16-OCT-2002 02:53
Operator : CPW Inst ID: hp3.i
Smp Info : L95433-3
Misc Info : CONFIRMATION
Comment :
Method : \chem\hp3.i\1254FCONFIRMIIIa.b\8082_PCBsec.M
Meth Date : 16-Oct-2002 12:27 Administra Quant Type: ESTD
Cal Date : 16-OCT-2002 01:19 Cal File: E3956425.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 1254.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

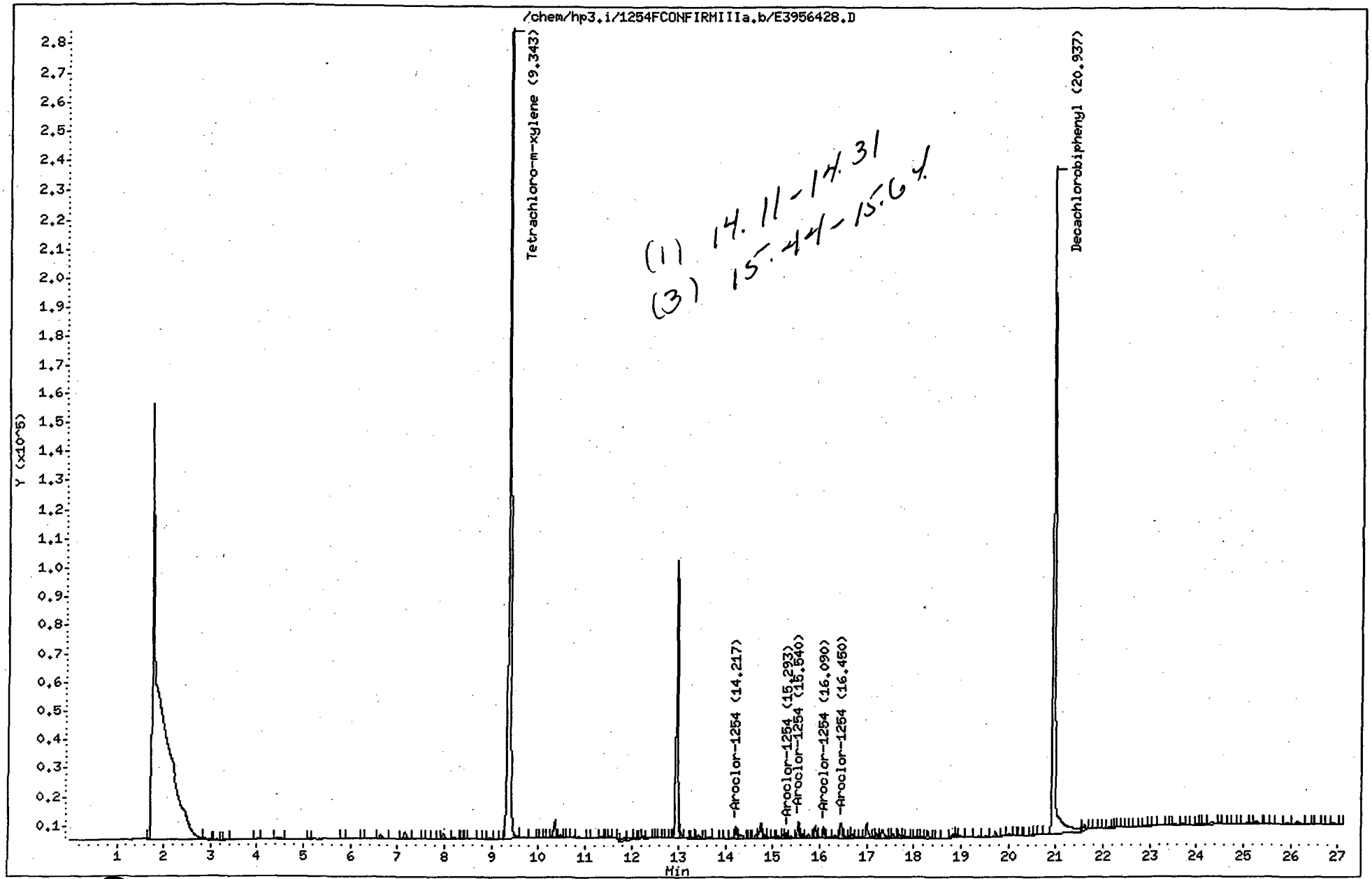
Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.229	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	62.200	Total Solid

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
9.343	9.337	0.006	904557	59.3919	933.51		
25 Aroclor-1254					CAS #: 11097-69-1		
14.217	14.213	0.004	10896	16.8486	264.82	80.00- 120.00	100.00
15.293	15.297	-0.004	4811	7.19550	113.10	83.82- 123.82	44.15
15.540	15.537	0.003	14342	13.9927	219.94	136.90- 176.90	131.63
16.090	16.087	0.003	9958	11.8576	186.38	111.13- 151.13	91.39
16.450	16.447	0.003	18163	20.1201	316.25	119.15- 159.15	166.69
Average of Peak Concentrations =					220.10		
$ 29 Decachlorobiphenyl					CAS #:		
20.937	20.927	0.010	700911	64.6075	1015.49		

Data File: /chem/hp3.i/1254FCONFIRMIIIa.b/E3956428.D
Date: OCT-2002 02:53
Client: L95433-3
Sample Info: L95433-3
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i
Operator: CPW
Column diameter: 0.32

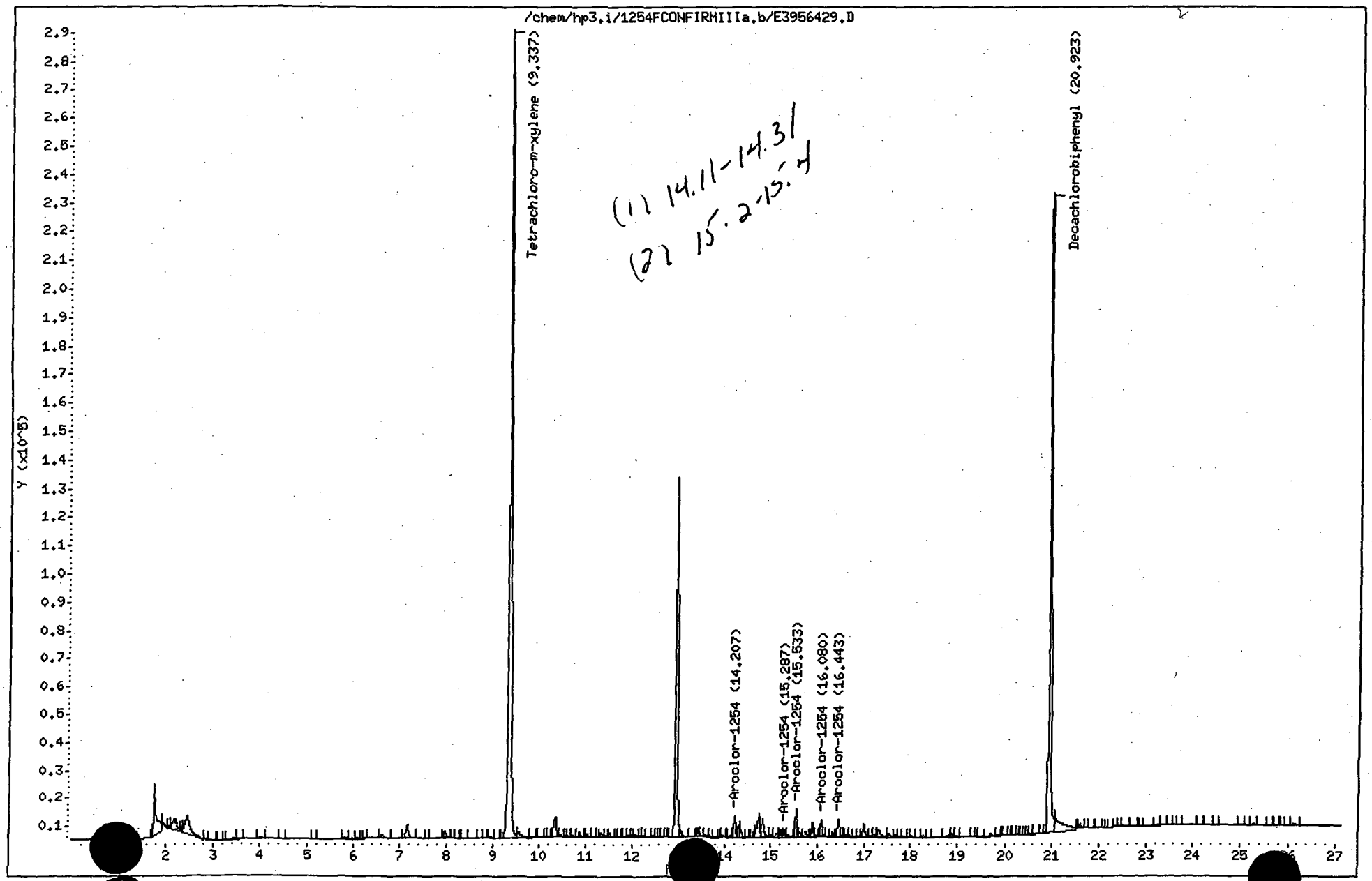


(1) 14.11 - 14.31
(3) 15.44 - 15.64

00027

Data File: /chem/hp3.i/1254FCONFIRMIIIa.b/E3956429.D
Date : 16-OCT-2002 03:24
Client ID: L95433-4
Sample Info: L95433-4
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i
Operator: CPW
Column diameter: 0.32



Thru-Put Systems, Inc.

Data file : \chem\hp3.i\1254FCONFIRMIIIa.b\E3956429.D
Lab Smp Id: L95433-4 Client Smp ID: L95433-4
Inj Date : 16-OCT-2002 03:24
Operator : CPW Inst ID: hp3.i
Smp Info : L95433-4
Misc Info : CONFIRMATION
Comment :
Method : \chem\hp3.i\1254FCONFIRMIIIa.b\8082_PCBsec.M
Meth Date : 16-Oct-2002 12:27 Administra Quant Type: ESTD
Cal Date : 16-OCT-2002 01:19 Cal File: E3956425.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 1254.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.723	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	56.900	Total Solid

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
9.337	9.337	0.000	924496	60.7011	994.91		
25 Aroclor-1254					CAS #: 11097-69-1		
14.207	14.213	-0.006	20051	31.0051	508.18	80.00- 120.00	100.00
15.287	15.297	-0.010	6978	10.4365	171.06	83.82- 123.82	34.80
15.533	15.537	-0.004	26022	25.3883	416.12	136.90- 176.90	129.78
16.080	16.087	-0.007	16450	19.5881	321.06	111.13- 151.13	82.04
16.443	16.447	-0.004	22942	25.4141	416.55	119.15- 159.15	114.42
Average of Peak Concentrations =					366.59		
$ 29 Decachlorobiphenyl					CAS #:		
20.923	20.927	-0.004	614584	56.6502	928.51		

Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2980188.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L95433-4
Misc Info: WG33196,02-004
Analysis Date: 16-OCT-2002 18:44
Sample Matrix: SOIL
File Number: 0188

Dilution Factor:	10.0000
Sample Weight:	10.7226
Final Volume:	10.0000
Total Solid :	56.9000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	423.67
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	102.14%
Decachlorobiphenyl	141.01%

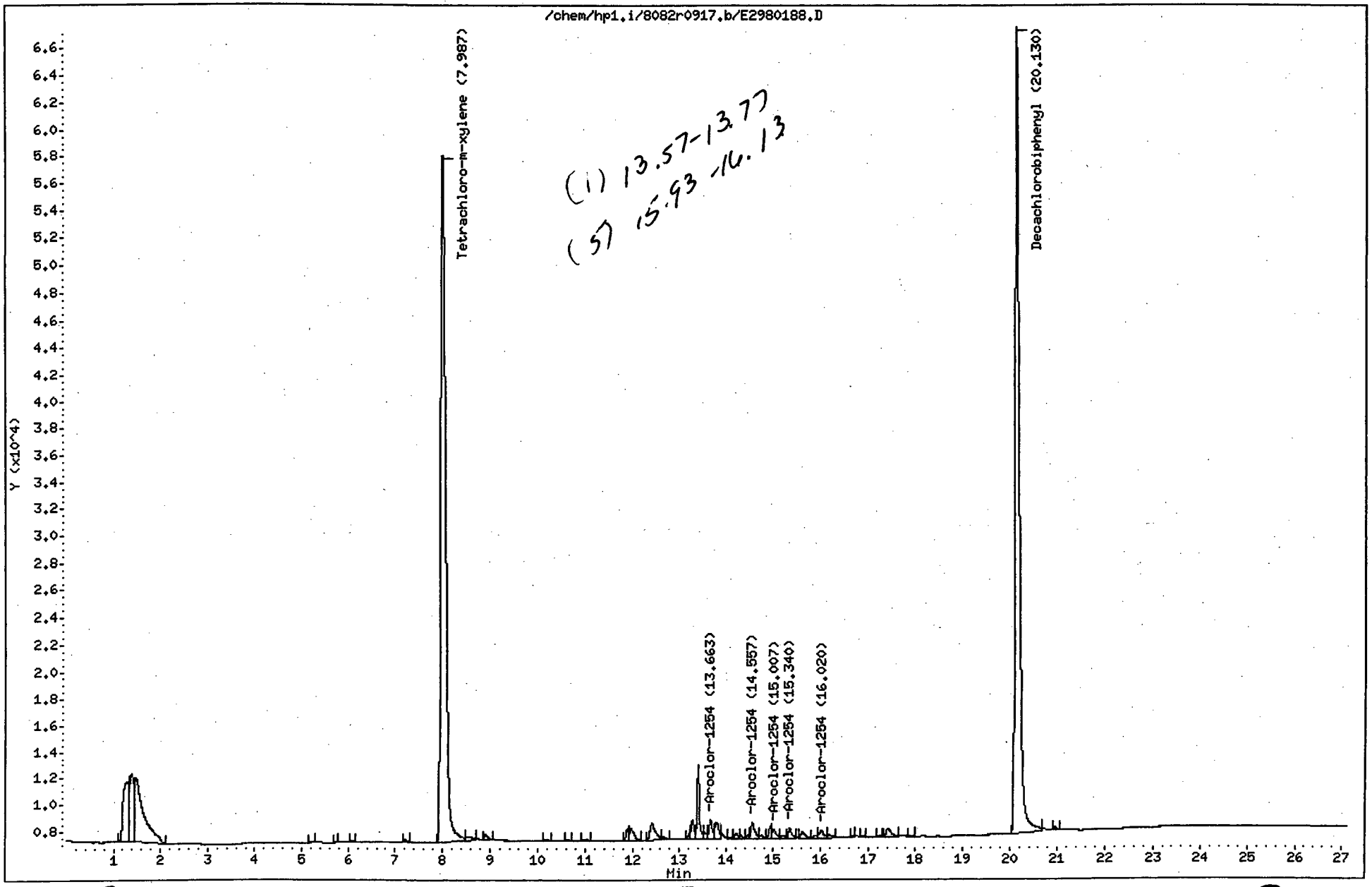
Analyst: CPW
Report Date: 10/17/2002 07:45

Supervisor: _____
Date: 10/17/02

Data File: /chem/hp1.i/8082r0917.b/E2980188.D
Date: OCT-2002 18:44
Client ID: L95433-4
Sample Info: L95433-4
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00034



(1) 13.57-13.77
(5) 15.93-16.13

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

[redacted]ument ID: HP1

[redacted] Column: RTX-CLPest2 ID: 0.32 (mm) Date(s) Analyzed: 09/17/02 09/17/02

File Numbers: 9827-9843

COMPOUND	Peak #	RT OF STANDARDS 10 ppb	50 ppb	100 ppb	250 ppb	500 ppb	1000 ppb	MEAN RT	RT WINDOW FROM	TO
PCB 1016	1*	10.19	10.20	10.20	10.20	10.21	10.21	10.20	10.10	10.30
	2*	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.61	10.81
	3*	11.89	11.89	11.90	11.90	11.90	11.90	11.90	11.80	12.00
	4	11.97	11.98	11.98	11.98	11.98	11.98	11.98	11.88	12.08
	5	12.67	12.68	12.68	12.68	12.69	12.69	12.68	12.58	12.78
PCB 1221	1*				8.79			8.79	8.69	8.89
	2*				9.12			9.12	9.02	9.22
	3*				9.27			9.27	9.17	9.37
PCB 1232	1*				9.27			9.27	9.17	9.37
	2*				10.20			10.20	10.10	10.30
	3*				11.19			11.19	11.09	11.29
	4				11.47			11.47	11.37	11.57
	5				11.97			11.97	11.87	12.07
PCB 1242	1*				10.20			10.20	10.10	10.30
	2*				11.19			11.19	11.09	11.29
	3*				11.47			11.47	11.37	11.57
	4				12.68			12.68	12.58	12.78
	5				13.29			13.29	13.19	13.39
[redacted]CB 1248	1*				11.19			11.19	11.09	11.29
	2*				11.90			11.90	11.80	12.00
	3*				12.68			12.68	12.58	12.78
	4				13.21			13.21	13.11	13.31
	5				13.29			13.29	13.19	13.39
PCB 1254	1*	13.67	13.67	13.67	13.67	13.67	13.67	13.67	13.57	13.77
	2*	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.46	14.66
	3*	15.01	15.01	15.01	15.01	15.00	15.00	15.01	14.91	15.11
	4	15.34	15.35	15.35	15.35	15.35	15.35	15.35	15.25	15.45
	5	16.02	16.03	16.03	16.03	16.03	16.03	16.03	15.93	16.13
PCB 1260	1*	14.93	14.93	14.94	14.94	14.94	14.94	14.94	14.84	15.04
	2*	15.34	15.34	15.35	15.35	15.35	15.35	15.35	15.25	15.45
	3*	16.19	16.19	16.20	16.20	16.20	16.21	16.20	16.10	16.30
	4	16.75	16.75	16.76	16.76	16.76	16.77	16.76	16.66	16.86
	5	17.23	17.23	17.24	17.24	17.25	17.25	17.24	17.14	17.34
Tetrachloro-m-xylene		7.97	7.99	8.00	7.99	8.00	8.00	7.99	7.89	8.09
Decachlorobiphenyl		20.11	20.12	20.13	20.13	20.13	20.13	20.13	20.03	20.23

* Denotes required peaks

Retention time windows are ± 0.1 minutes for all compounds.

$$\frac{10.19 + 10.20 + 10.20 + 10.20 + 10.21 + 10.21}{6} = 10.20$$

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA916
Instrument ID: HP1 Calibration Date(s): 09/17/2 09/17/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)
LAB FILE ID: RF10: E2989834 RF50: E2989835 RF100: E2989836
RF250: E2989843 RF500: E2989838

COMPOUND	RF10	RF50	RF100	RF250	RF500
Aroclor-1016	401.3	365.1	438.0	493.9	404.2
(2)	136.5	147.3	177.8	191.1	175.4
(3)	135.2	120.4	144.0	140.8	117.2
(4)	140.8	136.7	181.1	189.3	184.3
(5)	201.4	165.9	179.7	207.5	203.2
Aroclor-1221				86.2	
(2)				64.3	
(3)				307.9	
(4)					
(5)					
Aroclor-1232				283.3	
(2)				161.5	
(3)				221.6	
(4)				97.5	
(5)				57.9	
Aroclor-1242				352.7	
(2)				515.2	
(3)				225.6	
(4)				162.9	
(5)				195.6	
Aroclor-1254	316.9	313.4	305.2	308.2	343.4
(2)	288.2	317.8	319.7	345.8	442.7
(3)	190.1	233.8	239.2	278.8	384.7
(4)	148.5	164.1	178.0	186.5	230.4
(5)	253.9	263.2	271.9	294.5	392.1
Aroclor-1260	334.4	269.7	334.8	384.6	340.0
(2)	358.5	290.3	352.0	415.1	365.1
(3)	227.9	170.5	206.4	246.1	209.2
(4)	234.8	173.2	208.2	246.2	210.6
(5)	364.1	280.0	381.6	496.5	440.9
Aroclor-1248				278.0	
(2)				163.4	
(3)				213.4	
(4)				186.5	
(5)				304.2	
Tetrachloro-m-xylene	3613	5109	8081	7743	8808
Decachlorobiphenyl	3029	3502	5170	5257	6283

1242 - peak 3
$\frac{56413}{250} = 225.7$

Peak (3) - 1260
CF 10
$\frac{2279}{10} = 227.9$
CF 50
$\frac{8526}{50} = 170.5$
CF 100
$\frac{20638}{100} = 206.4$
CF 250
$\frac{41516}{250} = 246.1$
CF 500
$\frac{104581}{500} = 209.2$
CF 1000
$\frac{209963}{1000} = 209.96$

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA916
Instrument ID: HP1 Calibration Date(s): 09/17/2 09/17/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)
RF1000: E2989839

COMPOUND	RF100	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2
Aroclor-1016	366.0	LINR	-18.105188	2.688e-003	0.991
(2)	161.5	LINR	-9.4133819	6.109e-003	0.997
(3)	100.6	LINR	-18.332671	9.78e-003	0.993
(4)	162.6	LINR	-9.1394188	6.01e-003	0.995
(5)	201.8	LINR	2.94297360	4.926e-003	1.000
Aroclor-1221		LINR	0.00000000	1.159e-002	1.000
(2)		LINR	0.00000000	1.555e-002	1.000
(3)		LINR	0.00000000	3.248e-003	1.000
(4)		LINR			
(5)		LINR			
Aroclor-1232		LINR	0.00000000	3.53e-003	1.000
(2)		LINR	0.00000000	6.191e-003	1.000
(3)		LINR	0.00000000	4.512e-003	1.000
(4)		LINR	0.00000000	1.025e-002	1.000
(5)		LINR	0.00000000	1.727e-002	1.000
Aroclor-1242		LINR	0.00000000	2.835e-003	1.000
(2)		LINR	0.00000000	1.941e-003	1.000
(3)		LINR	0.00000000	4.432e-003	1.000
(4)		LINR	0.00000000	6.138e-003	1.000
(5)		LINR	0.00000000	5.111e-003	1.000
Aroclor-1254	296.1	LINR	-6.4375383	3.29e-003	0.994
(2)	434.5	LINR	16.6006465	2.262e-003	0.997
(3)	371.6	LINR	21.3460443	2.623e-003	0.995
(4)	190.9	LINR	4.45851132	5.219e-003	1.000
(5)	352.0	LINR	11.6581973	2.751e-003	0.994
Aroclor-1260	329.3	LINR	-5.1814212	3.014e-003	0.998
(2)	358.9	LINR	-3.4590831	2.769e-003	0.998
(3)	210.0	LINR	-3.5269711	4.748e-003	0.998
(4)	214.3	LINR	-2.0615020	4.659e-003	0.998
(5)	480.7	LINR	11.3530028	2.078e-003	0.998
Aroclor-1248		LINR	0.00000000	3.596e-003	1.000
(2)		LINR	0.00000000	6.12e-003	1.000
(3)		LINR	0.00000000	4.686e-003	1.000
(4)		LINR	0.00000000	5.361e-003	1.000
(5)		LINR	0.00000000	3.287e-003	1.000
Tetrachloro-m-xylene	7679	LINR	5.59456943	1.219e-004	0.991
Decachlorobiphenyl	5238	LINR	4.64742762	1.888e-004	0.999

Lab Name: FRIEND LABORATORY, INC. Contract: _____
Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA
Instrument ID: HP3
GC Column: RTX-CLPest1 ID: 0.32 (mm) Date(s) Analyzed: 10/16/02 1.19.
File Numbers: 6425

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
PCB 1254	250 PPB	1*	14.21	14.11	14.31	646.70
		2*	15.30	15.20	15.40	668.61
		3*	15.54	15.44	15.64	1024.96
		4	16.09	15.99	16.19	839.80
		5	16.45	16.35	16.55	902.73
Tetrachloro-m-xylene	300 PPB		9.34	9.24	9.44	15230.30
Decachlorobiphenyl	300 PPB		20.93	20.83	21.03	10848.76

* Denotes required peaks

Single injections of the low standard are made to establish approximate retention times and instrument sensitivity. Five point calibrations are performed if a multipeak component is detected in a sample.
Alternate column confirmation is run if a pesticide or PCB is detected in a site sample.

$\left|\frac{250-250}{250}\right| \times 100 = 0\%$

CF Peak (1).

$\frac{161675}{250} = 646.70$

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254

File Name: E2980181.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 10/16/02

Analysis Time: 1504

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	13.67	13.57	13.77	253.31	250.00	1.32
Aroclor-1254	2	14.57	14.46	14.66	241.89	250.00	3.24
Aroclor-1254	3	15.01	14.91	15.11	226.17	250.00	9.53
Aroclor-1254	4	15.35	15.25	15.45	316.85	250.00	26.74
Aroclor-1254	5	16.04	15.93	16.13	257.07	250.00	2.83
Tetrachloro-m-xylene	1	8.01	7.89	8.09	316.71	300.00	5.57
Decachlorobiphenyl	1	20.14	20.03	20.23	344.81	300.00	14.94

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

Avg

$\left|\frac{259-250}{250}\right| \times 100 = 3.6$

FORM VII-PCB-2

00108

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254

File Name: E2980184.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 10/16/02

Analysis Time: 1639

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	13.67	13.57	13.77	238.95	250.00	4.42
Aroclor-1254	2	14.57	14.46	14.66	224.88	250.00	10.05
Aroclor-1254	3	15.01	14.91	15.11	203.48	250.00	18.61
Aroclor-1254	4	15.35	15.25	15.45	243.99	250.00	2.40
Aroclor-1254	5	16.03	15.93	16.13	210.62	250.00	15.75
Tetrachloro-m-xylene	1	8.01	7.89	8.09	319.44	300.00	6.48
Decachlorobiphenyl	1	20.13	20.03	20.23	343.54	300.00	14.51

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

$\left|\frac{224-250}{250}\right| \times 100 = 10.4\%$

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254

File Name: E2980192.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 10/16/02

Analysis Time: 2049

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	13.67	13.57	13.77	248.79	250.00	0.48
Aroclor-1254	2	14.57	14.46	14.66	227.10	250.00	9.16
Aroclor-1254	3	15.01	14.91	15.11	205.08	250.00	17.97
Aroclor-1254	4	15.35	15.25	15.45	246.88	250.00	1.25
Aroclor-1254	5	16.03	15.93	16.13	209.27	250.00	16.29
Tetrachloro-m-xylene	1	8.01	7.89	8.09	318.87	300.00	6.29
Decachlorobiphenyl	1	20.13	20.03	20.23	341.31	300.00	13.77

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

$\left|\frac{227-250}{250}\right| \times 100 = 9.2$

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____
Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254
File Name: E2980200.D
Instrument ID: HP1.I
GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)
Analysis Date: 10/17/02
Analysis Time: 0100

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	13.67	13.57	13.77	236.84	250.00	5.26
Aroclor-1254	2	14.56	14.46	14.66	222.34	250.00	11.06
Aroclor-1254	3	15.01	14.91	15.11	195.65	250.00	21.74
Aroclor-1254	4	15.35	15.25	15.45	237.80	250.00	4.88
Aroclor-1254	5	16.03	15.93	16.13	202.33	250.00	19.07
Tetrachloro-m-xylene	1	7.99	7.89	8.09	309.54	300.00	3.18
Decachlorobiphenyl	1	20.13	20.03	20.23	333.62	300.00	11.21

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

$\left|\frac{219-252}{252}\right| \times 100 = 12.4$

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254

File Name: E3956439.D

Instrument ID: HP3.I

GC Column: RTX-CLPesticides 1 ID: 0.32 (mm)

Analysis Date: 10/16/02

Analysis Time: 0836

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	14.21	14.11	14.31	270.48	250.00	8.19
Aroclor-1254	2	15.29	15.20	15.40	271.61	250.00	8.64
Aroclor-1254	3	15.53	15.44	15.64	267.77	250.00	7.11
Aroclor-1254	4	16.08	15.99	16.19	273.12	250.00	9.25
Aroclor-1254	5	16.44	16.35	16.55	269.63	250.00	7.85
Tetrachloro-m-xylene	1	9.33	9.24	9.44	304.58	300.00	1.53
Decachlorobiphenyl	1	20.91	20.83	21.03	305.68	300.00	1.89

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

$\left|\frac{271-250}{250}\right| \times 100 = 8.4$

FORM VII-PCB-2

00112

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA916
Instrument ID: HP1 Init. Calib. Date(s): 09/17/2 09/17
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 8.00 DCB: 20.13

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	STD11660	STD11660	09/17/2	1304	7.97	20.11
02	STD21660	STD21660	09/17/2	1335	7.99	20.12
03	STD31660	STD31660	09/17/2	1406	8.00	20.13
04	STD41660	STD41660	09/17/2	1437	7.99	20.13
05	STD51660	STD51660	09/17/2	1509	8.00	20.13
06	STD61660	STD61660	09/17/2	1540	8.00	20.13
07	STD11254	STD11254	09/17/2	1643	7.98	20.12
08	STD21254	STD21254	09/17/2	1714	7.99	20.13
09	STD31254	STD31254	09/17/2	1745	8.00	20.13
10	STD41254	STD41254	09/17/2	1816	7.99	20.13
11	STD51254	STD51254	09/17/2	1848	7.98	20.13
12	STD61254	STD61254	09/17/2	1919	8.00	20.13
13	STD41248	STD41248	09/17/2	1950	7.99	20.13
14	STD41242	STD41242	09/17/2	2021	7.99	20.13
15	STD41232	STD41232	09/17/2	2052	7.99	20.13
16	STD41221	STD41221	09/17/2	2124	8.00	20.13
17	~~CC166001~~	CC166001	09/18/2	1401	8.00	20.13
18	MB82	MB82	09/18/2	1433	8.02	20.13
19	QC82	QC82	09/18/2	1507	8.02	20.13
20	L94080-1RE	L94080-1RE	09/18/2	1538	7.99	20.13
21	L94080-2	L94080-2	09/18/2	1610	7.99	20.13
22	L94080-3RE	L94080-3RE	09/18/2	1641	7.99	20.13
23	L94080-4	L94080-4	09/18/2	1712	7.98	20.13
24	CC166002	CC166002	09/18/2	1815	8.01	20.13
25	L94081-1RE	L94081-1RE	09/18/2	1846	7.98	20.13
26	L94081-4RE	L94081-4RE	09/18/2	1917	7.99	20.13
27	L94081-5RE	L94081-5RE	09/18/2	1948	8.00	20.13
28	L94081-6RE	L94081-6RE	09/18/2	2019	7.99	20.13
29	L94081-7R	L94081-7R	09/18/2	2051	7.98	20.13
30	L94081-1MSR	L94081-1MSR	09/18/2	2122	7.98	20.13
31	L94081-1MSDR	L94081-1MSDR	09/18/2	2153	7.97	20.11
32	CC166003	CC166003	09/18/2	2255	8.01	20.13
33	CC125401	CC125401	09/18/2	2327	7.99	20.13
34	CC125402	CC125402	09/19/2	1009	7.99	20.13
35	L94080-1	L94080-1	09/19/2	1038	7.99	20.13
36	L94080-3R	L94080-3R	09/19/2	1116	7.99	20.13
37	~~L94081-6~~	L94081-6	09/19/2	1148	7.98	20.13

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

ear
10/25/07

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA1014
Instrument ID: HP1 Init. Calib. Date(s): 09/17/2 09/17/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 8.00 DCB: 20.13

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	1254CC01	1254CC01	10/16/2	1504	8.01	20.14
02	MB12	MB12	10/16/2	1536	7.99	20.13
03	QC12	QC12	10/16/2	1608	8.00	20.13
04	1254CC02	1254CC02	10/16/2	1639	8.01	20.13
05	L95433-1	L95433-1	10/16/2	1710	8.01	20.13
06	L95433-2	L95433-2	10/16/2	1742	7.98	20.13
07	L95433-3	L95433-3	10/16/2	1813	8.00	20.13
08	L95433-4	L95433-4	10/16/2	1844	7.99	20.13
09	L95433-5	L95433-5	10/16/2	1915	7.99	20.13
10	L95433-6	L95433-6	10/16/2	1947	7.99	20.13
11	1254CC03	1254CC03	10/16/2	2049	8.01	20.13
12	L95433-7	L95433-7	10/16/2	2121	7.99	20.13
13	L95433-8	L95433-8	10/16/2	2152	7.99	20.13
14	L95433-9	L95433-9	10/16/2	2223	7.99	20.13
15	L95433-10	L95433-10	10/16/2	2254	7.99	20.13
16	L95433-11	L95433-11	10/16/2	2326	7.99	20.13
17	L95433-12	L95433-12	10/16/2	2357	7.98	20.13
18	1254CC04	1254CC04	10/17/2	0100	7.99	20.13
19	[illegible]	L95346-9	10/17/2	0131	7.99	20.13
20	L95346-11	L95346-11	10/17/2	0202	7.99	20.13
21	L95420-1	L95420-1	10/17/2	0233	7.99	20.13
22	L95420-1MS	L95420-1MS	10/17/2	0305	7.99	20.13
23	L95420-1MSD	L95420-1MSD	10/17/2	0336	7.99	20.13
24	L95420-7	L95420-7	10/17/2	0407	8.00	20.13
25	[illegible]	1254CC05	10/17/2	0510	8.00	20.13
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA1014CONFIRM
Instrument ID: HP3 Init. Calib. Date(s): 10/16/2 10/[illegible]/2
GC Column: RTX-CLPESTICIDES 1 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 9.34 DCB: 20.93

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	1254CC02	1254CC02	10/16/2	0119	9.34	20.93
02	L95433-1	L95433-1	10/16/2	0150	9.34	20.93
03	L95433-2	L95433-2	10/16/2	0222	9.34	20.92
04	L95433-3	L95433-3	10/16/2	0253	9.34	20.94
05	L95433-4	L95433-4	10/16/2	0324	9.34	20.92
06	L95433-5	L95433-5	10/16/2	0355	9.36	20.92
07	L95433-6	L95433-6	10/16/2	0426	9.32	20.92
08	L95433-7	L95433-7	10/16/2	0458	9.32	20.92
09	L95433-8	L95433-8	10/16/2	0529	9.32	20.92
10	L95433-9	L95433-9	10/16/2	0600	9.33	20.93
11	L95433-10	L95433-10	10/16/2	0631	9.32	20.92
12	L95433-11	L95433-11	10/16/2	0703	9.33	20.92
13	L95433-12	L95433-12	10/16/2	0734	9.32	20.92
14	1254CC03	1254CC03	10/16/2	0836	9.33	20.91
15						
16						
17						
18						
19						
20						
21						
22						
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24						
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27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						

QC LIMITS

TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2980183.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: QC12
Misc Info: QC12
Analysis Date: 16-OCT-2002 16:08
Sample Matrix: SOIL
File Number: 0183

==========

Dilution Factor: 1.0000
Sample Weight: 10.6196
Final Volume: 10.0000
Total Solid : 100.0000

==========

Analytes (ug/Kg)

Aroclor-1016	99.88%
Aroclor-1260	110.60%
Tetrachloro-m-xylene	94.69%
Decachlorobiphenyl	118.22%

Analyst: CPW
Report Date: 10/17/2002 07:45

Supervisor: _____
Date: 10/17/02

00213

Notebook : 02-066
Start Date : 15-OCT-02 11:18
End Date : 15-OCT-02 11:18

Sample I.D.	Analysis Date Time	Anal Init	Method	Dish#	Volume (mls)	Initial Weight	1st&2nd Weight	3rd&4th Weight	5th&6th Weight	7th&8th Weight	9th&10th Weight	Final Result	Rpd	Units
[illegible]	Start:15-OCT-02 11:18 Stop :15-OCT-02 11:18		CLP 3.0	4	5.0316	1.2523	4.5202					64.9	.154	%
Comments :														
[illegible]	Start:15-OCT-02 11:18 Stop :15-OCT-02 11:18		CLP 3.0	5	5.3949	1.2431	5.0575					70.7		%
Comments :														
L95433-1	Start:15-OCT-02 11:18 Stop :15-OCT-02 11:18		CLP 3.0	6	5.9733	1.2461	6.7415					92		%
Comments :														
L95433-10	Start:15-OCT-02 11:18 Stop :15-OCT-02 11:18		CLP 3.0	15	5.2789	1.2424	4.0256					52.7		%
Comments :														
L95433-11	Start:15-OCT-02 11:18 Stop :15-OCT-02 11:18		CLP 3.0	16	5.4293	1.2515	4.5663					61.1		%
Comments :														
L95433-12	Start:15-OCT-02 11:18 Stop :15-OCT-02 11:18		CLP 3.0	17	5.1043	1.2476	4.5564					64.8		%
Comments :														
L95433-2	Start:15-OCT-02 11:18 Stop :15-OCT-02 11:18		CLP 3.0	7	5.3219	1.2548	6.118					91.4		%
Comments :														
L95433-3	Start:15-OCT-02 11:18 Stop :15-OCT-02 11:18		CLP 3.0	8	5.9986	1.2407	4.9718					62.2		%
Comments :														
L95433-4	Start:15-OCT-02 11:18 Stop :15-OCT-02 11:18		CLP 3.0	9	5.1422	1.2443	4.1715					56.9		%
Comments :														
L95433-5	Start:15-OCT-02 11:18 Stop :15-OCT-02 11:18		CLP 3.0	10	5.3357	1.2356	5.2375					75		%

6.7415 - 1.2461 / 5.9733 = 92%

Calculations: Final Results = (fnl wgt - initial wgt) / mls of sample x 1000000

Analyst Signature 10/16/2 Date

Manager Signature Teresa B. Bailey 10/16/02 Date

00214

WET CHEMISTRY TOTAL SOLIDS [redacted]

Notebook : 02-066
Start Date : 15-OCT-02 11:18
End Date : 15-OCT-02 11:18

Sample I.D.	Analysis Date Time	Anal Init	Method	Dish#	Volume (mls)	Initial Weight	1st&2nd Weight	3rd&4th Weight	5th&6th Weight	7th&8th Weight	9th&10th Weight	Final Result	Rpd	Units
Comments :														
L95433-6	Start:15-OCT-02 11:18 Stop :15-OCT-02 11:18		CLP 3.0	11	5.5937	1.237	4.3667					56		%
Comments :														
L95433-7	Start:15-OCT-02 11:18 Stop :15-OCT-02 11:18		CLP 3.0	12	5.9035	1.2573	4.6024					56.7		%
Comments :														
L95433-8	Start:15-OCT-02 11:18 Stop :15-OCT-02 11:18		CLP 3.0	13	5.9703	1.254	5.4498					70.3		%
Comments :														
L95433-9	Start:15-OCT-02 11:18 Stop :15-OCT-02 11:18		CLP 3.0	14	5.4042	1.2455	5.1979					73.1		%
Comments :														
WG33173-1	Start:15-OCT-02 11:18 Stop :15-OCT-02 11:18		CLP 3.0	1	1.2492	1.2491	1.2491					0		%
Comments :	Blank													
[redacted]	Start:15-OCT-02 11:18 Stop :15-OCT-02 11:18		CLP 3.0	2	5.4308	1.2459	4.7779					65		%
Comments :	[redacted]													

Calculations: Final Results = $\frac{\text{(fnl wgt - initial wgt)} \times 1000000}{\text{mls of sample}}$

Analyst Signature — 10/16/02 Date — Manager Signature: Teresa B. Bishop — 10/16/02 Date

W.G. 35174

Organic Extractions

Notebook: 02-090 Page: 12

Extracted By: KJB
Date Extracted: 10/5/02

Sur Ref.: 00-13134-B
Sur Conc.:

Analysis: 8082
Matrix: Soil (3550)

Spike Ref.: 00-13-34-1
Spike Conc.:

Clean up method
1. 3665 H_2SO_4
2. 3620A florisil
3. 3660A Hg

I. D.	Customer	Int. size	Fin. vol.	Sr. amt.	Spk amt.	Wit.. by	Clean-ups
MB12		10.2683	1Dml	1ml			1,2,3
QC12		10.6196			1ml		
L9543-1	AAA Env	10.8723					
-2		10.1400					
-3		10.2286					
-4		10.7226					
-5		10.4668					
-6		10.9637					
-7		10.1911					
-8		10.6246					
-9		10.0079					
-10		10.6150					
-11		10.0932					
-12		10.7819					

Extracts Reliquished to:

Comments:

C.O.C

284744

10/5

ECT.CON INC.
Environmental and Computer
Technology Consultants

Data Validation Report

SDG#	97127-97224
Validation Report Date	April 28, 2003
Validation Guidance	USEPA Region 2 Guidelines for Data Review SW 846 Method 8082
Client Name	Cummings-Riter
Project Name	Viacom/Horseheads
Laboratory	Friend Laboratory Inc.
Method(s) Utilized	SW 846 8082
Analytical Fraction	PCBs

Samples/Matrix:

Date Sampled	Sample ID	Laboratory ID	PCBs	Matrix
SDG# 97127				
11/20/02	N-B-S-W-001	97127-1	X	Solid
11/20/02	N-B-SS-W-001	97127-2	X	Solid
11/20/02	N-C-SS-B1-001	97127-3	X	Solid
11/20/02	N-C-SS-B2-001	97127-4	X	Solid
11/20/02	N-C-SS-B3-001	97127-5	X	Solid
11/20/02	L-B-S-W-002	97127-6	X	Solid
11/20/02	L-B-SS-E-002	97127-7	X	Solid
SDG# 97224				
11/21/02	P-B-SS-W-001	97224-1	X	Solid
11/21/02	P-B-S-E-001	97224-2	X	Solid
11/21/02	P-C-SS-B-001	97224-3	X	Solid
11/21/02	P-B-S1-W-001	97224-4	X	Solid
11/21/02	P-BSUB-S-N-001	97224-5	X	Solid
11/21/02	P-BSUB-S-S-001	97224-6	X	Solid
11/21/02	P-B-SS-E-001	97224-7	X	Solid
11/21/02	P-B-S2-W-001	97224-8	X	Solid
11/21/02	L-B-SS-W-004	97224-9	X	Solid
11/21/02	L-B-S-E-004	97224-10	X	Solid

Analytical data in this report were screened to determine analytical limitations of the data based on specific quality control criteria. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of laboratory calculations has been verified as part of this validation. Specific findings on analytical limitations are presented in this report. Annotated Form 1s or spreadsheets for samples reviewed are included after the Data Assessment Findings. Form 1s for the MS/MSD samples and spreadsheets are not annotated.

SUMMARY

The sample set for Viacom/Horsehead consists of 17 solid field samples. These samples were analyzed for the parameters as provided above. The findings presented in this review of the analytical data assume that the information presented by the analytical laboratory is correct. This review is identified as a false positive/false negative review, and therefore, does not include the review of some quality control (QC) items. Those included in the review are listed below.

The polychlorinated biphenyl (PCBs) findings are based upon the assessment of the following:

False Positives/False Negatives Validation

*	• Data Completeness
*	• Holding Times
	• Calibration and GC Performance
*	• Blanks
*	• Analytical Sequence Check
*	• Target Compound Identification
	• Compound Quantitation and Reported Detection Limits
*	• Chromatogram Quality

* Criteria were met for this evaluation item.

This evaluation was conducted in accordance with USEPA Region II SOP No. HW-23B (May 2002), USEPA CLP National Functional Guidelines for Organic Data Review and the analytical method. Findings from this evaluation should be considered when using the analytical data. This report presents a summary of the data qualifications based on the review of the aforementioned evaluation criteria. This is followed by annotated Form 1s/ spreadsheets. Finally, the worksheets used to perform the evaluation are provided.

FINDINGS

Polychlorinated Biphenyls (PCBs)

1. Calibration

The 11/23/02 2:25 continuing calibration percent difference (%D) for Arolcor 1016 (28.4%) was greater than the control limit of 15%. For the following samples, qualify positive results of Aroclor 1016 as estimated "J" and nondetected results as estimated "UJ".

N-B-S-W-001	N-B-SS-W-001	N-C-SS-B1-001	N-C-SS-B3-001

The 11/26/02 5:02 continuing calibration percent difference (%D) for Arolcor 1016 (16.8%) was greater than the control limit of 15%. For the following samples, qualify positive results of Aroclor 1016 as estimated "J" and nondetected results as estimated "UJ".

P-B-SS-E-001	P-B-S2-W-001	L-B-SS-W-004	L-B-S-E-004

2. Compound Quantitation

The percent difference between columns exceeded the 25% quality control limit. For the following sample and compound, qualify PCB results as indicated in the table below. Samples were qualified based on SOP HW-23, Section 12.6.

Sample	Compound	% Difference	Qualifier
N-C-SS-B2-001	Aroclor 1254	34.6%	J

NOTES

Polychlorinated Biphenyls (PCBs)

Completeness

The USEPA Region II SOP No. HW-23B has the following sections that are not applicable to this project because it is a false positive/false negative review:

- Surrogate Recovery (Form 2)
- Laboratory Control Sample
- Matrix Spikes (Form 3)
- Contamination
- GC Apparatus and Materials
- Extraction Techniques for Sample Preparation
- Field Duplicates

Samples within this batch were received by the laboratory in several coolers. The case narrative indicates that the various cooler temperature upon receipt at the laboratory ranged was 4 and 6 C. Data are not qualified upon this basis.

Calibration

The laboratory used linear regression to calculate PCB results. The use of linear regression is permissible for SW-846 methodologies. The laboratory met the acceptance criteria specified in Section 7.5.2 of Method 8000B (r value greater than or equal to 0.99).

Data summary forms (including calibration factors) for the initial and continuing calibration is not provided for the second column except for Aroclor 1254. The second column is used only for fingerprint confirmation, therefore, the laboratory does not provide the calibration factor information. Because Aroclor 1254 was identified as a constituent of concern, the data summary information for the second column is provided for the continuing calibration. Data are not qualified on this basis.

The percent difference (%D) per peak for multi-standard Aroclors are provided. For SW 846, the laboratory used the average Aroclor concentration to determine the %D. Data are not qualified because the average value is used.

Retention Time

Retention time windows are not determined by the use of three standards for single standard calibration Aroclors. The center of the retention time window is defined as the retention time of the midpoint standard from the initial calibration. For the multi-standard calibration Aroclors, the center of the retention time window is the mean of the retention time generated from each standard. The retention time windows are the mean $\pm$ 0.1 minutes. Data are not qualified on this basis.

Retention time windows are not provided for the second column except for Aroclor 1254. The second column is used only for fingerprint confirmation, therefore, the laboratory does not provide the retention time window information. Because Aroclor 1254 was identified as a constituent of concern, the retention time information for the second column is provided. Data are not qualified on this basis.

Compound Quantitation

Samples were analyzed and reported at a dilution due to the presence of target compounds. Dilutions for samples are presented below. Reporting limits were adjusted for percent solids and dilutions.

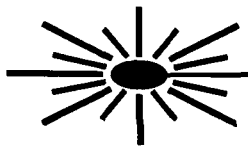
N-B-S-W-001, N-B-SS-W-001, N-C-SS-B1-001, N-C-SS-B2-001, N-C-SS-B3-001, L-B-S-W-002, L-B-SS-E-002, P-B-SS-W-001, P-B-S-E-001, P-C-SS-B-001, P-B-S1-W-001, P-BSUB-S-N-001, P-BSUB-S-S-001, P-B-SS-E-001, P-B-S2-W-001, L-B-SS-W-004, L-B-S-E-004	10x

Data Reviewer

4/28/07
Date

Glossary of Data Qualifiers

U	Not Detected.	The associated number indicates approximate sample concentration necessary to be detected.
UJ	Not Detected.	Quantitation limit may be inaccurate or imprecise.
J	Analyte Present.	Reported value may not be accurate or precise.
N	Consider Present.	Tentative identification. Special methods may be needed to confirm its presence or absence in future sampling efforts.
R	Unusable Result.	Analyte may or may not be present in the sample.
UR	Unusable Result.	Analyte may or may not be present in the sample.



ECT.CON INC.

Environmental and Computer
Technology Consultants

Annotated Form 1's
(Spreadsheet)

FLI
FRIEND LABORATORY
I · N · C

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:25-NOV-2002

Lab Sample ID: L97127-1

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: N-B-S-W-001
Description: COMPOSITE
Sampled On: 20-NOV-02 09:30 by CLIENT
Date Received: 21-NOV-02 08:54
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	76.8	%		21-NOV-02 00:00	CLP 3.0	02-123-7
EPA 8082						
PCB 1016	~~U~~ UJ	ug/kg	120	23-NOV-02 02:56	EPA 8082	02-117-0777
PCB 1221	U	ug/kg	250	23-NOV-02 02:56	EPA 8082	02-117-0777
PCB 1232	U	ug/kg	120	23-NOV-02 02:56	EPA 8082	02-117-0777
PCB 1242	U	ug/kg	120	23-NOV-02 02:56	EPA 8082	02-117-0777
PCB 1248	U	ug/kg	120	23-NOV-02 02:56	EPA 8082	02-117-0777
PCB 1254	U	ug/kg	120	23-NOV-02 02:56	EPA 8082	02-117-0777
PCB 1260	U	ug/kg	120	23-NOV-02 02:56	EPA 8082	02-117-0777
Extraction Information:				22-NOV-02 00:00	EPA 3550	02-090-42
Surrogate Recovery:						
Tetrachloro-m-xylene	105	%				02-117-0777
Decachlorobiphenyl	115	%				02-117-0777

JMB 4/25/07

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC ZZZR

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
= analyte was detected in the method or trip blank J = result estimated below the quantitation limit

Information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost for these services. Your samples will be discarded after 14 days unless we are advised otherwise.

FLI
FRIEND LABORATORY I · N · C

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:25-NOV-2002

Lab Sample ID: L97127-2

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: N-B-SS-W-001
Description: COMPOSITE
Sampled On: 20-NOV-02 09:35 by CLIENT
Date Received: 21-NOV-02 08:54
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	78.3	%		21-NOV-02 00:00	CLP 3.0	02-123-7
EPA 8082						
PCB 1016	~~U~~ U	ug/kg	120	23-NOV-02 03:28	EPA 8082	02-117-0778
PCB 1221	U	ug/kg	240	23-NOV-02 03:28	EPA 8082	02-117-0778
PCB 1232	U	ug/kg	120	23-NOV-02 03:28	EPA 8082	02-117-0778
PCB 1242	U	ug/kg	120	23-NOV-02 03:28	EPA 8082	02-117-0778
PCB 1248	U	ug/kg	120	23-NOV-02 03:28	EPA 8082	02-117-0778
PCB 1254	U	ug/kg	120	23-NOV-02 03:28	EPA 8082	02-117-0778
PCB 1260	U	ug/kg	120	23-NOV-02 03:28	EPA 8082	02-117-0778
Extraction Information:				22-NOV-02 00:00	EPA 3550	02-090-42
Surrogate Recovery:						
Tetrachloro-m-xylene	102	%				02-117-0778
Decachlorobiphenyl	100	%				02-117-0778

MB 4/25/13

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

Information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed cost for these services. Your samples will be discarded after 14 days unless we are advised otherwise.

FLI
FRIEND LABORATORY INC

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:25-NOV-2002

Lab Sample ID: L97127-3

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: N-C-SS-B1-001
Description: COMPOSITE
Sampled On: 20-NOV-02 09:40 by CLIENT
Date Received: 21-NOV-02 08:54
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	90.5	%		21-NOV-02 00:00	CLP 3.0	02-123-7
EPA 8082						
PCB 1016	~~U~~ UJ	ug/kg	110	23-NOV-02 03:59	EPA 8082	02-117-0779
PCB 1221	U	ug/kg	210	23-NOV-02 03:59	EPA 8082	02-117-0779
PCB 1232	U	ug/kg	110	23-NOV-02 03:59	EPA 8082	02-117-0779
PCB 1242	U	ug/kg	110	23-NOV-02 03:59	EPA 8082	02-117-0779
PCB 1248	U	ug/kg	110	23-NOV-02 03:59	EPA 8082	02-117-0779
PCB 1254	U	ug/kg	110	23-NOV-02 03:59	EPA 8082	02-117-0779
PCB 1260	U	ug/kg	110	23-NOV-02 03:59	EPA 8082	02-117-0779
Extraction Information:				22-NOV-02 00:00	EPA 3550	02-090-42
Surrogate Recovery:						
Tetrachloro-m-xylene	91	%				02-117-0779
Decachlorobiphenyl	87	%				02-117-0779

MB 6/25/03

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC RAR

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
= analyte was detected in the method or trip blank J = result estimated below the quantitation limit

rmation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost se services. Your samples will be discarded after 14 days unless we are advised otherwise.

FLI
FRIEND LABORATORY I · N · C

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date: 02-DEC-2002

Lab Sample ID: L97127-4

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: N-C-SS-B2-001
Description: COMPOSITE
Sampled On: 20-NOV-02 09:45 by CLIENT
Date Received: 21-NOV-02 08:54
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	88.1	%		21-NOV-02 00:00	CLP 3.0	02-123-7
EPA 8082						
PCB 1016	U	ug/kg	110	26-NOV-02 14:08	EPA 8082	02-117-0837
PCB 1221	U	ug/kg	220	26-NOV-02 14:08	EPA 8082	02-117-0837
PCB 1232	U	ug/kg	110	26-NOV-02 14:08	EPA 8082	02-117-0837
PCB 1242	U	ug/kg	110	26-NOV-02 14:08	EPA 8082	02-117-0837
PCB 1248	U	ug/kg	110	26-NOV-02 14:08	EPA 8082	02-117-0837
PCB 1254	480 J	ug/kg	110	26-NOV-02 14:08	EPA 8082	02-117-0837
PCB 1260	U	ug/kg	110	26-NOV-02 14:08	EPA 8082	02-117-0837
Extraction Information:				22-NOV-02 00:00	EPA 3550	02-090-42
Surrogate Recovery:						
Tetrachloro-m-xylene	121	%				02-117-0837
Decachlorobiphenyl	149	%				02-117-0837

MMB 4/04/03

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

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FLI
FRIEND LABORATORY INC

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:25-NOV-2002

Lab Sample ID: L97127-5

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: N-C-SS-B3-001
Description: COMPOSITE
Sampled On: 20-NOV-02 09:50 by CLIENT
Date Received: 21-NOV-02 08:54
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	88.7	%		21-NOV-02 00:00	CLP 3.0	02-123-7
EPA 8082						
PCB 1016	~~U~~	ug/kg	110	23-NOV-02 05:01	EPA 8082	02-117-0781
PCB 1221	U	ug/kg	220	23-NOV-02 05:01	EPA 8082	02-117-0781
PCB 1232	U	ug/kg	110	23-NOV-02 05:01	EPA 8082	02-117-0781
PCB 1242	U	ug/kg	110	23-NOV-02 05:01	EPA 8082	02-117-0781
PCB 1248	U	ug/kg	110	23-NOV-02 05:01	EPA 8082	02-117-0781
PCB 1254	U	ug/kg	110	23-NOV-02 05:01	EPA 8082	02-117-0781
PCB 1260	U	ug/kg	110	23-NOV-02 05:01	EPA 8082	02-117-0781
Extraction Information:				22-NOV-02 00:00	EPA 3550	02-090-42
Surrogate Recovery:						
Tetrachloro-m-xylene	95	%				02-117-0781
Decachlorobiphenyl	114	%				02-117-0781

MB 4/29/03

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC CLK

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

...ormation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost fo... ...ese services. Your samples will be discarded after 14 days unless we are advised otherwise.

FLI
FRIEND LABORATORY I · N · C

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:25-NOV-2002

Lab Sample ID: L97127-6

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: L-B-S-W-002
Description: COMPOSITE
Sampled On: 20-NOV-02 10:00 by CLIENT
Date Received: 21-NOV-02 08:54
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	76.5	%		21-NOV-02 00:00	CLP 3.0	02-123-7
EPA 8082						
PCB 1016	U	ug/kg	130	23-NOV-02 06:35	EPA 8082	02-117-0784
PCB 1221	U	ug/kg	260	23-NOV-02 06:35	EPA 8082	02-117-0784
PCB 1232	U	ug/kg	130	23-NOV-02 06:35	EPA 8082	02-117-0784
PCB 1242	U	ug/kg	130	23-NOV-02 06:35	EPA 8082	02-117-0784
PCB 1248	U	ug/kg	130	23-NOV-02 06:35	EPA 8082	02-117-0784
PCB 1254	U	ug/kg	130	23-NOV-02 06:35	EPA 8082	02-117-0784
PCB 1260	U	ug/kg	130	23-NOV-02 06:35	EPA 8082	02-117-0784
Extraction Information:				22-NOV-02 00:00	EPA 3550	02-090-42
Surrogate Recovery:						
Tetrachloro-m-xylene	104	%				02-117-0784
Decachlorobiphenyl	120	%				02-117-0784

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
= analyte was detected in the method or trip blank J = result estimated below the quantitation limit

[illegible]ormation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed [illegible]ost for these services. Your samples will be discarded after 14 days unless we are advised otherwise.

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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:25-NOV-2002

Lab Sample ID: L97127-7

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: L-B-SS-E-002
Description: COMPOSITE
Sampled On: 20-NOV-02 10:05 by CLIENT
Date Received: 21-NOV-02 08:54
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	85.5	%		21-NOV-02 00:00	CLP 3.0	02-123-7
EPA 8082						
PCB 1016	U	ug/kg	120	23-NOV-02 07:06	EPA 8082	02-117-0785
PCB 1221	U	ug/kg	230	23-NOV-02 07:06	EPA 8082	02-117-0785
PCB 1232	U	ug/kg	120	23-NOV-02 07:06	EPA 8082	02-117-0785
PCB 1242	U	ug/kg	120	23-NOV-02 07:06	EPA 8082	02-117-0785
PCB 1248	U	ug/kg	120	23-NOV-02 07:06	EPA 8082	02-117-0785
PCB 1254	U	ug/kg	120	23-NOV-02 07:06	EPA 8082	02-117-0785
PCB 1260	U	ug/kg	120	23-NOV-02 07:06	EPA 8082	02-117-0785
Extraction Information:				22-NOV-02 00:00	EPA 3550	02-090-42
Surrogate Recovery:						
Tetrachloro-m-xylene	110	%				02-117-0785
Decachlorobiphenyl	120	%				02-117-0785

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
= analyte was detected in the method or trip blank J = result estimated below the quantitation limit

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FLI
FRIEND LABORATORY INC

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:04-DEC-2002

Lab Sample ID: L97224-1

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: P-B-SS-W-001
Description: COMPOSITE
Sampled On: 21-NOV-02 15:45 by CLIENT
Date Received: 22-NOV-02 14:45
P.O. No: N/A

Analysis Performed	Result		Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	82.1		%		27-NOV-02 13:32	CLP 3.0	02-123-8
EPA 8082							
PCB 1016	U		ug/kg	120	26-NOV-02 01:24	EPA 8082	02-117-0815
PCB 1221	U		ug/kg	240	26-NOV-02 01:24	EPA 8082	02-117-0815
PCB 1232	U		ug/kg	120	26-NOV-02 01:24	EPA 8082	02-117-0815
PCB 1242	U		ug/kg	120	26-NOV-02 01:24	EPA 8082	02-117-0815
PCB 1248	U		ug/kg	120	26-NOV-02 01:24	EPA 8082	02-117-0815
PCB 1254	U		ug/kg	120	26-NOV-02 01:24	EPA 8082	02-117-0815
PCB 1260	U		ug/kg	120	26-NOV-02 01:24	EPA 8082	02-117-0815
Extraction Information:					25-NOV-02 00:00	EPA 3550	02-090-45
Surrogate Recovery:							
Tetrachloro-m-xylene	132		%				02-117-0815
Decachlorobiphenyl	164	D	%				02-117-0815

ysis Comment:D - Diluted.

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC QAR

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

rmation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed st.
e services. Your samples will be discarded after 14 days unless we are advised otherwise.

FLI
FRIEND LABORATORY
I · N · C

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:03-DEC-2002

Lab Sample ID: L97224-2

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: P-B-S-E-001
Description: COMPOSITE
Sampled On: 21-NOV-02 16:35 by CLIENT
Date Received: 22-NOV-02 14:45
P.O. No: N/A

Analysis Performed	Result		Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	76.6		%		27-NOV-02 13:32	CLP 3.0	02-123-8
EPA 8082							
PCB 1016	U		ug/kg	130	26-NOV-02 01:55	EPA 8082	02-117-0816
PCB 1221	U		ug/kg	250	26-NOV-02 01:55	EPA 8082	02-117-0816
PCB 1232	U		ug/kg	130	26-NOV-02 01:55	EPA 8082	02-117-0816
PCB 1242	U		ug/kg	130	26-NOV-02 01:55	EPA 8082	02-117-0816
PCB 1248	U		ug/kg	130	26-NOV-02 01:55	EPA 8082	02-117-0816
PCB 1254	U		ug/kg	130	26-NOV-02 01:55	EPA 8082	02-117-0816
PCB 1260	U		ug/kg	130	26-NOV-02 01:55	EPA 8082	02-117-0816
Extraction Information:					25-NOV-02 00:00	EPA 3550	02-090-45
Surrogate Recovery:							
Tetrachloro-m-xylene	128		%				02-117-0816
Decachlorobiphenyl	165	D	%				02-117-0816

Analysis Comment:D - Diluted

Results calculated on a dry weight basis.

Approved by: Lab Director

Page 1 of 1
NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
= analyte was detected in the method or trip blank J = result estimated below the quantitation limit

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FLI
FRIEND LABORATORY I · N · C

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date: 03-DEC-2002

Lab Sample ID: L97224-3

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: P-C-SS-B-001
Description: COMPOSITE
Sampled On: 21-NOV-02 12:30 by CLIENT
Date Received: 22-NOV-02 14:45
P.O. No: N/A

Analysis Performed	Result		Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	66.7		%		27-NOV-02 13:32	CLP 3.0	02-123-8
EPA 8082							
PCB 1016	U		ug/kg	140	26-NOV-02 02:27	EPA 8082	02-117-0817
PCB 1221	U		ug/kg	290	26-NOV-02 02:27	EPA 8082	02-117-0817
PCB 1232	U		ug/kg	140	26-NOV-02 02:27	EPA 8082	02-117-0817
PCB 1242	U		ug/kg	140	26-NOV-02 02:27	EPA 8082	02-117-0817
PCB 1248	U		ug/kg	140	26-NOV-02 02:27	EPA 8082	02-117-0817
PCB 1254	U		ug/kg	140	26-NOV-02 02:27	EPA 8082	02-117-0817
PCB 1260	U		ug/kg	140	26-NOV-02 02:27	EPA 8082	02-117-0817
Extraction Information:					25-NOV-02 00:00	EPA 3550	02-090-45
Surrogate Recovery:							
Tetrachloro-m-xylene	127		%				02-117-0817
Decachlorobiphenyl	160	D	%				02-117-0817

[illegible]ysis Comment:D - Diluted

Results calculated on a dry weight basis.

Approved by: [signature]
Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC [signature]

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

Th[illegible]ormation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed [illegible]st [illegible]e services. Your samples will be discarded after 14 days unless we are advised otherwise.

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· N · C

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:03-DEC-2002

Lab Sample ID: L97224-4

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: P-B-S1-W-001
Description: COMPOSITE
Sampled On: 21-NOV-02 16:05 by CLIENT
Date Received: 22-NOV-02 14:45
P.O. No: N/A

Analysis Performed	Result		Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	71.8		%		27-NOV-02 13:32	CLP 3.0	02-123-8
EPA 8082							
PCB 1016	U		ug/kg	140	26-NOV-02 02:58	EPA 8082	02-117-0818
PCB 1221	U		ug/kg	270	26-NOV-02 02:58	EPA 8082	02-117-0818
PCB 1232	U		ug/kg	140	26-NOV-02 02:58	EPA 8082	02-117-0818
PCB 1242	U		ug/kg	140	26-NOV-02 02:58	EPA 8082	02-117-0818
PCB 1248	U		ug/kg	140	26-NOV-02 02:58	EPA 8082	02-117-0818
PCB 1254	U		ug/kg	140	26-NOV-02 02:58	EPA 8082	02-117-0818
PCB 1260	U		ug/kg	140	26-NOV-02 02:58	EPA 8082	02-117-0818
Extraction Information:					25-NOV-02 00:00	EPA 3550	02-090-45
Surrogate Recovery:							
Tetrachloro-m-xylene	127		%				02-117-0818
Decachlorobiphenyl	161	D	%				02-117-0818

[redacted]sis Comment:D - Diluted

Results calculated on a dry weight basis.

Approved by: [signature]
Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC [redacted]

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

[redacted]ormation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost [redacted]e services. Your samples will be discarded after 14 days unless we are advised otherwise.

FLI
FRIEND LABORATORY I · N · C

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:03-DEC-2002

Lab Sample ID: L97224-5

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: P-BSUB-S-N-001
Description: COMPOSITE
Sampled On: 21-NOV-02 15:50 by CLIENT
Date Received: 22-NOV-02 14:45
P.O. No: N/A

Analysis Performed	Result		Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	77.5		%		27-NOV-02 13:32	CLP 3.0	02-123-8
EPA 8082							
PCB 1016	U		ug/kg	130	26-NOV-02 03:29	EPA 8082	02-117-0819
PCB 1221	U		ug/kg	250	26-NOV-02 03:29	EPA 8082	02-117-0819
PCB 1232	U		ug/kg	130	26-NOV-02 03:29	EPA 8082	02-117-0819
PCB 1242	U		ug/kg	130	26-NOV-02 03:29	EPA 8082	02-117-0819
PCB 1248	U		ug/kg	130	26-NOV-02 03:29	EPA 8082	02-117-0819
PCB 1254	U		ug/kg	130	26-NOV-02 03:29	EPA 8082	02-117-0819
PCB 1260	U		ug/kg	130	26-NOV-02 03:29	EPA 8082	02-117-0819
Extraction Information:					25-NOV-02 00:00	EPA 3550	02-090-45
Surrogate Recovery:							
Tetrachloro-m-xylene	132		%				02-117-0819
Decachlorobiphenyl	164	D	%				02-117-0819

Analysis Comment:D - Diluted

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

The information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost of these services. Your samples will be discarded after 14 days unless we are advised otherwise.

FLI
FRIEND LABORATORY INC

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:03-DEC-2002

Lab Sample ID: L97224-6

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: P-BSUB-S-S-001
Description: COMPOSITE
Sampled On: 21-NOV-02 15:40 by CLIENT
Date Received: 22-NOV-02 14:45
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	77.3	%		27-NOV-02 13:32	CLP 3.0	02-123-8
EPA 8082						
PCB 1016	U	ug/kg	120	26-NOV-02 04:00	EPA 8082	02-117-0820
PCB 1221	U	ug/kg	250	26-NOV-02 04:00	EPA 8082	02-117-0820
PCB 1232	U	ug/kg	120	26-NOV-02 04:00	EPA 8082	02-117-0820
PCB 1242	U	ug/kg	120	26-NOV-02 04:00	EPA 8082	02-117-0820
PCB 1248	U	ug/kg	120	26-NOV-02 04:00	EPA 8082	02-117-0820
PCB 1254	U	ug/kg	120	26-NOV-02 04:00	EPA 8082	02-117-0820
PCB 1260	U	ug/kg	120	26-NOV-02 04:00	EPA 8082	02-117-0820
Extraction Information:				25-NOV-02 00:00	EPA 3550	02-090-45
Surrogate Recovery:						
Tetrachloro-m-xylene	122	%				02-117-0820
Decachlorobiphenyl	150	%				02-117-0820

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

[illegible]ormation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost [illegible]ese services. Your samples will be discarded after 14 days unless we are advised otherwise.

FLI
FRIEND LABORATORY I · N · C

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date: 03-DEC-2002

Lab Sample ID: L97224-7

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: P-B-SS-E-001
Description: COMPOSITE
Sampled On: 21-NOV-02 16:30 by CLIENT
Date Received: 22-NOV-02 14:45
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	77.7	%		27-NOV-02 13:32	CLP 3.0	02-123-8
EPA 8082						
PCB 1016	~~U~~ UJ	ug/kg	130	26-NOV-02 05:34	EPA 8082	02-117-0823
PCB 1221	U	ug/kg	250	26-NOV-02 05:34	EPA 8082	02-117-0823
PCB 1232	U	ug/kg	130	26-NOV-02 05:34	EPA 8082	02-117-0823
PCB 1242	U	ug/kg	130	26-NOV-02 05:34	EPA 8082	02-117-0823
PCB 1248	U	ug/kg	130	26-NOV-02 05:34	EPA 8082	02-117-0823
PCB 1254	U	ug/kg	130	26-NOV-02 05:34	EPA 8082	02-117-0823
PCB 1260	U	ug/kg	130	26-NOV-02 05:34	EPA 8082	02-117-0823
Extraction Information:				25-NOV-02 00:00	EPA 3550	02-090-45
Surrogate Recovery:						
Tetrachloro-m-xylene	102	%				02-117-0823
Decachlorobiphenyl	115	%				02-117-0823

MMB
4/24/03

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

...ormation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed ...st ...ese services. Your samples will be discarded after 14 days unless we are advised otherwise.

FLI
FRIEND LABORATORY I · N · C

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date: 03-DEC-2002

Lab Sample ID: L97224-8

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: P-B-S2-W-001
Description: COMPOSITE
Sampled On: 21-NOV-02 16:00 by CLIENT
Date Received: 22-NOV-02 14:45
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	76.6	%		27-NOV-02 13:32	CLP 3.0	02-123-8
EPA 8082						
PCB 1016	~~U~~ U	ug/kg	130	26-NOV-02 06:05	EPA 8082	02-117-0824
PCB 1221	U	ug/kg	260	26-NOV-02 06:05	EPA 8082	02-117-0824
PCB 1232	U	ug/kg	130	26-NOV-02 06:05	EPA 8082	02-117-0824
PCB 1242	U	ug/kg	130	26-NOV-02 06:05	EPA 8082	02-117-0824
PCB 1248	U	ug/kg	130	26-NOV-02 06:05	EPA 8082	02-117-0824
PCB 1254	U	ug/kg	130	26-NOV-02 06:05	EPA 8082	02-117-0824
PCB 1260	U	ug/kg	130	26-NOV-02 06:05	EPA 8082	02-117-0824
Extraction Information:				25-NOV-02 00:00	EPA 3550	02-090-45
Surrogate Recovery:						
Tetrachloro-m-xylene	109	%				02-117-0824
Decachlorobiphenyl	117	%				02-117-0824

TMB 4/29/03

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
= analyte was detected in the method or trip blank J = result estimated below the quantitation limit

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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date: 03-DEC-2002

Lab Sample ID: L97224-9

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 1920B
Origin: L-B-SS-W-004
Description: COMPOSITE
Sampled On: 21-NOV-02 16:15 by CLIENT
Date Received: 22-NOV-02 14:45
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	87.8	%		27-NOV-02 13:32	CLP 3.0	02-123-8
EPA 8082						
PCB 1016	~~U~~ UJ	ug/kg	110	26-NOV-02 06:36	EPA 8082	02-117-0825
PCB 1221	U	ug/kg	210	26-NOV-02 06:36	EPA 8082	02-117-0825
PCB 1232	U	ug/kg	110	26-NOV-02 06:36	EPA 8082	02-117-0825
PCB 1242	U	ug/kg	110	26-NOV-02 06:36	EPA 8082	02-117-0825
PCB 1248	U	ug/kg	110	26-NOV-02 06:36	EPA 8082	02-117-0825
PCB 1254	U	ug/kg	110	26-NOV-02 06:36	EPA 8082	02-117-0825
PCB 1260	U	ug/kg	110	26-NOV-02 06:36	EPA 8082	02-117-0825
Extraction Information:				25-NOV-02 00:00	EPA 3550	02-090-45
Surrogate Recovery:						
Tetrachloro-m-xylene	115	%				02-117-0825
Decachlorobiphenyl	131	%				02-117-0825

DMB 4/28/03

Results calculated on a dry weight basis.

FLI
FRIEND LABORATORY I · N · C

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FRIEND LABORATORY INC

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date: 03-DEC-2002

Lab Sample ID: L97224-10

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: L-B-S-E-004
Description: COMPOSITE
Sampled On: 21-NOV-02 16:10 by CLIENT
Date Received: 22-NOV-02 14:45
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	87.8	%		27-NOV-02 13:32	CLP 3.0	02-123-8
EPA 8082						
PCB 1016	~~U~~	ug/kg	110	26-NOV-02 07:07	EPA 8082	02-117-0826
PCB 1221	U	ug/kg	220	26-NOV-02 07:07	EPA 8082	02-117-0826
PCB 1232	U	ug/kg	110	26-NOV-02 07:07	EPA 8082	02-117-0826
PCB 1242	U	ug/kg	110	26-NOV-02 07:07	EPA 8082	02-117-0826
PCB 1248	U	ug/kg	110	26-NOV-02 07:07	EPA 8082	02-117-0826
PCB 1254	U	ug/kg	110	26-NOV-02 07:07	EPA 8082	02-117-0826
PCB 1260	U	ug/kg	110	26-NOV-02 07:07	EPA 8082	02-117-0826
Extraction Information:				25-NOV-02 00:00	EPA 3550	02-090-45
Surrogate Recovery:						
Tetrachloro-m-xylene	106	%				02-117-0826
Dec[illegible]robiphenyl	114	%				02-117-0826

MB 4/25/03

Results calculated on a dry weight basis.

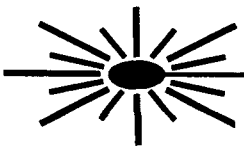
Approved by: [signature]
Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC JAR

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
= analyte was detected in the method or trip blank J = result estimated below the quantitation limit

[illegible]ormation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost for[illegible]ese services. Your samples will be discarded after 14 days unless we are advised otherwise.



ECT.CON INC.

Environmental and Computer
Technology Consultants

Support Documentation

CUSTOMER [redacted] # _____

CHAIN OF CUSTODY RECORD

11/20/02

PAGE 1 of 1

FLI FRIEND LABORATORY I • N • C

ONE RESEARCH CIRCLE
WAVERLY NY 14892-1532
Telephone (607) 565 3500
Fax (607) 565-4083

Untreated | Sodium thiosulfate | HCl pH <2 | Ascorbic acid & HCl pH <2 | HNO_3 pH <2 | H_2SO_4 pH <2 | NaOH pH >12 | NaOH & Zinc acetate pH >9 | Acetic Buffer pH <3 | Sodium sulfite

CLIENT: AAA ENVIRONMENTAL
ADDRESS: ONSITE
PHONE: FAX:

INVOICE TO:
ADDRESS: ←

Sample Site: HORSEHEADS
P.O. #

PROJECT NO. / NAME
19208
HORSEHEADS

COPY TO:
ADDRESS:

97127

DATE & TIME OF SAMPLE COLLECTION	SAMPLE DESCRIPTION	NUMBER OF CONTAINERS	ANALYSES / TESTS REQUESTED	SAMPLE NUMBER (LAB USE ONLY)
11/20/02 @ 0930	N-B-S-W-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's	-1
11/20/02 @ 0935	N-B-SS-W-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's	-2
11/20/02 @ 0940	N-C-SS-B1-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's	-3
11/20/02 @ 0945	N-C-SS-B2-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's	-4

RELINQUISHED BY	DATE /TIME	ACCEPTED BY	DATE/TIME	NOTES TO LABORATORY
SAMPLER TAS A. SCHRECKENGOST	11/20/02 1600		11/20/02 1600	Rush Project
	11/21/02 8:50	Tone Jones	11/21/02 854	

SUSPECTED CONTAMINATION LEVEL
NONE SLIGHT MODERATE HIGH (please circle)

CUSTOME[redacted]E # _____ 11/20/02

CHAIN OF C[redacted]TODY RECORD

PAGE [redacted]

FLI FRIEND LABORATORY I • N • C

ONE RESEARCH CIRCLE
WAVERLY NY 14892-1532
Telephone (607) 565 3500
Fax (607) 565-4083

Untreated | Sodium thiosulfate | HCl pH <2 | Ascorbic acid & HCl pH <2 | HNO_3 pH <2 | H_2SO_4 pH <2 | NaOH pH >12 | NaOH & Zinc acetate pH >9 | Acetic Buffer pH <3 | Sodium sulfite

CLIENT: AAA ENVIRONMENTAL
ADDRESS: ONSITE
PHONE: FAX:

INVOICE TO:
ADDRESS: ←

Sample Site: HORSEHEADS

P.O. #

PROJECT NO. / NAME
19208
HORSEHEADS

COPY TO:
ADDRESS:

97127

DATE & TIME OF SAMPLE COLLECTION	SAMPLE DESCRIPTION	NUMBER OF CONTAINERS	ANALYSES / TESTS REQUESTED	SAMPLE NUMBER
11/20/02 @ 0950	N-C-SS-133-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's	LAB USE ONLY 5
		Description: Grab Composite Other Matrix: DW WW MW Soil Air Other		
		Description: Grab Composite Other Matrix: DW WW MW Soil Air Other		
		Description: Grab Composite Other Matrix: DW WW MW Soil Air Other		

RELINQUISHED BY	DATE /TIME	ACCEPTED BY	DATE/TIME	NOTES TO LABORATORY
SAMPLER A. Schreckengost	11/20/02 1600		11/20/02 1600	
	11/21/02 850	Tom Jones	11/21/02 854	

SUSPECTED CONTAMINATION LEVEL
NONE SLIGHT MODERATE HIGH (please circle)

CUSTOMER [illegible] E # _____ 11/20/02

CHAIN OF CUSTODY RECORD

PAGE 1 of 1

FLI FRIEND LABORATORY I • N • C
ONE RESEARCH CIRCLE
WAVERLY NY 14892-1532
Telephone (607) 565 3500
Fax (607) 565-4083

CLIENT: AAA ENVIRONMENTAL
ADDRESS: ONSITE
PHONE: FAX:

INVOICE TO:
ADDRESS:

Sample Site: HORSEHEADS

P.O. #

PROJECT NO. / NAME
19208

COPY TO:
ADDRESS:

97127

DATE & TIME OF SAMPLE COLLECTION	SAMPLE DESCRIPTION	NUMBER OF CONTAINERS (Untreated; Sodium thiosulfate; HCl pH <2; Ascorbic acid & HCl pH <2; HNO_3 pH <2; H_2SO_4 pH <2; NaOH pH >12; NaOH & Zinc acetate pH >9; Acetic Buffer pH <3; Sodium sulfite)	ANALYSES / TESTS REQUESTED	LAB SAMPLE NUMBER (LAB USE ONLY)
11/20/02 @ 1006	L-B-S-W-002	Y Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's	-6
11/20/02 @ 1005	L-B-SS-E-002	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's	-7
		Description: Grab Composite Other Matrix: DW WW MW Soil Air Other		
		Description: Grab Composite Other Matrix: DW WW MW Soil Air Other		

RELINQUISHED BY	DATE /TIME	ACCEPTED BY	DATE/TIME	NOTES TO LABORATORY
SAMPLER RAF A. Schreckenhost	11/20/02 1600		11/20/02 1600	
	11/21/02 830	Tom Jones	11/21/02 854	

SUSPECTED CONTAMINATION LEVEL
NONE SLIGHT MODERATE HIGH (please circle)

CUSTOMER # _____ 11/20/02

CHAIN OF CUSTODY RECORD

PAGE 1 of 1

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FRIEND LABORATORY I • N • C

ONE RESEARCH CIRCLE
WAVERLY NY 14892-1532
Telephone (607) 565 3500
Fax (607) 565-4083

Untreated | Sodium thiosulfate | HCl pH <2 | Ascorbic acid & HCl pH <2 | HNO_3 pH <2 | H_2SO_4 pH <2 | NaOH pH >12 | NaOH & Zinc acetate pH >9 | Acetic Buffer pH <3 | Sodium sulfite

CLIENT: AAA ENVIRONMENTAL
ADDRESS: ONSITE
PHONE: FAX:

INVOICE TO:
ADDRESS: ←

Sample Site: HORSEHEADS

P.O. #

PROJECT NO. / NAME

COPY TO:
ADDRESS:

9 7127

DATE & TIME OF SAMPLE COLLECTION	SAMPLE DESCRIPTION	NUMBER OF CONTAINERS	ANALYSES / TESTS REQUESTED	SAMPLE NUMBER
11/20/02 @ 1430	K-13-SS-W-005	4 Description: Grab Composite Other Matrix: DW WW MW Soil Air Other	PCB's	LAB USE ONLY -8, -9, -10
11/20/02 @ 1440	K-13-SS-E-003	4 Description: Grab Composite Other Matrix: DW WW MW Soil Air Other	PCB's	-11
		Description: Grab Composite Other Matrix: DW WW MW Soil Air Other		
		Description: Grab Composite Other Matrix: DW WW MW Soil Air Other		

RELINQUISHED BY	DATE /TIME	ACCEPTED BY	DATE/TIME	NOTES TO LABORATORY
SAMPLER A. SCHRECKENGOST AS	11/20/02 1600 11/21/02 830		11/20/02 1600 11/21/02 854	

SUSPECTED CONTAMINATION LEVEL
NONE SLIGHT MODERATE HIGH (please circle)

CUSTOMER # _____ 11/22/02

CHAIN OF CUSTODY RECORD

PAGE 1 of 1

FLI FRIEND LABORATORY I • N • C

ONE RESEARCH CIRCLE
WAVERLY NY 14892-1532
Telephone (607) 565 3500
Fax (607) 565-4083

Untreated	Sodium thiosulfate	HCl pH <2	Ascorbic acid & HCl pH <2	HNO_3 pH <2	H_2SO_4 pH <2	NaOH pH >12	NaOH & Zinc acetate pH >9	Acetic Buffer pH <3	Sodium sulfite

CLIENT: AAA ENVIRONMENTAL
ADDRESS: ONSITE
PHONE: FAX:

INVOICE TO:
ADDRESS:

Sample Site:

P.O. #

PROJECT NO. / NAME
19208
HORSEHEADS

COPY TO:
ADDRESS:

97224

DATE & TIME OF SAMPLE COLLECTION	SAMPLE DESCRIPTION	NUMBER OF CONTAINERS	ANALYSES / TESTS REQUESTED	LAB USE ONLY SAMPLE NUMBER
11/21/02 @ 1545	P-B-SS-W-001	Description: Grab Composite Other Matrix: DW WW MW Soil Air Other	PCB's	-1
11/21/02 @ 1635	P-B-S-E-001	X Description: Grab Composite Other Matrix: DW WW MW Soil Air Other	PCB's	-2
11/21/02 @ 1230	P-C-SS-B-001	X Description: Grab Composite Other Matrix: DW WW MW Soil Air Other	PCB's	-3
11/21/02 @ 1605	P13-S1-W-001	X Description: Grab Composite Other Matrix: DW WW MW Soil Air Other	PCB's	-4

RELINQUISHED BY	DATE /TIME	ACCEPTED BY	DATE/TIME	NOTES TO LABORATORY
SAMPLER: P.A. SCHRECKENGOST	11/21/02		11/22/02	
	11/22/02 2pm	Tom Jones	11/22/02 245	

SUSPECTED CONTAMINATION LEVEL
NONE SLIGHT MODERATE HIGH (please circle)

CUSTOMER [redacted] E # _____ 11/22/02

CHAIN OF CUSTODY RECORD

PAGE 2 [redacted]

FLI FRIEND LABORATORY I • N • C

ONE RESEARCH CIRCLE
WAVERLY NY 14892-1532
Telephone (607) 565 3500
Fax (607) 565-4083

Untreated	Sodium thiosulfate	HCl pH <2	Ascorbic acid & HCl pH <2	HNO_3 pH <2	H_2SO_4 pH <2	NaOH pH >12	NaOH & Zinc acetate pH >9	Acetic Buffer pH <3	Sodium sulfite

CLIENT: AA ENVIRONMENTAL
ADDRESS: ONSITE
PHONE: FAX:

INVOICE TO:
ADDRESS: ←

Sample Site:

P.O. #

PROJECT NO. / NAME
19208

COPY TO:
ADDRESS:

97294

DATE & TIME OF SAMPLE COLLECTION	SAMPLE DESCRIPTION	NUMBER OF CONTAINERS	ANALYSES / TESTS REQUESTED	SAMPLE NUMBER
11/21/02 @ 1550	P-B_{SUB}-S-N-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's	LAB USE ONLY -5
11/21/02 @ 1540	P-B_{SUB}-S-S-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's	-6
11/21/02 @ 1630	P-B-SS-E-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's	-7
11/21/02 @ 1600	P-B-SZ-W-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's	-8

RELINQUISHED BY	DATE /TIME	ACCEPTED BY	DATE/TIME	NOTES TO LABORATORY
SAMPLER FAJ A. SCHECKENGOST	11/21/02		11/22/02 1200	6
	11/22/02 2 pm		11/22/02 245	SUSPECTED CONTAMINATION LEVEL NONE SLIGHT MODERATE HIGH (please circle)

CUSTOMER # 11/22/02

CHAIN OF CUSTODY RECORD

PAGE 1 of 1

FLI FRIEND LABORATORY I • N • C
ONE RESEARCH CIRCLE
WAVERLY NY 14892-1532
Telephone (607) 565 3500
Fax (607) 565-4083

Untreated	Sodium thiosulfate	HCl pH <2	Ascorbic acid & HCl pH <2	HNO_3 pH <2	H_2SO_4 pH <2	NaOH pH >12	NaOH & Zinc acetate pH >9	Acetic Buffer pH <3	Sodium sulfite

CLIENT: AAA ENVIRONMENTAL
ADDRESS: ONSITE
PHONE: FAX:

INVOICE TO:
ADDRESS:

Sample Site:

P.O. #

PROJECT NO. / NAME
14208
HORSEHEADS

COPY TO:
ADDRESS:

97224

DATE & TIME OF SAMPLE COLLECTION	SAMPLE DESCRIPTION	NUMBER OF CONTAINERS	ANALYSES / TESTS REQUESTED	SAMPLE NUMBER (LAB USE ONLY)
11/21/02 @ 1615	L-B-SS-W-~~004~~ ~~003~~ BL -004	X Description: Grab Composite Other Matrix: DW WW MW Soil Air Other	PCB's	-9
11/21/02 @ 1610	L-B-S-E-~~004~~ ~~003~~ BL -004	X Description: Grab Composite Other Matrix: DW WW MW Soil Air Other	PCB's	-10
		Description: Grab Composite Other Matrix: DW WW MW Soil Air Other		
		Description: Grab Composite Other Matrix: DW WW MW Soil Air Other		

RELINQUISHED BY	DATE /TIME	ACCEPTED BY	DATE/TIME	NOTES TO LABORATORY
SAMPLER: RAS A. SCHREECKENGOST	11/21/02		11/22/02 12W	
	11/22/02 8pm	Lone Jones	11/22/02 245	

SUSPECTED CONTAMINATION LEVEL
NONE SLIGHT MODERATE HIGH (please circle)

Laboratory Case Narrative

FLI
FRIEND LABORATORY I · N · C

Laboratory Validation and Usability Assessment

Project: **AAA Environmental**
Viacom/Horseheads 19208
Sampled November 20 & 21, 2002

The data reported in this package have been reviewed for compliance with QC acceptance limits as specified in the method cited for each analysis.

These statistical limits are typically based on historical laboratory data for a given sample matrix, and will not exceed any default limits specified by the method. CLP acceptance limits are also considered.

The following Quality Control operations are considered in the validation of reported results:

Holding times, surrogate recovery, spiked sample recovery, duplicates/spiked duplicate precision, tuning criteria, internal standard variation, continuing calibration variation, reference (check) sample recovery, and instrument, method, trip and field blanks. The appropriate frequency for each operation is also considered.

Every effort has been made to report data that is compliant with the EPA methodology cited for each analysis. In cases where the laboratory was unable to meet all method requirements prior to sample expiry, either due to the nature of the sample or other technical difficulty, results are reported with qualification with the understanding that qualified results may not be suitable for compliance purposes. The internal technical review is based on the USEPA Contract Laboratory Program *National Functional Guidelines for Organic Review* (EPA 540/R-94/012, February 1994) and *National Functional Guidelines for Inorganic Review* (EPA 540/R-94/013, February 1994).

Validation

Nineteen samples were received on November 21 & 22, 2002, with ice. The temperature, as received, was 4°C and 6°C

PCB

The site samples were analyzed by EPA method 8082 for PCBs with a two-microliter injection volume.

RTX-CLPesticides 1 and RTX-CLPesticides 2 capillary columns, 0.32 mm ID, with purge packed inlets and electronic pressure control are used on an Hewlett-Packard 5890 series II with dual ECD and an HP 7673 autosampler with simultaneous injection. Data is collected with HP Chemstation software and processed by Thruput with Target software. If a peak is detected within the retention time window of a target compound, second-column confirmation is performed. Column RTX-CLPesticides 2 was used for the primary analysis. Column RTX-CLPesticides 1 was used to confirm only the fingerprint, not the quantitation. Form 10B's are provided in order to verify pattern recognition.

PCB 1254 was detected in site sample N-C-SS-B2-001. Second-column analysis confirmed the presence of this target. No PCBs were detected in the associated method blank.

Surrogate recoveries were within limits.

Site sample K-B-SS-W-005 was spiked in duplicate. Spike recoveries were within acceptance limits.

Precision, as indicated by RPD, was within acceptance limits.

Two blank spikes were associated with the site samples. Blank spike recoveries were within acceptance limits.

No analytical difficulties were encountered.

Usability Assessment

All reported data were found to be valid and usable within the EPA National Functional Validation guidelines except those that were qualified in this Laboratory Validation.

Laboratory validation and
Usability assessment conducted by: Elizabeth A Keator

Date: March 31, 2003

Elizabeth A. Keator
Quality Assurance

Worksheets

					YES	NO	N/A
N-B-S-W-001	97127-1	P-B-SS-W-001	97224-1				
N-B-SS-W-001	-2	R-B-S-G-001	2	P-B-SSG-001			-7
N-C-SS-B1-001	-3	R-C-SS-B-001	3	P-B-S2-W-001			-8
N-C-SS-B2-001	-4	PTB-S1-W-001	4	L-B-SS-W-004			9
N-C-SS-B3-001	-5	P-Bsub-S-N-001	5	L-B-S-G-004			10
L-B-S-W-002	6	P-Bsub-S-S-001	6				
L-B-SS-G-002	7						

PACKAGE COMPLETENESS AND DELIVERABLES

CASE NUMBER: — SDG# 97127 / 97224

LAB: Friend Laboratory Inc. SITE: Viacom / Horseheads

1.0 Data Completeness and Deliverables

		YES	NO	N/A
1.1	Has all the data been submitted in CLP deliverable format?	☑		
1.2	Have any missing deliverables been received and added to the data package?		✓	

ACTION: Call lab for explanation/resubmittal of any missing deliverables. If lab cannot provide them, note the effect on review of the data in the reviewer narrative.

2.0 Cover Letter, SDG Narrative

		YES	NO	N/A
2.1	Is a laboratory narrative or cover letter present?	☑		
2.2	Are the case number and/or SDG number contained in the narrative or cover letter?	☑		

3.0 Data Validation Checklist

		YES	NO	N/A
3.1	Does this data package contain:			
	Water data?		✓	
	Waste data?		✓	
	Soil/solid data?	✓		

YES NO N/A

POLYCHLORINATED BIPHENYLS

1.0 Traffic Reports and Laboratory Narrative

1.1 Are traffic report and chain-of-custody forms present for all samples? ☑ ___ ___

ACTION: If no, contact lab for replacement of missing or illegible copies.

1.2 Do the traffic reports, chain-of-custody forms or SDG narrative indicate any problems with sample receipt, condition of the samples, analytical problems or special circumstances affecting the quality of the data? ___ ☑ ___

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50%-90% water, all data should be qualified as estimated, "J." If a soil sample, other than TCLP, contains more than 90% water, non detects shall be qualified as unusable, "R."

ACTION: If samples were not iced or if the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10° C), flag all positive results "J" and all non-detects "UJ".

Cooler Temp? 4°C. 4+4

2.0 Holding Times

2.1 Have any PCB technical holding times, determined from date of collection to date of extraction, been exceeded? ___ ☑ ___

Water and waste samples for PCB analysis must be extracted within 7 days of the date of collection. Extracts must be analyzed within 40 days of the date of extraction. Soils and solid samples must be extracted within 14 days of collection and analyzed within 40 days of extraction.

97127 Collected 11/20/02 Extracted 11/22/02 Analyzed 11/23/02

97224 Collected 11/21/02 Extracted 11/25/02. Analyzed 11/26/02.

ACTION: If technical holding times are exceeded, flag all positive results as estimated, "J," and sample quantitation limits "UJ" and document in the narrative that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon re-analysis, the reviewer must use

	YES	NO	N/A

professional judgement to determine the reliability of the data and the effects of additional storage on the sample results. At a minimum, all the data should at least be qualified "J", but the reviewer may determine that non-detects are unusable,"R."

3.0 Surrogate Recovery (Form II) NA for false + / false - review.

3.1 Were the recoveries of tetrachloro-m-xylene (TCMX) and decachlorobiphenyl (DCB) presented on CLP Surrogate Recovery Summary forms (Form II), or equivalent, for each of the following matrices?

a.	Water/Waste	[ ]	___	✓
b.	Soil/Solid	[ ]	___	✓

3.2 Are all the PCB samples listed on the appropriate surrogate recovery form for each of the following matrices?

a.	Water	[ ]	___	✓
b.	Waste	[ ]	___	✓
c.	Soil/Solid	[ ]	___	✓

ACTION: Call lab for explanation/resubmittals. If missing deliverables are unavailable, document the effect in the data assessment.

3.3 Did the laboratory provide their developed in-house Surrogate recoveries? [ ] ___ ✓

ACTION: If no, use 70 -130% recovery to qualify in section 3.4 below.

3.4 Were surrogate recoveries of TCMX or DCB outside of the laboratory-established upper (UCL) or lower (LCL) control limits for any sample or blank? ___ [ ] ✓

ACTION: Circle all outliers in red.

ACTION: No qualification is done if surrogates are diluted out. If recovery for <u>both</u> surrogates is

YES NO N/A

below the LCL, but above 10%, flag all results for that sample "J". If recovery is < 10% for either surrogate, qualify positive results "J" and flag non-detects "R". If recovery is above the UCL for both surrogates qualify positive values "J".

Note: DCB is used when PCBs are determined as Aroclors. DCB is the internal standard when determining PCB congeners and TCMX the surrogate.

3.5 Were surrogate retention times (RT) within the windows established during the initial 5-point analysis? [ ] ____ ✓

ACTION: If the RT limits are not met, the analysis may be qualified unusable (R) for that sample on the basis of professional judgement. However, flag positive hits as estimate (J) if confirmed by GC/MS analysis.

3.6 Are there any transcription/calculation errors between raw data and Form II? ___ [ ] ✓

ACTION: If large errors exist, call lab for explanation/resubmittal. Make any necessary corrections and document the effect in data assessments.

4.0 Laboratory Control Sample NA for Soil / Solid - review

4.1 Are raw data and percent recoveries present for all Laboratory Control samples as required by Method 8000B (section 8.5) and Method 8082 (section 8.4.2)? [ ] ___ ✓

Verify that QC check samples were extracted and analyzed by the same procedures used for the actual samples.

ACTION: If any Laboratory Control Sample data are missing, call the lab for explanation /resubmittals. Make note in the data assessment.

NOTE: For aqueous samples, an additional QC check sample must be prepared and analyzed when any analyte in a matrix spike fails the required acceptance criteria (see section 5.3 below). The additional QC check sample must contain each analyte that failed in the MS analysis.

YES NO N/A

Note: When the results for matrix spike analysis indicates a problem due to sample matrix effects, the LCS results are used to verify the laboratory can perform the analysis in a clean sample.

4.2 Were Laboratory Control Samples analyzed at the required concentration for all analytes of interest as specified in Method 8000B (sec.8.5)? [ ] ___ ✓

ACTION: If Laboratory Control Samples were not analyzed at the required concentration or the required frequency, make note in the data assessment and use professional judgement to determined the affect on the data.

4.3 Were the LCS recoveries within the laboratory's in-house per cent recoveries (if not available, use 70 - 130%) [ ] ___ ✓

4.4 If no, were Laboratory Control Samples re-analyzed? [ ] ___ ✓

Note: Corrective action must be taken when one or more of the analytes of interest fail the QC acceptance criteria (Method 8000B, section 8.7.4)

ACTION: If QC check samples were not re-analyzed, or a general system problem is indicated by repeated failure to meet the QC acceptance criteria specified in the method, make note in the data assessment and use professional judgement to determine the effect on the data.

5.0 Matrix Spikes (Form III) NA for Pobe + / Pobe - review

5.1 Are all data for one matrix spike and matrix duplicate (unspiked) pair (MS/Dup) or matrix spike/matric spike duplicate (MS/MSD)present and complete for each matrix Method 8082(section 8.4.1)? [ ] ___ ✓

NOTE: For soil and waste samples showing detectable amounts of organics, the lab may substitute replicate samples in place of the matrix spike (see Method 8000B-40, section 8.5.3)).

5.2 Have MS/Dup or MS/MSD results been summarized on modified CLP Form III? [ ] ___ ✓

ACTION: If any data are missing take action as specified in section 3.2 above.

5.3 Were matrix spikes analyzed at the required frequency

	YES	NO	N/A

for each of the following matrices? (One MS/Dup, MS/MSD must be performed for every 20 samples of similar matrix or concentration level. Laboratories analyzing one to ten samples per month are required to analyze at least one MS per month (Method 8000B-39 (section 8.5)).

a.	Water	[ ]	___	✓
b.	Waste	[ ]	___	✓
c.	Soil/Solid	[ ]	___	✓

ACTION: If any MS/Dup or MS/MSD data are missing, take the action specified in 3.2 above.

5.4 Were the 70 - 130% recoveries used to compare the matrix spike recoveries, or did the lab use the optional QC acceptance criteria discussed in Method 8000B-40(section 8.5.3.1)?

List the criteria used and make note in data assessment.

Criteria used _____

5.5 Was the matrix spike prepared at the proper spike concentration? (Method 8000B, section 8.5.1-8.5.2) [ ] ___ ✓

For aqueous organic extractable, the spike concentration should be prepared according options in: Method 8000B-40, (section 8.5.1 and 8.5.2).

ACTION: No action is taken based on MS or replicate data alone. However, using informed professional judgement, the data reviewer may use the matrix spike or laboratory replicate results in conjunction with other QC criteria and determine the need for some qualification of the data. In some instances it may be determined that only the replicate or spiked samples are affected. Alternatively, the data may suggest that the laboratory is having a systematic problem with one or more analytes, thereby affecting all associated samples.

6.0 Blanks (Form IV)

	YES	NO	N/A
6.1 Was reagent blank data reported on CLP equivalent Method Blank Summary form(s) (Form IV)?	☑		
6.2 Frequency of Analysis: Has a reagent blank been analyzed for every 20 (or less) samples of similar matrix or concentration or each extraction batch?	☑		

ACTION: If any blank data are missing, take action as specified above (section 3.2) . If blank data is not available, reject (R) all associated positive data. However, using professional judgement, the data reviewer may substitute field blank data for missing method blank data.

6.3 Chromatography: review the blank raw data - chromatograms, quant reports or data system printouts. Is the chromatographic performance (baseline stability) for each instrument acceptable for PCBs?	☑		

ACTION: Use professional judgement to determine the effect on the data.

7.0 Contamination

NOTE: "Water blanks", "distilled water blanks" and "drilling water blanks" are validated like any other sample and are not used to qualify the data. Do not confuse them with the other QC blanks discussed below.

7.1 Do any method/instrument/reagent/cleanup blanks have positive results for PCBs? When applied as described below, the contaminant concentration in these blanks are multiplied by the sample Dilution Factor and corrected for % moisture when necessary.		☑	
7.2 Do any field/rinse blanks have positive PCB results? Not part of data set or false + false - review		☐	✓

ACTION: Prepare a list of the samples associated with each of the contaminated blanks. (Attach a separate sheet.)

NOTE: All field blank results associated to a particular group of samples (may exceed one per case or one per day) may be used to qualify data.

YES NO N/A

Blanks may not be qualified because of contamination in another blank. Field blanks must be qualified for surrogate, or calibration QC problems.

ACTION: Follow the directions in the table below to qualify sample results due to contamination. Use the largest value from all the associated blanks.

Sample conc > EDL but < 5 x blank	Sample conc < EDL & is < 5 x blank value	Sample conc > EDL & > 5 x blank value
Flag sample result with a "U"	Report EDL & qualify "U"	No qualification is needed

NOTE: If gross blank contamination exists, all data in the associated samples should be qualified as unusable (R).

7.3 Are there field/rinse/equipment blanks associated with every sample? Not applicable to samples as part of false + false - review [ ] — ✓

ACTION: For low level samples, note in data assessment that there is no associated field/rinse/equipment blank. Exception: samples taken from a drinking water tap do not have associated field blanks.

8.0 GC Apparatus and Materials — NA for false + / false - review

8.1 Was the proper gas chromatographic capillary column used for the analysis of PCBs?

Action: Check raw data, instrument logs, or contact the lab to determine what type of columns were used. (Method 8082, section 4.2) [ ] — ✓

8.2 Indicate the specific type of narrow bore or wide bore (.53 mm ID, fused silica GC columns, such as DB-608 and DB-1701 or equivalent).

column 1: _____

column 2: _____

ACTION: Note any changes to the suggested materials in section 8.1 above in the data assessment. Also note the impact (positive or negative) such changes have on the analytical results.

	YES	NO	N/A

9.0 Calibration and GC Performance

9.1 Are the following Gas Chromatograms and Data Systems Printouts for both columns present for all samples, blanks, MS, replicates?

a.	Samples	[✓]	___	___
b.	All blanks	[✓]	___	___
c.	Matrix spike samples	[ ]	___	✓
d.	5 pt. initial calibration standards	[✓]	___	___
e.	calibration verification standards	[✓]	___	___
f.	Laboratory Control samples (LCS)	[ ]	___	✓

NA for false + false - neg.

ACTION: If no, take action specified in 3.2 above.

9.2 Are data summary forms (containing calibration factors or response factors) for the initial 5 pt. calibration and daily calibration verification standards present and complete for each column and each analytical sequence? [✓] ___ ___

(not for 2nd column for IDC)

Note: Calibration Aroclor mixtures other than 1016/1260 may be used (as per approved project QA plan)

NOTE: If internal standard calibration procedure is used (Method 8000B-15(section 7.4.2.2)), then response factors must be used for %RSD calculations and compound quantitation. If, external standard calibration procedures are used (Method 8000B-16 (section 7.4.2.1)), then calibration factors must be used. The internal standard approach is highly recommended for PCB congener analysis.

ACTION: If any data are missing or it cannot be determined how the laboratory calculated calibration factors or response factors, contact the lab for explanation/resubmittals. Make necessary corrections and note any problems in the data assessment.

9.3 Are there any transcription/calculation errors between raw data and data summary forms? ___ [✓] ___

ACTION: If large errors exist, call lab for

YES NO N/A

explanation/resubmittal, make necessary corrections and document the effect in data assessments.

9.4 Are standard retention time (RT) windows for each PCB peak of interest presented on modified CLP summary forms? [✓] ___ ___

ACTION: If any data are missing, or it cannot be determined how RT windows were calculated, call the lab for explanation/resubmittals. Note any problems in the data assessment.

NOTE: Retention time windows for all PCBs are established using retention times from three calibration standards analyzed during the entire analytical sequence (Method 8000B, section 7.6).

Best results are obtained using retention times which span the entire sequence; i.e., using the calibration verification/continuing calibration standards analyzed every 12 hours.

no - use average value for multi-stds. and center value for single-stds. ±0.1. – QL.

9.5 Were RT windows on the confirmation column established using three standards as described above? [ ] [✓] ___

NOTE: RT windows for the confirmation column should be established using a 3 pt. calibration, preferably spanning the entire analytical sequence as described in 9.4 above. If RT windows on one column are tighter than the other, this may result in false negatives when attempting to identify compounds in the samples.

ACTION: Note potential problems, if any, in the data assessment.

9.6 Do all standard retention times in each level of the initial 5 pt. calibrations for PCBs fall within the windows established during the initial calibration sequence? [✓] ___ ___

ACTION i: If no, all samples in the entire analytical sequence are potentially affected. Check to see if three standard spanning the entire sequence were used to obtained RT windows. If the lab used three standards from the 5 pt., RT windows may be too tight. If so, RT windows should be recalculated as per Method 8081B-15 (section 7.4.6).

ii. Alternatively, check to see if the chromatograms contain peaks

YES NO N/A

within an expanded window surrounding the expected retention times.

If no peaks are found and the surrogates are visible, non-detects are valid. If peaks are present but cannot be discerned through pattern recognition or by using revised RT windows, qualify all positive results and non-detects as unusable, "R".

9.7 Has the linearity criteria for the initial calibration standards been satisfied for both columns? (% RSD must be < 20.0% for all analytes). >0.99 ☑ ___ ___

ACTION: If no, qualify all associated positive results generated during the entire analytical sequence "J" and all non-detects "UJ". When RSD > 90%, flag all non-detect results for that analyte "R" (unusable).

9.8 Does the calibration verification/continuing Calibration standard contain the PCB peaks of interest, analyzed on each working day, prior to sample analyses (Method 8082, sections 7.6.2)? ☑ ___ ___

9.9 Has a calibration verification/continuing calibration standard been analyzed after every 10 samples and at the end of each analytical sequence (Method 8082, section 7.6.2) ☑ ___ ___

ACTION: If no, take action as specified in section 3.2 above.

- use average and not peak Apeak.

9.10 Has the percent difference (%D) exceeded ± 15% for any PCB analyte in any calibration verification/ Continuing calibration standard? ☑ ___ ___

9.11 Has a new 5 pt. initial calibration curve been generated for those PCB analytes which failed in the calibration verification/continuing calibration standard (8000B, section 7.7.3), and all samples which followed the out-of-control calibration verification/standard continuing calibration Standard? ☐ ✓ ___

ACTION: If the %D for any analyte exceeded the ± 15% criterion and the instrument was not recalibrated for those analytes, qualify positive results for all associated samples (those which followed the out-of-control standard) "J" and sample quantitation limits "UJ". If the %D was > 90%

10/16
11/23/02 2:25 - 28.4
11/26/02 5:02 16.8
+J/-UJ for 1016
97127 1; 2, 3, 5
97204 1, 6, 9, 10

	YES	NO	N/A
for any analyte, qualify non-detects "R", unusable.			
9.12 Have retention time (RT) windows been properly calculated for each analyte of interest (Method 8000B, section 7.6), using RTs from the associated calibration verification/continuing standard?	[√]	___	___

used ICAL quant from ICAL.

ACTION: If no, take action specified in section 3.2 above

9.13 Do all standard retention times for each calibration verification/continuing calibration standard fall within the windows established during the initial calibration sequence?	[√]	___	___
9.14 Do all standard retention times for each mid-concentration standard (analyzed after every 10 samples) fall within the <u>daily</u> RT windows	[√]	___	___

ACTION: If the answer to either 9.13 or 9.14 above is no, check the chromatograms of all samples which followed the last in-control standard. All samples analyzed after the last in-control standard must be re-injected, if initial analysis indicated the presence of the specific analyte that exceeded the retention time criteria. If samples were not re-analyzed, document under Contract Non-compliance in the Data Assessment.

Reviewer has two options to determine how to qualify questionable sample data. First option is to determine if possible peaks are present within daily retention time window. If no possible peaks are found, non-detects are valid. If possible peaks are found (or interference), qualify positive hits as presumptively present "NJ" and non-detects are rejected "R". Second option is to use the ratio of the retention time of the analyte over the retention time of either surrogate. The passing criteria is ± 0.06 RRT units of the RRT of the standard component. Reject "R" all questionable analytes exceeding criteria, and "NJ" all other positive hits.

For any multi-response analytes, retention time windows should be used but analyst and reviewer should rely primarily on pattern recognition or use option 2 specified in paragraph above.

9.15 Are there any transcription/calculation errors

	YES	NO	N/A
between raw data and data summary forms?	___	[✓]	___

ACTION: If large errors exists, call lab for explanation/resubmittal, make any necessary corrections and document the effect in data assessments under "Conclusions".

10.0 Analytical Sequence Check (Form VIII-PEST)

	YES	NO	N/A
10.1 Have all samples been listed on CLP Form VIII or equivalent, and are separate forms present for each column?	[✓]	___	___

ACTION: If no, take action specified in 3.2 above.

	YES	NO	N/A
10.2 Was the proper analytical sequence followed for each initial calibration and subsequent analyses?	[✓]	___	___

ACTION: If no, use professional judgement to determine the severity of the effect on the data and qualify it accordingly. Generally, the effect is negligible unless the sequence was grossly altered or the calibration was also out of limits.

	YES	NO	N/A
10.3 Were the TCMX/DCB surrogate RTs for the samples within the mean surrogate RT from the initial calibration?	[✓]	___	___

Action: If no, see "Action" in section 9.14 above

11.0 Extraction Techniques for Sample Preparation NA for field + lab - review

Method 8081B permits a variety of extraction techniques to be used for sample preparation. Which extraction procedure was used?

	YES	NO	N/A
1. Aqueous samples:			
1. Separatory funnel (Method 3510)	[ ]	___	___
2. Continuous liquid-liquid extraction (Method 3520)	[ ]	___	___
3. Solid phase extraction (Method 3535)	[ ]	___	___
4. Other	[ ]	___	___
2. Solid samples:			
1. Soxhlet (Method 3540)	[ ]	___	___

	YES	NO	N/A
2. Automated Soxhlet (Method 3541)	[ ]	___	✓
3. Pressurized fluid (Method 3545)	[ ]	___	✓
4. Microwave extraction (Method 3546)	[ ]	___	✓
5. Ultrasonic extraction (Method 3550)	[ ]	___	✓
6. Supercritical fluid (Method 3562)	[ ]	___	✓
7. Other	[ ]	___	___

11.1 Extract Cleanup - Efficiency Verification (Form IX) NA per false + / false - review

11.1.1 Method 8082 (section 7.2) references method 3660 (sulfur) and 3665A (sulfuric acid) to use for Cleaning extracts. Were one or both method used? [ ] ___ ✓

ACTION: If no, take action specified in 3.2 above. If data suggests cleanup was not performed, make note in the data assessment.

NOTE: Method 3620A, Florisil, may be used per approved project QA plan. The method does not list which analytes and surrogate(s) to use to verify column efficiency. The reviewer must check project plan to verify method used as well as the correct PCB list. If not stated or available, use the CLP listing or accept what the laboratory used.

11.2 Are all samples listed on modified CLP PCBs Florisil/Cartridge Check Form? [ ] ___ ✓

ACTION: If no, take action specified in 3.2 above.

11.3 Was GPC Cleanup (method 3640A) performed? [ ] ___ ✓

NOTE: GPC cleanup is not required and is optional. The reviewer should check Project Plan to verify requirement.

11.4 Were the same PCB analytes used in calibration used to check the efficiency of the cleanup procedures? [ ] ___ ✓

11.5 Are percent recoveries (% R) of the PCBs and surrogate compounds used to check the efficiency of the cleanup procedures within lab's in-house QC limits (use 70-130% if not available) [ ] ___ ✓

70-130% for GPC calibration? [ ] ___ ✓

YES NO N/A

Qualify only the analyte(s) which fail the recovery criteria as follows:

ACTION: If % R are < 80%, qualify positive results "J" and quantitation limits "UJ". Non-detects should be qualified "R" if zero %R was obtained for PCBs. Use professional judgement to qualify positive results if recoveries are greater than the upper limit.

12.0 PCB Identification

12.1 Has CLP Form X or equivalent, showing **retention time** data for positive results on the two GC columns, been completed for every sample in which a PCB was detected? [✓] ___ ___

ACTION: If no, take action specified in 3.2 above, or compile a list comparing the retention times for all sample hits on the two columns.

12.2 Are there any transcription/calculation errors between raw data and data summary forms (initial calibration summaries, calibration verification summaries, analytical sequence summaries, GPC and cleanup verification forms)? ___ [✓] ___

ACTION: If large errors exist, call lab for explanation/resubmittal, make necessary corrections and note error in the data assessment.

12.3 Are retention times (RT) of sample compounds within the established RT windows for both columns/analyses? [✓] ___ ___

ACTION: Qualify as unusable (R) all positive results which were not confirmed by second GC column analysis. Also qualify "R", unusable, all positive results not within RT windows unless associated standard compounds are similarly biased. The reviewer should use professional judgement to assign an appropriate quantitation limit.

12.4 Check chromatograms for false negatives, especially if RT windows on each column were established differently.
Were there any false negatives? ___ [✓] ___

YES NO N/A

ACTION: Use professional judgement to decide if the compound should be reported. If there is reason to believe that peaks outside retention RT windows should be reported, make corrections to data summary forms (Form I) and note in data assessment.

12.5 Was GC/MS confirmation provided when sample concentration was sufficient (> 10 ug/ml) in the final extract? [ ] — ✓

ACTION: Indicate with red pencil which Form I results were confirmed by GC/MS and also note in data assessment.

12.6 Is the percent difference (%D) calculated for the positive sample results on the two GC columns <25.0%? [ ] ✓ —

NOTE: The method requires quantitation from one column. The second column is to confirm the presence of an analyte. It is the reviewer's responsibility to verify from the project plan what the lab was required to report. If the lab was required to report concentrations from both columns, continue with validation for % Difference. If required, but not reported, either contact the lab for results or calculate the concentrations from the calibration. If not required, skip this section. Document actions in Data Assessment.

97127-4.
34.6
Aroclor 1254

ACTION: If the reviewer finds neither column shows interference for the positive hits, the data should be qualified as follows:

% Difference	Qualifier
0-25%	none
26-70%	"J"
71-100%	"NJ"
>100% *	"R"
100-200% (Interference detected)**	"NJ"
>50% (PCBs value is <CRQL)	"U"

When the reported PCBs value is <CRQL and the %D is >50%, raise the value to the CRQL and qualify with "U" (non-detect).

* Check the chromatogram. If pattern is confirmed qualify "J". If pattern is mixed, has interference, or the PCB cannot be positively determined due to weathering, qualify "JN".

YES NO N/A

If PCB can not be confirmed, qualify the PCB as "R".

** When the reported %D is 100-200% but interference is detected in either column, qualify the data with "NJ".

13.0 Compound Quantitation and Reported Detection Limits

13.1 Are there any transcription/calculation errors in Form I results? Check at least two positive values. Were any errors found? — ☑ —

NOTE: Single-peak PCBs results can be checked for rough agreement between quantitative results obtained on the two GC columns. The reviewer should use professional judgement to decide whether a much larger concentration obtained on one column versus the other indicates the presence of an interfering compound. If an interference is suspected, the lower of the two values should be reported and qualified according to section 12.6 above. This necessitates a determination of an estimated concentration on the confirmation column. The narrative should indicate that the presence of interferences has led to the quantitation of the second column confirmation results.

13.2 Are the EDLs (Estimated Detection Limits) adjusted to reflect sample dilutions and, for soils, % moisture? ☑ — —

ACTION: If errors are large, call lab for explanation/resubmittal, make any necessary corrections and document effect in data assessments.

ACTION: When a sample is analyzed at more than one dilution, the lowest EDLs are used (unless a QC exceedance dictates the use of the higher EDL data from the diluted sample analysis). Replace concentrations that exceed the calibration range in the original analysis by crossing out the value on the original Form I and substituting it with data from the analysis of diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form I's that should not be used, including any in the summary package.

97,27 - 1
120 ug/kg.

$10 \times \frac{10}{10.462} \times .1$

$\frac{}{76.8 \times 1000}$

$= 1.24 \times 10^{-5}$

$= 120 \frac{ug}{kg}$

	YES	NO	N/A

ACTION: EDLs affected by large, off-scale peaks should be qualified as unusable, "R". If the interference is on-scale, the reviewer can provide a modified EDL flagged "UJ" for each affected compound.

14.0 Chromatogram Quality

14.1 Were baselines stable?	[✓]	___	___
14.2 Were any electropositive displacement (negative peaks) or unusual peaks seen?	___	[✓]	___

ACTION: Note all system performance problems in the data assessment.

15.0 Field Duplicates NA for fake + / fake - review.

15.1 Were any field duplicates submitted for PCB analysis?	[ ]	___	✓

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between field duplicate results must be addressed in the reviewer narrative. However, if large differences exist, the identity of the field duplicates is questionable. An attempt should be made to determine the proper identification of field duplicates.

4 C

PESTICIDE METHOD BLANK SUMMARY

NYSDEC SAMPLE NO.

MB 42

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Lab Sample ID: MB 42 Lab File ID: 02-117-0770

Matrix: (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N Date Extracted: 11/22/02

Date Analyzed (1) : 11/23/02 Date Analyzed (2): _____

Time Analyzed (1) : 23:17 Time Analyzed (2): _____

Instrument ID (1) : HP1 Instrument ID (2): HP3

GC Column (1): RTX-CLPESTICIDES2 ID 0.32 (mm)

GC Column (2): RTX-CLPESTICIDES1 ID 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, AND MSB

	NYSDEC SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	N-B-S-W-001	L97127-1	11/23/02	
02	N-B-SS-W-001	L97127-2	11/23/02	
03	N-C-SS-B1-001	L97127-3	11/23/02	
04	N-C-SS-B3-001	L97127-5	11/23/02	
05	L-B-S-W-002	L97127-6	11/23/02	
06	L-B-SS-E-002	L97127-7	11/23/02	
07	K-B-SS-W-005	L97127-8	11/23/02	
08	K-B-SS-W-005 MS	L97127-9, -8MS	11/23/02	
09	K-B-SS-W-005 MSD	L97127-10, -8MSD	11/23/02	
10	K-B-SS-E-003	L97127-11	11/23/02	
11	QC 42	QC 42	11/26/02	
12	N-C-SS-B2-001	L97127-4	11/26/02	11/26/02
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

00007

4 C

PESTICIDE METHOD BLANK SUMMARY

NYSDEC SAMPLE NO.

MB 45

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Lab Sample ID: MB 45 Lab File ID: 02-117-0813

Matrix: (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N Date Extracted: 11/25/02

Date Analyzed (1) : 11/26/02 Date Analyzed (2): _____

Time Analyzed (1) : 0022 Time Analyzed (2): _____

Instrument ID (1) : HP1 Instrument ID (2): HP3

GC Column (1): RTX-CLPESTICIDES2 ID 0.32 (mm)

GC Column (2): RTX-CLPESTICIDES1 ID 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, AND MSB

	NYSDEC SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	P-B-SS-W-001	L97224-1	11/26/02	
02	P-B-S-E-001	L97224-2	11/26/02	
03	P-C-SS-B-001	L97224-3	11/26/02	
04	P-B-S1-W-001	L97224-4	11/26/02	
05	P-BSUB-S-N-001	L97224-5	11/26/02	
06	P-BSUB-S-S-001	L97224-6	11/26/02	
07	P-B-SS-E-001	L97224-7	11/26/02	
08	P-B-S2-W-001	L97224-8	11/26/02	
09	L-B-SS-W-004	L97224-9	11/26/02	
10	L-B-S-E-004	L97224-10	11/26/02	
11	QC 45	QC 45	11/26/02	
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB42

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1121

Matrix: (soil/water) SOIL Lab Sample ID: MB42

Sample wt/vol: 10.9 (g/mL) G Lab File ID: E2980770

% Moisture: 0 decanted: (Y/N) N Date Received: 11/21/2

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 11/22/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/22/2

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
12674-11-2	Aroclor-1016	9.2	~~0.01~~	U
1104-28-2	Aroclor-1221	18	0.02	U
11141-16-5	Aroclor-1232	9.2	0.01	U
53469-21-9	Aroclor-1242	9.2	0.01	U
11097-69-1	Aroclor-1254	9.2	0.01	U
11096-82-5	Aroclor-1260	9.2	0.01	U
----------	Aroclor-1248	9.2	~~0.01~~	U

eaR
3/31/03

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980770.D
Lab Smp Id: MB42 Client Smp ID: MB42
Inj Date : 22-NOV-2002 23:17
Operator : CPW Inst ID: hp1.i
Smp Info : MB42
Misc Info : WG33714,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 25-Nov-2002 08:50 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL

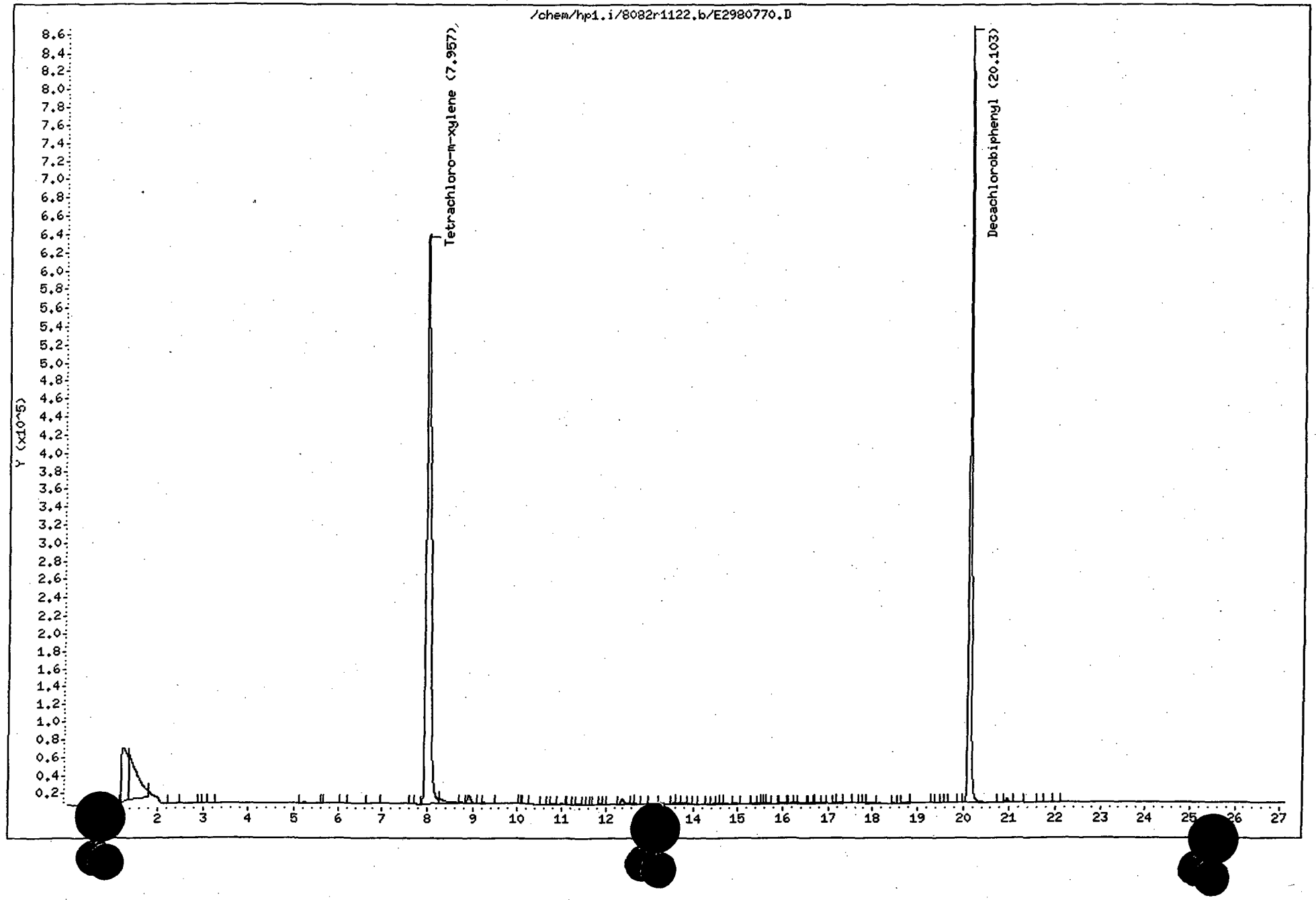
Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	1.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.890	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	100.000	Total Solid

				CONCENTRATIONS ON-COL	FINAL		
	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #:		
	7.957	7.980	-0.023	4124732	481.610	442.23		
$ 29 Decachlorobiphenyl						CAS #:		
	20.103	20.127	-0.024	2666674	455.108	417.90		

Data File: /chem/hp1.i/8082r1122.b/E2980770.D
Date : 22-NOV-2002 23:17
Client ID: MB42
Sample Info: MB42
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32



Friend Inc.

Data File: /chem/hp1.i/8082r1122.b/E2980770.D
Method: /chem/hp1.i/8082r1122.b/8082_PCBsec.M
Sample Info: MB42
Misc Info: WG33714,02-117
Analysis Date: 22-NOV-2002 23:17
Sample Matrix: SOIL
File Number: 0770

Dilution Factor:	1.0000
Sample Weight:	10.8904
Final Volume:	10.0000
Total Solid :	100.0000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	0.00
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	96.32%
Decachlorobiphenyl	91.02%

Analyst: CPW
Report Date: 11/25/2002 09:06

Supervisor: _____
Date: 11/25/02

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB45

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1121

Matrix: (soil/water) SOIL Lab Sample ID: MB45

Sample wt/vol: 10.8 (g/mL) G Lab File ID: E2980813

% Moisture: 0 decanted: (Y/N) N Date Received: 11/22/2

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 11/25/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/26/2

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
12674-11-2	Aroclor-1016	9.3	~~0.01~~	U
1104-28-2	Aroclor-1221	19.	0.02	U
11141-16-5	Aroclor-1232	9.3	0.01	U
53469-21-9	Aroclor-1242	9.3	0.01	U
11097-69-1	Aroclor-1254	9.3	0.01	U
11096-82-5	Aroclor-1260	9.3	0.01	U
----------	Aroclor-1248	9.3	~~0.01~~	U

eaR
3/31/03

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980813.D
Lab Smp Id: MB45 Client Smp ID: MB45
Inj Date : 26-NOV-2002 00:22
Operator : CPW Inst ID: hp1.i
Smp Info : MB45
Misc Info :
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 26-Nov-2002 07:58 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	1.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.791	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	100.000	Total Solid

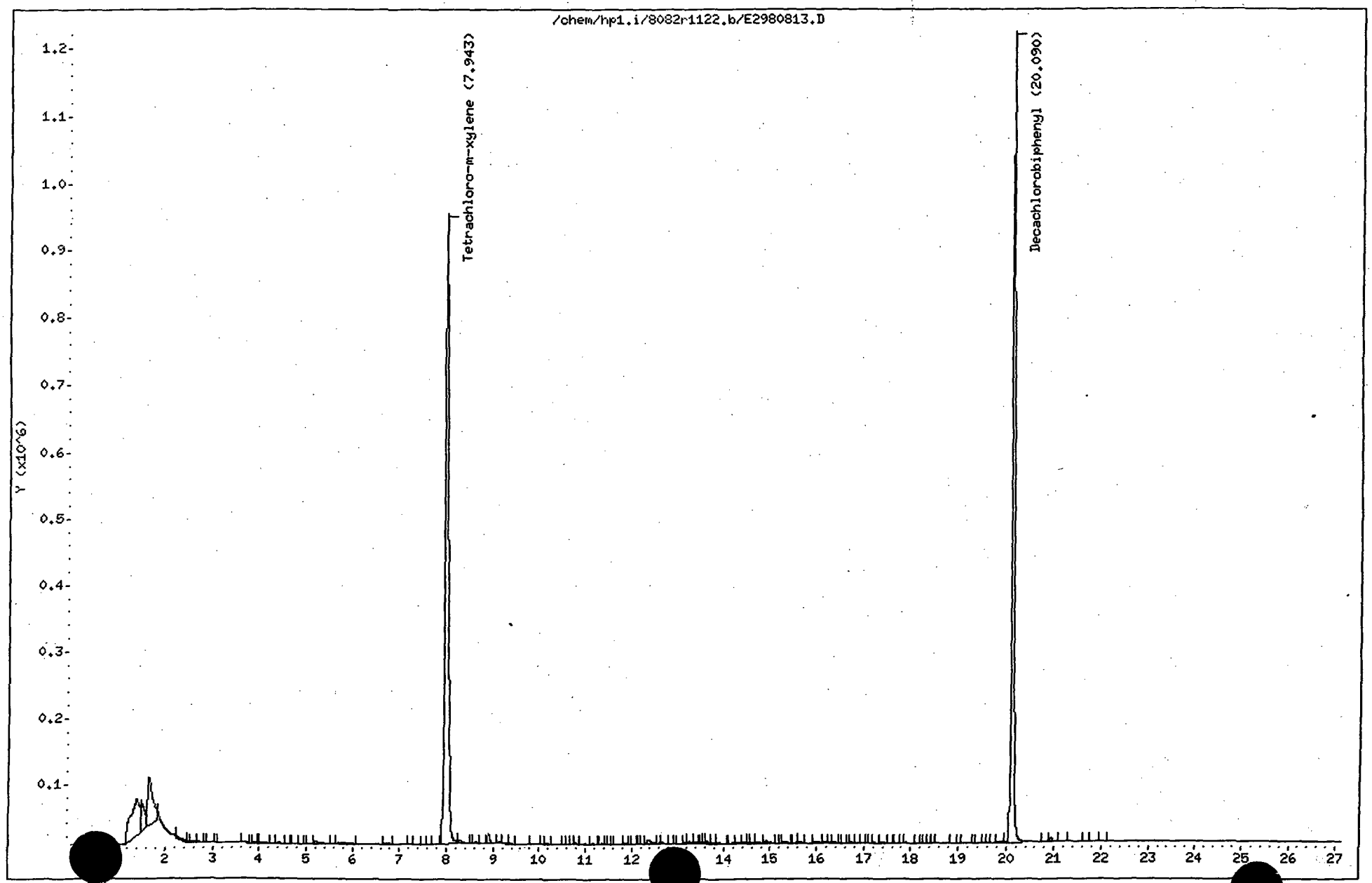
	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene							CAS #:	
	7.943	7.980	-0.037	4391838	513.275	475.64		
$ 29 Decachlorobiphenyl							CAS #:	
	20.090	20.127	-0.037	3678835	630.346	584.13		

00220

Data File: /chem/hp1.i/8082r1122.b/E2980813.D
Date : 26-NOV-2002 00:22
Client ID: MB45
Sample Info: MB45
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00221



Friend Inc.

Data File: /chem/hp1.i/8082r1122.b/E2980813.D
Method: /chem/hp1.i/8082r1122.b/8082_PCBsec.M
Sample Info: MB45
Misc Info:
Analysis Date: 26-NOV-2002 00:22
Sample Matrix: SOIL
File Number: 0813

Dilution Factor:	1.0000
Sample Weight:	10.7912
Final Volume:	10.0000
Total Solid :	100.0000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	0.00
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	102.66%
Decachlorobiphenyl	126.07%

Analyst: CPW
Report Date: 11/26/2002 08:05

Supervisor:_____
Date:_____

00222

01/12/02	RTX-CLPEST 1		UG/L ON COLUMN			IDL	UG/L IN WATER	CRDL (UG/L)
Instrument#3	Run #1	Run #2	Run #3	Average	SD	SD*6.95	IDL	
PCB 1016	99.14	100.48	98.05	99.22	1.21	8.44	0.08437	1.0
PCB 1221	200.36	193.87	196.82	197.02	3.25	22.5824	0.22582	2.0
PCB 1232	97.97	96.72	99.17	97.95	1.22	8.51	0.08506	1.0
PCB 1242	99.14	100.08	101.34	100.19	1.10	7.67	0.07673	1.0
PCB 1248	101.82	101.01	99.76	100.86	1.04	7.22	0.0722	1.0
PCB 1254	99.63	100.10	99.13	99.62	0.48708	3.39	0.03	1.0
PCB 1260	100.74	100.76	101.10	100.87	0.19949	1.39	0.01	1.0

10/22/02	RTX-CLPEST 2		UG/L ON COLUMN			IDL	UG/L IN WATER	CRDL (UG/L)
Instrument#1	Run #1	Run #2	Run #3	Average	SD	SD*6.95	IDL	
PCB 1016	8.72	6.71	6.44	7.29	1.24513	8.65	0.08654	1.0
PCB 1221	17.30	21.26	23.39	20.65	3.08802	21.46	0.21462	2.0
PCB 1232	16.48	13.15	14.83	14.82	1.66496	11.57	0.11571	1.0
PCB 1242	10.01	10.71	11.10	10.61	0.56	3.86	0.04	1.0
PCB 1248	13.05	12.31	10.92	12.09	1.08241	7.52	0.07523	1.0
PCB 1254	14.63	15.76	15.48	15.29	0.59	4.08657	0.04	1.0
PCB 1260	20.45	21.22	20.65	20.77	0.39707	2.76	0.03	1.0

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L97127-1

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1121

Matrix: (soil/water) SOIL Lab Sample ID: L97127-1

Sample wt/vol: 10.5 (g/mL) G Lab File ID: E2980777

% Moisture: ~~0~~ 23.2 decanted: (Y/N) N Date Received: 11/21/2

~~-~~ eaR 3/31/03

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 11/22/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/23/2

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
12674-11-2	Aroclor-1016	120	~~0.12~~	U
1104-28-2	Aroclor-1221	250	0.25	U
11141-16-5	Aroclor-1232	120	0.12	U
53469-21-9	Aroclor-1242	120	0.12	U
11097-69-1	Aroclor-1254	120	0.12	U
11096-82-5	Aroclor-1260	120	0.12	U
----------	Aroclor-1248	120	~~0.12~~	U

eaR 3/31/03

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980777.D
Lab Smp Id: L97127-1 Client Smp ID: L97127-1
Inj Date : 23-NOV-2002 02:56
Operator : CPW Inst ID: hp1.i
Smp Info : L97127-1
Misc Info : WG33714,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 25-Nov-2002 08:50 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

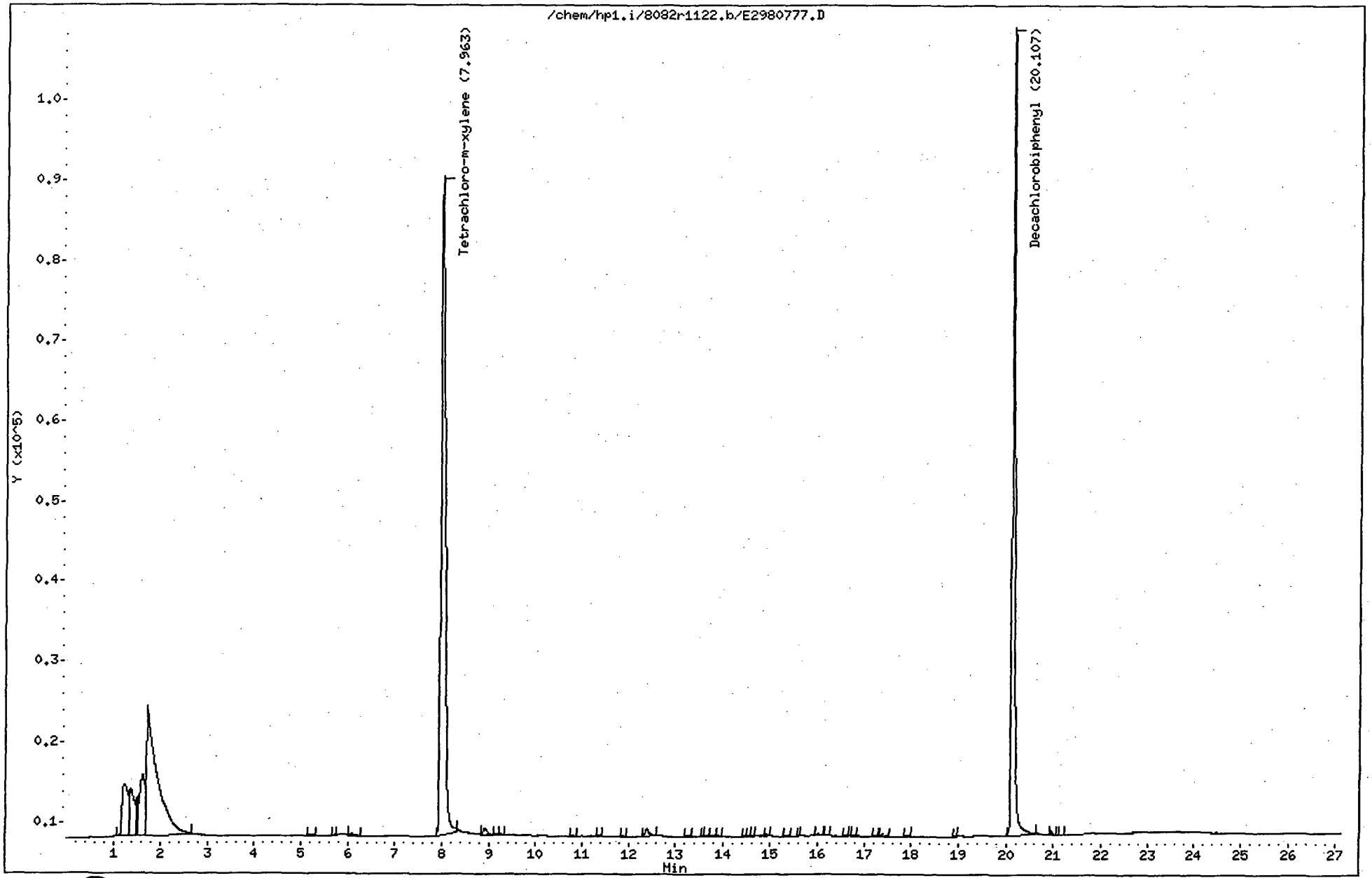
Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.462	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	76.800	Total Solid

				CONCENTRATIONS ON-COL	FINAL		
	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #:		
	7.963	7.980	-0.017	505480	52.5475	654.01		
$ 29 Decachlorobiphenyl						CAS #:		
	20.107	20.127	-0.020	371038	57.6579	717.61		

Data F[redacted] /chem/hp1.i/8082r1122.b/E2980777.D
Date [redacted]OV-2002 02:56
Client [redacted] L97127-1
Sample Info: L97127-1
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

[redacted]strument: hp1.i
Operator: CPW
Column diameter: 0.32

21000



Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980778.D
Lab Smp Id: L97127-2 Client Smp ID: L97127-2
Inj Date : 23-NOV-2002 03:28
Operator : CPW Inst ID: hp1.i
Smp Info : L97127-2
Misc Info : WG33714,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 25-Nov-2002 08:50 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

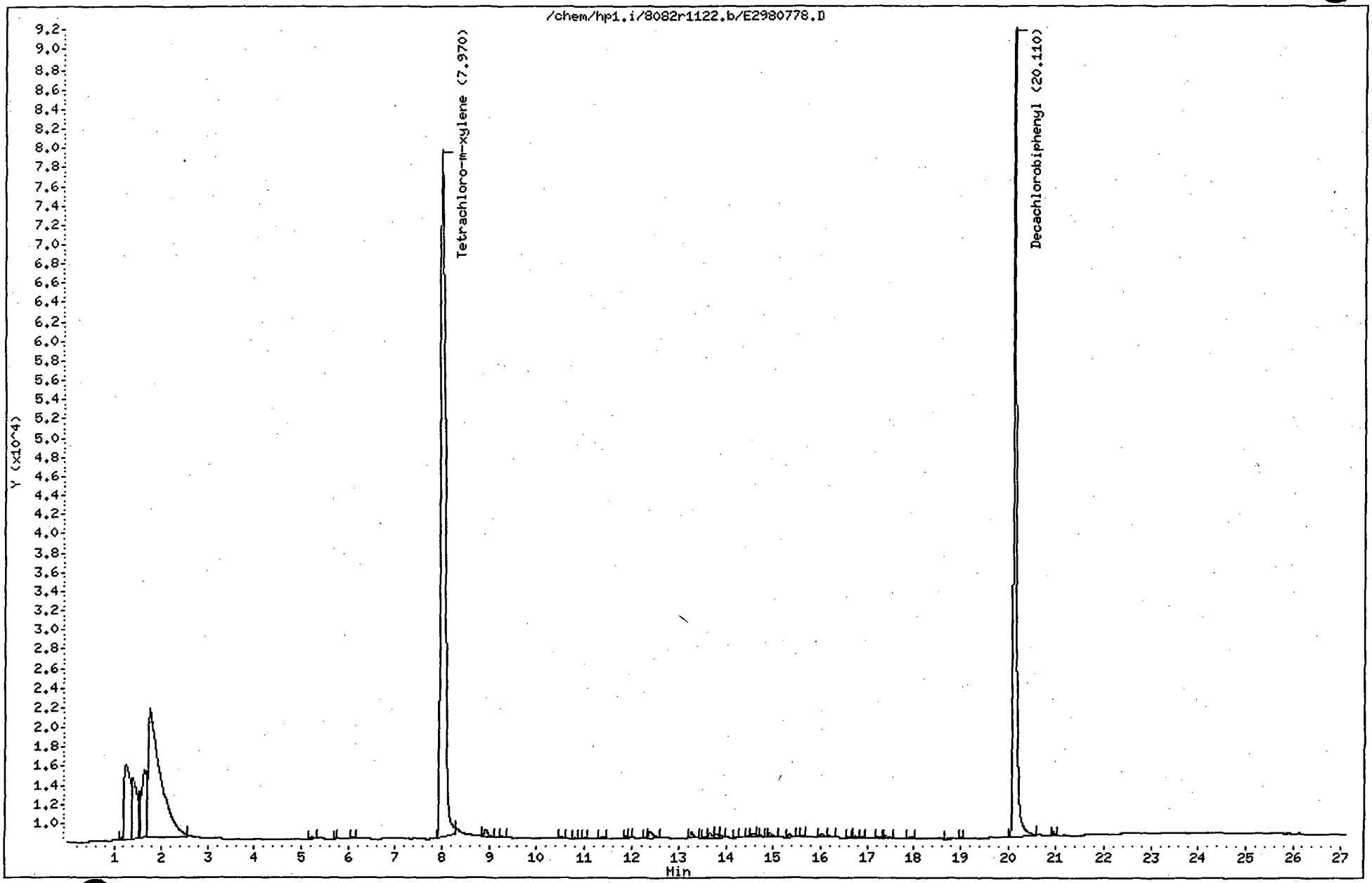
Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.549	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	78.300	Total Solid

				CONCENTRATIONS ON-COL	FINAL		
	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$	1 Tetrachloro-m-xylene					CAS #:		
	7.970	7.980	-0.010	491386	50.8767	615.96		
$	29 Decachlorobiphenyl					CAS #:		
	20.110	20.127	-0.017	326694	49.9805	605.11		

Data File: /chem/hp1.i/8082r1122.b/E2980778.D
Date: [redacted]OV-2002 03:28
Client ID: L97127-2
Sample Info: L97127-2
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

91000



Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980779.D
Lab Smp Id: L97127-3 Client Smp ID: L97127-3
Inj Date : 23-NOV-2002 03:59
Operator : CPW Inst ID: hp1.i
Smp Info : L97127-3
Misc Info : WG33714,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 25-Nov-2002 08:50 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.339	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	90.500	Total Solid

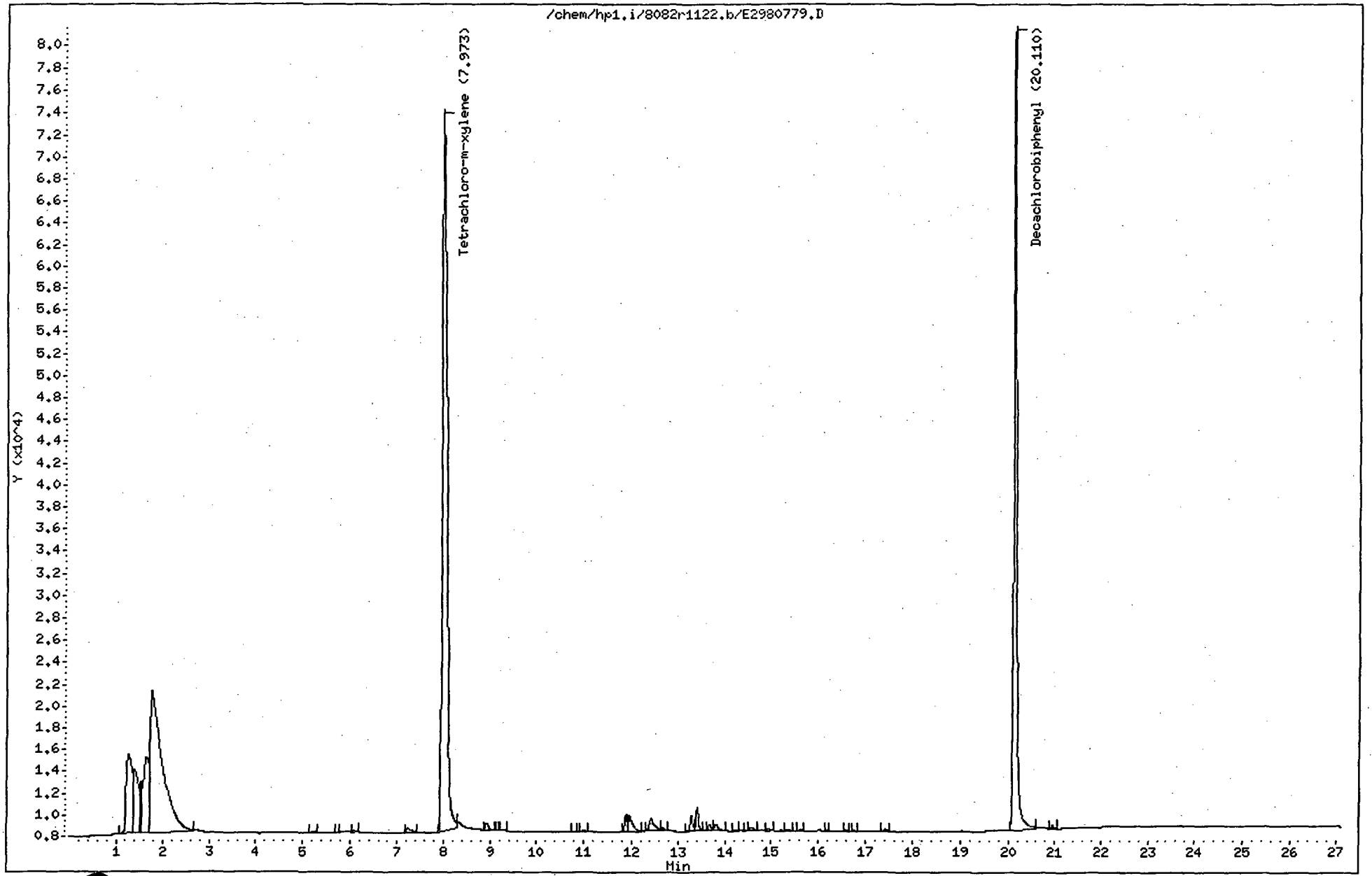
	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene							CAS #:	
	7.973	7.980	-0.007	444389	45.3052	484.20		
$ 29 Decachlorobiphenyl							CAS #:	
	20.110	20.127	-0.017	289439	43.5305	465.24		

00019

Data Fi /chem/hp1.i/8082r1122.b/E2980779.D
Date DV-2002 03:59
Client L97127-3
Sample Info: L97127-3
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

strument: hp1.i
Operator: CPW
Column diameter: 0.32

00020



Friend Inc.

Data File: /chem/hp1.i/8082r1122.b/E2980779.D
Method: /chem/hp1.i/8082r1122.b/8082_PCBsec.M
Sample Info: L97127-3
Misc Info: WG33714,02-117
Analysis Date: 23-NOV-2002 03:59
Sample Matrix: SOIL
File Number: 0779

Dilution Factor:	10.0000
Sample Weight:	10.3388
Final Volume:	10.0000
Total Solid :	90.5000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	0.00
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	90.61%
Decachlorobiphenyl	87.06%

Analyst: CPW
Report Date: 11/25/2002 09:06

Supervisor: _____
Date: 11/25/2

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L97127-4

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1121

Matrix: (soil/water) SOIL Lab Sample ID: L97127-4

Sample wt/vol: 10.4 (g/mL) G Lab File ID: E2980837

% Moisture: ~~0~~ 11.9 decanted: (Y/N) N Date Received: 11/21/2

eaR 3/31/03

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 11/22/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/26/2

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
12674-11-2	Aroclor-1016	110	~~0.11~~	U
1104-28-2	Aroclor-1221	220	0.22	U
11141-16-5	Aroclor-1232	110	0.11	U
53469-21-9	Aroclor-1242	110	~~0.11~~	U
11097-69-1	Aroclor-1254		483.59	
11096-82-5	Aroclor-1260	110	~~0.11~~	U
----------	Aroclor-1248	110	0.11	U

eaR 3/31/03

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980837.D
Lab Smp Id: L97127-4 Client Smp ID: L97127-4
Inj Date : 26-NOV-2002 14:08
Operator : CPW Inst ID: hp1.i
Smp Info : L97127-4
Misc Info : WG33714,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 27-Nov-2002 08:38 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.358	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	88.100	Total Solid

Real.
Amt = -17.133977 + (38380 x 2.467 x10.
= 77.5495.

Final = 77.5495 x10 x 10/10.358 x.1 / 88.1x10
= 8.498x10^-4
= 849.82 ug/kg.

CONCENTRATIONS

RT	EXP RT	DLT RT	RESPONSE	ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
7.960	7.957	0.003	574648	60.7474	665.68		
$ 29 Decachlorobiphenyl					CAS #:		
20.100	20.110	-0.010	467013	74.2744	813.91		
25 Aroclor-1254					CAS #: 11097-69-1		
13.263	13.260	0.003	38380	77.5375	849.67	80.00- 120.00	100.00(H)
13.650	13.650	0.000	28973	65.2265	714.77	70.58- 110.58	75.49
14.917	14.920	-0.003	16487	39.7550	435.64	50.45- 90.45	42.96
15.327	15.333	-0.006	13324	21.2843	233.24	62.38- 102.38	34.72
16.000	16.020	-0.020	10537	16.8498	184.64	115.83- 155.83	27.45
Average of Peak Concentrations =					483.59		

Confirmation
HP 3 CLP1
11/26/02
Le8809F
CPW 11/27/02

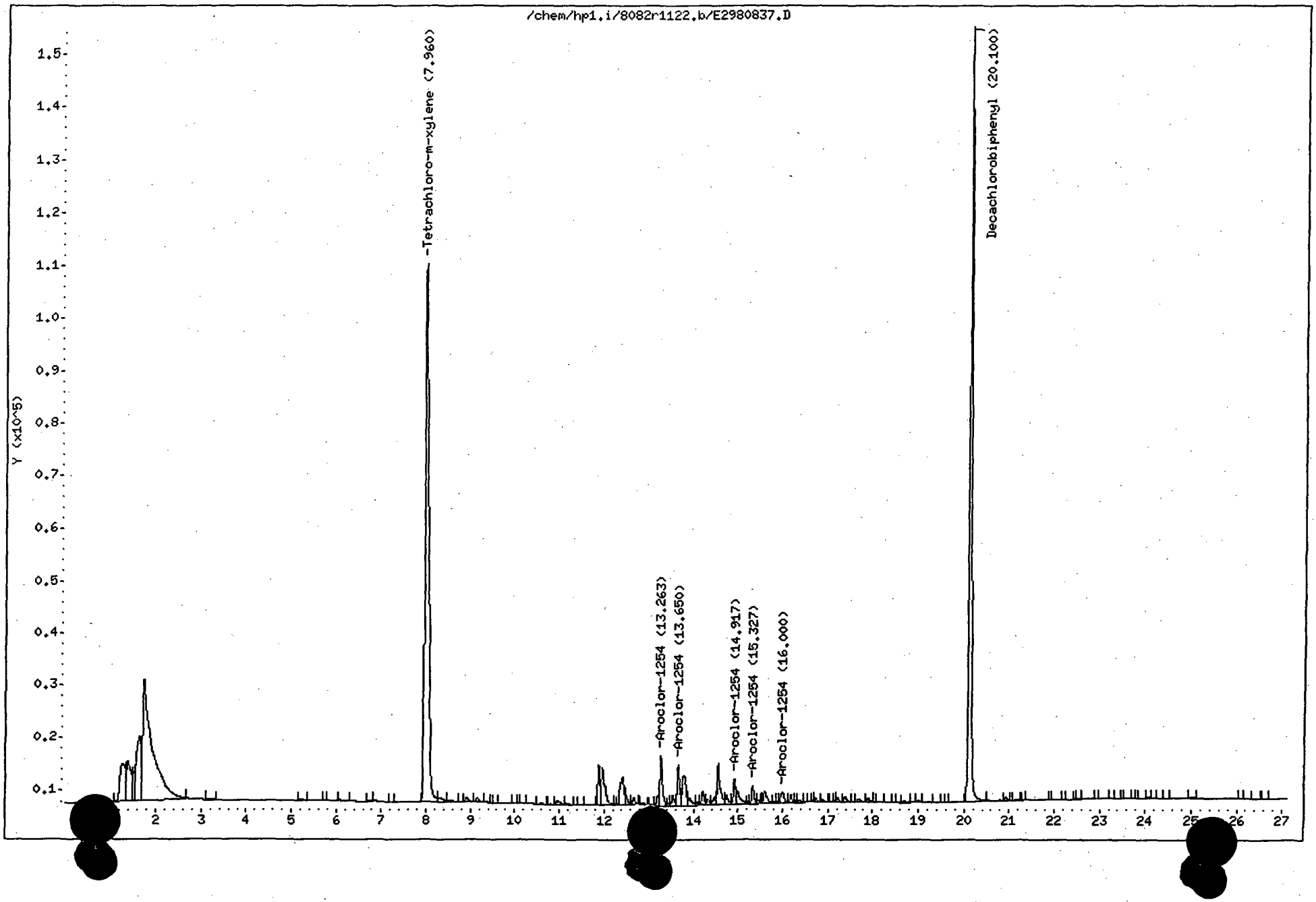
QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/hp1.i/8082r1122.b/E2980837.D
Date : 26-NOV-2002 14:08
Client ID: L97127-4
Sample Info: L97127-4
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00025



Friend Inc.

Data File: /chem/hp1.i/8082r1122.b/E2980837.D
Method: /chem/hp1.i/8082r1122.b/8082_PCBsec.M
Sample Info: L97127-4
Misc Info: WG33714,02-117
Analysis Date: 26-NOV-2002 14:08
Sample Matrix: SOIL
File Number: 0837

Dilution Factor:	10.0000
Sample Weight:	10.3582
Final Volume:	10.0000
Total Solid :	88.1000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	483.59
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	121.49%
Decachlorobiphenyl	148.55%

Analyst: CPW
Report Date: 11/27/2002 09:03

Supervisor: _____
Date: 12/2/2

Thru-Put Systems, Inc.

Data file : \chem\hp3.i\1254FCONFIRMVa.b\E3956869.D
Lab Smp Id: L97127-4 Client Smp ID: L97127-4
Inj Date : 26-NOV-2002 11:25
Operator : CPW Inst ID: hp3.i
Smp Info : L97127-4
Misc Info : CONFIRMATION
Comment :
Method : \chem\hp3.i\1254FCONFIRMVa.b\8082_PCBsec.M
Meth Date : 26-Nov-2002 14:20 Administra Quant Type: ESTD
Cal Date : 26-NOV-2002 10:54 Cal File: E3956868.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 1254.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.358	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	88.100	Total Solid

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO	
$ 1	Tetrachloro-m-xylene					CAS #:			
	8.577	8.597	-0.020	1529743	45.3757	497.24			
25	Aroclor-1254					CAS #: 11097-69-1			
	14.493	14.490	0.003	18051	19.4757	213.42	80.00- 120.00	100.00(M)	
	14.737	14.730	0.007	67245	45.9409	503.43	138.90- 178.90	372.53	
	15.100	15.093	0.007	33022	47.1000	516.13	58.39- 98.39	182.94	
	15.280	15.273	0.007	17986	16.9191	185.40	98.45- 138.45	99.64	
	15.647	15.640	0.007	40031	34.5198	378.28	106.65- 146.65	221.77	
			Average of Peak Concentrations =			359.33			
$ 29	Decachlorobiphenyl					CAS #:			
	20.100	20.097	0.003	995859	63.4277	695.05			

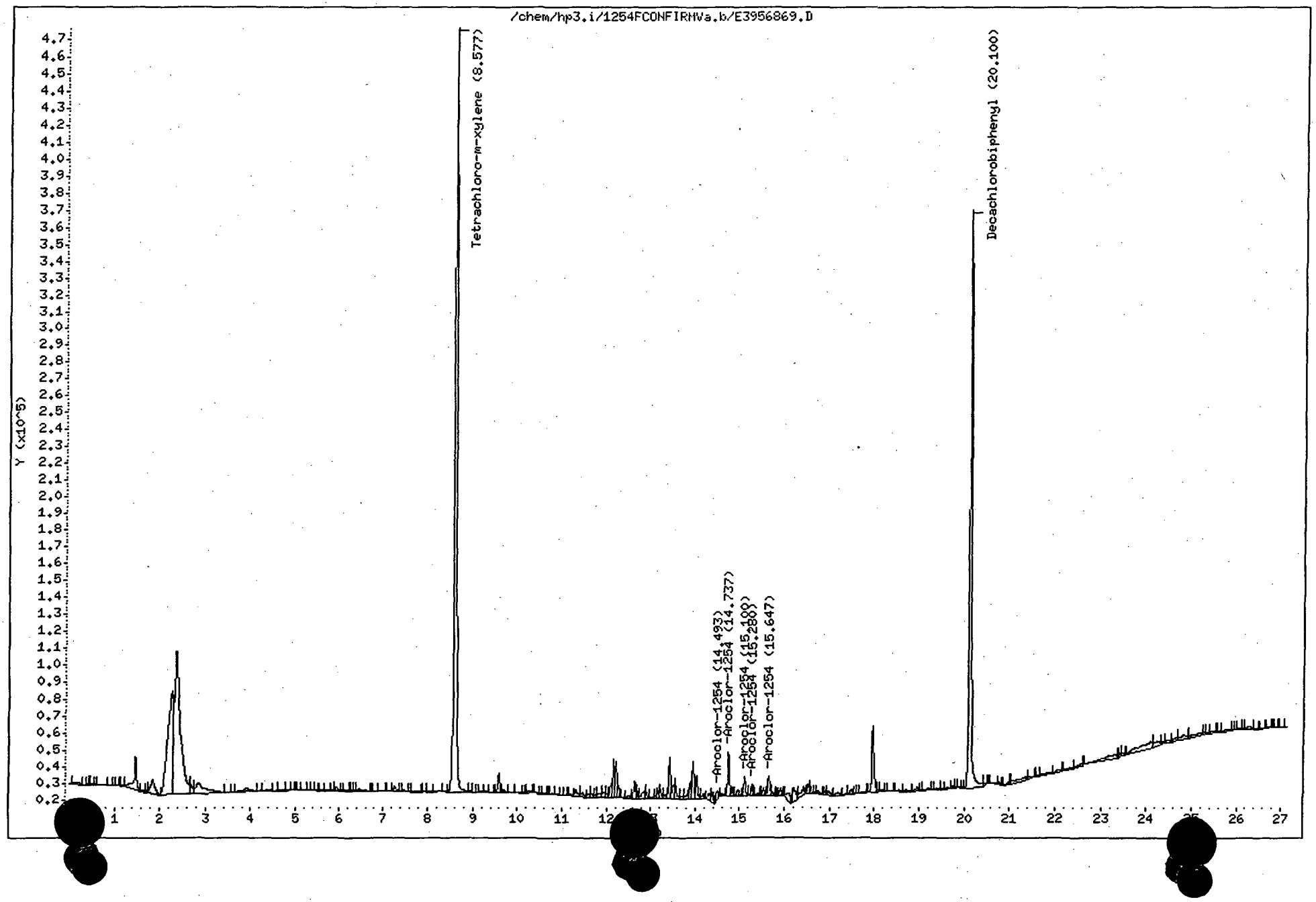
QC Flag Legend

M - Compound response manually integrated.

Data File: /chem/hp3.i/1254FCONFIRMVa.b/E3956869.D
Date : 26-NOV-2002 11:25
Client ID: L97127-4
Sample Info: L97127-4
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i
Operator: CPW
Column diameter: 0.32

00029



Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMVa.b/E3956869.D
Method: /chem/hp3.i/1254FCONFIRMVa.b/8082_PCBsec.M
Sample Info: L97127-4
Misc Info: CONFIRMATION
Analysis Date: 26-NOV-2002 11:25
Sample Matrix: SOIL
File Number: 6869

Dilution Factor:	10.0000
Sample Weight:	10.3582
Final Volume:	10.0000
Total Solid :	88.1000

Analytes (ug/Kg)	
Aroclor-1254	359.33
Tetrachloro-m-xylene	90.75%
Decachlorobiphenyl	126.86%

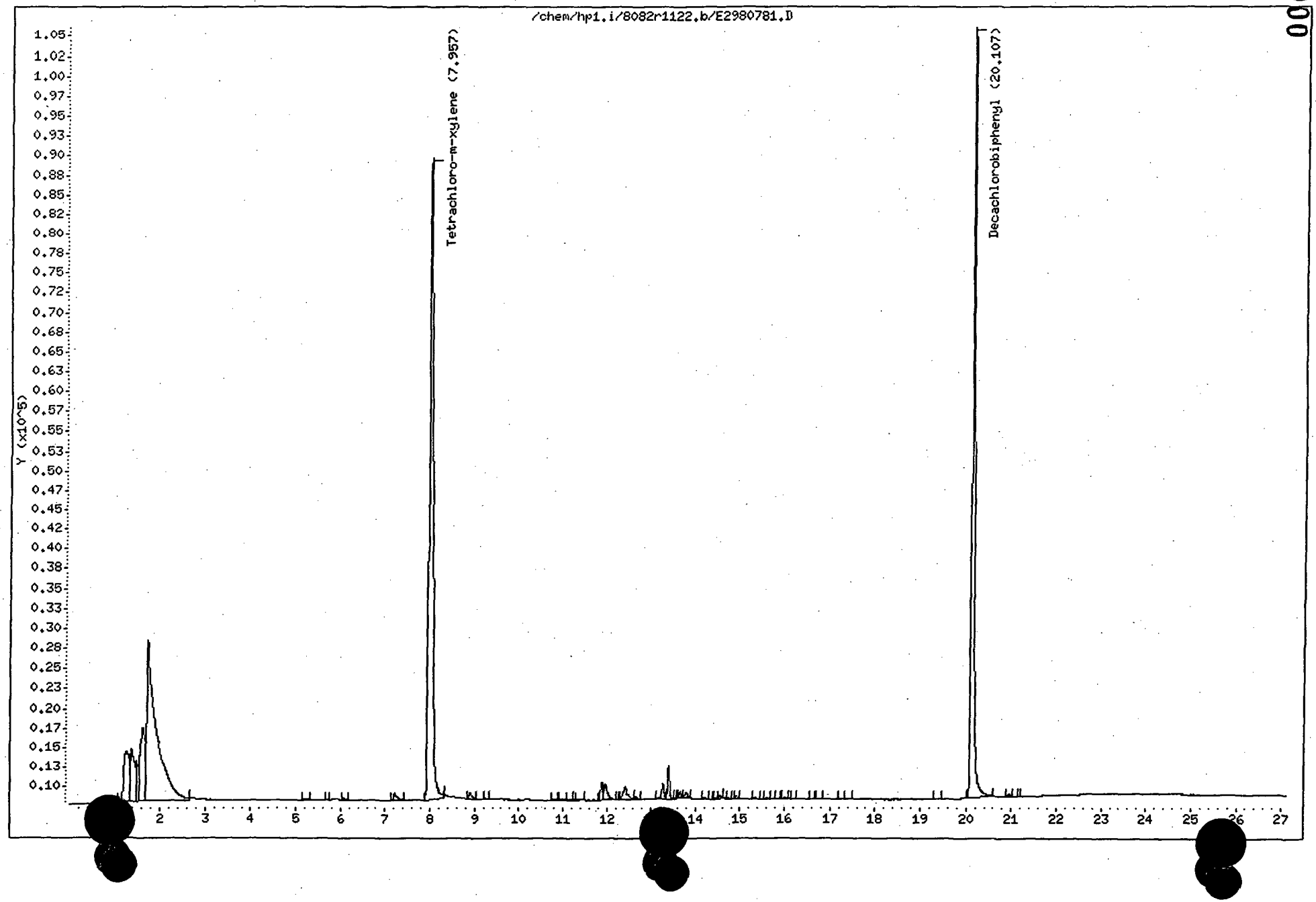
Analyst: CPW
Report Date: 12/02/2002 08:39

Supervisor: _____
Date: _____

Data File: /chem/hp1.i/8082r1122.b/E2980781.D
Date : 23-NOV-2002 05:01
Client ID: L97127-5
Sample Info: L97127-5
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00033



Friend Inc.

Data File: /chem/hp1.i/8082r1122.b/E2980781.D
Method: /chem/hp1.i/8082r1122.b/8082_PCBsec.M
Sample Info: L97127-5
Misc Info: WG33714,02-117
Analysis Date: 23-NOV-2002 05:01
Sample Matrix: SOIL
File Number: 0781

Dilution Factor:	10.0000
Sample Weight:	10.1284
Final Volume:	10.0000
Total Solid :	88.7000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	0.00
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	95.26%
Decachlorobiphenyl	114.37%

Analyst: CPW
Report Date: 11/25/2002 09:07

Supervisor: _____
Date: _____ 11/27/2

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L97127-6

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1121

Matrix: (soil/water) SOIL Lab Sample ID: L97127-6

Sample wt/vol: 10.2 (g/mL) G Lab File ID: E2980784

% Moisture: ~~0~~ 23.5 decanted: (Y/N) N Date Received: 11/21/2

eaR 3/31/03

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 11/22/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 11/23/2

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
12674-11-2	Aroclor-1016	130	~~0.13~~	U
1104-28-2	Aroclor-1221	260	0.26	U
11141-16-5	Aroclor-1232	130	0.13	U
53469-21-9	Aroclor-1242	130	~~0.13~~	U
11097-69-1	Aroclor-1254	130	~~119.81~~	U
11096-82-5	Aroclor-1260	130	~~0.13~~	U
----------	Aroclor-1248	130	~~0.13~~	U

eaR 3/31/03

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980784.D
Lab Smp Id: L97127-6 Client Smp ID: L97127-6
Inj Date : 23-NOV-2002 06:35
Operator : CPW Inst ID: hp1.i
Smp Info : L97127-6
Misc Info : WG33714,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 25-Nov-2002 08:50 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.191	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	76.500	Total Solid

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
7.957	7.980	-0.023	499139	51.7958	664.40		
$ 29 Decachlorobiphenyl					CAS #:		
20.103	20.127	-0.024	383378	59.7944	767.00		
25 Aroclor-1254					CAS #:	11097-69-1	
13.260	13.263	-0.003	5458			80.00- 120.00	100.00(M)
13.647	13.657	-0.010	4441			56.30- 96.30	81.37
14.917	14.927	-0.010	3508			44.43- 84.43	64.27
15.330	15.347	-0.017	3718			63.85- 103.85	68.12
16.013	16.043	-0.030	6299	9.34027	119.81	73.96- 113.96	115.41
Average of Peak Concentrations =					119.81		

< PQL

00036

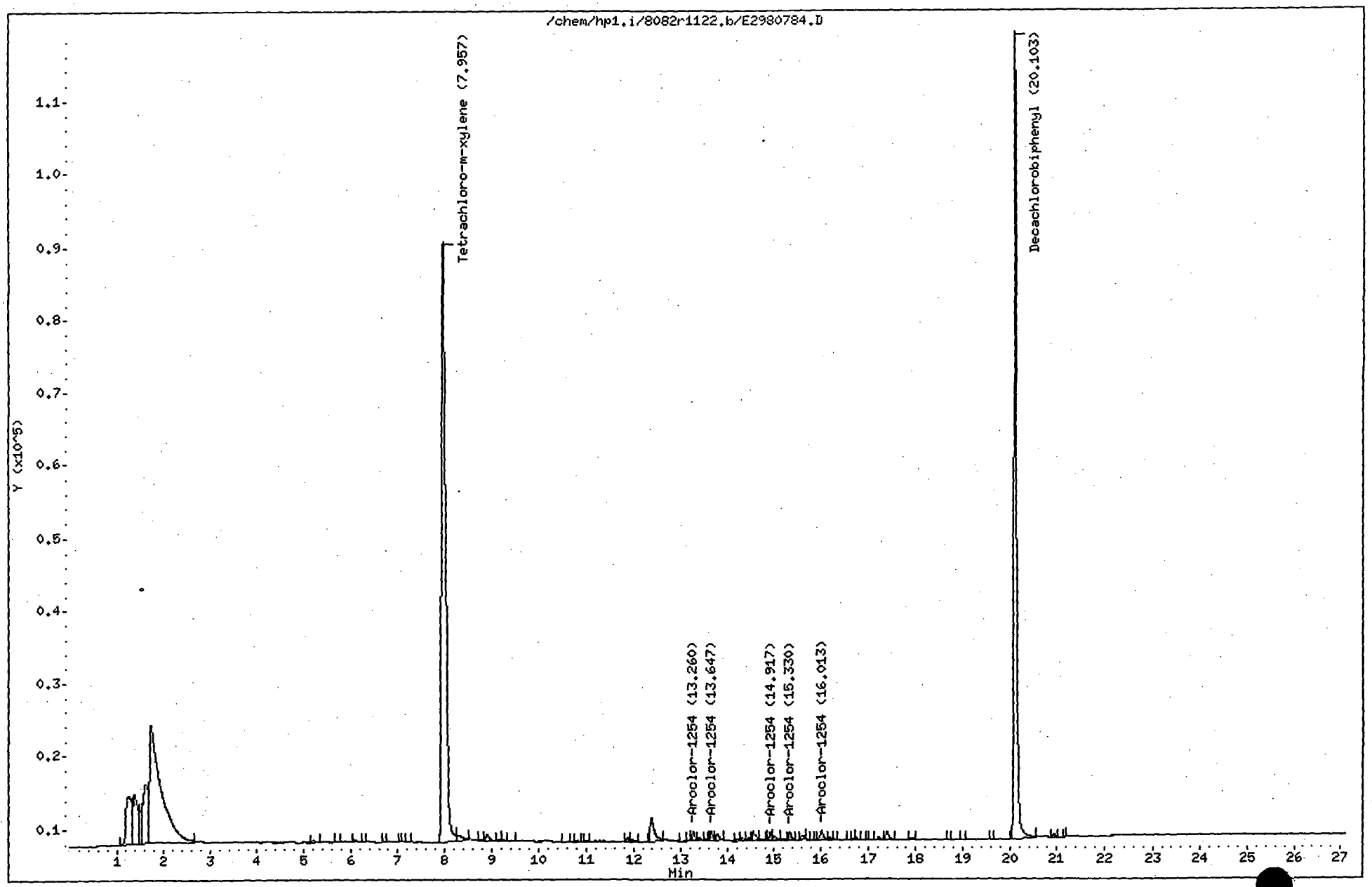
Flag Legend

M - Compound response manually integrated.

Data File: /chem/hp1.i/8082r1122.b/E2980784.D
Date: 23-NOV-2002 06:35
Client ID: L97127-6
Sample Info: L97127-6
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00038



Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980785.D
Lab Smp Id: L97127-7 Client Smp ID: L97127-7
Inj Date : 23-NOV-2002 07:06
Operator : CPW Inst ID: hp1.i
Smp Info : L97127-7
Misc Info : WG33714,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 25-Nov-2002 08:50 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

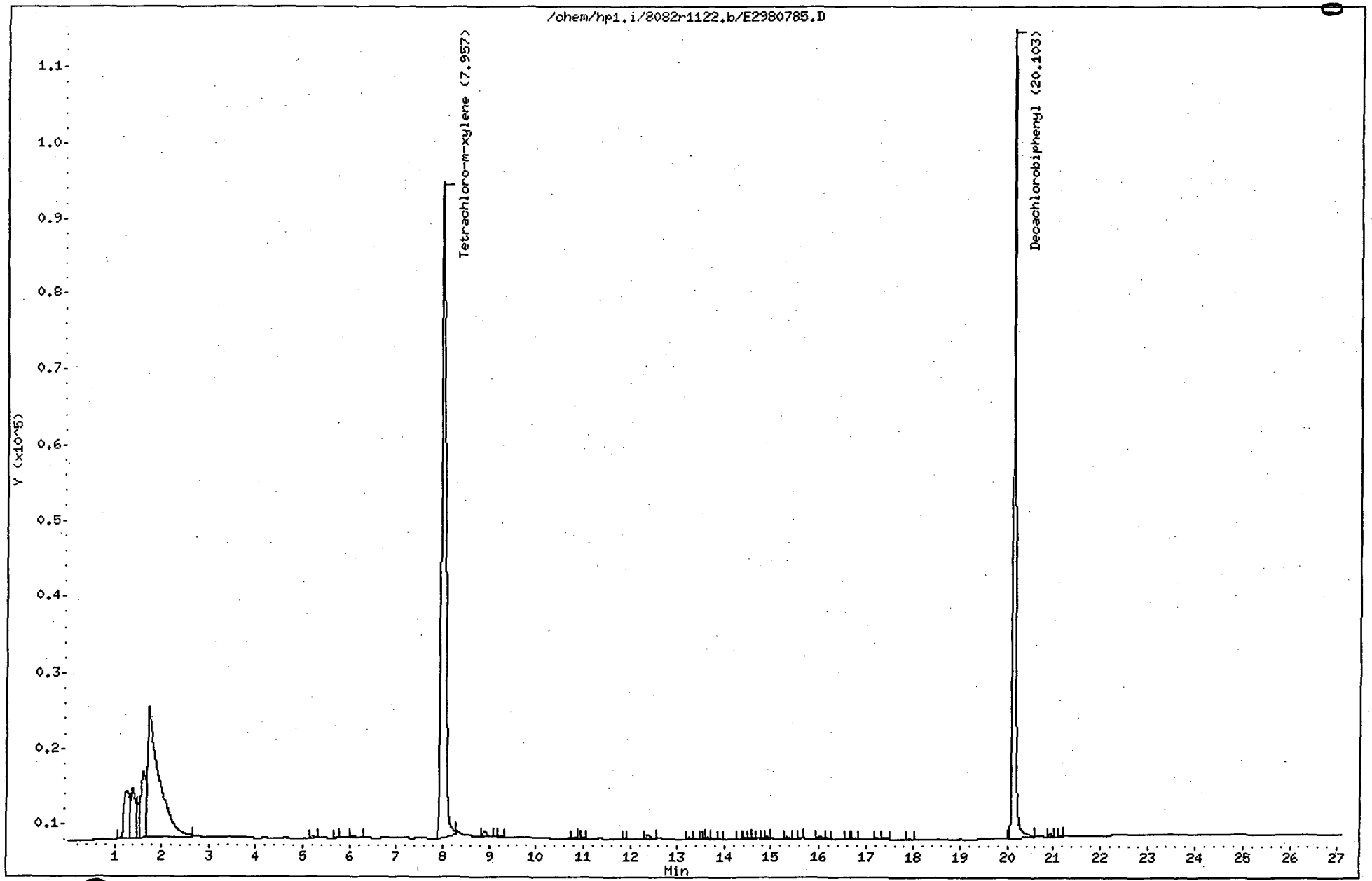
Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.099	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	85.500	Total Solid

				CONCENTRATIONS			
				ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
7.957	7.980	-0.023	527809	55.1946	639.21		
$ 29 Decachlorobiphenyl					CAS #:		
20.103	20.127	-0.024	385565	60.1730	696.87		

Data File: /chem/hp1.i/8082r1122.b/E2980785.D
Date [redacted]OV-2002 07:06
Client [redacted] L97127-7
Sample Info: L97127-7
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

[redacted]strument: hp1.i
Operator: CPW
Column diameter: 0.32

00042



Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980815.D
Lab Smp Id: L97224-1 Client Smp ID: L97224-1
Inj Date : 26-NOV-2002 01:24
Operator : CPW Inst ID: hp1.i
Smp Info : L97224-1
Misc Info : WG33733,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 26-Nov-2002 14:11 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.052	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	82.100	Total Solid

				CONCENTRATIONS ON-COL	FINAL		
	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #:		
	7.947	7.957	-0.010	619665	66.0841	800.77		
$ 29 Decachlorobiphenyl						CAS #:		
	20.097	20.110	-0.013	512086	82.0780	994.58		(RM)

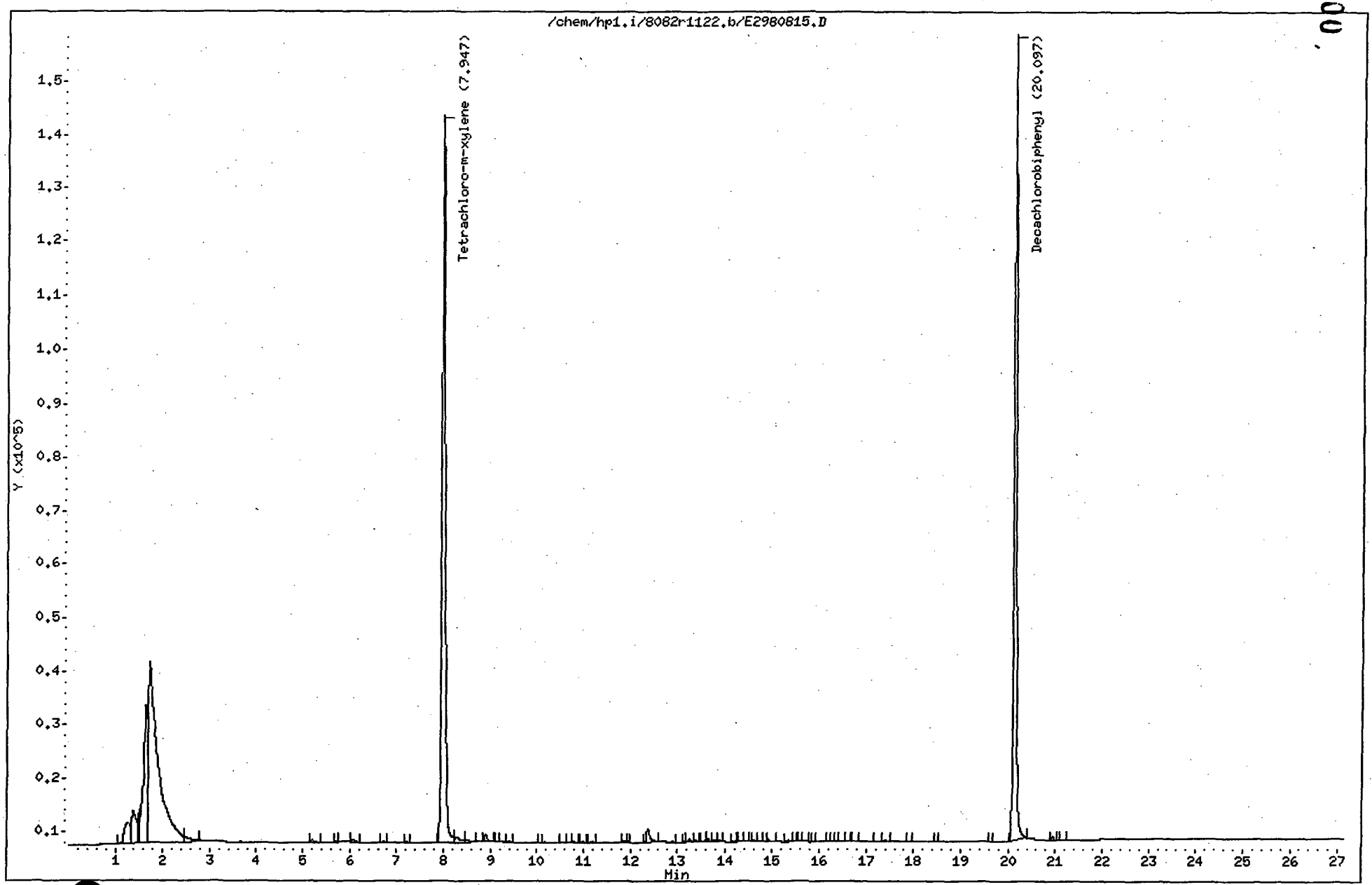
QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/hp1.i/8082r1122.b/E2980815.D
Date: NOV-2002 01:24
Client ID: L97224-1
Sample Info: L97224-1
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00054



Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980816.D
Lab Smp Id: L97224-2 Client Smp ID: L97224-2
Inj Date : 26-NOV-2002 01:55
Operator : CPW Inst ID: hp1.i
Smp Info : L97224-2
Misc Info : WG33733,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 26-Nov-2002 14:11 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.315	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	76.600	Total Solid

				CONCENTRATIONS ON-COL	FINAL		
	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #:		
	7.947	7.957	-0.010	600621	63.8265	807.77		
$ 29 Decachlorobiphenyl						CAS #:		
	20.097	20.110	-0.013	513598	82.3397	1042.07		(RM)

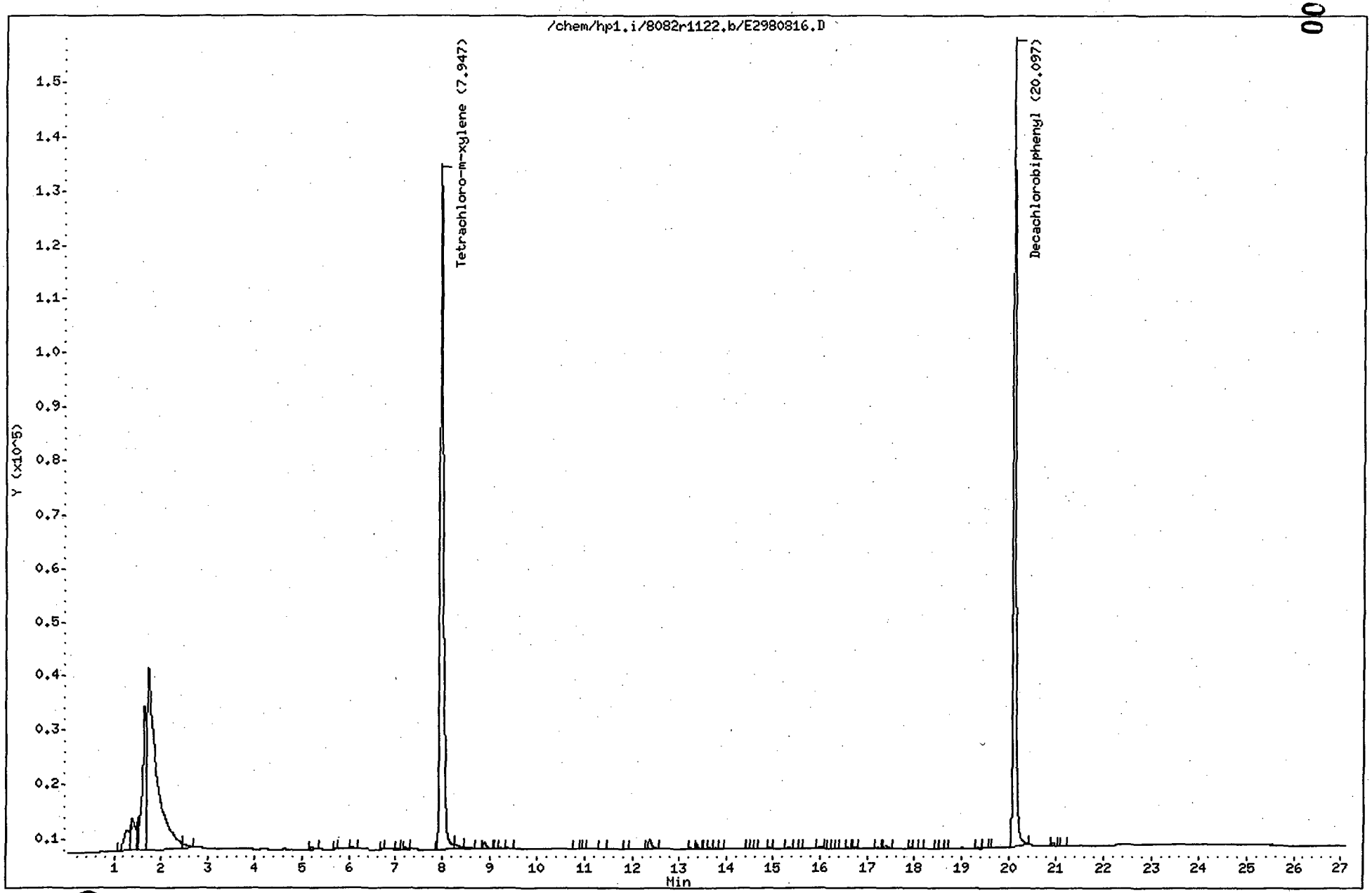
QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/hp1.i/8082r1122.b/E2980816.D
Date: [redacted]NOV-2002 01:55
Client ID: L97224-2
Sample Info: L97224-2
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00058



Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980817.D
Lab Smp Id: L97224-3 Client Smp ID: L97224-3
Inj Date : 26-NOV-2002 02:27
Operator : CPW Inst ID: hp1.i
Smp Info : L97224-3
Misc Info : WG33733,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 26-Nov-2002 14:11 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.362	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	66.700	Total Solid

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL			
	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$	1 Tetrachloro-m-xylene					CAS #:		
	7.947	7.957	-0.010	599045	63.6396	920.79		
$	29 Decachlorobiphenyl					CAS #:		
	20.093	20.110	-0.017	500796	80.1233	1159.29		(RM)

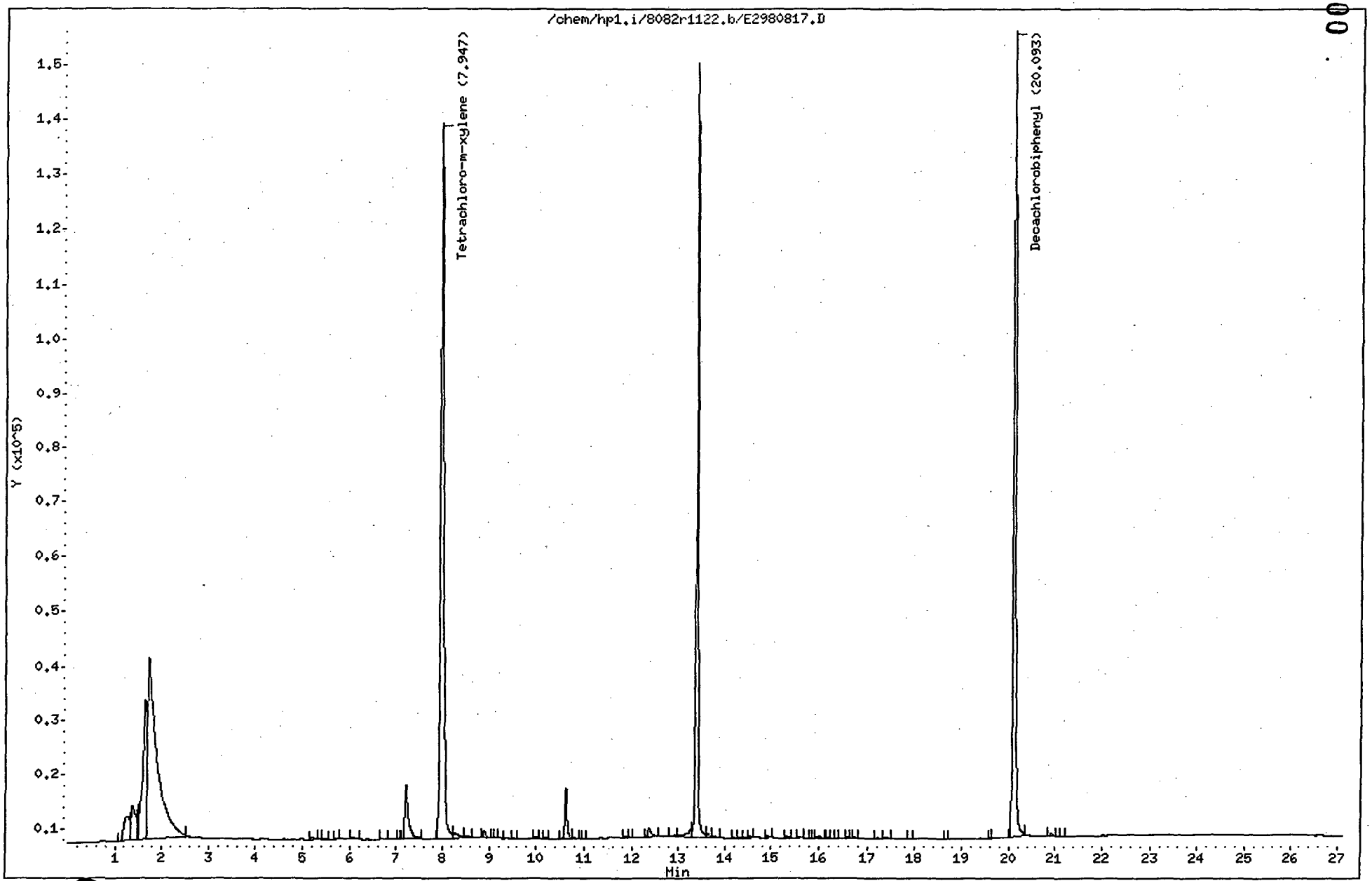
QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/hp1.i/8082r1122.b/E2980817.D
Date: [redacted]-NOV-2002 02:27
Client ID: L97224-3
Sample Info: L97224-3
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00062



Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980818.D
Lab Smp Id: L97224-4 Client Smp ID: L97224-4
Inj Date : 26-NOV-2002 02:58
Operator : CPW Inst ID: hp1.i
Smp Info : L97224-4
Misc Info : WG33733,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 26-Nov-2002 14:11 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.274	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	71.800	Total Solid

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$	1 Tetrachloro-m-xylene					CAS #:		
	7.947	7.957	-0.010	599193	63.6572	862.95		
$	29 Decachlorobiphenyl					CAS #:		
	20.097	20.110	-0.013	503140	80.5291	1091.67		(RM)

QC Flag Legend

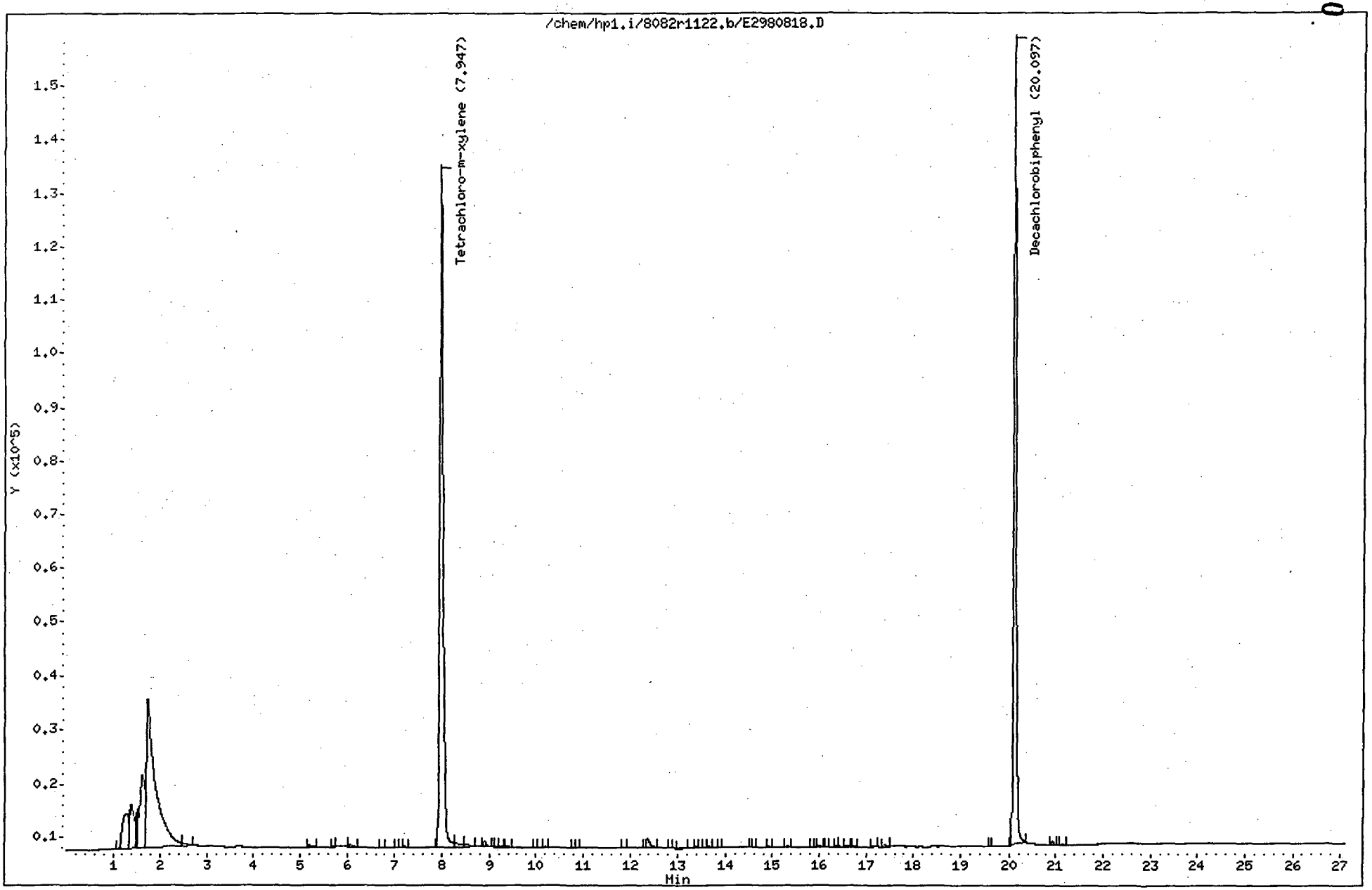
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data : /chem/hp1.i/8082r1122.b/E2980818.D
Date : NOV-2002 02:58
Client ID: L97224-4
Sample Info: L97224-4
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

Page

99000



Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980819.D
Lab Smp Id: L97224-5 Client Smp ID: L97224-5
Inj Date : 26-NOV-2002 03:29
Operator : CPW Inst ID: hp1.i
Smp Info : L97224-5
Misc Info : WG33733,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 26-Nov-2002 14:11 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.240	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	77.500	Total Solid

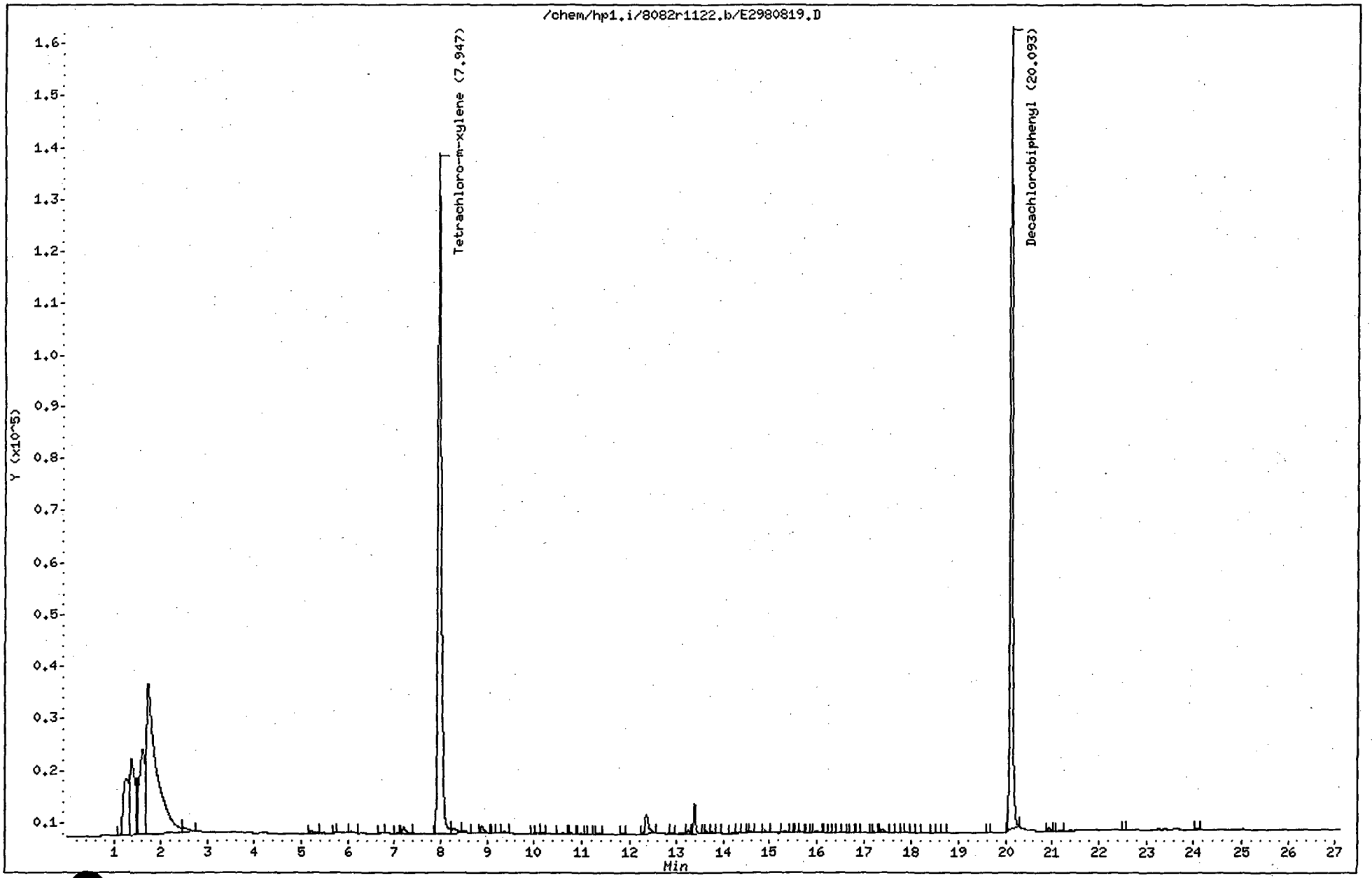
	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene							CAS #:		
	7.947	7.957	-0.010	620463	66.1787	833.91			
$ 29 Decachlorobiphenyl							CAS #:		
	20.093	20.110	-0.017	512575	82.1626	1035.32			(RM)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data Fi[redacted]/chem/hp1.i/8082r1122.b/E2980819.D
Date : [redacted]-2002 03:29
Client ID: L97224-5
Sample Info: L97224-5
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

[redacted]strument: hp1.i
Operator: CPW
Column diameter: 0.32



Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980820.D
Lab Smp Id: L97224-6 Client Smp ID: L97224-6
Inj Date : 26-NOV-2002 04:00
Operator : CPW Inst ID: hp1.i
Smp Info : L97224-6
Misc Info : WG33733,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 26-Nov-2002 14:11 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.473	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	77.300	Total Solid

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene							CAS #:		
	7.947	7.957	-0.010	577220	61.0523	754.13			
$ 29 Decachlorobiphenyl							CAS #:		
	20.097	20.110	-0.013	472154	75.1644	928.45			(RM)

QC Flag Legend

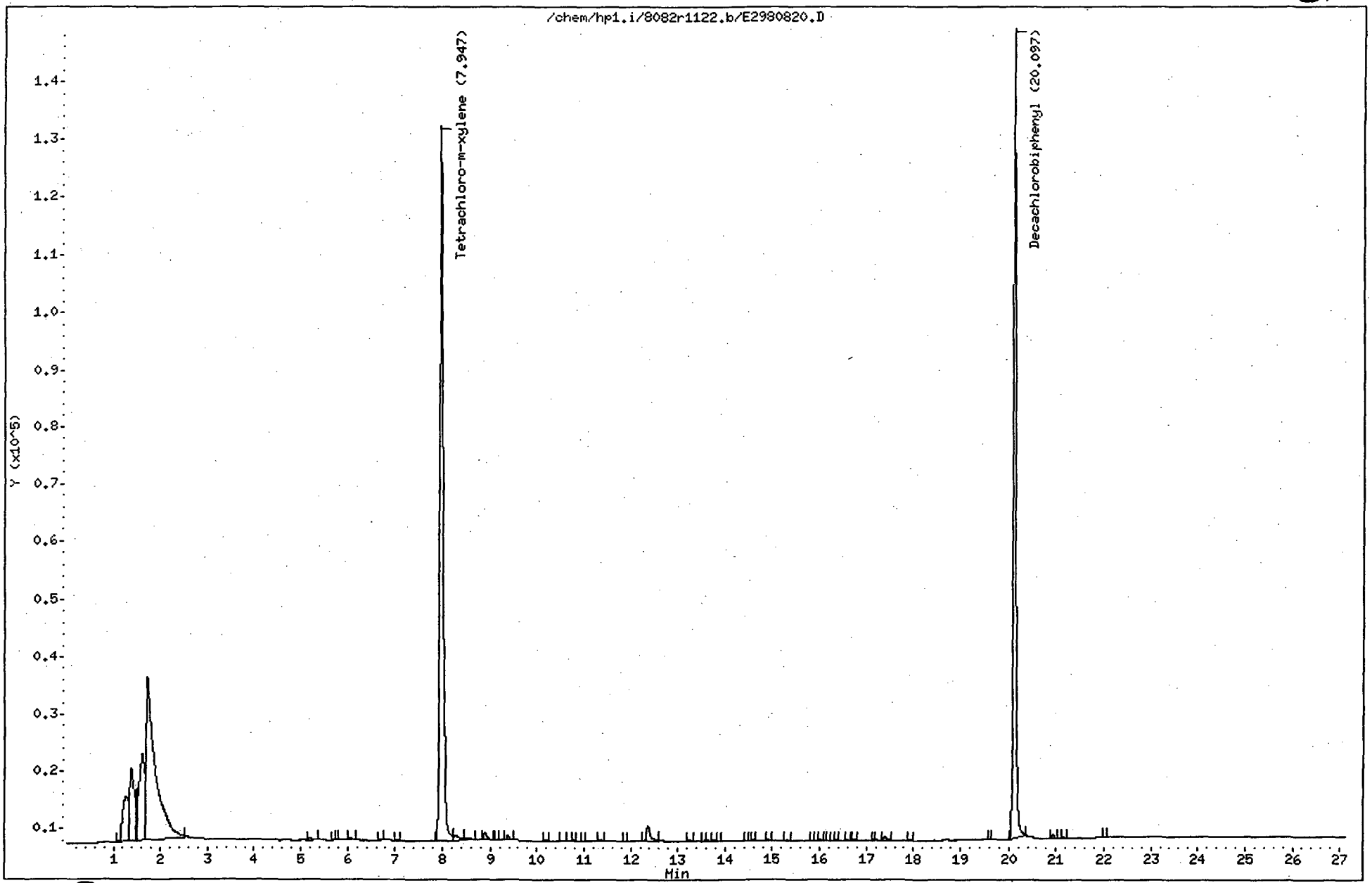
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: /chem/hp1.i/8082r1122.b/E2980820.D
Date: 6-NOV-2002 04:00
Client ID: L97224-6
Sample Info: L97224-6
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i

Operator: CPW
Column diameter: 0.32

00074



Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980823.D
Lab Smp Id: L97224-7 Client Smp ID: L97224-7
Inj Date : 26-NOV-2002 05:34
Operator : CPW Inst ID: hp1.i
Smp Info : L97224-7
Misc Info : WG33733,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 26-Nov-2002 14:11 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.243	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	77.700	Total Solid

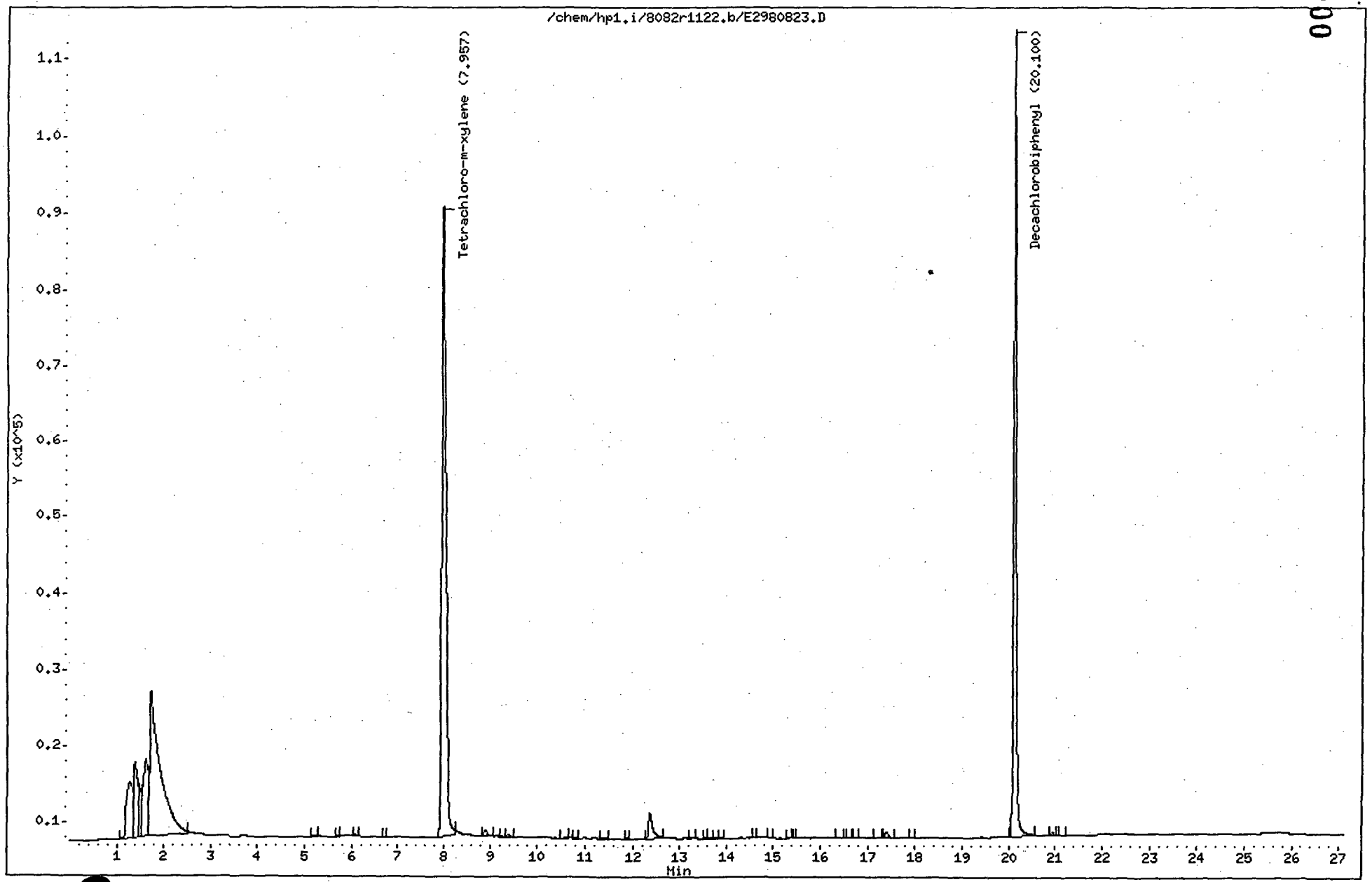
	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene							CAS #:	
	7.957	7.957	0.000	491138	50.8473	638.91		
$ 29 Decachlorobiphenyl							CAS #:	
	20.100	20.110	-0.010	369488	57.3896	721.12		

00077

Data F /chem/hp1.i/8082r1122.b/E2980823.D
Date DW-2002 05:34
Client I: L97224-7
Sample Info: L97224-7
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00078



Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980824.D
Lab Smp Id: L97224-8 Client Smp ID: L97224-8
Inj Date : 26-NOV-2002 06:05
Operator : CPW Inst ID: hp1.i
Smp Info : L97224-8
Misc Info : WG33733,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 26-Nov-2002 14:11 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

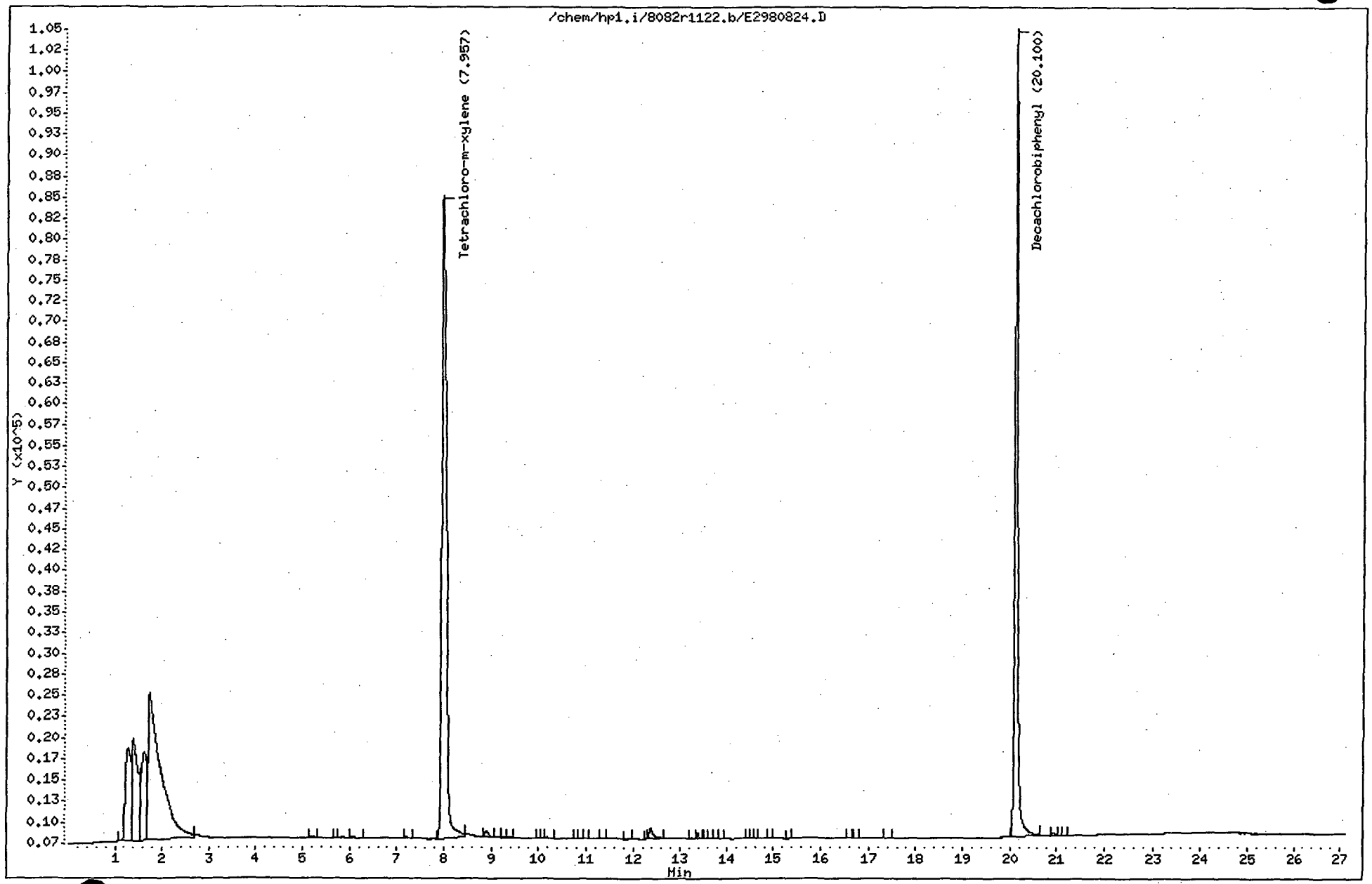
Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.151	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	76.600	Total Solid

				CONCENTRATIONS ON-COL	FINAL		
	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #:		
	7.957	7.957	0.000	521475	54.4437	700.18		
$ 29 Decachlorobiphenyl						CAS #:		
	20.100	20.110	-0.010	374953	58.3357	750.23		

Data File: /chem/hp1.i/8082r1122.b/E2980824.D
Date: [illegible]JV-2002 06:05
Client ID: L97224-8
Sample Info: L97224-8
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00082



Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980825.D
Lab Smp Id: L97224-9 Client Smp ID: L97224-9
Inj Date : 26-NOV-2002 06:36
Operator : CPW Inst ID: hp1.i
Smp Info : L97224-9
Misc Info : WG33733,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 26-Nov-2002 14:11 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.751	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	87.800	Total Solid

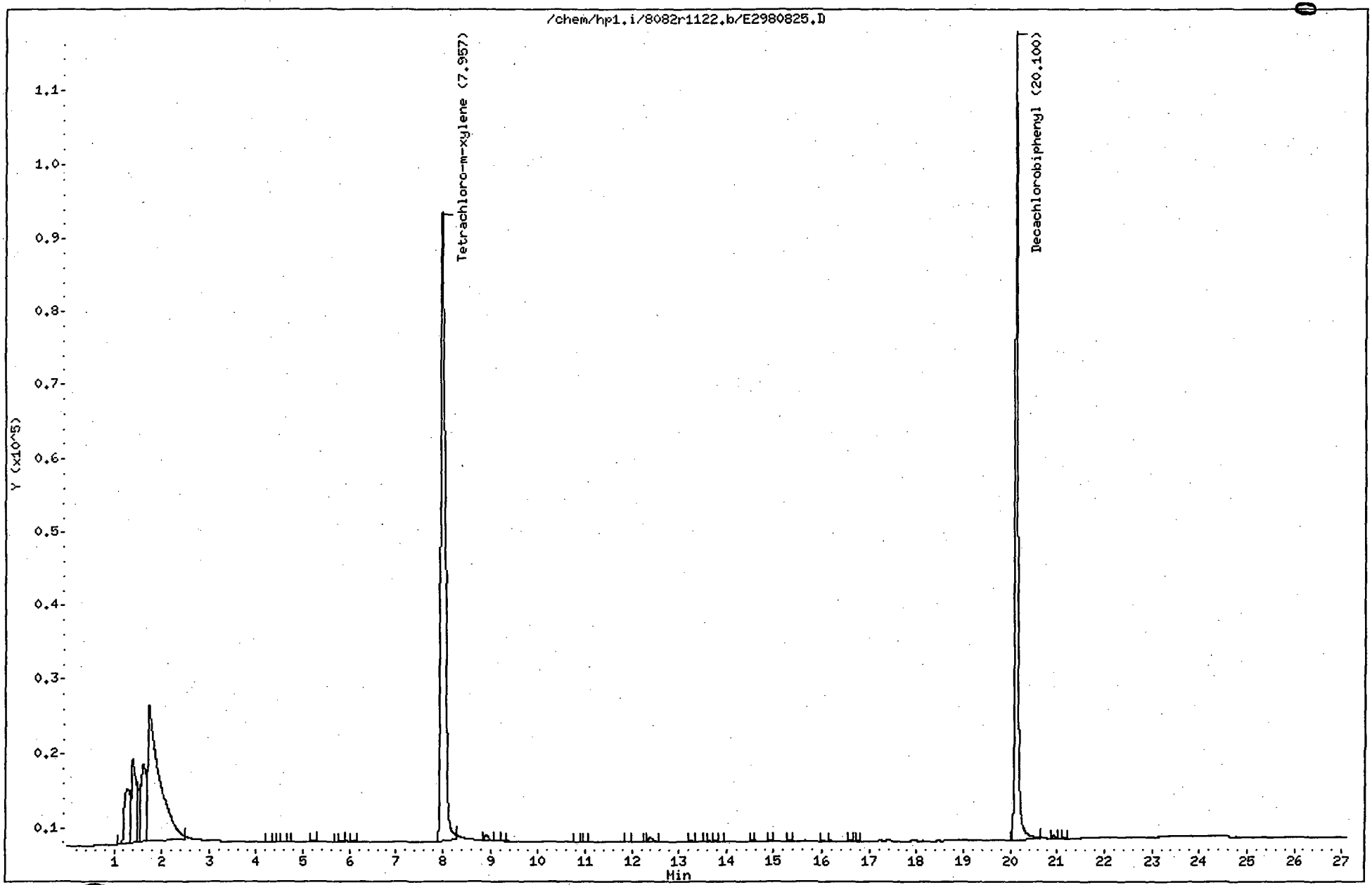
	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene							CAS #:	
	7.957	7.957	0.000	545846	57.3329	607.40		
$ 29 Decachlorobiphenyl							CAS #:	
	20.100	20.110	-0.010	417175	65.6458	695.47		

Data F /chem/hp1.i/8082r1122.b/E2980825.D
Date OV-2002 06:36
Client ID: L97224-9
Sample Info: L97224-9
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i

Operator: CPW
Column diameter: 0.32

98000



Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r1122.b\E2980826.D
Lab Smp Id: L97224-10 Client Smp ID: L97224-10
Inj Date : 26-NOV-2002 07:07
Operator : CPW Inst ID: hp1.i
Smp Info : L97224-10
Misc Info : WG33733,02-117
Comment :
Method : \chem\hp1.i\8082r1122.b\8082_PCBsec.M
Meth Date : 26-Nov-2002 14:11 Administra Quant Type: ESTD
Cal Date : 22-NOV-2002 18:04 Cal File: E2980760.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

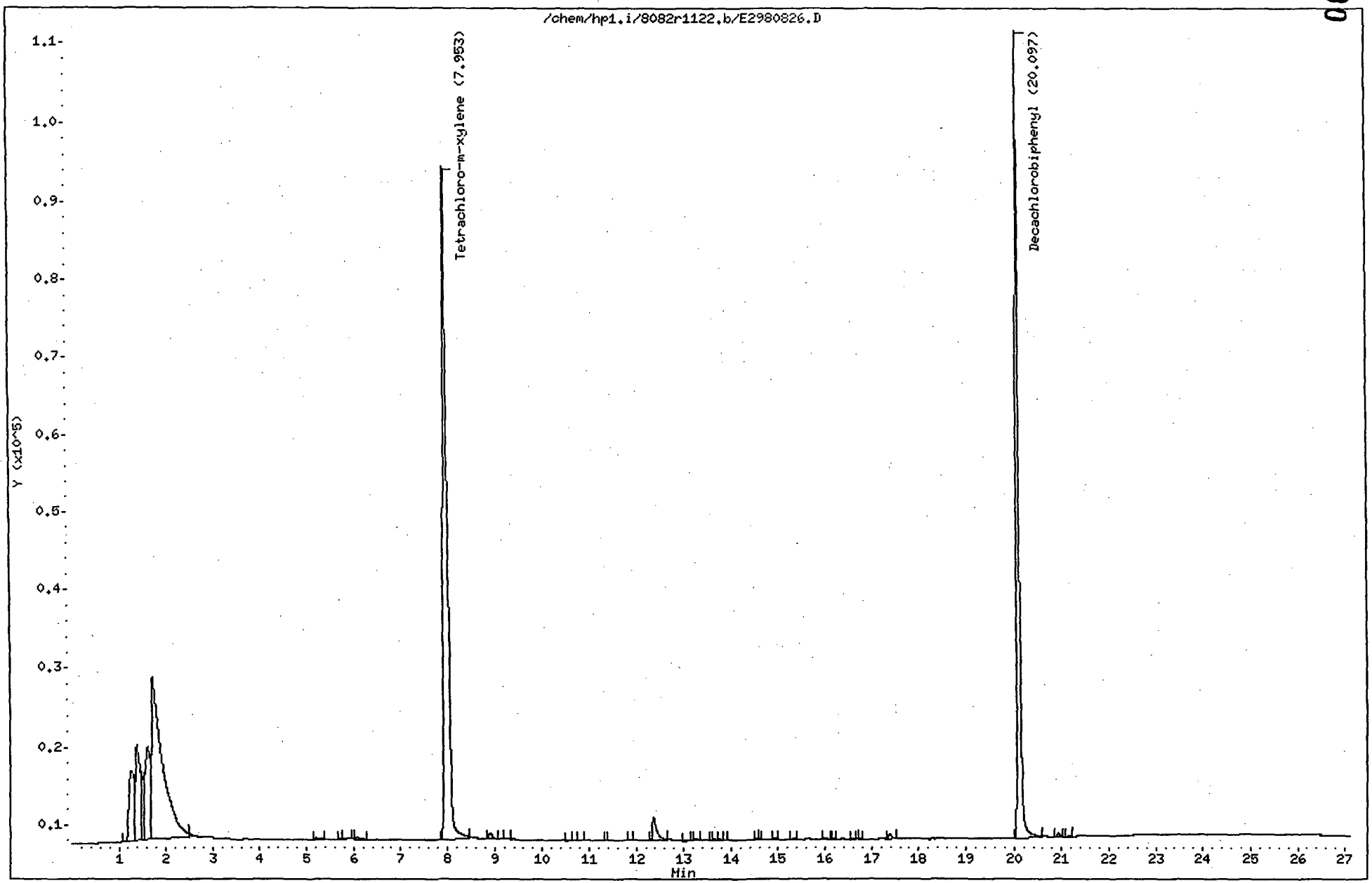
Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.432	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	87.800	Total Solid

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene							CAS #:	
	7.953	7.957	-0.004	509053	52.9711	578.34		
$ 29 Decachlorobiphenyl							CAS #:	
	20.097	20.110	-0.013	367728	57.0849	623.25		

Data File: /chem/hp1.i/8082r1122.b/E2980826.D
Date : [redacted]-2002 07:07
Client [redacted]97224-10
Sample Info: L97224-10
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

[redacted]trument: hp1.i
Operator: CPW
Column diameter: 0.32

00090



Friend Inc.

Data File: /chem/hp1.i/8082r1122.b/E2980826.D
Method: /chem/hp1.i/8082r1122.b/8082_PCBsec.M
Sample Info: L97224-10
Misc Info: WG33733,02-117
Analysis Date: 26-NOV-2002 07:07
Sample Matrix: SOIL
File Number: 0826

Dilution Factor:	10.0000
Sample Weight:	10.4319
Final Volume:	10.0000
Total Solid :	87.8000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	0.00
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	105.94%
Decachlorobiphenyl	114.17%

Analyst: CPW
Report Date: 11/26/2002 15:25

Supervisor:_____
Date:_____

Lab Name: FRIEND LABORATORY, INC. Contract: _____
Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA
Instrument ID: HP1
GC Column: RTX-CLPest2 ID: 0.32 (mm) Date(s) Analyzed: 11/22/02 11/22/02
File Numbers: 0753 - 0769

COMPOUND	Peak #	RT OF STANDARDS 10 ppb	50 ppb	100 ppb	250 ppb	500 ppb	1000 ppb	MEAN RT	RT WINDOW FROM	TO
PCB 1016	1*	10.19	10.19	10.18	10.18	10.18	10.18	10.18	10.08	10.28
	2*	10.71	10.70	10.70	10.70	10.70	10.70	10.70	10.60	10.80
	3*	11.90	11.89	11.88	11.88	11.88	11.88	11.89	11.79	11.99
	4	11.97	11.97	11.97	11.97	11.96	11.96	11.97	11.87	12.07
	5	12.68	12.67	12.67	12.67	12.67	12.67	12.67	12.57	12.77
PCB 1221	1*				8.76			8.76	8.66	8.86
	2*				9.10			9.10	9.00	9.20
	3*				9.24			9.24	9.14	9.34
PCB 1232	1*				10.18			10.18	10.08	10.28
	2*				10.70			10.70	10.60	10.80
	3*				11.17			11.17	11.07	11.27
	4				11.88			11.88	11.78	11.98
	5				12.42			12.42	12.32	12.52
PCB 1242	1*				10.18			10.18	10.08	10.28
	2*				11.45			11.45	11.35	11.55
	3*				11.87			11.87	11.77	11.97
	4				11.96			11.96	11.86	12.06
	5				12.42			12.42	12.32	12.52
PCB 1248	1*				11.16			11.16	11.06	11.26
	2*				11.87			11.87	11.77	11.97
	3*				11.96			11.96	11.86	12.06
	4				12.66			12.66	12.56	12.76
	5				13.27			13.27	13.17	13.37
PCB 1254	1*	13.26	13.26	13.26	13.26	13.26	13.26	13.26	13.16	13.36
	2*	13.66	13.65	13.65	13.65	13.65	13.65	13.65	13.55	13.75
	3*	14.93	14.92	14.93	14.92	14.92	14.92	14.92	14.82	15.02
	4	15.35	15.34	15.34	15.34	15.34	15.33	15.34	15.24	15.44
	5	16.04	16.03	16.03	16.03	16.02	16.02	16.03	15.93	16.13
PCB 1260	1*	14.94	14.93	14.93	14.93	14.93	14.92	14.93	14.83	15.03
	2*	15.36	15.35	15.35	15.34	15.34	15.34	15.35	15.25	15.45
	3*	16.21	16.20	16.20	16.19	16.19	16.19	16.20	16.10	16.30
	4	16.30	16.30	16.30	16.30	16.29	16.29	16.30	16.20	16.40
	5	16.77	16.76	16.76	16.75	16.75	16.75	16.76	16.66	16.86
Tetrachloro-m-xylene		7.98	7.97	7.96	7.96	7.96	7.96	7.96	7.86	8.06
Decachlorobiphenyl		20.13	20.12	20.11	20.11	20.11	20.11	20.12	20.02	20.22

* Denotes required peaks

Retention time windows are ± 0.1 minutes for all compounds.

1252/ peak 2

$\frac{13.66 + 13.65 + 13.65 + 13.65 + 13.65 + 13.65}{6} = 13.65$

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA1121
Instrument ID: HP1 Calibration Date(s): 11/22/2 11/22/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)
LAB FILE ID: RF10: E2980760 RF50: E2980761 RF100: E2980762
RF250: E2980769 RF500: E2980764

COMPOUND	RF10	RF50	RF100	RF250	RF500
Aroclor-1016	578.2	531.5	710.9	516.9	423.4
(2)	240.3	252.9	343.6	247.4	217.8
(3)	522.7	334.3	325.0	222.9	196.1
(4)	320.7	280.9	346.7	244.3	226.6
(5)	560.0	421.9	380.8	343.1	328.0
Aroclor-1221				139.6	
(2)				93.4	
(3)				345.0	
(4)					
(5)					
Aroclor-1232				215.4	
(2)				81.3	
(3)				294.0	
(4)				76.1	
(5)				90.4	
Aroclor-1242				399.2	
(2)				338.1	
(3)				180.8	
(4)				201.5	
(5)				220.4	
Aroclor-1254	468.0	523.6	548.9	554.3	455.2
(2)	357.1	412.9	424.9	423.8	391.3
(3)	301.5	351.8	353.4	337.4	317.7
(4)	392.4	421.9	431.5	399.9	393.9
(5)	439.7	567.5	566.3	567.0	588.0
Aroclor-1260	672.6	574.1	701.3	610.0	550.3
(2)	632.5	544.0	712.4	634.8	581.6
(3)	471.3	410.9	544.2	468.2	428.0
(4)	427.4	377.9	448.2	366.3	340.7
(5)	394.9	344.5	496.5	437.6	420.5
Aroclor-1248				435.5	
(2)				276.3	
(3)				283.7	
(4)				409.5	
(5)				518.7	
Tetrachloro-m-xylene	10763	9638	9680	9265	8179
Decachlorobiphenyl	10481	7311	7654	6357	5747

Recalc CF10
4680/10 = 468.0
CF50 26178/50 → 523.6
CF100 54890/100 548.9
CF250 138508/250 = 554.3
CF500 227664/500 = 455.2
401221/1000 = 401.29

FORM VI PCB

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA1121
Instrument ID: HP1 Calibration Date(s): 11/22/2 11/22/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)
RF1000: E2980765

COMPOUND	RF100	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2
Aroclor-1016	381.7	LINR	-28.597271	2.628e-003	0.992
(2)	203.6	LINR	-25.806778	4.933e-003	0.994
(3)	175.9	LINR	-43.802148	5.77e-003	0.992
(4)	207.8	LINR	-26.889190	4.833e-003	0.995
(5)	339.2	LINR	-5.9371278	2.985e-003	0.999
Aroclor-1221		LINR	0.00000000	7.162e-003	1.000
(2)		LINR	0.00000000	1.071e-002	1.000
(3)		LINR	0.00000000	2.898e-003	1.000
(4)		LINR			
(5)		LINR			
Aroclor-1232		LINR	0.00000000	4.642e-003	1.000
(2)		LINR	0.00000000	1.23e-002	1.000
(3)		LINR	0.00000000	3.401e-003	1.000
(4)		LINR	0.00000000	1.314e-002	1.000
(5)		LINR	0.00000000	1.107e-002	1.000
Aroclor-1242		LINR	0.00000000	2.505e-003	1.000
(2)		LINR	0.00000000	2.958e-003	1.000
(3)		LINR	0.00000000	5.532e-003	1.000
(4)		LINR	0.00000000	4.963e-003	1.000
(5)		LINR	0.00000000	4.537e-003	1.000
Aroclor-1254	401.3	LINR	-17.133977	2.467e-003	0.996
(2)	351.4	LINR	-16.249952	2.812e-003	0.996
(3)	281.9	LINR	-18.021529	3.504e-003	0.995
(4)	345.3	LINR	-16.736714	2.854e-003	0.995
(5)	559.9	LINR	-1.8211930	1.772e-003	0.999
Aroclor-1260	455.1	LINR	-8.4371855	1.802e-003	0.995
(2)	490.9	LINR	-5.4842243	1.701e-003	0.996
(3)	367.7	LINR	-24.322565	2.672e-003	0.991
(4)	278.3	LINR	-29.272384	3.621e-003	0.992
(5)	363.8	LINR	-17.363874	2.694e-003	0.993
Aroclor-1248		LINR	0.00000000	2.296e-003	1.000
(2)		LINR	0.00000000	3.62e-003	1.000
(3)		LINR	0.00000000	3.525e-003	1.000
(4)		LINR	0.00000000	2.442e-003	1.000
(5)		LINR	0.00000000	1.928e-003	1.000
Tetrachloro-m-xylene	8400	LINR	-7.3771217	1.185e-004	0.994
Decachlorobiphenyl	5746	LINR	-6.5809225	1.731e-004	0.997

Lab Name: FRIEND LABORATORY, INC. Contract: _____
Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA
Instrument ID: HP3
GC Column: RTX-CLPest1 ID: 0.32 (mm) Date(s) Analyzed: 11/26/02 10:54
File Numbers: 6868

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
PCB 1254	250 PPB	1*	14.49	14.39	14.59	926.85
		2*	14.73	14.63	14.83	1463.73
		3*	15.09	14.99	15.19	701.10
		4	15.27	15.17	15.37	1063.11
		5	15.64	15.54	15.74	1159.66
Tetrachloro-m-xylene	300 PPB		8.60	8.50	8.70	33712.85
Decachlorobiphenyl	300 PPB		20.10	20.00	20.20	15700.69

* Denotes required peaks

Single injections of the low standard are made to establish approximate retention times and instrument sensitivity. Five point calibrations are performed if a multipeak component is detected in a sample.
Alternate column confirmation is run if a pesticide or PCB is detected in a site sample.

CF peak 3

$\frac{175274}{250} = 701.10$

%D Avg

$\left| \frac{250-250}{250} \right| \times 100 = 0$

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1660

File Name: E2980776.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 11/23/02

Analysis Time: 0225

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1016	1	10.18	10.08	10.28	345.60	250.00	38.24
Aroclor-1016	2	10.69	10.60	10.80	294.90	250.00	17.96
Aroclor-1016	3	11.88	11.79	11.99	337.54	250.00	35.02
Aroclor-1016	4	11.96	11.87	12.07	349.59	250.00	39.84
Aroclor-1016	5	12.67	12.57	12.77	277.93	250.00	11.17
Aroclor-1260	1	14.92	14.83	15.03	271.52	250.00	8.61
Aroclor-1260	2	15.33	15.25	15.45	270.51	250.00	8.20
Aroclor-1260	3	16.19	16.10	16.30	260.89	250.00	4.36
Aroclor-1260	4	16.29	16.20	16.40	171.87	250.00	31.25
Aroclor-1260	5	16.75	16.66	16.86	312.51	250.00	25.00
Tetrachloro-m-xylene	1	7.95	7.86	8.06	356.61	300.00	18.87
Decachlorobiphenyl	1	20.11	20.02	20.22	372.91	300.00	24.30

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or ~~equal to 15%~~.

1016 Avg.

$\frac{321 - 250}{250} / \times 100 = 28.4$

1260 Avg

$\frac{257 - 250}{250} / \times 100 = 2.8\%$

00096

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1660

File Name: E2980783.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 11/23/02

Analysis Time: 0604

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1016	1	10.18	10.08	10.28	316.95	250.00	26.78
Aroclor-1016	2	10.69	10.60	10.80	253.38	250.00	1.35
Aroclor-1016	3	11.87	11.79	11.99	288.97	250.00	15.59
Aroclor-1016	4	11.96	11.87	12.07	294.39	250.00	17.76
Aroclor-1016	5	12.66	12.57	12.77	277.51	250.00	11.00
Aroclor-1260	1	14.92	14.83	15.03	247.89	250.00	0.84
Aroclor-1260	2	15.33	15.25	15.45	253.55	250.00	1.42
Aroclor-1260	3	16.19	16.10	16.30	281.37	250.00	12.55
Aroclor-1260	4	16.29	16.20	16.40	268.95	250.00	7.58
Aroclor-1260	5	16.75	16.66	16.86	274.74	250.00	9.90
Tetrachloro-m-xylene	1	7.95	7.86	8.06	317.72	300.00	5.91
Decachlorobiphenyl	1	20.10	20.02	20.22	312.69	300.00	4.23

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

1016 Avg

$\left|\frac{286-250}{250}\right| \times 100 = 14.4\%$

PCB Avg.

$\left|\frac{265-250}{250}\right| \times 100 = 6\%$

00097

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1660

File Name: E2980791.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 11/23/02

Analysis Time: 1014

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1016	1	10.17	10.08	10.28	316.17	250.00	26.47
Aroclor-1016	2	10.69	10.60	10.80	249.67	250.00	0.13
Aroclor-1016	3	11.87	11.79	11.99	278.81	250.00	11.52
Aroclor-1016	4	11.96	11.87	12.07	282.20	250.00	12.88
Aroclor-1016	5	12.66	12.57	12.77	243.57	250.00	2.57
Aroclor-1260	1	14.92	14.83	15.03	265.44	250.00	6.18
Aroclor-1260	2	15.33	15.25	15.45	271.74	250.00	8.70
Aroclor-1260	3	16.19	16.10	16.30	302.15	250.00	20.86
Aroclor-1260	4	16.29	16.20	16.40	276.82	250.00	10.73
Aroclor-1260	5	16.75	16.66	16.86	290.17	250.00	16.07
Tetrachloro-m-xylene	1	7.95	7.86	8.06	323.83	300.00	7.94
Decachlorobiphenyl	1	20.10	20.02	20.22	335.68	300.00	11.89

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

1016 Avg

$\left|\frac{274-250}{250}\right| \times 100 = 9.6$

1260 Avg.

$\left|\frac{281-250}{250}\right| \times 100 = 12.4$

00098

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1660

File Name: E2980812.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 11/25/02

Analysis Time: 2351

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1016	1	10.17	10.08	10.28	327.19	250.00	30.88
Aroclor-1016	2	10.69	10.60	10.80	264.97	250.00	5.99
Aroclor-1016	3	11.87	11.79	11.99	293.96	250.00	17.58
Aroclor-1016	4	11.95	11.87	12.07	298.05	250.00	19.22
Aroclor-1016	5	12.66	12.57	12.77	246.81	250.00	1.28
Aroclor-1260	1	14.92	14.83	15.03	254.63	250.00	1.85
Aroclor-1260	2	15.33	15.25	15.45	267.02	250.00	6.81
Aroclor-1260	3	16.18	16.10	16.30	291.47	250.00	16.59
Aroclor-1260	4	16.28	16.20	16.40	270.70	250.00	8.28
Aroclor-1260	5	16.74	16.66	16.86	291.67	250.00	16.67
Tetrachloro-m-xylene	1	7.95	7.86	8.06	334.83	300.00	11.61
Decachlorobiphenyl	1	20.10	20.02	20.22	324.02	300.00	8.01

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

1016 Avg.

$\left|\frac{286-250}{250}\right| \times 100 = 14.4$

1260 Avg.

$\left|\frac{275-250}{250}\right| \times 100 = 10$

00099

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____
Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1660
File Name: E2980822.D
Instrument ID: HP1.I
GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)
Analysis Date: 11/26/02
Analysis Time: 0502

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1016	1	10.17	10.08	10.28	346.82	250.00	38.73
Aroclor-1016	2	10.68	10.60	10.80	286.96	250.00	14.78
Aroclor-1016	3	11.87	11.79	11.99	303.07	250.00	21.23
Aroclor-1016	4	11.95	11.87	12.07	292.65	250.00	17.06
Aroclor-1016	5	12.66	12.57	12.77	230.93	250.00	7.63
Aroclor-1260	1	14.91	14.83	15.03	283.71	250.00	13.48
Aroclor-1260	2	15.33	15.25	15.45	281.20	250.00	12.48
Aroclor-1260	3	16.18	16.10	16.30	255.62	250.00	2.25
Aroclor-1260	4	16.28	16.20	16.40	174.75	250.00	30.10
Aroclor-1260	5	16.74	16.66	16.86	315.16	250.00	26.06
Tetrachloro-m-xylene	1	7.94	7.86	8.06	371.47	300.00	23.82
Decachlorobiphenyl	1	20.10	20.02	20.22	442.31	300.00	47.44

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

1016 Avg.

$\left(\frac{292-250}{250}\right) \times 100 = 16.8$

1260 Avg.

$\left(\frac{260-250}{250}\right) \times 100 = 4.8$

00100

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1660

File Name: E2980828.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 11/26/02

Analysis Time: 0809

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1016	1	10.17	10.08	10.28	361.03	250.00	44.41
Aroclor-1016	2	10.69	10.60	10.80	291.16	250.00	16.46
Aroclor-1016	3	11.87	11.79	11.99	266.69	250.00	6.68
Aroclor-1016	4	11.95	11.87	12.07	287.34	250.00	14.94
Aroclor-1016	5	12.66	12.57	12.77	231.97	250.00	7.21
Aroclor-1260	1	14.92	14.83	15.03	268.69	250.00	7.48
Aroclor-1260	2	15.33	15.25	15.45	260.97	250.00	4.39
Aroclor-1260	3	16.18	16.10	16.30	234.06	250.00	6.38
Aroclor-1260	4	16.28	16.20	16.40	156.55	250.00	37.38
Aroclor-1260	5	16.74	16.66	16.86	285.27	250.00	14.11
Tetrachloro-m-xylene	1	7.95	7.86	8.06	374.89	300.00	24.96
Decachlorobiphenyl	1	20.10	20.02	20.22	376.89	300.00	25.63

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

1016 Avg.

$\left|\frac{288-250}{250}\right| \times 100 = 15.2$

1260 Avg.

$\left|\frac{241-250}{250}\right| \times 100 = 3.6$

00101

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1660

File Name: E2980833.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 11/26/02

Analysis Time: 1205

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1016	1	10.19	10.08	10.28	307.90	250.00	23.16
Aroclor-1016	2	10.70	10.60	10.80	250.51	250.00	0.20
Aroclor-1016	3	11.88	11.79	11.99	269.83	250.00	7.93
Aroclor-1016	4	11.97	11.87	12.07	277.44	250.00	10.98
Aroclor-1016	5	12.67	12.57	12.77	234.70	250.00	6.12
Aroclor-1260	1	14.93	14.83	15.03	242.77	250.00	2.89
Aroclor-1260	2	15.34	15.25	15.45	254.33	250.00	1.73
Aroclor-1260	3	16.19	16.10	16.30	279.42	250.00	11.77
Aroclor-1260	4	16.30	16.20	16.40	252.52	250.00	1.01
Aroclor-1260	5	16.75	16.66	16.86	278.37	250.00	11.35
Tetrachloro-m-xylene	1	7.96	7.86	8.06	322.79	300.00	7.60
Decachlorobiphenyl	1	20.11	20.02	20.22	314.56	300.00	4.85

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

1016 Avg.

$\left|\frac{268-252}{252}\right| \times 100 = 7.2$

1260 Avg.

$\left|\frac{261-252}{260}\right| \times 100 = 11.4$

00102

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1660

File Name: E2980836.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 11/26/02

Analysis Time: 1336

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1016	1	10.18	10.08	10.28	320.69	250.00	28.28
Aroclor-1016	2	10.69	10.60	10.80	239.68	250.00	4.13
Aroclor-1016	3	11.88	11.79	11.99	223.47	250.00	10.61
Aroclor-1016	4	11.96	11.87	12.07	250.68	250.00	0.27
Aroclor-1016	5	12.66	12.57	12.77	217.05	250.00	13.18
Aroclor-1260	1	14.92	14.83	15.03	228.49	250.00	8.60
Aroclor-1260	2	15.33	15.25	15.45	231.29	250.00	7.48
Aroclor-1260	3	16.19	16.10	16.30	265.54	250.00	6.22
Aroclor-1260	4	16.29	16.20	16.40	235.58	250.00	5.77
Aroclor-1260	5	16.74	16.66	16.86	260.94	250.00	4.38
Tetrachloro-m-xylene	1	7.96	7.86	8.06	322.30	300.00	7.43
Decachlorobiphenyl	1	20.10	20.02	20.22	301.80	300.00	0.60

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

1016 Avg

$\left|\frac{250-250}{250}\right| \times 100 = 0$

1260 Avg.

$\left|\frac{244-250}{250}\right| \times 100 = 2.4$

00103

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1660

File Name: E2980842.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 11/26/02

Analysis Time: 1647

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1016	1	10.18	10.08	10.28	313.98	250.00	25.59
Aroclor-1016	2	10.70	10.60	10.80	236.39	250.00	5.44
Aroclor-1016	3	11.88	11.79	11.99	226.99	250.00	9.20
Aroclor-1016	4	11.96	11.87	12.07	247.00	250.00	1.20
Aroclor-1016	5	12.67	12.57	12.77	210.41	250.00	15.84
Aroclor-1260	1	14.92	14.83	15.03	222.06	250.00	11.18
Aroclor-1260	2	15.33	15.25	15.45	221.32	250.00	11.47
Aroclor-1260	3	16.19	16.10	16.30	251.38	250.00	0.55
Aroclor-1260	4	16.29	16.20	16.40	217.11	250.00	13.16
Aroclor-1260	5	16.74	16.66	16.86	248.95	250.00	0.42
Tetrachloro-m-xylene	1	7.96	7.86	8.06	319.12	300.00	6.37
Decachlorobiphenyl	1	20.10	20.02	20.22	279.58	300.00	6.81

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

Avg 1016

$\left|\frac{247-250}{250}\right| \times 100 = 1.2$

Avg 1260

$\left|\frac{232-250}{250}\right| \times 100 = 7.2$

00104

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254

File Name: E3956872.D

Instrument ID: HP3.I

GC Column: RTX-CLPesticides 1 ID: 0.32 (mm)

Analysis Date: 11/26/02

Analysis Time: 1258

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	14.48	14.39	14.59	255.60	250.00	2.24
Aroclor-1254	2	14.72	14.63	14.83	257.17	250.00	2.87
Aroclor-1254	3	15.09	14.99	15.19	264.86	250.00	5.94
Aroclor-1254	4	15.27	15.17	15.37	263.95	250.00	5.58
Aroclor-1254	5	15.63	15.54	15.74	258.72	250.00	3.49
Tetrachloro-m-xylene	1	8.58	8.50	8.70	302.96	300.00	0.99
Decachlorobiphenyl	1	20.10	20.00	20.20	307.79	300.00	2.60

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

$\%D = \frac{|260 - 252|}{252} \times 100 = 4$

RF (peak 2.)

$\frac{376425}{250} = 1505.7$

00105

FORM VII-PCB-2

8D

PCB ANALYTICAL SEQUENCE

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1121

Instrument ID: HP1 Init. Calib. Date(s): 11/22/2 11/23/2

GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 7.96 DCB: 20.11

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	1660STD1	1660STD1	11/22/2	1427	7.98	20.13
02	1660STD2	1660STD2	11/22/2	1457	7.97	20.12
03	1660STD3	1660STD3	11/22/2	1528	7.96	20.11
04	1660STD4	1660STD4	11/22/2	1559	7.96	20.11
05	1660STD5	1660STD5	11/22/2	1630	7.96	20.11
06	1660STD6	1660STD6	11/22/2	1702	7.96	20.11
07	1660STD1	1254STD1	11/22/2	1804	7.97	20.12
08	1660STD2	1254STD2	11/22/2	1835	7.96	20.11
09	1660STD3	1254STD3	11/22/2	1907	7.96	20.11
10	1660STD4	1254STD4	11/22/2	1938	7.96	20.11
11	1660STD5	1254STD5	11/22/2	2009	7.96	20.11
12	1660STD6	1254STD6	11/22/2	2041	7.95	20.11
13	1248STD	1248STD	11/22/2	2112	7.95	20.11
14	1242STD	1242STD	11/22/2	2143	7.95	20.11
15	1232STD	1232STD	11/22/2	2214	7.96	20.11
16	1221STD	1221STD	11/22/2	2246	7.96	20.11
17	MB42	MB42	11/22/2	2317	7.96	20.10
18	1660CC01 ✓	1660CC01	11/23/2	0225	7.95	20.11
19	L97127-1	L97127-1	11/23/2	0256	7.96	20.11
20	L97127-2	L97127-2	11/23/2	0328	7.97	20.11
21	L97127-3	L97127-3	11/23/2	0359	7.97	20.11
22	L97127-5	L97127-5	11/23/2	0501	7.96	20.11
23	1660CC02 ✓	1660CC02	11/23/2	0604	7.95	20.10
24	L97127-6	L97127-6	11/23/2	0635	7.96	20.10
25	L97127-7	L97127-7	11/23/2	0706	7.96	20.10
26	L97127-8	L97127-8	11/23/2	0738	7.96	20.10
27	L97127-8MS	L97127-8MS	11/23/2	0809	7.96	20.11
28	L97127-8MSD	L97127-8MSD	11/23/2	0840	7.96	20.10
29	L97127-11	L97127-11	11/23/2	0911	7.96	20.10
30	1660CC03 ✓	1660CC03	11/23/2	1014	7.95	20.10
31	1660CC07 ✓	1660CC07	11/25/2	2351	7.95	20.10
32	MB45	MB45	11/26/2	0022	7.94	20.09
33	~~QC45~~	QC45	11/26/2	0053	7.94	20.09
34	L97224-1	L97224-1	11/26/2	0124	7.95	20.10
35	L97224-2	L97224-2	11/26/2	0155	7.95	20.10
36	L97224-3	L97224-3	11/26/2	0227	7.95	20.09
37	L97224-4	L97224-4	11/26/2	0258	7.95	20.10

QC LIMITS

TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.

* Values outside of QC limits.

FORM VIII PCB

00106

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA1121
Instrument ID: HP1 Init. Calib. Date(s): 11/22/2 11/22/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 7.96 DCB: 20.11

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	L97224-5	L97224-5	11/26/2	0329	7.95	20.09
02	L97224-6	L97224-6	11/26/2	0400	7.95	20.10
03	1660CC08	1660CC08	11/26/2	0502	7.94	20.10
04	L97224-7	L97224-7	11/26/2	0534	7.96	20.10
05	L97224-8	L97224-8	11/26/2	0605	7.96	20.10
06	L97224-9	L97224-9	11/26/2	0636	7.96	20.10
07	L97224-10	L97224-10	11/26/2	0707	7.95	20.10
08	1660CC09	1660CC09	11/26/2	0809	7.95	20.10
09	1660CC10	1660CC10	11/26/2	1205	7.96	20.11
10	QC42	QC42	11/26/2	1234	7.95	20.10
11	QC45	QC45	11/26/2	1305	7.95	20.10
12	1660CC11	1660CC11	11/26/2	1336	7.96	20.10
13	L97127-4	L97127-4	11/26/2	1408	7.96	20.10
14	~~L96984-13~~	L96984-13	11/26/2	1442	7.96	20.10
15	L96984-4	L96984-4	11/26/2	1514	7.96	20.10
16	~~L96984-5~~	L96984-5	11/26/2	1545	7.96	20.10
17	1660CC12	1660CC12	11/26/2	1647	7.96	20.10
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA1121CONFIRM
Instrument ID: HP3 Init. Calib. Date(s): 11/20/2 11/2
GC Column: RTX-CLPESTICIDES 1 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 8.60 DCB: 20.10

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	1254STD	1254STD	11/26/2	1054	8.60	20.10
02	L97127-4	L97127-4	11/26/2	1125	8.58	20.10
03	~~L97260-5~~	L97260-5	11/26/2	1156	8.57	20.10
04	1254CC01	1254CC01	11/26/2	1258	8.58	20.10
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
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27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

10B

PESTICIDE IDENTIFICATION SUMMARY FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L97127-4

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1121

Lab Sample ID: L97127-4 Date(s) Analyzed: 11/26/2 11/26/02

Instrument ID (1): HP1 Instrument ID (2): HP3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST 1 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.26	13.16	13.36	849.67		
Aroclor-1254	2	13.65	13.55	13.75	714.77		
	3	14.92	14.82	15.02	435.64		
COLUMN 1	4	15.33	15.23	15.43	233.24		
	5	16.00	15.92	16.12	184.64	483.59	
	1	14.49	14.39	14.59	213.42		
	2	14.74	14.63	14.83	503.43		
	3	15.10	14.99	15.19	516.13		
COLUMN 2	4	15.28	15.17	15.37	185.40		
	5	15.65	15.54	15.74	378.28	359.33	34.6
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

00109

10B

PESTICIDE IDENTIFICATION SUMMARY FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.: L97127-8MS

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA1121

Lab Sample ID: L97127-8MS Date(s) Analyzed: 11/23/2 _____

Instrument ID (1): HP1 Instrument ID (2): _____

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): _____ ID: ____

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	10.18	10.08	10.28	442.08		
Aroclor-1016	2	10.69	10.60	10.80	336.65		
	3	11.88	11.78	11.98	359.78		
COLUMN 1	4	11.96	11.86	12.06	418.40		
	5	12.66	12.57	12.77	540.19	419.42	
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1	14.92	14.82	15.02	521.22		
Aroclor-1260	2	15.34	15.24	15.44	541.34		
	3	16.19	16.09	16.29	424.74		
COLUMN 1	4	16.29	16.19	16.39	368.84		
	5	16.75	16.65	16.85	422.97	455.82	
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

W.O. [redacted]

Organic Extractions

Id: [redacted] 02-090 Page: 1/5

Extracted By: 11/25/02
Date Extracted: KJB

Sur Ref.: QC-131-35-D
Sur Conc.: 100-131-35-E (new)

Analysis: 8082
Matrix: Soil (3550)

Spike Ref.: QC-131-34-K
Spike Conc.:

Clean up method
1. 3665 H_2SO_4
2. 3620A Florisil
3. 3660A Hg.

I. D.	Customer	Int. size	Fin. vol.	Sr. amt.	Spk amt.	Wit.. by	Clean-ups
MB45		10.7912	10 ml	1 ml			1,2,3
QC45		10.2087	↓	↓	1 ml		↓
LQ7224-1	ADA Env	10.0518	↓	↓	↓	↓	↓
-2	↓	10.3153	↓	↓	↓	↓	↓
-3	↓	10.3619	↓	↓	↓	↓	↓
-4	↓	10.2739	↓	↓	↓	↓	↓
-5	↓	10.2400	↓	↓	↓	↓	↓
-6	↓	10.4731	↓	↓	↓	↓	↓
-7	↓	10.2425	↓	↓	↓	↓	↓
-8	↓	10.1510	↓	↓	↓	↓	↓
-9	↓	10.7507	↓	↓ new	↓	↓	↓
-10	↓	10.4319	↓	↓	↓	↓	↓
[redacted]	[redacted]	10.3920	↓	↓	↓	↓	↓
[redacted]	[redacted]	10.1325	↓	↓	↓	↓	↓

Extracts Reliquished to: _____

Comments:

[redacted]

C.O.C

286836
11/25

N.G. 33702

Organic Extractions

Notebook: 02-090 Page: 42

Extracted By: KJB
Date Extracted: 11/22/02

Sur Ref.: OD 13/35 D
Sur Conc.:

Analysis: 8082
Matrix: SOIL (3550)

Spike Ref.: OD 13/34 K
Spike Conc.:

Clean up method
1. 3665 H_2SO_4
2. 3620A florisil
3. 3660A Hg

I. D.	Customer	Int. size	Fin. vol.	Sr. amt.	Spk amt.	Wit.. by	Clean-ups
MB42		10.8904	10 ml	1 ml			1,2,3
QC42		10.3378			1 ml		
L97127-1	AAA Env	10.4618					
-2		10.5489					
-3		10.3388					
-4		10.3582					
-5		10.1284					
-6		10.1907					
-7		10.0992					
-8		10.5672					
-9 MS		10.5384			1 ml		
-10 MSD		10.4028			1		
-11		10.9690					

Extracts Reliquished to:

Comments:

C.O.C.

R86755
11/22/02

WET CHEMISTRY TOTAL SOLIDS [redacted]X

Notebook : 02-123
Start Date : 21-NOV-02 13:37
End Date : 21-NOV-02 13:37

Sample I.D.	Analysis Date Time	Anal Init	Method	Dish#	Volume (mls)	Initial Weight	1st&2nd Weight	3rd&4th Weight	5th&6th Weight	7th&8th Weight	9th&10th Weight	Final Result	Rpd	Units
L97127-1	Start:21-NOV-02 13:37 Stop :21-NOV-02 13:37		CLP 3.0	3	5.1421	1.2559	5.2034					76.8		%
Comments :														
L97127-11	Start:21-NOV-02 13:37 Stop :21-NOV-02 13:37		CLP 3.0	11	5.3726	1.2636	6.0921					89.9		%
Comments :														
L97127-2	Start:21-NOV-02 13:37 Stop :21-NOV-02 13:37		CLP 3.0	4	5.8228	1.2688	5.828					78.3		%
Comments :														
L97127-3	Start:21-NOV-02 13:37 Stop :21-NOV-02 13:37		CLP 3.0	5	5.16	1.2629	5.9325					90.5		%
Comments :														
L97127-4	Start:21-NOV-02 13:37 Stop :21-NOV-02 13:37		CLP 3.0	6	5.4977	1.257	6.1006					88.1		%
Comments :														
L97127-5	Start:21-NOV-02 13:37 Stop :21-NOV-02 13:37		CLP 3.0	7	5.2953	1.2626	5.9614	5.9614 - 1.2626 5.2953				88.7 88.72		%
Comments :														
L97127-6	Start:21-NOV-02 13:37 Stop :21-NOV-02 13:37		CLP 3.0	8	5.1257	1.2693	5.1915					76.5		%
Comments :														
L97127-7	Start:21-NOV-02 13:37 Stop :21-NOV-02 13:37		CLP 3.0	9	5.1442	1.2597	5.66					85.5		%
Comments :														
L97127-8	Start:21-NOV-02 13:37 Stop :21-NOV-02 13:37		CLP 3.0	10	5.5922	1.266	6.5581					94.6	.106	%
Comments :														
WG13681-1	Start:21-NOV-02 13:37 Stop :21-NOV-02 13:37		CLP 3.0	1	1.2638	1.2639	1.2629				Blank	-.0791		%

Calculations: Final Results = (fnl - initial) x 1000000

$$\frac{\text{wgt} - \text{wgt}}{\text{mls of sample}}$$

Analyst Signature 11/22/2 Date

Manager Signature 11/22/02 Date

00167

WET CHEMISTRY TOTAL SOLIDS NOTEBOOK

Notebook : 02-123
Start Date : 21-NOV-02 13:37
End Date : 21-NOV-02 13:37

Sample I.D.	Analysis Date Time	Anal Init	Method	Dish#	Volume (mls)	Initial Weight	1st&2nd Weight	3rd&4th Weight	5th&6th Weight	7th&8th Weight	9th&10th Weight	Final Result	Rpd	Units
Comments :														
WG33681-2	Start:21-NOV-02 13:37 Stop :21-NOV-02 13:37		CLP 3.0	2	5.3845	1.2662	6.3629					94.7		%
Comments : L97127-8D														

Calculations: Final Results = (fnl wgt - initial wgt) x 1000000 / mls of sample

Analyst Signature 11/22/02 Date

Manager Signature 11/22/02 Date

89200

WET CHEMISTRY TOTAL SOLIDS NO

Notebook : 02-123
Start Date : 27-NOV-02 13:32
End Date : 27-NOV-02 13:32

Sample I.D.	Analysis Date Time	Anal Init	Method	Dish#	Volume (mls)	Initial Weight	1st&2nd Weight	3rd&4th Weight	5th&6th Weight	7th&8th Weight	9th&10th Weight	Final Result	Rpd	Units
L97224-1	Start:27-NOV-02 13:32 Stop :27-NOV-02 13:32 Comments :		CLP 3.0	3	5.0547	1.2537	5.4052					82.1	1.349	%
L97224-10	Start:27-NOV-02 13:32 Stop :27-NOV-02 13:32 Comments :		CLP 3.0	12	5.4805	1.2593	6.0736					87.8		%
L97224-2	Start:27-NOV-02 13:32 Stop :27-NOV-02 13:32 Comments :		CLP 3.0	4	5.5682	1.2661	5.5286					76.6		%
L97224-3	Start:27-NOV-02 13:32 Stop :27-NOV-02 13:32 Comments :		CLP 3.0	5	5.0249	1.2578	4.6096					66.7		%
L97224-4	Start:27-NOV-02 13:32 Stop :27-NOV-02 13:32 Comments :		CLP 3.0	6	5.8609	1.2612	5.4684					71.8		%
L97224-5	Start:27-NOV-02 13:32 Stop :27-NOV-02 13:32 Comments :		CLP 3.0	7	5.1228	1.2679	5.236					77.5		%
L97224-6	Start:27-NOV-02 13:32 Stop :27-NOV-02 13:32 Comments :		CLP 3.0	8	5.1998	1.2612	5.2824					77.3		%
L97224-7	Start:27-NOV-02 13:32 Stop :27-NOV-02 13:32 Comments :		CLP 3.0	9	5.087	1.2721	5.227					77.7		%
L97224-8	Start:27-NOV-02 13:32 Stop :27-NOV-02 13:32 Comments :		CLP 3.0	10	5.3433	1.2583	5.3528					76.6		%
L97224-9	Start:27-NOV-02 13:32 Stop :27-NOV-02 13:32		CLP 3.0	11	5.2674	1.2673	5.8899					87.8		%

Calculations: Final Results = (fnl - initial) x 1000000

$$\frac{\text{wgt} - \text{wgt}}{\text{mls of sample}}$$

Analyst Signature 3/27 Date

Manager Signature 3/27/03 Date

69200

Notebook : 02-123
Start Date : 27-NOV-02 13:32
End Date : 27-NOV-02 13:32

Sample I.D.	Analysis Date Time	Anal Init	Method	Dish#	Volume (mls)	Initial Weight	1st&2nd Weight	3rd&4th Weight	5th&6th Weight	7th&8th Weight	9th&10th Weight	Final Result	Rpd	Units
Comments :														
WG33762-1	Start:27-NOV-02 13:32 Stop :27-NOV-02 13:32		CLP 3.0	1	1.2631	1.263	1.2631					.00792		%
Comments : Blank														
WG33762-2	Start:27-NOV-02 13:32 Stop :27-NOV-02 13:32		CLP 3.0	2	5.1582	1.262	5.4383					81		%
Comments : L97224-1D														

Calculations: Final Results = $\frac{(\text{fnl wgt} - \text{initial wgt}) \times 1000000}{\text{mls of sample}}$

John Kerbs/KBO 3/27
Analyst Signature Date

Teresa B. Bailey 3/27/03
Manager Signature Date

02700

ECT.CON INC.
Environmental and Computer
Technology Consultants

Data Validation Report

SDG#	94538
Validation Report Date	April 28, 2003
Validation Guidance	USEPA Region 2 Guidelines for Data Review SW 846 Method 8082
Client Name	Cummings-Riter
Project Name	Viacom/Horseheads
Laboratory	Friend Laboratory Inc.
Method(s) Utilized	SW 846 8082
Analytical Fraction	PCBs

Samples/Matrix:

Date Sampled	Sample ID	Laboratory ID	PCBs	Matrix
9/24/02	B-B-SS-W-001(B)	94538-1	X	Solid
9/24/02	B-B-SS-E-001	94538-2	X	Solid
9/24/02	B-B-S-E-001	94538-5	X	Solid
9/24/02	B-B-SS-W-001(A)	94538-6	X	Solid
9/24/02	B-C-S-B-001	94538-7	X	Solid
9/24/02	B-B-S-W-001	94538-8	X	Solid

Analytical data in this report were screened to determine analytical limitations of the data based on specific quality control criteria. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of laboratory calculations has been verified as part of this validation. Specific findings on analytical limitations are presented in this report. Annotated Form 1s or spreadsheets for samples reviewed are included after the Data Assessment Findings. Form 1s for the MS/MSD samples and spreadsheets are not annotated.

SUMMARY

The sample set for Viacom/Horsehead consists of six solid field samples. These samples were analyzed for the parameters as provided above. The findings presented in this review of the analytical data assume that the information presented by the analytical laboratory is correct. This review is identified as a false positive/false negative review, and therefore, does not include the review of some quality control (QC) items. Those included in the review are listed below.

The polychlorinated biphenyl (PCBs) findings are based upon the assessment of the following:

* • Data Completeness
* • Holding Times
* • Calibration and GC Performance
* • Blanks
* • Analytical Sequence Check
* • Target Compound Identification
  • Compound Quantitation and Reported Detection Limits
* • Chromatogram Quality

* Criteria were met for this evaluation item.

This evaluation was conducted in accordance with USEPA Region II SOP No. HW-23B (May 2002), USEPA CLP National Functional Guidelines for Organic Data Review and the analytical method. Findings from this evaluation should be considered when using the analytical data. This report presents a summary of the data qualifications based on the review of the aforementioned evaluation criteria. This is followed by annotated Form 1s/ spreadsheets. Finally, the worksheets used to perform the evaluation are provided.

FINDINGS

Polychlorinated Biphenyls (PCBs)

1. Compound Quantitation

The percent difference between columns exceeded the 25% quality control limit. For the following samples and compounds, qualify PCB results as indicated in the table below. Samples were qualified based on SOP HW-23, Section 12.6.

Sample	Compound	% Difference	Qualifier
B-B-SS-W-001(B)	Aroclor 1254	35.6%	J
B-B-SS-E-001	Aroclor 1254	36.7%	J
B-B-S-W-001	Aroclor 1254	48.6%	J

NOTES

Polychlorinated Biphenyls (PCBs)

Completeness

The USEPA Region II SOP No. HW-23B has the following sections that are not applicable to this project because it is a false positive/false negative review:

- Surrogate Recovery (Form 2)
- Laboratory Control Sample
- Matrix Spikes (Form 3)
- Contamination
- GC Apparatus and Materials
- Extraction Techniques for Sample Preparation
- Field Duplicates

Samples within this batch were received by the laboratory over a three day period. The case narrative indicates that the various cooler temperature upon receipt at the laboratory ranged from 3 to 6 C. Data are not qualified upon this basis.

Calibration

The laboratory used linear regression to calculate PCB results. The use of linear regression is permissible for SW-846 methodologies. The laboratory met the acceptance criteria specified in Section 7.5.2 of Method 8000B (r value greater than or equal to 0.99).

Data summary forms (including calibration factors) for the initial and continuing calibration is not provided for the second column except for Aroclor 1254. The second column is used only for fingerprint confirmation, therefore, the laboratory does not provide the calibration factor information. Because Aroclor 1254 was identified as a constituent of concern, the data summary information for the second column is provided for the continuing calibration. Data are not qualified on this basis.

The percent difference (%D) per peak for multi-standard Aroclors are provided. For SW 846, the laboratory used the average Aroclor concentration to determine the %D. Data are not qualified because the average value is used.

Retention Time

Retention time windows are not determined by the use of three standards for single standard calibration Aroclors. The center of the retention time window is defined as the retention time of the midpoint standard from the initial calibration. For the multi-standard calibration Aroclors, the center of the retention time window is the mean of the retention time generated from each standard. The retention time windows are the mean $\pm$ 0.1 minutes. Data are not qualified on this basis.

Retention time windows are not provided for the second column except for Aroclor 1254. The second column is used only for fingerprint confirmation, therefore, the laboratory does not provide the retention time window information. Because Aroclor 1254 was identified as a constituent of concern, the retention time information for the second column is provided. Data are not qualified on this basis.

Compound Quantitation

Samples were analyzed and reported at a dilution due to the presence of target compounds. Dilutions for samples are presented below. Reporting limits were adjusted for percent solids and dilutions.

B-B-SS-W-001(B), B-B-SS-E-001, B-B-S-E-001, B-B-SS-W-001(A), B-C-S-B-001, B-B-S-W-001	10x

Data Reviewer

7/28/03
Date

Glossary of Data Qualifiers

U	Not Detected.	The associated number indicates approximate sample concentration necessary to be detected.
UJ	Not Detected.	Quantitation limit may be inaccurate or imprecise.
J	Analyte Present.	Reported value may not be accurate or precise.
N	Consider Present.	Tentative identification. Special methods may be needed to confirm its presence or absence in future sampling efforts.
R	Unusable Result.	Analyte may or may not be present in the sample.
UR	Unusable Result.	Analyte may or may not be present in the sample.

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Environmental and Computer
Technology Consultants

Annotated Form 1's

(Spreadsheet)

FLI
FRIEND LABORATORY
I · N · C

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:30-SEP-2002

Lab Sample ID: L94538-1

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: B-B-SS-W-001 (B)
Description: COMPOSITE
Sampled On: 24-SEP-02 16:15 by CLIENT
Date Received: 25-SEP-02 15:25
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	69.2	%		25-SEP-02 00:00	CLP 3.0	02-066-77
EPA 8082						
PCB 1016	U	ug/kg	140	26-SEP-02 12:17	EPA 8082	02-004-9953
PCB 1221	U	ug/kg	280	26-SEP-02 12:17	EPA 8082	02-004-9953
PCB 1232	U	ug/kg	140	26-SEP-02 12:17	EPA 8082	02-004-9953
PCB 1242	U	ug/kg	140	26-SEP-02 12:17	EPA 8082	02-004-9953
PCB 1248	U	ug/kg	140	26-SEP-02 12:17	EPA 8082	02-004-9953
PCB 1254	260 J	ug/kg	140	26-SEP-02 12:17	EPA 8082	02-004-9953
PCB 1260	U	ug/kg	140	26-SEP-02 12:17	EPA 8082	02-004-9953
Extraction Information:				25-SEP-02 00:00	EPA 3550	02-044-87
Surrogate Recovery:						
Tetrachloro-m-xylene	75	%				02-004-9953
Decachlorobiphenyl	83	%				02-004-9953

DMB 4/25/03

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

rmation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost se services. Your samples will be discarded after 14 days unless we are advised otherwise.

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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:30-SEP-2002

Lab Sample ID: L94538-2

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: B-B-SS-E-001
Description: COMPOSITE
Sampled On: 24-SEP-02 16:10 by CLIENT
Date Received: 25-SEP-02 15:25
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	87.5	%		25-SEP-02 00:00	CLP 3.0	02-066-77
EPA 8082						
PCB 1016	U	ug/kg	100	26-SEP-02 09:41	EPA 8082	02-004-9948
PCB 1221	U	ug/kg	210	26-SEP-02 09:41	EPA 8082	02-004-9948
PCB 1232	U	ug/kg	100	26-SEP-02 09:41	EPA 8082	02-004-9948
PCB 1242	U	ug/kg	100	26-SEP-02 09:41	EPA 8082	02-004-9948
PCB 1248	U	ug/kg	100	26-SEP-02 09:41	EPA 8082	02-004-9948
PCB 1254	490 J	ug/kg	100	26-SEP-02 09:41	EPA 8082	02-004-9948
PCB 1260	U	ug/kg	100	26-SEP-02 09:41	EPA 8082	02-004-9948
Extraction Information:				*25-SEP-02 00:00*	*EPA 3550*	*02-044-87*
Surrogate Recovery:						
Tetrachloro-m-xylene	85	%				02-004-9948
Decachlorobiphenyl	114	%				02-004-9948

TMB 4/29/03

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

Information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed cost for these services. Your samples will be discarded after 14 days unless we are advised otherwise.

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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:30-SEP-2002

Lab Sample ID: L94538-5

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: B-B-S-E-001
Description: COMPOSITE
Sampled On: 24-SEP-02 16:00 by CLIENT
Date Received: 25-SEP-02 15:25
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	45.4	%		25-SEP-02 00:00	CLP 3.0	02-066-77
EPA 8082						
PCB 1016	U	ug/kg	200	26-SEP-02 10:12	EPA 8082	02-004-9949
PCB 1221	U	ug/kg	400	26-SEP-02 10:12	EPA 8082	02-004-9949
PCB 1232	U	ug/kg	200	26-SEP-02 10:12	EPA 8082	02-004-9949
PCB 1242	U	ug/kg	200	26-SEP-02 10:12	EPA 8082	02-004-9949
PCB 1248	U	ug/kg	200	26-SEP-02 10:12	EPA 8082	02-004-9949
PCB 1254	1100	ug/kg	200	26-SEP-02 10:12	EPA 8082	02-004-9949
PCB 1260	U	ug/kg	200	26-SEP-02 10:12	EPA 8082	02-004-9949
Extraction Information:				25-SEP-02 00:00	EPA 3550	02-044-87
Surrogate Recovery:						
Tetrachloro-m-xylene	87	%				02-004-9949
Decachlorobiphenyl	114	%				02-004-9949

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

rmation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost e services. Your samples will be discarded after 14 days unless we are advised otherwise.

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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:30-SEP-2002

Lab Sample ID: L94538-6

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: B-B-SS-W-001 (A)
Description: COMPOSITE
Sampled On: 24-SEP-02 15:50 by CLIENT
Date Received: 25-SEP-02 15:25
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	81.9	%		25-SEP-02 00:00	CLP 3.0	02-066-77
EPA 8082						
PCB 1016	U	ug/kg	110	26-SEP-02 10:43	EPA 8082	02-004-9950
PCB 1221	U	ug/kg	230	26-SEP-02 10:43	EPA 8082	02-004-9950
PCB 1232	U	ug/kg	110	26-SEP-02 10:43	EPA 8082	02-004-9950
PCB 1242	U	ug/kg	110	26-SEP-02 10:43	EPA 8082	02-004-9950
PCB 1248	U	ug/kg	110	26-SEP-02 10:43	EPA 8082	02-004-9950
PCB 1254	220	ug/kg	110	26-SEP-02 10:43	EPA 8082	02-004-9950
PCB 1260	U	ug/kg	110	26-SEP-02 10:43	EPA 8082	02-004-9950
Extraction Information:				25-SEP-02 00:00	EPA 3550	02-044-87
Surrogate Recovery:						
Tetrachloro-m-xylene	90	%				02-004-9950
Decachlorobiphenyl	110	%				02-004-9950

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

rmation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed ost for se services. Your samples will be discarded after 14 days unless we are advised otherwise.

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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:30-SEP-2002

Lab Sample ID: L94538-7

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: B-C-S-B-001
Description: COMPOSITE
Sampled On: 24-SEP-02 15:40 by CLIENT
Date Received: 25-SEP-02 15:25
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	80.7	%		25-SEP-02 00:00	CLP 3.0	02-066-77
EPA 8082						
PCB 1016	U	ug/kg	120	26-SEP-02 11:14	EPA 8082	02-004-9951
PCB 1221	U	ug/kg	240	26-SEP-02 11:14	EPA 8082	02-004-9951
PCB 1232	U	ug/kg	120	26-SEP-02 11:14	EPA 8082	02-004-9951
PCB 1242	U	ug/kg	120	26-SEP-02 11:14	EPA 8082	02-004-9951
PCB 1248	U	ug/kg	120	26-SEP-02 11:14	EPA 8082	02-004-9951
PCB 1254	1000	ug/kg	120	26-SEP-02 11:14	EPA 8082	02-004-9951
PCB 1260	U	ug/kg	120	26-SEP-02 11:14	EPA 8082	02-004-9951
Extraction Information:				25-SEP-02 00:00	EPA 3550	02-044-87
Surrogate Recovery:						
Tetrachloro-m-xylene	96	%				02-004-9951
Decachlorobiphenyl	141	%				02-004-9951

Results calculated on a dry weight basis.

Approved by: Lab Director

Page 1 of 1
NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
= analyte was detected in the method or trip blank J = result estimated below the quantitation limit

Information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost for these services. Your samples will be discarded after 14 days unless we are advised otherwise.

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32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date: 30-SEP-2002

Lab Sample ID: L94538-8

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS 19208
Origin: B-B-S-W-001
Description: COMPOSITE
Sampled On: 24-SEP-02 15:40 by CLIENT
Date Received: 25-SEP-02 15:25
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	86.2	%		25-SEP-02 00:00	CLP 3.0	02-066-77
EPA 8082						
PCB 1016	U	ug/kg	110	26-SEP-02 11:46	EPA 8082	02-004-9952
PCB 1221	U	ug/kg	210	26-SEP-02 11:46	EPA 8082	02-004-9952
PCB 1232	U	ug/kg	110	26-SEP-02 11:46	EPA 8082	02-004-9952
PCB 1242	U	ug/kg	110	26-SEP-02 11:46	EPA 8082	02-004-9952
PCB 1248	U	ug/kg	110	26-SEP-02 11:46	EPA 8082	02-004-9952
PCB 1254	270 J	ug/kg	110	26-SEP-02 11:46	EPA 8082	02-004-9952
PCB 1260	U	ug/kg	110	26-SEP-02 11:46	EPA 8082	02-004-9952
Extraction Information:				25-SEP-02 00:00	EPA 3550	02-044-87
Surrogate Recovery:						
Tetrachloro-m-xylene	103	%				02-004-9952
Decachlorobiphenyl	137	%				02-004-9952

Results calculated on a dry weight basis.

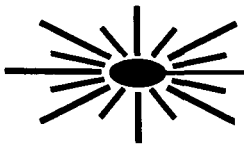
Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

[illegible]ormation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed [illegible]ost fo[illegible]ese services. Your samples will be discarded after 14 days unless we are advised otherwise.



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Environmental and Computer
Technology Consultants

Support Documentation

CUSTOM[illegible]

CHAIN OF CUSTODY RECORD

PAGE 1 OF [illegible]

FLI FRIEND LABORATORY I • N • C
ONE RESEARCH CIRCLE
WAVERLY NY 14892-1532
Telephone (607) 565 3500
Fax (607) 565-4083

Untreated | Sodium thiosulfate | HCl pH <2 | Ascorbic acid & HCl pH <2 | HNO_3 pH <2 | H_2SO_4 pH <2 | NaOH pH >12 | NaOH & Zinc acetate pH >9 | Acetic Buffer pH <3 | Sodium sulfite

CLIENT: AAA ENVIRONMENTAL
ADDRESS: HORSEHEADS ONSITE
PHONE: FAX:

INVOICE TO:
ADDRESS:

Sample Site: VIACOM/HORSEHEADS

P.O. #

PROJECT NO. / NAME
19208
VIACOM/HORSEHEADS

COPY TO:
ADDRESS:

94538

DATE & TIME OF SAMPLE COLLECTION	SAMPLE DESCRIPTION	NUMBER OF CONTAINERS	ANALYSES / TESTS REQUESTED	SAMPLE NUMBER
9/24/02 @ 1615	# B-B-SS-W-001 (B)	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's IN SOIL	-1 LAB USE ONLY
9/24/02 @ 1610	# B-B-SS-E-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's IN SOIL	-2, -3, -4
9/24/02 @ 1600	# B-B-S-E-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's IN SOIL	-5
9/24/02 @ 1550	# B-B-SS-W-001 (A)	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's IN SOIL	-6

RELINQUISHED BY	DATE /TIME	ACCEPTED BY	DATE/TIME	NOTES TO LABORATORY
SAMPLER A. SCHRECKENGOST RAS	9/25/02 0800	[signature]	9/25/02 2:20	Rush Project
[signature]	9/25 310	Tom Jones	9/25/02 3:25	

SUSPECTED CONTAMINATION LEVEL

NONE SLIGHT MODERATE HIGH (please circle)

CUSTOM[illegible] —

CHAIN OF CUSTODY RECORD

PAGE 1 OF [illegible]

FLI
FRIEND LABORATORY I • N • C

ONE RESEARCH CIRCLE
WAVERLY NY 14892-1532
Telephone (607) 565 3500
Fax (607) 565-4083

Untreated | Sodium thiosulfate | HCl pH <2 | Ascorbic acid & HCl pH <2 | HNO_3 pH <2 | H_2SO_4 pH <2 | NaOH pH >12 | NaOH & Zinc acetate pH >9 | Acetic Buffer pH <3 | Sodium sulfite

CLIENT: AAA ENVIRONMENTAL
ADDRESS: HORSEHEADS ON-SITE
PHONE: FAX:

INVOICE TO:
ADDRESS:
←

Sample Site:

P.O. #

PROJECT NO. / NAME
19208
VIACOM/HORSEHEADS

COPY TO:
ADDRESS:

94538

DATE & TIME OF SAMPLE COLLECTION	SAMPLE DESCRIPTION	NUMBER OF CONTAINERS	ANALYSES / TESTS REQUESTED	SAMPLE NUMBER
9/24/02 @1540	#B-C-S-B-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's IN SOIL	LAB USE ONLY -7
9/24/02 @ 1548	#B-B-S-W-001	X Description: Grab (Composite) Other Matrix: DW WW MW (Soil) Air Other	PCB's IN SOIL	-8
		Description: Grab Composite Other Matrix: DW WW MW Soil Air Other		
		Description: Grab Composite Other Matrix: DW WW MW Soil Air Other		

RELINQUISHED BY	DATE /TIME	ACCEPTED BY	DATE/TIME	NOTES TO LABORATORY
SAMPLER TAB A. SCHRECENGOST	9/24/02 0800		9/24/02 2209	Rush Project
	9/25/02 3:10	Tom Jones	9/25/02 3:25	

SUSPECTED CONTAMINATION LEVEL

NONE SLIGHT MODERATE HIGH (please circle)

Laboratory Case Narrative

FLI
FRIEND LABORATORY I · N · C

Laboratory Validation and Usability Assessment

Project: **AAA Environmental**
Viacom/Horseheads 19208
Sampled September 21, 23, & 24, 2002

The data reported in this package have been reviewed for compliance with QC acceptance limits as specified in the method cited for each analysis.

These statistical limits are typically based on historical laboratory data for a given sample matrix, and will not exceed any default limits specified by the method. CLP acceptance limits are also considered.

The following Quality Control operations are considered in the validation of reported results:

Holding times, surrogate recovery, spiked sample recovery, duplicates/spiked duplicate precision, tuning criteria, internal standard variation, continuing calibration variation, reference (check) sample recovery, and instrument, method, trip and field blanks. The appropriate frequency for each operation is also considered.

Every effort has been made to report data that is compliant with the EPA methodology cited for each analysis. In cases where the laboratory was unable to meet all method requirements prior to sample expiry, either due to the nature of the sample or other technical difficulty, results are reported with qualification with the understanding that qualified results may not be suitable for compliance purposes. The internal technical review is based on the USEPA Contract Laboratory Program *National Functional Guidelines for Organic Review* (EPA 540/R-94/012, February 1994) and *National Functional Guidelines for Inorganic Review* (EPA 540/R-94/013, February 1994).

Validation

Sixteen site samples and a matrix spike/matrix spike duplicate set were received on September 23, 24, & 25, 2002, with ice and ice packs. The temperature, as received, was 3°C to 6°C.

PCB

Site samples were analyzed by EPA method 8082 for PCBs with a two-microliter injection volume.

RTX-CLPesticides 1 and RTX-CLPesticides 2 capillary columns, 0.32 mm ID, with purge packed inlets and electronic pressure control are used on an Hewlett-Packard 5890 series II with dual ECD and an HP 7673 autosampler with simultaneous injection. Data is collected with HP Chemstation software and processed by Thruput with Target software. If a peak is detected within the retention time window of a target compound, second-column confirmation is performed. Column RTX-CLPesticides 2 was used for the primary analysis. Column RTX-CLPesticides 1 was used to confirm only the fingerprint, not the quantitation. Form 10B's are provided in order to verify pattern recognition.

PCB 1254 was detected in each of the site samples. Second-column analysis confirmed the presence of these targets. No PCBs were detected in the method blank.

Surrogate recoveries were within limits for the site samples.

Surrogate recoveries for the method blank and blank spike extracted on 9/25/02 were five times the expected amount. Since no PCBs were detected in the method blank, and blank spike recoveries of PCBs 1016 and 1260 were within the acceptance limits, no qualification was made.

Site sample A-B-SS-B-001 was spiked in duplicate. Spike recoveries were above the acceptance limits for the MS, and slightly above the acceptance limits for the MSD. Since PCB 1254 was present in this site sample, overlapping peaks probably caused an elevation of the recoveries.

Precision as indicated by RPD was within the acceptance limits.

Two blank spikes were associated with the site samples. Blank spike recoveries were within the acceptance limits.

No other analytical difficulties were encountered.

Metals

Site samples were analyzed for TCLP Cadmium by Inductively Coupled Plasma - Optical Emission Spectrometry.

The ICP-OES instrument is an ARL 3560 with an AIM 1250 autosampler with an extension. The data is acquired with the Microactive, Australia software ICP Manager 35xx.

Laboratory Control sample recoveries for Cadmium were within acceptance limits.

No analytical difficulties were encountered.

Wet Chemistry

Site samples were analyzed by EPA method 9095 for Paint Filter.

No analytical difficulties were encountered.

Usability Assessment

All reported data were found to be valid and usable within the EPA National Functional Validation guidelines except those that were qualified in this Laboratory Validation.

Laboratory validation and
Usability assessment conducted by: Elizabeth A Keator

Date: October 25, 2002

Elizabeth A. Keator
Quality Assurance

Worksheets

B-B-SS-W-001 (B) 94538-1
B-B-SS-E-001 -2
B-B-S-E-001 -5
B-B-SS-W-001 (A) -6
B-C-S-B-001 -7
B-B-S-W-001 -8

YES NO N/A

PACKAGE COMPLETENESS AND DELIVERABLES

CASE NUMBER: — SDG# 94538

LAB: Friedel Laboratory, Inc. SITE: Viacom / Horse Lead

1.0 Data Completeness and Deliverables

		YES	NO	N/A
1.1	Has all the data been submitted in CLP deliverable format?	☑		
1.2	Have any missing deliverables been received and added to the data package?		✓	

ACTION: Call lab for explanation/resubmittal of any missing deliverables. If lab cannot provide them, note the effect on review of the data in the reviewer narrative.

2.0 Cover Letter, SDG Narrative

		YES	NO	N/A
2.1	Is a laboratory narrative or cover letter present?	☑		
2.2	Are the case number and/or SDG number contained in the narrative or cover letter?	☑		

3.0 Data Validation Checklist

		YES	NO	N/A
3.1	Does this data package contain:			
	Water data?		✓	
	Waste data?		✓	
	Soil/solid data?	✓		

YES NO N/A

POLYCHLORINATED BIPHENYLS

1.0 Traffic Reports and Laboratory Narrative

1.1 Are traffic report and chain-of-custody forms present for all samples? [✓] ___ ___

ACTION: If no, contact lab for replacement of missing or illegible copies.

1.2 Do the traffic reports, chain-of-custody forms or SDG narrative indicate any problems with sample receipt, condition of the samples, analytical problems or special circumstances affecting the quality of the data? ___ [✓] ___

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50%-90% water, all data should be qualified as estimated, "J." If a soil sample, other than TCLP, contains more than 90% water, non detects shall be qualified as unusable, "R."

ACTION: If samples were not iced or if the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10° C), flag all positive results "J" and all non-detects "UJ".

2.0 Holding Times

2.1 Have any PCB technical holding times, determined from date of collection to date of extraction, been exceeded? ___ [✓] ___

Water and waste samples for PCB analysis must be extracted within 7 days of the date of collection. Extracts must be analyzed within 40 days of the date of extraction. Soils and solid samples must be extracted within 14 days of collection and analyzed within 40 days of extraction.

Collected 9/24/02
Extracted 9/25/02
Analyzed 9/26/02

ACTION: If technical holding times are exceeded, flag all positive results as estimated, "J," and sample quantitation limits "UJ" and document in the narrative that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon re-analysis, the reviewer must use

	YES	NO	N/A

professional judgement to determine the reliability of the data and the effects of additional storage on the sample results. At a minimum, all the data should at least be qualified "J", but the reviewer may determine that non-detects are unusable,"R."

3.0 Surrogate Recovery (Form II) NA for false + false - review

3.1 Were the recoveries of tetrachloro-m-xylene (TCMX) and decachlorobiphenyl (DCB) presented on CLP Surrogate Recovery Summary forms (Form II), or equivalent, for each of the following matrices?

a.	Water/Waste	[ ]	___	✓
b.	Soil/Solid	[ ]	___	✓

3.2 Are all the PCB samples listed on the appropriate surrogate recovery form for each of the following matrices?

a.	Water	[ ]	___	✓
b.	Waste	[ ]	___	✓
c.	Soil/Solid	[ ]	___	✓

ACTION: Call lab for explanation/resubmittals. If missing deliverables are unavailable, document the effect in the data assessment.

3.3 Did the laboratory provide their developed in-house Surrogate recoveries? [ ] ___ ✓

ACTION: If no, use 70 -130% recovery to qualify in section 3.4 below.

3.4 Were surrogate recoveries of TCMX or DCB outside of the laboratory-established upper (UCL) or lower (LCL) control limits for any sample or blank? ___ [ ] ✓

ACTION: Circle all outliers in red.

ACTION: No qualification is done if surrogates are diluted out. If recovery for <u>both</u> surrogates is

YES NO N/A

below the LCL, but above 10%, flag all results for that sample "J". If recovery is < 10% for either surrogate, qualify positive results "J" and flag non-detects "R". If recovery is above the UCL for both surrogates qualify positive values "J".

Note: DCB is used when PCBs are determined as Aroclors. DCB is the internal standard when determining PCB congeners and TCMX the surrogate.

3.5 Were surrogate retention times (RT) within the windows established during the initial 5-point analysis? [ ] ___ ✓

ACTION: If the RT limits are not met, the analysis may be qualified unusable (R) for that sample on the basis of professional judgement. However, flag positive hits as estimate (J) if confirmed by GC/MS analysis.

3.6 Are there any transcription/calculation errors between raw data and Form II? ___ [ ] ✓

ACTION: If large errors exist, call lab for explanation/resubmittal. Make any necessary corrections and document the effect in data assessments.

4.0 Laboratory Control Sample NA for a false + / false - review

4.1 Are raw data and percent recoveries present for all Laboratory Control samples as required by Method 8000B (section 8.5) and Method 8082 (section 8.4.2)? [ ] ___ ✓

Verify that QC check samples were extracted and analyzed by the same procedures used for the actual samples.

ACTION: If any Laboratory Control Sample data are missing, call the lab for explanation /resubmittals. Make note in the data assessment.

NOTE: For aqueous samples, an additional QC check sample must be prepared and analyzed when any analyte in a matrix spike fails the required acceptance criteria (see section 5.3 below). The additional QC check sample must contain each analyte that failed in the MS analysis.

YES NO N/A

Note: When the results for matrix spike analysis indicates a problem due to sample matrix effects, the LCS results are used to verify the laboratory can perform the analysis in a clean sample.

4.2 Were Laboratory Control Samples analyzed at the required concentration for all analytes of interest as specified in Method 8000B (sec.8.5)? [ ] ___ ✓

ACTION: If Laboratory Control Samples were not analyzed at the required concentration or the required frequency, make note in the data assessment and use professional judgement to determined the affect on the data.

4.3 Were the LCS recoveries within the laboratory's in-house per cent recoveries (if not available, use 70 - 130%) [ ] ___ ✓

4.4 If no, were Laboratory Control Samples re-analyzed? [ ] ___ ✓

Note: Corrective action must be taken when one or more of the analytes of interest fail the QC acceptance criteria (Method 8000B, section 8.7.4)

ACTION: If QC check samples were not re-analyzed, or a general system problem is indicated by repeated failure to meet the QC acceptance criteria specified in the method, make note in the data assessment and use professional judgement to determine the effect on the data.

5.0 Matrix Spikes (Form III) NA for a false + / false - review

5.1 Are all data for one matrix spike and matrix duplicate (unspiked) pair (MS/Dup) or matrix spike/matric spike duplicate (MS/MSD)present and complete for each matrix Method 8082(section 8.4.1)? [ ] ___ ✓

NOTE: For soil and waste samples showing detectable amounts of organics, the lab may substitute replicate samples in place of the matrix spike (see Method 8000B-40, section 8.5.3)).

5.2 Have MS/Dup or MS/MSD results been summarized on modified CLP Form III? [ ] ___ ✓

ACTION: If any data are missing take action as specified in section 3.2 above.

5.3 Were matrix spikes analyzed at the required frequency

	YES	NO	N/A

for each of the following matrices? (One MS/Dup, MS/MSD must be performed for every 20 samples of similar matrix or concentration level. Laboratories analyzing one to ten samples per month are required to analyze at least one MS per month (Method 8000B-39 (section 8.5)).

a.	Water	[ ]	___	✓
b.	Waste	[ ]	___	✓
c.	Soil/Solid	[ ]	___	✓

ACTION: If any MS/Dup or MS/MSD data are missing, take the action specified in 3.2 above.

5.4 Were the 70 - 130% recoveries used to compare the matrix spike recoveries, or did the lab use the optional QC acceptance criteria discussed in Method 8000B-40(section 8.5.3.1)?

List the criteria used and make note in data assessment.

Criteria used _____

5.5 Was the matrix spike prepared at the proper spike concentration? (Method 8000B, section 8.5.1-8.5.2) [ ] ___ ✓

For aqueous organic extractable, the spike concentration should be prepared according options in: Method 8000B-40, (section 8.5.1 and 8.5.2).

ACTION: No action is taken based on MS or replicate data alone. However, using informed professional judgement, the data reviewer may use the matrix spike or laboratory replicate results in conjunction with other QC criteria and determine the need for some qualification of the data. In some instances it may be determined that only the replicate or spiked samples are affected. Alternatively, the data may suggest that the laboratory is having a systematic problem with one or more analytes, thereby affecting all associated samples.

6.0 Blanks (Form IV)

	YES	NO	N/A
6.1 Was reagent blank data reported on CLP equivalent Method Blank Summary form(s) (Form IV)?	☑		
6.2 Frequency of Analysis: Has a reagent blank been analyzed for every 20 (or less) samples of similar matrix or concentration or each extraction batch?	☑		

ACTION: If any blank data are missing, take action as specified above (section 3.2) . If blank data is not available, reject (R) all associated positive data. However, using professional judgement, the data reviewer may substitute field blank data for missing method blank data.

	YES	NO	N/A
6.3 Chromatography: review the blank raw data - chromatograms, quant reports or data system printouts. Is the chromatographic performance (baseline stability) for each instrument acceptable for PCBs?	☑		

ACTION: Use professional judgement to determine the effect on the data.

7.0 Contamination N/A for false + false - review. — not samples to be reviewed.

NOTE: "Water blanks", "distilled water blanks" and "drilling water blanks" are validated like any other sample and are not used to qualify the data. Do not confuse them with the other QC blanks discussed below.

	YES	NO	N/A
7.1 Do any method/instrument/reagent/cleanup blanks have positive results for PCBs? When applied as described below, the contaminant concentration in these blanks are multiplied by the sample Dilution Factor and corrected for % moisture when necessary.		☐	✓
7.2 Do any field/rinse blanks have positive PCB results?		☐	✓

ACTION: Prepare a list of the samples associated with each of the contaminated blanks. (Attach a separate sheet.)

NOTE: All field blank results associated to a particular group of samples (may exceed one per case or one per day) may be used to qualify data.

YES NO N/A

Blanks may not be qualified because of contamination in another blank. Field blanks must be qualified for surrogate, or calibration QC problems.

ACTION: Follow the directions in the table below to qualify sample results due to contamination. Use the largest value from all the associated blanks.

Sample conc > EDL but < 5 x blank	Sample conc < EDL & is < 5 x blank value	Sample conc > EDL & > 5 x blank value
Flag sample result with a "U"	Report EDL & qualify "U"	No qualification is needed

NOTE: If gross blank contamination exists, all data in the associated samples should be qualified as unusable (R).

7.3 Are there field/rinse/equipment blanks associated with every sample? [ ] ___ ✓

ACTION: For low level samples, note in data assessment that there is no associated field/rinse/equipment blank. Exception: samples taken from a drinking water tap do not have associated field blanks.

8.0 GC Apparatus and Materials NA for false + / false - review

8.1 Was the proper gas chromatographic capillary column used for the analysis of PCBs?

Action: Check raw data, instrument logs, or contact the lab to determine what type of columns were used. (Method 8082, section 4.2) [ ] ___ ✓

8.2 Indicate the specific type of narrow bore or wide bore (.53 mm ID, fused silica GC columns, such as DB-608 and DB-1701 or equivalent).

column 1: _____

column 2: _____

ACTION: Note any changes to the suggested materials in section 8.1 above in the data assessment. Also note the impact (positive or negative) such changes have on the analytical results.

	YES	NO	N/A

9.0 Calibration and GC Performance

9.1 Are the following Gas Chromatograms and Data Systems Printouts for both columns present for all samples, blanks, MS, replicates?

a.	Samples	☑		
b.	All blanks	☑		
c.	Matrix spike samples	☐		☑
d.	5 pt. initial calibration standards	☑		
e.	calibration verification standards	☑		☑ TMB 9/16/03
f.	Laboratory Control samples (LCS)	☐		☑

not applicable for Aroclor/Toxaphene review.

ACTION: If no, take action specified in 3.2 above.

9.2 Are data summary forms (containing calibration factors or response factors) for the initial 5 pt. calibration and daily calibration verification standards present and complete for each column and each analytical sequence? ☑ | | | only 1° column.

Note: Calibration Aroclor mixtures other than 1016/1260 may be used (as per approved project QA plan)

NOTE: If internal standard calibration procedure is used (Method 8000B-15(section 7.4.2.2)), then response factors must be used for %RSD calculations and compound quantitation. If, external standard calibration procedures are used (Method 8000B-16 (section 7.4.2.1)), then calibration factors must be used. The internal standard approach is highly recommended for PCB congener analysis.

ACTION: If any data are missing or it cannot be determined how the laboratory calculated calibration factors or response factors, contact the lab for explanation/resubmittals. Make necessary corrections and note any problems in the data assessment.

9.3 Are there any transcription/calculation errors between raw data and data summary forms? | | ☑ |

ACTION: If large errors exist, call lab for

YES NO N/A

explanation/resubmittal, make necessary corrections and document the effect in data assessments.

9.4 Are standard retention time (RT) windows for each PCB peak of interest presented on modified CLP summary forms? [✓] ___ ___

ACTION: If any data are missing, or it cannot be determined how RT windows were calculated, call the lab for explanation/resubmittals. Note any problems in the data assessment.

NOTE: Retention time windows for all PCBs are established using retention times from three calibration standards analyzed during the entire analytical sequence (Method 8000B, section 7.6).

Best results are obtained using retention times which span the entire sequence; i.e., using the calibration verification/continuing calibration standards analyzed every 12 hours.

9.5 Were RT windows on the confirmation column established using three standards as described above? [ ] ✓ ___

used.
. avg value for multi-std.
. center value for single stad.
±0.1 minute

NOTE: RT windows for the confirmation column should be established using a 3 pt. calibration, preferably spanning the entire analytical sequence as described in 9.4 above. If RT windows on one column are tighter than the other, this may result in false negatives when attempting to identify compounds in the samples.

ACTION: Note potential problems, if any, in the data assessment.

9.6 Do all standard retention times in each level of the initial 5 pt. calibrations for PCBs fall within the windows established during the initial calibration sequence? [✓] ___ ___

ACTION i: If no, all samples in the entire analytical sequence are potentially affected. Check to see if three standard spanning the entire sequence were used to obtained RT windows. If the lab used three standards from the 5 pt., RT windows may be too tight. If so, RT windows should be recalculated as per Method 8081B-15 (section 7.4.6).

ii. Alternatively, check to see if the chromatograms contain peaks

YES NO N/A

within an expanded window surrounding the expected retention times.

If no peaks are found and the surrogates are visible, non-detects are valid. If peaks are present but cannot be discerned through pattern recognition or by using revised RT windows, qualify all positive results and non-detects as unusable, "R".

9.7 Has the linearity criteria for the initial calibration standards been satisfied for both columns? (% RSD must be < 20.0% for all analytes). 7049. [✓] ___ ___

ACTION: If no, qualify all associated positive results generated during the entire analytical sequence "J" and all non-detects "UJ". When RSD > 90%, flag all non-detect results for that analyte "R" (unusable).

9.8 Does the calibration verification/continuing Calibration standard contain the PCB peaks of interest, analyzed on each working day, prior to sample analyses (Method 8082, sections 7.6.2)? [✓] ___ ___

9.9 Has a calibration verification/continuing calibration standard been analyzed after every 10 samples and at the end of each analytical sequence (Method 8082, section 7.6.2) [✓] ___ ___

ACTION: If no, take action as specified in section 3.2 above.

- use average value and not peak-specific

9.10 Has the percent difference (%D) exceeded ± 15% for any PCB analyte in any calibration verification/ Continuing calibration standard? [ ] ___ [✓]

9.11 Has a new 5 pt. initial calibration curve been generated for those PCB analytes which failed in the calibration verification/continuing calibration standard (8000B, section 7.7.3), and all samples which followed the out-of-control calibration verification/standard continuing calibration Standard? [ ] ___ [✓]

ACTION: If the %D for any analyte exceeded the ± 15% criterion and the instrument was not recalibrated for those analytes, qualify positive results for all associated samples (those which followed the out-of-control standard) "J" and sample quantitation limits "UJ". If the %D was > 90%

	YES	NO	N/A

for any analyte, qualify non-detects "R", unusable.

9.12 Have retention time (RT) windows been properly calculated for each analyte of interest (Method 8000B, section 7.6), using RTs from the associated calibration verification/continuing standard?

-use ICAL
-quant from ICAL
-%D - cal.

☑ ___ ___

ACTION: If no, take action specified in section 3.2 above

9.13 Do all standard retention times for each calibration verification/continuing calibration standard fall within the windows established during the initial calibration sequence?

☑ ___ ___

9.14 Do all standard retention times for each mid-concentration standard (analyzed after every 10 samples) fall within the <u>daily</u> RT windows

☑ ___ ___

ACTION: If the answer to either 9.13 or 9.14 above is no, check the chromatograms of all samples which followed the last in-control standard. All samples analyzed after the last in-control standard must be re-injected, if initial analysis indicated the presence of the specific analyte that exceeded the retention time criteria. If samples were not re-analyzed, document under Contract Non-compliance in the Data Assessment.

Reviewer has two options to determine how to qualify questionable sample data. First option is to determine if possible peaks are present within daily retention time window. If no possible peaks are found, non-detects are valid. If possible peaks are found (or interference), qualify positive hits as presumptively present "NJ" and non-detects are rejected "R". Second option is to use the ratio of the retention time of the analyte over the retention time of either surrogate. The passing criteria is ± 0.06 RRT units of the RRT of the standard component. Reject "R" all questionable analytes exceeding criteria, and "NJ" all other positive hits.

For any multi-response analytes, retention time windows should be used but analyst and reviewer should rely primarily on pattern recognition or use option 2 specified in paragraph above.

9.15 Are there any transcription/calculation errors

	YES	NO	N/A
between raw data and data summary forms?	___	[✓]	___

ACTION: If large errors exists, call lab for explanation/resubmittal, make any necessary corrections and document the effect in data assessments under "Conclusions".

10.0 Analytical Sequence Check (Form VIII-PEST)

	YES	NO	N/A
10.1 Have all samples been listed on CLP Form VIII or equivalent, and are separate forms present for each column?	[✓]	___	___

ACTION: If no, take action specified in 3.2 above.

	YES	NO	N/A
10.2 Was the proper analytical sequence followed for each initial calibration and subsequent analyses?	[✓]	___	___

ACTION: If no, use professional judgement to determine the severity of the effect on the data and qualify it accordingly. Generally, the effect is negligible unless the sequence was grossly altered or the calibration was also out of limits.

	YES	NO	N/A
10.3 Were the TCMX/DCB surrogate RTs for the samples within the mean surrogate RT from the initial calibration?	[✓]	___	___

Action: If no, see "Action" in section 9.14 above

11.0 Extraction Techniques for Sample Preparation NA for Pulse + / Pulse - review.

Method 8081B permits a variety of extraction techniques to be used for sample preparation. Which extraction procedure was used?

1. Aqueous samples:			✓
1. Separatory funnel (Method 3510)	[ ]	___	___
2. Continuous liquid-liquid extraction (Method 3520)	[ ]	___	✓
3. Solid phase extraction (Method 3535)	[ ]	___	___ ✓
4. Other	[ ]	___	✓ ___
2. Solid samples:			✓
1. Soxhlet (Method 3540)	[ ]	___	___

	YES	NO	N/A
2. Automated Soxhlet (Method 3541)	[ ]	___	___ ✓
3. Pressurized fluid (Method 3545)	[ ]	___	___ ✓
4. Microwave extraction (Method 3546)	[ ]	___	___ ✓
5. Ultrasonic extraction (Method 3550)	[ ]	___	___ ✓
6. Supercritical fluid (Method 3562)	[ ]	___	___ ✓
7. Other	[ ]	___	___ ✓

11.1 Extract Cleanup - Efficiency Verification (Form IX) NA for fuel + / fuel review

11.1.1 Method 8082 (section 7.2) references method 3660 (sulfur) and 3665A (sulfuric acid) to use for Cleaning extracts. Were one or both method used?	[ ]	___	___ ✓

ACTION: If no, take action specified in 3.2 above. If data suggests cleanup was not performed, make note in the data assessment.

NOTE: Method 3620A, Florisil, may be used per approved project QA plan. The method does not list which analytes and surrogate(s) to use to verify column efficiency. The reviewer must check project plan to verify method used as well as the correct PCB list. If not stated or available, use the CLP listing or accept what the laboratory used.

11.2 Are all samples listed on modified CLP PCBs Florisil/Cartridge Check Form?	[ ]	___	___ ✓

ACTION: If no, take action specified in 3.2 above.

11.3 Was GPC Cleanup (method 3640A) performed?	[ ]	___	___ ✓

NOTE: GPC cleanup is not required and is optional. The reviewer should check Project Plan to verify requirement.

11.4 Were the same PCB analytes used in calibration used to check the efficiency of the cleanup procedures?	[ ]	___	✓ ___
11.5 Are percent recoveries (% R) of the PCBs and surrogate compounds used to check the efficiency of the cleanup procedures within lab's in-house QC limits (use 70-130% if not available)	[ ]	___	___ ✓
70-130% for GPC calibration?	[ ]	___	___ ✓

YES NO N/A

Qualify only the analyte(s) which fail the recovery criteria as follows:

ACTION: If % R are < 80%, qualify positive results "J" and quantitation limits "UJ". Non-detects should be qualified "R" if zero %R was obtained for PCBs. Use professional judgement to qualify positive results if recoveries are greater than the upper limit.

12.0 PCB Identification

12.1 Has CLP Form X or equivalent, showing **retention time** data for positive results on the two GC columns, been completed for every sample in which a PCB was detected? [✓] ___ ___

ACTION: If no, take action specified in 3.2 above, or compile a list comparing the retention times for all sample hits on the two columns.

12.2 Are there any transcription/calculation errors between raw data and data summary forms (initial calibration summaries, calibration verification summaries, analytical sequence summaries, GPC and cleanup verification forms)? ___ [✓] ___

ACTION: If large errors exist, call lab for explanation/resubmittal, make necessary corrections and note error in the data assessment.

not for HW3 for ICAL because only one reanalysis frequency.

12.3 Are retention times (RT) of sample compounds within the established RT windows for both columns/analyses? [✓] ___ ___

ACTION: Qualify as unusable (R) all positive results which were not confirmed by second GC column analysis. Also qualify "R", unusable, all positive results not within RT windows unless associated standard compounds are similarly biased. The reviewer should use professional judgement to assign an appropriate quantitation limit.

12.4 Check chromatograms for false negatives, especially if RT windows on each column were established differently.
Were there any false negatives? ___ [✓] ___

YES NO N/A

ACTION: Use professional judgement to decide if the compound should be reported. If there is reason to believe that peaks outside retention RT windows should be reported, make corrections to data summary forms (Form I) and note in data assessment.

12.5 Was GC/MS confirmation provided when sample concentration was sufficient (> 10 ug/ml) in the final extract? [ ] ___ ✓

ACTION: Indicate with red pencil which Form I results were confirmed by GC/MS and also note in data assessment.

12.6 Is the percent difference (%D) calculated for the positive sample results on the two GC columns <25.0%? [ ] ✓ ___

48.6
8 1254 36.
2 1254 35.6
1 1254

NOTE: The method requires quantitation from one column. The second column is to confirm the presence of an analyte. It is the reviewer's responsibility to verify from the project plan what the lab was required to report. If the lab was required to report concentrations from both columns, continue with validation for % Difference. If required, but not reported, either contact the lab for results or calculate the concentrations from the calibration. If not required, skip this section. Document actions in Data Assessment.

ACTION: If the reviewer finds neither column shows interference for the positive hits, the data should be qualified as follows:

% Difference	Qualifier
0-25%	none
26-70%	"J"
71-100%	"NJ"
>100% *	"R"
100-200% (Interference detected)**	"NJ"
>50% (PCBs value is <CRQL)	"U"

When the reported PCBs value is <CRQL and the %D is >50%, raise the value to the CRQL and qualify with "U" (non-detect).

* Check the chromatogram. If pattern is confirmed qualify "J". If pattern is mixed, has interference, or the PCB cannot be positively determined due to weathering, qualify "JN".

YES NO N/A

If PCB can not be confirmed, qualify the PCB as "R".

** When the reported %D is 100-200% but interference is detected in either column, qualify the data with "NJ".

13.0 Compound Quantitation and Reported Detection Limits

13.1 Are there any transcription/calculation errors in Form I results? Check at least two positive values. Were any errors found? ___ [√] ___

NOTE: Single-peak PCBs results can be checked for rough agreement between quantitative results obtained on the two GC columns. The reviewer should use professional judgement to decide whether a much larger concentration obtained on one column versus the other indicates the presence of an interfering compound. If an interference is suspected, the lower of the two values should be reported and qualified according to section 12.6 above. This necessitates a determination of an estimated concentration on the confirmation column. The narrative should indicate that the presence of interferences has led to the quantitation of the second column confirmation results.

13.2 Are the EDLs (Estimated Detection Limits) adjusted to reflect sample dilutions and, for soils, % moisture? [√] ___ ___

ACTION: If errors are large, call lab for explanation/resubmittal, make any necessary corrections and document effect in data assessments.

ACTION: When a sample is analyzed at more than one dilution, the lowest EDLs are used (unless a QC exceedance dictates the use of the higher EDL data from the diluted sample analysis). Replace concentrations that exceed the calibration range in the original analysis by crossing out the value on the original Form I and substituting it with data from the analysis of diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form I's that should not be used, including any in the summary package.

$$10\left(\frac{\times 10}{10.3\%}\times 1\right) = 69.2\times 10^{-8} = 1.4\times 10^{-8} = 140\ \mu g/kg.$$

YES NO N/A

ACTION: EDLs affected by large, off-scale peaks should be qualified as unusable, "R". If the interference is on-scale, the reviewer can provide a modified EDL flagged "UJ" for each affected compound.

14.0 Chromatogram Quality

14.1 Were baselines stable? [✓] ___ ___

14.2 Were any electropositive displacement (negative peaks) or unusual peaks seen? ___ [✓] ___

ACTION: Note all system performance problems in the data assessment.

15.0 Field Duplicates NA for false / false-negative

15.1 Were any field duplicates submitted for PCB analysis? [ ] ___ ✓

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between field duplicate results must be addressed in the reviewer narrative. However, if large differences exist, the identity of the field duplicates is questionable. An attempt should be made to determine the proper identification of field duplicates.

4 C

PESTICIDE METHOD BLANK SUMMARY

NYSDEC SAMPLE NO.

MB 87

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Lab Sample ID: MB 87 Lab File ID: E2989945

Matrix: (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N Date Extracted: 09/25/02

Date Analyzed (1) : 09/26/02 Date Analyzed (2): _____

Time Analyzed (1) : 0803 Time Analyzed (2): _____

Instrument ID (1) : HP1 Instrument ID (2): HP3

GC Column (1): RTX-CLPESTICIDES2 ID 0.32 (mm)

GC Column (2): RTX-CLPESTICIDES1 ID 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, AND MSB

	NYSDEC SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	QC 87	QC 87	09/26/02	09/26/02
02	L94538-1	L94538-1	09/26/02	09/26/02
03	L94538-2	L94538-2	09/26/02	09/26/02
04	L94538-5	L94538-5	09/26/02	09/26/02
05	L94538-6	L94538-6	09/26/02	09/26/02
06	L94538-7	L94538-7	09/26/02	09/26/02
07	L94538-8	L94538-8	09/26/02	09/26/02
08	L94538-2MS	L94538-2MS	09/26/02	09/26/02
09	L94538-2MSD	L94538-2MSD	09/26/02	09/26/02
10				
11				
12				
13				
14				
15				
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17				
18				
19				
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21				
22				
23				
24				
25				
26				

COMMENTS:

00009

4 C

PESTICIDE METHOD BLANK SUMMARY

NYSDEC SAMPLE NO.

MB 84

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Lab Sample ID: MB 84 Lab File ID: E2989924

Matrix: (soil/water) SOIL Extraction:(SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N Date Extracted: 09/24/02

Date Analyzed (1) : 09/25/02 Date Analyzed (2): _____

Time Analyzed (1) : 1314 Time Analyzed (2): _____

Instrument ID (1) : HP1 Instrument ID (2): HP3

GC Column (1): RTX-CLPESTICIDES2 ID 0.32 (mm)

GC Column (2): RTX-CLPESTICIDES1 ID 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, AND MSB

	NYSDEC SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	QC 84	QC 84	09/25/02	09/25/02
02	L94363-4	L94363-4	09/25/02	09/25/02
03	L94363-6	L94363-6	09/25/02	09/25/02
04	L94363-8	L94363-8	09/25/02	09/25/02
05	L94363-10	L94363-10	09/25/02	09/25/02
06	L94363-12	L94363-12	09/25/02	09/25/02
07	L94363-2	L94363-2	09/25/02	09/25/02
08				
09				
10				
11				
12				
13				
14				
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18				
19				
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21				
22				
23				
24				
25				
26				

COMMENTS:

00008

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB87

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA925

Matrix: (soil/water) SOIL Lab Sample ID: MB87

Sample wt/vol: 10.0 (g/mL) G Lab File ID: E2989945

% Moisture: 0 decanted: (Y/N) N Date Received: 09/25/2

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/25/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/26/2

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	10.0 ~~0.01~~	U
1104-28-2	Aroclor-1221	20 ~~0.02~~	U
11141-16-5	Aroclor-1232	10 ~~0.01~~	U
53469-21-9	Aroclor-1242	10 ~~0.01~~	U
11097-69-1	Aroclor-1254	10 ~~0.01~~	U
11096-82-5	Aroclor-1260	10 ~~0.01~~	U
----------	Aroclor-1248	10 ~~0.01~~	U

eaR
10/25/02

FORM I PEST

00231

Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2989924.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: MB84
Misc Info:
Analysis Date: 25-SEP-2002 13:14
Sample Matrix: SOIL
File Number: 9924

Dilution Factor:	1.0000
Sample Weight:	10.4202
Final Volume:	10.0000
Total Solid :	100.0000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	0.00
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	94.24%
Decachlorobiphenyl	132.37%

Analyst: CPW
Report Date: 09/25/2002 15:37

Supervisor: _____
Date: 9/25/2

00230

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2989945.D
Lab Smp Id: MB87 Client Smp ID: MB87
Inj Date : 26-SEP-2002 08:03
Operator : CPW Inst ID: hp1.i
Smp Info : MB87
Misc Info :
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 26-Sep-2002 12:38 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	1.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.037	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	100.000	Total Solid

				CONCENTRATIONS ON-COL	FINAL		
	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #:		
	7.973	7.997	-0.024	3885733	479.418	477.65		(R)
$ 29 Decachlorobiphenyl						CAS #:		
	20.123	20.130	-0.007	3131701	595.878	593.68		(R)

QC Flag Legend

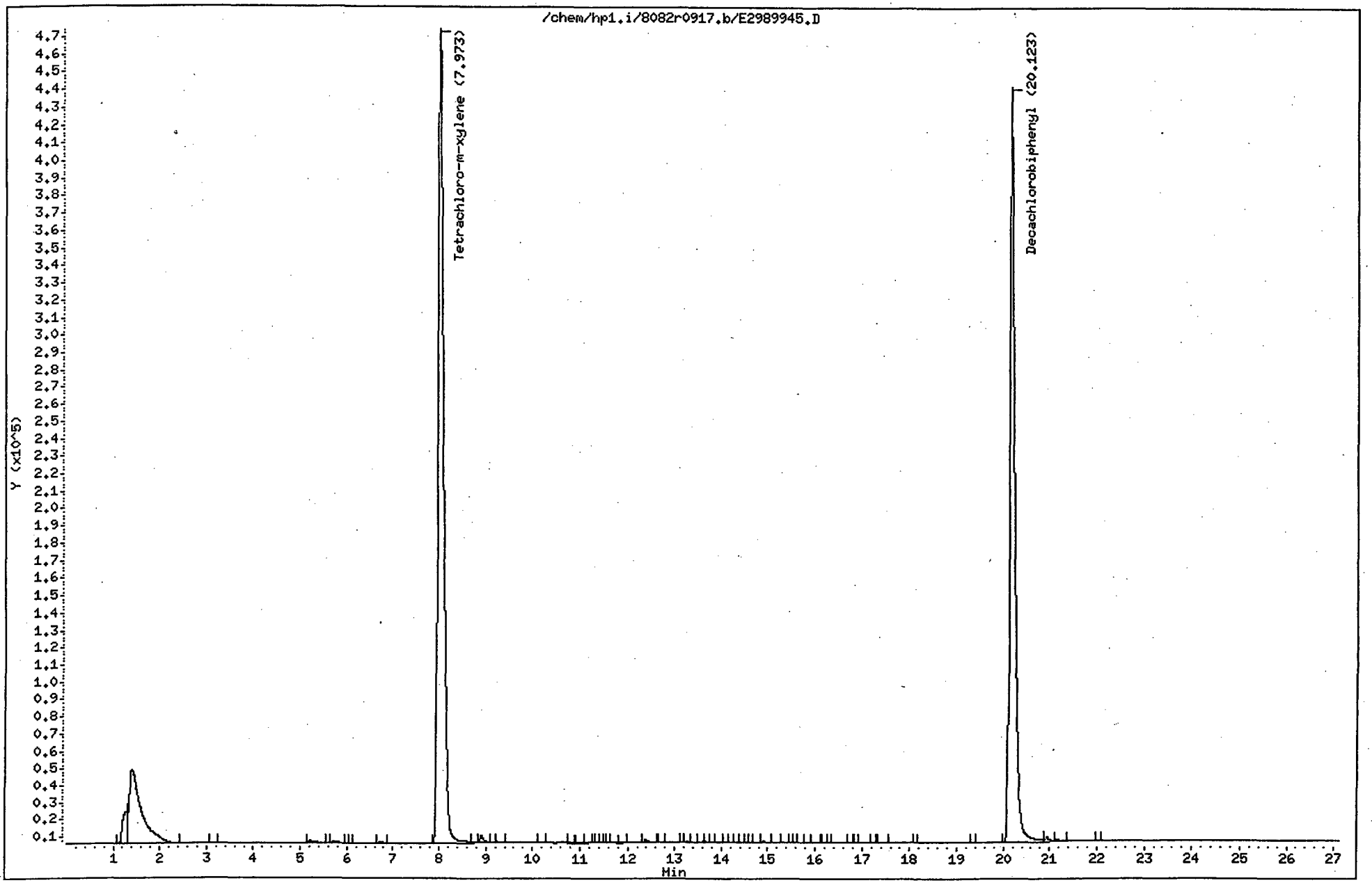
R - Spike/Surrogate failed recovery limits.

Data File: /chem/hp1.i/8082r0917.b/E2989945.D
Date: 06-SEP-2002 08:03
Client ID: MB87
Sample Info: MB87
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

Page

00233



Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2989945.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: MB87
Misc Info:
Analysis Date: 26-SEP-2002 08:03
Sample Matrix: SOIL
File Number: 9945

Dilution Factor:	1.0000
Sample Weight:	10.0371
Final Volume:	10.0000
Total Solid :	100.0000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	0.00
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	479.42%
Decachlorobiphenyl	595.88%

Analyst: CPW
Report Date: 09/26/2002 12:43

Supervisor: _____
Date: 9/30/2

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

QC84

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA923

Matrix: (soil/water) SOIL Lab Sample ID: QC84

Sample wt/vol: 10.0 (g/mL) G Lab File ID: E2989917

% Moisture: 0 decanted: (Y/N) N Date Received: 09/23/2

Extraction: (SepF/Cont/Sonc) SONC Date Extracted:09/24/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/25/2

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	494.02	
11096-82-5	Aroclor-1260	572.76	E

Lab Name: FRIEND LABORATORY, INC. Contract: _____
Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA
Instrument ID: HP1
GC Column: RTX-CLPest2 ID: 0.32 (mm) Date(s) Analyzed: 09/17/02 09/17/02
File Numbers: 9827-9843

COMPOUND	Peak #	RT OF STANDARDS 10 ppb	50 ppb	100 ppb	250 ppb	500 ppb	1000 ppb	MEAN RT	RT WINDOW FROM	TO
PCB 1016	1*	10.19	10.20	10.20	10.20	10.21	10.21	10.20	10.10	10.30
	2*	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.61	10.81
	3*	11.89	11.89	11.90	11.90	11.90	11.90	11.90	11.80	12.00
	4	11.97	11.98	11.98	11.98	11.98	11.98	11.98	11.88	12.08
	5	12.67	12.68	12.68	12.68	12.69	12.69	12.68	12.58	12.78
PCB 1221	1*				8.79			8.79	8.69	8.89
	2*				9.12			9.12	9.02	9.22
	3*				9.27			9.27	9.17	9.37
PCB 1232	1*				9.27			9.27	9.17	9.37
	2*				10.20			10.20	10.10	10.30
	3*				11.19			11.19	11.09	11.29
	4				11.47			11.47	11.37	11.57
	5				11.97			11.97	11.87	12.07
PCB 1242	1*				10.20			10.20	10.10	10.30
	2*				11.19			11.19	11.09	11.29
	3*				11.47			11.47	11.37	11.57
	4				12.68			12.68	12.58	12.78
	5				13.29			13.29	13.19	13.39
PCB 1248	1*				11.19			11.19	11.09	11.29
	2*				11.90			11.90	11.80	12.00
	3*				12.68			12.68	12.58	12.78
	4				13.21			13.21	13.11	13.31
	5				13.29			13.29	13.19	13.39
PCB 1254	1*	13.67	13.67	13.67	13.67	13.67	13.67	13.67	13.57	13.77
	2*	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.46	14.66
	3*	15.01	15.01	15.01	15.01	15.00	15.00	15.01	14.91	15.11
	4	15.34	15.35	15.35	15.35	15.35	15.35	15.35	15.25	15.45
	5	16.02	16.03	16.03	16.03	16.03	16.03	16.03	15.93	16.13
PCB 1260	1*	14.93	14.93	14.94	14.94	14.94	14.94	14.94	14.84	15.04
	2*	15.34	15.34	15.35	15.35	15.35	15.35	15.35	15.25	15.45
	3*	16.19	16.19	16.20	16.20	16.20	16.21	16.20	16.10	16.30
	4	16.75	16.75	16.76	16.76	16.76	16.77	16.76	16.66	16.86
	5	17.23	17.23	17.24	17.24	17.25	17.25	17.24	17.14	17.34
Tetrachloro-m-xylene		7.97	7.99	8.00	7.99	8.00	8.00	7.99	7.89	8.09
Decachlorobiphenyl		20.11	20.12	20.13	20.13	20.13	20.13	20.13	20.03	20.23

* Denotes required peaks

Retention time windows are ± 0.1 minutes for all compounds.

$\frac{14.93 + 14.93 + 14.94 + 14.94 + 14.94 + 14.94}{6} = 14.94$

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA916
Instrument ID: HP1 Calibration Date(s): 09/17/2 09/17/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)
LAB FILE ID: RF10: E2989834 RF50: E2989835 RF100: E2989836
RF250: E2989843 RF500: E2989838

Peak 3

COMPOUND	RF10	RF50	RF100	RF250	RF500
Aroclor-1016	401.3	365.1	438.0	493.9	404.2
(2)	136.5	147.3	177.8	191.1	175.4
(3)	135.2	120.4	144.0	140.8	117.2
(4)	140.8	136.7	181.1	189.3	184.3
(5)	201.4	165.9	179.7	207.5	203.2
Aroclor-1221				86.2	
(2)				64.3	
(3)				307.9	
(4)					
(5)					
Aroclor-1232				283.3	
(2)				161.5	
(3)				221.6	
(4)				97.5	
(5)				57.9	
Aroclor-1242				352.7	
(2)				515.2	
(3)				225.6	
(4)				162.9	
(5)				195.6	
Aroclor-1254	316.9	313.4	305.2	308.2	343.4
(2)	288.2	317.8	319.7	345.8	442.7
(3)	190.1	233.8	239.2	278.8	384.7
(4)	148.5	164.1	178.0	186.5	230.4
(5)	253.9	263.2	271.9	294.5	392.1
Aroclor-1260	334.4	269.7	334.8	384.6	340.0
(2)	358.5	290.3	352.0	415.1	365.1
(3)	227.9	170.5	206.4	246.1	209.2
(4)	234.8	173.2	208.2	246.2	210.6
(5)	364.1	280.0	381.6	496.5	440.9
Aroclor-1248				278.0	
(2)				163.4	
(3)				213.4	
(4)				186.5	
(5)				304.2	
Tetrachloro-m-xylene	3613	5109	8081	7743	8808
Decachlorobiphenyl	3029	3502	5170	5257	6283

CF 10
$\frac{1352}{10} = 135.2$

CF 50
$\frac{6018}{50} = 120.4$

CF 100
$\frac{14403}{100} = 144.0$

CF 250
$\frac{35200}{250} = 140.8$

CF 500
$\frac{58587}{500} = 117.2$

CF 1000
$\frac{100613}{1000} = 100.6$

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA916
Instrument ID: HP1 Calibration Date(s): 09/17/2 09/17/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)
RF1000: E2989839

COMPOUND	RF100	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2
Aroclor-1016	366.0	LINR	-18.105188	2.688e-003	0.991
(2)	161.5	LINR	-9.4133819	6.109e-003	0.997
(3)	100.6	LINR	-18.332671	9.78e-003	0.993
(4)	162.6	LINR	-9.1394188	6.01e-003	0.995
(5)	201.8	LINR	2.94297360	4.926e-003	1.000
Aroclor-1221		LINR	0.00000000	1.159e-002	1.000
(2)		LINR	0.00000000	1.555e-002	1.000
(3)		LINR	0.00000000	3.248e-003	1.000
(4)		LINR			
(5)		LINR			
Aroclor-1232		LINR	0.00000000	3.53e-003	1.000
(2)		LINR	0.00000000	6.191e-003	1.000
(3)		LINR	0.00000000	4.512e-003	1.000
(4)		LINR	0.00000000	1.025e-002	1.000
(5)		LINR	0.00000000	1.727e-002	1.000
Aroclor-1242		LINR	0.00000000	2.835e-003	1.000
(2)		LINR	0.00000000	1.941e-003	1.000
(3)		LINR	0.00000000	4.432e-003	1.000
(4)		LINR	0.00000000	6.138e-003	1.000
(5)		LINR	0.00000000	5.111e-003	1.000
Aroclor-1254	296.1	LINR	-6.4375383	3.29e-003	0.994
(2)	434.5	LINR	16.6006465	2.262e-003	0.997
(3)	371.6	LINR	21.3460443	2.623e-003	0.995
(4)	190.9	LINR	4.45851132	5.219e-003	1.000
(5)	352.0	LINR	11.6581973	2.751e-003	0.994
Aroclor-1260	329.3	LINR	-5.1814212	3.014e-003	0.998
(2)	358.9	LINR	-3.4590831	2.769e-003	0.998
(3)	210.0	LINR	-3.5269711	4.748e-003	0.998
(4)	214.3	LINR	-2.0615020	4.659e-003	0.998
(5)	480.7	LINR	11.3530028	2.078e-003	0.998
Aroclor-1248		LINR	0.00000000	3.596e-003	1.000
(2)		LINR	0.00000000	6.12e-003	1.000
(3)		LINR	0.00000000	4.686e-003	1.000
(4)		LINR	0.00000000	5.361e-003	1.000
(5)		LINR	0.00000000	3.287e-003	1.000
Tetrachloro-m-xylene	7679	LINR	5.59456943	1.219e-004	0.991
Decachlorobiphenyl	5238	LINR	4.64742762	1.888e-004	0.999

Lab Name: FRIEND LABORATORY, INC. Contract: _____
Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA
Instrument ID: HP3
GC Column: RTX-CLPest1 ID: 0.32 (mm) Date(s) Analyzed: 09/25/02 _____
File Numbers: 6172

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
PCB 1254	250 PPB	1*	14.60	14.50	14.70	289.77
		2*	15.12	15.02	15.22	481.24
		3*	15.93	15.83	16.03	405.70
		4	16.29	16.19	16.39	225.50
		5	16.84	16.74	16.94	400.31
Tetrachloro-m-xylene	300 PPB		9.72	9.62	9.82	5801.99
Decachlorobiphenyl	300 PPB		21.33	21.23	21.43	4463.69

* Denotes required peaks

Single injections of the low standard are made to establish approximate retention times and instrument sensitivity. Five point calibrations are performed if a multipeak component is detected in a sample.
Alternate column confirmation is run if a pesticide or PCB is detected in a site sample.

Avg %D
$\left|\frac{250-250}{250}\right| \times 100 = 0\%$

CF
Peak 1
$\frac{72443}{250} = 289.77$

Lab Name: FRIEND LABORATORY, INC. Contract: _____
Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA
Instrument ID: HP3
GC Column: RTX-CLPest1 ID: 0.32 (mm) Date(s) Analyzed: 09/26/02 10:50.
File Numbers: 6215

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
PCB 1254	250 PPB	1*	14.58	14.48	14.68	293.65
		2*	15.10	15.00	15.20	500.98
		3*	15.91	15.81	16.01	435.40
		4	16.27	16.17	16.37	231.60
		5	16.82	16.72	16.92	404.01
Tetrachloro-m-xylene	300 PPB		9.70	9.60	9.80	6001.89
Decachlorobiphenyl	300 PPB		21.31	21.21	21.41	4459.74

* Denotes required peaks

Single injections of the low standard are made to establish approximate retention times and instrument sensitivity. Five point calibrations are performed if a multipeak component is detected in a sample.
Alternate column confirmation is run if a pesticide or PCB is detected in a site sample.

%D.

$\left|\frac{258-250}{250}\right| \times 100 = 3.2$

CF peak 3

$\frac{108851}{250} = 435.40$

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____
Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254
File Name: E2989916.D
Instrument ID: HP1.I
GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)
Analysis Date: 09/25/02
Analysis Time: 0903

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	13.66	13.57	13.77	238.56	250.00	4.58
Aroclor-1254	2	14.55	14.46	14.66	216.56	250.00	13.38
Aroclor-1254	3	15.00	14.91	15.11	203.89	250.00	18.44
Aroclor-1254	4	15.34	15.25	15.45	264.10	250.00	5.64
Aroclor-1254	5	16.02	15.93	16.13	227.43	250.00	9.03
Tetrachloro-m-xylene	1	7.98	7.89	8.09	297.98	300.00	0.67
Decachlorobiphenyl	1	20.12	20.03	20.23	308.82	300.00	2.94

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

Average.

$\left|\frac{230-250}{250}\right| \times 100 = 8\%$

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254

File Name: E2989925.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 09/25/02

Analysis Time: 1345

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	13.66	13.57	13.77	271.52	250.00	8.61
Aroclor-1254	2	14.55	14.46	14.66	241.18	250.00	3.53
Aroclor-1254	3	15.00	14.91	15.11	239.00	250.00	4.40
Aroclor-1254	4	15.34	15.25	15.45	290.21	250.00	16.08
Aroclor-1254	5	16.02	15.93	16.13	247.62	250.00	0.95
Tetrachloro-m-xylene	1	8.00	7.89	8.09	297.80	300.00	0.73
Decachlorobiphenyl	1	20.12	20.03	20.23	297.12	300.00	0.96

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

Average. $\left(\frac{258-250}{250}\right) \times 100 = 3.2$

00119

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254

File Name: E2989944.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 09/26/02

Analysis Time: 0734

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	13.66	13.57	13.77	253.65	250.00	1.46
Aroclor-1254	2	14.56	14.46	14.66	219.37	250.00	12.25
Aroclor-1254	3	15.00	14.91	15.11	223.72	250.00	10.51
Aroclor-1254	4	15.34	15.25	15.45	281.08	250.00	12.43
Aroclor-1254	5	16.02	15.93	16.13	231.65	250.00	7.34
Tetrachloro-m-xylene	1	7.98	7.89	8.09	288.02	300.00	3.99
Decachlorobiphenyl	1	20.13	20.03	20.23	330.41	300.00	10.14

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

Ave. $\frac{|240-250|}{250} \times 100 = 3.2$

00120

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254

File Name: E2989957.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 09/26/02

Analysis Time: 1422

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	13.66	13.57	13.77	232.98	250.00	6.81
Aroclor-1254	2	14.55	14.46	14.66	213.71	250.00	14.52
Aroclor-1254	3	15.00	14.91	15.11	208.31	250.00	16.68
Aroclor-1254	4	15.34	15.25	15.45	258.13	250.00	3.25
Aroclor-1254	5	16.02	15.93	16.13	224.63	250.00	10.15
Tetrachloro-m-xylene	1	7.98	7.89	8.09	275.22	300.00	8.26
Decachlorobiphenyl	1	20.12	20.03	20.23	302.03	300.00	0.68

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

Avg

$\left| \frac{228-250}{250} \right| \times 100 = 8.8\%$

00121

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____
Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254
File Name: E3956179.D
Instrument ID: HP3.I
GC Column: RTX-CLPesticides 1 ID: 0.32 (mm)
Analysis Date: 09/25/02
Analysis Time: 1250

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	14.59	14.50	14.70	240.21	250.00	3.92
Aroclor-1254	2	15.12	15.02	15.22	244.39	250.00	2.24
Aroclor-1254	3	15.92	15.83	16.03	248.85	250.00	0.46
Aroclor-1254	4	16.28	16.19	16.39	235.03	250.00	5.99
Aroclor-1254	5	16.83	16.74	16.94	233.24	250.00	6.70
Tetrachloro-m-xylene	1	9.71	9.62	9.82	304.08	300.00	1.36
Decachlorobiphenyl	1	21.32	21.23	21.43	290.67	300.00	3.11

↑ ave

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

Avg. - %D

$\left|\frac{240-250}{250}\right| \times 100 = 4\%$

00122

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254

File Name: E3956222.D

Instrument ID: HP3.I

GC Column: RTX-CLPesticides 1 ID: 0.32 (mm)

Analysis Date: 09/26/02

Analysis Time: 1428

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	14.58	14.48	14.68	254.71	250.00	1.88
Aroclor-1254	2	15.10	15.00	15.20	263.81	250.00	5.52
Aroclor-1254	3	15.91	15.81	16.01	272.60	250.00	9.04
Aroclor-1254	4	16.27	16.17	16.37	262.78	250.00	5.11
Aroclor-1254	5	16.81	16.72	16.92	258.77	250.00	3.51
Tetrachloro-m-xylene	1	9.70	9.60	9.80	319.48	300.00	6.49
Decachlorobiphenyl	1	21.30	21.21	21.41	306.20	300.00	2.07

All.

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

%D - Avg

$\left|\frac{263 - 250}{250}\right| \times 100 = 5.2\%$

CF - peak 1

$\frac{73867}{250} = 29523$

00123

FORM VII-PCB-2

PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA916
Instrument ID: HP1 Init. Calib. Date(s): 09/17/2 09/17/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 8.00 DCB: 20.13

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	STD11660	STD11660	09/17/2	1304	7.97	20.11
02	STD21660	STD21660	09/17/2	1335	7.99	20.12
03	STD31660	STD31660	09/17/2	1406	8.00	20.13
04	STD41660	STD41660	09/17/2	1437	7.99	20.13
05	STD51660	STD51660	09/17/2	1509	8.00	20.13
06	STD61660	STD61660	09/17/2	1540	8.00	20.13
07	STD11254	STD11254	09/17/2	1643	7.98	20.12
08	STD21254	STD21254	09/17/2	1714	7.99	20.13
09	STD31254	STD31254	09/17/2	1745	8.00	20.13
10	STD41254	STD41254	09/17/2	1816	7.99	20.13
11	STD51254	STD51254	09/17/2	1848	7.98	20.13
12	STD61254	STD61254	09/17/2	1919	8.00	20.13
13	STD41248	STD41248	09/17/2	1950	7.99	20.13
14	STD41242	STD41242	09/17/2	2021	7.99	20.13
15	STD41232	STD41232	09/17/2	2052	7.99	20.13
16	STD41221	STD41221	09/17/2	2124	8.00	20.13
17	~~CC166001~~	CC166001	09/18/2	1401	8.00	20.13
18	MB82	MB82	09/18/2	1433	8.02	20.13
19	QC82	QC82	09/18/2	1507	8.02	20.13
20	L94080-1RE	L94080-1RE	09/18/2	1538	7.99	20.13
21	L94080-2	L94080-2	09/18/2	1610	7.99	20.13
22	L94080-3RE	L94080-3RE	09/18/2	1641	7.99	20.13
23	L94080-4	L94080-4	09/18/2	1712	7.98	20.13
24	CC166002	CC166002	09/18/2	1815	8.01	20.13
25	L94081-1RE	L94081-1RE	09/18/2	1846	7.98	20.13
26	L94081-4RE	L94081-4RE	09/18/2	1917	7.99	20.13
27	L94081-5RE	L94081-5RE	09/18/2	1948	8.00	20.13
28	L94081-6RE	L94081-6RE	09/18/2	2019	7.99	20.13
29	L94081-7R	L94081-7R	09/18/2	2051	7.98	20.13
30	L94081-1MSR	L94081-1MSR	09/18/2	2122	7.98	20.13
31	L94081-1MSDR	L94081-1MSDR	09/18/2	2153	7.97	20.11
32	CC166003	CC166003	09/18/2	2255	8.01	20.13
33	CC125401	CC125401	09/18/2	2327	7.99	20.13
34	CC125402	CC125402	09/19/2	1009	7.99	20.13
35	L94080-1	L94080-1	09/19/2	1038	7.99	20.13
36	L94080-3R	L94080-3R	09/19/2	1116	7.99	20.13
37	~~L94081-6~~	L94081-6	09/19/2	1148	7.98	20.13

QC LIMITS

TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

ear
10/25/02

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA923
Instrument ID: HP1 Init. Calib. Date(s): 09/17/2 09/17/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 8.00 DCB: 20.13

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	CC125402	CC125402	09/25/2	0903	7.98	20.12
02	QC84	QC84	09/25/2	0934	7.98	20.12
03	L94363-4	L94363-4	09/25/2	1007	7.97	20.11
04	L94363-6	L94363-6	09/25/2	1038	7.97	20.11
05	L94363-8	L94363-8	09/25/2	1109	7.97	20.11
06	L94363-10	L94363-10	09/25/2	1141	7.97	20.11
07	L94363-12	L94363-12	09/25/2	1212	7.97	20.11
08	L94363-2	L94363-2	09/25/2	1243	7.97	20.12
09	MB84	MB84	09/25/2	1314	7.98	20.12
10	CC125402	CC125402	09/25/2	1345	8.00	20.12
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12						
13						
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QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA925
Instrument ID: HP1 Init. Calib. Date(s): 09/17/2 09/ 2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 8.00 DCB: 20.13

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	CC1254	CC1254	09/26/2	0734	7.98	20.13
02	MB87	MB87	09/26/2	0803	7.97	20.12
03	QC87	QC87	09/26/2	0838	7.99	20.12
04	~~L94538-1~~	L94538-1	09/26/2	0909	7.97	20.12
05	L94538-2	L94538-2	09/26/2	0941	7.97	20.12
06	L94538-5	L94538-5	09/26/2	1012	7.97	20.12
07	L94538-6	L94538-6	09/26/2	1043	7.98	20.12
08	L94538-7	L94538-7	09/26/2	1114	7.97	20.12
09	L94538-8	L94538-8	09/26/2	1146	7.97	20.12
10	L94538-1	L94538-1	09/26/2	1217	7.98	20.12
11	L94538-2MS	L94538-2MS	09/26/2	1248	7.98	20.12
12	L94538-2MSD	L94538-2MSD	09/26/2	1319	7.98	20.12
13	CC125402	CC125402	09/26/2	1422	7.98	20.12
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QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA923CONFIRM
Instrument ID: HP3 Init. Calib. Date(s): 09/19/2 09/25/2
GC Column: RTX-CLPESTICIDES 1 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 9.72 DCB: 21.33

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	CC125401	CC125401	09/25/2	0908	9.72	21.33
02	L94363-2	L94363-2	09/25/2	0939	9.72	21.33
03	L94363-4	L94363-4	09/25/2	1011	9.73	21.34
04	L94363-12	L94363-12	09/25/2	1045	9.73	21.32
05	L94363-6	L94363-6	09/25/2	1116	9.72	21.33
06	L94363-8	L94363-8	09/25/2	1147	9.72	21.32
07	L94363-10	L94363-10	09/25/2	1218	9.71	21.32
08	CC125402	CC125402	09/25/2	1250	9.71	21.32
09						
10						
11						
12						
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QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA925CONFIRM
Instrument ID: HP3 Init. Calib. Date(s): 09/19/2 09/
GC Column: RTX-CLPESTICIDES 1 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 9.72 DCB: 21.33

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	CC125401	CC125401	09/26/2	1050	9.70	21.31
02	L94538-2	L94538-2	09/26/2	1121	9.70	21.30
03	L94538-5	L94538-5	09/26/2	1153	9.69	21.30
04	L94538-6	L94538-6	09/26/2	1224	9.69	21.30
05	L94538-7	L94538-7	09/26/2	1255	9.70	21.30
06	L94538-8	L94538-8	09/26/2	1326	9.69	21.30
07	L94538-1	L94538-1	09/26/2	1357	9.69	21.31
08	CC125402	CC125402	09/26/2	1428	9.70	21.30
09						
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QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94538-1

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA925

Lab Sample ID: L94538-1 Date(s) Analyzed: 09/26/2 09/26/07

Instrument ID (1): HP1 Instrument ID (2): HP3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST 1 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.65	13.57	13.77	64.86		
Aroclor-1254	2	14.54	14.46	14.66	306.78		
	3	14.99	14.90	15.10	358.85		
COLUMN 1	4	15.33	15.25	15.45	280.04		
	5	16.01	15.93	16.13	289.50	260.01	
	1	14.57	14.50	14.70	176.02		
	2	15.10	15.02	15.22	147.47		
	3	15.91	15.83	16.03	155.41		
COLUMN 2	4	16.27	16.19	16.39	262.29		
	5	16.81	16.74	16.94	217.54	191.75	35.6
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

$\frac{260.01 - 191.75}{260.01 + 191.75} \times 100 = 30.2$

FORM X PEST-2

00135

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94538-2

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA925

Lab Sample ID: L94538-2 Date(s) Analyzed: 09/26/2 09/26/02

Instrument ID (1): HP1 Instrument ID (2): HP3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST 1 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.65	13.57	13.77	428.87		
Aroclor-1254	2	14.55	14.46	14.66	564.11		
	3	14.99	14.90	15.10	479.80		
COLUMN 1	4	15.33	15.25	15.45	533.47		
	5	16.01	15.93	16.13	462.70	493.79	
	1	14.58	14.50	14.70	731.20		
	2	15.10	15.02	15.22	1668.78		
	3	15.91	15.83	16.03	663.68		
COLUMN 2	4	16.27	16.19	16.39	680.78		
	5	16.81	16.74	16.94	635.66	676.02	36.9
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

00136

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94538-5

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA925

Lab Sample ID: L94538-5 Date(s) Analyzed: 09/26/2 09/26/07

Instrument ID (1): HP1 Instrument ID (2): HP3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST 1 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.65	13.57	13.77	1023.52		
Aroclor-1254	2	14.55	14.46	14.66	1223.05		
	3	14.99	14.90	15.10	1148.80		
COLUMN 1	4	15.33	15.25	15.45	1197.75		
	5	16.01	15.93	16.13	1084.08	1135.44	
	1	14.57	14.50	14.70	1363.27		
	2	15.09	15.02	15.22	1296.30		
	3	15.90	15.83	16.03	1355.91		
COLUMN 2	4	16.26	16.19	16.29	1205.87		
	5	16.81	16.74	16.94	1315.98	1307.47	15.2
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

00139

10B
PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94538-6

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA925

Lab Sample ID: L94538-6 Date(s) Analyzed: 09/26/2 09/26/02

Instrument ID (1): HP1 Instrument ID (2): HP-3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST 1 ID: 0.3

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.65	13.57	13.77	57.62		
Aroclor-1254	2	14.54	14.46	14.66	258.14		
	3	14.99	14.90	15.10	297.04		
COLUMN 1	4	15.33	15.25	15.45	209.28		
	5	16.01	15.93	16.13	276.69	219.76	
	1	14.57	14.50	14.70	180.31		
	2	15.10	15.02	15.22	143.82		
	3	15.90	15.83	16.03	163.36		
COLUMN 2	4	16.26	16.19	16.39	250.35		
	5	16.81	16.74	16.94	223.95	192.36	14.2
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

00140

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94538-7

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA925

Lab Sample ID: L94538-7 Date(s) Analyzed: 09/26/2 09/26/02

Instrument ID (1): HP1 Instrument ID (2): HP3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST 1 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.65	13.57	13.77	1156.53		
Aroclor-1254	2	14.55	14.46	14.66	1017.89		
	3	14.99	14.90	15.10	911.80		
COLUMN 1	4	15.33	15.25	15.45	1237.70		
	5	16.01	15.93	16.13	748.61	1014.51	
	1	14.57	14.50	14.70	973.05		
	2	15.10	15.02	15.22	956.53		
	3	15.90	15.83	16.03	987.39		
COLUMN 2	4	16.27	16.19	16.39	1022.41		
	5	16.81	16.74	16.94	994.01	986.68	2.8
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94538-8

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA925

Lab Sample ID: L94538-8 Date(s) Analyzed: 09/26/2

Instrument ID (1): HP1 Instrument ID (2): _____

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): _____ ID: ____

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.65	13.57	13.77	107.35		
Aroclor-1254	2	14.54	14.46	14.66	255.97		
	3	14.98	14.90	15.10	340.79		
COLUMN 1	4	15.33	15.25	15.45	342.27		
	5	16.01	15.93	16.13	319.99	273.27	
	1	14.58	14.50	14.70	145.54		
	2	15.10	15.02	15.22	140.47		
	3	15.91	15.83	16.03	141.54		
COLUMN 2	4	16.27	16.19	16.39	255.97		
	5	16.81	16.74	16.94	235.99	183.90	48.6
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

00142

Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956175.D
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: L94363-12
Misc Info: CONFIRMATION
Analysis Date: 25-SEP-2002 10:45
Sample Matrix: SOIL
File Number: 6175

Dilution Factor:	10.0000
Sample Weight:	10.0473
Final Volume:	10.0000
Total Solid :	84.9000

Analytes (ug/Kg)	
Aroclor-1254	1026.21
Tetrachloro-m-xylene	148.45%
Decachlorobiphenyl	173.51%

Analyst: CPW
Report Date: 09/25/2002 16:12

Supervisor: _____
Date: _____

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L94538-1

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA925

Matrix: (soil/water) SOIL Lab Sample ID: L94538-1

Sample wt/vol: 10.4 (g/mL) G Lab File ID: E2989953

% Moisture: 30.8 decanted: (Y/N) N Date Received: 09/25/2

lak 10/25/02

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/25/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/26/2

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	140 ~~0.14~~	U
1104-28-2	Aroclor-1221	280 ~~0.28~~	U
11141-16-5	Aroclor-1232	140 ~~0.14~~	U
53469-21-9	Aroclor-1242	140 ~~0.14~~	U
11097-69-1	Aroclor-1254	260.01	
11096-82-5	Aroclor-1260	140 ~~0.14~~	U
----------	Aroclor-1248	140 ~~0.14~~	U

lak 10/28/02

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2989953.D
Lab Smp Id: L94538-1 Client Smp ID: L94538-1
Inj Date : 26-SEP-2002 12:17
Operator : CPW Inst ID: hp1.i
Smp Info : L94538-1
Misc Info : WG32900,02-004
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 26-Sep-2002 14:49 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.366	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	69.200	Total Solid

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #:		
	7.983	7.997	-0.014	259778	37.2717	519.57		
$ 29 Decachlorobiphenyl						CAS #:		
	20.120	20.130	-0.010	193975	41.2678	575.28		
25 Aroclor-1254						CAS #: 11097-69-1		
	13.647	13.670	-0.023	3371	4.65275	64.86	80.00- 120.00	100.00(MH)
	14.537	14.563	-0.026	2390	22.0067	306.78	99.75- 139.75	70.90
	14.987	15.003	-0.016	1676	25.7425	358.85	77.94- 117.94	49.72
	15.327	15.350	-0.023	2995	20.0888	280.04	46.79- 86.79	88.85
	16.007	16.033	-0.026	3311	20.7672	289.50	86.38- 126.38	98.22

Average of Peak Concentrations = 260.01

Peak 2
AMT = 16.4006 + (2390 × 2.262×10⁻³)
= 22.0068.

Final = 22.0068 × 10 × (10/10.366 × 1) / 6.92×1000
= 3.0689×10⁻⁴
= 306.79 ug/kg.

1300.03 / 5 = 260.01

Confirmation
HP3 CLP1
6221F

00066

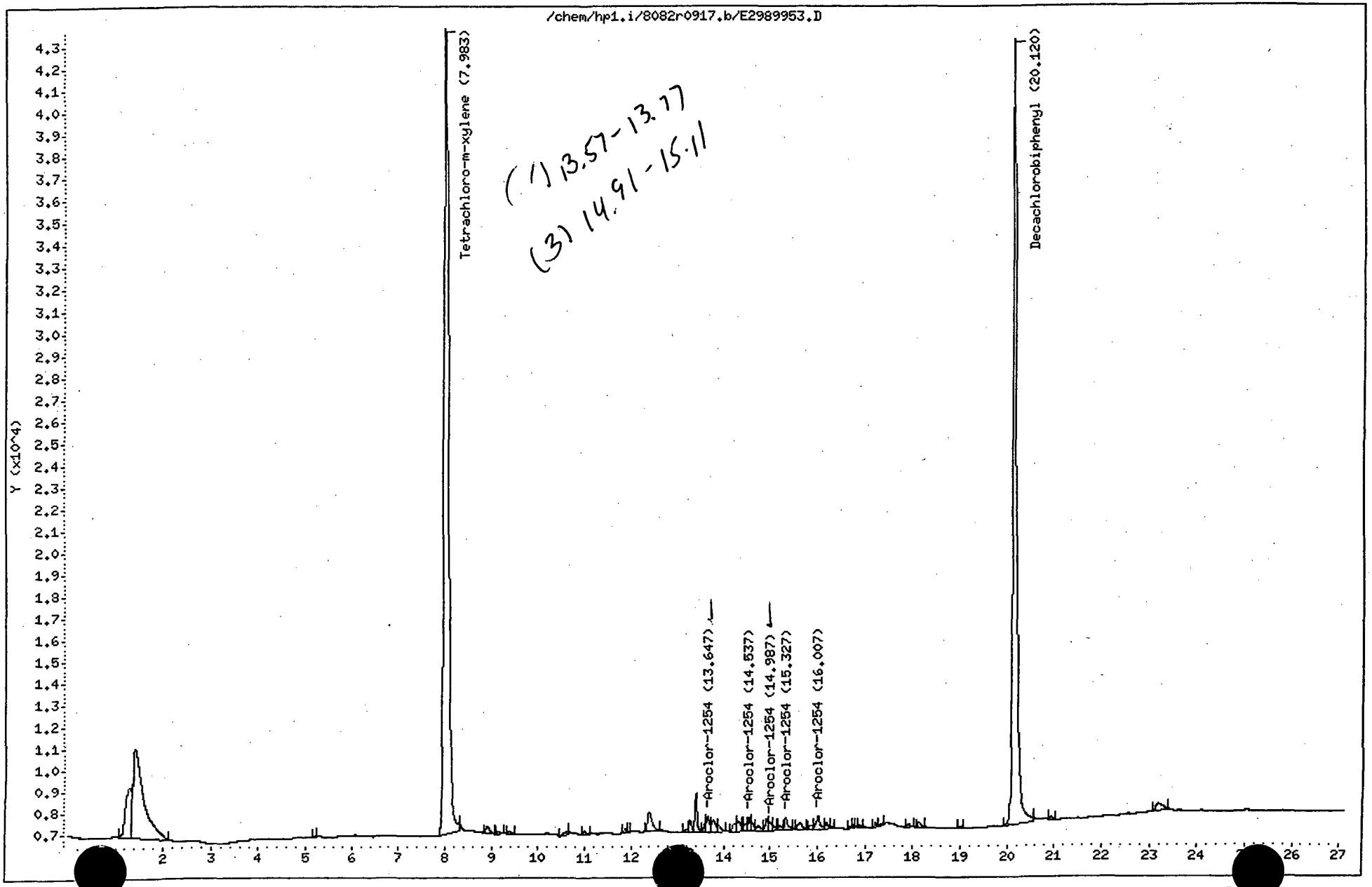
QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /chem/hp1.i/8082r0917.b/E2989953.D
Date : 26-SEP-2002 12:17
Client ID: L94538-1
Sample Info: L94538-1
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00068



Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2989953.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L94538-1
Misc Info: WG32900,02-004
Analysis Date: 26-SEP-2002 12:17
Sample Matrix: SOIL
File Number: 9953

SJ 581403

Dilution Factor:	10.0000
Sample Weight:	10.3664
Final Volume:	10.0000
Total Solid :	69.2000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	260.01
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	74.54%
Decachlorobiphenyl	82.54%

Analyst: CPW
Report Date: 09/26/2002 14:51

Supervisor:_____
Date:_____

Thru-Put Systems, Inc.

Data file : \chem\hp3.i\1254FCONFIRMa.b\E3956221.D
Lab Smp Id: L94538-1 Client Smp ID: L94538-1
Inj Date : 26-SEP-2002 13:57
Operator : CPW Inst ID: hp3.i
Smp Info : L94538-1
Misc Info : CONFIRMATION
Comment :
Method : \chem\hp3.i\1254FCONFIRMa.b\8082_PCBsec.M
Meth Date : 26-Sep-2002 14:54 Administra Quant Type: ESTD
Cal Date : 25-SEP-2002 09:08 Cal File: E3956172.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 1254.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.366	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	69.200	Total Solid

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #:		
	9.690	9.717	-0.027	378910	65.3069	910.38		
25 Aroclor-1254						CAS #: 11097-69-1		
	14.573	14.597	-0.024	3659	12.6272	176.02	80.00- 120.00	100.00
	15.100	15.123	-0.023	5091	10.5788	147.47	152.01- 192.01	139.14
	15.907	15.927	-0.020	4523	11.1485	155.41	129.84- 169.84	123.61
	16.270	16.290	-0.020	4243	18.8156	262.29	60.29- 100.29	115.96
	16.813	16.837	-0.024	6247	15.6055	217.54	120.35- 160.35	170.73
Average of Peak Concentrations =						191.75		
$ 29 Decachlorobiphenyl						CAS #:		
	21.313	21.327	-0.014	294002	65.8652	918.17		

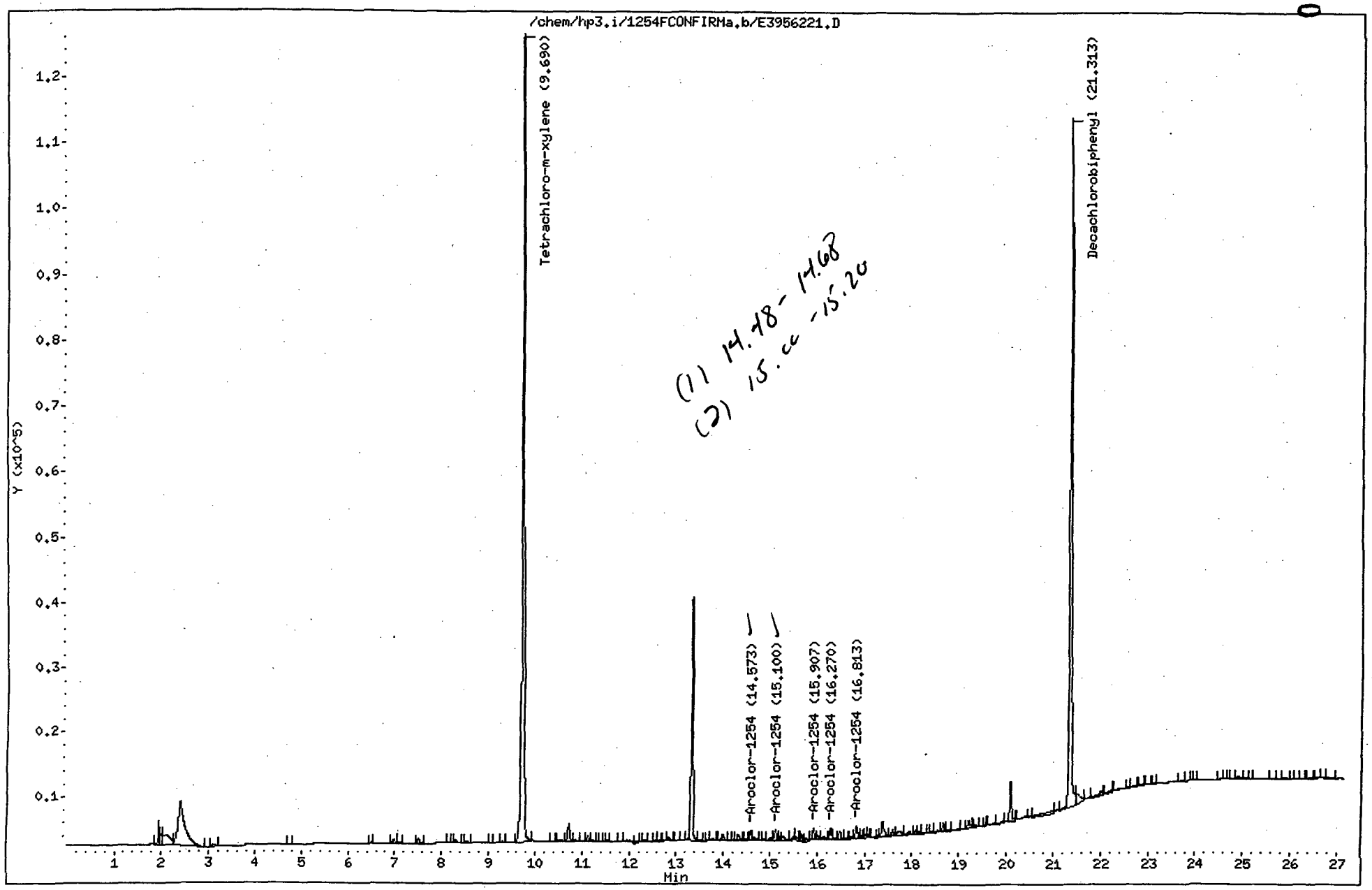
00070

Data [redacted] /chem/hp3.i/1254FCONFIRMa.b/E3956221.D
Date [redacted]26-SEP-2002 13:57
Cli[redacted]: L94538-1
Sampl[redacted]nfo: L94538-1
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i
Operator: CPW
Column diameter: 0.32

Page [redacted]

00071



1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L94538-2

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA925

Matrix: (soil/water) SOIL Lab Sample ID: L94538-2

Sample wt/vol: 10.9 (g/mL) G Lab File ID: E2989948

% Moisture: ~~0~~ 12.5 decanted: (Y/N) N Date Received: 09/25/2

eak 10/25/02

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/25/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/26/2

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	100 ~~0.10~~	U
1104-28-2	Aroclor-1221	210 ~~0.21~~	U
11141-16-5	Aroclor-1232	100 ~~0.10~~	U
53469-21-9	Aroclor-1242	100 ~~0.10~~	U
11097-69-1	Aroclor-1254	493.79	
11096-82-5	Aroclor-1260	100 ~~0.10~~	U
----------	Aroclor-1248	100 ~~0.10~~	U

eak 10/25/02

Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956221.D
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: L94538-1
Misc Info: CONFIRMATION
Analysis Date: 26-SEP-2002 13:57
Sample Matrix: SOIL
File Number: 6221

Dilution Factor:	10.0000
Sample Weight:	10.3664
Final Volume:	10.0000
Total Solid :	69.2000

Analytes (ug/Kg)	
Aroclor-1254	191.75
Tetrachloro-m-xylene	130.61%
Decachlorobiphenyl	131.73%

Analyst: CPW
Report Date: 09/26/2002 15:02

Supervisor: _____
Date: _____

00072

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2989948.D
Lab Smp Id: L94538-2 Client Smp ID: L94538-2
Inj Date : 26-SEP-2002 09:41
Operator : CPW Inst ID: hp1.i
Smp Info : L94538-2
Misc Info : WG32900,02-004
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 26-Sep-2002 14:49 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.929	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	87.500	Total Solid

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1	Tetrachloro-m-xylene					CAS #:		
	7.973	7.997	-0.024	300888	42.2846	442.17		
$ 29	Decachlorobiphenyl					CAS #:		
	20.120	20.130	-0.010	278127	57.1548	597.67		
25	Aroclor-1254					CAS #: 11097-69-1		
	13.653	13.670	-0.017	14423	41.0129	428.87	80.00- 120.00	100.00(H)
	14.547	14.563	-0.016	16510	53.9452	564.11	99.75- 139.75	114.47
	14.993	15.003	-0.010	9354	45.8835	479.80	77.94- 117.94	64.85
	15.333	15.350	-0.017	8921	51.0155	533.47	46.79- 86.79	61.85
	16.013	16.033	-0.020	11846	44.2482	462.70	86.38- 126.38	82.13
	Average of Peak Concentrations =					493.79		

Confirmation
HP3 CLP1
6216F
9/26/02
00074

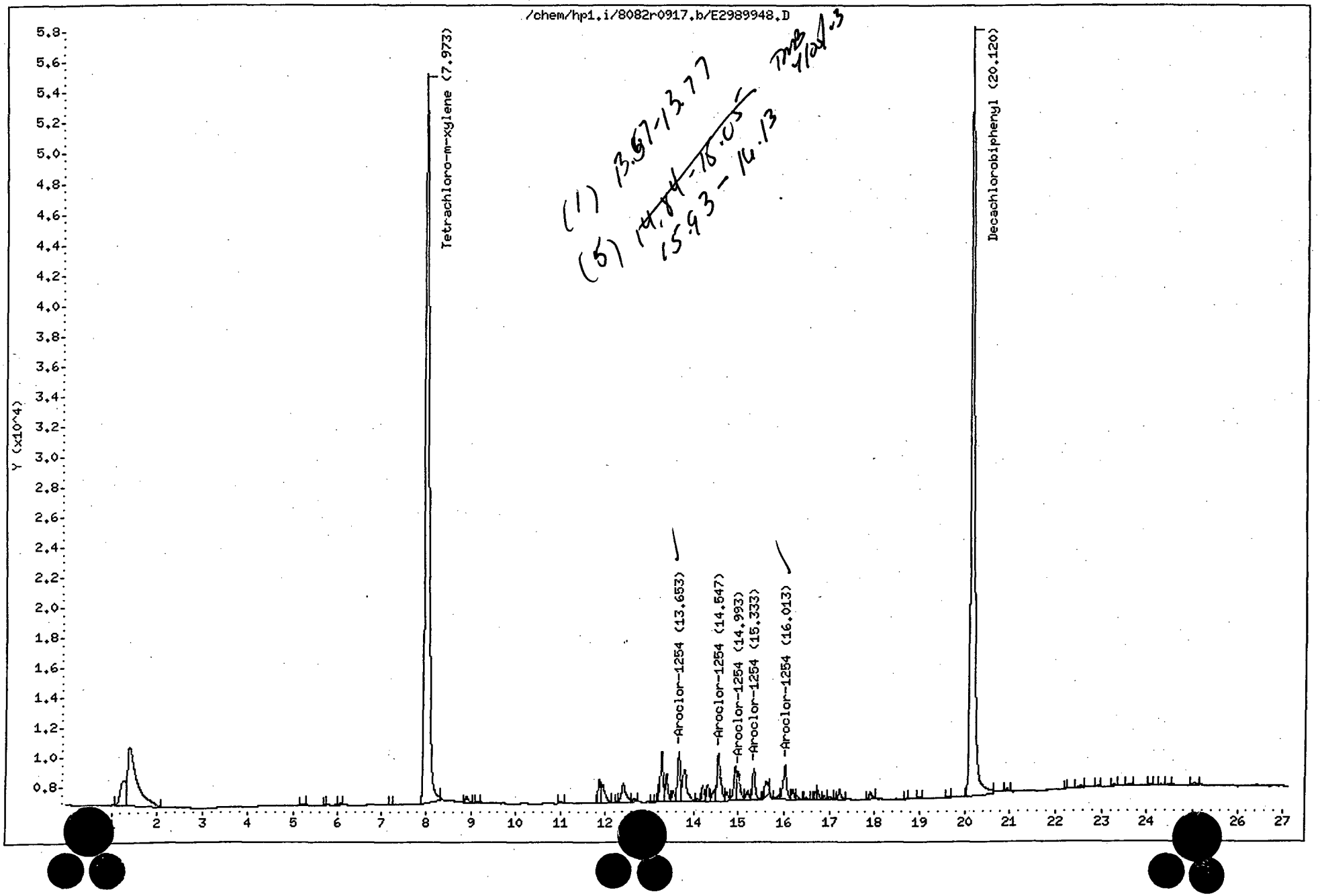
QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/hp1.i/8082r0917.b/E2989948.D
Date : 26-SEP-2002 09:41
Client ID: L94538-2
Sample Info: L94538-2
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

000176



Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2989948.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L94538-2
Misc Info: WG32900,02-004
Analysis Date: 26-SEP-2002 09:41
Sample Matrix: SOIL
File Number: 9948

Dilution Factor:	10.0000
Sample Weight:	10.9291
Final Volume:	10.0000
Total Solid :	87.5000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	493.79
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	84.57%
Decachlorobiphenyl	114.31%

Analyst: CPW
Report Date: 09/26/2002 14:51

Supervisor: _____
Date: 9/30/2

00077

Thru-Put Systems, Inc.

Data file : \chem\hp3.i\1254FCONFIRMa.b\E3956216.D
Lab Smp Id: L94538-2 Client Smp ID: L94538-2
Inj Date : 26-SEP-2002 11:21
Operator : CPW Inst ID: hp3.i
Smp Info : L94538-2
Misc Info : CONFIRMATION
Comment :
Method : \chem\hp3.i\1254FCONFIRMa.b\8082_PCBsec.M
Meth Date : 26-Sep-2002 14:54 Administra Quant Type: ESTD
Cal Date : 25-SEP-2002 09:08 Cal File: E3956172.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 1254.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.929	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	87.500	Total Solid

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
9.700	9.717	-0.017	368178	63.4572	663.57		
25 Aroclor-1254					CAS #: 11097-69-1		
14.577	14.597	-0.020	20262	69.9239	731.20	80.00- 120.00	100.00
15.100	15.123	-0.023	30778	63.9551	668.78	152.01- 192.01	151.90
15.907	15.927	-0.020	25749	63.4675	663.68	129.84- 169.84	127.08
16.267	16.290	-0.023	14681	65.1031	680.78	60.29- 100.29	72.46
16.813	16.837	-0.024	24334	60.7882	635.66	120.35- 160.35	120.10
Average of Peak Concentrations =					676.02		
$ 29 Decachlorobiphenyl					CAS #:		
21.303	21.327	-0.024	300647	67.3539	704.32		

00078

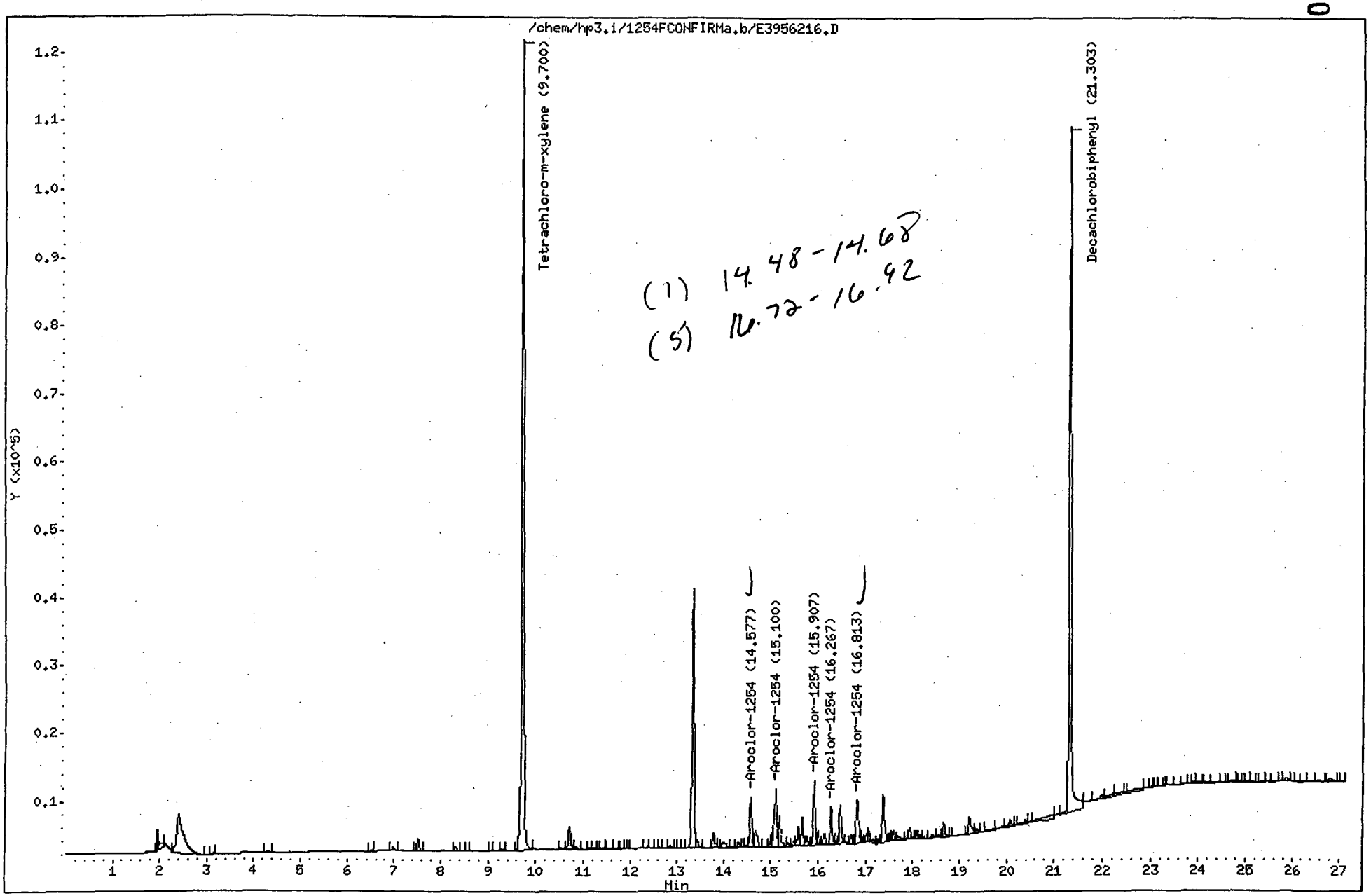
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Dat[redacted]26-SEP-2002 11:21
Cl[redacted]D: L94538-2
Sample Info: L94538-2
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i

Operator: CPW
Column diameter: 0.32

Page 2

00079



Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956216.D
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: L94538-2
Misc Info: CONFIRMATION
Analysis Date: 26-SEP-2002 11:21
Sample Matrix: SOIL
File Number: 6216

Dilution Factor:	10.0000
Sample Weight:	10.9291
Final Volume:	10.0000
Total Solid :	87.5000

Analytes (ug/Kg)	
Aroclor-1254	676.02
Tetrachloro-m-xylene	126.91%
Decachlorobiphenyl	134.71%

Analyst: CPW
Report Date: 09/26/2002 15:01

Supervisor: _____
Date: _____

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L94538-5

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA925

Matrix: (soil/water) SOIL Lab Sample ID: L94538-5

Sample wt/vol: 11.0 (g/mL) G Lab File ID: E2989949

% Moisture: ~~85~~ 54.6 decanted: (Y/N) N Date Received: 09/25/2

Extraction: (SepF/Cont/Sonc) SONC ear 10/25/02 Date Extracted: 09/25/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/26/2

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	200 ~~0.20~~	U
1104-28-2	Aroclor-1221	400 ~~0.40~~	U
11141-16-5	Aroclor-1232	200 ~~0.20~~	U
53469-21-9	Aroclor-1242	200 ~~0.20~~	U
11097-69-1	Aroclor-1254	1135.44	
11096-82-5	Aroclor-1260	200 ~~0.20~~	U
----------	Aroclor-1248	200 ~~0.20~~	U

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2989949.D
Lab Smp Id: L94538-5 Client Smp ID: L94538-5
Inj Date : 26-SEP-2002 10:12
Operator : CPW Inst ID: hp1.i
Smp Info : L94538-5
Misc Info : WG32900,02-004
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 26-Sep-2002 14:49 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.975	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	45.400	Total Solid

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$	1 Tetrachloro-m-xylene					CAS #:		
	7.973	7.997	-0.024	311670	43.5994	875.04		
$	29 Decachlorobiphenyl					CAS #:		
	20.120	20.130	-0.010	278337	57.1944	1147.89		
	25 Aroclor-1254					CAS #: 11097-69-1		
	13.653	13.670	-0.017	17458	50.9977	1023.52	80.00- 120.00	100.00(H)
	14.547	14.563	-0.016	19602	60.9391	1223.05	99.75- 139.75	112.28
	14.990	15.003	-0.013	13683	57.2394	1148.80	77.94- 117.94	78.38
	15.333	15.350	-0.017	10581	59.6787	1197.75	46.79- 86.79	60.61
	16.013	16.033	-0.020	15396	54.0147	1084.08	86.38- 126.38	88.19

Average of Peak Concentrations = 1135.44

Confirmation
HP3 CL81
6217F

00082

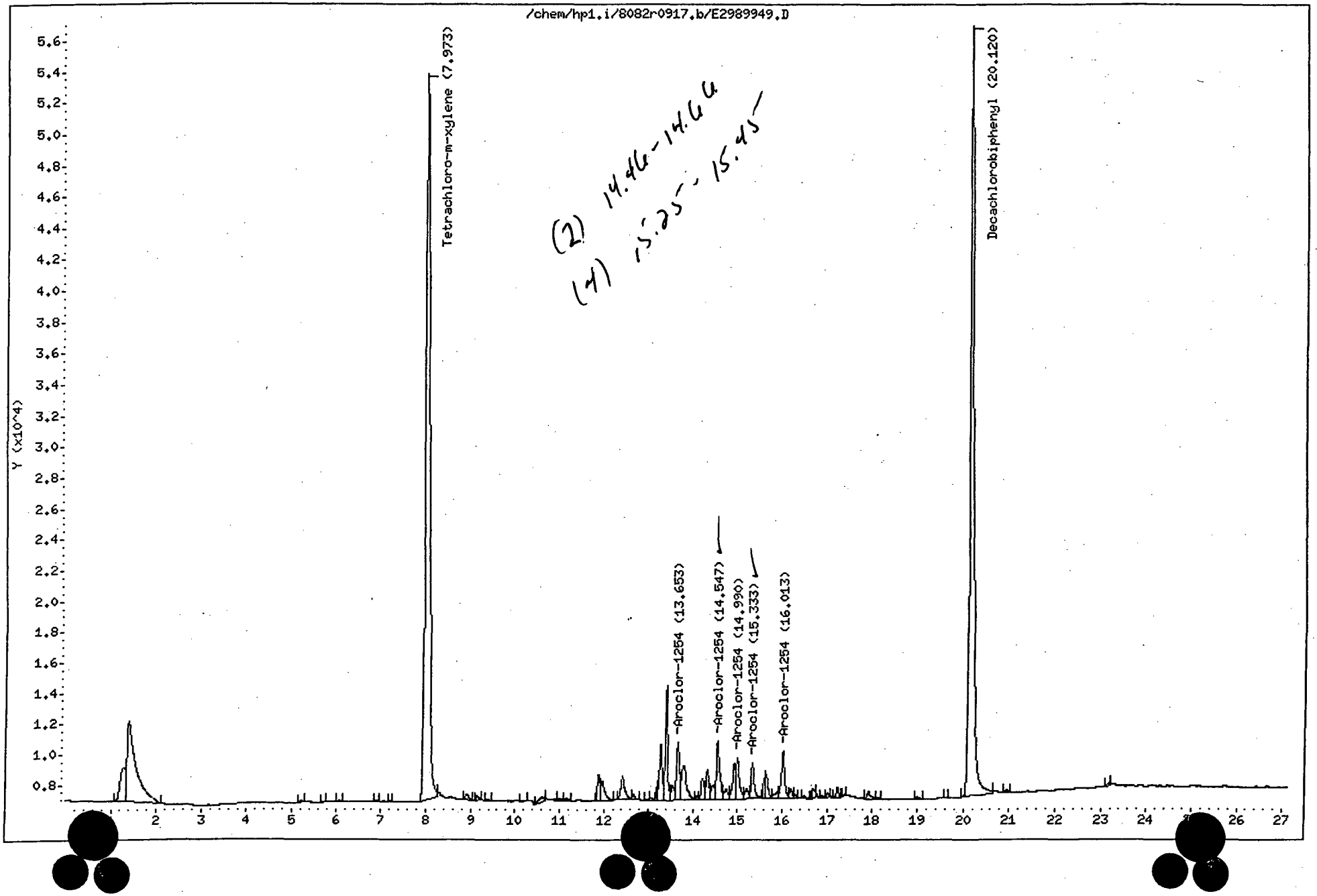
QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/hp1.i/8082r0917.b/E2989949.D
Date : 26-SEP-2002 10:12
Client ID: L94538-5
Sample Info: L94538-5
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

000841



Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2989949.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L94538-5
Misc Info: WG32900,02-004
Analysis Date: 26-SEP-2002 10:12
Sample Matrix: SOIL
File Number: 9949

Dilution Factor:	10.0000
Sample Weight:	10.9748
Final Volume:	10.0000
Total Solid :	45.4000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	1135.44
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	87.20%
Decachlorobiphenyl	114.39%

Analyst: CPW
Report Date: 09/26/2002 14:51

Supervisor: _____
Date: _____ 9/30/2

00085

Thru-Put Systems, Inc.

Data file : \chem\hp3.i\1254FCONFIRMa.b\E3956217.D
Lab Smp Id: L94538-5 Client Smp ID: L94538-5
Inj Date : 26-SEP-2002 11:53
Operator : CPW Inst ID: hp3.i
Smp Info : L94538-5
Misc Info : CONFIRMATION
Comment :
Method : \chem\hp3.i\1254FCONFIRMa.b\8082_PCBsec.M
Meth Date : 26-Sep-2002 14:54 Administra Quant Type: ESTD
Cal Date : 25-SEP-2002 09:08 Cal File: E3956172.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 1254.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.975	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	45.400	Total Solid

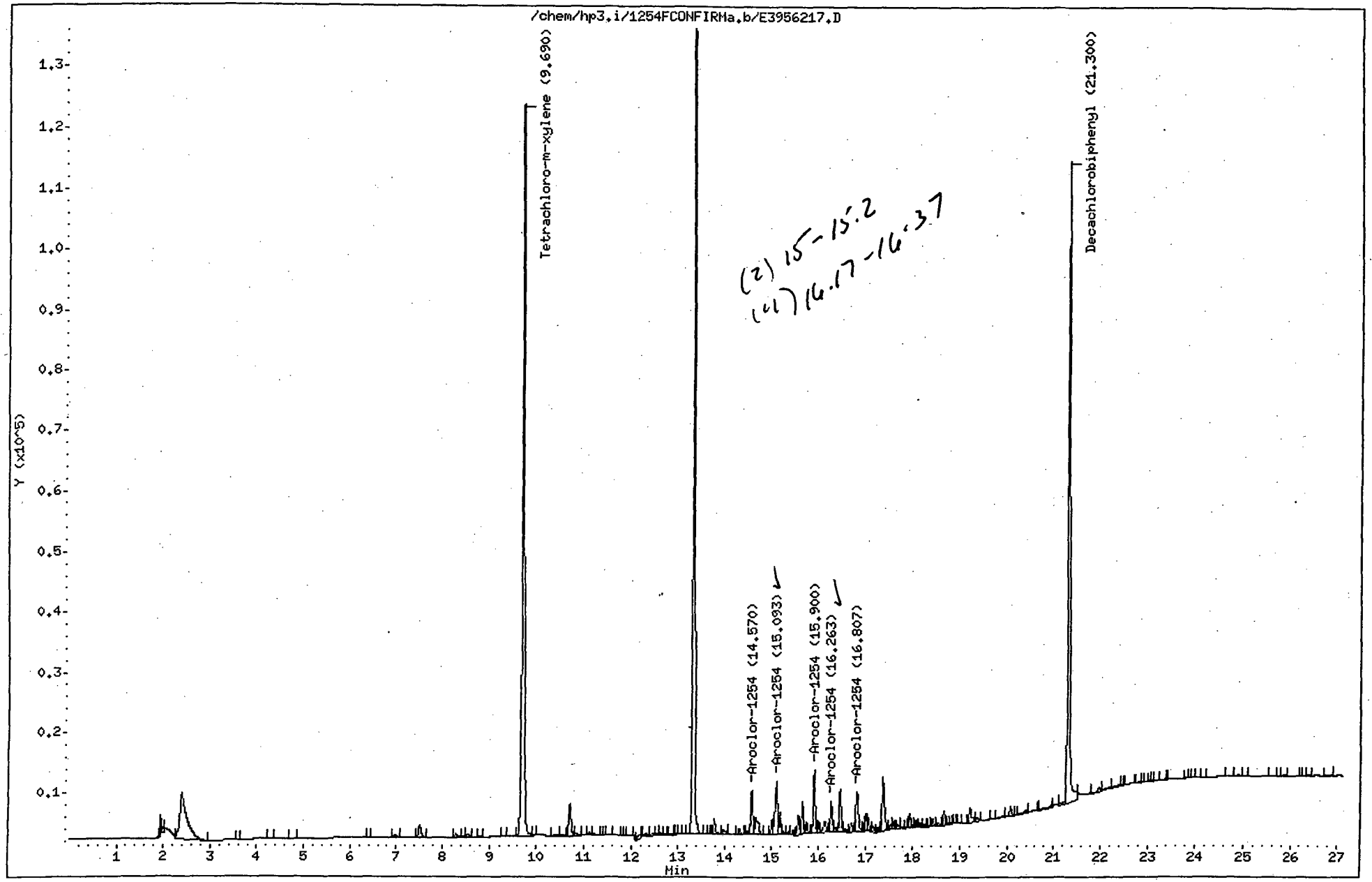
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
9.690	9.717	-0.027	375501	64.7193	1298.92		
25 Aroclor-1254					CAS #: 11097-69-1		
14.570	14.597	-0.027	19683	67.9258	1363.27	80.00- 120.00	100.00
15.093	15.123	-0.030	31083	64.5889	1296.30	152.01- 192.01	157.92
15.900	15.927	-0.027	27409	67.5591	1355.91	129.84- 169.84	139.25
16.263	16.290	-0.027	13549	60.0832	1205.87	60.29- 100.29	68.84
16.807	16.837	-0.030	26248	65.5695	1315.98	120.35- 160.35	133.35
Average of Peak Concentrations = 1307.47							
$ 29 Decachlorobiphenyl					CAS #:		
21.300	21.327	-0.027	297785	66.7127	1338.93		

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956217.D
Date: 26-SEP-2002 11:53
Client ID: L94538-5
Sample Info: L94538-5
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i

Operator: CPW
Column diameter: 0.32

00087



Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956217.D
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: L94538-5
Misc Info: CONFIRMATION
Analysis Date: 26-SEP-2002 11:53
Sample Matrix: SOIL
File Number: 6217

Dilution Factor:	10.0000
Sample Weight:	10.9748
Final Volume:	10.0000
Total Solid :	45.4000

Analytes (ug/Kg)	
Aroclor-1254	1307.47
Tetrachloro-m-xylene	129.44%
Decachlorobiphenyl	133.43%

Analyst: CPW
Report Date: 09/26/2002 15:01

Supervisor: _____
Date: _____

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L94538-6

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA925

Matrix: (soil/water) SOIL Lab Sample ID: L94538-6

Sample wt/vol: 10.7 (g/mL) G Lab File ID: E2989950

% Moisture: ~~0~~ 18.1 decanted: (Y/N) N Date Received: 09/25/2

Extraction: (SepF/Cont/Sonc) SONC eaR 10/25/02 Date Extracted: 09/25/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/26/2

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110 ~~0.11~~	U
1104-28-2	Aroclor-1221	230 ~~0.23~~	U
11141-16-5	Aroclor-1232	110 ~~0.11~~	U
53469-21-9	Aroclor-1242	110 ~~0.11~~	U
11097-69-1	Aroclor-1254	219.76	
11096-82-5	Aroclor-1260	110 ~~0.11~~	U
----------	Aroclor-1248	110 ~~0.11~~	U

eaR 10/25/02

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2989950.D
Lab Smp Id: L94538-6 Client Smp ID: L94538-6
Inj Date : 26-SEP-2002 10:43
Operator : CPW Inst ID: hp1.i
Smp Info : L94538-6
Misc Info : WG32900,02-004
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 26-Sep-2002 14:49 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.682	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	81.900	Total Solid

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #:		
	7.977	7.997	-0.020	322734	44.9485	513.79		
$ 29 Decachlorobiphenyl						CAS #:		
	20.120	20.130	-0.010	266769	55.0105	628.80		
25 Aroclor-1254						CAS #: 11097-69-1		
	13.650	13.670	-0.020	3489	5.04096	57.62	80.00- 120.00	100.00
	14.543	14.563	-0.020	2645	22.5835	258.14	99.75- 139.75	75.81
	14.987	15.003	-0.016	1769	25.9865	297.04	77.94- 117.94	50.70
	15.330	15.350	-0.020	2654	18.3092	209.28	46.79- 86.79	76.07
	16.010	16.033	-0.023	4561	24.2061	276.69	86.38- 126.38	130.73
Average of Peak Concentrations =						219.76		

confirmation
HP3 (LP1
6218F

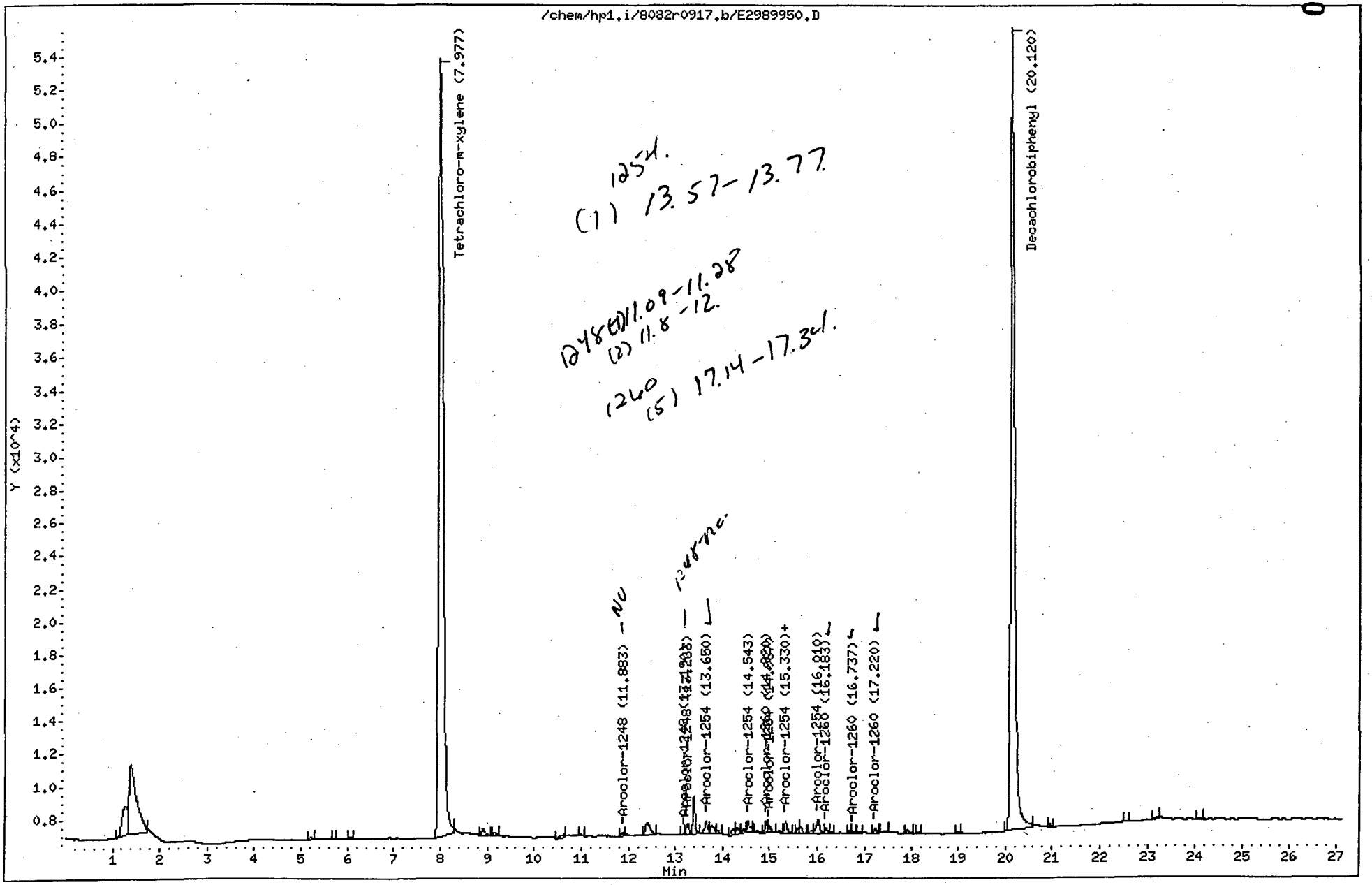
00090

Data File: /chem/hp1.i/8082r0917.b/E2989950.D
Date: 16-SEP-2002 10:43
Client: L94538-6
Sample Info: L94538-6
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

Page

00091



125-1.
(1) 13.57 - 13.77

1248(1) 11.09 - 11.28
(2) 11.8 - 12.

(240
(5) 17.14 - 17.34

Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2989950.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L94538-6
Misc Info: WG32900,02-004
Analysis Date: 26-SEP-2002 10:43
Sample Matrix: SOIL
File Number: 9950

Dilution Factor:	10.0000
Sample Weight:	10.6819
Final Volume:	10.0000
Total Solid :	81.9000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	219.76
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	89.90%
Decachlorobiphenyl	110.02%

Analyst: CPW
Report Date: 09/26/2002 14:51

Supervisor: _____
Date: 9/30/2

Thru-Put Systems, Inc.

Data file : \chem\hp3.i\1254FCONFIRMa.b\E3956218.D
Lab Smp Id: L94538-6 Client Smp ID: L94538-6
Inj Date : 26-SEP-2002 12:24
Operator : CPW Inst ID: hp3.i
Smp Info : L94538-6
Misc Info : CONFIRMATION
Comment :
Method : \chem\hp3.i\1254FCONFIRMa.b\8082_PCBsec.M
Meth Date : 26-Sep-2002 14:54 Administra Quant Type: ESTD
Cal Date : 25-SEP-2002 09:08 Cal File: E3956172.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 1254.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

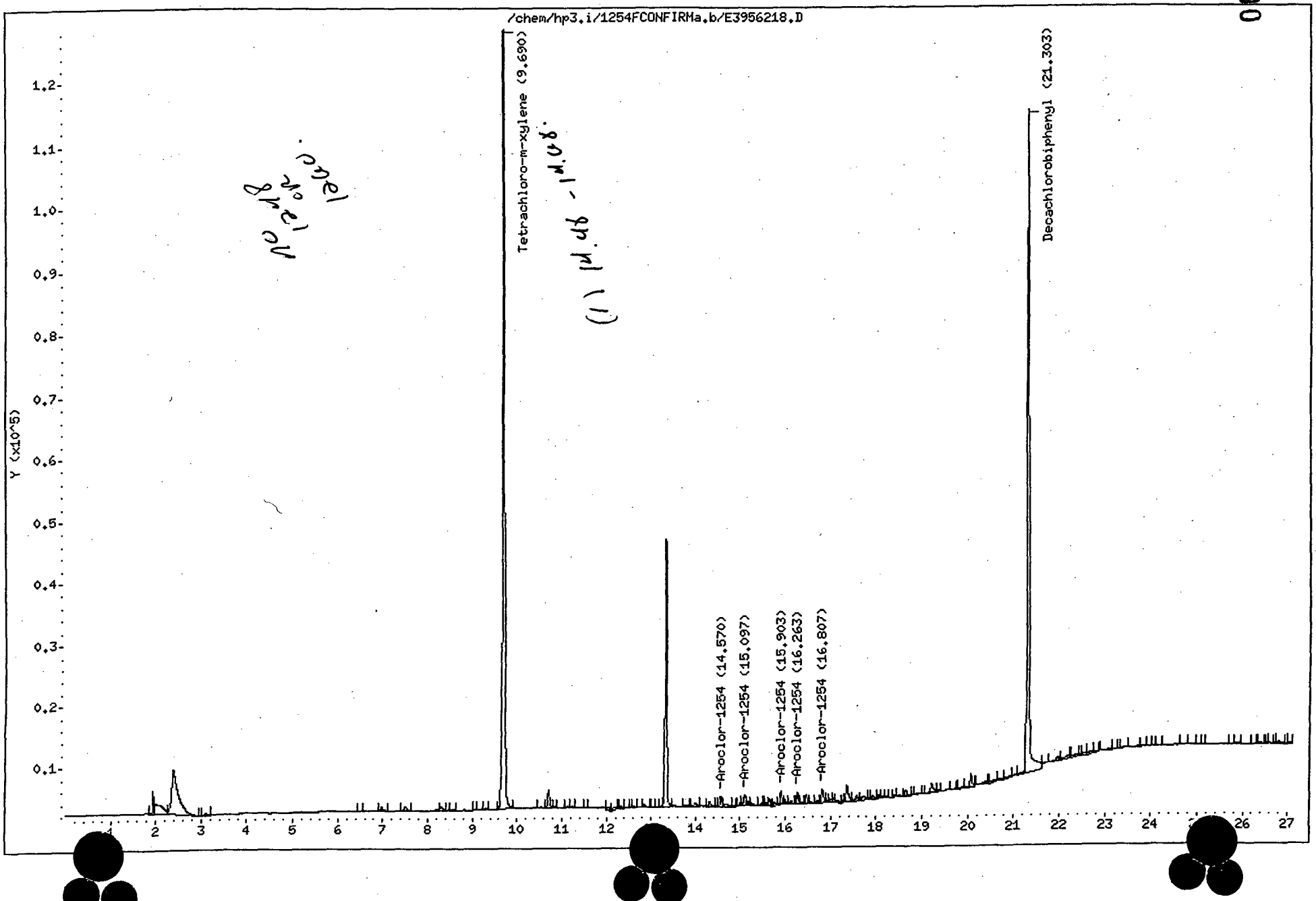
Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.682	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	81.900	Total Solid

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #:		
	9.690	9.717	-0.027	388020	66.8771	764.44		
25 Aroclor-1254						CAS #: 11097-69-1		
	14.570	14.597	-0.027	4571	15.7745	180.31	80.00- 120.00	100.00
	15.097	15.123	-0.026	6055	12.5820	143.82	152.01- 192.01	132.47
	15.903	15.927	-0.024	5798	14.2912	163.36	129.84- 169.84	126.84
	16.263	16.290	-0.027	4939	21.9021	250.35	60.29- 100.29	108.05
	16.807	16.837	-0.030	7843	19.5924	223.95	120.35- 160.35	171.58
Average of Peak Concentrations =						192.36		
$ 29 Decachlorobiphenyl						CAS #:		
	21.303	21.327	-0.024	316778	70.9677	811.20		

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956218.D
Date : 26-SEP-2002 12:24
Client ID: L94538-6
Sample Info: L94538-6
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i
Operator: CPW
Column diameter: 0.32

00094



Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956218.D
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: L94538-6
Misc Info: CONFIRMATION
Analysis Date: 26-SEP-2002 12:24
Sample Matrix: SOIL
File Number: 6218

Dilution Factor:	10.0000
Sample Weight:	10.6819
Final Volume:	10.0000
Total Solid :	81.9000

Analytes (ug/Kg)

Aroclor-1254	192.36
Tetrachloro-m-xylene	133.75%
Decachlorobiphenyl	141.94%

Analyst: CPW
Report Date: 09/26/2002 15:02

Supervisor: _____
Date: _____

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L94538-7

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA925

Matrix: (soil/water) SOIL Lab Sample ID: L94538-7

Sample wt/vol: 10.2 (g/mL) G Lab File ID: E2989951

% Moisture: ~~0~~ 19.3 decanted: (Y/N) N Date Received: 09/25/2

eaR 10/27/02

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/25/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/26/2

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	120 ~~0.12~~	U
1104-28-2	Aroclor-1221	240 ~~0.24~~	U
11141-16-5	Aroclor-1232	120 ~~0.12~~	U
53469-21-9	Aroclor-1242	120 ~~0.12~~	U
11097-69-1	Aroclor-1254	1014.51	
11096-82-5	Aroclor-1260	120 ~~0.12~~	U
----------	Aroclor-1248	120 0.12	U

eaR 10/25/02

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2989951.D
Lab Smp Id: L94538-7 Client Smp ID: L94538-7
Inj Date : 26-SEP-2002 11:14
Operator : CPW Inst ID: hp1.i
Smp Info : L94538-7
Misc Info : WG32900,02-004
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 26-Sep-2002 14:49 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.231	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	80.700	Total Solid

			CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
7.970	7.997	-0.027	346383	47.8323	579.36		
$ 29 Decachlorobiphenyl					CAS #:		
20.120	20.130	-0.010	347802	70.3086	851.60		
25 Aroclor-1254					CAS #: 11097-69-1		
13.653	13.670	-0.017	30980	95.4839	1156.53	80.00- 120.00	100.00(H)
14.547	14.563	-0.016	29814	84.0380	1017.89	99.75- 139.75	96.24
14.987	15.003	-0.016	20560	75.2792	911.80	77.94- 117.94	66.37
15.333	15.350	-0.017	18726	102.186	1237.70	46.79- 86.79	60.45
16.010	16.033	-0.023	18228	61.8059	748.61	86.38- 126.38	58.84
Average of Peak Concentrations =					1014.51		

Confirmation
HP3 CLP1
6219F
00097

Flag Legend

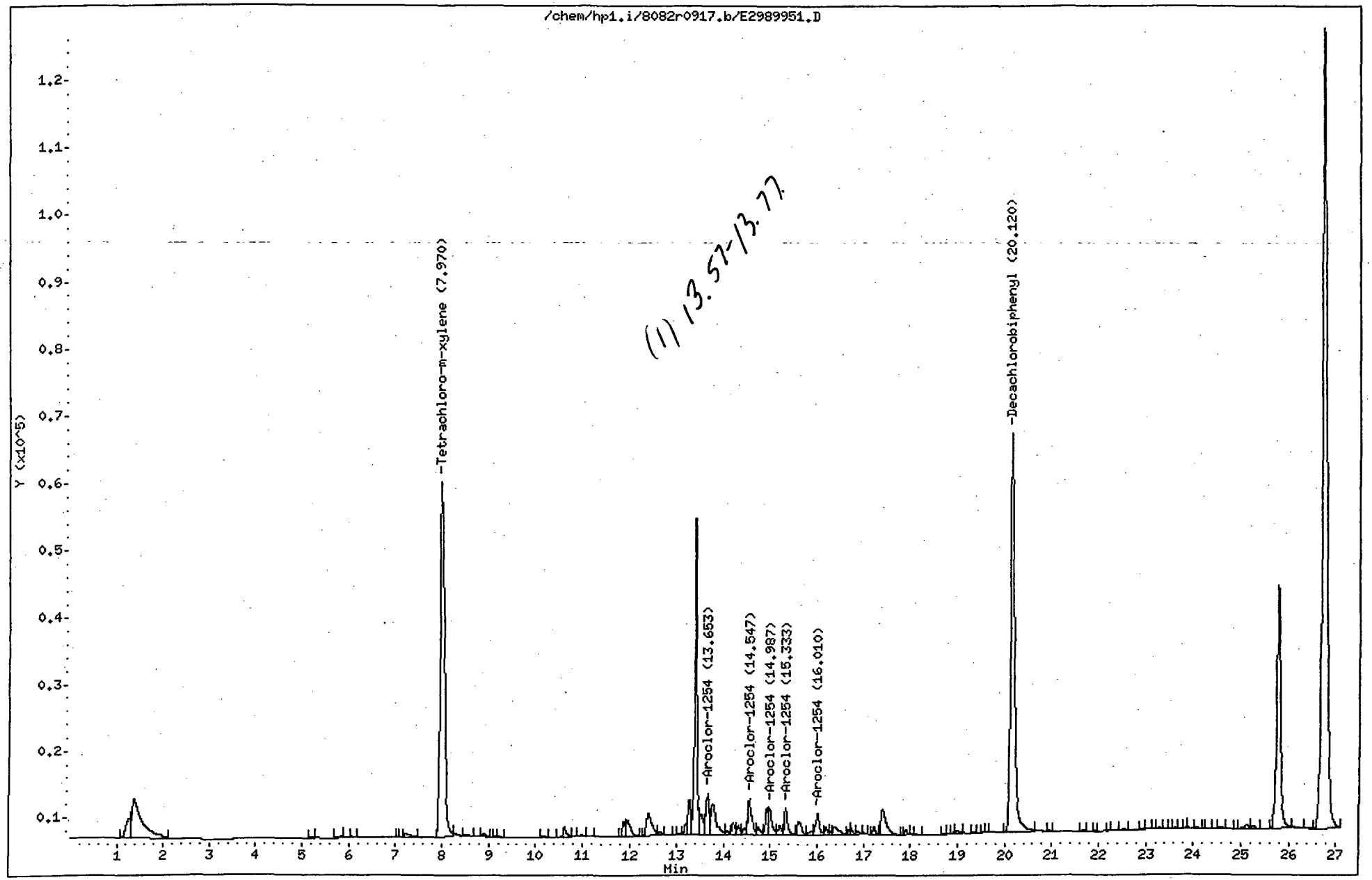
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Data File: /chem/hp1.i/8082r0917.b/E2989951.D
Date: [redacted]-SEP-2002 11:14
Client: L94538-7
Sample Info: L94538-7
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

Page [redacted]

00099



Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2989951.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L94538-7
Misc Info: WG32900,02-004
Analysis Date: 26-SEP-2002 11:14
Sample Matrix: SOIL
File Number: 9951

Dilution Factor:	10.0000
Sample Weight:	10.2306
Final Volume:	10.0000
Total Solid :	80.7000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	1014.51
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	95.66%
Decachlorobiphenyl	140.62%

Analyst: CPW
Report Date: 09/26/2002 14:51

Supervisor: _____
Date: 9/30/2

Thru-Put Systems, Inc.

Data file : \chem\hp3.i\1254FCONFIRMa.b\E3956219.D
Lab Smp Id: L94538-7 Client Smp ID: L94538-7
Inj Date : 26-SEP-2002 12:55
Operator : CPW Inst ID: hp3.i
Smp Info : L94538-7
Misc Info : CONFIRMATION
Comment :
Method : \chem\hp3.i\1254FCONFIRMa.b\8082_PCBsec.M
Meth Date : 26-Sep-2002 14:54 Administra Quant Type: ESTD
Cal Date : 25-SEP-2002 09:08 Cal File: E3956172.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 1254.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.231	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	80.700	Total Solid

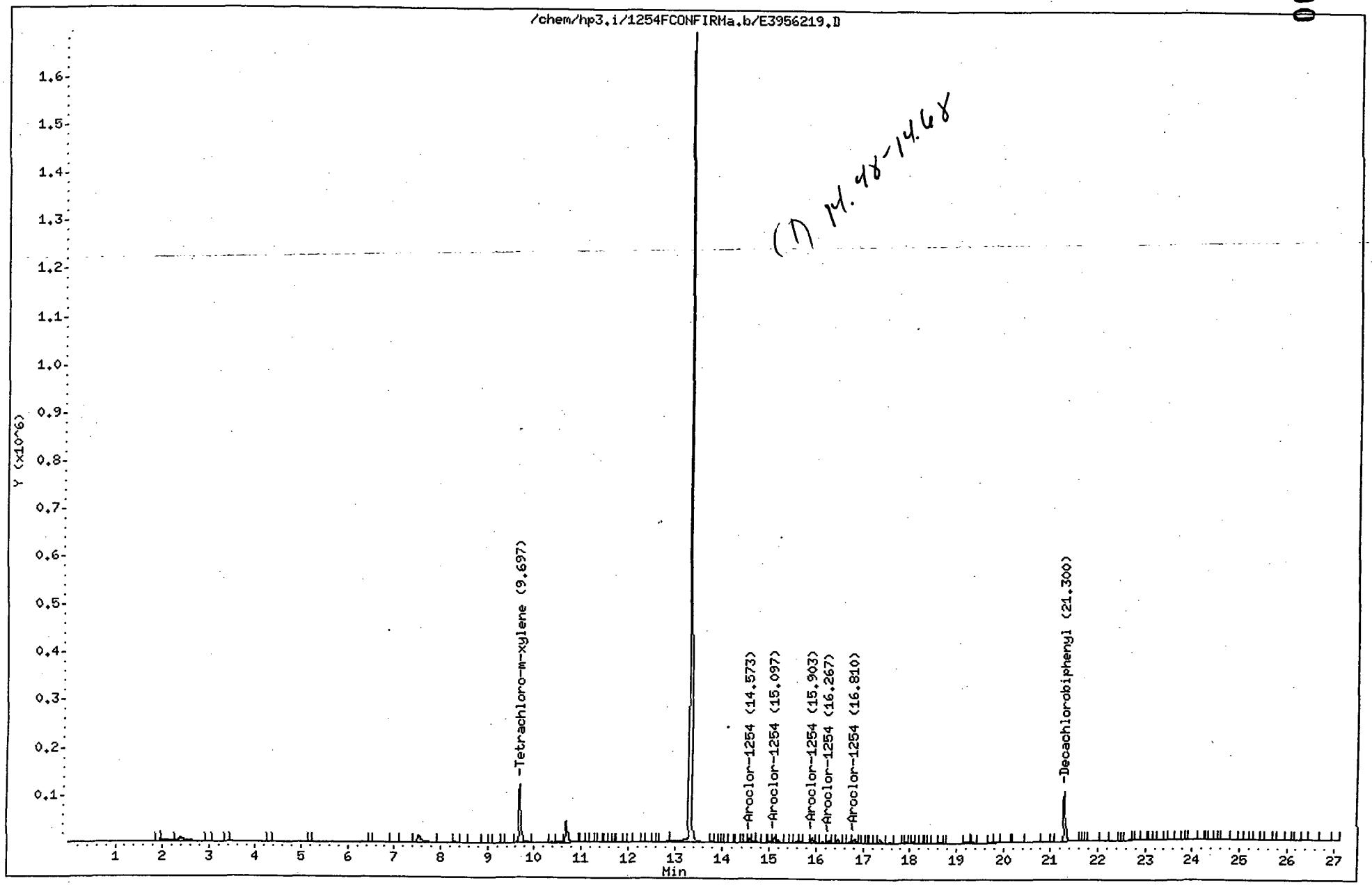
	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #:		
	9.697	9.717	-0.020	372332	64.1732	777.28		
25 Aroclor-1254						CAS #: 11097-69-1		
	14.573	14.597	-0.024	23279	80.3356	973.05	80.00- 120.00	100.00
	15.097	15.123	-0.026	38005	78.9724	956.53	152.01- 192.01	163.26
	15.903	15.927	-0.024	33073	81.5200	987.39	129.84- 169.84	142.07
	16.267	16.290	-0.023	19035	84.4109	1022.41	60.29- 100.29	81.77
	16.810	16.837	-0.027	32852	82.0668	994.01	120.35- 160.35	141.12
Average of Peak Concentrations =						986.68		
$ 29 Decachlorobiphenyl						CAS #:		
	21.300	21.327	-0.027	305212	68.3766	828.20		

Data [redacted] /chem/hp3.i/1254FCONFIRMa.b/E3956219.D
Date [redacted]26-SEP-2002 12:55
Cl[redacted]: L94538-7
Samp[redacted]nfo: L94538-7
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i
Operator: CPW
Column diameter: 0.32

Page [redacted]

00102



(1) 14.98-14.68

Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956219.D
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: L94538-7
Misc Info: CONFIRMATION
Analysis Date: 26-SEP-2002 12:55
Sample Matrix: SOIL
File Number: 6219

Dilution Factor:	10.0000
Sample Weight:	10.2306
Final Volume:	10.0000
Total Solid :	80.7000

Analytes (ug/Kg)	
Aroclor-1254	986.68
Tetrachloro-m-xylene	128.35%
Decachlorobiphenyl	136.75%

Analyst: CPW
Report Date: 09/26/2002 15:02

Supervisor: _____
Date: _____

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L94538-8

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA925

Matrix: (soil/water) SOIL Lab Sample ID: L94538-8

Sample wt/vol: 10.9 (g/mL) G Lab File ID: E2989952

% Moisture: ~~0~~ 13.8 decanted: (Y/N) N Date Received: 09/25/2

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/25/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/26/2

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110 ~~0.11~~	U
1104-28-2	Aroclor-1221	210 ~~0.21~~	U
11141-16-5	Aroclor-1232	110 ~~0.11~~	U
53469-21-9	Aroclor-1242	110 ~~0.11~~	U
11097-69-1	Aroclor-1254	273.27	
11096-82-5	Aroclor-1260	110 ~~0.11~~	U
----------	Aroclor-1248	110 ~~0.11~~	U

ear
10/25/02

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2989952.D
Lab Smp Id: L94538-8 Client Smp ID: L94538-8
Inj Date : 26-SEP-2002 11:46
Operator : CPW Inst ID: hp1.i
Smp Info : L94538-8
Misc Info : WG32900,02-004
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 26-Sep-2002 14:49 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.923	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	86.200	Total Solid

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1	Tetrachloro-m-xylene					CAS #:		
	7.973	7.997	-0.024	377088	51.5764	547.76		
$ 29	Decachlorobiphenyl					CAS #:		
	20.123	20.130	-0.007	338210	68.4978	727.48		
25	Aroclor-1254					CAS #: 11097-69-1		
	13.647	13.670	-0.023	5029	10.1074	107.35	80.00- 120.00	100.00(MH)
	14.540	14.563	-0.023	3316	24.1012	255.97	99.75- 139.75	65.94
	14.983	15.003	-0.020	4095	32.0881	340.79	77.94- 117.94	81.43
	15.330	15.350	-0.020	5321	32.2278	342.27	46.79- 86.79	105.81
	16.010	16.033	-0.023	6714	30.1293	319.99	86.38- 126.38	133.51
			Average of Peak Concentrations =			273.27		

Confirmation
HP3 CL01
6220F
00105

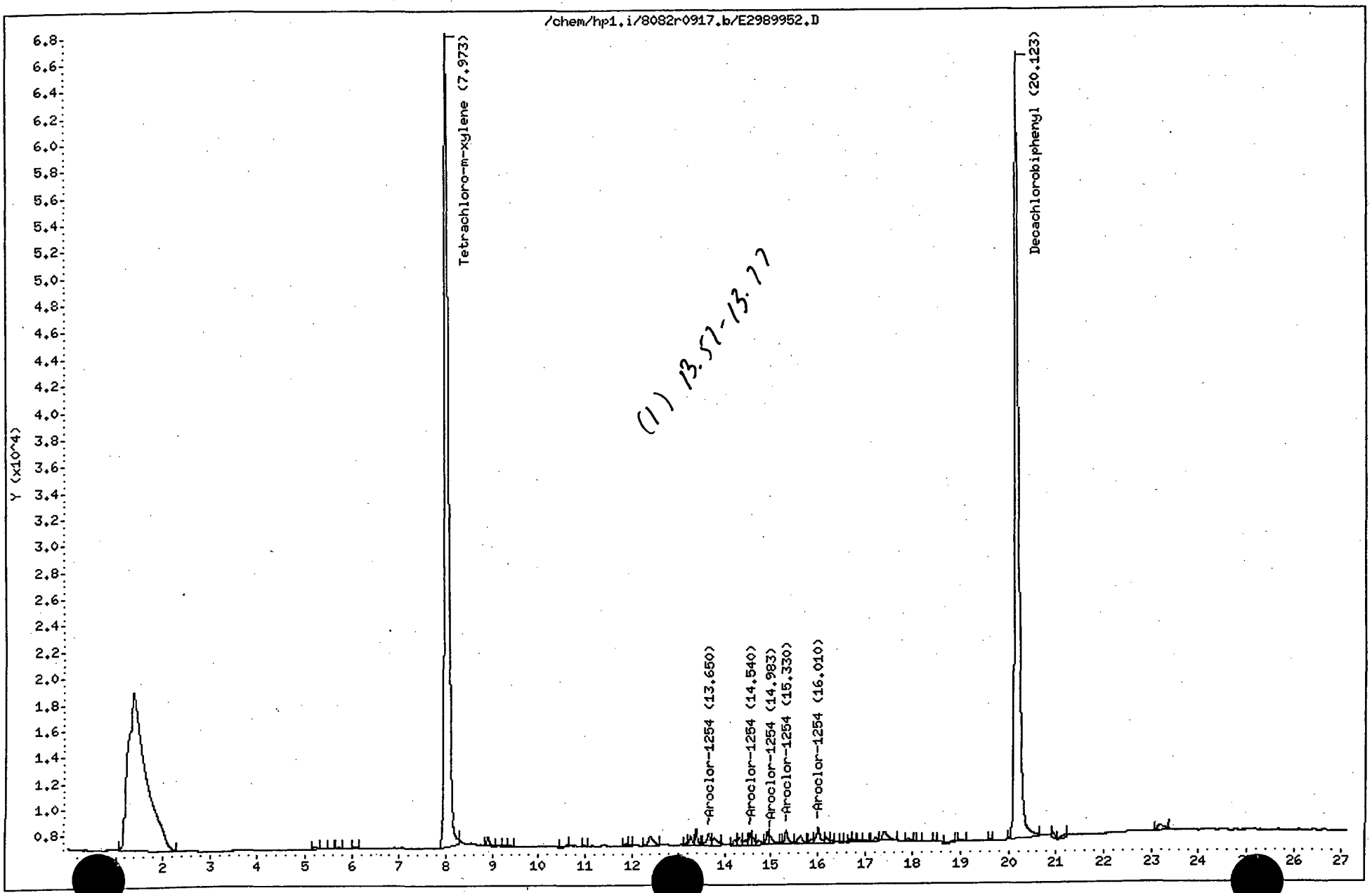
QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /chem/hp1.i/8082r0917.b/E2989952.D
Date : 26-SEP-2002 11:46
Client ID: L94538-8
Sample Info: L94538-8
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00107



Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2989952.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L94538-8
Misc Info: WG32900,02-004
Analysis Date: 26-SEP-2002 11:46
Sample Matrix: SOIL
File Number: 9952

Dilution Factor:	10.0000
Sample Weight:	10.9232
Final Volume:	10.0000
Total Solid :	86.2000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	273.27
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	103.15%
Decachlorobiphenyl	137.00%

Analyst: CPW
Report Date: 09/26/2002 14:51

Supervisor: _____
Date: _____ 9/30/2

00108

Thru-Put Systems, Inc.

Data file : \chem\hp3.i\1254FCONFIRMa.b\E3956220.D
Lab Smp Id: L94538-8 Client Smp ID: L94538-8
Inj Date : 26-SEP-2002 13:26
Operator : CPW Inst ID: hp3.i
Smp Info : L94538-8
Misc Info : CONFIRMATION
Comment :
Method : \chem\hp3.i\1254FCONFIRMa.b\8082_PCBsec.M
Meth Date : 26-Sep-2002 14:54 Administra Quant Type: ESTD
Cal Date : 25-SEP-2002 09:08 Cal File: E3956172.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: 1254.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	10.923	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	86.200	Total Solid

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
9.693	9.717	-0.024	418831	72.1875	766.66		
25 Aroclor-1254					CAS #: 11097-69-1		
14.577	14.597	-0.020	3971	13.7039	145.54	80.00- 120.00	100.00
15.100	15.123	-0.023	6365	13.2261	140.47	152.01- 192.01	160.29
15.907	15.927	-0.020	5407	13.3275	141.54	129.84- 169.84	136.16
16.267	16.290	-0.023	5435	24.1016	255.97	60.29- 100.29	136.87
16.810	16.837	-0.027	8895	22.2204	235.99	120.35- 160.35	224.00
Average of Peak Concentrations =					183.90		
$ 29 Decachlorobiphenyl					CAS #:		
21.303	21.327	-0.024	338550	75.8453	805.51		(R)

QC Flag Legend

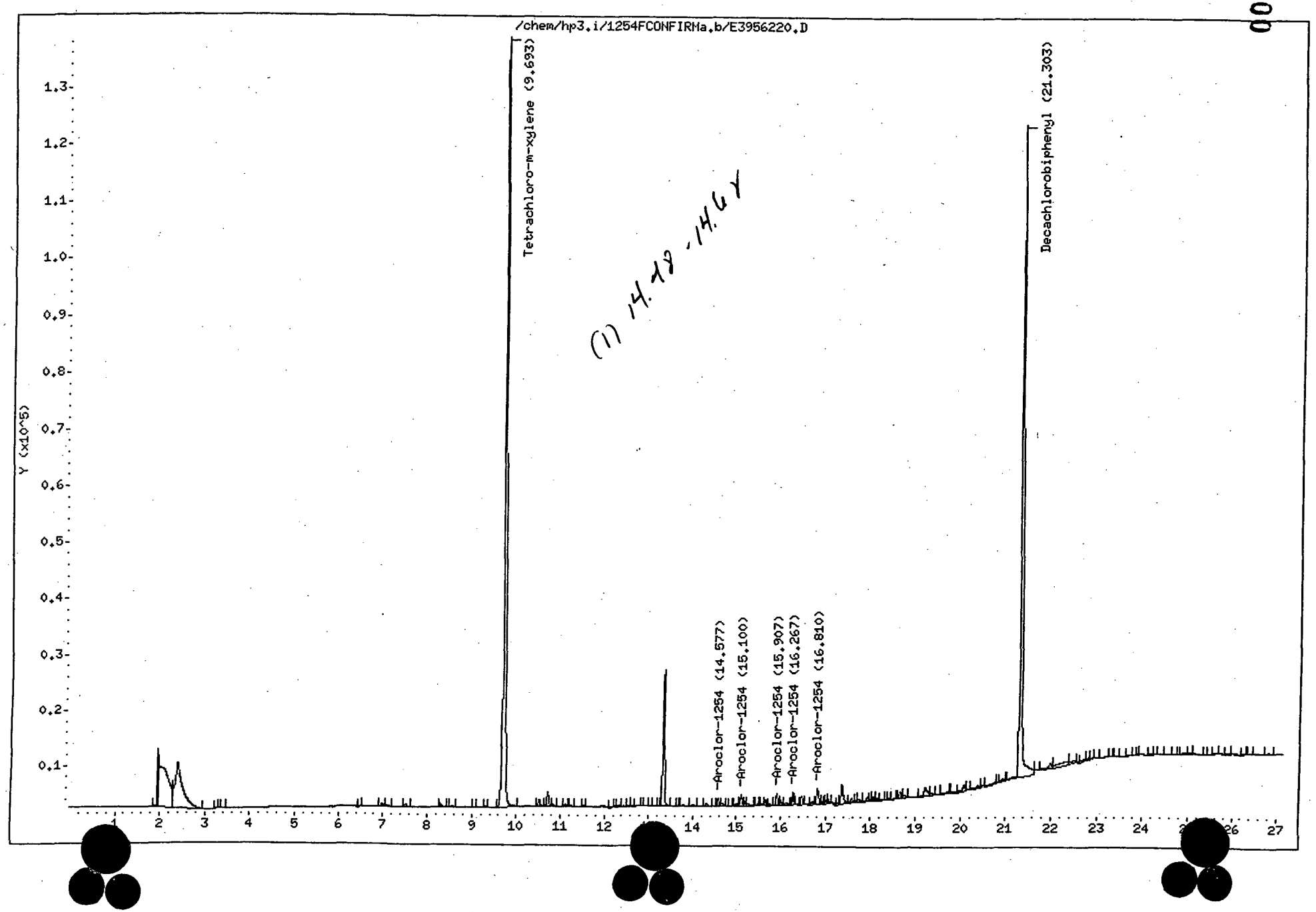
R - Spike/Surrogate failed recovery limits.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956220.D
Date : 26-SEP-2002 13:26
Client ID: L94538-8
Sample Info: L94538-8
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i

Operator: CPW
Column diameter: 0.32

00111



Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956220.D
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: L94538-8
Misc Info: CONFIRMATION
Analysis Date: 26-SEP-2002 13:26
Sample Matrix: SOIL
File Number: 6220

Dilution Factor:	10.0000
Sample Weight:	10.9232
Final Volume:	10.0000
Total Solid :	86.2000

Analytes (ug/Kg)	
Aroclor-1254	183.90
Tetrachloro-m-xylene	144.37%
Decachlorobiphenyl	151.69%

Analyst: CPW
Report Date: 09/26/2002 15:02

Supervisor: _____
Date: _____

01/12/02	RTX-CLPEST 1		PG ON COLUMN			IDL	UG/L IN WATER	CRDL (UG/L)
Instrument#3	Run #1	Run #2	Run #3	Average	SD	SD*6.95	IDL	
PCB 1016	99.14	100.48	98.05	99.22	1.21	8.44	0.1	1.0
PCB 1221	200.36	193.87	196.82	197.02	3.25	22.6	0.2	2.0
PCB 1232	97.97	96.72	99.17	97.95	1.22	8.51	0.1	1.0
PCB 1242	99.14	100.08	101.34	100.19	1.10	7.67	0.1	1.0
PCB 1248	101.82	101.01	99.76	100.86	1.04	7.22	0.1	1.0
PCB 1254	99.63	100.10	99.13	99.62	0.487	3.39	0.1	1.0
PCB 1260	100.74	100.76	101.10	100.87	0.199	1.39	0.1	1.0

01/12/02	RTX-CLPEST 2		PG ON COLUMN			IDL	UG/L IN WATER	CRDL (UG/L)
Instrument#3	Run #1	Run #2	Run #3	Average	SD	SD*6.95	IDL	
PCB 1016	106.01	105.20	106.90	106.04	0.850	5.91	0.1	1.0
PCB 1221	202.83	203.02	204.03	203.29	0.642	4.46	0.1	2.0
PCB 1232	105.99	105.07	104.41	105.16	0.796	5.53	0.1	1.0
PCB 1242	104.27	105.07	108.17	105.84	2.06	14.3	0.1	1.0
PCB 1248	101.79	101.90	101.19	101.63	0.379	2.64	0.1	1.0
PCB 1254	101.02	103.64	105.02	103.23	2.03	14.1	0.1	1.0
PCB 1260	102.25	102.84	103.11	102.74	0.437	3.04	0.1	1.0

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L94363-2

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA923

Matrix: (soil/water) SOIL Lab Sample ID: L94363-2

Sample wt/vol: 10.8 (g/mL) G Lab File ID: E2989923

% Moisture: ~~0~~ 19.6 decanted: (Y/N) N Date Received: 09/23/2

ear 10/25/02

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/24/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/25/2

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	110 ~~0.11~~	U
1104-28-2	Aroclor-1221	230 ~~0.23~~	U
11141-16-5	Aroclor-1232	110 ~~0.11~~	U
53469-21-9	Aroclor-1242	110 ~~0.11~~	U
11097-69-1	Aroclor-1254	1549.70	
11096-82-5	Aroclor-1260	110 ~~0.11~~	U
----------	Aroclor-1248	110 ~~0.11~~	U

ear 10/25/02

Organic Extractions

Notebook: 02-044 Page: 84 WG# 32855

Extracted By: KTB

Date Extracted: 9/24/02

Sur. Ref.: 00-131-31-E1

Analysis: 8081/8270

Matrix: Soil (3550)

Spike Ref: ~~pest 00-131-26-E~~

pcb 00-131-33-A1

I.D.	Customer	Int. Size	Fin. Vol	Sr. Amt	Spk Amt	Bottle #	pH 5-9	Emulsion	Clean-ups
MB84		10.4202	10ml	1ml					
QC84pest		10.1863			1ml pest				
QC84pcb		10.0086			1ml pcb				1,2,3
L94362-1	[redacted]	10.0476							
-2MS		10.7183			1ml pest				
-2MSD		10.2470							
L94365-1		10.4557							
L94193-1	[redacted]	10.7180							1,2,3
L94204-1	[redacted]	10.2153							
-2		10.2091							
-3		10.0602							
L94365-2	[redacted]	10.[illegible]							
-4		10.6583							
-6		10.0907							
L94363-2	AAA Env	10.8420							
-4		10.0534							
-6		10.2548							
-8		10.7849							
-10		10.0941							
-12		10.0473							

Extracts Relinquished to: _____

00256

Comments: Clean-up Methods: 1. 3665 H_2SO_4 2. 3620A florisil. 3. 3660A Hg

R83677

C.O.C

9/25

Organic Extractions

Notebook: 02-044 Page: 89 WG# 32876

Extracted By: KJB
Date Extracted: 9/25/02

Sur. Ref.: 00-131-33-C

Analysis: 8082 PCB
Matrix: SOIL (3550)

Spike Ref: 00-131-33-A

I.D.	Customer	Int. Size	Fin. Vol	Sr. Amt	Spk Amt	Bottle #	pH 5-9	Emulsion	Clean-ups
MB87		10.0371	10ml	1ml					1,2,3
QC87		10.0963			1ml				
L94588-1	AAA Env	10.3664							
-2		10.9291							
-3		10.7086			1ml				
-4 MS		10.4938							
-5		10.9748							
-6		10.6819							
-7		10.2306							
-8		10.9732							

Extracts Relinquished to:

Comments: Clean-up Methods:1. 3665 H_2SO_4 2. 3620A florisil. 3. 3660A Hg

R83722
9-26

00257 9/26 lak 9/26/02

WET CHEMISTRY TOTAL SOLIDS NO

Notebook : 02-066
Start Date : 24-SEP-02 16:41
End Date : 24-SEP-02 16:41

Sample I.D.	Analysis Date Time	Anal Init	Method	Dish#	Volume (mls)	Initial Weight	1st&2nd Weight	3rd&4th Weight	5th&6th Weight	7th&8th Weight	9th&10th Weight	Final Result	Rpd	Units
Comments :														
[redacted]	Start:24-SEP-02 16:41 Stop :24-SEP-02 16:41		CLP 3.0	13	5.2825	1.2541	5.9326					88.6		%
Comments :														
[redacted]	Start:24-SEP-02 16:41 Stop :24-SEP-02 16:41		CLP 3.0	14	5.8929	1.2446	7.1384					100		%
Comments :														
WG32861-1	Start:24-SEP-02 16:41 Stop :24-SEP-02 16:41		CLP 3.0	1	1.2427	1.2426	1.2426							%
Comments :	Blank													
WG32861-2	Start:24-SEP-02 16:41 Stop :24-SEP-02 16:41		CLP 3.0	2	5.1555	1.2458	6.0172					92.5		%
Comments :	[redacted]													

Calculations: Final Results = (fnl wgt - initial wgt) x 1000000 / mls of sample

John [illegible] 9/25/2 Teresa B. Bishop 9/25/02 ✓

Analyst Signature Date Manager Signature Date

2556
RWR 10/27/02

Rush

WET CHEMISTRY TOTAL SOLIDS NOTEBOOK

Notebook : 02-066
Start Date : 25-SEP-02 20:01
End Date : 25-SEP-02 20:01

Sample I.D.	Analysis Date Time	Anal Init	Method	Dish#	Volume (mls)	Initial Weight	1st&2nd Weight	3rd&4th Weight	5th&6th Weight	7th&8th Weight	9th&10th Weight	Final Result	Rpd	Units
L94538-1	Start:25-SEP-02 20:01 Stop :25-SEP-02 20:01		CLP 3.0	3	6.277	1.251	5.5978					69.2	5.07	%
	Comments :													
L94538-2	Start:25-SEP-02 20:01 Stop :25-SEP-02 20:01		CLP 3.0	4	5.0281	1.2495	5.6509					87.5		%
	Comments :													
L94538-5	Start:25-SEP-02 20:01 Stop :25-SEP-02 20:01		CLP 3.0	5	5.0553	1.2434	3.5381					45.4		%
	Comments :													
L94538-6	Start:25-SEP-02 20:01 Stop :25-SEP-02 20:01		CLP 3.0	6	5.0417	1.2408	5.371					81.9		%
	Comments :													
L94538-7	Start:25-SEP-02 20:01 Stop :25-SEP-02 20:01		CLP 3.0	7	5.0494	1.2523	5.3255					80.7		%
	Comments :													
L94538-8	Start:25-SEP-02 20:01 Stop :25-SEP-02 20:01		CLP 3.0	8	5.266	1.2538	5.7947					86.2		%
	Comments :													
WG32880-1	Start:25-SEP-02 20:01 Stop :25-SEP-02 20:01		CLP 3.0	1	1.2426	1.2425	1.2427					.0161		%
	Comments : BLANK													
WG32880-2	Start:25-SEP-02 20:01 Stop :25-SEP-02 20:01		CLP 3.0	2	5.3745	1.2489	5.1601					72.8		%
	Comments : 94538-1 DUP													

$\frac{5.5978 - 1.251}{4.277} \times 100 = 69.2\%$

Calculations: Final Results = $\frac{\text{(fnl wgt - initial wgt)}}{\text{mls of sample}} \times 1000000$

Analyst Signature — 9/26/02 Date

Teresa B. Bishop — Manager Signature — 9/26/02 Date

255C
EAR 10/7/04

ECT.CON INC.
Environmental and Computer
Technology Consultants

Data Validation Report

SDG#	94081
Validation Report Date	April 28, 2003
Validation Guidance	USEPA Region 2 Guidelines for Data Review SW 846 Method 8082
Client Name	Cummings-Riter
Project Name	Viacom/Horseheads
Laboratory	Friend Laboratory Inc.
Method(s) Utilized	SW 846 8082
Analytical Fraction	PCBs

Samples/Matrix:

Date Sampled	Sample ID	Laboratory ID	PCBs	Matrix
9/16/02	A-B-SS-B-001	94081-1	X	Solid
9/16/02	A-B-S-W-001	94081-4	X	Solid
9/16/02	A-B-SS-W-001	94081-5	X	Solid
9/16/02	A-B-S-E-001	94081-6	X	Solid
9/16/02	A-B-SS-E-001	94081-7	X	Solid

Analytical data in this report were screened to determine analytical limitations of the data based on specific quality control criteria. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of laboratory calculations has been verified as part of this validation. Specific findings on analytical limitations are presented in this report. Annotated Form 1s or spreadsheets for samples reviewed are included after the Data Assessment Findings. Form 1s for the MS/MSD samples and spreadsheets are not annotated.

SUMMARY

The sample set for Viacom/Horsehead consists of five solid field samples. These samples were analyzed for the parameters as provided above. The findings presented in this review of the analytical data assume that the information presented by the analytical laboratory is correct. This review is identified as a false positive/false negative review, and therefore, does not include the review of some quality control (QC) items. Those included in the review are listed below.

The polychlorinated biphenyl (PCBs) findings are based upon the assessment of the following:

False Positives/False Negatives Validation

* • Data Completeness
* • Holding Times
* • Calibration and GC Performance
* • Blanks
* • Analytical Sequence Check
* • Target Compound Identification
  • Compound Quantitation and Reported Detection Limits
* • Chromatogram Quality

* Criteria were met for this evaluation item.

This evaluation was conducted in accordance with USEPA Region II SOP No. HW-23B (May 2002), USEPA CLP National Functional Guidelines for Organic Data Review and the analytical method. Findings from this evaluation should be considered when using the analytical data. This report presents a summary of the data qualifications based on the review of the aforementioned evaluation criteria. This is followed by annotated Form 1s/ spreadsheets. Finally, the worksheets used to perform the evaluation are provided.

FINDINGS

Polychlorinated Biphenyls (PCBs)

1. Compound Quantitation

The percent difference between columns exceeded the 25% quality control limit. For the following samples and compounds, qualify PCB results as indicated in the table below. Samples were qualified based on SOP HW-23, Section 12.6.

Sample	Compound	% Difference	Qualifier
A-B-SS-E-001	Aroclor 1254	27.1%	J
A-B-SS-W-001	Aroclor 1254	29.4%	J

NOTES

Polychlorinated Biphenyls (PCBs)

Completeness

The USEPA Region II SOP No. HW-23B has the following sections that are not applicable to this project because it is a false positive/false negative review:

- Surrogate Recovery (Form 2)
- Laboratory Control Sample
- Matrix Spikes (Form 3)
- Contamination
- GC Apparatus and Materials
- Extraction Techniques for Sample Preparation
- Field Duplicates

The cooler temperature upon receipt at the laboratory was 1 C. Data are not qualified upon this basis.

Calibration

The laboratory used linear regression to calculate PCB results. The use of linear regression is permissible for SW-846 methodologies. The laboratory met the acceptance criteria specified in Section 7.5.2 of Method 8000B (r value greater than or equal to 0.99).

Data summary forms (including calibration factors) for the initial and continuing calibration is not provided for the second column except for Aroclor 1254. The second column is used only for fingerprint confirmation, therefore, the laboratory does not provide the calibration factor information. Because Aroclor 1254 was identified as a constituent of concern, the data summary information for the second column is provided for the continuing calibration. Data are not qualified on this basis.

The percent difference (%D) per peak for multi-standard Aroclors are provided. For SW 846, the laboratory used the average Aroclor concentration to determine the %D. Data are not qualified because the average value is used.

The percent difference (%D) for calibration standards (first column) Aroclor 1260 (9/18/02 18:15) 21.2% and Aroclor 1260 (9/18/02 22:55) 18.8% were greater than the control limit of 15%. These standards were not associated with any project samples. Data are not qualified on this basis. The percent difference (%D) for calibration standard (second column) Aroclor 1254 (9/19/02 19:10) 15.6% was greater than the control limit of 15%. Since second column is not used for quantitation, data are not qualified.

Retention Time

Retention time windows are not determined by the use of three standards for single standard calibration Aroclors. The center of the retention time window is defined as the retention time of the midpoint standard from the initial calibration. For the multi-standard calibration Aroclors, the center of the retention time window is the mean of the retention time generated from each standard. The retention time windows are the mean $\pm$ 0.1 minutes. Data are not qualified on this basis.

Retention time windows are not provided for the second column except for Aroclor 1254. The second column is used only for fingerprint confirmation, therefore, the laboratory does not provide the retention time window information. Because Aroclor 1254 was identified as a constituent of concern, the retention time information for the second column is provided. Data are not qualified on this basis.

Compound Quantitation

Samples were analyzed and reported at a dilution due to the presence of target compounds. Dilutions for samples are presented below. Reporting limits were adjusted for percent solids and dilutions.

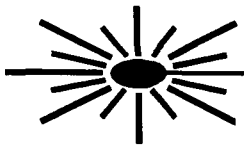
A-B-SS-B-001, A-B-S-W-001, A-B-SS-W-001, A-B-S-E-001	10x
A-B-SS-E-001	50x

Data Reviewer

7/24/07
Date

Glossary of Data Qualifiers

U	Not Detected.	The associated number indicates approximate sample concentration necessary to be detected.
UJ	Not Detected.	Quantitation limit may be inaccurate or imprecise.
J	Analyte Present.	Reported value may not be accurate or precise.
N	Consider Present.	Tentative identification. Special methods may be needed to confirm its presence or absence in future sampling efforts.
R	Unusable Result.	Analyte may or may not be present in the sample.
UR	Unusable Result.	Analyte may or may not be present in the sample.



ECT.CON INC.

Environmental and Computer
Technology Consultants

Annotated Form 1's

(Spreadsheet)

FLI
FRIEND LABORATORY I·N·C

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:19-SEP-2002

Lab Sample ID: L94081-1

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS #19208
Origin: A-B-SS-B-001
Description: COMPOSITE
Sampled On: 16-SEP-02 16:45 by CLIENT
Date Received: 17-SEP-02 09:18
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	79.2	%		17-SEP-02 00:00	CLP 3.0	02-066-73
EPA 8082						
PCB 1016	U	ug/kg	63	19-SEP-02 13:53	EPA 8082	02-004-9884
PCB 1221	U	ug/kg	130	19-SEP-02 13:53	EPA 8082	02-004-9884
PCB 1232	U	ug/kg	63	19-SEP-02 13:53	EPA 8082	02-004-9884
PCB 1242	U	ug/kg	63	19-SEP-02 13:53	EPA 8082	02-004-9884
PCB 1248	U	ug/kg	63	19-SEP-02 13:53	EPA 8082	02-004-9884
PCB 1254	98	ug/kg	63	19-SEP-02 13:53	EPA 8082	02-004-9884
PCB 1260	U	ug/kg	63	19-SEP-02 13:53	EPA 8082	02-004-9884
Extraction Information:				17-SEP-02 00:00	EPA 3550	02-044-82
Surrogate Recovery:						
Tetrachloro-m-xylene	78	%				02-004-9884
Decachlorobiphenyl	94	%				02-004-9884

Results calculated on a dry weight basis.

Approved by: _____ Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC: _____

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
= analyte was detected in the method or trip blank J = result estimated below the quantitation limit

Information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost for these services. Your samples will be discarded after 14 days unless we are advised otherwise.

FLI
FRIEND LABORATORY I · N · C

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:19-SEP-2002

Lab Sample ID: L94081-4

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS #19208
Origin: A-B-S-W-001
Description: COMPOSITE
Sampled On: 16-SEP-02 16:20 by CLIENT
Date Received: 17-SEP-02 09:18
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	68.6	%		17-SEP-02 00:00	CLP 3.0	02-066-73
EPA 8082						
PCB 1016	U	ug/kg	71	19-SEP-02 14:24	EPA 8082	02-004-9885
PCB 1221	U	ug/kg	140	19-SEP-02 14:24	EPA 8082	02-004-9885
PCB 1232	U	ug/kg	71	19-SEP-02 14:24	EPA 8082	02-004-9885
PCB 1242	U	ug/kg	71	19-SEP-02 14:24	EPA 8082	02-004-9885
PCB 1248	U	ug/kg	71	19-SEP-02 14:24	EPA 8082	02-004-9885
PCB 1254	480	ug/kg	71	19-SEP-02 14:24	EPA 8082	02-004-9885
PCB 1260	U	ug/kg	71	19-SEP-02 14:24	EPA 8082	02-004-9885
Extraction Information:				17-SEP-02 00:00	EPA 3550	02-044-82
Surrogate Recovery:						
Tetrachloro-m-xylene	81	%				02-004-9885
Decachlorobiphenyl	90	%				02-004-9885

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC:

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

[redacted]rmation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed [redacted]ost for [redacted]se services. Your samples will be discarded after 14 days unless we are advised otherwise.

FLI
FRIEND LABORATORY INC

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:19-SEP-2002

Lab Sample ID: L94081-5

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS #19208
Origin: A-B-SS-W-001
Description: COMPOSITE
Sampled On: 16-SEP-02 16:35 by CLIENT
Date Received: 17-SEP-02 09:18
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	88.9	%		17-SEP-02 00:00	CLP 3.0	02-066-73
EPA 8082						
PCB 1016	U	ug/kg	51	19-SEP-02 14:55	EPA 8082	02-004-9886
PCB 1221	U	ug/kg	100	19-SEP-02 14:55	EPA 8082	02-004-9886
PCB 1232	U	ug/kg	51	19-SEP-02 14:55	EPA 8082	02-004-9886
PCB 1242	U	ug/kg	51	19-SEP-02 14:55	EPA 8082	02-004-9886
PCB 1248	U	ug/kg	51	19-SEP-02 14:55	EPA 8082	02-004-9886
PCB 1254	580 J	ug/kg	51	19-SEP-02 14:55	EPA 8082	02-004-9886
PCB 1260	U	ug/kg	51	19-SEP-02 14:55	EPA 8082	02-004-9886
Extraction Information:				17-SEP-02 00:00	EPA 3550	02-044-82
Surrogate Recovery:						
Tetrachloro-m-xylene	72	%				02-004-9886
Decachlorobiphenyl	88	%				02-004-9886

TMB 4/24/03

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
= analyte was detected in the method or trip blank J = result estimated below the quantitation limit

Information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost for these services. Your samples will be discarded after 14 days unless we are advised otherwise.

FLI
FRIEND LABORATORY I · N · C

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:19-SEP-2002

Lab Sample ID: L94081-6

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS #19208
Origin: A-B-S-E-001
Description: COMPOSITE
Sampled On: 16-SEP-02 17:10 by CLIENT
Date Received: 17-SEP-02 09:18
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	68.7	%		17-SEP-02 00:00	CLP 3.0	02-066-73
EPA 8082						
PCB 1016	U	ug/kg	68	19-SEP-02 11:48	EPA 8082	02-004-9880
PCB 1221	U	ug/kg	140	19-SEP-02 11:48	EPA 8082	02-004-9880
PCB 1232	U	ug/kg	68	19-SEP-02 11:48	EPA 8082	02-004-9880
PCB 1242	U	ug/kg	68	19-SEP-02 11:48	EPA 8082	02-004-9880
PCB 1248	U	ug/kg	68	19-SEP-02 11:48	EPA 8082	02-004-9880
PCB 1254	2200	ug/kg	68	19-SEP-02 11:48	EPA 8082	02-004-9880
PCB 1260	U	ug/kg	68	19-SEP-02 11:48	EPA 8082	02-004-9880
Extraction Information:				17-SEP-02 00:00	EPA 3550	02-044-82
Surrogate Recovery:						
Tetrachloro-m-xylene	68	%				02-004-9880
Decachlorobiphenyl	85	%				02-004-9880

Results calculated on a dry weight basis.

Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

[redacted]rmation in this report is accurate to the best of our knowledge and ability. In no event shall our liability exce[redacted]cost fo[redacted]ese services. Your samples will be discarded after 14 days unless we are advised otherwise.

FLI
FRIEND LABORATORY · N · C

32 ITHACA STREET WAVERLY, NY 14892-1532
TELEPHONE (607) 565-3500 FAX (607) 565-4083

Date:20-SEP-2002

Lab Sample ID: L94081-7

AAA Environmental
Peter Porter
6679 Moore Road
Syracuse, NY 13211

Sample Source: VIACOM/HORSEHEADS #19208
Origin: A-B-SS-E-001
Description: COMPOSITE
Sampled On: 16-SEP-02 17:05 by CLIENT
Date Received: 17-SEP-02 09:18
P.O. No: N/A

Analysis Performed	Result	Units	Detection Limit	Date Analyzed	Method	Notebook Reference
Total Solids	72.4	%		17-SEP-02 00:00	CLP 3.0	02-066-73
EPA 8082						
PCB 1016	U	ug/kg	330	19-SEP-02 17:31	EPA 8082	02-004-9891
PCB 1221	U	ug/kg	670	19-SEP-02 17:31	EPA 8082	02-004-9891
PCB 1232	U	ug/kg	330	19-SEP-02 17:31	EPA 8082	02-004-9891
PCB 1242	U	ug/kg	330	19-SEP-02 17:31	EPA 8082	02-004-9891
PCB 1248	U	ug/kg	330	19-SEP-02 17:31	EPA 8082	02-004-9891
PCB 1254	13000 J	ug/kg	330	19-SEP-02 17:31	EPA 8082	02-004-9891
PCB 1260	U	ug/kg	330	19-SEP-02 17:31	EPA 8082	02-004-9891
Extraction Information:				17-SEP-02 00:00	EPA 3550	02-044-82
Surrogate Recovery:						
Tetrachloro-m-xylene	95	%				02-004-9891
Decachlorobiphenyl	110	%				02-004-9891

TMB 4/24/03

Results calculated on a dry weight basis.

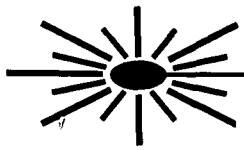
Approved by: Lab Director

NY 10252 NJ 73168 PA 68180 EPA NY 00033

QC

KEY: ND or U = None Detected < = less than ug/L = micrograms per liter (equivalent to parts per billion)
mg/L = milligram per liter (equivalent to parts per million) mg/kg = milligrams per kilogram (equivalent to parts per million)
B = analyte was detected in the method or trip blank J = result estimated below the quantitation limit

The information in this report is accurate to the best of our knowledge and ability. In no event shall our liability exceed the cost for services. Your samples will be discarded after 14 days unless we are advised otherwise.



ECT.CON INC.

Environmental and Computer
Technology Consultants

Support Documentation

CUSTOM[illegible]E # _____

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FLI FRIEND LABORATORY I • N • C
ONE RESEARCH CIRCLE
WAVERLY NY 14892-1532
Telephone (607) 565 3500
Fax (607) 565-4083

Untreated	Sodium thiosulfate	HCl pH <2	Ascorbic acid & HCl pH <2	HNO_3 pH <2	H_2SO_4 pH <2	NaOH pH >12	NaOH & Zinc acetate pH >9	Acetic Buffer pH <3	Sodium sulfite

CLIENT: AAA ENVIRONMENTAL
ADDRESS: ON-SITE DELIVERY OF RESULTS
PHONE: FAX:

INVOICE TO:
ADDRESS:

Sample Site: VIACOM/HORSEHEADS PROJECT
P.O. #

PROJECT NO. / NAME
VIACOM/HORSEHEADS
#19208

COPY TO:
ADDRESS:

94081

DATE & TIME OF SAMPLE COLLECTION	SAMPLE DESCRIPTION	NUMBER OF CONTAINERS	ANALYSES / TESTS REQUESTED	SAMPLE NUMBER
9/16/02 945pm 1645	Composite Soil Sample #A-B-SS-B-001	X Description: Grab (Composite) Other Matrix: DW WW MW Soil Air Other	PCB's IN SOIL	USE ONLY -1, -2, -3
9/16/02 420pm 1620	Composite Soil Sample #A-B-S-W-001	X Description: Grab (Composite) Other Matrix: DW WW MW Soil Air Other	PCB's IN SOIL	-4
9/16/02 1635	Composite Soil Sample #A-B-SS-W-001	X Description: Grab (Composite) Other Matrix: DW WW MW Soil Air Other	PCB's IN SOIL	-5
9/16/02 1710	#A-B-S-E-001 Composite Soil Sample	X Description: Grab (Composite) Other Matrix: DW WW MW Soil Air Other	PCB's IN SOIL	-6

RELINQUISHED BY	DATE /TIME	ACCEPTED BY	DATE/TIME	NOTES TO LABORATORY
SAMPLER A. SCHREUKENGOST	830pm 9/17/02	[signature]	9/17/02	1
		[signature]	9/17/02 9:18	
				SUSPECTED CONTAMINATION LEVEL

NONE SLIGHT MODERATE HIGH (please circle)

CUSTOMER [redacted]E # _____

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FRIEND LABORATORY I • N • C

ONE RESEARCH CIRCLE
WAVERLY NY 14892-1532
Telephone (607) 565 3500
Fax (607) 565-4083

Untreated | Sodium thiosulfate | HCl pH <2 | Ascorbic acid & HCl pH <2 | HNO_3 pH <2 | H_2SO_4 pH <2 | NaOH pH >12 | NaOH & Zinc acetate pH >9 | Acetic Buffer pH <3 | Sodium sulfite

CLIENT: AAA ENV.
ADDRESS: ON-SITE DELIVERY OF RESULTS
PHONE: FAX:

INVOICE TO:
ADDRESS:

Sample Site:

P.O. #

PROJECT NO. / NAME
VIACOM/HORSEHEADS
#19208

COPY TO:
ADDRESS:

94081

DATE & TIME OF SAMPLE COLLECTION	SAMPLE DESCRIPTION	NUMBER OF CONTAINERS	ANALYSES / TESTS REQUESTED	SAMPLE NUMBER
9/16/02 505pm	COMPOSITE SOIL SAMPLE #A-B-SS-E-001	1 Description: Grab ~~Composite~~ Other Matrix: DW WW MW Soil Air Other	PCB'S IN SOIL	LAB USE ONLY -7
		Description: Grab Composite Other Matrix: DW WW MW Soil Air Other		
		Description: Grab Composite Other Matrix: DW WW MW Soil Air Other		
		Description: Grab Composite Other Matrix: DW WW MW Soil Air Other		

RELINQUISHED BY	DATE /TIME	ACCEPTED BY	DATE/TIME	NOTES TO LABORATORY
SAMPLER A. Sch[redacted]ICENGOST RAS	830A 9/17/02	[signature]	830AM 9/17/02	
		Tom Jon[redacted]	9/17/02 918	

SUSPECTED CONTAMINATION LEVEL

NONE SLIGHT MODERATE HIGH (please circle)

Laboratory Case Narrative

FLI
FRIEND LABORATORY I · N · C

Laboratory Validation and Usability Assessment

Project: **AAA Environmental**
Viacom/Horseheads 19208
Sampled September 16, 2002

The data reported in this package have been reviewed for compliance with QC acceptance limits as specified in the method cited for each analysis.

These statistical limits are typically based on historical laboratory data for a given sample matrix, and will not exceed any default limits specified by the method. CLP acceptance limits are also considered.

The following Quality Control operations are considered in the validation of reported results:

Holding times, surrogate recovery, spiked sample recovery, duplicates/spiked duplicate precision, tuning criteria, internal standard variation, continuing calibration variation, reference (check) sample recovery, and instrument, method, trip and field blanks. The appropriate frequency for each operation is also considered.

Every effort has been made to report data that is compliant with the EPA methodology cited for each analysis. In cases where the laboratory was unable to meet all method requirements prior to sample expiry, either due to the nature of the sample or other technical difficulty, results are reported with qualification with the understanding that qualified results may not be suitable for compliance purposes. The internal technical review is based on the USEPA Contract Laboratory Program *National Functional Guidelines for Organic Review* (EPA 540/R-94/012, February 1994) and *National Functional Guidelines for Inorganic Review* (EPA 540/R-94/013, February 1994).

Validation

Five site samples and a matrix spike/matrix spike duplicate set were received on September 17, 2002, with ice. The temperature, as received, was 1°C.

PCB

Site samples were analyzed by EPA method 8082 for PCBs with a two-microliter injection volume.

RTX-CLPesticides 1 and RTX-CLPesticides 2 capillary columns, 0.32 mm ID, with purge packed inlets and electronic pressure control are used on an Hewlett-Packard 5890 series II with dual ECD and an HP 7673 autosampler with simultaneous injection. Data is collected with HP Chemstation software and processed by Thruput with Target software. If a peak is detected within the retention time window of a target compound, second-column confirmation is performed. Column RTX-CLPesticides 2 was used for the primary analysis. Column RTX-CLPesticides 1 was used to confirm only the fingerprint, not the quantitation. Form 10B's are provided in order to verify pattern recognition.

PCB 1254 was detected in each of the site samples. Second-column analysis confirmed the presence of these targets. No PCBs were detected in the method blank.

Surrogate recoveries were within limits for the site samples.

Site sample A-B-SS-B-001 was spiked in duplicate. Recoveries were above the acceptance limits for the MS, within limits for PCB 1260 in the MSD, and below the limit for PCB 1016 in the MSD. Since the MSD also had low surrogate recoveries, an extraction error isolated to the MSD is suspected. Results for site sample A-B-SS-B-001 should be considered as estimated.

Precision as indicated by RPD was above the acceptance limits. Since the results for site sample A-B-SS-B-001 had already been qualified due to the matrix spike recovery, no further qualification was made.

One blank spike was associated with the site samples. Blank spike recoveries were within the acceptance limits.

No other analytical difficulties were encountered.

Usability Assessment

All reported data were found to be valid and usable within the EPA National Functional Validation guidelines except those that were qualified in this Laboratory Validation.

Laboratory validation and
Usability assessment conducted by: Elizabeth A Keator

Date: October 9, 2002

Elizabeth A. Keator
Quality Assurance

Worksheets

		MS MSD
A-B-SS-B-001	94081	-1, 2, 3
A-B-S-W-001		-4
A-B-SS-W-001		-5
A-B-S-E-001		-6
A-B-SS-E-001		-7

YES NO N/A

PACKAGE COMPLETENESS AND DELIVERABLES

CASE NUMBER: 94081 SDG# 94081

LAB: Friend Laboratory Inc. SITE: Viacom / Horse Leads

1.0 Data Completeness and Deliverables

		YES	NO	N/A
1.1	Has all the data been submitted in CLP deliverable format?	[✓]		
1.2	Have any missing deliverables been received and added to the data package?	[ ]	✓	

ACTION: Call lab for explanation/resubmittal of any missing deliverables. If lab cannot provide them, note the effect on review of the data in the reviewer narrative.

2.0 Cover Letter, SDG Narrative

		YES	NO	N/A
2.1	Is a laboratory narrative or cover letter present?	[✓]		
2.2	Are the case number and/or SDG number contained in the narrative or cover letter?	[✓]		

3.0 Data Validation Checklist

3.1 Does this data package contain:

	YES	NO
Water data?		✓
Waste data?		✓
Soil/solid data?	✓	

YES NO N/A

POLYCHLORINATED BIPHENYLS

1.0 Traffic Reports and Laboratory Narrative

1.1 Are traffic report and chain-of-custody forms present for all samples? ☑ ___ ___

ACTION: If no, contact lab for replacement of missing or illegible copies.

1.2 Do the traffic reports, chain-of-custody forms or SDG narrative indicate any problems with sample receipt, condition of the samples, analytical problems or special circumstances affecting the quality of the data? ___ ☑ ___

ACTION: If any sample analyzed as a soil, other than TCLP, contains 50%-90% water, all data should be qualified as estimated, "J." If a soil sample, other than TCLP, contains more than 90% water, non detects shall be qualified as unusable, "R."

Cooler Temp 1°C.

ACTION: If samples were not iced or if the ice was melted upon arrival at the laboratory and the temperature of the cooler was elevated (> 10° C), flag all positive results "J" and all non-detects "UJ".

2.0 Holding Times

2.1 Have any PCB technical holding times, determined from date of collection to date of extraction, been exceeded? ___ ☑ ___

Water and waste samples for PCB analysis must be extracted within 7 days of the date of collection. Extracts must be analyzed within 40 days of the date of extraction. Soils and solid samples must be extracted within 14 days of collection and analyzed within 40 days of extraction.

Collected 9/16/02

ACTION: If technical holding times are exceeded, flag all positive results as estimated, "J," and sample quantitation limits "UJ" and document in the narrative that holding times were exceeded. If analyses were done more than 14 days beyond holding time, either on the first analysis or upon re-analysis, the reviewer must use

Prep 9/17/02.

Analyzed 9/19/02

YES NO N/A

professional judgement to determine the reliability of the data and the effects of additional storage on the sample results. At a minimum, all the data should at least be qualified "J", but the reviewer may determine that non-detects are unusable,"R."

3.0 Surrogate Recovery (Form II) N/A for false + / false - review

3.1 Were the recoveries of tetrachloro-m-xylene (TCMX) and decachlorobiphenyl (DCB) presented on CLP Surrogate Recovery Summary forms (Form II), or equivalent, for each of the following matrices?

a. Water/Waste [ ] ___ ✓

b. Soil/Solid [ ] ___ ✓

3.2 Are all the PCB samples listed on the appropriate surrogate recovery form for each of the following matrices?

a. Water [ ] ___ ✓

b. Waste [ ] ___ ✓

c. Soil/Solid [ ] ___ ✓

ACTION: Call lab for explanation/resubmittals. If missing deliverables are unavailable, document the effect in the data assessment.

3.3 Did the laboratory provide their developed in-house Surrogate recoveries? [ ] ___ ✓

ACTION: If no, use 70 -130% recovery to qualify in section 3.4 below.

3.4 Were surrogate recoveries of TCMX or DCB outside of the laboratory-established upper (UCL) or lower (LCL) control limits for any sample or blank? ___ [ ] ✓

ACTION: Circle all outliers in red.

ACTION: No qualification is done if surrogates are diluted out. If recovery for <u>both</u> surrogates is

YES NO N/A

below the LCL, but above 10%, flag all results for that sample "J". If recovery is < 10% for either surrogate, qualify positive results "J" and flag non-detects "R". If recovery is above the UCL for both surrogates qualify positive values "J".

Note: DCB is used when PCBs are determined as Aroclors. DCB is the internal standard when determining PCB congeners and TCMX the surrogate.

3.5 Were surrogate retention times (RT) within the windows established during the initial 5-point analysis? [ ] ___ ✓

ACTION: If the RT limits are not met, the analysis may be qualified unusable (R) for that sample on the basis of professional judgement. However, flag positive hits as estimate (J) if confirmed by GC/MS analysis.

3.6 Are there any transcription/calculation errors between raw data and Form II? ___ [ ] ✓

ACTION: If large errors exist, call lab for explanation/resubmittal. Make any necessary corrections and document the effect in data assessments.

4.0 Laboratory Control Sample NA for false + / false - review

4.1 Are raw data and percent recoveries present for all Laboratory Control samples as required by Method 8000B (section 8.5) and Method 8082 (section 8.4.2)? [ ] ___ ✓

Verify that QC check samples were extracted and analyzed by the same procedures used for the actual samples.

ACTION: If any Laboratory Control Sample data are missing, call the lab for explanation /resubmittals. Make note in the data assessment.

NOTE: For aqueous samples, an additional QC check sample must be prepared and analyzed when any analyte in a matrix spike fails the required acceptance criteria (see section 5.3 below). The additional QC check sample must contain each analyte that failed in the MS analysis.

YES NO N/A

Note: When the results for matrix spike analysis indicates a problem due to sample matrix effects, the LCS results are used to verify the laboratory can perform the analysis in a clean sample.

4.2 Were Laboratory Control Samples analyzed at the required concentration for all analytes of interest as specified in Method 8000B (sec.8.5)? [ ] ___ ✓

ACTION: If Laboratory Control Samples were not analyzed at the required concentration or the required frequency, make note in the data assessment and use professional judgement to determined the affect on the data.

4.3 Were the LCS recoveries within the laboratory's in-house per cent recoveries (if not available, use 70 - 130%) [ ] ___ ✓

4.4 If no, were Laboratory Control Samples re-analyzed? [ ] ___ ✓

Note: Corrective action must be taken when one or more of the analytes of interest fail the QC acceptance criteria (Method 8000B, section 8.7.4)

ACTION: If QC check samples were not re-analyzed, or a general system problem is indicated by repeated failure to meet the QC acceptance criteria specified in the method, make note in the data assessment and use professional judgement to determine the effect on the data.

5.0 Matrix Spikes (Form III) NA for false + / false - review

5.1 Are all data for one matrix spike and matrix duplicate (unspiked) pair (MS/Dup) or matrix spike/matric spike duplicate (MS/MSD)present and complete for each matrix Method 8082(section 8.4.1)? [ ] ___ ✓

NOTE: For soil and waste samples showing detectable amounts of organics, the lab may substitute replicate samples in place of the matrix spike (see Method 8000B-40, section 8.5.3)).

5.2 Have MS/Dup or MS/MSD results been summarized on modified CLP Form III? [ ] ___ ✓

ACTION: If any data are missing take action as specified in section 3.2 above.

5.3 Were matrix spikes analyzed at the required frequency

YES NO N/A

for each of the following matrices? (One MS/Dup, MS/MSD must be performed for every 20 samples of similar matrix or concentration level. Laboratories analyzing one to ten samples per month are required to analyze at least one MS per month (Method 8000B-39 (section 8.5)).

a. Water [ ] ___ ✓

b. Waste [ ] ___ ✓

c. Soil/Solid [ ] ___ ✓

ACTION: If any MS/Dup or MS/MSD data are missing, take the action specified in 3.2 above.

5.4 Were the 70 - 130% recoveries used to compare the matrix spike recoveries, or did the lab use the optional QC acceptance criteria discussed in Method 8000B-40(section 8.5.3.1)?

List the criteria used and make note in data assessment.

Criteria used _____

5.5 Was the matrix spike prepared at the proper spike concentration? (Method 8000B, section 8.5.1-8.5.2) [ ] ___ ✓

For aqueous organic extractable, the spike concentration should be prepared according options in: Method 8000B-40, (section 8.5.1 and 8.5.2).

ACTION: No action is taken based on MS or replicate data alone. However, using informed professional judgement, the data reviewer may use the matrix spike or laboratory replicate results in conjunction with other QC criteria and determine the need for some qualification of the data. In some instances it may be determined that only the replicate or spiked samples are affected. Alternatively, the data may suggest that the laboratory is having a systematic problem with one or more analytes, thereby affecting all associated samples.

6.0 Blanks (Form IV)

	YES	NO	N/A
6.1 Was reagent blank data reported on CLP equivalent Method Blank Summary form(s) (Form IV)?	[✓]	___	___
6.2 Frequency of Analysis: Has a reagent blank been analyzed for every 20 (or less) samples of similar matrix or concentration or each extraction batch?	[✓]	___	___

ACTION: If any blank data are missing, take action as specified above (section 3.2) . If blank data is not available, reject (R) all associated positive data. However, using professional judgement, the data reviewer may substitute field blank data for missing method blank data.

6.3 Chromatography: review the blank raw data - chromatograms, quant reports or data system printouts. Is the chromatographic performance (baseline stability) for each instrument acceptable for PCBs?	[✓]	___	___

ACTION: Use professional judgement to determine the effect on the data.

7.0 Contamination

NOTE: "Water blanks", "distilled water blanks" and "drilling water blanks" are validated like any other sample and are not used to qualify the data. Do not confuse them with the other QC blanks discussed below.

7.1 Do any method/instrument/reagent/cleanup blanks have positive results for PCBs? When applied as described below, the contaminant concentration in these blanks are multiplied by the sample Dilution Factor and corrected for % moisture when necessary.	___	[✓]	___
7.2 Do any field/rinse blanks have positive PCB results? NA for this review.	___	[ ]	✓

ACTION: Prepare a list of the samples associated with each of the contaminated blanks. (Attach a separate sheet.)

NOTE: All field blank results associated to a particular group of samples (may exceed one per case or one per day) may be used to qualify data.

YES NO N/A

Blanks may not be qualified because of contamination in another blank. Field blanks must be qualified for surrogate, or calibration QC problems.

ACTION: Follow the directions in the table below to qualify sample results due to contamination. Use the largest value from all the associated blanks.

Sample conc > EDL but < 5 x blank	Sample conc < EDL & is < 5 x blank value	Sample conc > EDL & > 5 x blank value
Flag sample result with a "U"	Report EDL & qualify "U"	No qualification is needed

NOTE: If gross blank contamination exists, all data in the associated samples should be qualified as unusable (R).

7.3 Are there field/rinse/equipment blanks associated with every sample? Not included for this review. [ ] ___ ✓

ACTION: For low level samples, note in data assessment that there is no associated field/rinse/equipment blank. Exception: samples taken from a drinking water tap do not have associated field blanks.

8.0 GC Apparatus and Materials NA for false + / false - review

8.1 Was the proper gas chromatographic capillary column used for the analysis of PCBs?

Action: Check raw data, instrument logs, or contact the lab to determine what type of columns were used. (Method 8082, section 4.2) [ ] ___ ✓

8.2 Indicate the specific type of narrow bore or wide bore (.53 mm ID, fused silica GC columns, such as DB-608 and DB-1701 or equivalent).

column 1: _____

column 2: _____

ACTION: Note any changes to the suggested materials in section 8.1 above in the data assessment. Also note the impact (positive or negative) such changes have on the analytical results.

	YES	NO	N/A

9.0 Calibration and GC Performance

9.1 Are the following Gas Chromatograms and Data Systems Printouts for both columns present for all samples, blanks, MS, replicates?

a.	Samples	☑		
b.	All blanks	☑		
c.	Matrix spike samples NA for false+/false-review	☐		☑
d.	5 pt. initial calibration standards	☑		
e.	calibration verification standards	☑		
f.	Laboratory Control samples (LCS) NA for false+/false-review	☐		☑

ACTION: If no, take action specified in 3.2 above.

9.2 Are data summary forms (containing calibration factors or response factors) for the initial 5 pt. calibration and daily calibration verification standards present and complete for each column and each analytical sequence? not for HP3.i (2nd column) only use for compd. id verification. ☑

Note: Calibration Aroclor mixtures other than 1016/1260 may be used (as per approved project QA plan)

NOTE: If internal standard calibration procedure is used (Method 8000B-15(section 7.4.2.2)), then response factors must be used for %RSD calculations and compound quantitation. If, external standard calibration procedures are used (Method 8000B-16 (section 7.4.2.1)), then calibration factors must be used. The internal standard approach is highly recommended for PCB congener analysis.

ACTION: If any data are missing or it cannot be determined how the laboratory calculated calibration factors or response factors, contact the lab for explanation/resubmittals. Make necessary corrections and note any problems in the data assessment.

9.3 Are there any transcription/calculation errors between raw data and data summary forms? ☑

ACTION: If large errors exist, call lab for

YES NO N/A

explanation/resubmittal, make necessary corrections and document the effect in data assessments.

9.4 Are standard retention time (RT) windows for each PCB peak of interest presented on modified CLP summary forms? [✓] ___ ___

ACTION: If any data are missing, or it cannot be determined how RT windows were calculated, call the lab for explanation/resubmittals. Note any problems in the data assessment.

NOTE: Retention time windows for all PCBs are established using retention times from three calibration standards analyzed during the entire analytical sequence (Method 8000B, section 7.6).

for 1221, 1232, 1242 12-18 → used 1 std. multiple peaks

Best results are obtained using retention times which span the entire sequence; i.e., using the calibration verification/continuing calibration standards analyzed every 12 hours.

9.5 Were RT windows on the confirmation column established using three standards as described above? [ ] [✓] ___

NOTE: RT windows for the confirmation column should be established using a 3 pt. calibration, preferably spanning the entire analytical sequence as described in 9.4 above. If RT windows on one column are tighter than the other, this may result in false negatives when attempting to identify compounds in the samples.

only have RT for 1254 since it's used only for fingerprint confirmation, don't have up for 1260/1016 but guarded for 1254 since it was known to be of concern.

ACTION: Note potential problems, if any, in the data assessment.

9.6 Do all standard retention times in each level of the initial 5 pt. calibrations for PCBs fall within the windows established during the initial calibration sequence? [✓] ___ ___

ACTION i: If no, all samples in the entire analytical sequence are potentially affected. Check to see if three standard spanning the entire sequence were used to obtained RT windows. If the lab used three standards from the 5 pt., RT windows may be too tight. If so, RT windows should be recalculated as per Method 8081B-15 (section 7.4.6).

ii. Alternatively, check to see if the chromatograms contain peaks

YES NO N/A

within an expanded window surrounding the expected retention times.

If no peaks are found and the surrogates are visible, non-detects are valid. If peaks are present but cannot be discerned through pattern recognition or by using revised RT windows, qualify all positive results and non-detects as unusable, "R".

9.7 Has the linearity criteria for the initial calibration standards been satisfied for both columns? (% RSD must be < 20.0% for all analytes). [✓] ___ ___

ACTION: If no, qualify all associated positive results generated during the entire analytical sequence "J" and all non-detects "UJ". When RSD > 90%, flag all non-detect results for that analyte "R" (unusable). 70.99.

9.8 Does the calibration verification/continuing Calibration standard contain the PCB peaks of interest, analyzed on each working day, prior to sample analyses (Method 8082, sections 7.6.2)? [✓] ___ ___

9.9 Has a calibration verification/continuing calibration standard been analyzed after every 10 samples and at the end of each analytical sequence (Method 8082, section 7.6.2) [✓] ___ ___

ACTION: If no, take action as specified in section 3.2 above. % Dan Ferri's exceed (CLP) Analyst looks @ average value to determine

9.10 Has the percent difference (%D) exceeded ± 15% for any PCB analyte in any calibration verification/ Continuing calibration standard? [✓] ___ ___

9.11 Has a new 5 pt. initial calibration curve been generated for those PCB analytes which failed in the calibration verification/continuing calibration standard (8000B, section 7.7.3), and all samples which followed the out-of-control calibration verification/standard continuing calibration Standard? [ ] ✓ ___

ACTION: If the %D for any analyte exceeded the ± 15% criterion and the instrument was not recalibrated for those analytes, qualify positive results for all associated samples (those which followed the out-of-control standard) "J" and sample quantitation limits "UJ". If the %D was > 90%

1260 (9/18/02 18:15) (21.22)

1260 (9/18/02 22:55) 18.87

HP3 -125H 9/19/02 19:10 15.6.

YES NO N/A

for any analyte, qualify non-detects "R", unusable.

9.12 Have retention time (RT) windows been properly calculated for each analyte of interest (Method 8000B, section 7.6), using RTs from the associated calibration verification/continuing standard? [✓] ___ ___

ACTION: If no, take action specified in section 3.2 above

9.13 Do all standard retention times for each calibration verification/continuing calibration standard fall within the windows established during the initial calibration sequence? [✓] ___ ___

9.14 Do all standard retention times for each mid-concentration standard (analyzed after every 10 samples) fall within the daily RT windows [✓] ___ ___

ACTION: If the answer to either 9.13 or 9.14 above is no, check the chromatograms of all samples which followed the last in-control standard. All samples analyzed after the last in-control standard must be re-injected, if initial analysis indicated the presence of the specific analyte that exceeded the retention time criteria. If samples were not re-analyzed, document under Contract Non-compliance in the Data Assessment.

Reviewer has two options to determine how to qualify questionable sample data. First option is to determine if possible peaks are present within daily retention time window. If no possible peaks are found, non-detects are valid. If possible peaks are found (or interference), qualify positive hits as presumptively present "NJ" and non-detects are rejected "R". Second option is to use the ratio of the retention time of the analyte over the retention time of either surrogate. The passing criteria is ± 0.06 RRT units of the RRT of the standard component. Reject "R" all questionable analytes exceeding criteria, and "NJ" all other positive hits.

For any multi-response analytes, retention time windows should be used but analyst and reviewer should rely primarily on pattern recognition or use option 2 specified in paragraph above.

9.15 Are there any transcription/calculation errors

	YES	NO	N/A
between raw data and data summary forms?	___	[✓]	___

ACTION: If large errors exists, call lab for explanation/resubmittal, make any necessary corrections and document the effect in data assessments under "Conclusions".

10.0 Analytical Sequence Check (Form VIII-PEST)

10.1 Have all samples been listed on CLP Form VIII or equivalent, and are separate forms present for each column?	[✓]	___	___

ACTION: If no, take action specified in 3.2 above.

10.2 Was the proper analytical sequence followed for each initial calibration and subsequent analyses?	[✓]	___	___

ACTION: If no, use professional judgement to determine the severity of the effect on the data and qualify it accordingly. Generally, the effect is negligible unless the sequence was grossly altered or the calibration was also out of limits.

10.3 Were the TCMX/DCB surrogate RTs for the samples within the mean surrogate RT from the initial calibration?	[✓]	___	___

Action: If no, see "Action" in section 9.14 above

11.0 Extraction Techniques for Sample Preparation NA for false + / false - review

Method 8081B permits a variety of extraction techniques to be used for sample preparation. Which extraction procedure was used?

1. Aqueous samples:			
1. Separatory funnel (Method 3510)	[ ]	___	✓
2. Continuous liquid-liquid extraction (Method 3520)	[ ]	___	✓
3. Solid phase extraction (Method 3535)	[ ]	___	✓
4. Other	[ ]	___	✓
2. Solid samples:			
1. Soxhlet (Method 3540)	[ ]	___	✓

	YES	NO	N/A
2. Automated Soxhlet (Method 3541)	[ ]	___	✓
3. Pressurized fluid (Method 3545)	[ ]	___	✓
4. Microwave extraction (Method 3546)	[ ]	___	✓
5. Ultrasonic extraction (Method 3550)	[ ]	___	✓
6. Supercritical fluid (Method 3562)	[ ]	___	✓
7. Other	[ ]	___	✓

11.1 Extract Cleanup - Efficiency Verification (Form IX) NA for false + / false - review

11.1.1 Method 8082 (section 7.2) references method 3660 (sulfur) and 3665A (sulfuric acid) to use for Cleaning extracts. Were one or both method used? [ ] ___ ✓

ACTION: If no, take action specified in 3.2 above. If data suggests cleanup was not performed, make note in the data assessment.

NOTE: Method 3620A, Florisil, may be used per approved project QA plan. The method does not list which analytes and surrogate(s) to use to verify column efficiency. The reviewer must check project plan to verify method used as well as the correct PCB list. If not stated or available, use the CLP listing or accept what the laboratory used.

11.2 Are all samples listed on modified CLP PCBs Florisil/Cartridge Check Form? [ ] ___ ✓

ACTION: If no, take action specified in 3.2 above.

11.3 Was GPC Cleanup (method 3640A) performed? [ ] ___ ✓

NOTE: GPC cleanup is not required and is optional. The reviewer should check Project Plan to verify requirement.

11.4 Were the same PCB analytes used in calibration used to check the efficiency of the cleanup procedures? [ ] ___ ✓

11.5 Are percent recoveries (% R) of the PCBs and surrogate compounds used to check the efficiency of the cleanup procedures within lab's in-house QC limits (use 70-130% if not available) [ ] ___ ✓

70-130% for GPC calibration? [ ] ___ ✓

YES NO N/A

Qualify only the analyte(s) which fail the recovery criteria as follows:

ACTION: If % R are < 80%, qualify positive results "J" and quantitation limits "UJ". Non-detects should be qualified "R" if zero %R was obtained for PCBs. Use professional judgement to qualify positive results if recoveries are greater than the upper limit.

12.0 PCB Identification

12.1 Has CLP Form X or equivalent, showing **retention time** data for positive results on the two GC columns, been completed for every sample in which a PCB was detected? [✓] ___ ___

ACTION: If no, take action specified in 3.2 above, or compile a list comparing the retention times for all sample hits on the two columns.

12.2 Are there any transcription/calculation errors between raw data and data summary forms (initial calibration summaries, calibration verification summaries, analytical sequence summaries, GPC and cleanup verification forms)? ___ [✓] ___

ACTION: If large errors exist, call lab for explanation/resubmittal, make necessary corrections and note error in the data assessment.

12.3 Are retention times (RT) of sample compounds within the established RT windows for both columns/analyses? [✓] ___ ___

ACTION: Qualify as unusable (R) all positive results which were not confirmed by second GC column analysis. Also qualify "R", unusable, all positive results not within RT windows unless associated standard compounds are similarly biased. The reviewer should use professional judgement to assign an appropriate quantitation limit.

12.4 Check chromatograms for false negatives, especially if RT windows on each column were established differently.
Were there any false negatives? ___ [✓] ___

YES NO N/A

ACTION: Use professional judgement to decide if the compound should be reported. If there is reason to believe that peaks outside retention RT windows should be reported, make corrections to data summary forms (Form I) and note in data assessment.

12.5 Was GC/MS confirmation provided when sample concentration was sufficient (> 10 ug/ml) in the final extract? [ ] ___ ✓

ACTION: Indicate with red pencil which Form I results were confirmed by GC/MS and also note in data assessment.

12.6 Is the percent difference (%D) calculated for the positive sample results on the two GC columns <25.0%? ✓ ___ ___

NOTE: The method requires quantitation from one column. The second column is to confirm the presence of an analyte. It is the reviewer's responsibility to verify from the project plan what the lab was required to report. If the lab was required to report concentrations from both columns, continue with validation for % Difference. If required, but not reported, either contact the lab for results or calculate the concentrations from the calibration. If not required, skip this section. Document actions in Data Assessment.

TDL. 27.1 -125 ug/L
& 29.4 -125 ug/L

ACTION: If the reviewer finds neither column shows interference for the positive hits, the data should be qualified as follows:

% Difference	Qualifier
0-25%	none
26-70%	"J"
71-100%	"NJ"
>100% *	"R"
100-200% (Interference detected)**	"NJ"
>50% (PCBs value is <CRQL)	"U"

When the reported PCBs value is <CRQL and the %D is >50%, raise the value to the CRQL and qualify with "U" (non-detect).

* Check the chromatogram. If pattern is confirmed qualify "J". If pattern is mixed, has interference, or the PCB cannot be positively determined due to weathering, qualify "JN".

YES NO N/A

If PCB can not be confirmed, qualify the PCB as "R".

** When the reported %D is 100-200% but interference is detected in either column, qualify the data with "NJ".

13.0 Compound Quantitation and Reported Detection Limits

13.1 Are there any transcription/calculation errors in Form I results? Check at least two positive values. Were any errors found? — ☑ —

NOTE: Single-peak PCBs results can be checked for rough agreement between quantitative results obtained on the two GC columns. The reviewer should use professional judgement to decide whether a much larger concentration obtained on one column versus the other indicates the presence of an interfering compound. If an interference is suspected, the lower of the two values should be reported and qualified according to section 12.6 above. This necessitates a determination of an estimated concentration on the confirmation column. The narrative should indicate that the presence of interferences has led to the quantitation of the second column confirmation results.

13.2 Are the EDLs (Estimated Detection Limits) adjusted to reflect sample dilutions and, for soils, % moisture? ☑ — —

ACTION: If errors are large, call lab for explanation/resubmittal, make any necessary corrections and document effect in data assessments.

ACTION: When a sample is analyzed at more than one dilution, the lowest EDLs are used (unless a QC exceedance dictates the use of the higher EDL data from the diluted sample analysis). Replace concentrations that exceed the calibration range in the original analysis by crossing out the value on the original Form I and substituting it with data from the analysis of diluted sample. Specify which Form I is to be used, then draw a red "X" across the entire page of all Form I's that should not be used, including any in the summary package.

"6"

$10 \times \frac{10}{21.409} \times .1 \Big/ (68.7 \times 10^6) = 6.8 \times 10^{-6}$

$= 6.8 \text{ mg/kg}$

	YES	NO	N/A

ACTION: EDLs affected by large, off-scale peaks should be qualified as unusable, "R". If the interference is on-scale, the reviewer can provide a modified EDL flagged "UJ" for each affected compound.

14.0 Chromatogram Quality

14.1 Were baselines stable?	[✓]	___	___
14.2 Were any electropositive displacement (negative peaks) or unusual peaks seen?	___	[✓]	___

ACTION: Note all system performance problems in the data assessment.

15.0 Field Duplicates NA for false + / false - soils.

15.1 Were any field duplicates submitted for PCB analysis?	[ ]	___	___

ACTION: Compare the reported results for field duplicates and calculate the relative percent difference.

ACTION: Any gross variation between field duplicate results must be addressed in the reviewer narrative. However, if large differences exist, the identity of the field duplicates is questionable. An attempt should be made to determine the proper identification of field duplicates.

4C

EPA SAMPLE NO.

PCB METHOD BLANK SUMMARY

MB82

[redacted] Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA916

Lab Sample ID: MB82 Lab File ID: E2989859

Matrix (soil/water) SOIL Extraction: (SepF/Cont/Sonc/Other) SONC

Sulfur Cleanup (Y/N) N Date Extracted: 09/17/2

Date Analyzed (1): 09/18/2 Date Analyzed (2):

Time Analyzed (1): 1433 Time Analyzed (2):

Instrument ID (1): HP1 Instrument ID (2): HP3

GC Column (1): RTX-CLPESTICIDES 2 ID: 0.32(mm)

GC Column (2): RTX-CLPEST 1 ID: 0.32(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	QC82	QC82	09/18/2	
02	~~L94080-1RE~~	L94080-1RE	09/18/2	
03	L94080-2	L94080-2	09/18/2	
04	L94080-3RE	L94080-3RE	09/18/2	
05	L94080-4	L94080-4	09/18/2	
06	L94081-1RE	L94081-1RE	09/18/2	
07	L94081-4RE	L94081-4RE	09/18/2	
08	L94081-5RE	L94081-5RE	09/18/2	
09	~~L94081-6RE~~	L94081-6RE	09/18/2	
10	L94081-7R	L94081-7R	09/18/2	
11	~~L94081-1MSR~~	L94081-1MSR	09/18/2	
12	~~L94081-1MSDR~~	L94081-1MSDR	09/18/2	
13	L94081-6	L94081-6	09/19/02	09/19/02
14	L94081-1	L94081-1	09/19/02	09/19/02
15	L94081-4	L94081-4	09/19/02	09/19/02
16	L94081-5	L94081-5	09/19/02	09/19/02
17	L94081-7DL	L94081-7DL	09/19/02	09/19/02
18	L94081-1MS	L94081-1MS	09/19/02	
19	L94081-1MSD	L94081-1MSD	09/19/02	
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

3F
SOIL PCB BLANK SPIKE RECOVERY
SW846/8082

Lab name: FRIEND LABORATORY, INC. Reference: 02-004-9860

Lab code: 10252 Date analyzed: 09/18/02

Matrix Spike - Lab Sample No.: QC 82 Date Extracted: 09/17/02

COMPOUND	SPIKE ADDED (ug/kg)	SAMPLE CONCENTRATION (ug/kg)	MS CONCENTRATION (ug/kg)	MS % REC	#	QC LIMITS REC
PCB 1016	249	0.00	190	77		50-114
PCB 1260	249	0.00	199	80		10-127

Column to be used to flag recovery values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

FORM III - PCB

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MB82

[redacted]b Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA916

Matrix: (soil/water) SOIL Lab Sample ID: MB82

Sample wt/vol: 20.1 (g/mL) G Lab File ID: E2989859

% Moisture: 0 decanted: (Y/N) N Date Received: 09/17/2

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/17/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/18/2

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	5 ~~0.00~~	U
1104-28-2	Aroclor-1221	10 ~~0.01~~	U
11141-16-5	Aroclor-1232	5 ~~0.00~~	U
53469-21-9	Aroclor-1242	5 ~~0.00~~	U
11097-69-1	Aroclor-1254	5 ~~0.00~~	U
11096-82-5	Aroclor-1260	5 ~~0.00~~	U
----------	Aroclor-1248	5 ~~0.00~~	U

QAR
10/9/02

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2989859.D
Lab Smp Id: MB82 Client Smp ID: MB82
Inj Date : 18-SEP-2002 14:33
Operator : CPW Inst ID: hp1.i
Smp Info : MB82
Misc Info :
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 19-Sep-2002 07:17 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	1.000	Dilution Factor
Vf	10.000	Final volume
Ws	20.065	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	100.000	Total Solid

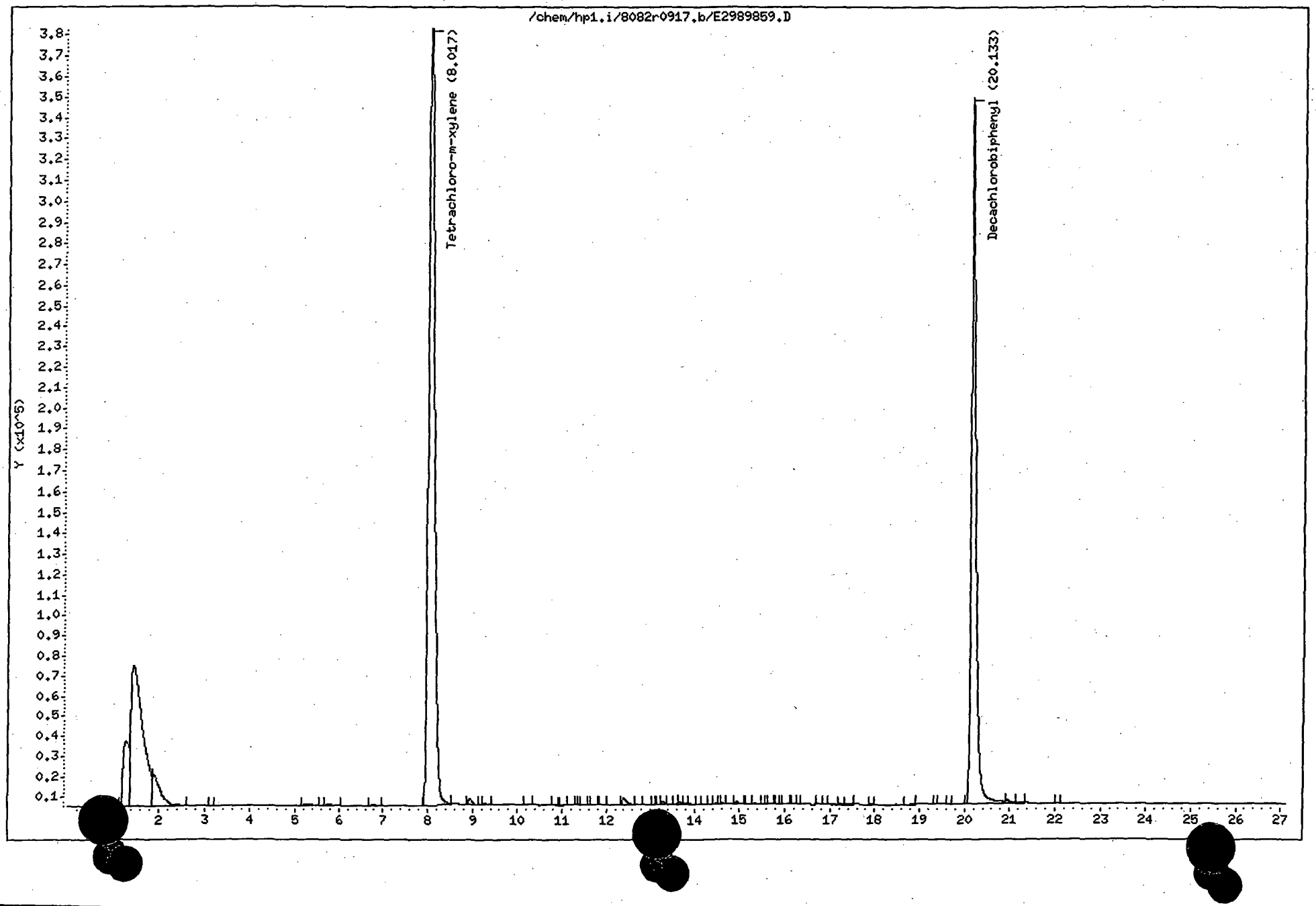
				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$	1 Tetrachloro-m-xylene					CAS #:		
	8.017	7.997	0.020	3543802	382.198	190.48		
$	29 Decachlorobiphenyl					CAS #:		
	20.133	20.130	0.003	2274174	397.705	198.21		

00177

Data File: /chem/hp1.i/8082r0917.b/E2989859.D
Date : 18-SEP-2002 14:33
Client ID: MB82
Sample Info: MB82
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00178



Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2989859.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: MB82
Misc Info:
Analysis Date: 18-SEP-2002 14:33
Sample Matrix: SOIL
File Number: 9859

Dilution Factor:	1.0000
Sample Weight:	20.0649
Final Volume:	10.0000
Total Solid :	100.0000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	0.00
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	76.44%
Decachlorobiphenyl	79.54%

Analyst: CPW
Report Date: 09/19/2002 07:38

Supervisor: _____
Date: 9/19/2

00179

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA916
Instrument ID: HP1 Calibration Date(s): 09/17/2 09/17/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)
LAB FILE ID: RF10: E2989834 RF50: E2989835 RF100: E2989836
RF250: E2989843 RF500: E2989838

COMPOUND	RF10	RF50	RF100	RF250	RF500
Aroclor-1016	401.3	365.1	438.0	493.9	404.2
(2)	136.5	147.3	177.8	191.1	175.4
(3)	135.2	120.4	144.0	140.8	117.2
(4)	140.8	136.7	181.1	189.3	184.3
(5)	201.4	165.9	179.7	207.5	203.2
Aroclor-1221				86.2	
(2)				64.3	
(3)				307.9	
(4)					
(5)					
Aroclor-1232				283.3	
(2)				161.5	
(3)				221.6	
(4)				97.5	
(5)				57.9	
Aroclor-1242				352.7	
(2)				515.2	
(3)				225.6	
(4)				162.9	
(5)				195.6	
Aroclor-1254	316.9	313.4	305.2	308.2	343.4
(2)	288.2	317.8	319.7	345.8	442.7
(3)	190.1	233.8	239.2	278.8	384.7
(4)	148.5	164.1	178.0	186.5	230.4
(5)	253.9	263.2	271.9	294.5	392.1
Aroclor-1260	334.4	269.7	334.8	384.6	340.0
(2)	358.5	290.3	352.0	415.1	365.1
(3)	227.9	170.5	206.4	246.1	209.2
(4)	234.8	173.2	208.2	246.2	210.6
(5)	364.1	280.0	381.6	496.5	440.9
Aroclor-1248				278.0	
(2)				163.4	
(3)				213.4	
(4)				186.5	
(5)				304.2	
Tetrachloro-m-xylene	3613	5109	8081	7743	8808
Decachlorobiphenyl	3029	3502	5170	5257	6283

Peak 1
CF 10
$\frac{401^3}{10} = 401.3$
CF 50
$\frac{18253}{50} = 365.1$
CF 100
$\frac{43\,805}{100} = 438.0$
CF 250
$\frac{123487}{250} = 493.9$
CF 500
$\frac{202127}{500} = 404.2$
CF 100
$\frac{365953}{100} = 365.9$
Peak 1
$\frac{69514}{250} = 278$

FORM 6
PCB INITIAL CALIBRATION DATA

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA916
Instrument ID: HP1 Calibration Date(s): 09/17/2 09/17/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)
RF1000: E2989839

COMPOUND	RF1000	CURVE	COEFFICENTS A0	COEFFICENTS A1	%RSD OR R^2
Aroclor-1016	366.0	LINR	-18.105188	2.688e-003	0.991
(2)	161.5	LINR	-9.4133819	6.109e-003	0.997
(3)	100.6	LINR	-18.332671	9.78e-003	0.993
(4)	162.6	LINR	-9.1394188	6.01e-003	0.995
(5)	201.8	LINR	2.94297360	4.926e-003	1.000
Aroclor-1221		LINR	0.00000000	1.159e-002	1.000
(2)		LINR	0.00000000	1.555e-002	1.000
(3)		LINR	0.00000000	3.248e-003	1.000
(4)		LINR			
(5)		LINR			
Aroclor-1232		LINR	0.00000000	3.53e-003	1.000
(2)		LINR	0.00000000	6.191e-003	1.000
(3)		LINR	0.00000000	4.512e-003	1.000
(4)		LINR	0.00000000	1.025e-002	1.000
(5)		LINR	0.00000000	1.727e-002	1.000
Aroclor-1242		LINR	0.00000000	2.835e-003	1.000
(2)		LINR	0.00000000	1.941e-003	1.000
(3)		LINR	0.00000000	4.432e-003	1.000
(4)		LINR	0.00000000	6.138e-003	1.000
(5)		LINR	0.00000000	5.111e-003	1.000
Aroclor-1254	296.1	LINR	-6.4375383	3.29e-003	0.994
(2)	434.5	LINR	16.6006465	2.262e-003	0.997
(3)	371.6	LINR	21.3460443	2.623e-003	0.995
(4)	190.9	LINR	4.45851132	5.219e-003	1.000
(5)	352.0	LINR	11.6581973	2.751e-003	0.994
Aroclor-1260	329.3	LINR	-5.1814212	3.014e-003	0.998
(2)	358.9	LINR	-3.4590831	2.769e-003	0.998
(3)	210.0	LINR	-3.5269711	4.748e-003	0.998
(4)	214.3	LINR	-2.0615020	4.659e-003	0.998
(5)	480.7	LINR	11.3530028	2.078e-003	0.998
Aroclor-1248		LINR	0.00000000	3.596e-003	1.000
(2)		LINR	0.00000000	6.12e-003	1.000
(3)		LINR	0.00000000	4.686e-003	1.000
(4)		LINR	0.00000000	5.361e-003	1.000
(5)		LINR	0.00000000	3.287e-003	1.000
Tetrachloro-m-xylene	7679	LINR	5.59456943	1.219e-004	0.991
Decachlorobiphenyl	5238	LINR	4.64742762	1.888e-004	0.999

r70.99

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2989827.D
Lab Smp Id: STD11660 Client Smp ID: STD11660
Inj Date : 17-SEP-2002 13:04
Operator : CPW Inst ID: hp1.i
Smp Info : 10PPB 1660
Misc Info :
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 18-Sep-2002 08:00 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 3.40 Sample Matrix: WATER
Processing Host: TARGET3

Concentration Formula: Amt * DF * Vt / Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	5.000	FinalVolume
Vo	1000.000	SampleVolume

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
26 Aroclor-1260					CAS #: 11096-82-5		
14.927	14.943	-0.016	3344	10.0000	4.90	80.00- 120.00	100.00(M)
15.340	15.353	-0.013	3585	10.0000	6.47	87.23- 127.23	107.21
16.190	16.207	-0.017	2279	10.0000	7.29	44.03- 84.03	68.15
16.747	16.767	-0.020	2348	10.0000	8.88	45.69- 85.69	70.22
17.233	17.247	-0.014	3641	10.0000	18.92	112.78- 152.78	108.88
Average of Peak Amounts =					9.29		
20 Aroclor-1016					CAS #: 12674-11-2		
10.193	10.207	-0.014	4013	10.0000		80.00- 120.00	100.00(M)
10.707	10.713	-0.006	1365	10.0000		14.45- 54.45	34.01
11.890	11.900	-0.010	1352	10.0000		8.36- 48.36	33.69
11.970	11.977	-0.007	1408	10.0000		20.90- 60.90	35.09
12.673	12.693	-0.020	2014	10.0000	12.86	24.49- 64.49	50.19
Average of Peak Amounts =					12.9		

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
==	======	========	========	=======	=======	==========	=====
$ 1 Tetrachloro-m-xylene						CAS #:	
7.973	7.997	-0.024	15611	4.00000		6.51	
$ 29 Decachlorobiphenyl						CAS #:	
20.113	20.130	-0.017	11565	4.00000		9.22	

QC Flag Legend

M - Compound response manually integrated.

Lab Name: FRIEND LABORATORY, INC. Contract: _____

[redacted]b Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

[redacted]trument ID: HP1

GC Column: RTX-CLPest2 ID: 0.32 (mm) Date(s) Analyzed: 09/17/02 09/17/02

File Numbers: 9827-9843

COMPOUND	Peak #	RT OF STANDARDS 10 ppb	50 ppb	100 ppb	250 ppb	500 ppb	1000 ppb	MEAN RT	RT WINDOW FROM	TO
PCB 1016	1*	10.19	10.20	10.20	10.20	10.21	10.21	10.20	10.10	10.30
	2*	10.71	10.71	10.71	10.71	10.71	10.71	10.71	10.61	10.81
	3*	11.89	11.89	11.90	11.90	11.90	11.90	11.90	11.80	12.00
	4	11.97	11.98	11.98	11.98	11.98	11.98	11.98	11.88	12.08
	5	12.67	12.68	12.68	12.68	12.69	12.69	12.68	12.58	12.78
PCB 1221	1*				8.79			8.79	8.69	8.89
	2*				9.12			9.12	9.02	9.22
	3*				9.27			9.27	9.17	9.37
PCB 1232	1*				9.27			9.27	9.17	9.37
	2*				10.20			10.20	10.10	10.30
	3*				11.19			11.19	11.09	11.29
	4				11.47			11.47	11.37	11.57
	5				11.97			11.97	11.87	12.07
PCB 1242	1*				10.20			10.20	10.10	10.30
	2*				11.19			11.19	11.09	11.29
	3*				11.47			11.47	11.37	11.57
	4				12.68			12.68	12.58	12.78
	5				13.29			13.29	13.19	13.39
[redacted]CB 1248	1*				11.19			11.19	11.09	11.29
	2*				11.90			11.90	11.80	12.00
	3*				12.68			12.68	12.58	12.78
	4				13.21			13.21	13.11	13.31
	5				13.29			13.29	13.19	13.39
PCB 1254	1*	13.67	13.67	13.67	13.67	13.67	13.67	13.67	13.57	13.77
	2*	14.56	14.56	14.56	14.56	14.56	14.56	14.56	14.46	14.66
	3*	15.01	15.01	15.01	15.01	15.00	15.00	15.01	14.91	15.11
	4	15.34	15.35	15.35	15.35	15.35	15.35	15.35	15.25	15.45
	5	16.02	16.03	16.03	16.03	16.03	16.03	16.03	15.93	16.13
PCB 1260	1*	14.93	14.93	14.94	14.94	14.94	14.94	14.94	14.84	15.04
	2*	15.34	15.34	15.35	15.35	15.35	15.35	15.35	15.25	15.45
	3*	16.19	16.19	16.20	16.20	16.20	16.21	16.20	16.10	16.30
	4	16.75	16.75	16.76	16.76	16.76	16.77	16.76	16.66	16.86
	5	17.23	17.23	17.24	17.24	17.25	17.25	17.24	17.14	17.34
Tetrachloro-m-xylene		7.97	7.99	8.00	7.99	8.00	8.00	7.99	7.89	8.09
Decachlorobiphenyl		20.11	20.12	20.13	20.13	20.13	20.13	20.13	20.03	20.23

* Denotes required peaks

Retention time windows are ± 0.1 minutes for all compounds.

10 16.

$$\frac{10.19 + 10.20 + 10.20 + 10.20 + 10.21 + 10.21}{6} = 10.20$$

Lab Name: FRIEND LABORATORY, INC. Contract: _____
Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA 1254STD
Instrument ID: HP3
GC Column: RTX-CLPest1 ID: 0.32 (mm) Date(s) Analyzed: 09/19/02 _____
File Numbers: 6149 PbL check.

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
PCB 1254	250 PPB	1*	14.62	14.52	14.72	260.72
		2*	15.14	15.04	15.24	397.02
		3*	15.95	15.85	16.05	307.45
		4	16.31	16.21	16.41	217.85
		5	16.86	16.76	16.96	330.96
Tetrachloro-m-xylene	300 PPB		9.73	9.63	9.83	5361.44
Decachlorobiphenyl	301 PPB		21.35	21.25	21.45	3867.94

* Denotes required peaks

Single injections of the low standard are made to establish approximate retention times and instrument sensitivity. Five point calibrations are performed if a multipeak component is detected in a sample.
Alternate column confirmation is run if a pesticide or PCB is detected in a site sample.

DMB Peak 1.
4/24/03 CF 250.
4218
TO
45181 / 252 = 260.72

FORM VI-PCB-3

Thru-Put Systems, Inc.

Data file : \chem\hp3.i\1254FCONFIRMa.b\E3956149.D
Lab Smp Id: 1254STD Client Smp ID: 1254STD
Inj Date : 19-SEP-2002 13:57
Operator : CPW Inst ID: hp3.i
Smp Info : 250PPB 1254
Misc Info : CONFIRMATION
Comment :
Method : \chem\hp3.i\1254FCONFIRMa.b\8082_PCBsec.M
Meth Date : 20-Sep-2002 06:59 Administra Quant Type: ESTD
Cal Date : 19-SEP-2002 13:57 Cal File: E3956149.D
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1254.sub
Target Version: 3.40 Sample Matrix: WATER
Processing Host: TARGET3

Concentration Formula: Amt * DF * Vt / Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	5.000	FinalVolume
Vo	1000.000	SampleVolume

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO	
$ 1 Tetrachloro-m-xylene					CAS #:			
9.730	9.730	0.000	1608432	300.000	300.00			(M)
25 Aroclor-1254					CAS #: 11097-69-1			
14.617	14.617	0.000	65181	250.000	250.00	80.00- 120.00	100.00	(M)
15.140	15.140	0.000	99255	250.000	250.00	146.75- 186.75	152.28	
15.947	15.947	0.000	76863	250.000	250.00	122.83- 162.83	117.92	
16.307	16.307	0.000	54462	250.000	250.00	57.51- 97.51	83.56	
16.863	16.863	0.000	82739	250.000	250.00	118.07- 158.07	126.94	
Average of Peak Amounts =					250			
$ 29 Decachlorobiphenyl					CAS #:			
21.347	21.347	0.000	1160381	300.000	300.00			(M)

Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2989895.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: 250PPB 1254
Misc Info:
Analysis Date: 19-SEP-2002 19:36
Sample Matrix: WATER
File Number: 9895

==========

Dilution Factor: 1.0000
Sample Volume: 1000.0000
Final Volume: 5.0000

==========

Analytes (ug/L)

Aroclor-1254	220.14
Tetrachloro-m-xylene	0.00%
Decachlorobiphenyl	0.00%

Analyst: CPW
Report Date: 09/20/2002 06:44

Supervisor: _____
Date: 9/20/2002

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

initial blk.

Sample Name: 250PPB 1660

File Name: E2989858.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 09/18/02

Analysis Time: 1401

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1016	1	10.21	10.10	10.30	290.85	250.00	16.34
Aroclor-1016	2	10.72	10.61	10.81	246.67	250.00	1.33
Aroclor-1016	3	11.90	11.80	12.00	307.89	250.00	23.16
Aroclor-1016	4	11.98	11.88	12.08	273.24	250.00	9.30
Aroclor-1016	5	12.69	12.58	12.78	256.52	250.00	2.61
Aroclor-1260	1	14.94	14.84	15.04	296.92	250.00	18.77
Aroclor-1260	2	15.35	15.25	15.45	289.30	250.00	15.72
Aroclor-1260	3	16.21	16.10	16.30	298.85	250.00	19.54
Aroclor-1260	4	16.76	16.66	16.86	292.16	250.00	16.86
Aroclor-1260	5	17.25	17.14	17.34	263.15	250.00	5.26
Tetrachloro-m-xylene	1	8.00	7.89	8.09	301.18	300.00	0.39
Decachlorobiphenyl	1	20.13	20.03	20.23	306.99	300.00	2.33

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

Peak 1. 1260

CF $\frac{100230}{250} = 401.$

%D = $\left|\frac{296.92-250}{250}\right| \times 100 = 18.77\%$

1260 - Avg

$\left|\frac{288-250}{250}\right| \times 100 = 15.2\%$

1016

$\left|\frac{275-250}{250}\right| \times 100 = 10\%$

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1660

File Name: E2989866.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 09/18/02

Analysis Time: 1815

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1016	1	10.21	10.10	10.30	279.25	250.00	11.70
Aroclor-1016	2	10.72	10.61	10.81	267.51	250.00	7.00
Aroclor-1016	3	11.90	11.80	12.00	326.74	250.00	30.70
Aroclor-1016	4	11.98	11.88	12.08	287.35	250.00	14.94
Aroclor-1016	5	12.68	12.58	12.78	255.78	250.00	2.31
Aroclor-1260	1	14.94	14.84	15.04	306.93	250.00	22.77
Aroclor-1260	2	15.35	15.25	15.45	306.04	250.00	22.42
Aroclor-1260	3	16.20	16.10	16.30	316.74	250.00	26.70
Aroclor-1260	4	16.76	16.66	16.86	304.00	250.00	21.60
Aroclor-1260	5	17.25	17.14	17.34	283.69	250.00	13.48
Tetrachloro-m-xylene	1	8.01	7.89	8.09	315.26	300.00	5.09
Decachlorobiphenyl	1	20.13	20.03	20.23	330.97	300.00	10.32

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

1260 - Avg.

303

$\left|\frac{303-250}{250}\right| \times 100 = 21.2\%$

1016 Avg.

$\left|\frac{283-250}{250}\right| \times 100 = 13.2\%$

Thru-Put Systems, Inc.

CCAL

Data file : \chem\hp1.i\8082r0917.b\E2989858.D
Lab Smp Id: CC166001 Client Smp ID: CC166001
Inj Date : 18-SEP-2002 14:01
Operator : CPW Inst ID: hp1.i
Smp Info : 250PPB 1660
Misc Info :
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 19-Sep-2002 07:17 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 3.40 Sample Matrix: WATER
Processing Host: TARGET3

Concentration Formula: Amt * DF * Vt / Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	5.000	FinalVolume
Vo	1000.000	SampleVolume

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE		RATIO
26 Aroclor-1260					CAS #: 11096-82-5			
14.943	14.943	0.000	100230	250.000	296.92	80.00-	120.00	100.00
15.353	15.353	0.000	105731	250.000	289.30	88.18-	128.18	105.49
16.207	16.207	0.000	63689	250.000	298.85	42.93-	82.93	63.54
16.763	16.767	-0.004	63150	250.000	292.16	41.14-	81.14	63.01
17.250	17.247	0.003	121190	250.000	263.15	108.65-	148.65	120.91
Average of Peak Amounts =					288			
20 Aroclor-1016					CAS #: 12674-11-2			
10.210	10.207	0.003	114927	250.000	290.85	80.00-	120.00	100.00
10.717	10.713	0.004	41919	250.000	246.67	16.92-	56.92	36.47
11.903	11.900	0.003	33355	250.000	307.89	10.29-	50.29	29.02
11.980	11.977	0.003	46984	250.000	273.24	24.51-	64.51	40.88
12.690	12.693	-0.003	51480	250.000	256.52	26.73-	66.73	44.79
Average of Peak Amounts =					275			

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene						CAS #:	
8.000	7.997	0.003	2772737	300.000	301.18		
$ 29 Decachlorobiphenyl						CAS #:	
20.133	20.130	0.003	1740644	300.000	306.99		

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1660

File Name: E2989875.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 09/18/02

Analysis Time: 2255

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1016	1	10.20	10.10	10.30	291.25	250.00	16.50
Aroclor-1016	2	10.71	10.61	10.81	250.15	250.00	0.06
Aroclor-1016	3	11.90	11.80	12.00	322.53	250.00	29.01
Aroclor-1016	4	11.97	11.88	12.08	298.68	250.00	19.47
Aroclor-1016	5	12.68	12.58	12.78	267.80	250.00	7.12
Aroclor-1260	1	14.94	14.84	15.04	303.34	250.00	21.34
Aroclor-1260	2	15.35	15.25	15.45	303.16	250.00	21.26
Aroclor-1260	3	16.20	16.10	16.30	302.32	250.00	20.93
Aroclor-1260	4	16.76	16.66	16.86	289.54	250.00	15.82
Aroclor-1260	5	17.24	17.14	17.34	284.97	250.00	13.99
Tetrachloro-m-xylene	1	8.01	7.89	8.09	285.47	300.00	4.84
Decachlorobiphenyl	1	20.13	20.03	20.23	304.88	300.00	1.63

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

1260

$\left|\frac{297-250}{250}\right| \times 100 = 18.8$

1016

$\left|\frac{286-250}{250}\right| \times 100 = 14.4$

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

encl MB initial G

Sample Name: 250PPB 1254

File Name: E2989876.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 09/18/02

Analysis Time: 2327

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	13.67	13.57	13.77	272.65	250.00	9.06
Aroclor-1254	2	14.56	14.46	14.66	241.09	250.00	3.56
Aroclor-1254	3	15.00	14.91	15.11	231.09	250.00	7.56
Aroclor-1254	4	15.34	15.25	15.45	285.36	250.00	14.14
Aroclor-1254	5	16.03	15.93	16.13	242.50	250.00	3.00
Tetrachloro-m-xylene	1	7.99	7.89	8.09	272.39	300.00	9.20
Decachlorobiphenyl	1	20.13	20.03	20.23	303.43	300.00	1.14

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

$\left|\frac{253-250}{253}\right| \times 100 = 2\%$

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

initial

Sample Name: 250PPB 1254

File Name: E2989877.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 09/19/02

Analysis Time: 1009

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	13.67	13.57	13.77	259.53	250.00	3.81
Aroclor-1254	2	14.56	14.46	14.66	225.30	250.00	9.88
Aroclor-1254	3	15.01	14.91	15.11	223.36	250.00	10.66
Aroclor-1254	4	15.35	15.25	15.45	285.42	250.00	14.17
Aroclor-1254	5	16.03	15.93	16.13	235.44	250.00	5.82
Tetrachloro-m-xylene	1	7.99	7.89	8.09	290.73	300.00	3.09
Decachlorobiphenyl	1	20.13	20.03	20.23	307.49	300.00	2.50

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

$\left| \frac{246-250}{250} \right| \times 100 = 1.6\%$

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

initial 1,4,5.

Sample Name: 250PPB 1254

File Name: E2989883.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 09/19/02

Analysis Time: 1321

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	13.67	13.57	13.77	259.55	250.00	3.82
Aroclor-1254	2	14.56	14.46	14.66	228.67	250.00	8.53
Aroclor-1254	3	15.00	14.91	15.11	228.48	250.00	8.61
Aroclor-1254	4	15.35	15.25	15.45	285.04	250.00	14.02
Aroclor-1254	5	16.03	15.93	16.13	237.94	250.00	4.82
Tetrachloro-m-xylene	1	7.99	7.89	8.09	275.42	300.00	8.19
Decachlorobiphenyl	1	20.13	20.03	20.23	323.32	300.00	7.77

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

$\left|\frac{248-252}{252}\right| \times 100 = 0.8\%$

00064

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254

File Name: E2989888.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

Analysis Date: 09/19/02

Analysis Time: 1558

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	13.67	13.57	13.77	234.65	250.00	6.14
Aroclor-1254	2	14.56	14.46	14.66	206.97	250.00	17.21
Aroclor-1254	3	15.01	14.91	15.11	199.78	250.00	20.09
Aroclor-1254	4	15.35	15.25	15.45	247.93	250.00	0.83
Aroclor-1254	5	16.03	15.93	16.13	207.20	250.00	17.12
Tetrachloro-m-xylene	1	8.00	7.89	8.09	270.47	300.00	9.84
Decachlorobiphenyl	1	20.13	20.03	20.23	264.18	300.00	11.94

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

$\left|\frac{219-250}{250}\right| \times 100 = 12.4\%$

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254

File Name: E2989888.D

Instrument ID: HP1.I

GC Column: RTX-CLPesticides 2 ID: 0.32 (mm)

end 1, 4, 5
initial 7pt.

Analysis Date: 09/19/02

Analysis Time: ~~1558~~ 19:36.

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	13.67	13.57	13.77	237.28	250.00	5.09
Aroclor-1254	2	14.56	14.46	14.66	210.21	250.00	15.92
Aroclor-1254	3	15.01	14.91	15.11	197.63	250.00	20.95
Aroclor-1254	4	15.35	15.25	15.45	247.15	250.00	1.14
Aroclor-1254	5	16.03	15.93	16.13	208.42	250.00	16.63
Tetrachloro-m-xylene	1	8.01	7.89	8.09	272.21	300.00	9.26
Decachlorobiphenyl	1	20.13	20.03	20.23	272.91	300.00	9.03

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

$\left|\frac{220-250}{250}\right| \times 100 = 12\%$

00066

FORM VII-PCB-2

7E

PCB CALIBRATION VERIFICATION SUMMARY

Lab Name: FRIEND LABORATORY, INC. Contract: _____

Lab Code: 10252 Case No.: _____ SAS No.: _____ SDG No.: AAA

Sample Name: 250PPB 1254

File Name: E2989888.D

Instrument ID: HP3.I - only used to confirm compd. ID ending CCV.

GC Column: RTX-CLPesticides 1 ID: 0.32 (mm)

Analysis Date: 09/19/02

Analysis Time: 1910

COMPOUND	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	TRUE AMOUNT	%D
Aroclor-1254	1	14.59	14.52	14.72	271.45	250.00	8.58
Aroclor-1254	2	15.11	15.04	15.24	297.25	250.00	18.90
Aroclor-1254	3	15.92	15.85	16.05	328.78	250.00	31.51
Aroclor-1254	4	16.28	16.21	16.41	251.81	250.00	0.72
Aroclor-1254	5	16.82	16.76	16.96	295.26	250.00	18.10
Tetrachloro-m-xylene	1	9.70	9.63	9.83	330.09	300.00	10.03
Decachlorobiphenyl	1	21.32	21.25	21.45	340.09	300.00	13.36

* QC LIMITS: %D of amounts in the Continuing Calibration must be less than or equal to 15%.

$\left| \frac{289 - 250}{250} \right| \times 100 = 15.6\%$

00067

FORM VII-PCB-2

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA916
Instrument ID: HP1 Init. Calib. Date(s): 09/17/2 09/
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 8.00 DCB: 20.13

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	STD11660	STD11660	09/17/2	1304	7.97	20.11
02	STD21660	STD21660	09/17/2	1335	7.99	20.12
03	STD31660	STD31660	09/17/2	1406	8.00	20.13
04	STD41660	STD41660	09/17/2	1437	7.99	20.13
05	STD51660	STD51660	09/17/2	1509	8.00	20.13
06	STD61660	STD61660	09/17/2	1540	8.00	20.13
07	STD11254	STD11254	09/17/2	1643	7.98	20.12
08	STD21254	STD21254	09/17/2	1714	7.99	20.13
09	STD31254	STD31254	09/17/2	1745	8.00	20.13
10	STD41254	STD41254	09/17/2	1816	7.99	20.13
11	STD51254	STD51254	09/17/2	1848	7.98	20.13
12	STD61254	STD61254	09/17/2	1919	8.00	20.13
13	STD41248	STD41248	09/17/2	1950	7.99	20.13
14	STD41242	STD41242	09/17/2	2021	7.99	20.13
15	STD41232	STD41232	09/17/2	2052	7.99	20.13
16	STD41221	STD41221	09/17/2	2124	8.00	20.13
17	CC166001	CC166001	09/18/2	1401	8.00	20.13
18	MB82	MB82	09/18/2	1433	8.02	20.13
19	QC82	QC82	09/18/2	1507	8.02	20.13
20	[illegible]	L94080-1RE	09/18/2	1538	7.99	20.13
21	L94080-2	L94080-2	09/18/2	1610	7.99	20.13
22	L94080-3RE	L94080-3RE	09/18/2	1641	7.99	20.13
23	[illegible]	L94080-4	09/18/2	1712	7.98	20.13
24	CC166002	CC166002	09/18/2	1815	8.01	20.13
25	[illegible]	L94081-1RE	09/18/2	1846	7.98	20.13
26	L94081-4RE	L94081-4RE	09/18/2	1917	7.99	20.13
27	L94081-5RE	L94081-5RE	09/18/2	1948	8.00	20.13
28	[illegible]	L94081-6RE	09/18/2	2019	7.99	20.13
29	L94081-7R	L94081-7R	09/18/2	2051	7.98	20.13
30	[illegible]	L94081-1MSR	09/18/2	2122	7.98	20.13
31	[illegible]	L94081-1MSDR	09/18/2	2153	7.97	20.11
32	CC166003	CC166003	09/18/2	2255	8.01	20.13
33	CC125401	CC125401	09/18/2	2327	7.99	20.13
34	CC125402	CC125402	09/19/2	1009	7.99	20.13
35	[illegible]	L94080-1	09/19/2	1038	7.99	20.13
36	[illegible]	L94080-3R	09/19/2	1116	7.99	20.13
37	L94081-6	L94081-6	09/19/2	1148	7.98	20.13

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA916
Instrument ID: HP1 Init. Calib. Date(s): 09/17/2 09/17/2
GC Column: RTX-CLPESTICIDES 2 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 8.00 DCB: 20.13

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	~~L94081-7D~~	L94081-7D	09/19/2	1219	7.98	20.12
02	CC125403	CC125403	09/19/2	1321	7.99	20.13
03	L94081-1	L94081-1	09/19/2	1353	7.99	20.13
04	L94081-4	L94081-4	09/19/2	1424	7.99	20.13
05	L94081-5	L94081-5	09/19/2	1455	8.00	20.13
06	CC125404	CC125404	09/19/2	1558	8.00	20.13
07	~~L94080-3~~	L94080-3	09/19/2	1629	7.99	20.13
08	~~L94081-7DL~~	L94081-7DL	09/19/2	1700	7.97	20.12
09	L94081-7DL	L94081-7DL	09/19/2	1731	7.98	20.12
10	L94081-1MS	L94081-1MS	09/19/2	1803	7.99	20.13
11	L94081-1MSD	L94081-1MSD	09/19/2	1834	7.98	20.12
12	CC125405	CC125405	09/19/2	1936	8.01	20.13
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

8D
PCB ANALYTICAL SEQUENCE

Lab Name: Contract:
Lab Code: Case No.: SAS No.: SDG No.: AAA916CONFIRM
Instrument ID: HP3 Init. Calib. Date(s): 09/19/2 09/1
GC Column: RTX-CLPESTICIDES 1 ID: 0.32 (mm)

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 9.73 DCB: 21.35

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	1254STD	1254STD	09/19/2	1357	9.73	21.35
02	1254LSTD	1254LSTD	09/19/2	1429	9.74	21.35
03	[illegible]3	L94080-3	09/19/2	1500	9.72	21.33
04	[illegible]	L94080-1	09/19/2	1531	9.72	21.33
05	L94081-1	L94081-1	09/19/2	1602	9.71	21.33
06	L94081-4	L94081-4	09/19/2	1634	9.72	21.33
07	L94081-5	L94081-5	09/19/2	1705	9.71	21.32
08	L94081-6	L94081-6	09/19/2	1736	9.71	21.33
09	L94081-7	L94081-7	09/19/2	1807	9.71	21.33
10	CC1254	CC1254	09/19/2	1910	9.70	21.32
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						

QC LIMITS
TCX = Tetrachloro-m-xylene (+/- 0.10 MINUTES)
DCB = Decachlorobiphenyl (+/- 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

FORM VIII PCB

10B

EPA SAMPLE NO.

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

L94081-1

[redacted] Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA916

Lab Sample ID: L94081-1 Date(s) Analyzed: 09/19/2 09/19/02

Instrument ID (1): HP1 Instrument ID (2): HP3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST 1 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.66	13.57	13.77	24.12		
Aroclor-1254	2	14.55	14.46	14.66	130.30		
	3	15.00	14.90	15.10	151.17		
COLUMN 1	4	15.34	15.25	15.45	81.10		
	5	16.02	15.93	16.13	104.56	98.25	
	1	14.60	14.52	14.72	109.14		
	2	15.12	15.04	15.24	83.74		
	3	15.93	15.85	16.05	93.35		
COLUMN 2	4	16.29	16.21	16.41	114.03		
	5	16.84	16.76	16.86	99.18	99.89	1.7
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

00071

10B

PESTICIDE IDENTIFICATION SUMMARY FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94081-1MS

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA916

Lab Sample ID: L94081-1MS Date(s) Analyzed: 09/19/2 _____

Instrument ID (1): HP1 Instrument ID (2): _____

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): _____ ID: ____

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	10.20	10.11	10.31	233.25		
Aroclor-1016	2	10.71	10.61	10.81	368.47		
	3	11.90	11.80	12.00	569.59		
COLUMN 1	4	11.98	11.88	12.08	397.59		
	5	12.68	12.59	12.79	518.57	417.49	
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1	14.94	14.84	15.04	494.90		
Aroclor-1260	2	15.35	15.25	15.45	475.44		
	3	16.20	16.11	16.31	420.94		
COLUMN 1	4	16.75	16.67	16.87	443.89		
	5	17.24	17.15	17.35	375.30	442.10	
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

10B

PESTICIDE IDENTIFICATION SUMMARY FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94081-5

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA916

Lab Sample ID: L94081-5 Date(s) Analyzed: 09/19/2 09/19/02

Instrument ID (1): HP1 Instrument ID (2): HP3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST1 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.67	13.57	13.77	524.70		
Aroclor-1254	2	14.56	14.46	14.66	511.19		
	3	15.00	14.90	15.10	467.20		
COLUMN 1	4	15.35	15.25	15.45	824.19		
	5	16.03	15.93	16.13	552.60	575.97	
	1	14.59	14.52	14.72	604.21		
	2	15.12	15.04	15.24	633.72		
	3	15.92	15.85	16.05	727.66		
COLUMN 2	4	16.28	16.21	16.41	864.64		
	5	16.83	16.76	16.96	895.50	745.14	29.4
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94081-6

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA916

Lab Sample ID: L94081-6 Date(s) Analyzed: 09/19/2 09/19/02

Instrument ID (1): HP1 Instrument ID (2): HP3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST1 ID: 0.37 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.66	13.57	13.77	2938.10		
Aroclor-1254	2	14.56	14.46	14.66	1659.16		
	3	15.00	14.90	15.10	1994.92		
COLUMN 1	4	15.35	15.25	15.45	2825.70		
	5	16.03	15.93	16.13	1546.67	2192.91	
	1	14.60	14.52	14.72	2194.82		
	2	15.12	15.04	15.24	2311.82		
	3	15.93	15.85	16.05	2405.20		
COLUMN 2	4	16.29	16.21	16.41	2353.97		
	5	16.83	16.76	16.96	2620.02	2377.17	8.4
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

00976

10B

PESTICIDE IDENTIFICATION SUMMARY
FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94081-7R

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA916

Lab Sample ID: L94081-7R Date(s) Analyzed: 09/18/2 _____

Instrument ID (1): HP1 Instrument ID (2): _____

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): _____ ID: ____

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.67	13.57	13.77	11414.52		
Aroclor-1254	2	14.56	14.46	14.66	13549.70		
	3	15.00	14.90	15.10	17400.42		
COLUMN 1	4	15.35	15.25	15.45	17289.71		
	5	16.02	15.93	16.13	7984.88	13527.85	
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

10B

PESTICIDE IDENTIFICATION SUMMARY FOR MULTICOMPONENT ANALYTES

EPA SAMPLE NO.

L94081-7DL

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA916

Lab Sample ID: L94081-7 Date(s) Analyzed: 09/19/2 09/19/07

Instrument ID (1): HP1 Instrument ID (2): HP3

GC Column(1): RTX-CLPESTICIDES 2 ID: 0.32(mm) GC Column(2): RTX-CLPEST 1 ID: 0.32 (mm)

ANALYTE	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	MEAN CONCENTRATION	%D
	1	13.67	13.57	13.77	13707.37		
Aroclor-1254	2	14.57	14.46	14.66	13018.07		
	3	15.00	14.90	15.10	12706.46		
COLUMN 1	4	15.35	15.25	15.45	17143.69		
	5	16.03	15.93	16.13	7131.85	12741.49	
	1	14.59	14.52	14.72	14438.59		
	2	15.12	15.04	15.24	16353.32		
	3	15.92	15.85	16.05	18667.99		
COLUMN 2	4	16.28	16.21	16.41	14669.70		
	5	16.83	16.76	16.96	16814.42	16188.80	27.1
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						
	1						
	2						
	3						
COLUMN 1	4						
	5						
	1						
	2						
	3						
COLUMN 2	4						
	5						

At least 3 peaks are required for identification of multicomponent analytes.

FORM X PEST-2

00078

Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2989893.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L94081-3
Misc Info: WG32788,02-004
Analysis Date: 19-SEP-2002 18:34
Sample Matrix: SOIL
File Number: 9893

==========

Dilution Factor: 10.0000
Sample Weight: 20.5502
Final Volume: 10.0000
Total Solid : 79.2000

==========

Analytes (ug/Kg)

Aroclor-1016	~~1.55%~~ ~~9.52%~~	~~15~~ 15 %
Aroclor-1260	~~1.61%~~ ~~9.91%~~	~~16~~ 16 %
Tetrachloro-m-xylene	16.26%	
Decachlorobiphenyl	17.28%	

DAR 10/8/02

Analyst: CPW
Report Date: 09/20/2002 06:44

Supervisor: _____
Date: 9/20/2

WET CHEMISTRY TOTAL SOLIDS NOTEBOOK

Notebook : 02-066
Start Date : 17-SEP-02 21:06
End Date : 17-SEP-02 21:06

TB 9/18

Sample I.D.	Analysis Date Time	Anal Init	Method	Dish#	Volume (mls)	Initial Weight	1st&2nd Weight	3rd&4th Weight	5th&6th Weight	7th&8th Weight	9th&10th Weight	Final Result	Rpd	Units
[illegible]	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	2	5.299	1.254	4.2712					56.9		%
Comments :														
L94080-2	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	3	6.292	1.2404	1.9169					10.8		%
Comments :														
L94080-3	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	4	5.219	1.2568	4.1541					55.5		%
Comments :														
[illegible]	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	5	6.5832	1.247	6.8212					84.7		%
Comments :														
L94081-1	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	6	6.2174	1.2498	6.1731					79.2	3.352	%
Comments :														
L94081-4	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	7	5.765	1.2472	5.2032					68.6		%
Comments :														
L94081-5	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	8	6.9795	1.259	7.467					88.9		%
Comments :														
L94081-6	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	9	6.1228	1.2581	5.4646					68.7		%
Comments :														
L94081-7	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	10	6.2114	1.249	5.7488					72.4		%
Comments :														
[illegible]	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	14	5.4585	1.2521	3.1685					35.1		%

$\frac{7.467 - 1.259}{6.9795} \times 100 = 88.9$

Calculations: Final Results = $\frac{\text{(fnl wgt - initial wgt)}}{\text{mls of sample}} \times 1000000$

Analyst Signature — 9/18/2 Date

Teresa B. Bishop Manager Signature — 9/18/02 Date

00195

WET CHEMISTRY TOTAL SOLIDS NO[redacted]

Notebook : 02-066
Start Date : 17-SEP-02 21:06
End Date : 17-SEP-02 21:06

Sample I.D.	Analysis Date Time	Anal Init	Method	Dish#	Volume (mls)	Initial Weight	1st&2nd Weight	3rd&4th Weight	5th&6th Weight	7th&8th Weight	9th&10th Weight	Final Result	Rpd	Units
Comments :														
L94[redacted]	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	15	5.8466	1.2428	4.8567					61.8		%
Comments :														
L94127-16	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	16	5.2804	1.2456	6.5235					100		%
Comments :														
L94127-18	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	17	6.2811	1.2526	7.5329					100		%
Comments :														
L94127-2	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	11	5.0582	1.2411	4.1926					58.4		%
Comments :														
L94127-4	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	12	7.8025	1.255	7.1914					76.1		%
Comments :														
L94132-4	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	13	10.6343	1.26	1.3601					.941		%
Comments :														
WG32767-1	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	1	1.2423	1.2423	1.2427					.0322		%
Comments :	Blank													
WG32767-2	Start:17-SEP-02 21:06 Stop :17-SEP-02 21:06		CLP 3.0	18	5.606	1.2417	5.8321					81.9		%
Comments :	L94081-3 DUP													

Calculations: Final Results = (fnl wgt - initial wgt) x 1000000 / mls of sample

Analyst Signature — Date: 9/18/2

Manager Signature: Teresa B. Bishop — Date: 9/18/02

TB 9/18

Organic Extractions

Notebook: 02-049 Page: 82 WG# 32764

Extracted By: KTB

Date Extracted: 9/17/02

Sur. Ref: A 00-131-32-I
B 00-131-32-C (NCS)

Analysis: 8082 PCB

Matrix: Sol (3550)

Spike Ref: 00-131-33-A

I.D.	Customer	Int. Size	Fin. Vol	Sr. Amt	Spk Amt	Bottle #	pH 5-9	Emulsion	Clean-ups
MB 82		20.0649	10ml	1ml A					1,2,3
LCS 82		20.1131			1ml				
194081-1	MA Environmental	20.0304							
-2MS		21.8670			1ml				
-3MSD		20.5502							
-4		20.5290							
-5		21.9251		1ml B					
-6		21.4094							
-7		20.6724							
~~194080~~		20.1866							
-2		20.8819							
-3		20.3922							
~~-4~~		20.3420							

Extracts Relinquished to:

Comments: Clean-up Methods: 1. 3665 H_2SO_4 2. 3620A florisil. 3. 3660A Hg

283356

C.O.C

9/18

9/18/02

00197

ASP 95-3 01/12/02	RTX-CLPEST 2			PG ON COLUMN		IDL	UG/L IN WATER	CRDL (UG/L)
Instrument#3	Run #1	Run #2	Run #3	Average	SD	SD*6.95	IDL	
alpha-BHC	3.64	3.74	3.73	3.70	0.0551	0.383	0.004	0.050
Heptachlor	4.82	4.92	4.99	4.91	0.0854	0.594	0.006	0.050
gamma-BHC	3.97	4.09	4.07	4.04	0.0643	0.447	0.004	0.050
Endosulfan I	3.88	4.05	4.13	4.02	0.128	0.887	0.009	0.050
Dieldrin	7.37	7.58	7.59	7.51	0.124	0.863	0.01	0.10
Endrin	8.77	8.89	8.98	8.88	0.105	0.732	0.01	0.10
4,4'-DDD	8.60	8.82	8.88	8.77	0.147	1.02	0.01	0.10
4,4'-DDT	9.79	9.99	10.04	9.94	0.132	0.919	0.01	0.10
Methoxychlor	58.26	59.00	59.19	58.82	0.491	3.41	0.03	0.50
Tetrachloro-m-xylene	4.49	4.62	4.62	4.58	0.0751	0.522	0.005	0.050
Decachlorobiphenyl	10.49	10.29	10.37	10.38	0.101	0.700	0.01	0.10
beta-BHC	5.09	5.02	5.22	5.11	0.101	0.705	0.007	0.050
delta-BHC	4.65	4.71	4.97	4.78	0.170	1.18	0.012	0.050
Aldrin	3.64	3.65	3.73	3.67	0.0493	0.343	0.003	0.050
Heptachlor epoxide	4.07	4.03	4.17	4.09	0.0721	0.501	0.005	0.050
alpha-Chlordane	4.18	4.16	4.32	4.22	0.0872	0.606	0.006	0.050
gamma-Chlordane	4.53	4.18	4.36	4.36	0.175	1.22	0.012	0.050
4,4'-DDE	8.10	7.94	8.42	8.15	0.244	1.70	0.02	0.10
Endosulfan sulfate	9.28	9.20	9.71	9.40	0.274	1.91	0.02	0.10
Endrin aldehyde	10.69	9.73	10.29	10.24	0.482	3.35	0.03	0.10
Endrin ketone	9.58	9.37	9.94	9.63	0.288	2.00	0.02	0.10
Endosulfan II	8.89	8.74	9.19	8.94	0.229	1.59	0.02	0.10
PCB 1016	106.01	105.20	106.90	106.04	0.850	5.91	0.1	1.0
PCB 1221	202.83	203.02	204.03	203.29	0.642	4.46	0.1	2.0
PCB 1232	105.99	105.07	104.41	105.16	0.796	5.53	0.1	1.0
PCB 1242	104.27	105.07	108.17	105.84	2.06	14.3	0.1	1.0
PCB 1248	101.79	101.90	101.19	101.63	0.379	2.64	0.1	1.0
PCB 1254	101.02	103.64	105.02	103.23	2.03	14.1	0.1	1.0
PCB 1260	102.25	102.84	103.11	102.74	0.437	3.04	0.1	1.0

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ASP 95-3 01/12/02	RTX-CLPEST 1		PG ON COLUMN			IDL	UG/L IN WATER	CRDL (UG/L)
Instrument#3	Run #1	Run #2	Run #3	Average	SD	SD*6.95	IDL	
alpha-BHC	3.85	3.91	3.90	3.89	0.0321	0.223	0.002	0.050
Heptachlor	4.97	5.06	5.05	5.03	0.0493	0.343	0.003	0.05
gamma-BHC	4.06	4.12	4.11	4.10	0.0321	0.223	0.002	0.050
Endosulfan I	4.90	4.90	4.83	4.88	0.0404	0.281	0.003	0.050
Dieldrin	8.49	8.62	8.66	8.59	0.0889	0.618	0.01	0.10
Endrin	9.38	9.59	9.48	9.48	0.105	0.730	0.01	0.10
4,4'-DDD	8.61	8.68	8.82	8.70	0.107	0.743	0.01	0.10
4,4'-DDT	9.88	9.89	9.87	9.88	0.0100	0.070	0.01	0.10
Methoxychlor	56.72	58.46	58.11	57.76	0.920	6.40	0.06	0.50
Tetrachloro-m-xylene	4.99	5.05	5.04	5.03	0.0321	0.223	0.002	0.050
Decachlorobiphenyl	10.75	11.00	11.05	10.93	0.161	1.12	0.01	0.10
beta-BHC	4.83	4.68	4.86	4.79	0.0964	0.670	0.007	0.050
delta-BHC	3.91	3.84	3.93	3.89	0.0473	0.328	0.003	0.050
Aldrin	4.37	4.32	4.35	4.35	0.0252	0.175	0.002	0.050
Heptachlor epoxide	4.70	4.62	4.74	4.69	0.0611	0.425	0.004	0.050
alpha-Chlordane	4.61	4.56	4.64	4.60	0.0404	0.281	0.003	0.050
gamma-Chlordane	4.84	4.71	4.87	4.81	0.0850	0.591	0.006	0.050
4,4'-DDE	8.56	8.38	8.72	8.55	0.170	1.18	0.01	0.10
Endosulfan sulfate	9.43	8.99	9.17	9.20	0.221	1.54	0.02	0.10
Endrin aldehyde	9.86	9.63	9.80	9.76	0.119	0.829	0.01	0.10
Endrin ketone	8.98	8.80	9.09	8.96	0.146	1.02	0.01	0.10
Endosulfan II	9.08	9.02	9.12	9.07	0.0503	0.350	0.01	0.10
PCB 1016	99.14	100.48	98.05	99.22	1.21	8.44	0.1	1.0
PCB 1221	200.36	193.87	196.82	197.02	3.25	22.6	0.2	2.0
PCB 1232	97.97	96.72	99.17	97.95	1.22	8.51	0.1	1
PCB 1242	99.14	100.08	101.34	100.19	1.10	7.67	0.1	1
PCB 1248	101.82	101.01	99.76	100.86	1.04	7.22	0.1	1.0
PCB 1254	99.63	100.10	99.13	99.62	0.487	3.39	0.1	1.0
PCB 1260	100.74	100.76	101.10	100.87	0.199	1.39	0.1	1.0

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1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L94081-1

[redacted]b Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA916

Matrix: (soil/water) SOIL Lab Sample ID: L94081-1

Sample wt/vol: 20.0 (g/mL) G Lab File ID: E2989884

% Moisture: 20,8 decanted: (Y/N) N Date Received: 09/17/2

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/17/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/19/2

Injection Volume: 2.0(uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	63 ~~0.06~~	U
1104-28-2	Aroclor-1221	130 ~~0.13~~	U
11141-16-5	Aroclor-1232	63 ~~0.06~~	U
53469-21-9	Aroclor-1242	63 ~~0.06~~	U
11097-69-1	Aroclor-1254	98.25	
11096-82-5	Aroclor-1260	63 ~~0.06~~	U
----------	Aroclor-1248	63 ~~0.06~~	U

car
10/9/02

FORM I PEST

00009

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2989884.D
Lab Smp Id: L94081-1 Client Smp ID: L94081-1
Inj Date : 19-SEP-2002 13:53
Operator : CPW Inst ID: hp1.i
Smp Info : L94081-1
Misc Info : WG32788,02-004
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 19-Sep-2002 16:32 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	20.030	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	79.200	Total Solid

			CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
7.993	7.997	-0.004	274134	39.0223	245.98		
$ 29 Decachlorobiphenyl					CAS #:		
20.127	20.130	-0.003	225375	47.1958	297.50		
25 Aroclor-1254					CAS #: 11097-69-1		
13.660	13.670	-0.010	3120	3.82699	24.12	80.00- 120.00	100.00(MH)
14.550	14.563	-0.013	1799	20.6717	130.30	94.85- 134.85	82.33
15.000	15.003	-0.003	1005	23.9824	151.17	72.82- 112.82	32.21
15.337	15.350	-0.013	1611	12.8660	81.10	43.66- 83.66	51.63
16.017	16.033	-0.016	1792	16.5882	104.56	76.99- 116.99	57.44
Average of Peak Concentrations =					98.25		

$Amt = -6.4375383 + (3120 \times 3.29 \times 10^{-3})$
$= 3.82699.$

$Final: 3.82699 \times 10 \times \frac{10}{20.03} \times 0.1$
79.2×100

$= 2.412 \times 10^{-5}$
$= 24.12$ ug/kg ✓.

00010

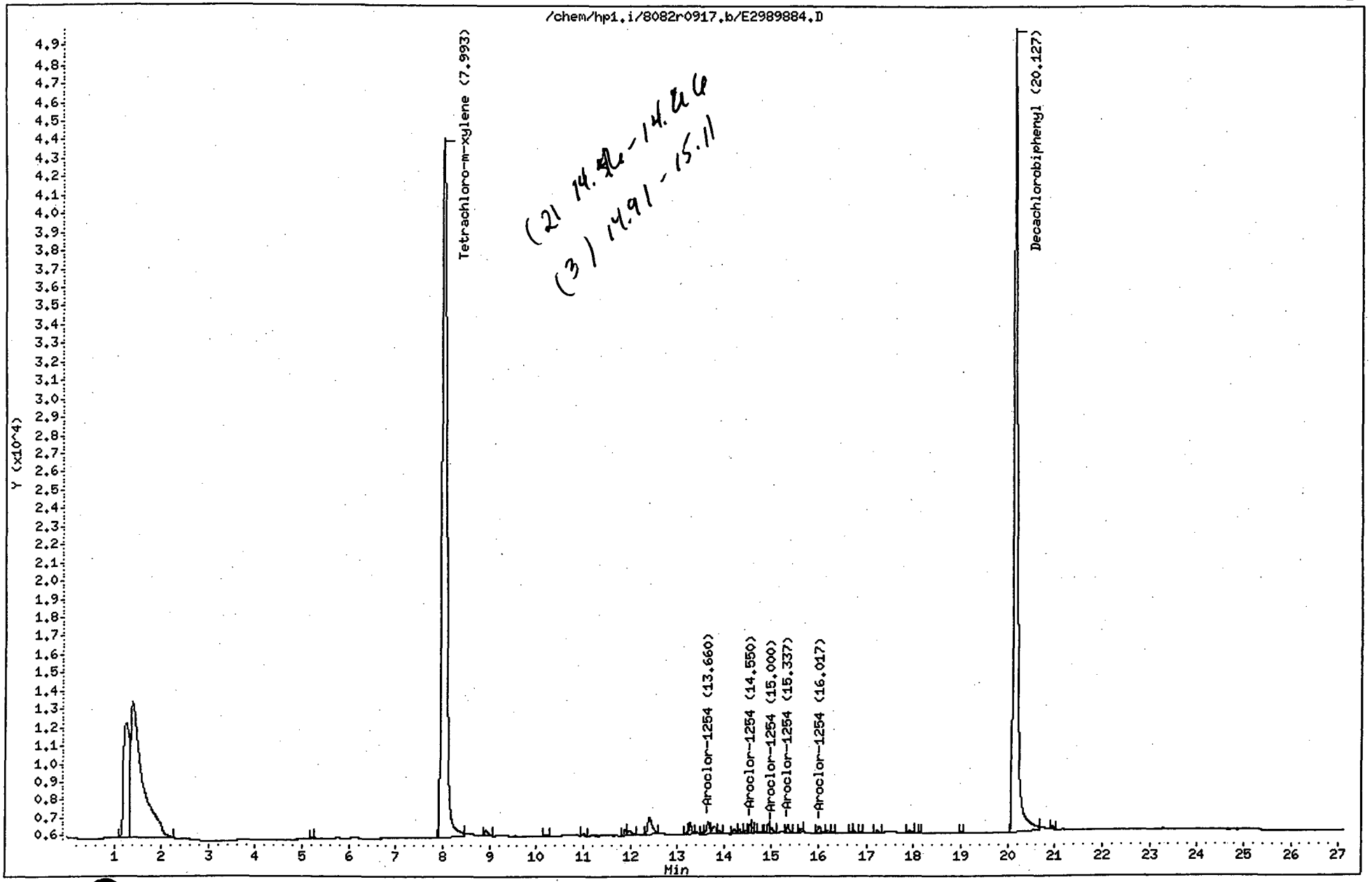
Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /chem/hp1.i/8082r0917.b/E2989884.D
Date [redacted]EP-2002 13:53
Client [redacted]L94081-1
Sample Info: L94081-1
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

[redacted]strument: hp1.i
Operator: CPW
Column diameter: 0.32

00012

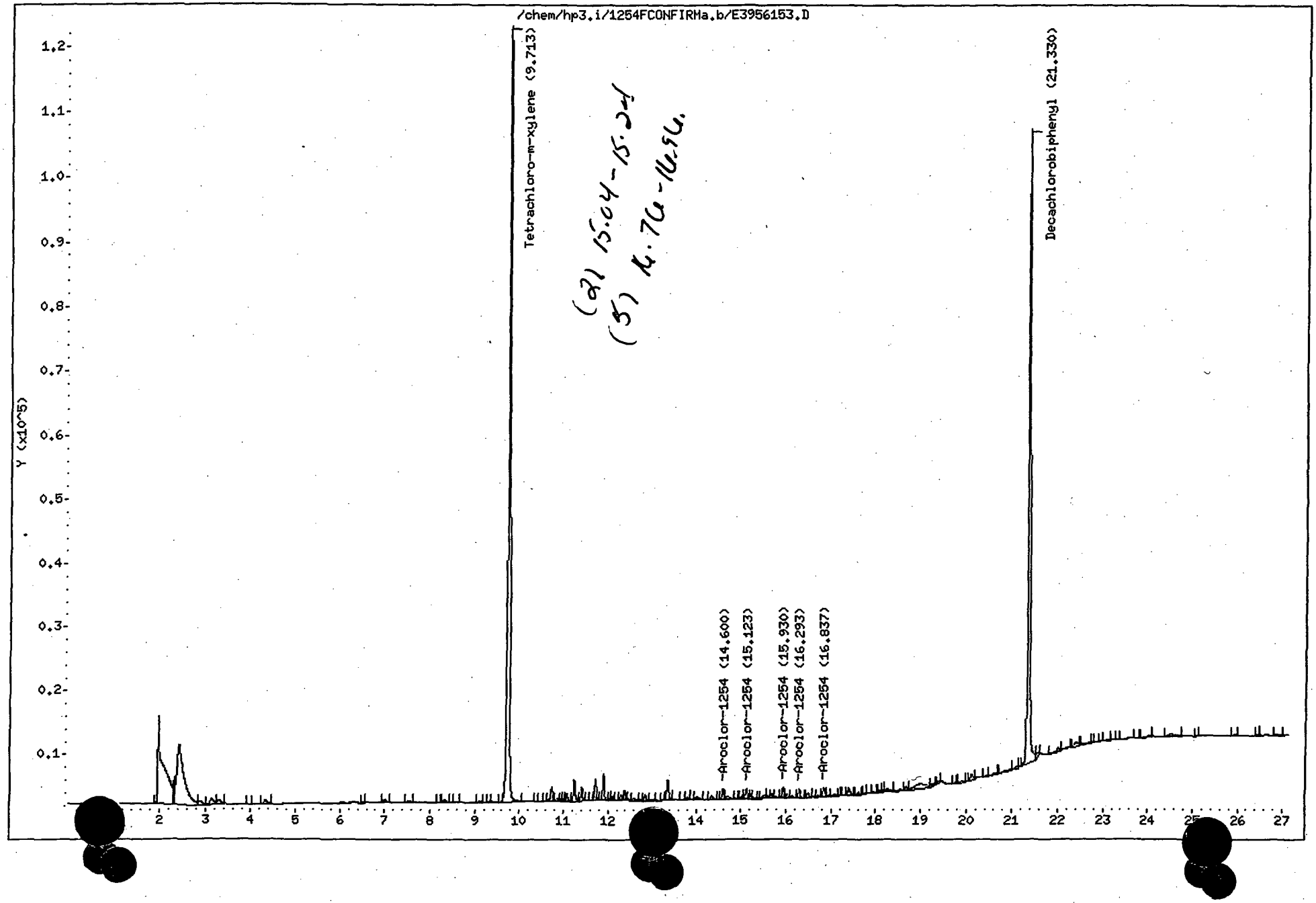


(21 14.[redacted]-14.[redacted]6
(3) 14.91 - 15.11

00015

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956153.D
Date : 19-SEP-2002 16:02
Client ID: L94081-1
Sample Info: L94081-1
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i
Operator: CPW
Column diameter: 0.32



(a) 15.04 - 15.34
(5) 16.76 - 16.96

Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956153.D
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: L94081-1
Misc Info: CONFIRMATION
Analysis Date: 19-SEP-2002 16:02
Sample Matrix: SOIL
File Number: 6153

Dilution Factor:	10.0000
Sample Weight:	20.0304
Final Volume:	10.0000
Total Solid :	79.2000

Analytes (ug/Kg)	
Aroclor-1254	99.89
Tetrachloro-m-xylene	138.94%
Decachlorobiphenyl	146.56%

Analyst: CPW
Report Date: 09/20/2002 07:21

Supervisor: _____
Date: _____ 9/20/02

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L94081-4

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA916

Matrix: (soil/water) SOIL Lab Sample ID: L94081-4

Sample wt/vol: 20.5 (g/mL) G Lab File ID: E2989885

% Moisture: ~~0~~ 31.4 decanted: (Y/N) N Date Received: 09/17/2

ear 10/9/02

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/17/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/19/2

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	~~71~~ ~~0.07~~	U
1104-28-2	Aroclor-1221	~~140~~ ~~0.14~~	U
11141-16-5	Aroclor-1232	~~71~~ ~~0.07~~	U
53469-21-9	Aroclor-1242	~~71~~ ~~0.07~~	U
11097-69-1	Aroclor-1254	477.68	
11096-82-5	Aroclor-1260	~~71~~ ~~0.07~~	U
----------	Aroclor-1248	~~71~~ ~~0.07~~	U

ear 10/9/02

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2989885.D
Lab Smp Id: L94081-4 Client Smp ID: L94081-4
Inj Date : 19-SEP-2002 14:24
Operator : CPW Inst ID: hp1.i
Smp Info : L94081-4
Misc Info : WG32788,02-004
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 19-Sep-2002 16:32 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	20.529	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	68.600	Total Solid

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
7.990	7.997	-0.007	286877	40.5761	288.12		
$ 29 Decachlorobiphenyl					CAS #:		
20.127	20.130	-0.003	212827	44.8268	318.31		
25 Aroclor-1254					CAS #: 11097-69-1		
13.663	13.670	-0.007	18932	55.8471	396.56	80.00- 120.00	100.00(H)
14.553	14.563	-0.010	20302	62.5224	443.96	94.85- 134.85	107.24
15.000	15.003	-0.003	17432	67.0738	476.28	72.82- 112.82	92.08
15.340	15.350	-0.010	17129	93.8514	666.42	43.66- 83.66	90.48
16.023	16.033	-0.010	16503	57.0602	405.17	76.99- 116.99	87.17

Average of Peak Concentrations = 477.68

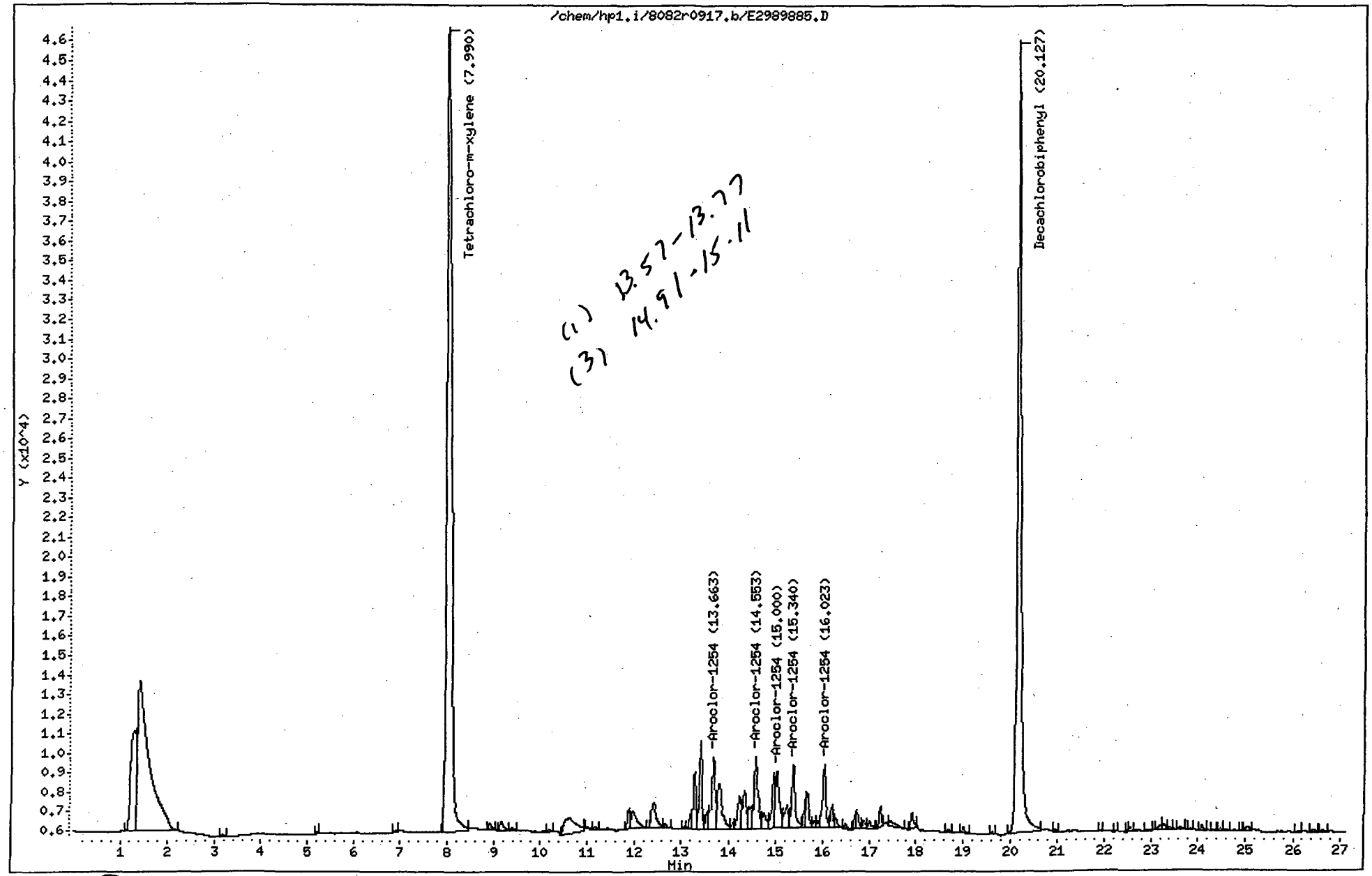
Flag Legend

H - Operator selected an alternate compound hit.

Data Fil /chem/hp1.i/8082r0917.b/E2989885.D
Date P-2002 14:24
Client L94081-4
Sample Info: L94081-4
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

strument: hp1.i
Operator: CPW
Column diameter: 0.32

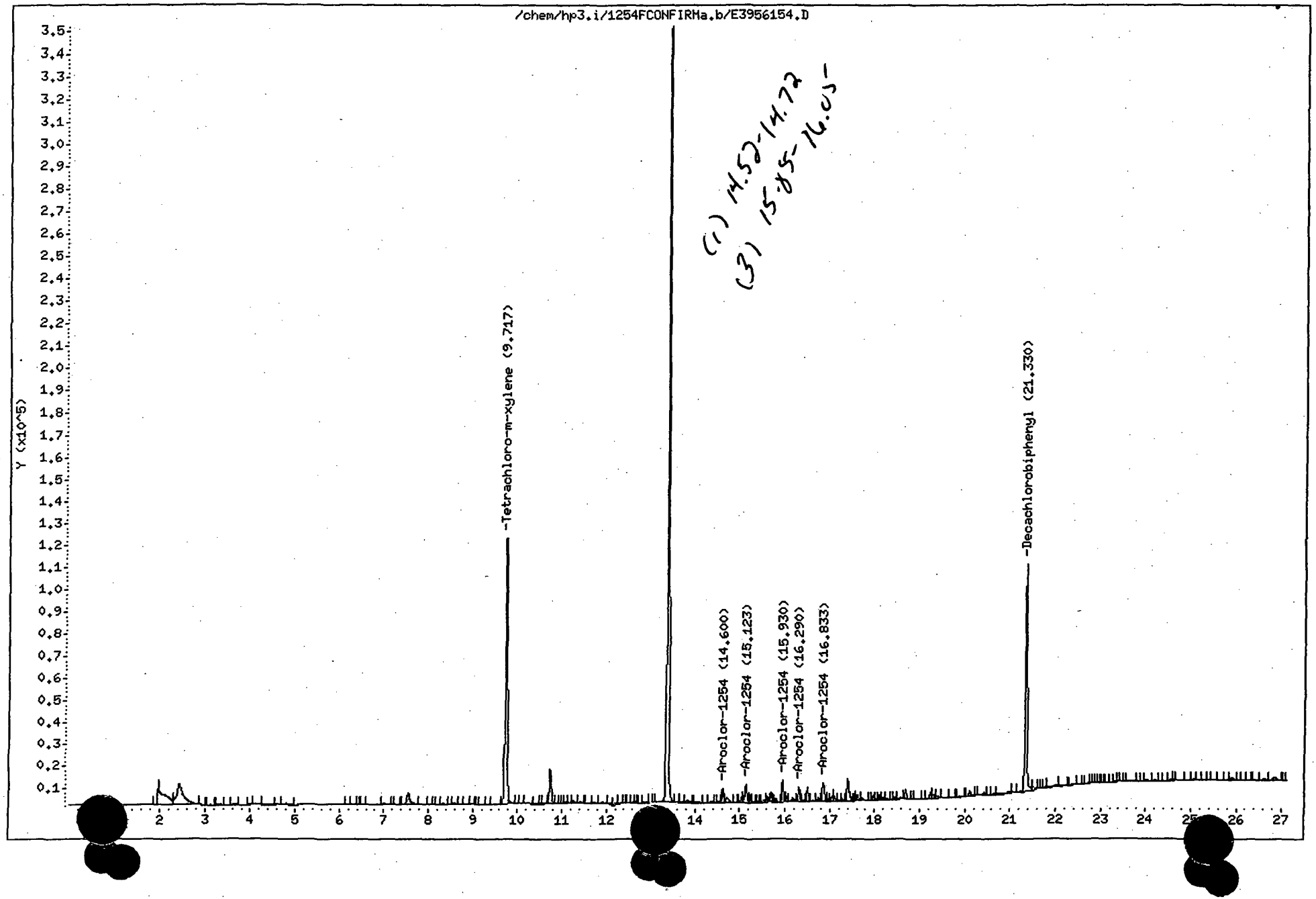
00020



Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956154.D
Date : 19-SEP-2002 16:34
Client ID: L94081-4
Sample Info: L94081-4
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i
Operator: CPW
Column diameter: 0.32

00023



Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956154.D
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: L94081-4
Misc Info: CONFIRMATION
Analysis Date: 19-SEP-2002 16:34
Sample Matrix: SOIL
File Number: 6154

Dilution Factor:	10.0000
Sample Weight:	20.5290
Final Volume:	10.0000
Total Solid :	68.6000

Analytes (ug/Kg)	
Aroclor-1254	540.65
Tetrachloro-m-xylene	136.08%
Decachlorobiphenyl	144.23%

Analyst: CPW
Report Date: 09/20/2002 07:21

Supervisor: _____
Date: 9/20/2

00024

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L94081-5

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA916

Matrix: (soil/water) SOIL Lab Sample ID: L94081-5

Sample wt/vol: 21.9 (g/mL) G Lab File ID: E2989886

% Moisture: ~~0~~ 11.1 decanted: (Y/N) N Date Received: 09/17/2

eaR 10/9/02

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/17/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/19/2

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	51 ~~0.05~~	U
1104-28-2	Aroclor-1221	100 ~~0.10~~	U
11141-16-5	Aroclor-1232	51 ~~0.05~~	U
53469-21-9	Aroclor-1242	51 ~~0.05~~	U
11097-69-1	Aroclor-1254	575.97	P
11096-82-5	Aroclor-1260	51 ~~0.05~~	U
----------	Aroclor-1248	51 ~~0.05~~	U

eaR 10/9/02

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2989886.D
Lab Smp Id: L94081-5 Client Smp ID: L94081-5
Inj Date : 19-SEP-2002 14:55
Operator : CPW Inst ID: hp1.i
Smp Info : L94081-5
Misc Info : WG32788,02-004
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 19-Sep-2002 16:32 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	21.925	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	88.900	Total Solid

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-xylene					CAS #:		
7.997	7.997	0.000	250486	36.1387	185.41		
$ 29 Decachlorobiphenyl					CAS #:		
20.127	20.130	-0.003	208199	43.9531	225.50		
25 Aroclor-1254					CAS #: 11097-69-1		
13.667	13.670	-0.003	33043	102.271	524.70	80.00- 120.00	100.00(H)
14.557	14.563	-0.006	36711	99.6385	511.19	94.85- 134.85	111.10
14.997	15.003	-0.006	26577	91.0631	467.20	72.82- 112.82	80.43
15.347	15.350	-0.003	29928	160.647	824.19	43.66- 83.66	90.57
16.027	16.033	-0.006	34913	107.709	552.60	76.99- 116.99	105.66
Average of Peak Concentrations =					575.97		

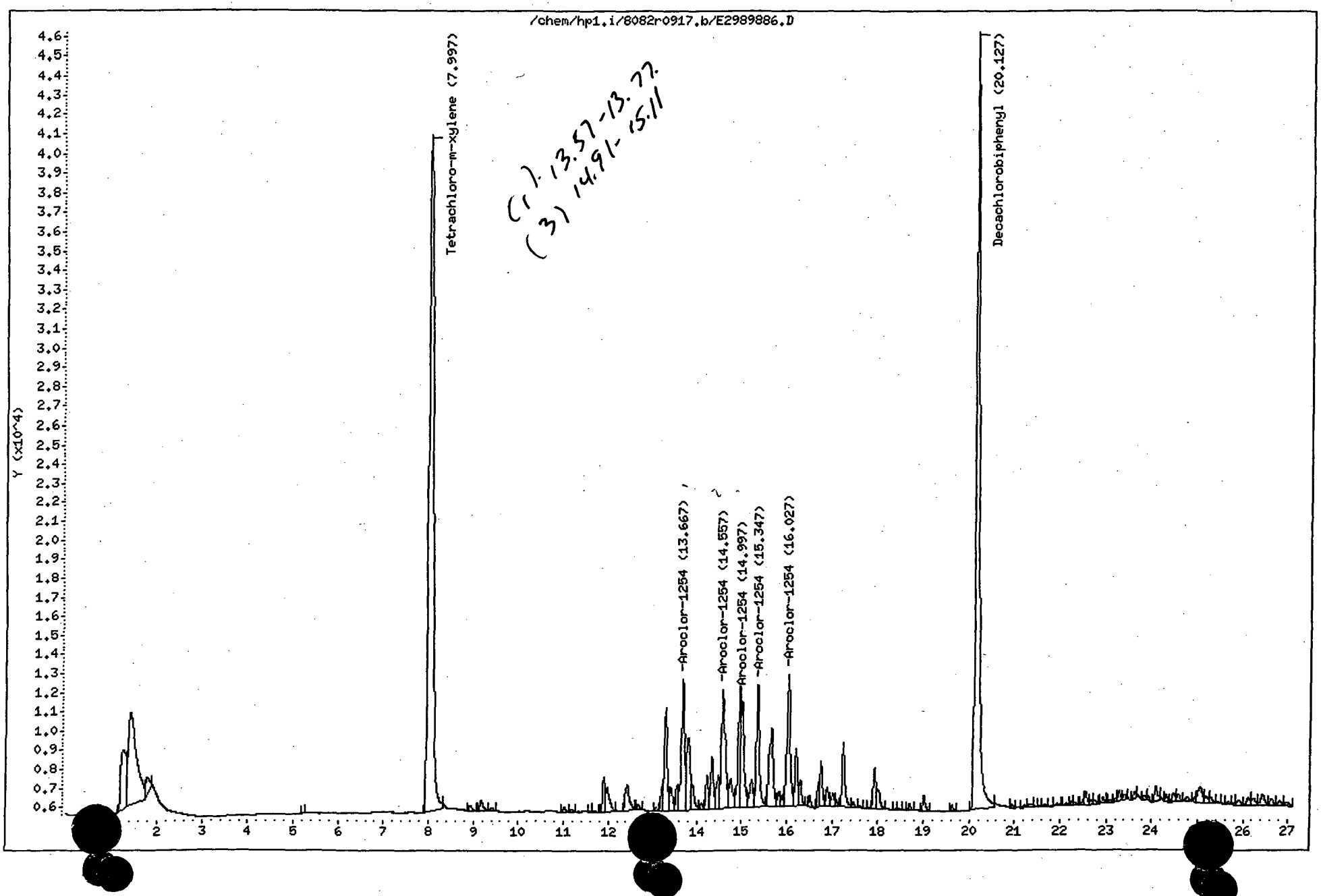
00026

Data File: /chem/hp1.i/8082r0917.b/E2989886.D
Date : 19-SEP-2002 14:55
Client ID: L94081-5
Sample Info: L94081-5
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i

Operator: CPW
Column diameter: 0.32

00028



(1). 13.57-13.77.
(3) 14.91-15.11

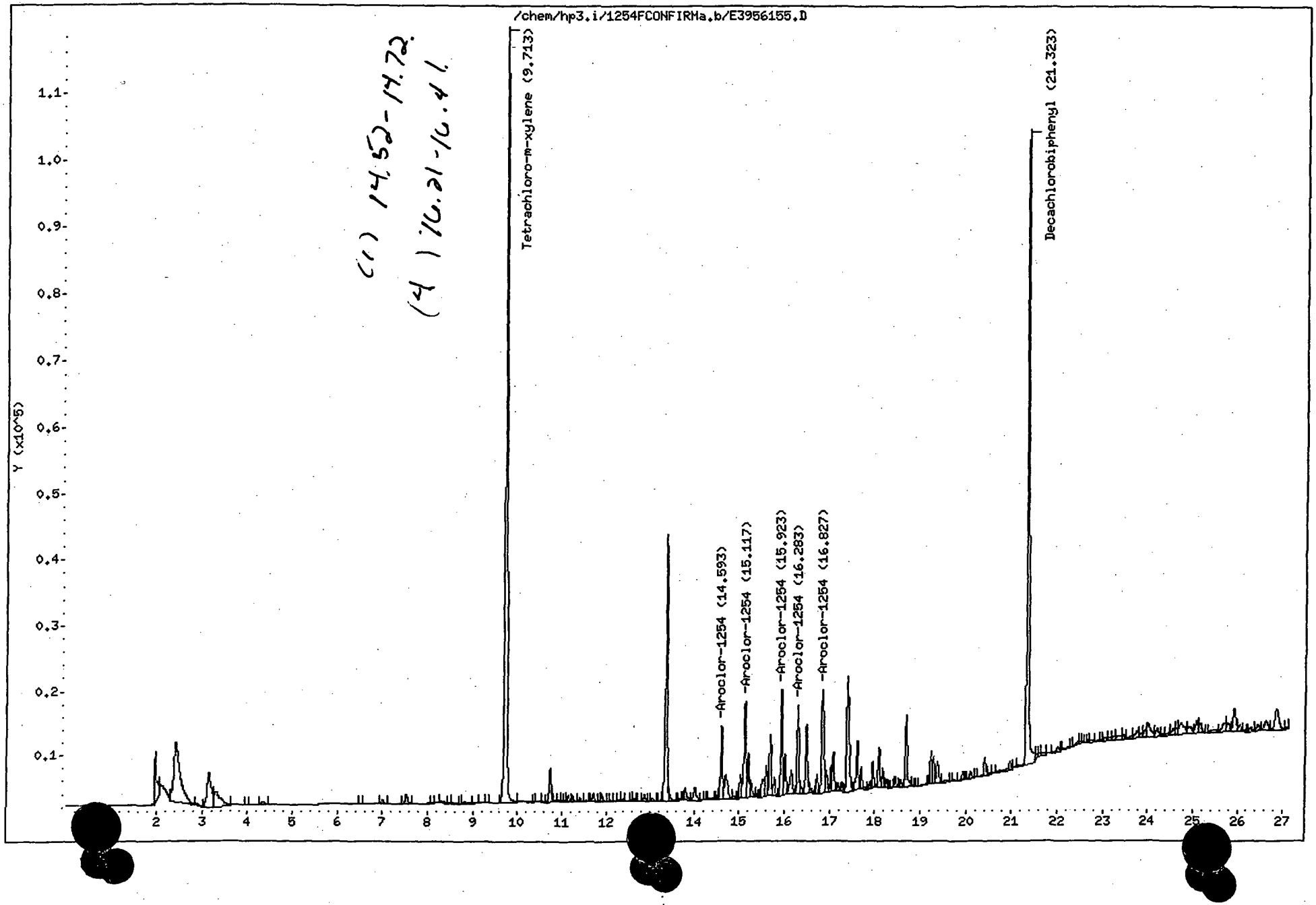
QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956155.D
Date : 19-SEP-2002 17:05
Client ID: L94081-5
Sample Info: L94081-5
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i
Operator: CPW
Column diameter: 0.32

00031



(1) 14.52-14.72.
(4) 16.21-16.41

Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956155.D
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: L94081-5
Misc Info: CONFIRMATION
Analysis Date: 19-SEP-2002 17:05
Sample Matrix: SOIL
File Number: 6155

Dilution Factor:	10.0000
Sample Weight:	21.9251
Final Volume:	10.0000
Total Solid :	88.9000

Analytes (ug/Kg)	
Aroclor-1254	745.14
Tetrachloro-m-xylene	133.89%
Decachlorobiphenyl	142.94%

Analyst: CPW
Report Date: 09/20/2002 07:21

Supervisor: _____
Date: 9/20/2

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2989880.D
Lab Smp Id: L94081-6 Client Smp ID: L94081-6
Inj Date : 19-SEP-2002 11:48
Operator : CPW Inst ID: hp1.i
Smp Info : L94081-6
Misc Info : WG32788,02-004
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 19-Sep-2002 16:32 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	10.000	Dilution Factor
Vf	10.000	Final volume
Ws	21.409	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	68.700	Total Solid

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1	Tetrachloro-m-xylene					CAS #:		
	7.983	7.997	-0.014	233125	34.0217	231.31		
$ 29	Decachlorobiphenyl					CAS #:		
	20.127	20.130	-0.003	199295	42.2721	287.40		
25	Aroclor-1254					CAS #: 11097-69-1		
	13.663	13.670	-0.007	133311	432.144	2938.10	80.00- 120.00	100.00(H)
	14.557	14.563	-0.006	100548	244.034	1659.16	94.85- 134.85	75.42
	14.997	15.003	-0.006	103717	293.417	1994.92	72.82- 112.82	77.80
	15.347	15.350	-0.003	78783	415.611	2825.70	43.66- 83.66	59.10
	16.027	16.033	-0.006	78451	227.488	1546.67	76.99- 116.99	58.85

Average of Peak Concentrations = 2192.91

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L94081-6

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: AAA916

Matrix: (soil/water) SOIL Lab Sample ID: L94081-6

Sample wt/vol: 21.4 (g/mL) G Lab File ID: E2989880

% Moisture: ~~0~~ 31.3 decanted: (Y/N) N Date Received: 09/17/2

ear 10/9/02

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 09/17/2

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 09/19/2

Injection Volume: 2.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) N pH: 7.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
12674-11-2	Aroclor-1016	68 ~~0.07~~	U
1104-28-2	Aroclor-1221	140 ~~0.14~~	U
11141-16-5	Aroclor-1232	68 ~~0.07~~	U
53469-21-9	Aroclor-1242	68 ~~0.07~~	U
11097-69-1	Aroclor-1254	2192.91	
11096-82-5	Aroclor-1260	68 ~~0.07~~	U
----------	Aroclor-1248	68 ~~0.07~~	U

ear 10/9/02

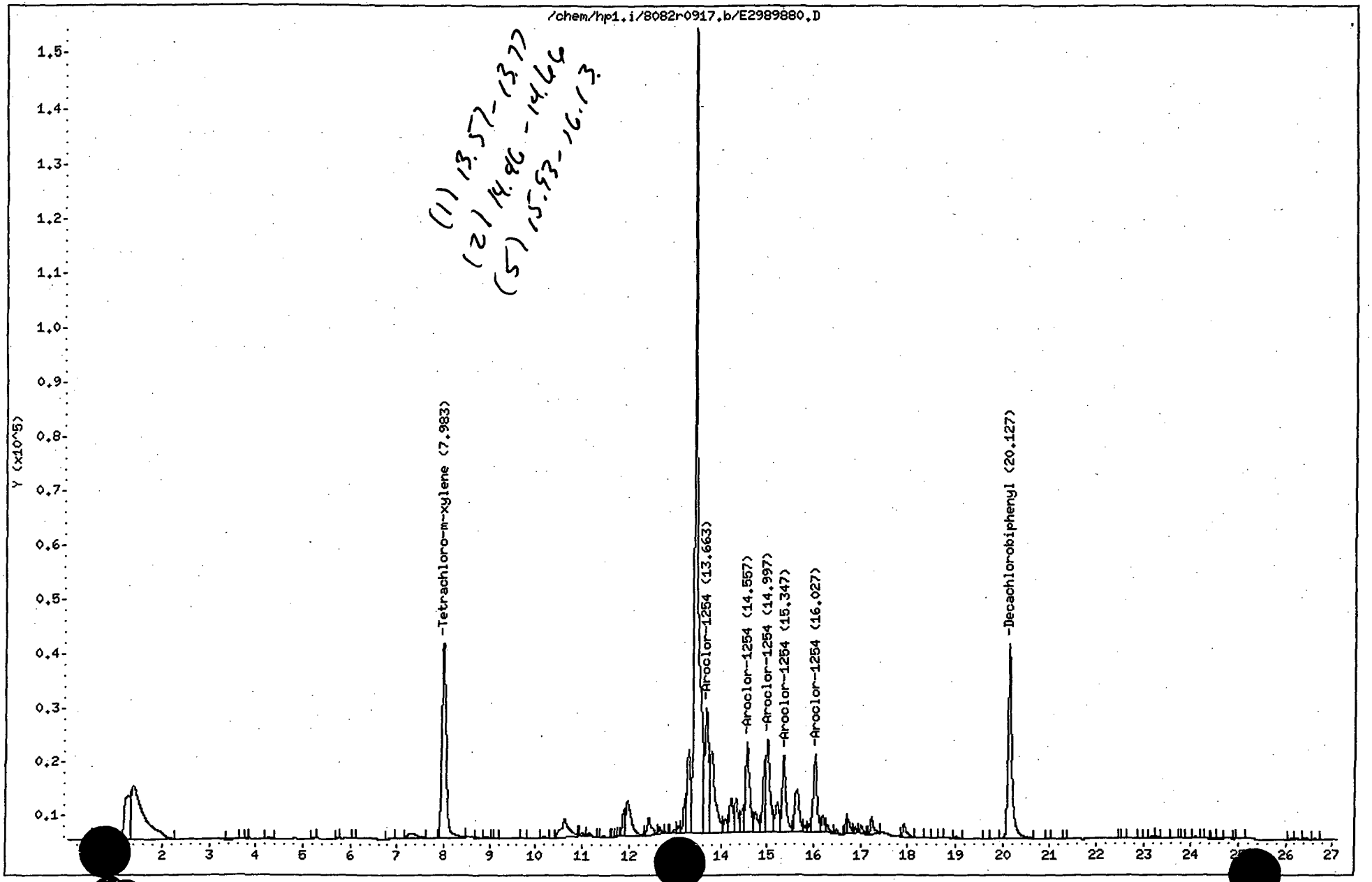
FORM I PEST

00033

Data File: /chem/hp1.i/8082r0917.b/E2989880.D
Date : 19-SEP-2002 11:48
Client ID: L94081-6
Sample Info: L94081-6
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00036



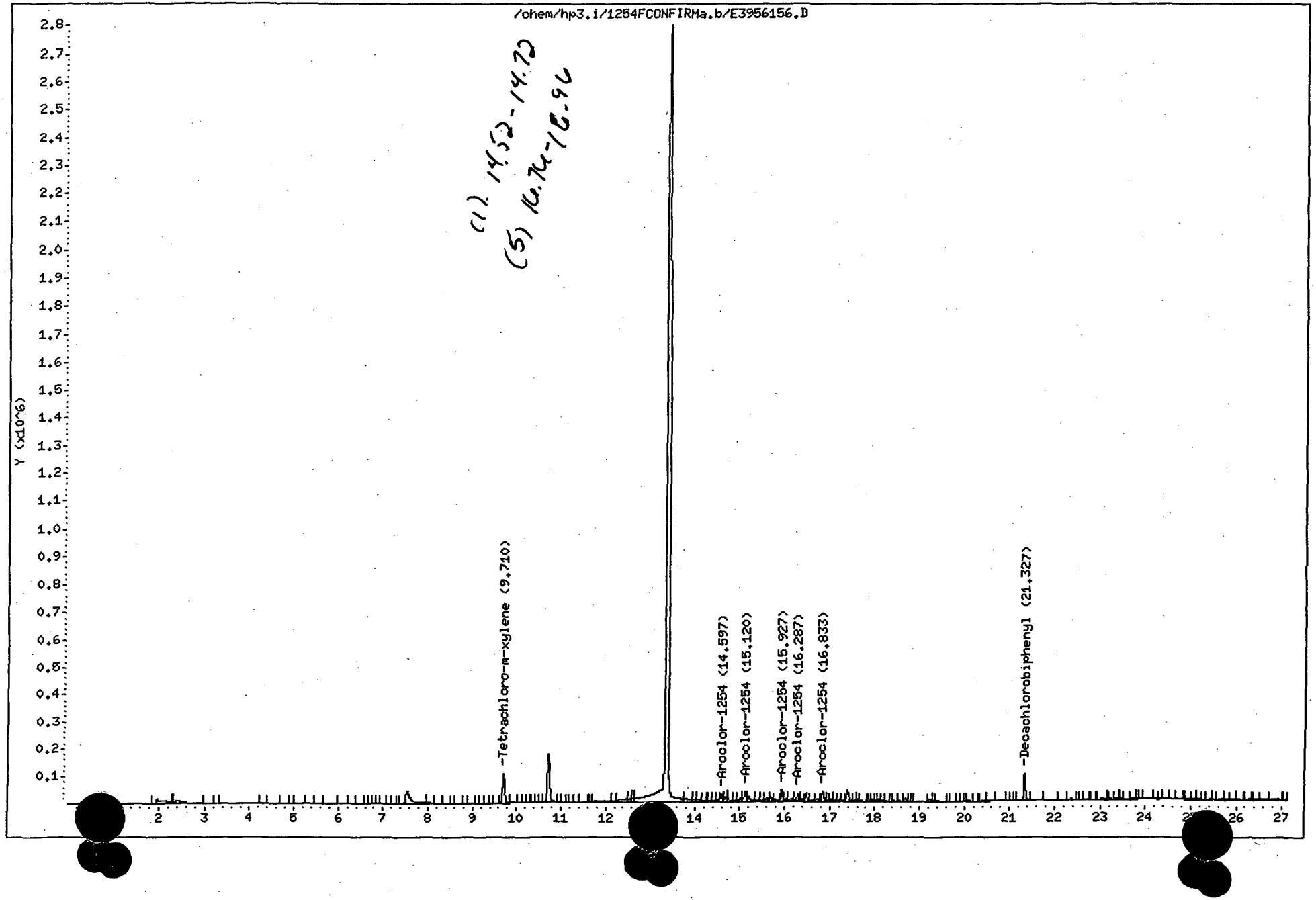
QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956156.D
Date : 19-SEP-2002 17:36
Client ID: L94081-6
Sample Info: L94081-6
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i
Operator: CPW
Column diameter: 0.32

00039



Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956156.D
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: L94081-6
Misc Info: CONFIRMATION
Analysis Date: 19-SEP-2002 17:36
Sample Matrix: SOIL
File Number: 6156

Dilution Factor:	10.0000
Sample Weight:	21.4094
Final Volume:	10.0000
Total Solid :	68.7000

Analytes (ug/Kg)	
Aroclor-1254	2377.17
Tetrachloro-m-xylene	121.61%
Decachlorobiphenyl	139.99%

Analyst: CPW
Report Date: 09/20/2002 07:21

Supervisor: _____
Date: 9/20/2

Thru-Put Systems, Inc.

Data file : \chem\hp1.i\8082r0917.b\E2989891.D
Lab Smp Id: L94081-7DL Client Smp ID: L94081-7DL
Inj Date : 19-SEP-2002 17:31
Operator : CPW Inst ID: hp1.i
Smp Info : L94081-7
Misc Info : WG32788,02-004
Comment :
Method : \chem\hp1.i\8082r0917.b\8082_PCBsec.M
Meth Date : 20-Sep-2002 06:21 Administra Quant Type: ESTD
Cal Date : 17-SEP-2002 16:43 Cal File: E2989834.D
Als bottle: 1
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: TARGET3

Concentration Formula: Amt * DF * ((Vf / Ws) * Uf) / Ts * 1000

Name	Value	Description
DF	50.000	Dilution Factor
Vf	10.000	Final volume
Ws	20.677	Weight of sample extracted (g)
Uf	0.100	Unit Correction Factor
Ts	72.400	Total Solid

	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1	Tetrachloro-m-xylene					CAS #:		
	7.983	7.997	-0.014	32418	9.54760	318.88		
$ 29	Decachlorobiphenyl					CAS #:		
	20.123	20.130	-0.007	33446	10.9617	366.11		
25	Aroclor-1254					CAS #: 11097-69-1		
	13.673	13.670	0.003	126705	410.411	13707.37	80.00- 120.00	100.00(H)
	14.567	14.563	0.004	164979	389.772	13018.07	95.55- 135.55	130.21
	15.003	15.003	0.000	136892	380.442	12706.46	70.72- 110.72	108.04
	15.350	15.350	0.000	97501	513.297	17143.69	42.78- 82.78	76.95
	16.027	16.033	-0.006	73379	213.534	7131.85	76.54- 116.54	57.91

Average of Peak Concentrations = 12741.49

00047

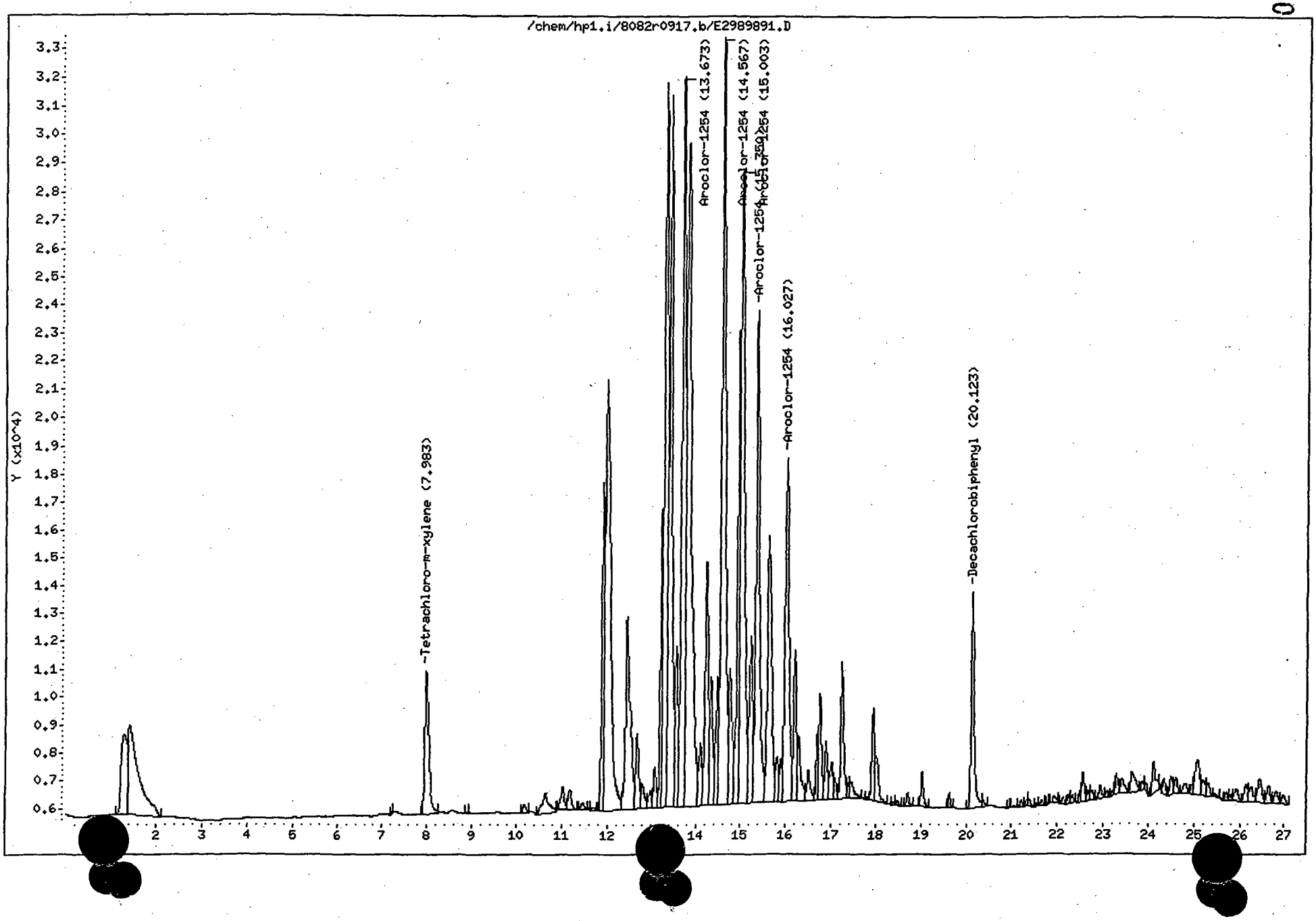
QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: /chem/hp1.i/8082r0917.b/E2989891.D
Date : 19-SEP-2002 17:31
Client ID: L94081-7DL
Sample Info: L94081-7
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 2

Instrument: hp1.i
Operator: CPW
Column diameter: 0.32

00049



Friend Inc.

Data File: /chem/hp1.i/8082r0917.b/E2989891.D
Method: /chem/hp1.i/8082r0917.b/8082_PCBsec.M
Sample Info: L94081-7
Misc Info: WG32788,02-004
Analysis Date: 19-SEP-2002 17:31
Sample Matrix: SOIL
File Number: 9891

Dilution Factor:	50.0000
Sample Weight:	20.6774
Final Volume:	10.0000
Total Solid :	72.4000

Analytes (ug/Kg)	
Aroclor-1016	0.00
Aroclor-1221	0.00
Aroclor-1232	0.00
Aroclor-1242	0.00
Aroclor-1254	12741.49
Aroclor-1260	0.00
Aroclor-1248	0.00
Tetrachloro-m-xylene	95.48%
Decachlorobiphenyl	109.62%

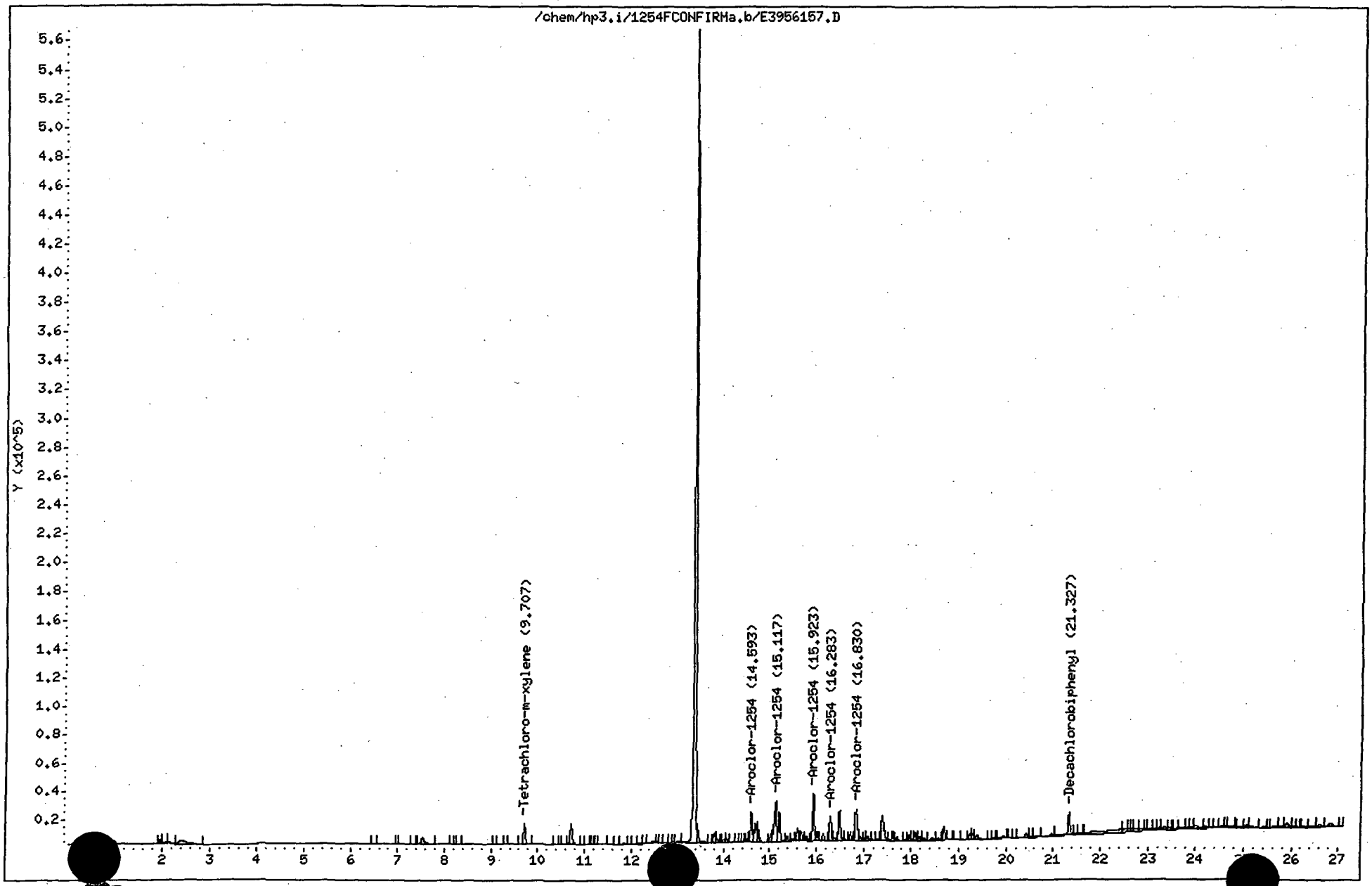
Analyst: CPW
Report Date: 09/20/2002 06:43

Supervisor: _____
Date: 9/20/2

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956157.D
Date : 19-SEP-2002 18:07
Client ID: L94081-7
Sample Info: L94081-7
Volume Injected (uL): 2.0
Column phase: RTX-CLPesticides 1

Instrument: hp3.i
Operator: CPW
Column diameter: 0.32

00053



Friend Inc.

Data File: /chem/hp3.i/1254FCONFIRMa.b/E3956157.D
Method: /chem/hp3.i/1254FCONFIRMa.b/8082_PCBsec.M
Sample Info: L94081-7
Misc Info: CONFIRMATION
Analysis Date: 19-SEP-2002 18:07
Sample Matrix: SOIL
File Number: 6157

Dilution Factor:	100.0000
Sample Weight:	20.6774
Final Volume:	10.0000
Total Solid :	72.4000

Analytes (ug/Kg)	
Aroclor-1254	16188.80
Tetrachloro-m-xylene	158.49%
Decachlorobiphenyl	287.45%

Analyst: CPW
Report Date: 09/20/2002 07:21

Supervisor: _____
Date: 9/20/2

ECT.CON INC.
Environmental and Computer
Technology Consultants

Data Validation Report

SDG#	94662
Validation Report Date	April 28, 2003
Validation Guidance	USEPA Region 2 Guidelines for Data Review SW 846 Method 8082
Client Name	Cummings-Riter
Project Name	Viacom/Horseheads
Laboratory	Friend Laboratory Inc.
Method(s) Utilized	SW 846 8082
Analytical Fraction	PCBs

Samples/Matrix:

Date Sampled	Sample ID	Laboratory ID	PCBs	Matrix
9/26/02	A-B-S-E-R-002	94662-1	X	Solid
9/26/02	A-B-SS-E-R-002	94662-2	X	Solid
9/26/02	A-B-S-E-B-001	94662-3	X	Solid

Analytical data in this report were screened to determine analytical limitations of the data based on specific quality control criteria. This screening assumes analytical results are correct as reported and merely provides an interpretation of the reported quality control results. A minimum of 10% of laboratory calculations has been verified as part of this validation. Specific findings on analytical limitations are presented in this report. Annotated Form 1s or spreadsheets for samples reviewed are included after the Data Assessment Findings. Form 1s for the MS/MSD samples and spreadsheets are not annotated.

SUMMARY

The sample set for Viacom/Horsehead consists of three solid field samples. These samples were analyzed for the parameters as provided above. The findings presented in this review of the analytical data assume that the information presented by the analytical laboratory is correct. This review is identified as a false positive/false negative review, and therefore, does not include the review of some quality control (QC) items. Those included in the review are listed below.

The polychlorinated biphenyl (PCBs) findings are based upon the assessment of the following:

False Positives/False Negatives Validation

* • Data Completeness
* • Holding Times
* • Calibration and GC Performance
* • Blanks
* • Analytical Sequence Check
* • Target Compound Identification
  • Compound Quantitation and Reported Detection Limits
* • Chromatogram Quality

* Criteria were met for this evaluation item.

This evaluation was conducted in accordance with USEPA Region II SOP No. HW-23B (May 2002), USEPA CLP National Functional Guidelines for Organic Data Review and the analytical method. Findings from this evaluation should be considered when using the analytical data. This report presents a summary of the data qualifications based on the review of the aforementioned evaluation criteria. This is followed by annotated Form 1s/ spreadsheets. Finally, the worksheets used to perform the evaluation are provided.

FINDINGS

Polychlorinated Biphenyls (PCBs)

1. Compound Quantitation

The percent difference between columns exceeded the 25% quality control limit. For the following samples and compounds, qualify PCB results as indicated in the table below. Samples were qualified based on SOP HW-23, Section 12.6.

Sample	Compound	% Difference	Qualifier
A-B-S-E-R-002	Aroclor 1254	48.7%	J
A-B-S-E-B-001	Aroclor 1254	50%	J

NOTES

Polychlorinated Biphenyls (PCBs)

Completeness

The USEPA Region II SOP No. HW-23B has the following sections that are not applicable to this project because it is a false positive/false negative review:

- Surrogate Recovery (Form 2)
- Laboratory Control Sample
- Matrix Spikes (Form 3)
- Contamination
- GC Apparatus and Materials
- Extraction Techniques for Sample Preparation
- Field Duplicates

The cooler temperature upon receipt at the laboratory was 6 C. Data are not qualified upon this basis.

Calibration

The laboratory used linear regression to calculate PCB results. The use of linear regression is permissible for SW-846 methodologies. The laboratory met the acceptance criteria specified in Section 7.5.2 of Method 8000B (r value greater than or equal to 0.99).

Data summary forms (including calibration factors) for the initial and continuing calibration is not provided for the second column except for Aroclor 1254. The second column is used only for fingerprint confirmation, therefore, the laboratory does not provide the calibration factor information. Because Aroclor 1254 was identified as a constituent of concern, the data summary information for the second column is provided for the continuing calibration. Data are not qualified on this basis.

The percent difference (%D) per peak for multi-standard Aroclors are provided. For SW 846, the laboratory used the average Aroclor concentration to determine the %D. Data are not qualified because the average value is used.

Retention Time

Retention time windows are not determined by the use of three standards for single standard calibration Aroclors. The center of the retention time window is defined as the retention time of the midpoint standard from the initial calibration. For the multi-standard calibration Aroclors, the center of the retention time window is the mean of the retention time generated from each standard. The retention time windows are the mean $\pm$ 0.1 minutes. Data are not qualified on this basis.

Retention time windows are not provided for the second column except for Aroclor 1254. The second column is used only for fingerprint confirmation, therefore, the laboratory does not provide the retention time window information. Because Aroclor 1254 was identified as a constituent of concern, the retention time information for the second column is provided. Data are not qualified on this basis.

Compound Quantitation

Samples were analyzed and reported at a dilution due to the presence of target compounds. Dilutions for samples are presented below. Reporting limits were adjusted for percent solids and dilutions.

A-B-S-E-R-002, A-B-SS-E-R-002, A-B-S-E-B-002	10x

Data Reviewer

7/28/03
Date

Glossary of Data Qualifiers

U	Not Detected.	The associated number indicates approximate sample concentration necessary to be detected.
UJ	Not Detected.	Quantitation limit may be inaccurate or imprecise.
J	Analyte Present.	Reported value may not be accurate or precise.
N	Consider Present.	Tentative identification. Special methods may be needed to confirm its presence or absence in future sampling efforts.
R	Unusable Result.	Analyte may or may not be present in the sample.
UR	Unusable Result.	Analyte may or may not be present in the sample.