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CONSTRUCTION COMPLETION REPORT, VARIOUS SITE REMEDIATIONS

FORT DEARBORN U.S. ARMY RESERVE CENTER
Chicago, Illinois

FINAL

Prepared for:

US Army Corps of Engineers
Louisville District

Prepared by:

MWH

August 2004

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TABLE OF CONTENTS

CHAPTER	PAGE
TABLE OF CONTENTS	i
LIST OF TABLES	ii
LIST OF FIGURES	ii
LIST OF APPENDICES	ii
ACRONYMS AND ABBREVIATIONS	iii
1.0 INTRODUCTION	1
1.1. BACKGROUND	1
1.2. SITE DESCRIPTIONS	2
1.2.1 Former Vehicle Inspection Pit (OTH-1)	2
1.2.2 Former Shop Sink (OTH-2)	3
1.2.3 Former Vehicle Wash Rack (OTH-3)	3
1.2.4 Oil-Water Separator (OWS-1)	3
1.3. PROJECT SCOPE AND OBJECTIVES	4
2.0 DEMOLITION ACTIVITIES	6
2.1. SITE PREPARATION	6
2.2. EXCAVATION	6
2.2.1 Former Shop Sink (OTH-2)	6
2.2.2 Former Vehicle Wash Rack (OTH-3)	8
2.2.3 Oil-Water Separator (OWS-1)	8
2.3. DRILLING AND SOIL SAMPLING	9
2.4. MATERIAL LOADING, TRANSPORTATION, AND DISPOSAL	9
2.5. EXCAVATION BACKFILLING	10
2.6. EMISSION AND EROSION CONTROL	10
2.7. SITE RESORATION AND EQUIPMENT DECONTAMINATION	11
2.8. INSPECTION AND OVERSIGHT	11
3.0 SAMPLING AND LABORATORY ANALYSIS	12
3.1. SITE CHARACTERIZATION SAMPLING	12
3.1.1 Former Vehicle Inspection Pit (OTH-1)	12
3.1.2 Former Shop Sink (OTH-2)	13
3.1.3 Former Vehicle Wash Rack (OTH-3)	14
3.1.4 Oil-Water Separator (OWS-1)	15
3.1.5 Analytical Data Validation	15
3.2. WASTE DISPOSAL SAMPLING	17
4.0 FINDINGS AND RECOMENDATIONS	19
5.0 REFERENCES	21

LIST OF TABLES

Table 1 Analytical Data Summary

LIST OF FIGURES

Figure 1 Fort Dearborn USARC Location Map
Figure 2 Work Area Location Map
Figure 3 Former Shop Sink (OTH-2), Excavation Area and Sample Locations
Figure 4 Former Vehicle Wash Rack (OTH-3), Excavation Area and Sample Locations
Figure 5 Oil-Water Separator (OWS-1), Excavation Area and Sample Locations
Figure 6 Former Vehicle Inspection Pit (OTH-1), Sample Locations

LIST OF APPENDICES

Appendix A Photograph Log
Appendix B Contractor's Field Notes
Appendix C Waste Manifests
Appendix D Laboratory Analytical Reports and Chain-of-Custody Forms
Appendix E Iron Risk Evaluation
Appendix F PAH Risk Evaluation
Appendix G Data Validation Report

ACRONYMS AND ABBREVIATIONS

ARDL	Applied Research & Development Laboratory
ARS	O'Hare Air Reserve Station
AST	Above Ground Storage Tank
bgs	below ground surface
BCT	Base Closure Team
BRAC	Base Realignment and Closure Act
CCR	Construction Completion Report
DOT	Department of Transportation
EBS	Environmental Baseline Survey
Harza	Harza Engineering Company
IAC	Illinois Administrative Code
IEPA	Illinois Environmental Protection Agency
mg/kg	milligrams per kilogram
MDEQ	Michigan Department of Environmental Quality
MWH	MWH Americas, Inc.
NPDES	National Pollutant Discharge Elimination System
OMS	Organizational Maintenance Shop
OTH-1	Former Vehicle Inspection Pit
OTH-2	Former Shop Sink
OTH-3	Former Vehicle Wash Rack
OWS-1	Oil-Water Separator
PAH	Polynuclear Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PID	Photoionization Detector
POV	Personal Owned Vehicle
QC	Quality Control
PRG	Preliminary Remediation Goal
SVOC	Semi-Volatile Organic Compound
TACO	Tiered Approach to Corrective Action Objectives
TAL	Target Analyte List
TCLP	Toxicity Characteristics Leaching Procedure
µg/kg	micrograms per kilogram
USACE	U.S. Army Corps of Engineers
USAR	U.S. Army Reserve
USARC	U.S. Army Reserve Center
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

1.0 INTRODUCTION

This Construction Completion Report (CCR) summarizes demolition activities completed at the Former Vehicle Inspection Pit (OTH-1), Former Shop Sink (OTH-2), Former Vehicle Wash Rack (OTH-3), and Oil-Water Separator (OWS-1) sites at the Fort Dearborn U.S. Army Reserve Center (USARC), 6540 N. Mannheim Road, Chicago, Illinois. The demolition activities were completed between 10 September 2002 and 18 September 2002 by Ferguson-Harbour, Inc. (Ferguson-Harbour), Groveport, Ohio under Contract No. DACA27-97-D-007, Delivery Order No. 0016. The U.S. Army Corps of Engineers, Louisville District (USACE) contracted MWH Americas, Inc (MWH) to prepare this CCR under Contract No. DACW45-94-D-0044, Delivery Order No. 0026.

This CCR was prepared in accordance with the requirements detailed in Section 9.0 of *Final Work Plan for Various Site Remediations, Fort Dearborn USARC, Chicago, Illinois* (Ferguson-Harbour, 2001a) as approved by the Illinois Environmental Protection Agency (IEPA) and United States Environmental Protection Agency – Region V (USEPA).

1.1. BACKGROUND

The Fort Dearborn USARC is an inactive facility that occupied 16.48 acres at the northeast corner of O'Hare International Airport, City of Chicago, Cook County, Illinois (Figure 1). The USARC property is bound on the east by Mannheim Road, on the north by Higgins Road, on the west by the former U.S. Air Force O'Hare Air Reserve Station (ARS), and on the south by the former O'Hare ARS and Bessie Coleman Drive. Two buildings are located on the USARC property, a Reserve Center Building and the Organizational Maintenance Shop (OMS). The Reserve Center Building was constructed for use as an administration office and drill hall. It is a multiple level irregular shaped building consisting of one, one and one-half, and two story rectangular building sections. The OMS Building was constructed for use as a vehicle maintenance facility. It is a one story rectangular building with concrete block walls and a brick façade. The parcel of property located between the Reserve Center Building and the OMS Building has historically been used for military and personnel owned vehicle (POV) parking. Remaining portions of the property have remained undeveloped since the time the property was first developed.

Under terms of the Base Realignment and Closure (BRAC) Act of 1995, the Fort Dearborn USARC was to be closed and the land transferred from the U.S. Army Reserve (USAR) to the

City of Chicago. In 1999, the USACE retained Harza Engineering Company (Harza), Chicago, Illinois to complete a Phase I Environmental Baseline Survey (EBS) for the USARC property. The purpose of the Phase I EBS was to document the environmental condition of the property, resulting from the storage, release, and disposal of hazardous substances and petroleum products, and their derivatives, over the installation's history. In part, results of the Phase I EBS (Harza, 2000) identified five (5) sites requiring further investigation to resolve data gaps. These sites were placed in Category 7 because available information was insufficient to make determination of the environmental condition at these sites. A Category 7 property is defined as a geographically continuous and mapable area where the presence of sources or releases of hazardous substances or petroleum products (including derivatives) is suspected, but not well characterized, based on the results of a properly scoped records search, chain of title review, aerial photograph review, physical inspection, set of employee interviews and possibly sampling and analysis. To date, the portion of the USARC property located south of the Reserve Center Building has been transferred by deed to the City of Chicago. Transfer by lease or deed of the remaining portion of the USARC property containing the Category 7 sites is pending.

This CCR addresses the removal of equipment and collection of associated soil samples for laboratory chemical analysis at four of the five identified Category 7 locations [i.e., Former Vehicle Inspection Pit (OTH-1), the Former Shop Sink (OTH-2), the Former Vehicle Wash Rack (OTH-3), and the Oil-Water Separator (OWS-1)] as shown on Figure 2. The goal of the sampling was to obtain sufficient site data to support a determination of suitability for transfer by deed or lease of the Category 7 property and/or identify previously unknown environmental concerns that would require further actions. A fifth Category 7 area, the Indoor Firing Range, was remediated by Cape Environmental, Inc. in November 1999 and is not addressed herein. Results of the remediation are presented in *Final Closure Report, Industrial Hygiene Surveillance and Air Monitoring Conducted During Range Decommissioning at Fort Dearborn Army Reserve Center, Small Arms Firing Range, Rosemont, Illinois* prepared by Cape Environmental, Inc. and dated May 2000.

1.2. SITE DESCRIPTIONS

1.2.1 Former Vehicle Inspection Pit (OTH-1)

OTH-1 is a former vehicle inspection pit located inside the west side of the OMS Building. Available records indicate that the pit was installed during construction of the OMS Building in 1961 and has been closed (i.e. filled and capped with concrete) since at least 1987. Construction specifications indicate that walls and floor of the pit were constructed of 8-inch thick concrete with stairways at each end to provide physical access. The pit was approximately 27 feet long,

including the descending stairways, 2.5 feet wide and 5 feet deep. The pit floor sloped toward a small sump in the center of the floor. No documentary evidence was found during the Phase I EBS (Harza, 2000) that the pit had been inspected to determine its integrity or assess the presence of possible spills prior to being filled.

1.2.2 Former Shop Sink (OTH-2)

OTH-2 is described as an improvised sink installed in 1989 along the west wall inside the OMS Building. The sink reportedly drained to a 55-gallon drum that had holes punched in it and was buried in the ground, west of the OMS Building. During an April 1999 visual site inspection, the sink was found to have been removed; however, a paint silhouette was observed along the west wall inside the OMS Building and an open hole in the exterior of the OMS Building wall was observed near the silhouette.

1.2.3 Former Vehicle Wash Rack (OTH-3)

OTH-3 is a former vehicle wash rack located near the southwest corner of the OMS Building. The wash rack is currently not in use and has reportedly not been used since cancellation of the facility's National Pollutant Discharge Elimination System (NPDES) permit in January 1978. Construction drawings indicate that the wash rack is 15 feet wide, 30 feet long and constructed of 12-inch thick concrete. The wash rack slopes to the south and drains along a riprap protected drainage way toward a shallow ditch near the property boundary. During an April 1999 visual site inspection, the concrete surface of the former wash rack was observed to be in poor condition with numerous cracks and surface spalling.

1.2.4 Oil-Water Separator (OWS-1)

OWS-1 is an approximate 1900-gallon capacity concrete oil-water separator near the northwest corner of the Reserve Center Building. The separator was installed in approximately 1977 and was used to pre-treat wash water from an adjacent wash rack prior to discharge to the municipal storm sewer system. Construction specifications indicate that the separator is 4 feet wide, 8 feet long, and 8 feet deep, with the unit installed at grade level [i.e. the bottom of the separator is approximately 8 feet below ground surface (bgs)]. Results of an interior inspection of OWS-1 in April 1999 indicated that the unit was generally in good condition, except water was noted seeping through the walls near the inlet and outlet pipes on the west and east ends of the unit.

1.3. PROJECT SCOPE AND OBJECTIVES

Field work completed for this project consisted of removing facilities and/or collecting soil samples for laboratory chemical analysis associated with the Former Vehicle Inspection Pit (OTH-1), the Former Shop Sink (OTH-2), the Former Vehicle Wash Rack (OTH-3), and the Oil-Water Separator (OWS-1) sites. Site-specific scope and objectives were as follows:

- Sample soils at the Former Vehicle Inspection Pit (OTH-1) for identification of possible contamination.
- Perform an investigative excavation to determine if a buried drum is located at the Former Shop Sink (OTH-2) site, remove the drum (if present), and sample surrounding soils to identify possible contamination.
- Remove the Former Vehicle Wash Rack (OTH-3) and sample surrounding soils to identify possible contamination.
- Remove the Oil-Water Separator (OWS-1) and sample surrounding soils to identify possible contamination.
- Remove any visually obvious contaminated soil found during equipment removal and restore each area to near original condition.

Principal work activities completed to meet these objectives included removal of concrete pavement and sidewalks to facilitate excavation, transporting and disposal of excavated materials, collecting soil samples for laboratory chemical analysis, and backfilling the excavations. Detailed discussion of the field activities performed by Ferguson-Harbour at individual site locations is provided in Section 2.0.

The scope of work also included removal of an empty, unattached 250-gallon aboveground storage tank (AST) that was resting on the ground near the north side of the OMS Building. No evidence of spills or leaks were observed to be associated with the tank. Therefore, no environmental sampling was required as part of this project. Upon mobilization, Ferguson-Harbour personnel noted that the tank was not present on the Ft Dearborn USARC property. No further information regarding the disposition of the tank is available

The USACE separately contracted MWH to prepare this CCR to document the demolition activities and associated sampling results. For purposes of this CCR, sample results are compared to USEPA Region IX Preliminary Remediation Goals (PRGs) for industrial soils

(USEPA, 2002), Title 35 Illinois Administration Code (IAC) Part 742, Tiered Approach to Corrective Action Objectives (TACO) Tier I residential and industrial-commercial criteria, and IEPA Provisional Remediation Objectives (for chemicals not listed in the TACO Tier I tables).

2.0 DEMOLITION ACTIVITIES

Demolition and associated sampling activities were performed in accordance with the Work Plan (Ferguson-Harbour, 2001a) and Field Sampling Plan (Ferguson-Harbour, 2002a). Principal work activities included: site preparation; excavation; drilling and soil sampling; material loading, transportation and disposal; excavation backfilling; emission and erosion control; site restoration and equipment decontamination; and inspection and oversight. Work completed at each site is described below, organized in accordance with the general type of work activity. Photographs taken during the fieldwork were provided by Ms. Rebecca Oswald, Illinois EPA. Selected representative photographs are provided in Appendix A. Copies of the contractor's field notes are provided in Appendix B.

2.1. SITE PREPARATION

In accordance with O'Hare International Airport requirements and the Illinois Underground Utility Facilities Damage Prevention Act (220 Illinois Compiled Statutes 50), an underground utilities search was conducted at each site prior to excavation. Utility lines were field marked by the owner of each utility and available utility maps for the USARC property were provided to Ferguson-Harbour field personnel for additional reference during implementation of the demolition activities.

An initial site health and safety meeting was held with site personnel to discuss the planned field operations and associated safety issues. A site walkthrough was conducted to familiarize site workers with the work areas. The field crews deployed and staged the necessary equipment to perform the planned field activities. Principal equipment used included a trackhoe excavator, rubber tire loader, core drill, compactor, and roll-off containers.

Other site preparation activities included removal of a portion of the fence near the Oil-Water Separator (OWS-1) site to allow access for excavation activities and coring holes in the concrete floor inside the OMS Building to facilitate drilling of boreholes at the Former Vehicle Inspection Pit (OTH-1).

2.2. EXCAVATION

2.2.1 Former Shop Sink (OTH-2)

The objective of the excavation at OTH-2 was to perform an investigative excavation to determine if a buried drum is located at the site, remove the drum (if present), and sample

surrounding soils to identify possible contamination. Excavation at the Former Shop Sink (OTH-2) began on 11 September 2002 and was completed on 13 September 2002. The initial excavation was completed to a depth of 42-inches below ground surface (bgs) across an area measuring 6 feet by 6 feet immediately adjacent to the northwest corner of the OMS Building. At the depth of 42-inches, a 4-inch diameter, clay sewer pipe was encountered and vertical excavation ceased. The sewer pipe was observed to connect into and receive water from the roof drain at the northwest corner of the OMS Building. The sewer pipe then proceeds westward to an undetermined location. An approximate 2-inch diameter round hole in the downspout and a broken bracket on the exterior wall of the OMS Building were observed during excavation, suggesting that the former shop sink might have connected to the downspout at some time. Excavation then resumed southward along the west wall of the OMS Building in an effort to locate the suspected buried 55-gallon drum. The 55-gallon drum was encountered approximately 3 feet south of the northwest corner of the OMS Building immediately adjacent to the building. The top of the drum was buried approximately 5-inches bgs and was filled with fine sand. The drum and its contents were removed in one piece and placed into a 85-gallon over-pack drum. Visual observation indicated that the drum was intact, with 6 drilled holes in the bottom of the drum and no apparent corrosion.

Following removal of the drum, staining was visually observed in soils immediately beneath the former drum location were detected but no photoionization detector (PID) readings above background were detected. Excavation proceeded to remove the stained soil. At completion, an area of approximately 6 feet long and 4 feet wide depth had been excavated and no PID readings above background were observed. The northern part of the excavation was terminated at a depth of 54-inches and the southern part, in the area of the former buried drum, was excavated to a depth of approximately 7.8 feet bgs. During excavation, water was observed to very slowly enter the floor of the southern part of the excavation. The excavation was left open overnight and was observed to contain approximately 5-inches of water in the bottom of the southern part of the excavation. The final limits of the excavation, as determined using a measured tape and referenced to existing surface features, are illustrated on Figure 3.

Following excavation, confirmation soil samples were collected from the sidewalls and floors of the excavation at the frequency specified in the Michigan Department of Environmental Quality (MDEQ) Waste Management Division Verification of Soil Remediation Guidance Document of April 1994, Revision 1 (MDEQ, 1994), as agreed by the Ft Dearborn USARC Base Closure Team (BCT). Four soil samples were collected from the walls and two from the floor of excavation as shown on Figure 3. The samples were shipped via overnight delivery service to Applied Research & Development Laboratory (ARDL) in Mt. Vernon, IL for analysis. Analytical results are discussed in Section. 3.1.2.

2.2.2 Former Vehicle Wash Rack (OTH-3)

The objective of the excavation at OTH-3 was to remove the former vehicle wash rack and sample surrounding soils to identify possible contamination. Excavation at the Former Vehicle Wash Rack began on 10 September 2002 and was completed on 12 September 2002. Excavation was performed to remove the concrete surface of the wash rack and the underlying baserock. During excavation, no obvious visual or olfactory evidence of contamination was observed and no PID readings above background were detected. At completion, the excavation was completed to a depth of 2-3 feet bgs over an area measuring 14.5 feet wide and 30 feet long. The final limits of the excavation, as determined using a measured tape and referenced to existing surface features, are illustrated on Figure 4.

Following excavation, confirmation soil samples were collected from the sidewalls and floors of the excavation at the frequency specified in MDEQ (1994) guidance. Four soil samples were collected from the walls and four from the floor of excavation as shown on Figure 4. Samples were collected at the locations specified in the Work Plan with exception of the floor samples, which were adjusted based on field conditions. The presence of large gravel required the samples to be relocated. Samples were collected as close as possible to the planned sample locations. The samples were shipped via overnight delivery service to Applied Research & Development Laboratory (ARDL) in Mt. Vernon, IL for analysis. Analytical results are discussed in Section 3.1.3.

2.2.3 Oil-Water Separator (OWS-1)

The objective of the sampling at OWS-1 was to remove the oil-water separator and sample surrounding soils to identify possible contamination. Excavation to remove the oil-water separator and the existing surrounding backfill materials began and was completed on 17 September 2003. During excavation, no obvious visual or olfactory evidence of contamination was observed and no PID readings above background were detected. However, over-excavation was required to address the dry, unstable soil surrounding the oil-water separator. Excavation was conducted to a depth of 8.5 feet over an area measuring approximately 12 feet by 7 feet. The limits of the excavation, as determined using a measured tape and referenced to existing surface features, are illustrated on Figure 5.

Confirmation samples were collected from the sidewalls and floors of the excavation at the frequency specified in MDEQ (1994) guidance. Four soil samples were collected from the walls and two from the floors of excavation as shown on Figure 5. The samples were then shipped via overnight delivery service to Applied Research & Development Laboratory (ARDL) in Mt. Vernon, IL for analysis. Analytical results are discussed in Section 3.1.3.

2.3. DRILLING AND SOIL SAMPLING

Four soil borings, as shown on Figure 6, were drilled in the area of the Former Vehicle Inspection Pit (OTH-1) to sample soils for identification of possible contamination. Borings were advanced using a hand auger to a depth of 6 feet bgs. During drilling, no base rock/gravel was encountered, which would have prevented sample collection at the planned depth interval. One soil sample was collected for laboratory chemical analysis from a depth of 6 feet bgs from each boring. The samples were shipped via overnight delivery service to Applied Research & Development Laboratory (ARDL) in Mt. Vernon, IL for analysis. Analytical results are discussed in Section 3.1.4.

2.4. MATERIAL LOADING, TRANSPORTATION, AND DISPOSAL

All excavated materials (contaminated soil and concrete) were placed by the trackhoe excavator into a front-end loader and then directly into roll-off containers. Following completion of excavation, samples were collected for disposal profiling in accordance with the Work Plan (Ferguson-Harbour, 2001a). The roll-off containers were temporarily held on-site until the disposal analytical results had been obtained, waste profiles generated, and acceptance by disposal facility obtained. Following acceptance from the waste disposal facility, roll-off boxes were transported and the contents disposed. Transportation of the excavated materials was conducted in accordance with the Work Plan (Ferguson-Harbour, 2001a). The roll-off containers were lined with plastic prior to loading to eliminate the need for decontamination, and the loaded containers were tarped to contain wind borne particulate matter that could escape during transport. The excavated soils were transported to Woodland Landfill, South Elgin, Illinois and the concrete was transported to Vulcan Materials Company, Elk Grove Village, Illinois.

Soil cuttings from borings at the Former Vehicle Inspection Pit (OTH-1) were placed in a single U.S. Department of Transportation (DOT) steel 55-gallon drum and staged inside the OMS Building until transportation and disposal was arranged. Following completion of field activities, a sample of the soil cuttings was collected for disposal profiling in accordance with the Work Plan (Ferguson-Harbour, 2001a). Following acceptance from the waste disposal facility, the 55-gallon drum was placed into a contaminated soil roll-off container, transported, and the contents disposed at the Woodland Landfill, South Elgin, Illinois.

The buried drum from the Former Shop Sink (OTH-2) excavation was placed in a 75-gallon over pack drum and staged inside the OMS Building until transportation and disposal was arranged. Following completion of field activities, a sample of the drum contents (pea gravel) was collected for disposal profiling. Following acceptance from the waste disposal facility, the drum

was placed into a contaminated soil roll-off container, transported, and the contents disposed at the Woodland Landfill, South Elgin, Illinois.

All wastewater (i.e., decontamination water and tank cleaning fluids) generated during the field work was collected and placed in a single fully enclosed poly tank, staged near the Oil-Water Separator (OWS-1) excavation. Following completion of field activities, a sample of the water was collected for disposal profiling in accordance with the Work Plan (Ferguson-Harbour, 2001a). Following acceptance from the waste disposal facility, the wastewater was transported by vacuum truck to RS Used Oil Services Inc, Chicago, IL for disposal.

Copies of the waste manifests and shipping manifests are included in Appendix C.

2.5. EXCAVATION BACKFILLING

The excavations at the Former Shop Sink (OTH-2), Former Vehicle Wash Rack (OTH-3), and Oil-Water Separator (OWS-1) were backfilled with CA-6 crushed limestone gravel obtained from an off-site source. Approximately 60 cubic yards of CA-6 gravel was used as backfill. The backfill material was placed in the excavation in approximately 1-foot lifts and compacted in-place using a gasoline powered vibrating compactor. To prevent rainwater from direct contact with any potentially contaminated soil remaining in the excavation area, the open excavations were lined with poly sheeting and were weighed down while the excavations were open after sampling and before the backfilling.

2.6. EMISSION AND EROSION CONTROL

Organic vapors did not pose a concern during the demolition activities and did not require any upgrades in the level of personal protection based on the criteria specified in the Health and Safety Plan (Ferguson-Harbour, 2001b). Dust was monitored by visually during soil excavation, loading, and transportation activities. Due to the limited amount of excavated soils and the limited traffic, dust generation did not pose a problem. Roll-off containers were tarped prior to leaving the site to control particulate emissions during transportation.

The need for erosion controls was reduced by the use of roll-off containers for construction debris and excavated soils. There was no rainfall throughout the fieldwork. Therefore, no additional erosion control measures were required.

2.7. SITE RESORATION AND EQUIPMENT DECONTAMINATION

At the Oil-Water Separator (OWS-1), topsoil was placed at the ground surface in the immediate area of the excavation. Grass seed was then raked into the topsoil. All other excavated areas were dressed out with CA-6 crushed limestone gravel and compacted at the surface. A fencing contractor repaired the portion of fence removed during the excavation at the Oil-Water Separator (OWS-1) site. The boreholes at the Former Vehicle Inspection Pit (OTH-1) were backfilled with CA-6 crushed limestone gravel and the holes in the concrete were plugged using an epoxy grout.

Prior to removal from the Ft Dearborn USARC and between each work site, excavation equipment was scraped clean to remove any potentially contaminated soil. Potentially contaminated soil removed during this process was collected and handled in the same manner as excavated soils (see Section 2.4). Decontamination of field sampling equipment was performed in accordance with the Field Sampling Plan (Ferguson-Harbour, 2002a).

2.8. INSPECTION AND OVERSIGHT

Inspections were performed by Ferguson-Harbour personnel on a continuous basis throughout the duration of field activities. Inspections were performed to identify the presence of visually contaminated soils, to check that the required excavation depths were maintained, to check that the required samples were collected and appropriate sampling procedures utilized, to check for safe work practices and personal protective equipment (PPE) guidelines, and to check that proper decontamination of equipment was performed.

The IEPA provided regular field oversight throughout the project. The IEPA oversight person, Ms. Rebecca Oswald, Environmental Protection Specialist, collected photographic documentation of the project, communicated with the IEPA Project Manager regarding field decisions and observations, and oversaw sample collection activities.

The USACE provided regular field oversight throughout the project. USACE personnel checked that the field activities were being performed in accordance with the Work Plan (Ferguson-Harbour, 2001a), provided additional health and safety and site control inspections, and communicated with the USACE Project Manager regarding the status and general quality of the fieldwork. USACE personnel were supported by MWH during portions of the fieldwork to observe the work.

3.0 SAMPLING AND LABORATORY ANALYSIS

Site characterization and waste characterization samples were collected at the locations and frequency specified in the Work Plan (Ferguson-Harbour, 2001a). Sample collection and handling was completed in accordance with the methods and procedures specified in the Field Sampling Plan (Ferguson-Harbour, 2002a). Samples were analyzed for chemicals of potential concern using the analytical methods outlined in the Quality Assurance Project Plan (Ferguson-Harbour, 2002b). Samples were shipped via overnight delivery service to Applied Research & Development Laboratory (ARDL) in Mt. Vernon, IL for analysis. A summary of the sampling activities conducted for site characterization at individual site locations is outlined in Section 3.1. Waste disposal characterization sampling is summarized in Section 3.2. Copies of the laboratory analytical reports and the accompanying chain-of-custody forms are presented in Appendix D. A summary of the site characterization sample results is presented in Table 1.

3.1. SITE CHARACTERIZATION SAMPLING

3.1.1 Former Vehicle Inspection Pit (OTH-1)

Four soil borings were drilled to depths of six feet each in the area of the Former Vehicle Inspection Pit (OTH-1). One soil sample from each boring (FIP-001-06-SSS, FIP-002-06-SSS, FIP-003-06-SSS, FIP-004-06-SSS) was collected at the locations and depths indicated on Figure 6. Samples were analyzed for Target Analyte List (TAL) metals, semi-volatile organic compounds (SVOCs), polynuclear aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and polychlorinated biphenyls (PCBs).

No organic chemicals were detected exceeding USEPA Region IX PRGs (industrial), TACO Tier 1 (industrial-commercial and residential) criteria were detected. Organic chemicals detected at the site below USEPA Region IX PRGs and TACO Tier 1 criteria included: the VOCs *methylene chloride in samples FIP-001-06-SSS, FIP-002-06-SSS, and FIP-004-06-SSS*, and *acetone* in sample FIP-002-06-SSS; the PAHs *benzo(a)pyrene* and benzo(g,h,i)perylene in samples FIP-002-06-SSS and FIP-004-06-SSS, *chrysene* in sample FIP-004-06-SSS, and *fluoranthene* and *pyrene* in each sample; and the SVOCs *benzylbutylphthalate* in samples FIP-002-06-SSS and FIP-003-06-SSS, and *bis(2-ethylhexyl)phthalate* in sample FIP-002-06-SSS. No PCBs were detected in any sample.

Arsenic exceeded the USEPA Region IX industrial PRG of 1.6 mg/kg in each sample. The highest detected arsenic concentration detected at the site (14 mg/kg) was reported in sample FIP-001-06-SSS and marginally exceeded the TACO Tier 1 residential (ingestion) criteria and

the background concentration for the region of 13 mg/kg, as provided in 35 IAC §724.405(b). Arsenic concentrations in the three other samples analyzed at this site ranged from 8.6 to 9.8 mg/kg, below the TACO comparative criteria used. All detected arsenic concentrations were below TACO Tier 1 construction worker, industrial-commercial worker, residential inhalation, and migration to Class I groundwater pathways. No other inorganic chemicals exceeded either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial-commercial and residential) criteria.

No organic or inorganic chemicals exceeded the IEPA Provisional Remediation Objectives, except iron. Iron exceeded only the residential ingestion Provisional Remediation Objective of 23,000 mg/kg in sample FIP-001-06-SSS at 27,600 mg/kg. A risk calculation was performed to evaluate the potential significance of this iron exceedance. Results are presented in Appendix E and indicate iron concentrations in site soils are not expected to represent a hazard to human health.

3.1.2 Former Shop Sink (OTH-2)

A total of six field soil samples (FSS-001-04-ESW, FSS-002-04-ESW, FSS-003-04-ESW, FSS-004-04-ESW, FSS-005-08-EBT, and FSS-006-05-EBT) were collected for laboratory chemical analysis from the walls and floor of the excavation at OTH-2. Sample locations and depths are illustrated on Figure 3. Each sample was analyzed for TAL metals, SVOCs, PAHs, VOCs, and PCBs.

No organic chemicals exceeding USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial-commercial and residential) criteria were detected. Organic chemicals detected in one or more samples at the site below USEPA Region IX PRGs and TACO Tier 1 criteria included: the VOC *ethylbenzene, and m,p-xylene*; the PAHs *acenaphthene, acenaphthylene*, *anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluorathene, benzo(g,h,i)perylene, benzo(k)fluorathene, chrysene, dibenzo(a,h)anthracene, flouranthene, fluorene, indeno(1,2,3-c,d)pyrene, naphthalene, phenanthrene,* and *pyrene*; and the SVOCs *2-methylnaphthalene, and benzylbutylphthalate.*. No PCBs were detected in any sample.

Arsenic exceeded the USEPA Region IX industrial PRG of 1.6 mg/kg in each sample. The detected arsenic concentrations ranged from 7.4 to 11.6 mg/kg, below the TACO Tier 1 construction worker, industrial-commercial worker, residential, and migration to Class I groundwater pathways, and the background concentration for the region of 13 mg/kg. No other inorganic chemicals exceeded either USEPA Region IX PRGs (industrial), TACO Tier 1 (industrial-commercial and residential) criteria.

No organic or inorganic chemicals exceeded the IEPA Provisional Remediation Objectives, except iron. Iron exceeded only the residential ingestion Provisional Remediation Objective of 23,000 mg/kg in samples FSS-001-04-ESW and FSS-002-04-ESW at concentrations of 26,300 mg/kg and 26,100 mg/kg. A risk calculation was performed to evaluate the potential significance of this exceedance. Results are presented in Appendix E and indicate iron concentrations in site soils are not expected to represent a hazard to human health.

3.1.3 Former Vehicle Wash Rack (OTH-3)

A total of eight field soil samples (VWR-001-03-EBT, VWR-001-03-ESW, VWR-002-02-ESW, VWR-003-02-ESW, VWR-004-02-ESW, VWR-005-02-EBT, VWR-006-02-EBT and VWR-007-04-EBT) were collected for laboratory chemical analysis from the walls and floor of the excavation at OTH-3. Sample locations and depths are illustrated on Figure 4. Each sample was analyzed for TAL metals, SVOCs, PAHs, VOCs, ethylene glycol, and PCBs.

No organic chemicals exceeding either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial) criteria were detected. *Benzo(a)pyrene* (167 μg/kg) in sample VWR-002-02-ESW was the only organic chemical detected that exceeded TACO Tier 1 (residential) criteria and marginally exceeded the ingestion pathway criterion (90 μg/kg). A TACO Tier 3 risk calculation was performed to evaluate the potential significance of this exceedance. Results are presented in Appendix F and indicate risks from exposure to PAHs in site soils, including benzo(a)pyrene, are not significant. Organic chemicals detected in one or more samples at the site below USEPA Region IX PRGs and TACO Tier 1 (industrial-commercial) criteria included: the VOC *acetone* in sample VWR-006-02-EBT; the PAHs *acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluorathene, benzo(g,h,i)perylene, benzo(k)fluorathene, chrysene, dibenzo(a,h)anthracene, flouranthene, fluorene, indeno(1,2,3-c,d)pyrene, phenanthrene,* and *pyrene*; and the SVOCs *benzylbutylphthalate* and *bis(2-ethylhexyl)phthalate*; and the PCB *Arochlor-1260*. No *Ethylene Glycol* was detected in any sample.

Arsenic exceeded the USEPA Region IX industrial PRG of 1.6 mg/kg in each sample. The detected arsenic concentrations ranged from 7.5 to 12.9 mg/kg, below the TACO Tier 1 construction worker, industrial-commercial worker, residential, and migration to Class I groundwater pathways, and the background concentration for the region of 13 mg/kg. No other inorganic chemicals exceeded either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial-commercial and residential) criteria.

No organic or inorganic chemicals exceeded the IEPA Provisional Remediation Objectives, except iron. Iron exceeded only the residential ingestion Provisional Remediation Objective of 23,000 mg/kg in samples VWR-001-03-EBT and VWR-005-02-EBT at concentrations of 28,400 mg/kg and 23,900 mg/kg. A risk calculation was performed to evaluate the potential significance of this iron exceedance. Results are presented in Appendix E and indicate iron concentrations in site soils are not expected to represent a hazard to human health.

3.1.4 Oil-Water Separator (OWS-1)

A total of six field soil samples (OWS-001-05-ESW, OWS-002-05-ESW, OWS-003-04-ESW, OWS-004-05-ESW, OWS-005-08-EBT, and OWS-006-08-EBT) were collected for laboratory chemical analysis from the walls and floor of the excavation at OWS-1. Sample locations and depths are illustrated on Figure 5. Each sample was analyzed for TAL metals, SVOCs, PAHs, VOCs, ethylene glycol, and PCBs.

No organic chemicals exceeding either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial-commercial and residential) criteria were detected. Organic chemicals detected in one or more samples at the site below USEPA Region IX PRGs and TACO Tier 1 criteria included: the VOC *toluene*; the PAHs *anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluorathene, benzo(g,h,i)perylene, benzo(k)fluorathene, chrysene, flouranthene, fluorene, indeno(1,2,3-c,d)pyrene, phenanthrene,* and *pyrene*. No SVOCs or PCBs were detected in any sample.

Arsenic exceeded the USEPA Region IX industrial PRG of 1.6 mg/kg in each sample analyzed. The detected arsenic concentrations ranged from 6.3 to 10.3 mg/kg, well below the TACO Tier 1 construction worker, industrial-commercial worker, residential, and migration to Class I groundwater pathways, and the background concentration for the region of 13 mg/kg. No other inorganic chemicals exceeded either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial-commercial and residential) criteria.

3.1.5 Analytical Data Validation

All analytical data used in this report were subjected to data validation and found to be usable, except as specifically noted herein. A data validation report entitled *Data Validation Report for Various Site Remediations, Fort Dearborn USARC, Illinois* (MWH, 2003) was prepared and is included in Appendix G. The data validation report verified and validated the site characterization analytical data reported by the fixed laboratory, ARDL of Mt. Vernon, Illinois. The data validation was completed based on the criteria presented in the Quality Assurance

Project Plan (Ferguson-Harbour, 2002b). Principal findings and conclusions of the data validation process are highlighted below:

- Based on the results of equipment tuning, initial calibration, initial calibration verification, and continuing calibration the data are considered precise as qualified.

- Based on the results of the holding time evaluation, the data for this project were considered accurate as qualified, except for those data that were qualified with an "R" flag. All extraction and holding times were met except for soil VOC sample VWR-001-03-ESW. The results were rejected and are not usable.

- Based on the results for internal standard recoveries, surrogate spike recoveries, laboratory control sample/laboratory control sample duplicate analyses, and matrix spike/matrix spike duplicate analyses the results are precise as qualified.

- Trace concentrations of methylene chloride were detected in the method and trip blanks. Methylene chloride is recognized by the USEPA as a common laboratory contaminant. The reported methylene chloride values are attributed to laboratory contamination and not representative of site conditions.

- Trace concentrations of methylene chloride, acetone, chloroform and toluene were detected in the equipment rinseate blanks. Methylene chloride and acetone are attributed to laboratory contamination and are not representative of site conditions. Chloroform and toluene were not detected in any of the associated samples.

- All investigative and quality control (QC) samples were collected as scheduled. Sample collection completeness is 100 percent.

- A comparison of sample results and relative percent differences (RPDs) indicates good agreement between parent samples and their respective duplicates.

- The analytical completeness was 100 percent for all analyses except soil VOCs. The soil VOCs had a completeness of 96 percent due to the rejected soil VOC sample, which exceeded the completeness goal of 90 percent.

- The reporting limits for 2-4-Dinitrophenol, 2-4-Dinitrotoluene, 2,6-Dinitrotoluene, 3-3'-Dichlorobenzidine, bis(2-chloroethyl)ether, nitrobenzene, n-nitrosodi-n-propylamine, pentachlorophenol, and vinyl chloride were above the TACO residential and/or migration

to Class I groundwater criteria due to limitations inherent in available laboratory testing methods. Best available technology and standard analytical methods, with normal reporting limits, were utilized. However, this is a common occurrence in environmental investigations. This contributes to the overall uncertainty associated with the results of the investigation but is not considered significant.

Overall, the data collected were of sufficient quality and quantity for intended data end use.

In addition, a minimum of 10% of the data was fully validated by an independent USACE contractor, Lee A. Knupple and Associates, Inc. of Montgomery, Ohio. Copies of the independent validation report were submitted separately.

3.2. WASTE DISPOSAL SAMPLING

A total of 75 cubic yards of soil and 90 cubic yards of concrete were excavated from the Former Shop Sink (OTH-2), the Former Vehicle Wash Rack (OTH-3), and the Oil-Water Separator (OWS-1) sites. Five roll-off containers were filled with soil and six containers were filled with concrete. Composite and discrete samples of the excavated soil were collected for disposal profiling. Two composite and discrete samples of the soil and two composite and discrete samples of the concrete were collected for waste characterization purposes. The composite samples were analyzed for Toxicity Characteristics Leaching Procedure (TCLP) SVOCs, TCLP metals, TCLP PCBs, pH, paint filter, and flash point. The discrete samples were analyzed for TCLP VOCs. Based on the analytical results, the soil was determined to be non-hazardous waste in accordance with the criteria specified in 35 IAC §721.121, §721.122 and §721.124. The loading, transportation, and disposal of the waste materials are discussed in Section 2.4.

A total of 790 gallons of wastewater was generated during this project and was placed in a single fully enclosed poly tank. One sample of the wastewater was collected for waste characterization purposes. The sample was analyzed for TAL metals, VOCs, PCBs, SVOCs, flashpoint, and pH. Based on the analytical results, the water was determined to be non-hazardous waste in accordance with the criteria specified in 35 IAC §721.121, §721.122 and §721.124. The loading, transportation, and disposal of the waste materials are discussed in Section 2.4.

One 55-gallon drum of soil cuttings from the former vehicle inspection pit (OTH-1) investigation was generated during this project. One composite and one discrete sample of the soil cuttings were collected for waste characterization purposes. The composite sample was analyzed for TCLP SVOCs, TCLP metals, TCLP PCBs, pH, paint filter, and flash point and the discrete sample was analyzed for TCLP VOCs. Based on the analytical results, the soil cuttings were

determined to be non-hazardous waste in accordance with the criteria specified in 35 IAC §721.121, §721.122 and §721.124. The loading, transportation, and disposal of the waste materials are discussed in Section 2.4.

One composite sample and one discrete sample of the contents of the former buried drum at the Former Shop Sink (OTH-2) were collected for waste characterization purposes. The composite sample was analyzed for TCLP SVOCs, TCLP metals, TCLP PCBs, pH, paint filter, and flash point and the discrete sample was analyzed for TCLP VOCs. Based on the analytical results, the drum contents were determined to be non-hazardous waste in accordance with the criteria specified in 35 IAC §721.121, §721.122 and §721.124. The loading, transportation, and disposal of the waste materials are discussed in Section 2.4.

4.0 FINDINGS AND RECOMENDATIONS

This CCR presents the results of demolition activities completed at the Former Vehicle Inspection Pit (OTH-1), Former Shop Sink (OTH-2), Former Vehicle Wash Rack (OTH-3), and Oil-Water Separator (OWS-1) sites at the Fort Dearborn U.S. Army Reserve Center (USARC) 6540 N. Mannheim Road, Chicago, Illinois. Demolition activities were completed between 10 September 2002 and 18 September 2002 by Ferguson-Harbour, Inc., Groveport, Ohio under contract to the USACE. Principal findings are summarized below:

1. No obvious visual evidence of contamination was observed during field activities at the Former Vehicle Inspection Pit (OTH-1), the Former Vehicle Wash Rack (OTH-3), and the Oil-Water Separator (OWS-1) sites.

2. Stained soils in the immediate vicinity of the buried drum at the Former Shop Sink (OTH-2) were observed during excavation activities and removed.

3. No organic chemicals exceeding either USEPA Region IX PRGs (industrial) or TACO Tier 1 industrial-commercial criteria were detected. All organic chemicals detected were also below TACO Tier 1 residential criteria, except benzo(a)pyrene (167 μg/kg) in sample VWR-002-02-ESW at the Former Vehicle Wash Rack (OTH-3) which marginally exceeded the ingestion pathway criterion (90 μg/kg). A TACO Tier 3 risk calculation was performed to evaluate the potential significance of this exceedance. Results are presented in Appendix F and indicate risks due to exposure to PAHs, including benzo(a)pyrene, in site soils are not significant.

4. No metals, except arsenic, were detected at concentrations exceeding USEPA Region IX (industrial) PRGs and/or regional background concentrations.

5. Arsenic exceeded the USEPA Region IX PRG (industrial) of 1.6 mg/kg in each of the 24 samples analyzed. Concentrations ranged from 6.3 to 14 mg/kg. All arsenic concentrations were below the regional background concentration (13 mg/kg) except sample FIP-001-06-SSS at the Former Vehicle Inspection Pit (OTH-1), which marginally exceeded the regional background concentration at 14 mg/kg. Arsenic concentrations in the three other samples analyzed at OTH-1 ranged from 8.6 to 9.8 mg/kg, below the regional background concentration.

6. All metal concentrations were below TACO Tier 1 construction worker, industrial-commercial worker, residential inhalation, and migration to Class I groundwater pathway criteria.

7. All detected chemicals were below IEPA Provisional Remediation Objectives except iron. Iron exceeded only the residential ingestion Provisional Remediation Objective of 23,000 mg/kg in samples VWR-001-03-EBT and VWR-005-02-EBT at the Former Vehicle Wash Rack (OTH-3), FSS-001-04-ESW and FSS-002-04-ESW at the Former Shop Sink (OTH-2), and FIP-001-06-SSS at Former Vehicle Inspection Pit (OTH-1). A risk calculation was performed to evaluate the potential significance of these exceedances. Results are presented in Appendix E and indicate iron concentrations in site soils are not expected to represent a hazard to human health.

Based on these findings, no further action is recommended at the Former Vehicle Inspection Pit (OTH-1), the Former Shop Sink (OTH-2), the Former Vehicle Wash Rack (OTH-3) and the Oil/Water Separator (OWS-1) sites. The USARC property is suitable for future unrestricted reuse and institutional controls are not required given the marginal and sporadic exceedances of comparative criteria and results of the risk evaluations completed.

5.0 REFERENCES

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Tables

MWH

Table 1
Analytical Data Summary
Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results								
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SCIGW	FIP-001-06-SSS	FIP-002-06-SSS	FIP-003-06-SSS	FIP-004-06-SSS	FSS-001-04-ESW	FSS-002-04-ESW	FSS-003-04-ESW	FSS-004-04-ESW	FSS-005-08-EBT
SVOCs(ug/kg)																	
1,2,4-Trichlorobenzene	3.0E+06	2000000	920000	20000000	3200000	780000	3200000	5000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
1,2-Dichlorobenzene	3.7E+05	18000000	310000	180000000	560000	7000000	560000	17000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
1,3-Dichlorobenzene	6.3E+04	180[a]	570[a]	1800[a]	570[a]	70[a]	570[a]	0.2[a]	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
1,4-Dichlorobenzene	7.9E+03	--	340000	--	17000000	--	11000000	2000	405 UJ	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
2,4,5-Trichlorophenol	6.2E+07	200000000	--	200000000	--	7800000	--	270000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
2,4,6-Trichlorophenol	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
2,4-Dichlorophenol	1.8E+06	610000	--	6100000	--	230000	--	1000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
2,4-Dimethylphenol	1.2E+07	41000000	--	41000000	--	1600000	--	9000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
2,4-Dinitrophenol	1.2E+06	410000	--	4100000	--	160000	--	200	405 UJ	423 UJ	406 UJ	411 UJ	411 UJ	419 UJ	400 UJ	404 U	407 U
2,4-Dinitrotoluene	1.2E+06	180000	--	8400	--	900	--	0.8	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
2,6-Dinitrotoluene	6.2E+05	180000	--	8400	--	900	--	0.7	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
2-Chloronaphthalene	2.3E+07	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
2-Chlorophenol	2.4E+05	10000000	53000000	10000000	53000000	390000	53000000	4000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
2-Methylnaphthalene	--	61000000	--	61000000	--	2300000	--	29000	405 U	423 U	406 U	411 U	411 U	419 U	99.2 J	404 U	407 U
2-Methylphenol (O-Cresol)	3.1E+07	100000000	--	100000000	--	3900000	--	15000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
2-Nitroaniline	1.8E+04	--	7.5[a]	--	120[a]	--	73[a]	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
2-Nitrophenol	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
3,3'-Dichlorobenzidine	3.8E+03	280000	--	13000	--	1000	--	7	405 UJ	423 UJ	406 U	411 UJ	411 UJ	419 UJ	400 UJ	404 U	407 U
3-Nitroaniline	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
4,6-Dinitro-2-methylphenol	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
4-Bromophenyl Phenyl Ether	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
4-Chloro-3-methylphenol	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
4-Chlorophenyl Phenyl Ether	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
4-Methylphenol (P-Cresol)	3.1E+06	1000[a]	--	10000[a]	--	390[a]	--	0.24[a]	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
4-Nitroaniline	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
4-Nitrophenol	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
Benzyl Butyl Phthalate	1.0E+08	410000000	930000	410000000	930000	16000000	930000	930000	405 U	952 =	77.3 J	411 U	411 U	419 U	400 U	404 U	1310 =
Bis(2-Chloroethoxy) Methane	--	--	--	--	--	--	--	--	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
Bis(2-Chloroethyl) Ether	5.5E+02	75000	660	5000	470	600	200	0.4	405 UJ	423 U	406 UJ	411 UJ	411 U	419 U	400 U	404 U	407 U
Bis(2-Chloroisopropyl) Ether	7.4E+03	8200[a]	1300[a]	82000[a]	1300[a]	3100[a]	1300[a]	2.4[a]	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
Bis(2-Ethylhexyl) Phthalate	1.2E+05	4100000	31000000	410000	31000000	46000	31000000	3600000	405 U	124 J	406 U	411 U	411 U	419 U	400 U	404 U	407 U
Dibenzofuran	3.1E+06	820[a]	--	8200[a]	--	310[a]	--	15[a]	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
Diethyl Phthalate	1.0E+08	1000000000	2000000	1000000000	2000000	63000000	2000000	470000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
Dimethyl Phthalate	1.0E+08	1000000[a]	1300[a]	1000000[a]	1300[a]	780000[a]	1300[a]	380[a]	405 U	423 U	406 U	411 U	411 UJ	419 UJ	400 UJ	404 UJ	407 U
Di-N-Butyl Phthalate	6.2E+07	200000000	2300000	200000000	2300000	7800000	2300000	2300000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
Di-N-Octylphthalate	2.5E+07	4100000	10000000	41000000	10000000	1600000	10000000	10000000	405 U	423 UJ	406 U	411 U	411 U	419 U	400 U	404 U	407 U
Hexachlorobenzene	1.1E+03	78000	2600	4000	1800	400	1000	2000	405 UJ	423 UJ	406 U	411 UJ	411 U	419 U	400 U	404 U	407 U
Hexachlorobutadiene	2.2E+04	41[a]	180[a]	410[a]	1000[a]	16[a]	1000[a]	2.9[a]	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
Hexachlorocyclopentadiene	3.7E+06	14000000	1100	14000000	16000	550000	10000	400000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
Hexachloroethane	1.2E+05	2000000	--	2000000	--	78000	--	500	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
Isophorone	1.8E+06	410000000	4600000	410000000	4600000	15600000	4600000	8000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
Nitrobenzene	1.0E+05	1000000	9400	1000000	140000	39000	92000	100	405 UJ	423 U	406 UJ	411 UJ	411 U	419 U	400 U	404 U	407 U
N-Nitrosodi-N-Propylamine	2.5E+02	18000	--	800	--	90	--	0.05	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U
N-Nitrosodiphenylamine	3.5E+05	25000000	--	1200000	--	130000	--	1000	405 UJ	423 U	406 UJ	411 UJ	411 U	419 U	400 U	404 U	407 U
Pentachlorophenol	9.0E+03	520000	--	24000	--	3000	--	30	405 U	423 U	406 U	411 U	411 UJ	419 UJ	400 UJ	404 U	407 U
Phenol	1.0E+08	120000000	--	1000000000	--	47000000	--	100000	405 U	423 U	406 U	411 U	411 U	419 U	400 U	404 U	407 U

Table 1
Analytical Data Summary
Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

		TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results								
Parameter	Region 9 Industrial PRG	CWING	CWINH	ICING	ICINH	RESING	RESINH	SCIGW	FIP-001-06-SSS	FIP-002-06-SSS	FIP-003-06-SSS	FIP-004-06-SSS	FSS-001-04-ESW	FSS-002-04-ESW	FSS-003-04-ESW	FSS-004-04-ESW	FSS-005-08-EBT
VOCs(ug/kg)																	
1,1,1-Trichloroethane	1.2E+06	--	1200000	--	1200000	--	1200000	2000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
1,1,2,2-Tetrachloroethane	9.3E+02	--	--	--	--	--	--	--	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
1,1,2-Trichloroethane	1.6E+03	8200000	1800000	8200000	1800000	310000	1800000	20	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
1,1-Dichloroethane	1.7E+06	200000000	130000	200000000	1700000	7800000	1300000	23000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
1,1-Dichloroethene	4.1E+05	1800000	300000	18000000	1500000	700000	1500000	60	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
1,2-Dichloroethane	6.0E+02	1400000	990	63000	700	7000	400	20	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
1,2-Dichloropropane	7.4E+02	1800000	500	84000	23000	9000	15000	30	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
2-Hexanone	--	8200[a]	0.72[a]	82000[a]	110[a]	3100[a]	70[a]	1.3[a]	24.5 U	25.6 U	24.6 U	24.9 U	24.9 U	25.4 U	24.2 U	24.5 U	24.7 U
Acetone	6.0E+06	200000000	100000000	200000000	100000000	7800000	100000000	16000	61.3 U	71.9 =	61.5 U	62.3 U	62.3 U	63.5 U	60.5 U	61.3 U	61.7 U
Benzene	1.3E+03	2300000	2200	100000	1600	12000	800	30	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
Bromochloromethane	--	--	--	--	--	--	--	--	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
Bromodichloromethane	1.8E+03	2000000	3000000	92000	3000000	10000	3000000	600	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
Bromoform	2.2E+05	16000000	140000	720000	100000	81000	53000	800	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
Bromomethane	1.3E+04	1000000	3900	2900000	15000	110000	10000	200	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	12.1 U	12.3 U	12.3 U
Carbon disulfide	7.2E+05	20000000	9000	200000000	720000	7800000	720000	32000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
Carbon tetrachloride	5.5E+02	410000	900	44000	640	5000	300	70	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
Chlorobenzene	5.3E+05	4100000	1300	41000000	210000	1600000	130000	1000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
Chloroethane	6.5E+03	82000[a]	94[a]	820000[a]	1500[a]	31000[a]	1500[a]	15[a]	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	12.1 U	12.3 U	12.3 U
Chloroform	1.2E+04	2000000	760	940000	540	100000	300	600	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
Chloromethane	2.6E+03	820[a]	1.1[a]	8200[a]	170[a]	310[a]	110[a]	0.14[a]	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	12.1 U	12.3 U	12.3 U
cis-1,2-Dichloroethene	1.5E+05	20000000	1200000	20000000	1200000	780000	1200000	400	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
cis-1,3-Dichloropropene	--	--	--	--	--	--	--	--	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
Dibromochloromethane	2.6E+03	41000000	1300000	41000000	1300000	1600000	1300000	400	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
Ethylbenzene	2.0E+04	20000000	58000	200000000	400000	7800000	400000	13000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	4.5 J	6.2 U
Ethylene Glycol	1.0E+08	410000[a]	100000[a]	1000000[a]	100000[a]	160000[a]	100000[a]	56[a]									
m,p-Xylene (Sum Of Isomers)	4.2E+05	--	--	--	--	--	--	--	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	25.8 =	6.2 U
Methyl ethyl ketone	2.7E+07	--	--	--	--	--	--	--	61.3 U	64 U	61.5 U	62.3 U	62.3 U	63.5 U	60.5 U	61.3 U	61.7 U
Methyl isobutyl ketone	2.8E+06	--	--	--	--	--	--	--	24.5 U	25.6 U	24.6 U	24.9 U	24.9 U	25.4 U	24.2 U	24.5 U	24.7 U
Methylene chloride	2.1E+04	12000000	34000	760000	24000	85000	13000	20	8 =	6.7 =	6.2 U	7.1 =	7.6 UB	6.2 UB	4.7 UB	5.5 UB	6.2 U
o-Xylene (1,2-Dimethylbenzene)	--	410000000	410000	1000000000	410000	160000000	410000	190000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
Styrene	1.7E+06	41000000	430000	410000000	1500000	16000000	1500000	4000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
Tetrachloroethene(PCE)	3.4E+03	2400000	28000	110000	20000	12000	11000	60	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
Toluene	5.2E+05	410000000	42000	410000000	650000	16000000	650000	12000	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
trans-1,2-Dichloroethene	2.3E+05	41000000	3100000	41000000	3100000	1600000	3100000	700	6.1 UJ	6.4 UJ	6.2 UJ	6.2 UJ	6.2 U	6.3 U	6.1 U	6.1 U	6.2 UJ
trans-1,3-Dichloropropene	--	--	--	--	--	--	--	--	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
Trichloroethene (TCE)	1.1E+02	1200000	12000	520000	8900	58000	5000	60	6.1 U	6.4 U	6.2 U	6.2 U	6.2 U	6.3 U	6.1 U	6.1 U	6.2 U
Vinyl chloride	7.5E+02	170000	1100	7900	1100	460	200	10	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	12.1 U	12.3 U	12.3 U

Table 1
Analytical Data Summary
Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results								
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	FIP-001-06-SSS	FIP-002-06-SSS	FIP-003-06-SSS	FIP-004-06-SSS	FSS-001-04-ESW	FSS-002-04-ESW	FSS-003-04-ESW	FSS-004-04-ESW	FSS-005-08-EBT
PAHs(ug/kg)																	
Acenaphthene	2.9E+07	120000000	--	120000000	--	4700000	--	570000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	12.1 U	12.3 U	12.3 U
Acenaphthylene	--	61000000	--	61000000	--	2300000	--	15000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	12.1 U	12.3 U	12.3 U
Anthracene	1.0E+08	610000000	--	610000000	--	23000000	--	12000000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	5.1 J	5.8 J	12.3 U
Benzo(a)anthracene	2.1E+03	170000	--	8000	--	900	--	2000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	11.6 J	9.1 J	12.3 U
Benzo(a)pyrene	2.1E+02	17000	--	800	--	90	--	8000	12.3 U	32 =	12.3 U	10.7 J	12.5 U	12.7 U	10.5 J	6.7 J	12.3 U
Benzo(b)fluoranthene	2.1E+03	170000	--	8000	--	900	--	5000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	11.7 J	7.7 J	12.3 U
Benzo(g,h,i)perylene	--	61000000	--	61000000	--	2300000	--	16000000	12.3 U	23.9 =	12.3 U	9.1 J	12.5 U	12.7 U	13.2 =	6.5 J	3.1 J
Benzo(k)fluoranthene	2.1E+04	1700000	--	78000	--	9000	--	49000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	7.5 J	6.4 J	12.3 U
Chrysene	2.1E+05	17000000	800000	780000	--	88000	--	160000	12.3 U	12.8 U	12.3 U	16.3 =	12.5 U	12.7 U	16.1 =	12.6 =	3.8 J
Dibenz(a,h)anthracene	2.1E+02	17000	--	800	--	90	--	2000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	12.1 U	12.3 U	12.3 U
Fluoranthene	2.2E+07	82000000	--	82000000	--	3100000	--	4300000	4.4 J	13.7 =	8.2 J	15.7 =	12.5 U	12.7 U	20.2 =	29.6 =	12.3 U
Fluorene	2.6E+07	82000000	--	82000000	--	3100000	--	560000	12.3 U	12.8 U	12.3 U	6.2 J	12.5 U	12.7 U	5.2 J	4.8 J	12.3 U
Indeno(1,2,3-c,d)pyrene	2.1E+03	170000	--	8000	--	900	--	14000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	7.7 J	4.3 J	12.3 U
Naphthalene	1.9E+05	4100000	1800	41000000	270000	1600000	170000	12000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	34.9 =	12.3 U	12.3 U
Phenanthrene	--	61000000	--	61000000	--	2300000	--	140000	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	15.4 =	30.2 =	12.3 U
Pyrene	2.9E+07	61000000	--	61000000	--	2300000	--	4200000	10.3 J	48 =	23.5 =	36.9 =	12.5 U	12.7 U	26.8 =	26.3 =	2.7 J
PCBs/Pesticides (ug/kg)																	
PCB-1016 (Arochlor 1016)	2.1E+04	--	--	--	--	--	--	--	40.5 U	42.3 U	40.6 U	41.1 U	41.1 U	41.9 U	40 U	40.4 U	40.7 U
PCB-1221 (Arochlor 1221)	7.4E+02	--	--	--	--	--	--	--	82.2 U	85.8 U	82.4 U	83.4 U	83.4 U	85 U	81.1 U	82.1 U	82.7 U
PCB-1232 (Arochlor 1232)	7.4E+02	--	--	--	--	--	--	--	40.5 U	42.3 U	40.6 U	41.1 U	41.1 U	41.9 U	40 U	40.4 U	40.7 U
PCB-1242 (Arochlor 1242)	7.4E+02	--	--	--	--	--	--	--	40.5 U	42.3 U	40.6 U	41.1 U	41.1 U	41.9 U	40 U	40.4 U	40.7 U
PCB-1248 (Arochlor 1248)	7.4E+02	--	--	--	--	--	--	--	40.5 U	42.3 U	40.6 U	41.1 U	41.1 U	41.9 U	40 U	40.4 U	40.7 U
PCB-1254 (Arochlor 1254)	7.4E+02	--	--	--	--	--	--	--	40.5 U	42.3 U	40.6 U	41.1 U	41.1 U	41.9 U	40 U	40.4 U	40.7 U
PCB-1260 (Arochlor 1260)	7.4E+02	--	--	--	--	--	--	--	40.5 U	42.3 U	40.6 U	41.1 U	41.1 U	41.9 U	40 U	40.4 U	40.7 U
Inorganics (mg/kg)																	
Aluminum	1.0E+05	200000[a]	--	1000000(a)	--	78000[a]	--	--	8750 =	10300 =	8380 =	7710 =	14800 =	14400 =	8100 =	10300 =	6440 =
Antimony	4.1E+02	82	--	820	--	31	--	5	1 J	0.84 =	0.82 =	1.1 =	1.3 =	1.3 =	1.1 =	1.3 =	0.9 =
Arsenic	1.6E+00	61	25000	--	1200	13	750	31	**14 =**	**8.6 =**	**8.9 =**	**9.8 =**	**11.6 =**	**10.9 =**	**9.2 =**	**7.4 =**	**9.7 =**
Barium	6.7E+04	14000	870000	140000	910000	5500	690000	2100	60.4 =	88.3 =	70.8 =	61.2 =	94.2 =	93.9 =	56.1 =	85.7 =	37.8 =
Beryllium	1.9E+03	410	44000	4100	2100	160	1300	8000	0.44 =	0.38 =	0.28 =	0.33 =	0.86 =	0.81 =	0.47 =	0.6 =	0.25 =
Cadmium	4.5E+02	200	59000	2000	2800	78	1800	430	0.25 U	0.26 U	0.25 U	0.25 U	0.62 =	0.51 U	0.48 U	0.5 =	0.25 U
Calcium	--	--	--	--	--	--	--	--	31200 =	29000 =	35400 =	37500 =	3030 =	7930 =	25000 =	14600 =	53100 =
Chromium, Total	4.5E+02	4100	690	6100	420	230	270	--	16.3 =	17.8 =	13.8 =	12.9 =	20.6 =	21.2 =	12.2 =	13.8 =	11.9 =
Cobalt	1.9E+03	12000	--	120000	--	4700	--	--	13.6 =	10.2 =	7.9 =	8.9 =	12.9 =	13.7 =	8.7 =	9 =	8.9 =
Copper	4.1E+04	8200	--	82000	--	2900	--	330000	56.3 J	34.3 =	32.7 =	36.7 =	31.9 =	34.4 =	25.7 =	23.7 =	41.1 =
Iron	1.0E+05	61000[a]	--	610000[a]	--	23000[a]	--	--	27600 =	22500 =	20100 =	20200 =	26300 =	26100 =	17000 =	17000 =	20100 =
Lead	7.5E+02	400	--	400	--	400	--	--	25.3 =	30.5 =	14.7 =	18.7 =	18.6 =	16.9 =	21.5 =	102 =	17.2 =
Magnesium	--	--	--	--	--	--	--	--	22100 =	19900 =	24900 =	24900 =	4770 =	8290 =	16700 =	9630 =	34000 =
Manganese	1.9E+04	9600	8700	96000	91000	3700	69000	--	606 =	470 =	384 =	413 =	651 =	541 =	396 =	338 =	437 =
Mercury	3.1E+02	61	52000	610	540000	23	10	6.4	0.098 U	0.1 U	0.098 U	0.1 U	0.1 U	0.1 U	0.097 U	0.098 U	0.099 U
Nickel	2.0E+04	4100	440000	41000	21000	1600	13000	3800	39 J	27.7 =	22.9 =	25.4 =	32.3 =	36 =	17.9 =	18.6 =	25.5 =
Potassium	--	--	--	--	--	--	--	--	1580 =	1250 =	1180 =	1330 =	1590 =	1620 =	1360 =	1250 =	1470 =
Selenium	5.1E+03	1000	--	10000	--	390	--	2.4	0.61 U	0.94 =	0.62 U	0.62 U	0.94 =	0.63 U	0.61 U	0.61 U	0.62 U
Silver	5.1E+03	1000	--	10000	--	390	--	110	0.61 U	0.64 U	0.62 U	0.62 U	0.62 U	0.63 U	0.61 U	0.61 U	0.62 U
Sodium	--	--	--	--	--	--	--	--	49.1 U	51.2 U	49.2 U	64.6 =	81.8 =	90.1 =	89.3 =	132 =	65.9 =
Thallium	6.7E+01	160	--	160	--	6.3	--	3.8	0.37 U	0.38 U	0.37 U	0.37 U	0.37 U	0.38 U	0.36 U	0.37 U	0.37 U

Table 1
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Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

		TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results								
Parameter	Region 9 Industrial PRG	CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	FIP-001-06-SSS	FIP-002-06-SSS	FIP-003-06-SSS	FIP-004-06-SSS	FSS-001-04-ESW	FSS-002-04-ESW	FSS-003-04-ESW	FSS-004-04-ESW	FSS-005-08-EBT
Vanadium	7.2E+03	1400	--	14000	--	550	--	980	19.6 =	20.7 =	15.5 =	13.7 =	27.5 =	26.1 =	16.5 =	20.9 =	13.4 =
Zinc	1.0E+05	61000	--	610000	--	23000	--	53000	67 =	57.1 =	48.5 =	57.6 =	54.3 =	53.8 =	56.7 =	51.3 =	46.4 =

Notes:

	Exceeds TACO Tier 1 Soil ROs for residential ingestion pathway
Bold	Exceeds Region 9 PRGs (October 2002) for industrial soil
CWING	TACO Tier 1 Soil RO for construction worker ingestion pathway
CWINH	TACO Tier 1 Soil RO for construction worker inhalation pathway
ICING	TACO Tier 1 Soil RO for industrial/commercial worker ingestion pathway
ICINH	TACO Tier 1 Soil RO for industrial/commercial worker inhalation pathway
RESING	TACO Tier 1 Soil RO for residential ingestion pathway
RESINH	TACO Tier 1 Soil RO for residential inhalation pathway
SC1GW	TACO Tier 1 Soil RO for soil component of the groundwater ingestion pathway (Class I) Soil pH ranges 8-10. Soil component of the groundwater ingestion pathway for metals depends on the pH value. Uses values at pH = 8.
U	Analyte is not detected
J	Reported concentration is estimated
=	Analyte is detected at the reported concentration
--	Not available
(a)	Provisional Remedial Objective. Value provided by Mr. Tom Hornshaw, Illinois EPA Bureau of Land in August 8, 2003 Internal Memorandum to Andy Jankowski.

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Various Sites Remediations

Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results						
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SCIGW	FSS-006-05-EBT	OWS-001-05-ESW	OWS-002-05-ESW	OWS-003-04-ESW	OWS-004-05-ESW	OWS-005-08-EBT	OWS-006-08-EBT
SVOCs(ug/kg)															
1,2,4-Trichlorobenzene	3.0E+06	2000000	920000	20000000	3200000	780000	3200000	5000	402 U	416 U	413 U	378 U	403 U	395 U	374 U
1,2-Dichlorobenzene	3.7E+05	18000000	310000	180000000	560000	7000000	560000	17000	402 U	416 U	413 U	378 U	403 U	395 U	374 U
1,3-Dichlorobenzene	6.3E+04	180[a]	570[a]	1800[a]	570[a]	70[a]	570[a]	0.2[a]	402 U	416 U	413 U	378 U	403 U	395 U	374 U
1,4-Dichlorobenzene	7.9E+03	--	340000	--	17000000	--	11000000	2000	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2,4,5-Trichlorophenol	6.2E+07	200000000	--	200000000	--	7800000	--	270000	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2,4,6-Trichlorophenol	--	--	--	--	--	--	--	--	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2,4-Dichlorophenol	1.8E+06	610000	--	6100000	--	230000	--	1000	402 U	416 U	413 U	378 U	403 U	395 UJ	374 UJ
2,4-Dimethylphenol	1.2E+07	41000000	--	41000000	--	1600000	--	9000	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2,4-Dinitrophenol	1.2E+06	410000	--	4100000	--	160000	--	200	402 U	416 U	413 UJ	378 UJ	403 U	395 UJ	374 UJ
2,4-Dinitrotoluene	1.2E+06	180000	--	8400	--	900	--	0.8	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2,6-Dinitrotoluene	6.2E+05	180000	--	8400	--	900	--	0.7	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2-Chloronaphthalene	2.3E+07	--	--	--	--	--	--	--	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2-Chlorophenol	2.4E+05	10000000	53000000	10000000	53000000	390000	53000000	4000	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2-Methylnaphthalene	--	61000000	--	61000000	--	2300000	--	29000	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2-Methylphenol (O-Cresol)	3.1E+07	100000000	--	100000000	--	3900000	--	15000	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2-Nitroaniline	1.8E+04	--	7.5[a]	--	120[a]	--	73[a]	--	402 U	416 U	413 U	378 U	403 U	395 U	374 U
2-Nitrophenol	--	--	--	--	--	--	--	--	402 U	416 U	413 U	378 U	403 U	395 U	374 U
3,3'-Dichlorobenzidine	3.8E+03	280000	--	13000	--	1000	--	7	402 U	416 U	413 U	378 U	403 UJ	395 UJ	374 U
3-Nitroaniline	--	--	--	--	--	--	--	--	402 U	416 U	413 U	378 U	403 U	395 U	374 U
4,6-Dinitro-2-methylphenol	--	--	--	--	--	--	--	--	402 U	416 U	413 U	378 U	403 U	395 U	374 U
4-Bromophenyl Phenyl Ether	--	--	--	--	--	--	--	--	402 U	416 U	413 U	378 U	403 U	395 U	374 U
4-Chloro-3-methylphenol	--	--	--	--	--	--	--	--	402 U	416 U	413 U	378 U	403 U	395 U	374 U
4-Chlorophenyl Phenyl Ether	--	--	--	--	--	--	--	--	402 U	416 U	413 U	378 U	403 U	395 U	374 U
4-Methylphenol (P-Cresol)	3.1E+06	1000[a]	--	10000[a]	--	390[a]	--	0.24[a]	402 U	416 U	413 U	378 U	403 U	395 U	374 U
4-Nitroaniline	--	--	--	--	--	--	--	--	402 U	416 U	413 U	378 U	403 U	395 U	374 U
4-Nitrophenol	--	--	--	--	--	--	--	--	402 U	416 U	413 UJ	378 UJ	403 U	395 U	374 U
Benzyl Butyl Phthalate	1.0E+08	410000000	930000	410000000	930000	16000000	930000	930000	123 J	416 U	413 U	378 U	403 U	395 U	374 U
Bis(2-Chloroethoxy) Methane	--	--	--	--	--	--	--	--	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Bis(2-Chloroethyl) Ether	5.5E+02	75000	660	5000	470	600	200	0.4	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Bis(2-Chloroisopropyl) Ether	7.4E+03	8200[a]	1300[a]	82000[a]	1300[a]	3100[a]	1300[a]	2.4[a]	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Bis(2-Ethylhexyl) Phthalate	1.2E+05	4100000	31000000	410000	31000000	46000	31000000	3600000	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Dibenzofuran	3.1E+06	820[a]	--	8200[a]	--	310[a]	--	15[a]	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Diethyl Phthalate	1.0E+08	1000000000	2000000	1000000000	2000000	63000000	2000000	470000	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Dimethyl Phthalate	1.0E+08	1000000[a]	1300[a]	1000000[a]	1300[a]	780000[a]	1300[a]	380[a]	402 U	416 U	413 U	378 U	403 U	395 U	374 UJ
Di-N-Butyl Phthalate	6.2E+07	200000000	2300000	200000000	2300000	7800000	2300000	2300000	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Di-N-Octylphthalate	2.5E+07	4100000	10000000	41000000	10000000	1600000	10000000	10000000	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Hexachlorobenzene	1.1E+03	78000	2600	4000	1800	400	1000	2000	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Hexachlorobutadiene	2.2E+04	41[a]	180[a]	410[a]	1000[a]	16[a]	1000[a]	2.9[a]	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Hexachlorocyclopentadiene	3.7E+06	14000000	1100	14000000	16000	550000	10000	400000	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Hexachloroethane	1.2E+05	2000000	--	2000000	--	78000	--	500	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Isophorone	1.8E+06	410000000	4600000	410000000	4600000	15600000	4600000	8000	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Nitrobenzene	1.0E+05	1000000	9400	1000000	140000	39000	92000	100	402 U	416 U	413 U	378 U	403 U	395 U	374 U
N-Nitrosodi-N-Propylamine	2.5E+02	18000	--	800	--	90	--	0.05	402 U	416 U	413 U	378 U	403 U	395 U	374 U
N-Nitrosodiphenylamine	3.5E+05	25000000	--	1200000	--	130000	--	1000	402 U	416 U	413 U	378 U	403 U	395 UJ	374 UJ
Pentachlorophenol	9.0E+03	520000	--	24000	--	3000	--	30	402 U	416 U	413 U	378 U	403 U	395 U	374 U
Phenol	1.0E+08	120000000	--	1000000000	--	47000000	--	100000	402 U	416 U	413 U	378 U	403 U	395 U	374 U

Table 1
Analytical Data Summary
Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results						
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	FSS-006-05-EBT	OWS-001-05-ESW	OWS-002-05-ESW	OWS-003-04-ESW	OWS-004-05-ESW	OWS-005-08-EBT	OWS-006-08-EBT
VOCs(ug/kg)															
1,1,1-Trichloroethane	1.2E+06	--	1200000	--	1200000	--	1200000	2000	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
1,1,2,2-Tetrachloroethane	9.3E+02	--	--	--	--	--	--	--	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
1,1,2-Trichloroethane	1.6E+03	8200000	1800000	8200000	1800000	310000	1800000	20	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
1,1-Dichloroethane	1.7E+06	200000000	130000	200000000	1700000	7800000	1300000	23000	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
1,1-Dichloroethene	4.1E+05	1800000	300000	18000000	1500000	700000	1500000	60	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
1,2-Dichloroethane	6.0E+02	1400000	990	63000	700	7000	400	20	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
1,2-Dichloropropane	7.4E+02	1800000	500	84000	23000	9000	15000	30	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
2-Hexanone	--	8200[a]	0.72[a]	82000[a]	110[a]	3100[a]	70[a]	1.3[a]	24.4 U	25.2 U	25 U	22.9 U	24.4 U	24 U	22.7 U
Acetone	6.0E+06	200000000	100000000	200000000	100000000	7800000	100000000	16000	61 U	63.1 U	62.6 U	57.2 U	61.1 U	59.9 U	56.6 U
Benzene	1.3E+03	2300000	2200	100000	1600	12000	800	30	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Bromochloromethane	--	--	--	--	--	--	--	--	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Bromodichloromethane	1.8E+03	2000000	3000000	92000	3000000	10000	3000000	600	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Bromoform	2.2E+05	16000000	140000	720000	100000	81000	53000	800	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Bromomethane	1.3E+04	1000000	3900	2900000	15000	110000	10000	200	12.2 U	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Carbon disulfide	7.2E+05	20000000	9000	200000000	720000	7800000	720000	32000	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Carbon tetrachloride	5.5E+02	410000	900	44000	640	5000	300	70	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Chlorobenzene	5.3E+05	4100000	1300	41000000	210000	1600000	130000	1000	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Chloroethane	6.5E+03	82000[a]	94[a]	820000[a]	1500[a]	31000[a]	1500[a]	15[a]	12.2 U	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Chloroform	1.2E+04	2000000	760	940000	540	100000	300	600	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Chloromethane	2.6E+03	820[a]	1.1[a]	8200[a]	170[a]	310[a]	110[a]	0.14[a]	12.2 U	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U
cis-1,2-Dichloroethene	1.5E+05	20000000	1200000	20000000	1200000	780000	1200000	400	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
cis-1,3-Dichloropropene	--	--	--	--	--	--	--	--	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Dibromochloromethane	2.6E+03	41000000	1300000	41000000	1300000	1600000	1300000	400	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Ethylbenzene	2.0E+04	20000000	58000	200000000	400000	7800000	400000	13000	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Ethylene Glycol	1.0E+08	410000[a]	100000[a]	1000000[a]	100000[a]	160000[a]	100000[a]	56[a]		12600 U	12500 U	11400 U	12200 U	12000 U	11300 U
m,p-Xylene (Sum Of Isomers)	4.2E+05	--	--	--	--	--	--	--	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Methyl ethyl ketone	2.7E+07	--	--	--	--	--	--	--	61 U	63.1 U	62.6 U	57.2 U	61.1 U	59.9 U	56.6 U
Methyl isobutyl ketone	2.8E+06	--	--	--	--	--	--	--	24.4 U	25.2 U	25 U	22.9 U	24.4 U	24 U	22.7 U
Methylene chloride	2.1E+04	12000000	34000	760000	24000	85000	13000	20	6.1 U	5.3 U	6.3 U	5.6 U	8.2 U	6 U	4.8 U
o-Xylene (1,2-Dimethylbenzene)	--	410000000	410000	1000000000	410000	160000000	410000	190000	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Styrene	1.7E+06	41000000	430000	410000000	1500000	16000000	1500000	4000	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Tetrachloroethene(PCE)	3.4E+03	2400000	28000	110000	20000	12000	11000	60	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Toluene	5.2E+05	410000000	42000	410000000	650000	16000000	650000	12000	6.1 U	0.52 J	6.3 U	5.7 U	6.1 U	6 U	5.7 U
trans-1,2-Dichloroethene	2.3E+05	41000000	3100000	41000000	3100000	1600000	3100000	700	6.1 UJ	6.3 UJ	6.3 UJ	5.7 UJ	6.1 UJ	6 UJ	5.7 UJ
trans-1,3-Dichloropropene	--	--	--	--	--	--	--	--	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Trichloroethene (TCE)	1.1E+02	1200000	12000	520000	8900	58000	5000	60	6.1 U	6.3 U	6.3 U	5.7 U	6.1 U	6 U	5.7 U
Vinyl chloride	7.5E+02	170000	1100	7900	1100	460	200	10	12.2 U	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U

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Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results						
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	FSS-006-05-EBT	OWS-001-05-ESW	OWS-002-05-ESW	OWS-003-04-ESW	OWS-004-05-ESW	OWS-005-08-EBT	OWS-006-08-EBT
PAHs(ug/kg)															
Acenaphthene	2.9E+07	120000000	--	120000000	--	4700000	--	570000	11.4 J	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Acenaphthylene	--	61000000	--	61000000	--	2300000	--	15000	6.4 J	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Anthracene	1.0E+08	610000000	--	610000000	--	23000000	--	12000000	18.2 =	10.4 J	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Benzo(a)anthracene	2.1E+03	170000	--	8000	--	900	--	2000	32.6 =	64.7 =	21.6 =	11.4 U	12.2 U	12 U	12.1 =
Benzo(a)pyrene	2.1E+02	17000	--	800	--	90	--	8000	28.8 =	69.6 =	22.9 =	11.4 U	12.2 U	12 U	11.3 U
Benzo(b)fluoranthene	2.1E+03	170000	--	8000	--	900	--	5000	28.3 =	70 =	20.8 =	11.4 U	12.2 U	12 U	11.3 U
Benzo(g,h,i)perylene	--	61000000	--	61000000	--	2300000	--	16000000	22.3 =	49.1 =	16.9 =	11.4 U	12.2 U	6.6 J	8.7 J
Benzo(k)fluoranthene	2.1E+04	1700000	--	78000	--	9000	--	49000	24.9 =	60.2 =	24.3 =	11.4 U	12.2 U	12 U	11.3 U
Chrysene	2.1E+05	17000000	800000	780000	--	88000	--	160000	40.6 =	84.2 =	27.8 =	11.4 U	12.2 U	12.2 =	13.4 =
Dibenz(a,h)anthracene	2.1E+02	17000	--	800	--	90	--	2000	6.7 J	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Fluoranthene	2.2E+07	82000000	--	82000000	--	3100000	--	4300000	80.5 =	152 =	46.1 =	11.4 U	12.2 U	12 U	11.3 U
Fluorene	2.6E+07	82000000	--	82000000	--	3100000	--	560000	19.9 =	4.4 J	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Indeno(1,2,3-c,d)pyrene	2.1E+03	170000	--	8000	--	900	--	14000	18.4 =	46.4 =	15.6 =	11.4 U	12.2 U	12 U	11.3 U
Naphthalene	1.9E+05	4100000	1800	41000000	270000	1600000	170000	12000	12.2 U	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Phenanthrene	--	61000000	--	61000000	--	2300000	--	140000	91.6 =	67.7 =	20.3 =	11.4 U	12.2 U	12 U	11.3 U
Pyrene	2.9E+07	61000000	--	61000000	--	2300000	--	4200000	76.4 =	136 =	44.4 =	11.4 U	12.2 U	5.6 J	5.2 J
PCBs/Pesticides (ug/kg)															
PCB-1016 (Arochlor 1016)	2.1E+04	--	--	--	--	--	--	--	40.2 U	41.6 U	41.3 U	37.8 U	40.3 U	39.5 U	37.4 U
PCB-1221 (Arochlor 1221)	7.4E+02	--	--	--	--	--	--	--	81.7 U	84.5 U	83.9 U	76.7 U	81.8 U	80.2 U	75.9 U
PCB-1232 (Arochlor 1232)	7.4E+02	--	--	--	--	--	--	--	40.2 U	41.6 U	41.3 U	37.8 U	40.3 U	39.5 U	37.4 U
PCB-1242 (Arochlor 1242)	7.4E+02	--	--	--	--	--	--	--	40.2 U	41.6 U	41.3 U	37.8 U	40.3 U	39.5 U	37.4 U
PCB-1248 (Arochlor 1248)	7.4E+02	--	--	--	--	--	--	--	40.2 U	41.6 U	41.3 U	37.8 U	40.3 U	39.5 U	37.4 U
PCB-1254 (Arochlor 1254)	7.4E+02	--	--	--	--	--	--	--	40.2 U	41.6 U	41.3 U	37.8 U	40.3 U	39.5 U	37.4 U
PCB-1260 (Arochlor 1260)	7.4E+02	--	--	--	--	--	--	--	40.2 U	41.6 U	41.3 U	37.8 U	40.3 U	39.5 U	37.4 U
Inorganics (mg/kg)															
Aluminum	1.0E+05	200000[a]	--	1000000(a)	--	78000[a]	--	--	10200 =	11800 =	11500 =	5220 =	9100 =	6480 =	5080 =
Antimony	4.1E+02	82	--	820	--	31	--	5	0.92 =	1.3 =	1.1 =	0.82 =	0.94 =	0.92 J	0.99 =
Arsenic	1.6E+00	61	25000	--	1200	13	750	31	**8.1 =**	**10.3 =**	**8.2 =**	**7.4 =**	**7.7 =**	**6.3 =**	**9.2 =**
Barium	6.7E+04	14000	870000	140000	910000	5500	690000	2100	82.6 =	80.9 =	99 =	28.8 =	49.6 =	33.5 =	26 =
Beryllium	1.9E+03	410	44000	4100	2100	160	1300	8000	0.41 =	0.7 =	0.63 =	0.32 =	0.54 =	0.37 =	0.33 =
Cadmium	4.5E+02	200	59000	2000	2800	78	1800	430	0.24 U	0.5 U	0.5 U	0.46 U	0.49 U	0.48 U	0.62 =
Calcium	--	--	--	--	--	--	--	--	21900 =	11900 =	12400 =	63400 =	56800 =	62500 =	55400 =
Chromium, Total	4.5E+02	4100	690	6100	420	230	270	--	18.3 =	16.6 =	14.4 =	9 =	14.9 =	11.6 =	9.5 =
Cobalt	1.9E+03	12000	--	120000	--	4700	--	--	8.8 =	8.9 =	9.8 =	6.4 =	9.4 =	15 J	6.2 =
Copper	4.1E+04	8200	--	82000	--	2900	--	330000	39.1 =	29.3 =	20.2 =	20.6 =	28.3 =	22.5 =	24.3 =
Iron	1.0E+05	61000[a]	--	610000[a]	--	23000[a]	--	--	20300 =	21800 =	17300 =	13600 =	17900 =	14000 =	17300 =
Lead	7.5E+02	400	--	400	--	400	--	--	43.2 =	43.3 =	15.9 =	8.8 =	10.7 =	10.6 =	11.7 =
Magnesium	--	--	--	--	--	--	--	--	13500 =	8560 =	7230 =	38700 =	26900 =	37600 =	33700 =
Manganese	1.9E+04	9600	8700	96000	91000	3700	69000	--	404 =	459 =	518 =	445 =	343 =	676 =	359 =
Mercury	3.1E+02	61	52000	610	540000	23	10	6.4	0.098 U	0.1 U	0.1 U	0.092 U	0.098 U	0.096 U	0.091 U
Nickel	2.0E+04	4100	440000	41000	21000	1600	13000	3800	22.1 =	21.3 =	15 =	13.8 =	23.8 =	26.6 J	17.8 =
Potassium	--	--	--	--	--	--	--	--	1400 =	1320 =	1110 =	1050 =	2010 =	1700 =	1310 =
Selenium	5.1E+03	1000	--	10000	--	390	--	2.4	0.61 U	0.7 =	0.63 U	0.57 U	0.61 U	0.6 U	0.57 U
Silver	5.1E+03	1000	--	10000	--	390	--	110	0.61 U	0.63 U	0.63 U	0.57 U	0.61 U	0.6 U	0.57 U
Sodium	--	--	--	--	--	--	--	--	48.8 U	101 =	85.9 =	128 =	140 =	157 =	137 =
Thallium	6.7E+01	160	--	160	--	6.3	--	3.8	0.37 U	0.38 U	0.38 U	0.34 U	0.37 U	0.36 U	0.34 U

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Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

		TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results						
Parameter	Region 9 Industrial PRG	CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	FSS-006-05-EBT	OWS-001-05-ESW	OWS-002-05-ESW	OWS-003-04-ESW	OWS-004-05-ESW	OWS-005-08-EBT	OWS-006-08-EBT
Vanadium	7.2E+03	1400	--	14000	--	550	--	980	21.9 =	26.3 =	23.9 =	12.1 =	18.7 =	14 =	11.5 =
Zinc	1.0E+05	61000	--	610000	--	23000	--	53000	60.9 =	60.2 =	45.5 =	29.9 =	40.5 =	33.7 =	52.5 =

Notes:

	Exceeds TACO Tier 1 Soil ROs for residential ingestion pathway
Bold	Exceeds Region 9 PRGs (October 2002) for industrial soil
CWING	TACO Tier 1 Soil RO for construction worker ingestion pathway
CWINH	TACO Tier 1 Soil RO for construction worker inhalation pathway
ICING	TACO Tier 1 Soil RO for industrial/commercial worker ingestion pathway
ICINH	TACO Tier 1 Soil RO for industrial/commercial worker inhalation pathway
RESING	TACO Tier 1 Soil RO for residential ingestion pathway
RESINH	TACO Tier 1 Soil RO for residential inhalation pathway
SC1GW	TACO Tier 1 Soil RO for soil component of the groundwater ingestion pathway (Class I) Soil pH ranges 8-10. Soil component of the groundwater ingestion pathway for metals depends on the pH value. Uses values at pH = 8.
U	Analyte is not detected
J	Reported concentration is estimated
=	Analyte is detected at the reported concentration
--	Not available
(a)	Provisional Remedial Objective. Value provided by Mr. Tom Hornshaw, Illinois EPA Bureau of Land in August 8, 2003 Internal Memorandum to Andy Jankowski.

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Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results							
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SCIGW	VWR-001-03-EBT	VWR-001-03-ESW	VWR-002-02-ESW	VWR-003-02-ESW	VWR-004-02-ESW	VWR-005-02-EBT	VWR-006-02-EBT	VWR-007-04-EBT
SVOCs(ug/kg)																
1,2,4-Trichlorobenzene	3.0E+06	2000000	920000	20000000	3200000	780000	3200000	5000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
1,2-Dichlorobenzene	3.7E+05	18000000	310000	180000000	560000	7000000	560000	17000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
1,3-Dichlorobenzene	6.3E+04	180[a]	570[a]	1800[a]	570[a]	70[a]	570[a]	0.2[a]	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
1,4-Dichlorobenzene	7.9E+03	--	340000	--	17000000	--	11000000	2000	414 U	403 U	381 U	385 U	400 U	386 UJ	392 U	405 U
2,4,5-Trichlorophenol	6.2E+07	200000000	--	200000000	--	7800000	--	270000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2,4,6-Trichlorophenol	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2,4-Dichlorophenol	1.8E+06	610000	--	6100000	--	230000	--	1000	414 UJ	403 U	381 UJ	385 UJ	400 UJ	386 U	392 U	405 UJ
2,4-Dimethylphenol	1.2E+07	41000000	--	41000000	--	1600000	--	9000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2,4-Dinitrophenol	1.2E+06	410000	--	4100000	--	160000	--	200	414 U	403 U	381 U	385 U	400 U	386 UJ	392 UJ	405 U
2,4-Dinitrotoluene	1.2E+06	180000	--	8400	--	900	--	0.8	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2,6-Dinitrotoluene	6.2E+05	180000	--	8400	--	900	--	0.7	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2-Chloronaphthalene	2.3E+07	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2-Chlorophenol	2.4E+05	10000000	53000000	10000000	53000000	390000	53000000	4000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2-Methylnaphthalene	--	61000000	--	61000000	--	2300000	--	29000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2-Methylphenol (O-Cresol)	3.1E+07	100000000	--	100000000	--	3900000	--	15000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2-Nitroaniline	1.8E+04	--	7.5[a]	--	120[a]	--	73[a]	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
2-Nitrophenol	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
3,3'-Dichlorobenzidine	3.8E+03	280000	--	13000	--	1000	--	7	414 U	403 U	381 U	385 U	400 U	386 UJ	392 UJ	405 U
3-Nitroaniline	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
4,6-Dinitro-2-methylphenol	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
4-Bromophenyl Phenyl Ether	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
4-Chloro-3-methylphenol	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
4-Chlorophenyl Phenyl Ether	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
4-Methylphenol (P-Cresol)	3.1E+06	1000[a]	--	10000[a]	--	390[a]	--	0.24[a]	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
4-Nitroaniline	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
4-Nitrophenol	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 UJ	392 UJ	405 U
Benzyl Butyl Phthalate	1.0E+08	410000000	930000	410000000	930000	16000000	930000	930000	410 J	403 U	92.8 J	385 U	400 U	386 U	392 U	405 U
Bis(2-Chloroethoxy) Methane	--	--	--	--	--	--	--	--	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Bis(2-Chloroethyl) Ether	5.5E+02	75000	660	5000	470	600	200	0.4	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Bis(2-Chloroisopropyl) Ether	7.4E+03	8200[a]	1300[a]	82000[a]	1300[a]	3100[a]	1300[a]	2.4[a]	414 U	403 U	381 U	385 U	400 U	386 UJ	392 UJ	405 U
Bis(2-Ethylhexyl) Phthalate	1.2E+05	4100000	31000000	410000	31000000	46000	31000000	3600000	414 U	403 U	381 U	69.1 J	400 U	155 J	775 =	405 U
Dibenzofuran	3.1E+06	820[a]	--	8200[a]	--	310[a]	--	15[a]	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Diethyl Phthalate	1.0E+08	1000000000	2000000	1000000000	2000000	63000000	2000000	470000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Dimethyl Phthalate	1.0E+08	1000000[a]	1300[a]	1000000[a]	1300[a]	780000[a]	1300[a]	380[a]	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Di-N-Butyl Phthalate	6.2E+07	200000000	2300000	200000000	2300000	7800000	2300000	2300000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Di-N-Octylphthalate	2.5E+07	4100000	10000000	41000000	10000000	1600000	10000000	10000000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Hexachlorobenzene	1.1E+03	78000	2600	4000	1800	400	1000	2000	414 U	403 U	381 U	385 U	400 U	386 UJ	392 UJ	405 U
Hexachlorobutadiene	2.2E+04	41[a]	180[a]	410[a]	1000[a]	16[a]	1000[a]	2.9[a]	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Hexachlorocyclopentadiene	3.7E+06	14000000	1100	14000000	16000	550000	10000	400000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Hexachloroethane	1.2E+05	2000000	--	2000000	--	78000	--	500	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Isophorone	1.8E+06	410000000	4600000	410000000	4600000	15600000	4600000	8000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Nitrobenzene	1.0E+05	1000000	9400	1000000	140000	39000	92000	100	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
N-Nitrosodi-N-Propylamine	2.5E+02	18000	--	800	--	90	--	0.05	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
N-Nitrosodiphenylamine	3.5E+05	25000000	--	1200000	--	130000	--	1000	414 U	403 U	381 U	385 U	400 U	386 UJ	392 UJ	405 U
Pentachlorophenol	9.0E+03	520000	--	24000	--	3000	--	30	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U
Phenol	1.0E+08	120000000	--	1000000000	--	47000000	--	100000	414 U	403 U	381 U	385 U	400 U	386 U	392 U	405 U

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Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results							
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	VWR-001-03-EBT	VWR-001-03-ESW	VWR-002-02-ESW	VWR-003-02-ESW	VWR-004-02-ESW	VWR-005-02-EBT	VWR-006-02-EBT	VWR-007-04-EBT
VOCs(ug/kg)																
1,1,1-Trichloroethane	1.2E+06	--	1200000	--	1200000	--	1200000	2000	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
1,1,2,2-Tetrachloroethane	9.3E+02	--	--	--	--	--	--	--	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
1,1,2-Trichloroethane	1.6E+03	8200000	1800000	8200000	1800000	310000	1800000	20	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
1,1-Dichloroethane	1.7E+06	200000000	130000	200000000	1700000	7800000	1300000	23000	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
1,1-Dichloroethene	4.1E+05	1800000	300000	18000000	1500000	700000	1500000	60	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
1,2-Dichloroethane	6.0E+02	1400000	990	63000	700	7000	400	20	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
1,2-Dichloropropane	7.4E+02	1800000	500	84000	23000	9000	15000	30	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
2-Hexanone	--	8200[a]	0.72[a]	82000[a]	110[a]	3100[a]	70[a]	1.3[a]	25.1 U	24.4 R	23.1 U	23.3 U	24.2 U	23.4 U	23.8 U	24.5 U
Acetone	6.0E+06	200000000	100000000	200000000	100000000	7800000	100000000	16000	62.7 U	61.1 R	57.7 U	58.3 U	60.6 U	58.5 U	57.4 J	61.3 U
Benzene	1.3E+03	2300000	2200	100000	1600	12000	800	30	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Bromochloromethane	--	--	--	--	--	--	--	--	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Bromodichloromethane	1.8E+03	2000000	3000000	92000	3000000	10000	3000000	600	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Bromoform	2.2E+05	16000000	140000	720000	100000	81000	53000	800	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Bromomethane	1.3E+04	1000000	3900	2900000	15000	110000	10000	200	12.5 U	12.2 R	11.5 U	11.7 U	12.1 U	11.7 U	11.9 U	12.3 U
Carbon disulfide	7.2E+05	20000000	9000	200000000	720000	7800000	720000	32000	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Carbon tetrachloride	5.5E+02	410000	900	44000	640	5000	300	70	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Chlorobenzene	5.3E+05	4100000	1300	41000000	210000	1600000	130000	1000	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Chloroethane	6.5E+03	82000[a]	94[a]	820000[a]	1500[a]	31000[a]	1500[a]	15[a]	12.5 U	12.2 R	11.5 U	11.7 U	12.1 U	11.7 U	11.9 U	12.3 U
Chloroform	1.2E+04	2000000	760	940000	540	100000	300	600	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Chloromethane	2.6E+03	820[a]	1.1[a]	8200[a]	170[a]	310[a]	110[a]	0.14[a]	12.5 U	12.2 R	11.5 U	11.7 U	12.1 U	11.7 U	11.9 U	12.3 U
cis-1,2-Dichloroethene	1.5E+05	20000000	1200000	20000000	1200000	780000	1200000	400	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
cis-1,3-Dichloropropene	--	--	--	--	--	--	--	--	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Dibromochloromethane	2.6E+03	41000000	1300000	41000000	1300000	1600000	1300000	400	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Ethylbenzene	2.0E+04	20000000	58000	200000000	400000	7800000	400000	13000	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Ethylene Glycol	1.0E+08	410000[a]	100000[a]	1000000[a]	100000[a]	160000[a]	100000[a]	56[a]	12500 U	12200 R	11500 U	11700 U	12100 U	11700 U	11900 U	12300 U
m,p-Xylene (Sum Of Isomers)	4.2E+05	--	--	--	--	--	--	--	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Methyl ethyl ketone	2.7E+07	--	--	--	--	--	--	--	62.7 U	61.1 R	57.7 U	58.3 U	60.6 U	58.5 U	59.4 U	61.3 U
Methyl isobutyl ketone	2.8E+06	--	--	--	--	--	--	--	25.1 U	24.4 R	23.1 U	23.3 U	24.2 U	23.4 U	23.8 U	24.5 U
Methylene chloride	2.1E+04	12000000	34000	760000	24000	85000	13000	20	6.3 U	6.1 R	5.8 U	6.8 U	6.1 U	6.9 U	7.9 U	6.1 U
o-Xylene (1,2-Dimethylbenzene)	--	410000000	410000	1000000000	410000	160000000	410000	190000	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Styrene	1.7E+06	41000000	430000	410000000	1500000	16000000	1500000	4000	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Tetrachloroethene(PCE)	3.4E+03	2400000	28000	110000	20000	12000	11000	60	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Toluene	5.2E+05	410000000	42000	410000000	650000	16000000	650000	12000	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
trans-1,2-Dichloroethene	2.3E+05	41000000	3100000	41000000	3100000	1600000	3100000	700	6.3 UJ	6.1 R	5.8 UJ	5.8 UJ	6.1 UJ	5.8 UJ	5.9 UJ	6.1 UJ
trans-1,3-Dichloropropene	--	--	--	--	--	--	--	--	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Trichloroethene (TCE)	1.1E+02	1200000	12000	520000	8900	58000	5000	60	6.3 U	6.1 R	5.8 U	5.8 U	6.1 U	5.8 U	5.9 U	6.1 U
Vinyl chloride	7.5E+02	170000	1100	7900	1100	460	200	10	12.5 U	12.2 R	11.5 U	11.7 U	12.1 U	11.7 U	11.9 U	12.3 U

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Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

Parameter	Region 9 Industrial PRG	TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results							
		CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	VWR-001-03-EBT	VWR-001-03-ESW	VWR-002-02-ESW	VWR-003-02-ESW	VWR-004-02-ESW	VWR-005-02-EBT	VWR-006-02-EBT	VWR-007-04-EBT
PAHs(ug/kg)																
Acenaphthene	2.9E+07	120000000	--	120000000	--	4700000	--	570000	12.5 U	12.2 U	7.5 J	11.7 U	12.1 U	11.7 U	11.9 U	12.3 U
Acenaphthylene	--	61000000	--	61000000	--	2300000	--	15000	12.5 U	12.2 U	6.7 J	11.7 U	12.1 U	11.7 U	11.9 U	12.3 U
Anthracene	1.0E+08	610000000	--	610000000	--	23000000	--	12000000	12.5 U	12.2 U	27.7 =	7.1 J	5.8 J	11.7 U	11.9 U	12.3 U
Benzo(a)anthracene	2.1E+03	170000	--	8000	--	900	--	2000	5.1 J	4.7 J	138 =	47.1 =	10.1 J	9.2 J	26.9 =	12.3 U
Benzo(a)pyrene	2.1E+02	17000	--	800	--	90	--	8000	5.4 J	12.2 U	167 =	58.8 =	10.3 J	7.5 J	27.7 =	12.3 U
Benzo(b)fluoranthene	2.1E+03	170000	--	8000	--	900	--	5000	12.5 U	12.2 U	11.5 U	72.4 =	12.1 U	9.5 J	22 =	12.3 U
Benzo(g,h,i)perylene	--	61000000	--	61000000	--	2300000	--	16000000	4.6 J	12.2 U	114 =	48.9 =	7.3 J	6.9 J	22 =	12.3 U
Benzo(k)fluoranthene	2.1E+04	1700000	--	78000	--	9000	--	49000	12.5 U	12.2 U	11.5 U	39.8 =	12.1 U	6.2 J	23.5 =	12.3 U
Chrysene	2.1E+05	17000000	800000	780000	--	88000	--	160000	6.7 J	5.2 J	190 =	66.1 =	14 =	11.3 J	33.6 =	12.3 U
Dibenz(a,h)anthracene	2.1E+02	17000	--	800	--	90	--	2000	12.5 U	12.2 U	11.5 U	6 J	12.1 U	11.7 UJ	11.9 U	12.3 U
Fluoranthene	2.2E+07	82000000	--	82000000	--	3100000	--	4300000	11 J	8.2 J	335 =	106 =	29.5 =	15.3 =	38 =	12.3 U
Fluorene	2.6E+07	82000000	--	82000000	--	3100000	--	560000	12.5 U	12.2 U	7.8 J	11.7 U	12.1 U	11.7 U	11.9 U	12.3 U
Indeno(1,2,3-c,d)pyrene	2.1E+03	170000	--	8000	--	900	--	14000	3.6 J	12.2 U	104 =	44.9 =	6.1 J	5.9 J	18.3 =	12.3 U
Naphthalene	1.9E+05	4100000	1800	41000000	270000	1600000	170000	12000	12.5 U	12.2 U	11.5 U	11.7 U	10.8 J	11.7 U	11.9 U	12.3 U
Phenanthrene	--	61000000	--	61000000	--	2300000	--	140000	5.7 J	12.2 U	146 =	40.7 =	37.8 =	8.9 J	16.7 =	12.3 U
Pyrene	2.9E+07	61000000	--	61000000	--	2300000	--	4200000	11 J	8.8 J	291 =	105 =	25 =	20.7 =	48.3 =	12.3 U
PCBs/Pesticides (ug/kg)																
PCB-1016 (Arochlor 1016)	2.1E+04	--	--	--	--	--	--	--	41.4 U	40.3 U	38.1 U	38.5 U	40 U	38.6 U	39.2 U	40.5 U
PCB-1221 (Arochlor 1221)	7.4E+02	--	--	--	--	--	--	--	84.1 U	81.9 U	77.3 U	78.2 U	81.2 U	78.4 U	79.6 U	82.2 U
PCB-1232 (Arochlor 1232)	7.4E+02	--	--	--	--	--	--	--	41.4 U	40.3 U	38.1 U	38.5 U	40 U	38.6 U	39.2 U	40.5 U
PCB-1242 (Arochlor 1242)	7.4E+02	--	--	--	--	--	--	--	41.4 U	40.3 U	38.1 U	38.5 U	40 U	38.6 U	39.2 U	40.5 U
PCB-1248 (Arochlor 1248)	7.4E+02	--	--	--	--	--	--	--	41.4 U	40.3 U	38.1 U	38.5 U	40 U	38.6 U	39.2 U	40.5 U
PCB-1254 (Arochlor 1254)	7.4E+02	--	--	--	--	--	--	--	41.4 U	40.3 U	38.1 U	38.5 U	40 U	38.6 U	39.2 U	40.5 U
PCB-1260 (Arochlor 1260)	7.4E+02	--	--	--	--	--	--	--	41.4 U	40.3 U	42 =	7.1 J	40 U	38.6 U	39.2 U	40.5 U
Inorganics (mg/kg)																
Aluminum	1.0E+05	200000[a]	--	1000000(a)	--	78000[a]	--	--	15300 =	11800 =	11900 =	12000 =	12300 =	10500 =	10800 =	14900 =
Antimony	4.1E+02	82	--	820	--	31	--	5	0.83 =	1 =	2.4 J	1.3 =	0.82 =	0.87 J	0.83 =	0.94 =
Arsenic	1.6E+00	61	25000	--	1200	13	750	31	**9.3 =**	**8.5 =**	**9.8 =**	**8.7 =**	**7.6 =**	**12.9 =**	**7.5 =**	**11.8 =**
Barium	6.7E+04	14000	870000	140000	910000	5500	690000	2100	117 =	109 =	154 =	109 =	134 =	81.2 =	103 =	115 =
Beryllium	1.9E+03	410	44000	4100	2100	160	1300	8000	0.39 =	0.7 =	0.5 =	0.57 =	0.55 =	0.43 =	0.51 =	0.52 =
Cadmium	4.5E+02	200	59000	2000	2800	78	1800	430	0.25 U	0.49 U	1.4 =	0.72 =	0.24 U	0.23 U	0.24 U	0.25 U
Calcium	--	--	--	--	--	--	--	--	4000 =	2850 =	11200 =	13400 =	5070 =	22600 =	16400 =	3390 =
Chromium, Total	4.5E+02	4100	690	6100	420	230	270	--	21.8 =	14.6 =	21.7 =	20.5 =	17.6 =	17.6 =	16 =	21.2 =
Cobalt	1.9E+03	12000	--	120000	--	4700	--	--	10.7 =	10.4 =	9.2 =	9 =	9.8 =	10.5 =	8.4 =	10.6 =
Copper	4.1E+04	8200	--	82000	--	2900	--	330000	29 =	16.7 =	41.9 =	33.5 =	24.9 =	38.1 J	24.8 =	37 =
Iron	1.0E+05	61000[a]	--	610000[a]	--	23000[a]	--	--	28400 =	19300 =	21400 =	21500 =	20600 =	23900 =	18800 =	31600 =
Lead	7.5E+02	400	--	400	--	400	--	--	18.7 =	16.4 =	158 J	73.1 =	19 =	22.4 =	21.2 =	18.1 =
Magnesium	--	--	--	--	--	--	--	--	4410 =	2740 =	7180 =	9050 =	3730 =	14400 =	9370 =	4240 =
Manganese	1.9E+04	9600	8700	96000	91000	3700	69000	--	663 =	680 =	653 =	627 =	403 =	439 =	319 =	622 =
Mercury	3.1E+02	61	52000	610	540000	23	10	6.4	0.1 U	0.098 U	0.092 U	0.093 U	0.11 =	0.094 U	0.095 U	0.098 U
Nickel	2.0E+04	4100	440000	41000	21000	1600	13000	3800	26 =	13.7 =	19.6 =	23.4 =	19.6 =	28.2 =	18.6 =	30.3 =
Potassium	--	--	--	--	--	--	--	--	982 =	889 =	1690 =	1750 =	1330 =	1390 =	1260 =	1080 =
Selenium	5.1E+03	1000	--	10000	--	390	--	2.4	0.96 =	1 =	0.8 =	0.63 =	0.93 =	0.58 U	0.59 U	0.94 =
Silver	5.1E+03	1000	--	10000	--	390	--	110	0.63 U	0.61 U	0.58 U	0.58 U	0.61 U	0.58 U	0.59 U	0.61 U
Sodium	--	--	--	--	--	--	--	--	50.2 U	62.7 =	46.1 U	46.7 U	48.5 U	46.8 U	47.5 U	49.1 U
Thallium	6.7E+01	160	--	160	--	6.3	--	3.8	0.38 U	0.37 U	0.35 U	0.35 U	0.36 U	0.35 U	0.36 U	0.37 U

Table 1
Analytical Data Summary
Fort Dearborn, USARC, Chicago, IL
Various Sites Remediations

		TACO Tier 1 Soil Remediation Objectives							Soil Sample Analytical Results							
Parameter	Region 9 Industrial PRG	CWING	CWINH	ICING	ICINH	RESING	RESINH	SC1GW	VWR-001-03-EBT	VWR-001-03-ESW	VWR-002-02-ESW	VWR-003-02-ESW	VWR-004-02-ESW	VWR-005-02-EBT	VWR-006-02-EBT	VWR-007-04-EBT
Vanadium	7.2E+03	1400	--	14000	--	550	--	980	35.1 =	27.1 =	26.8 =	23.5 =	26.3 =	22.1 =	24.1 =	33.3 =
Zinc	1.0E+05	61000	--	610000	--	23000	--	53000	46.4 =	41.3 =	105 =	71.9 =	48.8 =	49 =	49.1 =	58.4 =

Notes:

	Exceeds TACO Tier 1 Soil ROs for residential ingestion pathway
Bold	Exceeds Region 9 PRGs (October 2002) for industrial soil
CWING	TACO Tier 1 Soil RO for construction worker ingestion pathway
CWINH	TACO Tier 1 Soil RO for construction worker inhalation pathway
ICING	TACO Tier 1 Soil RO for industrial/commercial worker ingestion pathway
ICINH	TACO Tier 1 Soil RO for industrial/commercial worker inhalation pathway
RESING	TACO Tier 1 Soil RO for residential ingestion pathway
RESINH	TACO Tier 1 Soil RO for residential inhalation pathway
SC1GW	TACO Tier 1 Soil RO for soil component of the groundwater ingestion pathway (Class I) Soil pH ranges 8-10. Soil component of the groundwater ingestion pathway for metals depends on the pH value. Uses values at pH = 8.
U	Analyte is not detected
J	Reported concentration is estimated
=	Analyte is detected at the reported concentration
--	Not available
(a)	Provisional Remedial Objective. Value provided by Mr. Tom Hornshaw, Illinois EPA Bureau of Land in August 8, 2003 Internal Memorandum to Andy Jankowski.

Figures

MWH

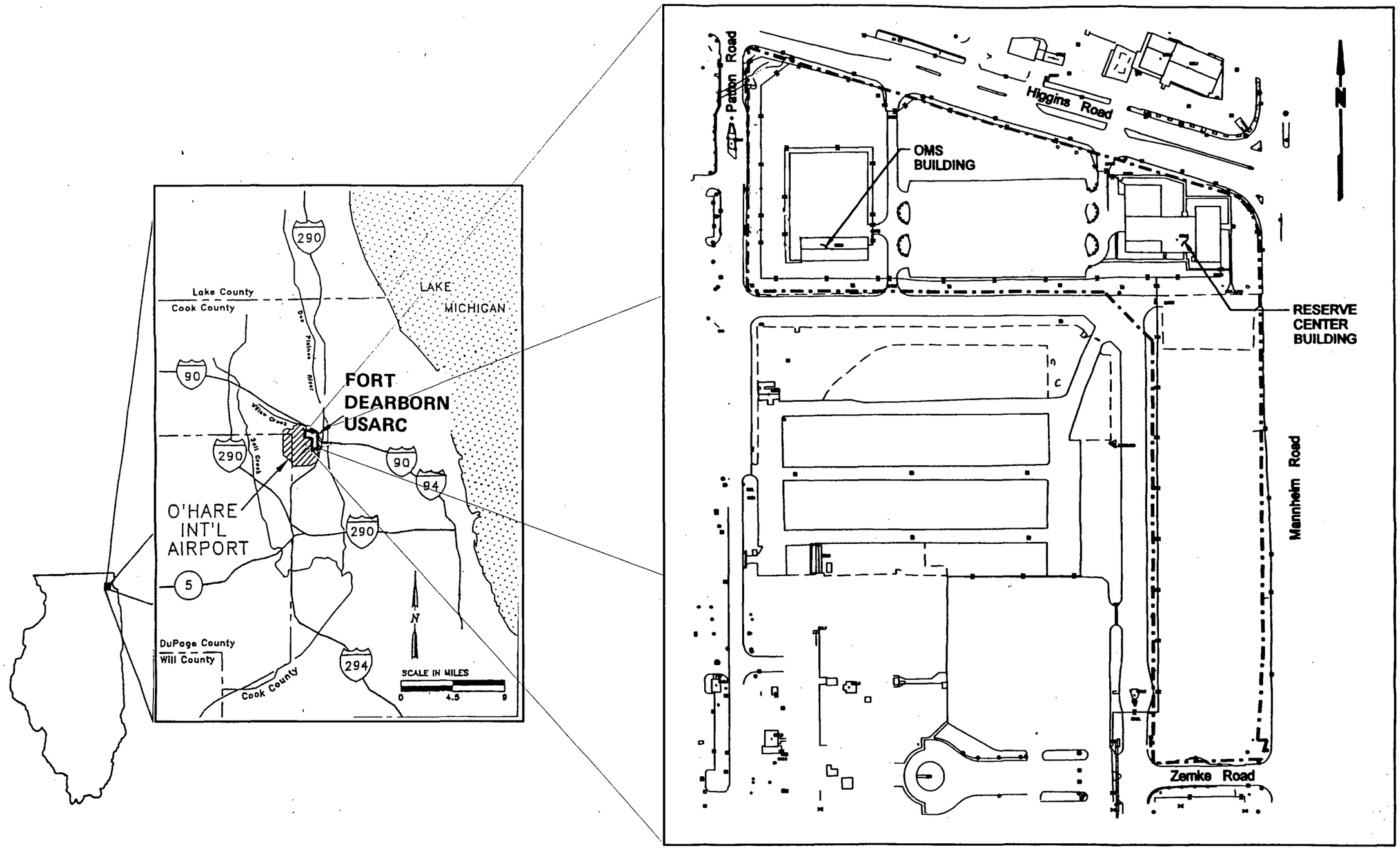

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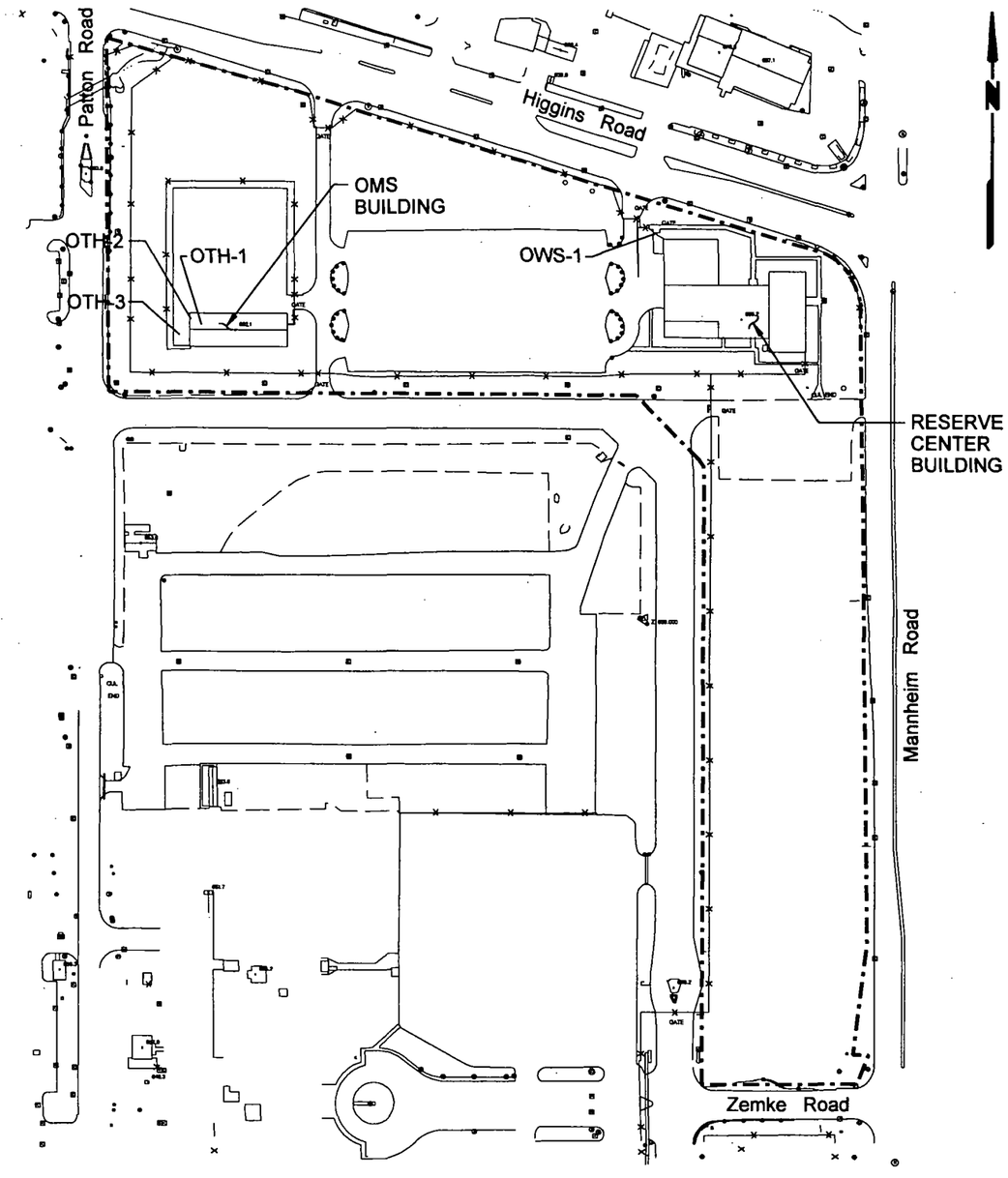
Figure 1
FORT DEARBORN USARC LOCATION MAP
CONSTRUCTION COMPLETION REPORT, VARIOUS SITE REMEDIATIONS
FORT DEARBORN U.S. ARMY RESERVE CENTER
City of Chicago, Illinois

O:/chicago/fort dearborn/construction completion/figure1.cdr

Property Categorization Factor (Site) Designation	Description
OTH-1	Former Maintenance Pit. Former pit used to facilitate maintenance activities beneath vehicles. Pit has been filed and covered with concrete.
OTH-2	Former Shop Sink. Former shop sink described as an improvised sink that drained to a 55-gallon drum that had holes punched into it and was buried in the ground, west of the OMS building. Sink has been removed but an open drain is present in the area of the former sink.
OTH-3	Former Vehicle Wash Rack. Former concrete vehicle washrack used for vehicle cleaning. The wash rack slopes to the south and drains toward a shallow ditch near the property boundary. Site is currently not in use.
OWS-1	Oil/Water Separator. Oil/water separator used to pre-treat washwater from an adjacent vehicle wash rack prior to discharge to the storm sewer system. Site is currently inactive.

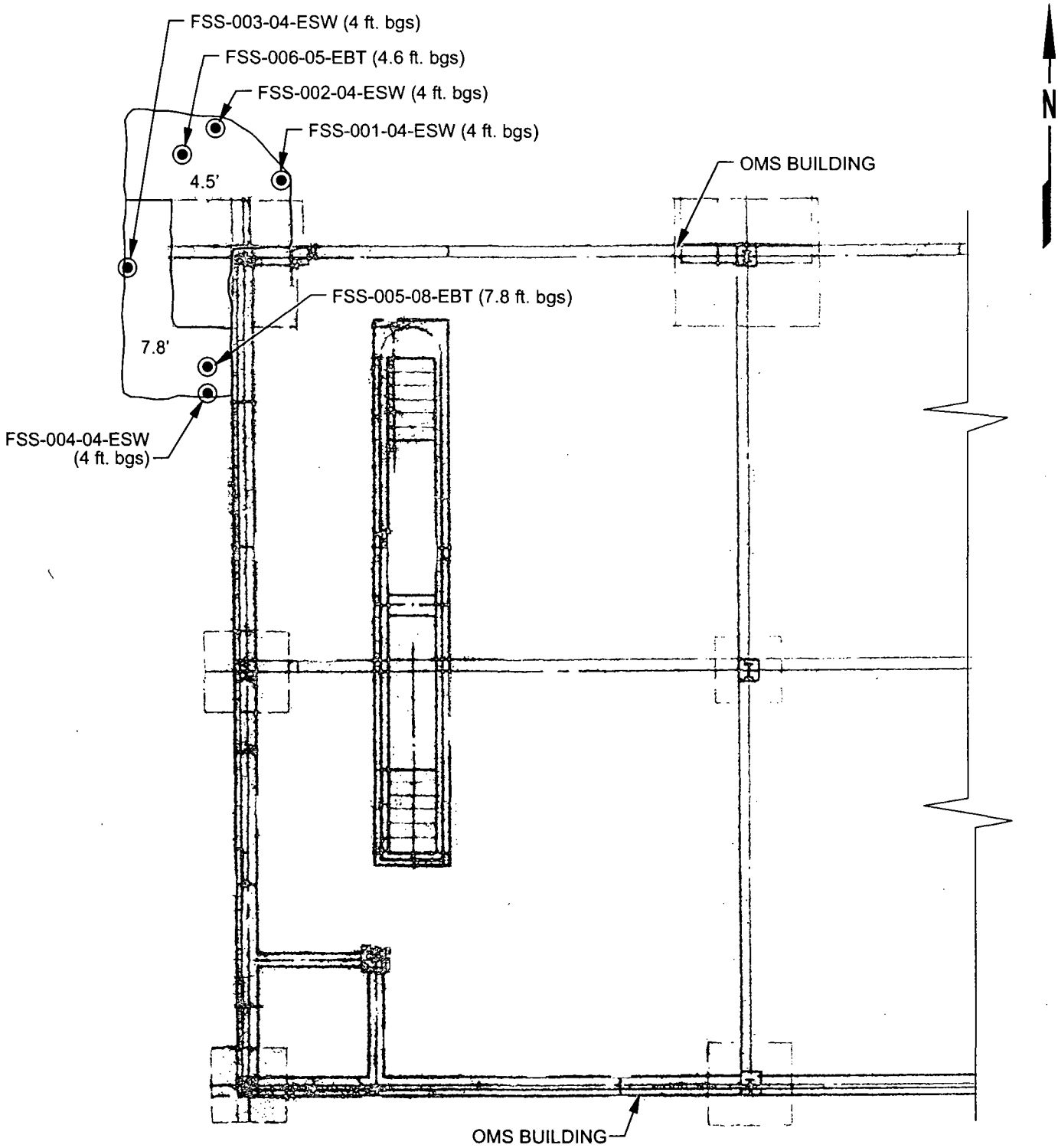


SCALE 0 200 FEET

MWH

R:/5593K/400/FIGURE2.dgn

Figure 2
WORK AREA LOCATION MAP
CONSTRUCTION COMPLETION REPORT, VARIOUS SITE REMEDIATIONS
FORT DEARBORN U.S. ARMY RESERVE CENTER
City of Chicago, Illinois



LEGEND:

- ◉ Soil Sample Location (Sample Depth)
- Approximate Limits of Excavation
- 7.8' Approximate Excavation Depth

5 0 5 10

1/8"= 1'-0"

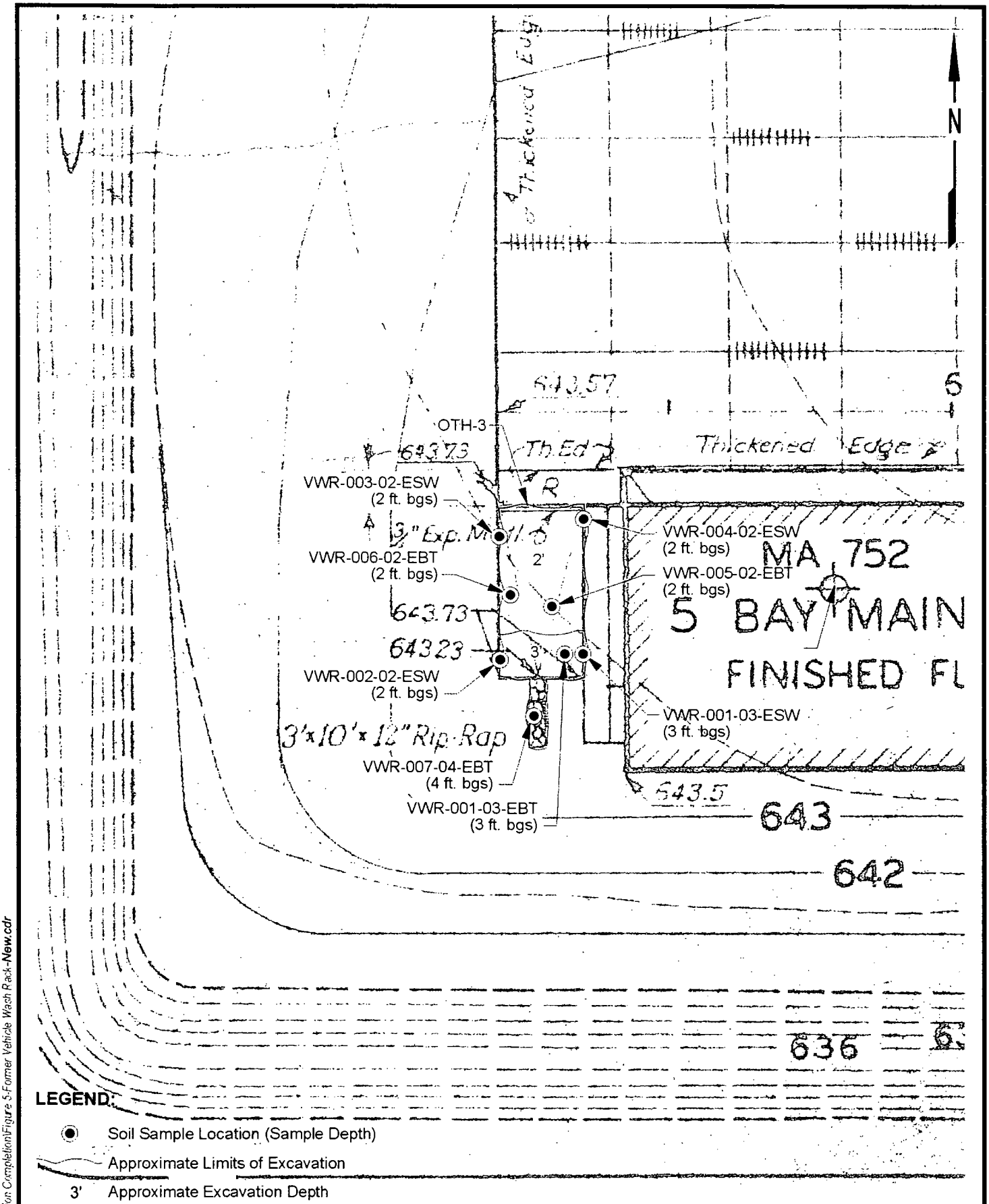
Figure 3

FORMER SHOP SINK (OTH-2)
EXCAVATION AREA AND SAMPLE LOCATIONS

CONSTRUCTION COMPLETION REPORT, VARIOUS SITE REMEDIATIONS
FORT DEARBORN U.S. ARMY RESERVE CENTER
City of Chicago, Illinois

MWH

O:\chicago\fort dearborn\Construction Completion\Figure4-Former Shop Sink.cdr.cdr



Scale 0 22.5 Feet

Figure 4

FORMER VEHICLE WASH RACK (OTH-3)
EXCAVATION AREA AND SAMPLE LOCATIONS

CONSTRUCTION COMPLETION REPORT, VARIOUS SITE REMEDIATIONS
FORT DEARBORN U.S. ARMY RESERVE CENTER
City of Chicago, Illinois

MWH

O:\chicago\fort dearborn\Construction Completion\Figure 5-Former Vehicle Wash Rack-New.cdr

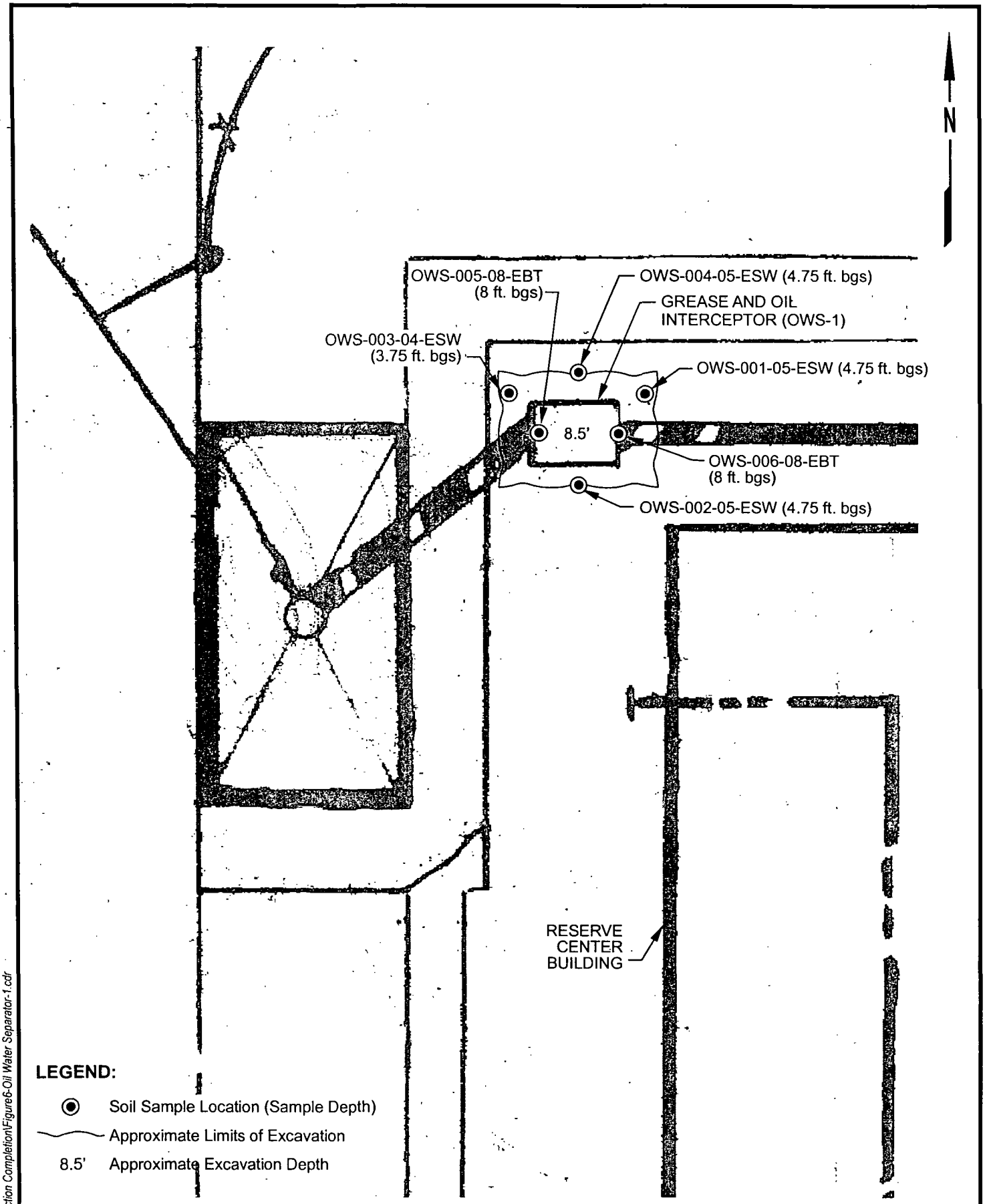


Figure 5

OIL-WATER SEPARATOR (OWS-1)
EXCAVATION AREA AND SAMPLE LOCATIONS

CONSTRUCTION COMPLETION REPORT, VARIOUS SITE REMEDIATIONS
FORT DEARBORN U.S. ARMY RESERVE CENTER
City of Chicago, Illinois

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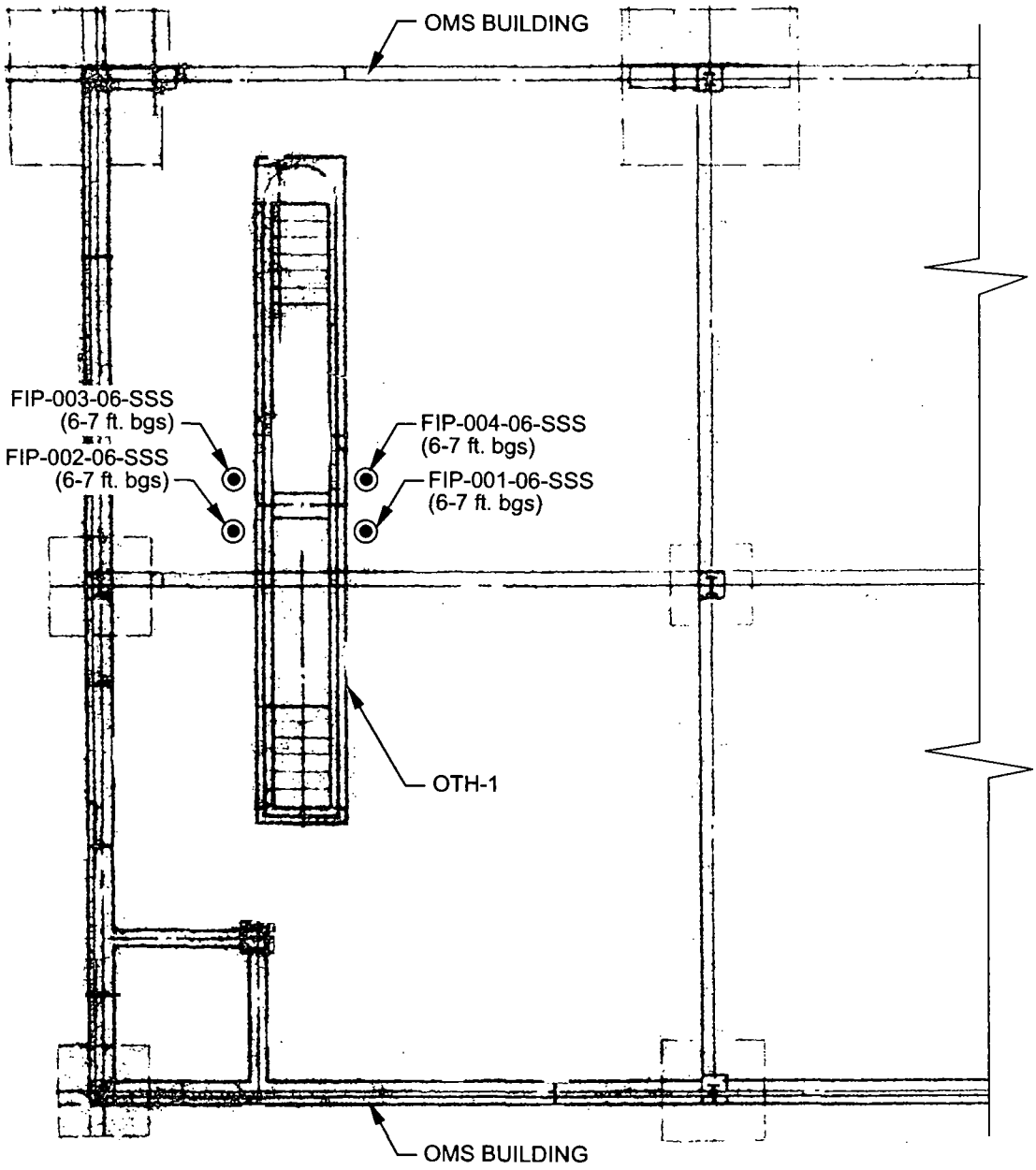
O:\chicago\fort dearborn\Construction Completion\Figure6-Oil Water Separator-1.cdr



LEGEND:

◉ Soil Sample Location (Sample Depth)

5 0 5 10

1/8"= 1'-0"

Figure 6

FORMER VEHICLE INSPECTION PIT (OTH-1)
SAMPLE LOCATIONS

CONSTRUCTION COMPLETION REPORT, VARIOUS SITE REMEDIATIONS
FORT DEARBORN U.S. ARMY RESERVE CENTER
City of Chicago, Illinois

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O:\chicago\fort dearborn\Construction Completion\Figure 7-Vehicle Inspection Pit.cdr

Appendix A

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INSPECTION PHOTOS
FT DEARBORN USARC, VARIOUS SITE REMEDIATIONS
FERGUSON-HARBOUR INC, SEPTEMBER 2002

DATE: 9/10/2002

DIRECTION: South

COMMENTS: Former Maintenance Pit (OTH-1). Preparation for core drilling and soil sampling

DATE: 9/10/2002

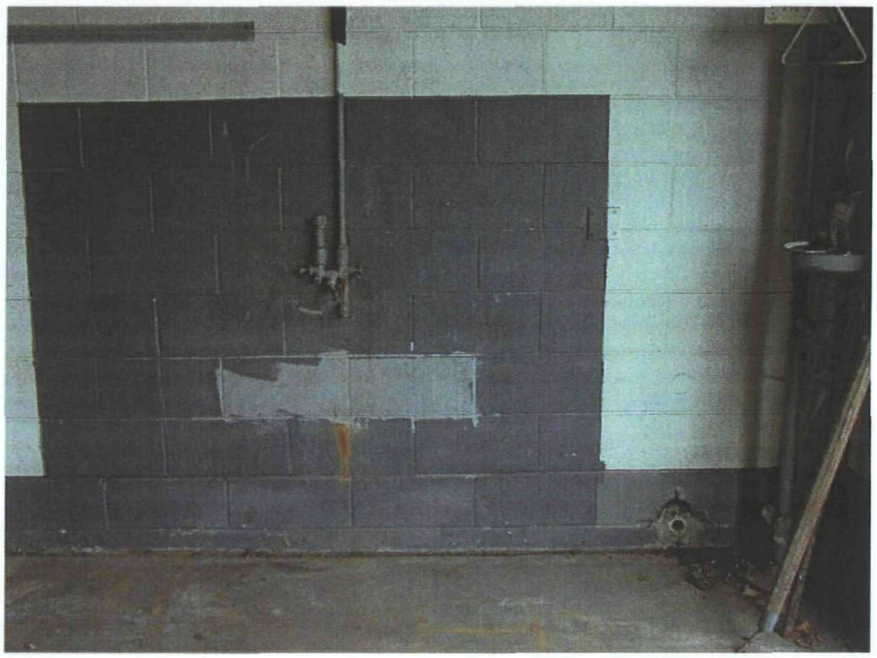
DIRECTION: North

COMMENTS: Roll-off container lined with plastic.

DATE: 9/10/2002

DIRECTION: West

COMMENTS: Suspected Former Sink Shop (OTH-2) location inside the OMS Building. Drain located in lower right corner of photo.



DATE: 9/10/2002

DIRECTION: Southwest

COMMENTS: Breaking concrete at the Former Vehicle Wash Rack (OTH-3).

DATE: 9/10/2002

DIRECTION: Southeast

COMMENTS: Northwest corner of the OMS Building. Former Shop Sink (OTH-2) drain visible on building wall (far right of photo) and hole in downspout visible (far left of photo).

DATE: 9/11/2002

DIRECTION: South

COMMENTS: The buried 55-gallon drum can be seen after the concrete was removed at Site OTH-2, west of the OMS Building.

DATE: 9/11/2002

DIRECTION: North

COMMENTS: Four boreholes located at the Former Maintenance Pit (OTH-1).

DATE: 9/11/2002

DIRECTION: Southwest

COMMENTS: Initial removal of soil and sand from around the buried 55-gallon metal drum at the Former Shop Sink (OTH-2).

DATE: 9/11/2002

DIRECTION: East

COMMENTS: Removal of the buried 55-gallon drum at the Former Shop Sink (OTH-2), west of OMS Building

DATE: 9/11/2002

DIRECTION: Northeast

COMMENTS: Placing the 55-gallon drum from the Former Shop Sink (OTH-2) excavation into over-pack drum.

DATE: 9/11/2002

DIRECTION: East

COMMENTS: Excavation in the area of the 55-gallon drum at OTH-2 after drum removal.

DATE: 9/11/2002

DIRECTION: North

COMMENTS: Soil sample collection at Former Maintenance Pit (OTH-1).

DATE: 9/11/2002

DIRECTION: East

COMMENTS: Soil sample collection at the Former Maintenance Pit (OTH-1).

DATE: 9/12/2002

DIRECTION: North

COMMENTS: Bottom of buried 55-gallon drum removed from the Former Shop Sink (OTH-2) excavation, outside NW corner of OMS Building. Several holes are present.

DATE: 9/12/2002

DIRECTION: West

COMMENTS: Collection of samples for headspace screening at the Former Vehicle Wash Rack (OTH-3). The concrete washrack floor has been removed.

DATE: 9/12/2002

DIRECTION: South

COMMENTS: Former Vehicle Wash Rack (OTH-3) following completion of washrack floor excavation.

DATE: 9/12/2002

DIRECTION: South

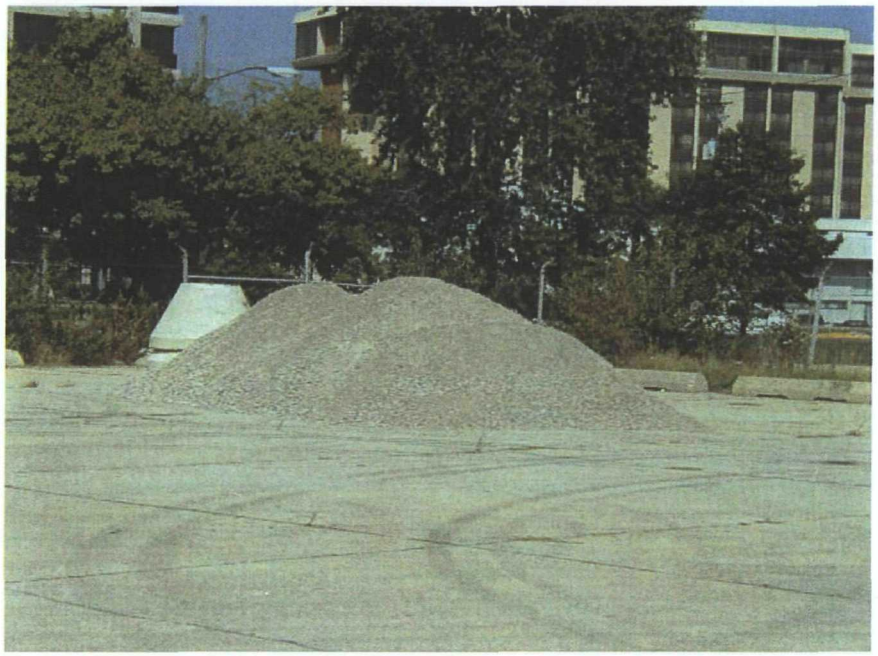
COMMENTS: Removal of soil at the Former Shop Sink (OTH-2) at the northwest corner of OMS Building. The OMS Building downspout is visible at the left side of the photograph.

DATE: 9/12/2002

DIRECTION: North

COMMENTS: View of final depth of excavation at the Former Shop Sink (OTH-2) excavation.

DATE: 9/12/2002
DIRECTION: North
COMMENTS: CA-6 crushed limestone gravel staged for backfilling and site restoration.



DATE: 9/17/2002

DIRECTION: Southwest

COMMENTS: Former Wash Rack (OTH-3) and Former Sink Shop (OTH-2) excavations after backfilling.

DATE: 9/17/2002

DIRECTION: North

COMMENTS: Baker tank temporarily located south of the Oil-Water Separator (OWS-1) for storage of wastewater.

DATE: 9/17/2002

DIRECTION: West

COMMENTS: Removal of the concrete Oil-Water Separator (OWS-1).

DATE: 9/17/2002

DIRECTION: West

COMMENTS: View of soil revealed after removal of the Oil-Water Separator (OWS-1).

DATE: 9/17/2002

DIRECTION: Southwest

COMMENTS: View of inlet pipe located on west wall of Oil- Water Separator (OWS-1) excavation.

DATE: 9/17/2002

DIRECTION: East

COMMENTS: Final depth of Oil-Water Separator (OWS-1) excavation.

DATE: 9/18/2002

DIRECTION: East

COMMENTS: Oil-Water Separator (OWS-1) site during backfilling and restoration.

DATE: 9/18/2002

DIRECTION: West

COMMENTS: View of restoration of boreholes located at the Former Maintenance Pit (OTH-1).

DATE: 9/18/2002

DIRECTION: South

COMMENTS: Former Wash Rack (OTH-3) and Former Sink Shop (OTH-2) sites after backfilling and restoration.

DATE: 9/18/2002

DIRECTION: West

COMMENTS: The 55-gallon drum and its contents removed from the Former Shop Sink (OTH-2) site excavation are shown.

Appendix B

MWH

FERGUSON·HARBOUR
INCORPORATED

ACTIVITY MEETING/INSPECTION REPORT

Contract No. DACA 27-97-D-0007	Client: U.S. ARMY CORPS OF ENGINEERS
Project No. 17297	Project Name: FT DEARBORN, CHICAGO
Activity No.	Activity Name: MOBILIZATION
Activity Description: MOBILIZE TO THE PROJECT SITE FROM FERGUSON HARBOUR LOCATED IN FINDLAY, OHIO	

Date: 9 SEPT 02	Day: MONADAY	Time: 1500

Check (✓) the appropriate box below.

☑ Preparatory Meeting	☐ Initial Inspection/Meeting	☐ Follow-up Inspection/Meeting

Meeting/Inspection Attendees:	
RINEBOLT, TOM	
WHISENANT, DAVID	
EUTSLER, BRUCE	
COEN, BRETT	

Scope of Activity: DRIVE FROM FINDLAY, OHIO AND COLUMBUS, OHIO VIA U.S. INTERSTATE, PREDETERMINED, HIGHWAYS TO FT DEARBORN LOCATED IN CHICAGO, IL AT THE CORNER OF MANCHEIM + HIGGINS RD. DROP OFF SUPPLIES AND TRAILER AT THE PROJECT LOCATION THEN GO TO THE RAMADA INN PLAIN HOTEL.

Project No. 17297	Activity No.

Labor to be used:	
1-SUPERVISOR	
2-EQUIPMENT OPERATORS	
1-TECHNICIAN	

Equipment to be used:	
3-1 TON PICKUPS	
1-ER TRAILER	
1-COMPRESSOR	

Materials to be used:	
NONE	

Quality Control/Assurance Concerns:
NONE

Additional Comments/Notes (attach additional pages if required):
NONE
completed by [illegible]

FERGUSON·HARBOUR
INCORPORATED

ASSOCIATE/VISITOR SITE LOG

Page 1 of 1

Project # 17297

Date 9 SEPT 02 Day MONDAY

Project Name U.S. ACE Ft DEARBORN

Project Location CHICAGO, IL

Company Name U.S. ARMY CORPS OF ENGINEERS

Project Description MOBILIZATION - DROP OFF ER TRAILER, AIR COMPRESSOR

Customer Rep DON MANGIALARDO

DATE	NAME	SIGNATURE	COMPANY NAME	PURPOSE OF VISIT	TIME IN	TIME OUT
9-9-02	Tom Rinetoolt	[signature]	FHI	DROP OFF EQUIPMENT	1930 ~~1930~~	2030

White-Centrail File; Yellow-Project File; Pink-Customer Copy

FERGUSON HARBOUR
INCORPORATED

Project # 17297 Date 9 SEPT 02 Day MONDAY

Project Name VILLAGE FT DEARBORN Project Location CHICAGO, IL

Company Name U.S. ARMY CORPS OF ENGINEERS Project Description EXCAVATE, SAMPLE, BACKFILL & DISPOSAL

Customer Rep DON MANGTALARDO

Time Started 1500 Time Completed 1530

Meeting Conducted By RINGBOLT

☐ Emergency Response ☐ Industrial ☒ Contract

Project Manager JIM FALCI

Site Health & Safety RINGBOLT

Site Supervisor RINGBOLT

#FHI Associates 4 #Subcontractors ____ #Others ____

SIGNED BY ALL IN ATTENDANCE.

1. RINGBOLT
2. [illegible]
3. [illegible]
4. [illegible]
5.
6.
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i Daily Scope of Work: MOBILIZE TO PROJECT SITE AT FT DEARBORN LOCATED IN CHICAGO, IL

ii Daily Chemical Hazards: NONE

Chemical	Exposure Limit	Route of Entry	Symptoms

iii Daily Physical Hazards: TRAFFIC, PULLING TRAILERS.

iv Accidents Reviewed: NONE

v Comments/Suggestions: NONE

vi Protective Levels Task

Level	PPE Description	Work Task	Type Cartridge if Level C
D	WORK CLOTHS, STEEL TOED BOOTS, SUN GLASSES (SAFETY)	ALL	—

Prepared By Tom Ringbolt Title Supervisor

White-Central File Yellow-Project File, Pink-Customer Copy

FERGUSON·HARBOUR
INCORPORATED

ACTIVITY MEETING/INSPECTION REPORT

Contract No. DACA27-97-D-007	Client: U.S. ARMY CORPS OF ENGINEERS
Project No. 17297	Project Name: U.S. ACE FT DEARBORN
Activity No. 16	Activity Name: SAMPLE OWS REMOVAL CONCRETE REMOVAL
Activity Description: BREAK UP CONCRETE PAD ON WASH RACK, LOAD CONCRETE CORE OUT SAMPLE POINTS	

Date: Sept 10, 2002	Day: TUESDAY	Time: 0630

Check (✓) the appropriate box below.

[X] Preparatory Meeting	[ ] Initial Inspection/Meeting	[ ] Follow-up Inspection/Meeting

Meeting/Inspection Attendees:	
[illegible]	
[illegible]	
[illegible]	
[illegible]	
[illegible]	

Scope of Activity:

0630 - SAFETY MEETING
0700 - OPERATIONS
A - REMOVE WASH RACK CONCRETE PAD
B - LOAD CONCRETE INTO ROLL OFF BOXES PROVIDED BY SUB CONTRACTOR
C - BEGIN CORING IN WORK BAY

Project No. 17297	Activity No. 16

Labor to be used:	
DAVID WHISENANT	OPERATOR
BRUCE BUTSLER	TECH
BRET COEN	OPERATOR
GREG KNIGHT	CHEMIST

Equipment to be used:	
JOHN DEER 544 RUBBER TIRE LOADER	
EXCAVATOR	
HOE RAM	
CORING DRILL	

Materials to be used:	
NA	

Quality Control/Assurance Concerns:
NA

Additional Comments/Notes (attach additional pages if required):
NONE
completed by: [illegible]

FERGUSON·HARBOUR
INCORPORATED

Project # 17297 Date 9-10-02 Day TUESDAY

Project Name USACE Ft DEARBORN Project Location CHICAGO, IL

Company Name US ACE Project Description EXCAVATION, SAMPLING, BACKFILL

Customer Rep DON MANGIALARDO

Weather Temperature AM °F PM °F

TIME	DESCRIPTION OF ACTIVITIES AND EVENTS
0630	TR, DW, BC, RG ON SITE, DO SAFETY AND OPTS MEETING
	LOADER ON SITE, TR SENDS BC, DW TO GET SITE FLUIDS
	CREW OPENS BAY DOOR TO GAIN ACCESS TO GREASE PIT
	FOR SAMPLE LOCATIONS. 1st ROLL OFF ON SITE
0800	CREW BEGINS REMOVING PAD. TR CALL JF TO CONFIRM
	SAMPLING POINTS FOR GREASE PIT. EXCAVATOR WITH HAMMER
	ON SITE. CORE REP SAYS THAT WE WILL HAVE DIG AROUND
	DRAIN SPOUT TO SEE IF WE CAN TRACE DRAIN LINE
1000	TR CALL JF AND SAYS WE WILL NEED MORE ROLL OFFS. JF
	GIVES NUMBER TO TR. 2nD ROLL OFF ON SITE TR CALL R-1
1200	CREW BREAKS FOR LUNCH
1230	CREW CONTINUES BREAKING OUT AND LOADING OUT PAD.
	JANIS FROM R1 CALL TR BACK SAYS WE WILL HAVE 2 MORE BOXES
	ON SITE WED.
1300	GREG KNIGHT ON SITE. TR GIVES HIM SAMPLING AND WORK
	PLAN TO REVIEW.
1400	BEGIN CORING SAMPLING POINTS IN BAY.
1930	CREW DEPARTS SITE FOR THE DAY.

Prepared By RINGEBOLT Customer Rep.

Site Supervisor RINGEBOLT Title

Project Mgr. FACC I Date

SAFETY INSPECTION CHECKLIST FOR CONSTRUCTION EQUIPMENT U. S. Army Engineer Division, Great Lakes & Ohio River	Date of Inspection: 9-10-02
Contractor or Unit Ferguson Harbor Inc	Contract No. or Activity DACA27-97-D-007
Inspected by (Signature) [illegible]	Witness (Signature) [illegible]

CRANE/DERRICK, DRAGLINE, RUBBER TIRE TRACTOR (BACKHOES, FRONT END LOADERS), CRAWLER TRACTOR (DOZERS), DUMP TRUCK AND SIMILAR HEAVY EQUIPMENT NOTE: Safety and Health Requirements Manual (EM 385-1-1) references in parentheses.		Yes	No	N/A
1	Are the following documents with the crane at all times? (16.C.02)			
1a	Operating manual from the manufacturer for the specific crane being inspected.			
	(1) Any operator aids for which the crane is equipped?		✓	
1b	Load rating chart for the crane which shall include:		✓	
	(1) the crane make and model, serial number, and year of manufacturer Kobelco 135 SRLC 122322	✓		
	(2) load ratings for all crane operating configurations: including optional equipment			✓
	(3) recommended reeving for the hoist line			✓
	(4) operating limits in windy or cold conditions		✓	
1c	Crane logbook that shows operating hours, inspections, tests, maintenance & repair. **Note:** Has log been updated daily when crane is used, and is signed by operator & supervisor? **Note:** Mechanics shall sign after conducting maintenance or repairs.			✓
2	Does operator have certification that he meets operator qualification and training as stated in 16.C.05? (Corps' crane operators must comply with Appendix G.)	✓		
3	Is there a hazard analysis for set-up and set-down procedures (mobilization, assembly, dismantling, etc.)? (16.C.08)		✓	
4	Are adequate clearances provided from electrical sources, fixed objects, and swing radius? (16.C.09)	✓		
5	Are communications provided as required? (16.C.11)	✓		
6	Has an inspection been performed in accordance with 16.C.12 and Appendix H?	✓		
7	Have performance load tests been conducted in accordance with 16.C.13?			✓
8	Are tag lines used to control loads? (16.C.16)		✓	
9	Is a critical lift plan required? (16.C.18 and page 293)		✓	
10	Are all environmental considerations of 16.C.19 being met?	✓		
11	Is the crane equipped with a boom angle indicator, load-indicating device, means to visually determine levelness, and anti-two block devices? (16.D.01)			
12	Are cable-supported booms equipped with boom stops? (16.D.06)		✓	

	SAFETY INSPECTION CHECKLIST FOR CONSTRUCTION EQUIPMENT	Yes	No	N/A
13	Do all floating cranes and derricks meet the requirements of 16.F?			✓
14	Are all moving parts (gears, drums, shafts, belts, etc.) and all hot surfaces (exhaust lines, pipes, etc.) guarded? (16.B.03)	✓		
15	Is protection (grills, canopies, screens) provided to shield operator from falling or flying objects? (16.B.10 and 16.B.11)	✓		
16	Is adequate rollover protection provided? (16.B.12)	✓		
17	Are seat belts provided? (16.B.08)	✓		
18	Does the unit have a suitable fire extinguisher? Min. 5 BC (16.A.26)		✓	
19	Is there an effective and operational reverse alarm? (16.B.01)		✓	
20	Is a safe means of access to the cab provided (steps, grab bars, non-slip surfaces)? (16.B.03 (d))	✓		
21	Are pressurized cylinders, outriggers, etc., equipped with a pilot check valve? (20.A.17)		✓	
22	Are sufficient lights provided for night operators? (16.A.11)		✓	
23	Are daily, initial inspections, and tests (prior to each shift) of the equipment performed by a designated competent person? (16.A.01 & 16.A.02)	✓		
24	Are fuel tanks located in a manner to prevent spills or overflows from running onto engine exhaust or electrical equipment? (16.B.04)	✓		
25	Are exhaust discharges from equipment so directed that they do not endanger persons or obstruct the view of the operator? (16.B.05)	✓		
26	Are inspection records kept available as a part of the official project file? (16.A.01 (b))			
27	Do all motor vehicles meet the requirements of 18.A and 18.B?			
	Remarks:			
	NOTE: It is not anticipated that this checklist will be used for conveyors, concrete plants, material hoists, elevators air compressors and other special purpose construction equipment not mentioned on page 1 of this form.			

SAFETY INSPECTION CHECKLIST FOR CONSTRUCTION EQUIPMENT U. S. Army Engineer Division, Great Lakes & Ohio River	Date of Inspection: 9/10/02 DACA 27-99-D-007
Contractor or Unit Ferguson Harbor	Contract No. or Activity
Inspected by (Signature) [signature]	Witness (Signature) [signature]

CRANE/DERRICK, DRAGLINE, RUBBER TIRE TRACTOR (BACKHOES, FRONT END LOADERS), CRAWLER TRACTOR (DOZERS), DUMP TRUCK AND SIMILAR HEAVY EQUIPMENT NOTE: Safety and Health Requirements Manual (EM 385-1-1) references in parentheses.		Yes	No	N/A
1	Are the following documents with the crane at all times? (16.C.02)			
1a	Operating manual from the manufacturer for the specific crane being inspected.	✓		
	(1) Any operator aids for which the crane is equipped?			✓
1b	Load rating chart for the crane which shall include:			✓
	(1) the crane make and model, serial number, and year of manufacturer 544H 3672RD Johndeere	✓		
	(2) load ratings for all crane operating configurations: including optional equipment	✓		
	(3) recommended reeving for the hoist line			✓
	(4) operating limits in windy or cold conditions			✓
1c	Crane logbook that shows operating hours, inspections, tests, maintenance & repair. **Note:** Has log been updated daily when crane is used, and is signed by operator & supervisor? **Note:** Mechanics shall sign after conducting maintenance or repairs.			✓
2	Does operator have certification that he meets operator qualification and training as stated in 16.C.05? (Corps' crane operators must comply with Appendix G.)	✓		
3	Is there a hazard analysis for set-up and set-down procedures (mobilization, assembly, dismantling, etc.)? (16.C.08)			✓
4	Are adequate clearances provided from electrical sources, fixed objects, and swing radius? (16.C.09)	✓		
5	Are communications provided as required? (16.C.11)	✓		
6	Has an inspection been performed in accordance with 16.C.12 and Appendix H?	✓		
7	Have performance load tests been conducted in accordance with 16.C.13?			✓
8	Are tag lines used to control loads? (16.C.16)			✓
9	Is a critical lift plan required? (16.C.18 and page 293)			✓
10	Are all environmental considerations of 16.C.19 being met?		✓	
11	Is the crane equipped with a boom angle indicator, load-indicating device, means to visually determine levelness, and anti-two block devices? (16.D.01)			✓
12	Are cable-supported booms equipped with boom stops? (16.D.06)			✓

	SAFETY INSPECTION CHECKLIST FOR CONSTRUCTION EQUIPMENT	Yes	No	N/A
13	Do all floating cranes and derricks meet the requirements of 16.F?			✓
	Are all moving parts (gears, drums, shafts, belts, etc.) and all hot surfaces (exhaust lines, pipes, etc.) guarded? (16.B.03)	✓		
15	Is protection (grills, canopies, screens) provided to shield operator from falling or flying objects? (16.B.10 and 16.B.11)	✓		
16	Is adequate rollover protection provided? (16.B.12)	✓		
17	Are seat belts provided? (16.B.08)	✓		
18	Does the unit have a suitable fire extinguisher? Min. 5 BC (16.A.26)		✓	
19	Is there an effective and operational reverse alarm? (16.B.01)	✓		
20	Is a safe means of access to the cab provided (steps, grab bars, non-slip surfaces)? (16.B.03 (d))	✓		
21	Are pressurized cylinders, outriggers, etc., equipped with a pilot check valve? (20.A.17)			✓
22	Are sufficient lights provided for night operators? (16.A.11)	✓		
23	Are daily, initial inspections, and tests (prior to each shift) of the equipment performed by a designated competent person? (16.A.01 & 16.A.02)	✓		
24	Are fuel tanks located in a manner to prevent spills or overflows from running onto engine exhaust or electrical equipment? (16.B.04)	✓		
25	Are exhaust discharges from equipment so directed that they do not endanger persons or obstruct the view of the operator? (16.B.05)	✓		
26	Are inspection records kept available as a part of the official project file? (16.A.01 (b))	✓		
27	Do all motor vehicles meet the requirements of 18.A and 18.B?			
	Remarks:			
	NOTE: It is not anticipated that this checklist will be used for conveyors, concrete plants, material hoists, elevators air compressors and other special purpose construction equipment not mentioned on page 1 of this form.			

FERGUSON·HARBOUR
INCORPORATED

ASSOCIATE/VISITOR SITE LOG

Project # 7297
Date Sept 10, 2002 Day Tuesday
Project Name USACE Ft Dearborn
Project Location Chicago, Il
Company Name USACE
Project Description Sampling, OWS Removal Soil Removal
Customer Rep Don Mangialardo

DATE	NAME	SIGNATURE	COMPANY NAME	PURPOSE OF VISIT	TIME IN	TIME OUT
9-10-02	David Whiserant	D Whiserant	FHI	work	0630	1900
9-10-02	Brent Coen	Brent	FHI	work	0630	1900
9-10-02	Bruce Eutsler	Bruce Eutsler	FHI	work	0630	1900
9-10-02	Tom Rinehart	T Rinehart	FHI	work	0630	1900
9/10/02	Greg Knight	Gregory A. Knight	FHI	work	1100	1900
9/10/02	Don Mangialardo	D Mangialardo	COE	QA	8:30	
9/10/02	Rebecca Oswald	R Oswald	IEPA	oversite	9:15	

White-Central File; Yellow-Project File; Pink-Customer Copy

FERGUSON HARBOUR INCORPORATED

DAILY SAFETY MEETING

Project #

Date Sept 10, 2002 Day Tuesday

Project Name USACE Ft Dearborn

Project Location Chicago, Il

Company Name USACE

Project Description Gas Removal, Sampling, Soil Removal

Customer Rep Don Mongielardo

Time Started 0630 Time Completed 0700

Meeting Conducted By RINEBOLT

☐ Emergency Response ☐ Industrial ☒ Contract

Project Manager FACCI

Site Health & Safety RINEBOLT

Site Supervisor RINEBOLT

#FHI Associates 4 #Subcontractors ____ #Others ____

SIGNED BY ALL IN ATTENDANCE.

1. [signature]
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i. Daily Scope of Work: CORE SAMPLE POINTS, REMOVE CONCRETE PAD

ii. Daily Chemical Hazards

Chemical	Exposure Limit	Route of Entry	Symptoms
Possible Solvents			

iii. Daily Physical Hazards: Slips, Trips, Falls, Heat Stress, Strains From Lifting

iv. Accidents Reviewed: NONE

v. Comments/Suggestions: NONE

vi. Protective Levels Task

Level	PPE Description	Work Task	Type Cartridge if Level C
D	Hard Hat, Safety Glasses, Steel Toed Boots, Gloves	All	NA

Prepared By Rinebolt Title RM

White-Central File Yellow-Project File, Pink-Customer Copy

Project No. 17297	Activity No.

Labor to be used:	
Chemist	
2-OPERATORS	
1-Tech	

Equipment to be used:	
Loader	
excavator	

Materials to be used:	
C-AG Backfill	

Quality Control/Assurance Concerns: NONE

Additional Comments/Notes (attach additional pages if required):

Completed by: T. Ruth

FERGUSON·HARBOUR
INCORPORATED

Project # 17297 Date 9-11-02 Day WED

Project Name U.S.ACE Ft DEARBORN Project Location CHICAGO IL

Company Name U.S.ACE Project Description SAMPLE CORING, PAD REMOVAL, EXCAVATE SOIL

Customer Rep DON MANGIACARDO

Weather Temperature AM °F PM °F

TIME	DESCRIPTION OF ACTIVITIES AND EVENTS
0630	SAFETY AND OPS MEETING, TR DISCUSSES IMPORTANCE AND
	UPGRADED SECURITY BECAUSE OF 9/11
0700	CREW CONTINUES CORING SAMPLE LOCATIONS IN GARAGE BAY
1000	CORINGS ARE COMPLETE ISSA AND ARMY CORE CHEMIST ON SITE
	BEGIN DISCUSSING SAMPLING PLAN. GK AND CORE QA CHEMIST GOING
	OVER AMOUNT OF SAMPLES TO BE TAKEN AT EACH LOCATION. TR TELLS
	CREW TO AUGER DOWN 1 FT ABOVE WERE SAMPLES ARE TO BE TAKEN
	UNTIL USACE FIGURES OUT SAMPLING PLAN.
1200	CREW BREAKS FOR LUNCH
1230	DW + BC BEGIN EXCAVATING FOR DRUM. FIND DRUM
	RIGHT BELOW CONCRETE PAD DIRECTLY BELOW WERE THE
	DRAIN CAME OUT ON THE OUTSIDE OF THE BUILDING. CREW
	PULLS DRUM AND PLACES IN OVER PACK.
1500	BEGIN SAMPLING CORINGS IN BAY - SAMPLING IS
	TAKING AN EXTREME LONG PERIOD OF TIME. DUE TO
	USACE BEING CONFUSED ABOUT SAMPLING PLAN
	TR SEND BC + BC TO PUMP OUT DWS.
1830	2 CORE POINTS SAMPLED. TR CONTACTS LABS ABOUT INCOMING
	SAMPLES.
1930	BC + DW TAKE SAMPLE TO FED-X - CREW DEPARTS SITE
	~~CREW~~ FOR THE DAY
2000	DW CALL TR AND SAY THAT OUR FED-X ACCOUNT IS
	NO GOOD - TR PAYS FOR SHIPMENT OVER THE PHONE.

Prepared By RINEBOLT Customer Rep.

Site Supervisor RINEBOLT Title

Project Mgr. FACCI Date

FERGUSON·HARBOUR
INCORPORATED

ASSOCIATE/VISITOR SITE LOG

Project # 17297
Date Sept 11 98 Day Wed
Project Name USACE Ft DEARBORN
Project Location Chicago, Il
Company Name USACE
Project Description SAMPLE, CORING, CONCRETE REMOVAL
Customer Rep DON MANGIALARDO

DATE	NAME	SIGNATURE	COMPANY NAME	PURPOSE OF VISIT	TIME IN	TIME OUT
9/11	Tom Rinebott	[signature]	FHI	WORK	0630	1930
9/11	David Whisenant	[signature]	FHI	Work	0630	1930
9/11	Greg Knight	Gregory C. Knight	FHI	WORK	0630	1930
9/11	Bruce Eutbler	[signature]	FHI	WORK	0630	1930
9/11	Brent Coen	[signature]	FHI	Work	0630	1930
9/11	Don MANGIALARDO	D Mangialardo	COE	QA	7:00	
9/11	Rebecca Oswald	R.S. Oswald	ISPA	oversite	9:15	1600
9/11	Kathy Krantz	[signature]	COE Louisville District	oversite	9:15	1930

FERGUSON·HARBOUR
INCORPORATED

ACTIVITY MEETING/INSPECTION REPORT

Contract No. DACA 27-97-D-007	Client: U.S. ARMY CORPS OF ENGINEERS
Project No. 17297	Project Name: U.S. ACE PT DEARBORN
Activity No. 16	Activity Name: SAMPLE, OWS REMOVAL, DRUM EXCAVATION
Activity Description: LOAD OUT CONCRETE PAD FROM WASH RACK, FIND AND REMOVE BURIED DRUM, SAMPLE CORE POINTS, AT GREASE PIT, PUMP OWS.	

Date: Sept 11, 2002	Day: WED	Time: 2:30

Check (✓) the appropriate box below.

☑ Preparatory Meeting	☐ Initial Inspection/Meeting	☐ Follow-up Inspection/Meeting

Meeting/Inspection Attendees:	
[illegible]	
GREG KNIGHT	
BRENT COEN	
David Whisenant	
[illegible]	

Scope of Activity:

A - LOAD OUT CONCRETE PAD FROM WASH RACK

B - EXCAVATE TO LOCATE BURIED DRUM

C - COMPLETE CORING OF SAMPLE POINTS AROUND GREASE PIT

D - PUMP OUT WATER IN OWS

E - SAMPLE CORE POINTS AT GREASE PIT

FERGUSON HARBOUR INCORPORATED

DAILY SAFETY MEETING

Page 1 of 1

Project # _____

Date Sept 11, 02 Day Wed

Project Name USACE Ft Dearborn

Project Location Chicago, Il

Company Name USACE

Project Description Sample, concrete removal

Customer Rep _____

Owns Remove

Time Started 0630 Time Completed 0900

Meeting Conducted By RINEBOLT

☐ Emergency Response ☐ Industrial ☒ Contract

Project Manager [illegible]

Site Health & Safety RINEBOLT

Site Supervisor RINEBOLT

#FHI Associates 5 #Subcontractors _____ #Others _____

SIGNED BY ALL IN ATTENDANCE.

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i Daily Scope of Work: CORING, SAMPLING LOADING OUT CONCRETE, PUMP OUT OWS

ii Daily Chemical Hazards: NA

Chemical	Exposure Limit	Route of Entry	Symptoms

iii Daily Physical Hazards: NA

iv Accidents Reviewed: NA

v Comments/Suggestions: NA

vi Protective Levels Task

Level	PPE Description	Work Task	Type Cartridge if Level C
D	HARD HAT, SAFETY GLASSES STEEL TOED BOOTS	ALL	NA

Prepared By Rinebolt Title RM

White-Central File Yellow-Project File, Pink-Customer Copy

FERGUSON·HARBOUR
INCORPORATED

ACTIVITY MEETING/INSPECTION REPORT

Contract No. DACA 27-97-D-007	Client: U.S. ARMY CORPS OF ENGINEERS
Project No. 17297	Project Name: U.S. ACE FT DEARBORN
Activity No. 16	Activity Name: SAMPLE OWS REMOVAL D
Activity Description: EXCAVATE SINK/DRUM AREA, CONTINUE SAMPLE WASH PAD PUMP OWS	

Date: SEPT 12, 2002	Day: THURS	Time: 0630

Check (✓) the appropriate box below.

[X] Preparatory Meeting	[ ] Initial Inspection/Meeting	[ ] Follow-up Inspection/Meeting

Meeting/Inspection Attendees:

[illegible]	
[illegible]	
[illegible]	

Scope of Activity:

A LOAD OUT ADDITIONAL SOIL FROM WASH RACK

B COMPLETE SAMPLING OFF WASH RACK

C EXCAVATE DRUM AREA

D FIND PIPE DRAIN DIRECTION

E BEGIN SAMPLING DRUM EXCAVATION AREA

Project No. 17297	Activity No. 16

Labor to be used:	
Chemist	
2-OPERATORS	
1-Tech	

Equipment to be used:	
LOADER	
EXCAVATOR	
ROLL OFFS	

Materials to be used:	
C-66 BACKFILL	

Quality Control/Assurance Concerns: NONE

Additional Comments/Notes (attach additional pages if required): Many ans

REMOVAL TO TUES SEPT 17, 2002

completed by [illegible]

FERGUSON·HARBOUR
INCORPORATED

Project # 17297 Date 9-12-02 Day THURSDAY

Project Name USACE CH DEARBORN Project Location CHICAGO, IL

Company Name USACE Project Description SAMPLE, CORING SOIL REMOVAL

Customer Rep DON MANGIALARDO

Weather Temperature AM °F PM °F

TIME	DESCRIPTION OF ACTIVITIES AND EVENTS
0630	SAFETY AND OPS MEETING
0700	CREW CONTINUES SAMPLING CORINGS IN BUILDING
	DW BEGINS EXCAVATING SOIL FROM WASH RACK.
1000	DW BEGINS EXCAVATING DRUM AREA. USACE WANTS US TO EXCAVATE
	DOWN SIX FEET OR UNTIL CLEAN AND ALSO TO CHASE PIPING FROM
	DOWN SPOUT.
1100	DW DONE EXCAVATING - SAMPLING CREW BEGINS DOING
	HEAD SPACE MONITORING. TR MEASURES SAMPLE POINT IN
	EXCAVATION. TR ORDERS BACKFILL FROM VULCAN MATERIALS.
	LOADER STARTING TO RUN BAD.
1200	CREW BREAKS FOR LUNCH. TR TELL USACE WE WILL DO DWS NEXT TUES.
1230	USACE CHEMIST SAYS WE DO NOT HAVE ENOUGH SAMPLE JARS.
	TR TELLS HER TO LET HIM KNOW HOW MANY. LAB RUNNER IS
	ALREADY DROPPING OFF 1-LITE + 16 OZ JARS. RUNNER ON SITE
1400	USACE CHEMIST SAYS WE HAVE TO EXCAVATE 3'×3' AREA
	FROM SW CORNER OF EXCAVATION. THEY HAD A SLIGHT
	HEAD SPACE HIT. IEPA SAYS SHE IS OK WITH 0-5 ppm
	"DON'T OVERKILL". BEGIN SAMPLING WASH RACK EXCAVATION.
	STILL ALOT OF CONFUSION ABOUT SAMPLING PLAN. USACE SAYS
	WERE STILL SHORT JARS BUT WILL NOT TELL TR WHAT TO
	ORDER. TR NOW DOING ALOT OF THE SAMPLING.
1930	CREW DEPARTS SITE DW + BL GO TO FED-X TO SHIP
	SAMPLES

Prepared By RINGBOLT Customer Rep.

Site Supervisor RINGBOLT Title

Project Mgr. FACCI Date

FERGUSON·HARBOUR
INCORPORATED

ASSOCIATE/VISITOR SITE LOG

Page 1 of 1

Project # 17297
Date Sept 12, 02 Day Thursday
Project Name USACE Ft Dearborn
Project Location Chicago, Il
Company Name USACE
Project Description SAMPLE, OWS REMOVAL
Customer Rep DON MANGIALARDO
BACKFILL

DATE	NAME	SIGNATURE	COMPANY NAME	PURPOSE OF VISIT	TIME IN	TIME OUT
9/12/02	David Whiseman	[illegible]	FHI	Work	0630	1930
9/12/02	Greg Knight	Gregory C. Knight	FHI	Work	0630	1930
9/12/02	Bruce Eutsler	[illegible]	FHI	Work	0630	1930
9/12/02	Brent Coen	[illegible]	FHI	Work	0630	1930
9/12/02	Don Mangialardo	D Mangialardo	Corps of Engrs	QA	0700	
9/12/02	Rebecca Osinaid	[illegible]	IEPA	Oversite	0730	

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FERGUSON·HARBOUR
INCORPORATED

DAILY SAFETY MEETING

Page 1 of 1

Project # 17297 Date Sept 12, 02 Day Thursday

Project Name USACE Ft Dearborn Project Location Chicago, IL

Company Name USACE Project Description SAMPLE, OWS REMOVAL

Customer Rep DON MANGIALARDO BACKFILL

Time Started 0630 Time Completed 2200

Meeting Conducted By RIVERBOLT

☐ Emergency Response ☐ Industrial ☒ Contract

Project Manager FALCI

Site Health & Safety RIVERBOLT

Site Supervisor RIVERBOLT

#FHI Associates 5 #Subcontractors ____ #Others ____

SIGNED BY ALL IN ATTENDANCE.

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I. Daily Scope of Work: SAMPLE EXCAVATED AREAS, REMOVE OIL WATER SEPERATOR, BACKFILL

II. Daily Chemical Hazards: NA

Chemical	Exposure Limit	Route of Entry	Symptoms

III. Daily Physical Hazards: SLIPS, TRIPS, FALLS; STRAINS FROM LIFTING, HEAT STRESS, HEAVY EQUIPMENT

IV. Accidents Reviewed: NONE

V. Comments/Suggestions: NONE

VI. Protective Levels Task

Level	PPE Description	Work Task	Type Cartridge if Level C
D	HARD HAT SAFETY GLASSES	ALL	NA
	STEEL TOED BOOTS		

Prepared By RIVERBOLT Title FM

White-Central File, Yellow-Project File, Pink-Customer Copy

FERGUSON·HARBOUR
INCORPORATED

ACTIVITY MEETING/INSPECTION REPORT

Contract No. DACA-27-97-D-007	Client: U.S. ARMY CORPS OF ENGINEER
Project No. 17297	Project Name: U.S. ACE FT DEARBORN
Activity No. 16	Activity Name: ~~SAMPLE DRUM EXCAVATION AREA~~
Activity Description: SAMPLE DRUM EXCAVATION AREA + BACK FILL	

Date: SEPT 13, 02	Day: FRIDAY	Time: 0630

Check (✓) the appropriate box below.

☒ Preparatory Meeting	☐ Initial Inspection/Meeting	☐ Follow-up Inspection/Meeting

Meeting/Inspection Attendees:	

Scope of Activity:

A- SAMPLE DRUM EXCAVATION AREA

B- BACK FILL AND COMPACT DRUM EXCAVATION AREA AND WASH RACK

C DEMOBE UNITS 9-17-02

Project No. 17297	Activity No. 16

Labor to be used:	
CHEMIST	
2-EO'S	
1-LABORER	

Equipment to be used:	
LOADER	
EXCAVATOR	
ROLL-OFFS	

Materials to be used:	
C-AG STONE	

Quality Control/Assurance Concerns: NONE

Additional Comments/Notes (attach additional pages if required):

Completed by T. Kutz

FERGUSON·HARBOUR
INCORPORATED

Page ____ of ____

Project # 17297 Date 9-13-02 Day FRIDAY

Project Name USACE FT DEARBORN Project Location Chicago IL

Company Name USACE Project Description SAMPLE FACILITY

Customer Rep DON MANGIALARDO

Weather _____ Temperature _____ AM _____ °F _____ PM _____ °F

TIME	DESCRIPTION OF ACTIVITIES AND EVENTS
0630	SAFETY AND OPS MEETING.
0700	CREW BEGINS COMPLETING SAMPLING WATER BACK
0800	CREW BEGINS SAMPLING DRUM EXCAVATION AREA - BAKER TANK ONSITE
1000	CREW ~~BEGINS~~ BEGINS BACKFILLING EXCAVATED AREAS
	GK BACKING AND DOCUMENTING SAMPLES. CREW PUMPS OUT OWS.
1100	BC RUNS GK BACK TO HOTEL SO HE CAN CATCH SHUTTLE TO
	AIRPORT - TR CONTINUES PACKAGING SAMPLES.
1300	CREW DEPARTS SITE. TAKES SAMPLES TO FED-X. WILL RETURN
	TO SITE ON 9-17-02

Prepared By RINGBOLT Customer Rep. _____

Site Supervisor RINGBOLT Title _____

Project Mgr. SACCI Date _____

FERGUSON HARDOON INCORPORATED

DAILY SAFETY MEETING

Page 1 of 1

Project # 17297 Date Sept 13, 2002 Day Friday

Project Name USACE FT DEARBORN Project Location Chicago, Il

Company Name U.S. ACC Project Description Sample, Back Fill

Customer Rep DON MANGIALARDO

Time Started 0630 Time Completed 0700

Meeting Conducted By RINGBOLT

☐ Emergency Response ☐ Industrial ☒ Contract

Project Manager FACCI

Site Health & Safety RINGBOLT

Site Supervisor RINGBOLT

#FHI Associates 5 #Subcontractors ____ #Others ____

SIGNED BY ALL IN ATTENDANCE.

1. [signature]
2. Gregory C. Knight
3. [signature]
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I. Daily Scope of Work: SAMPLE WASH STAIR, DRUM AREA, BACKFILL

II. Daily Chemical Hazards

Chemical	Exposure Limit	Route of Entry	Symptoms
VOC SVOC	VARIOUS		

III. Daily Physical Hazards: SLIPS, TRIPS, FALLS, STRAINS FROM LIFTING, HEAT STRESS, HEAVY EQUIPMENT

IV. Accidents Reviewed: NONE

V. Comments/Suggestions: NONE

VI. Protective Levels Task

Level	PPE Description	Work Task	Type Cartridge if Level C
D	HARD HAT, SAFETY GLASSES, STEEL TOED BOOTS	ALL	—

Prepared By Ringbolt Title RM

White-Central File Yellow-Project File Pink-Customer Copy

FERGUSON·HARBOUR
INCORPORATED

ASSOCIATE/VISITOR SITE LOG

Project # 17297
Date SEPT 13, 2002 Day FRIDAY
Project Name U.S. ACE FT DEARBORN
Project Location CHICAGO, IL
Company Name U.S. ACE
Project Description SAMPLE, BACKFILL
Customer Rep DON MANGIACARDO

DATE	NAME	SIGNATURE	COMPANY NAME	PURPOSE OF VISIT	TIME IN	TIME OUT
9-13	Tom Rinebolt	[illegible]	FHI	WORK	0630	
9-13	BRENT COCH	[illegible]	FHI	WORK	0630	
9/13/02	GREG KNIGHT	[illegible]	FHI	WORK	0630	
9/13/02	BRUCE EUTSLER	[illegible]	FHI	WORK	0630	
9/13/02	DON MANGIACARDO	D Mangiacardo	Corps of Engrs	QA	7:20	

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FERGUSON·HARBOUR
INCORPORATED

ACTIVITY MEETING/INSPECTION REPORT

Contract No. DACA-27-97-D-007	Client: U.S. ARMY CORPS OF ENGINEERS
Project No. 17297	Project Name: USACE FT DEARBORN
Activity No. 16	Activity Name: BACKFILL + SAMPLE, EXCAVATE
Activity Description: COMPLETE EXCAVATE AND REMOVE OWS-1, B-SAMPLE AND BACKFILL	

Date: 9-17-02	Day: TUES	Time: 0630
Check (✓) the appropriate box below.		
[X] Preparatory Meeting	[ ] Initial Inspection/Meeting	[ ] Follow-up Inspection/Meeting

Meeting/Inspection Attendees:	
Dwayne Bayes	
[illegible]	
[illegible]	
Tom [illegible]	

Scope of Activity:
A - REMOVE OWS-1
B - SAMPLE OWS-1
C BACKFILL OWS-1
D - REPLACE FENCE

Project No. 17297	Activity No. 16

Labor to be used:	
2 Operators	
1 Laborer	
1 Sup	

Equipment to be used:	
Excavator	
loader	
Compactor	

Materials to be used:	
C-1K STONE	

Quality Control/Assurance Concerns: none

Additional Comments/Notes (attach additional pages if required): none

Completed by: [illegible]

FERGUSON·HARBOUR
INCORPORATED

Page ____ of ____

Project # 17297 Date Sept 17, 02 Day Tues

ect Name USACE Ft DEARBORN Project Location Chicago, Il

Company Name U.S. ACE Project Description REMOVE DWS, SAMPLE, BACKFILL

Customer Rep DON MANGIALARDO

Weather Temperature ____ AM ____ °F ____ PM ____ °F

TIME	DESCRIPTION OF ACTIVITIES AND EVENTS
0630	SAFETY + OPTS MEETING
0700	CREW BEGINS REMOVING DWS. TR SET UP SAMPLING AREA.
	EXPLAINS TO USACE THAT WE WILL SAMPLE DWS TODAY AND
	DO ROLLOFFS AND BAKER TANK LATER.
0730	VULCAN MATERIAL BEGINS BRINGING IN BACK FILL
1030	DWS REMOVED.
1100	TR DOES HEAD SPACE AT SAMPLE LOCATIONS
1130	TR DOES BOTTOM SAMPLES - THEN WILL BACK FILL UP
	TO WALL SAMPLE LEVEL - FENCING CONTRACTOR ONSITE
1200	CREW BREAKS FOR LUNCH.
1230	TR CONTINUES SAMPLING EXCAVATION OF DWS.
1500	TR COMPLETES SAMPLING DWS. CREW CONTINUES TO BACKFILL
1830	BACKFILL COMPLETE - FENCE BACK IN PLACE
1900	DW + BC TAKE SAMPLES TO FED-X CREW DEPARTS SITE

repared By RINEBOLT Customer Rep. ____

Site Supervisor RINEBOLT Title ____

Project Mgr. FACCI Date ____

FERGUSON·HARBOUR
INCORPORATED

ASSOCIATE/VISITOR SITE LOG

Project # 17297 Date Sept 17 2002 Day Tues

Project Name U.S. A.C.E FT DEARBORN Project Location Chicago IL

Company Name U.S ACE Project Description SAMPLE, EXCAVATION

Customer Rep DON MANGIALARDO

DATE	NAME	SIGNATURE	COMPANY NAME	PURPOSE OF VISIT	TIME IN	TIME OUT
9-17-02	Tom Rietbolt	TRA	FHI	WORK	0630	1900
9-17-02	Duwayne Bays	Duwayne Bays	FHI	WORK	0630	1900
9-17-02	Brent Coen	[illegible]	FHI	WORK	0630	1930
9-17-02	David Whiseinant	[illegible]	FHI	WORK	0630	1930
9-17-02	DON MANGIALARDO	D Mangialardo	Corps of Engrs	QA	8:00	1830

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FERGUSON HARBOUR INCORPORATED

DAILY SAFETY MEETING

Page 1 of 1

Project # 17297

Date Sept 17, 2002 Day Tuesday

Project Name U.S. ACE FT DEARBORN

Project Location Chicago, Il

Company Name US ACE

Project Description SAMPLE EXCAVATE OWS, BACKFILL

Customer Rep

Time Started 0630 Time Completed 0700

Meeting Conducted By RINEBOLT

☐ Emergency Response ☐ Industrial ☒ Contract

Project Manager FACCI

Site Health & Safety RINEBOLT

Site Supervisor RINEBOLT

#FHI Associates 4 #Subcontractors ____ #Others ____

SIGNED BY ALL IN ATTENDANCE.

1. [signature]
2. [signature]
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I. Daily Scope of Work: EXCAVATE OWS, SAMPLE BACK FILL

II. Daily Chemical Hazards

Chemical	Exposure Limit	Route of Entry	Symptoms
VARIOUS VOC			

III. Daily Physical Hazards: SLIPS, TRIPS, FALLS, STRAINS FROM LIFTING, HEATSTRESS, HEAVY EQUIPMENT

IV. Accidents Reviewed: NONE

V. Comments/Suggestions: NONE

VI. Protective Levels Task

Level	PPE Description	Work Task	Type Cartridge if Level C
D	HARD HAT, SAFETY GLASSES STEEL TOED BOOTS	ALL	NA

Prepared By Rinebolt Title RM

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FERGUSON·HARBOUR
INCORPORATED

ACTIVITY MEETING/INSPECTION REPORT

Contract No. DACA27-97-D-0007	Client: USACE
Project No. 17297	Project Name: Various Site Remediations – Ft Dearborn, IL
Activity No. 16	Activity Name: BACKFILL, SAMPLE
Activity Description: Complete backfilling, seed, Sample Roll offs	

Date: 9-18-02	Day: Wed	Time: 0630
Check (✓) the appropriate box below.		
[X] Preparatory Meeting	[ ] Initial Inspection/Meeting	[ ] Follow-up Inspection/Meeting

Meeting/Inspection Attendees:	
Tom Rinebolt	
Duane Bass	
Brent Cox	
Dave Whisenant	

Scope of Activity:

A- BACKFILL, GRADE, + SEED ON 5:1

B SAMPLE ROLL-OFFS AND WATER TANK

Project No. 17297	Activity No. 16

Labor to be used:	
2 OPERATORS	
2 LABORES	
1 SUP	

Equipment to be used:	
TRACKHOE	
LOADER	
SKID LOADER	

Materials to be used:	
TOP SOIL, SEED	

Quality Control/Assurance Concerns:
NONE

Additional Comments/Notes (attach additional pages if required):
NONE
Completed by T. Ruff

FERGUSON·HARBOUR
INCORPORATED

Page ____ of ____

Project # 17297 Date SEPT 18, 2002 Day WED

Project Name USACE Ft DEARBORN Project Location Chicago, IL

Company Name U.S. ACE Project Description BACKFILL, SEED EXCAVATION, SAMPLE ROLL-OFFS

Customer Rep DON MANGIALARDO

Weather Temperature ____ AM ____ °F ____ PM ____ °F

TIME	DESCRIPTION OF ACTIVITIES AND EVENTS
0630	SAFETY AND OPTS MEETING
0800	BC + DW GO AND PICK UP TOP SOIL AND SEED + GB PLACES
	MORE STONE IN EXCAVATION + TR CALLS UNITED TO GET LOADER LOOKED AT
0900	DW TR SAMPLE ROLL-OFFS. DRUM, BAKER TANK - SKID LOADER ONSITE
1100	~~CORE~~ USACE HAS US SPREAD REMAINING STONE ON
	PAD NEAR DWS AND RE-GRADE WASH RACK
1200	CREW BREAKS FOR LUNCH
1230	TR CONTINUES SAMPLING CREW BEGINS CLEANING UP AND
	SECURING SITE
1400	SAMPLING COMPLETED. TR CALLS UNITED TO SEE WHAT TIME
	THEY WILL BE ONSITE TO PICKUP EQUIPMENT. THEY SAID IF
	WE PARK IT OUT THE GATE ON THURS DAY MORNING. THEY WILL
	PICK UP EQUIPMENT
1600	DW + BC DEMOBE SITE, TR GB CONTINUE PACKING SAMPLES
1730	TR GB DEPART SITE, DROP OFF SAMPLES AT FEDEX

Prepared By RINEBOLT Customer Rep. ____

Site Supervisor RINEBOLT Title ____

Project Mgr. FACCI Date ____

FERGUSON·HARBOUR
INCORPORATED

ASSOCIATE/VISITOR SITE LOG

Project # 17297
Date Sept 18, 2002 Day WED
Project Name U.S. ACE Ft DEARBORN
Project Location Chicago, Il
Company Name US ACE
Project Description BACKFILL, SAMPLE ROLLOFFS
Customer Rep DON MANGIALARDO

DATE	NAME	SIGNATURE	COMPANY NAME	PURPOSE OF VISIT	TIME IN	TIME OUT
9-18-02	Tom Rinebolt	[illegible]	FHI	work	0650	1730
9-18-02	Duane Boys	Duane Boys	FHI	work	0630	1730
9-18-02	BRENT COEN	[illegible]	FHI	WORK	0630	1600
9-18-02	David Whisenant	[illegible]	FHI	work	0630	1600
9-18-02	DON MANGIALARDO	D Mangialardo	Corps of Engrs	QA	0800	1700

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FERGUSON HARBOUR INCORPORATED

DAILY SAFETY MEETING

Page ____ of ____

Project # 17297 Date Sept 18, 02 Day Wed

Project Name U.S. ACE Ft Dearborn Project Location Chicago, Il

Company Name U.S. ACE Project Description SAMPLE, BACKFILL

Customer Rep DON MANGIALARDO

Time Started 06:30 Time Completed 07:00

Meeting Conducted By RINEBOLT

☐ Emergency Response ☐ Industrial ☒ Contract

Project Manager CACCI

Site Health & Safety RINEBOLT

Site Supervisor RINEBOLT

#FHI Associates 4 #Subcontractors ____ #Others ____

SIGNED BY ALL IN ATTENDANCE.

1. Duwayne Berger
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3. [illegible]
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I. Daily Scope of Work: BACKFILL, SAMPLE TOOL - OCS

II. Daily Chemical Hazards

Chemical	Exposure Limit	Route of Entry	Symptoms
CARBON VOC			

III. Daily Physical Hazards: SLIPS, TRIPS, FALL, HEAVY EQUIPMENT, STRAINS FROM LIFTING, HEAT STRESS

IV. Accidents Reviewed: NONE

V. Comments/Suggestions: NONE

VI. Protective Levels Task

Level	PPE Description	Work Task	Type Cartridge if Level C
D	HARD HAT, SAFETY GLASSES, STEEL TOED BOOTS,	ALL	N/A

Prepared By RINEBOLT Title RM

White-Central File Yellow-Project File Pink-Customer Copy

FERGUSON·HARBOUR
INCORPORATED

ACTIVITY MEETING/INSPECTION REPORT

Contract No. DACA27-97-D-0007	Client: USACE U.S. ARMY CORPS OF ENGINEERS
Project No. 17297	Project Name: Various Site Remediations – Ft Dearborn, IL
Activity No.	Activity Name: DEMOBILIZATION
Activity Description: PARK EQUIPMENT OUT SIDE GATE, DEMOBILIZATION FROM SITE BACK TO FERGUSON HARBOUR LOCATED IN FINDLAY, OHIO	

Date: 19 SEPT 02	Day: THURSDAY	Time: 0630
Check (✓) the appropriate box below.		
☑ Preparatory Meeting	☐ Initial Inspection/Meeting	☐ Follow-up Inspection/Meeting

Meeting/Inspection Attendees:	
RINEBOLT, TOM	
BAYS, DWAYNE	

Scope of Activity: PARK HEAVY EQUIPMENT OUTSIDE THE GATE FOR SUB-CONTRACTOR TO PICKUP. DEPART SITE AND DRIVE BACK TO FINDLAY, OHIO.

Project No. 17297	Activity No.

Labor to be used:	
1- SUPERVISOR	

Equipment to be used:	
1- 1 TON TRUCK	
1- AIR COMPRESSOR	

Materials to be used:	
NONE	

Quality Control/Assurance Concerns:
NONE

Additional Comments/Notes (attach additional pages if required):
NONE
Completed by [illegible]

FERGUSON·HARBOUR
INCORPORATED

ASSOCIATE/VISITOR SITE LOG

Page ____ of ____

Project # 17297

Date 19 SEPT 02 Day THURSDAY

Project Name U.S. ACC AT DEARBORN

Project Location CHICAGO, IL

Company Name U.S. ARMY CORPS OF ENGINEERS

Project Description DEMOBILIZATION

Customer Rep DON MANGIALARDO

DATE	NAME	SIGNATURE	COMPANY NAME	PURPOSE OF VISIT	TIME IN	TIME OUT
9-19-02	Duane Bays	Duane Bays	FHI	WORK	0630	1100
9-19-02	TOM RINEBOLT	TRA	FHI	WORK	0630	1100

White-Centrail File; Yellow-Project File; Pink-Customer Copy

FERGUSON HARBOUR INCORPORATED

DAILY SAFETY MEETING

Project # 17297 Date 19 SEPT 02 Day THURSDAY

Project Name U.S. ACE Ft DEARBORN Project Location CHICAGO, IL

Company Name U.S. ARMY CORPS OF ENGINEERS Project Description DEMORIZIATION

Customer Rep DON MAUGALARDO

Time Started 0630 Time Completed 0745

Meeting Conducted By RINGBOLT

☐ Emergency Response ☐ Industrial ☒ Contract

Project Manager JIM FACCI

Site Health & Safety RINGBOLT

Site Supervisor RINGBOLT

#FHI Associates 2 #Subcontractors ____ #Others ____

I Daily Scope of Work: MOVE EQUIPMENT TO OUTSIDE OF FENCE, DEMORILIZE

II Daily Chemical Hazards: NONE

Chemical	Exposure Limit	Route of Entry	Symptoms

III Daily Physical Hazards: HEAVY EQUIPMENT, TRAFFIC

IV Accidents Reviewed: NONE

V Comments/Suggestions: NONE

VI Protective Levels Task

Level	PPE Description	Work Task	Type Cartridge if Level C
D	HARD HAT, SAFETY GLASSES, STEEL TOED BOOTS	ALL	NA

SIGNED BY ALL IN ATTENDANCE.

1. Dwayne Bayes
2. [illegible]
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Prepared By Tom Ringbolt Title Supervisor

White-Central File Yellow-Project File, Pink-Customer Copy

THE Following (4) pages contain
Sample information spreadsheets

[illegible] 7°E5

[illegible] [illegible] 7°E5 [illegible] 1-HTO

TOM RINEBOLT
BRENT COEN
DAVE
BRUCE EUTSLER
MYSELF
REBECCA
KATHY
DON
BOB

Location Code	Sample ID#	Date - Time	Temperature	Weather	Sampler Initials
OTH-1	FIP-001-06-SSS GAK	9/11/02 / 1545	74°F	CLEAR	GAK
OTH-1	FIP-001-06-SSS MS/MSD	9/11/02 / 1545	74°F	CLEAR	GAK
OTH-1	FIP-001-06-SSS-MS	9/11/02 / 1545	74°F	CLEAR	GAK
OTH-1	FIP-001-06-SSS-MSD	9/11/02 / 1545	74°F	CLEAR	GAK
OTH-1	FIP-004-06-SSS	9/11/02 / 1650	73°F	CLEAR	GAK
OTH-1	FIP-002-06-SSS (1)	9/11/02 / 1736	73°F	CLEAR	DW / GAK
OTH-1	FIP-003-06-SSS (2) (3)	9/11/02 / 1849	73°F	CLEAR	GAK / DW
OTH-1	FIP-003-06-ERB	9/11/02 / 1827	73°F	CLEAR	GAK
~~OTH-1~~ GAK	~~FIP-00~~ GAK				
OTH-3	VWR-005-02-EBT	9/12/02 / 1041	75°F	CLEAR	GAK, KJK
OTH-3	VWR-005-02-MS/MSD	9/12/02 / 1041	75°F	CLEAR	GAK, KJK
OTH-3	VWR-005-02-MS	9/12/02 / 1041	75°F	CLEAR	GAK, KJK
OTH-3	VWR-005-02-MSD	9/12/02 / 1041	75°F	CLEAR	GAK, KJK
OTH-3	VWR-005-02-EBT	9/12/02 / 1041	75°F	CLEAR	GAK, K
OTH-3	VWR-005-02-MS/MSD	9/12/02 / 1041	75°F	CLEAR	GAK, KJK
OTH-3	VWR-006-02-EBT	9/12/02 / 1246	76°F	CLEAR	GAK, KJK
OTH-3	VWR-006-02-EBT	9/12/02 / 1246	76°F	CLEAR	GAK, KJK
OTH-3	VWR-006-02-EBT QA	9/12/02 / 1246	76°F	CLEAR	GAK, KJK
OTH-3	VWR-006-02-EBT QA	9/12/02 / 1246	76°F	CLEAR	GAK, KJK
OTH-3	VWR-008-02-EBT (4)	9/12/02 / 1246	76°F	CLEAR	GAK, KJK
OTH-3	VWR-003-02-ESW	9/12/02 / 1246	76°F	CLEAR	GAK, KJK
OTH-3	VWR-003-02-ESW	9/12/02 / 1246	76°F	CLEAR	GAK, KJK
OTH-3	VWR-004-02-ESW	9/12/02 / 1330	76°F	CLEAR	GAK, KJK
OTH-3	VWR-004-02-ESW	9/12/02 / 1330	76°F	CLEAR	GAK, KJK

2

Description	Sample Location from fixed point	Analysis Requested
SUBSURFACE SOIL 6'-7' DEEP	SOUTHEAST HOLE IN FLOOR 6' DEEP	VOC, SVOC, PAH, PCB, TAL METALS
SUBSURFACE SOIL 6'-7' DEEP	SOUTHEAST HOLE IN FLOOR 6' DEEP	SVOC, PAH, PCB, TAL METALS
SUBSURFACE SOIL 6'-7' DEEP	SOUTHEAST HOLE IN FLOOR 6' DEEP	VOC
SUBSURFACE SOIL 6'-7' DEEP	SOUTHEAST HOLE IN FLOOR 6' DEEP	VOC
SUBSURFACE SOIL 6'-7' DEEP	NORTHEAST HOLE IN FLOOR 6' DEEP	VOC, SVOC, PAH, PCB, TAL METALS
SUBSURFACE (1) SOIL 6'-7' DEEP	SOUTHWEST HOLE IN FLOOR 6'6" DEEP	VOC, SVOC, PAH, PCB, TAL METALS
SUBSURFACE SOIL 7'-8' DEEP	NORTHWEST HOLE IN FLOOR 7'6" DEEP	VOC, SVOC, PAH, PCB, TAL METALS
RINSATE	**SOUTHWEST HOLE IN FLOOR**	**VOC, SVOC, PAH, PCB, TAL METALS**
EXCAVATION BOTTOM 2' DEEP	LOCATION #5 ON DRAWING (EAST, MIDDLE OF AREA)	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION BOTTOM 2' DEEP	LOCATION #5 ON DRAWING (EAST) MIDDLE OF AREA	SVOC, PAH, PCB, TAL METALS
EXCAVATION BOTTOM 2' DEEP	LOCATION #5	VOC
EXCAVATION BOTTOM 2' DEEP	LOCATION #5	VOC
EXCAVATION BOTTOM VA 2' DEEP	LOCATION #5	GLYCOL
EXCAVATION BOTTOM 2' DEEP	LOCATION #5	GLYCOL
EXCAVATION BOTTOM 2' DEEP	LOCATION #6	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION BOTTOM 2' DEEP	LOCATION #6	GLYCOL
EXCAVATION BOTTOM 2' DEEP	LOCATION #6	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION BOTTOM VA 2' DEEP	LOCATION #6	GLYCOL
EXCAVATION BOTTOM 2' DEEP	LOCATION #6	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION ~~BOTTOM~~ SIDEWALL 2' DEEP	LOCATION #3	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 2' DEEP	LOCATION #3	GLYCOL
EXCAVATION SIDEWALL 2' DEEP	LOCATION #4	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 2' DEEP	LOCATION #4	GLYCOL
(1) BECAUSE OF OBSTRUCTION WE WENT DOWN ANOTHER 6" IN ORDER TO COLLECT SAMPLE (2) SAMPLES WERE FILLED OUT OF ORDER + LABELS WERE CHANGED TO RETAIN THE ORDER (3) BECAUSE OF OBSTRUCTION WE WENT DOWN ANOTHER 1' IN ORDER TO COLLECT SAMPLE (4) DUPLICATE OF UWR-006-02-EBT (NONE GLYCOL)		

Location Code	Sample ID #	Date-Time	Temp	Weather	1/11/04 Sampler Initials VF 1st 2nd 3rd IN VOTW
OTH-3	UWR-008-02-EBT (5)	9/12/02 / 1246	76°F	CLEAR	GAK, KJK
OTH-3	UWR-007-04-ERB	9/12/02 / 1430	76°F	CLEAR	GAK
OTH-3	UWR-002-02-ERB	9/12/02 / 1430	76°F	CLEAR	GAK
OTH-2	FSS-005-08-EBT	9/12/02 / 1605	76°F	CLEAR	GAK
OTH-2	FSS-006-05-EBT	9/12/02 / 1611	76°F	CLEAR	GAK
OTH-2	FSS-006-05-EBT QA	9/12/02 / 1611	76°F	CLEAR	GAK
OTH-2	FSS-007-05-EBT	9/12/02 / 1611	76°F	CLEAR	GAK
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~
OTH-3	UWR-002-02-ESW	9/12/02 / 1715	74°F	CLEAR	GAK
OTH-3	UWR-002-02-ESW	9/12/02 / 1715	74°F	CLEAR	GAK
OTH-3	UWR-007-04-EBT	9/12/02 / 1722	74°F	CLEAR	GAK
OTH-3	UWR-007-04-EBT	9/12/02 / 1722	74°F	CLEAR	GAK
OTH-3	UWR-001-03-EBT	9/12/02 / 1730	74°F	CLEAR	GAK
OTH-3	UWR-001-03-EBT	9/12/02 / 1730	74°F	CLEAR	GAK
OTH-3	UWR-002-02-~~EBT~~ ERB	9/12/02 / 1500	76°F	CLEAR	GAK
OTH-3	UWR-002-02-ERB	9/12/02 / 1500	76°F	CLEAR	GAK
OTH-3	UWR-004-02-ESW	9/12/02 / 1330	76°F	CLEAR	GAK
OTH-3	UWR-004-02-ESW	9/12/02 / 1330	76°F	CLEAR	GAK
OTH-3	UWR-002-02-ERB	9/12/02 / 1500	76°F	CLEAR	GAK
OTH-~~3~~ 2 GAK	FSS-005-08-EBT	9/12/02 / 1605	76°F	CLEAR	GAK
OTH-2	FSS-006-05-EBT	9/12/02 / 164	76°F	CLEAR	GAK
OTH-2	FSS-007-05-EBT (6)	9/12/02 / 1611	76°F	CLEAR	GAK
OTH-3	UWR-002-02-ESW	9/12/02 / 1715	74°F	CLEAR	GAK
OTH-3	UWR-007-04-EBT	9/12/02 / 1722	74°F	CLEAR	GAK

(5) DUPLICATE OF UWR-006-02-EBT (CYCLE)
(6) DUPLICATE OF FSS-006-05-EBT

4

Description	Sample Location from Fixed Point	Analysis Requested
EXCAVATION Bottom 2' DEEP	LOCATION #6 ON DRAWING	GLYCOL
RINSATE	LOCATION #7 ON DRAWING	VOC
RINSATE	LOCATION #2 ON DRAWING	VOC
EXCAVATION Bottom 7'10" DEEP	LOCATION #5 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION Bottom 4'7" DEEP	LOCATION #6 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION Bottom 4'7" DEEP	LOCATION #6 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION Bottom 4'7" DEEP	LOCATION #6 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 2' DEEP	LOCATION #2 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 2' DEEP	LOCATION #2 ON DRAWING	GLYCOL
EXCAVATION Bottom 4' DEEP	LOCATION #7 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION Bottom 4' DEEP	LOCATION #7 ON DRAWING	GLYCOL
EXCAVATION Bottom 3' DEEP	2' WEST + 1' DOWN FROM ORIGINAL SIDEWALL LOCATION	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION Bottom 3' DEEP	2' WEST + 1' DOWN FROM ORIGINAL SIDEWALL LOCATION	GLYCOL
RINSATE	LOCATION #2 ON DRAWING	SVOC, PAH
RINSATE	LOCATION #2 ON DRAWING	PCB
EXCAVATION Bottom 2' DEEP	LOCATION #4 ON DIAGRAM	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 2' DEEP	LOCATION #4 ON DIAGRAM	GLYCOL
RINSATE	LOCATION #2 ON DRAWING	METALS (TAL)
EXCAVATION Bottom 7'10" DEEP	LOCATION #5 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION Bottom 4'7" DEEP	LOCATION #6 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION Bottom 4'7" DEEP	LOCATION #6 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 2' DEEP	LOCATION #2 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS, GLYCOL
EXCAVATION Bottom 4' DEEP	LOCATION #7 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS, GLYCOL

INTENTIONALLY

LEFT

BLANK

GREG KNIGHT FT. DEARBORN USARC CHICAGO, IL
9/11/02

1040 MINI CALIBRATED @ 98.8 ppm ISOBUTYLENE @ A SPAN OF 5.2

START: 0630

TEMP: 60°F @ 0630

WEATHER: CLEAR, COOL, WIND E ~ 5-10 MPH

GREG KNIGHT 9/12/02 FT. DEARBORN USARC CHICAGO, IL

START: 0630

TEMP: 64°F @ 0830

WEATHER: CLEAR, COOL, WIND CALM

0849 MINI CALIBRATED @ 98.8 ppm ISOBUTYLENE @ A SPAN OF 5.22

0955 COMPLETED HEADSPACE SAMPLING @ OTH-3

0950 SAMPLE 1 HEADSPACE 50.0

2	0.0
3	0.4
4	0.6
5	0.8
6	1.0
7	1.1

VWR-001 HEADSPACE TAKEN AGAIN @ 1655 → 1.0 ppm

9/13/02 GREG KNIGHT FT. DEARBORN USARC CHICAGO, IL

START: 0630 TEMP: 63°F @ 0730

WEATHER: CLEAR, COOL, WIND CALM - 5 MPH SW

0915 MINI CALIBRATED @ 98.8 ppm ISOBUTYLENE @ A SPAN OF 4.68

0929 VWR-001-03-ESW READS 0.0 - CLEAN!

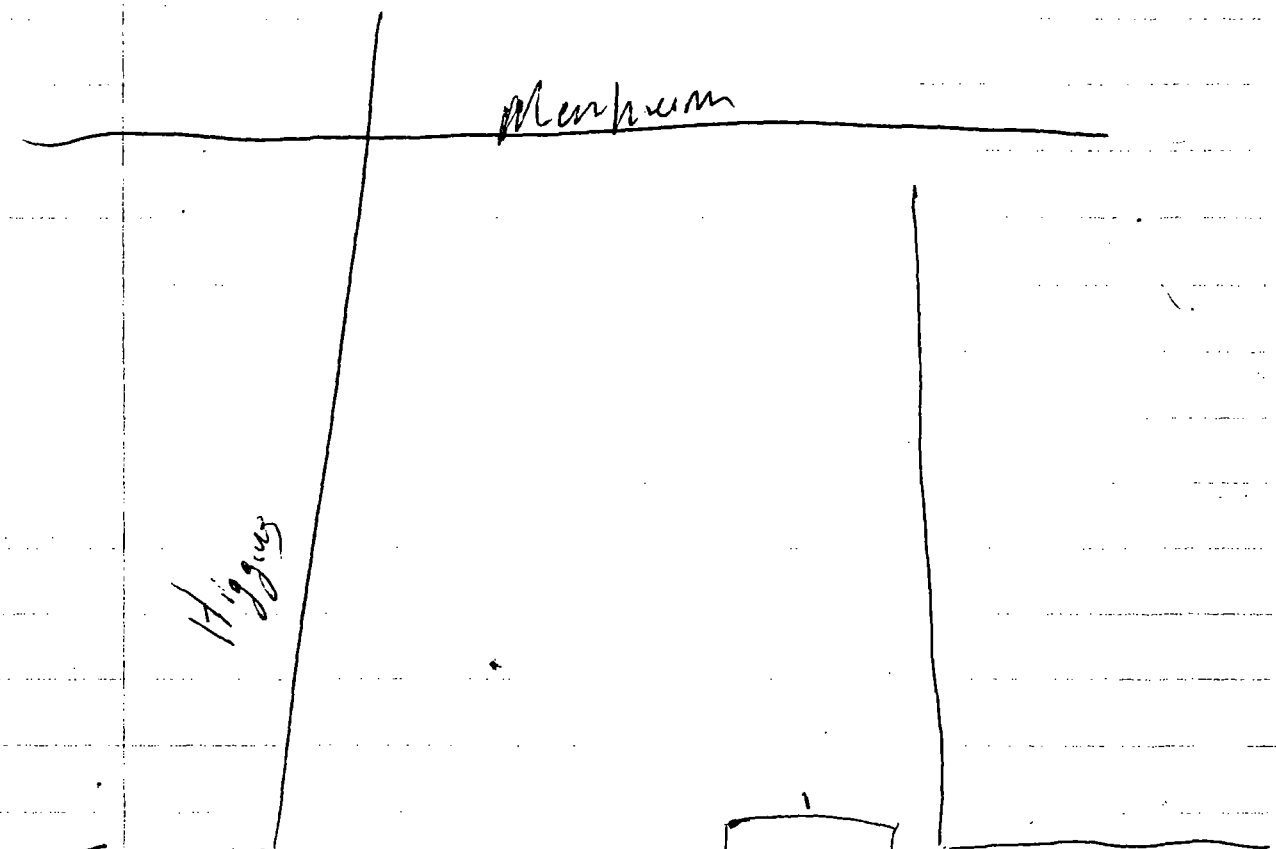
LOCATION CODE	SAMPLE ID #	DATE/ TIME	TEMP	WEATHER	SAMPLE INITIALS
OTH-3	UWR-001-03-EBT	9/12/02/1730	72°F	CLEAR	GAK
OTH-2	FSS-004-04-ESW	9/13/02 0730	63°F	CLEAR	GAK
OTH-2	FSS-003-04-ESW	9/13/02 0735	62°F	CLEAR	GAK
OTH-2	FSS-002-04-ESW	9/13/02 0740	62°F	CLEAR	GAK
OTH-2	FSS-001-04-ESW	9/13/02 0808	63°F	CLEAR	GAK
OTH-2	(1) FSS-008-04-ESW MS/MSD	9/13/02 0808	63°F	CLEAR	GAK
OTH-1	(2) FSS-008-04-ESW-MS	9/13/02	0808	63°F	CLEAR	GAK
OTH-2	FSS-008-04-ESW-MSD	9/13/02	0808	63°F	CLEAR	GAK
OTH-3	UWR-001-03-ESW	9/13/02	0934	66°F	CLEAR	GAK
OWS-1	OWS-005-08-MSD	9-17-02	81°F	CLOUDY	THR
OWS-1	OWS-005-08-EBT	9-17-02	81°F	CLOUDY	THR
OWS-1	OWS-05-08-MS	9-17-02	81°F	CLOUDY	THR
OWS-1	OWS-06-08-EBT	9-17-02	81°F	CLOUDY	THR
OWS-1	OWS-01-05-ESW	9-17-02	81°F	CLOUDY	THR
OWS-1	OWS-02-05-ESW	9-17-02	81°F	CLOUDY	THR
OWS-1	OWS-03-04-ESW	9-17-02	81°F	CLOUDY	THR
OWS-1	OWS-04-05-ESW	9-17-02	81°F	CLOUDY	THR
—	TEMPERATURE BLANK	9-17-02	76°	CLOUDY	THR
OTH-3	OTH3-RO-CC-001	9-18-02	75°	PTLY CLDY	THR
OTH-3	OTH3-RO-SO-001	9-18-02	77°	PTLY CLDY	THR
OWS-1	OWS1-RO-SO-001	9-18-02	79°	PTLY CLDY	THR
OWS-1	OWS1-RO-CC-001	9-18-02	79°	PTLY CLDY	THR

(1) TAKEN AT UWR-001-04-ESW LOCATION

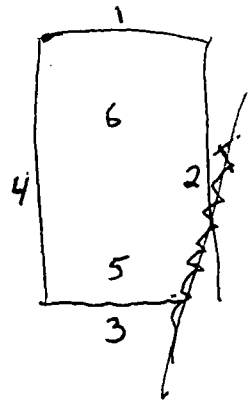
DESCRIPTION	SAMPLE LOCATION FROM FIXED POINT	ANALYSIS REQUIRED
EXCAVATION BOTTOM 3' DEEP	LOCATION #1 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS, GLYCOL
EXCAVATION SIDEWALL 42" DEEP	LOCATION #4 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 42" DEEP	LOCATION #3 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 42" DEEP	LOCATION #2 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 42" DEEP	LOCATION #1 ON DRAWING	VOC, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 42" DEEP	LOCATION #1 ON DRAWING	GAK ~~VOC~~, SVOC, PAH, PCB, TAL METALS
EXCAVATION SIDEWALL 42" DEEP	LOCATION #1 ON DRAWING	VOC
EXCAVATION SIDEWALL 42" DEEP	LOCATION #1 ON DRAWING	VOC
EXCAVATION SIDEWALL 3' DEEP	LOCATION #1 ON DRAWING	VOC, SVOC, PAH, PCB, GLYCOL, TAL METALS
	~~LOCATION #1~~ GAK	~~GLYCOL~~ GAK
EXCAVATION BOTTOM W. END	FROM NW CORNER OF BLDG 11' NORTH 3' WEST	~~TR VOC, SVOC, PAH, PCB, TAL METALS GLYCOL~~ VOC
EXCAVATION BOTTOM W. END	11' NORTH 3' WEST	VOC, SVOC, PAH, PCB, TAL METAL GLYCOL
BOTTOM W END EXCAVATION	11' NORTH 3' WEST	VOC
BOTTOM W END EXCAVATION SIDE WALL	11' NORTH 3' WEST	VOC
EAST SIDE SIDE WALL	11' NORTH 4'9" DEEP	VOC, SVOC, PAH, PCB, TAL METALS GLYCOL
SOUTH SIDE SIDE WALL	4' NORTH 4'9" DEEP	VOC, SVOC, PAH, PCB, TAL METALS GLYCOL
WEST SIDE SIDE WALL	11' NORTH 3'9" DEEP	VOC, SVOC, PAH, PCB, TAL METALS GLYCOL
NORTH SIDE	14'6" NORTH 4'9" DEEP	VOC, SVOC, PAH, PCB, TAL METALS, GLYCOL
BLANK	COOLER	TEMPERATURE
COMPOSITE SAMP RO'S 20-013 20-009 20-006	ROLL OFF'S 20-013, 20-009, 20-006 ROLL OFFS	PAINT FILTER, FLASH POINT TCLP VOC, TCLP SVOC, TCLP PCB, pH PAINT FILTER, FLASH POINT, TCLP VOC
COMPOSITE	20-008, 20-004, 20-003 ROLL OFFS	TCLP SVOC, TCLP PCB, pH PAINT FILTER, FLASH POINT, TCLP VOC
COMPOSITE	R25239R, R25326RT.	TCLP SVOC, TCLP PCB, pH PAINT FILTER, FLASH POINT TCLP VOC
COMPOSITE	ROLL OFF R25353	TCLP SVOC, TCLP PCB, pH

9-17-02

PID Calibrate @ 4.98 Span @ 98 ppm 1150 AM T



HEAD Space	TIME	DEPTH	RESULT
Point 1	1210	4'9"	.6 ppm
2	1206	4'9"	0 ppm
3	1212	4'9"	0 ppm
4	1209	4'9"	0 ppm
5	1203	8'6"	0 ppm
6	1201	8'6"	0 ppm



10

7'
12'
9'
3'
6'
9'
11' WIDE
4'9" DEEP
11' WIDE
4'6" DEEP
DEPTH 8'6"
TO TOP of Concrete Sidewalk

Time SAMPLE 81° F

1	
2	
3	
4	
5	1231
6	1217

Blank

12

Blank

LOCATION CODE	SAMPLE ID#	DATE/TIME	TEMP	WEATHER	SAMPLER INIT.
FSS	FSS-DR-SD-001	9-18-02 1313	79°	PTLY CLDY	TR
OWS	OWS1-BT-WT-001	9-18-02 1345	79°	PTLY CLDY	TR

DESCRIPTION	SAMPLE LOCATION FROM FIXED POINT	ANALYSIS
GRAB SAMPLE	GRAB SAMPLE FROM DRUM IN OVERPACK FROM FORMER SHOP SINK	TCLP VOC, TCLP Metals TCLP PCB pH, Flash Point TCLP SVOC, paint filter
GRAB SAMPLE	GRAB SAMPLE OF WATER FROM BAKER TANK P-4229	

	Roll off	CONTENTS
X1	R25239R	SOIL FROM OWS-1
J2	R25353	CONCRETE FROM OWS-1
X3	20-006	CONCRETE FROM OTH-3 WASH RACK
X4	20-003	SOIL FROM OTH-3
X5	R25326RT	SOIL FROM OWS-1
X6	20-004	CONCRET, DIRT DEBRIS FROM OTH-3
X7	20-009	CONCRETE FROM OTH-3
X8	20-008	CONCRETE DIRT DEBRIS FROM OTH-3
X9	20-013	CONCRETE FROM OTH-3

DRUM - DISPOSAL - TCLP METALS VOC SVOC PCB

RINSATE - TANK - ALLAN-R3

BRET - MUST COMPLETE DEA PACKAGE - SIGNATURE

COMPOSITE GROUPS				DRUM	OWS/RINSATE
9	8	1	2	1	1
7	6	5			
3	4				

RINSATE WATER INTO TANK

BAKER TANK P-4229

9-9-02 CREW MOBES TO CHICAGO, TOM RINEBOLT, BRUCE GUTSLER DAVE WHISENAT, BRET COEN. GREG KNIGHT WILL FLY IN ON TUESDAY AM.

9-10-02 0630 CREW ON SITE, SAFETY AND OPTS MEETING

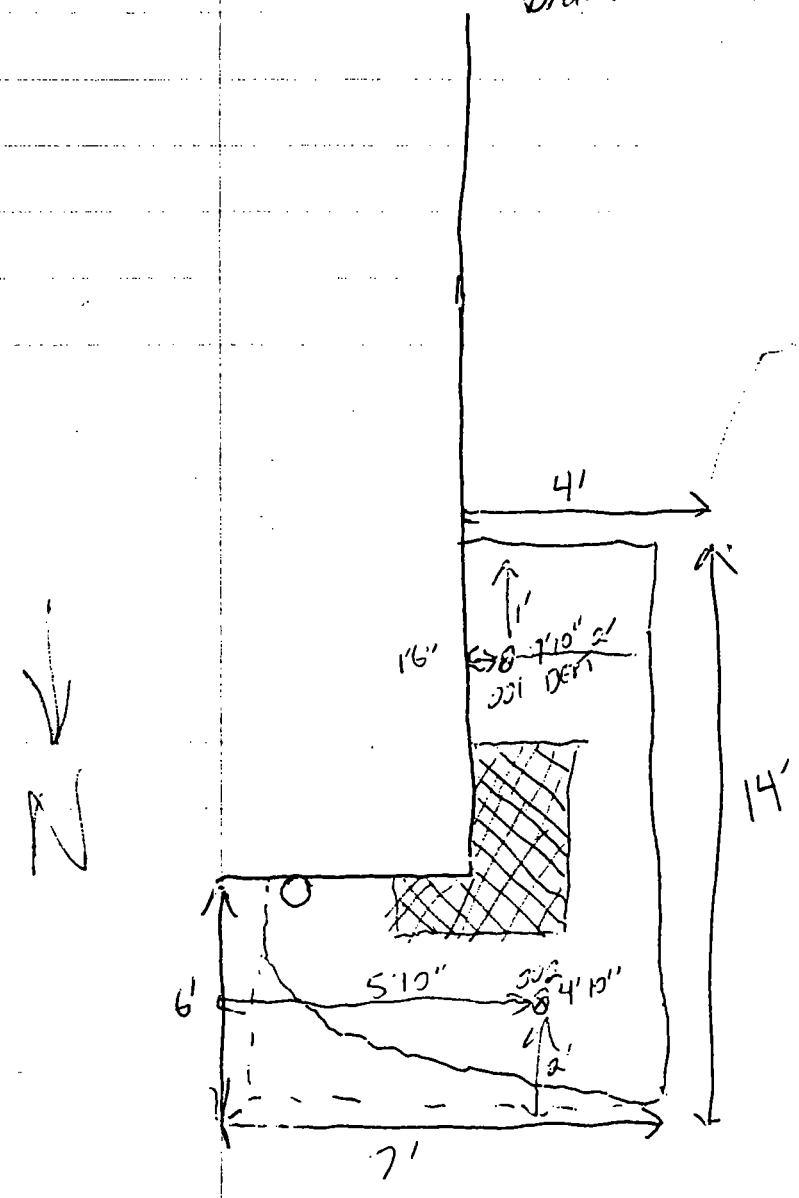
000 FRONT END LOADER ON SITE. DRIVER SAYS HE WILL BE BACK IN HOUR 1/2 TO DROP OFF EXCAVATOR WITH THE BUCKET AND THE BREAKER

0800 CREW GAIN ACCESS TO BAY WHERE WE WILL DO THE CORING. TR CALLS JF TO DISCUSS LOCATION OF CORING POINTS. THE MAP INDICATES WERE THE PROXIMATE LOCATION BUT NOT EXTACT TR SUGGEST THAT WE MOVE BORING LOCATION 8" INCHES AWAY FROM WERE THE WALL OFF THE GREASE PIT WOULD BE

0830 TRACK HOE + PORT-A-JOHN ON SITE. DW BEGINS REMOVING.

Wash Rack area

Drum Removal Area



Appendix C

MWH

ONYX

Zion Landfill
701 Green Bay Road
Zion, Illinois 60099

Weighmaster: SCALE OP 1
Ticket: 168776ZL
5 December 2002 7:53 am
5 December 2002 9:40 am
Vehicle: H3 02046 SUPEROIR
15

000485
R3 ENVIRONMENTAL MANAGEMENT
676 BONDED PARKWAY

Contract: N002658

Inbound - DISPOSAL CHARGE

Reference: 103089

OTHER COUNTIES

00 Gross Weight 80,160.00 LB
Tare Weight 43,740.00 LB
Net Weight 36,420.00 LB 18.21 TN

Quantity	Unit	Description	Rate	Total
18.21	TN	C4 [OT] C-Soil		

Net Amount:
Tendered:
Change:

I hereby certify that this load does not contain any unauthorized waste.

SIGNATURE: _____

Thank you for your business !!

ONYX NORTH AMERICA CORP.

ONYX

NON-HAZARDOUS SPECIAL WASTE MANIFEST

No. 103089

Section I — GENERATOR (Generator completes all of Section I)

a. Generator Name: U.S. Army Corps of Engineers

b. Generating Location: Fort Dearborn

c. Address: 600 Martin L. King Jr. Place Drive
Louisville, KY 40202

d. Address: 6540 N. Mannheim Road
Rosemont, IL 60010

e. Phone No.: (502) 315-6327 Attn: Douglas Meadors

f. Phone No.: N/A

If owner of the generating facility differs from the generator, provide:

g. Owner's Name: N/A

h. Owner's Phone No.: N/A

i. Waste Profile No.: S-Z-L 02658

j. Description of Waste: Oil-Contaminated Soil

k. Quantity: 00015 Units: Y³ TYPE: T

TYPE
- DR - DRUM
- B - BAG
- BA - 6 MIL. PLASTIC BAG or WRAP
- T - TRUCK
- O - OTHER

UNITS
- P - POUNDS
- Y - YARDS
- M³ - CUBIC METERS
- Y³ - CUBIC YARDS
- O - OTHER

*GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

ON BEHALF OF THE DEPT OF DEFENSE

X Donald Mangialardo — Generator Authorized Agent Name

X Donald Mangialardo — Signature

120502 — Shipment Date

Section II — TRANSPORTER (Generator completes a-d; Transporter I complete c-g; Transporter II complete h-n)

TRANSPORTER I

a. Name: Superior Special Services, Inc.

b. Address: 337 River Road
Lemont, IL 60439

c. Driver Name/Title: Teffy Welch (PRINT/TYPE)

d. Phone No.: (630) 257-7540

e. Truck No. H332046

f. Vehicle License No./State: 60249 / WI

Acknowledgement of Receipt of Materials.

g. [signature] — Driver Signature

120502 — Shipment Date

TRANSPORTER II

h. Name:

i. Address:

j. Driver Name/Title: (PRINT/TYPE)

k. Phone No.:

l. Truck No.:

m. Vehicle License No./State:

Acknowledgement of Receipt of Materials.

n. Driver Signature

Shipment Date

Section III — DESTINATION (Generator completes a-d; destination site completes e-f)

a. Site Name: Onyx Zion Landfill

c. Phone No.: 847-731-5110

b. Physical Address: 701 Green Bay Rd.
Zion, IL 60099

d. Mailing Address: SAME

e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Julie Robinson — Name of Authorized Agent

[signature] — Signature

120502 — Receipt Date

* Shipper refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation, or both.

WHITE - Destination Retain CANARY - Return to Generator PINK - Transporter Retain GOLD - Generator Retain

ONYX

Zion Landfill
701 Green Bay Road
Zion, Illinois 60099

Weighmaster: SCALE OP 1
Ticket: 168825ZL
5 December 2002 10:17 am
5 December 2002 11:14 am
Vehicle: H5 32005 SUPERIOR LEMONT
15

00485
R3 ENVIRONMENTAL MANAGEMENT
676 BONDED PARKWAY

Contract: N002658

Inbound - DISPOSAL CHARGE

Reference: 103090

OTHER COUNTIES

DEC 0 9 2002

00 Gross Weight 60,620.00 LB
Tare Weight 30,440.00 LB
Net Weight 30,180.00 LB 15.09 TN

Quantity	Unit	Description	Rate	Total
15.09	TN	C4 [OT] C-Soil		

Net Amount:
Tendered:
Change:

I hereby certify that this load does not contain any unauthorized waste.

SIGNATURE: _____

Thank you for your business !!

ONYX NORTH AMERICA CORP.

ONYX

NON-HAZARDOUS SPECIAL WASTE MANIFEST

No. 103090

Section I — GENERATOR (Generator completes all of Section I)

a. Generator Name: U.S. Army Corps of Engineers

b. Generating Location: Fort Dearborn

c. Address: 600 Martin L. King Jr. Place Drive
Louisville, ~~IL~~ KY 40202

d. Address: 6540 N. Mannheim Road
Rosemont, IL 60010

e. Phone No.: (502) 315-6327 Attn: Douglas Meadors

f. Phone No.: N/A

If owner of the generating facility differs from the generator, provide:

g. Owner's Name: N/A

h. Owner's Phone No.: N/A

i. Waste Profile No.: SZL 02658

j. Description of Waste: Oil-Contaminated Soil

k. Quantity: 00015 Units: Y³ TYPE: T

TYPE	
DR	- DRUM
B	- BAG
BA	- 6 MIL. PLASTIC BAG or WRAP
T	- TRUCK
O	- OTHER

UNITS	
P	- POUNDS
Y	- YARDS
M³	- CUBIC METERS
Y³	- CUBIC YARDS
O	- OTHER

*GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

ON BEHALF OF THE DEPT OF DEFENSE

X Donald Mangialardo — Generator Authorized Agent Name

X Donald Mangialardo — Signature

120502 — Shipment Date

Section II — TRANSPORTER (Generator completes a-d; Transporter I complete c-g; Transporter II complete h-n)

TRANSPORTER I

a. Name: Superior Special Services, Inc.

b. Address: 337 River Road
Lemont, IL 60439

c. Driver Name/Title: JIM PHELAN (PRINT/TYPE)

d. Phone No.: (630) 257-7540 e. Truck No.: H532005

f. Vehicle License No./State: ~~PH504F~~ M47144 WIS

Acknowledgement of Receipt of Materials.

g. X Driver Signature — Shipment Date: 120502

TRANSPORTER II

h. Name:

i. Address:

j. Driver Name/Title: (PRINT/TYPE)

k. Phone No.: l. Truck No.:

m. Vehicle License No./State:

Acknowledgement of Receipt of Materials.

n. Driver Signature — Shipment Date

Section III — DESTINATION (Generator completes a-d; destination site completes e-f)

a. Site Name: Onyx Zion Landfill

c. Phone No.: 847-731-5110

b. Physical Address: 701 Green Bay Rd.
Zion, IL 60099

d. Mailing Address: SAME

e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent — Signature — Receipt Date

* Shipper refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation, or both.

WHITE - Destination Retain CANARY - Return to Generator PINK - Transporter Retain GOLD - Generator Retain

ONYX

Zion Landfill
701 Green Bay Road
Zion, Illinois 60099

Weighmaster: SCALE OP 1
Ticket: 168885ZL
5 December 2002 12:16 pm
5 December 2002 12:58 pm
Vehicle: H3 02046 SUPEROIR
15

000485
R3 ENVIRONMENTAL MANAGEMENT
676 BONDED PARKWAY

Contract: N002658

Inbound - DISPOSAL CHARGE

Reference: 103091

OTHER COUNTIES

00 Gross Weight 74,720.00 LB
Tare Weight 44,600.00 LB
Net Weight 30,120.00 LB 15.06 TN

Quantity	Unit	Description	Rate	Total
15.06	TN	C4 [OT] C-Soil		

Net Amount:
Tendered:
Change:

I hereby certify that this load does not contain any unauthorized waste.

Thank you for your business !!

SIGNATURE: _____

ONYX NORTH AMERICA CORP.

ONYX

NON-HAZARDOUS SPECIAL WASTE MANIFEST

No. 103091

Section I GENERATOR (Generator completes all of Section I)

a. Generator Name: ~~U/~~ U.S. Army Corps of Engineers

b. Generating Location: Fort Dearborn

c. Address: 600 Martin L. King Jr. Place Drive
Louisville, KY 40202

d. Address: 6540 N. Mannheim Road
Rosemont, IL 60010

e. Phone No.: (502) 315-6327 Attn: Douglas Meadors

f. Phone No.: N/A

If owner of the generating facility differs from the generator, provide:

g. Owner's Name: N/A

h. Owner's Phone No.: N/A

i. Waste Profile No.: SZL 02658

j. Description of Waste: Oil-Contaminated Soil

k. Quantity: 00015 Units: Y³ TYPE: T

TYPE	
DR	- DRUM
B	- BAG
BA	- 6 MIL. PLASTIC BAG or WRAP
T	- TRUCK
O	- OTHER

UNITS	
P	- POUNDS
Y	- YARDS
M³	- CUBIC METERS
Y³	- CUBIC YARDS
O	- OTHER

*GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

ON BEHALF OF THE DEPT OF DEFENSE

X DONALD MANGIALARDO — Generator Authorized Agent Name

X Donald Mangialardo — Signature

120502 — Shipment Date

Section II TRANSPORTER (Generator completes a-d; Transporter I complete e-g, Transporter II complete h-n)

TRANSPORTER I

a. Name: Superior Special Services, Inc.

b. Address: 337 River Road
Lemont, IL 60439

c. Driver Name/Title: Terry Iverlin (PRINT/TYPE)

d. Phone No.: (630) 257-7540 e. Truck No.: [illegible]

f. Vehicle License No./State: 62419 NOT

Acknowledgement of Receipt of Materials.

g. X [signature] — Driver Signature

120502 — Shipment Date

TRANSPORTER II

h. Name:

i. Address:

j. Driver Name/Title: (PRINT/TYPE)

k. Phone No.: l. Truck No.:

m. Vehicle License No./State:

Acknowledgement of Receipt of Materials.

n. Driver Signature

Shipment Date

Section III DESTINATION (Generator completes a-d; destination site completes e-f)

a. Site Name: Onyx Zion Landfill

c. Phone No.: 847-731-5110

b. Physical Address: 701 Green Bay Rd.
Zion, IL 60099

d. Mailing Address: SAME

e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

D. GARCIA — Name of Authorized Agent

[signature] — Signature

Receipt Date

* Shipper refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation, or both.

WHITE - Destination Retain CANARY - Return to Generator PINK - Transporter Retain GOLD - Generator Retain

ONYX

Zion Landfill
701 Green Bay Road
Zion, Illinois 60099

Weighmaster: SCALE OP 1
Ticket: 168984ZL
5 December 2002 4:00 pm
5 December 2002 4:06 pm
Vehicle: H3 02046 SUPEROIR
15

00485
R3 ENVIRONMENTAL MANAGEMENT
676 BONDED PARKWAY

Contract: N002658

Inbound - DISPOSAL CHARGE

Reference: 103092

OTHER COUNTIES

01 Gross Weight 88,860.00 LB
Tare Weight 44,100.00 LB
Net Weight 44,760.00 LB 22.38 TN

Quantity	Unit	Description	Rate	Total
22.38	TN	C4 [OT] C-Soil		

Net Amount:
Tendered:
Change:

I hereby certify that this load does not contain any unauthorized waste.

SIGNATURE: _____

Thank you for your business !!

ONYX NORTH AMERICA CORP.

ONYX

NON-HAZARDOUS SPECIAL WASTE MANIFEST

No. 103092

Section I — GENERATOR (Generator completes all of Section I)

a. Generator Name: U.S. Army Corps of Engineers

b. Generating Location: Fort Dearborn

c. Address: 600 Martin L. King Jr. Place Drive
Louisville, KY 40202

d. Address: 6540 N. Mannheim Road
Rosemont, IL 60010

e. Phone No.: (502) 315-6327 Attn: Douglas Meadors

f. Phone No.: N/A

If owner of the generating facility differs from the generator, provide:

g. Owner's Name: N/A

h. Owner's Phone No.: N/A

i. Waste Profile No.: SZL 02658

j. Description of Waste: Oil-Contaminated Soil

k. Quantity: 0 0 0 1 5 Units: Y³ TYPE: T

TYPE
- DR - DRUM
- B - BAG
- BA - 6 MIL. PLASTIC BAG or WRAP
- T - TRUCK
- O - OTHER

UNITS
- P - POUNDS
- Y - YARDS
- M³ - CUBIC METERS
- Y³ - CUBIC YARDS
- O - OTHER

*GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

ON BEHALF OF THE DEPT OF DEFENSE

X DONALD MANGIALARDO — Generator Authorized Agent Name

X Donald Mangialardo — Signature

1 2 0 5 0 2 — Shipment Date

Section II — TRANSPORTER (Generator completes a-d; Transporter I complete c-g; Transporter II complete h-n)

TRANSPORTER I

a. Name: Superior Special Services, Inc.

b. Address: 337 River Road
Lemont, IL 60439

c. Driver Name/Title: Terry Velch Driver (PRINT/TYPE)

d. Phone No.: (630) 257-7540 e. Truck No.: #302046

f. Vehicle License No./State: 60249 WIS

Acknowledgement of Receipt of Materials.

g. X [signature] — Driver Signature

1 2 0 5 0 2 — Shipment Date

TRANSPORTER II

h. Name:

i. Address:

j. Driver Name/Title: (PRINT/TYPE)

k. Phone No.: l. Truck No.:

m. Vehicle License No./State:

Acknowledgement of Receipt of Materials.

n. Driver Signature

Shipment Date

Section III — DESTINATION (Generator completes a-d; destination site completes e-f)

a. Site Name: Onyx Zion Landfill

c. Phone No.: 847-731-5110

b. Physical Address: 701 Green Bay Rd.
Zion, IL 60099

d. Mailing Address: SAME

e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

D Garcia — Name of Authorized Agent

D Garcia — Signature

1 2 0 5 0 2 — Receipt Date

* Shipper refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation, or both.

WHITE - Destination Retain CANARY - Return to Generator PINK - Transporter Retain GOLD - Generator Retain

Zion Landfill
701 Green Bay Road
Zion, Illinois 60099

Weighmaster: SCALE OP 3
Ticket: 171668ZL
19 December 2002 10:21 am
19 December 2002 10:53 am
Vehicle: H5 32005 SUPERIOR LEMONT
15

000485
R3 ENVIRONMENTAL MANAGEMENT
676 BONDED PARKWAY

Contract: N002658

Inbound - DISPOSAL CHARGE

Reference: 103093

OTHER COUNTIES

00 Gross Weight 51,800.00 LB
Tare Weight 30,960.00 LB
Net Weight 20,840.00 LB 10.42 TN

Quantity	Unit	Description	Rate	Total
10.42	TN	C4 [OT] C-Soil		

Net Amount:
Tendered:
Change:

I hereby certify that this load does not contain any unauthorized waste.

SIGNATURE:

Thank you for your business !!

ONYX NORTH AMERICA CORP.

ONYX

NON-HAZARDOUS SPECIAL WASTE MANIFEST

No. 103093

Section I **GENERATOR** (Generator completes all of Section I)

a. Generator Name: U.S. Army Corps of Engineers

b. Generating Location: Fort Dearborn

c. Address: 600 Martin L. King Jr. Place Drive
Louisville, KY 40202

d. Address: 6540 N. Mannheim Road
Rosemont, IL 60010

e. Phone No. (502) 315-6327 Attn: Douglas Meadors

f. Phone No.: N/A

If owner of the generating facility differs from the generator, provide:

g. Owner's Name: N/A

h. Owner's Phc No.: N/A

i. Waste Profile No.: SZL 02658

j. Description of Waste: Oil-Contaminated Soil

k. Quantity: 00015 Units: Y³ TYPE: T

TYPE	
DR	- DRUM
B	- BAG
BA	- 6 MIL. PLASTIC BAG or WRAP
T	- TRUCK
O	- OTHER

UNITS	
P	- POUNDS
Y	- YARDS
M³	- CUBIC METERS
Y³	- CUBIC YARDS
O	- OTHER

*GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

ON BEHALF OF THE DEPT OF DEFENSE

X DONALD MANGIALARDO — Generator Authorized Agent Name

X Donald Mangialardo — Signature

120502 — Shipment Date

Section II **TRANSPORTER** (Generator completes a-d; Transporter I complete c-g; Transporter II complete h-n)

TRANSPORTER I	TRANSPORTER II
a. Name: Superior Special Services, Inc.	h. Name:
b. Address: 337 River Road, Lemont, IL 60439	i. Address:
c. Driver Name/Title: William Horrell / Driver (PRINT/TYPE)	j. Driver Name/Title: (PRINT/TYPE)
d. Phone No.: (630) 257-7540 e. Truck No.: 32005	k. Phone No.: l. Truck No.:
f. Vehicle License No./State:	m. Vehicle License No./State:
Acknowledgement of Receipt of Materials.	Acknowledgement of Receipt of Materials.
g. Driver Signature — Shipment Date: 1/7/97	n. Driver Signature — Shipment Date:

Section III **DESTINATION** (Generator completes a-d; destination site completes e-f)

a. Site Name: Onyx Zion Landfill

c. Phone No.: 847-731-5110

b. Physical Address: 701 Green Bay Rd.
Zion, IL 60099

d. Mailing Address: SAME

e. Discrepancy Indication Space:

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent — Signature — Receipt Date: 1/9/97

* Shipper refers to the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation, or both.

WHITE - Destination Retain CANARY - Return to Generator PINK - Transporter Retain GOLD - Generator Retain

THE NATION'S LEADING PRODUCER OF CONSTRUCTION AGGREGATES

737997

130150

Vulcan Materials Company

Midwest Division, Vulcan Construction Materials, LP
747 East 22nd Street • Lombard, IL 60148

SHIPPING LOCATION: VULCAN MATERIALS / BUSSE
1520-1700 MIDWAY COURT
ELK GROVE VILLAGE, IL

BY SIGNING BELOW, TRANSPORTERS OF MATERIAL INTO VULCAN PROPERTY AGREE TO THE CONDITIONS ON THE REVERSE SIDE.

CARRIER	RECEIVED BY

DATE	TIME	PLANT	
12/04/02	08:35	ELK GROVE DUM	737997

CUSTOMER NO. 0999116 CASH2 SALES ORDER NO. 991162 2

CASH SALE
CASH SALES DEPT 116 LOADS
NON-TAXABLE TODAY
R3 ENVIRONMENTAL
SHIP TO CK NO 10363 1

HAULER	TRUCK NO.	DELIVERY TYPE
999 CUSTOMER PICK	CASH2	PICKED UP

PRODUCT	CUSTOMER P.O. NO.
030 CONC DUMP-SEMI	

GROSS	TARE	NET	NET TONS	WEIGHER
				EG

COMMENTS: 1.00 LOADS OR UNITS
1.00 TODAY

M=Man.Wt. CASH SALE ONLY 1=Scale 1

ENVIRONMENTAL MANAGEMENT INC.

Shipping Order

must be legibly filled in, in ink, in indelible Pencil, or in Carbon, and retained by the Agent

Shipper No.

Carrier No.

Page 1 of 1

Superior Special Services, Inc.
(Name of Carrier)

Date 12-4-02

To:	From:
Consignee Vulcan Materials Company	**Shipper** U.S. Army Corps of Engineers - Fort Dearborn
Street 1520 Midway Court	**Street** 6540 North Mannheim Road
City Elk Grove Village **State** IL **Zip Code** 60007	**City** Rosemont **State** IL **Zip Code** 60010
	24 hour Emergency Phone # N/A

Route

Vehicle Number 20-009

No. of units & Container Type	HM	Basic Description Proper Shipping Name, Hazard Class, UN or NA Number, Packing Group	Total Quantity (Weight, Volume, Gallons, etc.)	Weight (Subject to Correction)	Rate
1x RO	-	Non-R.C.R.A./Non-D.O.T. Regulated Material (Concrete, Debris)	15 cy		

Placards Tendered: Yes ☐ **No** ☒

Remit C.O.D. TO:
Address

Freight Charges

Freight Prepaid Except when box at right is checked

Check box if charges are to be collect ☐

RECEIVED, subject to the classification and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property descried above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its rout, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Shipper U.S. Army Corps of Engineers	**Carrier** Superior Special Services, Inc.
Signature [signature] RINEBOT EHI	**Signature** [signature]
Date 12-4-02	**Date** 12-4-2

THE NATION'S LEADING PRODUCER OF CONSTRUCTION AGGREGATES

737998

Vulcan Materials Company

Midwest Division, Vulcan Construction Materials, LP
747 East 22nd Street • Lombard, IL 60148

SHIPPING LOCATION: VULCAN MATERIALS / BUSSO
1520-1700 MIDWAY COURT
ELK GROVE VILLAGE, IL

BY SIGNING BELOW, TRANSPORTERS OF MATERIAL INTO VULCAN PROPERTY AGREE TO THE CONDITIONS ON THE REVERSE SIDE.

CARRIER	RECEIVED BY

DATE	TIME	PLANT	
12/04/02	08:36	ELK GROVE DUM	737998

CUSTOMER NO. 0000116 CASH2 SALES ORDER NO. 991162 2

CASH SALE
CASH SALES DEPT 116 LOADS
NON-TAXABLE TODAY
RJ ENVIRONMENTAL
SHIP TO CK NO 10363 1

HAULER	TRUCK NO.	DELIVERY TYPE
999 CUSTOMER PICK-	CASH2	PICKED UP

PRODUCT	CUSTOMER P.O. NO.
851 CONC DUMP-GMH	

GROSS	TARE	NET	NET TONS	WEIGHER
				LG

COMMENTS: 1.00 LOADS OR UNITS
1.00 TODAY

M=Man. Wt. CASH SALE ONLY 1=Scale 1

ENVIRONMENTAL MANAGEMENT INC.

Shipping Order

must be legibly filled in, in ink, in indelible Pencil, or in Carbon, and retained by the Agent

Shipper No.

Carrier No.

Page 1 of 1

Superior Special Services, Inc.
(Name of Carrier)

Date 12-4-02

To:	From:
Consignee Vulcan Materials Company	**Shipper** U.S. Army Corps of Engineers - Fort Dearborn
Street 1520 Midway Court	**Street** 6540 North Mannheim Road
City Elk Grove Village **State** IL **Zip Code** 60007	**City** Rosemont **State** IL **Zip Code** 60010
	24 hour Emergency Phone # N/A

Route

Vehicle Number 20-013

No. of units & Container Type	HM	Basic Description Proper Shipping Name, Hazard Class, UN or NA Number, Packing Group	Total Quantity (Weight, Volume, Gallons, etc.)	Weight (Subject to Correction)	Rate
1-RO		Non-R.C.R.A./Non-D.O.T. Regulated Material (Concrete, Debris)	15 cy		

Placards Tendered: Yes ☐ **No** ☒

Remit C.O.D. TO:
Address

Freight Charges

Freight Prepaid Except when box at right is checked

Check box if charges are to be collect ☐

RECEIVED, subject to the classification and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property descried above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its rout, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Shipper U.S. Army Corps of Engineers	**Carrier** Superior Special Services, Inc.
Signature RINEBOLT	**Signature** J. Sheela
Date 12-4-02	**Date** 12-04-02

THE NATION'S LEADING PRODUCER OF CONSTRUCTION AGGREGATES

738012

Vulcan Materials Company

Midwest Division, Vulcan Construction Materials, LP
747 East 22nd Street • Lombard, IL 60148

SHIPPING LOCATION: VULCAN MATERIALS / BUSSE
1520-1700 MIDWAY COURT
ELK GROVE VILLAGE, IL

BY SIGNING BELOW, TRANSPORTERS OF MATERIAL INTO VULCAN PROPERTY AGREE TO THE CONDITIONS ON THE REVERSE SIDE.

CARRIER	RECEIVED BY

DATE	TIME	PLANT	
12/04/02	10:25	ELK GROVE DUM	738012

CUSTOMER NO. 0999116 CASH2 SALES ORDER NO. 991162 2

CASH SALE
CASH SALES DEPT 116 LOADS
NON-TAXABLE TODAY
R3 ENVIRONMENTAL
SHIP TO OK NO 10363 2

HAULER	TRUCK NO.	DELIVERY TYPE
999 CUSTOMER PICK	CASH2	PICKED UP

PRODUCT	CUSTOMER P.O. NO.
030 CONC DUMP-SEMI	

GROSS	TARE	NET	NET TONS	WEIGHER

COMMENTS: 1.00 LOADS ORDERED
2.00 TODAY

M=Man. Wt. CASH SALE ONLY 1=Scale 1

ENVIRONMENTAL MANAGEMENT INC.

This Shipping Order must be legibly filled in, in ink, in indelible Pencil, or in Carbon, and retained by the Agent

Shipper No.

Carrier No.

Page 1 of 1

Superior Special Services, Inc.
(Name of Carrier)

Date 12-4-02

To:	From:
Consignee Vulcan Materials Company	**Shipper** U.S. Army Corps of Engineers - Fort Dearborn
Street 1520 Midway Court	**Street** 6540 North Mannheim Road
City Elk Grove Village **State** IL **Zip Code** 60007	**City** Rosemont **State** IL **Zip Code** 60010
	24 hour Emergency Phone # N/A

Route

Vehicle Number Baker R25353

No. of units & Container Type	HM	Basic Description Proper Shipping Name, Hazard Class, UN or NA Number, Packing Group	Total Quantity (Weight, Volume, Gallons, etc.)	Weight (Subject to Correction)	Rate
1 CM		Non-R.C.R.A./Non-D.O.T. Regulated Material (Concrete, Debris)	15 y3		

Placards Tendered: Yes ☐ **No** ☒

Remit C.O.D. TO:
Address

Freight Charges

Freight Prepaid Except when box at right is checked

Check box if charges are to be collect ☐

RECEIVED, subject to the classification and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property descried above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its rout, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Shipper U.S. Army Corps of Engineers	**Carrier** Superior Special Services, Inc.
Signature X [signature] FIREBOAT FHI	**Signature** X [signature]
Date X 12-04-02	**Date** X 12-4-2

THE NATION'S LEADING PRODUCER OF CONSTRUCTION AGGREGATES

738025

Vulcan Materials Company

Midwest Division, Vulcan Construction Materials, LP
747 East 22nd Street • Lombard, IL 60148

SHIPPING LOCATION: VULCAN MATERIALS / BUSSE
1520-1700 MIDWAY COURT
ELK GROVE VILLAGE, IL

BY SIGNING BELOW, TRANSPORTERS OF MATERIAL INTO VULCAN PROPERTY AGREE TO THE CONDITIONS ON THE REVERSE SIDE.

CARRIER	RECEIVED BY

DATE	TIME	PLANT	
12/04/02	12:40	ELK GROVE DUM	738025

CUSTOMER NO. 0999116 CASH2 SALES ORDER NO. 991162 2

CASH SALE
CASH SALES DEPT 116 LOADS
NON-TAXABLE TODAY
R3 ENVIRONMENTAL
SHIP TO CK NO 10363 3

HAULER	TRUCK NO.	DELIVERY TYPE
999 CUSTOMER PICK-	CASH2	PICKED UP

PRODUCT	CUSTOMER P.O. NO.
030 CONC DUMP-SEMI	

GROSS	TARE	NET	NET TONS	WEIGHER
				LC

COMMENTS: 1.00 LOADS OR UNITS
3.00 TODAY

M-Man.Ut. CASH SALE ONLY 195031 1

ENVIRONMENTAL MANAGEMENT INC.

his Shipping Order must be legibly filled in, in ink, in indelible Pencil, or in Carbon, and retained by the Agent

Shipper No.

Carrier No.

Page 1 of 1

Superior Special Services, Inc.
(Name of Carrier)

Date 12-4-02

To:	From:
Consignee Vulcan Materials Company	**Shipper** U.S. Army Corps of Engineers - Fort Dearborn
Street 1520 Midway Court	**Street** 6540 North Mannheim Road
City Elk Grove Village **State** IL **Zip Code** 60007	**City** Rosemont **State** IL **Zip Code** 60010
	24 hour Emergency Phone # N/A

Route

Vehicle Number 20-004

No. of units & Container Type	HM	Basic Description Proper Shipping Name, Hazard Class, UN or NA Number, Packing Group	Total Quantity (Weight, Volume, Gallons, etc.)	Weight (Subject to Correction)	Rate
1 cm		Non-R.C.R.A./Non-D.O.T. Regulated Material (Concrete, Debris)	15 Y3		

Placards Tendered: Yes ☐ **No** ☒

Remit C.O.D. TO:
Address

Freight Charges

Freight Prepaid Except when box at right is checked

Check box if charges are to be collect ☐

RECEIVED, subject to the classification and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property descried above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its rout, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Shipper U.S. Army Corps of Engineers	**Carrier** Superior Special Services, Inc.
Signature X	**Signature** X
Date X 12-4-02	**Date** X 12-4-2

THE NATION'S LEADING PRODUCER OF CONSTRUCTION AGGREGATES

737947

Vulcan Materials Company

Midwest Division, Vulcan Construction Materials, LP
747 East 22nd Street • Lombard, IL 60148

SHIPPING LOCATION: VULCAN MATERIALS / BUSSE
1520-1700 MIDWAY COURT
ELK GROVE VILLAGE, IL

BY SIGNING BELOW, TRANSPORTERS OF MATERIAL INTO VULCAN PROPERTY AGREE TO THE CONDITIONS ON THE REVERSE SIDE.

CARRIER: [illegible] | RECEIVED BY:

DATE	TIME	PLANT	
12/03/02	09:15	ELK GROVE DUM	737947

CUSTOMER NO. 0999116 CASH2 SALES ORDER NO. 091162 2

CASH SALE

SHIP TO
CASH SALES DEPT 116 LOADS
NON-TAXABLE TODAY
R3 ENVIRONMENTAL
CK NO 10363 1

HAULER	TRUCK NO.	DELIVERY TYPE
999 CUSTOMER PICK	CASH2	PICKED UP

PRODUCT	CUSTOMER P.O. NO.
030 CONC DUMP-SEMI	

GROSS	TARE	NET	NET TONS	WEIGHER

COMMENTS: 1.00 LOADS/OR/UNITS
1.00 TODAY

M=Man. Wt. CASH SALE ONLY 1=Scale

ENVIRONMENTAL MANAGEMENT INC.

This Shipping Order must be legibly filled in, in ink, in indelible Pencil, or in Carbon, and retained by the Agent

Shipper No.

Carrier No.

Page 1 of 1

Superior Special Services, Inc.
(Name of Carrier)

Date 12-3-02

To:	From:
Consignee Vulcan Materials Company	**Shipper** U.S. Army Corps of Engineers - Fort Dearborn
Street 1520 Midway Court	**Street** 6540 North Mannheim Road
City Elk Grove Village **State** IL **Zip Code** 60007	**City** Rosemont **State** IL **Zip Code** 60010
	24 hour Emergency Phone # N/A

Route

Vehicle Number 20-006

No. of units & Container Type	HM	Basic Description Proper Shipping Name, Hazard Class, UN or NA Number, Packing Group	Total Quantity (Weight, Volume, Gallons, etc.)	Weight (Subject to Correction)	Rate
1		Non-R.C.R.A./Non-D.O.T. Regulated Material (Concrete, Debris)	~~[illegible]~~ 15 yd.		

Placards Tendered: Yes ☐ **No** ☒

Remit C.O.D. TO:
Address

Freight Charges

Freight Prepaid Except when box at right is checked

Check box if charges are to be collect ☐

RECEIVED, subject to the classification and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property descried above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its rout, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Shipper U.S. Army Corps of Engineers	**Carrier** Superior Special Services, Inc.
Signature Tom Rinebolt CHF RINEBOLT	**Signature** [illegible]
Date 12-3-02	**Date** 12-3-2

ENVIRONMENTAL MANAGEMENT INC.

s Shipping Order

must be legibly filled in, in ink, in indelible Pencil, or in Carbon, and retained by the Agent

Shipper No.

Carrier No.

Page 1 of 1

Superior Special Services, Inc.
(Name of Carrier)

Date 12-3-02

To:	From:
Consignee Vulcan Materials Company	Shipper U.S. Army Corps of Engineers - Fort Dearborn
Street 1520 Midway Court	Street 6540 North Mannheim Road
City Elk Grove Village State IL Zip Code 60007	City Rosemont State IL Zip Code 60010
	24 hour Emergency Phone # N/A

Route

Vehicle Number RZ5239RT

No. of units & Container Type	HM	Basic Description Proper Shipping Name, Hazard Class, UN or NA Number, Packing Group	Total Quantity (Weight, Volume, Gallons, etc.)	Weight (Subject to Correction)	Rate
1 - 20	–	Non-R.C.R.A./Non-D.O.T. Regulated Material (Concrete, Debris)	15 cy		

Placards Tendered: Yes ☐ No ☒

Remit C.O.D. TO: Address

Freight Charges

Freight Prepaid Except when box at right is checked

Check box if charges are to be collect ☐

RECEIVED, subject to the classification and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property descried above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its rout, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Shipper U.S. Army Corps of Engineers	**Carrier** Superior Special Services, Inc.
Signature Tom Rinebolt AIF	**Signature**
Date 12-03-02	**Date** 12-03-02

STATE OF ILLINOIS

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

State Form LPC 62 8/81 IL532-0610

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No.: N/A
Manifest Document No.: 0 2 2 3 9
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address: C/o Doug Madors
U.S. Army Corps of Engineers
600 M.L. King Jr. Place Drive
Louisville, KY 40202

Site Address If Different:
Fort Dearborn
6540 N. Mannheim Road
Rosemont, IL 60010

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*: (800) 235-1344

A. Illinois Manifest Document Number: IL1U455700 FEE PAID IF APPLICABLE
B. Generator's IL ID Number: 0 3 1 2 7 6 5 0 7 9

5. Transporter 1 Company Name: A & C Environmental, Inc.
6. US EPA ID Number: I L R 0 0 0 0 2 8 9 9 3
C. Transporter's ID Number: UPW-0571694-IL
D. Transporter's Phone: (815) 464-5344

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. Transporter's ID Number:
F. Transporter's Phone: ( )

9. Designated Facility Name and Site Address:
City of Crest Hill
1610 Plainfield Road
Crest Hill, IL 60435
10. US EPA ID Number: N/A
G. Facility's IL ID Number: 1 9 7 0 2 5 3 0 0 1
H. Facility's Phone: (815) 723-6900

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Non-Hazardous Special Waste (Separator Water)	001	TT	00650	G	EPA HW Number: NONE
b.					EPA HW Number
c.					EPA HW Number
d.					EPA HW Number

J. Additional Description for Materials Listed Above

K. Handling Codes for Wastes Listed Above In Item #14

15. Special Handling Instructions and Additional Information
Generator's Phone: (502) 315-6327 Attn: Doug Madors
Bill to R3 Environmental Management, Inc.
Emergency phone # 800-235-1344

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

ON BEHALF OF THE DEPT OF DEFENSE

Printed/Typed Name: X DONALD MAUGIALARDO
Signature: X Donald Maugialardo
Date (Month Day Year): X 1 2 0 3 0 2

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: THOMAS C GRAD
Signature:
Date (Month Day Year): 1 2 0 3 0 2

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Date (Month Day Year):

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of [redacted] materials covered by this manifest except as noted in item 19.
Printed/Typed Name: John Roberts
Signature: John Roberts
Date (Month Day Year): 1 2 0 3 0 2

GENERATOR — TRANSPORTER — FACILITY

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

STATE OF ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF LAND POLLUTION CONTROL

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

FOR SHIPMENT OF HAZARDOUS AND SPECIAL WASTE

State Form LPC 62 8/81 IL532-0610

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved. OMB No. 2050-0039

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No.: N/A — Manifest Document No.: 0 2 2 6 4

2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but is required by Illinois law.

3. Generator's Name and Mailing Address:
U.S. Army Corps of Engineers
600 M. L. King Jr. Place Drive
Louisville, KY 40202

Location If Different:
Fort Dearborn
6540 N. Mannheim Road
Rosemont, IL 60010

4. *24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS*: N/A

A. Illinois Manifest Document Number: IL10455771 FEE PAID IF APPLICABLE

B. Generator's IL ID Number: 0 3 1 2 7 5 5 0 7 9

C. Transporter's ID Number: UPW-0571694-IL

D. Transporter's Phone: (815) 464-5344

E. Transporter's ID Number:

F. Transporter's Phone: ( )

G. Facility's IL ID Number: 1 9 7 0 2 5 3 0 0 1

H. Facility's Phone: (815) 723-6900

5. Transporter 1 Company Name: A & C Environmental, Inc.

6. US EPA ID Number: I L R 0 0 0 0 2 8 9 9 3

7. Transporter 2 Company Name:

8. US EPA ID Number:

9. Designated Facility Name and Site Address:
City of Crest Hill
1610 Plainfield Road
Crest Hill, IL 60435

10. US EPA ID Number: N/A

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Non-Hazardous Special Waste (Separator Water)	0 0 1	T T	0 0 1 4 0	G	EPA HW Number: NONE
b.					EPA HW Number:
c.					EPA HW Number:
d.					EPA HW Number:

J. Additional Description for Materials Listed Above: 11a.

K. Handling Codes for Wastes Listed Above In Item #14

15. Special Handling Instructions and Additional Information
Generator's Phone: (502) 315-6327 Attn: Douglas Meadors
Bill to R3 Environmental Management, Inc.
FHI -- 24 HOUR EMERGENCY RESPONSE HOTLINE -- (800) 235-1344

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

ON BEHALF OF THE DEPT OF DEFENSE

Printed/Typed Name: X DONALD MANGIALARDO — Signature: X Donald Mangialardo — Date: X 12 12 02

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: THOMAS C. GRAD — Signature: [signature] — Date: 12 12 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name: — Signature: — Date: Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of ~~hazardous~~ materials covered by this manifest except as noted in item 19.

Printed/Typed Name: John Roberts — Signature: John Roberts — Date: 12 12 02

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1. TSD MAIL TO GENERATOR

In case of a spill call the Illinois Office of Emergency Response at 217/782-7860 and the National Response Center at 800/424-8802 or 202/426-2675.

Appendix D

MWH

Appendix D

ORGANIC ANALYSIS DATA PACKAGE

ontract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301100 Samples Received at ARDL: 9/12/02

CASE NARRATIVE

VOLATILE FRACTION - METHOD 8260

Water and soil samples were received by ARDL, Inc. on September 12, 2002,for 8260 analysis by GC/MS. All analyses were performed within the method specified holding time.

Sample 301100-04 (FIP-003-06-SSS) failed the third internal standard area, but could not be repeated since the sample was depleted. Therefore, the results were reported as is.

On the chromatograms, the injected date stamp appears as "**" instead of "02" for the year 2002. The quantitation date stamp is correct and accurately represents the year of the injection date.

No additional problems were encountered during the sample analyses.

SEMIVOLATILE FRACTION - METHOD 8270

oil and water samples were received by ARDL, Inc. on September 12, 2002, for BNA analysis by GC/MS. The analyses were performed according to low level protocol within method specified holding times.

There was insufficient sample volume to perform a matrix spike and matrix spike duplicate evaluation for this site for the water sample. Two spiked blanks were extracted and analyzed for QC purposes.

The soil spiked blank and soil MS/MSD all exhibited high 4-Nitrophenol recovery. None of the samples contained this target, therefore, no further action was needed. In addition, 1,4-Dichlorobenzene was low in the MSD. The spiked blank was acceptable. Low recovery attributed to the sample matrix, no further action needed.

Sample FFIP-002-06-SSS had an internal standard recovery failure. The sample was re-analyzed with the failure being repeated. Results of the re-analysis are found on QC summary forms 2,4 and 8 only.

No other unusual problems were encountered during the sample extraction or sample analyses.

PNA/SIM FRACTION

Soil and water samples were received by ARDL, Inc. on September 12, 2002, for PNA-SIM analysis by GC/MS. The analyses were performed according to low evel protocol within method specified holding times.

There was insufficient sample volume to perform a matrix spike and matrix spike duplicate evaluation for this site for the water sample. Two spiked blanks were extracted and analyzed for QC purposes.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301100 Samples Received at ARDL: 9/12/02

CASE NARRATIVE (Continued)

PNA/SIM FRACTION (Continued)

No other unusual problems were encountered during the samples extraction or sample analysis.

PCB FRACTION - METHOD 8082

Soil and water samples were received by ARDL, Inc. on September 12, 2002, for PCB analysis. The samples were extracted within holding time requirements.

The soil samples were cleaned up using acid hydrolysis.

The columns used for PCB analysis are as follows: Primary column - RTX-CLP PESTICIDE II, 30 meter, 0.32 mm ID, 0.25 mm df; Confirmation column - RTX-CLP PESTICIDES, 30 meter, 0.32 mm ID, 0.50 mm df.

Due to insufficient volume, the water samples could not have an MS/MSD evaluation performed. As QC, two spike blanks were extracted and analyzed.

The soil samples were extracted in a batch which contained ARDL SDG 301101; therefore, only one blank and spike blank were extracted. Due to software limitations, the blank and spike blank are designated as SDG 301101, although they are also applicable to ARDL SDG 301100.

The following pages list manual integrations performed on the data. (See hard copy for explanations of manual integrations):

Pages: 50014-50017
50021-50024
50030-50033
50037-50041
50048-50051
50056-50059
50065-50068
50073-50076
50345-50348
50352-50355
50361-50364
50368-50371

No additional problems were encountered in the analysis of these samples.

ORGANIC DATA REPORTING QUALIFIERS

The following organic data reporting qualifiers are used as required.

ontract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301100 Samples Received at ARDL: 9/12/02

CASE NARRATIVE (Continued)

ORGANIC DATA REPORTING QUALIFIERS (Continued)

ND- Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns.

C - This flag applies to pesticide results where the identification has

been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag; instead use a laboratory-defined flag.

B - This flag is used when the analyte is found in the blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must by used for a TIC as well as for a positively identified target compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form 1 for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form 1. The Form 1 for the diluted sample shall have the "DL" suffix appended to the sample number.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301100 Samples Received at ARDL: 9/12/02

CASE NARRATIVE (Continued)

ORGANIC DATA REPORTING QUALIFIERS (Continued)

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form 1 for the diluted sample, and all concentration values reported on that Form 1 are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized for the Laboratory Manager or his designee, as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

VOA-8260B

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-001-06-SSS	ARDL Lab No.:	301100-01
Desc/Location:	NONE	Lab Filename:	Y2543
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1545	Prep. Date:	09/12/2002
Matrix:	SOIL	Analysis Date:	09/12/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSH
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.3	ND		UG/KG	1
Vinyl Chloride	2.2	12.3	ND		UG/KG	1
Bromomethane	1.6	12.3	ND		UG/KG	1
Chloroethane	2	12.3	ND		UG/KG	1
1,1-Dichloroethene	1	6.1	ND		UG/KG	1
Methylene Chloride	2.9	6.1	8		UG/KG	1
trans-1,2-Dichloroethene	0.97	6.1	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.1	ND		UG/KG	1
Carbon disulfide	1.1	6.1	ND		UG/KG	1
cis-1,2-Dichloroethene	0.4	6.1	ND		UG/KG	1
Bromochloromethane	0.99	6.1	ND		UG/KG	1
Chloroform	0.83	6.1	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.1	ND		UG/KG	1
Carbon Tetrachloride	0.75	6.1	ND		UG/KG	1
Benzene	0.7	6.1	ND		UG/KG	1
1,2-Dichloroethane	0.45	6.1	ND		UG/KG	1
Trichloroethene	1.1	6.1	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.1	ND		UG/KG	1
Bromodichloromethane	0.28	6.1	ND		UG/KG	1
cis-1,3-Dichloropropene	0.8	6.1	ND		UG/KG	1
Toluene	0.38	6.1	ND		UG/KG	1
trans-1,3-Dichloropropene	0.76	6.1	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.1	ND		UG/KG	1
Tetrachloroethene	0.58	6.1	ND		UG/KG	1
Dibromochloromethane	0.28	6.1	ND		UG/KG	1
Chlorobenzene	0.26	6.1	ND		UG/KG	1
Ethyl Benzene	0.44	6.1	ND		UG/KG	1
m & p-Xylene	0.98	6.1	ND		UG/KG	1
o-Xylene	1.1	6.1	ND		UG/KG	1
Styrene	0.43	6.1	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-001-06-SSS	ARDL Lab No.:	301100-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2543
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1545	Prep. Date:	09/12/2002
Matrix:	SOIL	Analysis Date:	09/12/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSH
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.1	ND		UG/KG	1
2-Hexanone	22.1	24.5	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.1	ND		UG/KG	1
Acetone	39.3	61.3	ND		UG/KG	1
2-Butanone	20.9	61.3	ND		UG/KG	1
4-Methyl-2-pentanone	18.4	24.5	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	97%
1,2-Dichloroethane-d4	78-135	96%
Toluene-d8	86-129	101%
4-Bromofluorobenzene	76-141	102%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-002-06-SSS	ARDL Lab No.:	301100-03
Desc/Location:	NONE	Lab Filename:	Y2545
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1736	Prep. Date:	09/12/2002
Matrix:	SOIL	Analysis Date:	09/12/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSH
% Moisture:	21.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.4	12.8	ND		UG/KG	1
Vinyl Chloride	2.3	12.8	ND		UG/KG	1
Bromomethane	1.7	12.8	ND		UG/KG	1
Chloroethane	2	12.8	ND		UG/KG	1
1,1-Dichloroethene	1.1	6.4	ND		UG/KG	1
Methylene Chloride	3.1	6.4	6.7		UG/KG	1
trans-1,2-Dichloroethene	1	6.4	ND		UG/KG	1
1,1-Dichloroethane	0.29	6.4	ND		UG/KG	1
Carbon disulfide	1.1	6.4	ND		UG/KG	1
cis-1,2-Dichloroethene	0.42	6.4	ND		UG/KG	1
Bromochloromethane	1	6.4	ND		UG/KG	1
Chloroform	0.87	6.4	ND		UG/KG	1
1,1,1-Trichloroethane	0.4	6.4	ND		UG/KG	1
Carbon Tetrachloride	0.78	6.4	ND		UG/KG	1
Benzene	0.73	6.4	ND		UG/KG	1
1,2-Dichloroethane	0.47	6.4	ND		UG/KG	1
Trichloroethene	1.1	6.4	ND		UG/KG	1
1,2-Dichloropropane	0.44	6.4	ND		UG/KG	1
Bromodichloromethane	0.29	6.4	ND		UG/KG	1
cis-1,3-Dichloropropene	0.83	6.4	ND		UG/KG	1
Toluene	0.4	6.4	ND		UG/KG	1
trans-1,3-Dichloropropene	0.79	6.4	ND		UG/KG	1
1,1,2-Trichloroethane	0.33	6.4	ND		UG/KG	1
Tetrachloroethene	0.6	6.4	ND		UG/KG	1
Dibromochloromethane	0.29	6.4	ND		UG/KG	1
Chlorobenzene	0.27	6.4	ND		UG/KG	1
Ethyl Benzene	0.46	6.4	ND		UG/KG	1
m & p-Xylene	1	6.4	ND		UG/KG	1
o-Xylene	1.1	6.4	ND		UG/KG	1
Styrene	0.45	6.4	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-002-06-SSS	ARDL Lab No.:	301100-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2545
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1736	Prep. Date:	09/12/2002
Matrix:	SOIL	Analysis Date:	09/12/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSH
% Moisture:	21.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.28	6.4	ND		UG/KG	1
2-Hexanone	23	25.6	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.4	ND		UG/KG	1
Acetone	41	64.0	71.9		UG/KG	1
2-Butanone	21.8	64.0	ND		UG/KG	1
4-Methyl-2-pentanone	19.2	25.6	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	111%
1,2-Dichloroethane-d4	78-135	105%
Toluene-d8	86-129	101%
4-Bromofluorobenzene	76-141	108%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-003-06-SSS	ARDL Lab No.:	301100-04
Desc/Location:	NONE	Lab Filename:	Y2546
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1849	Prep. Date:	09/12/2002
Matrix:	SOIL	Analysis Date:	09/12/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSH
% Moisture:	18.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.3	ND		UG/KG	1
Vinyl Chloride	2.2	12.3	ND		UG/KG	1
Bromomethane	1.6	12.3	ND		UG/KG	1
Chloroethane	2	12.3	ND		UG/KG	1
1,1-Dichloroethene	1	6.2	ND		UG/KG	1
Methylene Chloride	3	6.2	ND		UG/KG	1
trans-1,2-Dichloroethene	0.97	6.2	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.2	ND		UG/KG	1
Carbon disulfide	1.1	6.2	ND		UG/KG	1
cis-1,2-Dichloroethene	0.41	6.2	ND		UG/KG	1
Bromochloromethane	1	6.2	ND		UG/KG	1
Chloroform	0.84	6.2	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.2	ND		UG/KG	1
Carbon Tetrachloride	0.75	6.2	ND		UG/KG	1
Benzene	0.7	6.2	ND		UG/KG	1
1,2-Dichloroethane	0.46	6.2	ND		UG/KG	1
Trichloroethene	1.1	6.2	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.2	ND		UG/KG	1
Bromodichloromethane	0.28	6.2	ND		UG/KG	1
cis-1,3-Dichloropropene	0.8	6.2	ND		UG/KG	1
Toluene	0.38	6.2	ND		UG/KG	1
trans-1,3-Dichloropropene	0.76	6.2	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.2	ND		UG/KG	1
Tetrachloroethene	0.58	6.2	ND		UG/KG	1
Dibromochloromethane	0.28	6.2	ND		UG/KG	1
Chlorobenzene	0.26	6.2	ND		UG/KG	1
Ethyl Benzene	0.44	6.2	ND		UG/KG	1
m & p-Xylene	0.98	6.2	ND		UG/KG	1
o-Xylene	1.1	6.2	ND		UG/KG	1
Styrene	0.43	6.2	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-003-06-SSS	ARDL Lab No.:	301100-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2546
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1849	Prep. Date:	09/12/2002
Matrix:	SOIL	Analysis Date:	09/12/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSH
% Moisture:	18.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.2	ND		UG/KG	1
2-Hexanone	22.1	24.6	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.2	ND		UG/KG	1
Acetone	39.4	61.5	ND		UG/KG	1
2-Butanone	20.9	61.5	ND		UG/KG	1
4-Methyl-2-pentanone	18.5	24.6	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	117%
1,2-Dichloroethane-d4	78-135	110%
Toluene-d8	86-129	106%
4-Bromofluorobenzene	76-141	111%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-004-06-SSS	ARDL Lab No.:	301100-02
Desc/Location:	NONE	Lab Filename:	Y2544
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1650	Prep. Date:	09/12/2002
Matrix:	SOIL	Analysis Date:	09/12/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSH
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.4	12.5	ND		UG/KG	1
Vinyl Chloride	2.2	12.5	ND		UG/KG	1
Bromomethane	1.6	12.5	ND		UG/KG	1
Chloroethane	2	12.5	ND		UG/KG	1
1,1-Dichloroethene	1	6.2	ND		UG/KG	1
Methylene Chloride	3	6.2	7.1		UG/KG	1
trans-1,2-Dichloroethene	0.98	6.2	ND		UG/KG	1
1,1-Dichloroethane	0.29	6.2	ND		UG/KG	1
Carbon disulfide	1.1	6.2	ND		UG/KG	1
cis-1,2-Dichloroethene	0.41	6.2	ND		UG/KG	1
Bromochloromethane	1	6.2	ND		UG/KG	1
Chloroform	0.85	6.2	ND		UG/KG	1
1,1,1-Trichloroethane	0.39	6.2	ND		UG/KG	1
Carbon Tetrachloride	0.76	6.2	ND		UG/KG	1
Benzene	0.71	6.2	ND		UG/KG	1
1,2-Dichloroethane	0.46	6.2	ND		UG/KG	1
Trichloroethene	1.1	6.2	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.2	ND		UG/KG	1
Bromodichloromethane	0.29	6.2	ND		UG/KG	1
cis-1,3-Dichloropropene	0.81	6.2	ND		UG/KG	1
Toluene	0.39	6.2	ND		UG/KG	1
trans-1,3-Dichloropropene	0.77	6.2	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.2	ND		UG/KG	1
Tetrachloroethene	0.59	6.2	ND		UG/KG	1
Dibromochloromethane	0.29	6.2	ND		UG/KG	1
Chlorobenzene	0.26	6.2	ND		UG/KG	1
Ethyl Benzene	0.45	6.2	ND		UG/KG	1
m & p-Xylene	1	6.2	ND		UG/KG	1
o-Xylene	1.1	6.2	ND		UG/KG	1
Styrene	0.44	6.2	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-004-06-SSS	ARDL Lab No.:	301100-02 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2544
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1650	Prep. Date:	09/12/2002
Matrix:	SOIL	Analysis Date:	09/12/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSH
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.2	ND		UG/KG	1
2-Hexanone	22.4	24.9	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.2	ND		UG/KG	1
Acetone	39.9	62.3	ND		UG/KG	1
2-Butanone	21.2	62.3	ND		UG/KG	1
4-Methyl-2-pentanone	18.7	24.9	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	104%
1,2-Dichloroethane-d4	78-135	99%
Toluene-d8	86-129	98%
4-Bromofluorobenzene	76-141	101%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/26/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-003-06-ERB	ARDL Lab No.:	301100-05
Desc/Location:	NONE	Lab Filename:	J6516
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1827	Prep. Date:	09/25/2002
Matrix:	WATER	Analysis Date:	09/25/2002
Amount Used:	5 mL	Instrument ID:	HP4
Final Volume:	5 mL	QC Batch:	0926JLSV
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	1.5	10.0	ND		UG/L	1
Vinyl Chloride	1.5	10.0	ND		UG/L	1
Bromomethane	2.2	10.0	ND		UG/L	1
Chloroethane	1.5	10.0	ND		UG/L	1
1,1-Dichloroethene	0.54	5.0	ND		UG/L	1
Methylene Chloride	3.7	5.0	6.5		UG/L	1
trans-1,2-Dichloroethene	0.38	5.0	ND		UG/L	1
1,1-Dichloroethane	0.23	5.0	ND		UG/L	1
Carbon disulfide	0.67	5.0	ND		UG/L	1
cis-1,2-Dichloroethene	0.26	5.0	ND		UG/L	1
Bromochloromethane	0.66	5.0	ND		UG/L	1
Chloroform	0.17	5.0	3.2	J	UG/L	1
1,1,1-Trichloroethane	0.32	5.0	ND		UG/L	1
Carbon Tetrachloride	0.35	5.0	ND		UG/L	1
Benzene	0.8	5.0	ND		UG/L	1
1,2-Dichloroethane	0.25	5.0	ND		UG/L	1
Trichloroethene	0.75	5.0	ND		UG/L	1
1,2-Dichloropropane	0.29	5.0	ND		UG/L	1
Bromodichloromethane	0.21	5.0	ND		UG/L	1
cis-1,3-Dichloropropene	0.24	5.0	ND		UG/L	1
Toluene	0.56	5.0	4.1	J	UG/L	1
trans-1,3-Dichloropropene	0.73	5.0	ND		UG/L	1
1,1,2-Trichloroethane	0.31	5.0	ND		UG/L	1
Tetrachloroethene	0.53	5.0	ND		UG/L	1
Dibromochloromethane	0.24	5.0	ND		UG/L	1
Chlorobenzene	0.28	5.0	ND		UG/L	1
Ethyl Benzene	0.33	5.0	ND		UG/L	1
m & p-Xylene	0.96	5.0	ND		UG/L	1
o-Xylene	0.36	5.0	ND		UG/L	1
Styrene	0.28	5.0	ND		UG/L	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/26/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FIP-003-06-ERB	ARDL Lab No.:	301100-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	J6516
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1827	Prep. Date:	09/25/2002
Matrix:	WATER	Analysis Date:	09/25/2002
Amount Used:	5 mL	Instrument ID:	HP4
Final Volume:	5 mL	QC Batch:	0926JLSV
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.24	5.0	ND		UG/L	1
2-Hexanone	18	20.0	ND		UG/L	1
1,1,2,2-Tetrachloroethane	0.71	5.0	ND		UG/L	1
Acetone	43	50.0	44.2	J	UG/L	1
2-Butanone	19	50.0	ND		UG/L	1
4-Methyl-2-pentanone	16	20.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	89-127	110%
1,2-Dichloroethane-d4	79-130	103%
Toluene-d8	84-122	106%
4-Bromofluorobenzene	82-125	107%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

BNA-8270

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-001-06-SSS	ARDL Lab No.:	301100-01
Desc/Location:	NONE	Lab Filename:	Z3974
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1545	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/03/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	140	405	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.6	405	ND		UG/KG	1
2-Chlorophenol	129	405	ND		UG/KG	1
1,3-Dichlorobenzene	65.5	405	ND		UG/KG	1
1,4-Dichlorobenzene	52.3	405	ND		UG/KG	1
1,2-Dichlorobenzene	59.5	405	ND		UG/KG	1
2-Methylphenol	115	405	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.4	405	ND		UG/KG	1
4-Methylphenol	146	405	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.7	405	ND		UG/KG	1
Hexachloroethane	60.5	405	ND		UG/KG	1
Nitrobenzene	76	405	ND		UG/KG	1
Isophorone	60.9	405	ND		UG/KG	1
2-Nitrophenol	125	405	ND		UG/KG	1
2,4-Dimethylphenol	139	405	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.6	405	ND		UG/KG	1
2,4-Dichlorophenol	148	405	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.5	405	ND		UG/KG	1
Naphthalene	16.8	405	ND		UG/KG	1
4-Chloroaniline	93.1	405	ND		UG/KG	1
Hexachlorobutadiene	71.3	405	ND		UG/KG	1
4-Chloro-3-methylphenol	121	405	ND		UG/KG	1
2-Methylnaphthalene	76.2	405	ND		UG/KG	1
Hexachlorocyclopentadiene	61.7	405	ND		UG/KG	1
2,4,6-Trichlorophenol	130	405	ND		UG/KG	1
2,4,5-Trichlorophenol	137	405	ND		UG/KG	1
2-Chloronaphthalene	59.9	405	ND		UG/KG	1
2-Nitroaniline	62.9	405	ND		UG/KG	1
Dimethylphthalate	25.4	405	ND		UG/KG	1
2,6-Dinitrotoluene	51.9	405	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-001-06-SSS	ARDL Lab No.:	301100-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z3974
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1545	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/03/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46.9	405	ND		UG/KG	1
2,4-Dinitrophenol	125	405	ND		UG/KG	1
4-Nitrophenol	110	405	ND		UG/KG	1
Dibenzofuran	82.1	405	ND		UG/KG	1
2,4-Dinitrotoluene	60.2	405	ND		UG/KG	1
Diethylphthalate	17.7	405	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.4	405	ND		UG/KG	1
4-Nitroaniline	49.1	405	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	109	405	ND		UG/KG	1
N-Nitrosodiphenylamine	25.4	405	ND		UG/KG	1
4-Bromophenyl-phenylether	30.1	405	ND		UG/KG	1
Hexachlorobenzene	50.9	405	ND		UG/KG	1
Pentachlorophenol	102	405	ND		UG/KG	1
Di-n-butylphthalate	32.4	405	ND		UG/KG	1
Butylbenzylphthalate	24.9	405	ND		UG/KG	1
3,3'-Dichlorobenzidine	167	405	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27	405	ND		UG/KG	1
Di-n-octylphthalate	54	405	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	72%
Phenol-d5	24-113	88%
Nitrobenzene-d5	23-120	104%
2-Fluorobiphenyl	30-115	77%
2,4,6-Tribromophenol	19-122	48%
Terphenyl-d14	18-137	69%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-002-06-SSS	ARDL Lab No.:	301100-03
Desc/Location:	NONE	Lab Filename:	Z3978
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1736	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/03/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	21.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	146	423	ND		UG/KG	1
bis(2-Chloroethyl)ether	30.9	423	ND		UG/KG	1
2-Chlorophenol	134	423	ND		UG/KG	1
1,3-Dichlorobenzene	68.4	423	ND		UG/KG	1
1,4-Dichlorobenzene	54.5	423	ND		UG/KG	1
1,2-Dichlorobenzene	62.1	423	ND		UG/KG	1
2-Methylphenol	120	423	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	24.5	423	ND		UG/KG	1
4-Methylphenol	152	423	ND		UG/KG	1
N-Nitroso-di-n-propylamine	28.9	423	ND		UG/KG	1
Hexachloroethane	63.1	423	ND		UG/KG	1
Nitrobenzene	79.3	423	ND		UG/KG	1
Isophorone	63.5	423	ND		UG/KG	1
2-Nitrophenol	131	423	ND		UG/KG	1
2,4-Dimethylphenol	145	423	ND		UG/KG	1
bis(2-Chloroethoxy)methane	31.9	423	ND		UG/KG	1
2,4-Dichlorophenol	155	423	ND		UG/KG	1
1,2,4-Trichlorobenzene	65.2	423	ND		UG/KG	1
Naphthalene	17.5	423	ND		UG/KG	1
4-Chloroaniline	97.2	423	ND		UG/KG	1
Hexachlorobutadiene	74.4	423	ND		UG/KG	1
4-Chloro-3-methylphenol	126	423	ND		UG/KG	1
2-Methylnaphthalene	79.5	423	ND		UG/KG	1
Hexachlorocyclopentadiene	64.4	423	ND		UG/KG	1
2,4,6-Trichlorophenol	136	423	ND		UG/KG	1
2,4,5-Trichlorophenol	143	423	ND		UG/KG	1
2-Chloronaphthalene	62.5	423	ND		UG/KG	1
2-Nitroaniline	65.7	423	ND		UG/KG	1
Dimethylphthalate	26.5	423	ND		UG/KG	1
2,6-Dinitrotoluene	54.2	423	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-002-06-SSS	ARDL Lab No.:	301100-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z3978
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1736	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/03/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	21.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	48.9	423	ND		UG/KG	1
2,4-Dinitrophenol	131	423	ND		UG/KG	1
4-Nitrophenol	115	423	ND		UG/KG	1
Dibenzofuran	85.7	423	ND		UG/KG	1
2,4-Dinitrotoluene	62.9	423	ND		UG/KG	1
Diethylphthalate	18.4	423	ND		UG/KG	1
4-Chlorophenyl-phenylether	27.5	423	ND		UG/KG	1
4-Nitroaniline	51.2	423	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	114	423	ND		UG/KG	1
N-Nitrosodiphenylamine	26.5	423	ND		UG/KG	1
4-Bromophenyl-phenylether	31.4	423	ND		UG/KG	1
Hexachlorobenzene	53.1	423	ND		UG/KG	1
Pentachlorophenol	106	423	ND		UG/KG	1
Di-n-butylphthalate	33.8	423	ND		UG/KG	1
Butylbenzylphthalate	26	423	952		UG/KG	1
3,3'-Dichlorobenzidine	174	423	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	28.2	423	124	J	UG/KG	1
Di-n-octylphthalate	56.3	423	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	71%
Phenol-d5	24-113	90%
Nitrobenzene-d5	23-120	77%
2-Fluorobiphenyl	30-115	75%
2,4,6-Tribromophenol	19-122	53%
Terphenyl-d14	18-137	71%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-003-06-SSS	ARDL Lab No.:	301100-04
Desc/Location:	NONE	Lab Filename:	Z3979
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1849	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/03/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	18.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	140	406	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.6	406	ND		UG/KG	1
2-Chlorophenol	129	406	ND		UG/KG	1
1,3-Dichlorobenzene	65.7	406	ND		UG/KG	1
1,4-Dichlorobenzene	52.4	406	ND		UG/KG	1
1,2-Dichlorobenzene	59.7	406	ND		UG/KG	1
2-Methylphenol	115	406	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.5	406	ND		UG/KG	1
4-Methylphenol	146	406	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.8	406	ND		UG/KG	1
Hexachloroethane	60.6	406	ND		UG/KG	1
Nitrobenzene	76.1	406	ND		UG/KG	1
Isophorone	61	406	ND		UG/KG	1
2-Nitrophenol	125	406	ND		UG/KG	1
2,4-Dimethylphenol	139	406	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.6	406	ND		UG/KG	1
2,4-Dichlorophenol	149	406	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.6	406	ND		UG/KG	1
Naphthalene	16.9	406	ND		UG/KG	1
4-Chloroaniline	93.4	406	ND		UG/KG	1
Hexachlorobutadiene	71.5	406	ND		UG/KG	1
4-Chloro-3-methylphenol	121	406	ND		UG/KG	1
2-Methylnaphthalene	76.4	406	ND		UG/KG	1
Hexachlorocyclopentadiene	61.9	406	ND		UG/KG	1
2,4,6-Trichlorophenol	130	406	ND		UG/KG	1
2,4,5-Trichlorophenol	138	406	ND		UG/KG	1
2-Chloronaphthalene	60	406	ND		UG/KG	1
2-Nitroaniline	63.1	406	ND		UG/KG	1
Dimethylphthalate	25.5	406	ND		UG/KG	1
2,6-Dinitrotoluene	52	406	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-003-06-SSS	ARDL Lab No.:	301100-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z3979
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1849	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/03/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	18.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	47	406	ND		UG/KG	1
2,4-Dinitrophenol	125	406	ND		UG/KG	1
4-Nitrophenol	110	406	ND		UG/KG	1
Dibenzofuran	82.3	406	ND		UG/KG	1
2,4-Dinitrotoluene	60.4	406	ND		UG/KG	1
Diethylphthalate	17.7	406	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.4	406	ND		UG/KG	1
4-Nitroaniline	49.2	406	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	110	406	ND		UG/KG	1
N-Nitrosodiphenylamine	25.5	406	ND		UG/KG	1
4-Bromophenyl-phenylether	30.1	406	ND		UG/KG	1
Hexachlorobenzene	51	406	ND		UG/KG	1
Pentachlorophenol	102	406	ND		UG/KG	1
Di-n-butylphthalate	32.5	406	ND		UG/KG	1
Butylbenzylphthalate	25	406	77.3	J	UG/KG	1
3,3'-Dichlorobenzidine	167	406	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.1	406	ND		UG/KG	1
Di-n-octylphthalate	54.1	406	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	70%
Phenol-d5	24-113	93%
Nitrobenzene-d5	23-120	91%
2-Fluorobiphenyl	30-115	78%
2,4,6-Tribromophenol	19-122	53%
Terphenyl-d14	18-137	70%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-004-06-SSS	ARDL Lab No.:	301100-02
Desc/Location:	NONE	Lab Filename:	Z3977
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1650	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/03/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	142	411	ND		UG/KG	1
bis(2-Chloroethyl)ether	30	411	ND		UG/KG	1
2-Chlorophenol	131	411	ND		UG/KG	1
1,3-Dichlorobenzene	66.5	411	ND		UG/KG	1
1,4-Dichlorobenzene	53.1	411	ND		UG/KG	1
1,2-Dichlorobenzene	60.4	411	ND		UG/KG	1
2-Methylphenol	117	411	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.8	411	ND		UG/KG	1
4-Methylphenol	148	411	ND		UG/KG	1
N-Nitroso-di-n-propylamine	28.1	411	ND		UG/KG	1
Hexachloroethane	61.4	411	ND		UG/KG	1
Nitrobenzene	77.1	411	ND		UG/KG	1
Isophorone	61.8	411	ND		UG/KG	1
2-Nitrophenol	127	411	ND		UG/KG	1
2,4-Dimethylphenol	141	411	ND		UG/KG	1
bis(2-Chloroethoxy)methane	31	411	ND		UG/KG	1
2,4-Dichlorophenol	151	411	ND		UG/KG	1
1,2,4-Trichlorobenzene	63.4	411	ND		UG/KG	1
Naphthalene	17.1	411	ND		UG/KG	1
4-Chloroaniline	94.5	411	ND		UG/KG	1
Hexachlorobutadiene	72.4	411	ND		UG/KG	1
4-Chloro-3-methylphenol	123	411	ND		UG/KG	1
2-Methylnaphthalene	77.3	411	ND		UG/KG	1
Hexachlorocyclopentadiene	62.6	411	ND		UG/KG	1
2,4,6-Trichlorophenol	132	411	ND		UG/KG	1
2,4,5-Trichlorophenol	139	411	ND		UG/KG	1
2-Chloronaphthalene	60.8	411	ND		UG/KG	1
2-Nitroaniline	63.9	411	ND		UG/KG	1
Dimethylphthalate	25.8	411	ND		UG/KG	1
2,6-Dinitrotoluene	52.7	411	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-004-06-SSS	ARDL Lab No.:	301100-02 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z3977
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1650	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/03/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	47.6	411	ND		UG/KG	1
2,4-Dinitrophenol	127	411	ND		UG/KG	1
4-Nitrophenol	112	411	ND		UG/KG	1
Dibenzofuran	83.3	411	ND		UG/KG	1
2,4-Dinitrotoluene	61.1	411	ND		UG/KG	1
Diethylphthalate	17.9	411	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.8	411	ND		UG/KG	1
4-Nitroaniline	49.8	411	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	111	411	ND		UG/KG	1
N-Nitrosodiphenylamine	25.8	411	ND		UG/KG	1
4-Bromophenyl-phenylether	30.5	411	ND		UG/KG	1
Hexachlorobenzene	51.7	411	ND		UG/KG	1
Pentachlorophenol	103	411	ND		UG/KG	1
Di-n-butylphthalate	32.9	411	ND		UG/KG	1
Butylbenzylphthalate	25.3	411	ND		UG/KG	1
3,3'-Dichlorobenzidine	169	411	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.4	411	ND		UG/KG	1
Di-n-octylphthalate	54.8	411	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	66%
Phenol-d5	24-113	82%
Nitrobenzene-d5	23-120	77%
2-Fluorobiphenyl	30-115	73%
2,4,6-Tribromophenol	19-122	55%
Terphenyl-d14	18-137	60%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/04/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510B

Field ID:	FIP-003-06-ERB	ARDL Lab No.:	301100-05
Desc/Location:	NONE	Lab Filename:	T6990
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1827	Prep. Date:	09/18/2002
Matrix:	WATER	Analysis Date:	09/30/2002
Amount Used:	1000 mL	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5013
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	1	10.0	ND		UG/L	1
bis(2-Chloroethyl)ether	0.5	10.0	ND		UG/L	1
2-Chlorophenol	2.1	10.0	ND		UG/L	1
1,3-Dichlorobenzene	1.2	10.0	ND		UG/L	1
1,4-Dichlorobenzene	1.1	10.0	ND		UG/L	1
1,2-Dichlorobenzene	1.1	10.0	ND		UG/L	1
2-Methylphenol	1.6	10.0	ND		UG/L	1
bis(2-Chloroisopropyl)ether	0.48	10.0	ND		UG/L	1
4-Methylphenol	1.5	10.0	ND		UG/L	1
N-Nitroso-di-n-propylamine	0.58	10.0	ND		UG/L	1
Hexachloroethane	1.1	10.0	ND		UG/L	1
Nitrobenzene	0.92	10.0	ND		UG/L	1
Isophorone	1.1	10.0	ND		UG/L	1
2-Nitrophenol	2.2	10.0	ND		UG/L	1
2,4-Dimethylphenol	1.8	10.0	ND		UG/L	1
bis(2-Chloroethoxy)methane	0.47	10.0	ND		UG/L	1
2,4-Dichlorophenol	1.7	10.0	ND		UG/L	1
1,2,4-Trichlorobenzene	1	10.0	ND		UG/L	1
Naphthalene	0.25	10.0	ND		UG/L	1
4-Chloroaniline	0.82	10.0	ND		UG/L	1
Hexachlorobutadiene	1.2	10.0	ND		UG/L	1
4-Chloro-3-methylphenol	1.9	10.0	ND		UG/L	1
2-Methylnaphthalene	1.1	10.0	ND		UG/L	1
Hexachlorocyclopentadiene	1	10.0	ND		UG/L	1
2,4,6-Trichlorophenol	2.2	10.0	ND		UG/L	1
2,4,5-Trichlorophenol	2	10.0	ND		UG/L	1
2-Chloronaphthalene	1	10.0	ND		UG/L	1
2-Nitroaniline	1.1	10.0	ND		UG/L	1
Dimethylphthalate	0.4	10.0	ND		UG/L	1
2,6-Dinitrotoluene	0.58	10.0	ND		UG/L	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/04/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510B

Field ID:	FIP-003-06-ERB	ARDL Lab No.:	301100-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	T6990
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1827	Prep. Date:	09/18/2002
Matrix:	WATER	Analysis Date:	09/30/2002
Amount Used:	1000 mL	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5013
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	1.4	10.0	ND		UG/L	1
2,4-Dinitrophenol	1.7	10.0	ND		UG/L	1
4-Nitrophenol	1.5	10.0	ND		UG/L	1
Dibenzofuran	1.2	10.0	ND		UG/L	1
2,4-Dinitrotoluene	0.8	10.0	ND		UG/L	1
Diethylphthalate	0.44	10.0	ND		UG/L	1
4-Chlorophenyl-phenylether	0.44	10.0	ND		UG/L	1
4-Nitroaniline	1.2	10.0	ND		UG/L	1
4,6-Dinitro-2-methylphenol	1.6	10.0	ND		UG/L	1
N-Nitrosodiphenylamine	0.4	10.0	ND		UG/L	1
4-Bromophenyl-phenylether	0.4	10.0	ND		UG/L	1
Hexachlorobenzene	0.91	10.0	ND		UG/L	1
Pentachlorophenol	1.9	10.0	ND		UG/L	1
Di-n-butylphthalate	1.1	10.0	ND		UG/L	1
Butylbenzylphthalate	0.32	10.0	ND		UG/L	1
3,3'-Dichlorobenzidine	2.8	10.0	ND		UG/L	1
bis(2-Ethylhexyl)phthalate	0.87	10.0	ND		UG/L	1
Di-n-octylphthalate	0.37	10.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	21-110	37%
Phenol-d5	10-94	27%
Nitrobenzene-d5	35-114	54%
2-Fluorobiphenyl	43-116	63%
2,4,6-Tribromophenol	10-123	60%
Terphenyl-d14	33-141	56%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PCB's-8082

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FIP-001-06-SSS	ARDL Lab No.:	301100-01
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1545	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4997
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.1	40.5	ND		UG/KG	1
Aroclor 1221	16.6	82.2	ND		UG/KG	1
Aroclor 1232	10.2	40.5	ND		UG/KG	1
Aroclor 1242	11.4	40.5	ND		UG/KG	1
Aroclor 1248	7.6	40.5	ND		UG/KG	1
Aroclor 1254	5.3	40.5	ND		UG/KG	1
Aroclor 1260	6.8	40.5	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	74%
Tetrachloro-m-xylene	42-94	74%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FIP-002-06-SSS	ARDL Lab No.:	301100-03
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1736	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/19/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4997
% Moisture:	21.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.5	42.3	ND		UG/KG	1
Aroclor 1221	17.3	85.8	ND		UG/KG	1
Aroclor 1232	10.7	42.3	ND		UG/KG	1
Aroclor 1242	11.9	42.3	ND		UG/KG	1
Aroclor 1248	8	42.3	ND		UG/KG	1
Aroclor 1254	5.5	42.3	ND		UG/KG	1
Aroclor 1260	7.1	42.3	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	60%
Tetrachloro-m-xylene	42-94	68%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FIP-003-06-SSS	ARDL Lab No.:	301100-04
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1849	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4997
% Moisture:	18.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.2	40.6	ND		UG/KG	1
Aroclor 1221	16.6	82.4	ND		UG/KG	1
Aroclor 1232	10.2	40.6	ND		UG/KG	1
Aroclor 1242	11.4	40.6	ND		UG/KG	1
Aroclor 1248	7.6	40.6	ND		UG/KG	1
Aroclor 1254	5.3	40.6	ND		UG/KG	1
Aroclor 1260	6.8	40.6	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	63%
Tetrachloro-m-xylene	42-94	66%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FIP-004-06-SSS	ARDL Lab No.:	301100-02
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1650	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4997
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.3	41.1	ND		UG/KG	1
Aroclor 1221	16.8	83.4	ND		UG/KG	1
Aroclor 1232	10.4	41.1	ND		UG/KG	1
Aroclor 1242	11.6	41.1	ND		UG/KG	1
Aroclor 1248	7.7	41.1	ND		UG/KG	1
Aroclor 1254	5.4	41.1	ND		UG/KG	1
Aroclor 1260	6.9	41.1	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	80%
Tetrachloro-m-xylene	42-94	80%

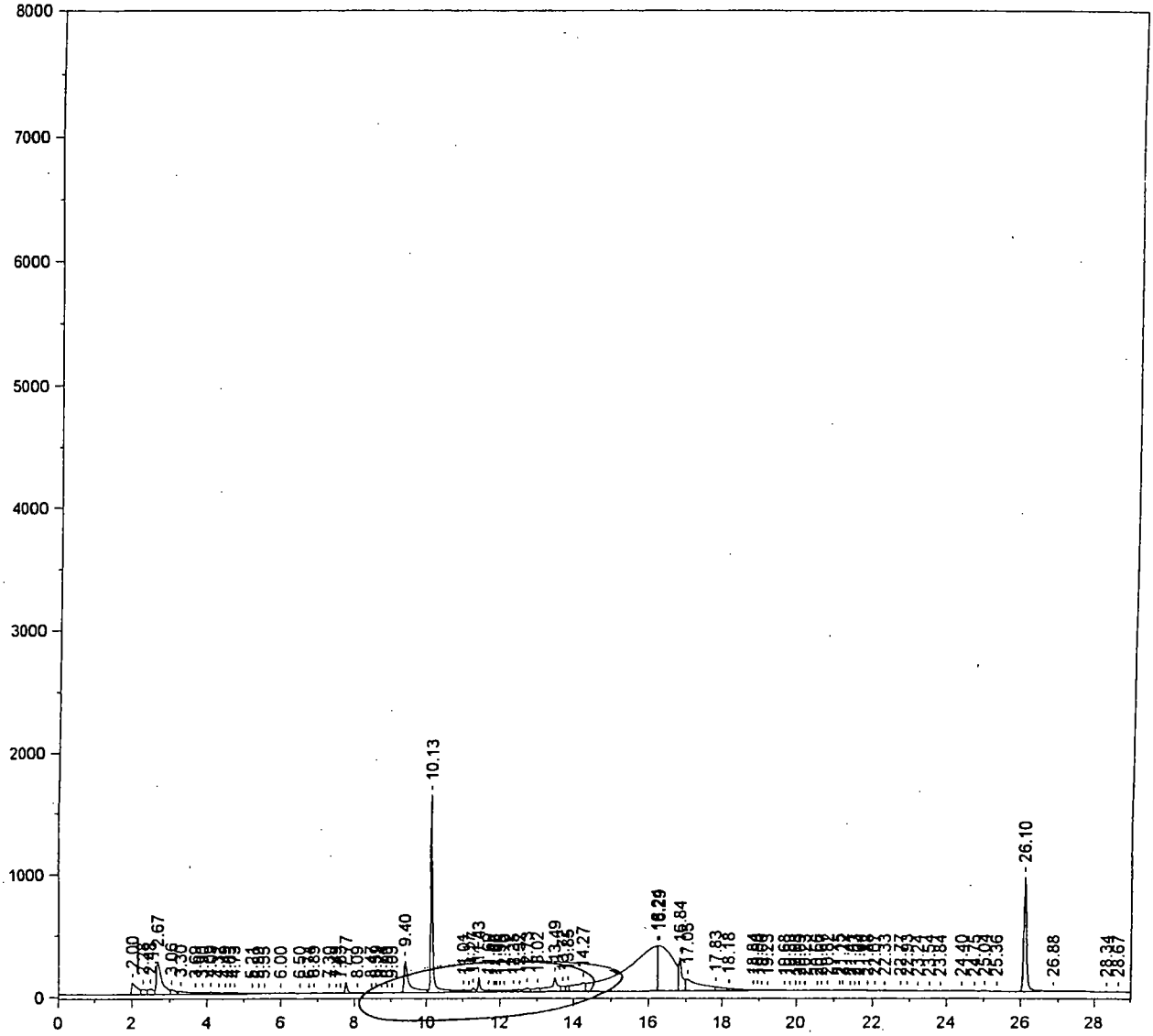
Surrogate recoveries marked with '*' indicates they are outside standard limits.

PCB's-8082

ARDL REPORT NO 301100
Volume 5

50000

— H:\CP2\HP2\M0919.0037.RAW 301100-01 B8068 FIP-001-06-SSS



Primary Column

Before reintegration
excess area under peaks
RJT 9/20/02

50014

Sample Name = **301100-01 B8068 FIP-001-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0037.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/20/02 7:34:32 AM
Method Version = 618
Calibration Version = 9

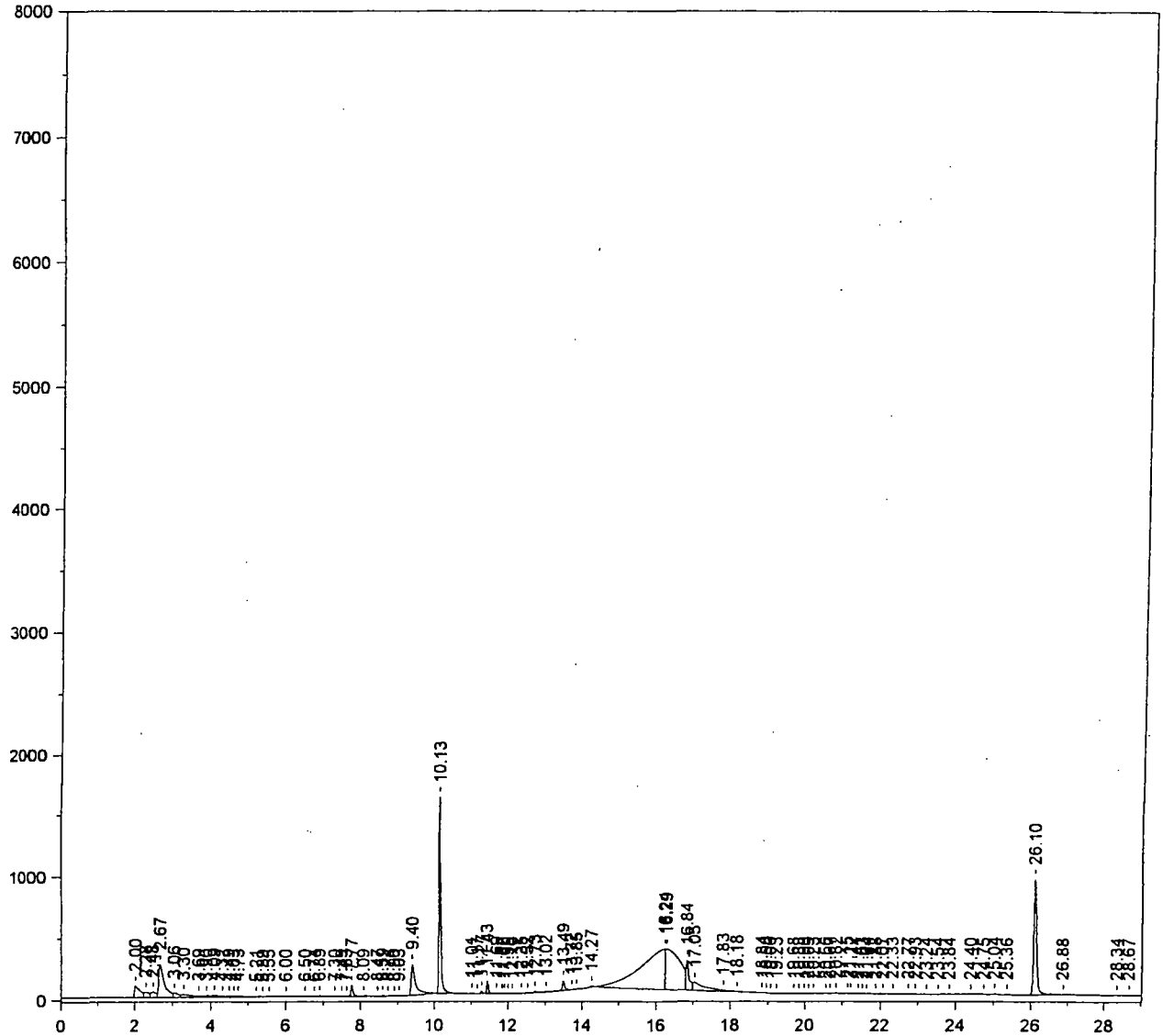
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	889615	1.341	BV	0.17
2	2.28		0.00	0.000	389392	0.587	VV	0.09
3	2.48		0.00	0.000	416092	0.627	VV	0.09
4	2.67		0.00	0.000	2780910	4.192	VV	0.13
5	3.06		0.00	0.000	295967	0.446	VV	0.10
6	3.30		0.00	0.000	386065	0.582	VV	0.16
7	3.69		0.00	0.000	80736	0.122	VV	0.09
8	3.90		0.00	0.000	147057	0.222	VV	0.14
9	4.09		0.00	0.000	131536	0.198	VV	0.08
10	4.32		0.00	0.000	67812	0.102	VV	0.11
11	4.49		0.00	0.000	107853	0.163	VV	0.11
12	4.63		0.00	0.000	45076	0.068	VV	0.05
13	4.73		0.00	0.000	173305	0.261	VV	0.15
14	5.21		0.00	0.000	105586	0.159	VV	0.15
15	5.39		0.00	0.000	31191	0.047	VV	0.07
16	5.55		0.00	0.000	92454	0.139	VV	0.20
17	6.00		0.00	0.000	105140	0.158	VV	0.27
18	6.50		0.00	0.000	80315	0.121	VV	0.22
19	6.74		0.00	0.000	36475	0.055	VV	0.10
20	6.89		0.00	0.000	88912	0.134	VV	0.09
21	7.30		0.00	0.000	47188	0.071	VV	0.20
22	7.49		0.00	0.000	20396	0.031	VV	0.06
23	7.63		0.00	0.000	13838	0.021	VV	0.08
24	7.77		0.00	0.000	390931	0.589	VV	0.06
25	8.09		0.00	0.000	30520	0.046	VB	0.24
26	8.47		0.00	0.000	8361	0.013	BV	0.15
27	8.59		0.00	0.000	37268	0.056	VV	0.07
28	8.74		0.00	0.000	5878	0.009	VV	0.06
29	8.90		0.00	0.000	4595	0.007	VV	0.11
30	9.03		0.00	0.000	3492	0.005	VB	0.07
31	9.40		0.00	0.000	2724719	4.107	BV	0.11
32	10.13	CL4XYL	0.86	10.067	6704549	10.106	VV	0.05
33	11.01		0.00	0.000	244128	0.368	VV	0.11
34	11.17		0.00	0.000	115375	0.174	VV	0.08
35	11.27		0.00	0.000	220651	0.333	VV	0.05
36	11.43		0.00	0.000	610782	0.921	VV	0.05
37	11.69		0.00	0.000	182949	0.276	VV	0.07
38	11.82		0.00	0.000	61151	0.092	VV	0.03
39	11.90		0.00	0.000	97959	0.148	VV	0.05
40	11.99		0.00	0.000	62149	0.094	VV	0.04
41	12.10		0.00	0.000	171307	0.258	VV	0.11
42	12.35		0.00	0.000	216854	0.327	VV	0.07
43	12.52		0.00	0.000	192860	0.291	VV	0.09
44	12.73	AR1016#2	1.20	14.061	378859	0.571	VV	0.06
45	13.02		0.00	0.000	405622	0.611	VV	0.08
46	13.49		0.00	0.000	1641839	2.475	VV	0.07
47	13.72		0.00	0.000	341689	0.515	VV	0.09
48	13.85	AR1016#3	0.60	7.023	290778	0.438	VV	0.06
49	14.27	AR1016#4	4.95	58.157	1556831	2.347	VV	0.11
50	16.24		0.00	0.000	21560780	32.498	VV	0.70
51	16.29		0.00	0.000	9949416	14.996	VV	0.35
52	16.84		0.00	0.000	1965818	2.963	VV	0.08

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	17.05		0.00	0.000	2816390	4.245	VV	0.24
54	17.83		0.00	0.000	560566	0.845	VV	0.14
55	18.18		0.00	0.000	556918	0.839	VV	0.26
56	18.84	AR1260#2	0.11	1.244	45689	0.069	VV	0.06
57	18.96		0.00	0.000	40917	0.062	VV	0.07
58	19.06		0.00	0.000	39116	0.059	VV	0.08
59	19.23		0.00	0.000	47396	0.071	VV	0.11
60	19.68		0.00	0.000	19735	0.030	VV	0.07
61	19.83	AR1260#3	0.03	0.382	10761	0.016	VV	0.05
62	19.98		0.00	0.000	5485	0.008	VV	0.05
63	20.09		0.00	0.000	2411	0.004	VB	0.05
64	20.23		0.00	0.000	7632	0.012	BB	0.05
65	20.56		0.00	0.000	1464	0.002	BV	0.11
66	20.67		0.00	0.000	12062	0.018	VV	0.14
67	20.82		0.00	0.000	12502	0.019	VB	0.05
68	21.15	AR1260#4	0.01	0.143	9567	0.014	BV	0.06
69	21.22		0.00	0.000	19577	0.030	VV	0.06
70	21.41		0.00	0.000	15812	0.024	VV	0.12
71	21.53		0.00	0.000	10491	0.016	VV	0.08
72	21.64		0.00	0.000	13622	0.021	VV	0.12
73	21.88		0.00	0.000	9746	0.015	VV	0.05
74	22.07	AR1260#5	0.02	0.271	12317	0.019	VV	0.12
75	22.33		0.00	0.000	21007	0.032	VB	0.09
76	22.77		0.00	0.000	35167	0.053	BV	0.07
77	22.93		0.00	0.000	16993	0.026	VB	0.08
78	23.24		0.00	0.000	1389	0.002	BB	0.06
79	23.54		0.00	0.000	5181	0.008	BB	0.07
80	23.84		0.00	0.000	4811	0.007	BB	0.07
81	24.40		0.00	0.000	245	0.000	BB	0.05
82	24.75		0.00	0.000	610	0.001	BV	0.07
83	25.04		0.00	0.000	28804	0.043	VV	0.07
84	25.36		0.00	0.000	5601	0.008	VB	0.11
85	26.10	CL10BP	0.74	8.653	5213064	7.857	BV	0.08
86	26.88		0.00	0.000	21912	0.033	VB	0.15
87	28.34		0.00	0.000	2916	0.004	BB	0.12
88	28.67		0.00	0.000	6599	0.010	BB	0.14

Total Area = 6.63455E+07 Total Height = 5474084 Total Amount = 8.507541

50016

— H:\CP2\HP2\M0919.0037.RAW 301100-01 B8068 FIP-001-06-SSS



after reintegration
KJT
9/20/02

50017

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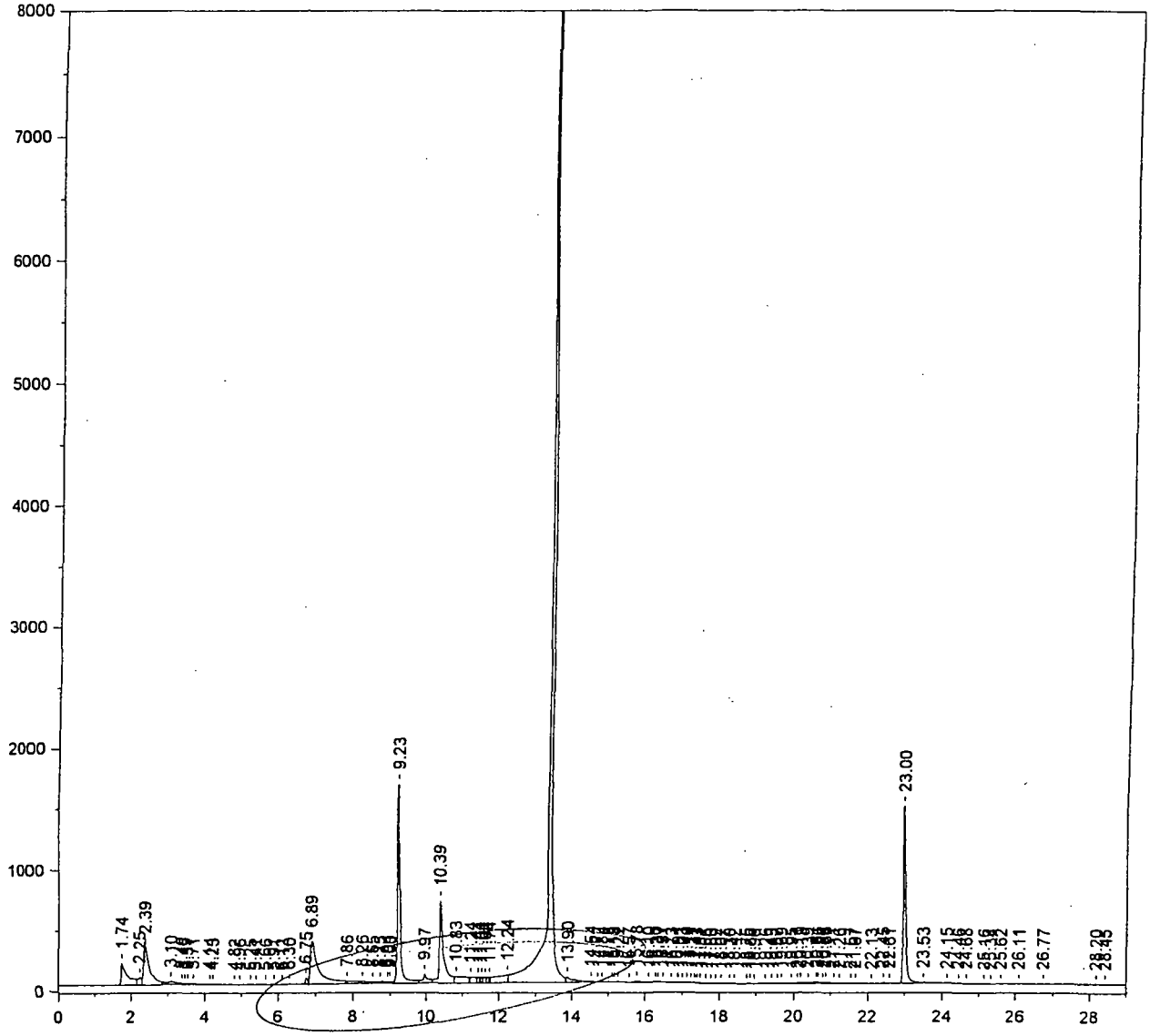


Before reintegration
excess area under peaks
RDT
9/20/2

50021

Sample Name = **301100-01 B8068 FIP-001-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

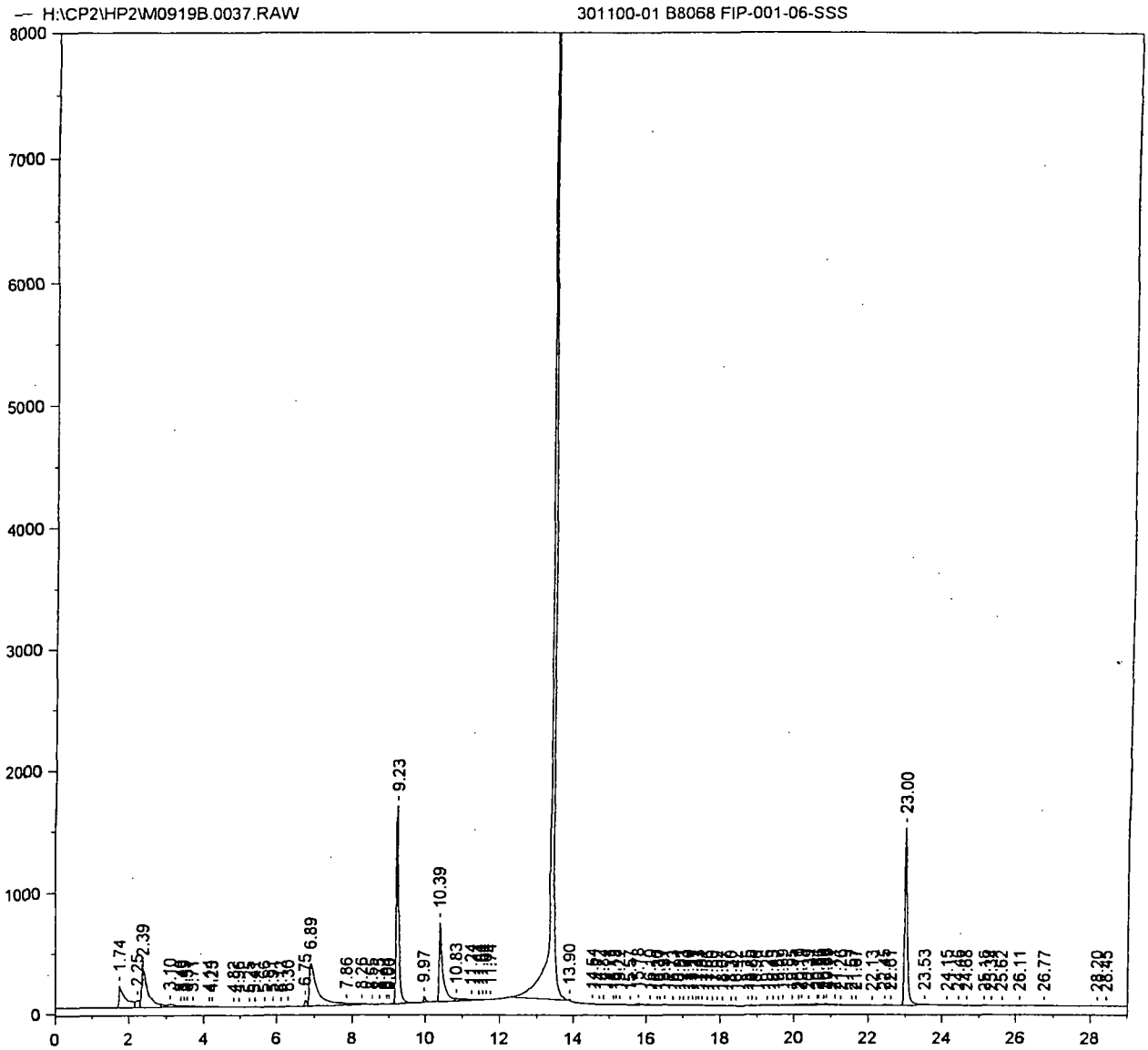
Raw File Name = **H:\CP2\HP2\M0919B.0037.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/20/02 7:34:32 AM
Method Version = 567
Calibration Version = 5

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	2102487	1.855	BV	0.14
2	2.25		0.00	0.000	455097	0.402	VV	0.08
3	2.39		0.00	0.000	3656839	3.227	VV	0.14
4	3.10		0.00	0.000	382378	0.337	VV	0.17
5	3.40		0.00	0.000	44943	0.040	VV	0.05
6	3.49		0.00	0.000	44187	0.039	VV	0.07
7	3.57		0.00	0.000	45861	0.040	VV	0.07
8	3.71		0.00	0.000	109573	0.097	VB	0.16
9	4.14		0.00	0.000	33803	0.030	BV	0.11
10	4.23		0.00	0.000	28554	0.025	VB	0.10
11	4.82		0.00	0.000	10889	0.010	BV	0.09
12	4.96		0.00	0.000	2405	0.002	VB	0.06
13	5.25		0.00	0.000	3173	0.003	BV	0.07
14	5.41		0.00	0.000	3796	0.003	VV	0.08
15	5.66		0.00	0.000	2819	0.002	VV	0.06
16	5.91		0.00	0.000	4078	0.004	VB	0.17
17	6.12		0.00	0.000	21238	0.019	BV	0.07
18	6.30		0.00	0.000	29538	0.026	VB	0.08
19	6.75		0.00	0.000	233440	0.206	BV	0.07
20	6.89		0.00	0.000	5770098	5.092	VV	0.18
21	7.86		0.00	0.000	511203	0.451	VV	0.22
22	8.26		0.00	0.000	268289	0.237	VV	0.14
23	8.55		0.00	0.000	138346	0.122	VV	0.07
24	8.75		0.00	0.000	273353	0.241	VV	0.19
25	8.94		0.00	0.000	53630	0.047	VV	0.04
26	9.00		0.00	0.000	101081	0.089	VV	0.05
27	9.23	CL4XYL	0.79	0.215	8376626	7.392	VV	0.06
28	9.97		0.00	0.000	807403	0.712	VV	0.06
29	10.39	AR1016#1	23.68	6.473	5586674	4.930	VV	0.08
30	10.83		0.00	0.000	1316748	1.162	VV	0.19
31	11.24	AR1016#2	1.27	0.347	551455	0.487	VV	0.12
32	11.44		0.00	0.000	169885	0.150	VV	0.03
33	11.54		0.00	0.000	178344	0.157	VV	0.05
34	11.64		0.00	0.000	291491	0.257	VV	0.05
35	11.74		0.00	0.000	112072	0.099	VV	0.03
36	12.24		0.00	0.000	1617616	1.427	VV	0.17
37	13.42	AR1016#5	339.17	92.709	70635128	62.331	VV	0.06
38	13.90		0.00	0.000	722020	0.637	VV	0.10
39	14.54		0.00	0.000	81988	0.072	VV	0.12
40	14.72		0.00	0.000	29797	0.026	VV	0.06
41	14.84		0.00	0.000	40413	0.036	VV	0.09
42	15.12		0.00	0.000	5107	0.005	VV	0.03
43	15.18		0.00	0.000	5531	0.005	VV	0.04
44	15.27		0.00	0.000	6458	0.006	VB	0.12
45	15.57		0.00	0.000	1548	0.001	BB	0.07
46	15.78		0.00	0.000	128401	0.113	BV	0.17
47	16.10		0.00	0.000	5308	0.005	VB	0.06
48	16.30		0.00	0.000	1204	0.001	BV	0.04
49	16.37		0.00	0.000	5659	0.005	VV	0.08
50	16.51	AR1260#1	0.03	0.007	6948	0.006	VV	0.10
51	16.73	AR1260#2	0.02	0.004	7527	0.007	VB	0.15
52	16.91		0.00	0.000	1755	0.002	BV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	17.03		0.00	0.000	9366	0.008	VV	0.05
54	17.16		0.00	0.000	7494	0.007	VV	0.05
55	17.27		0.00	0.000	2320	0.002	VB	0.06
56	17.37		0.00	0.000	1257	0.001	BV	0.04
57	17.43		0.00	0.000	4210	0.004	VV	0.04
58	17.51		0.00	0.000	8983	0.008	VB	0.07
59	17.66		0.00	0.000	4646	0.004	BV	0.07
60	17.80		0.00	0.000	3310	0.003	VV	0.09
61	17.92		0.00	0.000	2533	0.002	VV	0.08
62	18.07		0.00	0.000	7213	0.006	VB	0.11
63	18.30	AR1260#3	0.01	0.002	3031	0.003	BV	0.06
64	18.42		0.00	0.000	5412	0.005	VB	0.09
65	18.75		0.00	0.000	6729	0.006	BV	0.06
66	18.86		0.00	0.000	2510	0.002	VV	0.06
67	18.96		0.00	0.000	869	0.001	VB	0.04
68	19.26		0.00	0.000	37915	0.033	BV	0.18
69	19.43		0.00	0.000	13630	0.012	VV	0.06
70	19.57	AR1260#4	0.02	0.005	22425	0.020	VV	0.06
71	19.69		0.00	0.000	40014	0.035	VV	0.07
72	19.95		0.00	0.000	39426	0.035	VV	0.07
73	20.11		0.00	0.000	41271	0.036	VV	0.10
74	20.19		0.00	0.000	69030	0.061	VV	0.07
75	20.39		0.00	0.000	61536	0.054	VV	0.10
76	20.61		0.00	0.000	95605	0.084	VV	0.05
77	20.66		0.00	0.000	57447	0.051	VV	0.05
78	20.80		0.00	0.000	52840	0.047	VV	0.06
79	20.88		0.00	0.000	84857	0.075	VV	0.07
80	21.11		0.00	0.000	38130	0.034	VV	0.06
81	21.26		0.00	0.000	53144	0.047	VV	0.14
82	21.57		0.00	0.000	30646	0.027	VV	0.06
83	21.67	AR1260#5	0.13	0.036	38329	0.034	VV	0.12
84	22.13		0.00	0.000	2126	0.002	VB	0.05
85	22.45		0.00	0.000	38077	0.034	BV	0.07
86	22.61		0.00	0.000	7060	0.006	VB	0.06
87	23.00	CL10BP	0.74	0.203	7357008	6.492	SBB	0.07
88	23.53		0.00	0.000	6558	0.006	TBB	0.13
89	24.15		0.00	0.000	1517	0.001	BB	0.11
90	24.46		0.00	0.000	3331	0.003	BV	0.16
91	24.68		0.00	0.000	3546	0.003	VB	0.12
92	25.16		0.00	0.000	3335	0.003	BV	0.08
93	25.34		0.00	0.000	7312	0.006	VV	0.14
94	25.62		0.00	0.000	3915	0.003	VB	0.23
95	26.11		0.00	0.000	1186	0.001	BB	0.19
96	26.77		0.00	0.000	14240	0.013	BB	0.22
97	28.20		0.00	0.000	1955	0.002	BV	0.12
98	28.45		0.00	0.000	837	0.001	VB	0.10

Total Area = 1.133224E+08 Total Height = 2.016931E+07 Total Amount = 365.8397

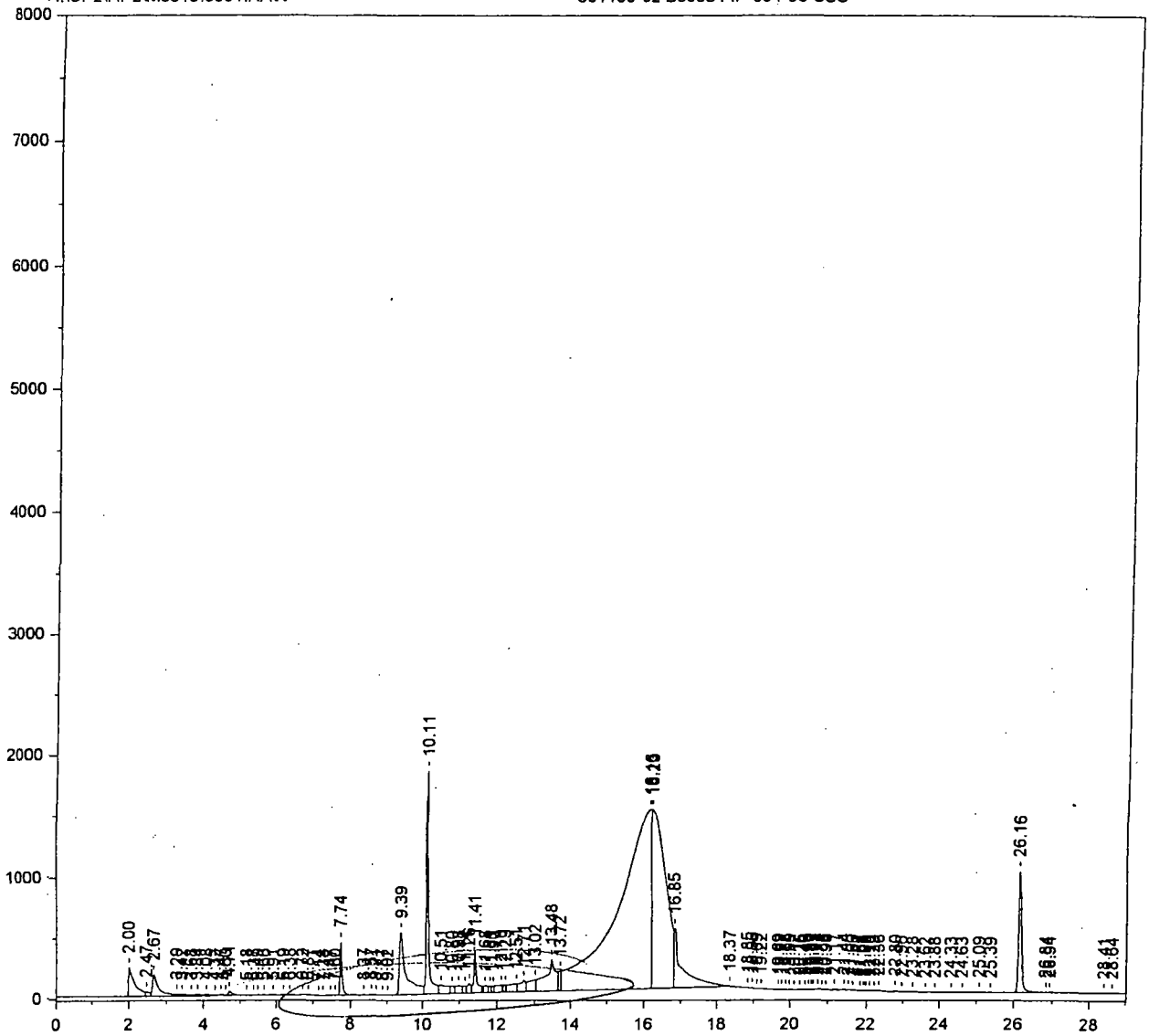


After reintegration
BT
9/20/2

BL
9-24-02

50024

— H:\CP2\HP2\M0919.0051.RAW 301100-02 B8068 FIP-004-06-SSS



Primary Column

Before reintegration
excess area under peak
BT
9/23/2

50030

Sample Name = **301100-02 B8068 FIP-004-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0051.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

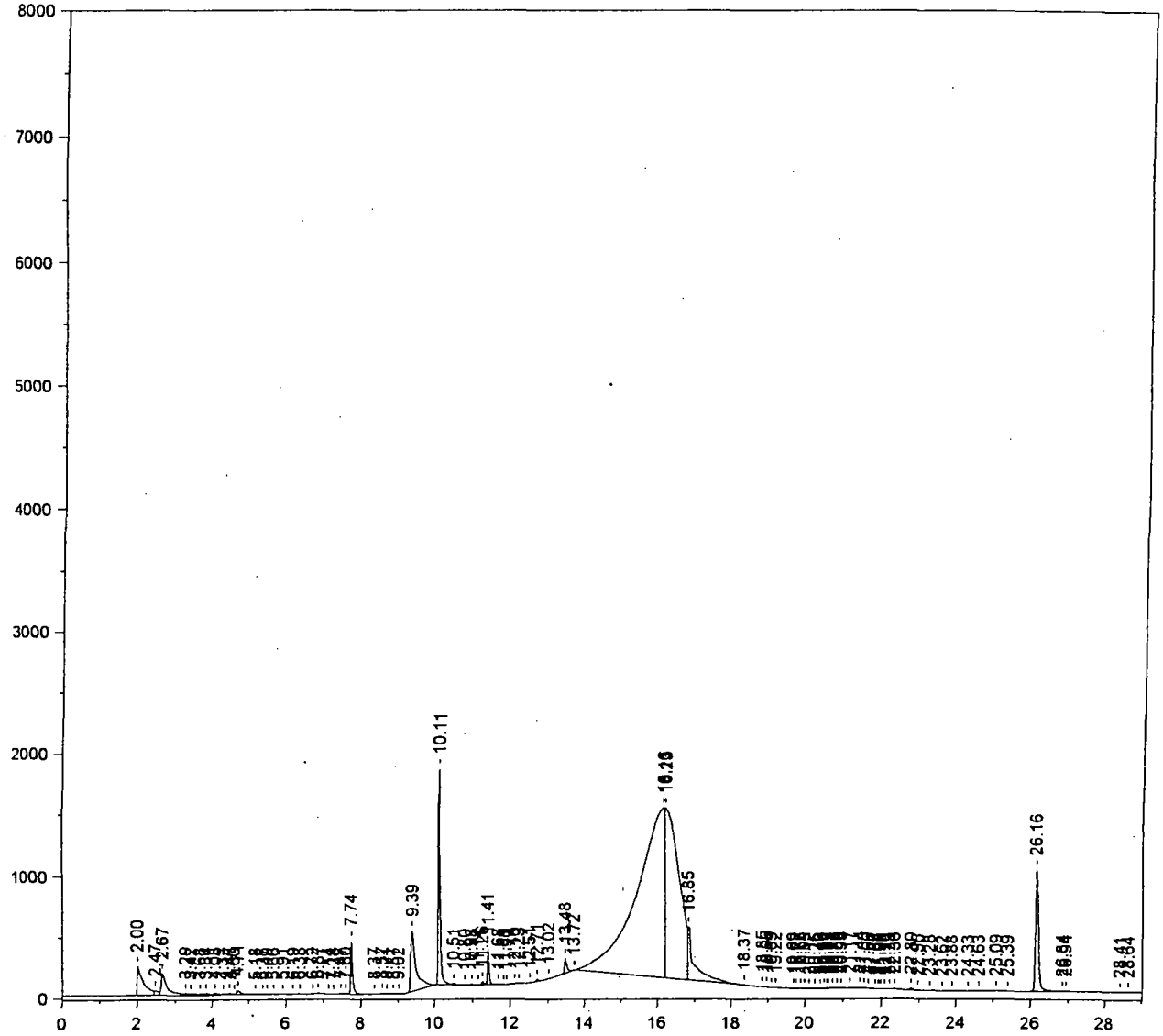
Date Taken (end) = 9/20/02 5:09:51 PM
Method Version = 618
Calibration Version = 11

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	2680562	1.465	BV	0.15
2	2.47		0.00	0.000	270769	0.148	VV	0.09
3	2.67		0.00	0.000	1936220	1.058	VV	0.12
4	3.29		0.00	0.000	119532	0.065	VV	0.10
5	3.42		0.00	0.000	140020	0.077	VV	0.15
6	3.68		0.00	0.000	59356	0.032	VV	0.07
7	3.84		0.00	0.000	131030	0.072	VV	0.18
8	4.08		0.00	0.000	139121	0.076	VV	0.08
9	4.32		0.00	0.000	41864	0.023	VV	0.07
10	4.47		0.00	0.000	86573	0.047	VV	0.13
11	4.60		0.00	0.000	29546	0.016	VV	0.05
12	4.71		0.00	0.000	306172	0.167	VV	0.09
13	5.18		0.00	0.000	46676	0.026	VV	0.15
14	5.37		0.00	0.000	25717	0.014	VV	0.06
15	5.49		0.00	0.000	30058	0.016	VV	0.11
16	5.66		0.00	0.000	17758	0.010	VV	0.10
17	5.91		0.00	0.000	33626	0.018	VV	0.14
18	6.19		0.00	0.000	13817	0.008	VV	0.11
19	6.38		0.00	0.000	22027	0.012	VB	0.14
20	6.72		0.00	0.000	14919	0.008	BB	0.07
21	6.87		0.00	0.000	18742	0.010	BB	0.06
22	7.14		0.00	0.000	3356	0.002	BV	0.07
23	7.28		0.00	0.000	3859	0.002	VB	0.09
24	7.47		0.00	0.000	16863	0.009	BV	0.06
25	7.60		0.00	0.000	10225	0.006	VV	0.06
26	7.74		0.00	0.000	1724109	0.942	VV	0.05
27	8.37		0.00	0.000	8958	0.005	VB	0.12
28	8.57		0.00	0.000	37128	0.020	BV	0.07
29	8.71		0.00	0.000	20510	0.011	VV	0.06
30	8.87		0.00	0.000	2396	0.001	VB	0.05
31	9.02		0.00	0.000	2917	0.002	BB	0.08
32	9.39		0.00	0.000	6850864	3.743	BV	0.13
33	10.11	CL4XYL	1.00	18.469	7819651	4.273	VV	0.05
34	10.51		0.00	0.000	1245981	0.681	VV	0.12
35	10.80		0.00	0.000	373484	0.204	VV	0.08
36	10.98		0.00	0.000	730819	0.399	VV	0.09
37	11.14		0.00	0.000	369950	0.202	VV	0.07
38	11.26		0.00	0.000	608549	0.333	VV	0.05
39	11.41		0.00	0.000	1847732	1.010	VV	0.05
40	11.68		0.00	0.000	444174	0.243	VV	0.09
41	11.81		0.00	0.000	225028	0.123	VV	0.05
42	11.90		0.00	0.000	236612	0.129	VV	0.04
43	12.10		0.00	0.000	689648	0.377	VV	0.11
44	12.23		0.00	0.000	314667	0.172	VV	0.07
45	12.51		0.00	0.000	1103542	0.603	VV	0.10
46	12.71	AR1016#2	3.45	63.831	1093400	0.597	VV	0.08
47	13.02		0.00	0.000	1357647	0.742	VV	0.10
48	13.48		0.00	0.000	5261589	2.875	VV	0.10
49	13.72		0.00	0.000	871955	0.476	VV	0.06
50	16.16		0.00	0.000	90928176	49.685	VV	0.74
51	16.23		0.00	0.000	38122076	20.831	VV	0.36
52	16.85		0.00	0.000	8333830	4.554	VV	0.09

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.37		0.00	0.000	13315	0.007	VB	0.05
54	18.85	AR1260#2	0.02	0.447	10429	0.006	BB	0.06
55	18.96		0.00	0.000	13873	0.008	BB	0.06
56	19.09		0.00	0.000	10667	0.006	BB	0.09
57	19.22		0.00	0.000	13209	0.007	BB	0.13
58	19.69		0.00	0.000	26371	0.014	BV	0.09
59	19.77		0.00	0.000	6175	0.003	VV	0.05
60	19.88	AR1260#3	0.03	0.531	9504	0.005	VV	0.05
61	19.99		0.00	0.000	18191	0.010	VV	0.06
62	20.12		0.00	0.000	3618	0.002	VB	0.10
63	20.26		0.00	0.000	2878	0.002	BB	0.08
64	20.40		0.00	0.000	772	0.000	BV	0.04
65	20.50		0.00	0.000	7715	0.004	VV	0.06
66	20.57		0.00	0.000	5929	0.003	VV	0.04
67	20.63		0.00	0.000	10810	0.006	VV	0.05
68	20.73		0.00	0.000	6236	0.003	VV	0.06
69	20.85		0.00	0.000	17598	0.010	VV	0.07
70	20.95		0.00	0.000	1595	0.001	VB	0.04
71	21.17	AR1260#4	0.07	1.320	56318	0.031	BV	0.11
72	21.44		0.00	0.000	34399	0.019	VB	0.10
73	21.55		0.00	0.000	1367	0.001	BB	0.04
74	21.66		0.00	0.000	6825	0.004	BB	0.11
75	21.84		0.00	0.000	1378	0.001	BV	0.05
76	21.93		0.00	0.000	5600	0.003	VV	0.06
77	21.99		0.00	0.000	8496	0.005	VV	0.05
78	22.10	AR1260#5	0.04	0.658	19019	0.010	VB	0.11
79	22.23		0.00	0.000	209	0.000	BB	0.03
80	22.36		0.00	0.000	26816	0.015	BB	0.09
81	22.80		0.00	0.000	64289	0.035	BV	0.07
82	22.96		0.00	0.000	22110	0.012	VB	0.11
83	23.28		0.00	0.000	1348	0.001	BB	0.07
84	23.62		0.00	0.000	3192	0.002	BB	0.17
85	23.88		0.00	0.000	3987	0.002	BB	0.06
86	24.33		0.00	0.000	1536	0.001	BB	0.14
87	24.63		0.00	0.000	1018	0.001	BB	0.10
88	25.09		0.00	0.000	33104	0.018	BV	0.08
89	25.39		0.00	0.000	17296	0.009	VB	0.17
90	26.16	CL10BP	0.80	14.745	5647363	3.086	BV	0.08
91	26.84		0.00	0.000	13172	0.007	VV	0.05
92	26.94		0.00	0.000	27528	0.015	VB	0.14
93	28.41		0.00	0.000	8267	0.005	BV	0.18
94	28.64		0.00	0.000	3048	0.002	VB	0.13

Total Area = 1.830104E+08 Total Height = 9579992 Total Amount = 5.408716

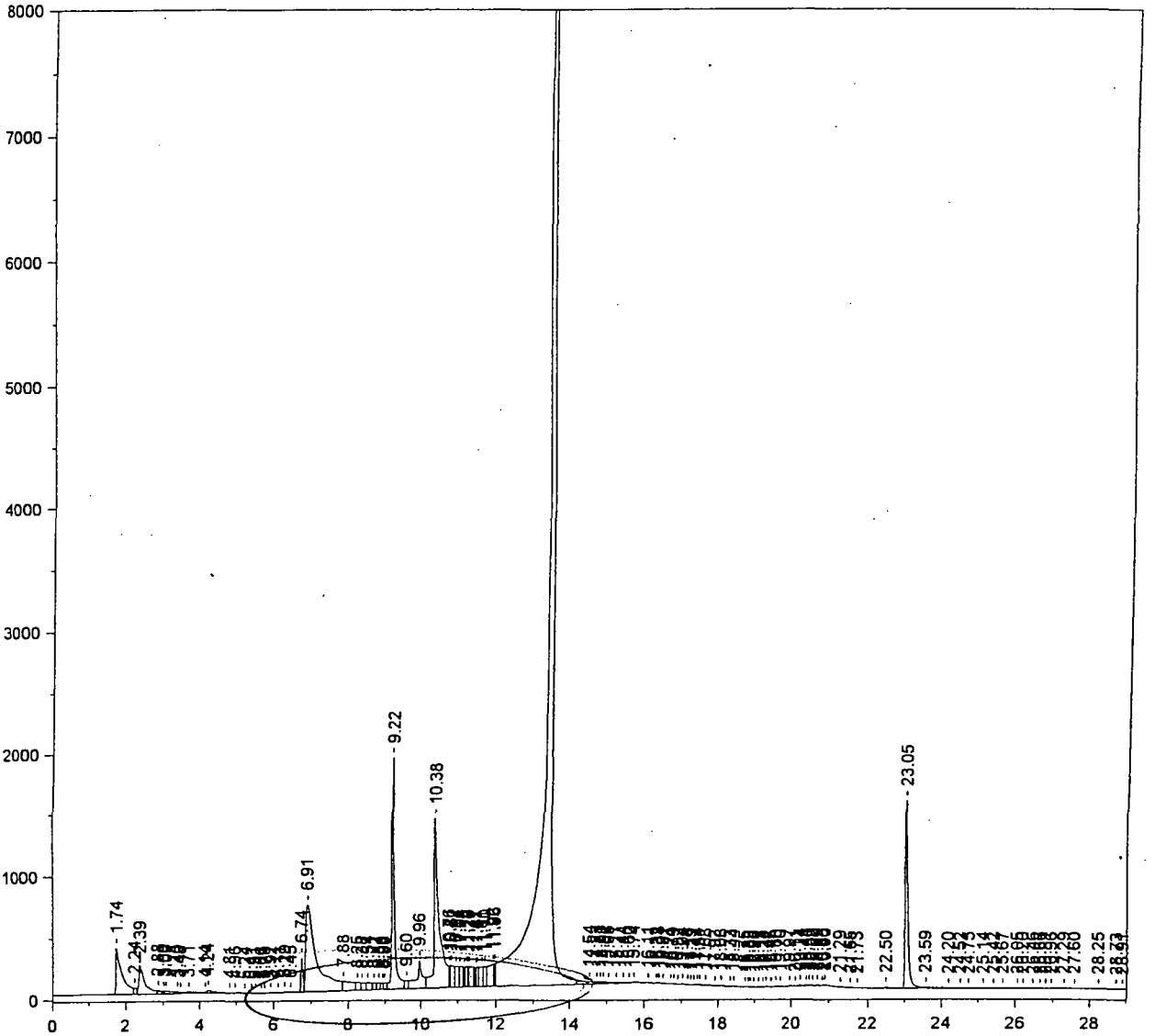
— H:\CP2\HP2\M0919.0051.RAW 301100-02 B8068 FIP-004-06-SSS



after integration
RDT
9/23/02

50033

— H:\CP2\HP2\M0919B.0051.RAW 301100-02 B8068 FIP-004-06-SSS



Before reintegration
excess area under peaks
RDT
9/23/02

Sample Name = **301100-02 B8068 FIP-004-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0051.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/20/02 5:09:51 PM
Method Version = 567
Calibration Version = 7

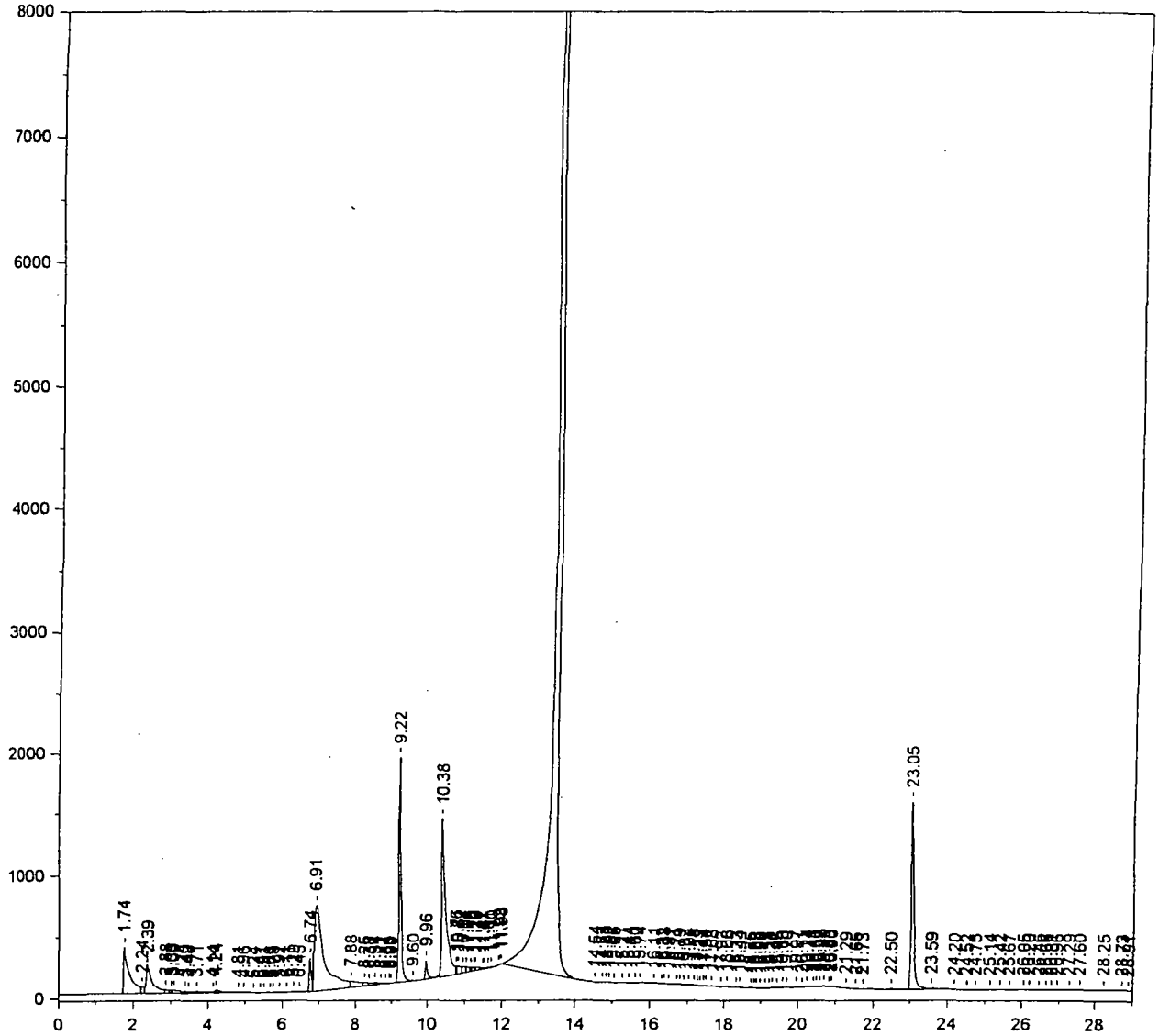
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	4187760	1.807	BV	0.14
2	2.24		0.00	0.000	289217	0.125	VV	0.07
3	2.39		0.00	0.000	2575993	1.111	VV	0.13
4	2.88		0.00	0.000	173110	0.075	VV	0.08
5	3.03		0.00	0.000	87464	0.038	VV	0.05
6	3.09		0.00	0.000	306618	0.132	VV	0.18
7	3.40		0.00	0.000	82113	0.035	VV	0.05
8	3.48		0.00	0.000	77125	0.033	VV	0.05
9	3.71		0.00	0.000	258535	0.112	VV	0.17
10	4.14		0.00	0.000	82805	0.036	VV	0.09
11	4.24		0.00	0.000	335211	0.145	VV	0.10
12	4.81		0.00	0.000	38385	0.017	VV	0.07
13	4.96		0.00	0.000	40195	0.017	VV	0.11
14	5.24		0.00	0.000	10740	0.005	VV	0.07
15	5.41		0.00	0.000	12726	0.005	VV	0.09
16	5.51		0.00	0.000	7187	0.003	VV	0.06
17	5.66		0.00	0.000	6348	0.003	VV	0.06
18	5.75		0.00	0.000	4310	0.002	VV	0.07
19	5.92		0.00	0.000	6176	0.003	VB	0.05
20	6.11		0.00	0.000	24719	0.011	BV	0.11
21	6.29		0.00	0.000	28772	0.012	VV	0.07
22	6.45		0.00	0.000	3319	0.001	VB	0.06
23	6.74		0.00	0.000	1095116	0.472	BV	0.06
24	6.91		0.00	0.000	14366421	6.198	VV	0.21
25	7.88		0.00	0.000	1504668	0.649	VV	0.16
26	8.25		0.00	0.000	570582	0.246	VV	0.11
27	8.38		0.00	0.000	516662	0.223	VV	0.07
28	8.54		0.00	0.000	543380	0.234	VV	0.06
29	8.71		0.00	0.000	372092	0.161	VV	0.07
30	8.84		0.00	0.000	336462	0.145	VV	0.06
31	8.93		0.00	0.000	284331	0.123	VV	0.05
32	8.99		0.00	0.000	300254	0.130	VV	0.05
33	9.22	CL4XYL	0.92	1.477	9832039	4.242	VV	0.06
34	9.60		0.00	0.000	446906	0.193	VV	0.06
35	9.96		0.00	0.000	2649391	1.143	VV	0.06
36	10.38	AR1016#1	57.56	91.993	13580847	5.860	VV	0.09
37	10.76		0.00	0.000	351553	0.152	VV	0.02
38	10.81		0.00	0.000	1328081	0.573	VV	0.08
39	10.94		0.00	0.000	1155110	0.498	VV	0.09
40	11.04		0.00	0.000	1103472	0.476	VV	0.08
41	11.15		0.00	0.000	395529	0.171	VV	0.03
42	11.22		0.00	0.000	629564	0.272	VV	0.03
43	11.26		0.00	0.000	334387	0.144	VV	0.02
44	11.29	AR1016#2	3.01	4.803	1303835	0.563	VV	0.05
45	11.47		0.00	0.000	283975	0.123	VV	0.02
46	11.51		0.00	0.000	634840	0.274	VV	0.02
47	11.61		0.00	0.000	1090456	0.470	VV	0.08
48	11.70		0.00	0.000	838503	0.362	VV	0.06
49	11.92		0.00	0.000	1896874	0.818	VV	0.07
50	11.96		0.00	0.000	471550	0.203	VV	0.02
51	13.48		0.00	0.000	154711168	66.751	VV	0.12
52	14.54		0.00	0.000	217109	0.094	VV	0.12

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	14.73		0.00	0.000	85932	0.037	VV	0.08
54	14.83		0.00	0.000	95172	0.041	VV	0.06
55	14.92		0.00	0.000	78823	0.034	VV	0.08
56	15.05		0.00	0.000	79787	0.034	VV	0.11
57	15.27		0.00	0.000	56284	0.024	VV	0.12
58	15.44		0.00	0.000	41531	0.018	VV	0.15
59	15.60		0.00	0.000	7562	0.003	VB	0.08
60	15.74		0.00	0.000	4905	0.002	BB	0.07
61	16.11		0.00	0.000	21696	0.009	BB	0.13
62	16.32		0.00	0.000	6079	0.003	BV	0.05
63	16.38		0.00	0.000	24212	0.010	VV	0.06
64	16.51	AR1260#1	0.12	0.197	33130	0.014	VV	0.09
65	16.71		0.00	0.000	8174	0.004	VV	0.04
66	16.79	AR1260#2	0.04	0.064	20110	0.009	VV	0.08
67	16.92		0.00	0.000	13401	0.006	VV	0.07
68	17.04		0.00	0.000	22814	0.010	VV	0.08
69	17.18		0.00	0.000	8857	0.004	VV	0.07
70	17.29		0.00	0.000	3855	0.002	VB	0.05
71	17.37		0.00	0.000	2205	0.001	BV	0.03
72	17.44		0.00	0.000	19022	0.008	VV	0.05
73	17.51		0.00	0.000	27075	0.012	VV	0.07
74	17.68		0.00	0.000	36135	0.016	VV	0.12
75	17.92		0.00	0.000	10738	0.005	VV	0.07
76	18.08		0.00	0.000	43004	0.019	VV	0.12
77	18.33	AR1260#3	0.03	0.043	13910	0.006	VV	0.05
78	18.44		0.00	0.000	34972	0.015	VB	0.11
79	18.75		0.00	0.000	1773	0.001	BV	0.05
80	18.82		0.00	0.000	4397	0.002	VV	0.03
81	18.88		0.00	0.000	11167	0.005	VV	0.06
82	18.98		0.00	0.000	3100	0.001	VB	0.05
83	19.12		0.00	0.000	19720	0.009	BV	0.08
84	19.23		0.00	0.000	14545	0.006	VV	0.05
85	19.32		0.00	0.000	31551	0.014	VV	0.09
86	19.45		0.00	0.000	7954	0.003	VB	0.07
87	19.60	AR1260#4	0.02	0.036	29092	0.013	BV	0.05
88	19.70		0.00	0.000	34338	0.015	VV	0.06
89	19.97		0.00	0.000	32318	0.014	VV	0.06
90	20.11		0.00	0.000	35601	0.015	VV	0.09
91	20.24		0.00	0.000	65610	0.028	VV	0.12
92	20.41		0.00	0.000	68071	0.029	VV	0.09
93	20.50		0.00	0.000	42485	0.018	VV	0.06
94	20.58		0.00	0.000	29983	0.013	VV	0.05
95	20.69		0.00	0.000	74378	0.032	VV	0.05
96	20.83		0.00	0.000	25236	0.011	VV	0.04
97	20.90		0.00	0.000	62978	0.027	VB	0.10
98	21.29		0.00	0.000	20814	0.009	BB	0.15
99	21.55		0.00	0.000	1018	0.000	BB	0.05
100	21.73	AR1260#5	0.04	0.071	12987	0.006	BB	0.17
101	22.50		0.00	0.000	61266	0.026	BB	0.08
102	23.05	CL10BP	0.82	1.315	8170072	3.525	BV	0.07
103	23.59		0.00	0.000	207706	0.090	VV	0.20
104	24.20		0.00	0.000	29882	0.013	VV	0.15
105	24.52		0.00	0.000	13019	0.006	VV	0.12
106	24.75		0.00	0.000	9180	0.004	VB	0.10
107	25.14		0.00	0.000	4616	0.002	BB	0.10
108	25.42		0.00	0.000	11097	0.005	BV	0.12
109	25.67		0.00	0.000	1071	0.000	VB	0.06
110	26.05		0.00	0.000	588	0.000	BV	0.05
111	26.20		0.00	0.000	5309	0.002	VV	0.20
112	26.46		0.00	0.000	2321	0.001	VB	0.10
113	26.66		0.00	0.000	382	0.000	BV	0.06
114	26.81		0.00	0.000	7333	0.003	VV	0.11
115	26.96		0.00	0.000	7417	0.003	VB	0.15
116	27.29		0.00	0.000	276	0.000	BB	0.07

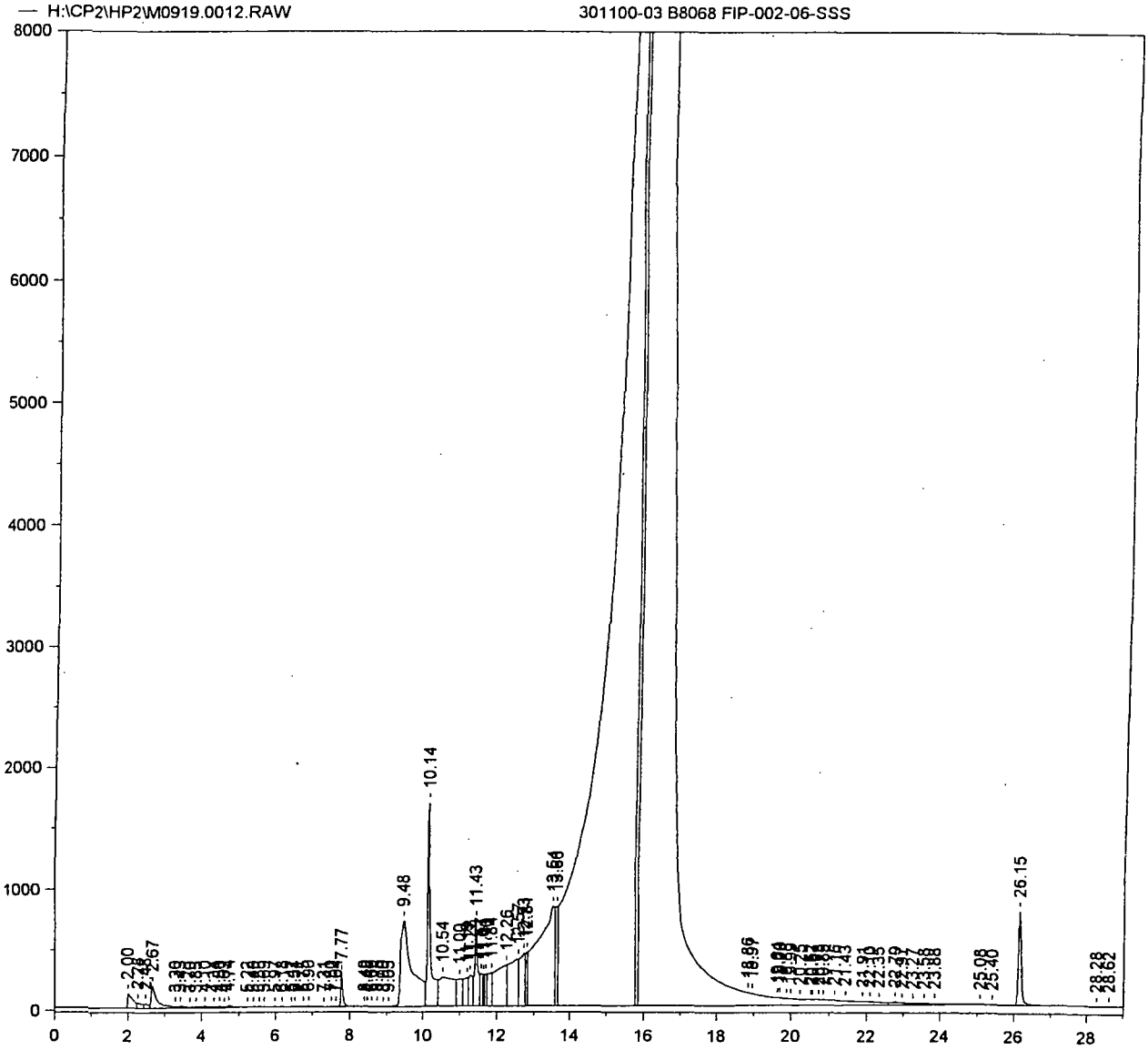
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	27.60		0.00	0.000	3231	0.001	BV	0.23
118	28.25		0.00	0.000	22096	0.010	VV	0.16
119	28.73		0.00	0.000	2638	0.001	VV	0.09
120	28.91		0.00	0.000	563	0.000	VB	0.07

Total Area = 2.317726E+08 Total Height = 2.458302E+07 Total Amount = 62.57283

— H:\CP2\HP2\M0919B.0051.RAW 301100-02 B8068 FIP-004-06-SSS



After integration
RST
9/23/2



Primary Column

Before resistigation
excess area underpeaks
BT
9/20/2

50048

Sample Name = **301100-03 B8068 FIP-002-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0012.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

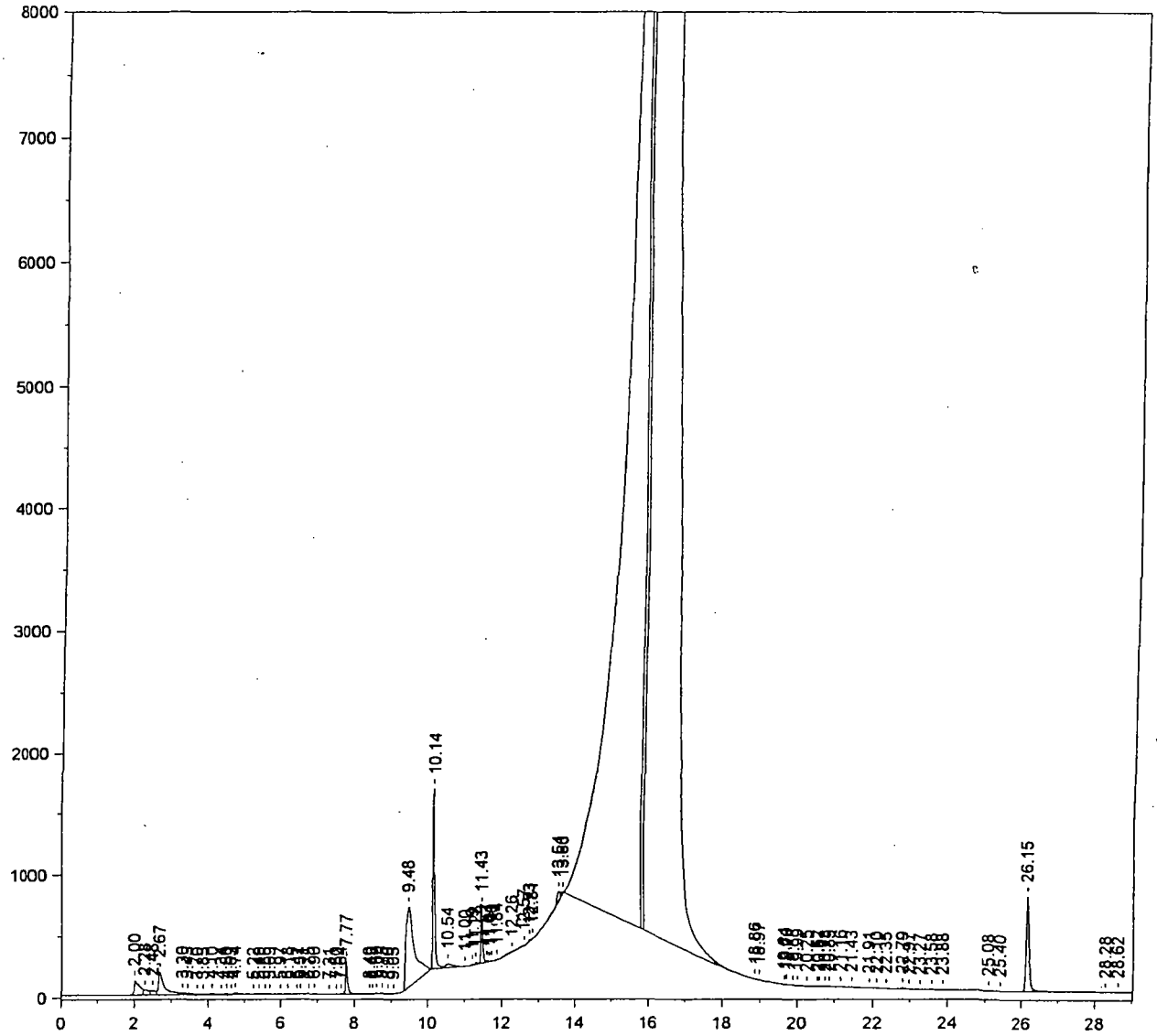
Date Taken (end) = 9/19/02 2:58:09 PM
Method Version = 618
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1248096	0.089	BV	0.18
2	2.28		0.00	0.000	430433	0.031	VV	0.09
3	2.48		0.00	0.000	305488	0.022	VV	0.10
4	2.67		0.00	0.000	2091213	0.150	VV	0.12
5	3.30		0.00	0.000	119943	0.009	VV	0.10
6	3.43		0.00	0.000	174075	0.012	VV	0.16
7	3.70		0.00	0.000	69311	0.005	VV	0.07
8	3.85		0.00	0.000	135722	0.010	VV	0.17
9	4.10		0.00	0.000	146048	0.010	VV	0.08
10	4.34		0.00	0.000	53962	0.004	VV	0.07
11	4.50		0.00	0.000	86957	0.006	VV	0.10
12	4.63		0.00	0.000	32544	0.002	VV	0.05
13	4.74		0.00	0.000	234751	0.017	VV	0.12
14	5.22		0.00	0.000	61984	0.004	VV	0.15
15	5.40		0.00	0.000	28493	0.002	VV	0.06
16	5.55		0.00	0.000	39708	0.003	VV	0.09
17	5.69		0.00	0.000	34764	0.002	VV	0.12
18	5.97		0.00	0.000	47718	0.003	VV	0.16
19	6.18		0.00	0.000	31427	0.002	VV	0.13
20	6.42		0.00	0.000	31128	0.002	VV	0.14
21	6.51		0.00	0.000	21970	0.002	VV	0.09
22	6.75		0.00	0.000	17819	0.001	VV	0.08
23	6.90		0.00	0.000	52558	0.004	VV	0.07
24	7.31		0.00	0.000	13086	0.001	VB	0.21
25	7.50		0.00	0.000	14116	0.001	BV	0.06
26	7.64		0.00	0.000	8352	0.001	VV	0.05
27	7.77		0.00	0.000	1054898	0.076	VV	0.05
28	8.40		0.00	0.000	1692	0.000	VV	0.07
29	8.48		0.00	0.000	884	0.000	VB	0.05
30	8.60		0.00	0.000	28165	0.002	BV	0.07
31	8.75		0.00	0.000	34816	0.002	VV	0.07
32	8.90		0.00	0.000	11149	0.001	VV	0.05
33	9.05		0.00	0.000	15184	0.001	VV	0.06
34	9.48		0.00	0.000	15363242	1.101	VV	0.24
35	10.14	CL4XYL	1.21	5.338	9467428	0.679	VV	0.05
36	10.54		0.00	0.000	6631531	0.475	VV	0.19
37	11.00		0.00	0.000	2252087	0.161	VV	0.12
38	11.19		0.00	0.000	2002313	0.144	VV	0.06
39	11.28		0.00	0.000	2040288	0.146	VV	0.05
40	11.43		0.00	0.000	4146713	0.297	VV	0.05
41	11.57	AR1016#1	6.80	30.016	1207707	0.087	VV	0.04
42	11.64		0.00	0.000	825684	0.059	VV	0.02
43	11.70		0.00	0.000	992128	0.071	VV	0.04
44	11.84		0.00	0.000	2145896	0.154	VV	0.06
45	12.26		0.00	0.000	7400305	0.531	VV	0.22
46	12.57		0.00	0.000	6860575	0.492	VV	0.15
47	12.73	AR1016#2	13.92	61.436	4408127	0.316	VV	0.08
48	12.81		0.00	0.000	1746793	0.125	VV	0.04
49	13.54		0.00	0.000	27663684	1.983	VV	0.28
50	13.66		0.00	0.000	3565509	0.256	VV	0.05
51	15.75		0.00	0.000	469771744	33.678	VV	0.29
52	15.84		0.00	0.000	66872352	4.794	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.52		0.00	0.000	748297472	53.645	SBB	0.76
54	18.86	AR1260#2	0.02	0.072	6997	0.001	TBV	0.05
55	18.97		0.00	0.000	10701	0.001	TVV	0.06
56	19.64		0.00	0.000	4491	0.000	TVV	0.04
57	19.70		0.00	0.000	16137	0.001	TVV	0.07
58	19.88	AR1260#3	0.02	0.090	6764	0.000	TVV	0.09
59	19.99		0.00	0.000	8207	0.001	TVV	0.07
60	20.25		0.00	0.000	4213	0.000	TVV	0.08
61	20.52		0.00	0.000	4524	0.000	TVV	0.04
62	20.57		0.00	0.000	7786	0.001	TVV	0.05
63	20.73		0.00	0.000	7172	0.001	TVV	0.08
64	20.85		0.00	0.000	22965	0.002	TVV	0.12
65	21.16	AR1260#4	0.05	0.213	37994	0.003	TVV	0.11
66	21.43		0.00	0.000	12017	0.001	TVV	0.11
67	21.91		0.00	0.000	6054	0.000	TVV	0.07
68	22.10	AR1260#5	0.04	0.176	21293	0.002	TVV	0.13
69	22.35		0.00	0.000	8292	0.001	TVV	0.10
70	22.79		0.00	0.000	49625	0.004	TVV	0.08
71	22.97		0.00	0.000	17873	0.001	TVV	0.12
72	23.27		0.00	0.000	4248	0.000	TVV	0.16
73	23.58		0.00	0.000	2628	0.000	TVV	0.14
74	23.88		0.00	0.000	5715	0.000	TVV	0.13
75	25.08		0.00	0.000	22936	0.002	TVV	0.08
76	25.40		0.00	0.000	2894	0.000	TVB	0.12
77	26.15	CL10BP	0.60	2.660	4267162	0.306	BB	0.08
78	28.28		0.00	0.000	2525	0.000	BV	0.12
79	28.62		0.00	0.000	4112	0.000	VB	0.19

Total Area = 1.394906E+09 Total Height = 5.360745E+07 Total Amount = 22.65561

Chrom Perfect Chromatogram Report

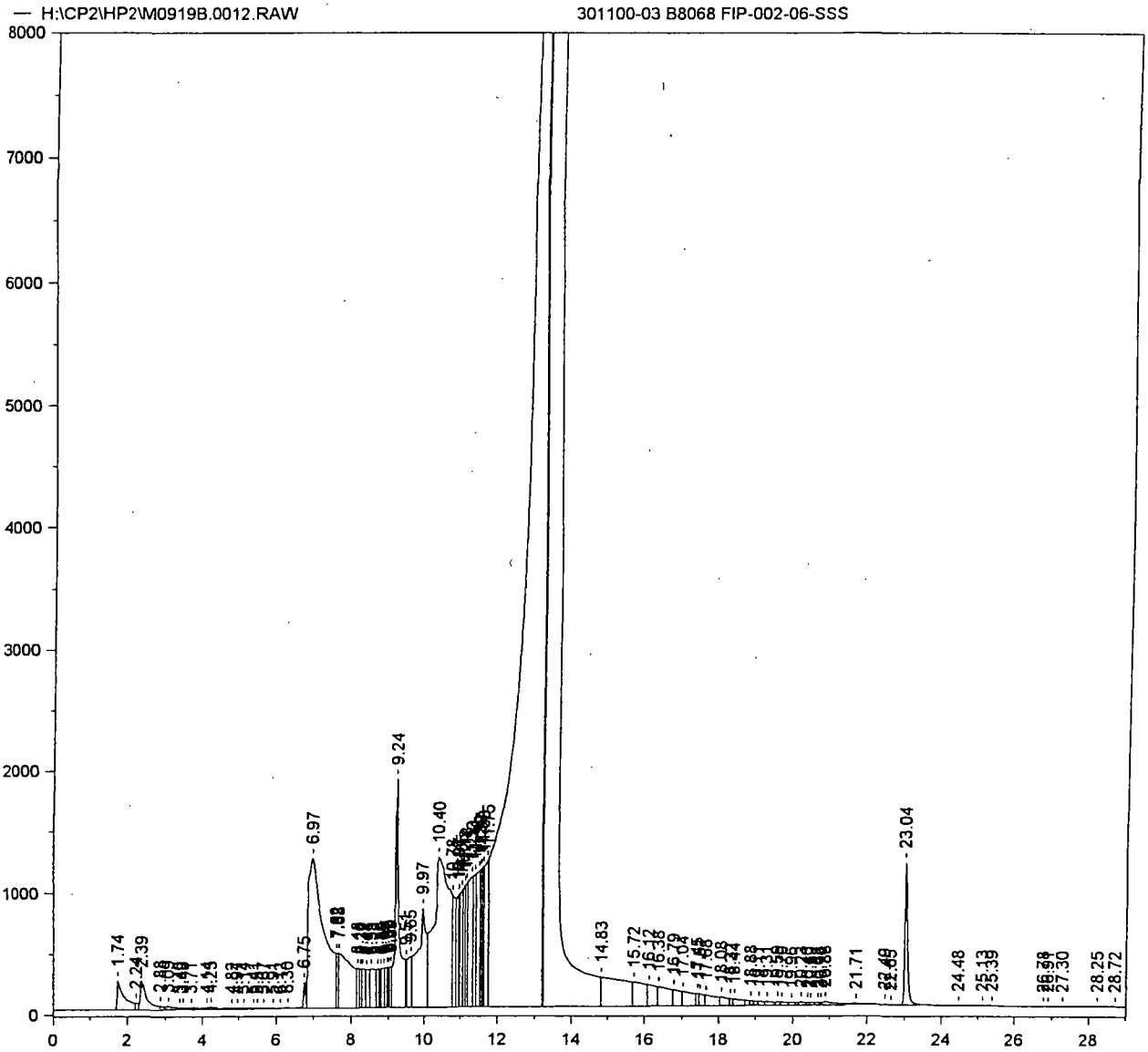


After reintegration
RDT
9/20/2

Printed on 9/20/02 9:05:01 AM

Page 1 of 3

50051



Before reintegration
excess area under peaks
RDT
9/20/2

50056

Sample Name = **301100-03 B8068 FIP-002-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0012.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/19/02 2:58:09 PM
Method Version = 567
Calibration Version = 5

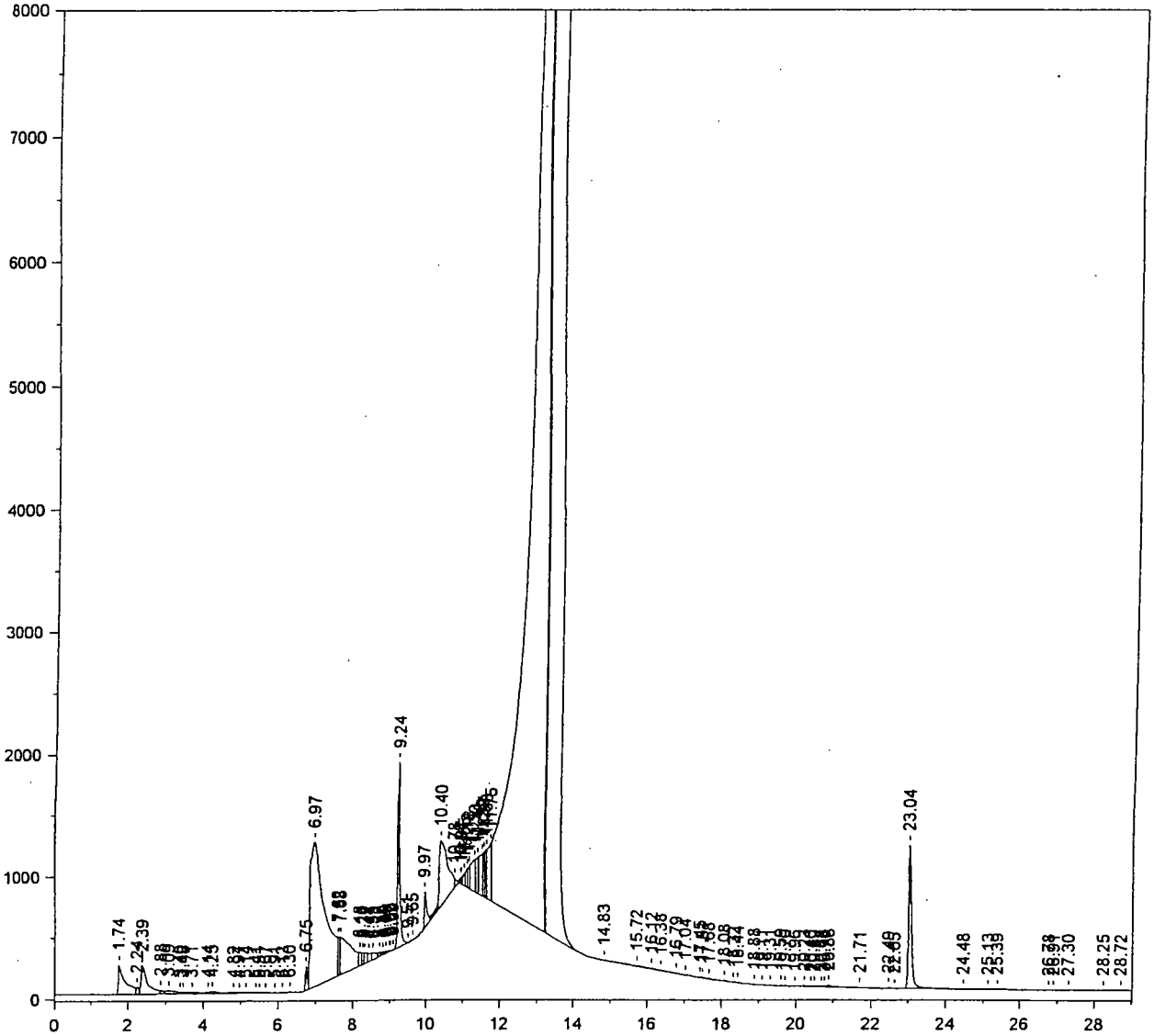
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	3160345	0.313	BV	0.16
2	2.24		0.00	0.000	338016	0.033	VV	0.08
3	2.39		0.00	0.000	2824149	0.280	VV	0.13
4	2.88		0.00	0.000	195012	0.019	VV	0.07
5	3.09		0.00	0.000	479327	0.047	VV	0.25
6	3.40		0.00	0.000	107047	0.011	VV	0.06
7	3.48		0.00	0.000	94995	0.009	VV	0.06
8	3.71		0.00	0.000	324590	0.032	VV	0.18
9	4.14		0.00	0.000	123488	0.012	VV	0.11
10	4.25		0.00	0.000	359755	0.036	VV	0.14
11	4.82		0.00	0.000	68489	0.007	VV	0.07
12	4.97		0.00	0.000	74467	0.007	VV	0.10
13	5.14		0.00	0.000	47432	0.005	VV	0.08
14	5.41		0.00	0.000	39502	0.004	VV	0.10
15	5.51		0.00	0.000	48089	0.005	VV	0.08
16	5.67		0.00	0.000	36440	0.004	VV	0.06
17	5.91		0.00	0.000	42647	0.004	VV	0.13
18	6.12		0.00	0.000	60228	0.006	VV	0.09
19	6.30		0.00	0.000	82621	0.008	VV	0.07
20	6.75		0.00	0.000	866639	0.086	VV	0.06
21	6.97		0.00	0.000	35838392	3.551	VV	0.41
22	7.62		0.00	0.000	1793468	0.178	VV	0.03
23	7.68		0.00	0.000	11096413	1.100	VV	0.24
24	8.18		0.00	0.000	1614123	0.160	VV	0.04
25	8.26		0.00	0.000	1415462	0.140	VV	0.06
26	8.32		0.00	0.000	1848220	0.183	VV	0.05
27	8.44		0.00	0.000	2092386	0.207	VV	0.07
28	8.55		0.00	0.000	3230953	0.320	VV	0.06
29	8.72		0.00	0.000	1392096	0.138	VV	0.05
30	8.80		0.00	0.000	1018694	0.101	VV	0.03
31	8.89		0.00	0.000	1684958	0.167	VV	0.07
32	8.97		0.00	0.000	1515264	0.150	VV	0.05
33	9.00		0.00	0.000	665120	0.066	VV	0.02
34	9.02		0.00	0.000	667291	0.066	VV	0.02
35	9.09		0.00	0.000	1139290	0.113	VV	0.02
36	9.24	CL4XYL	1.45	0.725	15390448	1.525	VV	0.06
37	9.51		0.00	0.000	789219	0.078	VV	0.02
38	9.65		0.00	0.000	3187779	0.316	VV	0.07
39	9.97		0.00	0.000	14107959	1.398	VV	0.11
40	10.40	AR1016#1	156.59	78.514	36945596	3.661	VV	0.41
41	10.78		0.00	0.000	5574008	0.552	VV	0.03
42	10.94		0.00	0.000	4331129	0.429	VV	0.05
43	10.97		0.00	0.000	2031443	0.201	VV	0.02
44	11.05		0.00	0.000	4147749	0.411	VV	0.05
45	11.12		0.00	0.000	4115123	0.408	VV	0.04
46	11.18		0.00	0.000	3416761	0.339	VV	0.03
47	11.33	AR1016#2	21.71	10.887	9419670	0.933	VV	0.09
48	11.41		0.00	0.000	4958685	0.491	VV	0.06
49	11.52		0.00	0.000	7698724	0.763	VV	0.07
50	11.57		0.00	0.000	3598784	0.357	VV	0.03
51	11.63		0.00	0.000	3887709	0.385	VV	0.03
52	11.75		0.00	0.000	8457817	0.838	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	13.17		0.00	0.000	390485472	38.693	VV	0.26
54	13.56		0.00	0.000	367483168	36.414	VV	0.39
55	14.83		0.00	0.000	11385395	1.128	VV	0.41
56	15.72		0.00	0.000	4586030	0.454	VV	0.24
57	16.12		0.00	0.000	2814939	0.279	VV	0.13
58	16.38	AR1260#1	13.46	6.749	3618806	0.359	VV	0.20
59	16.79	AR1260#2	3.87	1.938	1927489	0.191	VV	0.10
60	17.04		0.00	0.000	2602035	0.258	VV	0.19
61	17.45		0.00	0.000	505544	0.050	VV	0.04
62	17.51		0.00	0.000	878170	0.087	VV	0.07
63	17.68		0.00	0.000	1870683	0.185	VV	0.18
64	18.08		0.00	0.000	1022830	0.101	VV	0.13
65	18.32	AR1260#3	0.70	0.350	359467	0.036	VV	0.06
66	18.44		0.00	0.000	960059	0.095	VV	0.11
67	18.88		0.00	0.000	250843	0.025	VV	0.06
68	19.11		0.00	0.000	351825	0.035	VV	0.08
69	19.31		0.00	0.000	505677	0.050	VV	0.14
70	19.59	AR1260#4	0.17	0.083	213950	0.021	VV	0.05
71	19.70		0.00	0.000	330846	0.033	VV	0.09
72	19.96		0.00	0.000	248375	0.025	VV	0.04
73	20.23		0.00	0.000	300337	0.030	VV	0.09
74	20.40		0.00	0.000	150169	0.015	VV	0.06
75	20.49		0.00	0.000	167963	0.017	VV	0.07
76	20.68		0.00	0.000	164527	0.016	VV	0.08
77	20.76		0.00	0.000	94609	0.009	VV	0.05
78	20.88		0.00	0.000	793278	0.079	VV	0.18
79	21.71	AR1260#5	0.87	0.434	251752	0.025	VV	0.30
80	22.49		0.00	0.000	48208	0.005	VV	0.07
81	22.65		0.00	0.000	4263	0.000	VB	0.07
82	23.04	CL10BP	0.64	0.319	6323024	0.627	BV	0.07
83	24.48		0.00	0.000	2335	0.000	VB	0.12
84	25.13		0.00	0.000	5581	0.001	BV	0.13
85	25.39		0.00	0.000	6574	0.001	VB	0.13
86	26.78		0.00	0.000	7436	0.001	BV	0.14
87	26.91		0.00	0.000	7853	0.001	VB	0.16
88	27.30		0.00	0.000	989	0.000	BB	0.14
89	28.25		0.00	0.000	17316	0.002	BV	0.12
90	28.72		0.00	0.000	1955	0.000	VB	0.15

Total Area = 1.009194E+09 Total Height = 5.63235E+07 Total Amount = 199.4474

30058

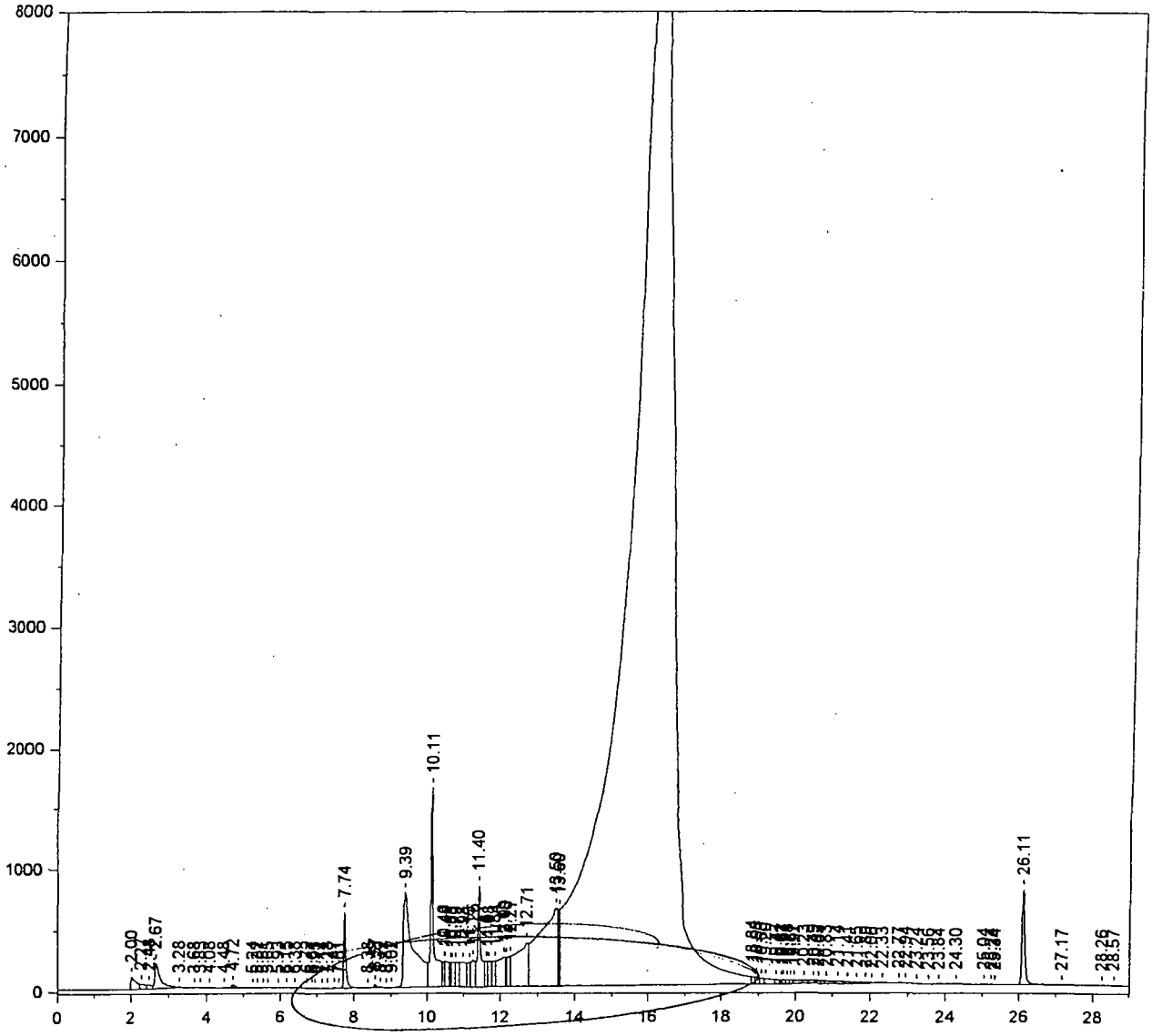
— H:\CP2\HP2\M0919B.0012.RAW 301100-03 B8068 FIP-002-06-SSS



After reintegration
RDT
9/20/2

50059

— H:\CP2\HP2\M0920.0004.RAW 301100-04 B8068 FIP-003-06-SSS



Primary Column

Before reintegration
excess area under peaks
RST 9/23/2

50065

Sample Name = **301100-04 B8068 FIP-003-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0920.0004.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

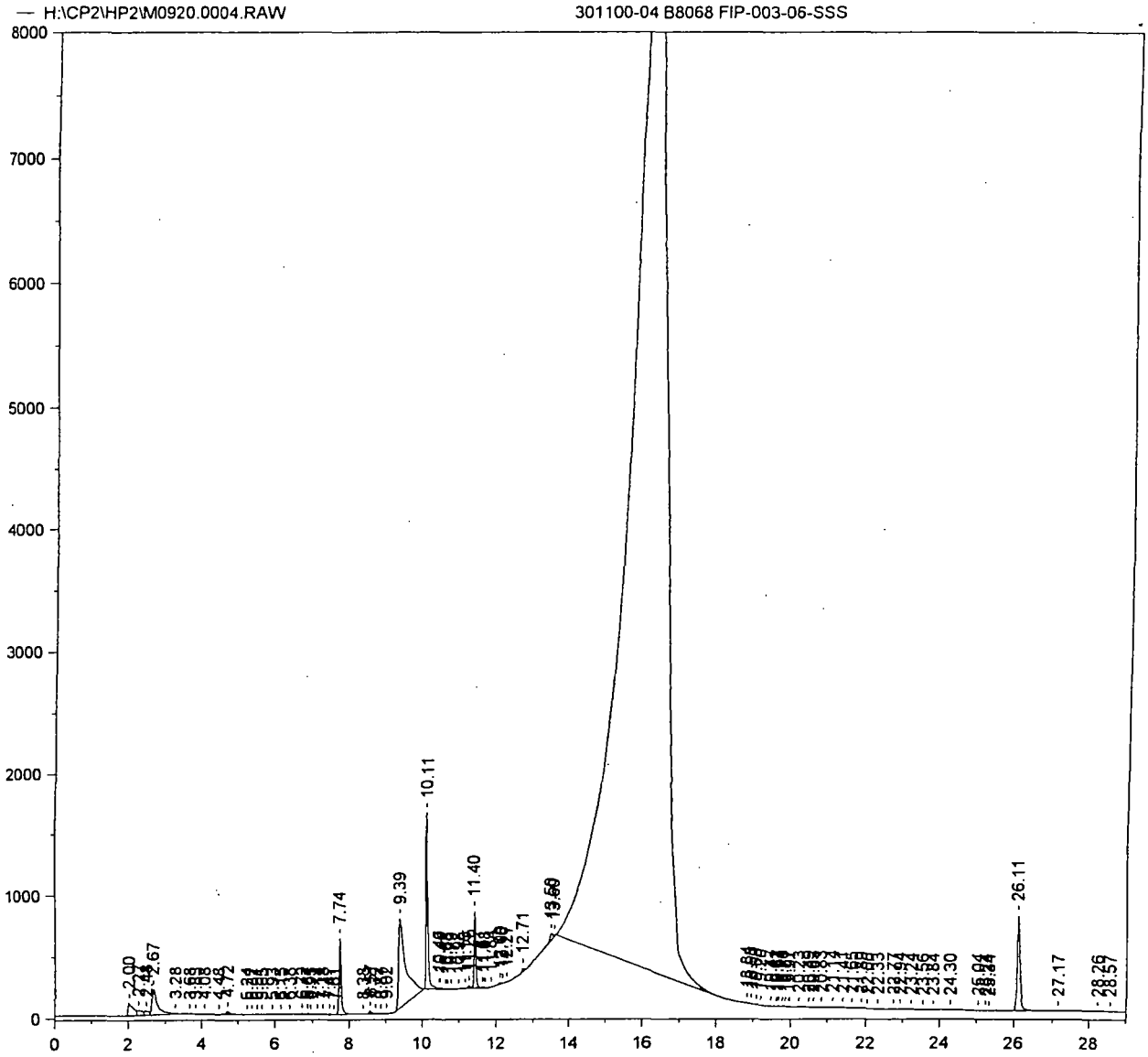
Date Taken (end) = 9/20/02 9:02:05 PM
Method Version = 618
Calibration Version = 12

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1001269	0.124	BV	0.18
2	2.27		0.00	0.000	416436	0.052	VV	0.11
3	2.48		0.00	0.000	278675	0.034	VV	0.10
4	2.67		0.00	0.000	2161670	0.267	VV	0.13
5	3.28		0.00	0.000	43659	0.005	VB	0.12
6	3.68		0.00	0.000	5885	0.001	BV	0.07
7	3.83		0.00	0.000	16663	0.002	VB	0.18
8	4.08		0.00	0.000	27531	0.003	BB	0.09
9	4.48		0.00	0.000	26228	0.003	BV	0.11
10	4.72		0.00	0.000	177391	0.022	VV	0.11
11	5.24		0.00	0.000	11501	0.001	VV	0.15
12	5.37		0.00	0.000	6036	0.001	VV	0.06
13	5.51		0.00	0.000	6360	0.001	VV	0.11
14	5.65		0.00	0.000	3521	0.000	VB	0.11
15	5.93		0.00	0.000	8914	0.001	BV	0.13
16	6.15		0.00	0.000	8348	0.001	VV	0.12
17	6.38		0.00	0.000	15594	0.002	VV	0.10
18	6.72		0.00	0.000	23476	0.003	VV	0.06
19	6.87		0.00	0.000	31410	0.004	VV	0.06
20	6.95		0.00	0.000	19891	0.002	VV	0.08
21	7.14		0.00	0.000	4854	0.001	VV	0.10
22	7.28		0.00	0.000	5135	0.001	VB	0.10
23	7.47		0.00	0.000	30687	0.004	BV	0.07
24	7.61		0.00	0.000	12675	0.002	VV	0.06
25	7.74		0.00	0.000	2484226	0.307	VV	0.05
26	8.38		0.00	0.000	8358	0.001	VB	0.12
27	8.57		0.00	0.000	106224	0.013	BV	0.07
28	8.72		0.00	0.000	35900	0.004	VV	0.07
29	8.87		0.00	0.000	9374	0.001	VV	0.05
30	9.02		0.00	0.000	16468	0.002	VV	0.08
31	9.39		0.00	0.000	14686061	1.816	VV	0.19
32	10.11	CL4XYL	1.25	3.415	9756722	1.207	VV	0.05
33	10.46		0.00	0.000	871445	0.108	VV	0.04
34	10.49		0.00	0.000	1558333	0.193	VV	0.07
35	10.63		0.00	0.000	725990	0.090	VV	0.04
36	10.68		0.00	0.000	1285253	0.159	VV	0.05
37	10.79		0.00	0.000	1271146	0.157	VV	0.05
38	10.98		0.00	0.000	2354974	0.291	VV	0.10
39	11.15		0.00	0.000	1283962	0.159	VV	0.06
40	11.25		0.00	0.000	1775918	0.220	VV	0.06
41	11.40		0.00	0.000	5078233	0.628	VV	0.05
42	11.61	AR1016#1	6.16	16.877	1093848	0.135	VV	0.04
43	11.68		0.00	0.000	1330515	0.165	VV	0.09
44	11.84		0.00	0.000	1210512	0.150	VV	0.07
45	12.09		0.00	0.000	3814112	0.472	VV	0.11
46	12.16		0.00	0.000	526434	0.065	VV	0.02
47	12.27		0.00	0.000	1523613	0.188	VV	0.06
48	12.71	AR1016#2	26.51	72.630	8394444	1.038	VV	0.16
49	13.50		0.00	0.000	22749738	2.814	VV	0.32
50	13.60		0.00	0.000	2368409	0.293	VV	0.03
51	16.14		0.00	0.000	708061760	87.572	VV	1.03
52	18.84	AR1260#2	0.79	2.169	341848	0.042	VV	0.06

50066

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.95		0.00	0.000	422636	0.052	VV	0.08
54	19.08		0.00	0.000	370130	0.046	VV	0.08
55	19.20		0.00	0.000	664600	0.082	VV	0.13
56	19.47		0.00	0.000	278208	0.034	VV	0.08
57	19.62		0.00	0.000	134728	0.017	VV	0.04
58	19.67		0.00	0.000	199183	0.025	VV	0.06
59	19.78		0.00	0.000	164968	0.020	VV	0.05
60	19.87	AR1260#3	0.52	1.430	172754	0.021	VV	0.07
61	19.97		0.00	0.000	427035	0.053	VV	0.09
62	20.23		0.00	0.000	227214	0.028	VV	0.08
63	20.49		0.00	0.000	274177	0.034	VV	0.05
64	20.63		0.00	0.000	173031	0.021	VV	0.07
65	20.83		0.00	0.000	364915	0.045	VV	0.09
66	21.14	AR1260#4	0.40	1.102	317060	0.039	VV	0.09
67	21.41		0.00	0.000	180523	0.022	VV	0.12
68	21.65		0.00	0.000	196765	0.024	VV	0.11
69	21.89		0.00	0.000	108133	0.013	VV	0.12
70	22.06	AR1260#5	0.24	0.665	129700	0.016	VV	0.13
71	22.33		0.00	0.000	97431	0.012	VV	0.11
72	22.77		0.00	0.000	48779	0.006	VV	0.07
73	22.94		0.00	0.000	16697	0.002	VB	0.08
74	23.24		0.00	0.000	3132	0.000	BB	0.13
75	23.56		0.00	0.000	6370	0.001	BB	0.18
76	23.84		0.00	0.000	5541	0.001	BB	0.19
77	24.30		0.00	0.000	8929	0.001	BB	0.30
78	25.04		0.00	0.000	28792	0.004	BV	0.08
79	25.24		0.00	0.000	7536	0.001	VV	0.06
80	25.34		0.00	0.000	9001	0.001	VB	0.12
81	26.11	CL10BP	0.62	1.712	4424820	0.547	SBB	0.08
82	27.17		0.00	0.000	2264	0.000	TBB	0.16
83	28.26		0.00	0.000	9419	0.001	BV	0.25
84	28.57		0.00	0.000	2688	0.000	VB	0.22

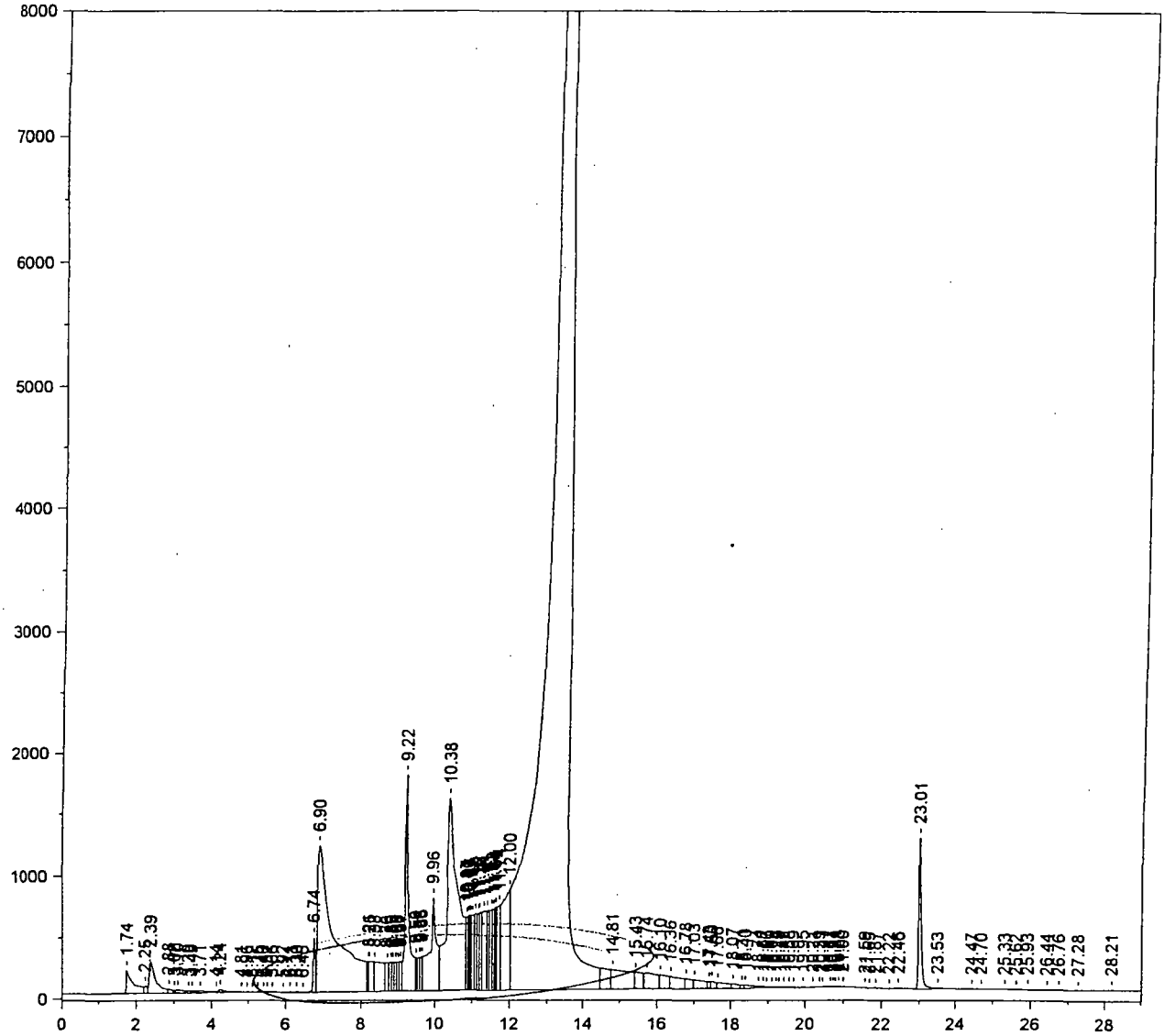
Total Area = 8.085448E+08 Total Height = 1.941533E+07 Total Amount = 36.4941



After reintegration
RDT
9/23/2

50068

— H:\CP2\HP2\M0920B.0004.RAW 301100-04 B8068 FIP-003-06-SSS



Before reintegration
excess area under peaks
RST 9/25/2

50073

Sample Name = **301100-04 B8068 FIP-003-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0920B.0004.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

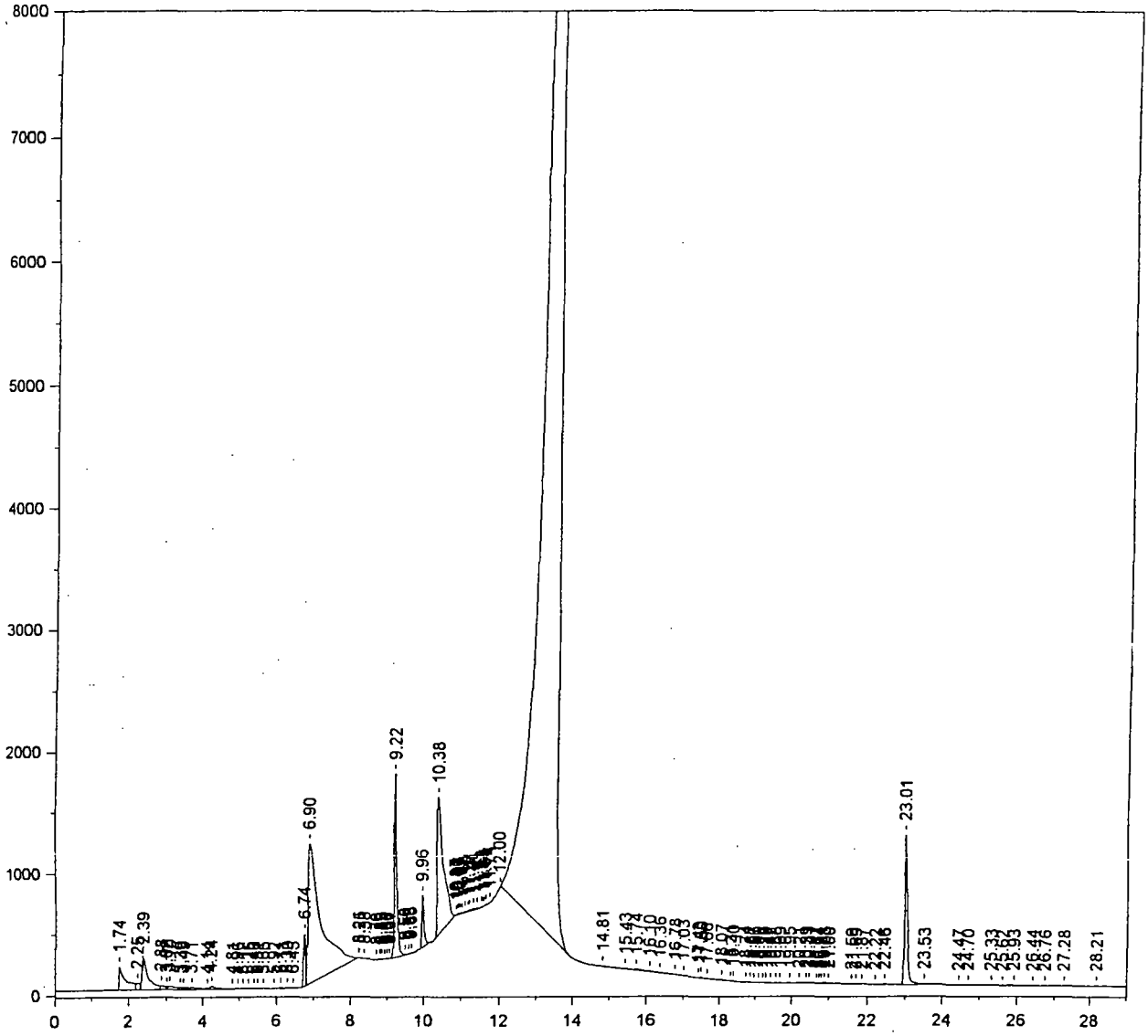
Date Taken (end) = 9/20/02 9:02:05 PM
Method Version = 567
Calibration Version = 8

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	2499667	0.388	BV	0.15
2	2.25		0.00	0.000	345818	0.054	VV	0.06
3	2.39		0.00	0.000	3228286	0.501	VV	0.13
4	2.88		0.00	0.000	223947	0.035	VV	0.08
5	3.02		0.00	0.000	86570	0.013	VV	0.04
6	3.10		0.00	0.000	380081	0.059	VV	0.18
7	3.39		0.00	0.000	102507	0.016	VV	0.05
8	3.49		0.00	0.000	91677	0.014	VV	0.07
9	3.71		0.00	0.000	308108	0.048	VV	0.17
10	4.14		0.00	0.000	104241	0.016	VV	0.10
11	4.24		0.00	0.000	379421	0.059	VV	0.12
12	4.81		0.00	0.000	46988	0.007	VV	0.07
13	4.96		0.00	0.000	45209	0.007	VV	0.10
14	5.12		0.00	0.000	21238	0.003	VV	0.08
15	5.26		0.00	0.000	13559	0.002	VV	0.07
16	5.40		0.00	0.000	15459	0.002	VV	0.09
17	5.51		0.00	0.000	16698	0.003	VV	0.07
18	5.66		0.00	0.000	20341	0.003	VV	0.13
19	5.92		0.00	0.000	9479	0.001	VB	0.06
20	6.11		0.00	0.000	30111	0.005	BV	0.08
21	6.30		0.00	0.000	37345	0.006	VV	0.08
22	6.45		0.00	0.000	3715	0.001	VV	0.06
23	6.74		0.00	0.000	1721119	0.267	VV	0.06
24	6.90		0.00	0.000	38374848	5.950	VV	0.27
25	8.21		0.00	0.000	729287	0.113	VV	0.03
26	8.25		0.00	0.000	2081460	0.323	VV	0.10
27	8.38		0.00	0.000	3897037	0.604	VV	0.16
28	8.70		0.00	0.000	1299544	0.201	VV	0.06
29	8.80		0.00	0.000	1216483	0.189	VV	0.06
30	8.85		0.00	0.000	938783	0.146	VV	0.04
31	8.93		0.00	0.000	941843	0.146	VV	0.05
32	9.00		0.00	0.000	901733	0.140	VV	0.03
33	9.07		0.00	0.000	1145653	0.178	VV	0.05
34	9.22	CL4XYL	1.17	0.750	12458147	1.932	VV	0.06
35	9.50		0.00	0.000	802718	0.124	VV	0.04
36	9.58		0.00	0.000	1023163	0.159	VV	0.04
37	9.65		0.00	0.000	1149901	0.178	VV	0.04
38	9.96		0.00	0.000	10309698	1.598	VV	0.06
39	10.38	AR1016#1	140.34	89.862	33111606	5.134	VV	0.19
40	10.87		0.00	0.000	1530694	0.237	VV	0.02
41	10.90		0.00	0.000	1432590	0.222	VV	0.02
42	10.94		0.00	0.000	1086971	0.169	VV	0.02
43	10.97		0.00	0.000	1455324	0.226	VV	0.03
44	11.01		0.00	0.000	2547448	0.395	VV	0.06
45	11.10		0.00	0.000	2579712	0.400	VV	0.05
46	11.18		0.00	0.000	2485855	0.385	VV	0.03
47	11.22		0.00	0.000	2522814	0.391	VV	0.05
48	11.31	AR1016#2	11.48	7.351	4980300	0.772	VV	0.10
49	11.41		0.00	0.000	2832053	0.439	VV	0.04
50	11.52		0.00	0.000	2853221	0.442	VV	0.04
51	11.57		0.00	0.000	1702432	0.264	VV	0.02
52	11.61		0.00	0.000	1730537	0.268	VV	0.03

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	11.64		0.00	0.000	1209081	0.187	VV	0.02
54	11.74		0.00	0.000	3806071	0.590	VV	0.03
55	12.00		0.00	0.000	11952553	1.853	VV	0.11
56	13.53		0.00	0.000	450995872	69.924	VV	0.35
57	14.81		0.00	0.000	5512028	0.855	VV	0.29
58	15.43		0.00	0.000	1900495	0.295	VV	0.13
59	15.74		0.00	0.000	2951133	0.458	VV	0.23
60	16.10		0.00	0.000	1732481	0.269	VV	0.14
61	16.36		0.00	0.000	2232083	0.346	VV	0.22
62	16.78	AR1260#2	2.16	1.383	1077139	0.167	VV	0.10
63	17.03		0.00	0.000	1521414	0.236	VV	0.20
64	17.43		0.00	0.000	262237	0.041	VV	0.05
65	17.50		0.00	0.000	534097	0.083	VV	0.07
66	17.66		0.00	0.000	931919	0.144	VV	0.22
67	18.07		0.00	0.000	482314	0.075	VV	0.13
68	18.31	AR1260#3	0.27	0.170	137090	0.021	VV	0.06
69	18.40		0.00	0.000	403348	0.063	VV	0.12
70	18.74		0.00	0.000	90942	0.014	VV	0.07
71	18.87		0.00	0.000	73034	0.011	VV	0.06
72	18.96		0.00	0.000	60594	0.009	VV	0.06
73	19.09		0.00	0.000	71399	0.011	VV	0.08
74	19.22		0.00	0.000	43836	0.007	VV	0.04
75	19.29		0.00	0.000	57737	0.009	VV	0.07
76	19.42		0.00	0.000	44915	0.007	VV	0.08
77	19.58	AR1260#4	0.03	0.022	44136	0.007	VV	0.05
78	19.69		0.00	0.000	48107	0.007	VV	0.05
79	19.95		0.00	0.000	34909	0.005	VV	0.05
80	20.21		0.00	0.000	47253	0.007	VV	0.10
81	20.39		0.00	0.000	28695	0.004	VV	0.07
82	20.47		0.00	0.000	29685	0.005	VV	0.05
83	20.67		0.00	0.000	33679	0.005	VV	0.05
84	20.74		0.00	0.000	11196	0.002	VV	0.04
85	20.81		0.00	0.000	19552	0.003	VV	0.04
86	20.88		0.00	0.000	50285	0.008	VV	0.07
87	21.00		0.00	0.000	13659	0.002	VB	0.08
88	21.59		0.00	0.000	16850	0.003	BV	0.10
89	21.69	AR1260#5	0.08	0.052	23413	0.004	VV	0.09
90	21.87		0.00	0.000	8512	0.001	VB	0.08
91	22.22		0.00	0.000	20793	0.003	BV	0.25
92	22.46		0.00	0.000	35575	0.006	VB	0.07
93	23.01	CL10BP	0.64	0.410	6364028	0.987	SBB	0.07
94	23.53		0.00	0.000	15607	0.002	TBB	0.19
95	24.47		0.00	0.000	6664	0.001	BV	0.17
96	24.70		0.00	0.000	5093	0.001	VB	0.17
97	25.33		0.00	0.000	41022	0.006	BV	0.32
98	25.62		0.00	0.000	4827	0.001	VV	0.09
99	25.93		0.00	0.000	41566	0.006	VB	0.43
100	26.44		0.00	0.000	849	0.000	BB	0.10
101	26.76		0.00	0.000	4790	0.001	BB	0.12
102	27.28		0.00	0.000	5323	0.001	BB	0.30
103	28.21		0.00	0.000	87865	0.014	BB	0.32

Total Area = 6.449809E+08 Total Height = 3.672893E+07 Total Amount = 156.1773

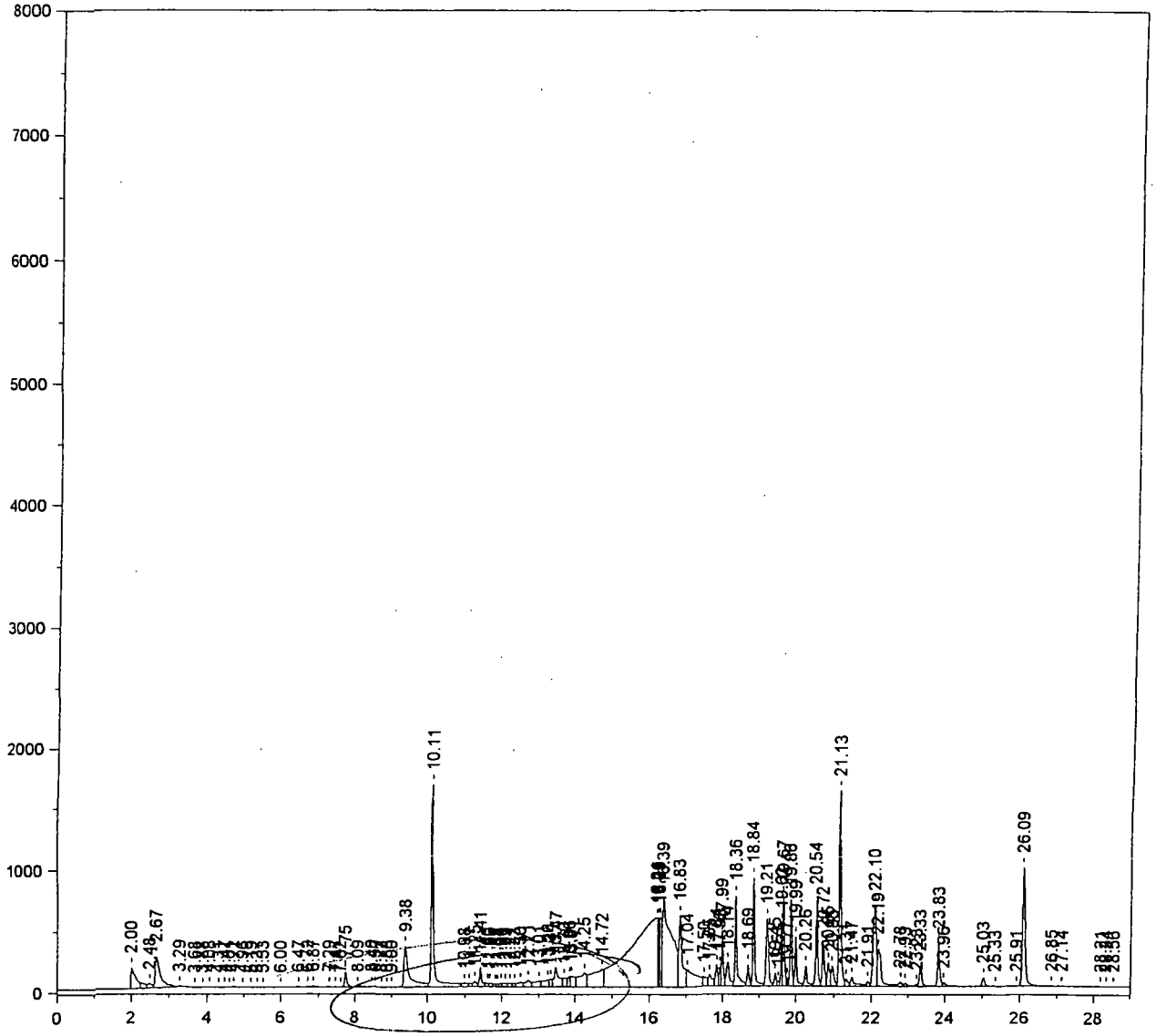
— H:\CP2\HP2\M0920B.0004.RAW 301100-04 B8068 FIP-003-06-SSS



after reintegration
RDT
9/23/02

50076

— H:\CP2\HP2\M0919.0016.RAW 301100-01MS B8068 FIP-001-06-SSSMS



Primary Column

Before integration
excess area under peaks
BT
9/20/02

50345

Sample Name = **301100-01MS B8068 FIP-001-06-SSSMS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0016.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/19/02 5:50:34 PM
Method Version = 618
Calibration Version = 9

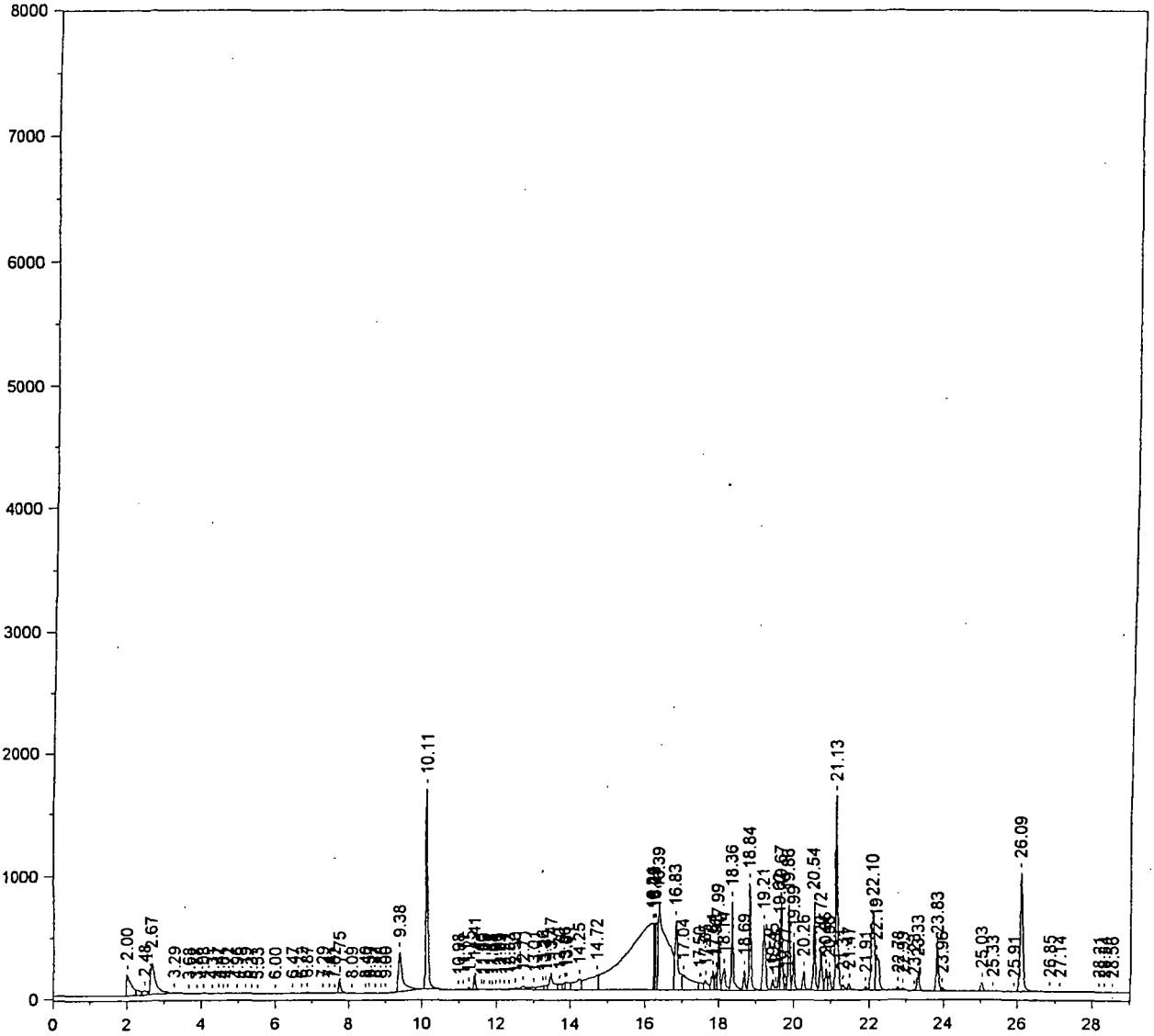
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1545582	1.122	BV	0.14
2	2.48		0.00	0.000	322321	0.234	VV	0.09
3	2.67		0.00	0.000	2596967	1.886	VV	0.12
4	3.29		0.00	0.000	48315	0.035	VB	0.15
5	3.68		0.00	0.000	5352	0.004	BB	0.08
6	3.88		0.00	0.000	21300	0.015	BV	0.14
7	4.08		0.00	0.000	28707	0.021	VV	0.07
8	4.31		0.00	0.000	12759	0.009	VV	0.14
9	4.47		0.00	0.000	22041	0.016	VV	0.11
10	4.61		0.00	0.000	13941	0.010	VV	0.06
11	4.72		0.00	0.000	58196	0.042	VV	0.12
12	4.96		0.00	0.000	543	0.000	VB	0.05
13	5.19		0.00	0.000	32768	0.024	BV	0.17
14	5.37		0.00	0.000	3331	0.002	VB	0.06
15	5.53		0.00	0.000	9126	0.007	BB	0.13
16	6.00		0.00	0.000	56288	0.041	BV	0.31
17	6.47		0.00	0.000	63964	0.046	VV	0.21
18	6.72		0.00	0.000	34815	0.025	VV	0.10
19	6.87		0.00	0.000	91232	0.066	VV	0.10
20	7.29		0.00	0.000	55430	0.040	VV	0.21
21	7.47		0.00	0.000	19350	0.014	VV	0.05
22	7.62		0.00	0.000	15645	0.011	VV	0.06
23	7.75		0.00	0.000	528673	0.384	VV	0.06
24	8.09		0.00	0.000	62766	0.046	VV	0.25
25	8.46		0.00	0.000	27814	0.020	VV	0.14
26	8.57		0.00	0.000	48147	0.035	VV	0.07
27	8.72		0.00	0.000	18461	0.013	VV	0.07
28	8.88		0.00	0.000	19464	0.014	VV	0.07
29	9.00		0.00	0.000	28518	0.021	VV	0.09
30	9.38		0.00	0.000	3687756	2.678	VV	0.11
31	10.11	CL4XYL	0.94	1.921	7388362	5.365	VV	0.05
32	10.98		0.00	0.000	390199	0.283	VV	0.12
33	11.11		0.00	0.000	184300	0.134	VV	0.08
34	11.25		0.00	0.000	317637	0.231	VV	0.05
35	11.41		0.00	0.000	808974	0.587	VV	0.05
36	11.60	AR1016#1	1.09	2.223	193990	0.141	VV	0.06
37	11.66		0.00	0.000	234284	0.170	VV	0.06
38	11.81		0.00	0.000	106335	0.077	VV	0.03
39	11.88		0.00	0.000	141773	0.103	VV	0.06
40	11.98		0.00	0.000	132769	0.096	VV	0.04
41	12.09		0.00	0.000	273271	0.198	VV	0.09
42	12.21		0.00	0.000	223460	0.162	VV	0.05
43	12.33		0.00	0.000	165669	0.120	VV	0.06
44	12.50		0.00	0.000	470429	0.342	VV	0.12
45	12.71	AR1016#2	1.87	3.806	592156	0.430	VV	0.07
46	13.01		0.00	0.000	651837	0.473	VV	0.09
47	13.26		0.00	0.000	682730	0.496	VV	0.07
48	13.34		0.00	0.000	357653	0.260	VV	0.06
49	13.47		0.00	0.000	1546655	1.123	VV	0.06
50	13.70		0.00	0.000	572630	0.416	VV	0.10
51	13.86		0.00	0.000	430711	0.313	VV	0.04
52	13.91	AR1016#3	1.48	3.023	722737	0.525	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	14.25	AR1016#4	5.57	11.339	1752845	1.273	VV	0.11
54	14.72		0.00	0.000	3259675	2.367	VV	0.14
55	16.21		0.00	0.000	29626634	21.512	VV	0.64
56	16.25		0.00	0.000	1577611	1.146	VV	0.03
57	16.29		0.00	0.000	2135205	1.550	VV	0.05
58	16.39		0.00	0.000	12314571	8.942	VV	0.13
59	16.83		0.00	0.000	3793045	2.754	VV	0.06
60	17.04		0.00	0.000	2893346	2.101	VV	0.15
61	17.50		0.00	0.000	548903	0.399	VV	0.06
62	17.65		0.00	0.000	775472	0.563	VV	0.05
63	17.84		0.00	0.000	753279	0.547	VV	0.05
64	17.92		0.00	0.000	530128	0.385	VV	0.05
65	17.99	AR1260#1	7.65	15.580	1523291	1.106	VV	0.05
66	18.14		0.00	0.000	1261484	0.916	VV	0.07
67	18.36		0.00	0.000	3012515	2.187	VV	0.05
68	18.69		0.00	0.000	750954	0.545	VV	0.05
69	18.84	AR1260#2	7.61	15.487	3285419	2.386	VV	0.05
70	19.21		0.00	0.000	3061339	2.223	VV	0.08
71	19.45		0.00	0.000	419931	0.305	VV	0.05
72	19.53		0.00	0.000	152170	0.110	VV	0.04
73	19.62		0.00	0.000	1323889	0.961	VV	0.04
74	19.67		0.00	0.000	2731278	1.983	VV	0.06
75	19.77		0.00	0.000	192661	0.140	VV	0.04
76	19.86	AR1260#3	7.17	14.585	2372320	1.723	VV	0.05
77	19.99		0.00	0.000	1550835	1.126	VV	0.05
78	20.26		0.00	0.000	821051	0.596	VV	0.05
79	20.54		0.00	0.000	2654099	1.927	VV	0.05
80	20.72		0.00	0.000	1449055	1.052	VV	0.05
81	20.85		0.00	0.000	889351	0.646	VV	0.05
82	20.95		0.00	0.000	810300	0.588	VV	0.08
83	21.13	AR1260#4	7.47	15.203	5889367	4.276	VV	0.05
84	21.31		0.00	0.000	362514	0.263	VV	0.06
85	21.47		0.00	0.000	722869	0.525	VV	0.06
86	21.91		0.00	0.000	245634	0.178	VV	0.06
87	22.10	AR1260#5	7.49	15.255	4005427	2.908	VV	0.10
88	22.19		0.00	0.000	2306516	1.675	VV	0.11
89	22.78		0.00	0.000	265372	0.193	VV	0.07
90	22.93		0.00	0.000	244337	0.177	VV	0.07
91	23.23		0.00	0.000	97177	0.071	VV	0.05
92	23.33		0.00	0.000	928727	0.674	VV	0.06
93	23.83		0.00	0.000	1607001	1.167	VV	0.07
94	23.96		0.00	0.000	506724	0.368	VV	0.08
95	25.03		0.00	0.000	440081	0.320	VV	0.07
96	25.33		0.00	0.000	104180	0.076	VV	0.17
97	25.91		0.00	0.000	23816	0.017	VV	0.06
98	26.09	CL10BP	0.77	1.578	5488050	3.985	VV	0.08
99	26.85		0.00	0.000	86966	0.063	VV	0.16
100	27.14		0.00	0.000	91932	0.067	VV	0.25
101	28.21		0.00	0.000	4716	0.003	VV	0.08
102	28.34		0.00	0.000	7443	0.005	VV	0.15
103	28.56		0.00	0.000	2365	0.002	VB	0.17

Total Area = 1.37722E+08 Total Height = 1.951321E+07 Total Amount = 49.12722

50347

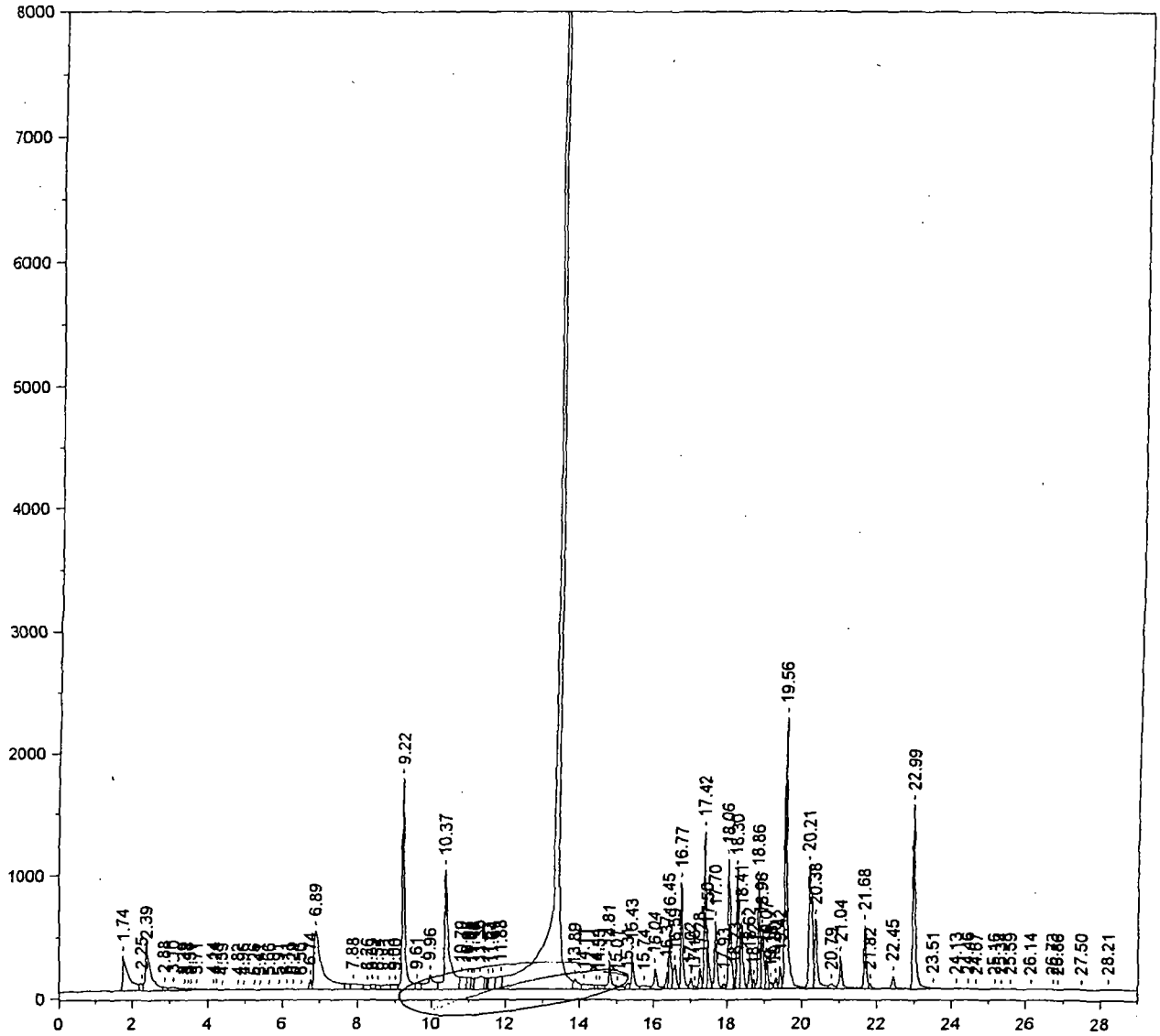
— H:\CP2\HP2\M0919.0016.RAW 301100-01MS B8068 FIP-001-06-SSSMS



After reintegration
AJT
9/20/02
BL 9-20-02

Primary Column

— H:\CP2\HP2\M0919B.0016.RAW 301100-01MS B8068 FIP-001-06-SSSMS



Before reintegration
excess area under peaks
BJ
9/20/02

50352

Sample Name = **301100-01MS B8068 FIP-001-06-SSSMS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0016.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/19/02 5:50:34 PM
Method Version = 567
Calibration Version = 5

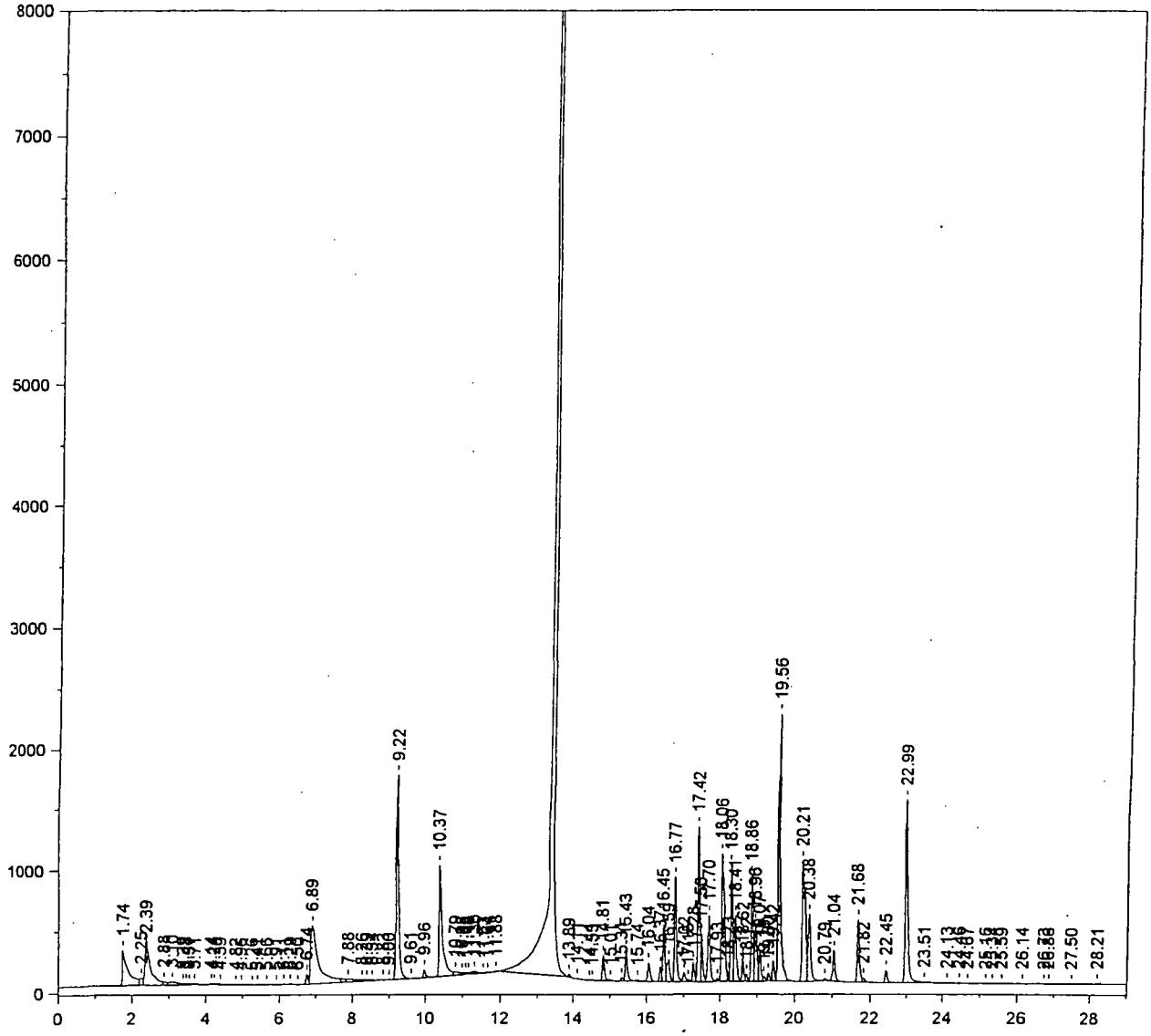
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	3143677	1.431	BV	0.13
2	2.25		0.00	0.000	373801	0.170	VV	0.06
3	2.39		0.00	0.000	3642123	1.658	VV	0.13
4	2.88		0.00	0.000	170483	0.078	VV	0.07
5	3.10		0.00	0.000	406283	0.185	VV	0.25
6	3.39		0.00	0.000	59755	0.027	VV	0.05
7	3.48		0.00	0.000	59634	0.027	VV	0.05
8	3.57		0.00	0.000	45716	0.021	VV	0.06
9	3.71		0.00	0.000	113391	0.052	VV	0.13
10	4.14		0.00	0.000	39662	0.018	VV	0.10
11	4.24		0.00	0.000	43026	0.020	VV	0.10
12	4.39		0.00	0.000	5497	0.003	VB	0.06
13	4.82		0.00	0.000	8973	0.004	BB	0.08
14	4.96		0.00	0.000	3501	0.002	BB	0.07
15	5.26		0.00	0.000	3736	0.002	BV	0.08
16	5.41		0.00	0.000	5973	0.003	VB	0.10
17	5.66		0.00	0.000	4703	0.002	BV	0.08
18	5.91		0.00	0.000	8891	0.004	VV	0.19
19	6.11		0.00	0.000	42870	0.020	VV	0.08
20	6.29		0.00	0.000	43653	0.020	VV	0.07
21	6.50		0.00	0.000	5763	0.003	VV	0.05
22	6.74		0.00	0.000	347473	0.158	VV	0.06
23	6.89		0.00	0.000	7629850	3.473	VV	0.17
24	7.88		0.00	0.000	828270	0.377	VV	0.20
25	8.26		0.00	0.000	422239	0.192	VV	0.12
26	8.39		0.00	0.000	315251	0.143	VV	0.11
27	8.54		0.00	0.000	276124	0.126	VV	0.08
28	8.83		0.00	0.000	559932	0.255	VV	0.19
29	9.00		0.00	0.000	429276	0.195	VV	0.05
30	9.22	CL4XYL	0.82	0.150	8683206	3.952	VV	0.06
31	9.61		0.00	0.000	455876	0.207	VV	0.07
32	9.96		0.00	0.000	1629259	0.742	VV	0.06
33	10.37	AR1016#1	33.71	6.204	7953683	3.620	VV	0.08
34	10.79		0.00	0.000	1133227	0.516	VV	0.12
35	10.98		0.00	0.000	617498	0.281	VV	0.05
36	11.08		0.00	0.000	370360	0.169	VV	0.03
37	11.13		0.00	0.000	258604	0.118	VV	0.02
38	11.30	AR1016#2	3.45	0.635	1497123	0.681	VV	0.10
39	11.53		0.00	0.000	310905	0.142	VV	0.05
40	11.64		0.00	0.000	983379	0.448	VV	0.10
41	11.88		0.00	0.000	1151369	0.524	VV	0.11
42	13.43	AR1016#5	468.38	86.198	97546168	44.396	VV	0.08
43	13.89		0.00	0.000	771315	0.351	VV	0.07
44	14.11		0.00	0.000	753354	0.343	VV	0.16
45	14.44		0.00	0.000	134172	0.061	VV	0.05
46	14.53		0.00	0.000	333207	0.152	VV	0.09
47	14.81		0.00	0.000	1300252	0.592	VV	0.06
48	15.01		0.00	0.000	401131	0.183	VV	0.08
49	15.31		0.00	0.000	295484	0.134	VV	0.08
50	15.43		0.00	0.000	1447923	0.659	VV	0.06
51	15.74		0.00	0.000	448939	0.204	VV	0.16
52	16.04		0.00	0.000	1156915	0.527	VV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.37		0.00	0.000	531941	0.242	VV	0.06
54	16.45	AR1260#1	6.83	1.256	1834859	0.835	VV	0.05
55	16.59		0.00	0.000	1285690	0.585	VV	0.11
56	16.77	AR1260#2	6.97	1.283	3476319	1.582	VV	0.05
57	17.02		0.00	0.000	471163	0.214	VV	0.06
58	17.15		0.00	0.000	154167	0.070	VV	0.06
59	17.28		0.00	0.000	675886	0.308	VV	0.06
60	17.42		0.00	0.000	5037931	2.293	VV	0.06
61	17.50		0.00	0.000	1489451	0.678	VV	0.05
62	17.70		0.00	0.000	2530378	1.152	VV	0.06
63	17.93		0.00	0.000	182556	0.083	VV	0.05
64	18.06		0.00	0.000	5726440	2.606	VV	0.09
65	18.23		0.00	0.000	221282	0.101	VV	0.03
66	18.30	AR1260#3	7.02	1.292	3617661	1.646	VV	0.05
67	18.41		0.00	0.000	2286928	1.041	VV	0.06
68	18.62		0.00	0.000	789186	0.359	VV	0.05
69	18.72		0.00	0.000	310540	0.141	VV	0.05
70	18.86		0.00	0.000	3272242	1.489	VV	0.06
71	18.96		0.00	0.000	2009953	0.915	VV	0.05
72	19.07		0.00	0.000	1106552	0.504	VV	0.06
73	19.18		0.00	0.000	262732	0.120	VV	0.07
74	19.30		0.00	0.000	387226	0.176	VV	0.05
75	19.42		0.00	0.000	734533	0.334	VV	0.05
76	19.56	AR1260#4	7.52	1.384	9704617	4.417	VV	0.05
77	20.21		0.00	0.000	5890816	2.681	VV	0.10
78	20.38		0.00	0.000	3356928	1.528	VV	0.08
79	20.79		0.00	0.000	323315	0.147	VV	0.06
80	21.04		0.00	0.000	1660883	0.756	VV	0.06
81	21.68	AR1260#5	7.90	1.453	2295401	1.045	VV	0.06
82	21.82		0.00	0.000	466393	0.212	VV	0.08
83	22.45		0.00	0.000	594115	0.270	VV	0.07
84	22.99	CL10BP	0.78	0.144	7785196	3.543	VV	0.07
85	23.51		0.00	0.000	292681	0.133	VV	0.19
86	24.13		0.00	0.000	64634	0.029	VV	0.15
87	24.46		0.00	0.000	41618	0.019	VV	0.13
88	24.67		0.00	0.000	51935	0.024	VV	0.14
89	25.16		0.00	0.000	10457	0.005	VV	0.08
90	25.34		0.00	0.000	31417	0.014	VV	0.13
91	25.59		0.00	0.000	17586	0.008	VV	0.20
92	26.14		0.00	0.000	5289	0.002	VB	0.29
93	26.73		0.00	0.000	6523	0.003	BV	0.16
94	26.86		0.00	0.000	4651	0.002	VB	0.15
95	27.50		0.00	0.000	491	0.000	BB	0.09
96	28.21		0.00	0.000	45406	0.021	BB	0.15

Total Area = 2.197189E+08 Total Height = 3.623376E+07 Total Amount = 543.3782

50354

— H:\CP2\HP2\M0919B.0016.RAW 301100-01MS B8068 FIP-001-06-SSSMS

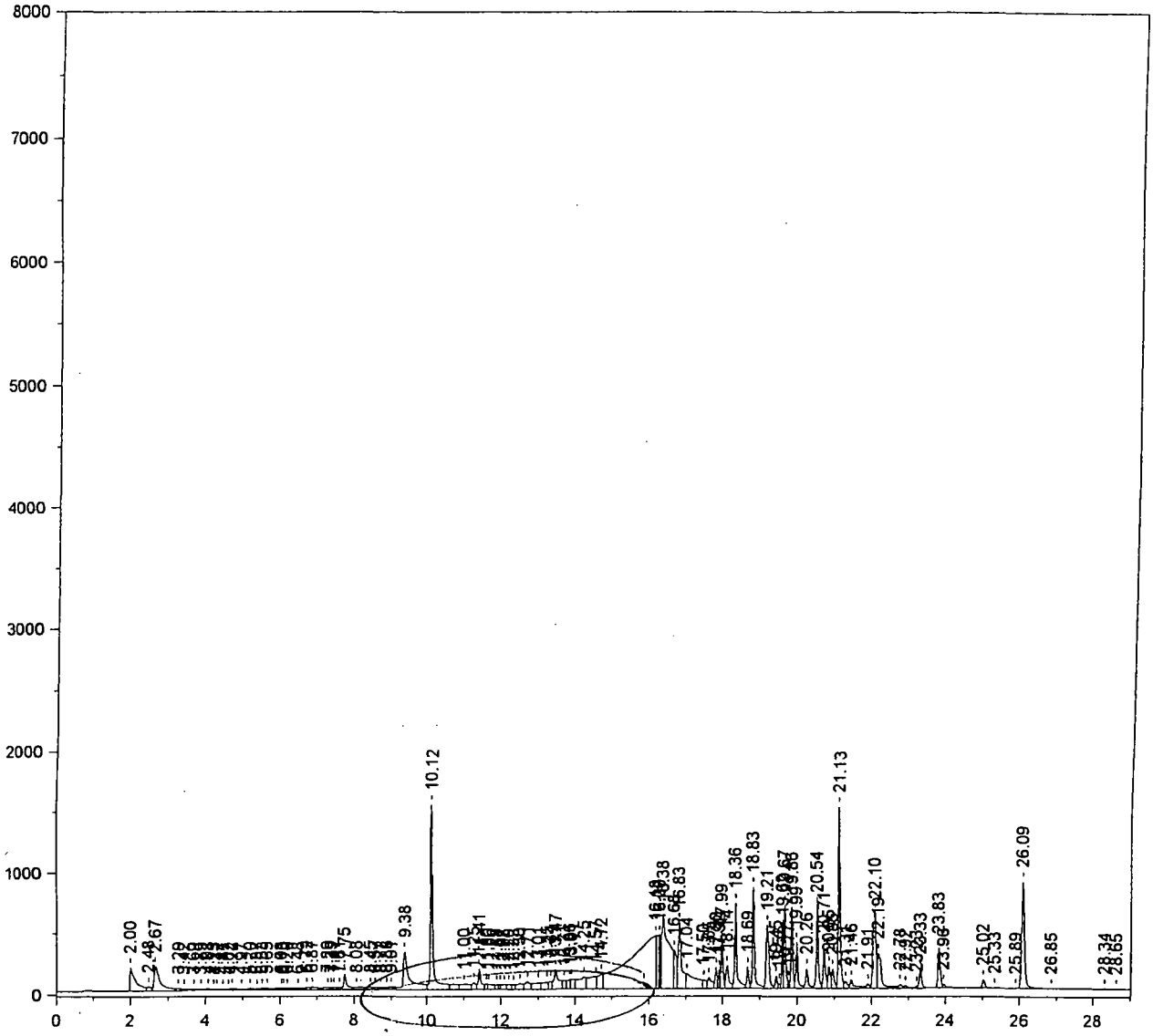


After reintegration
BJT
9/20/2

BL
9/20/02

50355

— H:\CP2\HP2\M0919.0018.RAW 301100-01MD B8068 FIP-001-06-SSSMSD



Primary Column

Before reintegration
excess area under peak
KJT
9/20/2

50361

Sample Name = **301100-01MD B8068 FIP-001-06-SSSMSD**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0018.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/19/02 7:08:18 PM
Method Version = 618
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	2107297	1.645	BV	0.14
2	2.48		0.00	0.000	291013	0.227	VV	0.11
3	2.67		0.00	0.000	2287031	1.785	VV	0.12
4	3.29		0.00	0.000	192451	0.150	VV	0.12
5	3.42		0.00	0.000	207985	0.162	VV	0.16
6	3.69		0.00	0.000	96641	0.075	VV	0.08
7	3.89		0.00	0.000	177648	0.139	VV	0.14
8	4.08		0.00	0.000	166905	0.130	VV	0.08
9	4.23		0.00	0.000	52256	0.041	VV	0.05
10	4.32		0.00	0.000	89714	0.070	VV	0.09
11	4.47		0.00	0.000	151641	0.118	VV	0.12
12	4.62		0.00	0.000	69521	0.054	VV	0.06
13	4.72		0.00	0.000	255147	0.199	VV	0.11
14	4.97		0.00	0.000	68026	0.053	VV	0.07
15	5.20		0.00	0.000	253833	0.198	VV	0.18
16	5.37		0.00	0.000	84689	0.066	VV	0.06
17	5.53		0.00	0.000	113694	0.089	VV	0.10
18	5.65		0.00	0.000	173123	0.135	VV	0.15
19	6.03		0.00	0.000	246516	0.192	VV	0.18
20	6.10		0.00	0.000	85339	0.067	VV	0.04
21	6.20		0.00	0.000	96965	0.076	VV	0.06
22	6.48		0.00	0.000	380019	0.297	VV	0.28
23	6.72		0.00	0.000	172841	0.135	VV	0.07
24	6.87		0.00	0.000	320704	0.250	VV	0.08
25	7.29		0.00	0.000	275258	0.215	VV	0.16
26	7.39		0.00	0.000	70509	0.055	VV	0.03
27	7.47		0.00	0.000	141280	0.110	VV	0.06
28	7.61		0.00	0.000	129431	0.101	VV	0.08
29	7.75		0.00	0.000	787334	0.615	VV	0.06
30	8.08		0.00	0.000	387786	0.303	VV	0.26
31	8.45		0.00	0.000	248624	0.194	VV	0.15
32	8.57		0.00	0.000	214880	0.168	VV	0.06
33	8.72		0.00	0.000	157822	0.123	VV	0.07
34	8.88		0.00	0.000	124471	0.097	VV	0.06
35	9.01		0.00	0.000	208513	0.163	VV	0.08
36	9.38		0.00	0.000	4239793	3.309	VV	0.11
37	10.12	CL4XYL	0.87	1.889	6827991	5.330	VV	0.05
38	11.00		0.00	0.000	831275	0.649	VV	0.11
39	11.25		0.00	0.000	412721	0.322	VV	0.05
40	11.41		0.00	0.000	938180	0.732	VV	0.05
41	11.60	AR1016#1	1.36	2.949	241873	0.189	VV	0.06
42	11.66		0.00	0.000	441988	0.345	VV	0.06
43	11.88		0.00	0.000	240198	0.187	VV	0.05
44	11.97		0.00	0.000	155343	0.121	VV	0.04
45	12.08		0.00	0.000	343826	0.268	VV	0.06
46	12.20		0.00	0.000	328590	0.256	VV	0.06
47	12.33		0.00	0.000	236750	0.185	VV	0.06
48	12.50		0.00	0.000	582118	0.454	VV	0.11
49	12.71	AR1016#2	1.93	4.171	610051	0.476	VV	0.07
50	13.01		0.00	0.000	740112	0.578	VV	0.08
51	13.25		0.00	0.000	701966	0.548	VV	0.07
52	13.34		0.00	0.000	346453	0.270	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	13.47		0.00	0.000	1520628	1.187	VV	0.06
54	13.71		0.00	0.000	450430	0.352	VV	0.05
55	13.86		0.00	0.000	447532	0.349	VV	0.04
56	13.91	AR1016#3	1.32	2.851	640787	0.500	VV	0.05
57	14.25	AR1016#4	5.04	10.919	1586617	1.238	VV	0.10
58	14.57		0.00	0.000	1620161	1.265	VV	0.12
59	14.72		0.00	0.000	1213861	0.947	VV	0.08
60	16.18		0.00	0.000	21981090	17.157	VV	0.58
61	16.27		0.00	0.000	2347876	1.833	VV	0.06
62	16.30		0.00	0.000	1308386	1.021	VV	0.04
63	16.38		0.00	0.000	8157801	6.367	VV	0.07
64	16.68		0.00	0.000	1885175	1.471	VV	0.06
65	16.83		0.00	0.000	3477925	2.715	VV	0.06
66	17.04		0.00	0.000	2497098	1.949	VV	0.15
67	17.50		0.00	0.000	476969	0.372	VV	0.06
68	17.65		0.00	0.000	702598	0.548	VV	0.05
69	17.83		0.00	0.000	697586	0.544	VV	0.05
70	17.92		0.00	0.000	487504	0.381	VV	0.04
71	17.99	AR1260#1	7.24	15.675	1440607	1.124	VV	0.05
72	18.14		0.00	0.000	1167646	0.911	VV	0.07
73	18.36		0.00	0.000	2828212	2.208	VV	0.05
74	18.69		0.00	0.000	700118	0.546	VV	0.05
75	18.83	AR1260#2	7.15	15.491	3089353	2.411	VV	0.05
76	19.21		0.00	0.000	2871040	2.241	VV	0.08
77	19.45		0.00	0.000	403231	0.315	VV	0.05
78	19.52		0.00	0.000	137560	0.107	VV	0.04
79	19.62		0.00	0.000	1210736	0.945	VV	0.04
80	19.67		0.00	0.000	2581502	2.015	VV	0.06
81	19.77		0.00	0.000	192829	0.151	VV	0.04
82	19.86	AR1260#3	6.68	14.464	2211580	1.726	VV	0.05
83	19.99		0.00	0.000	1458985	1.139	VV	0.05
84	20.26		0.00	0.000	776840	0.606	VV	0.05
85	20.54		0.00	0.000	2472043	1.930	VV	0.05
86	20.71		0.00	0.000	1367063	1.067	VV	0.05
87	20.85		0.00	0.000	838047	0.654	VV	0.05
88	20.95		0.00	0.000	745971	0.582	VV	0.07
89	21.13	AR1260#4	6.94	15.027	5472302	4.271	VV	0.05
90	21.31		0.00	0.000	338850	0.264	VV	0.06
91	21.46		0.00	0.000	663774	0.518	VV	0.06
92	21.91		0.00	0.000	224707	0.175	VV	0.06
93	22.10	AR1260#5	6.96	15.077	3721179	2.905	VV	0.10
94	22.19		0.00	0.000	2129033	1.662	VV	0.11
95	22.78		0.00	0.000	238854	0.186	VV	0.07
96	22.92		0.00	0.000	206375	0.161	VV	0.07
97	23.23		0.00	0.000	83480	0.065	VV	0.05
98	23.33		0.00	0.000	824368	0.643	VV	0.06
99	23.83		0.00	0.000	1478317	1.154	VV	0.07
100	23.96		0.00	0.000	349855	0.273	VV	0.08
101	25.02		0.00	0.000	357403	0.279	VV	0.07
102	25.33		0.00	0.000	32895	0.026	VV	0.19
103	25.89		0.00	0.000	1195	0.001	VB	0.06
104	26.09	CL10BP	0.69	1.487	4861413	3.795	BV	0.08
105	26.85		0.00	0.000	24935	0.019	VB	0.16
106	28.34		0.00	0.000	4679	0.004	BB	0.24
107	28.65		0.00	0.000	3731	0.003	BB	0.22

Total Area = 1.281169E+08 Total Height = 1.872634E+07 Total Amount = 46.18085

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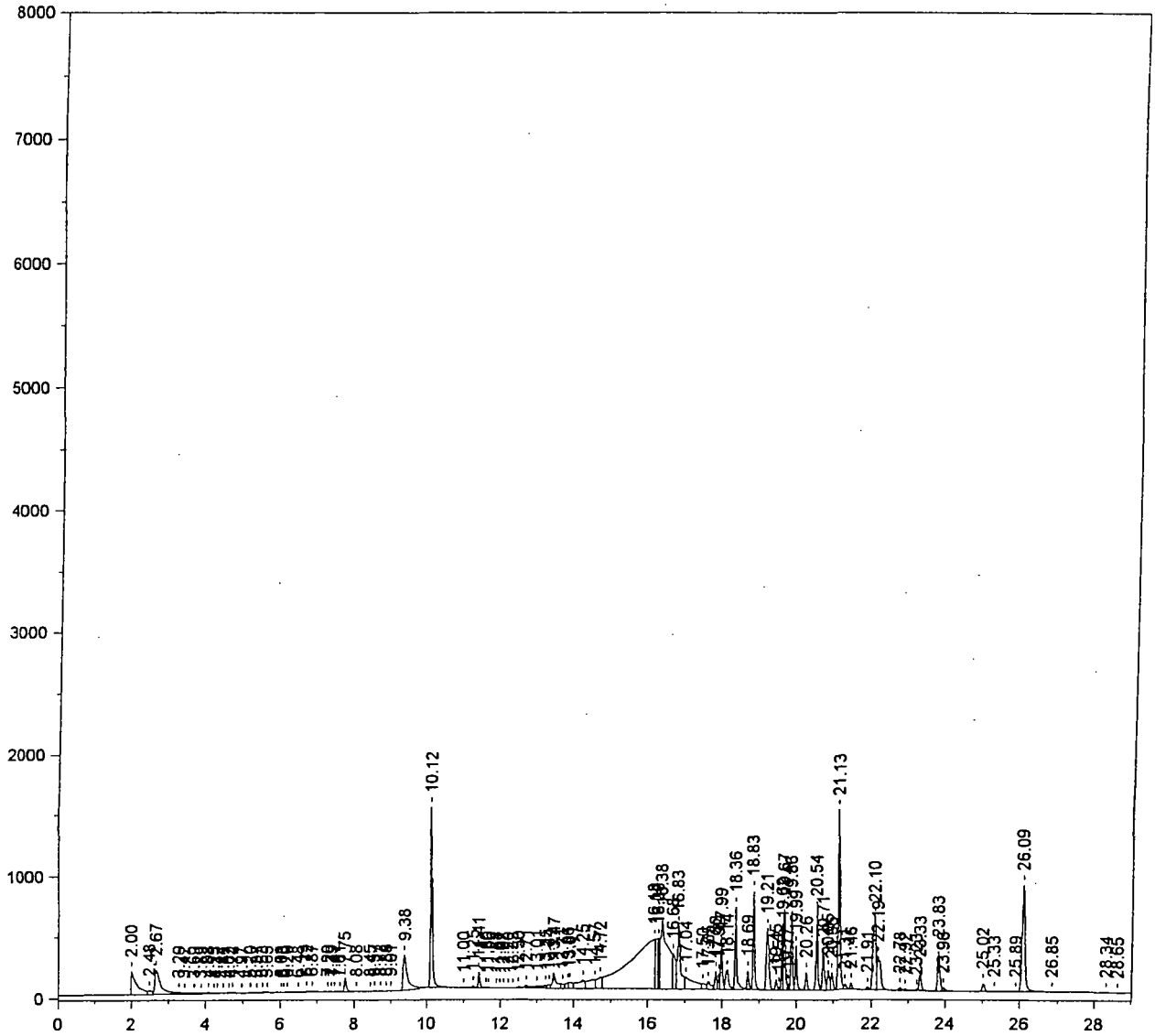
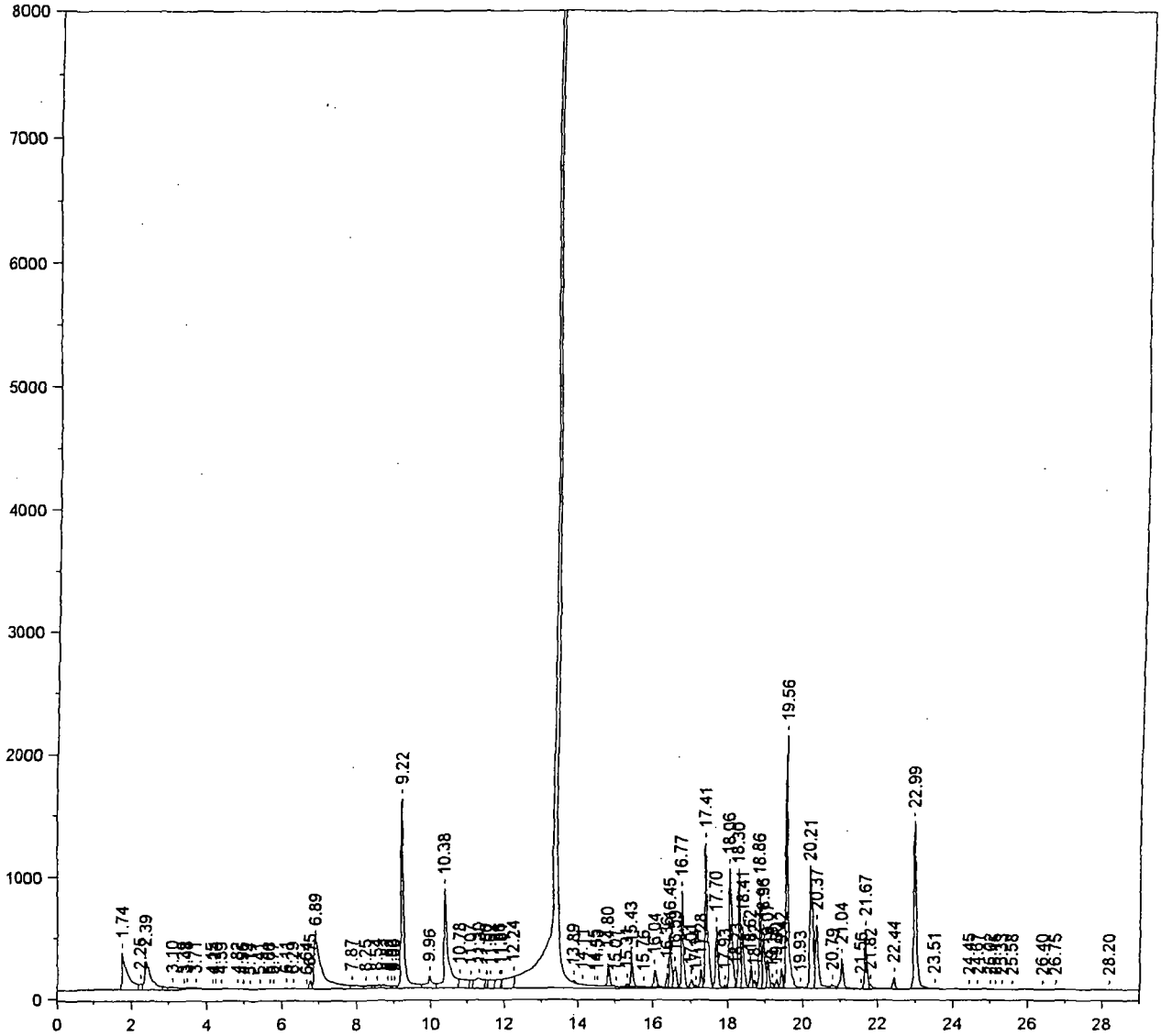


After reintegration
AST 9/20/02

Primary Column

50364

— H:\CP2\HP2\M0919B.0018.RAW 301100-01MD B8068 FIP-001-06-SSSMSD



Before reintegration
excess area under peaks

AST
9/20/02

50368

Sample Name = **301100-01MD B8068 FIP-001-06-SSSMSD**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0018.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/19/02 7:08:18 PM
Method Version = 567
Calibration Version = 5

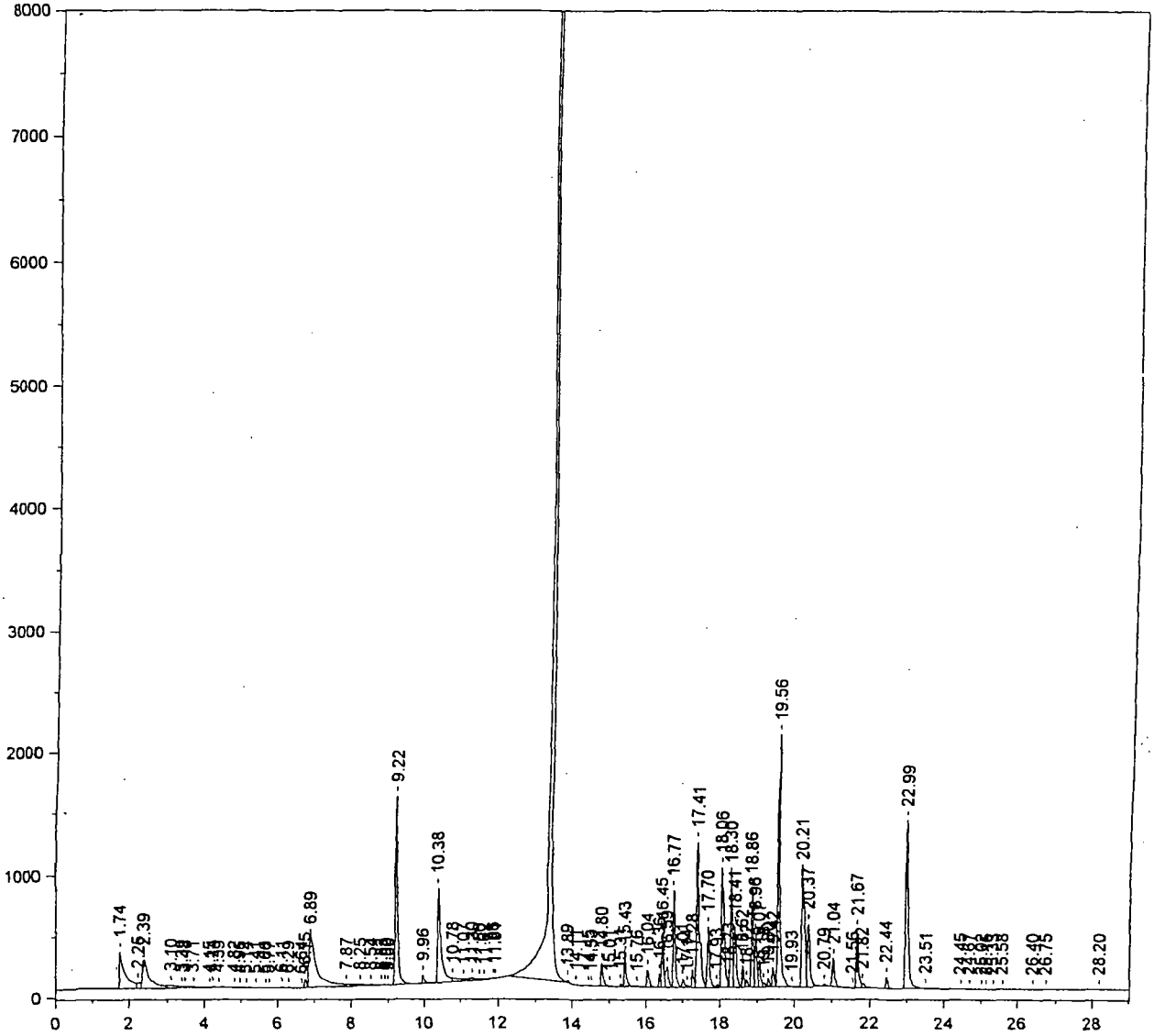
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	3199507	1.687	BV	0.12
2	2.25		0.00	0.000	294628	0.155	VV	0.06
3	2.39		0.00	0.000	2778082	1.465	VV	0.13
4	3.10		0.00	0.000	376148	0.198	VV	0.26
5	3.39		0.00	0.000	65933	0.035	VV	0.05
6	3.48		0.00	0.000	67957	0.036	VV	0.06
7	3.71		0.00	0.000	134349	0.071	VV	0.16
8	4.15		0.00	0.000	55593	0.029	VV	0.09
9	4.24		0.00	0.000	71529	0.038	VV	0.10
10	4.39		0.00	0.000	70751	0.037	VV	0.20
11	4.82		0.00	0.000	18986	0.010	VV	0.08
12	4.96		0.00	0.000	17334	0.009	VV	0.07
13	5.14		0.00	0.000	9453	0.005	VV	0.08
14	5.41		0.00	0.000	8900	0.005	VV	0.10
15	5.66		0.00	0.000	2156	0.001	VB	0.06
16	5.77		0.00	0.000	772	0.000	BB	0.07
17	6.11		0.00	0.000	44933	0.024	BV	0.08
18	6.29		0.00	0.000	30840	0.016	VV	0.08
19	6.64		0.00	0.000	6158	0.003	VV	0.08
20	6.75		0.00	0.000	295638	0.156	VV	0.06
21	6.89		0.00	0.000	6661010	3.513	VV	0.18
22	7.87		0.00	0.000	611527	0.323	VV	0.18
23	8.25		0.00	0.000	330882	0.174	VV	0.12
24	8.54		0.00	0.000	219380	0.116	VV	0.07
25	8.83		0.00	0.000	347130	0.183	VV	0.09
26	8.92		0.00	0.000	88758	0.047	VV	0.03
27	9.00		0.00	0.000	178066	0.094	VV	0.05
28	9.22	CL4XYL	0.75	0.156	7988500	4.213	VV	0.06
29	9.96		0.00	0.000	1161016	0.612	VV	0.06
30	10.38	AR1016#1	27.68	5.768	6531618	3.445	VV	0.08
31	10.78		0.00	0.000	1316139	0.694	VV	0.12
32	11.07		0.00	0.000	373649	0.197	VV	0.05
33	11.30	AR1016#2	3.34	0.696	1448603	0.764	VV	0.11
34	11.50		0.00	0.000	256240	0.135	VV	0.05
35	11.62		0.00	0.000	731276	0.386	VV	0.05
36	11.86		0.00	0.000	667822	0.352	VV	0.09
37	11.91		0.00	0.000	182830	0.096	VV	0.02
38	12.24		0.00	0.000	1649772	0.870	VV	0.12
39	13.42	AR1016#5	415.09	86.486	86447864	45.590	SBB	0.07
40	13.89		0.00	0.000	67973	0.036	TBV	0.07
41	14.11		0.00	0.000	21469	0.011	TVV	0.11
42	14.45		0.00	0.000	2714	0.001	TVV	0.05
43	14.53		0.00	0.000	9929	0.005	TVV	0.09
44	14.80		0.00	0.000	787437	0.415	TVV	0.06
45	15.01		0.00	0.000	35121	0.019	TVV	0.08
46	15.31		0.00	0.000	110041	0.058	TVV	0.08
47	15.43		0.00	0.000	1019283	0.538	TVV	0.06
48	15.76		0.00	0.000	64245	0.034	TVV	0.18
49	16.04		0.00	0.000	696352	0.367	TVV	0.07
50	16.36		0.00	0.000	373631	0.197	TVV	0.06
51	16.45	AR1260#1	6.05	1.260	1625366	0.857	TVV	0.05
52	16.59		0.00	0.000	1015580	0.536	TVV	0.11

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.77	AR1260#2	6.09	1.268	3034272	1.600	TVV	0.05
54	17.01		0.00	0.000	312967	0.165	TVV	0.06
55	17.14		0.00	0.000	62291	0.033	TVV	0.06
56	17.28		0.00	0.000	527599	0.278	TVV	0.06
57	17.41		0.00	0.000	5896915	3.110	TVV	0.06
58	17.70		0.00	0.000	2174842	1.147	TVV	0.06
59	17.93		0.00	0.000	95968	0.051	TVV	0.05
60	18.06		0.00	0.000	5176628	2.730	TVV	0.09
61	18.23		0.00	0.000	178929	0.094	TVV	0.03
62	18.30	AR1260#3	6.38	1.329	3286114	1.733	TVV	0.05
63	18.41		0.00	0.000	2019048	1.065	TVV	0.06
64	18.62		0.00	0.000	650097	0.343	TVV	0.05
65	18.72		0.00	0.000	230727	0.122	TVV	0.05
66	18.86		0.00	0.000	2958499	1.560	TVV	0.06
67	18.96		0.00	0.000	1807004	0.953	TVV	0.05
68	19.07		0.00	0.000	961565	0.507	TVV	0.06
69	19.18		0.00	0.000	192421	0.101	TVV	0.07
70	19.30		0.00	0.000	286861	0.151	TVV	0.05
71	19.42		0.00	0.000	610354	0.322	TVV	0.05
72	19.56	AR1260#4	6.81	1.418	8784623	4.633	TVV	0.05
73	19.93		0.00	0.000	89461	0.047	TVV	0.06
74	20.21		0.00	0.000	5366063	2.830	TVV	0.10
75	20.37		0.00	0.000	2935753	1.548	TVV	0.08
76	20.79		0.00	0.000	223411	0.118	TVV	0.06
77	21.04		0.00	0.000	1286985	0.679	TVV	0.06
78	21.56		0.00	0.000	10511	0.006	TVV	0.04
79	21.67	AR1260#5	7.07	1.474	2056381	1.084	TVV	0.06
80	21.82		0.00	0.000	242452	0.128	TVV	0.08
81	22.44		0.00	0.000	457237	0.241	TVV	0.07
82	22.99	CL10BP	0.70	0.145	6907357	3.643	TVV	0.07
83	23.51		0.00	0.000	148283	0.078	TVV	0.19
84	24.45		0.00	0.000	9203	0.005	TVV	0.12
85	24.67		0.00	0.000	6984	0.004	TVV	0.15
86	25.02		0.00	0.000	1766	0.001	TVV	0.11
87	25.15		0.00	0.000	2982	0.002	TVV	0.09
88	25.33		0.00	0.000	12200	0.006	TVV	0.14
89	25.58		0.00	0.000	5808	0.003	TVB	0.19
90	26.40		0.00	0.000	1032	0.001	BB	0.14
91	26.75		0.00	0.000	12024	0.006	BB	0.30
92	28.20		0.00	0.000	24831	0.013	BB	0.15

Total Area = 1.896193E+08 Total Height = 3.326381E+07 Total Amount = 479.9508

50370

— H:\CP2\HP2\M0919B.0018.RAW 301100-01MD B8068 FIP-001-06-SSSMSD



After reintegration
DT
9/20/02

7-24-02

50371

PAH-8270 SIM

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/04/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-001-06-SSS	ARDL Lab No.:	301100-01
Desc/Location:	NONE	Lab Filename:	Z3787
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1545	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.3	ND		UG/KG	1
Acenaphthylene	2.9	12.3	ND		UG/KG	1
Acenaphthene	3.4	12.3	ND		UG/KG	1
Fluorene	2.9	12.3	ND		UG/KG	1
Phenanthrene	3.1	12.3	ND		UG/KG	1
Anthracene	2.5	12.3	ND		UG/KG	1
Fluoranthene	3.2	12.3	4.4	J	UG/KG	1
Pyrene	2.3	12.3	10.3	J	UG/KG	1
Benzo(a)anthracene	2.4	12.3	ND		UG/KG	1
Chrysene	2.9	12.3	ND		UG/KG	1
Benzo(b)fluoranthene	2.9	12.3	ND		UG/KG	1
Benzo(k)fluoranthene	4.5	12.3	ND		UG/KG	1
Benzo(a)pyrene	2.7	12.3	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.3	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.3	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.3	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	68%
Nitrobenzene-d5	23-120	74%
Terphenyl-d14	18-137	85%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-002-06-SSS	ARDL Lab No.:	301100-03
Desc/Location:	NONE	Lab Filename:	Z3791
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1736	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	21.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.5	12.8	ND		UG/KG	1
Acenaphthylene	3	12.8	ND		UG/KG	1
Acenaphthene	3.5	12.8	ND		UG/KG	1
Fluorene	3	12.8	ND		UG/KG	1
Phenanthrene	3.2	12.8	ND		UG/KG	1
Anthracene	2.6	12.8	ND		UG/KG	1
Fluoranthene	3.3	12.8	13.7		UG/KG	1
Pyrene	2.4	12.8	48.0		UG/KG	1
Benzo(a)anthracene	2.5	12.8	ND		UG/KG	1
Chrysene	3	12.8	ND		UG/KG	1
Benzo(b)fluoranthene	3	12.8	ND		UG/KG	1
Benzo(k)fluoranthene	4.7	12.8	ND		UG/KG	1
Benzo(a)pyrene	2.9	12.8	32.0		UG/KG	1
Indeno(1,2,3-cd)pyrene	3	12.8	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.8	12.8	ND		UG/KG	1
Benzo(g,h,i)perylene	3.1	12.8	23.9		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	59%
Nitrobenzene-d5	23-120	53%
Terphenyl-d14	18-137	66%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-003-06-SSS	ARDL Lab No.:	301100-04
Desc/Location:	NONE	Lab Filename:	Z3792
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1849	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	18.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.3	ND		UG/KG	1
Acenaphthylene	2.9	12.3	ND		UG/KG	1
Acenaphthene	3.4	12.3	ND		UG/KG	1
Fluorene	2.9	12.3	ND		UG/KG	1
Phenanthrene	3.1	12.3	ND		UG/KG	1
Anthracene	2.5	12.3	ND		UG/KG	1
Fluoranthene	3.2	12.3	8.2	J	UG/KG	1
Pyrene	2.3	12.3	23.5		UG/KG	1
Benzo(a)anthracene	2.4	12.3	ND		UG/KG	1
Chrysene	2.9	12.3	ND		UG/KG	1
Benzo(b)fluoranthene	2.9	12.3	ND		UG/KG	1
Benzo(k)fluoranthene	4.5	12.3	ND		UG/KG	1
Benzo(a)pyrene	2.8	12.3	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.3	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.3	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.3	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	57%
Nitrobenzene-d5	23-120	55%
Terphenyl-d14	18-137	57%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 10/04/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FIP-004-06-SSS	ARDL Lab No.:	301100-02
Desc/Location:	NONE	Lab Filename:	Z3790
Sample Date:	09/11/2002	Received Date:	09/12/2002
Sample Time:	1650	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.5	12.5	ND		UG/KG	1
Acenaphthylene	3	12.5	ND		UG/KG	1
Acenaphthene	3.4	12.5	ND		UG/KG	1
Fluorene	2.9	12.5	6.2	J	UG/KG	1
Phenanthrene	3.2	12.5	ND		UG/KG	1
Anthracene	2.5	12.5	ND		UG/KG	1
Fluoranthene	3.2	12.5	15.7		UG/KG	1
Pyrene	2.3	12.5	36.9		UG/KG	1
Benzo(a)anthracene	2.4	12.5	ND		UG/KG	1
Chrysene	2.9	12.5	16.3		UG/KG	1
Benzo(b)fluoranthene	3	12.5	ND		UG/KG	1
Benzo(k)fluoranthene	4.6	12.5	ND		UG/KG	1
Benzo(a)pyrene	2.8	12.5	10.7	J	UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.5	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.5	ND		UG/KG	1
Benzo(g,h,i)perylene	3	12.5	9.1	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	69%
Nitrobenzene-d5	23-120	59%
Terphenyl-d14	18-137	72%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

INORGANICS

INORGANIC ANALYSIS DATA PACKAGE

FERGUSON HARBOR

Report Date: 09/27/02

Delivery Order No.: 17297

ARDL Report No.: 301100

Lab Name: ARDL, Inc.
Samples Received at ARDL: 12-Sep-02
Project Name: USACE Ft. Dearborn

CASE NARRATIVE

Sample ID No.	Date Collected	Lab ID No.	Analysis Requested
FIP-001-06-SSS	09/11/02	301100-01	Total Metals(1), Total Solids
FIP-004-06-SSS	09/11/02	301100-02	Total Metals(1), Total Solids
FIP-002-06-SSS	09/11/02	301100-03	Total Metals(1), Total Solids
FIP-003-06-SSS	09/11/02	301100-04	Total Metals(1), Total Solids
FIP-003-06-ERB	09/11/02	301100-05	Total Metals(1)

(1) Including aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, vanadium and zinc.

The quality control data are summarized as follows:

LABORATORY CONTROL SAMPLES
Percent recovery of all LCS analyses were within control limits.

PREPARATION BLANKS
Results of all preparation blanks were within acceptable limits.

MATRIX SPIKES
Percent recovery of all matrix spikes and matrix spike duplicates except 1 of 2 for copper and nickel and 2 of 2 for antimony in the soil matrix were within control limits. Sample results for aluminum, iron and manganese in the soil matrix were greater than 4 times the spike amount; therefore, percent recovery was not considered.

DUPLICATES
RPD on all duplicate analyses were within control limits.
All duplicate analyses are reported as MS/MSD except calcium, magnesium, potassium, sodium and total solids which are reported as sample/duplicate.

Release of the data contained in this package has been authorized by the Technical Services Manager or his designee as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FIP-001-06-SSS ARDL No: 301100-01
Sampling Loc'n: NONE Received: 09/12/2002
Sampling Date: 09/11/2002 Matrix: SOIL
Sampling Time: 1545 Moisture: 18.5

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.3	8750	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.61	1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.37	14.0	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	60.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.44	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.25	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	12.3	31200	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.61	16.3	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.61	13.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	56.3	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Iron	6.1	27600	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.37	25.3	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	12.3	22100	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.61	606	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.098	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	39.0	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	245	1580	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.61	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.61	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	49.1	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.37	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.61	19.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.61	67.0	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	81.5	%	NONE	160.3	NA	09/12/02	09179441

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FIP-002-06-SSS ARDL No: 301100-03
Sampling Loc'n: NONE Received: 09/12/2002
Sampling Date: 09/11/2002 Matrix: SOIL
Sampling Time: 1736 Moisture: 21.9

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.8	10300	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.64	0.84	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.38	8.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.3	88.3	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.13	0.38	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.26	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	12.8	29000	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.64	17.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.64	10.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.3	34.3	MG/KG	3050B	6010B	09/18/02	09/23/02	P39
Iron	6.4	22500	MG/KG	3050B	6010B	09/18/02	09/23/02	P399
Lead	0.38	30.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	12.8	19900	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.64	470	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.1	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.9	27.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	256	1250	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.64	0.94	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.64	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	51.2	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.38	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.64	20.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.64	57.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	78.1	%	NONE	160.3	NA	09/12/02	09179441

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FIP-003-06-SSS ARDL No: 301100-04
Sampling Loc'n: NONE Received: 09/12/2002
Sampling Date: 09/11/2002 Matrix: SOIL
Sampling Time: 1849 Moisture: 18.7

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.3	8380	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.62	0.82	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.37	8.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	70.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.28	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.25	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	12.3	35400	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.62	13.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.62	7.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	32.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Iron	6.2	20100	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.37	14.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	12.3	24900	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.62	384	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.098	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	22.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	246	1180	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.62	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.62	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	49.2	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.37	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.62	15.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.62	48.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	81.3	%	NONE	160.3	NA	09/12/02	09179441

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FIP-004-06-SSS ARDL No: 301100-02
Sampling Loc'n: NONE Received: 09/12/2002
Sampling Date: 09/11/2002 Matrix: SOIL
Sampling Time: 1650 Moisture: 19.7

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.5	7710	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.62	1.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.37	9.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	61.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.33	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.25	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	12.5	37500	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.62	12.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.62	8.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	36.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P39[illegible]
Iron	6.2	20200	MG/KG	3050B	6010B	09/18/02	09/23/02	P399[illegible]
Lead	0.37	18.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	12.5	24900	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.62	413	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.1	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.9	25.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	249	1330	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.62	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.62	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	49.8	64.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.37	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.62	13.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.62	57.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	80.3	%	NONE	160.3	NA	09/12/02	09179441

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301100 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FIP-003-06-ERB ARDL No: 301100-05
Sampling Loc'n: NONE Received: 09/12/2002
Sampling Date: 09/11/2002 Matrix: WATER
Sampling Time: 1827 Moisture: NA

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	0.1	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Antimony	0.005	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Arsenic	0.003	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Barium	0.01	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Beryllium	0.001	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Cadmium	0.002	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Calcium	0.1	0.33	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Chromium	0.005	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Cobalt	0.005	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Copper	0.01	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Iron	0.05	0.13	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Lead	0.003	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Magnesium	0.1	0.11	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Manganese	0.005	0.017	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Mercury	0.0002	ND	MG/L	7470A	7470A	09/16/02	09/16/02	C1640
Nickel	0.015	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Potassium	2	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Selenium	0.005	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Silver	0.005	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Sodium	0.4	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Thallium	0.003	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Vanadium	0.005	ND	MG/L	3010A	6010B	09/19/02	09/23/02	P3999
Zinc	0.005	0.0082	MG/L	3010A	6010B	09/19/02	09/23/02	P3999

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301101 Samples Received at ARDL: 9/13/02

CASE NARRATIVE

GLYCOL FRACTION - METHOD 8015M

Soil samples were received by ARDL, Inc. on September 13, 2002,for Glycol analysis. The samples were extracted with the method specified holding time.

No problems were encountered during the analysis of these samples.

PCB FRACTION - METHOD 8082

Soil samples were received by ARDL, Inc. on September 13, 2002, for PCB analysis. The samples were extracted within holding time requirements.

The soil samples were cleaned up by acid hydrolysis.

The columns used for PCB analysis are as follows: Primary column - RTX-CLP PESTICIDE II, 30 meter, 0.32 mm ID, 0.25 mm df; Confirmation column - RTX-CLP PESTICIDES, 30 meter, 0.32 mm ID, 0.50 mm df.

The following pages list manual integrations performed on the data. (See hard copy for explanation of manual integrations):

Pages: 50012-50015
50019-50022
50028-50031
50035-50038
50043-50047
50051-50054
50060-50063
50068-50071
50299-50302
50306-50309
50315-50318
50322-50325

No problems were encountered in the analysis of these samples.

SEMIVOLATILE FRACTION

Soil samples were received by ARDL, Inc. on September 13, 2002, for BNA analysis by GC/MS. All analyses were performed according to low level protocol within method specified holding times.

Compound 4-Nitrophenol exhibited high recovery in the spiked blank and MS/MSD. None found in samples, so no needed action.

1,4-Dichlorobenzene was low in MS/MSD, but within range in spike blank, no further action needed.

ORGANIC ANALYSIS DATA PACKAGE

ontract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301101 Samples Received at ARDL: 9/13/02

CASE NARRATIVE (Continued)

SEMIVOLATILE FRACTION (Continued)

No other unusual problems were encountered during the sample extraction or samples analyses.

VOLATILE FRACTION - METHOD 8260

Water and soil samples were received by ARDL, Inc. on September 13, 2002, for VOA analysis by GC/MS. All analyses were performed within the method specified holding time.

On the chromatograms, the injected date stamp appears as "**" instead of "02" for the year 2002. The quantitation date stamp is correct and accurately represents the year of the injection date.

No problems were encountered during the sample analyses.

NA FRACTION

Soil samples were received by ARDL, Inc. on September 13, 2002, for PNA-SIM analysis by GC/MS. All analyses were performed according to low level protocol within method specified holding times.

Sample VWR-005-02-EBT had an internal standard just below the lower recovery limit. The associated MS/MSD were just inside the lower limit. The trend of suppressed internal standard indicated it was matrix related, so there were no reanalysis.

Sample VWR-005-02-EBT required a manual integration for the compound benzo(b)fluoranthene. Samples VWR-006-02-EBT and VWR-003-02-ESW also required manual integrations for the compound benzo(k)fluoranthene.

No other unusual problems were encountered during the sample extraction or sample analysis.

ORGANIC DATA REPORTING QUALIFIERS

The following organic data reporting qualifiers are used as required.

ND- Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301101 Samples Received at ARDL: 9/13/02

CASE NARRATIVE (Continued)

ORGANIC DATA REPORTING QUALIFIERS (Continued)

result is less than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag; instead use a laboratory-define flag.

B - This flag is used when the analyte is found in the blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must by used for a TIC as well as for a positively identified target compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form 1 for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form 1. The Form 1 for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form 1 for the diluted sample, and all concentration values reported on that Form 1 are flagged with th "D" flag.

VOA-8260B

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-003-02-ESW	ARDL Lab No.:	301101-05
Desc/Location:	NONE	Lab Filename:	Y2558
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSI
% Moisture:	14.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.2	11.7	ND		UG/KG	1
Vinyl Chloride	2.1	11.7	ND		UG/KG	1
Bromomethane	1.5	11.7	ND		UG/KG	1
Chloroethane	1.9	11.7	ND		UG/KG	1
1,1-Dichloroethene	0.97	5.8	ND		UG/KG	1
Methylene Chloride	2.8	5.8	6.8		UG/KG	1
trans-1,2-Dichloroethene	0.92	5.8	ND		UG/KG	1
1,1-Dichloroethane	0.27	5.8	ND		UG/KG	1
Carbon disulfide	1	5.8	ND		UG/KG	1
cis-1,2-Dichloroethene	0.39	5.8	ND		UG/KG	1
Bromochloromethane	0.95	5.8	ND		UG/KG	1
Chloroform	0.79	5.8	ND		UG/KG	1
1,1,1-Trichloroethane	0.36	5.8	ND		UG/KG	1
Carbon Tetrachloride	0.71	5.8	ND		UG/KG	1
Benzene	0.67	5.8	ND		UG/KG	1
1,2-Dichloroethane	0.43	5.8	ND		UG/KG	1
Trichloroethene	1	5.8	ND		UG/KG	1
1,2-Dichloropropane	0.4	5.8	ND		UG/KG	1
Bromodichloromethane	0.27	5.8	ND		UG/KG	1
cis-1,3-Dichloropropene	0.76	5.8	ND		UG/KG	1
Toluene	0.36	5.8	ND		UG/KG	1
trans-1,3-Dichloropropene	0.72	5.8	ND		UG/KG	1
1,1,2-Trichloroethane	0.3	5.8	ND		UG/KG	1
Tetrachloroethene	0.55	5.8	ND		UG/KG	1
Dibromochloromethane	0.27	5.8	ND		UG/KG	1
Chlorobenzene	0.25	5.8	ND		UG/KG	1
Ethyl Benzene	0.42	5.8	ND		UG/KG	1
m & p-Xylene	0.93	5.8	ND		UG/KG	1
o-Xylene	1	5.8	ND		UG/KG	1
Styrene	0.41	5.8	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN
Project No.: 17297
Analysis: VOLATILES, GC/MS (8260)
Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-003-02-ESW	ARDL Lab No.:	301101-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2558
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSI
% Moisture:	14.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.26	5.8	ND		UG/KG	1
2-Hexanone	21	23.3	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	5.8	ND		UG/KG	1
Acetone	37.3	58.3	ND		UG/KG	1
2-Butanone	19.8	58.3	ND		UG/KG	1
4-Methyl-2-pentanone	17.5	23.3	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	110%
1,2-Dichloroethane-d4	78-135	105%
Toluene-d8	86-129	108%
4-Bromofluorobenzene	76-141	111%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-005-02-EBT	ARDL Lab No.:	301101-01
Desc/Location:	NONE	Lab Filename:	Y2555
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1051	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSI
% Moisture:	14.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.2	11.7	ND		UG/KG	1
Vinyl Chloride	2.1	11.7	ND		UG/KG	1
Bromomethane	1.5	11.7	ND		UG/KG	1
Chloroethane	1.9	11.7	ND		UG/KG	1
1,1-Dichloroethene	0.97	5.8	ND		UG/KG	1
Methylene Chloride	2.8	5.8	6.9		UG/KG	1
trans-1,2-Dichloroethene	0.92	5.8	ND		UG/KG	1
1,1-Dichloroethane	0.27	5.8	ND		UG/KG	1
Carbon disulfide	1	5.8	ND		UG/KG	1
cis-1,2-Dichloroethene	0.39	5.8	ND		UG/KG	1
Bromochloromethane	0.95	5.8	ND		UG/KG	1
Chloroform	0.8	5.8	ND		UG/KG	1
1,1,1-Trichloroethane	0.36	5.8	ND		UG/KG	1
Carbon Tetrachloride	0.71	5.8	ND		UG/KG	1
Benzene	0.67	5.8	ND		UG/KG	1
1,2-Dichloroethane	0.43	5.8	ND		UG/KG	1
Trichloroethene	1	5.8	ND		UG/KG	1
1,2-Dichloropropane	0.4	5.8	ND		UG/KG	1
Bromodichloromethane	0.27	5.8	ND		UG/KG	1
cis-1,3-Dichloropropene	0.76	5.8	ND		UG/KG	1
Toluene	0.36	5.8	ND		UG/KG	1
trans-1,3-Dichloropropene	0.73	5.8	ND		UG/KG	1
1,1,2-Trichloroethane	0.3	5.8	ND		UG/KG	1
Tetrachloroethene	0.55	5.8	ND		UG/KG	1
Dibromochloromethane	0.27	5.8	ND		UG/KG	1
Chlorobenzene	0.25	5.8	ND		UG/KG	1
Ethyl Benzene	0.42	5.8	ND		UG/KG	1
m & p-Xylene	0.94	5.8	ND		UG/KG	1
o-Xylene	1.	5.8	ND		UG/KG	1
Styrene	0.41	5.8	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN
Project No.: 17297
Analysis: VOLATILES, GC/MS (8260)
Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-005-02-EBT	ARDL Lab No.:	301101-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2555
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1051	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSI
% Moisture:	14.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.26	5.8	ND		UG/KG	1
2-Hexanone	21.1	23.4	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	5.8	ND		UG/KG	1
Acetone	37.4	58.5	ND		UG/KG	1
2-Butanone	19.9	58.5	ND		UG/KG	1
4-Methyl-2-pentanone	17.5	23.4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	106%
1,2-Dichloroethane-d4	78-135	98%
Toluene-d8	86-129	98%
4-Bromofluorobenzene	76-141	102%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-006-02-EBT	ARDL Lab No.:	301101-02
Desc/Location:	NONE	Lab Filename:	Y2574
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	15.8	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	11.9	ND		UG/KG	1
Vinyl Chloride	2.1	11.9	ND		UG/KG	1
Bromomethane	1.5	11.9	ND		UG/KG	1
Chloroethane	1.9	11.9	ND		UG/KG	1
1,1-Dichloroethene	0.99	5.9	ND		UG/KG	1
Methylene Chloride	2.9	5.9	7.9		UG/KG	1
trans-1,2-Dichloroethene	0.94	5.9	ND		UG/KG	1
1,1-Dichloroethane	0.27	5.9	ND		UG/KG	1
Carbon disulfide	1	5.9	ND		UG/KG	1
cis-1,2-Dichloroethene	0.39	5.9	ND		UG/KG	1
Bromochloromethane	0.96	5.9	ND		UG/KG	1
Chloroform	0.81	5.9	ND		UG/KG	1
1,1,1-Trichloroethane	0.37	5.9	ND		UG/KG	1
Carbon Tetrachloride	0.72	5.9	ND		UG/KG	1
Benzene	0.68	5.9	ND		UG/KG	1
1,2-Dichloroethane	0.44	5.9	ND		UG/KG	1
Trichloroethene	1	5.9	ND		UG/KG	1
1,2-Dichloropropane	0.4	5.9	ND		UG/KG	1
Bromodichloromethane	0.27	5.9	ND		UG/KG	1
cis-1,3-Dichloropropene	0.77	5.9	ND		UG/KG	1
Toluene	0.37	5.9	ND		UG/KG	1
trans-1,3-Dichloropropene	0.74	5.9	ND		UG/KG	1
1,1,2-Trichloroethane	0.31	5.9	ND		UG/KG	1
Tetrachloroethene	0.56	5.9	ND		UG/KG	1
Dibromochloromethane	0.27	5.9	ND		UG/KG	1
Chlorobenzene	0.25	5.9	ND		UG/KG	1
Ethyl Benzene	0.43	5.9	ND		UG/KG	1
m & p-Xylene	0.95	5.9	ND		UG/KG	1
o-Xylene	1	5.9	ND		UG/KG	1
Styrene	0.42	5.9	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN
Project No.: 17297
Analysis: VOLATILES, GC/MS (8260)
Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-006-02-EBT	ARDL Lab No.:	301101-02 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2574
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	15.8	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.26	5.9	ND		UG/KG	1
2-Hexanone	21.4	23.8	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	5.9	ND		UG/KG	1
Acetone	38	59.4	57.4	J	UG/KG	1
2-Butanone	20.2	59.4	ND		UG/KG	1
4-Methyl-2-pentanone	17.8	23.8	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	108%
1,2-Dichloroethane-d4	78-135	99%
Toluene-d8	86-129	107%
4-Bromofluorobenzene	76-141	112%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-008-02-EBT	ARDL Lab No.:	301101-04
Desc/Location:	NONE	Lab Filename:	Y2557
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSI
% Moisture:	15.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	11.8	ND		UG/KG	1
Vinyl Chloride	2.1	11.8	ND		UG/KG	1
Bromomethane	1.5	11.8	ND		UG/KG	1
Chloroethane	1.9	11.8	ND		UG/KG	1
1,1-Dichloroethene	0.98	5.9	ND		UG/KG	1
Methylene Chloride	2.8	5.9	7.4		UG/KG	1
trans-1,2-Dichloroethene	0.94	5.9	ND		UG/KG	1
1,1-Dichloroethane	0.27	5.9	ND		UG/KG	1
Carbon disulfide	1	5.9	ND		UG/KG	1
cis-1,2-Dichloroethene	0.39	5.9	ND		UG/KG	1
Bromochloromethane	0.96	5.9	ND		UG/KG	1
Chloroform	0.81	5.9	ND		UG/KG	1
1,1,1-Trichloroethane	0.37	5.9	ND		UG/KG	1
Carbon Tetrachloride	0.72	5.9	ND		UG/KG	1
Benzene	0.68	5.9	ND		UG/KG	1
1,2-Dichloroethane	0.44	5.9	ND		UG/KG	1
Trichloroethene	1	5.9	ND		UG/KG	1
1,2-Dichloropropane	0.4	5.9	ND		UG/KG	1
Bromodichloromethane	0.27	5.9	ND		UG/KG	1
cis-1,3-Dichloropropene	0.77	5.9	ND		UG/KG	1
Toluene	0.37	5.9	ND		UG/KG	1
trans-1,3-Dichloropropene	0.73	5.9	ND		UG/KG	1
1,1,2-Trichloroethane	0.31	5.9	ND		UG/KG	1
Tetrachloroethene	0.56	5.9	ND		UG/KG	1
Dibromochloromethane	0.27	5.9	ND		UG/KG	1
Chlorobenzene	0.25	5.9	ND		UG/KG	1
Ethyl Benzene	0.43	5.9	ND		UG/KG	1
m & p-Xylene	0.95	5.9	ND		UG/KG	1
o-Xylene	1	5.9	ND		UG/KG	1
Styrene	0.41	5.9	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/19/2002

Project Name: USACE FT DEARBORN
Project No.: 17297
Analysis: VOLATILES, GC/MS (8260)
Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-008-02-EBT	ARDL Lab No.:	301101-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2557
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0919JFSI
% Moisture:	15.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.26	5.9	ND		UG/KG	1
2-Hexanone	21.3	23.7	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	5.9	ND		UG/KG	1
Acetone	37.9	59.2	ND		UG/KG	1
2-Butanone	20.1	59.2	ND		UG/KG	1
4-Methyl-2-pentanone	17.8	23.7	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	111%
1,2-Dichloroethane-d4	78-135	106%
Toluene-d8	86-129	106%
4-Bromofluorobenzene	76-141	114%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/26/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-007-04-ERB	ARDL Lab No.:	301101-06
Desc/Location:	RINSATE	Lab Filename:	J6518
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1430	Prep. Date:	09/25/2002
Matrix:	WATER	Analysis Date:	09/25/2002
Amount Used:	5 mL	Instrument ID:	HP4
Final Volume:	5 mL	QC Batch:	0926JLSV
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	1.5	10.0	ND		UG/L	1
Vinyl Chloride	1.5	10.0	ND		UG/L	1
Bromomethane	2.2	10.0	ND		UG/L	1
Chloroethane	1.5	10.0	ND		UG/L	1
1,1-Dichloroethene	0.54	5.0	ND		UG/L	1
Methylene Chloride	3.7	5.0	ND		UG/L	1
trans-1,2-Dichloroethene	0.38	5.0	ND		UG/L	1
1,1-Dichloroethane	0.23	5.0	ND		UG/L	1
Carbon disulfide	0.67	5.0	ND		UG/L	1
cis-1,2-Dichloroethene	0.26	5.0	ND		UG/L	1
Bromochloromethane	0.66	5.0	ND		UG/L	1
Chloroform	0.17	5.0	ND		UG/L	1
1,1,1-Trichloroethane	0.32	5.0	ND		UG/L	1
Carbon Tetrachloride	0.35	5.0	ND		UG/L	1
Benzene	0.8	5.0	ND		UG/L	1
1,2-Dichloroethane	0.25	5.0	ND		UG/L	1
Trichloroethene	0.75	5.0	ND		UG/L	1
1,2-Dichloropropane	0.29	5.0	ND		UG/L	1
Bromodichloromethane	0.21	5.0	ND		UG/L	1
cis-1,3-Dichloropropene	0.24	5.0	ND		UG/L	1
Toluene	0.56	5.0	ND		UG/L	1
trans-1,3-Dichloropropene	0.73	5.0	ND		UG/L	1
1,1,2-Trichloroethane	0.31	5.0	ND		UG/L	1
Tetrachloroethene	0.53	5.0	ND		UG/L	1
Dibromochloromethane	0.24	5.0	ND		UG/L	1
Chlorobenzene	0.28	5.0	ND		UG/L	1
Ethyl Benzene	0.33	5.0	ND		UG/L	1
m & p-Xylene	0.96	5.0	ND		UG/L	1
o-Xylene	0.36	5.0	ND		UG/L	1
Styrene	0.28	5.0	ND		UG/L	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/26/2002

Project Name: USACE FT DEARBORN
Project No.: 17297
Analysis: VOLATILES, GC/MS (8260)
Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-007-04-ERB	ARDL Lab No.:	301101-06 (cont'd)
Desc/Location:	RINSATE	Lab Filename:	J6518
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1430	Prep. Date:	09/25/2002
Matrix:	WATER	Analysis Date:	09/25/2002
Amount Used:	5 mL	Instrument ID:	HP4
Final Volume:	5 mL	QC Batch:	0926JLSV
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.24	5.0	ND		UG/L	1
2-Hexanone	18	20.0	ND		UG/L	1
1,1,2,2-Tetrachloroethane	0.71	5.0	ND		UG/L	1
Acetone	43	50.0	ND		UG/L	1
2-Butanone	19	50.0	ND		UG/L	1
4-Methyl-2-pentanone	16	20.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	89-127	109%
1,2-Dichloroethane-d4	79-130	105%
Toluene-d8	84-122	106%
4-Bromofluorobenzene	82-125	109%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/26/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-002-02-ERB	ARDL Lab No.:	301101-07
Desc/Location:	RINSATE	Lab Filename:	J6519
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1500	Prep. Date:	09/25/2002
Matrix:	WATER	Analysis Date:	09/25/2002
Amount Used:	5 mL	Instrument ID:	HP4
Final Volume:	5 mL	QC Batch:	0926JLSV
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	1.5	10.0	ND		UG/L	1
Vinyl Chloride	1.5	10.0	ND		UG/L	1
Bromomethane	2.2	10.0	ND		UG/L	1
Chloroethane	1.5	10.0	ND		UG/L	1
1,1-Dichloroethene	0.54	5.0	ND		UG/L	1
Methylene Chloride	3.7	5.0	ND		UG/L	1
trans-1,2-Dichloroethene	0.38	5.0	ND		UG/L	1
1,1-Dichloroethane	0.23	5.0	ND		UG/L	1
Carbon disulfide	0.67	5.0	ND		UG/L	1
cis-1,2-Dichloroethene	0.26	5.0	ND		UG/L	1
Bromochloromethane	0.66	5.0	ND		UG/L	1
Chloroform	0.17	5.0	ND		UG/L	1
1,1,1-Trichloroethane	0.32	5.0	ND		UG/L	1
Carbon Tetrachloride	0.35	5.0	ND		UG/L	1
Benzene	0.8	5.0	ND		UG/L	1
1,2-Dichloroethane	0.25	5.0	ND		UG/L	1
Trichloroethene	0.75	5.0	ND		UG/L	1
1,2-Dichloropropane	0.29	5.0	ND		UG/L	1
Bromodichloromethane	0.21	5.0	ND		UG/L	1
cis-1,3-Dichloropropene	0.24	5.0	ND		UG/L	1
Toluene	0.56	5.0	ND		UG/L	1
trans-1,3-Dichloropropene	0.73	5.0	ND		UG/L	1
1,1,2-Trichloroethane	0.31	5.0	ND		UG/L	1
Tetrachloroethene	0.53	5.0	ND		UG/L	1
Dibromochloromethane	0.24	5.0	ND		UG/L	1
Chlorobenzene	0.28	5.0	ND		UG/L	1
Ethyl Benzene	0.33	5.0	ND		UG/L	1
m & p-Xylene	0.96	5.0	ND		UG/L	1
o-Xylene	0.36	5.0	ND		UG/L	1
Styrene	0.28	5.0	ND		UG/L	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/26/2002

Project Name: USACE FT DEARBORN
Project No.: 17297
Analysis: VOLATILES, GC/MS (8260)
Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-002-02-ERB	ARDL Lab No.:	301101-07 (cont'd)
Desc/Location:	RINSATE	Lab Filename:	J6519
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1500	Prep. Date:	09/25/2002
Matrix:	WATER	Analysis Date:	09/25/2002
Amount Used:	5 mL	Instrument ID:	HP4
Final Volume:	5 mL	QC Batch:	0926JLSV
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.24	5.0	ND		UG/L	1
2-Hexanone	18	20.0	ND		UG/L	1
1,1,2,2-Tetrachloroethane	0.71	5.0	ND		UG/L	1
Acetone	43	50.0	ND		UG/L	1
2-Butanone	19	50.0	ND		UG/L	1
4-Methyl-2-pentanone	16	20.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	89-127	106%
1,2-Dichloroethane-d4	79-130	101%
Toluene-d8	84-122	105%
4-Bromofluorobenzene	82-125	102%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/26/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	9-12-02-TB	ARDL Lab No.:	301101-03
Desc/Location:	NONE	Lab Filename:	J6517
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1500	Prep. Date:	09/25/2002
Matrix:	WATER	Analysis Date:	09/25/2002
Amount Used:	5 ml	Instrument ID:	HP4
Final Volume:	5 mL	QC Batch:	0926JLSV
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	1.5	10.0	ND		UG/L	1
Vinyl Chloride	1.5	10.0	ND		UG/L	1
Bromomethane	2.2	10.0	ND		UG/L	1
Chloroethane	1.5	10.0	ND		UG/L	1
1,1-Dichloroethene	0.54	5.0	ND		UG/L	1
Methylene Chloride	3.7	5.0	7.8		UG/L	1
trans-1,2-Dichloroethene	0.38	5.0	ND		UG/L	1
1,1-Dichloroethane	0.23	5.0	ND		UG/L	1
Carbon disulfide	0.67	5.0	ND		UG/L	1
cis-1,2-Dichloroethene	0.26	5.0	ND		UG/L	1
Bromochloromethane	0.66	5.0	ND		UG/L	1
Chloroform	0.17	5.0	ND		UG/L	1
1,1,1-Trichloroethane	0.32	5.0	ND		UG/L	1
Carbon Tetrachloride	0.35	5.0	ND		UG/L	1
Benzene	0.8	5.0	ND		UG/L	1
1,2-Dichloroethane	0.25	5.0	ND		UG/L	1
Trichloroethene	0.75	5.0	ND		UG/L	1
1,2-Dichloropropane	0.29	5.0	ND		UG/L	1
Bromodichloromethane	0.21	5.0	ND		UG/L	1
cis-1,3-Dichloropropene	0.24	5.0	ND		UG/L	1
Toluene	0.56	5.0	ND		UG/L	1
trans-1,3-Dichloropropene	0.73	5.0	ND		UG/L	1
1,1,2-Trichloroethane	0.31	5.0	ND		UG/L	1
Tetrachloroethene	0.53	5.0	ND		UG/L	1
Dibromochloromethane	0.24	5.0	ND		UG/L	1
Chlorobenzene	0.28	5.0	ND		UG/L	1
Ethyl Benzene	0.33	5.0	ND		UG/L	1
m & p-Xylene	0.96	5.0	ND		UG/L	1
o-Xylene	0.36	5.0	ND		UG/L	1
Styrene	0.28	5.0	ND		UG/L	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/26/2002

Project Name: USACE FT DEARBORN
Project No.: 17297
Analysis: VOLATILES, GC/MS (8260)
Analytical Method: 8260B
Prep Method: 5030A

Field ID:	9-12-02-TB	ARDL Lab No.:	301101-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	J6517
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1500	Prep. Date:	09/25/2002
Matrix:	WATER	Analysis Date:	09/25/2002
Amount Used:	5 ml	Instrument ID:	HP4
Final Volume:	5 mL	QC Batch:	0926JLSV
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.24	5.0	ND		UG/L	1
2-Hexanone	18	20.0	ND		UG/L	1
1,1,2,2-Tetrachloroethane	0.71	5.0	ND		UG/L	1
Acetone	43	50.0	ND		UG/L	1
2-Butanone	19	50.0	ND		UG/L	1
4-Methyl-2-pentanone	16	20.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	89-127	109%
1,2-Dichloroethane-d4	79-130	103%
Toluene-d8	84-122	98%
4-Bromofluorobenzene	82-125	105%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

BNA-8270

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-003-02-ESW	ARDL Lab No.:	301101-05
Desc/Location:	NONE	Lab Filename:	Z4013
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/09/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	14.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	133	385	ND		UG/KG	1
bis(2-Chloroethyl)ether	28.1	385	ND		UG/KG	1
2-Chlorophenol	123	385	ND		UG/KG	1
1,3-Dichlorobenzene	62.3	385	ND		UG/KG	1
1,4-Dichlorobenzene	49.7	385	ND		UG/KG	1
1,2-Dichlorobenzene	56.6	385	ND		UG/KG	1
2-Methylphenol	109	385	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	22.3	385	ND		UG/KG	1
4-Methylphenol	139	385	ND		UG/KG	1
N-Nitroso-di-n-propylamine	26.4	385	ND		UG/KG	1
Hexachloroethane	57.5	385	ND		UG/KG	1
Nitrobenzene	72.2	385	ND		UG/KG	1
Isophorone	57.9	385	ND		UG/KG	1
2-Nitrophenol	119	385	ND		UG/KG	1
2,4-Dimethylphenol	132	385	ND		UG/KG	1
bis(2-Chloroethoxy)methane	29.1	385	ND		UG/KG	1
2,4-Dichlorophenol	141	385	ND		UG/KG	1
1,2,4-Trichlorobenzene	59.4	385	ND		UG/KG	1
Naphthalene	16	385	ND		UG/KG	1
4-Chloroaniline	88.6	385	ND		UG/KG	1
Hexachlorobutadiene	67.8	385	ND		UG/KG	1
4-Chloro-3-methylphenol	115	385	ND		UG/KG	1
2-Methylnaphthalene	72.5	385	ND		UG/KG	1
Hexachlorocyclopentadiene	58.7	385	ND		UG/KG	1
2,4,6-Trichlorophenol	124	385	ND		UG/KG	1
2,4,5-Trichlorophenol	131	385	ND		UG/KG	1
2-Chloronaphthalene	56.9	385	ND		UG/KG	1
2-Nitroaniline	59.9	385	ND		UG/KG	1
Dimethylphthalate	24.2	385	ND		UG/KG	1
2,6-Dinitrotoluene	49.4	385	ND		UG/KG	1

ARDL, INC.
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Lab Report No: 301101 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-003-02-ESW	ARDL Lab No.:	301101-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4013
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/09/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	14.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	44.6	385	ND		UG/KG	1
2,4-Dinitrophenol	119	385	ND		UG/KG	1
4-Nitrophenol	105	385	ND		UG/KG	1
Dibenzofuran	78.1	385	ND		UG/KG	1
2,4-Dinitrotoluene	57.3	385	ND		UG/KG	1
Diethylphthalate	16.8	385	ND		UG/KG	1
4-Chlorophenyl-phenylether	25.1	385	ND		UG/KG	1
4-Nitroaniline	46.7	385	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	104	385	ND		UG/KG	1
N-Nitrosodiphenylamine	24.2	385	ND		UG/KG	1
4-Bromophenyl-phenylether	28.6	385	ND		UG/KG	1
Hexachlorobenzene	48.4	385	ND		UG/KG	1
Pentachlorophenol	96.6	385	ND		UG/KG	1
Di-n-butylphthalate	30.8	385	ND		UG/KG	1
Butylbenzylphthalate	23.7	385	ND		UG/KG	1
3,3'-Dichlorobenzidine	159	385	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	25.7	385	69.1	J	UG/KG	1
Di-n-octylphthalate	51.3	385	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	53%
Phenol-d5	24-113	70%
Nitrobenzene-d5	23-120	65%
2-Fluorobiphenyl	30-115	70%
2,4,6-Tribromophenol	19-122	77%
Terphenyl-d14	18-137	87%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-005-02-EBT	ARDL Lab No.:	301101-01
Desc/Location:	NONE	Lab Filename:	Z3980
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1051	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/04/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	14.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	133	386	ND		UG/KG	1
bis(2-Chloroethyl)ether	28.2	386	ND		UG/KG	1
2-Chlorophenol	123	386	ND		UG/KG	1
1,3-Dichlorobenzene	62.5	386	ND		UG/KG	1
1,4-Dichlorobenzene	49.8	386	ND		UG/KG	1
1,2-Dichlorobenzene	56.7	386	ND		UG/KG	1
2-Methylphenol	110	386	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	22.3	386	ND		UG/KG	1
4-Methylphenol	139	386	ND		UG/KG	1
N-Nitroso-di-n-propylamine	26.4	386	ND		UG/KG	1
Hexachloroethane	57.7	386	ND		UG/KG	1
Nitrobenzene	72.4	386	ND		UG/KG	1
Isophorone	58	386	ND		UG/KG	1
2-Nitrophenol	119	386	ND		UG/KG	1
2,4-Dimethylphenol	132	386	ND		UG/KG	1
bis(2-Chloroethoxy)methane	29.1	386	ND		UG/KG	1
2,4-Dichlorophenol	142	386	ND		UG/KG	1
1,2,4-Trichlorobenzene	59.5	386	ND		UG/KG	1
Naphthalene	16	386	ND		UG/KG	1
4-Chloroaniline	88.8	386	ND		UG/KG	1
Hexachlorobutadiene	68	386	ND		UG/KG	1
4-Chloro-3-methylphenol	115	386	ND		UG/KG	1
2-Methylnaphthalene	72.6	386	ND		UG/KG	1
Hexachlorocyclopentadiene	58.8	386	ND		UG/KG	1
2,4,6-Trichlorophenol	124	386	ND		UG/KG	1
2,4,5-Trichlorophenol	131	386	ND		UG/KG	1
2-Chloronaphthalene	57.1	386	ND		UG/KG	1
2-Nitroaniline	60	386	ND		UG/KG	1
Dimethylphthalate	24.2	386	ND		UG/KG	1
2,6-Dinitrotoluene	49.5	386	ND		UG/KG	1

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Lab Report No: 301101 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-005-02-EBT	ARDL Lab No.:	301101-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z3980
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1051	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/04/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	14.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	44.7	386	ND		UG/KG	1
2,4-Dinitrophenol	119	386	ND		UG/KG	1
4-Nitrophenol	105	386	ND		UG/KG	1
Dibenzofuran	78.2	386	ND		UG/KG	1
2,4-Dinitrotoluene	57.4	386	ND		UG/KG	1
Diethylphthalate	16.8	386	ND		UG/KG	1
4-Chlorophenyl-phenylether	25.1	386	ND		UG/KG	1
4-Nitroaniline	46.8	386	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	104	386	ND		UG/KG	1
N-Nitrosodiphenylamine	24.2	386	ND		UG/KG	1
4-Bromophenyl-phenylether	28.7	386	ND		UG/KG	1
Hexachlorobenzene	48.5	386	ND		UG/KG	1
Pentachlorophenol	96.8	386	ND		UG/KG	1
Di-n-butylphthalate	30.9	386	ND		UG/KG	1
Butylbenzylphthalate	23.7	386	ND		UG/KG	1
3,3'-Dichlorobenzidine	159	386	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	25.7	386	155	J	UG/KG	1
Di-n-octylphthalate	51.5	386	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	76%
Phenol-d5	24-113	90%
Nitrobenzene-d5	23-120	89%
2-Fluorobiphenyl	30-115	75%
2,4,6-Tribromophenol	19-122	53%
Terphenyl-d14	18-137	82%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-006-02-EBT	ARDL Lab No.:	301101-02
Desc/Location:	NONE	Lab Filename:	Z3983
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/04/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	15.8	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	135	392	ND		UG/KG	1
bis(2-Chloroethyl)ether	28.6	392	ND		UG/KG	1
2-Chlorophenol	125	392	ND		UG/KG	1
1,3-Dichlorobenzene	63.4	392	ND		UG/KG	1
1,4-Dichlorobenzene	50.6	392	ND		UG/KG	1
1,2-Dichlorobenzene	57.6	392	ND		UG/KG	1
2-Methylphenol	111	392	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	22.7	392	ND		UG/KG	1
4-Methylphenol	141	392	ND		UG/KG	1
N-Nitroso-di-n-propylamine	26.8	392	ND		UG/KG	1
Hexachloroethane	58.6	392	ND		UG/KG	1
Nitrobenzene	73.5	392	ND		UG/KG	1
Isophorone	58.9	392	ND		UG/KG	1
2-Nitrophenol	121	392	ND		UG/KG	1
2,4-Dimethylphenol	134	392	ND		UG/KG	1
bis(2-Chloroethoxy)methane	29.6	392	ND		UG/KG	1
2,4-Dichlorophenol	144	392	ND		UG/KG	1
1,2,4-Trichlorobenzene	60.5	392	ND		UG/KG	1
Naphthalene	16.3	392	ND		UG/KG	1
4-Chloroaniline	90.1	392	ND		UG/KG	1
Hexachlorobutadiene	69	392	ND		UG/KG	1
4-Chloro-3-methylphenol	117	392	ND		UG/KG	1
2-Methylnaphthalene	73.8	392	ND		UG/KG	1
Hexachlorocyclopentadiene	59.7	392	ND		UG/KG	1
2,4,6-Trichlorophenol	126	392	ND		UG/KG	1
2,4,5-Trichlorophenol	133	392	ND		UG/KG	1
2-Chloronaphthalene	58	392	ND		UG/KG	1
2-Nitroaniline	60.9	392	ND		UG/KG	1
Dimethylphthalate	24.6	392	ND		UG/KG	1
2,6-Dinitrotoluene	50.2	392	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-006-02-EBT	ARDL Lab No.:	301101-02 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z3983
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/04/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	15.8	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	45.4	392	ND		UG/KG	1
2,4-Dinitrophenol	121	392	ND		UG/KG	1
4-Nitrophenol	107	392	ND		UG/KG	1
Dibenzofuran	79.5	392	ND		UG/KG	1
2,4-Dinitrotoluene	58.3	392	ND		UG/KG	1
Diethylphthalate	17.1	392	ND		UG/KG	1
4-Chlorophenyl-phenylether	25.5	392	ND		UG/KG	1
4-Nitroaniline	47.5	392	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	106	392	ND		UG/KG	1
N-Nitrosodiphenylamine	24.6	392	ND		UG/KG	1
4-Bromophenyl-phenylether	29.1	392	ND		UG/KG	1
Hexachlorobenzene	49.3	392	ND		UG/KG	1
Pentachlorophenol	98.3	392	ND		UG/KG	1
Di-n-butylphthalate	31.4	392	ND		UG/KG	1
Butylbenzylphthalate	24.1	392	ND		UG/KG	1
3,3'-Dichlorobenzidine	162	392	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.1	392	775		UG/KG	1
Di-n-octylphthalate	52.3	392	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	77%
Phenol-d5	24-113	91%
Nitrobenzene-d5	23-120	94%
2-Fluorobiphenyl	30-115	77%
2,4,6-Tribromophenol	19-122	51%
Terphenyl-d14	18-137	76%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-008-02-EBT	ARDL Lab No.:	301101-04
Desc/Location:	NONE	Lab Filename:	Z4012
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/09/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	15.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	135	391	ND		UG/KG	1
bis(2-Chloroethyl)ether	28.6	391	ND		UG/KG	1
2-Chlorophenol	124	391	ND		UG/KG	1
1,3-Dichlorobenzene	63.3	391	ND		UG/KG	1
1,4-Dichlorobenzene	50.5	391	ND		UG/KG	1
1,2-Dichlorobenzene	57.5	391	ND		UG/KG	1
2-Methylphenol	111	391	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	22.6	391	ND		UG/KG	1
4-Methylphenol	141	391	ND		UG/KG	1
N-Nitroso-di-n-propylamine	26.8	391	ND		UG/KG	1
Hexachloroethane	58.4	391	ND		UG/KG	1
Nitrobenzene	73.3	391	ND		UG/KG	1
Isophorone	58.8	391	ND		UG/KG	1
2-Nitrophenol	121	391	ND		UG/KG	1
2,4-Dimethylphenol	134	391	ND		UG/KG	1
bis(2-Chloroethoxy)methane	29.5	391	ND		UG/KG	1
2,4-Dichlorophenol	143	391	ND		UG/KG	1
1,2,4-Trichlorobenzene	60.3	391	ND		UG/KG	1
Naphthalene	16.2	391	ND		UG/KG	1
4-Chloroaniline	89.9	391	ND		UG/KG	1
Hexachlorobutadiene	68.8	391	ND		UG/KG	1
4-Chloro-3-methylphenol	117	391	ND		UG/KG	1
2-Methylnaphthalene	73.6	391	ND		UG/KG	1
Hexachlorocyclopentadiene	59.6	391	ND		UG/KG	1
2,4,6-Trichlorophenol	126	391	ND		UG/KG	1
2,4,5-Trichlorophenol	133	391	ND		UG/KG	1
2-Chloronaphthalene	57.8	391	ND		UG/KG	1
2-Nitroaniline	60.8	391	ND		UG/KG	1
Dimethylphthalate	24.5	391	ND		UG/KG	1
2,6-Dinitrotoluene	50.1	391	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-008-02-EBT	ARDL Lab No.:	301101-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4012
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/09/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	15.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	45.3	391	ND		UG/KG	1
2,4-Dinitrophenol	121	391	ND		UG/KG	1
4-Nitrophenol	106	391	ND		UG/KG	1
Dibenzofuran	79.3	391	ND		UG/KG	1
2,4-Dinitrotoluene	58.2	391	ND		UG/KG	1
Diethylphthalate	17.1	391	ND		UG/KG	1
4-Chlorophenyl-phenylether	25.5	391	ND		UG/KG	1
4-Nitroaniline	47.4	391	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	106	391	ND		UG/KG	1
N-Nitrosodiphenylamine	24.5	391	ND		UG/KG	1
4-Bromophenyl-phenylether	29	391	ND		UG/KG	1
Hexachlorobenzene	49.2	391	ND		UG/KG	1
Pentachlorophenol	98.1	391	ND		UG/KG	1
Di-n-butylphthalate	31.3	391	ND		UG/KG	1
Butylbenzylphthalate	24.1	391	ND		UG/KG	1
3,3'-Dichlorobenzidine	161	391	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.1	391	621		UG/KG	1
Di-n-octylphthalate	52.1	391	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	56%
Phenol-d5	24-113	65%
Nitrobenzene-d5	23-120	49%
2-Fluorobiphenyl	30-115	63%
2,4,6-Tribromophenol	19-122	82%
Terphenyl-d14	18-137	92%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PCB's-8082

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	VWR-003-02-ESW	ARDL Lab No.:	301101-05
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	14.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	8.7	38.5	ND		UG/KG	1
Aroclor 1221	15.8	78.2	ND		UG/KG	1
Aroclor 1232	9.7	38.5	ND		UG/KG	1
Aroclor 1242	10.8	38.5	ND		UG/KG	1
Aroclor 1248	7.2	38.5	ND		UG/KG	1
Aroclor 1254	5	38.5	ND		UG/KG	1
Aroclor 1260	6.4	38.5	7.1	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	84%
Tetrachloro-m-xylene	42-94	76%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	VWR-005-02-EBT	ARDL Lab No.:	301101-01
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1051	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	14.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	8.7	38.6	ND		UG/KG	1
Aroclor 1221	15.8	78.4	ND		UG/KG	1
Aroclor 1232	9.7	38.6	ND		UG/KG	1
Aroclor 1242	10.9	38.6	ND		UG/KG	1
Aroclor 1248	7.3	38.6	ND		UG/KG	1
Aroclor 1254	5	38.6	ND		UG/KG	1
Aroclor 1260	6.5	38.6	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	75%
Tetrachloro-m-xylene	42-94	69%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	VWR-006-02-EBT	ARDL Lab No.:	301101-02
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	15.8	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	8.8	39.2	ND		UG/KG	1
Aroclor 1221	16	79.6	ND		UG/KG	1
Aroclor 1232	9.9	39.2	ND		UG/KG	1
Aroclor 1242	11	39.2	ND		UG/KG	1
Aroclor 1248	7.4	39.2	ND		UG/KG	1
Aroclor 1254	5.1	39.2	ND		UG/KG	1
Aroclor 1260	6.6	39.2	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	79%
Tetrachloro-m-xylene	42-94	73%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	VWR-008-02-EBT	ARDL Lab No.:	301101-04
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	15.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	8.8	39.1	ND		UG/KG	1
Aroclor 1221	16	79.4	ND		UG/KG	1
Aroclor 1232	9.9	39.1	ND		UG/KG	1
Aroclor 1242	11	39.1	ND		UG/KG	1
Aroclor 1248	7.4	39.1	ND		UG/KG	1
Aroclor 1254	5.1	39.1	ND		UG/KG	1
Aroclor 1260	6.5	39.1	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	77%
Tetrachloro-m-xylene	42-94	75%

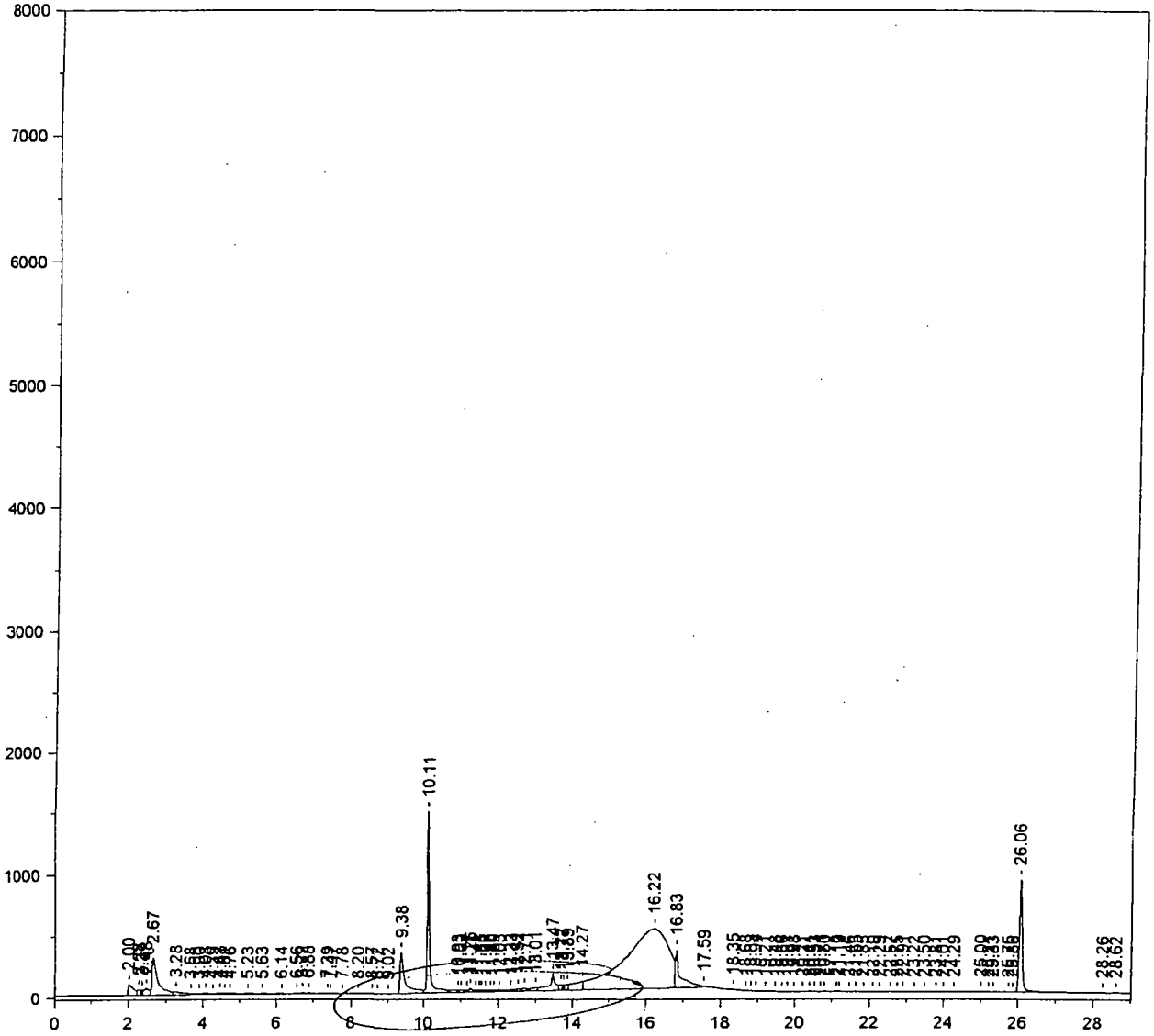
Surrogate recoveries marked with '*' indicates they are outside standard limits.

PCB's-8082

ARDL Report No. 301101
Volume 5

50000

— H:\CP2\HP2\M0919.0039.RAW 301101-01 B8068 VWR-005-02-EBT



Primary Column

Before reintegration
excess area under peak
BT
9/20/2

50012

Sample Name = **301101-01 B8068 VWR-005-02-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

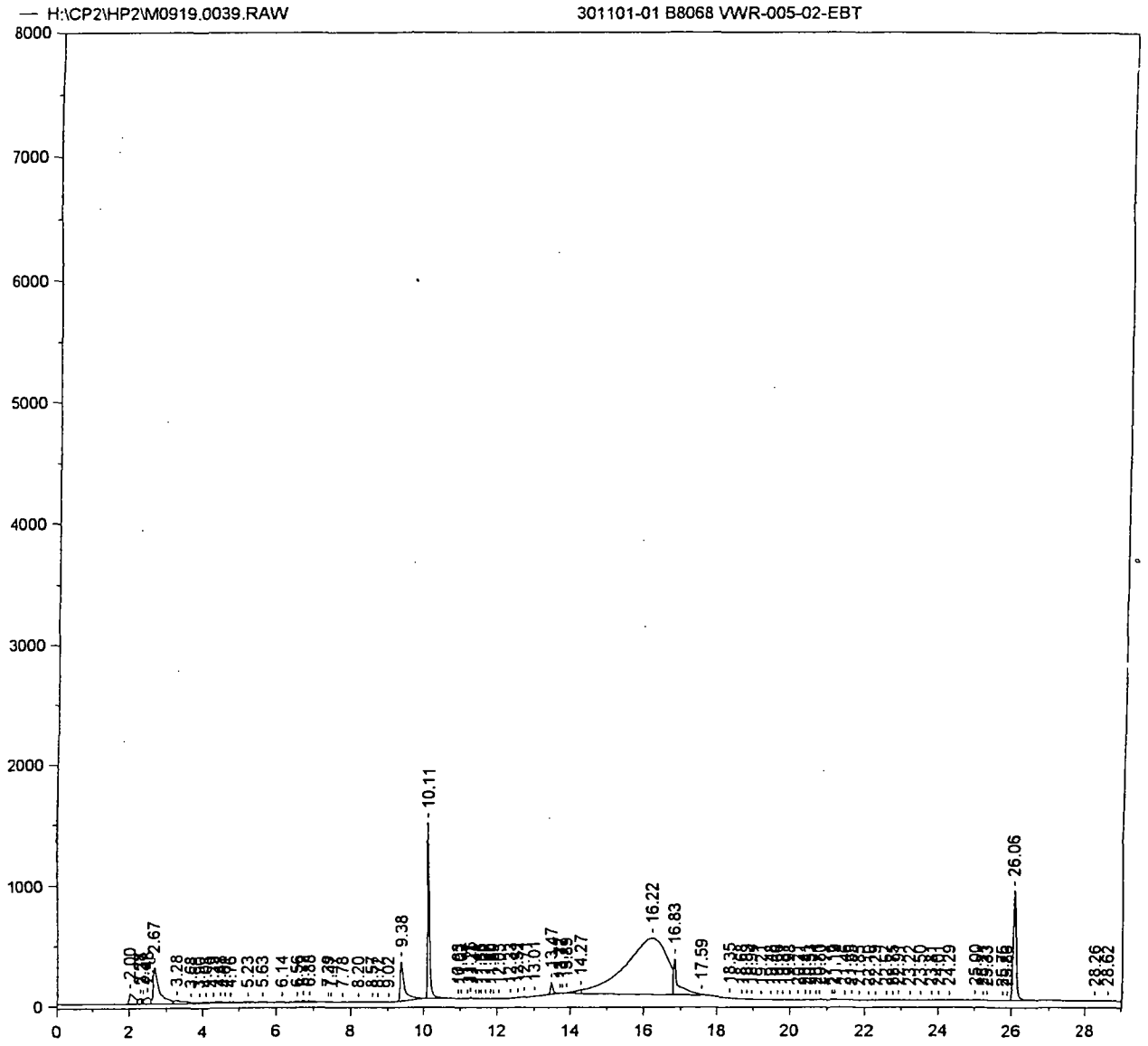
Raw File Name = **H:\CP2\HP2\M0919.0039.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/20/02 8:51:49 AM
Method Version = 618
Calibration Version = 9

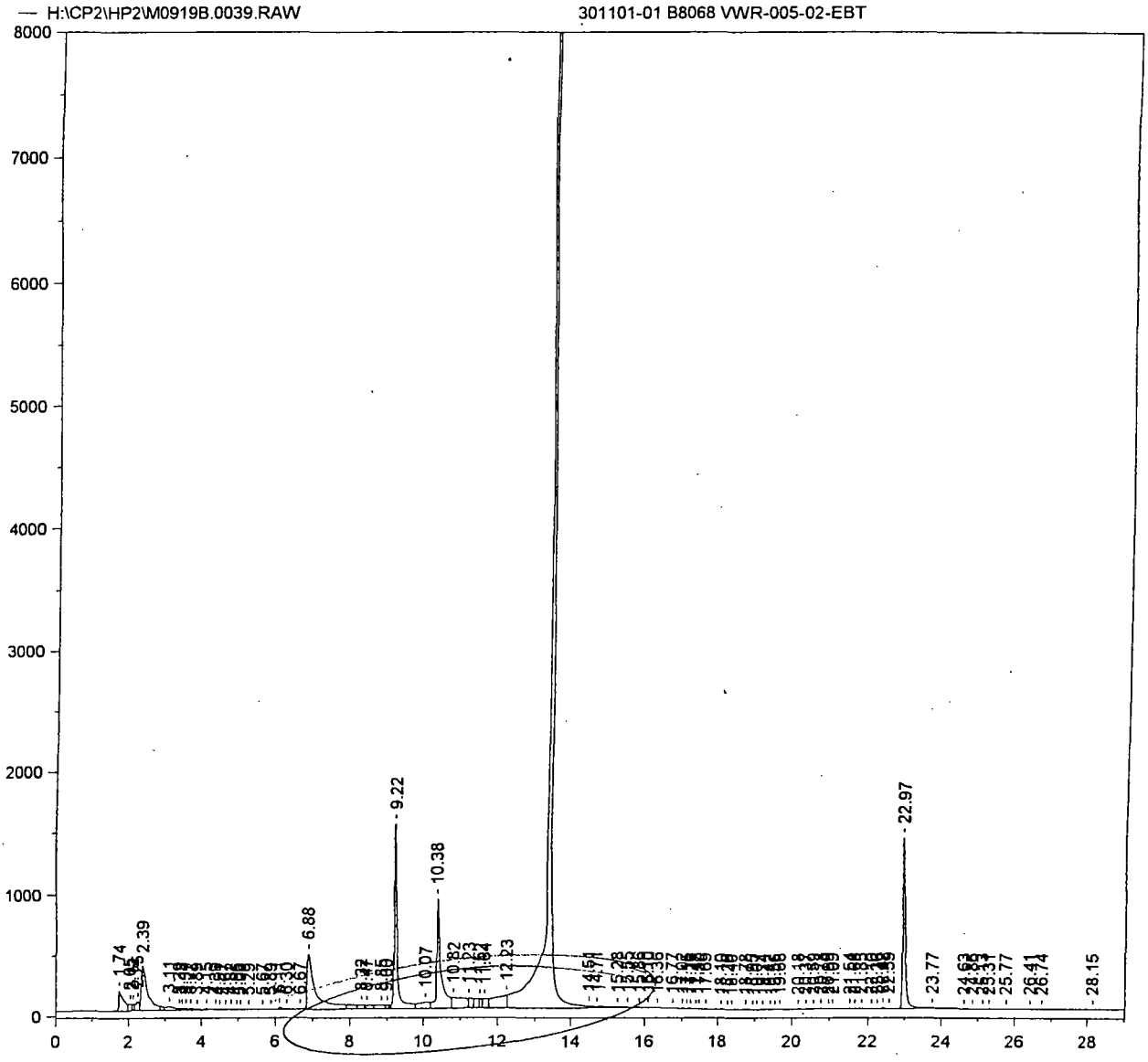
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	860643	1.181	BV	0.18
2	2.28		0.00	0.000	306095	0.420	VV	0.08
3	2.37		0.00	0.000	111033	0.152	VV	0.03
4	2.48		0.00	0.000	532743	0.731	VV	0.09
5	2.67		0.00	0.000	3570575	4.898	VV	0.13
6	3.28		0.00	0.000	493182	0.677	VV	0.17
7	3.68		0.00	0.000	108329	0.149	VV	0.09
8	3.90		0.00	0.000	145309	0.199	VV	0.14
9	4.08		0.00	0.000	152033	0.209	VV	0.08
10	4.29		0.00	0.000	125834	0.173	VV	0.11
11	4.48		0.00	0.000	136825	0.188	VV	0.09
12	4.61		0.00	0.000	58225	0.080	VV	0.05
13	4.76		0.00	0.000	207396	0.284	VV	0.17
14	5.23		0.00	0.000	217827	0.299	VV	0.24
15	5.63		0.00	0.000	179452	0.246	VV	0.25
16	6.14		0.00	0.000	175187	0.240	VV	0.25
17	6.56		0.00	0.000	126737	0.174	VV	0.20
18	6.72		0.00	0.000	93540	0.128	VV	0.06
19	6.88		0.00	0.000	159054	0.218	VV	0.19
20	7.39		0.00	0.000	76264	0.105	VV	0.15
21	7.47		0.00	0.000	46243	0.063	VV	0.09
22	7.78		0.00	0.000	84255	0.116	VV	0.18
23	8.20		0.00	0.000	58945	0.081	VV	0.19
24	8.57		0.00	0.000	35170	0.048	VV	0.11
25	8.72		0.00	0.000	15099	0.021	VB	0.09
26	9.02		0.00	0.000	17763	0.024	BB	0.19
27	9.38		0.00	0.000	3322060	4.557	BV	0.10
28	10.11	CL4XYL	0.81	10.335	6358278	8.722	VV	0.05
29	10.93		0.00	0.000	67383	0.092	VV	0.04
30	11.02		0.00	0.000	142708	0.196	VV	0.08
31	11.17		0.00	0.000	102980	0.141	VV	0.06
32	11.26		0.00	0.000	228186	0.313	VV	0.05
33	11.41		0.00	0.000	57636	0.079	VV	0.04
34	11.48		0.00	0.000	62947	0.086	VV	0.06
35	11.56	AR1016#1	0.38	4.820	67272	0.092	VV	0.04
36	11.67		0.00	0.000	134447	0.184	VV	0.06
37	11.80		0.00	0.000	62993	0.086	VV	0.04
38	11.89		0.00	0.000	49675	0.068	VV	0.05
39	12.03		0.00	0.000	114029	0.156	VV	0.10
40	12.33		0.00	0.000	197099	0.270	VV	0.08
41	12.52		0.00	0.000	209921	0.288	VV	0.12
42	12.71	AR1016#2	0.75	9.569	238178	0.327	VV	0.06
43	13.01		0.00	0.000	312191	0.428	VV	0.07
44	13.47		0.00	0.000	1697343	2.328	VV	0.07
45	13.72		0.00	0.000	263625	0.362	VV	0.05
46	13.77		0.00	0.000	161769	0.222	VV	0.05
47	13.89	AR1016#3	0.71	9.021	345074	0.473	VV	0.06
48	14.27	AR1016#4	4.38	55.728	1378148	1.890	VV	0.14
49	16.22		0.00	0.000	40036828	54.920	VV	1.17
50	16.83		0.00	0.000	3420270	4.692	VV	0.09
51	17.59		0.00	0.000	100652	0.138	VB	0.10
52	18.35		0.00	0.000	3859	0.005	BB	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.68		0.00	0.000	1461	0.002	BV	0.06
54	18.83	AR1260#2	0.01	0.073	2494	0.003	VB	0.06
55	18.94		0.00	0.000	4649	0.006	BB	0.07
56	19.21		0.00	0.000	8377	0.011	BB	0.09
57	19.48		0.00	0.000	4143	0.006	BB	0.05
58	19.66		0.00	0.000	12562	0.017	BV	0.08
59	19.81	AR1260#3	0.02	0.290	7537	0.010	VB	0.09
60	19.98		0.00	0.000	5619	0.008	BB	0.06
61	20.21		0.00	0.000	9357	0.013	BV	0.05
62	20.41		0.00	0.000	14489	0.020	VV	0.05
63	20.53		0.00	0.000	11597	0.016	VV	0.07
64	20.71		0.00	0.000	8945	0.012	VV	0.07
65	20.80		0.00	0.000	28930	0.040	VV	0.06
66	21.12	AR1260#4	0.02	0.281	17416	0.024	VV	0.06
67	21.19		0.00	0.000	30552	0.042	VV	0.08
68	21.46		0.00	0.000	9401	0.013	VV	0.10
69	21.65		0.00	0.000	22842	0.031	VV	0.08
70	21.85		0.00	0.000	10178	0.014	VV	0.05
71	22.10	AR1260#5	0.03	0.361	15181	0.021	VV	0.10
72	22.29		0.00	0.000	15084	0.021	VV	0.11
73	22.57		0.00	0.000	6059	0.008	VV	0.09
74	22.75		0.00	0.000	8762	0.012	VV	0.08
75	22.91		0.00	0.000	22982	0.032	VV	0.07
76	23.22		0.00	0.000	3902	0.005	VV	0.07
77	23.50		0.00	0.000	8188	0.011	VV	0.07
78	23.81		0.00	0.000	3645	0.005	VV	0.08
79	24.01		0.00	0.000	2362	0.003	VB	0.12
80	24.29		0.00	0.000	812	0.001	BB	0.09
81	25.00		0.00	0.000	27790	0.038	BB	0.07
82	25.21		0.00	0.000	2209	0.003	BV	0.07
83	25.33		0.00	0.000	1060	0.001	VB	0.06
84	25.75		0.00	0.000	430	0.001	BV	0.07
85	25.86		0.00	0.000	1202	0.002	VV	0.06
86	26.06	CL10BP	0.75	9.522	5299255	7.269	VV	0.08
87	28.26		0.00	0.000	18329	0.025	VV	0.25
88	28.62		0.00	0.000	23119	0.032	VB	0.40

Total Area = 7.290022E+07 Total Height = 4977498 Total Amount = 7.859298



after reintegration
RST
9/20/02



Before reintegration
excess area under peak
AT
9/20/2

Sample Name = **301101-01 B8068 VWR-005-02-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

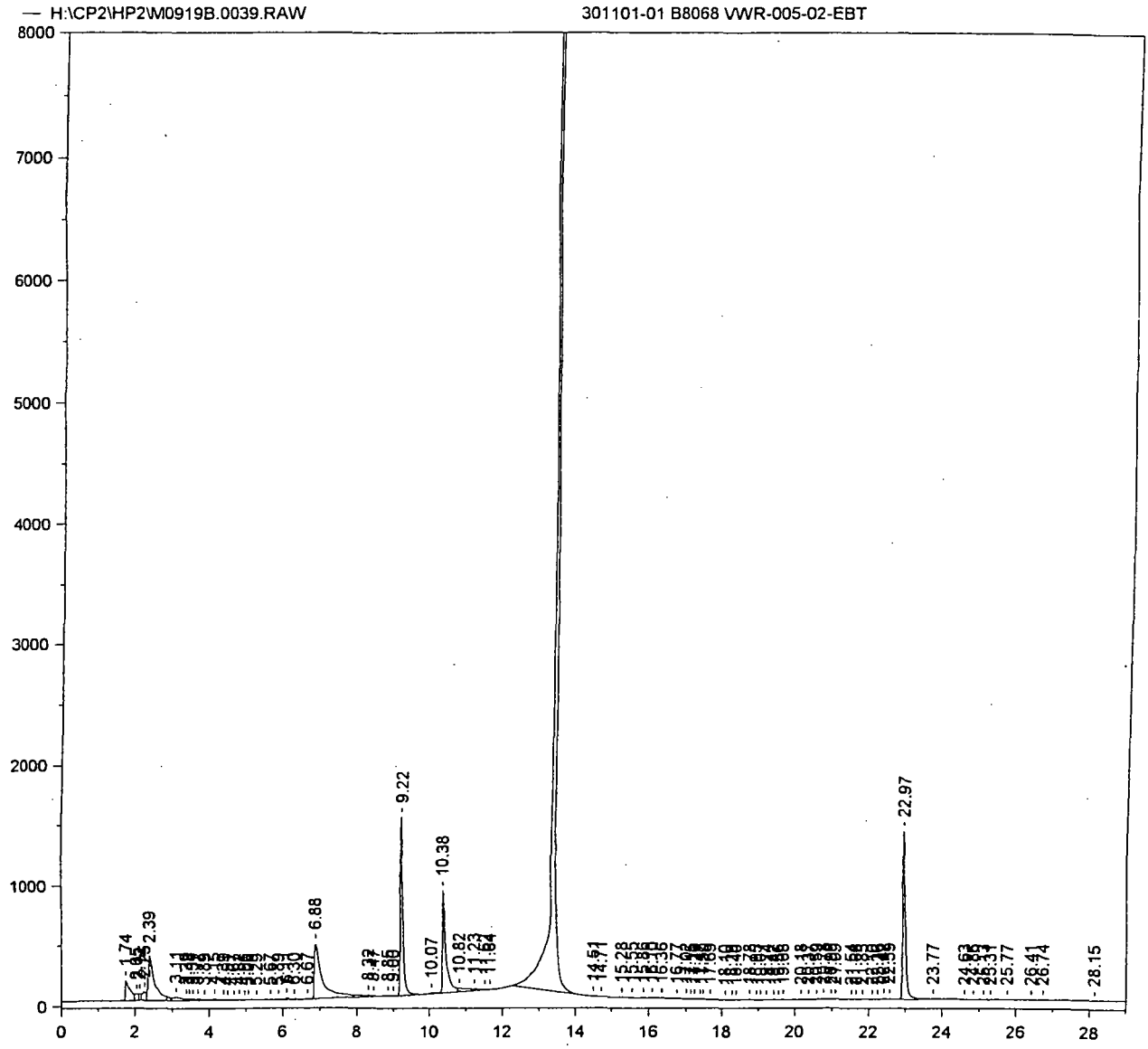
Raw File Name = **H:\CP2\HP2\M0919B.0039.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/20/02 8:51:49 AM
Method Version = 567
Calibration Version = 5

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	1514440	1.116	BV	0.15
2	2.05		0.00	0.000	346465	0.255	VV	0.08
3	2.12		0.00	0.000	226868	0.167	VV	0.05
4	2.25		0.00	0.000	556723	0.410	VV	0.09
5	2.39		0.00	0.000	4444396	3.274	VV	0.14
6	3.11		0.00	0.000	525257	0.387	VV	0.26
7	3.39		0.00	0.000	70040	0.052	VV	0.06
8	3.48		0.00	0.000	72756	0.054	VV	0.05
9	3.57		0.00	0.000	73498	0.054	VV	0.06
10	3.72		0.00	0.000	110781	0.082	VV	0.12
11	3.89		0.00	0.000	78029	0.057	VV	0.13
12	4.15		0.00	0.000	143855	0.106	VV	0.19
13	4.39		0.00	0.000	28989	0.021	VV	0.07
14	4.51		0.00	0.000	35430	0.026	VV	0.12
15	4.67		0.00	0.000	11485	0.008	VV	0.07
16	4.82		0.00	0.000	33729	0.025	VV	0.10
17	4.96		0.00	0.000	10990	0.008	VV	0.06
18	5.06		0.00	0.000	13777	0.010	VB	0.13
19	5.29		0.00	0.000	3158	0.002	BB	0.12
20	5.67		0.00	0.000	9878	0.007	BV	0.15
21	5.89		0.00	0.000	8485	0.006	VB	0.15
22	6.11		0.00	0.000	82855	0.061	BV	0.07
23	6.30		0.00	0.000	42684	0.031	VV	0.08
24	6.67		0.00	0.000	31466	0.023	VV	0.12
25	6.88		0.00	0.000	7419274	5.465	VV	0.17
26	8.32		0.00	0.000	408127	0.301	VV	0.13
27	8.47		0.00	0.000	390016	0.287	VV	0.11
28	8.85		0.00	0.000	565673	0.417	VV	0.22
29	9.00		0.00	0.000	206581	0.152	VV	0.06
30	9.22	CL4XYL	0.80	0.180	8563822	6.308	VV	0.07
31	10.07		0.00	0.000	1143066	0.842	VV	0.19
32	10.38	AR1016#1	31.45	7.042	7419968	5.466	VV	0.08
33	10.82		0.00	0.000	2186422	1.611	VV	0.15
34	11.23		0.00	0.000	742629	0.547	VV	0.10
35	11.52		0.00	0.000	369654	0.272	VV	0.04
36	11.64		0.00	0.000	854191	0.629	VV	0.16
37	12.23		0.00	0.000	2629706	1.937	VV	0.18
38	13.42	AR1016#5	413.55	92.600	86127704	63.445	VV	0.07
39	14.51		0.00	0.000	188994	0.139	VV	0.11
40	14.71		0.00	0.000	280888	0.207	VV	0.25
41	15.28		0.00	0.000	106526	0.078	VV	0.22
42	15.55		0.00	0.000	37967	0.028	VV	0.09
43	15.86		0.00	0.000	56043	0.041	VV	0.17
44	16.10		0.00	0.000	14848	0.011	VB	0.05
45	16.36		0.00	0.000	12399	0.009	BB	0.19
46	16.77	AR1260#2	0.02	0.005	10152	0.007	BV	0.09
47	17.02		0.00	0.000	8204	0.006	VV	0.06
48	17.15		0.00	0.000	7217	0.005	VB	0.07
49	17.26		0.00	0.000	2886	0.002	BV	0.08
50	17.42		0.00	0.000	6366	0.005	VV	0.05
51	17.50		0.00	0.000	14950	0.011	VV	0.08
52	17.69		0.00	0.000	16241	0.012	VB	0.12

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.10		0.00	0.000	16133	0.012	BV	0.10
54	18.29	AR1260#3	0.03	0.006	14402	0.011	VV	0.09
55	18.40		0.00	0.000	2077	0.002	VB	0.07
56	18.78		0.00	0.000	25175	0.019	BV	0.06
57	18.95		0.00	0.000	4604	0.003	VV	0.05
58	19.07		0.00	0.000	2082	0.002	VB	0.06
59	19.24		0.00	0.000	5456	0.004	BV	0.06
60	19.42		0.00	0.000	3998	0.003	VV	0.10
61	19.56	AR1260#4	0.01	0.002	12494	0.009	VV	0.06
62	19.68		0.00	0.000	12864	0.009	VB	0.05
63	20.18		0.00	0.000	25205	0.019	BV	0.13
64	20.37		0.00	0.000	5883	0.004	VV	0.07
65	20.59		0.00	0.000	23077	0.017	VV	0.06
66	20.78		0.00	0.000	25945	0.019	VV	0.06
67	20.99		0.00	0.000	6772	0.005	VV	0.09
68	21.09		0.00	0.000	3989	0.003	VB	0.04
69	21.54		0.00	0.000	6847	0.005	BV	0.08
70	21.66	AR1260#5	0.02	0.003	4466	0.003	VV	0.07
71	21.85		0.00	0.000	5646	0.004	VV	0.10
72	22.10		0.00	0.000	2730	0.002	VV	0.05
73	22.26		0.00	0.000	7090	0.005	VV	0.11
74	22.42		0.00	0.000	39582	0.029	VV	0.07
75	22.59		0.00	0.000	9693	0.007	VB	0.07
76	22.97	CL10BP	0.72	0.162	7179912	5.289	SBB	0.07
77	23.77		0.00	0.000	3642	0.003	TBB	0.10
78	24.63		0.00	0.000	2138	0.002	BB	0.12
79	24.86		0.00	0.000	2035	0.001	BV	0.14
80	25.13		0.00	0.000	2227	0.002	VV	0.11
81	25.31		0.00	0.000	2940	0.002	VB	0.12
82	25.77		0.00	0.000	7510	0.006	BB	0.19
83	26.41		0.00	0.000	696	0.001	BB	0.08
84	26.74		0.00	0.000	9221	0.007	BB	0.16
85	28.15		0.00	0.000	8509	0.006	BB	0.22

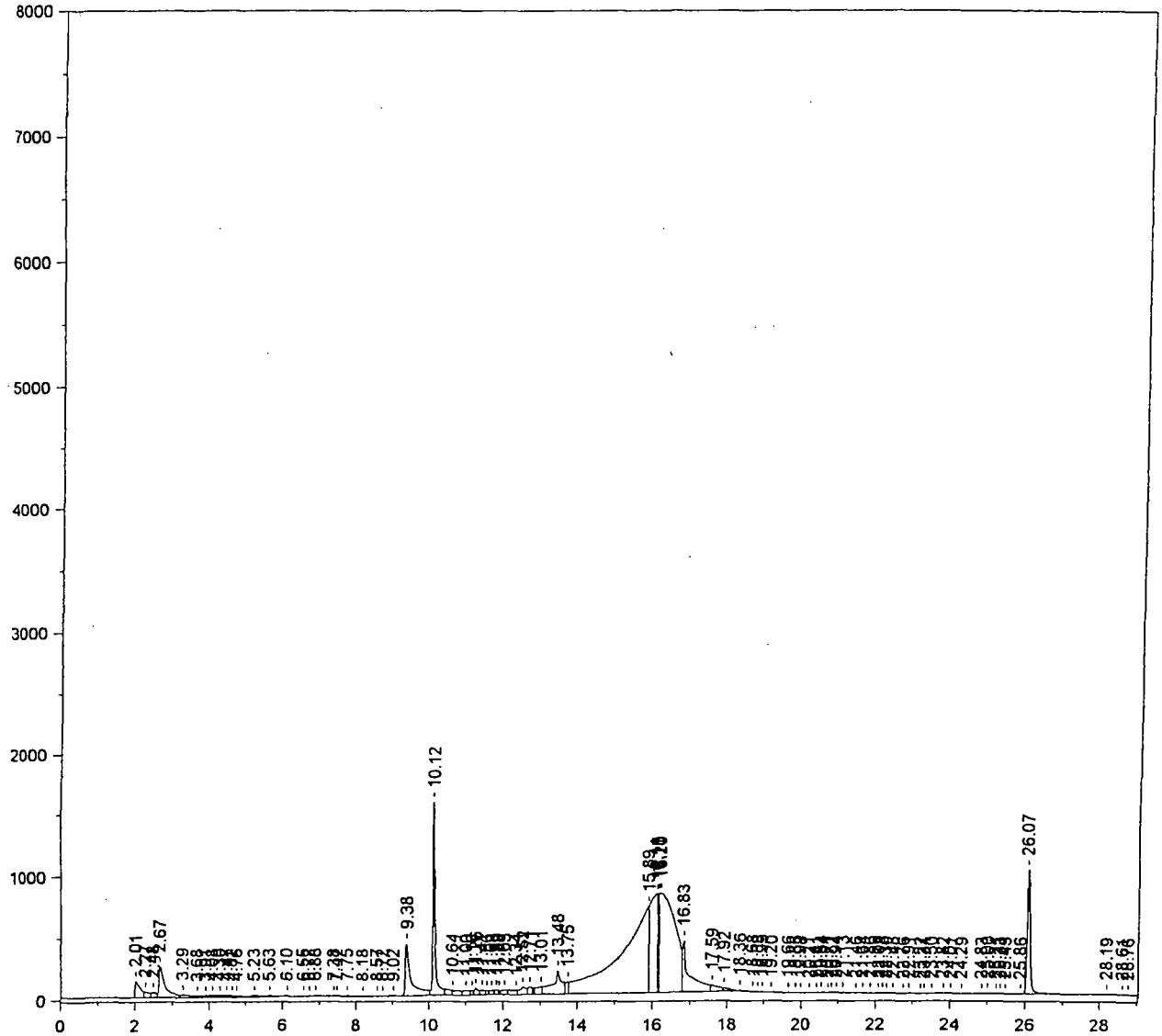
Total Area = 1.357516E+08 Total Height = 2.041644E+07 Total Amount = 446.6059



After integration
DST
9/20/02

50022

— H:\CP2\HP2\M0919.0043.RAW 301101-02 B8068 VWR-006-02-EBT



Primary Column

Before reintegration
review area under peaks
BT
9/20/2

50028

Sample Name = **301101-02 B8068 VWR-006-02-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0043.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/20/02 11:26:54 AM
Method Version = 618
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.01		0.00	0.000	1264242	1.125	BV	0.16
2	2.27		0.00	0.000	448839	0.399	VV	0.09
3	2.48		0.00	0.000	372849	0.332	VV	0.09
4	2.67		0.00	0.000	2892731	2.574	VV	0.13
5	3.29		0.00	0.000	414145	0.369	VV	0.19
6	3.68		0.00	0.000	90593	0.081	VV	0.09
7	3.91		0.00	0.000	131793	0.117	VV	0.17
8	4.08		0.00	0.000	112917	0.100	VV	0.08
9	4.30		0.00	0.000	132916	0.118	VV	0.14
10	4.47		0.00	0.000	100680	0.090	VV	0.08
11	4.62		0.00	0.000	52245	0.046	VV	0.06
12	4.76		0.00	0.000	189945	0.169	VV	0.18
13	5.23		0.00	0.000	209099	0.186	VV	0.23
14	5.63		0.00	0.000	163737	0.146	VV	0.24
15	6.10		0.00	0.000	157789	0.140	VV	0.26
16	6.55		0.00	0.000	118336	0.105	VV	0.20
17	6.72		0.00	0.000	52172	0.046	VV	0.06
18	6.88		0.00	0.000	138145	0.123	VV	0.18
19	7.38		0.00	0.000	68956	0.061	VV	0.17
20	7.47		0.00	0.000	34626	0.031	VV	0.08
21	7.75		0.00	0.000	91889	0.082	VV	0.10
22	8.18		0.00	0.000	42619	0.038	VV	0.19
23	8.57		0.00	0.000	29149	0.026	VV	0.09
24	8.72		0.00	0.000	13568	0.012	VB	0.07
25	9.02		0.00	0.000	16510	0.015	BB	0.12
26	9.38		0.00	0.000	4546751	4.046	BV	0.10
27	10.12	CL4XYL	0.85	19.831	6625921	5.896	VV	0.05
28	10.64		0.00	0.000	619003	0.551	VV	0.14
29	11.00		0.00	0.000	502923	0.447	VV	0.11
30	11.16		0.00	0.000	172888	0.154	VV	0.06
31	11.26		0.00	0.000	416299	0.370	VV	0.05
32	11.41		0.00	0.000	346330	0.308	VV	0.05
33	11.56	AR1016#1	0.93	21.874	165812	0.148	VV	0.04
34	11.68		0.00	0.000	318703	0.284	VV	0.06
35	11.80		0.00	0.000	217536	0.194	VV	0.05
36	11.88		0.00	0.000	111945	0.100	VV	0.03
37	12.03		0.00	0.000	414488	0.369	VV	0.13
38	12.34		0.00	0.000	595890	0.530	VV	0.12
39	12.52		0.00	0.000	807247	0.718	VV	0.17
40	12.71	AR1016#2	1.49	35.007	473214	0.421	VV	0.06
41	13.01		0.00	0.000	754438	0.671	VV	0.08
42	13.48		0.00	0.000	3262636	2.903	VV	0.08
43	13.75		0.00	0.000	623672	0.555	VV	0.07
44	15.89		0.00	0.000	35971332	32.007	VV	0.54
45	16.11		0.00	0.000	9955333	8.858	VV	0.14
46	16.15		0.00	0.000	1748551	1.556	VV	0.02
47	16.20		0.00	0.000	23416764	20.836	VV	0.41
48	16.83		0.00	0.000	5676418	5.051	VV	0.09
49	17.59		0.00	0.000	722876	0.643	VV	0.11
50	17.92		0.00	0.000	365065	0.325	VV	0.18
51	18.36		0.00	0.000	32324	0.029	VB	0.08
52	18.68		0.00	0.000	4227	0.004	BV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.83	AR1260#2	0.02	0.379	6979	0.006	VB	0.07
54	18.95		0.00	0.000	9205	0.008	BB	0.06
55	19.20		0.00	0.000	16092	0.014	BB	0.11
56	19.66		0.00	0.000	29479	0.026	BV	0.08
57	19.86	AR1260#3	0.04	1.000	14132	0.013	VV	0.05
58	19.98		0.00	0.000	12489	0.011	VB	0.07
59	20.21		0.00	0.000	6504	0.006	BV	0.06
60	20.41		0.00	0.000	6703	0.006	VV	0.05
61	20.54		0.00	0.000	21629	0.019	VV	0.06
62	20.71		0.00	0.000	13020	0.012	VV	0.05
63	20.82		0.00	0.000	19075	0.017	VV	0.07
64	20.94		0.00	0.000	9607	0.009	VV	0.06
65	21.13	AR1260#4	0.08	1.817	61155	0.054	VV	0.09
66	21.46		0.00	0.000	8778	0.008	VV	0.06
67	21.64		0.00	0.000	23039	0.020	VV	0.08
68	21.86		0.00	0.000	9759	0.009	VV	0.05
69	22.09	AR1260#5	0.05	1.083	24714	0.022	VV	0.10
70	22.18		0.00	0.000	9325	0.008	VV	0.06
71	22.30		0.00	0.000	10092	0.009	VV	0.11
72	22.48		0.00	0.000	5174	0.005	VV	0.06
73	22.76		0.00	0.000	9187	0.008	VV	0.07
74	22.91		0.00	0.000	21235	0.019	VB	0.07
75	23.22		0.00	0.000	3782	0.003	BV	0.08
76	23.31		0.00	0.000	3695	0.003	VV	0.08
77	23.50		0.00	0.000	4443	0.004	VV	0.12
78	23.82		0.00	0.000	7267	0.006	VV	0.06
79	24.01		0.00	0.000	3798	0.003	VB	0.13
80	24.29		0.00	0.000	1730	0.002	BB	0.07
81	24.83		0.00	0.000	541	0.000	BV	0.07
82	25.00		0.00	0.000	34427	0.031	VV	0.07
83	25.21		0.00	0.000	7018	0.006	VV	0.07
84	25.33		0.00	0.000	2432	0.002	VV	0.07
85	25.45		0.00	0.000	3981	0.004	VB	0.18
86	25.86		0.00	0.000	1359	0.001	BV	0.07
87	26.07	CL10BP	0.81	19.010	5745812	5.113	VB	0.08
88	28.19		0.00	0.000	517	0.000	BB	0.08
89	28.61		0.00	0.000	4555	0.004	BV	0.13
90	28.76		0.00	0.000	4320	0.004	VB	0.14

Total Area = 1.123861E+08 Total Height = 8206395 Total Amount = 4.268284

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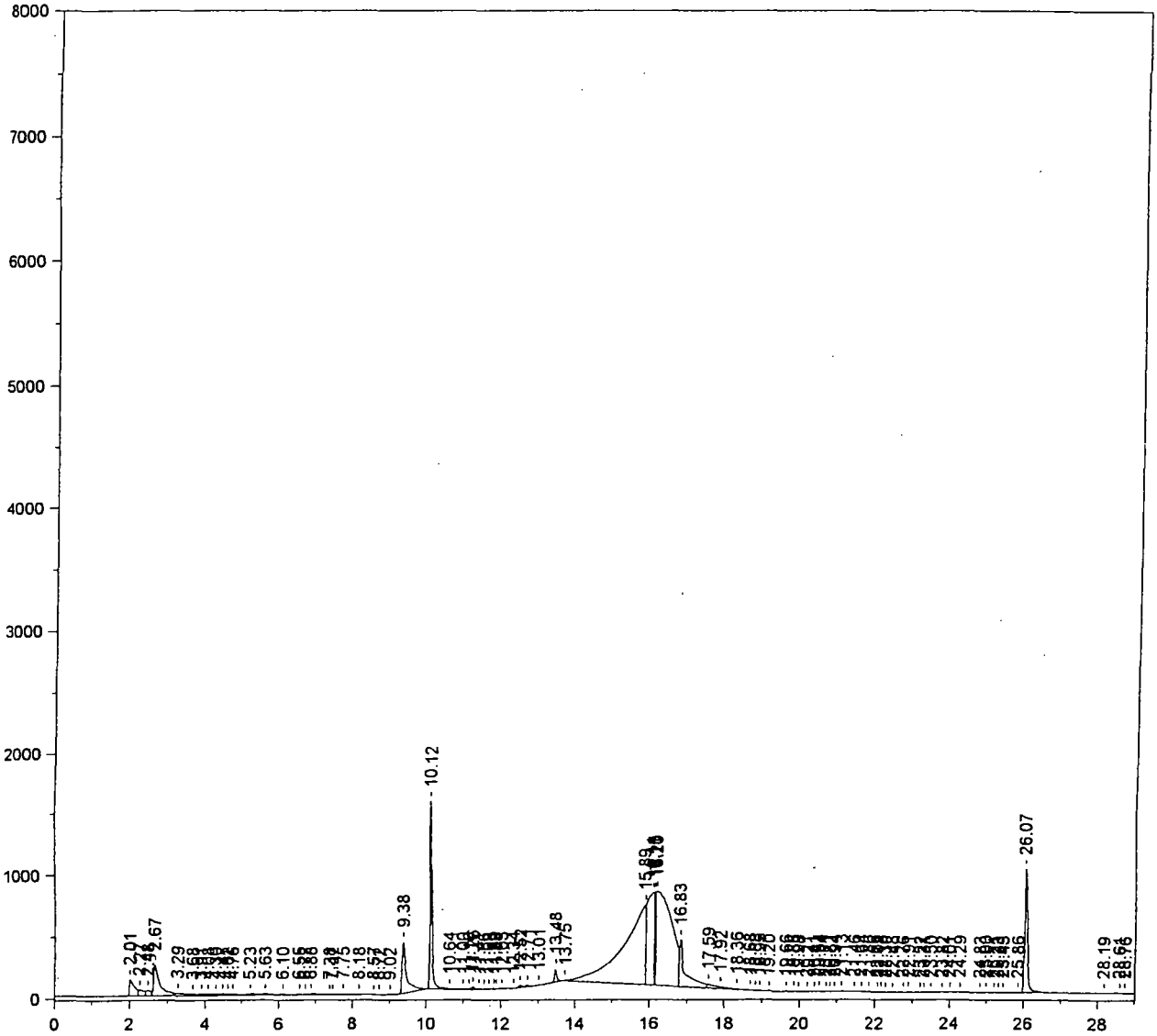

After reintegration
BT
9/20/02

50031

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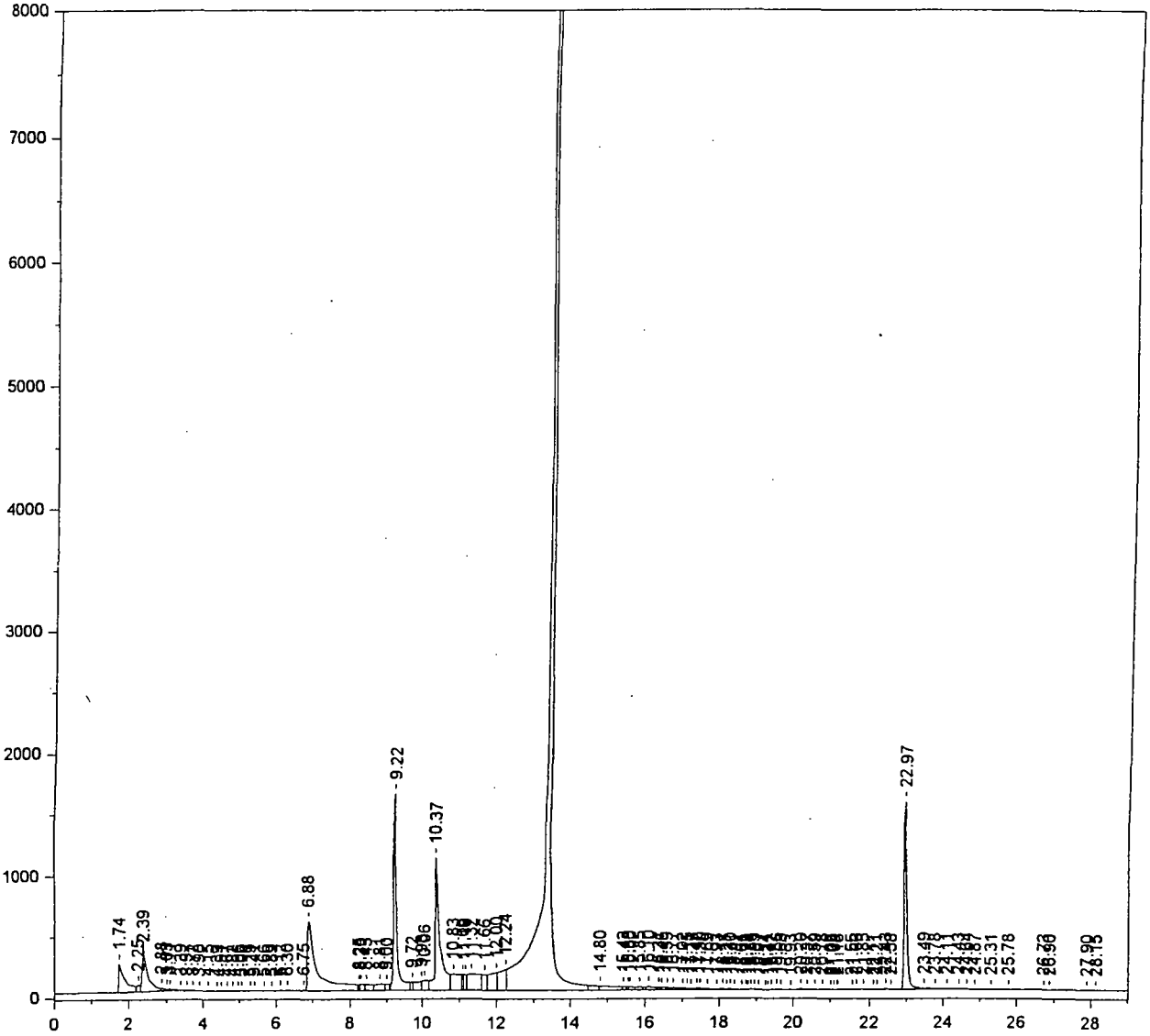


Before reintegration
Excess area under peaks
AST 9/20/02

50035

Sample Name = **301101-02 B8068 VWR-006-02-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0043.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/20/02 11:26:54 AM
Method Version = 567
Calibration Version = 5

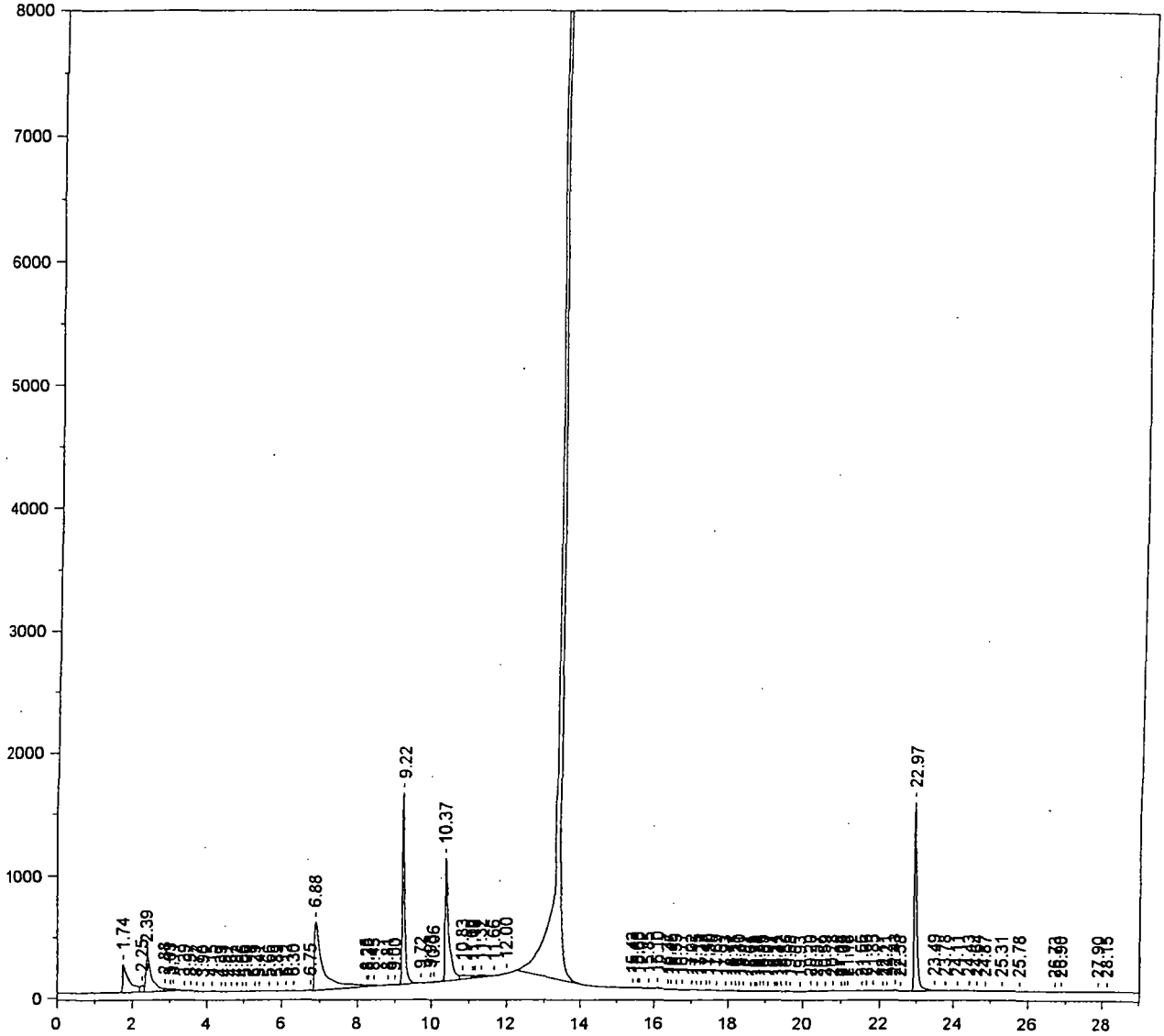
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	2705091	1.548	BV	0.14
2	2.25		0.00	0.000	337489	0.193	VV	0.07
3	2.39		0.00	0.000	3391131	1.941	VV	0.14
4	2.88		0.00	0.000	133162	0.076	VV	0.08
5	3.03		0.00	0.000	49375	0.028	VV	0.04
6	3.11		0.00	0.000	155620	0.089	VV	0.20
7	3.39		0.00	0.000	4934	0.003	VB	0.05
8	3.57		0.00	0.000	1127	0.001	BB	0.06
9	3.72		0.00	0.000	11252	0.006	BB	0.13
10	3.90		0.00	0.000	5308	0.003	BB	0.12
11	4.15		0.00	0.000	33223	0.019	BV	0.11
12	4.39		0.00	0.000	8563	0.005	VV	0.06
13	4.51		0.00	0.000	8645	0.005	VV	0.12
14	4.67		0.00	0.000	1682	0.001	VV	0.06
15	4.82		0.00	0.000	14895	0.009	VV	0.10
16	4.96		0.00	0.000	6016	0.003	VV	0.07
17	5.06		0.00	0.000	7357	0.004	VV	0.13
18	5.29		0.00	0.000	4742	0.003	VV	0.11
19	5.41		0.00	0.000	5088	0.003	VB	0.11
20	5.66		0.00	0.000	9458	0.005	BV	0.15
21	5.89		0.00	0.000	12197	0.007	VV	0.13
22	6.12		0.00	0.000	46387	0.027	VV	0.08
23	6.30		0.00	0.000	46862	0.027	VV	0.08
24	6.75		0.00	0.000	104056	0.060	VV	0.09
25	6.88		0.00	0.000	10903907	6.240	VV	0.17
26	8.25		0.00	0.000	166107	0.095	VV	0.03
27	8.30		0.00	0.000	386411	0.221	VV	0.07
28	8.45		0.00	0.000	706751	0.404	VV	0.13
29	8.81		0.00	0.000	979390	0.560	VV	0.23
30	9.00		0.00	0.000	348695	0.200	VV	0.05
31	9.22	CL4XYL	0.89	0.155	9426043	5.394	VV	0.07
32	9.72		0.00	0.000	318174	0.182	VV	0.07
33	9.98		0.00	0.000	1032667	0.591	VV	0.06
34	10.06		0.00	0.000	944191	0.540	VV	0.16
35	10.37	AR1016#1	40.92	7.179	9653172	5.524	VV	0.08
36	10.83		0.00	0.000	2503023	1.432	VV	0.08
37	11.09		0.00	0.000	306343	0.175	VV	0.02
38	11.16		0.00	0.000	637369	0.365	VV	0.07
39	11.32	AR1016#2	7.04	1.236	3054843	1.748	VV	0.18
40	11.66		0.00	0.000	1147496	0.657	VV	0.12
41	12.00		0.00	0.000	2364731	1.353	VV	0.13
42	12.24		0.00	0.000	2329405	1.333	VV	0.08
43	13.43	AR1016#5	519.17	91.094	108122344	61.877	VV	0.08
44	14.80		0.00	0.000	1188768	0.680	VV	0.22
45	15.43		0.00	0.000	184879	0.106	VV	0.06
46	15.55		0.00	0.000	110041	0.063	VV	0.04
47	15.60		0.00	0.000	241223	0.138	VV	0.09
48	15.85		0.00	0.000	313736	0.180	VV	0.11
49	16.10		0.00	0.000	452229	0.259	VV	0.07
50	16.37		0.00	0.000	122855	0.070	VV	0.05
51	16.45	AR1260#1	0.64	0.112	170914	0.098	VV	0.08
52	16.59		0.00	0.000	137477	0.079	VV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.77	AR1260#2	0.35	0.061	172424	0.099	VV	0.06
54	17.02		0.00	0.000	115687	0.066	VV	0.07
55	17.15		0.00	0.000	83744	0.048	VV	0.06
56	17.27		0.00	0.000	83298	0.048	VV	0.08
57	17.42		0.00	0.000	68307	0.039	VV	0.06
58	17.50		0.00	0.000	99732	0.057	VV	0.07
59	17.69		0.00	0.000	110813	0.063	VV	0.14
60	17.93		0.00	0.000	21945	0.013	VV	0.04
61	18.11		0.00	0.000	80272	0.046	VV	0.10
62	18.21		0.00	0.000	17762	0.010	VV	0.05
63	18.30	AR1260#3	0.08	0.013	39126	0.022	VV	0.06
64	18.41		0.00	0.000	23003	0.013	VV	0.07
65	18.61		0.00	0.000	6470	0.004	VV	0.05
66	18.73		0.00	0.000	8539	0.005	VV	0.05
67	18.78		0.00	0.000	8374	0.005	VV	0.03
68	18.85		0.00	0.000	17939	0.010	VV	0.05
69	18.95		0.00	0.000	11269	0.006	VV	0.05
70	19.07		0.00	0.000	5472	0.003	VB	0.07
71	19.24		0.00	0.000	2266	0.001	BV	0.05
72	19.31		0.00	0.000	3165	0.002	VV	0.05
73	19.42		0.00	0.000	9822	0.006	VV	0.06
74	19.56	AR1260#4	0.03	0.005	33257	0.019	VV	0.05
75	19.68		0.00	0.000	8091	0.005	VB	0.06
76	19.93		0.00	0.000	4946	0.003	BB	0.15
77	20.20		0.00	0.000	40533	0.023	BV	0.11
78	20.37		0.00	0.000	17111	0.010	VV	0.06
79	20.59		0.00	0.000	12152	0.007	VV	0.06
80	20.78		0.00	0.000	35119	0.020	VV	0.07
81	21.02		0.00	0.000	13715	0.008	VV	0.10
82	21.09		0.00	0.000	3697	0.002	VV	0.05
83	21.18		0.00	0.000	2872	0.002	VB	0.05
84	21.55		0.00	0.000	4822	0.003	BV	0.09
85	21.66	AR1260#5	0.04	0.008	12619	0.007	VV	0.06
86	21.85		0.00	0.000	13890	0.008	VV	0.07
87	22.11		0.00	0.000	1604	0.001	VV	0.06
88	22.21		0.00	0.000	8904	0.005	VV	0.10
89	22.43		0.00	0.000	46790	0.027	VV	0.06
90	22.58		0.00	0.000	5864	0.003	VB	0.08
91	22.97	CL10BP	0.79	0.138	7798051	4.463	BV	0.07
92	23.49		0.00	0.000	154949	0.089	VV	0.19
93	23.78		0.00	0.000	72401	0.041	VV	0.12
94	24.11		0.00	0.000	29690	0.017	VV	0.12
95	24.43		0.00	0.000	13556	0.008	VV	0.13
96	24.64		0.00	0.000	7703	0.004	VV	0.14
97	24.87		0.00	0.000	1330	0.001	VB	0.08
98	25.31		0.00	0.000	6557	0.004	BB	0.14
99	25.78		0.00	0.000	9812	0.006	BB	0.16
100	26.73		0.00	0.000	1882	0.001	BV	0.11
101	26.90		0.00	0.000	5515	0.003	VB	0.25
102	27.90		0.00	0.000	1110	0.001	BV	0.14
103	28.15		0.00	0.000	22985	0.013	VB	0.27

Total Area = 1.747377E+08 Total Height = 2.2063E+07 Total Amount = 569.9204

50037

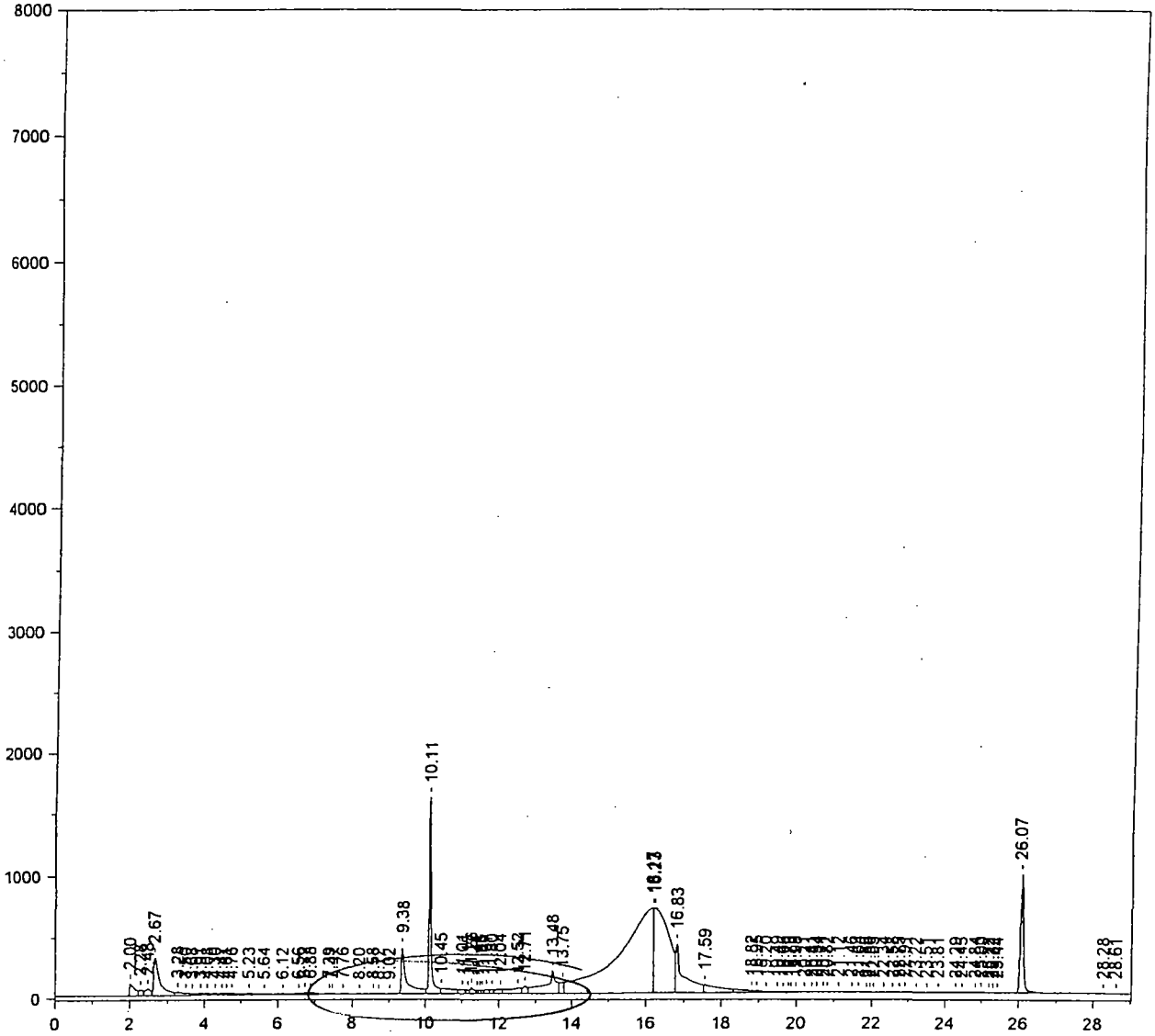
— H:\CP2\HP2\M0919B.0043.RAW 301101-02 B8068 VWR-006-02-EBT



After reintegration
RDT
9/20/02

50038

— H:\CP2\HP2\M0919.0045.RAW 301101-04 B8068 VWR-008-02-EBT



Primary Column

Before reintegration
excess area under peaks
RDT
9/23/2

50043

Sample Name = **301101-04 B8068 VWR-008-02-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0045.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

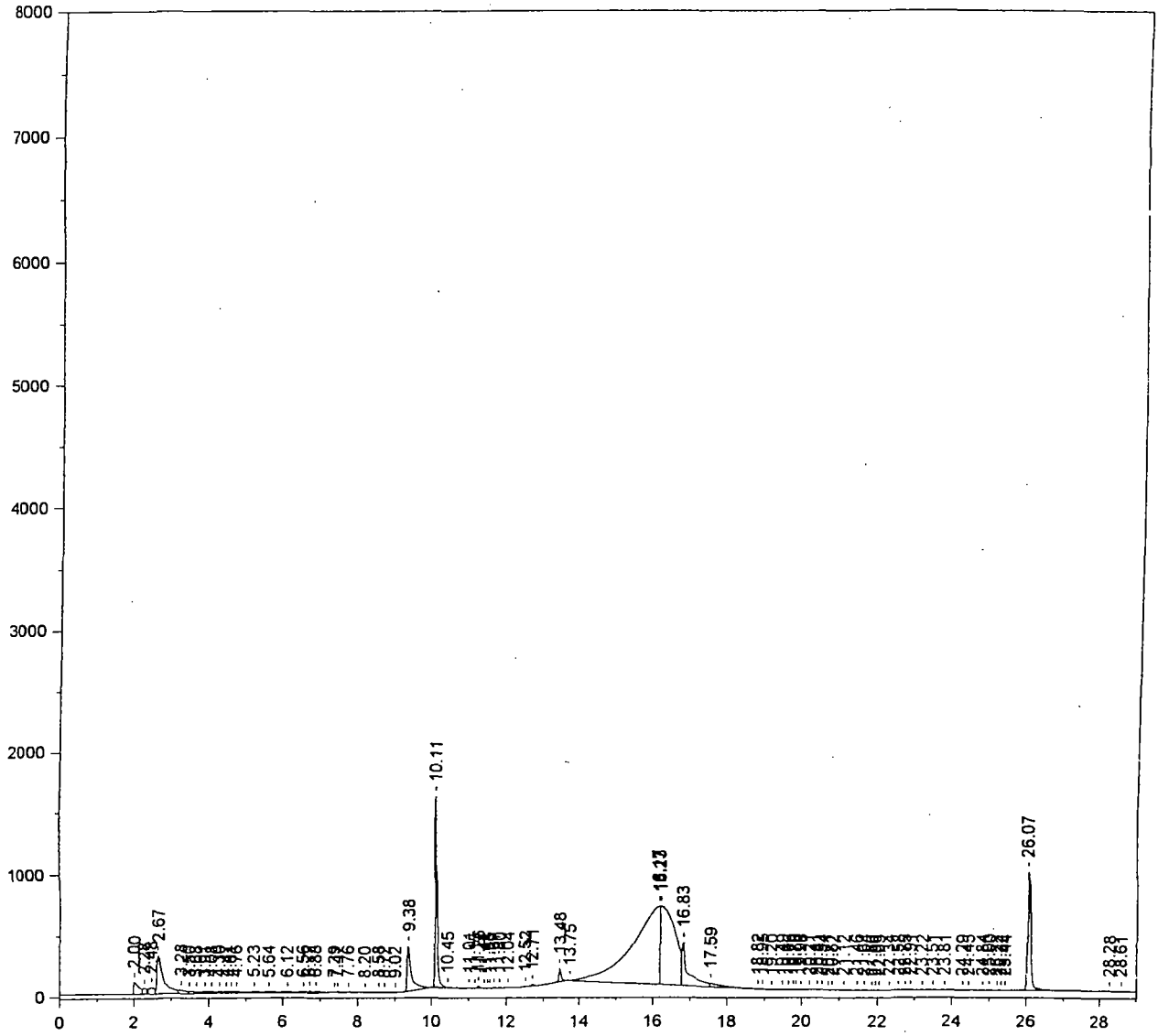
Date Taken (end) = 9/20/02 12:44:21 PM
Method Version = 618
Calibration Version = 13

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	955585	0.898	BV	0.17
2	2.28		0.00	0.000	337230	0.317	VV	0.08
3	2.48		0.00	0.000	541185	0.509	VV	0.08
4	2.67		0.00	0.000	3681480	3.460	VV	0.13
5	3.28		0.00	0.000	368229	0.346	VV	0.15
6	3.50		0.00	0.000	173609	0.163	VV	0.13
7	3.68		0.00	0.000	118738	0.112	VV	0.08
8	3.91		0.00	0.000	174848	0.164	VV	0.17
9	4.08		0.00	0.000	157626	0.148	VV	0.08
10	4.30		0.00	0.000	159013	0.149	VV	0.14
11	4.47		0.00	0.000	150438	0.141	VV	0.07
12	4.61		0.00	0.000	66459	0.062	VV	0.05
13	4.76		0.00	0.000	252582	0.237	VV	0.18
14	5.23		0.00	0.000	276307	0.260	VV	0.24
15	5.64		0.00	0.000	225137	0.212	VV	0.24
16	6.12		0.00	0.000	218527	0.205	VV	0.25
17	6.56		0.00	0.000	160793	0.151	VV	0.21
18	6.72		0.00	0.000	92139	0.087	VV	0.06
19	6.88		0.00	0.000	192076	0.181	VV	0.20
20	7.39		0.00	0.000	94034	0.088	VV	0.16
21	7.47		0.00	0.000	54302	0.051	VV	0.08
22	7.76		0.00	0.000	105652	0.099	VV	0.17
23	8.20		0.00	0.000	69313	0.065	VV	0.20
24	8.58		0.00	0.000	39033	0.037	VV	0.11
25	8.72		0.00	0.000	20491	0.019	VB	0.09
26	9.02		0.00	0.000	26096	0.025	BV	0.15
27	9.38		0.00	0.000	4025580	3.783	VV	0.10
28	10.11	CL4XYL	0.85	18.544	6654189	6.254	VV	0.05
29	10.45		0.00	0.000	1037635	0.975	VV	0.15
30	11.01		0.00	0.000	420315	0.395	VV	0.11
31	11.15		0.00	0.000	200504	0.188	VV	0.08
32	11.26		0.00	0.000	413105	0.388	VV	0.05
33	11.41		0.00	0.000	151981	0.143	VV	0.04
34	11.48		0.00	0.000	153054	0.144	VV	0.04
35	11.55	AR1016#1	0.97	21.089	171680	0.161	VV	0.04
36	11.67		0.00	0.000	291909	0.274	VV	0.05
37	11.80		0.00	0.000	200954	0.189	VV	0.06
38	12.04		0.00	0.000	468364	0.440	VV	0.12
39	12.52		0.00	0.000	1251234	1.176	VV	0.15
40	12.71	AR1016#2	1.66	36.213	525714	0.494	VV	0.06
41	13.48		0.00	0.000	3987023	3.747	VV	0.08
42	13.75		0.00	0.000	807634	0.759	VV	0.10
43	16.17		0.00	0.000	42927216	40.345	VV	0.71
44	16.23		0.00	0.000	19586432	18.408	VV	0.39
45	16.83		0.00	0.000	6089270	5.723	VV	0.09
46	17.59		0.00	0.000	1904430	1.790	VV	0.28
47	18.82	AR1260#2	0.19	4.151	82158	0.077	VV	0.06
48	18.95		0.00	0.000	159721	0.150	VV	0.09
49	19.20		0.00	0.000	100880	0.095	VV	0.12
50	19.49		0.00	0.000	37863	0.036	VV	0.07
51	19.66		0.00	0.000	66507	0.063	VV	0.08
52	19.79		0.00	0.000	26255	0.025	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	19.85	AR1260#3	0.08	1.705	25878	0.024	VV	0.05
54	19.98		0.00	0.000	62842	0.059	VV	0.06
55	20.21		0.00	0.000	28647	0.027	VV	0.05
56	20.41		0.00	0.000	38015	0.036	VV	0.05
57	20.54		0.00	0.000	37922	0.036	VV	0.08
58	20.71		0.00	0.000	25123	0.024	VV	0.06
59	20.82		0.00	0.000	54221	0.051	VV	0.09
60	21.12	AR1260#4	0.07	1.425	51515	0.048	VV	0.12
61	21.46		0.00	0.000	13430	0.013	VV	0.12
62	21.64		0.00	0.000	18955	0.018	VV	0.13
63	21.86		0.00	0.000	1069	0.001	VV	0.04
64	21.96		0.00	0.000	294	0.000	VB	0.06
65	22.05	AR1260#5	0.00	0.030	727	0.001	BB	0.05
66	22.34		0.00	0.000	13045	0.012	BV	0.17
67	22.58		0.00	0.000	5838	0.005	VV	0.07
68	22.75		0.00	0.000	11916	0.011	VV	0.07
69	22.91		0.00	0.000	25333	0.024	VB	0.08
70	23.22		0.00	0.000	4624	0.004	BV	0.09
71	23.51		0.00	0.000	5328	0.005	VB	0.20
72	23.81		0.00	0.000	2127	0.002	BB	0.07
73	24.29		0.00	0.000	850	0.001	BV	0.12
74	24.45		0.00	0.000	2812	0.003	VB	0.26
75	24.84		0.00	0.000	1101	0.001	BV	0.09
76	25.00		0.00	0.000	34036	0.032	VV	0.07
77	25.22		0.00	0.000	3385	0.003	VV	0.07
78	25.32		0.00	0.000	2730	0.003	VV	0.06
79	25.44		0.00	0.000	4203	0.004	VB	0.21
80	26.07	CL10BP	0.77	16.844	5467398	5.138	BB	0.08
81	28.28		0.00	0.000	3053	0.003	BB	0.16
82	28.61		0.00	0.000	2392	0.002	BB	0.18

Total Area = 1.064014E+08 Total Height = 6466073 Total Amount = 4.583855

— H:\CP2\HP2\M0919.0045.RAW 301101-04 B8068 VWR-008-02-EBT



after reintegration
KDT
9/23/2

50047

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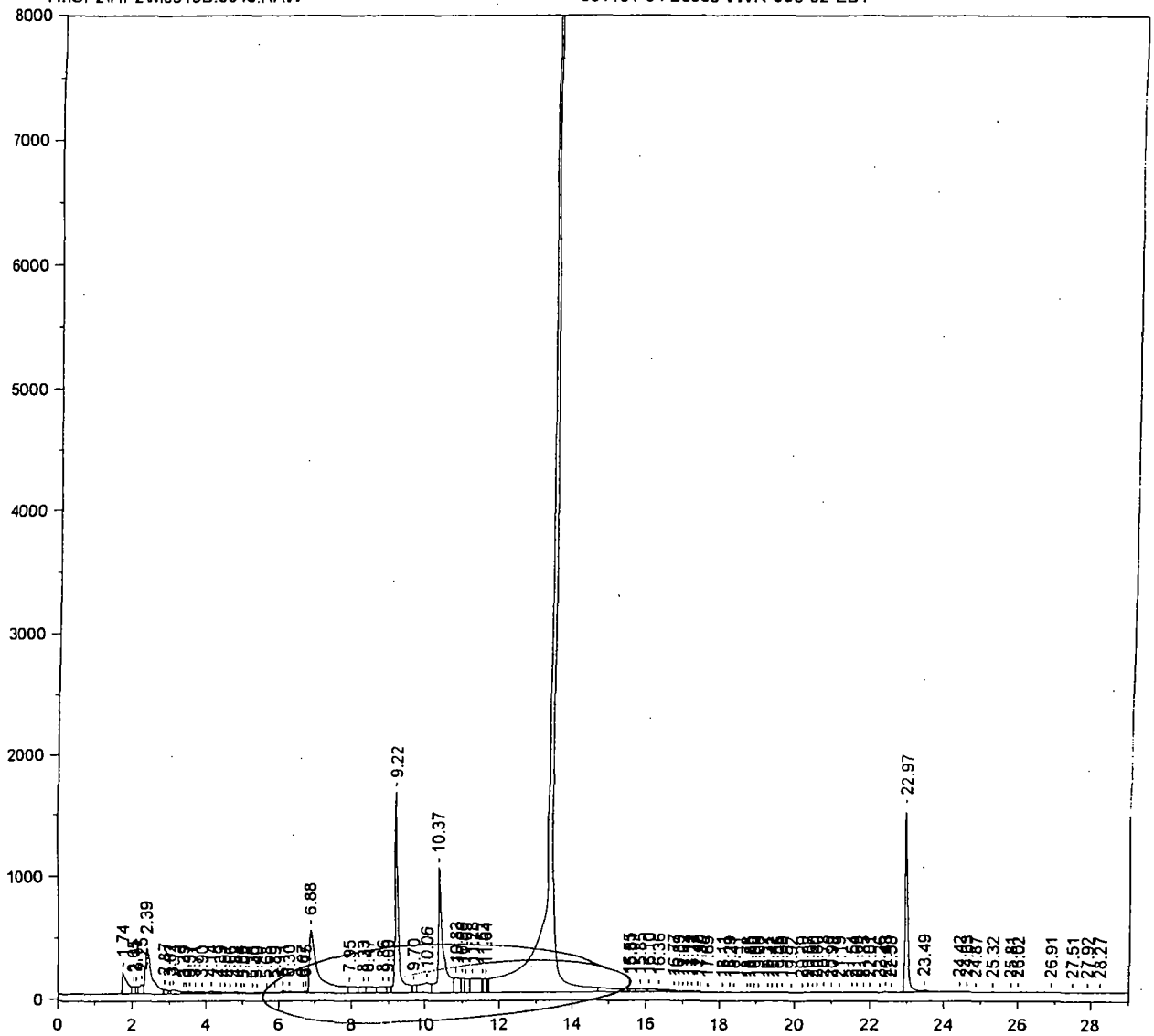

Before reintegration
excess area under peaks
RST
9/23/2

50051

Sample Name = **301101-04 B8068 VWR-008-02-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0045.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/20/02 12:44:21 PM
Method Version = 567
Calibration Version = 8

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	1652243	0.993	BV	0.14
2	2.05		0.00	0.000	355393	0.214	VV	0.07
3	2.11		0.00	0.000	251056	0.151	VV	0.05
4	2.25		0.00	0.000	567373	0.341	VV	0.08
5	2.39		0.00	0.000	4614086	2.774	VV	0.14
6	2.87		0.00	0.000	244288	0.147	VV	0.08
7	3.02		0.00	0.000	122349	0.074	VV	0.05
8	3.11		0.00	0.000	461763	0.278	VV	0.19
9	3.39		0.00	0.000	87552	0.053	VV	0.05
10	3.47		0.00	0.000	92568	0.056	VV	0.06
11	3.57		0.00	0.000	99110	0.060	VV	0.07
12	3.71		0.00	0.000	142299	0.086	VV	0.10
13	3.90		0.00	0.000	124625	0.075	VV	0.13
14	4.14		0.00	0.000	243912	0.147	VV	0.20
15	4.39		0.00	0.000	61405	0.037	VV	0.06
16	4.51		0.00	0.000	94958	0.057	VV	0.12
17	4.66		0.00	0.000	45053	0.027	VV	0.07
18	4.82		0.00	0.000	104489	0.063	VV	0.12
19	4.96		0.00	0.000	56553	0.034	VV	0.06
20	5.05		0.00	0.000	97805	0.059	VV	0.13
21	5.30		0.00	0.000	56279	0.034	VV	0.08
22	5.40		0.00	0.000	101857	0.061	VV	0.14
23	5.68		0.00	0.000	113121	0.068	VV	0.15
24	5.89		0.00	0.000	110880	0.067	VV	0.13
25	6.11		0.00	0.000	191054	0.115	VV	0.08
26	6.30		0.00	0.000	139128	0.084	VV	0.08
27	6.67		0.00	0.000	158667	0.095	VV	0.10
28	6.75		0.00	0.000	72299	0.043	VV	0.06
29	6.88		0.00	0.000	9107028	5.475	VV	0.16
30	7.95		0.00	0.000	858218	0.516	VV	0.15
31	8.33		0.00	0.000	612161	0.368	VV	0.15
32	8.47		0.00	0.000	838407	0.504	VV	0.16
33	8.86		0.00	0.000	841205	0.506	VV	0.22
34	9.00		0.00	0.000	430387	0.259	VV	0.06
35	9.22	CL4XYL	0.89	0.162	9449523	5.681	VV	0.07
36	9.70		0.00	0.000	430041	0.259	VV	0.08
37	10.06		0.00	0.000	1711234	1.029	VV	0.18
38	10.37	AR1016#1	38.34	6.979	9045985	5.438	VV	0.08
39	10.83		0.00	0.000	1393449	0.838	VV	0.09
40	10.99		0.00	0.000	773264	0.465	VV	0.08
41	11.09		0.00	0.000	944712	0.568	VV	0.08
42	11.28	AR1016#2	4.92	0.896	2135064	1.284	VV	0.21
43	11.53		0.00	0.000	225067	0.135	VV	0.02
44	11.64		0.00	0.000	820302	0.493	VV	0.08
45	13.43	AR1016#5	503.94	91.733	104951440	63.097	VV	0.08
46	15.55		0.00	0.000	102254	0.061	VV	0.03
47	15.61		0.00	0.000	210909	0.127	VV	0.09
48	15.85		0.00	0.000	492824	0.296	VV	0.16
49	16.10		0.00	0.000	374816	0.225	VV	0.07
50	16.36		0.00	0.000	400145	0.241	VV	0.19
51	16.77	AR1260#2	0.28	0.051	139447	0.084	VV	0.10
52	16.89		0.00	0.000	93796	0.056	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	17.02		0.00	0.000	102442	0.062	VV	0.09
54	17.14		0.00	0.000	70809	0.043	VV	0.06
55	17.27		0.00	0.000	91472	0.055	VV	0.09
56	17.42		0.00	0.000	46604	0.028	VV	0.04
57	17.50		0.00	0.000	96188	0.058	VV	0.08
58	17.69		0.00	0.000	126631	0.076	VV	0.16
59	18.11		0.00	0.000	54998	0.033	VV	0.11
60	18.29	AR1260#3	0.08	0.015	41157	0.025	VV	0.08
61	18.41		0.00	0.000	31841	0.019	VV	0.09
62	18.78		0.00	0.000	17156	0.010	VV	0.06
63	18.85		0.00	0.000	10762	0.006	VV	0.06
64	18.95		0.00	0.000	8955	0.005	VV	0.05
65	19.06		0.00	0.000	3001	0.002	VB	0.06
66	19.31		0.00	0.000	8488	0.005	BV	0.14
67	19.42		0.00	0.000	8490	0.005	VV	0.07
68	19.56	AR1260#4	0.01	0.002	14408	0.009	VV	0.05
69	19.68		0.00	0.000	8450	0.005	VV	0.05
70	19.92		0.00	0.000	25590	0.015	VV	0.19
71	20.20		0.00	0.000	47216	0.028	VV	0.16
72	20.37		0.00	0.000	21615	0.013	VV	0.08
73	20.50		0.00	0.000	19679	0.012	VV	0.06
74	20.60		0.00	0.000	30500	0.018	VV	0.08
75	20.78		0.00	0.000	77707	0.047	VV	0.06
76	20.99		0.00	0.000	43706	0.026	VV	0.09
77	21.19		0.00	0.000	47016	0.028	VV	0.17
78	21.54		0.00	0.000	35467	0.021	VV	0.11
79	21.66	AR1260#5	0.13	0.023	36513	0.022	VV	0.08
80	21.85		0.00	0.000	48944	0.029	VV	0.15
81	22.01		0.00	0.000	28886	0.017	VV	0.11
82	22.26		0.00	0.000	52424	0.032	VV	0.11
83	22.43		0.00	0.000	83525	0.050	VV	0.06
84	22.58		0.00	0.000	47903	0.029	VV	0.09
85	22.97	CL10BP	0.76	0.139	7592248	4.564	VV	0.07
86	23.49		0.00	0.000	359853	0.216	VV	0.25
87	24.42		0.00	0.000	31199	0.019	VV	0.13
88	24.63		0.00	0.000	25986	0.016	VV	0.14
89	24.87		0.00	0.000	17514	0.011	VV	0.17
90	25.32		0.00	0.000	3153	0.002	VB	0.07
91	25.81		0.00	0.000	14654	0.009	BV	0.21
92	26.02		0.00	0.000	24562	0.015	VV	0.22
93	26.91		0.00	0.000	11521	0.007	VV	0.26
94	27.51		0.00	0.000	4628	0.003	VB	0.29
95	27.92		0.00	0.000	1781	0.001	BV	0.17
96	28.27		0.00	0.000	13742	0.008	VB	0.20

Total Area = 1.663333E+08 Total Height = 2.18608E+07 Total Amount = 549.3521

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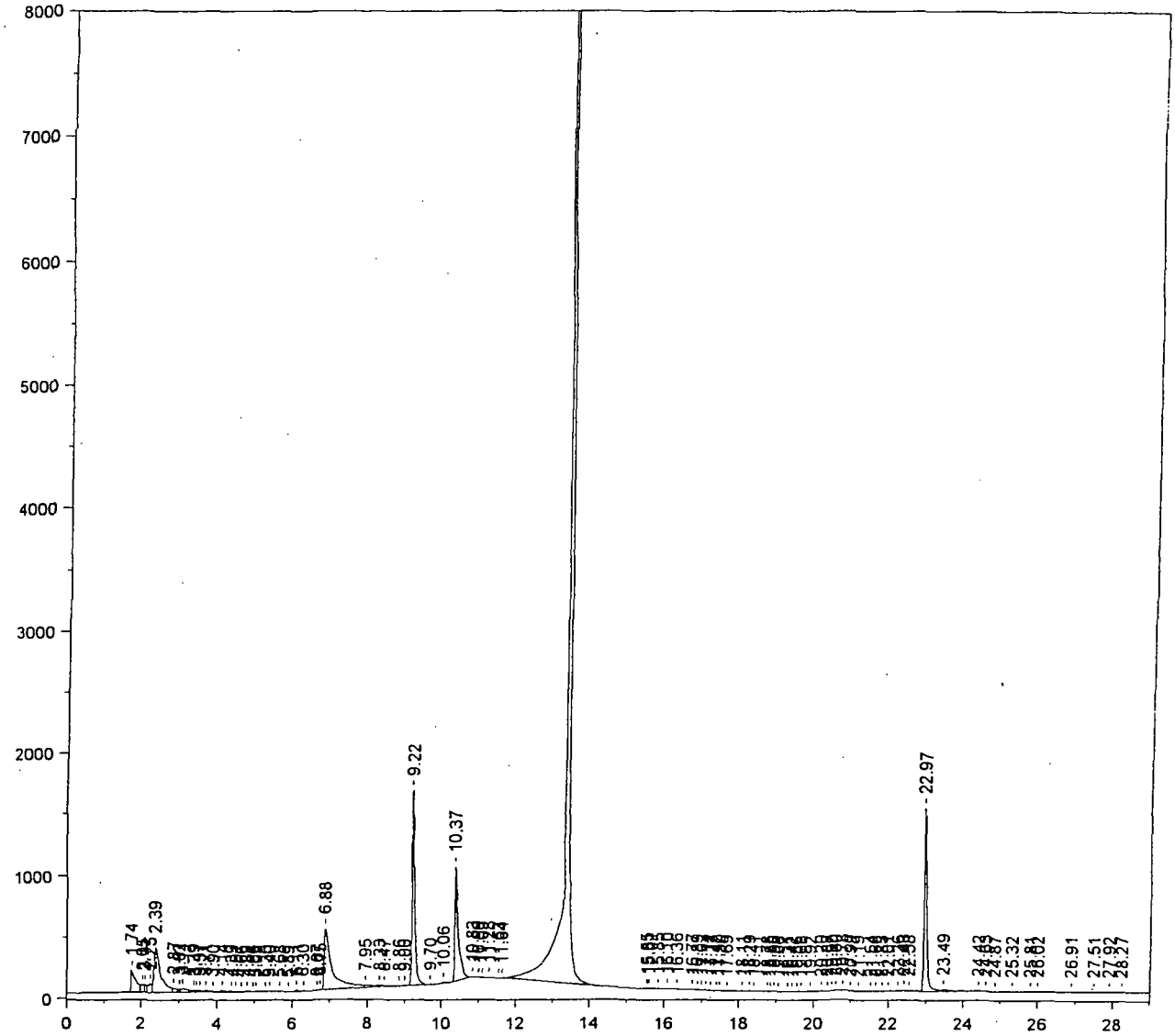
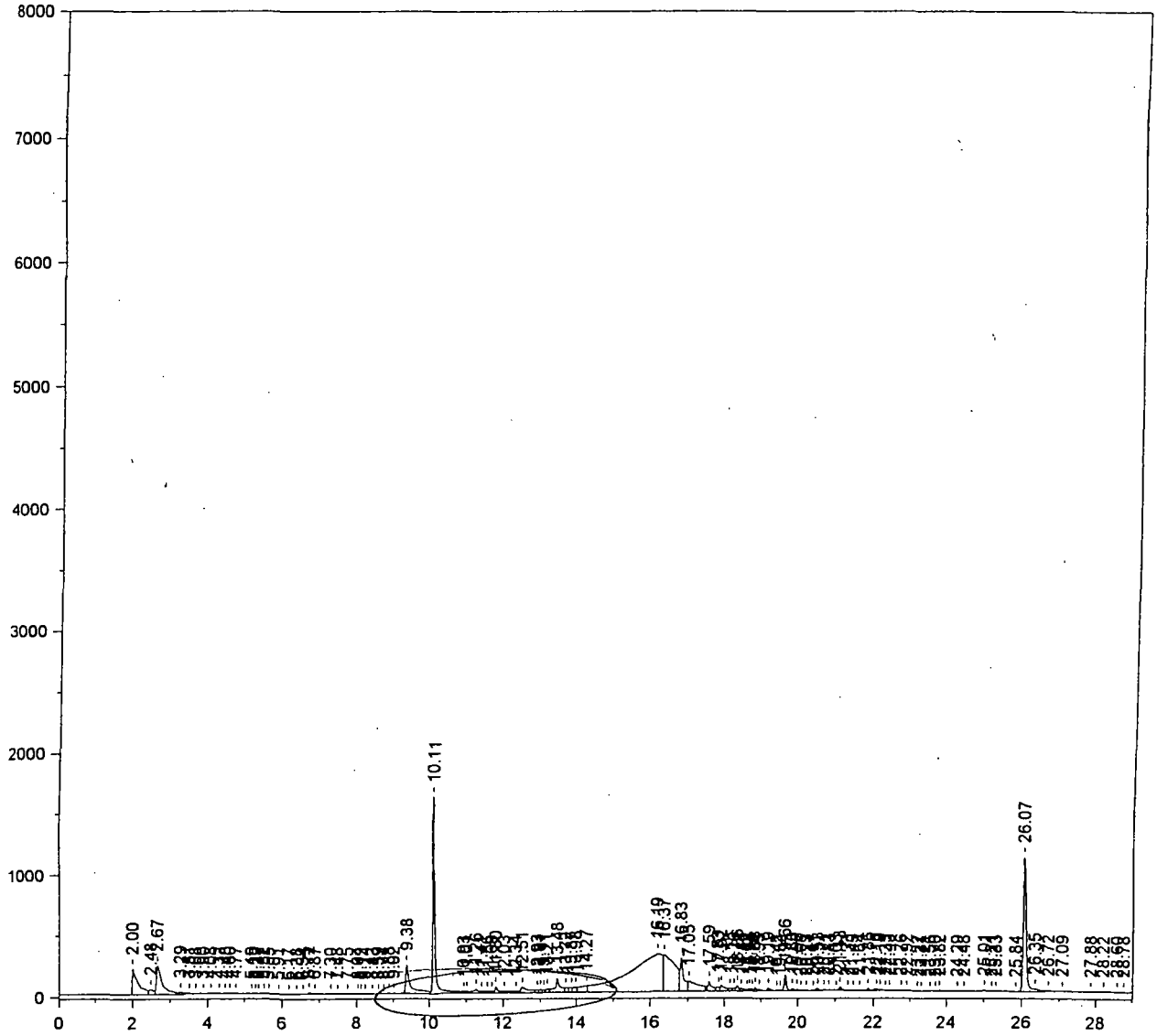


After reintegration
AST
9/23/02

50051



Primary Column

Before reintegration
excess area under peaks
BT
9/20/2

50060

Sample Name = **301101-05 B8068 FSS-007-05-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0041.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/20/02 10:09:21 AM
Method Version = 618
Calibration Version = 9

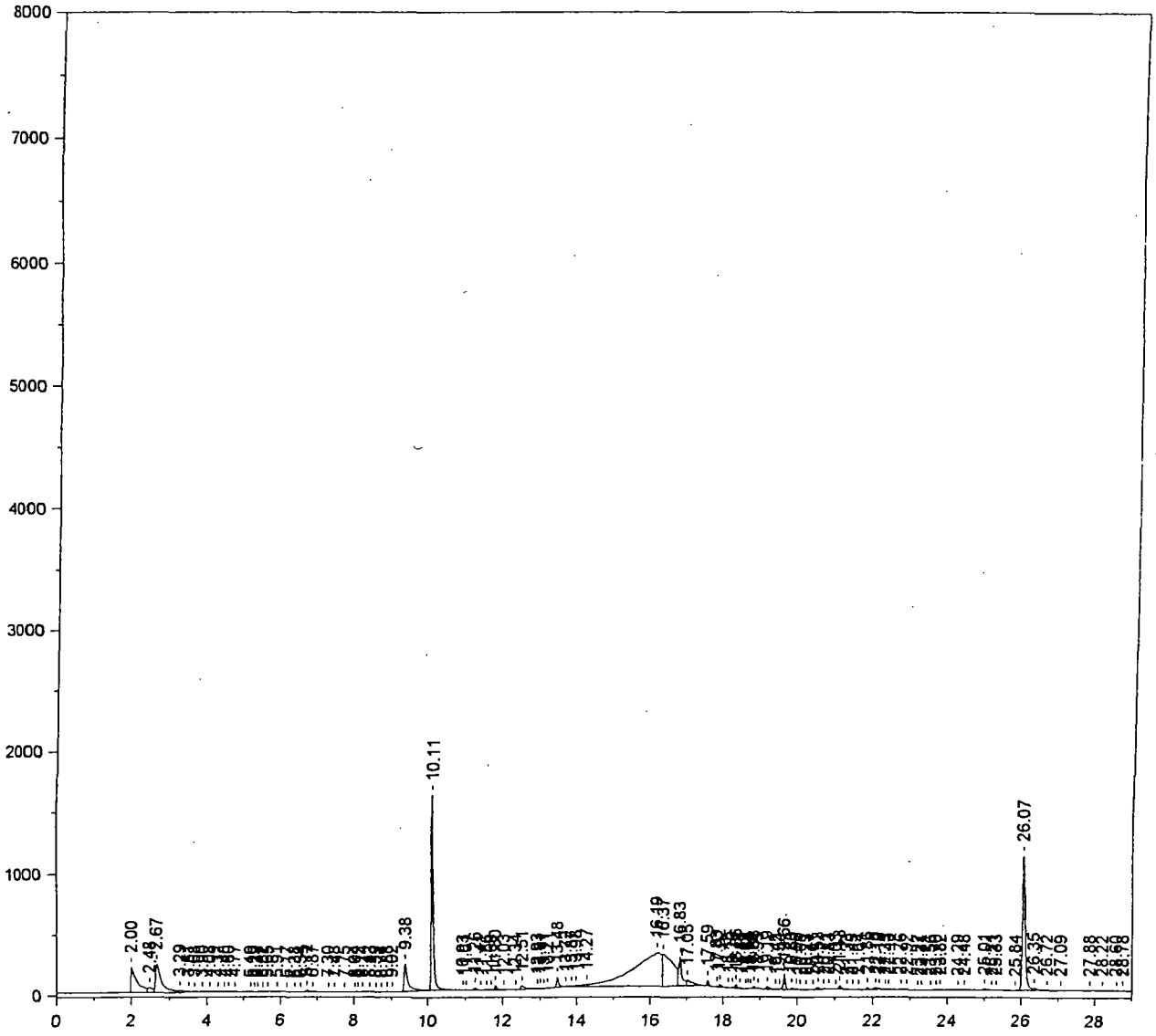
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	2266971	3.795	BV	0.14
2	2.48		0.00	0.000	323568	0.542	VV	0.11
3	2.67		0.00	0.000	2563700	4.292	VV	0.13
4	3.29		0.00	0.000	186427	0.312	VV	0.16
5	3.51		0.00	0.000	64275	0.108	VV	0.11
6	3.68		0.00	0.000	34353	0.058	VV	0.09
7	3.90		0.00	0.000	33638	0.056	VV	0.13
8	4.08		0.00	0.000	54724	0.092	VV	0.08
9	4.32		0.00	0.000	10933	0.018	VV	0.07
10	4.48		0.00	0.000	34764	0.058	VV	0.13
11	4.60		0.00	0.000	12297	0.021	VV	0.06
12	4.77		0.00	0.000	12770	0.021	VB	0.12
13	5.19		0.00	0.000	7242	0.012	BV	0.10
14	5.29		0.00	0.000	4881	0.008	VV	0.05
15	5.37		0.00	0.000	6858	0.011	VV	0.08
16	5.52		0.00	0.000	2734	0.005	VV	0.09
17	5.65		0.00	0.000	5102	0.009	VV	0.09
18	5.91		0.00	0.000	2940	0.005	VB	0.10
19	6.17		0.00	0.000	8231	0.014	BV	0.10
20	6.38		0.00	0.000	2451	0.004	VV	0.07
21	6.54		0.00	0.000	651	0.001	VB	0.05
22	6.72		0.00	0.000	62793	0.105	BV	0.06
23	6.87		0.00	0.000	40416	0.068	VV	0.08
24	7.30		0.00	0.000	1712	0.003	VB	0.07
25	7.48		0.00	0.000	11183	0.019	BB	0.07
26	7.75		0.00	0.000	12809	0.021	BV	0.12
27	8.04		0.00	0.000	3737	0.006	VV	0.05
28	8.12		0.00	0.000	4295	0.007	VV	0.06
29	8.24		0.00	0.000	5199	0.009	VV	0.07
30	8.43		0.00	0.000	9502	0.016	VV	0.06
31	8.59		0.00	0.000	1511	0.003	VB	0.10
32	8.74		0.00	0.000	2175	0.004	BB	0.08
33	8.88		0.00	0.000	17840	0.030	BV	0.07
34	9.02		0.00	0.000	18172	0.030	VV	0.07
35	9.38		0.00	0.000	2224916	3.725	VV	0.10
36	10.11	CL4XYL	0.86	10.580	6771029	11.335	VV	0.05
37	10.93		0.00	0.000	93375	0.156	VV	0.07
38	11.01		0.00	0.000	133541	0.224	VV	0.09
39	11.26		0.00	0.000	302118	0.506	VV	0.05
40	11.41		0.00	0.000	101815	0.170	VV	0.06
41	11.56	AR1016#1	0.55	6.690	97137	0.163	VV	0.05
42	11.68		0.00	0.000	94629	0.158	VV	0.05
43	11.80		0.00	0.000	305877	0.512	VV	0.05
44	12.03		0.00	0.000	89456	0.150	VV	0.06
45	12.34		0.00	0.000	167229	0.280	VV	0.07
46	12.51		0.00	0.000	728516	1.220	VV	0.11
47	12.93		0.00	0.000	120962	0.202	VV	0.05
48	13.01		0.00	0.000	142610	0.239	VV	0.06
49	13.11		0.00	0.000	111049	0.186	VV	0.05
50	13.21		0.00	0.000	189107	0.317	VV	0.07
51	13.48		0.00	0.000	1158637	1.940	VV	0.06
52	13.72		0.00	0.000	275002	0.460	VV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	13.87	AR1016#3	0.46	5.592	222509	0.372	VV	0.05
54	13.98		0.00	0.000	314196	0.526	VV	0.07
55	14.27	AR1016#4	2.52	30.863	793972	1.329	VV	0.11
56	16.19		0.00	0.000	19347972	32.390	VV	0.78
57	16.37		0.00	0.000	6385236	10.689	VV	0.25
58	16.83		0.00	0.000	1949239	3.263	VV	0.07
59	17.05		0.00	0.000	1659084	2.777	VV	0.19
60	17.59		0.00	0.000	598127	1.001	VV	0.05
61	17.83		0.00	0.000	193353	0.324	VV	0.06
62	17.92	AR1260#1	2.03	24.810	403685	0.676	VV	0.06
63	18.15		0.00	0.000	137736	0.231	VV	0.07
64	18.26		0.00	0.000	117677	0.197	VV	0.05
65	18.36		0.00	0.000	189140	0.317	VV	0.05
66	18.45		0.00	0.000	131490	0.220	VV	0.09
67	18.62		0.00	0.000	36398	0.061	VV	0.04
68	18.68		0.00	0.000	66779	0.112	VV	0.04
69	18.76		0.00	0.000	46077	0.077	VV	0.04
70	18.83	AR1260#2	0.28	3.412	120462	0.202	VV	0.05
71	18.95		0.00	0.000	71641	0.120	VV	0.05
72	19.19		0.00	0.000	152741	0.256	VV	0.10
73	19.42		0.00	0.000	29793	0.050	VV	0.05
74	19.52		0.00	0.000	25670	0.043	VV	0.04
75	19.66		0.00	0.000	527681	0.883	VV	0.05
76	19.86	AR1260#3	0.23	2.831	76625	0.128	VV	0.05
77	19.98		0.00	0.000	46451	0.078	VV	0.05
78	20.08		0.00	0.000	17479	0.029	VV	0.06
79	20.23		0.00	0.000	23535	0.039	VB	0.07
80	20.41		0.00	0.000	8685	0.015	BV	0.06
81	20.53		0.00	0.000	94817	0.159	VB	0.08
82	20.71		0.00	0.000	33014	0.055	BB	0.08
83	20.83		0.00	0.000	5564	0.009	BB	0.06
84	21.03		0.00	0.000	991	0.002	BV	0.03
85	21.13	AR1260#4	0.18	2.236	144165	0.241	VV	0.06
86	21.33		0.00	0.000	4648	0.008	VB	0.07
87	21.45		0.00	0.000	5974	0.010	BB	0.06
88	21.64		0.00	0.000	22082	0.037	BB	0.07
89	21.86		0.00	0.000	66319	0.111	BB	0.06
90	22.10	AR1260#5	0.17	2.039	89106	0.149	BV	0.10
91	22.18		0.00	0.000	41369	0.069	VV	0.10
92	22.33		0.00	0.000	4338	0.007	VV	0.05
93	22.43		0.00	0.000	9650	0.016	VB	0.05
94	22.76		0.00	0.000	16239	0.027	BV	0.08
95	22.92		0.00	0.000	31962	0.054	VV	0.07
96	23.22		0.00	0.000	5903	0.010	VV	0.07
97	23.31		0.00	0.000	11472	0.019	VB	0.07
98	23.56		0.00	0.000	4302	0.007	BV	0.08
99	23.70		0.00	0.000	1529	0.003	VV	0.07
100	23.82		0.00	0.000	37862	0.063	VB	0.07
101	24.29		0.00	0.000	2736	0.005	BB	0.07
102	24.48		0.00	0.000	2232	0.004	BB	0.22
103	25.01		0.00	0.000	56446	0.094	BV	0.07
104	25.21		0.00	0.000	9211	0.015	VV	0.07
105	25.33		0.00	0.000	1597	0.003	VB	0.07
106	25.84		0.00	0.000	420	0.001	BB	0.08
107	26.07	CL10BP	0.89	10.946	6337392	10.609	SBB	0.08
108	26.35		0.00	0.000	29265	0.049	TBV	0.13
109	26.72		0.00	0.000	2135	0.004	TVV	0.10
110	27.09		0.00	0.000	2536	0.004	TVB	0.15
111	27.88		0.00	0.000	1238	0.002	BB	0.14
112	28.22		0.00	0.000	12092	0.020	BV	0.19
113	28.60		0.00	0.000	9304	0.016	VV	0.19
114	28.78		0.00	0.000	6076	0.010	VB	0.15

Total Area = 5.973528E+07 Total Height = 5833607 Total Amount = 8.175701

50062

— H:\CP2\HP2\M0919.0041.RAW 301101-05 B8068 FSS-007-05-EBT



after investigation
BJ
9/20/02

50063

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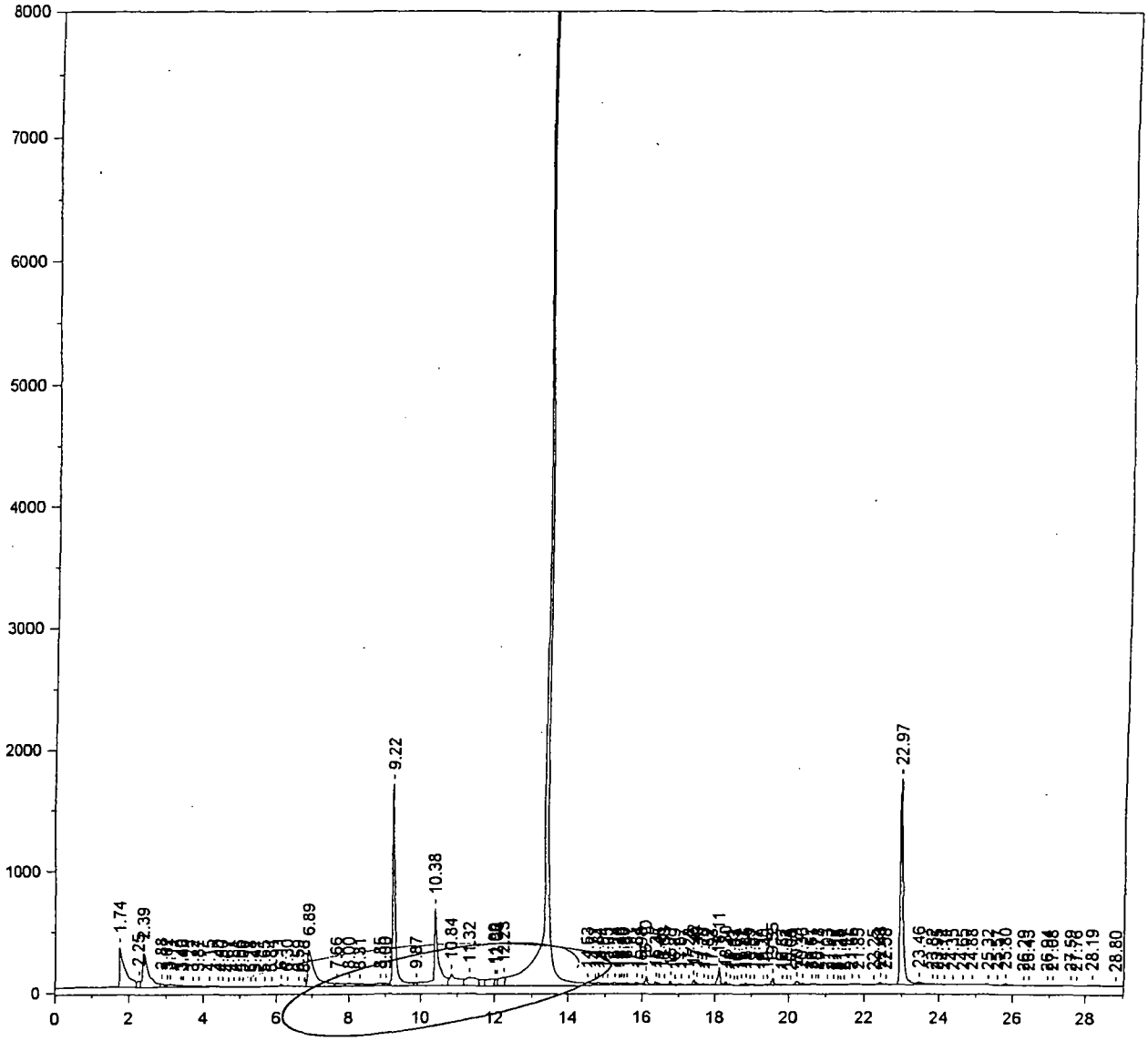


Before reintegration
excess area under peaks
BJT
9/20/02

50068

Sample Name = **301101-05 B8068 FSS-007-05-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

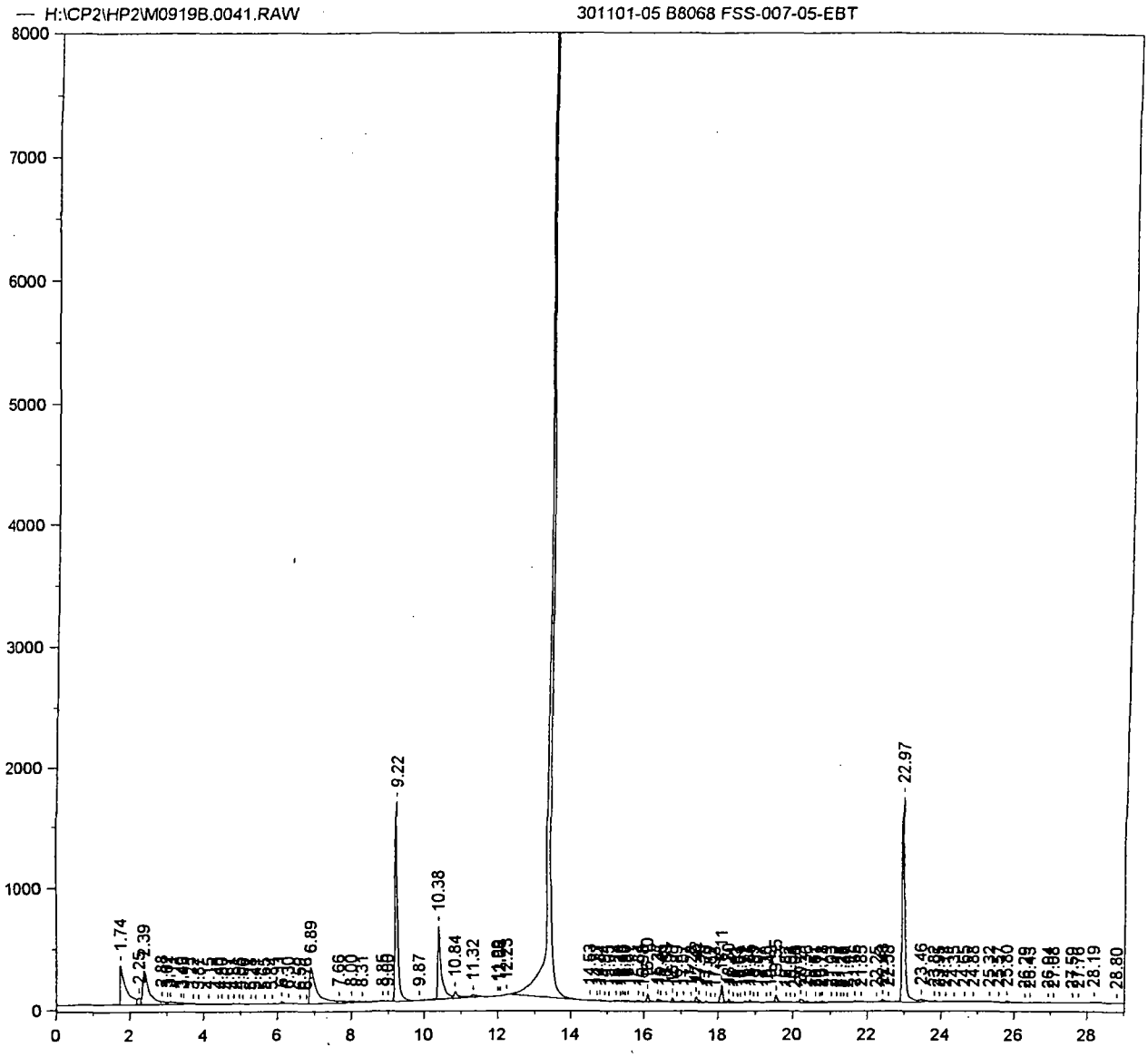
Raw File Name = **H:\CP2\HP2\M0919B.0041.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/20/02 10:09:21 AM
Method Version = 567
Calibration Version = 5

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	3513197	3.049	BV	0.13
2	2.25		0.00	0.000	352176	0.306	VV	0.06
3	2.39		0.00	0.000	3322813	2.884	VV	0.14
4	2.88		0.00	0.000	179431	0.156	VV	0.08
5	3.02		0.00	0.000	80396	0.070	VV	0.04
6	3.11		0.00	0.000	336133	0.292	VV	0.20
7	3.40		0.00	0.000	61543	0.053	VV	0.04
8	3.46		0.00	0.000	111589	0.097	VV	0.07
9	3.72		0.00	0.000	92778	0.081	VV	0.14
10	3.87		0.00	0.000	69899	0.061	VV	0.13
11	4.15		0.00	0.000	78400	0.068	VV	0.11
12	4.40		0.00	0.000	38911	0.034	VV	0.06
13	4.50		0.00	0.000	55111	0.048	VV	0.12
14	4.67		0.00	0.000	29092	0.025	VV	0.06
15	4.81		0.00	0.000	58415	0.051	VV	0.08
16	4.96		0.00	0.000	32782	0.028	VV	0.05
17	5.06		0.00	0.000	46672	0.041	VV	0.12
18	5.28		0.00	0.000	37094	0.032	VV	0.08
19	5.41		0.00	0.000	34347	0.030	VV	0.09
20	5.65		0.00	0.000	33969	0.029	VV	0.16
21	5.84		0.00	0.000	21445	0.019	VV	0.14
22	6.11		0.00	0.000	117310	0.102	VV	0.08
23	6.30		0.00	0.000	44543	0.039	VV	0.08
24	6.59		0.00	0.000	22713	0.020	VV	0.09
25	6.76		0.00	0.000	15291	0.013	VV	0.06
26	6.89		0.00	0.000	4339810	3.766	VV	0.17
27	7.66		0.00	0.000	398622	0.346	VV	0.12
28	8.00		0.00	0.000	398843	0.346	VV	0.12
29	8.31		0.00	0.000	251232	0.218	VV	0.08
30	8.85		0.00	0.000	315090	0.273	VV	0.17
31	9.00		0.00	0.000	153469	0.133	VV	0.08
32	9.22	CL4XYL	0.82	0.234	8697535	7.548	VV	0.06
33	9.87		0.00	0.000	159305	0.138	VV	0.07
34	10.38	AR1016#1	23.15	6.634	5462020	4.740	VV	0.08
35	10.84		0.00	0.000	1554480	1.349	VV	0.07
36	11.32	AR1016#2	3.29	0.941	1425162	1.237	VV	0.21
37	11.99		0.00	0.000	863503	0.749	VV	0.12
38	12.06		0.00	0.000	254275	0.221	VV	0.03
39	12.23		0.00	0.000	753300	0.654	VV	0.08
40	13.40	AR1016#5	319.35	91.506	66507956	57.717	VV	0.05
41	14.53		0.00	0.000	236977	0.206	VV	0.11
42	14.72		0.00	0.000	64162	0.056	VV	0.04
43	14.81		0.00	0.000	172852	0.150	VV	0.06
44	14.94		0.00	0.000	102215	0.089	VV	0.05
45	15.05		0.00	0.000	107741	0.094	VV	0.09
46	15.24		0.00	0.000	220659	0.191	VV	0.13
47	15.36		0.00	0.000	63303	0.055	VV	0.04
48	15.43		0.00	0.000	78414	0.068	VV	0.04
49	15.50		0.00	0.000	63943	0.055	VV	0.04
50	15.57		0.00	0.000	168358	0.146	VV	0.09
51	15.84		0.00	0.000	207355	0.180	VV	0.07
52	15.98		0.00	0.000	49209	0.043	VV	0.04

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.10		0.00	0.000	431449	0.374	VV	0.06
54	16.37		0.00	0.000	145416	0.126	VV	0.06
55	16.45	AR1260#1	0.42	0.121	113473	0.098	VV	0.06
56	16.60		0.00	0.000	100886	0.088	VV	0.07
57	16.77	AR1260#2	0.34	0.098	170405	0.148	VV	0.05
58	16.89		0.00	0.000	46307	0.040	VV	0.05
59	17.07		0.00	0.000	161042	0.140	VV	0.10
60	17.28		0.00	0.000	45589	0.040	VV	0.05
61	17.42		0.00	0.000	174942	0.152	VV	0.06
62	17.49		0.00	0.000	106393	0.092	VV	0.06
63	17.70		0.00	0.000	82048	0.071	VV	0.07
64	17.82		0.00	0.000	23753	0.021	VV	0.05
65	17.93		0.00	0.000	33346	0.029	VV	0.05
66	18.11		0.00	0.000	678069	0.588	VV	0.06
67	18.30	AR1260#3	0.25	0.073	130433	0.113	VV	0.05
68	18.41		0.00	0.000	37531	0.033	VV	0.05
69	18.53		0.00	0.000	15573	0.014	VV	0.05
70	18.61		0.00	0.000	11770	0.010	VV	0.06
71	18.72		0.00	0.000	72895	0.063	VV	0.08
72	18.85		0.00	0.000	82683	0.072	VV	0.05
73	18.95		0.00	0.000	48445	0.042	VV	0.05
74	19.07		0.00	0.000	41627	0.036	VB	0.06
75	19.30		0.00	0.000	21304	0.018	BV	0.08
76	19.42		0.00	0.000	46618	0.040	VV	0.06
77	19.55	AR1260#4	0.22	0.062	278161	0.241	VV	0.06
78	19.82		0.00	0.000	24017	0.021	VV	0.06
79	19.93		0.00	0.000	16489	0.014	VV	0.08
80	20.05		0.00	0.000	7247	0.006	VV	0.06
81	20.21		0.00	0.000	189902	0.165	VV	0.10
82	20.36		0.00	0.000	112667	0.098	VV	0.06
83	20.61		0.00	0.000	49049	0.043	VV	0.05
84	20.71		0.00	0.000	19532	0.017	VV	0.04
85	20.78		0.00	0.000	51065	0.044	VV	0.05
86	21.03		0.00	0.000	75627	0.066	VV	0.09
87	21.17		0.00	0.000	30926	0.027	VV	0.08
88	21.28		0.00	0.000	15413	0.013	VV	0.04
89	21.38		0.00	0.000	20217	0.018	VV	0.06
90	21.47		0.00	0.000	23642	0.021	VV	0.07
91	21.66	AR1260#5	0.29	0.084	85700	0.074	VV	0.06
92	21.85		0.00	0.000	65955	0.057	VV	0.10
93	22.25		0.00	0.000	19061	0.017	VV	0.07
94	22.43		0.00	0.000	125910	0.109	VV	0.07
95	22.58		0.00	0.000	24067	0.021	VV	0.08
96	22.97	CL10BP	0.86	0.248	8580444	7.446	VV	0.07
97	23.46		0.00	0.000	318176	0.276	VV	0.17
98	23.82		0.00	0.000	61088	0.053	VV	0.11
99	23.95		0.00	0.000	44884	0.039	VV	0.09
100	24.14		0.00	0.000	39286	0.034	VV	0.14
101	24.35		0.00	0.000	25019	0.022	VV	0.19
102	24.65		0.00	0.000	5092	0.004	VB	0.11
103	24.88		0.00	0.000	1593	0.001	BB	0.10
104	25.32		0.00	0.000	21292	0.018	BV	0.10
105	25.57		0.00	0.000	5538	0.005	VB	0.10
106	25.80		0.00	0.000	90994	0.079	BV	0.10
107	26.29		0.00	0.000	3824	0.003	VV	0.10
108	26.43		0.00	0.000	1588	0.001	VB	0.10
109	26.94		0.00	0.000	5995	0.005	BV	0.16
110	27.08		0.00	0.000	4141	0.004	VB	0.12
111	27.59		0.00	0.000	2426	0.002	BV	0.14
112	27.76		0.00	0.000	3562	0.003	VV	0.08
113	28.19		0.00	0.000	97079	0.084	VV	0.24
114	28.80		0.00	0.000	6073	0.005	VB	0.13

Total Area = 1.152306E+08 Total Height = 2.127327E+07 Total Amount = 348.9928

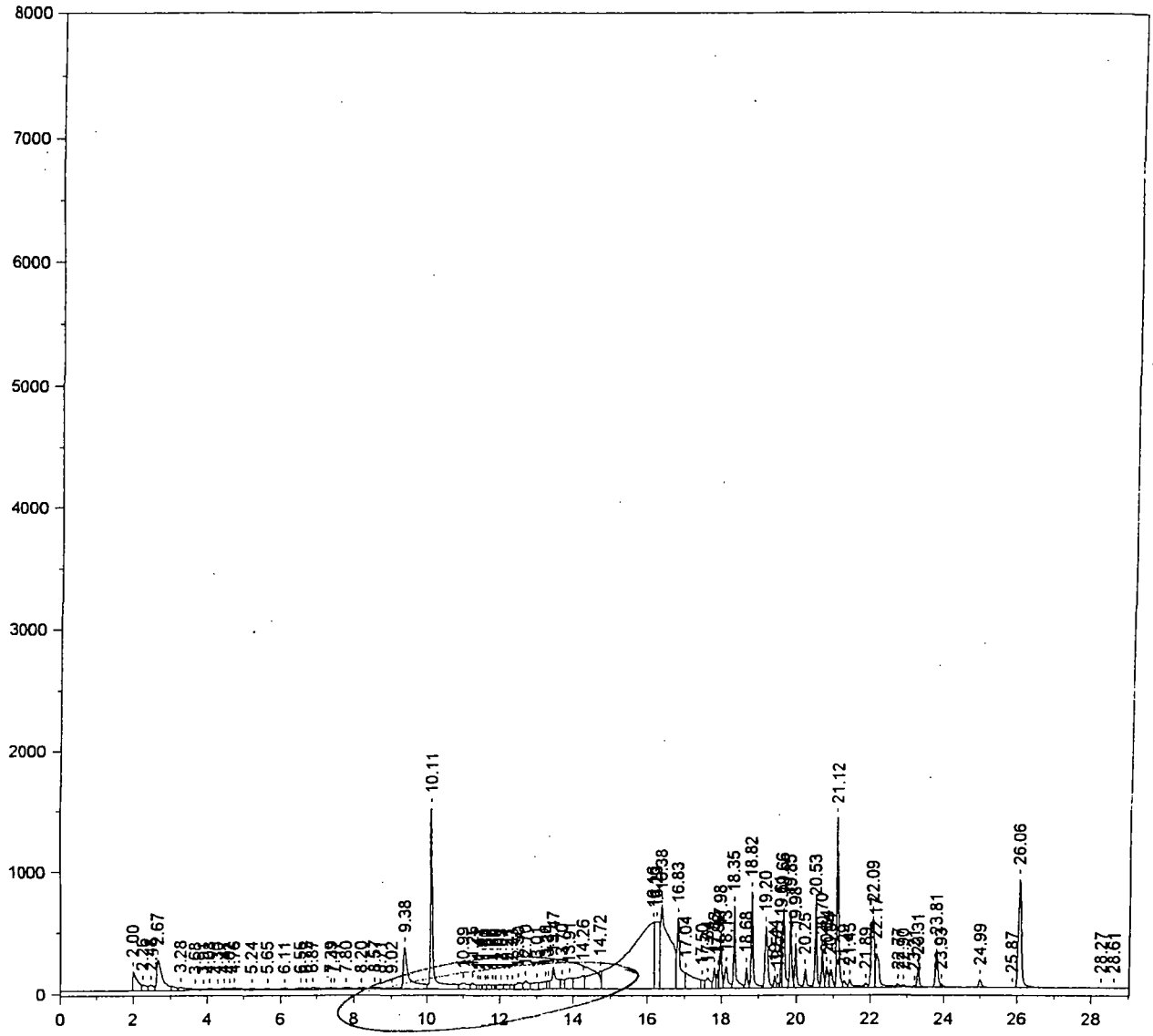


After integration
BT
9/20/2

BT
9/20/02

50071

— H:\CP2\HP2\M0919.0020.RAW 301101-01MS B8068 VWR-005-02-EBTMS



Primary Column

Before reintegration
excess area under peaks
BT 9/20/2

50299

Sample Name = **301101-01MS B8068 VWR-005-02-EBTMS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

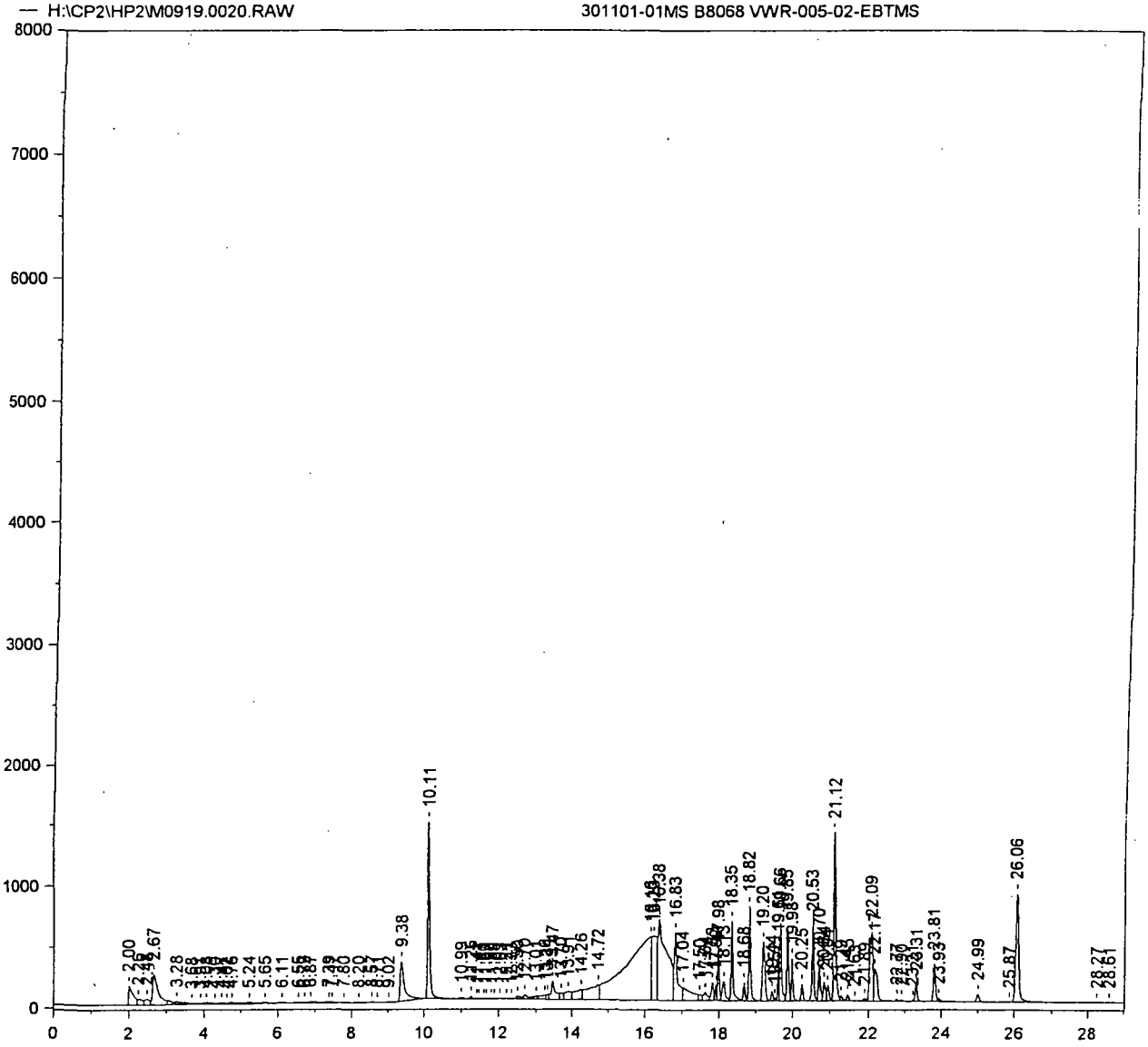
Raw File Name = **H:\CP2\HP2\M0919.0020.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/19/02 8:25:53 PM
Method Version = 618
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1365563	1.030	BV	0.14
2	2.26		0.00	0.000	442206	0.333	VV	0.09
3	2.48		0.00	0.000	447341	0.337	VV	0.09
4	2.67		0.00	0.000	2717818	2.049	VV	0.13
5	3.28		0.00	0.000	479798	0.362	VV	0.16
6	3.68		0.00	0.000	117105	0.088	VV	0.09
7	3.91		0.00	0.000	150984	0.114	VV	0.14
8	4.08		0.00	0.000	161544	0.122	VV	0.08
9	4.30		0.00	0.000	157460	0.119	VV	0.14
10	4.47		0.00	0.000	157253	0.119	VV	0.07
11	4.62		0.00	0.000	65770	0.050	VV	0.06
12	4.76		0.00	0.000	252317	0.190	VV	0.17
13	5.24		0.00	0.000	313275	0.236	VV	0.24
14	5.65		0.00	0.000	277160	0.209	VV	0.24
15	6.11		0.00	0.000	297905	0.225	VV	0.23
16	6.55		0.00	0.000	242634	0.183	VV	0.21
17	6.72		0.00	0.000	91653	0.069	VV	0.06
18	6.87		0.00	0.000	287941	0.217	VV	0.18
19	7.39		0.00	0.000	174168	0.131	VV	0.15
20	7.47		0.00	0.000	107162	0.081	VV	0.08
21	7.80		0.00	0.000	265140	0.200	VV	0.19
22	8.20		0.00	0.000	236278	0.178	VV	0.19
23	8.57		0.00	0.000	175176	0.132	VV	0.09
24	8.71		0.00	0.000	95078	0.072	VV	0.09
25	9.02		0.00	0.000	195073	0.147	VV	0.22
26	9.38		0.00	0.000	3927293	2.961	VV	0.10
27	10.11	CL4XYL	0.93	1.998	7253697	5.470	VV	0.05
28	10.99		0.00	0.000	798767	0.602	VV	0.10
29	11.25		0.00	0.000	409135	0.309	VV	0.05
30	11.41		0.00	0.000	169630	0.128	VV	0.05
31	11.47		0.00	0.000	178390	0.135	VV	0.05
32	11.60	AR1016#1	1.46	3.146	259105	0.195	VV	0.07
33	11.67		0.00	0.000	266203	0.201	VV	0.06
34	11.80		0.00	0.000	179943	0.136	VV	0.04
35	11.88		0.00	0.000	103699	0.078	VV	0.03
36	12.03		0.00	0.000	421932	0.318	VV	0.11
37	12.21		0.00	0.000	364313	0.275	VV	0.09
38	12.33		0.00	0.000	249770	0.188	VV	0.07
39	12.50		0.00	0.000	689794	0.520	VV	0.12
40	12.70	AR1016#2	2.00	4.319	634208	0.478	VV	0.06
41	13.01		0.00	0.000	682363	0.515	VV	0.08
42	13.26		0.00	0.000	747183	0.563	VV	0.08
43	13.34		0.00	0.000	354666	0.267	VV	0.06
44	13.47		0.00	0.000	1702846	1.284	VV	0.06
45	13.70		0.00	0.000	559684	0.422	VV	0.09
46	13.91	AR1016#3	2.39	5.156	1163462	0.877	VV	0.16
47	14.26	AR1016#4	5.46	11.766	1716662	1.294	VV	0.10
48	14.72		0.00	0.000	3322031	2.505	VV	0.13
49	16.16		0.00	0.000	26844550	20.243	VV	0.58
50	16.23		0.00	0.000	5188452	3.912	VV	0.14
51	16.38		0.00	0.000	11841271	8.929	VV	0.14
52	16.83		0.00	0.000	3829715	2.888	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	17.04		0.00	0.000	2570811	1.939	VV	0.17
54	17.50		0.00	0.000	366217	0.276	VV	0.06
55	17.64		0.00	0.000	813538	0.613	VV	0.06
56	17.83		0.00	0.000	684564	0.516	VV	0.05
57	17.92		0.00	0.000	455312	0.343	VV	0.04
58	17.98	AR1260#1	7.16	15.438	1424624	1.074	VV	0.05
59	18.13		0.00	0.000	1128669	0.851	VV	0.07
60	18.35		0.00	0.000	2705910	2.040	VV	0.05
61	18.68		0.00	0.000	653792	0.493	VV	0.05
62	18.82	AR1260#2	6.83	14.727	2948772	2.224	VV	0.05
63	19.20		0.00	0.000	2737843	2.065	VV	0.08
64	19.44		0.00	0.000	368405	0.278	VV	0.05
65	19.52		0.00	0.000	118003	0.089	VV	0.04
66	19.61		0.00	0.000	1179460	0.889	VV	0.04
67	19.66		0.00	0.000	2627801	1.982	VV	0.06
68	19.85	AR1260#3	6.38	13.762	2112750	1.593	VV	0.05
69	19.98		0.00	0.000	1367353	1.031	VV	0.05
70	20.25		0.00	0.000	693766	0.523	VV	0.05
71	20.53		0.00	0.000	2283166	1.722	VV	0.05
72	20.70		0.00	0.000	1253189	0.945	VV	0.05
73	20.84		0.00	0.000	744016	0.561	VV	0.05
74	20.94		0.00	0.000	684667	0.516	VV	0.08
75	21.12	AR1260#4	6.53	14.075	5146432	3.881	VV	0.05
76	21.29		0.00	0.000	279635	0.211	VV	0.07
77	21.45		0.00	0.000	347333	0.262	VV	0.05
78	21.89		0.00	0.000	178760	0.135	VV	0.05
79	22.09	AR1260#5	6.52	14.063	3484992	2.628	VV	0.10
80	22.17		0.00	0.000	1992124	1.502	VV	0.11
81	22.77		0.00	0.000	146120	0.110	VV	0.06
82	22.90		0.00	0.000	156912	0.118	VV	0.07
83	23.21		0.00	0.000	63351	0.048	VV	0.06
84	23.31		0.00	0.000	737841	0.556	VV	0.06
85	23.81		0.00	0.000	1389285	1.048	VV	0.07
86	23.93		0.00	0.000	231789	0.175	VV	0.08
87	24.99		0.00	0.000	308755	0.233	VB	0.07
88	25.87		0.00	0.000	1152	0.001	BV	0.07
89	26.06	CL10BP	0.72	1.550	5088044	3.837	VV	0.08
90	28.27		0.00	0.000	2886	0.002	VB	0.14
91	28.61		0.00	0.000	2576	0.002	BB	0.09

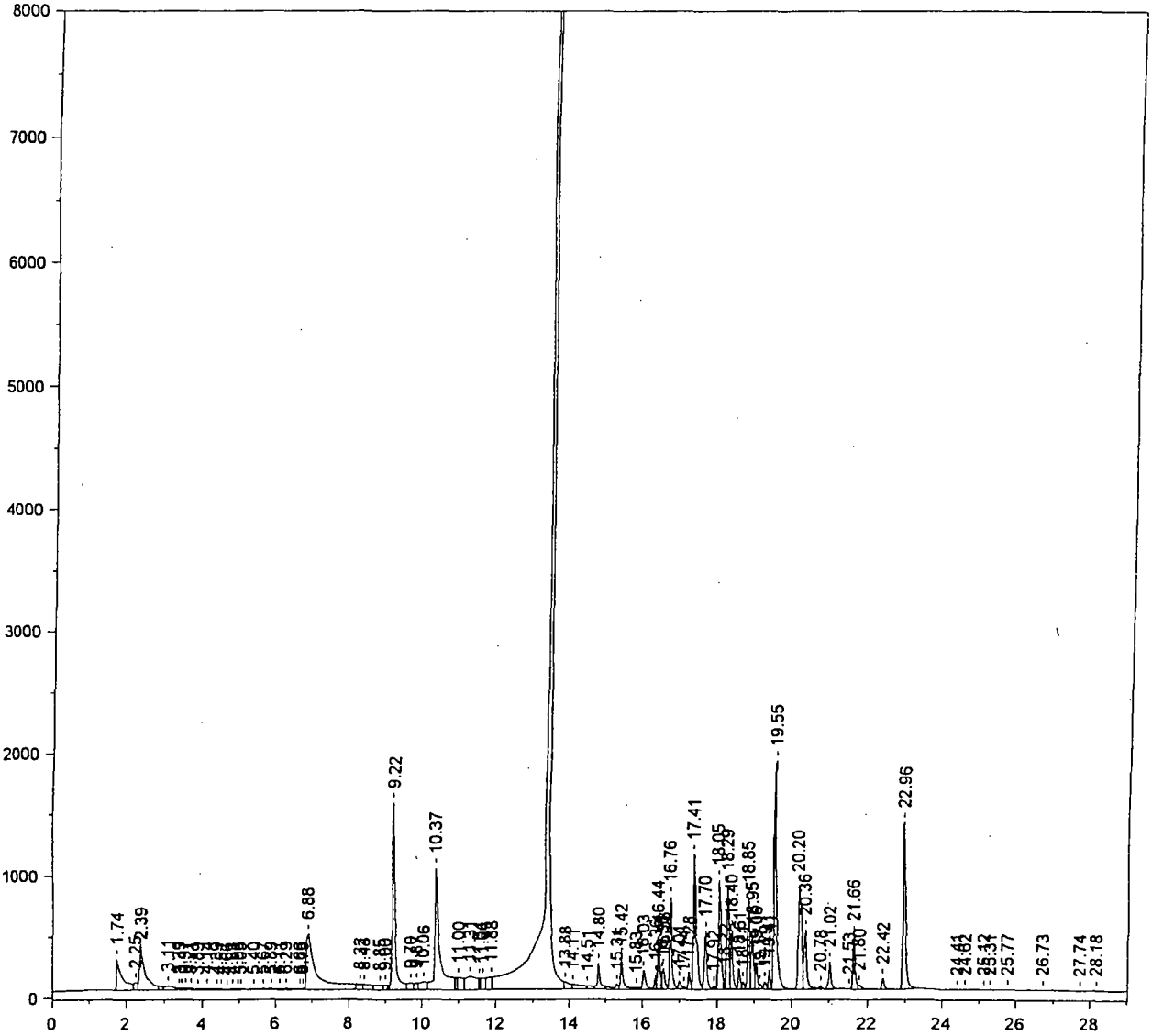
Total Area = 1.326132E+08 Total Height = 1.716059E+07 Total Amount = 46.36821



After reintegration
KDT
9/20/02

50302

— H:\CP2\HP2\M0919B.0020.RAW 301101-01MS B8068 VWR-005-02-EBTMS



Before integration
excess area under peaks

RDT
9/20/02

50306

Sample Name = **301101-01MS B8068 VWR-005-02-EBTMS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0020.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/19/02 8:25:53 PM
Method Version = 567
Calibration Version = 5

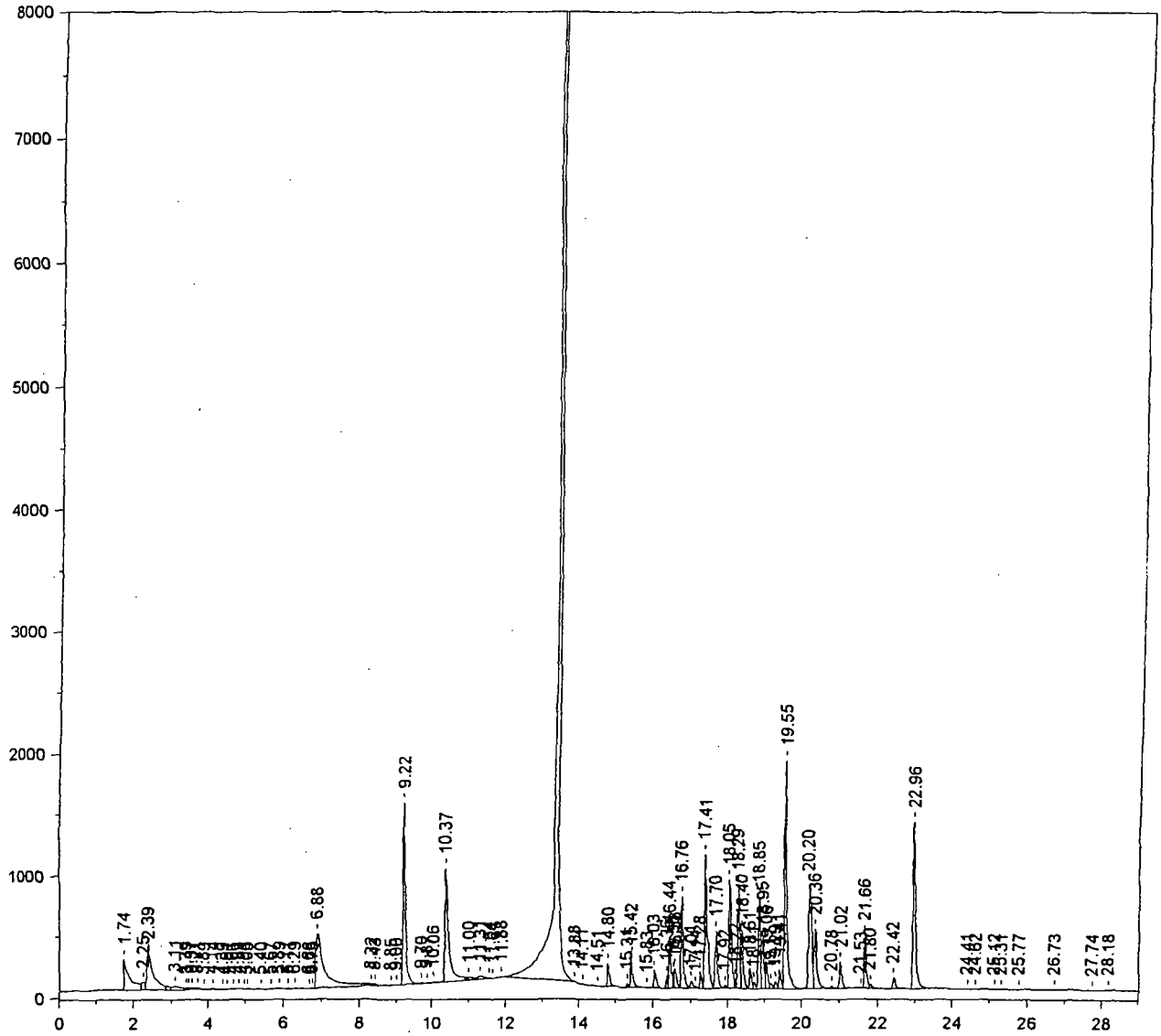
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	2865868	1.409	BV	0.13
2	2.25		0.00	0.000	412098	0.203	VV	0.07
3	2.39		0.00	0.000	3733040	1.835	VV	0.14
4	3.11		0.00	0.000	549588	0.270	VV	0.25
5	3.39		0.00	0.000	84008	0.041	VV	0.07
6	3.47		0.00	0.000	85230	0.042	VV	0.06
7	3.57		0.00	0.000	64165	0.032	VV	0.05
8	3.71		0.00	0.000	114315	0.056	VV	0.09
9	3.89		0.00	0.000	109490	0.054	VV	0.13
10	4.14		0.00	0.000	199868	0.098	VV	0.18
11	4.39		0.00	0.000	54170	0.027	VV	0.06
12	4.51		0.00	0.000	79082	0.039	VV	0.12
13	4.66		0.00	0.000	40306	0.020	VV	0.07
14	4.81		0.00	0.000	85589	0.042	VV	0.11
15	4.96		0.00	0.000	50610	0.025	VV	0.06
16	5.05		0.00	0.000	81152	0.040	VV	0.12
17	5.40		0.00	0.000	134605	0.066	VV	0.22
18	5.67		0.00	0.000	95851	0.047	VV	0.13
19	5.89		0.00	0.000	86256	0.042	VV	0.13
20	6.11		0.00	0.000	119236	0.059	VV	0.08
21	6.29		0.00	0.000	123199	0.061	VV	0.08
22	6.66		0.00	0.000	131755	0.065	VV	0.11
23	6.75		0.00	0.000	37050	0.018	VV	0.04
24	6.88		0.00	0.000	8808719	4.330	VV	0.18
25	8.32		0.00	0.000	447423	0.220	VV	0.13
26	8.43		0.00	0.000	644744	0.317	VV	0.16
27	8.85		0.00	0.000	625890	0.308	VV	0.20
28	9.00		0.00	0.000	254372	0.125	VV	0.06
29	9.22	CL4XYL	0.77	0.148	8220697	4.041	VV	0.06
30	9.70		0.00	0.000	614045	0.302	VV	0.15
31	9.87		0.00	0.000	369041	0.181	VV	0.09
32	10.06		0.00	0.000	917696	0.451	VV	0.15
33	10.37	AR1016#1	38.61	7.374	9108224	4.478	VV	0.08
34	11.00		0.00	0.000	1110109	0.546	VV	0.13
35	11.31	AR1016#2	5.05	0.964	2189873	1.077	VV	0.13
36	11.54		0.00	0.000	315022	0.155	VV	0.03
37	11.64		0.00	0.000	781473	0.384	VV	0.07
38	11.88		0.00	0.000	1035683	0.509	VV	0.09
39	13.42	AR1016#5	446.72	85.327	93035280	45.736	VV	0.07
40	13.88		0.00	0.000	645054	0.317	VV	0.10
41	14.11		0.00	0.000	799465	0.393	VV	0.16
42	14.51		0.00	0.000	274184	0.135	VV	0.09
43	14.80		0.00	0.000	1180725	0.580	VV	0.06
44	15.31		0.00	0.000	282033	0.139	VV	0.08
45	15.42		0.00	0.000	1352513	0.665	VV	0.06
46	15.83		0.00	0.000	187450	0.092	VV	0.17
47	16.03		0.00	0.000	942260	0.463	VV	0.07
48	16.36		0.00	0.000	387598	0.191	VV	0.06
49	16.44	AR1260#1	6.21	1.187	1670292	0.821	VV	0.05
50	16.55		0.00	0.000	339693	0.167	VV	0.03
51	16.58		0.00	0.000	763842	0.376	VV	0.07
52	16.76	AR1260#2	6.21	1.186	3094900	1.521	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	17.01		0.00	0.000	355916	0.175	VV	0.07
54	17.14		0.00	0.000	95275	0.047	VV	0.06
55	17.28		0.00	0.000	545613	0.268	VV	0.06
56	17.41		0.00	0.000	5807403	2.855	VV	0.06
57	17.70		0.00	0.000	2192293	1.078	VV	0.06
58	17.92		0.00	0.000	112523	0.055	VV	0.05
59	18.05		0.00	0.000	4999508	2.458	VV	0.09
60	18.22		0.00	0.000	184111	0.091	VV	0.03
61	18.29	AR1260#3	6.22	1.188	3204405	1.575	VV	0.05
62	18.40		0.00	0.000	2010601	0.988	VV	0.06
63	18.61		0.00	0.000	645690	0.317	VV	0.05
64	18.71		0.00	0.000	236017	0.116	VV	0.05
65	18.85		0.00	0.000	2839185	1.396	VV	0.06
66	18.95		0.00	0.000	1805471	0.888	VV	0.05
67	19.06		0.00	0.000	905976	0.445	VV	0.07
68	19.17		0.00	0.000	187598	0.092	VV	0.07
69	19.29		0.00	0.000	242964	0.119	VV	0.05
70	19.41		0.00	0.000	580431	0.285	VV	0.05
71	19.55	AR1260#4	6.45	1.232	8324602	4.092	VV	0.06
72	20.20		0.00	0.000	5005214	2.461	VV	0.10
73	20.36		0.00	0.000	2664837	1.310	VV	0.08
74	20.78		0.00	0.000	132123	0.065	VV	0.05
75	21.02		0.00	0.000	1151985	0.566	VV	0.06
76	21.53		0.00	0.000	9896	0.005	VV	0.04
77	21.66	AR1260#5	6.62	1.264	1924083	0.946	VV	0.06
78	21.80		0.00	0.000	241205	0.119	VV	0.08
79	22.42		0.00	0.000	438171	0.215	VB	0.07
80	22.96	CL10BP	0.68	0.131	6796404	3.341	BB	0.07
81	24.41		0.00	0.000	1894	0.001	BB	0.12
82	24.62		0.00	0.000	1730	0.001	BB	0.12
83	25.12		0.00	0.000	1605	0.001	BV	0.12
84	25.31		0.00	0.000	3107	0.002	VB	0.14
85	25.77		0.00	0.000	3508	0.002	BB	0.21
86	26.73		0.00	0.000	2544	0.001	BB	0.13
87	27.74		0.00	0.000	873	0.000	BV	0.13
88	28.18		0.00	0.000	29226	0.014	VB	0.16

Total Area = 2.034188E+08 Total Height = 3.309936E+07 Total Amount = 523.5402

50308

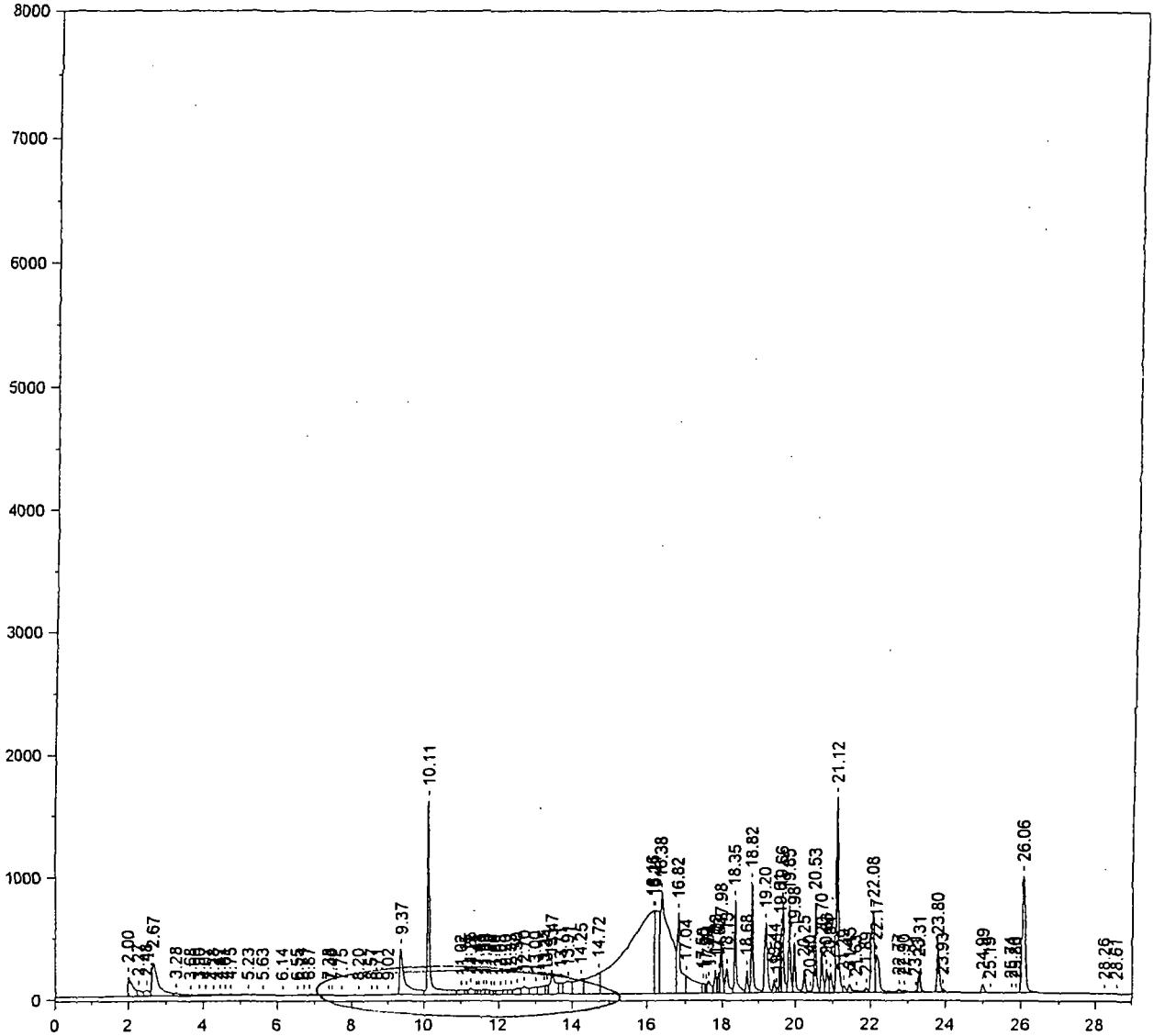
— H:\CP2\HP2\M0919B.0020.RAW 301101-01MS B8068 VWR-005-02-EBTMS



After reintegration
KST
9/20/02

50309

— H:\CP2\HP2\M0919.0022.RAW 301101-01MD B8068 VWR-005-02-EBTMSD



Primary Column

Before reintegration
express area underpeaks
AST
9/20/2

50315

Sample Name = **301101-01MD B8068 VWR-005-02-EBTMSD**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0022.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

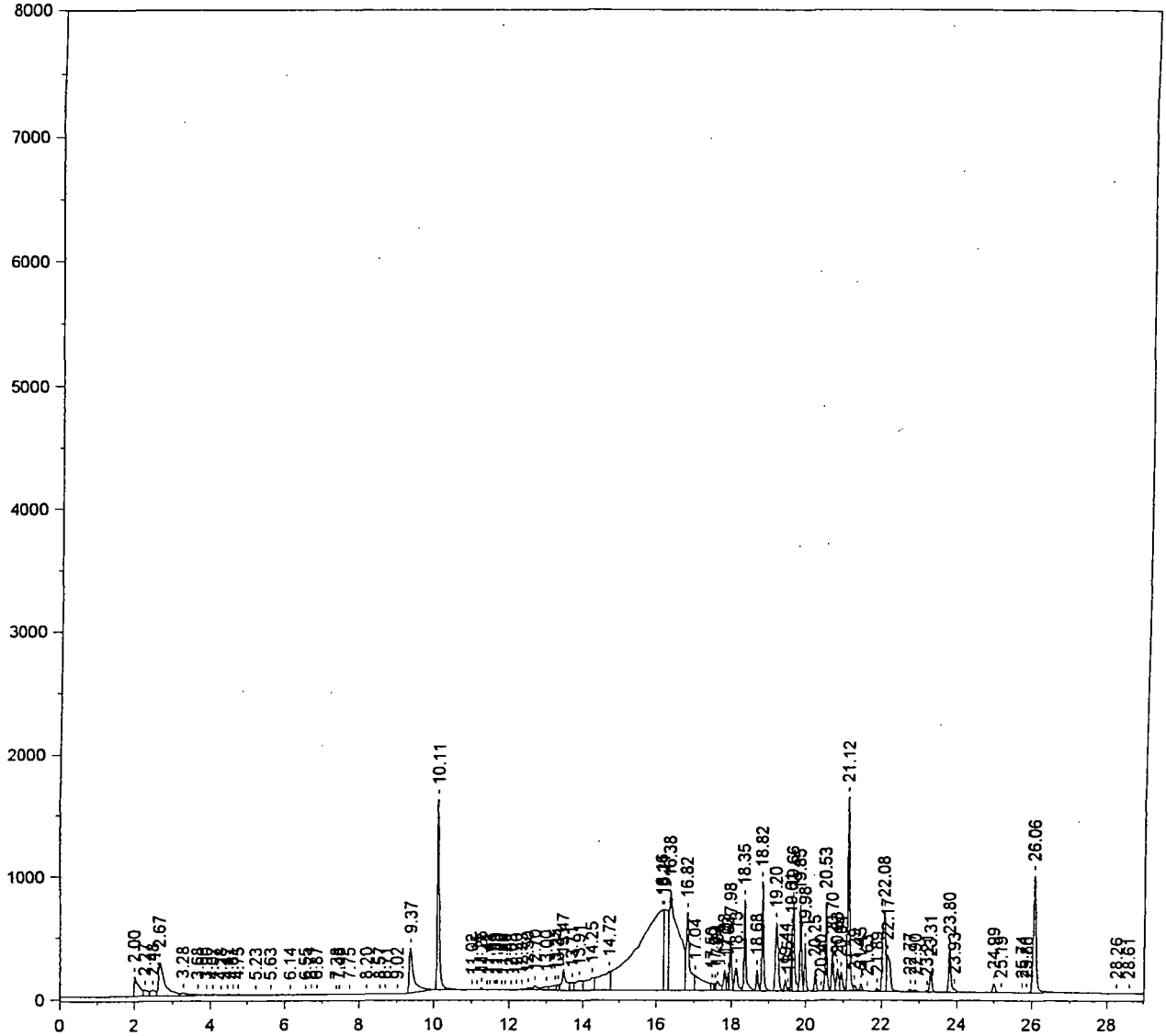
Date Taken (end) = 9/19/02 9:43:13 PM
Method Version = 618
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1382971	0.916	BV	0.14
2	2.27		0.00	0.000	433162	0.287	VV	0.09
3	2.48		0.00	0.000	475022	0.314	VV	0.09
4	2.67		0.00	0.000	3238153	2.144	VV	0.13
5	3.28		0.00	0.000	455923	0.302	VV	0.17
6	3.68		0.00	0.000	103512	0.069	VV	0.09
7	3.90		0.00	0.000	131192	0.087	VV	0.16
8	4.07		0.00	0.000	143877	0.095	VV	0.08
9	4.28		0.00	0.000	116422	0.077	VV	0.11
10	4.47		0.00	0.000	132025	0.087	VV	0.09
11	4.61		0.00	0.000	57630	0.038	VV	0.05
12	4.75		0.00	0.000	205503	0.136	VV	0.16
13	5.23		0.00	0.000	209999	0.139	VV	0.24
14	5.63		0.00	0.000	174446	0.115	VV	0.25
15	6.14		0.00	0.000	179669	0.119	VV	0.23
16	6.55		0.00	0.000	132866	0.088	VV	0.21
17	6.71		0.00	0.000	57775	0.038	VV	0.06
18	6.87		0.00	0.000	167265	0.111	VV	0.17
19	7.38		0.00	0.000	79475	0.053	VV	0.15
20	7.46		0.00	0.000	54972	0.036	VV	0.09
21	7.75		0.00	0.000	101448	0.067	VV	0.16
22	8.20		0.00	0.000	68157	0.045	VV	0.18
23	8.57		0.00	0.000	56717	0.038	VV	0.09
24	8.71		0.00	0.000	34127	0.023	VV	0.08
25	9.02		0.00	0.000	63392	0.042	VV	0.21
26	9.37		0.00	0.000	4014668	2.658	VV	0.10
27	10.11	CL4XYL	0.98	1.836	7647222	5.063	VV	0.05
28	11.02		0.00	0.000	450542	0.298	VV	0.09
29	11.15		0.00	0.000	170824	0.113	VV	0.06
30	11.25		0.00	0.000	435930	0.289	VV	0.05
31	11.41		0.00	0.000	165202	0.109	VV	0.05
32	11.48		0.00	0.000	145095	0.096	VV	0.04
33	11.60	AR1016#1	1.56	2.941	277894	0.184	VV	0.07
34	11.66		0.00	0.000	234995	0.156	VV	0.06
35	11.80		0.00	0.000	201637	0.133	VV	0.05
36	11.88		0.00	0.000	123742	0.082	VV	0.04
37	12.03		0.00	0.000	416028	0.275	VV	0.14
38	12.20		0.00	0.000	274841	0.182	VV	0.06
39	12.33		0.00	0.000	307295	0.203	VV	0.06
40	12.50		0.00	0.000	626566	0.415	VV	0.14
41	12.70	AR1016#2	2.21	4.148	699068	0.463	VV	0.07
42	13.00		0.00	0.000	746239	0.494	VV	0.08
43	13.25		0.00	0.000	855612	0.566	VV	0.08
44	13.34		0.00	0.000	384665	0.255	VV	0.05
45	13.47		0.00	0.000	1919933	1.271	VV	0.06
46	13.71		0.00	0.000	540961	0.358	VV	0.07
47	13.91	AR1016#3	3.05	5.726	1482825	0.982	VV	0.16
48	14.25	AR1016#4	6.61	12.417	2078988	1.376	VV	0.11
49	14.72		0.00	0.000	3919039	2.595	VV	0.13
50	16.16		0.00	0.000	34673676	22.956	VV	0.61
51	16.21		0.00	0.000	5515471	3.651	VV	0.11
52	16.38		0.00	0.000	14304479	9.470	VV	0.15

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.82		0.00	0.000	4362466	2.888	VV	0.06
54	17.04		0.00	0.000	2876781	1.905	VV	0.16
55	17.50		0.00	0.000	379334	0.251	VV	0.05
56	17.59		0.00	0.000	188874	0.125	VV	0.03
57	17.64		0.00	0.000	737855	0.488	VV	0.06
58	17.83		0.00	0.000	764571	0.506	VV	0.05
59	17.92		0.00	0.000	532370	0.352	VV	0.04
60	17.98	AR1260#1	8.07	15.169	1606317	1.063	VV	0.05
61	18.13		0.00	0.000	1269053	0.840	VV	0.08
62	18.35		0.00	0.000	3057625	2.024	VV	0.05
63	18.68		0.00	0.000	746220	0.494	VV	0.05
64	18.82	AR1260#2	7.75	14.559	3345262	2.215	VV	0.05
65	19.20		0.00	0.000	3120460	2.066	VV	0.08
66	19.44		0.00	0.000	411046	0.272	VV	0.05
67	19.51		0.00	0.000	139872	0.093	VV	0.04
68	19.61		0.00	0.000	1282809	0.849	VV	0.04
69	19.66		0.00	0.000	3068411	2.031	VV	0.07
70	19.85	AR1260#3	7.27	13.664	2407236	1.594	VV	0.05
71	19.98		0.00	0.000	1542643	1.021	VV	0.05
72	20.25		0.00	0.000	732632	0.485	VV	0.05
73	20.40		0.00	0.000	53177	0.035	VV	0.04
74	20.53		0.00	0.000	2593889	1.717	VV	0.05
75	20.70		0.00	0.000	1411656	0.935	VV	0.05
76	20.83		0.00	0.000	838522	0.555	VV	0.05
77	20.94		0.00	0.000	790007	0.523	VV	0.08
78	21.12	AR1260#4	7.48	14.050	5894961	3.903	VV	0.05
79	21.29		0.00	0.000	305308	0.202	VV	0.07
80	21.45		0.00	0.000	383520	0.254	VV	0.05
81	21.63		0.00	0.000	139951	0.093	VV	0.09
82	21.89		0.00	0.000	195158	0.129	VV	0.06
83	22.08	AR1260#5	7.49	14.072	4001942	2.649	VV	0.10
84	22.17		0.00	0.000	2227294	1.475	VV	0.11
85	22.77		0.00	0.000	157449	0.104	VV	0.06
86	22.90		0.00	0.000	166900	0.110	VV	0.06
87	23.21		0.00	0.000	66661	0.044	VV	0.05
88	23.31		0.00	0.000	833394	0.552	VV	0.06
89	23.80		0.00	0.000	1593270	1.055	VV	0.07
90	23.93		0.00	0.000	247561	0.164	VV	0.07
91	24.99		0.00	0.000	348192	0.231	VV	0.07
92	25.19		0.00	0.000	6310	0.004	VB	0.08
93	25.74		0.00	0.000	525	0.000	BB	0.07
94	25.86		0.00	0.000	735	0.000	BV	0.07
95	26.06	CL10BP	0.75	1.418	5344869	3.539	VB	0.08
96	28.26		0.00	0.000	1814	0.001	BB	0.13
97	28.61		0.00	0.000	3308	0.002	BB	0.09

Total Area = 1.510473E+08 Total Height = 1.94659E+07 Total Amount = 53.21012

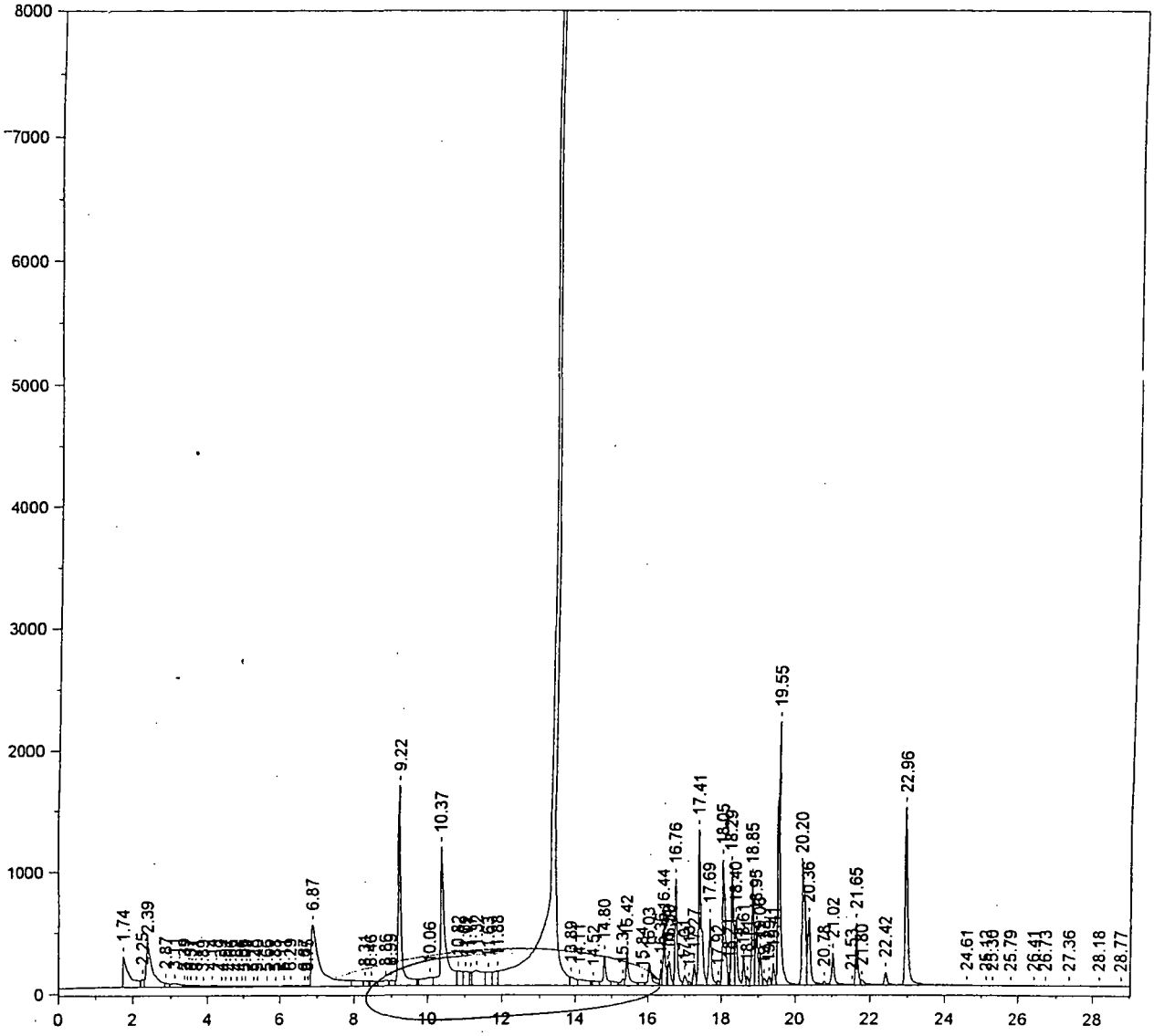
50317



After reintegration
AST
9/20/2

50318

— H:\CP2\HP2\M0919B.0022.RAW 301101-01MD B8068 VWR-005-02-EBTMSD



Before reintegration
excess area under peaks
RST
9/20/2

50322

Sample Name = **301101-01MD B8068 VWR-005-02-EBTMSD**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0022.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/19/02 9:43:13 PM
Method Version = 567
Calibration Version = 5

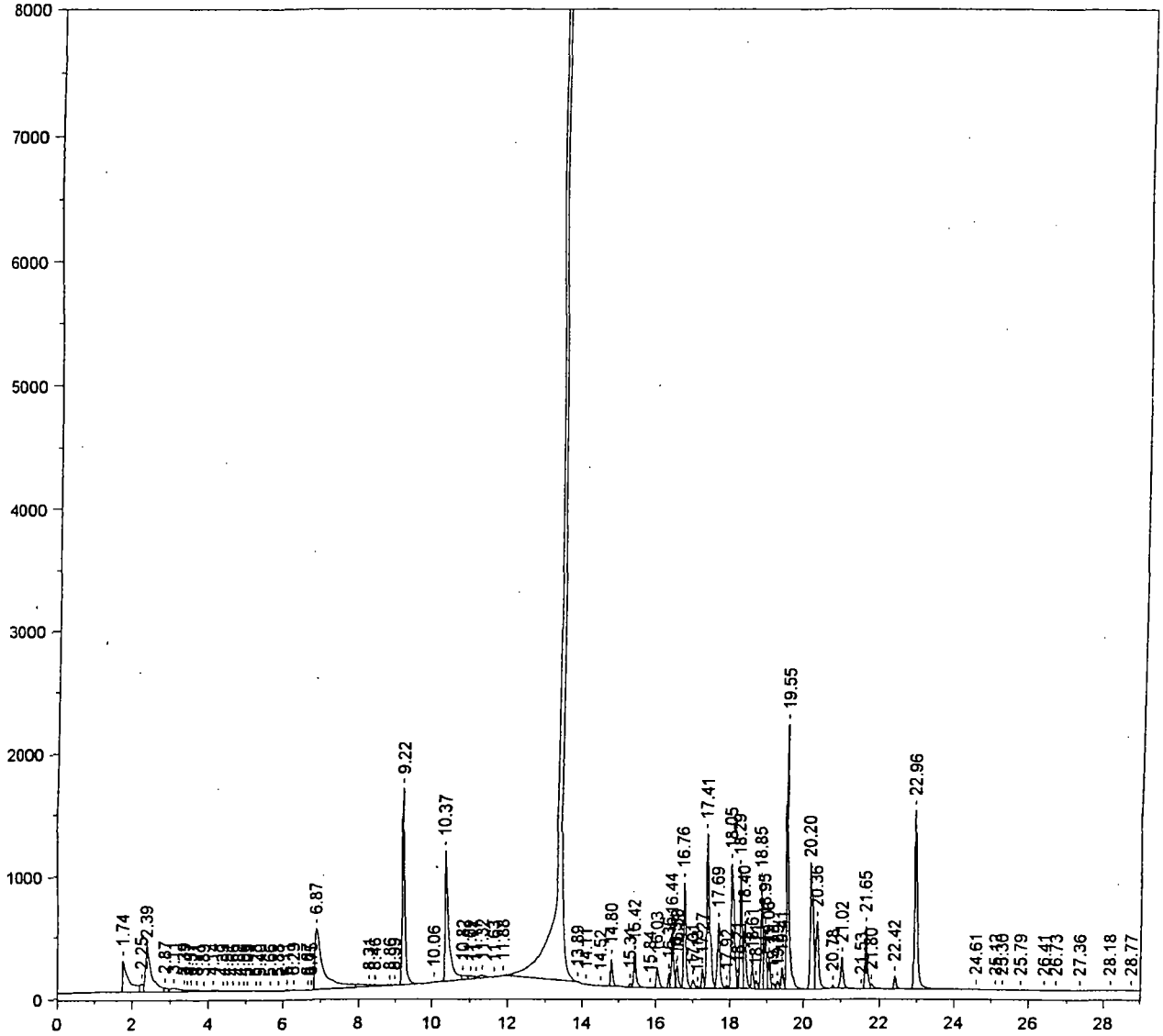
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	2939064	1.279	BV	0.13
2	2.25		0.00	0.000	429293	0.187	VV	0.07
3	2.39		0.00	0.000	4122779	1.793	VV	0.14
4	2.87		0.00	0.000	231319	0.101	VV	0.07
5	3.11		0.00	0.000	569149	0.248	VV	0.26
6	3.39		0.00	0.000	92840	0.040	VV	0.05
7	3.47		0.00	0.000	94478	0.041	VV	0.06
8	3.57		0.00	0.000	86103	0.037	VV	0.06
9	3.71		0.00	0.000	161642	0.070	VV	0.13
10	3.89		0.00	0.000	131912	0.057	VV	0.13
11	4.14		0.00	0.000	239068	0.104	VV	0.20
12	4.39		0.00	0.000	61950	0.027	VV	0.06
13	4.51		0.00	0.000	95558	0.042	VV	0.12
14	4.66		0.00	0.000	43001	0.019	VV	0.06
15	4.82		0.00	0.000	103285	0.045	VV	0.11
16	4.96		0.00	0.000	49411	0.021	VV	0.06
17	5.05		0.00	0.000	95598	0.042	VV	0.12
18	5.28		0.00	0.000	80658	0.035	VV	0.12
19	5.40		0.00	0.000	74522	0.032	VV	0.09
20	5.66		0.00	0.000	99868	0.043	VV	0.11
21	5.88		0.00	0.000	81496	0.035	VV	0.16
22	6.11		0.00	0.000	123941	0.054	VV	0.08
23	6.29		0.00	0.000	104560	0.045	VV	0.08
24	6.67		0.00	0.000	101790	0.044	VV	0.10
25	6.75		0.00	0.000	43577	0.019	VV	0.05
26	6.87		0.00	0.000	8824533	3.839	VV	0.17
27	8.31		0.00	0.000	379571	0.165	VV	0.08
28	8.46		0.00	0.000	512386	0.223	VV	0.12
29	8.86		0.00	0.000	768255	0.334	VV	0.20
30	8.99		0.00	0.000	413346	0.180	VV	0.05
31	9.22	CL4XYL	0.87	0.151	9282996	4.038	VV	0.06
32	10.06		0.00	0.000	1454253	0.633	VV	0.15
33	10.37	AR1016#1	41.24	7.120	9730742	4.233	VV	0.07
34	10.82		0.00	0.000	1132040	0.492	VV	0.08
35	11.02		0.00	0.000	1296870	0.564	VV	0.14
36	11.17		0.00	0.000	380892	0.166	VV	0.03
37	11.32	AR1016#2	5.80	1.001	2516471	1.095	VV	0.12
38	11.63		0.00	0.000	1142019	0.497	VV	0.10
39	11.88		0.00	0.000	1163222	0.506	VV	0.09
40	13.42	AR1016#5	493.48	85.185	102774016	44.707	VV	0.08
41	13.89		0.00	0.000	786793	0.342	VV	0.10
42	14.11		0.00	0.000	895012	0.389	VV	0.15
43	14.52		0.00	0.000	381347	0.166	VV	0.09
44	14.80		0.00	0.000	1462364	0.636	VV	0.06
45	15.31		0.00	0.000	393625	0.171	VV	0.08
46	15.42		0.00	0.000	1665528	0.725	VV	0.06
47	15.84		0.00	0.000	289379	0.126	VV	0.13
48	16.03		0.00	0.000	1228954	0.535	VV	0.07
49	16.36		0.00	0.000	497625	0.216	VV	0.06
50	16.44	AR1260#1	7.29	1.258	1958880	0.852	VV	0.05
51	16.54		0.00	0.000	411000	0.179	VV	0.03
52	16.58		0.00	0.000	908731	0.395	VV	0.06

50323

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.76	AR1260#2	7.29	1.258	3632775	1.580	VV	0 05
54	17.01		0.00	0.000	476044	0.207	VV	0.07
55	17.13		0.00	0.000	150283	0.065	VV	0.06
56	17.27		0.00	0.000	682681	0.297	VV	0.06
57	17.41		0.00	0.000	6788908	2.953	VV	0.06
58	17.69		0.00	0.000	2626184	1.142	VV	0.06
59	17.92		0.00	0.000	170241	0.074	VV	0.05
60	18.05		0.00	0.000	5867979	2.553	VV	0.09
61	18.21		0.00	0.000	225208	0.098	VV	0.03
62	18.29	AR1260#3	7.21	1.245	3718174	1.617	VV	0.05
63	18.40		0.00	0.000	2370481	1.031	VV	0.06
64	18.61		0.00	0.000	795706	0.346	VV	0.05
65	18.71		0.00	0.000	310635	0.135	VV	0.05
66	18.85		0.00	0.000	3321867	1.445	VV	0.06
67	18.95		0.00	0.000	2103265	0.915	VV	0.05
68	19.06		0.00	0.000	1081443	0.470	VV	0.07
69	19.17		0.00	0.000	251487	0.109	VV	0.07
70	19.29		0.00	0.000	324793	0.141	VV	0.05
71	19.41		0.00	0.000	727760	0.317	VV	0.05
72	19.55	AR1260#4	7.56	1.306	9761178	4.246	VV	0.06
73	20.20		0.00	0.000	5787436	2.518	VV	0 10
74	20.36		0.00	0.000	3049070	1.326	VV	0.08
75	20.78		0.00	0.000	195126	0.085	VV	0.05
76	21.02		0.00	0.000	1470698	0.640	VV	0.06
77	21.53		0.00	0.000	28427	0.012	VV	0.04
78	21.65	AR1260#5	7.77	1.342	2259294	0.983	VV	0.06
79	21.80		0.00	0.000	329696	0.143	VV	0.08
80	22.42		0.00	0.000	622631	0.271	VV	0.07
81	22.96	CL10BP	0.78	0.135	7776030	3.383	VV	0.07
82	24.61		0.00	0.000	21371	0.009	VV	0.13
83	25.12		0.00	0.000	6145	0.003	VV	0.12
84	25.30		0.00	0.000	2151	0.001	VB	0.08
85	25.79		0.00	0.000	8140	0.004	BB	0.12
86	26.41		0.00	0.000	653	0.000	BB	0.13
87	26.73		0.00	0.000	7594	0.003	BB	0.16
88	27.36		0.00	0.000	880	0.000	BB	0.11
89	28.18		0.00	0.000	20283	0.009	BV	0.24
90	28.77		0.00	0.000	1086	0.000	VB	0.12

Total Area = 2.298816E+08 Total Height = 3.581887E+07 Total Amount = 579.3076

— H:\CP2\HP2\M0919B.0022.RAW 301101-01MD B8068 VWR-005-02-EBTMSD



After reintegration
RJT
9/20/02

RJT
9/24/02

50325

PAH-8270 SIM

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-003-02-ESW	ARDL Lab No.:	301101-05
Desc/Location:	NONE	Lab Filename:	Z3797
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	14.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.3	11.7	ND		UG/KG	1
Acenaphthylene	2.8	11.7	ND		UG/KG	1
Acenaphthene	3.2	11.7	ND		UG/KG	1
Fluorene	2.7	11.7	ND		UG/KG	1
Phenanthrene	3	11.7	40.7		UG/KG	1
Anthracene	2.3	11.7	7.1	J	UG/KG	1
Fluoranthene	3	11.7	106		UG/KG	1
Pyrene	2.2	11.7	105		UG/KG	1
Benzo(a)anthracene	2.3	11.7	47.1		UG/KG	1
Chrysene	2.8	11.7	66.1		UG/KG	1
Benzo(b)fluoranthene	2.8	11.7	72.4		UG/KG	1
Benzo(k)fluoranthene	4.3	11.7	39.8		UG/KG	1
Benzo(a)pyrene	2.6	11.7	58.8		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.7	11.7	44.9		UG/KG	1
Dibenzo(a,h)anthracene	2.6	11.7	6	J	UG/KG	1
Benzo(g,h,i)perylene	2.8	11.7	48.9		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	73%
Nitrobenzene-d5	23-120	70%
Terphenyl-d14	18-137	93%

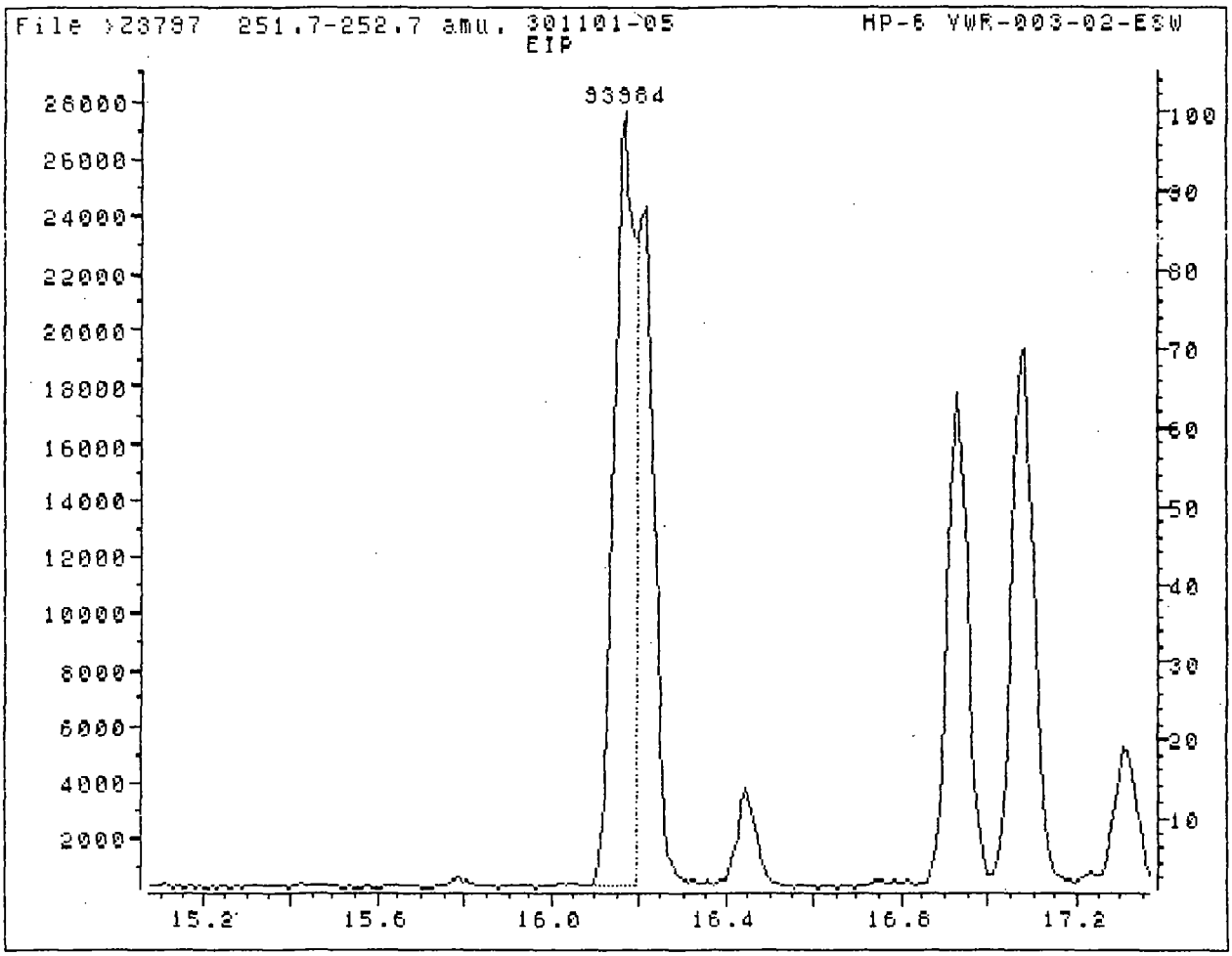
Surrogate recoveries marked with '*' indicates they are outside standard limits.

rator ID: DOUG Quant Rev: 7 Quant Time: 020925 01:51
Output File: ^Z3797::D1 Injected at: 020925 01:27
Data File: >Z3797::D8 Dilution Factor: 1.00000
Name: 301101-05 Instrument ID: **HP*6
Misc: HP-6 VWR-003-02-ESW B8067 8270 PNA/SIM SEMIVO

ID File: SIMPS6::SC
Title: PAH ANALYSIS
Last Calibration: 020924 15:56 Last Qcal Time: 020924 13:34

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*D8 Naphthalene (ISTD2)	5.56	136.0	1141946	333.00	ug/Kg	94
2)	D5 Nitrobenzene (Surr 3)	4.62	82.0	592104	468.29	ug/Kg	79
6)	*D10 Acenaphthene (ISTD3)	7.97	164.0	573027	333.00	ug/Kg	87
7)	2-Fluorobiphenyl (Surr 4)	6.99	172.0	958623	488.33	ug/Kg	96
11)	*D10 Phenanthrene (ISTD4)	10.02	188.0	798426	333.00	ug/Kg	95
12)	Phenanthrene	10.05	178.0	88367	34.88	ug/Kg	96
13)	Anthracene	10.11	178.0	15850	6.10	ug/Kg	92
14)	Fluoranthene	11.72	202.0	229788	90.65	ug/Kg	93
15)	*D12 Chrysene (ISTD 5)	13.86	240.0	593991	333.00	ug/Kg	100
16)	Pyrene	12.05	202.0	191220	90.22	ug/Kg	96
17)	D14 Terphenyl (Surr 6)	12.17	244.0	813099	617.99	ug/Kg	87
)	Benzo(a)Anthracene	13.83	228.0	79827	40.37	ug/Kg	96
)	Chrysene	13.90	228.0	101111	56.62	ug/Kg	97
20)	*D12 Perylene (ISTD 6)	17.24	264.0	421540	333.00	ug/Kg	97
21)	Benzo(b)Fluoranthene	16.17	252.0	93984	62.08	ug/Kg	93
22)	Benzo(k)Fluoranthene	16.21	252.0	45617M	34.07	ug/Kg	93
23)	Benzo(a)Pyrene	17.08	252.0	68008	50.40	ug/Kg	95
24)	Indeno(1,2,3-cd)Pyrene	21.07	276.0	52599	38.47	ug/Kg	76
25)	Dibenzo(a,h)Anthracene	21.50	278.0	5353	5.12	ug/Kg	73
26)	Benzo(g,h,i)Perylene	22.26	276.0	49135	41.91	ug/Kg	85

* Compound is ISTD



Data File: >Z3797::D8 Quant Output File: ^Z3797::D1
Name: 301101-05 Instrument ID: **HP*6
Misc: HP-6 VWR-003-02-ESW B8067 8270 PNA/SIM SEMIVO
Quant Time: 020925 01:51 Quant ID File: SIMPS6::SC
Injected at: 020925 01:27 Last Calibration: 020924 15:56

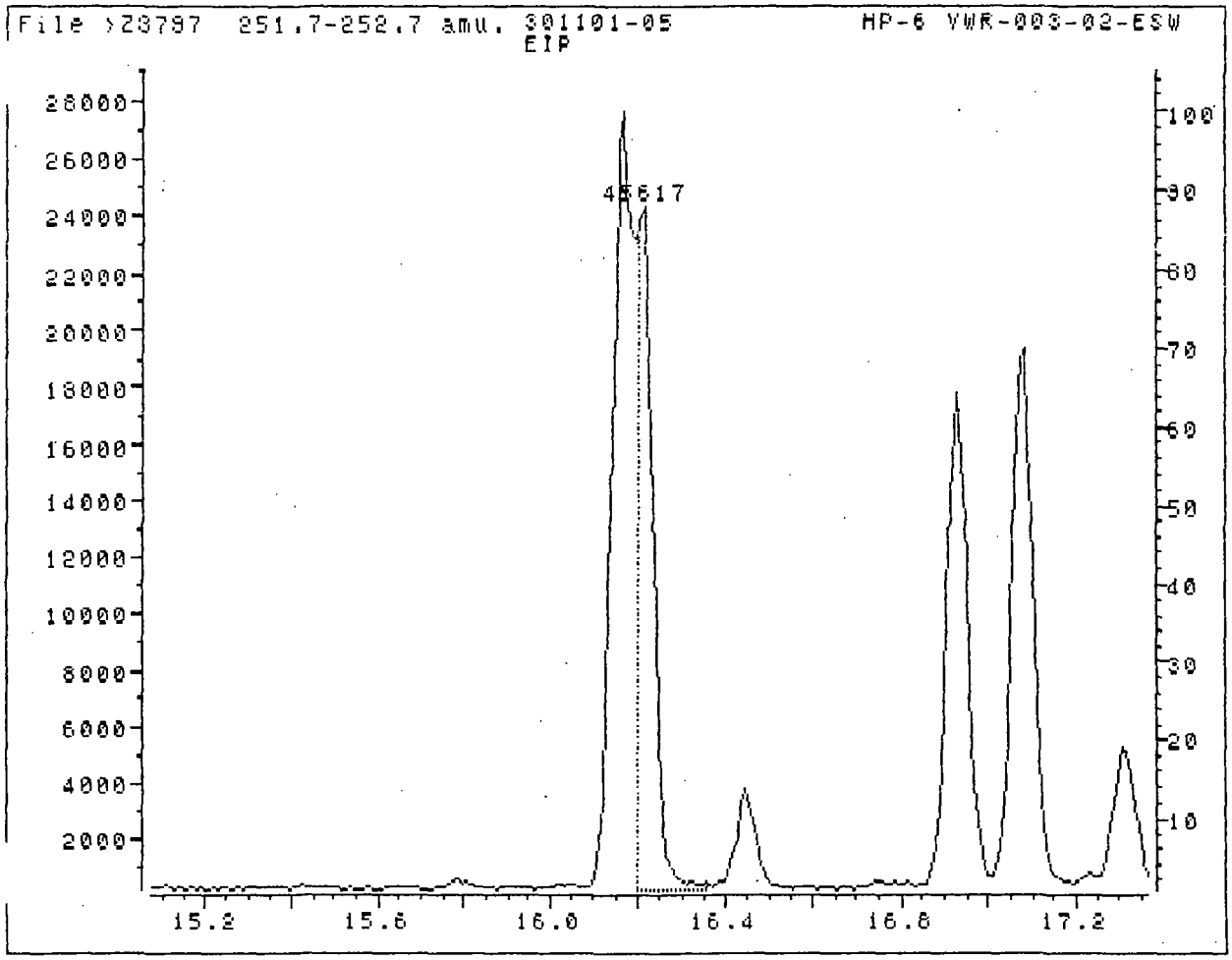
Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1334
Retention Time: 16.17 min.
Quant Ion: 252.0
Area: 93984
Concentration: 70.20 ug/Kg
q-value: 93

This report was produced by QAREA on: 021007 12:16

Incorrect peak integrated by computer.

10/7/02

40034 I



Data File: >Z3797::D8 Quant Output File: ^Z3797::D1
Name: 301101-05 Instrument ID: **HP*6
Misc: HP-6 VWR-003-02-ESW B8067 8270 PNA/SIM SEMIVO
Quant Time: 020925 01:51 Quant ID File: SIMPS6::SC
Injected at: 020925 01:27 Last Calibration: 020924 15:56

Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1339
Retention Time: 16.21 min.
Quant Ion: 252.0
Area: 45617M
Concentration: 34.07 ug/Kg
q-value: 93

This report was produced by QAREA on: 021007 12:19

gb 10/7/02

40034J

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-005-02-EBT	ARDL Lab No.:	301101-01
Desc/Location:	NONE	Lab Filename:	Z3793
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1051	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5001
% Moisture:	14.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.3	11.7	ND		UG/KG	1
Acenaphthylene	2.8	11.7	ND		UG/KG	1
Acenaphthene	3.2	11.7	ND		UG/KG	1
Fluorene	2.7	11.7	ND		UG/KG	1
Phenanthrene	3	11.7	8.9	J	UG/KG	1
Anthracene	2.3	11.7	ND		UG/KG	1
Fluoranthene	3	11.7	15.3		UG/KG	1
Pyrene	2.2	11.7	20.7		UG/KG	1
Benzo(a)anthracene	2.3	11.7	9.2	J	UG/KG	1
Chrysene	2.8	11.7	11.3	J	UG/KG	1
Benzo(b)fluoranthene	2.8	11.7	9.5	J	UG/KG	1
Benzo(k)fluoranthene	4.3	11.7	6.2	J	UG/KG	1
Benzo(a)pyrene	2.6	11.7	7.5	J	UG/KG	1
Indeno(1,2,3-cd)pyrene	2.7	11.7	5.9	J	UG/KG	1
Dibenzo(a,h)anthracene	2.6	11.7	ND		UG/KG	1
Benzo(g,h,i)perylene	2.8	11.7	6.9	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	71%
Nitrobenzene-d5	23-120	70%
Terphenyl-d14	18-137	95%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

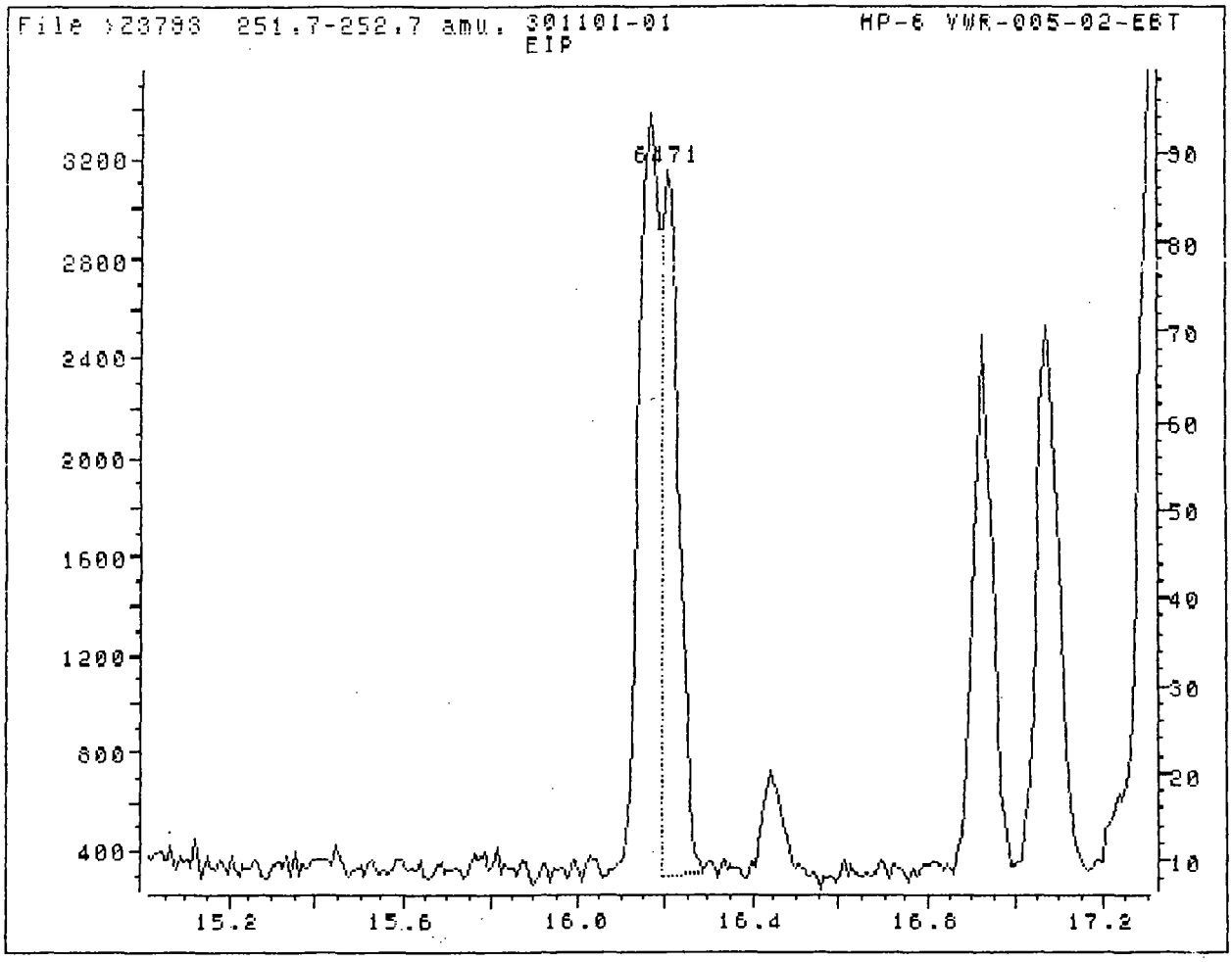
QUANT REPORT

Operator ID: DOUG Quant Rev: 7 Quant Time: 020924 23:55
Output File: ^Z3793::D1 Injected at: 020924 23:29
Data File: >Z3793::D8 Dilution Factor: 1.00000
Name: 301101-01 Instrument ID: **HP*6
Misc: HP-6 VWR-005-02-EBT B8067 8270 PNA/SIM SEMIVO

ID File: SIMPS6::SC
Title: PAH ANALYSIS
Last Calibration: 020924 15:56 Last Qcal Time: 020924 13:34

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*D8 Naphthalene (ISTD2)	5.56	136.0	1102147	333.00	ug/Kg	96
2)	D5 Nitrobenzene (Surr 3)	4.62	82.0	569148	466.39	ug/Kg	79
6)	*D10 Acenaphthene (ISTD3)	7.97	164.0	559788	333.00	ug/Kg	86
7)	2-Fluorobiphenyl (Surr 4)	6.99	172.0	911704	475.42	ug/Kg	96
11)	*D10 Phenanthrene (ISTD4)	10.02	188.0	724824	333.00	ug/Kg	95
12)	Phenanthrene	10.05	178.0	17518	7.62	ug/Kg	94
14)	Fluoranthene	11.72	202.0	30052	13.06	ug/Kg	91
15)	*D12 Chrysene (ISTD 5)	13.86	240.0	539202	333.00	ug/Kg	100
16)	Pyrene	12.05	202.0	33984	17.66	ug/Kg	97
17)	D14 Terphenyl (Surr 6)	12.17	244.0	753871	631.19	ug/Kg	89
3)	Benzo(a)Anthracene	13.83	228.0	14109	7.86	ug/Kg	92
,)	Chrysene	13.90	228.0	15715	9.69	ug/Kg	98
20)	*D12 Perylene (ISTD 6)	17.24	264.0	387358	333.00	ug/Kg	98
21)	Benzo(b)Fluoranthene	16.17	252.0	11296M	8.12	ug/Kg	93
22)	Benzo(k)Fluoranthene	16.20	252.0	6471	5.26	ug/Kg	93
23)	Benzo(a)Pyrene	17.07	252.0	7923	6.39	ug/Kg	88
24)	Indeno(1,2,3-cd)Pyrene	21.05	276.0	6303	5.02	ug/Kg	77
26)	Benzo(g,h,i)Perylene	22.26	276.0	6351	5.90	ug/Kg	86

* Compound is ISTD



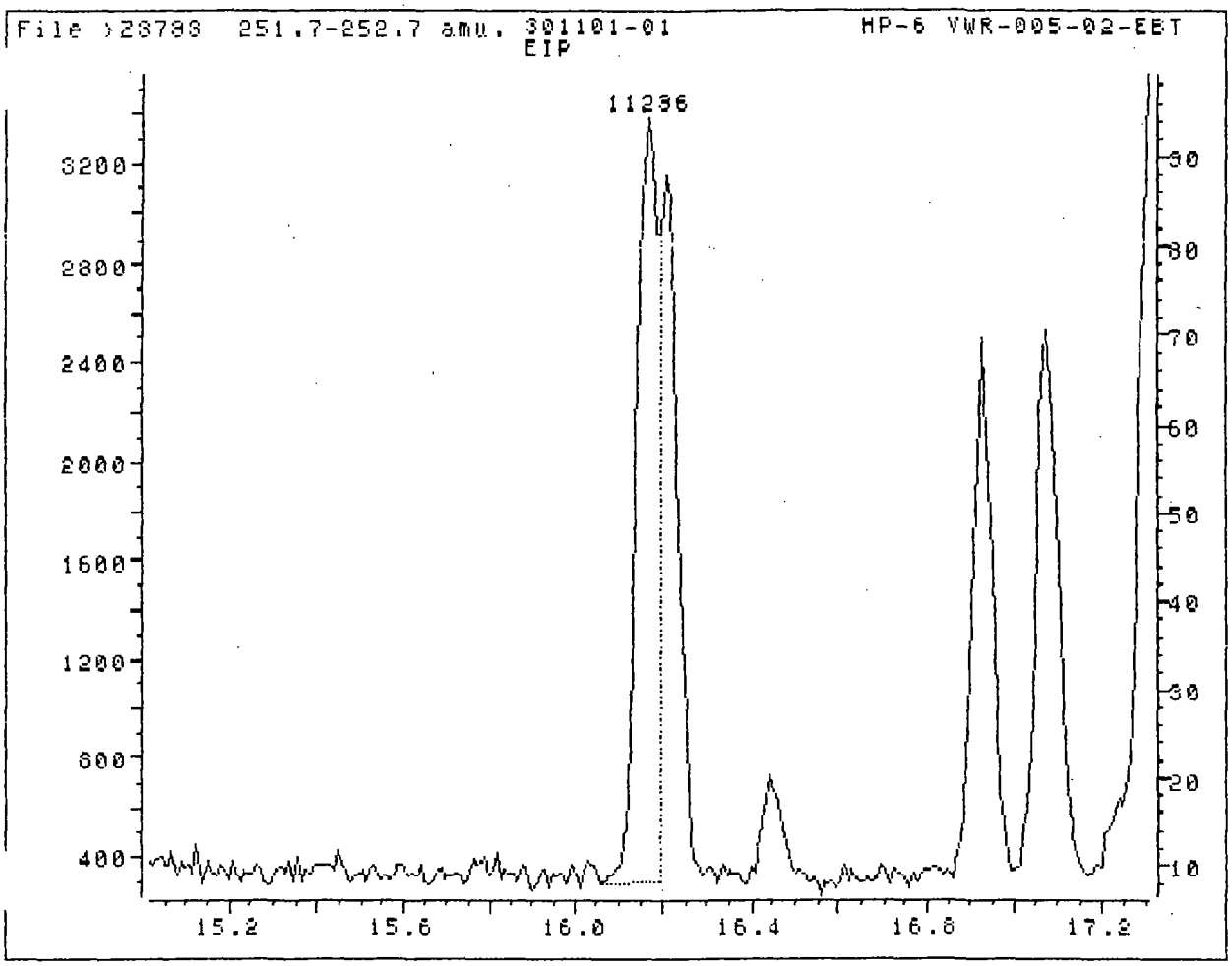
Data File: >Z3793::D8 Quant Output File: ^Z3793::D1
Name: 301101-01 Instrument ID: **HP*6
Misc: HP-6 VWR-005-02-EBT B8067 8270 PNA/SIM SEMIVO
Quant Time: 020924 23:55 Quant ID File: SIMPS6::SC
Injected at: 020924 23:29 Last Calibration: 020924 15:56

Compound No: 21
Compound Name: Benzo(b)Fluoranthene
Scan Number: 1338
Retention Time: 16.20 min.
Quant Ion: 252.0
Area: 6471
Concentration: 4.65 ug/Kg
q-value: 93

This report was produced by QAREA on: 021007 11:57

Wrong peak integrated by computer.
JB 10/7/02

4000286



Data File: >Z3793::D8 Quant Output File: ^Z3793::D1
Name: 301101-01 Instrument ID: **HP*6
Misc: HP-6 VWR-005-02-EBT B8067 8270 PNA/SIM SEMIVO
Quant Time: 020924 23:55 Quant ID File: SIMPS6::SC
Injected at: 020924 23:29 Last Calibration: 020924 15:56

Compound No: 21
Compound Name: Benzo(b)Fluoranthene
Scan Number: 1334
Retention Time: 16.17 min.
Quant Ion: 252.0
Area: 11296M
Concentration: 8.12 ug/Kg
q-value: 93

This report was produced by QAREA on: 021007 12:01

400028H

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-006-02-EBT	ARDL Lab No.:	301101-02
Desc/Location:	NONE	Lab Filename:	Z3779
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	15.8	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	11.9	ND		UG/KG	1
Acenaphthylene	2.8	11.9	ND		UG/KG	1
Acenaphthene	3.3	11.9	ND		UG/KG	1
Fluorene	2.8	11.9	ND		UG/KG	1
Phenanthrene	3	11.9	16.7		UG/KG	1
Anthracene	2.4	11.9	ND		UG/KG	1
Fluoranthene	3.1	11.9	38.0		UG/KG	1
Pyrene	2.2	11.9	48.3		UG/KG	1
Benzo(a)anthracene	2.3	11.9	26.9		UG/KG	1
Chrysene	2.8	11.9	33.6		UG/KG	1
Benzo(b)fluoranthene	2.8	11.9	22.0		UG/KG	1
Benzo(k)fluoranthene	4.4	11.9	23.5		UG/KG	1
Benzo(a)pyrene	2.7	11.9	27.7		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.8	11.9	18.3		UG/KG	1
Dibenzo(a,h)anthracene	2.6	11.9	ND		UG/KG	1
Benzo(g,h,i)perylene	2.8	11.9	22.0		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	74%
Nitrobenzene-d5	23-120	72%
Terphenyl-d14	18-137	85%

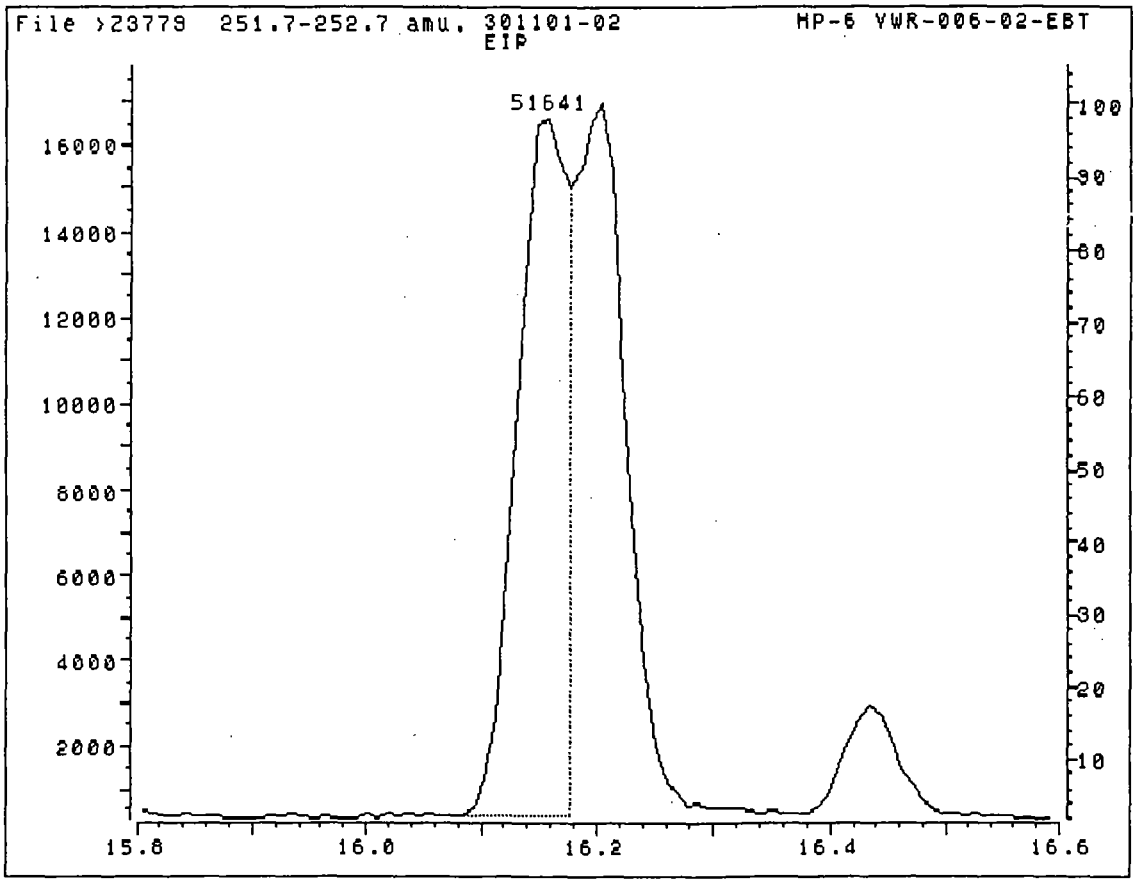
Surrogate recoveries marked with '*' indicates they are outside standard limits.

(·ator ID: DOUG Quant Rev: 7 Quant Time: 020924 17:32
Output File: ^Z3779::D1 Injected at: 020924 15:25
Data File: >Z3779::D8 Dilution Factor: 1.00000
Name: 301101-02 Instrument ID: **HP*6
Misc: HP-6 VWR-006-02-EBT B8067 PNA/SIM SEMIVOLATIL

ID File: SIMPS6::SC
Title: PAH ANALYSIS
Last Calibration: 020924 15:56 Last Qcal Time: 020924 13:34

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*D8 Naphthalene (ISTD2)	5.55	136.0	1787094	333.00	ug/Kg	95
2)	D5 Nitrobenzene (Surr 3)	4.62	82.0	952015	481.13	ug/Kg	78
6)	*D10 Acenaphthene (ISTD3)	7.97	164.0	908203	333.00	ug/Kg	85
7)	2-Fluorobiphenyl (Surr 4)	6.99	172.0	1531657	492.29	ug/Kg	96
11)	*D10 Phenanthrene (ISTD4)	10.02	188.0	1173289	333.00	ug/Kg	90
12)	Phenanthrene	10.05	178.0	52459	14.09	ug/Kg	96
14)	Fluoranthene	11.71	202.0	119091	31.97	ug/Kg	81
15)	*D12 Chrysene (ISTD 5)	13.85	240.0	951330	333.00	ug/Kg	100
16)	Pyrene	12.05	202.0	138194	40.71	ug/Kg	96
17)	D14 Terphenyl (Surr 6)	12.16	244.0	1187681	563.62	ug/Kg	77
18)	Benzo(a)Anthracene	13.82	228.0	71838	22.68	ug/Kg	98
)	Chrysene	13.90	228.0	80826	28.26	ug/Kg	96
)	*D12 Perylene (ISTD 6)	17.23	264.0	776773	333.00	ug/Kg	97
21)	Benzo(b)Fluoranthene	16.16	252.0	51641	18.51	ug/Kg	98
22)	Benzo(k)Fluoranthene	16.20	252.0	48804M	19.78	ug/Kg	98
23)	Benzo(a)Pyrene	17.06	252.0	58043	23.34	ug/Kg	97
24)	Indeno(1,2,3-cd)Pyrene	21.04	276.0	38720	15.37	ug/Kg	78
26)	Benzo(g,h,i)Perylene	22.22	276.0	40004	18.52	ug/Kg	83

* Compound is ISTD



Data File: >Z3779::D8 Quant Output File: ^Z3779::D1
Name: 301101-02 Instrument ID: **HP*6
Misc: HP-6 VWR-006-02-EBT B8067 PNA/SIM SEMIVOLATIL
Quant Time: 020924 17:32 Quant ID File: SIMPS6::SC
Injected at: 020924 15:25 Last Calibration: 020924 15:56

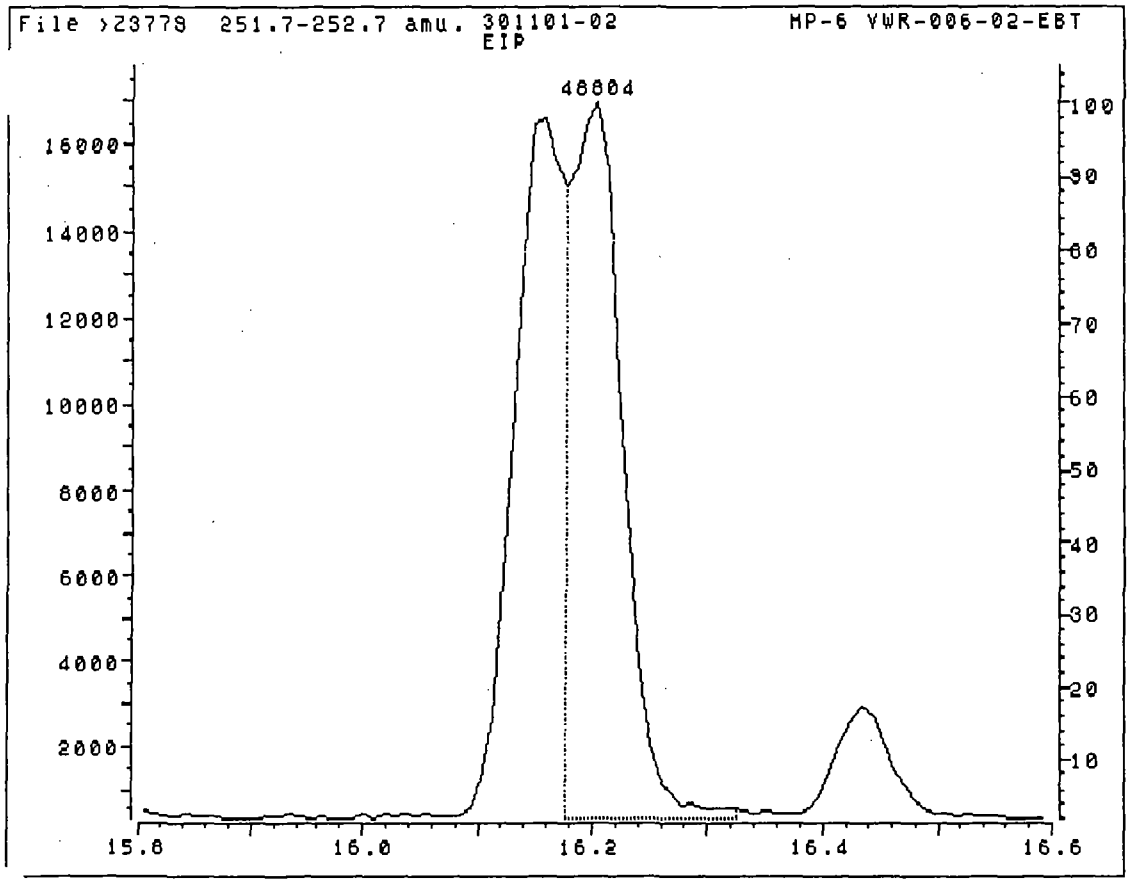
Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1333
Retention Time: 16.16 min.
Quant Ion: 252.0
Area: 51641
Concentration: 20.93 ug/Kg
q-value: 98

This report was produced by QAREA on: 020925 16:43

Incorrect peak was ~~integrated by~~ picked by computer. JB 10/11/02

JB 10/11/02

40033H



Data File: >Z3779::D8 Quant Output File: ^Z3779::D1
Name: 301101-02 Instrument ID: **HP*6
Misc: HP-6 VWR-006-02-EBT B8067 PNA/SIM SEMIVOLATIL
Quant Time: 020924 17:32 Quant ID File: SIMPS6::SC
Injected at: 020924 15:25 Last Calibration: 020924 15:56

Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1338
Retention Time: 16.20 min.
Quant Ion: 252.0
Area: 48804M
Concentration: 19.78 ug/Kg
q-value: 98

This report was produced by QAREA on: 020925 16:45

40033I

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-008-02-EBT	ARDL Lab No.:	301101-04
Desc/Location:	NONE	Lab Filename:	Z3796
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	15.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.3	11.8	ND		UG/KG	1
Acenaphthylene	2.8	11.8	ND		UG/KG	1
Acenaphthene	3.2	11.8	ND		UG/KG	1
Fluorene	2.8	11.8	ND		UG/KG	1
Phenanthrene	3	11.8	18.7		UG/KG	1
Anthracene	2.4	11.8	ND		UG/KG	1
Fluoranthene	3.1	11.8	34.7		UG/KG	1
Pyrene	2.2	11.8	46.8		UG/KG	1
Benzo(a)anthracene	2.3	11.8	19.8		UG/KG	1
Chrysene	2.8	11.8	26.7		UG/KG	1
Benzo(b)fluoranthene	2.8	11.8	18.9		UG/KG	1
Benzo(k)fluoranthene	4.4	11.8	19.1		UG/KG	1
Benzo(a)pyrene	2.7	11.8	20.3		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.8	11.8	13.9		UG/KG	1
Dibenzo(a,h)anthracene	2.6	11.8	ND		UG/KG	1
Benzo(g,h,i)perylene	2.8	11.8	17.2		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	86%
Nitrobenzene-d5	23-120	80%
Terphenyl-d14	18-137	97%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

8015M

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/25/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17297	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	VWR-003-02-ESW	ARDL Lab No.:	301101-05
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/23/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	14.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.9	11.7	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/25/2002

Project Name: USACE FT DEARBORN Analysis: MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.: 17297 Analytical Method: 8015
Prep Method: NONE

Field ID:	VWR-005-02-EBT	ARDL Lab No.:	301101-01
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1051	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/23/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	14.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.9	11.7	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/25/2002

Project Name: USACE FT DEARBORN Analysis: MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.: 17297 Analytical Method: 8015
Prep Method: NONE

Field ID:	VWR-006-02-EBT	ARDL Lab No.:	301101-02
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/23/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	15.8	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.9	11.9	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/25/2002

Project Name: USACE FT DEARBORN Analysis: MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.: 17297 Analytical Method: 8015
Prep Method: NONE

Field ID:	VWR-008-02-EBT	ARDL Lab No.:	301101-04
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1246	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/23/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	15.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.9	11.8	ND		MG/KG	1

INORGANICS

INORGANIC ANALYSIS DATA PACKAGE

FERGUSON HARBOR

Report Date: 09/27/02

Delivery Order No.: 17297

ARDL Report No.: 301101

Lab Name: ARDL, Inc.
Samples Received at ARDL: 13-Sep-02
Project Name: USACE Ft. Dearborn

CASE NARRATIVE

Sample ID No.	Date Collected	Lab ID No.	Analysis Requested
VWR-005-02-EBT	09/12/02	301101-01	Total Metals(1), Total Solids
VWR-006-02-EBT	09/12/02	301101-02	Total Metals(1), Total Solids
VWR-008-02-EBT	09/12/02	301101-04	Total Metals(1), Total Solids
VWR-003-02-ESW	09/12/02	301101-05	Total Metals(1), Total Solids

(1) Including aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, vanadium and zinc.

The quality control data are summarized as follows:

LABORATORY CONTROL SAMPLES
Percent recovery of all LCS analyses were within control limits.

PREPARATION BLANKS
Results of all preparation blanks were within acceptable limits.

MATRIX SPIKES
Percent recovery of all matrix spikes and matrix spike duplicates except 1 of 2 for copper and 2 of 2 for antimony were within control limits. The sample results for aluminum, iron and manganese were greater than 4 times the spike amount; therefore, percent recovery was not considered.

DUPLICATES
RPD on all duplicate analyses except calcium, copper and magnesium were within control limits.
All duplicate analyses are reported as MS/MSD except calcium, magnesium, potassium, sodium and total solids which are reported as sample/duplicate.

Release of the data contained in this package has been authorized by the Technical Services Manager or his designee as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-003-02-ESW ARDL No: 301101-05
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1246 Moisture: 14.3

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	11.7	12000	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.58	1.3	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.35	8.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	109	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.57	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.23	0.72	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	11.7	13400	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.58	20.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.58	9	MG/KG	3050B	6010B	09/18/02	09/23/02	P399[illegible]
Copper	1.2	33.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P39[illegible]
Iron	5.8	21500	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.35	73.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	11.7	9050	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.58	627	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.093	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	23.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	233	1750	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.58	0.63	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.58	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	46.7	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.35	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.58	23.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.58	71.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	85.7	%	NONE	160.3	NA	09/13/02	09179442

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301101 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-005-02-EBT ARDL No: 301101-01
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1051 Moisture: 14.5

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	11.7	10500	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.58	0.87	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.35	12.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	81.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.43	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.23	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	11.7	22600	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.58	17.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.58	10.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	38.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Iron	5.8	23900	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.35	22.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	11.7	14400	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.58	439	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.094	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	28.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	234	1390	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.58	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.58	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	46.8	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.35	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.58	22.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.58	49.0	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	85.5	%	NONE	160.3	NA	09/13/02	09179442

ARDL, INC.
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Lab Report No: 301101 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-006-02-EBT ARDL No: 301101-02
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1246 Moisture: 15.8

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	11.9	10800	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.59	0.83	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.36	7.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	103	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.51	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.24	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	11.9	16400	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.59	16.0	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.59	8.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P399
Copper	1.2	24.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P399
Iron	5.9	18800	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.36	21.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	11.9	9370	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.59	319	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.095	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	18.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	238	1260	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.59	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.59	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	47.5	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.36	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.59	24.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.59	49.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	84.2	%	NONE	160.3	NA	09/13/02	09179442

ARDL, INC.
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Lab Report No: 301101 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-008-02-EBT ARDL No: 301101-04
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1246 Moisture: 15.6

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	11.8	11400	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.59	0.81	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.36	8.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	110	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.49	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.24	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	11.8	13500	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.59	16.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.59	7.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	25.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Iron	5.9	19300	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.36	17.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	11.8	8360	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.59	347	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.095	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	18.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	237	1230	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.59	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.59	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	47.4	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.36	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.59	24.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.59	50.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	84.4	%	NONE	160.3	NA	09/13/02	09179442

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301102 Samples Received at ARDL: 9/13/02

CASE NARRATIVE

VOLATILE FRACTION-METHOD 8260

Soil samples were received by ARDL, Inc. on September 13, 2002, for VOA analysis by GC/MS. All analyses were performed within the method specified holding time.

No unusual problems were encountered during the sample analyses.

SEMIVOLATILE FRACTION - 8270

Soil samples were received by ARDL, Inc. on September 13, 2002 for BNA analysis by GC/MS. All analyses were performed according to low level protocol within method specified holding times.

The spiked blank had high recovery for 4-Nitrophenol. As none was found in the samples, no further action was taken.

No other unusual problems were encountered during the sample extraction or sample analyses.

PNA/SIM FRACTION

Soil samples were received by ARDL, Inc. on September 13, 2002, for PNA-SIM analysis by GC/MS. All analyses were performed according to low level protocol within method specified holding times.

Sample FSS-007-05-EBT required a manual integration for the compound benzo(k)fluoranthene.

No unusual problems were encountered during the sample analyses.

GLYCOL FRACTION - METHOD 8015M

Soil samples were received by ARDL, Inc. on 9/13/02,for Glycol analysis. The samples were extracted within the method specified holding time.

These samples were extracted with ARDL SDG 301101. Therefore, only one blank and spike blank were prepared. Due to software limitations, the blank and spike blank are designated as ARDL SDG 301101, although they are also applicable to ARDL SDG 301102. Additionally, the MS/MSD evaluation was also performed on samples from ARDL SDG 301101. Refer to that data package for results.

No additional problems were encountered during the analysis of these samples.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

ab Name: ARDL, Inc.

ARDL Report No.: 301102 Samples Received at ARDL: 9/13/02

CASE NARRATIVE (Continued)

PCB FRACTION - METHOD 8082

Soil samples were received by ARDL, Inc. on 9/13/02, for PCB analysis. The samples were extracted within holding time requirements.

The soil samples were cleaned up by acid hydrolysis.

These samples were extracted with ARDL SDG 301101. Therefore, only one blank and spike blank were prepared. Due to software limitations, the blank and spike blank are designated as ARDL SDG 301101, although they are also applicable to ARDL SDG 301102. Additionally, the MS/MSD evaluation was also performed on samples from ARDL SDG 301101. Refer to that data package for results.

The columnsThe columns used for PCB analysis are as follows: Primary column - RTX-CLP PESTICIDE II, 30 meter, 0.32 mm ID, 0.25 mm df; Confirmation column - RTX-CLP PESTICIDES, 30 meter, 0.32 mm ID, 0.50 mm df.

The following pages list manual integrations performed on the data. (See ard copy for explanation of manual integrations):

Pages: 50018-50021
50025-50028
50034-50037
50042-50045
50051-50054
50060-50064
50071-50074
50080-50083
50107-50110
50116-50119
50123-50126

No additional problems were encountered in the analysis of these samples.

ORGANIC DATA REPORTING QUALIFIERS

The following organic data reporting qualifiers are used as required.

ND- Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301102 Samples Received at ARDL: 9/13/02

CASE NARRATIVE (Continued)

ORGANIC DATA REPORTING QUALIFIERS (Continued)

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag; instead use a laboratory-defined flag.

B - This flag is used when the analyte is found in the blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must by used for TIC as well as for a positively identified target compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form 1 for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form 1. The Form 1 for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form 1 for the diluted sample, and all concentration values reported on that Form 1 are flagged with the "D" flag.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301102 Samples Received at ARDL: 9/13/02

CASE NARRATIVE (Continued)

ORGANIC DATA REPORTING QUALIFIERS (Continued)

A - This flag indicates that a TIC is a suspected aldol-condensation product.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized for the Laboratory Manager or his designee, as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

VOA-8260B

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-005-08-EBT	ARDL Lab No.:	301102-03
Desc/Location:	NONE	Lab Filename:	Y2577
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1605	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0902JFSJ
% Moisture:	19	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.3	ND		UG/KG	1
Vinyl Chloride	2.2	12.3	ND		UG/KG	1
Bromomethane	1.6	12.3	ND		UG/KG	1
Chloroethane	2	12.3	ND		UG/KG	1
1,1-Dichloroethene	1	6.2	ND		UG/KG	1
Methylene Chloride	3	6.2	ND		UG/KG	1
trans-1,2-Dichloroethene	0.98	6.2	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.2	ND		UG/KG	1
Carbon disulfide	1.1	6.2	ND		UG/KG	1
cis-1,2-Dichloroethene	0.41	6.2	ND		UG/KG	1
Bromochloromethane	1	6.2	ND		UG/KG	1
Chloroform	0.84	6.2	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.2	ND		UG/KG	1
Carbon Tetrachloride	0.75	6.2	ND		UG/KG	1
Benzene	0.7	6.2	ND		UG/KG	1
1,2-Dichloroethane	0.46	6.2	ND		UG/KG	1
Trichloroethene	1.1	6.2	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.2	ND		UG/KG	1
Bromodichloromethane	0.28	6.2	ND		UG/KG	1
cis-1,3-Dichloropropene	0.8	6.2	ND		UG/KG	1
Toluene	0.38	6.2	ND		UG/KG	1
trans-1,3-Dichloropropene	0.77	6.2	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.2	ND		UG/KG	1
Tetrachloroethene	0.58	6.2	ND		UG/KG	1
Dibromochloromethane	0.28	6.2	ND		UG/KG	1
Chlorobenzene	0.26	6.2	ND		UG/KG	1
Ethyl Benzene	0.44	6.2	ND		UG/KG	1
m & p-Xylene	0.99	6.2	ND		UG/KG	1
o-Xylene	1.1	6.2	ND		UG/KG	1
Styrene	0.43	6.2	ND		UG/KG	1

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Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-005-08-EBT	ARDL Lab No.:	301102-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2577
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1605	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	19	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.2	ND		UG/KG	1
2-Hexanone	22.2	24.7	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.2	ND		UG/KG	1
Acetone	39.5	61.7	ND		UG/KG	1
2-Butanone	21	61.7	ND		UG/KG	1
4-Methyl-2-pentanone	18.5	24.7	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	115%
1,2-Dichloroethane-d4	78-135	109%
Toluene-d8	86-129	111%
4-Bromofluorobenzene	76-141	108%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-006-05-EBT	ARDL Lab No.:	301102-04
Desc/Location:	NONE	Lab Filename:	Y2578
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0902JFSJ
% Moisture:	18	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.2	ND		UG/KG	1
Vinyl Chloride	2.2	12.2	ND		UG/KG	1
Bromomethane	1.6	12.2	ND		UG/KG	1
Chloroethane	2	12.2	ND		UG/KG	1
1,1-Dichloroethene	1	6.1	ND		UG/KG	1
Methylene Chloride	2.9	6.1	ND		UG/KG	1
trans-1,2-Dichloroethene	0.96	6.1	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.1	ND		UG/KG	1
Carbon disulfide	1	6.1	ND		UG/KG	1
cis-1,2-Dichloroethene	0.4	6.1	ND		UG/KG	1
Bromochloromethane	0.99	6.1	ND		UG/KG	1
Chloroform	0.83	6.1	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.1	ND		UG/KG	1
Carbon Tetrachloride	0.74	6.1	ND		UG/KG	1
Benzene	0.7	6.1	ND		UG/KG	1
1,2-Dichloroethane	0.45	6.1	ND		UG/KG	1
Trichloroethene	1.1	6.1	ND		UG/KG	1
1,2-Dichloropropane	0.41	6.1	ND		UG/KG	1
Bromodichloromethane	0.28	6.1	ND		UG/KG	1
cis-1,3-Dichloropropene	0.79	6.1	ND		UG/KG	1
Toluene	0.38	6.1	ND		UG/KG	1
trans-1,3-Dichloropropene	0.76	6.1	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.1	ND		UG/KG	1
Tetrachloroethene	0.57	6.1	ND		UG/KG	1
Dibromochloromethane	0.28	6.1	ND		UG/KG	1
Chlorobenzene	0.26	6.1	ND		UG/KG	1
Ethyl Benzene	0.44	6.1	ND		UG/KG	1
m & p-Xylene	0.98	6.1	ND		UG/KG	1
o-Xylene	1	6.1	ND		UG/KG	1
Styrene	0.43	6.1	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-006-05-EBT	ARDL Lab No.:	301102-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2578
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	18	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.1	ND		UG/KG	1
2-Hexanone	22	24.4	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.1	ND		UG/KG	1
Acetone	39	61.0	ND		UG/KG	1
2-Butanone	20.7	61.0	ND		UG/KG	1
4-Methyl-2-pentanone	18.3	24.4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	124%
1,2-Dichloroethane-d4	78-135	120%
Toluene-d8	86-129	127%
4-Bromofluorobenzene	76-141	127%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-007-05-EBT	ARDL Lab No.:	301102-05
Desc/Location:	NONE	Lab Filename:	Y2579
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0902JFSJ
% Moisture:	16.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.0	ND		UG/KG	1
Vinyl Chloride	2.2	12.0	ND		UG/KG	1
Bromomethane	1.6	12.0	ND		UG/KG	1
Chloroethane	1.9	12.0	ND		UG/KG	1
1,1-Dichloroethene	1	6	ND		UG/KG	1
Methylene Chloride	2.9	6	ND		UG/KG	1
trans-1,2-Dichloroethene	0.95	6	ND		UG/KG	1
1,1-Dichloroethane	0.28	6	ND		UG/KG	1
Carbon disulfide	1	6	ND		UG/KG	1
cis-1,2-Dichloroethene	0.4	6	ND		UG/KG	1
Bromochloromethane	0.97	6	ND		UG/KG	1
Chloroform	0.82	6	ND		UG/KG	1
1,1,1-Trichloroethane	0.37	6	ND		UG/KG	1
Carbon Tetrachloride	0.73	6	ND		UG/KG	1
Benzene	0.69	6	ND		UG/KG	1
1,2-Dichloroethane	0.45	6	ND		UG/KG	1
Trichloroethene	1	6	ND		UG/KG	1
1,2-Dichloropropane	0.41	6	ND		UG/KG	1
Bromodichloromethane	0.28	6	ND		UG/KG	1
cis-1,3-Dichloropropene	0.78	6	ND		UG/KG	1
Toluene	0.37	6	ND		UG/KG	1
trans-1,3-Dichloropropene	0.75	6	ND		UG/KG	1
1,1,2-Trichloroethane	0.31	6	ND		UG/KG	1
Tetrachloroethene	0.57	6	ND		UG/KG	1
Dibromochloromethane	0.28	6	ND		UG/KG	1
Chlorobenzene	0.25	6	ND		UG/KG	1
Ethyl Benzene	0.43	6	ND		UG/KG	1
m & p-Xylene	0.96	6	ND		UG/KG	1
o-Xylene	1	6	ND		UG/KG	1
Styrene	0.42	6	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-007-05-EBT	ARDL Lab No.:	301102-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2579
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	16.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.26	6	ND		UG/KG	1
2-Hexanone	21.7	24.1	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6	ND		UG/KG	1
Acetone	38.5	60.2	ND		UG/KG	1
2-Butanone	20.5	60.2	ND		UG/KG	1
4-Methyl-2-pentanone	18.1	24.1	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	113%
1,2-Dichloroethane-d4	78-135	103%
Toluene-d8	86-129	108%
4-Bromofluorobenzene	76-141	113%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301102 Report Date: 10/08/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-001-03-EBT	ARDL Lab No.:	301102-08
Desc/Location:	NONE	Lab Filename:	Y2582
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1730	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0902JFSJ
% Moisture:	20.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.4	12.5	ND		UG/KG	1
Vinyl Chloride	2.3	12.5	ND		UG/KG	1
Bromomethane	1.6	12.5	ND		UG/KG	1
Chloroethane	2	12.5	ND		UG/KG	1
1,1-Dichloroethene	1	6.3	ND		UG/KG	1
Methylene Chloride	3	6.3	ND		UG/KG	1
trans-1,2-Dichloroethene	0.99	6.3	ND		UG/KG	1
1,1-Dichloroethane	0.29	6.3	ND		UG/KG	1
Carbon disulfide	1.1	6.3	ND		UG/KG	1
cis-1,2-Dichloroethene	0.41	6.3	ND		UG/KG	1
Bromochloromethane	1	6.3	ND		UG/KG	1
Chloroform	0.85	6.3	ND		UG/KG	1
1,1,1-Trichloroethane	0.39	6.3	ND		UG/KG	1
Carbon Tetrachloride	0.77	6.3	ND		UG/KG	1
Benzene	0.72	6.3	ND		UG/KG	1
1,2-Dichloroethane	0.46	6.3	ND		UG/KG	1
Trichloroethene	1.1	6.3	ND		UG/KG	1
1,2-Dichloropropane	0.43	6.3	ND		UG/KG	1
Bromodichloromethane	0.29	6.3	ND		UG/KG	1
cis-1,3-Dichloropropene	0.82	6.3	ND		UG/KG	1
Toluene	0.39	6.3	ND		UG/KG	1
trans-1,3-Dichloropropene	0.78	6.3	ND		UG/KG	1
1,1,2-Trichloroethane	0.33	6.3	ND		UG/KG	1
Tetrachloroethene	0.59	6.3	ND		UG/KG	1
Dibromochloromethane	0.29	6.3	ND		UG/KG	1
Chlorobenzene	0.26	6.3	ND		UG/KG	1
Ethyl Benzene	0.45	6.3	ND		UG/KG	1
m & p-Xylene	1	6.3	ND		UG/KG	1
o-Xylene	1.1	6.3	ND		UG/KG	1
Styrene	0.44	6.3	ND		UG/KG	1

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Rt. 15E, Mt. Vernon Airport Industrial Park
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Lab Report No: 301102 Report Date: 10/08/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-001-03-EBT	ARDL Lab No.:	301102-08(cont'd)
Desc/Location:	NONE	Lab Filename:	Y2582
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1730	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	20.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.28	6.3	ND		UG/KG	1
2-Hexanone	22.6	25.1	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.3	ND		UG/KG	1
Acetone	40.2	62.7	ND		UG/KG	1
2-Butanone	21.3	62.7	ND		UG/KG	1
4-Methyl-2-pentanone	18.8	25.1	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	116%
1,2-Dichloroethane-d4	78-135	105%
Toluene-d8	86-129	109%
4-Bromofluorobenzene	76-141	108%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-002-02-ESW	ARDL Lab No.:	301102-06
Desc/Location:	NONE	Lab Filename:	Y2580
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1715	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0902JFSJ
% Moisture:	13.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.2	11.5	ND		UG/KG	1
Vinyl Chloride	2.1	11.5	ND		UG/KG	1
Bromomethane	1.5	11.5	ND		UG/KG	1
Chloroethane	1.8	11.5	ND		UG/KG	1
1,1-Dichloroethene	0.96	5.8	ND		UG/KG	1
Methylene Chloride	2.8	5.8	ND		UG/KG	1
trans-1,2-Dichloroethene	0.91	5.8	ND		UG/KG	1
1,1-Dichloroethane	0.27	5.8	ND		UG/KG	1
Carbon disulfide	0.99	5.8	ND		UG/KG	1
cis-1,2-Dichloroethene	0.38	5.8	ND		UG/KG	1
Bromochloromethane	0.93	5.8	ND		UG/KG	1
Chloroform	0.78	5.8	ND		UG/KG	1
1,1,1-Trichloroethane	0.36	5.8	ND		UG/KG	1
Carbon Tetrachloride	0.7	5.8	ND		UG/KG	1
Benzene	0.66	5.8	ND		UG/KG	1
1,2-Dichloroethane	0.43	5.8	ND		UG/KG	1
Trichloroethene	1	5.8	ND		UG/KG	1
1,2-Dichloropropane	0.39	5.8	ND		UG/KG	1
Bromodichloromethane	0.27	5.8	ND		UG/KG	1
cis-1,3-Dichloropropene	0.75	5.8	ND		UG/KG	1
Toluene	0.36	5.8	ND		UG/KG	1
trans-1,3-Dichloropropene	0.72	5.8	ND		UG/KG	1
1,1,2-Trichloroethane	0.3	5.8	ND		UG/KG	1
Tetrachloroethene	0.54	5.8	ND		UG/KG	1
Dibromochloromethane	0.27	5.8	ND		UG/KG	1
Chlorobenzene	0.24	5.8	ND		UG/KG	1
Ethyl Benzene	0.42	5.8	ND		UG/KG	1
m & p-Xylene	0.92	5.8	ND		UG/KG	1
o-Xylene	0.99	5.8	ND		UG/KG	1
Styrene	0.4	5.8	ND		UG/KG	1

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Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-002-02-ESW	ARDL Lab No.:	301102-06 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2580
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1715	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	13.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.25	5.8	ND		UG/KG	1
2-Hexanone	20.8	23.1	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.7	5.8	ND		UG/KG	1
Acetone	36.9	57.7	ND		UG/KG	1
2-Butanone	19.6	57.7	ND		UG/KG	1
4-Methyl-2-pentanone	17.3	23.1	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	107%
1,2-Dichloroethane-d4	78-135	103%
Toluene-d8	86-129	104%
4-Bromofluorobenzene	76-141	109%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-004-02-ESW	ARDL Lab No.:	301102-01
Desc/Location:	NONE	Lab Filename:	Y2576
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1330	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0902JFSJ
% Moisture:	17.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.1	ND		UG/KG	1
Vinyl Chloride	2.2	12.1	ND		UG/KG	1
Bromomethane	1.6	12.1	ND		UG/KG	1
Chloroethane	1.9	12.1	ND		UG/KG	1
1,1-Dichloroethene	1	6.1	ND		UG/KG	1
Methylene Chloride	2.9	6.1	ND		UG/KG	1
trans-1,2-Dichloroethene	0.96	6.1	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.1	ND		UG/KG	1
Carbon disulfide	1	6.1	ND		UG/KG	1
cis-1,2-Dichloroethene	0.40	6.1	ND		UG/KG	1
Bromochloromethane	0.98	6.1	ND		UG/KG	1
Chloroform	0.82	6.1	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.1	ND		UG/KG	1
Carbon Tetrachloride	0.74	6.1	ND		UG/KG	1
Benzene	0.69	6.1	ND		UG/KG	1
1,2-Dichloroethane	0.45	6.1	ND		UG/KG	1
Trichloroethene	1.1	6.1	ND		UG/KG	1
1,2-Dichloropropane	0.41	6.1	ND		UG/KG	1
Bromodichloromethane	0.28	6.1	ND		UG/KG	1
cis-1,3-Dichloropropene	0.79	6.1	ND		UG/KG	1
Toluene	0.38	6.1	ND		UG/KG	1
trans-1,3-Dichloropropene	0.75	6.1	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.1	ND		UG/KG	1
Tetrachloroethene	0.57	6.1	ND		UG/KG	1
Dibromochloromethane	0.28	6.1	ND		UG/KG	1
Chlorobenzene	0.25	6.1	ND		UG/KG	1
Ethyl Benzene	0.44	6.1	ND		UG/KG	1
m & p-Xylene	0.97	6.1	ND		UG/KG	1
o-Xylene	1	6.1	ND		UG/KG	1
Styrene	0.42	6.1	ND		UG/KG	1

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Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-004-02-ESW	ARDL Lab No.:	301102-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2576
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1330	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	17.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.1	ND		UG/KG	1
2-Hexanone	21.8	24.2	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.1	ND		UG/KG	1
Acetone	38.8	60.6	ND		UG/KG	1
2-Butanone	20.6	60.6	ND		UG/KG	1
4-Methyl-2-pentanone	18.2	24.2	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	104%
1,2-Dichloroethane-d4	78-135	98%
Toluene-d8	86-129	102%
4-Bromofluorobenzene	76-141	103%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Rt. 15E, Mt. Vernon Airport Industrial Park
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Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-007-04-EBT	ARDL Lab No.:	301102-07
Desc/Location:	NONE	Lab Filename:	Y2581
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1722	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0902JFSJ
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.3	ND		UG/KG	1
Vinyl Chloride	2.2	12.3	ND		UG/KG	1
Bromomethane	1.6	12.3	ND		UG/KG	1
Chloroethane	2	12.3	ND		UG/KG	1
1,1-Dichloroethene	1	6.1	ND		UG/KG	1
Methylene Chloride	2.9	6.1	ND		UG/KG	1
trans-1,2-Dichloroethene	0.97	6.1	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.1	ND		UG/KG	1
Carbon disulfide	1.1	6.1	ND		UG/KG	1
cis-1,2-Dichloroethene	0.4	6.1	ND		UG/KG	1
Bromochloromethane	0.99	6.1	ND		UG/KG	1
Chloroform	0.83	6.1	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.1	ND		UG/KG	1
Carbon Tetrachloride	0.75	6.1	ND		UG/KG	1
Benzene	0.7	6.1	ND		UG/KG	1
1,2-Dichloroethane	0.45	6.1	ND		UG/KG	1
Trichloroethene	1.1	6.1	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.1	ND		UG/KG	1
Bromodichloromethane	0.28	6.1	ND		UG/KG	1
cis-1,3-Dichloropropene	0.8	6.1	ND		UG/KG	1
Toluene	0.38	6.1	ND		UG/KG	1
trans-1,3-Dichloropropene	0.76	6.1	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.1	ND		UG/KG	1
Tetrachloroethene	0.58	6.1	ND		UG/KG	1
Dibromochloromethane	0.28	6.1	ND		UG/KG	1
Chlorobenzene	0.26	6.1	ND		UG/KG	1
Ethyl Benzene	0.44	6.1	ND		UG/KG	1
m & p-Xylene	0.98	6.1	ND		UG/KG	1
o-Xylene	1.1	6.1	ND		UG/KG	1
Styrene	0.43	6.1	ND		UG/KG	1

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Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/23/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-007-04-EBT	ARDL Lab No.:	301102-07 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2581
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1722	Prep. Date:	09/13/2002
Matrix:	SOIL	Analysis Date:	09/13/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSJ
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.1	ND		UG/KG	1
2-Hexanone	22.1	24.5	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.1	ND		UG/KG	1
Acetone	39.2	61.3	ND		UG/KG	1
2-Butanone	20.8	61.3	ND		UG/KG	1
4-Methyl-2-pentanone	18.4	24.5	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	108%
1,2-Dichloroethane-d4	78-135	102%
Toluene-d8	86-129	104%
4-Bromofluorobenzene	76-141	102%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

BNA-8270

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-005-08-EBT	ARDL Lab No.:	301102-03
Desc/Location:	NONE	Lab Filename:	Z4015
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1605	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	19	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	141	407	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.8	407	ND		UG/KG	1
2-Chlorophenol	130	407	ND		UG/KG	1
1,3-Dichlorobenzene	65.9	407	ND		UG/KG	1
1,4-Dichlorobenzene	52.6	407	ND		UG/KG	1
1,2-Dichlorobenzene	59.9	407	ND		UG/KG	1
2-Methylphenol	116	407	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.6	407	ND		UG/KG	1
4-Methylphenol	147	407	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.9	407	ND		UG/KG	1
Hexachloroethane	60.9	407	ND		UG/KG	1
Nitrobenzene	76.4	407	ND		UG/KG	1
Isophorone	61.2	407	ND		UG/KG	1
2-Nitrophenol	126	407	ND		UG/KG	1
2,4-Dimethylphenol	140	407	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.7	407	ND		UG/KG	1
2,4-Dichlorophenol	149	407	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.8	407	ND		UG/KG	1
Naphthalene	16.9	407	ND		UG/KG	1
4-Chloroaniline	93.7	407	ND		UG/KG	1
Hexachlorobutadiene	71.7	407	ND		UG/KG	1
4-Chloro-3-methylphenol	122	407	ND		UG/KG	1
2-Methylnaphthalene	76.7	407	ND		UG/KG	1
Hexachlorocyclopentadiene	62.1	407	ND		UG/KG	1
2,4,6-Trichlorophenol	131	407	ND		UG/KG	1
2,4,5-Trichlorophenol	138	407	ND		UG/KG	1
2-Chloronaphthalene	60.2	407	ND		UG/KG	1
2-Nitroaniline	63.3	407	ND		UG/KG	1
Dimethylphthalate	25.6	407	ND		UG/KG	1
2,6-Dinitrotoluene	52.2	407	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-005-08-EBT	ARDL Lab No.:	301102-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4015
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1605	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	19	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	47.2	407	ND		UG/KG	1
2,4-Dinitrophenol	126	407	ND		UG/KG	1
4-Nitrophenol	111	407	ND		UG/KG	1
Dibenzofuran	82.6	407	ND		UG/KG	1
2,4-Dinitrotoluene	60.6	407	ND		UG/KG	1
Diethylphthalate	17.8	407	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.5	407	ND		UG/KG	1
4-Nitroaniline	49.4	407	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	110	407	ND		UG/KG	1
N-Nitrosodiphenylamine	25.6	407	ND		UG/KG	1
4-Bromophenyl-phenylether	30.2	407	ND		UG/KG	1
Hexachlorobenzene	51.2	407	ND		UG/KG	1
Pentachlorophenol	102	407	ND		UG/KG	1
Di-n-butylphthalate	32.6	407	ND		UG/KG	1
Butylbenzylphthalate	25.1	407	1310		UG/KG	1
3,3'-Dichlorobenzidine	168	407	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.2	407	ND		UG/KG	1
Di-n-octylphthalate	54.3	407	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	49%
Phenol-d5	24-113	55%
Nitrobenzene-d5	23-120	48%
2-Fluorobiphenyl	30-115	61%
2,4,6-Tribromophenol	19-122	85%
Terphenyl-d14	18-137	86%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-006-05-EBT	ARDL Lab No.:	301102-04
Desc/Location:	NONE	Lab Filename:	Z4016
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	18	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	139	402	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.4	402	ND		UG/KG	1
2-Chlorophenol	128	402	ND		UG/KG	1
1,3-Dichlorobenzene	65.1	402	ND		UG/KG	1
1,4-Dichlorobenzene	52	402	ND		UG/KG	1
1,2-Dichlorobenzene	59.1	402	ND		UG/KG	1
2-Methylphenol	114	402	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.3	402	ND		UG/KG	1
4-Methylphenol	145	402	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.6	402	ND		UG/KG	1
Hexachloroethane	60.1	402	ND		UG/KG	1
Nitrobenzene	75.5	402	ND		UG/KG	1
Isophorone	60.5	402	ND		UG/KG	1
2-Nitrophenol	124	402	ND		UG/KG	1
2,4-Dimethylphenol	138	402	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.4	402	ND		UG/KG	1
2,4-Dichlorophenol	148	402	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.1	402	ND		UG/KG	1
Naphthalene	16.7	402	ND		UG/KG	1
4-Chloroaniline	92.6	402	ND		UG/KG	1
Hexachlorobutadiene	70.9	402	ND		UG/KG	1
4-Chloro-3-methylphenol	120	402	ND		UG/KG	1
2-Methylnaphthalene	75.7	402	ND		UG/KG	1
Hexachlorocyclopentadiene	61.3	402	ND		UG/KG	1
2,4,6-Trichlorophenol	129	402	ND		UG/KG	1
2,4,5-Trichlorophenol	137	402	ND		UG/KG	1
2-Chloronaphthalene	59.5	402	ND		UG/KG	1
2-Nitroaniline	62.6	402	ND		UG/KG	1
Dimethylphthalate	25.2	402	ND		UG/KG	1
2,6-Dinitrotoluene	51.6	402	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-006-05-EBT	ARDL Lab No.:	301102-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4016
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	18	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46.6	402	ND		UG/KG	1
2,4-Dinitrophenol	124	402	ND		UG/KG	1
4-Nitrophenol	110	402	ND		UG/KG	1
Dibenzofuran	81.6	402	ND		UG/KG	1
2,4-Dinitrotoluene	59.9	402	ND		UG/KG	1
Diethylphthalate	17.6	402	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.2	402	ND		UG/KG	1
4-Nitroaniline	48.8	402	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	109	402	ND		UG/KG	1
N-Nitrosodiphenylamine	25.2	402	ND		UG/KG	1
4-Bromophenyl-phenylether	29.9	402	ND		UG/KG	1
Hexachlorobenzene	50.6	402	ND		UG/KG	1
Pentachlorophenol	101	402	ND		UG/KG	1
Di-n-butylphthalate	32.2	402	ND		UG/KG	1
Butylbenzylphthalate	24.8	402	123	J	UG/KG	1
3,3'-Dichlorobenzidine	166	402	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.8	402	ND		UG/KG	1
Di-n-octylphthalate	53.7	402	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	59%
Phenol-d5	24-113	65%
Nitrobenzene-d5	23-120	56%
2-Fluorobiphenyl	30-115	62%
2,4,6-Tribromophenol	19-122	78%
Terphenyl-d14	18-137	82%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-007-05-EBT	ARDL Lab No.:	301102-05
Desc/Location:	NONE	Lab Filename:	Z4017
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	16.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	137	397	ND		UG/KG	1
bis(2-Chloroethyl)ether	29	397	ND		UG/KG	1
2-Chlorophenol	126	397	ND		UG/KG	1
1,3-Dichlorobenzene	64.3	397	ND		UG/KG	1
1,4-Dichlorobenzene	51.3	397	ND		UG/KG	1
1,2-Dichlorobenzene	58.4	397	ND		UG/KG	1
2-Methylphenol	113	397	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23	397	ND		UG/KG	1
4-Methylphenol	143	397	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.2	397	ND		UG/KG	1
Hexachloroethane	59.3	397	ND		UG/KG	1
Nitrobenzene	74.5	397	ND		UG/KG	1
Isophorone	59.7	397	ND		UG/KG	1
2-Nitrophenol	123	397	ND		UG/KG	1
2,4-Dimethylphenol	136	397	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30	397	ND		UG/KG	1
2,4-Dichlorophenol	146	397	ND		UG/KG	1
1,2,4-Trichlorobenzene	61.3	397	ND		UG/KG	1
Naphthalene	16.5	397	ND		UG/KG	1
4-Chloroaniline	91.3	397	ND		UG/KG	1
Hexachlorobutadiene	69.9	397	ND		UG/KG	1
4-Chloro-3-methylphenol	119	397	ND		UG/KG	1
2-Methylnaphthalene	74.7	397	ND		UG/KG	1
Hexachlorocyclopentadiene	60.5	397	ND		UG/KG	1
2,4,6-Trichlorophenol	128	397	ND		UG/KG	1
2,4,5-Trichlorophenol	135	397	ND		UG/KG	1
2-Chloronaphthalene	58.7	397	ND		UG/KG	1
2-Nitroaniline	61.7	397	ND		UG/KG	1
Dimethylphthalate	24.9	397	ND		UG/KG	1
2,6-Dinitrotoluene	50.9	397	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-007-05-EBT	ARDL Lab No.:	301102-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4017
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	16.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46	397	ND		UG/KG	1
2,4-Dinitrophenol	123	397	ND		UG/KG	1
4-Nitrophenol	108	397	ND		UG/KG	1
Dibenzofuran	80.5	397	ND		UG/KG	1
2,4-Dinitrotoluene	59.1	397	ND		UG/KG	1
Diethylphthalate	17.3	397	ND		UG/KG	1
4-Chlorophenyl-phenylether	25.9	397	ND		UG/KG	1
4-Nitroaniline	48.1	397	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	107	397	ND		UG/KG	1
N-Nitrosodiphenylamine	24.9	397	ND		UG/KG	1
4-Bromophenyl-phenylether	29.5	397	ND		UG/KG	1
Hexachlorobenzene	49.9	397	ND		UG/KG	1
Pentachlorophenol	99.6	397	ND		UG/KG	1
Di-n-butylphthalate	31.8	397	64.3	J	UG/KG	1
Butylbenzylphthalate	24.4	397	274	J	UG/KG	1
3,3'-Dichlorobenzidine	164	397	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.5	397	ND		UG/KG	1
Di-n-octylphthalate	52.9	397	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	46%
Phenol-d5	24-113	59%
Nitrobenzene-d5	23-120	50%
2-Fluorobiphenyl	30-115	58%
2,4,6-Tribromophenol	19-122	56%
Terphenyl-d14	18-137	78%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-001-03-EBT	ARDL Lab No.:	301102-08
Desc/Location:	NONE	Lab Filename:	Z4020
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1730	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	20.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	143	414	ND		UG/KG	1
bis(2-Chloroethyl)ether	30.2	414	ND		UG/KG	1
2-Chlorophenol	132	414	ND		UG/KG	1
1,3-Dichlorobenzene	67	414	ND		UG/KG	1
1,4-Dichlorobenzene	53.5	414	ND		UG/KG	1
1,2-Dichlorobenzene	60.9	414	ND		UG/KG	1
2-Methylphenol	118	414	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	24	414	ND		UG/KG	1
4-Methylphenol	149	414	ND		UG/KG	1
N-Nitroso-di-n-propylamine	28.4	414	ND		UG/KG	1
Hexachloroethane	61.9	414	ND		UG/KG	1
Nitrobenzene	77.7	414	ND		UG/KG	1
Isophorone	62.2	414	ND		UG/KG	1
2-Nitrophenol	128	414	ND		UG/KG	1
2,4-Dimethylphenol	142	414	ND		UG/KG	1
bis(2-Chloroethoxy)methane	31.2	414	ND		UG/KG	1
2,4-Dichlorophenol	152	414	ND		UG/KG	1
1,2,4-Trichlorobenzene	63.9	414	ND		UG/KG	1
Naphthalene	17.2	414	ND		UG/KG	1
4-Chloroaniline	95.2	414	ND		UG/KG	1
Hexachlorobutadiene	72.9	414	ND		UG/KG	1
4-Chloro-3-methylphenol	124	414	ND		UG/KG	1
2-Methylnaphthalene	77.9	414	ND		UG/KG	1
Hexachlorocyclopentadiene	63.1	414	ND		UG/KG	1
2,4,6-Trichlorophenol	133	414	ND		UG/KG	1
2,4,5-Trichlorophenol	141	414	ND		UG/KG	1
2-Chloronaphthalene	61.2	414	ND		UG/KG	1
2-Nitroaniline	64.4	414	ND		UG/KG	1
Dimethylphthalate	26	414	ND		UG/KG	1
2,6-Dinitrotoluene	53.1	414	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-001-03-EBT	ARDL Lab No.:	301102-08 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4020
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1730	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	20.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	47.9	414	ND		UG/KG	1
2,4-Dinitrophenol	128	414	ND		UG/KG	1
4-Nitrophenol	113	414	ND		UG/KG	1
Dibenzofuran	83.9	414	ND		UG/KG	1
2,4-Dinitrotoluene	61.6	414	ND		UG/KG	1
Diethylphthalate	18.1	414	ND		UG/KG	1
4-Chlorophenyl-phenylether	27	414	ND		UG/KG	1
4-Nitroaniline	50.2	414	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	112	414	ND		UG/KG	1
N-Nitrosodiphenylamine	26	414	ND		UG/KG	1
4-Bromophenyl-phenylether	30.7	414	ND		UG/KG	1
Hexachlorobenzene	52.1	414	ND		UG/KG	1
Pentachlorophenol	104	414	ND		UG/KG	1
Di-n-butylphthalate	33.1	414	ND		UG/KG	1
Butylbenzylphthalate	25.5	414	410	J	UG/KG	1
3,3'-Dichlorobenzidine	171	414	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.6	414	ND		UG/KG	1
Di-n-octylphthalate	55.2	414	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	60%
Phenol-d5	24-113	75%
Nitrobenzene-d5	23-120	53%
2-Fluorobiphenyl	30-115	64%
2,4,6-Tribromophenol	19-122	83%
Terphenyl-d14	18-137	82%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-002-02-ESW	ARDL Lab No.:	301102-06
Desc/Location:	NONE	Lab Filename:	Z4018
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1715	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	13.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	131	381	ND		UG/KG	1
bis(2-Chloroethyl)ether	27.8	381	ND		UG/KG	1
2-Chlorophenol	121	381	ND		UG/KG	1
1,3-Dichlorobenzene	61.6	381	ND		UG/KG	1
1,4-Dichlorobenzene	49.1	381	ND		UG/KG	1
1,2-Dichlorobenzene	55.9	381	ND		UG/KG	1
2-Methylphenol	108	381	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	22	381	ND		UG/KG	1
4-Methylphenol	137	381	ND		UG/KG	1
N-Nitroso-di-n-propylamine	26.1	381	ND		UG/KG	1
Hexachloroethane	56.9	381	ND		UG/KG	1
Nitrobenzene	71.4	381	ND		UG/KG	1
Isophorone	57.2	381	ND		UG/KG	1
2-Nitrophenol	118	381	ND		UG/KG	1
2,4-Dimethylphenol	130	381	ND		UG/KG	1
bis(2-Chloroethoxy)methane	28.7	381	ND		UG/KG	1
2,4-Dichlorophenol	140	381	ND		UG/KG	1
1,2,4-Trichlorobenzene	58.7	381	ND		UG/KG	1
Naphthalene	15.8	381	ND		UG/KG	1
4-Chloroaniline	87.5	381	ND		UG/KG	1
Hexachlorobutadiene	67	381	ND		UG/KG	1
4-Chloro-3-methylphenol	114	381	ND		UG/KG	1
2-Methylnaphthalene	71.6	381	ND		UG/KG	1
Hexachlorocyclopentadiene	58	381	ND		UG/KG	1
2,4,6-Trichlorophenol	122	381	ND		UG/KG	1
2,4,5-Trichlorophenol	129	381	ND		UG/KG	1
2-Chloronaphthalene	56.3	381	ND		UG/KG	1
2-Nitroaniline	59.2	381	ND		UG/KG	1
Dimethylphthalate	23.9	381	ND		UG/KG	1
2,6-Dinitrotoluene	48.8	381	ND		UG/KG	1

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Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-002-02-ESW	ARDL Lab No.:	301102-06 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4018
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1715	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	13.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	44.1	381	ND		UG/KG	1
2,4-Dinitrophenol	118	381	ND		UG/KG	1
4-Nitrophenol	104	381	ND		UG/KG	1
Dibenzofuran	77.2	381	ND		UG/KG	1
2,4-Dinitrotoluene	56.6	381	ND		UG/KG	1
Diethylphthalate	16.6	381	ND		UG/KG	1
4-Chlorophenyl-phenylether	24.8	381	ND		UG/KG	1
4-Nitroaniline	46.1	381	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	103	381	ND		UG/KG	1
N-Nitrosodiphenylamine	23.9	381	ND		UG/KG	1
4-Bromophenyl-phenylether	28.3	381	ND		UG/KG	1
Hexachlorobenzene	47.9	381	ND		UG/KG	1
Pentachlorophenol	95.5	381	ND		UG/KG	1
Di-n-butylphthalate	30.4	381	ND		UG/KG	1
Butylbenzylphthalate	23.4	381	92.8	J	UG/KG	1
3,3'-Dichlorobenzidine	157	381	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	25.4	381	ND		UG/KG	1
Di-n-octylphthalate	50.7	381	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	53%
Phenol-d5	24-113	72%
Nitrobenzene-d5	23-120	58%
2-Fluorobiphenyl	30-115	77%
2,4,6-Tribromophenol	19-122	84%
Terphenyl-d14	18-137	94%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
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Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-004-02-ESW	ARDL Lab No.:	301102-01
Desc/Location:	NONE	Lab Filename:	Z4014
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1330	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/09/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	17.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	138	400	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.2	400	ND		UG/KG	1
2-Chlorophenol	127	400	ND		UG/KG	1
1,3-Dichlorobenzene	64.7	400	ND		UG/KG	1
1,4-Dichlorobenzene	51.6	400	ND		UG/KG	1
1,2-Dichlorobenzene	58.8	400	ND		UG/KG	1
2-Methylphenol	114	400	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.2	400	ND		UG/KG	1
4-Methylphenol	144	400	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.4	400	ND		UG/KG	1
Hexachloroethane	59.8	400	ND		UG/KG	1
Nitrobenzene	75	400	ND		UG/KG	1
Isophorone	60.1	400	ND		UG/KG	1
2-Nitrophenol	124	400	ND		UG/KG	1
2,4-Dimethylphenol	137	400	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.2	400	ND		UG/KG	1
2,4-Dichlorophenol	147	400	ND		UG/KG	1
1,2,4-Trichlorobenzene	61.7	400	ND		UG/KG	1
Naphthalene	16.6	400	ND		UG/KG	1
4-Chloroaniline	92	400	ND		UG/KG	1
Hexachlorobutadiene	70.4	400	ND		UG/KG	1
4-Chloro-3-methylphenol	119	400	ND		UG/KG	1
2-Methylnaphthalene	75.3	400	ND		UG/KG	1
Hexachlorocyclopentadiene	61	400	ND		UG/KG	1
2,4,6-Trichlorophenol	128	400	ND		UG/KG	1
2,4,5-Trichlorophenol	136	400	ND		UG/KG	1
2-Chloronaphthalene	59.2	400	ND		UG/KG	1
2-Nitroaniline	62.2	400	ND		UG/KG	1
Dimethylphthalate	25.1	400	ND		UG/KG	1
2,6-Dinitrotoluene	51.3	400	ND		UG/KG	1

ARDL, INC.
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Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-004-02-ESW	ARDL Lab No.:	301102-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4014
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1330	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/09/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	17.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46.3	400	ND		UG/KG	1
2,4-Dinitrophenol	124	400	ND		UG/KG	1
4-Nitrophenol	109	400	ND		UG/KG	1
Dibenzofuran	81.1	400	ND		UG/KG	1
2,4-Dinitrotoluene	59.5	400	ND		UG/KG	1
Diethylphthalate	17.5	400	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.1	400	ND		UG/KG	1
4-Nitroaniline	48.5	400	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	108	400	ND		UG/KG	1
N-Nitrosodiphenylamine	25.1	400	ND		UG/KG	1
4-Bromophenyl-phenylether	29.7	400	ND		UG/KG	1
Hexachlorobenzene	50.3	400	ND		UG/KG	1
Pentachlorophenol	100	400	ND		UG/KG	1
Di-n-butylphthalate	32	400	ND		UG/KG	1
Butylbenzylphthalate	24.6	400	ND		UG/KG	1
3,3'-Dichlorobenzidine	165	400	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.7	400	ND		UG/KG	1
Di-n-octylphthalate	53.3	400	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	58%
Phenol-d5	24-113	71%
Nitrobenzene-d5	23-120	71%
2-Fluorobiphenyl	30-115	76%
2,4,6-Tribromophenol	19-122	85%
Terphenyl-d14	18-137	87%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-007-04-EBT	ARDL Lab No.:	301102-07
Desc/Location:	NONE	Lab Filename:	Z4019
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1722	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	140	405	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.6	405	ND		UG/KG	1
2-Chlorophenol	129	405	ND		UG/KG	1
1,3-Dichlorobenzene	65.5	405	ND		UG/KG	1
1,4-Dichlorobenzene	52.3	405	ND		UG/KG	1
1,2-Dichlorobenzene	59.5	405	ND		UG/KG	1
2-Methylphenol	115	405	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.4	405	ND		UG/KG	1
4-Methylphenol	146	405	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.7	405	ND		UG/KG	1
Hexachloroethane	60.5	405	ND		UG/KG	1
Nitrobenzene	76	405	ND		UG/KG	1
Isophorone	60.9	405	ND		UG/KG	1
2-Nitrophenol	125	405	ND		UG/KG	1
2,4-Dimethylphenol	139	405	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.6	405	ND		UG/KG	1
2,4-Dichlorophenol	148	405	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.5	405	ND		UG/KG	1
Naphthalene	16.8	405	ND		UG/KG	1
4-Chloroaniline	93.1	405	ND		UG/KG	1
Hexachlorobutadiene	71.3	405	ND		UG/KG	1
4-Chloro-3-methylphenol	121	405	ND		UG/KG	1
2-Methylnaphthalene	76.2	405	ND		UG/KG	1
Hexachlorocyclopentadiene	61.7	405	ND		UG/KG	1
2,4,6-Trichlorophenol	130	405	ND		UG/KG	1
2,4,5-Trichlorophenol	137	405	ND		UG/KG	1
2-Chloronaphthalene	59.9	405	ND		UG/KG	1
2-Nitroaniline	62.9	405	ND		UG/KG	1
Dimethylphthalate	25.4	405	ND		UG/KG	1
2,6-Dinitrotoluene	51.9	405	ND		UG/KG	1

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Lab Report No: 301102 Report Date: 10/10/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-007-04-EBT	ARDL Lab No.:	301102-07 (cont'd)
Desc/Location:	NONE	Lab Filename:	Z4019
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1722	Prep. Date:	09/16/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5023
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46.9	405	ND		UG/KG	1
2,4-Dinitrophenol	125	405	ND		UG/KG	1
4-Nitrophenol	110	405	ND		UG/KG	1
Dibenzofuran	82.1	405	ND		UG/KG	1
2,4-Dinitrotoluene	60.2	405	ND		UG/KG	1
Diethylphthalate	17.7	405	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.4	405	ND		UG/KG	1
4-Nitroaniline	49.1	405	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	109	405	ND		UG/KG	1
N-Nitrosodiphenylamine	25.4	405	ND		UG/KG	1
4-Bromophenyl-phenylether	30.1	405	ND		UG/KG	1
Hexachlorobenzene	50.9	405	ND		UG/KG	1
Pentachlorophenol	102	405	ND		UG/KG	1
Di-n-butylphthalate	32.4	405	ND		UG/KG	1
Butylbenzylphthalate	24.9	405	ND		UG/KG	1
3,3'-Dichlorobenzidine	167	405	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27	405	ND		UG/KG	1
Di-n-octylphthalate	54	405	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	50%
Phenol-d5	24-113	58%
Nitrobenzene-d5	23-120	45%
2-Fluorobiphenyl	30-115	60%
2,4,6-Tribromophenol	19-122	78%
Terphenyl-d14	18-137	82%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PCB's-8082

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FSS-005-08-EBT	ARDL Lab No.:	301102-03
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1605	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	19	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.2	40.7	ND		UG/KG	1
Aroclor 1221	16.7	82.7	ND		UG/KG	1
Aroclor 1232	10.3	40.7	ND		UG/KG	1
Aroclor 1242	11.5	40.7	ND		UG/KG	1
Aroclor 1248	7.7	40.7	ND		UG/KG	1
Aroclor 1254	5.3	40.7	ND		UG/KG	1
Aroclor 1260	6.8	40.7	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	75%
Tetrachloro-m-xylene	42-94	76%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/25/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FSS-006-05-EBT	ARDL Lab No.:	301102-04
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/21/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	18	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.1	40.2	ND		UG/KG	1
Aroclor 1221	16.5	81.7	ND		UG/KG	1
Aroclor 1232	10.2	40.2	ND		UG/KG	1
Aroclor 1242	11.3	40.2	ND		UG/KG	1
Aroclor 1248	7.6	40.2	ND		UG/KG	1
Aroclor 1254	5.3	40.2	ND		UG/KG	1
Aroclor 1260	6.7	40.2	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	79%
Tetrachloro-m-xylene	42-94	78%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FSS-007-05-EBT	ARDL Lab No.:	301102-05
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	16.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9	39.7	ND		UG/KG	1
Aroclor 1221	16.2	80.6	ND		UG/KG	1
Aroclor 1232	10	39.7	ND		UG/KG	1
Aroclor 1242	11.2	39.7	ND		UG/KG	1
Aroclor 1248	7.5	39.7	ND		UG/KG	1
Aroclor 1254	5.2	39.7	ND		UG/KG	1
Aroclor 1260	6.6	39.7	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	77%
Tetrachloro-m-xylene	42-94	76%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	VWR-001-03-EBT	ARDL Lab No.:	301102-08
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1730	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	20.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.3	41.4	ND		UG/KG	1
Aroclor 1221	16.9	84.1	ND		UG/KG	1
Aroclor 1232	10.5	41.4	ND		UG/KG	1
Aroclor 1242	11.7	41.4	ND		UG/KG	1
Aroclor 1248	7.8	41.4	ND		UG/KG	1
Aroclor 1254	5.4	41.4	ND		UG/KG	1
Aroclor 1260	6.9	41.4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	80%
Tetrachloro-m-xylene	42-94	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	VWR-002-02-ESW	ARDL Lab No.:	301102-06
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1715	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	13.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	8.6	38.1	ND		UG/KG	1
Aroclor 1221	15.6	77.3	ND		UG/KG	1
Aroclor 1232	9.6	38.1	ND		UG/KG	1
Aroclor 1242	10.7	38.1	ND		UG/KG	1
Aroclor 1248	7.2	38.1	ND		UG/KG	1
Aroclor 1254	5	38.1	ND		UG/KG	1
Aroclor 1260	6.4	38.1	42.0		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	82%
Tetrachloro-m-xylene	42-94	83%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	VWR-004-02-ESW	ARDL Lab No.:	301102-01
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1330	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/20/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	17.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9	40.0	ND		UG/KG	1
Aroclor 1221	16.4	81.2	ND		UG/KG	1
Aroclor 1232	10.1	40.0	ND		UG/KG	1
Aroclor 1242	11.3	40.0	ND		UG/KG	1
Aroclor 1248	7.5	40.0	ND		UG/KG	1
Aroclor 1254	5.2	40.0	ND		UG/KG	1
Aroclor 1260	6.7	40.0	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	82%
Tetrachloro-m-xylene	42-94	74%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	VWR-007-04-EBT	ARDL Lab No.:	301102-07
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1722	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/19/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4998
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.1	40.5	ND		UG/KG	1
Aroclor 1221	16.6	82.2	ND		UG/KG	1
Aroclor 1232	10.2	40.5	ND		UG/KG	1
Aroclor 1242	11.4	40.5	ND		UG/KG	1
Aroclor 1248	7.6	40.5	ND		UG/KG	1
Aroclor 1254	5.3	40.5	ND		UG/KG	1
Aroclor 1260	6.8	40.5	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	78%
Tetrachloro-m-xylene	42-94	73%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PCB's-8082

ARDL Report No. 301102
Volume 5

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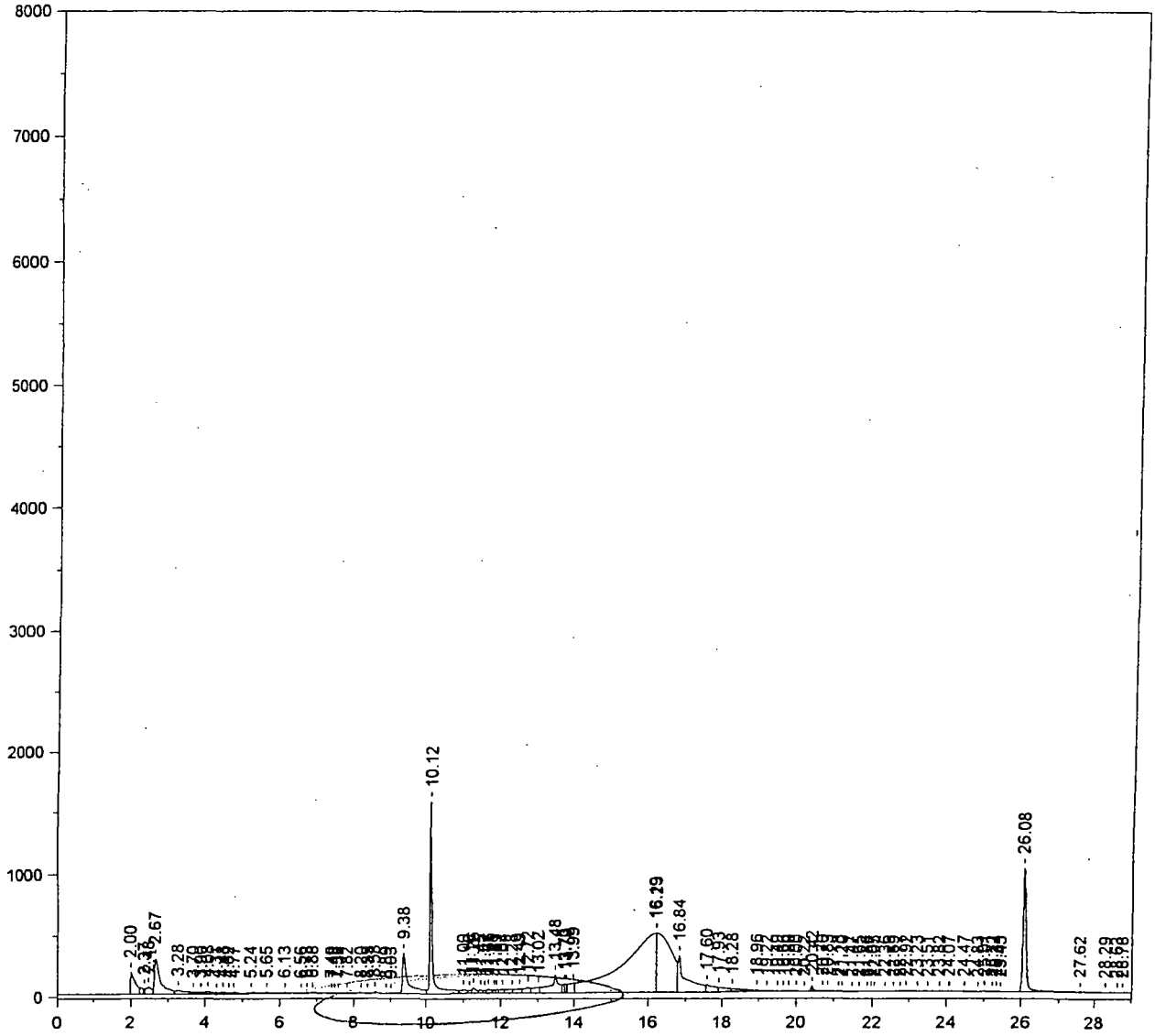
— H:\CP2\HP2\M0919.0049.RAW 301102-01 B8068 VWR-004-02-ESW



Before reintegration
excess area under peaks
AT
9/23/2

Primary Column

50018

Sample Name = **301102-01 B8068 VWR-004-02-ESW**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0049.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/20/02 3:52:35 PM
Method Version = 618
Calibration Version = 11

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1601100	1.888	BV	0.14
2	2.37		0.00	0.000	128931	0.152	VV	0.04
3	2.48		0.00	0.000	549241	0.648	VV	0.09
4	2.67		0.00	0.000	3419368	4.031	VV	0.13
5	3.28		0.00	0.000	512247	0.604	VV	0.18
6	3.70		0.00	0.000	122492	0.144	VV	0.10
7	3.90		0.00	0.000	143238	0.169	VV	0.13
8	4.08		0.00	0.000	188446	0.222	VV	0.08
9	4.31		0.00	0.000	124138	0.146	VV	0.14
10	4.48		0.00	0.000	138206	0.163	VV	0.09
11	4.62		0.00	0.000	61518	0.073	VV	0.05
12	4.77		0.00	0.000	215216	0.254	VV	0.17
13	5.24		0.00	0.000	160282	0.189	VV	0.19
14	5.65		0.00	0.000	167478	0.197	VV	0.26
15	6.13		0.00	0.000	160515	0.189	VV	0.23
16	6.56		0.00	0.000	109184	0.129	VV	0.18
17	6.73		0.00	0.000	50892	0.060	VV	0.06
18	6.88		0.00	0.000	128008	0.151	VV	0.17
19	7.40		0.00	0.000	49202	0.058	VV	0.15
20	7.48		0.00	0.000	31306	0.037	VV	0.09
21	7.58		0.00	0.000	15956	0.019	VV	0.07
22	7.82		0.00	0.000	46608	0.055	VV	0.16
23	8.20		0.00	0.000	23345	0.028	VV	0.17
24	8.39		0.00	0.000	4383	0.005	VB	0.05
25	8.58		0.00	0.000	49092	0.058	BB	0.08
26	8.89		0.00	0.000	6932	0.008	BV	0.08
27	9.03		0.00	0.000	24699	0.029	VV	0.08
28	9.38		0.00	0.000	3387760	3.994	VV	0.10
29	10.12	CL4XYL	0.92	11.551	7234776	8.530	VV	0.05
30	11.00		0.00	0.000	388291	0.458	VV	0.10
31	11.16		0.00	0.000	141994	0.167	VV	0.06
32	11.26		0.00	0.000	360884	0.425	VV	0.05
33	11.45		0.00	0.000	183718	0.217	VV	0.04
34	11.57	AR1016#1	0.80	10.050	142812	0.168	VV	0.06
35	11.66		0.00	0.000	249401	0.294	VV	0.06
36	11.81		0.00	0.000	134924	0.159	VV	0.05
37	11.89		0.00	0.000	147866	0.174	VV	0.04
38	12.04		0.00	0.000	249890	0.295	VV	0.08
39	12.28		0.00	0.000	359760	0.424	VV	0.06
40	12.49		0.00	0.000	457707	0.540	VV	0.10
41	12.72	AR1016#2	1.77	22.100	560033	0.660	VV	0.06
42	13.02		0.00	0.000	584559	0.689	VV	0.11
43	13.48		0.00	0.000	2500796	2.948	VV	0.07
44	13.73		0.00	0.000	285097	0.336	VV	0.04
45	13.79		0.00	0.000	233472	0.275	VV	0.02
46	13.99		0.00	0.000	912552	1.076	VV	0.07
47	16.19		0.00	0.000	29829398	35.168	VV	0.72
48	16.23		0.00	0.000	13547352	15.972	VV	0.38
49	16.84		0.00	0.000	4872291	5.744	VV	0.09
50	17.60		0.00	0.000	962528	1.135	VV	0.10
51	17.93	AR1260#1	3.32	41.552	661674	0.780	VV	0.15
52	18.28		0.00	0.000	650278	0.767	VV	0.19

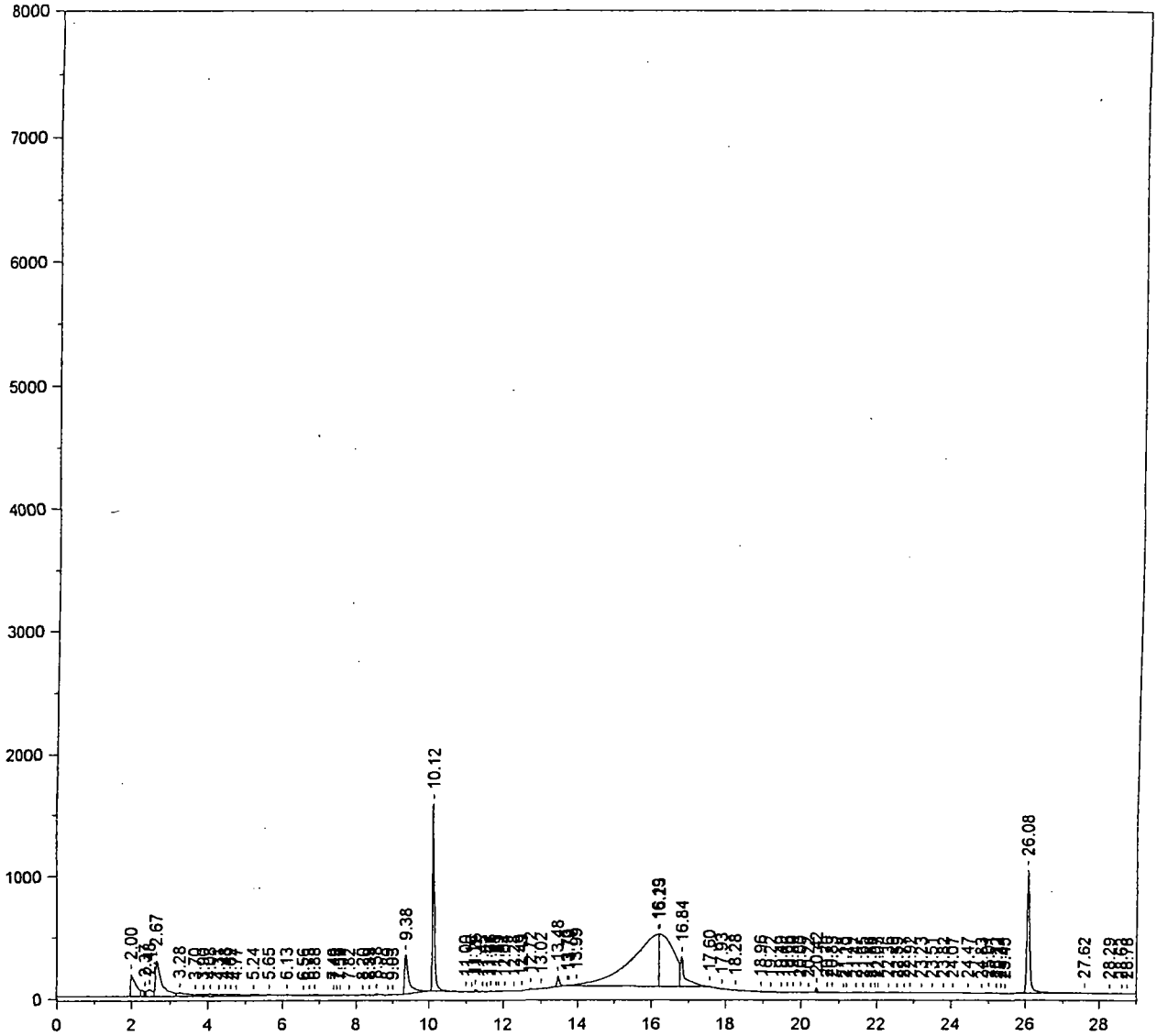
50019

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.96		0.00	0.000	182731	0.215	VV	0.07
54	19.22		0.00	0.000	167574	0.198	VV	0.13
55	19.49		0.00	0.000	55647	0.066	VV	0.07
56	19.66		0.00	0.000	81949	0.097	VV	0.08
57	19.80	AR1260#3	0.24	2.995	79349	0.094	VV	0.07
58	20.00		0.00	0.000	108326	0.128	VV	0.06
59	20.22		0.00	0.000	44111	0.052	VV	0.04
60	20.42		0.00	0.000	241149	0.284	VV	0.05
61	20.70		0.00	0.000	58409	0.069	VV	0.08
62	20.83		0.00	0.000	106490	0.126	VV	0.07
63	21.13	AR1260#4	0.06	0.778	49083	0.058	VV	0.09
64	21.20		0.00	0.000	76661	0.090	VV	0.09
65	21.47		0.00	0.000	39720	0.047	VV	0.09
66	21.65		0.00	0.000	70113	0.083	VV	0.13
67	21.86		0.00	0.000	19666	0.023	VV	0.06
68	21.97		0.00	0.000	19832	0.023	VV	0.07
69	22.05	AR1260#5	0.06	0.703	30042	0.035	VV	0.12
70	22.36		0.00	0.000	43370	0.051	VV	0.11
71	22.59		0.00	0.000	23134	0.027	VV	0.07
72	22.77		0.00	0.000	13815	0.016	VV	0.07
73	22.92		0.00	0.000	35075	0.041	VV	0.07
74	23.23		0.00	0.000	6678	0.008	VB	0.12
75	23.51		0.00	0.000	367	0.000	BB	0.06
76	23.82		0.00	0.000	1075	0.001	BV	0.10
77	24.07		0.00	0.000	884	0.001	VB	0.13
78	24.47		0.00	0.000	1385	0.002	BB	0.11
79	24.83		0.00	0.000	1273	0.002	BV	0.11
80	25.01		0.00	0.000	31655	0.037	VV	0.07
81	25.22		0.00	0.000	1516	0.002	VV	0.07
82	25.34		0.00	0.000	1366	0.002	VV	0.06
83	25.45		0.00	0.000	686	0.001	VB	0.07
84	26.08	CL10BP	0.82	10.272	5820398	6.862	BV	0.08
85	27.62		0.00	0.000	72835	0.086	VV	0.28
86	28.29		0.00	0.000	27348	0.032	VV	0.13
87	28.63		0.00	0.000	18919	0.022	VV	0.11
88	28.78		0.00	0.000	15055	0.018	VB	0.15

Total Area = 8.481953E+07 Total Height = 6030068 Total Amount = 8.001463

50020

— H:\CP2\HP2\M0919.0049.RAW 301102-01 B8068 VWR-004-02-ESW

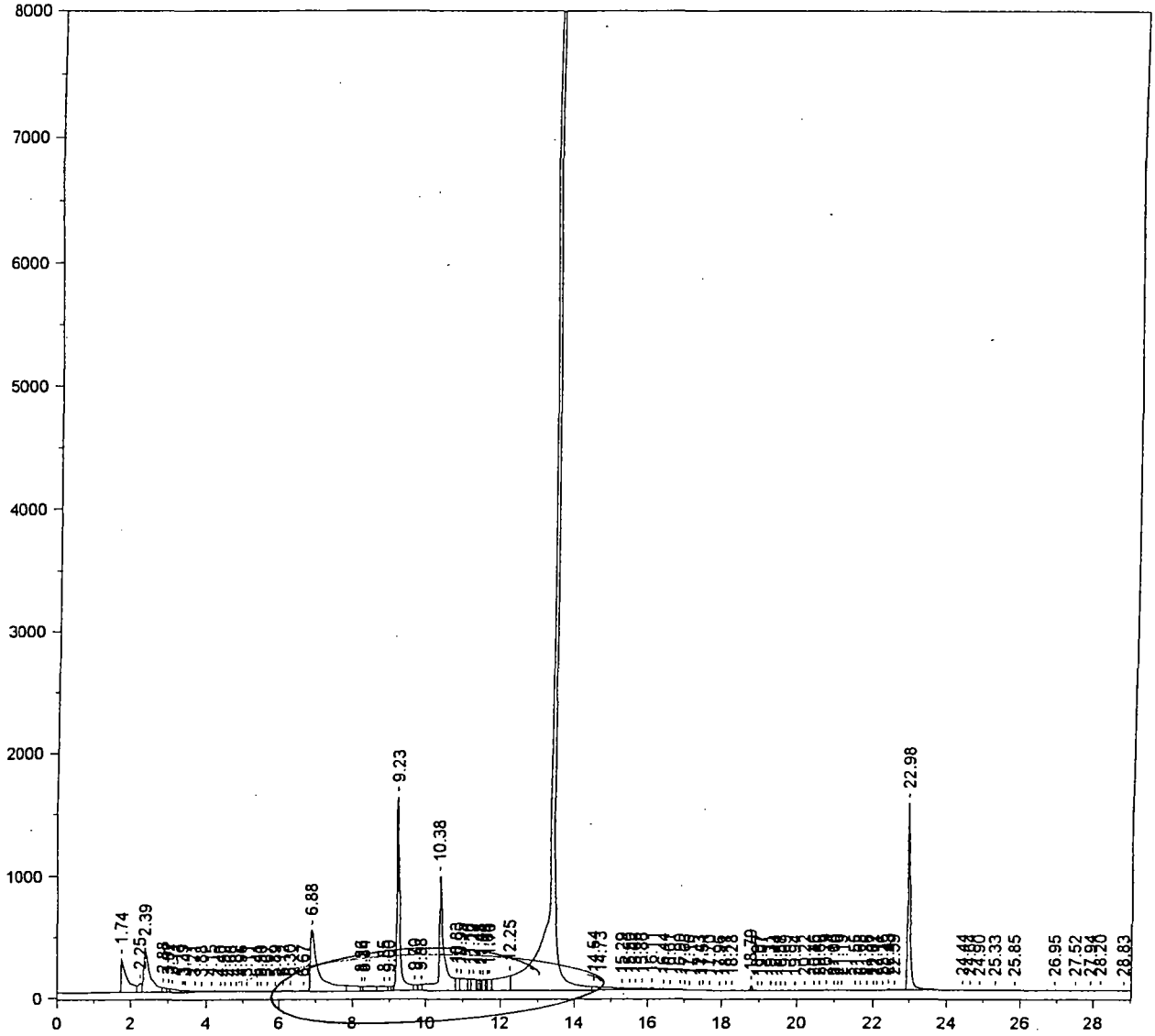


after reintegration
BT
9/23/2

AL
9/24/02

50021

— H:\CP2\HP2\M0919B.0049.RAW 301102-01 B8068 VWR-004-02-ESW



Before reintegration
excess area under peaks
BT
9/23/2

50025

Sample Name = **301102-01 B8068 VWR-004-02-ESW**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0049.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/20/02 3:52:35 PM
Method Version = 567
Calibration Version = 7

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	3064578	2.029	BV	0.13
2	2.25		0.00	0.000	558632	0.370	VV	0.09
3	2.39		0.00	0.000	4291642	2.842	VV	0.14
4	2.88		0.00	0.000	256299	0.170	VV	0.08
5	3.02		0.00	0.000	112486	0.074	VV	0.05
6	3.11		0.00	0.000	424973	0.281	VV	0.18
7	3.39		0.00	0.000	104559	0.069	VV	0.05
8	3.47		0.00	0.000	151586	0.100	VV	0.07
9	3.71		0.00	0.000	177293	0.117	VV	0.14
10	3.88		0.00	0.000	110648	0.073	VV	0.13
11	4.15		0.00	0.000	204839	0.136	VV	0.20
12	4.40		0.00	0.000	50973	0.034	VV	0.06
13	4.52		0.00	0.000	71810	0.048	VV	0.12
14	4.68		0.00	0.000	34688	0.023	VV	0.06
15	4.82		0.00	0.000	82494	0.055	VV	0.11
16	4.96		0.00	0.000	41447	0.027	VV	0.05
17	5.11		0.00	0.000	75471	0.050	VV	0.14
18	5.41		0.00	0.000	81344	0.054	VV	0.19
19	5.50		0.00	0.000	36292	0.024	VV	0.07
20	5.67		0.00	0.000	85313	0.056	VV	0.11
21	5.89		0.00	0.000	61270	0.041	VV	0.15
22	6.12		0.00	0.000	114005	0.075	VV	0.08
23	6.30		0.00	0.000	106404	0.070	VV	0.08
24	6.67		0.00	0.000	91794	0.061	VV	0.12
25	6.88		0.00	0.000	8248137	5.461	VV	0.17
26	8.26		0.00	0.000	157538	0.104	VV	0.04
27	8.34		0.00	0.000	858863	0.569	VV	0.25
28	8.85		0.00	0.000	676840	0.448	VV	0.20
29	9.00		0.00	0.000	215177	0.142	VV	0.05
30	9.23	CL4XYL	0.84	0.174	8921375	5.907	VV	0.07
31	9.70		0.00	0.000	315231	0.209	VV	0.09
32	9.88		0.00	0.000	329446	0.218	VV	0.06
33	10.38	AR1016#1	39.45	8.165	9308236	6.163	VV	0.08
34	10.83		0.00	0.000	652280	0.432	VV	0.06
35	10.95		0.00	0.000	1244155	0.824	VV	0.13
36	11.16		0.00	0.000	442051	0.293	VV	0.06
37	11.27	AR1016#2	1.97	0.409	856721	0.567	VV	0.11
38	11.43		0.00	0.000	334492	0.221	VV	0.04
39	11.48		0.00	0.000	296073	0.196	VV	0.04
40	11.54		0.00	0.000	458672	0.304	VV	0.07
41	11.64		0.00	0.000	350590	0.232	VV	0.04
42	11.70		0.00	0.000	579074	0.383	VV	0.04
43	12.25		0.00	0.000	3190694	2.113	VV	0.17
44	13.43	AR1016#5	439.55	90.965	91540560	60.612	VV	0.07
45	14.54		0.00	0.000	327844	0.217	VV	0.11
46	14.73		0.00	0.000	642513	0.425	VV	0.24
47	15.29		0.00	0.000	253595	0.168	VV	0.17
48	15.50		0.00	0.000	143109	0.095	VV	0.08
49	15.66		0.00	0.000	103333	0.068	VV	0.07
50	15.86		0.00	0.000	145578	0.096	VV	0.10
51	16.11		0.00	0.000	218212	0.144	VV	0.06
52	16.44	AR1260#1	0.35	0.072	94031	0.062	VV	0.14

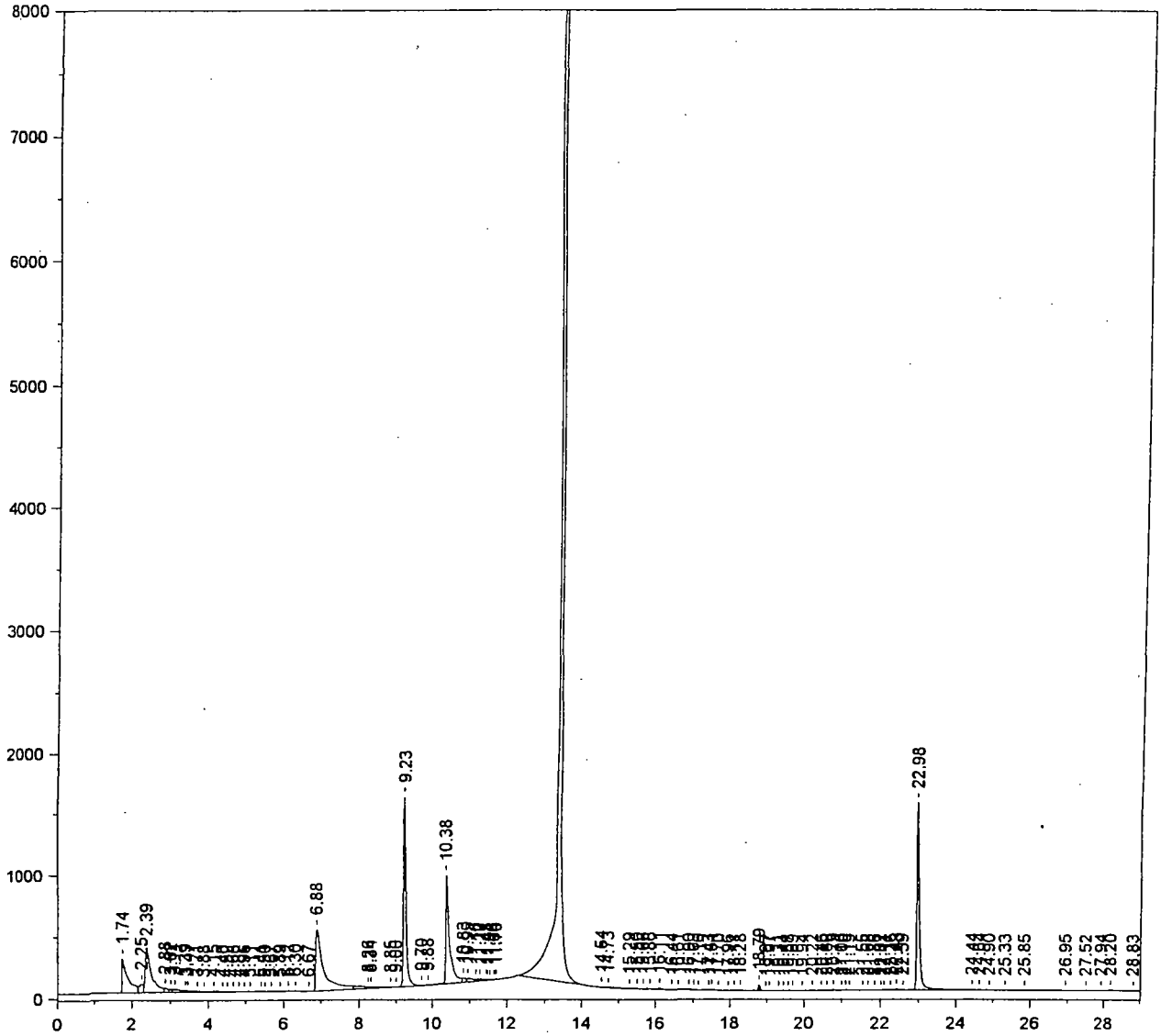
50026

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.61		0.00	0.000	66030	0.044	VV	0.11
54	16.90		0.00	0.000	22988	0.015	VV	0.07
55	17.03		0.00	0.000	19956	0.013	VV	0.08
56	17.16		0.00	0.000	6900	0.005	VB	0.06
57	17.43		0.00	0.000	2895	0.002	BV	0.05
58	17.51		0.00	0.000	23762	0.016	VV	0.06
59	17.70		0.00	0.000	11972	0.008	VB	0.14
60	17.96		0.00	0.000	1213	0.001	BV	0.05
61	18.11		0.00	0.000	16239	0.011	VV	0.10
62	18.28	AR1260#3	0.06	0.013	32312	0.021	VB	0.12
63	18.79		0.00	0.000	163241	0.108	BV	0.05
64	18.97		0.00	0.000	9951	0.007	VV	0.05
65	19.07		0.00	0.000	5491	0.004	VB	0.07
66	19.31		0.00	0.000	6535	0.004	BV	0.13
67	19.44		0.00	0.000	8387	0.006	VV	0.10
68	19.57	AR1260#4	0.01	0.002	12257	0.008	VV	0.05
69	19.69		0.00	0.000	13179	0.009	VV	0.06
70	19.94		0.00	0.000	22329	0.015	VV	0.08
71	20.22		0.00	0.000	45283	0.030	VV	0.15
72	20.46		0.00	0.000	35210	0.023	VV	0.07
73	20.60		0.00	0.000	44603	0.030	VV	0.06
74	20.79		0.00	0.000	80264	0.053	VV	0.06
75	21.00		0.00	0.000	47982	0.032	VV	0.11
76	21.10		0.00	0.000	22443	0.015	VV	0.05
77	21.19		0.00	0.000	58610	0.039	VV	0.13
78	21.55		0.00	0.000	46177	0.031	VV	0.12
79	21.68	AR1260#5	0.12	0.025	35139	0.023	VV	0.08
80	21.86		0.00	0.000	57079	0.038	VV	0.15
81	22.02		0.00	0.000	30844	0.020	VV	0.09
82	22.11		0.00	0.000	36614	0.024	VV	0.05
83	22.26		0.00	0.000	32760	0.022	VV	0.05
84	22.43		0.00	0.000	91992	0.061	VV	0.06
85	22.59		0.00	0.000	62022	0.041	VV	0.08
86	22.98	CL10BP	0.85	0.176	8421072	5.576	SBB	0.07
87	24.44		0.00	0.000	1439	0.001	TBV	0.11
88	24.64		0.00	0.000	4152	0.003	TVV	0.13
89	24.90		0.00	0.000	27089	0.018	TVV	0.22
90	25.33		0.00	0.000	33149	0.022	TVB	0.28
91	25.85		0.00	0.000	7497	0.005	BB	0.20
92	26.95		0.00	0.000	11987	0.008	BV	0.30
93	27.52		0.00	0.000	8797	0.006	VV	0.33
94	27.94		0.00	0.000	3370	0.002	VV	0.15
95	28.20		0.00	0.000	40264	0.027	VB	0.15
96	28.83		0.00	0.000	478	0.000	BB	0.10

Total Area = 1.510272E+08 Total Height = 2.167028E+07 Total Amount = 483.203

50027

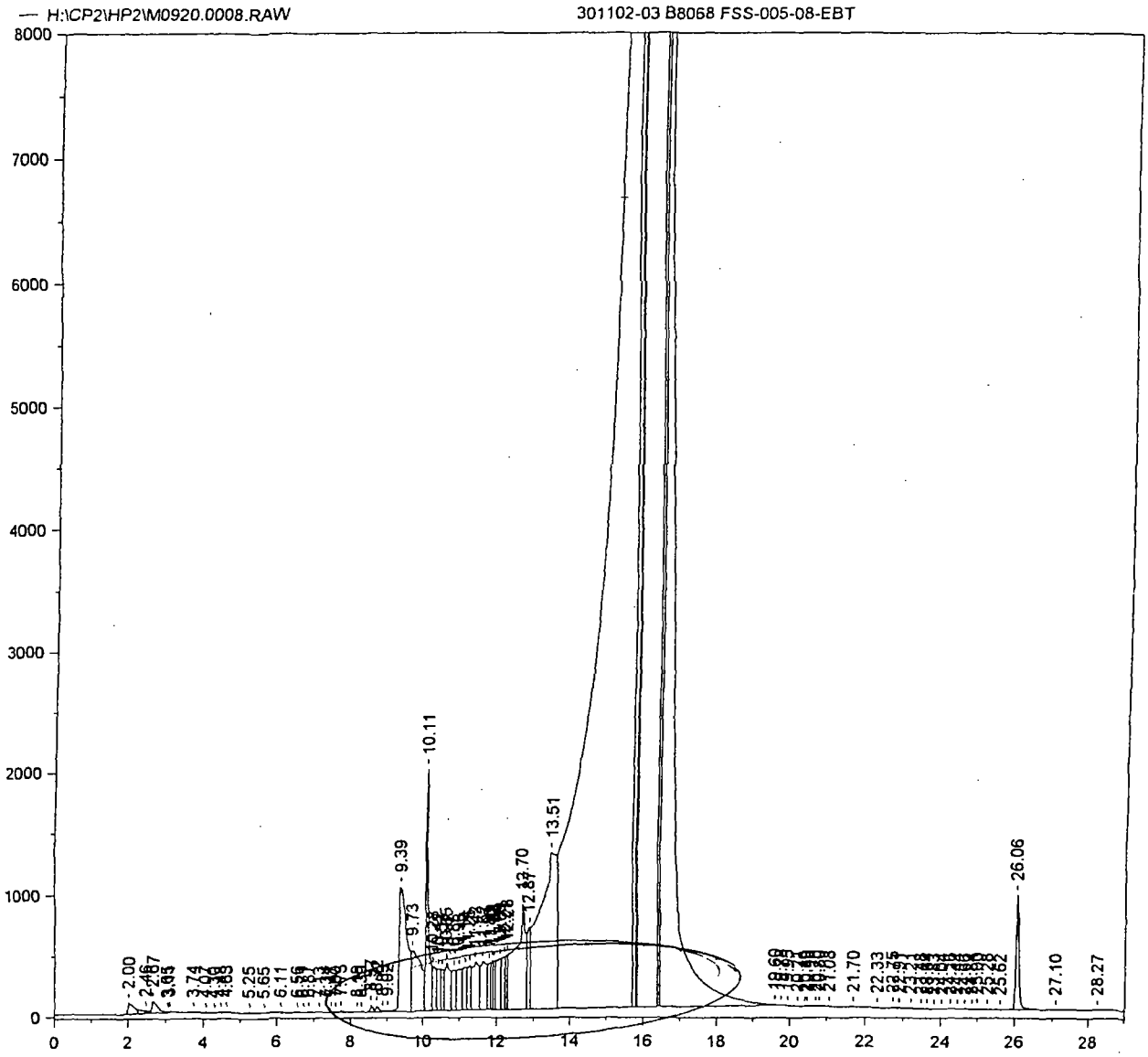
— H:\CP2\HP2\M0919B.0049.RAW 301102-01 B8068 VWR-004-02-ESW



After reintegration
AST
9/23/2

AST
9/24/02

50028



Primary Column

Before reintegration
excess area under peak
RBT
9/23/02

50034

Sample Name = **301102-03 B8068 FSS-005-08-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0920.0008.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/20/02 11:37:05 PM
Method Version = 618
Calibration Version = 12

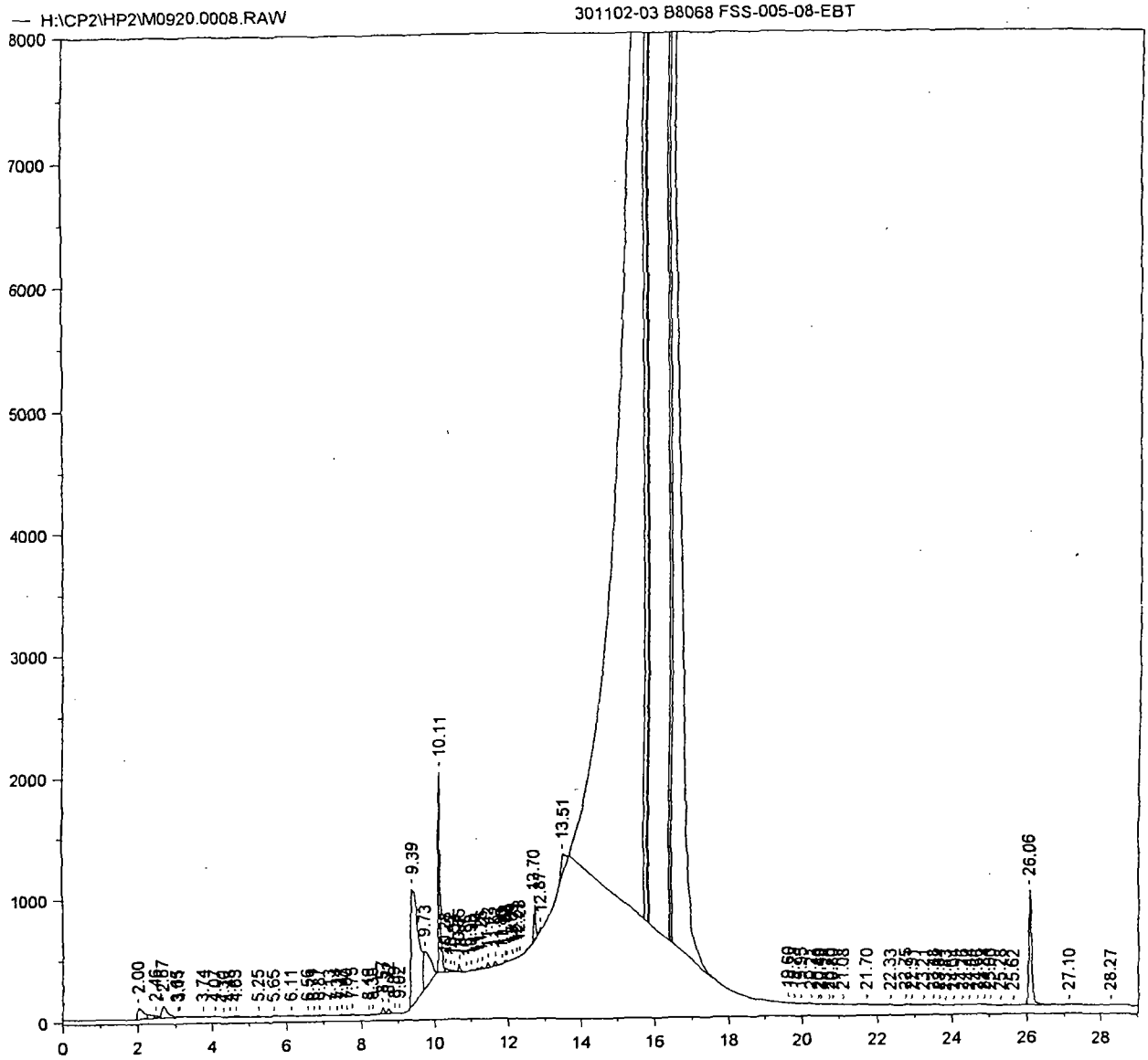
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	976476	0.063	BV	0.19
2	2.46		0.00	0.000	145285	0.009	VV	0.08
3	2.67		0.00	0.000	1014493	0.066	VV	0.14
4	3.05		0.00	0.000	23885	0.002	VV	0.04
5	3.11		0.00	0.000	38913	0.003	VB	0.08
6	3.74		0.00	0.000	52756	0.003	BV	0.22
7	4.07		0.00	0.000	29205	0.002	VV	0.08
8	4.30		0.00	0.000	21203	0.001	VV	0.18
9	4.48		0.00	0.000	36945	0.002	VV	0.10
10	4.63		0.00	0.000	87497	0.006	VB	0.23
11	5.25		0.00	0.000	53180	0.003	BB	0.14
12	5.65		0.00	0.000	9589	0.001	BB	0.18
13	6.11		0.00	0.000	33965	0.002	BV	0.18
14	6.56		0.00	0.000	36108	0.002	VV	0.17
15	6.71		0.00	0.000	8393	0.001	VV	0.06
16	6.87		0.00	0.000	57593	0.004	VV	0.09
17	7.13		0.00	0.000	2275	0.000	VV	0.05
18	7.34		0.00	0.000	11732	0.001	VV	0.13
19	7.47		0.00	0.000	47689	0.003	VV	0.07
20	7.60		0.00	0.000	21078	0.001	VV	0.08
21	7.75		0.00	0.000	76662	0.005	VB	0.10
22	8.19		0.00	0.000	12698	0.001	BV	0.15
23	8.30		0.00	0.000	21240	0.001	VB	0.06
24	8.57		0.00	0.000	247520	0.016	BV	0.07
25	8.72		0.00	0.000	269568	0.018	VV	0.07
26	8.89		0.00	0.000	41400	0.003	VV	0.07
27	9.02		0.00	0.000	49300	0.003	VV	0.05
28	9.39		0.00	0.000	15535171	1.010	VV	0.28
29	9.73		0.00	0.000	9462911	0.615	VV	0.23
30	10.11	CL4XYL	1.29	1.564	10109457	0.657	VV	0.05
31	10.28		0.00	0.000	2727759	0.177	VV	0.09
32	10.42		0.00	0.000	2291714	0.149	VV	0.04
33	10.53		0.00	0.000	1791236	0.116	VV	0.06
34	10.65		0.00	0.000	4044189	0.263	VV	0.05
35	10.85		0.00	0.000	2299407	0.149	VV	0.08
36	10.98		0.00	0.000	3390795	0.220	VV	0.12
37	11.14		0.00	0.000	2466187	0.160	VV	0.08
38	11.26		0.00	0.000	2391160	0.155	VV	0.05
39	11.42		0.00	0.000	5007494	0.325	VV	0.08
40	11.62	AR1016#1	25.78	31.221	4578557	0.298	VV	0.07
41	11.80		0.00	0.000	1952536	0.127	VV	0.06
42	11.88		0.00	0.000	1652909	0.107	VV	0.05
43	11.93		0.00	0.000	1280015	0.083	VV	0.03
44	12.09		0.00	0.000	3673843	0.239	VV	0.08
45	12.21		0.00	0.000	2884068	0.187	VV	0.06
46	12.28		0.00	0.000	1921745	0.125	VV	0.04
47	12.70	AR1016#2	54.75	66.306	17339654	1.127	VV	0.08
48	12.87		0.00	0.000	3506082	0.228	VV	0.06
49	13.51		0.00	0.000	42736268	2.778	VV	0.30
50	15.67		0.00	0.000	564482752	36.691	VV	0.35
51	15.77		0.00	0.000	98871912	6.427	VV	0.10
52	16.30		0.00	0.000	482677856	31.374	VV	0.45

50035

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.44		0.00	0.000	63963756	4.158	VV	0.04
54	16.50		0.00	0.000	176438912	11.468	VV	0.13
55	19.60		0.00	0.000	1814	0.000	VB	0.04
56	19.78		0.00	0.000	5473	0.000	BV	0.08
57	19.95		0.00	0.000	14272	0.001	VB	0.09
58	20.21		0.00	0.000	2117	0.000	BV	0.09
59	20.40		0.00	0.000	2027	0.000	VB	0.06
60	20.48		0.00	0.000	2499	0.000	BB	0.11
61	20.70		0.00	0.000	3506	0.000	BV	0.09
62	20.80		0.00	0.000	5838	0.000	VB	0.09
63	21.08	AR1260#4	0.00	0.002	1064	0.000	BB	0.04
64	21.70		0.00	0.000	4396	0.000	BB	0.12
65	22.33		0.00	0.000	3531	0.000	BB	0.13
66	22.75		0.00	0.000	54545	0.004	BV	0.08
67	22.91		0.00	0.000	20293	0.001	VB	0.09
68	23.21		0.00	0.000	750	0.000	BB	0.05
69	23.48		0.00	0.000	3536	0.000	BV	0.09
70	23.64		0.00	0.000	6431	0.000	VB	0.12
71	23.83		0.00	0.000	4939	0.000	BV	0.11
72	24.04		0.00	0.000	5770	0.000	VB	0.10
73	24.26		0.00	0.000	3767	0.000	BB	0.13
74	24.44		0.00	0.000	10140	0.001	BV	0.13
75	24.66		0.00	0.000	6383	0.000	VV	0.08
76	24.84		0.00	0.000	4821	0.000	VV	0.06
77	25.00		0.00	0.000	32763	0.002	VB	0.08
78	25.28		0.00	0.000	5210	0.000	BV	0.18
79	25.62		0.00	0.000	2912	0.000	VB	0.15
80	26.06	CL10BP	0.75	0.907	5306308	0.345	BV	0.08
81	27.10		0.00	0.000	51937	0.003	VV	0.41
82	28.27		0.00	0.000	2898	0.000	VB	0.14

Total Area = 1.538475E+09 Total Height = 8.645446E+07 Total Amount = 82.57271

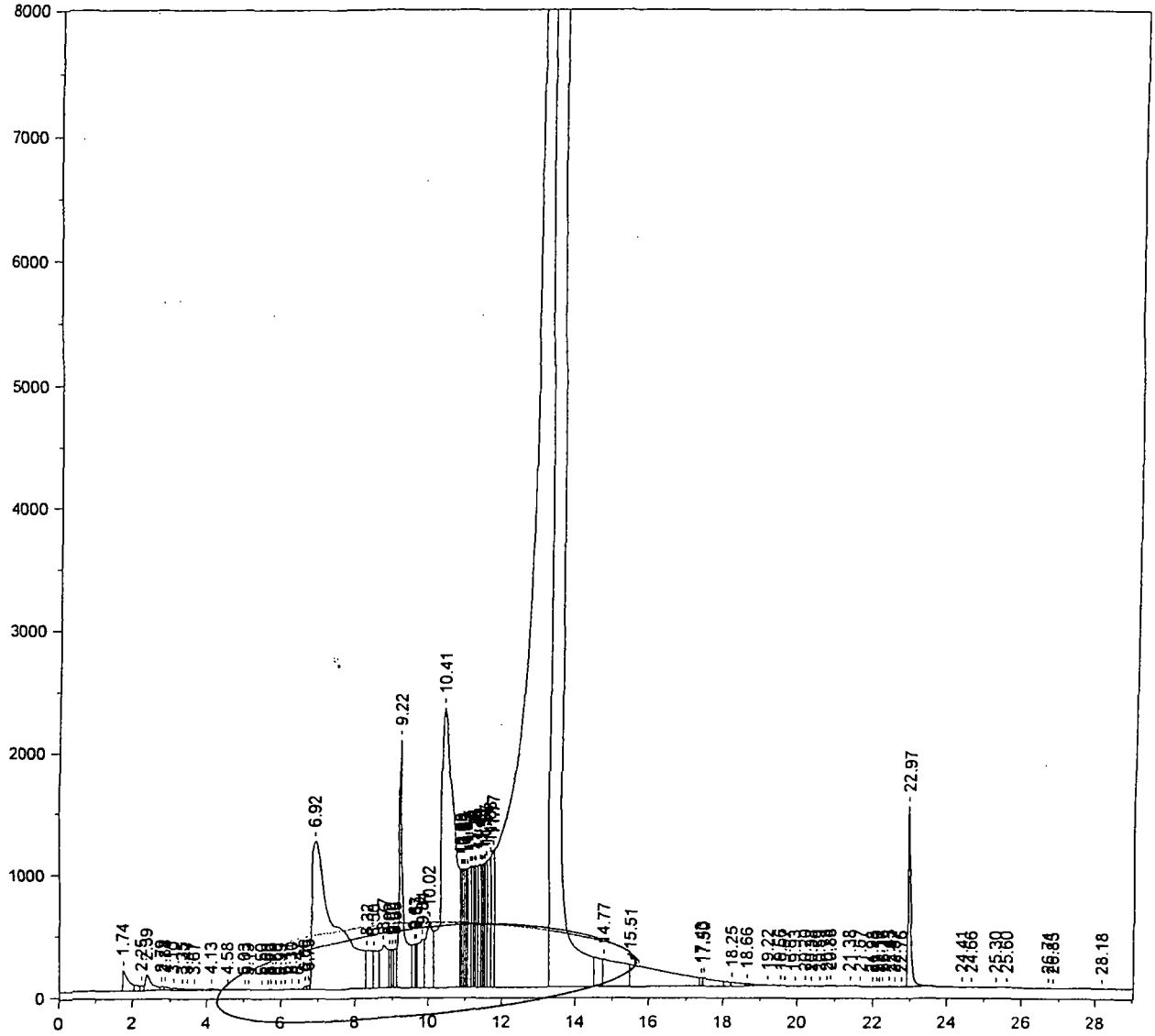
50036



After reintegration
RST
9/23/02

50037

— H:\CP2\HP2\M0920B.0008.RAW 301102-03 B8068 FSS-005-08-EBT



Before reintegration
Excess area under peak
RDT
9/25/02

50042

Sample Name = **301102-03 B8068 FSS-005-08-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0920B.0008.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/20/02 11:37:05 PM
Method Version = 567
Calibration Version = 8

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	1752188	0.185	BV	0.16
2	2.25		0.00	0.000	256905	0.027	VV	0.06
3	2.39		0.00	0.000	1577405	0.167	VV	0.13
4	2.79		0.00	0.000	221506	0.023	VV	0.06
5	2.88		0.00	0.000	283578	0.030	VV	0.09
6	3.10		0.00	0.000	313958	0.033	VV	0.12
7	3.35		0.00	0.000	99849	0.011	VV	0.08
8	3.47		0.00	0.000	132514	0.014	VV	0.11
9	3.67		0.00	0.000	238715	0.025	VV	0.20
10	4.13		0.00	0.000	283413	0.030	VV	0.17
11	4.58		0.00	0.000	132034	0.014	VV	0.12
12	5.03		0.00	0.000	37071	0.004	VV	0.12
13	5.13		0.00	0.000	52277	0.006	VV	0.11
14	5.50		0.00	0.000	56933	0.006	VV	0.14
15	5.66		0.00	0.000	27244	0.003	VV	0.07
16	5.73		0.00	0.000	40289	0.004	VV	0.07
17	5.86		0.00	0.000	26364	0.003	VV	0.08
18	5.99		0.00	0.000	11543	0.001	VV	0.05
19	6.11		0.00	0.000	63296	0.007	VV	0.12
20	6.30		0.00	0.000	99976	0.011	VV	0.09
21	6.47		0.00	0.000	34135	0.004	VV	0.06
22	6.66		0.00	0.000	204563	0.022	VV	0.10
23	6.75		0.00	0.000	153563	0.016	VV	0.05
24	6.92		0.00	0.000	51775384	5.478	VV	0.42
25	8.32		0.00	0.000	3652025	0.386	VV	0.06
26	8.50		0.00	0.000	3047033	0.322	VV	0.04
27	8.77		0.00	0.000	4818880	0.510	VV	0.08
28	8.92		0.00	0.000	1243707	0.132	VV	0.05
29	9.00		0.00	0.000	1427800	0.151	VV	0.04
30	9.08		0.00	0.000	1505652	0.159	VV	0.06
31	9.22	CL4XYL	1.55	0.599	16445175	1.740	VV	0.07
32	9.63		0.00	0.000	2118342	0.224	VV	0.06
33	9.67		0.00	0.000	929470	0.098	VV	0.03
34	9.84		0.00	0.000	4348080	0.460	VV	0.08
35	10.02		0.00	0.000	6979252	0.738	VV	0.12
36	10.41	AR1016#1	244.85	94.924	57767788	6.112	VV	0.37
37	10.90		0.00	0.000	2679993	0.284	VV	0.03
38	10.94		0.00	0.000	3459053	0.366	VV	0.04
39	10.99		0.00	0.000	2111045	0.223	VV	0.02
40	11.05		0.00	0.000	3461810	0.366	VV	0.05
41	11.15		0.00	0.000	5641418	0.597	VV	0.04
42	11.19		0.00	0.000	3338338	0.353	VV	0.04
43	11.26		0.00	0.000	2748987	0.291	VV	0.02
44	11.28	AR1016#2	9.56	3.706	4147147	0.439	VV	0.05
45	11.40		0.00	0.000	4984322	0.527	VV	0.04
46	11.45		0.00	0.000	2592473	0.274	VV	0.02
47	11.51		0.00	0.000	3218582	0.341	VV	0.04
48	11.57		0.00	0.000	4507860	0.477	VV	0.04
49	11.68		0.00	0.000	6076570	0.643	VV	0.05
50	11.77		0.00	0.000	6384571	0.675	VV	0.06
51	13.25		0.00	0.000	392712928	41.550	VV	0.2[illegible]
52	13.54		0.00	0.000	300959520	31.842	VV	0.32

50043

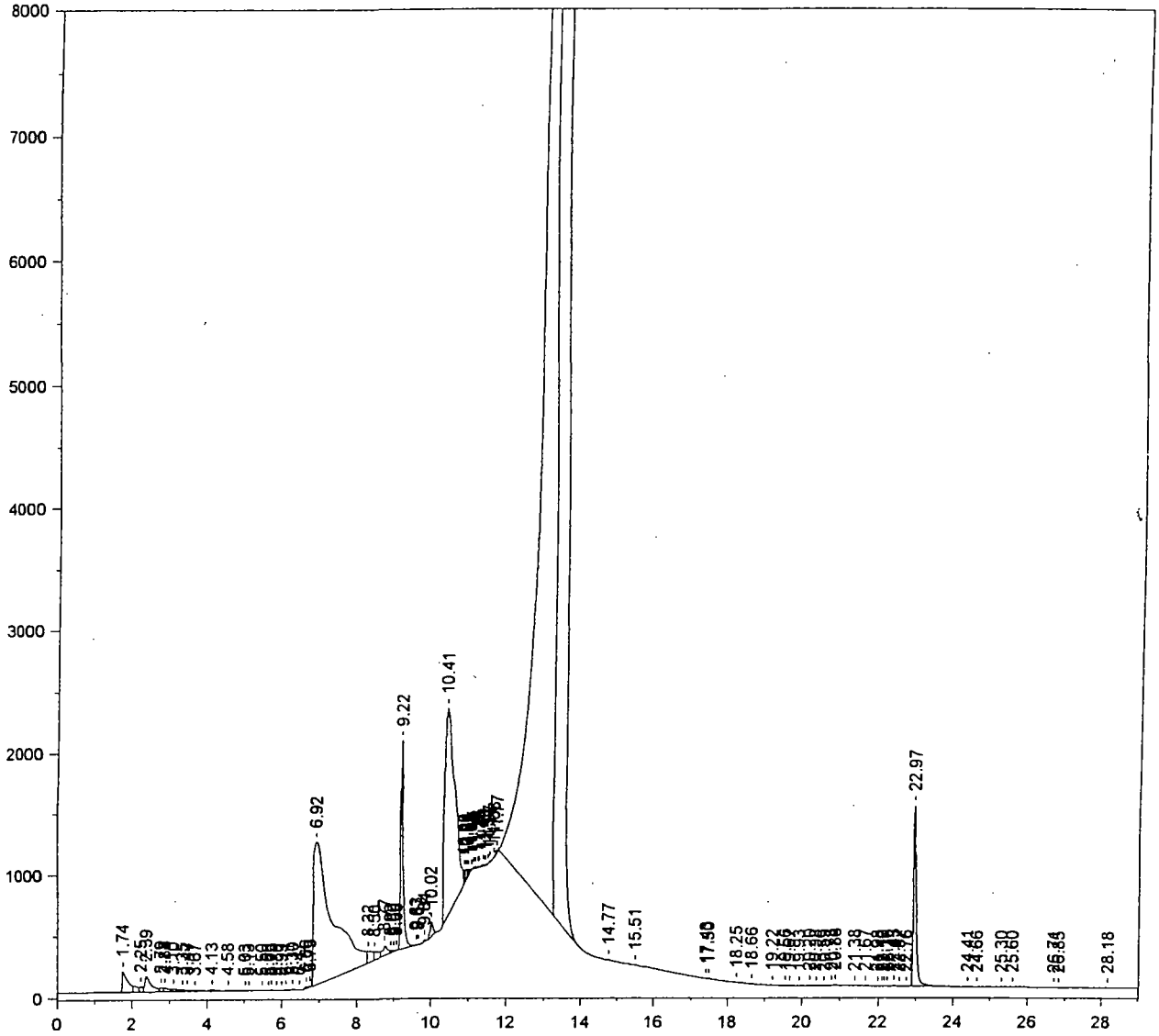
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	14.77		0.00	0.000	8745160	0.925	VV	0 29
54	15.51		0.00	0.000	14114298	1.493	VV	0.92
55	17.43		0.00	0.000	295658	0.031	VV	0.06
56	17.50		0.00	0.000	1763885	0.187	VV	0.23
57	18.25	AR1260#3	1.18	0.457	608027	0.064	VV	0.21
58	18.66		0.00	0.000	451894	0.048	VV	0.24
59	19.22		0.00	0.000	106885	0.011	VV	0.16
60	19.56	AR1260#4	0.02	0.008	26697	0.003	VV	0.06
61	19.67		0.00	0.000	21654	0.002	VV	0.08
62	19.93		0.00	0.000	3324	0.000	VB	0.07
63	20.20		0.00	0.000	28275	0.003	BV	0.10
64	20.38		0.00	0.000	4256	0.000	VV	0.06
65	20.59		0.00	0.000	7688	0.001	VV	0.06
66	20.78		0.00	0.000	15636	0.002	VV	0.06
67	20.88		0.00	0.000	59344	0.006	VB	0.09
68	21.38		0.00	0.000	1792	0.000	BV	0.08
69	21.67	AR1260#5	0.02	0.009	6528	0.001	VB	0.14
70	21.98		0.00	0.000	1268	0.000	BV	0.05
71	22.10		0.00	0.000	1574	0.000	VV	0.06
72	22.17		0.00	0.000	2091	0.000	VV	0.04
73	22.26		0.00	0.000	7129	0.001	VB	0.07
74	22.43		0.00	0.000	37110	0.004	BV	0.07
75	22.57		0.00	0.000	1150	0.000	VB	0.06
76	22.76		0.00	0.000	3355	0.000	BB	0.07
77	22.97	CL10BP	0.77	0.297	7606269	0.805	BV	0.07
78	24.41		0.00	0.000	9732	0.001	VV	0.13
79	24.66		0.00	0.000	4850	0.001	VB	0.13
80	25.30		0.00	0.000	2537	0.000	BB	0.15
81	25.60		0.00	0.000	954	0.000	BB	0.09
82	26.71		0.00	0.000	10039	0.001	BV	0.12
83	26.85		0.00	0.000	16088	0.002	VB	0.25
84	28.18		0.00	0.000	18157	0.002	BB	0.17

Total Area = 9.451659E+08 Total Height = 5.500413E+07 Total Amount = 257.944

50044

— H:\CP2\HP2\M0920B.0008.RAW

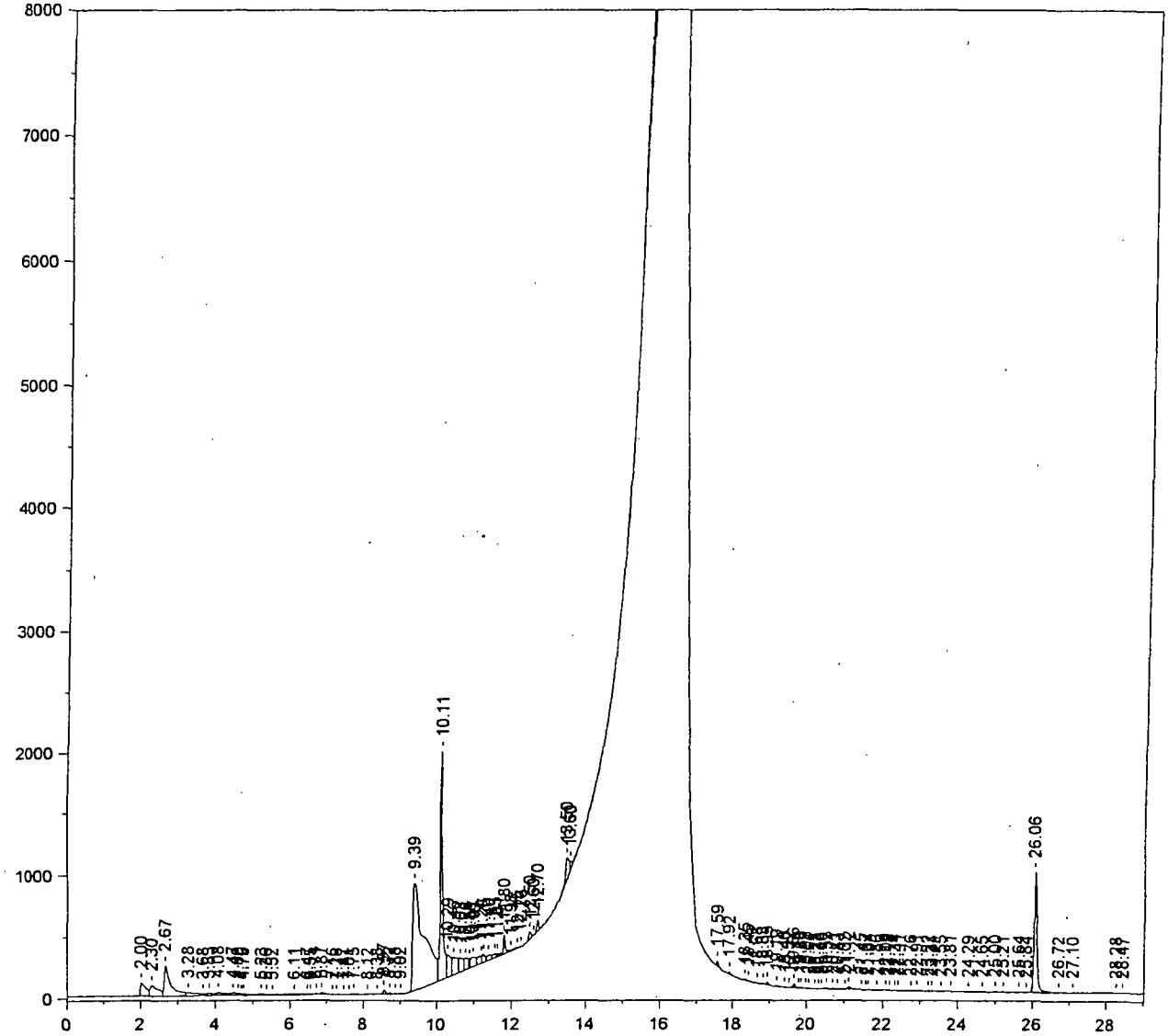
301102-03 B8068 FSS-005-08-EBT



After [illegible]
FDT
9/23/2
[illegible]

50045

— H:\CP2\HP2\M0920.0010.RAW 301102-04 B8068 FIP-002-06-SSS



Before reintegration
excess area under peaks
KT
9/23/2

Primary Column

50051

Sample Name = **301102-04 B8068 FIP-002-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0920.0010.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/21/02 12:54:22 AM
Method Version = 618
Calibration Version = 13

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1071633	0.644	BV	0.18
2	2.30		0.00	0.000	1285815	0.773	VV	0.15
3	2.67		0.00	0.000	3177609	1.910	VV	0.14
4	3.28		0.00	0.000	488005	0.293	VV	0.13
5	3.68		0.00	0.000	104344	0.063	VV	0.07
6	3.83		0.00	0.000	235484	0.142	VV	0.17
7	4.08		0.00	0.000	366264	0.220	VV	0.10
8	4.47		0.00	0.000	175380	0.105	VV	0.13
9	4.60		0.00	0.000	70189	0.042	VV	0.06
10	4.70		0.00	0.000	44831	0.027	VV	0.04
11	4.75		0.00	0.000	180592	0.109	VV	0.10
12	5.23		0.00	0.000	172532	0.104	VV	0.19
13	5.36		0.00	0.000	43774	0.026	VV	0.06
14	5.52		0.00	0.000	178031	0.107	VV	0.27
15	6.11		0.00	0.000	155958	0.094	VV	0.24
16	6.47		0.00	0.000	75791	0.046	VV	0.13
17	6.55		0.00	0.000	35012	0.021	VV	0.07
18	6.71		0.00	0.000	62058	0.037	VV	0.07
19	6.87		0.00	0.000	130860	0.079	VV	0.10
20	7.16		0.00	0.000	15238	0.009	VV	0.05
21	7.28		0.00	0.000	37417	0.022	VV	0.09
22	7.47		0.00	0.000	27187	0.016	VV	0.06
23	7.61		0.00	0.000	20365	0.012	VV	0.07
24	7.75		0.00	0.000	62092	0.037	VB	0.09
25	8.12		0.00	0.000	26718	0.016	BB	0.20
26	8.38		0.00	0.000	3973	0.002	BB	0.11
27	8.57		0.00	0.000	145393	0.087	BV	0.07
28	8.72		0.00	0.000	59717	0.036	VV	0.07
29	8.88		0.00	0.000	22911	0.014	VV	0.05
30	9.02		0.00	0.000	31806	0.019	VB	0.07
31	9.39		0.00	0.000	18566930	11.163	BV	0.37
32	10.11	CL4XYL	1.06	26.213	8295887	4.988	VV	0.05
33	10.29		0.00	0.000	1568251	0.943	VV	0.09
34	10.46		0.00	0.000	1376151	0.827	VV	0.14
35	10.63		0.00	0.000	929786	0.559	VV	0.11
36	10.78		0.00	0.000	726321	0.437	VV	0.08
37	10.88		0.00	0.000	200709	0.121	VV	0.03
38	10.97		0.00	0.000	728083	0.438	VV	0.14
39	11.20		0.00	0.000	526961	0.317	VV	0.09
40	11.25		0.00	0.000	369147	0.222	VV	0.05
41	11.40		0.00	0.000	332347	0.200	VV	0.10
42	11.55		0.00	0.000	215903	0.130	VV	0.07
43	11.61	AR1016#1	0.51	12.691	91123	0.055	VV	0.03
44	11.80		0.00	0.000	710882	0.427	VV	0.05
45	11.98		0.00	0.000	44988	0.027	VV	0.06
46	12.15		0.00	0.000	100247	0.060	VV	0.11
47	12.26		0.00	0.000	55370	0.033	VB	0.09
48	12.50		0.00	0.000	264359	0.159	BV	0.09
49	12.60		0.00	0.000	32808	0.020	VB	0.03
50	12.70	AR1016#2	0.99	24.368	312007	0.188	BB	0.08
51	13.50		0.00	0.000	1164113	0.700	BV	0.14
52	13.60		0.00	0.000	182829	0.110	VB	0.06

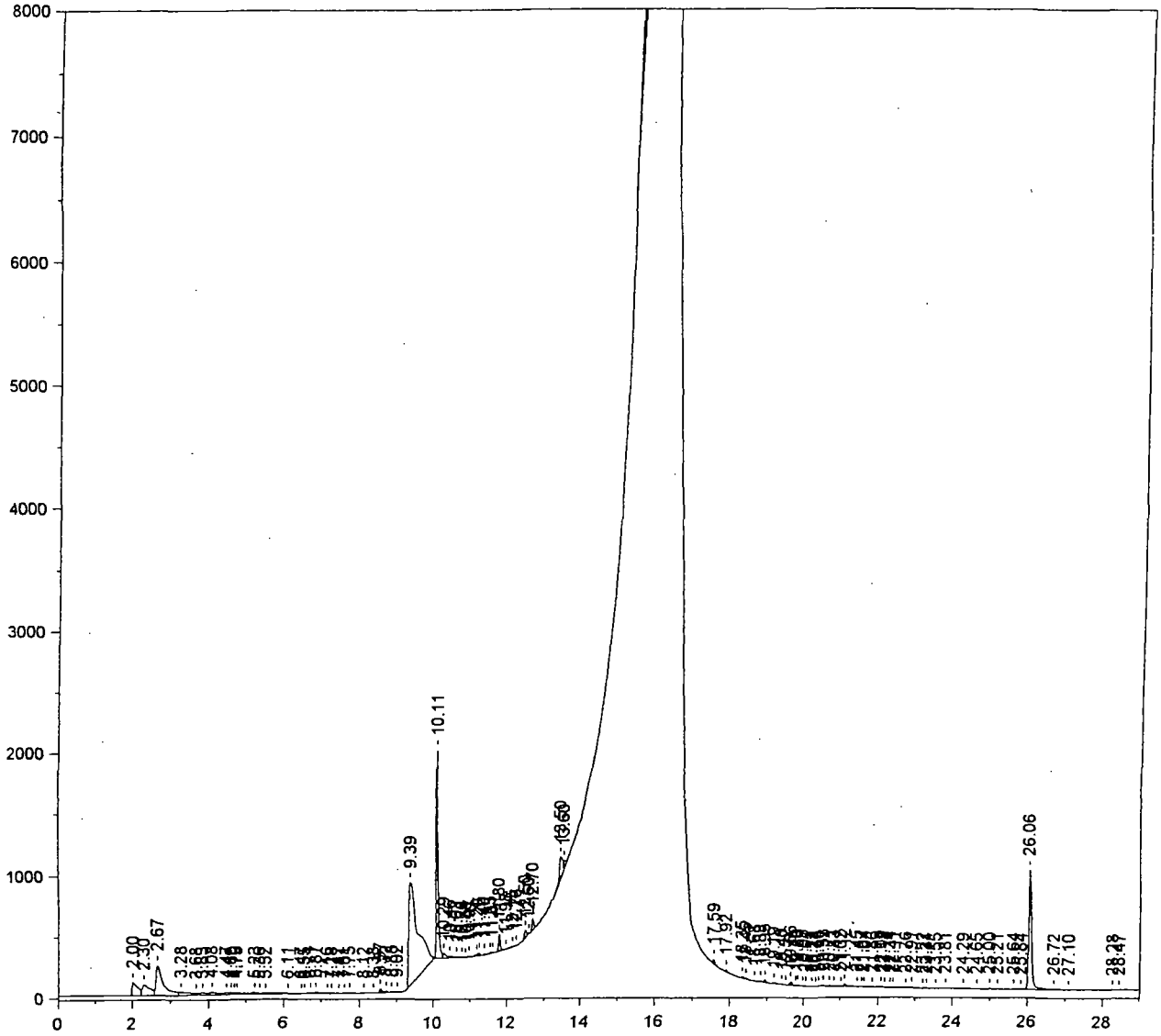
50052

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	15.84		0.00	0.000	50915804	30.611	BV	0.20
54	15.91		0.00	0.000	20201206	12.145	VV	0.07
55	15.97		0.00	0.000	17008342	10.226	VV	0.07
56	16.17		0.00	0.000	19658838	11.819	VV	0.14
57	16.24		0.00	0.000	6069348	3.649	VV	0.06
58	16.36		0.00	0.000	469040	0.282	VB	0.02
59	17.59		0.00	0.000	130962	0.079	BB	0.07
60	17.92	AR1260#1	0.31	7.572	60922	0.037	BB	0.07
61	18.35		0.00	0.000	43064	0.026	BB	0.07
62	18.45		0.00	0.000	22833	0.014	BB	0.09
63	18.68		0.00	0.000	7732	0.005	BB	0.05
64	18.83	AR1260#2	0.07	1.711	29876	0.018	BB	0.06
65	18.95		0.00	0.000	68946	0.041	BB	0.05
66	19.19		0.00	0.000	64916	0.039	BB	0.13
67	19.40		0.00	0.000	4183	0.003	BB	0.08
68	19.52		0.00	0.000	2615	0.002	BB	0.05
69	19.66		0.00	0.000	146669	0.088	BV	0.06
70	19.79		0.00	0.000	7552	0.005	VV	0.03
71	19.86	AR1260#3	0.10	2.390	31997	0.019	VV	0.05
72	19.98		0.00	0.000	22232	0.013	VV	0.06
73	20.07		0.00	0.000	3318	0.002	VB	0.05
74	20.22		0.00	0.000	8031	0.005	BV	0.09
75	20.33		0.00	0.000	1681	0.001	VV	0.03
76	20.40		0.00	0.000	5130	0.003	VV	0.04
77	20.53		0.00	0.000	52823	0.032	VV	0.08
78	20.71		0.00	0.000	23414	0.014	VV	0.05
79	20.83		0.00	0.000	27837	0.017	VV	0.07
80	21.02		0.00	0.000	5763	0.003	VV	0.04
81	21.12	AR1260#4	0.13	3.329	106131	0.064	VV	0.07
82	21.45		0.00	0.000	3439	0.002	VV	0.08
83	21.57		0.00	0.000	2410	0.001	VV	0.04
84	21.64		0.00	0.000	16833	0.010	VV	0.07
85	21.86		0.00	0.000	2637	0.002	VV	0.09
86	22.09	AR1260#5	0.09	2.306	49820	0.030	VV	0.10
87	22.18		0.00	0.000	20428	0.012	VV	0.09
88	22.34		0.00	0.000	9714	0.006	VV	0.05
89	22.41		0.00	0.000	7687	0.005	VB	0.07
90	22.76		0.00	0.000	7494	0.005	BV	0.08
91	22.91		0.00	0.000	24758	0.015	VB	0.09
92	23.22		0.00	0.000	5188	0.003	BV	0.07
93	23.31		0.00	0.000	7287	0.004	VB	0.08
94	23.55		0.00	0.000	2434	0.001	BB	0.14
95	23.81		0.00	0.000	12099	0.007	BB	0.06
96	24.29		0.00	0.000	5057	0.003	BV	0.08
97	24.65		0.00	0.000	3778	0.002	VB	0.08
98	25.00		0.00	0.000	37358	0.022	BV	0.08
99	25.21		0.00	0.000	17108	0.010	VB	0.09
100	25.64		0.00	0.000	8617	0.005	BB	0.09
101	25.84		0.00	0.000	1887	0.001	BV	0.06
102	26.06	CL10BP	0.79	19.419	5559330	3.342	SBB	0.08
103	26.72		0.00	0.000	4902	0.003	TBV	0.18
104	27.10		0.00	0.000	3307	0.002	TVB	0.13
105	28.28		0.00	0.000	9421	0.006	BV	0.20
106	28.47		0.00	0.000	6249	0.004	VB	0.21

Total Area = 1.663326E+08 Total Height = 2.068753E+07 Total Amount = 4.042835

50053

— H:\CP2\HP2\M0920.0010.BND 301102-04 B8068 FIP-002-06-SSS



After reintegration
LDT
9/23/02

50054

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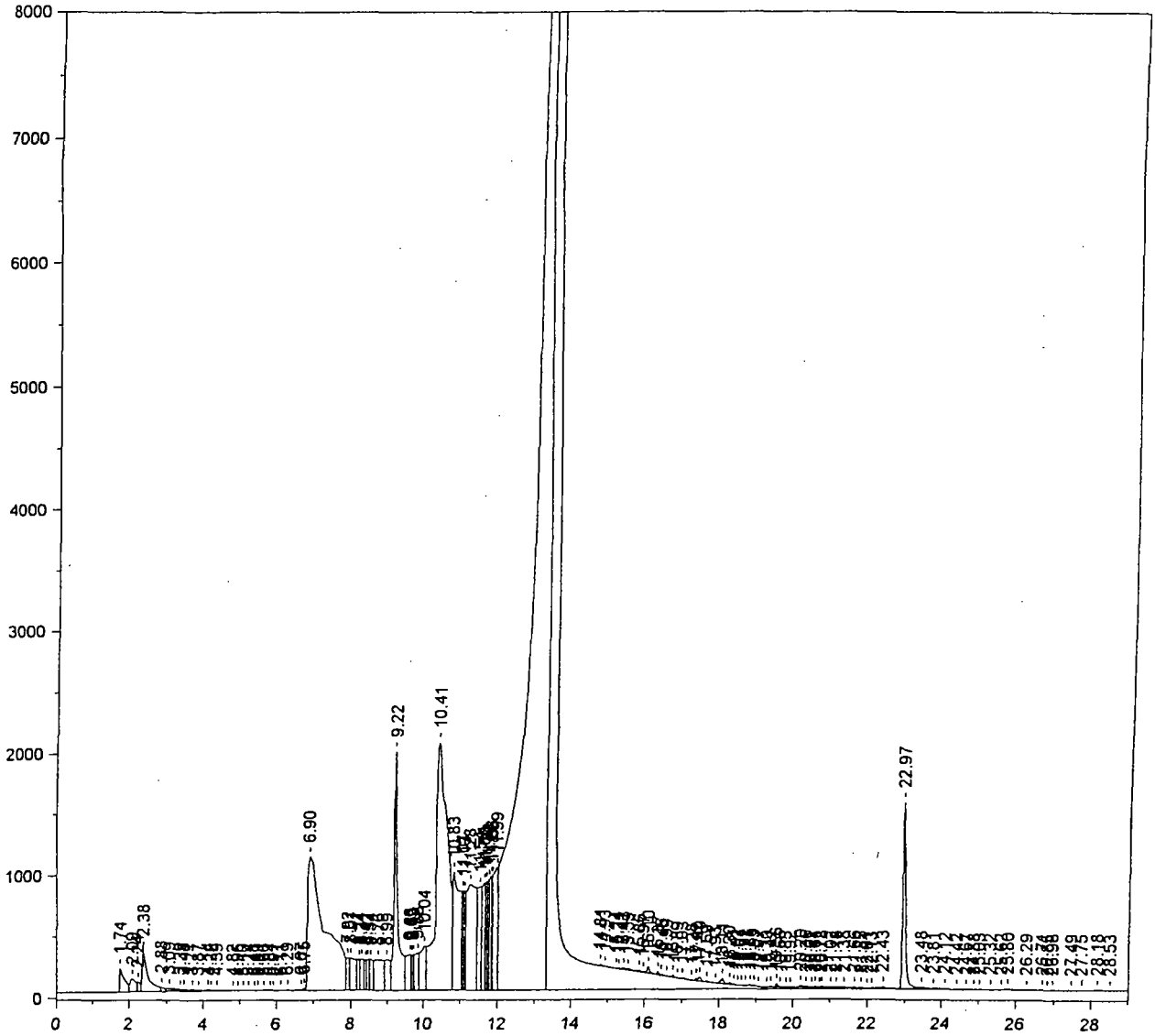


Before reintegration
excess area under peak
BT
9/23/2

50060

Sample Name = **301102-04 B8068 FIP-002-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0920B.0010.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/21/02 12:54:22 AM
Method Version = 567
Calibration Version = 8

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	1746988	0.220	BV	0.15
2	2.09		0.00	0.000	1057057	0.133	VV	0.13
3	2.24		0.00	0.000	445052	0.056	VV	0.07
4	2.38		0.00	0.000	3637967	0.458	VV	0.12
5	2.88		0.00	0.000	230598	0.029	VV	0.08
6	3.09		0.00	0.000	246511	0.031	VV	0.16
7	3.39		0.00	0.000	80214	0.010	VV	0.06
8	3.48		0.00	0.000	65712	0.008	VV	0.05
9	3.71		0.00	0.000	129341	0.016	VV	0.11
10	3.87		0.00	0.000	46844	0.006	VV	0.12
11	4.14		0.00	0.000	66871	0.008	VV	0.12
12	4.22		0.00	0.000	44332	0.006	VV	0.10
13	4.39		0.00	0.000	7092	0.001	VB	0.06
14	4.82		0.00	0.000	18319	0.002	BV	0.10
15	4.96		0.00	0.000	14643	0.002	VV	0.11
16	5.10		0.00	0.000	10992	0.001	VV	0.11
17	5.24		0.00	0.000	581	0.000	VV	0.04
18	5.41		0.00	0.000	2865	0.000	VV	0.08
19	5.49		0.00	0.000	6796	0.001	VV	0.07
20	5.66		0.00	0.000	11163	0.001	VV	0.10
21	5.84		0.00	0.000	2844	0.000	VV	0.03
22	5.91		0.00	0.000	7238	0.001	VV	0.06
23	6.11		0.00	0.000	55856	0.007	VV	0.10
24	6.29		0.00	0.000	69642	0.009	VV	0.08
25	6.67		0.00	0.000	122949	0.015	VV	0.09
26	6.75		0.00	0.000	91380	0.012	VV	0.06
27	6.90		0.00	0.000	36833700	4.641	VV	0.37
28	7.92		0.00	0.000	1409733	0.178	VV	0.05
29	8.01		0.00	0.000	3093281	0.390	VV	0.12
30	8.24		0.00	0.000	1241855	0.156	VV	0.05
31	8.31		0.00	0.000	1697466	0.214	VV	0.08
32	8.42		0.00	0.000	877941	0.111	VV	0.04
33	8.47		0.00	0.000	1134108	0.143	VV	0.05
34	8.54		0.00	0.000	1724570	0.217	VV	0.08
35	8.76		0.00	0.000	4338984	0.547	VV	0.18
36	8.99		0.00	0.000	2654688	0.334	VV	0.09
37	9.22	CL4XYL	1.34	0.058	14296773	1.801	VV	0.07
38	9.63		0.00	0.000	2831946	0.357	VV	0.08
39	9.69		0.00	0.000	746294	0.094	VV	0.02
40	9.75		0.00	0.000	633492	0.080	VV	0.02
41	9.86		0.00	0.000	2239328	0.282	VV	0.06
42	10.04		0.00	0.000	4037164	0.509	VV	0.10
43	10.41	AR1016#1	192 39	8.351	45391336	5.719	VV	0.33
44	10.83		0.00	0.000	13346569	1.681	VV	0.06
45	11.07		0.00	0.000	2250683	0.284	VV	0.03
46	11.13		0.00	0.000	2724196	0.343	VV	0.04
47	11.28	AR1016#2	35.94	1.560	15592128	1.964	VV	0.24
48	11.54		0.00	0.000	5867272	0.739	VV	0.09
49	11.65		0.00	0.000	5326379	0.671	VV	0.06
50	11.70		0.00	0.000	2286946	0.288	VV	0.03
51	11.76		0.00	0.000	2861155	0.360	VV	0.03
52	11.82		0.00	0.000	3307814	0.417	VV	0.03

50061

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	11.86		0.00	0.000	1860348	0.234	VV	0.02
54	11.99		0.00	0.000	8173116	1.030	VV	0.09
55	13.30	AR1016#4	2072.74	89.967	322228096	40.596	VV	0.22
56	13.52		0.00	0.000	263914832	33.250	SBB	0.24
57	14.81		0.00	0.000	33796	0.004	TBV	0.08
58	14.93		0.00	0.000	5128	0.001	TVV	0.05
59	15.24		0.00	0.000	7205	0.001	TVV	0.04
60	15.31		0.00	0.000	33153	0.004	TVV	0.09
61	15.43		0.00	0.000	64780	0.008	TVV	0.05
62	15.55		0.00	0.000	95213	0.012	TVV	0.11
63	15.86		0.00	0.000	72574	0.009	TVV	0.09
64	15.97		0.00	0.000	37330	0.005	TVV	0.06
65	16.10		0.00	0.000	260601	0.033	TVV	0.06
66	16.37		0.00	0.000	96085	0.012	TVV	0.05
67	16.45	AR1260#1	0.25	0.011	66138	0.008	TVV	0.09
68	16.59		0.00	0.000	25538	0.003	TVV	0.08
69	16.77	AR1260#2	0.14	0.006	68192	0.009	TVV	0.06
70	16.89		0.00	0.000	8680	0.001	TVV	0.06
71	17.03		0.00	0.000	64488	0.008	TVV	0.14
72	17.28		0.00	0.000	12972	0.002	TVV	0.08
73	17.42		0.00	0.000	73839	0.009	TVV	0.06
74	17.49		0.00	0.000	133495	0.017	TVV	0.07
75	17.69		0.00	0.000	43094	0.005	TVV	0.12
76	17.93		0.00	0.000	4904	0.001	TVV	0.06
77	18.11		0.00	0.000	211817	0.027	TVV	0.10
78	18.30	AR1260#3	0.11	0.005	58040	0.007	TVV	0.06
79	18.41		0.00	0.000	19870	0.003	TVV	0.07
80	18.52		0.00	0.000	2894	0.000	TVV	0.05
81	18.61		0.00	0.000	4462	0.001	TVV	0.06
82	18.72		0.00	0.000	26523	0.003	TVV	0.05
83	18.85		0.00	0.000	39327	0.005	TVV	0.05
84	18.95		0.00	0.000	25654	0.003	TVV	0.06
85	19.07		0.00	0.000	11735	0.001	TVV	0.07
86	19.30		0.00	0.000	11512	0.001	TVV	0.06
87	19.41		0.00	0.000	27381	0.003	TVV	0.06
88	19.56	AR1260#4	0.07	0.003	94491	0.012	TVV	0.05
89	19.66		0.00	0.000	13692	0.002	TVV	0.06
90	19.83		0.00	0.000	1351	0.000	TVV	0.05
91	19.92		0.00	0.000	4125	0.001	TVV	0.08
92	20.20		0.00	0.000	106331	0.013	TVV	0.10
93	20.36		0.00	0.000	45940	0.006	TVV	0.07
94	20.51		0.00	0.000	12131	0.002	TVV	0.04
95	20.61		0.00	0.000	29619	0.004	TVV	0.06
96	20.72		0.00	0.000	16651	0.002	TVV	0.04
97	20.78		0.00	0.000	50759	0.006	TVV	0.06
98	21.02		0.00	0.000	48889	0.006	TVV	0.10
99	21.18		0.00	0.000	24885	0.003	TVV	0.07
100	21.38		0.00	0.000	19437	0.002	TVV	0.09
101	21.66	AR1260#5	0.13	0.006	37181	0.005	TVV	0.06
102	21.85		0.00	0.000	38798	0.005	TVV	0.07
103	22.01		0.00	0.000	9800	0.001	TVV	0.08
104	22.13		0.00	0.000	8906	0.001	TVV	0.15
105	22.43		0.00	0.000	52351	0.007	TVV	0.07
106	22.97	CL10BP	0.78	0.034	7775836	0.980	TVV	0.07
107	23.48		0.00	0.000	187662	0.024	TVV	0.21
108	23.81		0.00	0.000	78494	0.010	TVV	0.12
109	24.12		0.00	0.000	32222	0.004	TVV	0.15
110	24.42		0.00	0.000	23057	0.003	TVV	0.16
111	24.67		0.00	0.000	18670	0.002	TVV	0.09
112	24.88		0.00	0.000	8252	0.001	TVV	0.08
113	25.03		0.00	0.000	9206	0.001	TVV	0.13
114	25.32		0.00	0.000	9906	0.001	TVV	0.10
115	25.62		0.00	0.000	9629	0.001	TVV	0.09
116	25.80		0.00	0.000	51839	0.007	TVV	0.12

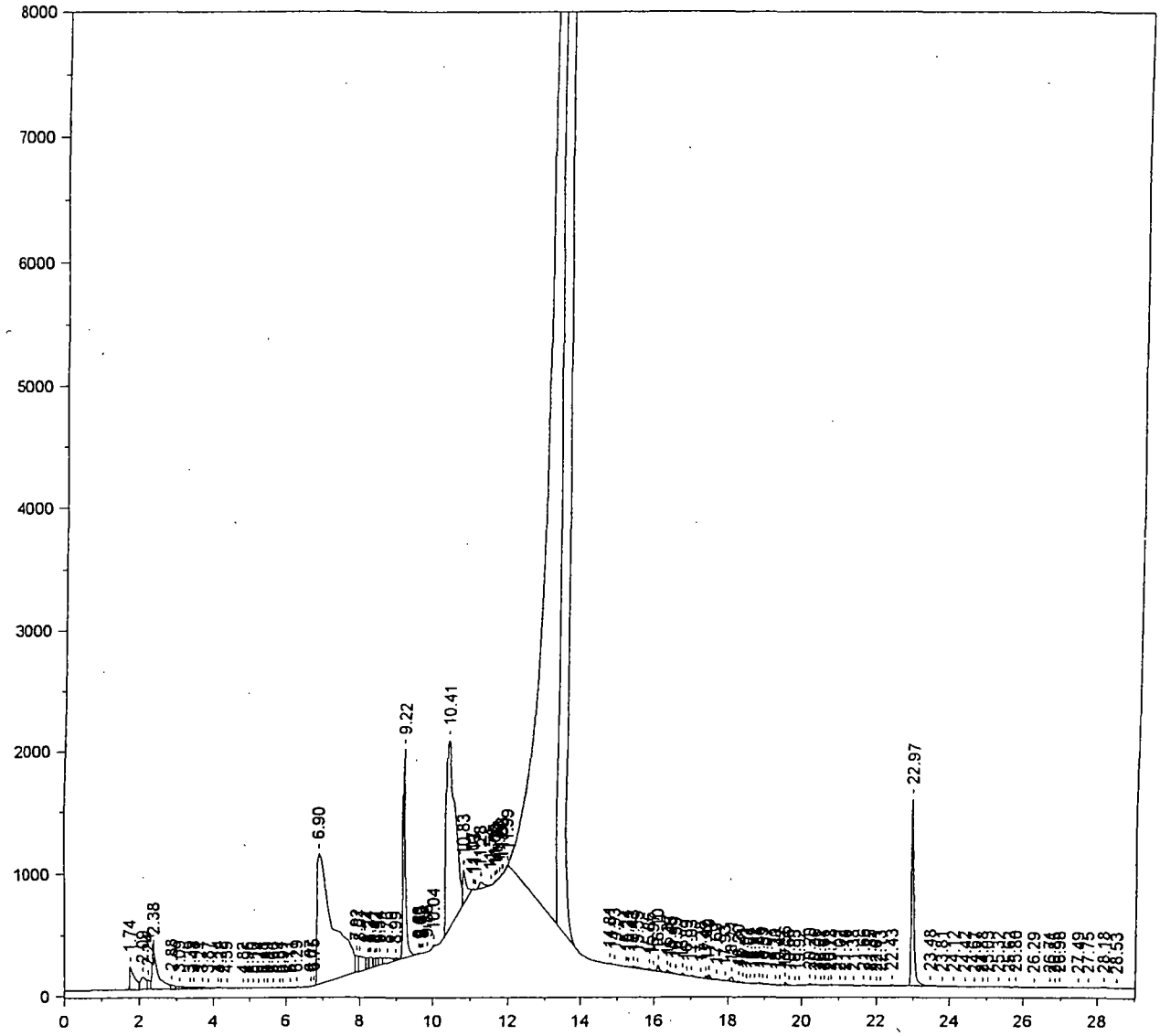
50062

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	26.29		0.00	0.000	2552	0.000	TVV	0.13
118	26.71		0.00	0.000	7286	0.001	TVV	0.11
119	26.85		0.00	0.000	6329	0.001	TVV	0.06
120	26.98		0.00	0.000	16927	0.002	TVV	0.15
121	27.49		0.00	0.000	1350	0.000	TVV	0.11
122	27.75		0.00	0.000	1935	0.000	TVV	0.08
123	28.18		0.00	0.000	80000	0.010	TVV	0.16
124	28.53		0.00	0.000	12445	0.002	TVB	0.15

Total Area = 7.937372E+08 Total Height = 5.076062E+07 Total Amount = 2303.898

50063

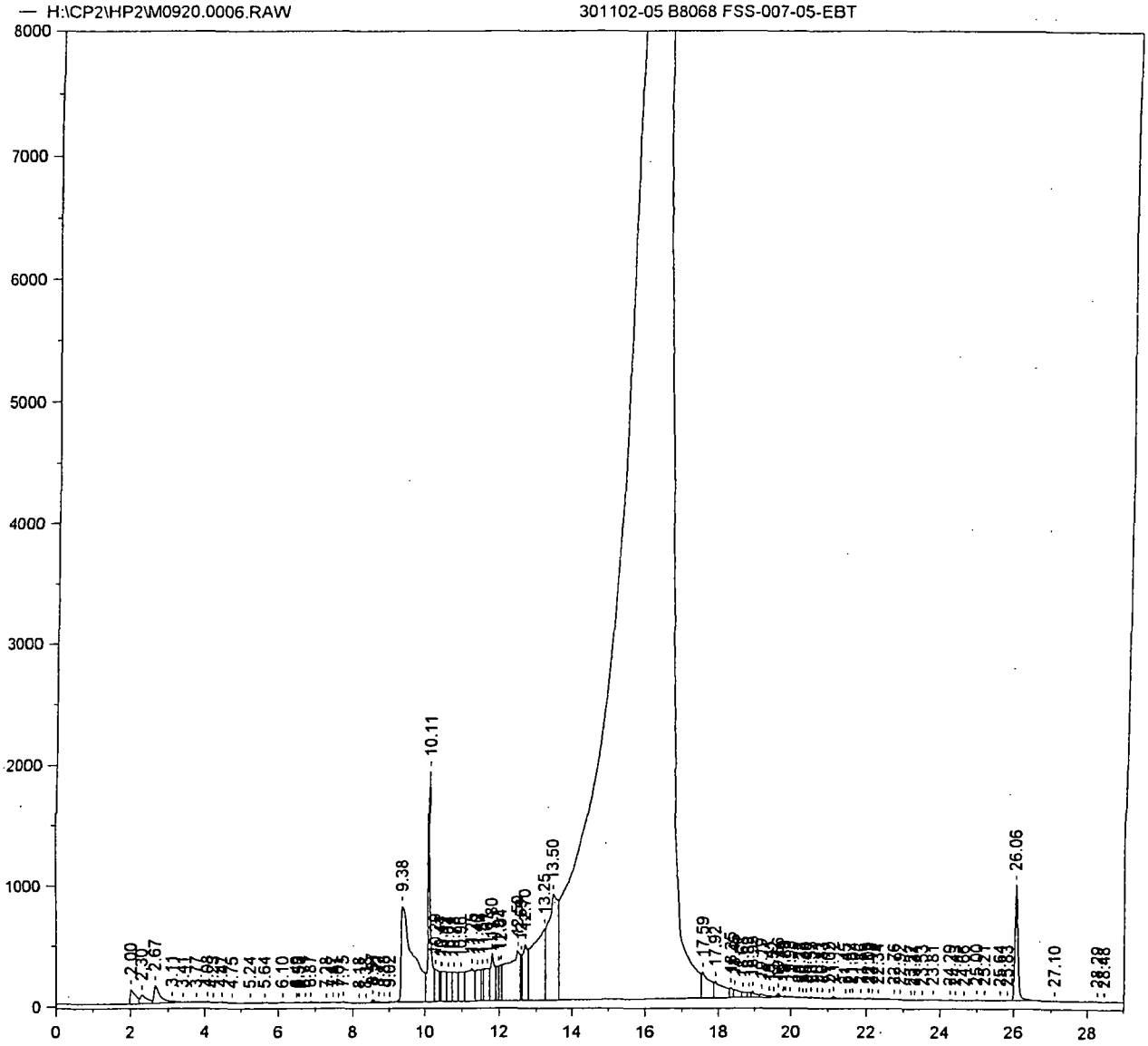
— H:\CP2\HP2\M0920B.0010.RAW 301102-04 B8068 FIP-002-06-SSS



after reintegration
AST
9/23/02

AST 9/24/02

50064



Primary Column

Before reintegration
excess area under peaks
FDT
9/23/2

50071

Sample Name = **301102-05 B8068 FSS-007-05-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

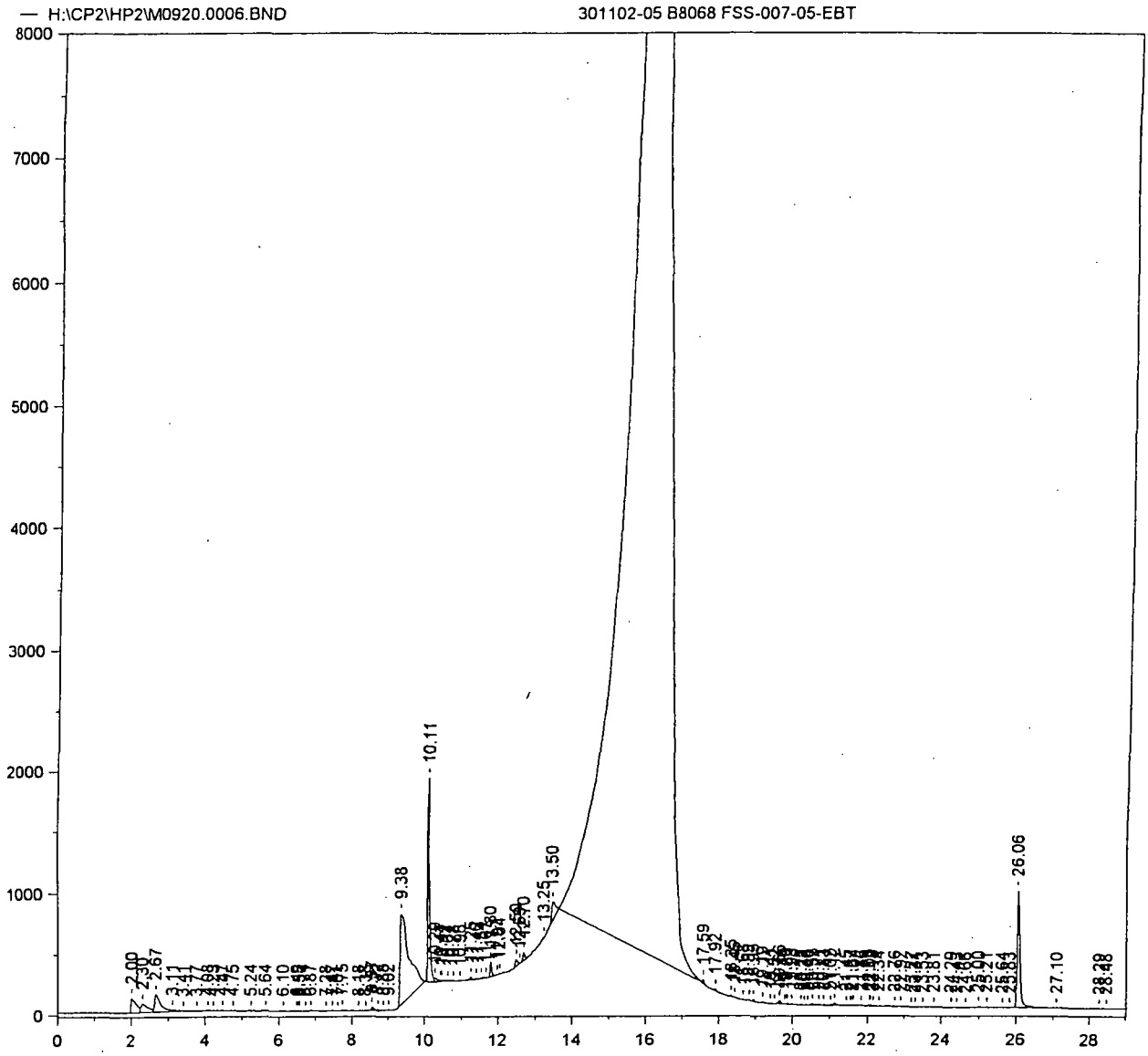
Raw File Name = **H:\CP2\HP2\M0920.0006.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/20/02 10:19:21 PM
Method Version = 618
Calibration Version = 13

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1165001	0.107	BV	0.17
2	2.30		0.00	0.000	946594	0.087	VV	0.14
3	2.67		0.00	0.000	1663406	0.152	VV	0.14
4	3.11		0.00	0.000	186701	0.017	VV	0.20
5	3.41		0.00	0.000	39897	0.004	VB	0.16
6	3.77		0.00	0.000	772	0.000	BB	0.04
7	4.08		0.00	0.000	37176	0.003	BV	0.09
8	4.23		0.00	0.000	27876	0.003	VV	0.15
9	4.47		0.00	0.000	55724	0.005	VV	0.11
10	4.75		0.00	0.000	36653	0.003	VB	0.17
11	5.24		0.00	0.000	47605	0.004	BV	0.21
12	5.64		0.00	0.000	45224	0.004	VB	0.30
13	6.10		0.00	0.000	43455	0.004	BV	0.21
14	6.49		0.00	0.000	24098	0.002	VV	0.11
15	6.55		0.00	0.000	20449	0.002	VV	0.08
16	6.71		0.00	0.000	18802	0.002	VV	0.06
17	6.87		0.00	0.000	83658	0.008	VV	0.10
18	7.28		0.00	0.000	16784	0.002	VV	0.10
19	7.47		0.00	0.000	18131	0.002	VV	0.06
20	7.61		0.00	0.000	11067	0.001	VV	0.07
21	7.75		0.00	0.000	58295	0.005	VB	0.10
22	8.18		0.00	0.000	22890	0.002	BV	0.20
23	8.38		0.00	0.000	1376	0.000	VB	0.06
24	8.57		0.00	0.000	123040	0.011	BV	0.07
25	8.72		0.00	0.000	59178	0.005	VV	0.07
26	8.88		0.00	0.000	27861	0.003	VV	0.05
27	9.02		0.00	0.000	55888	0.005	VV	0.08
28	9.38		0.00	0.000	18219022	1.668	VV	0.30
29	10.11	CL4XYL	1.20	3.287	9370473	0.858	VV	0.05
30	10.29		0.00	0.000	1956322	0.179	VV	0.07
31	10.44		0.00	0.000	791289	0.072	VV	0.03
32	10.47		0.00	0.000	2121447	0.194	VV	0.11
33	10.64		0.00	0.000	1982297	0.181	VV	0.09
34	10.78		0.00	0.000	2395796	0.219	VV	0.08
35	10.96		0.00	0.000	2407116	0.220	VV	0.11
36	11.25		0.00	0.000	4248197	0.389	VV	0.06
37	11.40		0.00	0.000	2386604	0.218	VV	0.12
38	11.54	AR1016#1	6.44	17.673	1143034	0.105	VV	0.05
39	11.67		0.00	0.000	2424809	0.222	VV	0.13
40	11.80		0.00	0.000	3149012	0.288	VV	0.05
41	11.97		0.00	0.000	1407648	0.129	VV	0.04
42	12.04		0.00	0.000	1448675	0.133	VV	0.05
43	12.50		0.00	0.000	9698095	0.888	VV	0.11
44	12.59		0.00	0.000	1133175	0.104	VV	0.04
45	12.70	AR1016#2	14.48	39.772	4587054	0.420	VV	0.07
46	13.25		0.00	0.000	14126842	1.293	VV	0.21
47	13.50		0.00	0.000	17063866	1.562	VV	0.21
48	16.22		0.00	0.000	970888512	88.871	VV	0.82
49	17.59		0.00	0.000	3160820	0.289	VV	0.11
50	17.92	AR1260#1	12.63	34.675	2513081	0.230	VV	0.14
51	18.35		0.00	0.000	514246	0.047	VV	0.08
52	18.45		0.00	0.000	759662	0.070	VV	0.10

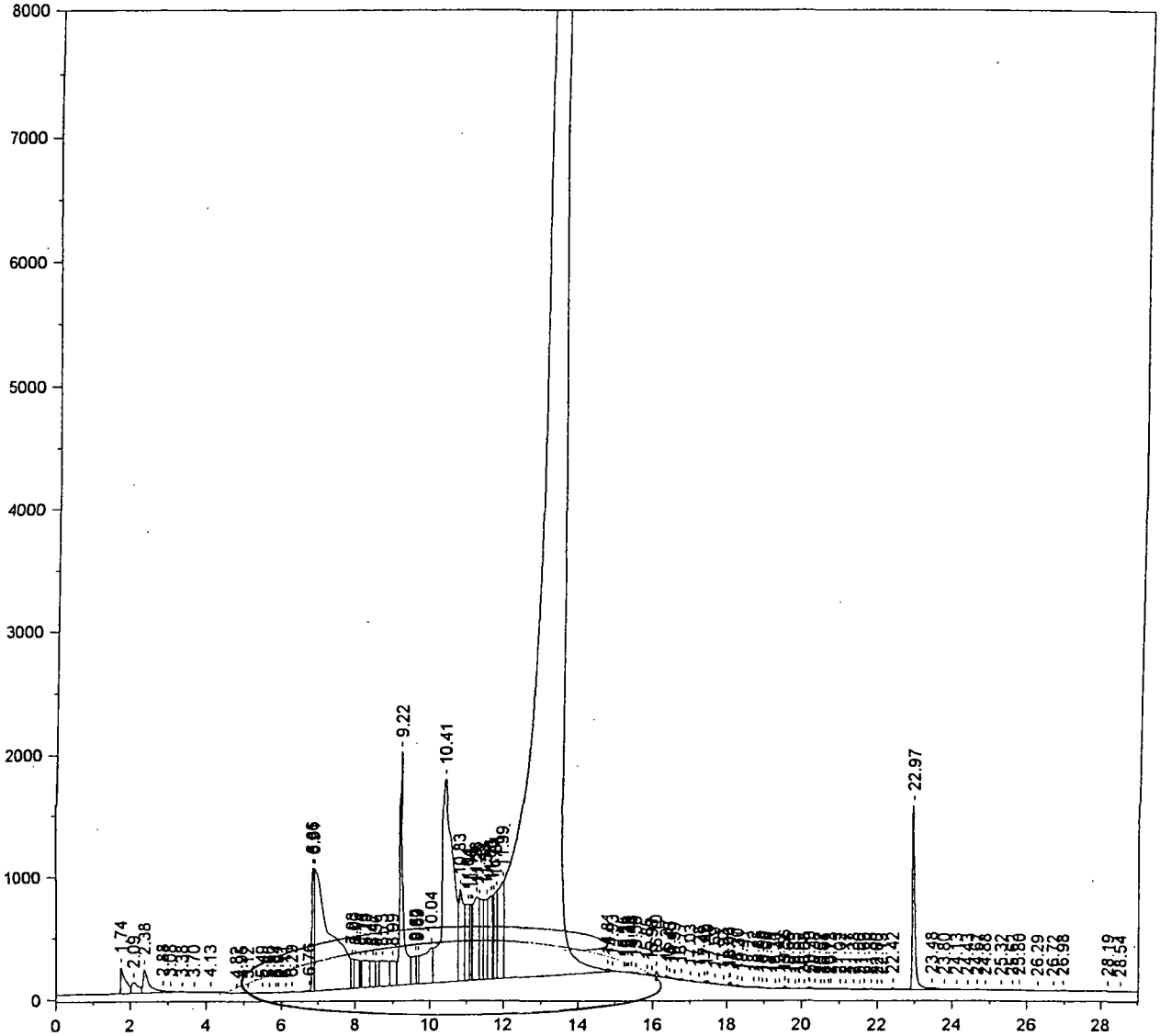
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.68		0.00	0.000	362837	0.033	VV	0.06
54	18.83	AR1260#2	0.60	1.634	257011	0.024	VV	0.06
55	18.95		0.00	0.000	406995	0.037	VV	0.06
56	19.19		0.00	0.000	287004	0.026	VV	0.13
57	19.41		0.00	0.000	78271	0.007	VV	0.08
58	19.52		0.00	0.000	43514	0.004	VV	0.06
59	19.66		0.00	0.000	188592	0.017	VV	0.06
60	19.79		0.00	0.000	21705	0.002	VV	0.03
61	19.86	AR1260#3	0.14	0.373	44915	0.004	VV	0.05
62	19.98		0.00	0.000	23215	0.002	VB	0.06
63	20.22		0.00	0.000	6603	0.001	BV	0.09
64	20.33		0.00	0.000	3086	0.000	VV	0.04
65	20.40		0.00	0.000	4245	0.000	VV	0.04
66	20.53		0.00	0.000	51091	0.005	VV	0.08
67	20.71		0.00	0.000	23766	0.002	VV	0.05
68	20.83		0.00	0.000	35743	0.003	VV	0.11
69	21.02		0.00	0.000	7195	0.001	VV	0.04
70	21.12	AR1260#4	0.12	0.320	91786	0.008	VV	0.07
71	21.45		0.00	0.000	5126	0.000	VV	0.07
72	21.57		0.00	0.000	4671	0.000	VV	0.04
73	21.64		0.00	0.000	25094	0.002	VV	0.07
74	21.86		0.00	0.000	8447	0.001	VV	0.09
75	22.05		0.00	0.000	18462	0.002	VV	0.04
76	22.09	AR1260#5	0.05	0.149	28963	0.003	VV	0.06
77	22.18		0.00	0.000	20059	0.002	VV	0.09
78	22.34		0.00	0.000	16846	0.002	VB	0.16
79	22.76		0.00	0.000	8934	0.001	BV	0.08
80	22.92		0.00	0.000	24517	0.002	VB	0.10
81	23.22		0.00	0.000	4720	0.000	BV	0.06
82	23.31		0.00	0.000	6371	0.001	VB	0.08
83	23.53		0.00	0.000	1749	0.000	BB	0.13
84	23.81		0.00	0.000	10901	0.001	BB	0.06
85	24.29		0.00	0.000	4860	0.000	BV	0.07
86	24.43		0.00	0.000	4210	0.000	VV	0.15
87	24.66		0.00	0.000	4365	0.000	VB	0.08
88	25.00		0.00	0.000	37249	0.003	BV	0.07
89	25.21		0.00	0.000	21060	0.002	VV	0.08
90	25.64		0.00	0.000	5364	0.000	VB	0.09
91	25.83		0.00	0.000	2682	0.000	BV	0.06
92	26.06	CL10BP	0.77	2.117	5459292	0.500	VV	0.08
93	27.10		0.00	0.000	51823	0.005	VV	0.37
94	28.29		0.00	0.000	11207	0.001	VV	0.21
95	28.48		0.00	0.000	5362	0.000	VB	0.18

Total Area = 1.092465E+09 Total Height = 2.576543E+07 Total Amount = 36.4168



After reintegration
AST
9/23/02

— H:\CP2\HP2\M0920B.0006.RAW 301102-05 B8068 FSS-007-05-EBT



Before reintegration
excess area underpeak
BT
9/23/2

50080

Sample Name = **301102-05 B8068 FSS-007-05-EBT**

Instrument = HP 2
Acquisition Port = 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Raw File Name = **H:\CP2\HP2\M0920B.0006.RAW**
Date Taken (end) = 9/20/02 10:19:21 PM
Method File Name = H:\CP2\HP2\Hp2pestB.met
Method Version = 567
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal
Calibration Version = 8

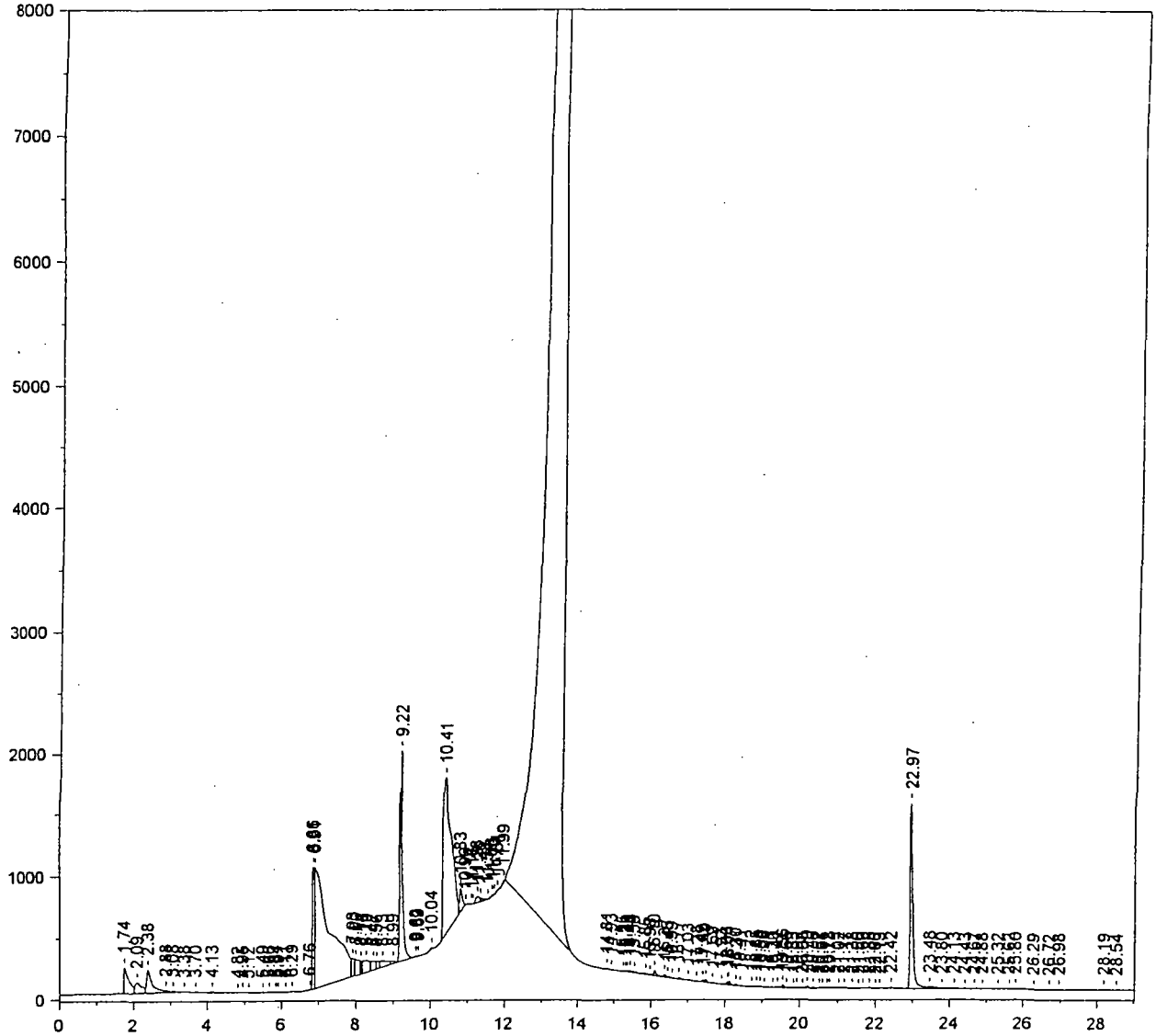
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	1955089	0.299	BV	0.15
2	2.09		0.00	0.000	1152643	0.176	VV	0.13
3	2.38		0.00	0.000	2110929	0.323	VV	0.12
4	2.88		0.00	0.000	100708	0.015	VV	0.08
5	3.08		0.00	0.000	111404	0.017	VV	0.18
6	3.38		0.00	0.000	7665	0.001	VB	0.07
7	3.70		0.00	0.000	23277	0.004	BB	0.13
8	4.13		0.00	0.000	116783	0.018	BB	0.28
9	4.82		0.00	0.000	9515	0.001	BV	0.09
10	4.95		0.00	0.000	13218	0.002	VV	0.11
11	5.12		0.00	0.000	9598	0.001	VB	0.12
12	5.49		0.00	0.000	13568	0.002	BV	0.14
13	5.66		0.00	0.000	8013	0.001	VV	0.09
14	5.84		0.00	0.000	1188	0.000	VV	0.03
15	5.91		0.00	0.000	4275	0.001	VB	0.06
16	6.11		0.00	0.000	16098	0.002	BV	0.12
17	6.29		0.00	0.000	32818	0.005	VB	0.08
18	6.76		0.00	0.000	74957	0.011	BV	0.14
19	6.86		0.00	0.000	3957710	0.605	VV	0.07
20	6.91		0.00	0.000	30381578	4.645	VV	0.25
21	7.93		0.00	0.000	1511737	0.231	VV	0.08
22	8.00		0.00	0.000	1948664	0.298	VV	0.11
23	8.14		0.00	0.000	651069	0.100	VV	0.03
24	8.29		0.00	0.000	2886716	0.441	VV	0.13
25	8.47		0.00	0.000	1792762	0.274	VV	0.09
26	8.56		0.00	0.000	1189806	0.182	VV	0.05
27	8.73		0.00	0.000	3366434	0.515	VV	0.20
28	8.99		0.00	0.000	2266724	0.347	VV	0.16
29	9.22	CL4XYL	1.17	0.692	12468088	1.906	VV	0.06
30	9.62		0.00	0.000	1949855	0.298	VV	0.06
31	9.69		0.00	0.000	944759	0.144	VV	0.05
32	10.04		0.00	0.000	5681510	0.869	VV	0.14
33	10.41	AR1016#1	150.93	89.104	35608988	5.444	VV	0.31
34	10.83		0.00	0.000	6759506	1.033	VV	0.06
35	11.04		0.00	0.000	4914946	0.751	VV	0.09
36	11.11		0.00	0.000	1840519	0.281	VV	0.03
37	11.16		0.00	0.000	1352733	0.207	VV	0.02
38	11.28	AR1016#2	15.93	9.402	6908785	1.056	VV	0.13
39	11.36		0.00	0.000	4535827	0.693	VV	0.04
40	11.54		0.00	0.000	3998579	0.611	VV	0.09
41	11.66		0.00	0.000	5697873	0.871	VV	0.09
42	11.73		0.00	0.000	1221216	0.187	VV	0.02
43	11.81		0.00	0.000	3771114	0.577	VV	0.05
44	11.99		0.00	0.000	8085600	1.236	VV	0.09
45	13.55		0.00	0.000	482389760	73.746	VV	0.42
46	14.81		0.00	0.000	137538	0.021	VV	0.07
47	14.93		0.00	0.000	22046	0.003	VB	0.06
48	15.25		0.00	0.000	7168	0.001	BV	0.05
49	15.31		0.00	0.000	12184	0.002	VV	0.03
50	15.36		0.00	0.000	19237	0.003	VV	0.04
51	15.43		0.00	0.000	62909	0.010	VV	0.05
52	15.56		0.00	0.000	119408	0.018	VV	0.13

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	15.85		0.00	0.000	53687	0.008	VV	0.09
54	15.98		0.00	0.000	31852	0.005	VV	0.05
55	16.10		0.00	0.000	196552	0.030	VV	0.06
56	16.37		0.00	0.000	80534	0.012	VV	0.05
57	16.45	AR1260#1	0.18	0.109	49482	0.008	VV	0.08
58	16.59		0.00	0.000	17632	0.003	VB	0.08
59	16.77	AR1260#2	0.10	0.062	52188	0.008	BB	0.06
60	17.03		0.00	0.000	55828	0.009	BB	0.13
61	17.28		0.00	0.000	10856	0.002	BB	0.07
62	17.42		0.00	0.000	63372	0.010	BV	0.06
63	17.49		0.00	0.000	95726	0.015	VV	0.07
64	17.69		0.00	0.000	38923	0.006	VB	0.12
65	17.93		0.00	0.000	5500	0.001	BB	0.07
66	18.06		0.00	0.000	53671	0.008	BV	0.04
67	18.11		0.00	0.000	115463	0.018	VV	0.06
68	18.30	AR1260#3	0.10	0.057	49511	0.008	VV	0.06
69	18.41		0.00	0.000	17718	0.003	VB	0.07
70	18.72		0.00	0.000	22542	0.003	BV	0.05
71	18.85		0.00	0.000	33895	0.005	VV	0.05
72	18.95		0.00	0.000	21504	0.003	VV	0.06
73	19.06		0.00	0.000	10281	0.002	VB	0.07
74	19.30		0.00	0.000	12481	0.002	BV	0.07
75	19.41		0.00	0.000	25629	0.004	VV	0.06
76	19.56	AR1260#4	0.06	0.038	82615	0.013	VV	0.05
77	19.66		0.00	0.000	11393	0.002	VB	0.06
78	19.83		0.00	0.000	1647	0.000	BV	0.06
79	19.92		0.00	0.000	3965	0.001	VV	0.08
80	20.08		0.00	0.000	3297	0.001	VV	0.07
81	20.20		0.00	0.000	83104	0.013	VV	0.10
82	20.36		0.00	0.000	40966	0.006	VV	0.06
83	20.52		0.00	0.000	13053	0.002	VV	0.05
84	20.61		0.00	0.000	31195	0.005	VV	0.06
85	20.72		0.00	0.000	18511	0.003	VV	0.04
86	20.78		0.00	0.000	56400	0.009	VV	0.06
87	21.02		0.00	0.000	54342	0.008	VV	0.10
88	21.17		0.00	0.000	34689	0.005	VV	0.08
89	21.38		0.00	0.000	25245	0.004	VV	0.08
90	21.56		0.00	0.000	9776	0.001	VV	0.06
91	21.66	AR1260#5	0.14	0.083	40992	0.006	VV	0.06
92	21.85		0.00	0.000	42034	0.006	VV	0.07
93	22.00		0.00	0.000	13558	0.002	VV	0.08
94	22.13		0.00	0.000	17247	0.003	VV	0.15
95	22.42		0.00	0.000	62524	0.010	VB	0.07
96	22.97	CL10BP	0.77	0.454	7639281	1.168	BV	0.07
97	23.48		0.00	0.000	210731	0.032	VV	0.21
98	23.80		0.00	0.000	69310	0.011	VV	0.12
99	24.13		0.00	0.000	24800	0.004	VV	0.15
100	24.43		0.00	0.000	14002	0.002	VV	0.17
101	24.67		0.00	0.000	12222	0.002	VB	0.09
102	24.88		0.00	0.000	1451	0.000	BB	0.09
103	25.32		0.00	0.000	7852	0.001	BV	0.12
104	25.62		0.00	0.000	7915	0.001	VV	0.09
105	25.80		0.00	0.000	41815	0.006	VB	0.12
106	26.29		0.00	0.000	1218	0.000	BB	0.12
107	26.72		0.00	0.000	6714	0.001	BV	0.13
108	26.98		0.00	0.000	26014	0.004	VB	0.15
109	28.19		0.00	0.000	62644	0.010	BV	0.19
110	28.54		0.00	0.000	6787	0.001	VB	0.13

Total Area = 6.541194E+08 Total Height = 3.252111E+07 Total Amount = 169.3861

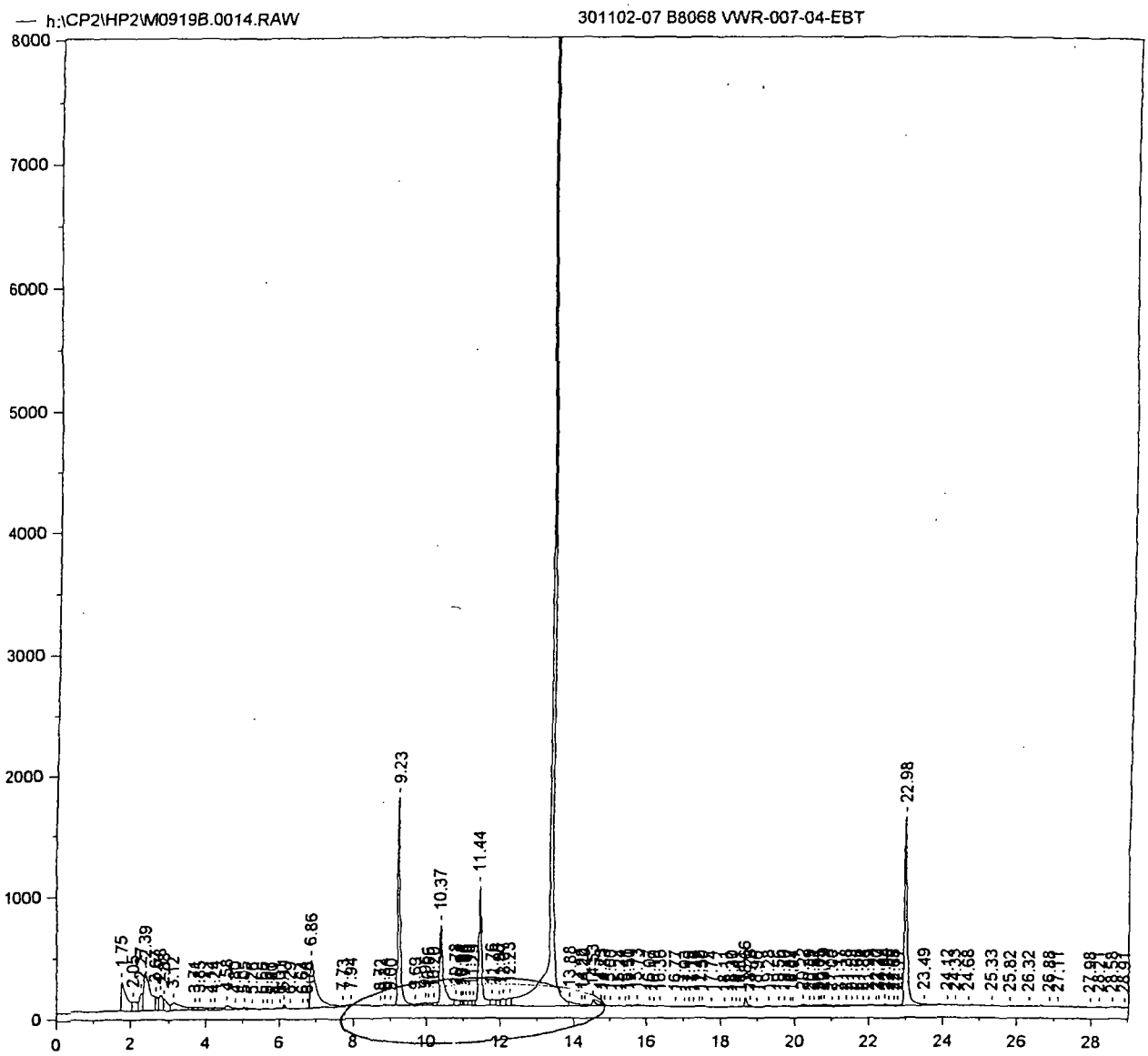
50082

Chrom Perfect Chromatogram Report



After reintegration
RDT
9/23/2

50083



Before reintegration
excess area under peaks
RDT
9/20/02

50107

Sample Name = **301102-07 B8068 VWR-007-04-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **h:\CP2\HP2\M0919B.0014.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/19/02 4:31:26 PM
Method Version = 566
Calibration Version = 4

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.75		0.00	0.000	2415322	2.135	BV	0.15
2	2.05		0.00	0.000	732080	0.647	VV	0.08
3	2.27		0.00	0.000	888294	0.785	VV	0.08
4	2.39		0.00	0.000	3817205	3.374	VV	0.13
5	2.67		0.00	0.000	538197	0.476	VV	0.06
6	2.78		0.00	0.000	878585	0.777	VV	0.07
7	2.88		0.00	0.000	784380	0.693	VV	0.09
8	3.12		0.00	0.000	1223670	1.082	VV	0.18
9	3.71		0.00	0.000	201498	0.178	VV	0.07
10	3.85		0.00	0.000	301026	0.266	VV	0.16
11	4.14		0.00	0.000	175201	0.155	VV	0.11
12	4.24		0.00	0.000	300166	0.265	VV	0.12
13	4.58		0.00	0.000	419323	0.371	VV	0.12
14	4.80		0.00	0.000	112062	0.099	VV	0.08
15	5.05		0.00	0.000	240854	0.213	VV	0.13
16	5.26		0.00	0.000	128787	0.114	VV	0.15
17	5.56		0.00	0.000	53669	0.047	VV	0.10
18	5.67		0.00	0.000	67563	0.060	VV	0.12
19	5.80		0.00	0.000	41945	0.037	VV	0.09
20	6.01		0.00	0.000	31138	0.028	VV	0.06
21	6.11		0.00	0.000	161071	0.142	VV	0.07
22	6.29		0.00	0.000	48678	0.043	VB	0.10
23	6.64		0.00	0.000	15355	0.014	BV	0.11
24	6.76		0.00	0.000	16448	0.015	VV	0.06
25	6.86		0.00	0.000	4796960	4.240	VV	0.15
26	7.73		0.00	0.000	152198	0.135	VV	0.10
27	7.94		0.00	0.000	107735	0.095	VB	0.10
28	8.72		0.00	0.000	20103	0.018	BV	0.05
29	8.84		0.00	0.000	32405	0.029	VV	0.07
30	9.00		0.00	0.000	4642	0.004	VV	0.04
31	9.23	CL4XYL	0.74	0.239	7883333	6.968	VV	0.06
32	9.69		0.00	0.000	185279	0.164	VV	0.13
33	9.96		0.00	0.000	195952	0.173	VV	0.09
34	10.06		0.00	0.000	147267	0.130	VV	0.09
35	10.20		0.00	0.000	178050	0.157	VV	0.10
36	10.37	AR1016#1	18.95	6.117	4470613	3.951	VV	0.07
37	10.78		0.00	0.000	419572	0.371	VV	0.11
38	10.94		0.00	0.000	162146	0.143	VV	0.05
39	10.98		0.00	0.000	131397	0.116	VV	0.03
40	11.06		0.00	0.000	227827	0.201	VV	0.05
41	11.16		0.00	0.000	261790	0.231	VV	0.08
42	11.25	AR1016#2	0.54	0.175	235151	0.208	VV	0.06
43	11.44		0.00	0.000	5901834	5.217	VV	0.09
44	11.76		0.00	0.000	376624	0.333	VV	0.06
45	11.96		0.00	0.000	409606	0.362	VV	0.07
46	12.07		0.00	0.000	482154	0.426	VV	0.08
47	12.23		0.00	0.000	515511	0.456	VV	0.09
48	13.40	AR1016#5	288.32	93.072	60045452	53.073	VV	0.05
49	13.88		0.00	0.000	437555	0.387	VV	0.10
50	14.22		0.00	0.000	59250	0.052	VV	0.04
51	14.29		0.00	0.000	171316	0.151	VV	0.12
52	14.53		0.00	0.000	294842	0.261	VV	0.07

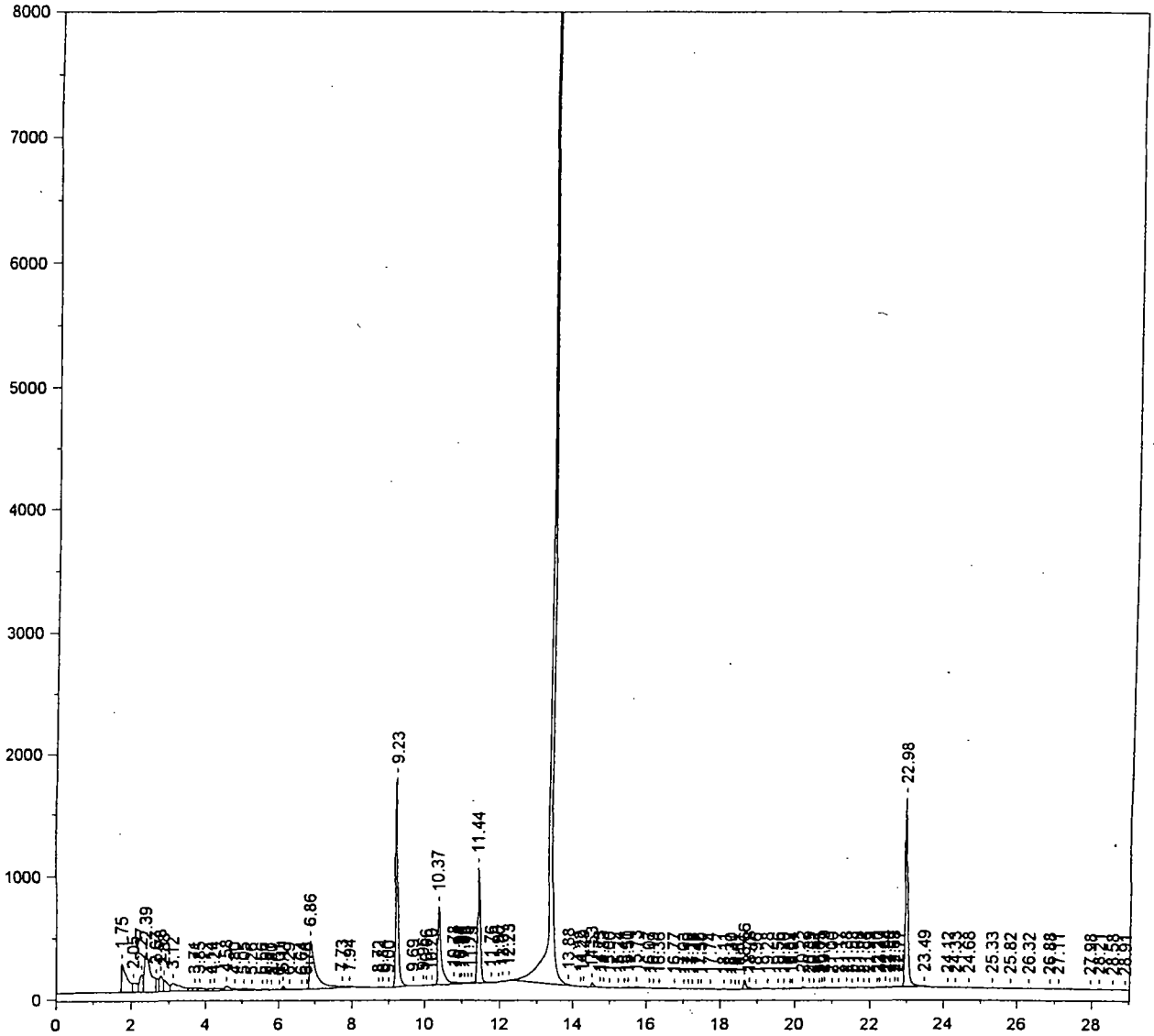
50108

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	14.73		0.00	0.000	75727	0.067	VV	0.05
54	14.83		0.00	0.000	62837	0.056	VV	0.07
55	15.00		0.00	0.000	56381	0.050	VV	0.14
56	15.24		0.00	0.000	19934	0.018	VV	0.06
57	15.41		0.00	0.000	24047	0.021	VV	0.05
58	15.50		0.00	0.000	97132	0.086	VV	0.12
59	15.73		0.00	0.000	184729	0.163	VV	0.13
60	16.07		0.00	0.000	38557	0.034	VV	0.07
61	16.19		0.00	0.000	15588	0.014	VV	0.07
62	16.36		0.00	0.000	3063	0.003	VB	0.06
63	16.77	AR1260#2	0.04	0.014	22169	0.020	BB	0.18
64	17.03		0.00	0.000	4975	0.004	BV	0.08
65	17.15		0.00	0.000	1771	0.002	VB	0.05
66	17.28		0.00	0.000	1868	0.002	BB	0.07
67	17.42		0.00	0.000	7726	0.007	BV	0.06
68	17.50		0.00	0.000	16111	0.014	VV	0.08
69	17.74		0.00	0.000	17444	0.015	VB	0.22
70	18.11		0.00	0.000	18643	0.016	BB	0.10
71	18.30	AR1260#3	0.01	0.004	6820	0.006	BB	0.06
72	18.41		0.00	0.000	5197	0.005	BV	0.05
73	18.51		0.00	0.000	3294	0.003	VB	0.08
74	18.66		0.00	0.000	337068	0.298	BV	0.06
75	18.78		0.00	0.000	88210	0.078	VV	0.06
76	18.96		0.00	0.000	12399	0.011	VV	0.08
77	19.28		0.00	0.000	108690	0.096	VV	0.23
78	19.56	AR1260#4	0.02	0.006	24977	0.022	VV	0.05
79	19.70		0.00	0.000	40249	0.036	VV	0.13
80	19.87		0.00	0.000	21045	0.019	VV	0.07
81	19.94		0.00	0.000	22354	0.020	VV	0.06
82	20.22		0.00	0.000	182452	0.161	VV	0.09
83	20.39		0.00	0.000	32689	0.029	VV	0.04
84	20.51		0.00	0.000	66709	0.059	VV	0.09
85	20.65		0.00	0.000	64507	0.057	VV	0.06
86	20.71		0.00	0.000	45671	0.040	VV	0.05
87	20.79		0.00	0.000	146546	0.130	VV	0.08
88	21.00		0.00	0.000	67055	0.059	VV	0.08
89	21.17		0.00	0.000	101740	0.090	VV	0.12
90	21.38		0.00	0.000	127175	0.112	VV	0.12
91	21.53		0.00	0.000	49076	0.043	VV	0.05
92	21.68	AR1260#5	0.34	0.111	100130	0.089	VV	0.10
93	21.84		0.00	0.000	69215	0.061	VV	0.09
94	21.99		0.00	0.000	43542	0.038	VV	0.07
95	22.20		0.00	0.000	83181	0.074	VV	0.07
96	22.27		0.00	0.000	79517	0.070	VV	0.05
97	22.44		0.00	0.000	113855	0.101	VV	0.06
98	22.55		0.00	0.000	55143	0.049	VV	0.07
99	22.68		0.00	0.000	40548	0.036	VV	0.05
100	22.77		0.00	0.000	53069	0.047	VV	0.05
101	22.98	CL10BP	0.81	0.260	8008433	7.079	VV	0.07
102	23.49		0.00	0.000	219417	0.194	VV	0.21
103	24.12		0.00	0.000	17863	0.016	VV	0.09
104	24.33		0.00	0.000	4444	0.004	VB	0.09
105	24.68		0.00	0.000	13163	0.012	BB	0.23
106	25.33		0.00	0.000	12301	0.011	BV	0.13
107	25.82		0.00	0.000	2842	0.003	VB	0.13
108	26.32		0.00	0.000	7922	0.007	BB	0.19
109	26.88		0.00	0.000	23050	0.020	BV	0.27
110	27.11		0.00	0.000	41069	0.036	VB	0.43
111	27.98		0.00	0.000	3846	0.003	BV	0.14
112	28.21		0.00	0.000	15874	0.014	VB	0.16
113	28.58		0.00	0.000	6854	0.006	BV	0.19
114	28.91		0.00	0.000	303	0.000	VB	0.03

Total Area = 1.131373E+08 Total Height = 2.246006E+07 Total Amount = 309.7769

50109

— H:\CP2\HP2\M0919B.0014.RAW 301102-07 B8068 VWR-007-04-EBT

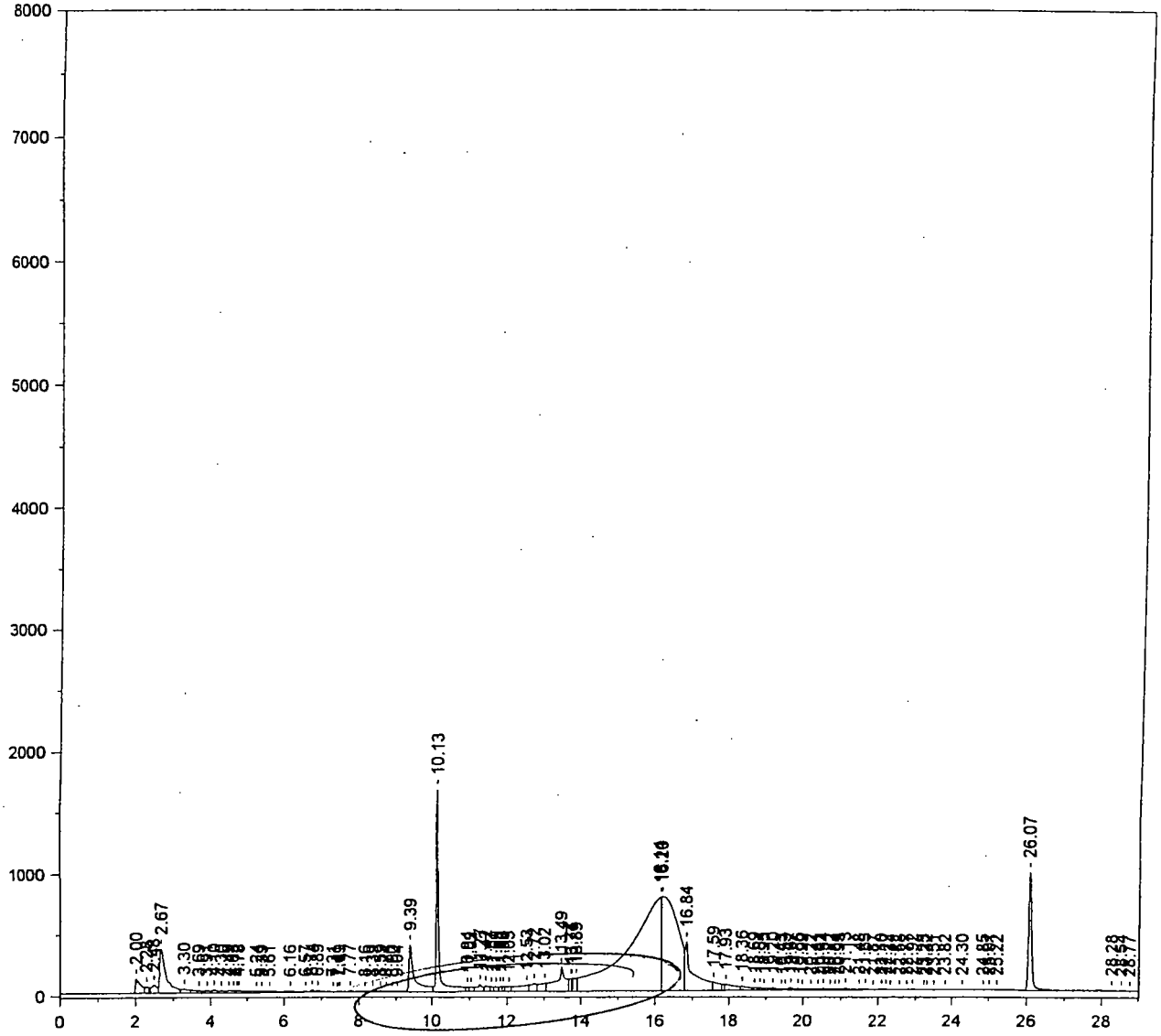


After reintegration
RBT
9/20/02

9-24-02

50110

— H:\CP2\HP2\M0919.0047.RAW 301102-08 B8068 VWR-001-03-EBT



Primary Column

Before integration
excess area under peaks
RDT 9/20/2

50116

Sample Name = **301102-08 B8068 VWR-001-03-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0047.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/20/02 2:14:17 PM
Method Version = 618
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1102277	0.944	BV	0.17
2	2.28		0.00	0.000	354255	0.303	VV	0.07
3	2.48		0.00	0.000	630664	0.540	VV	0.09
4	2.67		0.00	0.000	4325206	3.703	VV	0.14
5	3.30		0.00	0.000	398268	0.341	VV	0.16
6	3.69		0.00	0.000	128525	0.110	VV	0.09
7	3.91		0.00	0.000	175813	0.151	VV	0.15
8	4.10		0.00	0.000	185060	0.158	VV	0.08
9	4.30		0.00	0.000	138389	0.118	VV	0.12
10	4.49		0.00	0.000	151575	0.130	VV	0.12
11	4.63		0.00	0.000	85321	0.073	VV	0.05
12	4.72		0.00	0.000	48508	0.042	VV	0.04
13	4.78		0.00	0.000	215598	0.185	VV	0.10
14	5.24		0.00	0.000	176554	0.151	VV	0.18
15	5.39		0.00	0.000	71923	0.062	VV	0.08
16	5.61		0.00	0.000	189884	0.163	VV	0.26
17	6.16		0.00	0.000	182785	0.157	VV	0.26
18	6.57		0.00	0.000	125458	0.107	VV	0.17
19	6.74		0.00	0.000	102972	0.088	VV	0.06
20	6.89		0.00	0.000	151828	0.130	VV	0.16
21	7.31		0.00	0.000	37007	0.032	VV	0.08
22	7.41		0.00	0.000	34225	0.029	VV	0.06
23	7.49		0.00	0.000	39798	0.034	VV	0.08
24	7.77		0.00	0.000	92295	0.079	VV	0.07
25	8.16		0.00	0.000	35076	0.030	VV	0.19
26	8.39		0.00	0.000	5025	0.004	VV	0.05
27	8.59		0.00	0.000	42059	0.036	VV	0.07
28	8.74		0.00	0.000	12365	0.011	VB	0.09
29	8.90		0.00	0.000	4578	0.004	BV	0.07
30	9.04		0.00	0.000	13796	0.012	VV	0.07
31	9.39		0.00	0.000	4191378	3.589	VV	0.10
32	10.13	CL4XYL	1.02	7.959	7960721	6.816	VV	0.05
33	10.94		0.00	0.000	174450	0.149	VV	0.06
34	11.02		0.00	0.000	266021	0.228	VV	0.10
35	11.27		0.00	0.000	611761	0.524	VV	0.05
36	11.42		0.00	0.000	373222	0.320	VV	0.05
37	11.57	AR1016#1	1.32	10.341	234662	0.201	VV	0.05
38	11.69		0.00	0.000	272760	0.234	VV	0.05
39	11.82		0.00	0.000	192203	0.165	VV	0.06
40	11.90		0.00	0.000	150486	0.129	VV	0.05
41	12.05		0.00	0.000	413854	0.354	VV	0.13
42	12.53		0.00	0.000	1176494	1.007	VV	0.11
43	12.72	AR1016#2	2.26	17.682	715577	0.613	VV	0.06
44	13.02		0.00	0.000	860811	0.737	VV	0.12
45	13.49		0.00	0.000	3489635	2.988	VV	0.08
46	13.74		0.00	0.000	498093	0.426	VV	0.05
47	13.77		0.00	0.000	201346	0.172	VV	0.03
48	13.89	AR1016#3	1.53	11.985	745350	0.638	VV	0.06
49	16.14		0.00	0.000	45127756	38.640	VV	0.67
50	16.20		0.00	0.000	23219908	19.882	VV	0.42
51	16.84		0.00	0.000	6359346	5.445	VV	0.09
52	17.59		0.00	0.000	835261	0.715	VV	0.10

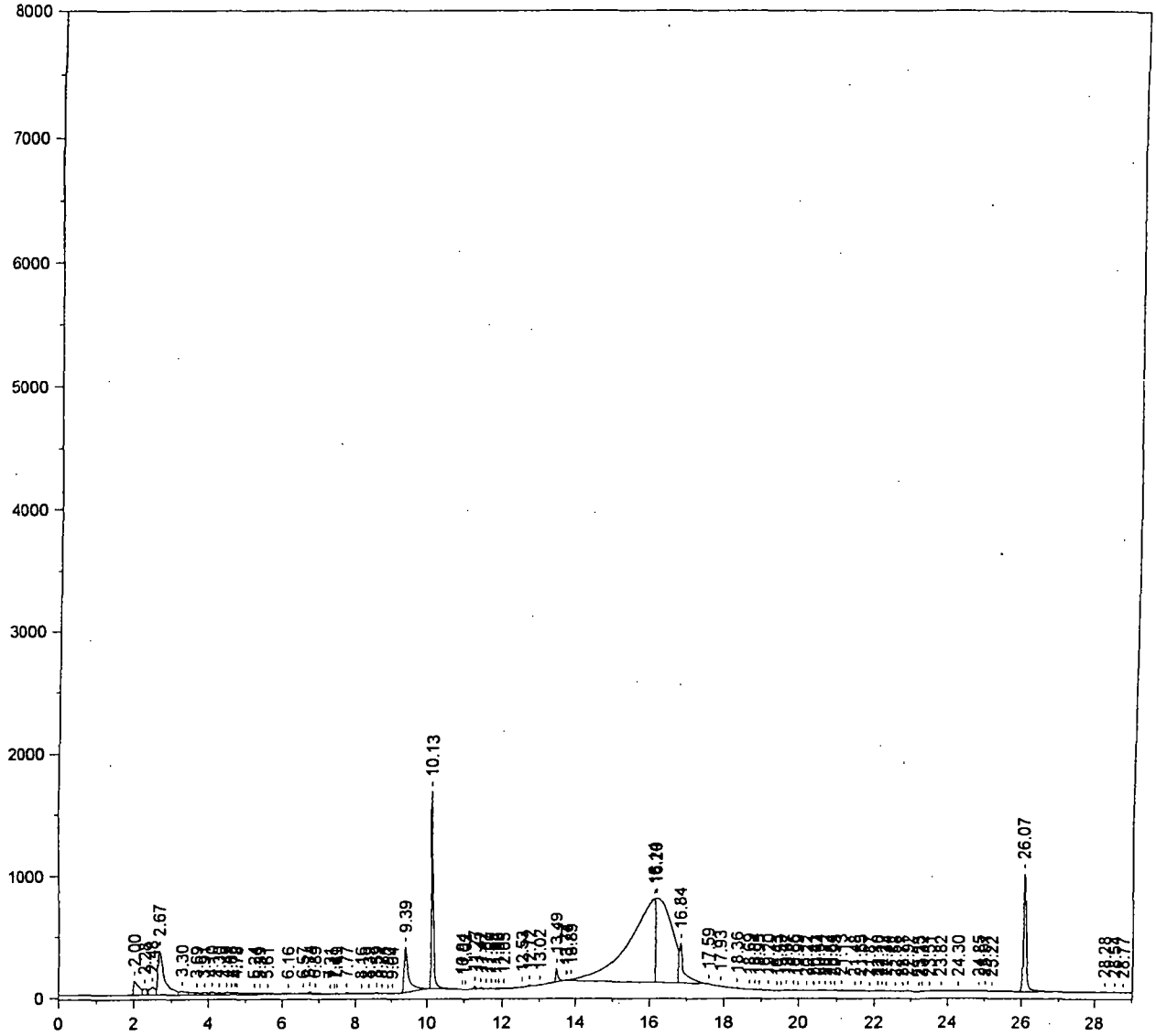
50117

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	17.93	AR1260#1	4.96	38.849	987922	0.846	VV	0.15
54	18.36		0.00	0.000	521384	0.446	VV	0.09
55	18.69		0.00	0.000	172078	0.147	VV	0.07
56	18.84	AR1260#2	0.33	2.610	144021	0.123	VV	0.06
57	18.95		0.00	0.000	187655	0.161	VV	0.08
58	19.20		0.00	0.000	194943	0.167	VV	0.08
59	19.43		0.00	0.000	76691	0.066	VV	0.09
60	19.53		0.00	0.000	46036	0.039	VV	0.05
61	19.67		0.00	0.000	189717	0.162	VV	0.08
62	19.86	AR1260#3	0.26	1.996	84432	0.072	VV	0.05
63	19.99		0.00	0.000	108208	0.093	VV	0.05
64	20.22		0.00	0.000	73768	0.063	VV	0.08
65	20.41		0.00	0.000	60573	0.052	VV	0.05
66	20.54		0.00	0.000	106598	0.091	VV	0.07
67	20.72		0.00	0.000	62306	0.053	VV	0.05
68	20.84		0.00	0.000	67202	0.058	VV	0.06
69	20.95		0.00	0.000	53032	0.045	VV	0.06
70	21.13	AR1260#4	0.17	1.335	134488	0.115	VV	0.06
71	21.48		0.00	0.000	39033	0.033	VV	0.10
72	21.65		0.00	0.000	107684	0.092	VV	0.07
73	21.87		0.00	0.000	42133	0.036	VV	0.08
74	22.10	AR1260#5	0.13	0.997	68113	0.058	VV	0.10
75	22.22		0.00	0.000	38833	0.033	VV	0.09
76	22.34		0.00	0.000	40214	0.034	VV	0.12
77	22.58		0.00	0.000	20513	0.018	VV	0.08
78	22.77		0.00	0.000	19815	0.017	VV	0.06
79	22.92		0.00	0.000	36126	0.031	VV	0.07
80	23.23		0.00	0.000	5880	0.005	VV	0.07
81	23.32		0.00	0.000	6086	0.005	VB	0.09
82	23.51		0.00	0.000	494	0.000	BB	0.07
83	23.82		0.00	0.000	10274	0.009	BB	0.08
84	24.30		0.00	0.000	5981	0.005	BB	0.07
85	24.85		0.00	0.000	340	0.000	BV	0.07
86	25.01		0.00	0.000	31203	0.027	VV	0.07
87	25.22		0.00	0.000	21835	0.019	VB	0.08
88	26.07	CL10BP	0.80	6.246	5651949	4.839	BV	0.08
89	28.28		0.00	0.000	14995	0.013	VV	0.15
90	28.54		0.00	0.000	20275	0.017	VV	0.21
91	28.77		0.00	0.000	8861	0.008	VB	0.14

Total Area = 1.167899E+08 Total Height = 7296104 Total Amount = 12.7779

50118

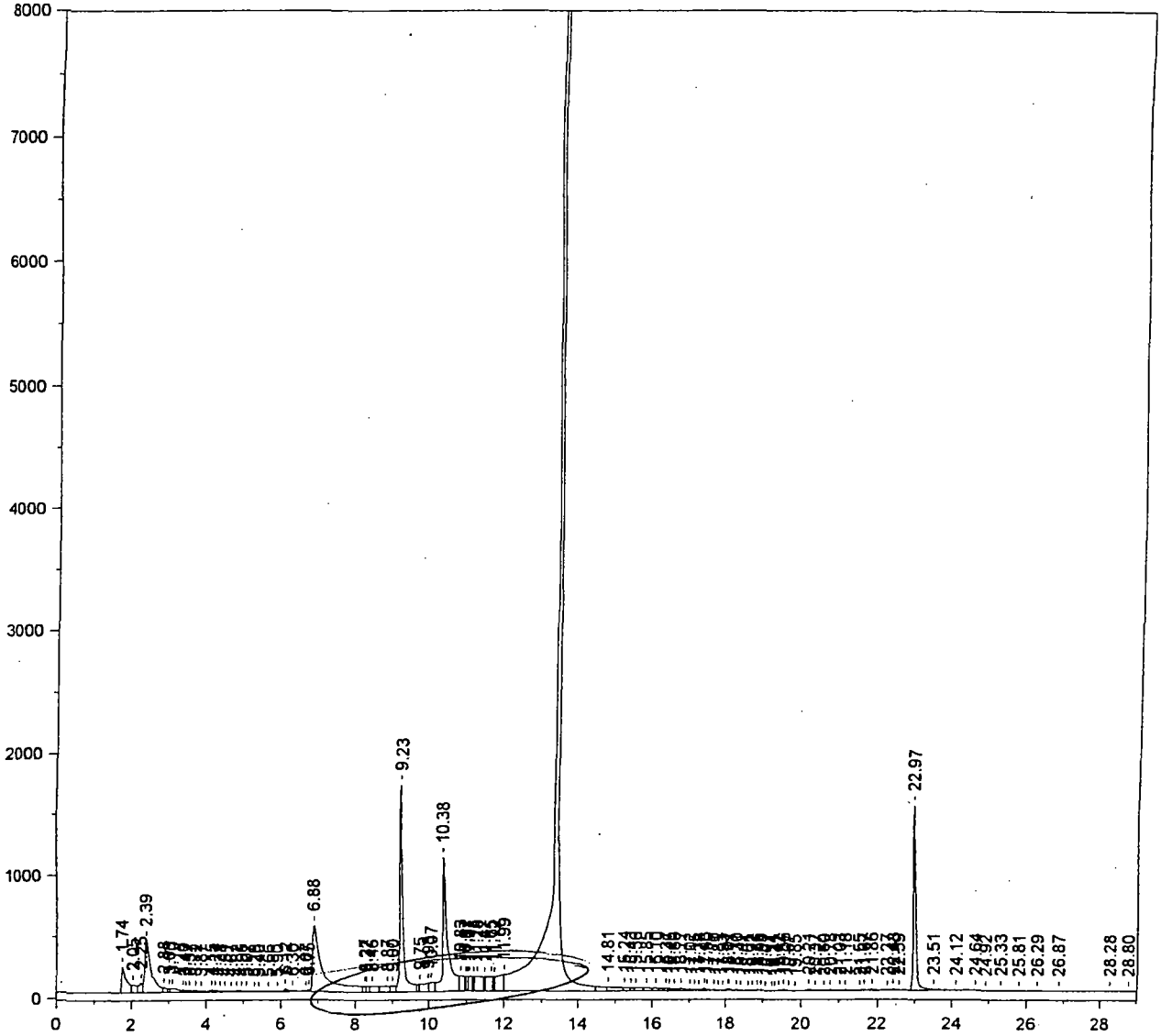
— H:\CP2\HP2\M0919.0047.RAW 301102-08 B8068 VWR-001-03-EBT



after reintegration
AST
9/20/2

50119

— H:\CP2\HP2\M0919B.0047.RAW 301102-08 B8068 VWR-001-03-EBT



Before reintegration
excess area under peaks
AT
9/20/2

50123

Sample Name = **301102-08 B8068 VWR-001-03-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0047.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/20/02 2:14:17 PM
Method Version = 567
Calibration Version = 5

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	1903907	1.096	BV	0.14
2	2.05		0.00	0.000	636571	0.366	VV	0.14
3	2.25		0.00	0.000	559036	0.322	VV	0.09
4	2.39		0.00	0.000	5251260	3.022	VV	0.14
5	2.88		0.00	0.000	260278	0.150	VV	0.08
6	3.03		0.00	0.000	117368	0.068	VV	0.04
7	3.10		0.00	0.000	459911	0.265	VV	0.20
8	3.40		0.00	0.000	89586	0.052	VV	0.05
9	3.47		0.00	0.000	84570	0.049	VV	0.06
10	3.57		0.00	0.000	85489	0.049	VV	0.07
11	3.72		0.00	0.000	143970	0.083	VV	0.09
12	3.87		0.00	0.000	104953	0.060	VV	0.13
13	4.15		0.00	0.000	112726	0.065	VV	0.10
14	4.24		0.00	0.000	133203	0.077	VV	0.11
15	4.38		0.00	0.000	50803	0.029	VV	0.06
16	4.51		0.00	0.000	75228	0.043	VV	0.12
17	4.67		0.00	0.000	38722	0.022	VV	0.05
18	4.82		0.00	0.000	104002	0.060	VV	0.10
19	4.96		0.00	0.000	42049	0.024	VV	0.06
20	5.07		0.00	0.000	79027	0.045	VV	0.13
21	5.29		0.00	0.000	52378	0.030	VV	0.10
22	5.40		0.00	0.000	47878	0.028	VV	0.09
23	5.66		0.00	0.000	70856	0.041	VV	0.08
24	5.90		0.00	0.000	58974	0.034	VV	0.13
25	6.12		0.00	0.000	166630	0.096	VV	0.07
26	6.30		0.00	0.000	109738	0.063	VV	0.08
27	6.67		0.00	0.000	104619	0.060	VV	0.11
28	6.75		0.00	0.000	81548	0.047	VV	0.07
29	6.88		0.00	0.000	10272670	5.911	VV	0.17
30	8.27		0.00	0.000	252731	0.145	VV	0.07
31	8.32		0.00	0.000	288890	0.166	VV	0.06
32	8.46		0.00	0.000	694275	0.399	VV	0.18
33	8.87		0.00	0.000	742588	0.427	VV	0.17
34	9.00		0.00	0.000	492699	0.284	VV	0.06
35	9.23	CL4XYL	0.90	0.159	9568663	5.506	VV	0.06
36	9.75		0.00	0.000	105164	0.061	VV	0.02
37	9.98		0.00	0.000	933977	0.537	VV	0.07
38	10.07		0.00	0.000	722407	0.416	VV	0.13
39	10.38	AR1016#1	42.20	7.461	9955201	5.728	VV	0.08
40	10.83		0.00	0.000	1078864	0.621	VV	0.06
41	10.97		0.00	0.000	296423	0.171	VV	0.02
42	11.01		0.00	0.000	443372	0.255	VV	0.05
43	11.07		0.00	0.000	824247	0.474	VV	0.05
44	11.18		0.00	0.000	336188	0.193	VV	0.04
45	11.28	AR1016#2	4.14	0.732	1795978	1.033	VV	0.18
46	11.47		0.00	0.000	374944	0.216	VV	0.04
47	11.65		0.00	0.000	1370187	0.788	VV	0.10
48	11.72		0.00	0.000	261448	0.150	VV	0.01
49	11.99		0.00	0.000	1971051	1.134	VV	0.13
50	13.43	AR1016#5	516.19	91.274	107501632	61.857	VV	0.08
51	14.81		0.00	0.000	820259	0.472	VV	0.19
52	15.24		0.00	0.000	310460	0.179	VV	0.[illegible]

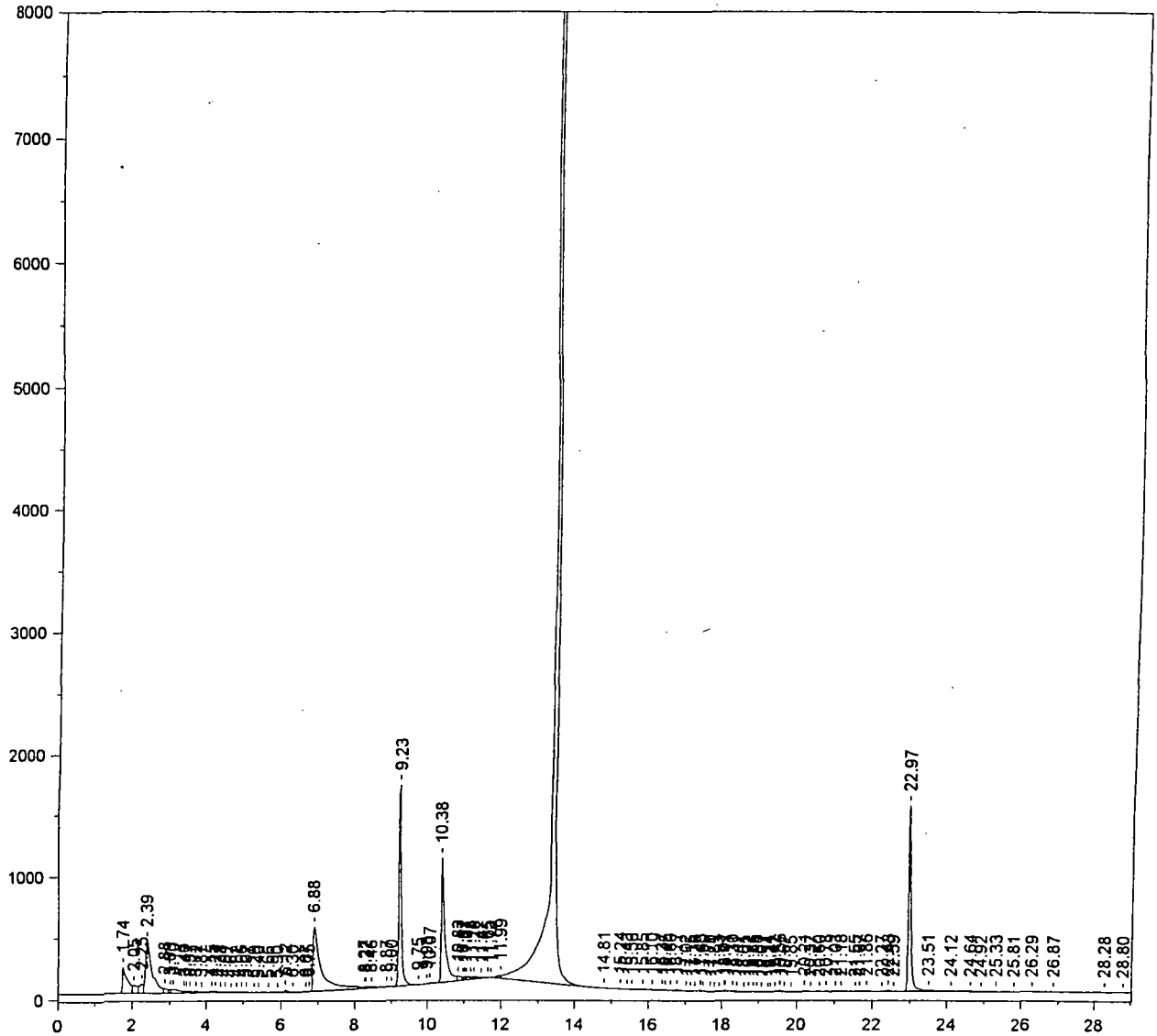
50124

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	15.43		0.00	0.000	161630	0.093	VV	0.06
54	15.56		0.00	0.000	358269	0.206	VV	0.16
55	15.85		0.00	0.000	359888	0.207	VV	0.10
56	16.10		0.00	0.000	234612	0.135	VV	0.10
57	16.37		0.00	0.000	136448	0.079	VV	0.05
58	16.45	AR1260#1	0.58	0.102	154589	0.089	VV	0.06
59	16.60		0.00	0.000	148738	0.086	VV	0.08
60	16.77	AR1260#2	0.48	0.084	236871	0.136	VV	0.06
61	17.02		0.00	0.000	114337	0.066	VV	0.07
62	17.15		0.00	0.000	75325	0.043	VV	0.06
63	17.28		0.00	0.000	75606	0.044	VV	0.06
64	17.43		0.00	0.000	96488	0.056	VV	0.06
65	17.50		0.00	0.000	80995	0.047	VV	0.06
66	17.70		0.00	0.000	68288	0.039	VV	0.08
67	17.81		0.00	0.000	32540	0.019	VV	0.06
68	17.93		0.00	0.000	27168	0.016	VV	0.06
69	18.07		0.00	0.000	53394	0.031	VV	0.05
70	18.11		0.00	0.000	66820	0.038	VV	0.05
71	18.30	AR1260#3	0.10	0.017	50622	0.029	VV	0.05
72	18.41		0.00	0.000	26855	0.015	VV	0.06
73	18.61		0.00	0.000	6038	0.003	VV	0.05
74	18.72		0.00	0.000	18908	0.011	VV	0.07
75	18.86		0.00	0.000	24197	0.014	VV	0.05
76	18.96		0.00	0.000	15766	0.009	VV	0.05
77	19.07		0.00	0.000	7069	0.004	VB	0.06
78	19.24		0.00	0.000	709	0.000	BV	0.05
79	19.31		0.00	0.000	1999	0.001	VV	0.05
80	19.42		0.00	0.000	32680	0.019	VV	0.07
81	19.56	AR1260#4	0.04	0.008	57380	0.033	VV	0.05
82	19.67		0.00	0.000	14548	0.008	VV	0.06
83	19.85		0.00	0.000	16782	0.010	VV	0.13
84	20.21		0.00	0.000	74643	0.043	VV	0.09
85	20.37		0.00	0.000	37330	0.021	VV	0.06
86	20.60		0.00	0.000	39037	0.022	VV	0.07
87	20.78		0.00	0.000	53721	0.031	VV	0.06
88	21.03		0.00	0.000	63978	0.037	VV	0.13
89	21.18		0.00	0.000	37591	0.022	VV	0.07
90	21.55		0.00	0.000	29407	0.017	VV	0.11
91	21.67	AR1260#5	0.15	0.026	43387	0.025	VV	0.06
92	21.86		0.00	0.000	88855	0.051	VV	0.08
93	22.27		0.00	0.000	19567	0.011	VV	0.06
94	22.43		0.00	0.000	68282	0.039	VV	0.06
95	22.59		0.00	0.000	35449	0.020	VV	0.08
96	22.97	CL10BP	0.77	0.136	7653397	4.404	VV	0.07
97	23.51		0.00	0.000	245899	0.141	VV	0.23
98	24.12		0.00	0.000	45442	0.026	VV	0.14
99	24.64		0.00	0.000	9115	0.005	VV	0.13
100	24.92		0.00	0.000	1634	0.001	VB	0.09
101	25.33		0.00	0.000	11930	0.007	BB	0.27
102	25.81		0.00	0.000	14272	0.008	BV	0.13
103	26.29		0.00	0.000	1916	0.001	VB	0.08
104	26.87		0.00	0.000	2708	0.002	BB	0.16
105	28.28		0.00	0.000	15553	0.009	BB	0.24
106	28.80		0.00	0.000	1372	0.001	BB	0.13

Total Area = 1.737896E+08 Total Height = 2.2724E+07 Total Amount = 565.5324

50125

— H:\CP2\HP2\M0919B.0047.RAW 301102-08 B8068 VWR-001-03-EBT



After reintegration
AST
9/20/02

50126

PAH-8270 SIM

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/26/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-005-08-EBT	ARDL Lab No.:	301102-03
Desc/Location:	NONE	Lab Filename:	Z3780
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1605	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	19	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.3	ND		UG/KG	1
Acenaphthylene	2.9	12.3	ND		UG/KG	1
Acenaphthene	3.4	12.3	ND		UG/KG	1
Fluorene	2.9	12.3	ND		UG/KG	1
Phenanthrene	3.1	12.3	ND		UG/KG	1
Anthracene	2.5	12.3	ND		UG/KG	1
Fluoranthene	3.2	12.3	ND		UG/KG	1
Pyrene	2.3	12.3	2.7	J	UG/KG	1
Benzo(a)anthracene	2.4	12.3	ND		UG/KG	1
Chrysene	2.9	12.3	3.8	J	UG/KG	1
Benzo(b)fluoranthene	2.9	12.3	ND		UG/KG	1
Benzo(k)fluoranthene	4.6	12.3	ND		UG/KG	1
Benzo(a)pyrene	2.8	12.3	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.3	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.3	ND		UG/KG	1
Benzo(g,h,i)perylene	3	12.3	3.1	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	63%
Nitrobenzene-d5	23-120	63%
Terphenyl-d14	18-137	70%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-006-05-EBT	ARDL Lab No.:	301102-04
Desc/Location:	NONE	Lab Filename:	Z3869
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	18	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.2	ND		UG/KG	1
Acenaphthylene	2.9	12.2	6.4	J	UG/KG	1
Acenaphthene	3.3	12.2	11.4	J	UG/KG	1
Fluorene	2.9	12.2	19.9		UG/KG	1
Phenanthrene	3.1	12.2	91.6		UG/KG	1
Anthracene	2.4	12.2	18.2		UG/KG	1
Fluoranthene	3.2	12.2	80.5		UG/KG	1
Pyrene	2.3	12.2	76.4		UG/KG	1
Benzo(a)anthracene	2.4	12.2	32.6		UG/KG	1
Chrysene	2.9	12.2	40.6		UG/KG	1
Benzo(b)fluoranthene	2.9	12.2	28.3		UG/KG	1
Benzo(k)fluoranthene	4.5	12.2	24.9		UG/KG	1
Benzo(a)pyrene	2.7	12.2	28.8		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.2	18.4		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.2	6.7	J	UG/KG	1
Benzo(g,h,i)perylene	2.9	12.2	22.3		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	69%
Nitrobenzene-d5	23-120	70%
Terphenyl-d14	18-137	80%

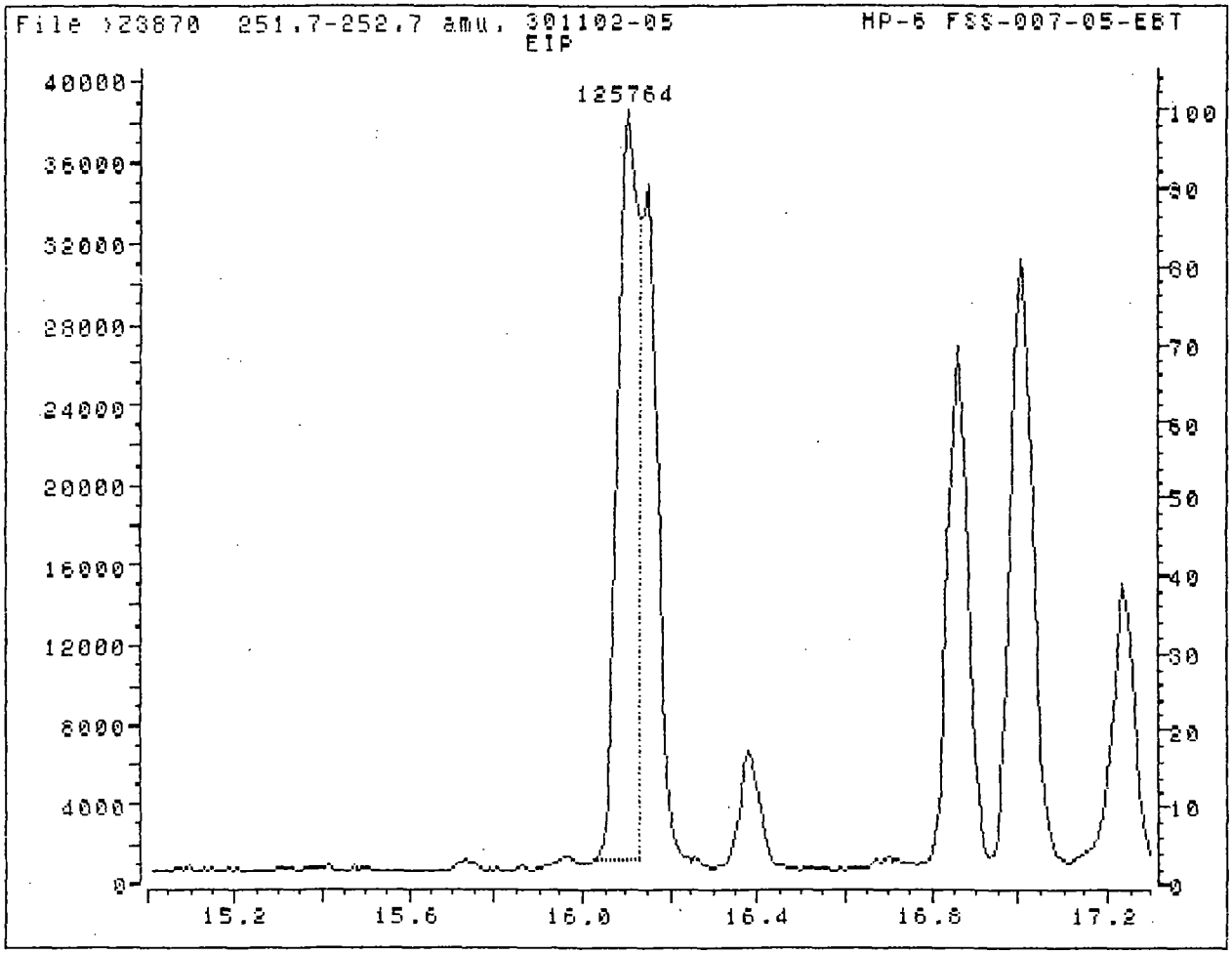
Surrogate recoveries marked with '*' indicates they are outside standard limits.

(:ator ID: DOUG Quant Rev: 7 Quant Time: 020926 17:30
Output File: ^Z3870::D1 Injected at: 020926 17:08
Data File: >Z3870::D8 Dilution Factor: 1.00000
Name: 301102-05 Instrument ID: **HP*6
Misc: HP-6 FSS-007-05-EBT B8067 8270 PNA/SIM ANALYS

ID File: SIMPS6::SC
Title: PAH ANALYSIS
Last Calibration: 020924 15:56 Last Qcal Time: 020926 09:38

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*D8 Naphthalene (ISTD2)	5.52	136.0	1731874	333.00	ug/Kg	95
2)	D5 Nitrobenzene (Surr 3)	4.60	82.0	1039553	542.12	ug/Kg	76
6)	*D10 Acenaphthene (ISTD3)	7.94	164.0	884315	333.00	ug/Kg	88
7)	2-Fluorobiphenyl (Surr 4)	6.96	172.0	1773062	585.27	ug/Kg	99
10)	Fluorene	8.68	166.0	13516	4.47	ug/Kg	93
11)	*D10 Phenanthrene (ISTD4)	9.99	188.0	1399528	333.00	ug/Kg	89
12)	Phenanthrene	10.02	178.0	85166	19.18	ug/Kg	98
13)	Anthracene	10.08	178.0	21857	4.80	ug/Kg	96
14)	Fluoranthene	11.69	202.0	203386	45.77	ug/Kg	95
15)	*D12 Chrysene (ISTD 5)	13.82	240.0	1056767	333.00	ug/Kg	100
16)	Pyrene	12.02	202.0	195642	51.88	ug/Kg	93
)	D14 Terphenyl (Surr 6)	12.14	244.0	1520611	649.61	ug/Kg	92
18)	Benzo(a)Anthracene	13.79	228.0	95753	27.22	ug/Kg	98
19)	Chrysene	13.86	228.0	116753	36.75	ug/Kg	98
20)	*D12 Perylene (ISTD 6)	17.16	264.0	882816	333.00	ug/Kg	95
21)	Benzo(b)Fluoranthene	16.10	252.0	125764	39.67	ug/Kg	93
22)	Benzo(k)Fluoranthene	16.15	252.0	85781M	30.60	ug/Kg	93
23)	Benzo(a)Pyrene	17.00	252.0	113162	40.05	ug/Kg	95
24)	Indeno(1,2,3-cd)Pyrene	20.96	276.0	79676	27.83	ug/Kg	79
26)	Benzo(g,h,i)Perylene	22.12	276.0	80551	32.81	ug/Kg	82

* Compound is ISTD



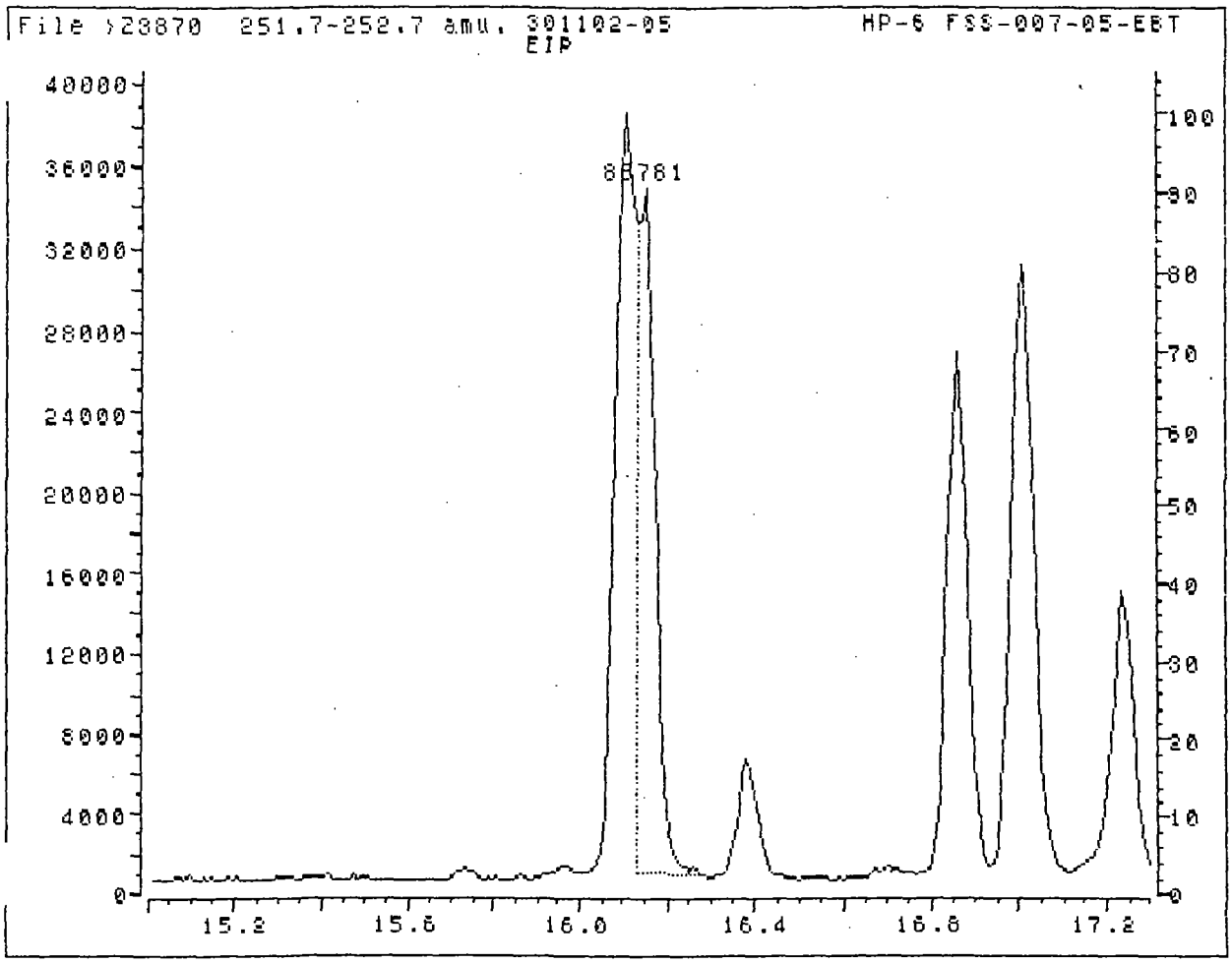
Data File: >Z3870::D8 Quant Output File: ^Z3870::D1
Name: 301102-05 Instrument ID: **HP*6
Misc: HP-6 FSS-007-05-EBT B8067 8270 PNA/SIM ANALYS
Quant Time: 020926 17:30 Quant ID File: SIMPS6::SC
Injected at: 020926 17:08 Last Calibration: 020924 15:56

Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1327
Retention Time: 16.10 min.
Quant Ion: 252.0
Area: 125764
Concentration: 44.86 ug/Kg
q-value: 93

This report was produced by QAREA on: 021007 11:12

Wrong peak integrated by computer.

10/1/02



Data File: >Z3870::D8 Quant Output File: ^Z3870::D1
Name: 301102-05 Instrument ID: **HP*6
Misc: HP-6 FSS-007-05-EBT B8067 8270 PNA/SIM ANALYS
Quant Time: 020926 17:30 Quant ID File: SIMPS6::SC
Injected at: 020926 17:08 Last Calibration: 020924 15:56

Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1332
Retention Time: 16.15 min.
Quant Ion: 252.0
Area: 85781M
Concentration: 30.60 ug/Kg
q-value: 93

This report was produced by QAREA on: 021007 11:18

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-007-05-EBT	ARDL Lab No.:	301102-05
Desc/Location:	NONE	Lab Filename:	Z3870
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1611	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	16.9	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.0	ND		UG/KG	1
Acenaphthylene	2.9	12.0	ND		UG/KG	1
Acenaphthene	3.3	12.0	ND		UG/KG	1
Fluorene	2.8	12.0	5.4	J	UG/KG	1
Phenanthrene	3	12.0	23.1		UG/KG	1
Anthracene	2.4	12.0	5.8	J	UG/KG	1
Fluoranthene	3.1	12.0	55.1		UG/KG	1
Pyrene	2.2	12.0	62.4		UG/KG	1
Benzo(a)anthracene	2.4	12.0	32.8		UG/KG	1
Chrysene	2.8	12.0	44.2		UG/KG	1
Benzo(b)fluoranthene	2.9	12.0	47.7		UG/KG	1
Benzo(k)fluoranthene	4.4	12.0	36.8		UG/KG	1
Benzo(a)pyrene	2.7	12.0	48.2		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.8	12.0	33.5		UG/KG	1
Dibenzo(a,h)anthracene	2.6	12.0	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.0	39.5		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	88%
Nitrobenzene-d5	23-120	81%
Terphenyl-d14	18-137	97%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-001-03-EBT	ARDL Lab No.:	301102-08
Desc/Location:	NONE	Lab Filename:	Z3873
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1730	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	20.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.5	12.5	ND		UG/KG	1
Acenaphthylene	3	12.5	ND		UG/KG	1
Acenaphthene	3.4	12.5	ND		UG/KG	1
Fluorene	2.9	12.5	ND		UG/KG	1
Phenanthrene	3.2	12.5	5.7	J	UG/KG	1
Anthracene	2.5	12.5	ND		UG/KG	1
Fluoranthene	3.2	12.5	11.0	J	UG/KG	1
Pyrene	2.3	12.5	11.0	J	UG/KG	1
Benzo(a)anthracene	2.5	12.5	5.1	J	UG/KG	1
Chrysene	3	12.5	6.7	J	UG/KG	1
Benzo(b)fluoranthene	3	12.5	ND		UG/KG	1
Benzo(k)fluoranthene	4.6	12.5	ND		UG/KG	1
Benzo(a)pyrene	2.8	12.5	5.4	J	UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.5	3.6	J	UG/KG	1
Dibenzo(a,h)anthracene	2.8	12.5	ND		UG/KG	1
Benzo(g,h,i)perylene	3	12.5	4.6	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	49%
Nitrobenzene-d5	23-120	47%
Terphenyl-d14	18-137	76%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-002-02-ESW	ARDL Lab No.:	301102-06
Desc/Location:	NONE	Lab Filename:	Z3871
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1715	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	13.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.3	11.5	ND		UG/KG	1
Acenaphthylene	2.7	11.5	6.7	J	UG/KG	1
Acenaphthene	3.2	11.5	7.5	J	UG/KG	1
Fluorene	2.7	11.5	7.8	J	UG/KG	1
Phenanthrene	2.9	11.5	146		UG/KG	1
Anthracene	2.3	11.5	27.7		UG/KG	1
Fluoranthene	3	11.5	335		UG/KG	1
Pyrene	2.1	11.5	291		UG/KG	1
Benzo(a)anthracene	2.3	11.5	138		UG/KG	1
Chrysene	2.7	11.5	190		UG/KG	1
Benzo(b)fluoranthene	2.7	11.5	ND		UG/KG	1
Benzo(k)fluoranthene	4.3	11.5	ND		UG/KG	1
Benzo(a)pyrene	2.6	11.5	167		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.7	11.5	104		UG/KG	1
Dibenzo(a,h)anthracene	2.5	11.5	ND		UG/KG	1
Benzo(g,h,i)perylene	2.8	11.5	114		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	87%
Nitrobenzene-d5	23-120	81%
Terphenyl-d14	18-137	84%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/11/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-004-02-ESW	ARDL Lab No.:	301102-01
Desc/Location:	NONE	Lab Filename:	Z3868
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1330	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	17.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.1	10.8	J	UG/KG	1
Acenaphthylene	2.9	12.1	ND		UG/KG	1
Acenaphthene	3.3	12.1	ND		UG/KG	1
Fluorene	2.8	12.1	ND		UG/KG	1
Phenanthrene	3.1	12.1	37.8		UG/KG	1
Anthracene	2.4	12.1	5.8	J	UG/KG	1
Fluoranthene	3.1	12.1	29.5		UG/KG	1
Pyrene	2.3	12.1	25.0		UG/KG	1
Benzo(a)anthracene	2.4	12.1	10.1	J	UG/KG	1
Chrysene	2.9	12.1	14.0		UG/KG	1
Benzo(b)fluoranthene	2.9	12.1	ND		UG/KG	1
Benzo(k)fluoranthene	4.5	12.1	ND		UG/KG	1
Benzo(a)pyrene	2.7	12.1	10.3	J	UG/KG	1
Indeno(1,2,3-cd)pyrene	2.8	12.1	6.1	J	UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.1	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.1	7.3	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	60%
Nitrobenzene-d5	23-120	57%
Terphenyl-d14	18-137	88%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-007-04-EBT	ARDL Lab No.:	301102-07
Desc/Location:	NONE	Lab Filename:	Z3872
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1722	Prep. Date:	09/17/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5000
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.3	ND		UG/KG	1
Acenaphthylene	2.9	12.3	ND		UG/KG	1
Acenaphthene	3.4	12.3	ND		UG/KG	1
Fluorene	2.9	12.3	ND		UG/KG	1
Phenanthrene	3.1	12.3	ND		UG/KG	1
Anthracene	2.5	12.3	ND		UG/KG	1
Fluoranthene	3.2	12.3	ND		UG/KG	1
Pyrene	2.3	12.3	ND		UG/KG	1
Benzo(a)anthracene	2.4	12.3	ND		UG/KG	1
Chrysene	2.9	12.3	ND		UG/KG	1
Benzo(b)fluoranthene	2.9	12.3	ND		UG/KG	1
Benzo(k)fluoranthene	4.5	12.3	ND		UG/KG	1
Benzo(a)pyrene	2.7	12.3	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.3	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.3	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.3	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	58%
Nitrobenzene-d5	23-120	52%
Terphenyl-d14	18-137	67%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

8015M

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/25/2002

Project Name: USACE FT DEARBORN Analysis: MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.: 17297 Analytical Method: 8015
Prep Method: NONE

Field ID:	VWR-001-03-EBT	ARDL Lab No.:	301102-08
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1730	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	20.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	2	12.5	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/25/2002

Project Name: USACE FT DEARBORN Analysis: MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.: 17297 Analytical Method: 8015
Prep Method: NONE

Field ID:	VWR-002-02-ESW	ARDL Lab No.:	301102-06
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1715	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/23/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	13.3	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.8	11.5	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/25/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17297	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	VWR-004-02-ESW	ARDL Lab No.:	301102-01
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1330	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/23/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	17.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.9	12.1	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/25/2002

Project Name: USACE FT. DEARBORN Analysis: MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.: 17297 Analytical Method: 8015
Prep Method: NONE

Field ID:	VWR-007-04-EBT	ARDL Lab No.:	301102-07
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/13/2002
Sample Time:	1722	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	18.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	2	12.3	ND		MG/KG	1

INORGANICS

INORGANIC ANALYSIS DATA PACKAGE

FERGUSON HARBOR

Report Date: 09/27/02

Delivery Order No.: 17297

ARDL Report No.: 301102

Lab Name: ARDL, Inc.
Samples Received at ARDL: 13-Sep-02
Project Name: USACE Ft. Dearborn

CASE NARRATIVE

Sample ID No.	Date Collected	Lab ID No.	Analysis Requested
VWR-004-02-ESW	09/12/02	301102-01	Total Metals(1), Total Solids
VWR-002-02-ERB	09/12/02	301102-02	Total Metals(1)
FSS-005-08-EBT	09/12/02	301102-03	Total Metals(1), Total Solids
FSS-006-05-EBT	09/12/02	301102-04	Total Metals(1), Total Solids
FSS-007-05-EBT	09/12/02	301102-05	Total Metals(1), Total Solids
VWR-002-02-ESW	09/12/02	301102-06	Total Metals(1), Total Solids
VWR-007-04-EBT	09/12/02	301102-07	Total Metals(1), Total Solids
VWR-001-03-EBT	09/12/02	301102-08	Total Metals(1), Total Solids

(1) Including aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, vanadium and zinc.

The quality control data are summarized as follows:

LABORATORY CONTROL SAMPLES
Percent recovery of all LCS analyses were within control limits.

PREPARATION BLANKS
Results of all preparation blanks were within acceptable limits.

MATRIX SPIKES
Percent recovery of all matrix spikes and matrix spike duplicates except 1 of 2 for lead and 2 of 2 for antimony in the soil matrix were within control limits. The sample results for aluminum, iron and manganese in the soil matrix were greater than 4 times the spike amount; therefore, percent recovery was not considered.

DUPLICATES
RPD on all duplicate analyses were within control limits.
All duplicate analyses are reported as MS/MSD except calcium, magnesium, potassium, sodium and total solids which are reported as sample/duplicate.

Release of the data contained in this package has been authorized by the Technical Services Manager or his designee as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-005-08-EBT ARDL No: 301102-03
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1605 Moisture: 19

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.3	6440	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.62	0.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.37	9.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	37.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.25	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.25	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	12.3	53100	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.62	11.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.62	8.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	41.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Iron	6.2	20100	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.37	17.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	12.3	34000	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.62	437	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.099	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.9	25.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	247	1470	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.62	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.62	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	49.4	65.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.37	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.62	13.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.62	46.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	81.0	%	NONE	160.3	NA	09/13/02	09179442

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-006-05-EBT ARDL No: 301102-04
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1611 Moisture: 18

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.2	10200	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.61	0.92	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.37	8.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	82.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.41	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.24	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	12.2	21900	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.61	18.3	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.61	8.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	39.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Iron	6.1	20300	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.37	43.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	12.2	13500	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.61	404	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.098	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	22.1	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	244	1400	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.61	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.61	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	48.8	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.37	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.61	21.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.61	60.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	82.0	%	NONE	160.3	NA	09/13/02	09179442

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-007-05-EBT ARDL No: 301102-05
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1611 Moisture: 16.9

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12	9620	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.6	0.91	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.36	8.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	79.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.36	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.24	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	12	23800	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.6	15.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.6	9.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	230	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Iron	6	19700	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.36	33.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	12	14100	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.6	400	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.096	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	21.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	241	1370	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.6	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.6	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	48.1	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.36	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.6	20.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.6	64.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	83.1	%	NONE	160.3	NA	09/13/02	09179442

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-001-03-EBT ARDL No: 301102-08
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1730 Moisture: 20.3

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.5	15300	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Antimony	0.63	0.83	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Arsenic	0.38	9.3	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Barium	1.3	117	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Beryllium	0.13	0.39	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Cadmium	0.25	ND	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Calcium	12.5	4000	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Chromium	0.63	21.8	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Cobalt	0.63	10.7	MG/KG	3050B	6010B	09/18/02	09/24/02	P399
Copper	1.3	29.0	MG/KG	3050B	6010B	09/18/02	09/24/02	P399
Iron	6.3	28400	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Lead	0.38	18.7	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Magnesium	12.5	4410	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Manganese	0.63	663	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Mercury	0.1	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.9	26.0	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Potassium	251	982	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Selenium	0.63	0.96	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Silver	0.63	ND	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Sodium	50.2	ND	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Thallium	0.38	ND	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Vanadium	0.63	35.1	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Zinc	0.63	46.4	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Solids, Percent	1	79.7	%	NONE	160.3	NA	09/13/02	09179442

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-002-02-ESW ARDL No: 301102-06
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1715 Moisture: 13.3

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	11.5	11900	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.58	2.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.35	9.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	154	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.5	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.23	1.4	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	11.5	11200	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.58	21.7	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.58	9.2	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Copper	1.2	41.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Iron	5.8	21400	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.35	158	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	11.5	7180	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.58	653	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.092	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.7	19.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	231	1690	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.58	0.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.58	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	46.1	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.35	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.58	26.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.58	105	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	86.7	%	NONE	160.3	NA	09/13/02	09179442

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-004-02-ESW ARDL No: 301102-01
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1330 Moisture: 17.5

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.1	12300	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Antimony	0.61	0.82	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Arsenic	0.36	7.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Barium	1.2	134	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Beryllium	0.12	0.55	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cadmium	0.24	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Calcium	12.1	5070	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Chromium	0.61	17.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Cobalt	0.61	9.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P39[illegible]
Copper	1.2	24.9	MG/KG	3050B	6010B	09/18/02	09/23/02	P3[illegible]
Iron	6.1	20600	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Lead	0.36	19.0	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Magnesium	12.1	3730	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Manganese	0.61	403	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Mercury	0.097	0.11	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	19.6	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Potassium	242	1330	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Selenium	0.61	0.93	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Silver	0.61	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Sodium	48.5	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Thallium	0.36	ND	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Vanadium	0.61	26.3	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Zinc	0.61	48.8	MG/KG	3050B	6010B	09/18/02	09/23/02	P3998
Solids, Percent	1	82.5	%	NONE	160.3	NA	09/13/02	09179442

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301102 Report Date: 09/27/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-007-04-EBT ARDL No: 301102-07
Sampling Loc'n: NONE Received: 09/13/2002
Sampling Date: 09/12/2002 Matrix: SOIL
Sampling Time: 1722 Moisture: 18.5

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.3	14900	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Antimony	0.61	0.94	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Arsenic	0.37	11.8	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Barium	1.2	115	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Beryllium	0.12	0.52	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Cadmium	0.25	ND	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Calcium	12.3	3390	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Chromium	0.61	21.2	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Cobalt	0.61	10.6	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Copper	1.2	37.0	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Iron	6.1	31600	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Lead	0.37	18.1	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Magnesium	12.3	4240	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Manganese	0.61	622	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Mercury	0.098	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1638
Nickel	1.8	30.3	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Potassium	245	1080	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Selenium	0.61	0.94	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Silver	0.61	ND	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Sodium	49.1	ND	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Thallium	0.37	ND	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Vanadium	0.61	33.3	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Zinc	0.61	58.4	MG/KG	3050B	6010B	09/18/02	09/24/02	P3998
Solids, Percent	1	81.5	%	NONE	160.3	NA	09/13/02	09179442

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301103 Samples Received at ARDL: 9/14/02

CASE NARRATIVE

VOLATILE FRACTION - METHOD 8260

Soil samples were received by ARDL, Inc. on September 14, 2002, for VOA analysis for GC/MS. All analyses were performed within the method specified holding time.

No unusual problems were encountered during the sample analyses.

SEMIVOLATILE FRACTION - METHOD 8270

Soil and water samples were received by ARDL, Inc. on September 14, 2002, for BNA analysis by GC/MS. All analyses were performed according to low level protocol within method specified holding times.

There was insufficient sample volume to perform a matrix spike and matrix spike duplicate evaluation for this site, for the water sample. Two spiked blanks were extracted and analyzed for QC purposes.

1,4-Dichlorobenzene had low recovery in the soil MS/MSD. This compound had acceptable recovery in the spiked blank. No further action was required.

4-Nitrophenol had high recovery in the spiked blank and MS/MSD. This compound was not detected in any sample, thus no further action was required.

Samples FSS-004-04-ESW and FSS-003-04-ESW both required manual integrations for the compound benzo(k)fluoranthene.

No other unusual problems were encountered during the sample extraction or sample analyses.

PNA-SIM FRACTION

Soil and water samples were received by ARDL, Inc. on September 14, 2002, for PNA-SIM analysis by GC/MS. All analyses were performed according to low level protocol within method specified holding times.

There was insufficient sample volume to perform a matrix spike and matrix spike duplicate evaluation for the water sample. Two spiked blanks were extracted and analyzed for QC purposes.

The soil blank failed recovery criteria for one surrogate compound, however, since there were no other surrogate failures in the batch, no reanalysis was performed.

The soil MS/MSD had several compounds which exceeded the % RPD ranges. All had acceptable spike recoveries, indicating acceptable accuracy in the QC.

ORGANIC ANALYSIS DATA PACKAGE

›ntract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301103 Samples Received at ARDL: 9/14/02

CASE NARRATIVE (Continued)

PNA-SIM FRACTION (Continued)

No other unusual problems were encountered during the sample extraction or sample analyses.

GLYCOL FRACTION - METHOD 8015M

A soil sample was received by ARDL, Inc. on September 14, 2002, for Glycol analysis. The samples were extracted within the method specified holding time.

This sample was extracted in a batch with ARDL SDG 301101. Therefore, only one blank and spike blank was extracted. Due to software limitations, the blank and spike blank are designated as ARDL SDG 301101, although they are also applicable to ARDL SDG 301103. Additionally, the MS/MSD evaluation was also performed on samples from ARDL SDG 301101. Refer to that data package for those results.

.o additional problems were encountered during the analysis of these samples.

PCB FRACTION - METHOD 8082

Soil and water samples were received by ARDL, Inc. on September 14, 2002, for PCB analysis. The samples were extracted within holding time requirements.

The soil samples were cleaned up by acid hydrolysis.

The water sample was extracted with ARDL SDG 301100. Therefore, only one blank and spike blank were extracted. Due to software limitations, the blank and spike blank are designated as ARDL SDG 301100, although they are also applicable to ARDL SDG 301103. Additionally, due to insufficient sample volumes supplied, an MS/MSD evaluation could not be performed on the water samples. As QC, two spike blanks were extracted and analyzed.

The columns used for PCB analysis are as follows: Primary column - RTX-CLP PESTICIDE II, 30 meter, 0.32 mm ID, 0.25 mm df; Confirmation column - RTX-CLP PESTICIDES, 30 meter, 0.32 mm ID, 0.50 mm df.

The following pages list manual integrations performed on the data. (See hard copy for explanation of manual integrations):

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301103 Samples Received at ARDL: 9/14/02

CASE NARRATIVE (Continued)

PCB FRACTION - METHOD 8082 (Continued)

Pages: 50026-50029
50033-50036
50042-50045
50050-50053
50059-50062
50066-50069
50092, 50157
50145-50148
50166-50169
50266-50269
50274-50277
50282-50285

No additional problems were encountered in the analysis of these samples.

ORGANIC DATA REPORTING QUALIFIERS

The following organic data reporting qualifiers are used as required.

ND- Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag; instead use a laboratory-defined flag.

ORGANIC ANALYSIS DATA PACKAGE

ɔntract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301103 Samples Received at ARDL: 9/14/02

CASE NARRATIVE (Continued)

ORGANIC DATA REPORTING QUALIFIERS (Continued)

B - This flag is used when the analyte is found in the blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must by used for a TIC as well as for a positively identified target compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form 1 for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form 1. The Form 1 for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form 1 for the diluted sample, and all concentration values reported on that Form 1 are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized for the Laboratory Manager or his designee, as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

VOA-8260B

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-001-04-ESW	ARDL Lab No.:	301103-05
Desc/Location:	NONE	Lab Filename:	Y2593
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.4	12.5	ND		UG/KG	1
Vinyl Chloride	2.2	12.5	ND		UG/KG	1
Bromomethane	1.6	12.5	ND		UG/KG	1
Chloroethane	2	12.5	ND		UG/KG	1
1,1-Dichloroethene	1	6.2	ND		UG/KG	1
Methylene Chloride	3	6.2	7.6	B	UG/KG	1
trans-1,2-Dichloroethene	0.98	6.2	ND		UG/KG	1
1,1-Dichloroethane	0.29	6.2	ND		UG/KG	1
Carbon disulfide	1.1	6.2	ND		UG/KG	1
cis-1,2-Dichloroethene	0.41	6.2	ND		UG/KG	1
Bromochloromethane	1	6.2	ND		UG/KG	1
Chloroform	0.85	6.2	ND		UG/KG	1
1,1,1-Trichloroethane	0.39	6.2	ND		UG/KG	1
Carbon Tetrachloride	0.76	6.2	ND		UG/KG	1
Benzene	0.71	6.2	ND		UG/KG	1
1,2-Dichloroethane	0.46	6.2	ND		UG/KG	1
Trichloroethene	1.1	6.2	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.2	ND		UG/KG	1
Bromodichloromethane	0.29	6.2	ND		UG/KG	1
cis-1,3-Dichloropropene	0.81	6.2	ND		UG/KG	1
Toluene	0.39	6.2	ND		UG/KG	1
trans-1,3-Dichloropropene	0.77	6.2	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.2	ND		UG/KG	1
Tetrachloroethene	0.59	6.2	ND		UG/KG	1
Dibromochloromethane	0.29	6.2	ND		UG/KG	1
Chlorobenzene	0.26	6.2	ND		UG/KG	1
Ethyl Benzene	0.45	6.2	ND		UG/KG	1
m & p-Xylene	1	6.2	ND		UG/KG	1
o-Xylene	1.1	6.2	ND		UG/KG	1
Styrene	0.44	6.2	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-001-04-ESW	ARDL Lab No.:	301103-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2593
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.2	ND		UG/KG	1
2-Hexanone	22.4	24.9	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.2	ND		UG/KG	1
Acetone	39.9	62.3	ND		UG/KG	1
2-Butanone	21.2	62.3	ND		UG/KG	1
4-Methyl-2-pentanone	18.7	24.9	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	108%
1,2-Dichloroethane-d4	78-135	102%
Toluene-d8	86-129	104%
4-Bromofluorobenzene	76-141	108%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-002-04-ESW	ARDL Lab No.:	301103-04
Desc/Location:	NONE	Lab Filename:	Y2592
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0746	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	21.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.4	12.7	ND		UG/KG	1
Vinyl Chloride	2.3	12.7	ND		UG/KG	1
Bromomethane	1.6	12.7	ND		UG/KG	1
Chloroethane	2	12.7	ND		UG/KG	1
1,1-Dichloroethene	1.1	6.3	ND		UG/KG	1
Methylene Chloride	3	6.3	6.2	JB	UG/KG	1
trans-1,2-Dichloroethene	1	6.3	ND		UG/KG	1
1,1-Dichloroethane	0.29	6.3	ND		UG/KG	1
Carbon disulfide	1.1	6.3	ND		UG/KG	1
cis-1,2-Dichloroethene	0.42	6.3	ND		UG/KG	1
Bromochloromethane	1	6.3	ND		UG/KG	1
Chloroform	0.86	6.3	ND		UG/KG	1
1,1,1-Trichloroethane	0.39	6.3	ND		UG/KG	1
Carbon Tetrachloride	0.77	6.3	ND		UG/KG	1
Benzene	0.72	6.3	ND		UG/KG	1
1,2-Dichloroethane	0.47	6.3	ND		UG/KG	1
Trichloroethene	1.1	6.3	ND		UG/KG	1
1,2-Dichloropropane	0.43	6.3	ND		UG/KG	1
Bromodichloromethane	0.29	6.3	ND		UG/KG	1
cis-1,3-Dichloropropene	0.82	6.3	ND		UG/KG	1
Toluene	0.39	6.3	ND		UG/KG	1
trans-1,3-Dichloropropene	0.79	6.3	ND		UG/KG	1
1,1,2-Trichloroethane	0.33	6.3	ND		UG/KG	1
Tetrachloroethene	0.6	6.3	ND		UG/KG	1
Dibromochloromethane	0.29	6.3	ND		UG/KG	1
Chlorobenzene	0.27	6.3	ND		UG/KG	1
Ethyl Benzene	0.46	6.3	ND		UG/KG	1
m & p-Xylene	1	6.3	ND		UG/KG	1
o-Xylene	1.1	6.3	ND		UG/KG	1
Styrene	0.44	6.3	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-002-04-ESW	ARDL Lab No.:	301103-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2592
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0746	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	21.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.28	6.3	ND		UG/KG	1
2-Hexanone	22.8	25.4	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.3	ND		UG/KG	1
Acetone	40.6	63.5	ND		UG/KG	1
2-Butanone	21.6	63.5	ND		UG/KG	1
4-Methyl-2-pentanone	19	25.4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	111%
1,2-Dichloroethane-d4	78-135	106%
Toluene-d8	86-129	108%
4-Bromofluorobenzene	76-141	104%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-003-04-ESW	ARDL Lab No.:	301103-03
Desc/Location:	NONE	Lab Filename:	Y2591
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0735	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	17.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.1	ND		UG/KG	1
Vinyl Chloride	2.2	12.1	ND		UG/KG	1
Bromomethane	1.6	12.1	ND		UG/KG	1
Chloroethane	1.9	12.1	ND		UG/KG	1
1,1-Dichloroethene	1	6.1	ND		UG/KG	1
Methylene Chloride	2.9	6.1	4.7	JB	UG/KG	1
trans-1,2-Dichloroethene	0.96	6.1	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.1	ND		UG/KG	1
Carbon disulfide	1	6.1	ND		UG/KG	1
cis-1,2-Dichloroethene	0.4	6.1	ND		UG/KG	1
Bromochloromethane	0.98	6.1	ND		UG/KG	1
Chloroform	0.82	6.1	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.1	ND		UG/KG	1
Carbon Tetrachloride	0.74	6.1	ND		UG/KG	1
Benzene	0.69	6.1	ND		UG/KG	1
1,2-Dichloroethane	0.45	6.1	ND		UG/KG	1
Trichloroethene	1.1	6.1	ND		UG/KG	1
1,2-Dichloropropane	0.41	6.1	ND		UG/KG	1
Bromodichloromethane	0.28	6.1	ND		UG/KG	1
cis-1,3-Dichloropropene	0.79	6.1	ND		UG/KG	1
Toluene	0.38	6.1	ND		UG/KG	1
trans-1,3-Dichloropropene	0.75	6.1	ND		UG/KG	1
1,1,2-Trichloroethane	0.31	6.1	ND		UG/KG	1
Tetrachloroethene	0.57	6.1	ND		UG/KG	1
Dibromochloromethane	0.28	6.1	ND		UG/KG	1
Chlorobenzene	0.25	6.1	ND		UG/KG	1
Ethyl Benzene	0.44	6.1	ND		UG/KG	1
m & p-Xylene	0.97	6.1	ND		UG/KG	1
o-Xylene	1	6.1	ND		UG/KG	1
Styrene	0.42	6.1	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-003-04-ESW	ARDL Lab No.:	301103-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2591
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0735	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	17.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.1	ND		UG/KG	1
2-Hexanone	21.8	24.2	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.1	ND		UG/KG	1
Acetone	38.7	60.5	ND		UG/KG	1
2-Butanone	20.6	60.5	ND		UG/KG	1
4-Methyl-2-pentanone	18.2	24.2	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	105%
1,2-Dichloroethane-d4	78-135	98%
Toluene-d8	86-129	100%
4-Bromofluorobenzene	76-141	106%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-004-04-ESW	ARDL Lab No.:	301103-02
Desc/Location:	NONE	Lab Filename:	Y2590
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0730	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	18.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.3	ND		UG/KG	1
Vinyl Chloride	2.2	12.3	ND		UG/KG	1
Bromomethane	1.6	12.3	ND		UG/KG	1
Chloroethane	2	12.3	ND		UG/KG	1
1,1-Dichloroethene	1	6.1	ND		UG/KG	1
Methylene Chloride	2.9	6.1	5.5	JB	UG/KG	1
trans-1,2-Dichloroethene	0.97	6.1	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.1	ND		UG/KG	1
Carbon disulfide	1.1	6.1	ND		UG/KG	1
cis-1,2-Dichloroethene	0.4	6.1	ND		UG/KG	1
Bromochloromethane	0.99	6.1	ND		UG/KG	1
Chloroform	0.83	6.1	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.1	ND		UG/KG	1
Carbon Tetrachloride	0.75	6.1	ND		UG/KG	1
Benzene	0.7	6.1	ND		UG/KG	1
1,2-Dichloroethane	0.45	6.1	ND		UG/KG	1
Trichloroethene	1.1	6.1	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.1	ND		UG/KG	1
Bromodichloromethane	0.28	6.1	ND		UG/KG	1
cis-1,3-Dichloropropene	0.8	6.1	ND		UG/KG	1
Toluene	0.38	6.1	ND		UG/KG	1
trans-1,3-Dichloropropene	0.76	6.1	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.1	ND		UG/KG	1
Tetrachloroethene	0.58	6.1	ND		UG/KG	1
Dibromochloromethane	0.28	6.1	ND		UG/KG	1
Chlorobenzene	0.26	6.1	ND		UG/KG	1
Ethyl Benzene	0.44	6.1	4.5	J	UG/KG	1
m & p-Xylene	0.98	6.1	25.8		UG/KG	1
o-Xylene	1.1	6.1	ND		UG/KG	1
Styrene	0.43	6.1	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-004-04-ESW	ARDL Lab No.:	301103-02 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2590
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0730	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	18.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.1	ND		UG/KG	1
2-Hexanone	22.1	24.5	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.1	ND		UG/KG	1
Acetone	39.2	61.3	ND		UG/KG	1
2-Butanone	20.8	61.3	ND		UG/KG	1
4-Methyl-2-pentanone	18.4	24.5	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	108%
1,2-Dichloroethane-d4	78-135	102%
Toluene-d8	86-129	104%
4-Bromofluorobenzene	76-141	102%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-001-03-ESW	ARDL Lab No.:	301103-07
Desc/Location:	NONE	Lab Filename:	Y2672
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0934	Prep. Date:	09/19/2002
Matrix:	SOIL	Analysis Date:	09/19/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSQ
% Moisture:	18.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.2	ND		UG/KG	1
Vinyl Chloride	2.2	12.2	ND		UG/KG	1
Bromomethane	1.6	12.2	ND		UG/KG	1
Chloroethane	2	12.2	ND		UG/KG	1
1,1-Dichloroethene	1	6.1	ND		UG/KG	1
Methylene Chloride	2.9	6.1	ND		UG/KG	1
trans-1,2-Dichloroethene	0.97	6.1	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.1	ND		UG/KG	1
Carbon disulfide	1.1	6.1	ND		UG/KG	1
cis-1,2-Dichloroethene	0.4	6.1	ND		UG/KG	1
Bromochloromethane	0.99	6.1	ND		UG/KG	1
Chloroform	0.83	6.1	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.1	ND		UG/KG	1
Carbon Tetrachloride	0.75	6.1	ND		UG/KG	1
Benzene	0.7	6.1	ND		UG/KG	1
1,2-Dichloroethane	0.45	6.1	ND		UG/KG	1
Trichloroethene	1.1	6.1	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.1	ND		UG/KG	1
Bromodichloromethane	0.28	6.1	ND		UG/KG	1
cis-1,3-Dichloropropene	0.79	6.1	ND		UG/KG	1
Toluene	0.38	6.1	ND		UG/KG	1
trans-1,3-Dichloropropene	0.76	6.1	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.1	ND		UG/KG	1
Tetrachloroethene	0.57	6.1	ND		UG/KG	1
Dibromochloromethane	0.28	6.1	ND		UG/KG	1
Chlorobenzene	0.26	6.1	ND		UG/KG	1
Ethyl Benzene	0.44	6.1	ND		UG/KG	1
m & p-Xylene	0.98	6.1	ND		UG/KG	1
o-Xylene	1.1	6.1	ND		UG/KG	1
Styrene	0.43	6.1	ND		UG/KG	1

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Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	VWR-001-03-ESW	ARDL Lab No.:	301103-07 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2672
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0934	Prep. Date:	09/19/2002
Matrix:	SOIL	Analysis Date:	09/19/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSQ
% Moisture:	18.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.1	ND		UG/KG	1
2-Hexanone	22	24.4	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.1	ND		UG/KG	1
Acetone	39.1	61.1	ND		UG/KG	1
2-Butanone	20.8	61.1	ND		UG/KG	1
4-Methyl-2-pentanone	18.3	24.4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	109%
1,2-Dichloroethane-d4	78-135	98%
Toluene-d8	86-129	105%
4-Bromofluorobenzene	76-141	111%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-008-04-ESW	ARDL Lab No.:	301103-06
Desc/Location:	NONE	Lab Filename:	Y2594
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	20.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.4	12.6	ND		UG/KG	1
Vinyl Chloride	2.3	12.6	ND		UG/KG	1
Bromomethane	1.6	12.6	ND		UG/KG	1
Chloroethane	2	12.6	ND		UG/KG	1
1,1-Dichloroethene	1	6.3	ND		UG/KG	1
Methylene Chloride	3	6.3	6.2	JB	UG/KG	1
trans-1,2-Dichloroethene	0.99	6.3	ND		UG/KG	1
1,1-Dichloroethane	0.29	6.3	ND		UG/KG	1
Carbon disulfide	1.1	6.3	ND		UG/KG	1
cis-1,2-Dichloroethene	0.42	6.3	ND		UG/KG	1
Bromochloromethane	1	6.3	ND		UG/KG	1
Chloroform	0.86	6.3	ND		UG/KG	1
1,1,1-Trichloroethane	0.39	6.3	ND		UG/KG	1
Carbon Tetrachloride	0.77	6.3	ND		UG/KG	1
Benzene	0.72	6.3	ND		UG/KG	1
1,2-Dichloroethane	0.47	6.3	ND		UG/KG	1
Trichloroethene	1.1	6.3	ND		UG/KG	1
1,2-Dichloropropane	0.43	6.3	ND		UG/KG	1
Bromodichloromethane	0.29	6.3	ND		UG/KG	1
cis-1,3-Dichloropropene	0.82	6.3	ND		UG/KG	1
Toluene	0.39	6.3	ND		UG/KG	1
trans-1,3-Dichloropropene	0.78	6.3	ND		UG/KG	1
1,1,2-Trichloroethane	0.33	6.3	ND		UG/KG	1
Tetrachloroethene	0.59	6.3	ND		UG/KG	1
Dibromochloromethane	0.29	6.3	ND		UG/KG	1
Chlorobenzene	0.26	6.3	ND		UG/KG	1
Ethyl Benzene	0.45	6.3	ND		UG/KG	1
m & p-Xylene	1	6.3	ND		UG/KG	1
o-Xylene	1.1	6.3	ND		UG/KG	1
Styrene	0.44	6.3	ND		UG/KG	1

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Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No. 17297 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	FSS-008-04-ESW	ARDL Lab No.:	301103-06 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2594
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/14/2002
Matrix:	SOIL	Analysis Date:	09/14/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSP
% Moisture:	20.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.28	6.3	ND		UG/KG	1
2-Hexanone	22.6	25.2	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.3	ND		UG/KG	1
Acetone	40.3	62.9	ND		UG/KG	1
2-Butanone	21.4	62.9	ND		UG/KG	1
4-Methyl-2-pentanone	18.9	25.2	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	109%
1,2-Dichloroethane-d4	78-135	101%
Toluene-d8	86-129	107%
4-Bromofluorobenzene	76-141	111%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

BNA-8270

ARDL, INC.
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Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-001-04-ESW	ARDL Lab No.:	301103-05
Desc/Location:	NONE	Lab Filename:	T7058
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	142	411	ND		UG/KG	1
bis(2-Chloroethyl)ether	30	411	ND		UG/KG	1
2-Chlorophenol	131	411	ND		UG/KG	1
1,3-Dichlorobenzene	66.5	411	ND		UG/KG	1
1,4-Dichlorobenzene	53.1	411	ND		UG/KG	1
1,2-Dichlorobenzene	60.4	411	ND		UG/KG	1
2-Methylphenol	117	411	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.8	411	ND		UG/KG	1
4-Methylphenol	148	411	ND		UG/KG	1
N-Nitroso-di-n-propylamine	28.1	411	ND		UG/KG	1
Hexachloroethane	61.4	411	ND		UG/KG	1
Nitrobenzene	77.1	411	ND		UG/KG	1
Isophorone	61.8	411	ND		UG/KG	1
2-Nitrophenol	127	411	ND		UG/KG	1
2,4-Dimethylphenol	141	411	ND		UG/KG	1
bis(2-Chloroethoxy)methane	31	411	ND		UG/KG	1
2,4-Dichlorophenol	151	411	ND		UG/KG	1
1,2,4-Trichlorobenzene	63.4	411	ND		UG/KG	1
Naphthalene	17.1	411	ND		UG/KG	1
4-Chloroaniline	94.5	411	ND		UG/KG	1
Hexachlorobutadiene	72.4	411	ND		UG/KG	1
4-Chloro-3-methylphenol	123	411	ND		UG/KG	1
2-Methylnaphthalene	77.3	411	ND		UG/KG	1
Hexachlorocyclopentadiene	62.6	411	ND		UG/KG	1
2,4,6-Trichlorophenol	132	411	ND		UG/KG	1
2,4,5-Trichlorophenol	139	411	ND		UG/KG	1
2-Chloronaphthalene	60.8	411	ND		UG/KG	1
2-Nitroaniline	63.9	411	ND		UG/KG	1
Dimethylphthalate	25.8	411	ND		UG/KG	1
2,6-Dinitrotoluene	52.7	411	ND		UG/KG	1

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Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-001-04-ESW	ARDL Lab No.:	301103-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7058
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	47.6	411	ND		UG/KG	1
2,4-Dinitrophenol	127	411	ND		UG/KG	1
4-Nitrophenol	112	411	ND		UG/KG	1
Dibenzofuran	83.3	411	ND		UG/KG	1
2,4-Dinitrotoluene	61.1	411	ND		UG/KG	1
Diethylphthalate	17.9	411	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.8	411	ND		UG/KG	1
4-Nitroaniline	49.8	411	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	111	411	ND		UG/KG	1
N-Nitrosodiphenylamine	25.8	411	ND		UG/KG	1
4-Bromophenyl-phenylether	30.5	411	ND		UG/KG	1
Hexachlorobenzene	51.7	411	ND		UG/KG	1
Pentachlorophenol	103	411	ND		UG/KG	1
Di-n-butylphthalate	32.9	411	ND		UG/KG	1
Butylbenzylphthalate	25.3	411	ND		UG/KG	1
3,3'-Dichlorobenzidine	169	411	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.4	411	ND		UG/KG	1
Di-n-octylphthalate	54.8	411	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	54%
Phenol-d5	24-113	65%
Nitrobenzene-d5	23-120	57%
2-Fluorobiphenyl	30-115	71%
2,4,6-Tribromophenol	19-122	100%
Terphenyl-d14	18-137	63%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-002-04-ESW	ARDL Lab No.:	301103-04
Desc/Location:	NONE	Lab Filename:	T7057
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0746	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	21.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	145	419	ND		UG/KG	1
bis(2-Chloroethyl)ether	30.6	419	ND		UG/KG	1
2-Chlorophenol	133	419	ND		UG/KG	1
1,3-Dichlorobenzene	67.8	419	ND		UG/KG	1
1,4-Dichlorobenzene	54.1	419	ND		UG/KG	1
1,2-Dichlorobenzene	61.5	419	ND		UG/KG	1
2-Methylphenol	119	419	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	24.2	419	ND		UG/KG	1
4-Methylphenol	151	419	ND		UG/KG	1
N-Nitroso-di-n-propylamine	28.7	419	ND		UG/KG	1
Hexachloroethane	62.6	419	ND		UG/KG	1
Nitrobenzene	78.6	419	ND		UG/KG	1
Isophorone	62.9	419	ND		UG/KG	1
2-Nitrophenol	129	419	ND		UG/KG	1
2,4-Dimethylphenol	143	419	ND		UG/KG	1
bis(2-Chloroethoxy)methane	31.6	419	ND		UG/KG	1
2,4-Dichlorophenol	154	419	ND		UG/KG	1
1,2,4-Trichlorobenzene	64.6	419	ND		UG/KG	1
Naphthalene	17.4	419	ND		UG/KG	1
4-Chloroaniline	96.3	419	ND		UG/KG	1
Hexachlorobutadiene	73.7	419	ND		UG/KG	1
4-Chloro-3-methylphenol	125	419	ND		UG/KG	1
2-Methylnaphthalene	78.8	419	ND		UG/KG	1
Hexachlorocyclopentadiene	63.8	419	ND		UG/KG	1
2,4,6-Trichlorophenol	135	419	ND		UG/KG	1
2,4,5-Trichlorophenol	142	419	ND		UG/KG	1
2-Chloronaphthalene	61.9	419	ND		UG/KG	1
2-Nitroaniline	65.1	419	ND		UG/KG	1
Dimethylphthalate	26.3	419	ND		UG/KG	1
2,6-Dinitrotoluene	53.7	419	ND		UG/KG	1

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Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-002-04-ESW	ARDL Lab No.:	301103-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7057
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0746	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	21.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	48.5	419	ND		UG/KG	1
2,4-Dinitrophenol	129	419	ND		UG/KG	1
4-Nitrophenol	114	419	ND		UG/KG	1
Dibenzofuran	84.9	419	ND		UG/KG	1
2,4-Dinitrotoluene	62.3	419	ND		UG/KG	1
Diethylphthalate	18.3	419	ND		UG/KG	1
4-Chlorophenyl-phenylether	27.3	419	ND		UG/KG	1
4-Nitroaniline	50.8	419	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	113	419	ND		UG/KG	1
N-Nitrosodiphenylamine	26.3	419	ND		UG/KG	1
4-Bromophenyl-phenylether	31.1	419	ND		UG/KG	1
Hexachlorobenzene	52.7	419	ND		UG/KG	1
Pentachlorophenol	105	419	ND		UG/KG	1
Di-n-butylphthalate	33.5	419	ND		UG/KG	1
Butylbenzylphthalate	25.8	419	ND		UG/KG	1
3,3'-Dichlorobenzidine	173	419	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.9	419	ND		UG/KG	1
Di-n-octylphthalate	55.8	419	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	59%
Phenol-d5	24-113	69%
Nitrobenzene-d5	23-120	53%
2-Fluorobiphenyl	30-115	75%
2,4,6-Tribromophenol	19-122	113%
Terphenyl-d14	18-137	67%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-003-04-ESW	ARDL Lab No.:	301103-03
Desc/Location:	NONE	Lab Filename:	T7056
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0735	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	17.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	138	400	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.2	400	ND		UG/KG	1
2-Chlorophenol	127	400	ND		UG/KG	1
1,3-Dichlorobenzene	64.6	400	ND		UG/KG	1
1,4-Dichlorobenzene	51.6	400	ND		UG/KG	1
1,2-Dichlorobenzene	58.7	400	ND		UG/KG	1
2-Methylphenol	114	400	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.1	400	ND		UG/KG	1
4-Methylphenol	144	400	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.4	400	ND		UG/KG	1
Hexachloroethane	59.7	400	ND		UG/KG	1
Nitrobenzene	74.9	400	ND		UG/KG	1
Isophorone	60	400	ND		UG/KG	1
2-Nitrophenol	123	400	ND		UG/KG	1
2,4-Dimethylphenol	137	400	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.1	400	ND		UG/KG	1
2,4-Dichlorophenol	146	400	ND		UG/KG	1
1,2,4-Trichlorobenzene	61.6	400	ND		UG/KG	1
Naphthalene	16.6	400	ND		UG/KG	1
4-Chloroaniline	91.9	400	ND		UG/KG	1
Hexachlorobutadiene	70.3	400	ND		UG/KG	1
4-Chloro-3-methylphenol	119	400	ND		UG/KG	1
2-Methylnaphthalene	75.2	400	99.2	J	UG/KG	1
Hexachlorocyclopentadiene	60.9	400	ND		UG/KG	1
2,4,6-Trichlorophenol	128	400	ND		UG/KG	1
2,4,5-Trichlorophenol	136	400	ND		UG/KG	1
2-Chloronaphthalene	59.1	400	ND		UG/KG	1
2-Nitroaniline	62.1	400	ND		UG/KG	1
Dimethylphthalate	25.1	400	ND		UG/KG	1
2,6-Dinitrotoluene	51.2	400	ND		UG/KG	1

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Rt. 15E, Mt. Vernon Airport Industrial Park
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Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-003-04-ESW	ARDL Lab No.:	301103-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7056
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0735	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	17.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46.2	400	ND		UG/KG	1
2,4-Dinitrophenol	123	400	ND		UG/KG	1
4-Nitrophenol	109	400	ND		UG/KG	1
Dibenzofuran	81	400	ND		UG/KG	1
2,4-Dinitrotoluene	59.4	400	ND		UG/KG	1
Diethylphthalate	17.4	400	ND		UG/KG	1
4-Chlorophenyl-phenylether	26	400	ND		UG/KG	1
4-Nitroaniline	48.4	400	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	108	400	ND		UG/KG	1
N-Nitrosodiphenylamine	25.1	400	ND		UG/KG	1
4-Bromophenyl-phenylether	29.7	400	ND		UG/KG	1
Hexachlorobenzene	50.2	400	ND		UG/KG	1
Pentachlorophenol	100	400	ND		UG/KG	1
Di-n-butylphthalate	32	400	ND		UG/KG	1
Butylbenzylphthalate	24.6	400	ND		UG/KG	1
3,3'-Dichlorobenzidine	165	400	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.6	400	ND		UG/KG	1
Di-n-octylphthalate	53.3	400	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	54%
Phenol-d5	24-113	65%
Nitrobenzene-d5	23-120	57%
2-Fluorobiphenyl	30-115	72%
2,4,6-Tribromophenol	19-122	103%
Terphenyl-d14	18-137	66%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-004-04-ESW	ARDL Lab No.:	301103-02
Desc/Location:	NONE	Lab Filename:	T7055
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0730	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	18.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	140	404	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.5	404	ND		UG/KG	1
2-Chlorophenol	129	404	ND		UG/KG	1
1,3-Dichlorobenzene	65.4	404	ND		UG/KG	1
1,4-Dichlorobenzene	52.2	404	ND		UG/KG	1
1,2-Dichlorobenzene	59.4	404	ND		UG/KG	1
2-Methylphenol	115	404	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.4	404	ND		UG/KG	1
4-Methylphenol	146	404	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.7	404	ND		UG/KG	1
Hexachloroethane	60.4	404	ND		UG/KG	1
Nitrobenzene	75.9	404	ND		UG/KG	1
Isophorone	60.8	404	ND		UG/KG	1
2-Nitrophenol	125	404	ND		UG/KG	1
2,4-Dimethylphenol	138	404	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.5	404	ND		UG/KG	1
2,4-Dichlorophenol	148	404	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.4	404	ND		UG/KG	1
Naphthalene	16.8	404	ND		UG/KG	1
4-Chloroaniline	93	404	ND		UG/KG	1
Hexachlorobutadiene	71.2	404	ND		UG/KG	1
4-Chloro-3-methylphenol	121	404	ND		UG/KG	1
2-Methylnaphthalene	76.1	404	ND		UG/KG	1
Hexachlorocyclopentadiene	61.6	404	ND		UG/KG	1
2,4,6-Trichlorophenol	130	404	ND		UG/KG	1
2,4,5-Trichlorophenol	137	404	ND		UG/KG	1
2-Chloronaphthalene	59.8	404	ND		UG/KG	1
2-Nitroaniline	62.9	404	ND		UG/KG	1
Dimethylphthalate	25.4	404	ND		UG/KG	1
2,6-Dinitrotoluene	51.8	404	ND		UG/KG	1

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Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-004-04-ESW	ARDL Lab No.:	301103-02 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7055
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0730	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	18.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46.8	404	ND		UG/KG	1
2,4-Dinitrophenol	125	404	ND		UG/KG	1
4-Nitrophenol	110	404	ND		UG/KG	1
Dibenzofuran	82	404	ND		UG/KG	1
2,4-Dinitrotoluene	60.2	404	ND		UG/KG	1
Diethylphthalate	17.6	404	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.3	404	ND		UG/KG	1
4-Nitroaniline	49	404	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	109	404	ND		UG/KG	1
N-Nitrosodiphenylamine	25.4	404	ND		UG/KG	1
4-Bromophenyl-phenylether	30	404	ND		UG/KG	1
Hexachlorobenzene	50.9	404	ND		UG/KG	1
Pentachlorophenol	101	404	ND		UG/KG	1
Di-n-butylphthalate	32.4	404	ND		UG/KG	1
Butylbenzylphthalate	24.9	404	ND		UG/KG	1
3,3'-Dichlorobenzidine	167	404	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27	404	ND		UG/KG	1
Di-n-octylphthalate	53.9	404	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	51%
Phenol-d5	24-113	64%
Nitrobenzene-d5	23-120	51%
2-Fluorobiphenyl	30-115	70%
2,4,6-Tribromophenol	19-122	96%
Terphenyl-d14	18-137	64%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-001-03-ESW	ARDL Lab No.:	301103-07
Desc/Location:	NONE	Lab Filename:	T7062
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0934	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	18.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	139	403	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.5	403	ND		UG/KG	1
2-Chlorophenol	128	403	ND		UG/KG	1
1,3-Dichlorobenzene	65.3	403	ND		UG/KG	1
1,4-Dichlorobenzene	52.1	403	ND		UG/KG	1
1,2-Dichlorobenzene	59.3	403	ND		UG/KG	1
2-Methylphenol	115	403	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.3	403	ND		UG/KG	1
4-Methylphenol	145	403	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.6	403	ND		UG/KG	1
Hexachloroethane	60.3	403	ND		UG/KG	1
Nitrobenzene	75.7	403	ND		UG/KG	1
Isophorone	60.6	403	ND		UG/KG	1
2-Nitrophenol	125	403	ND		UG/KG	1
2,4-Dimethylphenol	138	403	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.4	403	ND		UG/KG	1
2,4-Dichlorophenol	148	403	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.2	403	ND		UG/KG	1
Naphthalene	16.7	403	ND		UG/KG	1
4-Chloroaniline	92.8	403	ND		UG/KG	1
Hexachlorobutadiene	71	403	ND		UG/KG	1
4-Chloro-3-methylphenol	120	403	ND		UG/KG	1
2-Methylnaphthalene	75.9	403	ND		UG/KG	1
Hexachlorocyclopentadiene	61.5	403	ND		UG/KG	1
2,4,6-Trichlorophenol	130	403	ND		UG/KG	1
2,4,5-Trichlorophenol	137	403	ND		UG/KG	1
2-Chloronaphthalene	59.7	403	ND		UG/KG	1
2-Nitroaniline	62.7	403	ND		UG/KG	1
Dimethylphthalate	25.3	403	ND		UG/KG	1
2,6-Dinitrotoluene	51.7	403	ND		UG/KG	1

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Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-001-03-ESW	ARDL Lab No.:	301103-07 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7062
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0934	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	18.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46.7	403	ND		UG/KG	1
2,4-Dinitrophenol	125	403	ND		UG/KG	1
4-Nitrophenol	110	403	ND		UG/KG	1
Dibenzofuran	81.8	403	ND		UG/KG	1
2,4-Dinitrotoluene	60	403	ND		UG/KG	1
Diethylphthalate	17.6	403	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.3	403	ND		UG/KG	1
4-Nitroaniline	48.9	403	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	109	403	ND		UG/KG	1
N-Nitrosodiphenylamine	25.3	403	ND		UG/KG	1
4-Bromophenyl-phenylether	30	403	ND		UG/KG	1
Hexachlorobenzene	50.7	403	ND		UG/KG	1
Pentachlorophenol	101	403	ND		UG/KG	1
Di-n-butylphthalate	32.3	403	ND		UG/KG	1
Butylbenzylphthalate	24.8	403	ND		UG/KG	1
3,3'-Dichlorobenzidine	166	403	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.9	403	ND		UG/KG	1
Di-n-octylphthalate	53.8	403	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	52%
Phenol-d5	24-113	64%
Nitrobenzene-d5	23-120	52%
2-Fluorobiphenyl	30-115	73%
2,4,6-Tribromophenol	19-122	116%
Terphenyl-d14	18-137	65%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-008-04-ESW	ARDL Lab No.:	301103-06
Desc/Location:	NONE	Lab Filename:	T7059
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	20.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	143	415	ND		UG/KG	1
bis(2-Chloroethyl)ether	30.3	415	ND		UG/KG	1
2-Chlorophenol	132	415	ND		UG/KG	1
1,3-Dichlorobenzene	67.2	415	ND		UG/KG	1
1,4-Dichlorobenzene	53.6	415	ND		UG/KG	1
1,2-Dichlorobenzene	61	415	ND		UG/KG	1
2-Methylphenol	118	415	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	24	415	ND		UG/KG	1
4-Methylphenol	150	415	ND		UG/KG	1
N-Nitroso-di-n-propylamine	28.4	415	ND		UG/KG	1
Hexachloroethane	62	415	ND		UG/KG	1
Nitrobenzene	77.9	415	ND		UG/KG	1
Isophorone	62.4	415	ND		UG/KG	1
2-Nitrophenol	128	415	ND		UG/KG	1
2,4-Dimethylphenol	142	415	ND		UG/KG	1
bis(2-Chloroethoxy)methane	31.3	415	ND		UG/KG	1
2,4-Dichlorophenol	152	415	ND		UG/KG	1
1,2,4-Trichlorobenzene	64	415	ND		UG/KG	1
Naphthalene	17.2	415	ND		UG/KG	1
4-Chloroaniline	95.5	415	ND		UG/KG	1
Hexachlorobutadiene	73.1	415	ND		UG/KG	1
4-Chloro-3-methylphenol	124	415	ND		UG/KG	1
2-Methylnaphthalene	78.1	415	ND		UG/KG	1
Hexachlorocyclopentadiene	63.3	415	ND		UG/KG	1
2,4,6-Trichlorophenol	133	415	ND		UG/KG	1
2,4,5-Trichlorophenol	141	415	ND		UG/KG	1
2-Chloronaphthalene	61.4	415	ND		UG/KG	1
2-Nitroaniline	64.5	415	ND		UG/KG	1
Dimethylphthalate	26	415	ND		UG/KG	1
2,6-Dinitrotoluene	53.2	415	ND		UG/KG	1

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Lab Report No: 301103 Report Date: 10/09/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-008-04-ESW	ARDL Lab No.:	301103-06 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7059
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/07/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	20.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	48.1	415	ND		UG/KG	1
2,4-Dinitrophenol	128	415	ND		UG/KG	1
4-Nitrophenol	113	415	ND		UG/KG	1
Dibenzofuran	84.2	415	ND		UG/KG	1
2,4-Dinitrotoluene	61.8	415	ND		UG/KG	1
Diethylphthalate	18.1	415	ND		UG/KG	1
4-Chlorophenyl-phenylether	27	415	ND		UG/KG	1
4-Nitroaniline	50.3	415	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	112	415	ND		UG/KG	1
N-Nitrosodiphenylamine	26	415	ND		UG/KG	1
4-Bromophenyl-phenylether	30.8	415	ND		UG/KG	1
Hexachlorobenzene	52.2	415	ND		UG/KG	1
Pentachlorophenol	104	415	ND		UG/KG	1
Di-n-butylphthalate	33.2	415	ND		UG/KG	1
Butylbenzylphthalate	25.5	415	ND		UG/KG	1
3,3'-Dichlorobenzidine	171	415	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.7	415	ND		UG/KG	1
Di-n-octylphthalate	55.3	415	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	54%
Phenol-d5	24-113	64%
Nitrobenzene-d5	23-120	50%
2-Fluorobiphenyl	30-115	69%
2,4,6-Tribromophenol	19-122	105%
Terphenyl-d14	18-137	63%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301103 Report Date: 10/04/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510B

Field ID:	VWR-002-02-ERB	ARDL Lab No.:	301103-01
Desc/Location:	NONE	Lab Filename:	T6991
Sample Date:	09/12/2002	Received Date:	09/14/2002
Sample Time:	1500	Prep. Date:	09/18/2002
Matrix:	WATER	Analysis Date:	09/30/2002
Amount Used:	1000 mL	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5013
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	1	10.0	ND		UG/L	1
bis(2-Chloroethyl)ether	0.5	10.0	ND		UG/L	1
2-Chlorophenol	2.1	10.0	ND		UG/L	1
1,3-Dichlorobenzene	1.2	10.0	ND		UG/L	1
1,4-Dichlorobenzene	1.1	10.0	ND		UG/L	1
1,2-Dichlorobenzene	1.1	10.0	ND		UG/L	1
2-Methylphenol	1.6	10.0	ND		UG/L	1
bis(2-Chloroisopropyl)ether	0.48	10.0	ND		UG/L	1
4-Methylphenol	1.5	10.0	ND		UG/L	1
N-Nitroso-di-n-propylamine	0.58	10.0	ND		UG/L	1
Hexachloroethane	1.1	10.0	ND		UG/L	1
Nitrobenzene	0.92	10.0	ND		UG/L	1
Isophorone	1.1	10.0	ND		UG/L	1
2-Nitrophenol	2.2	10.0	ND		UG/L	1
2,4-Dimethylphenol	1.8	10.0	ND		UG/L	1
bis(2-Chloroethoxy)methane	0.47	10.0	ND		UG/L	1
2,4-Dichlorophenol	1.7	10.0	ND		UG/L	1
1,2,4-Trichlorobenzene	1	10.0	ND		UG/L	1
Naphthalene	0.25	10.0	ND		UG/L	1
4-Chloroaniline	0.82	10.0	ND		UG/L	1
Hexachlorobutadiene	1.2	10.0	ND		UG/L	1
4-Chloro-3-methylphenol	1.9	10.0	ND		UG/L	1
2-Methylnaphthalene	1.1	10.0	ND		UG/L	1
Hexachlorocyclopentadiene	1	10.0	ND		UG/L	1
2,4,6-Trichlorophenol	2.2	10.0	ND		UG/L	1
2,4,5-Trichlorophenol	2	10.0	ND		UG/L	1
2-Chloronaphthalene	1	10.0	ND		UG/L	1
2-Nitroaniline	1.1	10.0	ND		UG/L	1
Dimethylphthalate	0.4	10.0	ND		UG/L	1
2,6-Dinitrotoluene	0.58	10.0	ND		UG/L	1

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Lab Report No: 301103 Report Date: 10/04/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510B

Field ID:	VWR-002-02-ERB	ARDL Lab No.:	301103-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	T6991
Sample Date:	09/12/2002	Received Date:	09/14/2002
Sample Time:	1500	Prep. Date:	09/18/2002
Matrix:	WATER	Analysis Date:	09/30/2002
Amount Used:	1000 mL	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5013
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	1.4	10.0	ND		UG/L	1
2,4-Dinitrophenol	1.7	10.0	ND		UG/L	1
4-Nitrophenol	1.5	10.0	ND		UG/L	1
Dibenzofuran	1.2	10.0	ND		UG/L	1
2,4-Dinitrotoluene	0.8	10.0	ND		UG/L	1
Diethylphthalate	0.44	10.0	ND		UG/L	1
4-Chlorophenyl-phenylether	0.44	10.0	ND		UG/L	1
4-Nitroaniline	1.2	10.0	ND		UG/L	1
4,6-Dinitro-2-methylphenol	1.6	10.0	ND		UG/L	1
N-Nitrosodiphenylamine	0.4	10.0	ND		UG/L	1
4-Bromophenyl-phenylether	0.4	10.0	ND		UG/L	1
Hexachlorobenzene	0.91	10.0	ND		UG/L	1
Pentachlorophenol	1.9	10.0	ND		UG/L	1
Di-n-butylphthalate	1.1	10.0	ND		UG/L	1
Butylbenzylphthalate	0.32	10.0	ND		UG/L	1
3,3'-Dichlorobenzidine	2.8	10.0	ND		UG/L	1
bis(2-Ethylhexyl)phthalate	0.87	10.0	ND		UG/L	1
Di-n-octylphthalate	0.37	10.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	21-110	39%
Phenol-d5	10-94	30%
Nitrobenzene-d5	35-114	67%
2-Fluorobiphenyl	43-116	76%
2,4,6-Tribromophenol	10-123	64%
Terphenyl-d14	33-141	67%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PCB's-8082

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Lab Report No: 301103 Report Date: 09/30/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FSS-001-04-ESW	ARDL Lab No.:	301103-05
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.3	41.1	ND		UG/KG	1
Aroclor 1221	16.8	83.4	ND		UG/KG	1
Aroclor 1232	10.4	41.1	ND		UG/KG	1
Aroclor 1242	11.6	41.1	ND		UG/KG	1
Aroclor 1248	7.7	41.1	ND		UG/KG	1
Aroclor 1254	5.4	41.1	ND		UG/KG	1
Aroclor 1260	6.9	41.1	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	88%
Tetrachloro-m-xylene	42-94	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Lab Report No: 301103 Report Date: 09/30/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FSS-002-04-ESW	ARDL Lab No.:	301103-04
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0746	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	21.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.4	41.9	ND		UG/KG	1
Aroclor 1221	17.1	85.0	ND		UG/KG	1
Aroclor 1232	10.6	41.9	ND		UG/KG	1
Aroclor 1242	11.8	41.9	ND		UG/KG	1
Aroclor 1248	7.9	41.9	ND		UG/KG	1
Aroclor 1254	5.5	41.9	ND		UG/KG	1
Aroclor 1260	7	41.9	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	85%
Tetrachloro-m-xylene	42-94	75%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/30/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FSS-003-04-ESW	ARDL Lab No.:	301103-03
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0735	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	17.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9	40.0	ND		UG/KG	1
Aroclor 1221	16.3	81.1	ND		UG/KG	1
Aroclor 1232	10.1	40.0	ND		UG/KG	1
Aroclor 1242	11.2	40.0	ND		UG/KG	1
Aroclor 1248	7.5	40.0	ND		UG/KG	1
Aroclor 1254	5.2	40.0	ND		UG/KG	1
Aroclor 1260	6.7	40.0	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	89%
Tetrachloro-m-xylene	42-94	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/30/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FSS-004-04-ESW	ARDL Lab No.:	301103-02
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0730	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	18.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.1	40.4	ND		UG/KG	1
Aroclor 1221	16.5	82.1	ND		UG/KG	1
Aroclor 1232	10.2	40.4	ND		UG/KG	1
Aroclor 1242	11.4	40.4	ND		UG/KG	1
Aroclor 1248	7.6	40.4	ND		UG/KG	1
Aroclor 1254	5.3	40.4	ND		UG/KG	1
Aroclor 1260	6.8	40.4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	90%
Tetrachloro-m-xylene	42-94	86%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/30/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	VWR-001-03-ESW	ARDL Lab No.:	301103-07
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0934	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	18.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.1	40.3	ND		UG/KG	1
Aroclor 1221	16.5	81.9	ND		UG/KG	1
Aroclor 1232	10.2	40.3	ND		UG/KG	1
Aroclor 1242	11.4	40.3	ND		UG/KG	1
Aroclor 1248	7.6	40.3	ND		UG/KG	1
Aroclor 1254	5.3	40.3	ND		UG/KG	1
Aroclor 1260	6.7	40.3	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	90%
Tetrachloro-m-xylene	42-94	82%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3550A

Field ID:	FSS-008-04-ESW	ARDL Lab No.:	301103-06
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	20.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.4	41.5	ND		UG/KG	1
Aroclor 1221	17	84.3	ND		UG/KG	1
Aroclor 1232	10.5	41.5	ND		UG/KG	1
Aroclor 1242	11.7	41.5	ND		UG/KG	1
Aroclor 1248	7.8	41.5	ND		UG/KG	1
Aroclor 1254	5.4	41.5	ND		UG/KG	1
Aroclor 1260	6.9	41.5	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	87%
Tetrachloro-m-xylene	42-94	73%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3510B

Field ID:	VWR-002-02-ERB	ARDL Lab No.:	301103-01
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/12/2002	Received Date:	09/14/2002
Sample Time:	1500	Prep. Date:	09/18/2002
Matrix:	WATER	Analysis Date:	09/21/2002
Amount Used:	1000 mL	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B4993
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	0.23	1.0	ND		UG/L	1
Aroclor 1221	0.58	2.0	ND		UG/L	1
Aroclor 1232	0.33	1.0	ND		UG/L	1
Aroclor 1242	0.14	1.0	ND		UG/L	1
Aroclor 1248	0.12	1.0	ND		UG/L	1
Aroclor 1254	0.16	1.0	ND		UG/L	1
Aroclor 1260	0.15	1.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	17-101	33%
Tetrachloro-m-xylene	45-92	55%

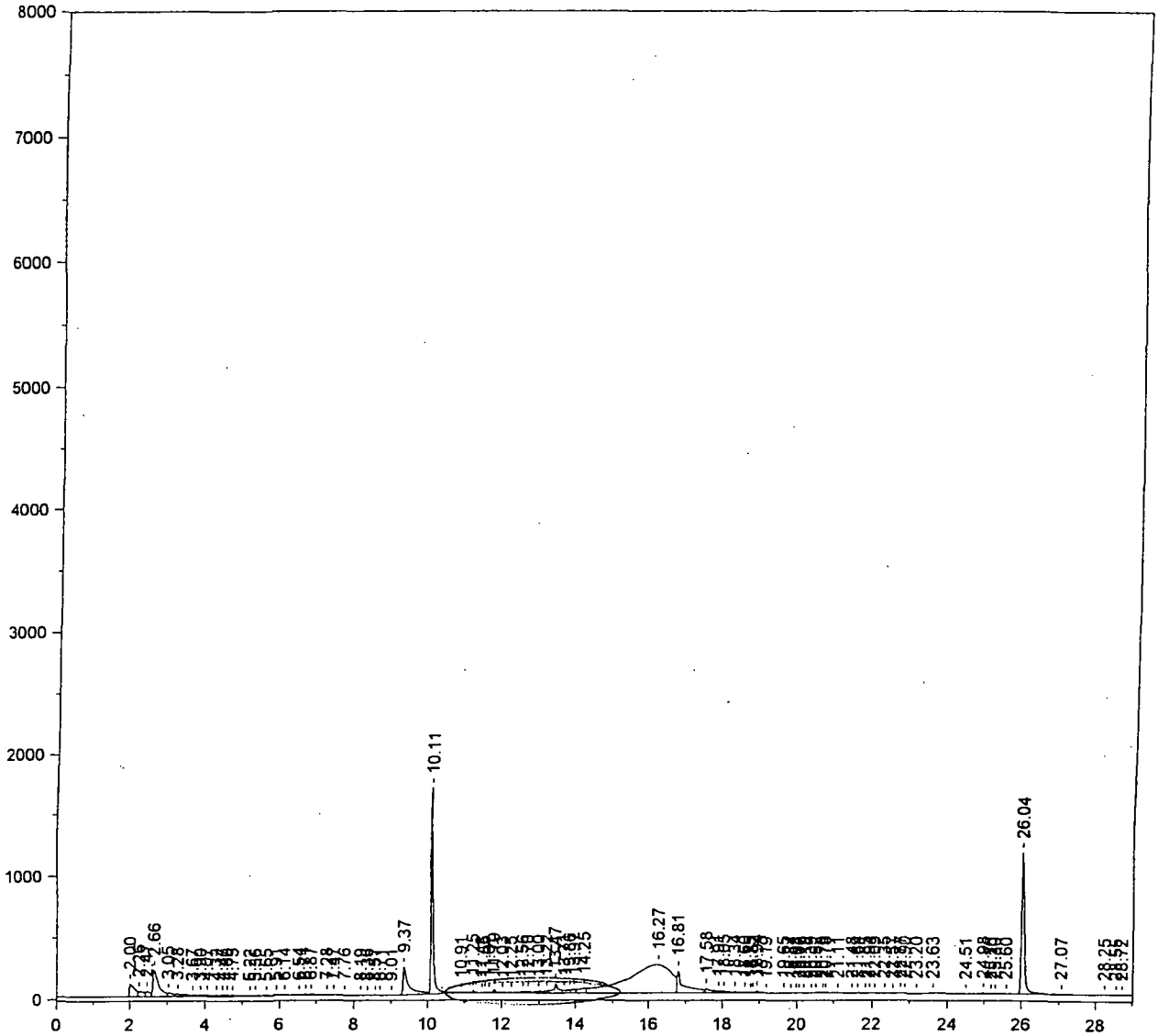
Surrogate recoveries marked with '*' indicates they are outside standard limits.

PCB's-8082

ARDL REPORT NO 301103
Volume 5

50000

— H:\CP2\HP2\M0924.0019.RAW 301103-02 B8079 FSS-004-04-ESW



Primary Column

Before reintegration
excess area under peaks

BT
9/25/02

50026

Sample Name = **301103-02 B8079 FSS-004-04-ESW**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

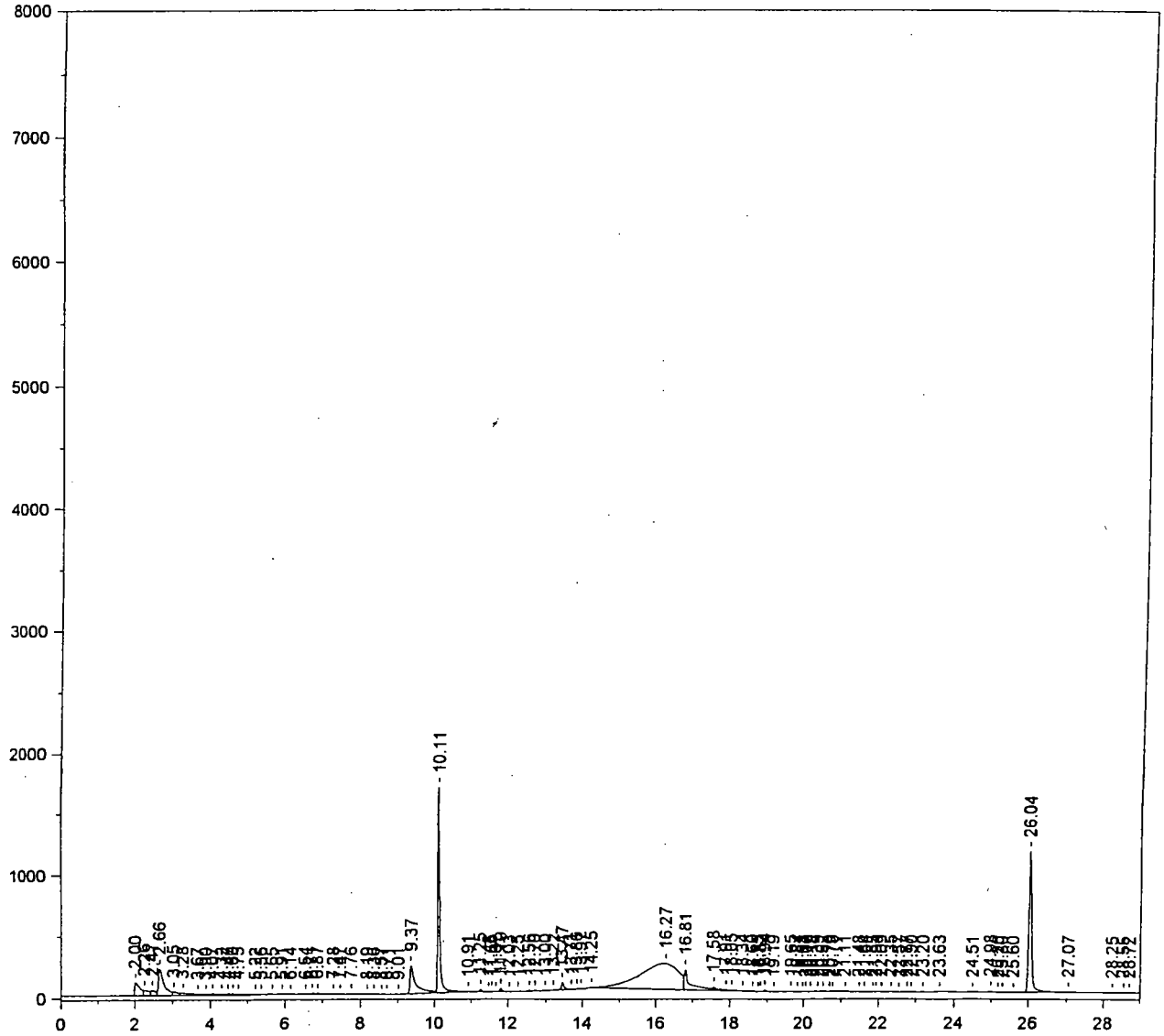
Raw File Name = **H:\CP2\HP2\M0924.0019.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/25/02 1:26:16 AM
Method Version = 620
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1044811	2.209	BV	0.18
2	2.26		0.00	0.000	429360	0.908	VV	0.10
3	2.47		0.00	0.000	344573	0.729	VV	0.10
4	2.66		0.00	0.000	2272071	4.804	VV	0.12
5	3.05		0.00	0.000	254074	0.537	VV	0.10
6	3.28		0.00	0.000	339353	0.718	VV	0.18
7	3.67		0.00	0.000	72919	0.154	VV	0.09
8	3.90		0.00	0.000	107856	0.228	VV	0.15
9	4.07		0.00	0.000	98180	0.208	VV	0.07
10	4.32		0.00	0.000	115384	0.244	VV	0.09
11	4.47		0.00	0.000	81375	0.172	VV	0.11
12	4.60		0.00	0.000	49776	0.105	VV	0.05
13	4.75		0.00	0.000	158664	0.335	VV	0.16
14	5.22		0.00	0.000	78176	0.165	VV	0.11
15	5.36		0.00	0.000	42020	0.089	VV	0.07
16	5.65		0.00	0.000	119809	0.253	VV	0.27
17	5.91		0.00	0.000	27468	0.058	VV	0.07
18	6.14		0.00	0.000	87527	0.185	VV	0.26
19	6.54		0.00	0.000	95478	0.202	VV	0.20
20	6.71		0.00	0.000	71530	0.151	VV	0.07
21	6.87		0.00	0.000	113037	0.239	VV	0.10
22	7.28		0.00	0.000	26884	0.057	VV	0.09
23	7.47		0.00	0.000	36845	0.078	VV	0.08
24	7.76		0.00	0.000	24348	0.051	VV	0.16
25	8.19		0.00	0.000	14971	0.032	VB	0.17
26	8.36		0.00	0.000	867	0.002	BB	0.05
27	8.57		0.00	0.000	6729	0.014	BV	0.07
28	8.71		0.00	0.000	5427	0.011	VB	0.08
29	9.01		0.00	0.000	11403	0.024	BB	0.21
30	9.37		0.00	0.000	2403183	5.081	BV	0.11
31	10.11	CL4XYL	0.86	19.798	6695291	14.157	VV	0.05
32	10.91		0.00	0.000	11471	0.024	VB	0.05
33	11.25		0.00	0.000	69553	0.147	BB	0.05
34	11.48		0.00	0.000	13983	0.030	BV	0.06
35	11.55	AR1016#1	0.14	3.308	25380	0.054	VV	0.05
36	11.67		0.00	0.000	10589	0.022	VV	0.05
37	11.79		0.00	0.000	103606	0.219	VV	0.05
38	12.03		0.00	0.000	7627	0.016	VV	0.06
39	12.25		0.00	0.000	23058	0.049	VV	0.11
40	12.56		0.00	0.000	120135	0.254	VV	0.16
41	12.70	AR1016#2	0.31	7.196	98453	0.208	VV	0.05
42	13.00		0.00	0.000	142917	0.302	VV	0.08
43	13.22		0.00	0.000	184882	0.391	VV	0.11
44	13.47		0.00	0.000	743153	1.571	VV	0.07
45	13.71		0.00	0.000	126978	0.268	VV	0.05
46	13.86	AR1016#3	0.34	7.940	166951	0.353	VV	0.05
47	13.97		0.00	0.000	218080	0.461	VV	0.08
48	14.25	AR1016#4	1.64	37.970	516138	1.091	VV	0.12
49	16.27		0.00	0.000	19217272	40.633	VV	1.20
50	16.81		0.00	0.000	2595240	5.487	VV	0.09
51	17.58		0.00	0.000	373949	0.791	VV	0.06
52	17.91		0.00	0.000	129869	0.275	VV	0.08

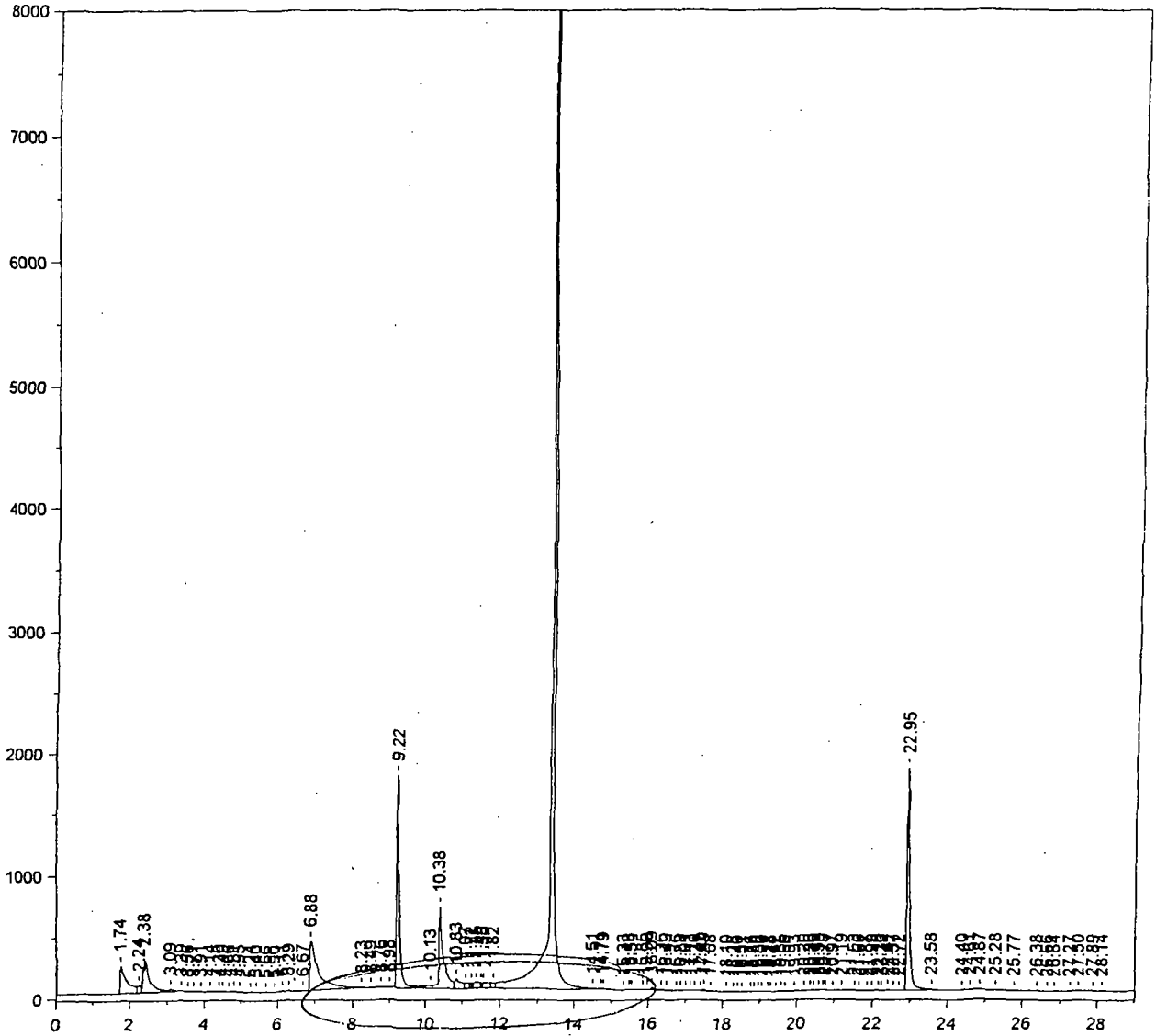
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.05		0.00	0.000	183140	0.387	VV	0.08
54	18.34		0.00	0.000	100723	0.213	VV	0.09
55	18.60		0.00	0.000	35661	0.075	VV	0.12
56	18.75		0.00	0.000	13452	0.028	VV	0.04
57	18.82	AR1260#2	0.05	1.057	19712	0.042	VV	0.06
58	18.94		0.00	0.000	66603	0.141	VV	0.05
59	19.19		0.00	0.000	13305	0.028	VB	0.12
60	19.65		0.00	0.000	18673	0.039	BV	0.06
61	19.84	AR1260#3	0.02	0.351	5020	0.011	VV	0.06
62	19.98		0.00	0.000	14716	0.031	VV	0.08
63	20.07		0.00	0.000	12896	0.027	VV	0.06
64	20.19		0.00	0.000	32998	0.070	VV	0.13
65	20.39		0.00	0.000	7455	0.016	VV	0.06
66	20.52		0.00	0.000	8301	0.018	VB	0.08
67	20.70		0.00	0.000	834	0.002	BB	0.05
68	20.78		0.00	0.000	315	0.001	BB	0.04
69	21.11	AR1260#4	0.03	0.611	20822	0.044	BB	0.08
70	21.48		0.00	0.000	6007	0.013	BV	0.13
71	21.64		0.00	0.000	13939	0.029	VV	0.17
72	21.85		0.00	0.000	3412	0.007	VV	0.06
73	21.94		0.00	0.000	6129	0.013	VV	0.05
74	22.09	AR1260#5	0.04	0.854	19711	0.042	VB	0.19
75	22.35		0.00	0.000	19105	0.040	BV	0.17
76	22.57		0.00	0.000	6868	0.015	VV	0.08
77	22.77		0.00	0.000	6941	0.015	VV	0.08
78	22.90		0.00	0.000	24474	0.052	VB	0.07
79	23.20		0.00	0.000	2634	0.006	BB	0.09
80	23.63		0.00	0.000	22421	0.047	BB	0.24
81	24.51		0.00	0.000	2837	0.006	BB	0.20
82	24.98		0.00	0.000	35246	0.075	BB	0.07
83	25.20		0.00	0.000	1751	0.004	BV	0.09
84	25.30		0.00	0.000	1881	0.004	VV	0.06
85	25.60		0.00	0.000	4496	0.010	VB	0.21
86	26.04	CL10BP	0.90	20.915	6398161	13.528	SBB	0.08
87	27.07		0.00	0.000	2079	0.004	TBB	0.17
88	28.25		0.00	0.000	7345	0.016	BV	0.10
89	28.55		0.00	0.000	14263	0.030	VV	0.13
90	28.72		0.00	0.000	11491	0.024	VB	0.14

Total Area = 4.729449E+07 Total Height = 4525314 Total Amount = 4.32003



After reintegration
ADT
-9/20/02

— H:\CP2\HP2\M0924B.0019.RAW 301103-02 B8079 FSS-004-04-ESW



Before integration
excess and under peaks
KDT
9/25/02

Sample Name = **301103-02 B8079 FSS-004-04-ESW**

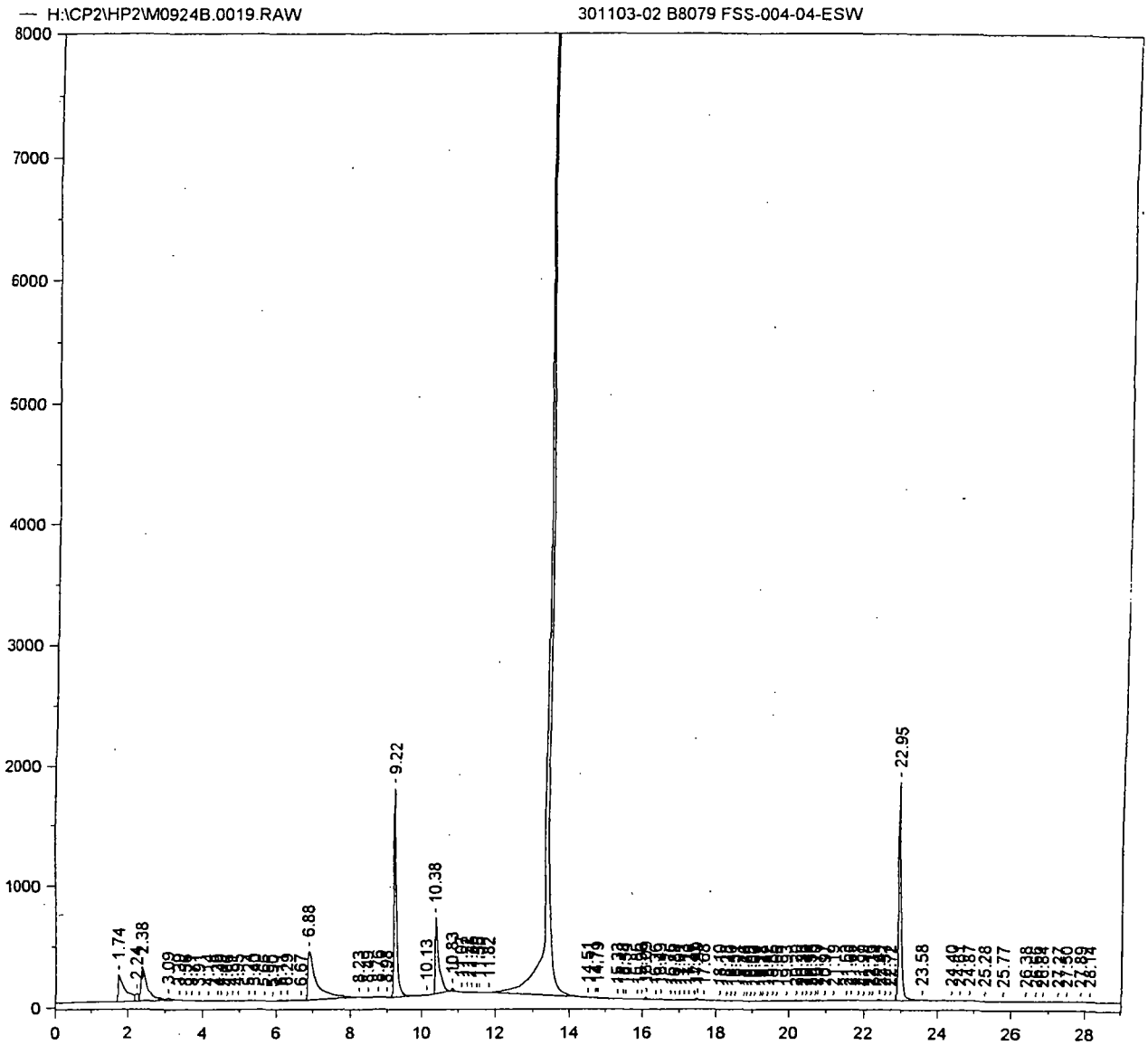
Instrument = HP 2
Acquisition Port = 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Raw File Name = **H:\CP2\HP2\M0924B.0019.RAW**
Date Taken (end) = 9/25/02 1:26:16 AM
Method File Name = H:\CP2\HP2\Hp2pestB.met
Method Version = 569
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	2833178	2.539	BV	0.16
2	2.24		0.00	0.000	365685	0.328	VV	0.06
3	2.38		0.00	0.000	3203198	2.870	VV	0.14
4	3.09		0.00	0.000	258505	0.232	VV	0.20
5	3.39		0.00	0.000	7021	0.006	VB	0.06
6	3.56		0.00	0.000	1022	0.001	BB	0.06
7	3.71		0.00	0.000	15941	0.014	BV	0.09
8	3.91		0.00	0.000	4986	0.004	VB	0.12
9	4.14		0.00	0.000	26055	0.023	BV	0.10
10	4.39		0.00	0.000	10724	0.010	VV	0.06
11	4.49		0.00	0.000	8515	0.008	VV	0.12
12	4.66		0.00	0.000	893	0.001	VB	0.06
13	4.81		0.00	0.000	13373	0.012	BV	0.11
14	4.95		0.00	0.000	3595	0.003	VB	0.06
15	5.24		0.00	0.000	22335	0.020	BV	0.10
16	5.40		0.00	0.000	10331	0.009	VB	0.10
17	5.66		0.00	0.000	8345	0.007	BV	0.15
18	5.90		0.00	0.000	6364	0.006	VB	0.15
19	6.11		0.00	0.000	56172	0.050	BV	0.09
20	6.29		0.00	0.000	47564	0.043	VV	0.08
21	6.67		0.00	0.000	7694	0.007	VB	0.18
22	6.88		0.00	0.000	6564600	5.882	BV	0.18
23	8.23		0.00	0.000	2948	0.003	VB	0.04
24	8.49		0.00	0.000	17623	0.016	BV	0.14
25	8.76		0.00	0.000	56333	0.050	VV	0.14
26	8.98		0.00	0.000	37143	0.033	VV	0.08
27	9.22	CL4XYL	0.84	0.232	8920303	7.993	VV	0.07
28	10.13		0.00	0.000	411892	0.369	VV	0.17
29	10.38	AR1016#1	23.09	6.387	5446701	4.880	VV	0.09
30	10.83		0.00	0.000	970958	0.870	VV	0.07
31	11.07		0.00	0.000	366135	0.328	VV	0.08
32	11.22		0.00	0.000	142305	0.128	VV	0.04
33	11.35	AR1016#2	1.18	0.326	511288	0.458	VV	0.12
34	11.49		0.00	0.000	122461	0.110	VV	0.03
35	11.55		0.00	0.000	576718	0.517	VV	0.17
36	11.82		0.00	0.000	295708	0.265	VV	0.07
37	13.41	AR1016#5	335.20	92.732	69808600	62.550	VV	0.05
38	14.51		0.00	0.000	64429	0.058	VV	0.11
39	14.71		0.00	0.000	21165	0.019	VV	0.05
40	14.79		0.00	0.000	11523	0.010	VB	0.06
41	15.33		0.00	0.000	12670	0.011	BV	0.08
42	15.48		0.00	0.000	9190	0.008	VV	0.04
43	15.54		0.00	0.000	7774	0.007	VB	0.06
44	15.85		0.00	0.000	14789	0.013	BV	0.07
45	15.96		0.00	0.000	12892	0.012	VV	0.06
46	16.09		0.00	0.000	85562	0.077	VV	0.06
47	16.36		0.00	0.000	12947	0.012	VV	0.05
48	16.49	AR1260#1	0.11	0.030	29576	0.027	VV	0.06
49	16.76	AR1260#2	0.02	0.005	8448	0.008	VB	0.07
50	16.88		0.00	0.000	1144	0.001	BB	0.06
51	17.01		0.00	0.000	1082	0.001	BB	0.04
52	17.13		0.00	0.000	2484	0.002	BB	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	17.26		0.00	0.000	4164	0.004	BB	0.09
54	17.41		0.00	0.000	6818	0.006	BV	0.05
55	17.49		0.00	0.000	64743	0.058	VV	0.06
56	17.68		0.00	0.000	4906	0.004	VB	0.10
57	18.10		0.00	0.000	26721	0.024	BV	0.09
58	18.28	AR1260#3	0.02	0.005	10013	0.009	VV	0.07
59	18.40		0.00	0.000	2405	0.002	VB	0.06
60	18.51		0.00	0.000	497	0.000	BV	0.04
61	18.76		0.00	0.000	8737	0.008	VV	0.08
62	18.84		0.00	0.000	5849	0.005	VV	0.07
63	18.95		0.00	0.000	3321	0.003	VV	0.06
64	19.06		0.00	0.000	2185	0.002	VB	0.06
65	19.22		0.00	0.000	2267	0.002	BV	0.05
66	19.28		0.00	0.000	2812	0.003	VV	0.06
67	19.42		0.00	0.000	5812	0.005	VV	0.10
68	19.55	AR1260#4	0.01	0.003	15338	0.014	VV	0.05
69	19.66		0.00	0.000	6534	0.006	VV	0.05
70	19.93		0.00	0.000	11519	0.010	VV	0.08
71	20.20		0.00	0.000	34779	0.031	VV	0.15
72	20.36		0.00	0.000	17925	0.016	VV	0.08
73	20.46		0.00	0.000	10368	0.009	VV	0.05
74	20.58		0.00	0.000	25178	0.023	VV	0.09
75	20.70		0.00	0.000	20274	0.018	VV	0.05
76	20.77		0.00	0.000	45205	0.041	VV	0.06
77	20.97		0.00	0.000	46748	0.042	VV	0.10
78	21.19		0.00	0.000	46760	0.042	VV	0.23
79	21.53		0.00	0.000	24611	0.022	VV	0.13
80	21.65	AR1260#5	0.09	0.024	24769	0.022	VV	0.06
81	21.87		0.00	0.000	22320	0.020	VV	0.11
82	21.99		0.00	0.000	18256	0.016	VV	0.11
83	22.16		0.00	0.000	14261	0.013	VV	0.09
84	22.23		0.00	0.000	10782	0.010	VV	0.06
85	22.41		0.00	0.000	70426	0.063	VV	0.07
86	22.57		0.00	0.000	14983	0.013	VV	0.06
87	22.72		0.00	0.000	14380	0.013	VV	0.08
88	22.95	CL10BP	0.93	0.256	9192680	8.237	VV	0.07
89	23.58		0.00	0.000	180477	0.162	VV	0.22
90	24.40		0.00	0.000	26192	0.023	VV	0.14
91	24.61		0.00	0.000	13934	0.012	VV	0.13
92	24.87		0.00	0.000	2296	0.002	VB	0.09
93	25.28		0.00	0.000	8130	0.007	BB	0.14
94	25.77		0.00	0.000	12574	0.011	BB	0.24
95	26.38		0.00	0.000	1089	0.001	BB	0.12
96	26.66		0.00	0.000	1704	0.002	BB	0.08
97	26.84		0.00	0.000	8436	0.008	BB	0.25
98	27.27		0.00	0.000	1918	0.002	BB	0.15
99	27.50		0.00	0.000	1439	0.001	BB	0.22
100	27.89		0.00	0.000	3859	0.003	BV	0.15
101	28.14		0.00	0.000	44404	0.040	VB	0.15

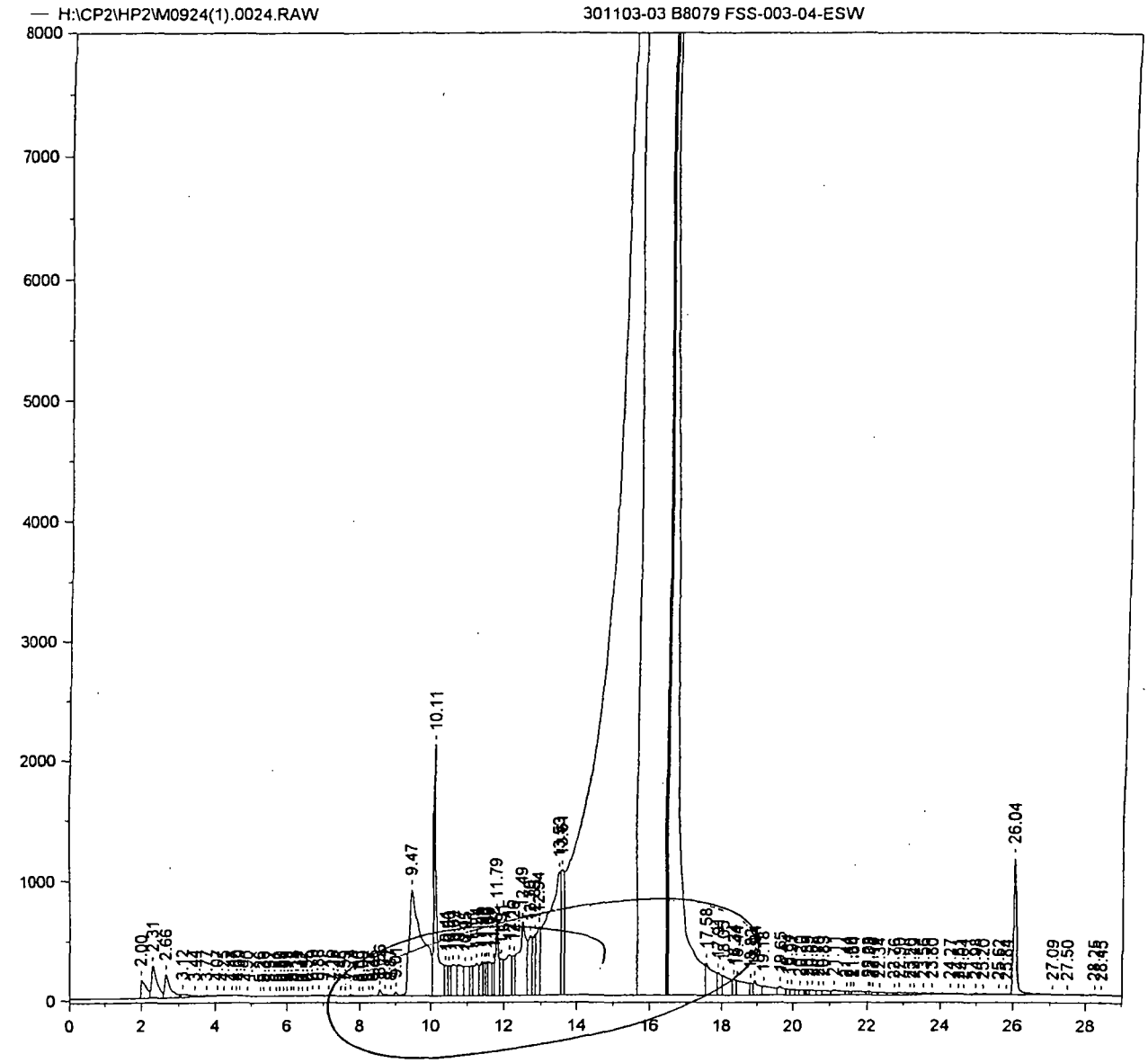
Total Area = 1.116047E+08 Total Height = 2.034488E+07 Total Amount = 361.4686



After reintegration
AJT
9/25/02

AJT
9/25/02

50036



Primary Column

Before integration
excess area under peaks
BT
9/25/02

50042

Sample Name = **301103-03 B8079 FSS-003-04-ESW**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

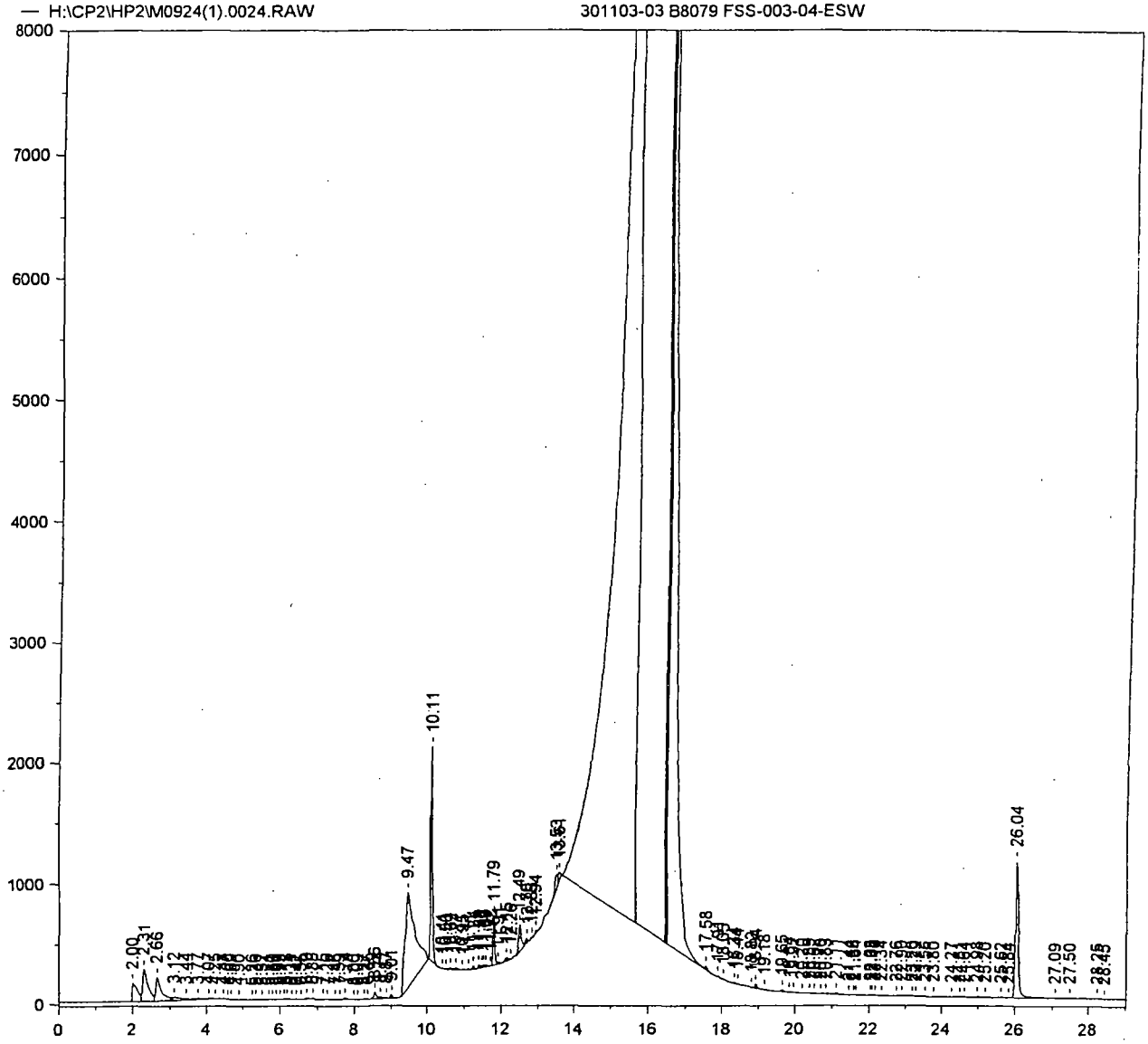
Raw File Name = **H:\CP2\HP2\M0924(1).0024.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/25/02 5:18:32 AM
Method Version = 620
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1502307	0.099	BV	0.17
2	2.31		0.00	0.000	2873059	0.190	VV	0.13
3	2.66		0.00	0.000	2151698	0.142	VV	0.13
4	3.12		0.00	0.000	355132	0.023	VV	0.18
5	3.44		0.00	0.000	133139	0.009	VV	0.14
6	3.77		0.00	0.000	117884	0.008	VB	0.26
7	4.07		0.00	0.000	27278	0.002	BB	0.09
8	4.25		0.00	0.000	1544	0.000	BB	0.06
9	4.47		0.00	0.000	20592	0.001	BV	0.12
10	4.60		0.00	0.000	10071	0.001	VV	0.05
11	4.69		0.00	0.000	23370	0.002	VB	0.14
12	4.90		0.00	0.000	5317	0.000	BB	0.14
13	5.26		0.00	0.000	27400	0.002	BV	0.16
14	5.36		0.00	0.000	10874	0.001	VB	0.07
15	5.52		0.00	0.000	1921	0.000	BV	0.05
16	5.71		0.00	0.000	4708	0.000	VV	0.11
17	5.80		0.00	0.000	4011	0.000	VV	0.05
18	5.91		0.00	0.000	5948	0.000	VV	0.06
19	5.99		0.00	0.000	11282	0.001	VV	0.08
20	6.12		0.00	0.000	27692	0.002	VV	0.07
21	6.18		0.00	0.000	30065	0.002	VV	0.06
22	6.31		0.00	0.000	23052	0.002	VV	0.05
23	6.42		0.00	0.000	28906	0.002	VV	0.09
24	6.55		0.00	0.000	16714	0.001	VV	0.07
25	6.70		0.00	0.000	77408	0.005	VV	0.09
26	6.86		0.00	0.000	97783	0.006	VV	0.08
27	7.15		0.00	0.000	57132	0.004	VV	0.07
28	7.26		0.00	0.000	36142	0.002	VV	0.08
29	7.46		0.00	0.000	25915	0.002	VV	0.07
30	7.59		0.00	0.000	37675	0.002	VV	0.06
31	7.74		0.00	0.000	97254	0.006	VB	0.09
32	8.00		0.00	0.000	667	0.000	BV	0.05
33	8.09		0.00	0.000	10659	0.001	VV	0.08
34	8.27		0.00	0.000	20369	0.001	VV	0.07
35	8.36		0.00	0.000	21147	0.001	VV	0.08
36	8.56		0.00	0.000	289404	0.019	VV	0.07
37	8.71		0.00	0.000	109568	0.007	VV	0.08
38	8.87		0.00	0.000	40966	0.003	VV	0.05
39	9.01		0.00	0.000	186077	0.012	VV	0.07
40	9.47		0.00	0.000	23174118	1.532	VV	0.43
41	10.11	CL4XYL	1.53	3.788	11949879	0.790	VV	0.05
42	10.41		0.00	0.000	1471072	0.097	VV	0.05
43	10.50		0.00	0.000	1154367	0.076	VV	0.06
44	10.62		0.00	0.000	2538326	0.168	VV	0.08
45	10.77		0.00	0.000	2762445	0.183	VV	0.08
46	10.95		0.00	0.000	2254434	0.149	VV	0.10
47	11.11		0.00	0.000	1386218	0.092	VV	0.07
48	11.24		0.00	0.000	2408412	0.159	VV	0.05
49	11.39		0.00	0.000	1905927	0.126	VV	0.06
50	11.46		0.00	0.000	1103700	0.073	VV	0.04
51	11.53		0.00	0.000	1062661	0.070	VV	0.04
52	11.59	AR1016#1	10.90	27.043	1935316	0.128	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	11.72		0.00	0.000	931746	0.062	VV	0.03
54	11.79		0.00	0.000	3952818	0.261	VV	0.05
55	11.91		0.00	0.000	1814757	0.120	VV	0.07
56	12.15		0.00	0.000	4062989	0.269	VV	0.11
57	12.26		0.00	0.000	1721369	0.114	VV	0.05
58	12.49		0.00	0.000	8819278	0.583	VV	0.11
59	12.70	AR1016#2	11.12	27.600	3522285	0.233	VV	0.08
60	12.83		0.00	0.000	2755221	0.182	VV	0.04
61	12.94		0.00	0.000	4434985	0.293	VV	0.07
62	13.53		0.00	0.000	26204332	1.733	VV	0.19
63	13.61		0.00	0.000	6828504	0.452	VV	0.06
64	15.65		0.00	0.000	478506304	31.639	VV	0.28
65	16.38		0.00	0.000	695808896	46.008	VV	0.70
66	16.49		0.00	0.000	46581564	3.080	VV	0.02
67	16.54		0.00	0.000	133084728	8.800	VV	0.10
68	17.58		0.00	0.000	4326556	0.286	VV	0.11
69	17.91		0.00	0.000	1595584	0.106	VV	0.07
70	18.05	AR1260#1	12.26	30.431	2440440	0.161	VV	0.12
71	18.34		0.00	0.000	821198	0.054	VV	0.07
72	18.44		0.00	0.000	2450029	0.162	VV	0.19
73	18.82	AR1260#2	1.37	3.398	591275	0.039	VV	0.07
74	18.94		0.00	0.000	1286395	0.085	VV	0.06
75	19.18		0.00	0.000	1640632	0.108	VV	0.16
76	19.65		0.00	0.000	841377	0.056	VV	0.08
77	19.84	AR1260#3	1.05	2.608	347921	0.023	VV	0.06
78	19.97		0.00	0.000	337368	0.022	VV	0.07
79	20.20		0.00	0.000	354633	0.023	VV	0.10
80	20.39		0.00	0.000	196613	0.013	VV	0.06
81	20.52		0.00	0.000	449855	0.030	VV	0.09
82	20.70		0.00	0.000	331445	0.022	VV	0.06
83	20.83		0.00	0.000	511565	0.034	VV	0.12
84	21.11	AR1260#4	0.91	2.254	716114	0.047	VV	0.09
85	21.44		0.00	0.000	201706	0.013	VV	0.08
86	21.56		0.00	0.000	96197	0.006	VV	0.03
87	21.64		0.00	0.000	587230	0.039	VV	0.11
88	22.03		0.00	0.000	126619	0.008	VV	0.05
89	22.08	AR1260#5	0.23	0.571	123056	0.008	VV	0.05
90	22.16		0.00	0.000	210811	0.014	VV	0.09
91	22.34		0.00	0.000	302826	0.020	VV	0.15
92	22.76		0.00	0.000	128199	0.008	VV	0.09
93	22.90		0.00	0.000	314150	0.021	VV	0.08
94	23.20		0.00	0.000	112947	0.007	VV	0.06
95	23.29		0.00	0.000	159058	0.011	VV	0.08
96	23.56		0.00	0.000	196386	0.013	VV	0.15
97	23.80		0.00	0.000	324039	0.021	VV	0.12
98	24.27		0.00	0.000	103024	0.007	VV	0.11
99	24.51		0.00	0.000	79281	0.005	VV	0.10
100	24.64		0.00	0.000	128184	0.008	VV	0.10
101	24.98		0.00	0.000	136739	0.009	VV	0.07
102	25.20		0.00	0.000	178751	0.012	VV	0.09
103	25.62		0.00	0.000	124647	0.008	VV	0.09
104	25.84		0.00	0.000	37009	0.002	VV	0.06
105	26.04	CL10BP	0.93	2.307	6583493	0.435	VV	0.08
106	27.09		0.00	0.000	101472	0.007	VV	0.17
107	27.50		0.00	0.000	83649	0.006	VV	0.35
108	28.25		0.00	0.000	24536	0.002	VV	0.16
109	28.45		0.00	0.000	9310	0.001	VB	0.20

Total Area = 1.512371E+09 Total Height = 7.435259E+07 Total Amount = 40.29617



after reintegration
RDT
9/25/02

BC
9/30/02

50045

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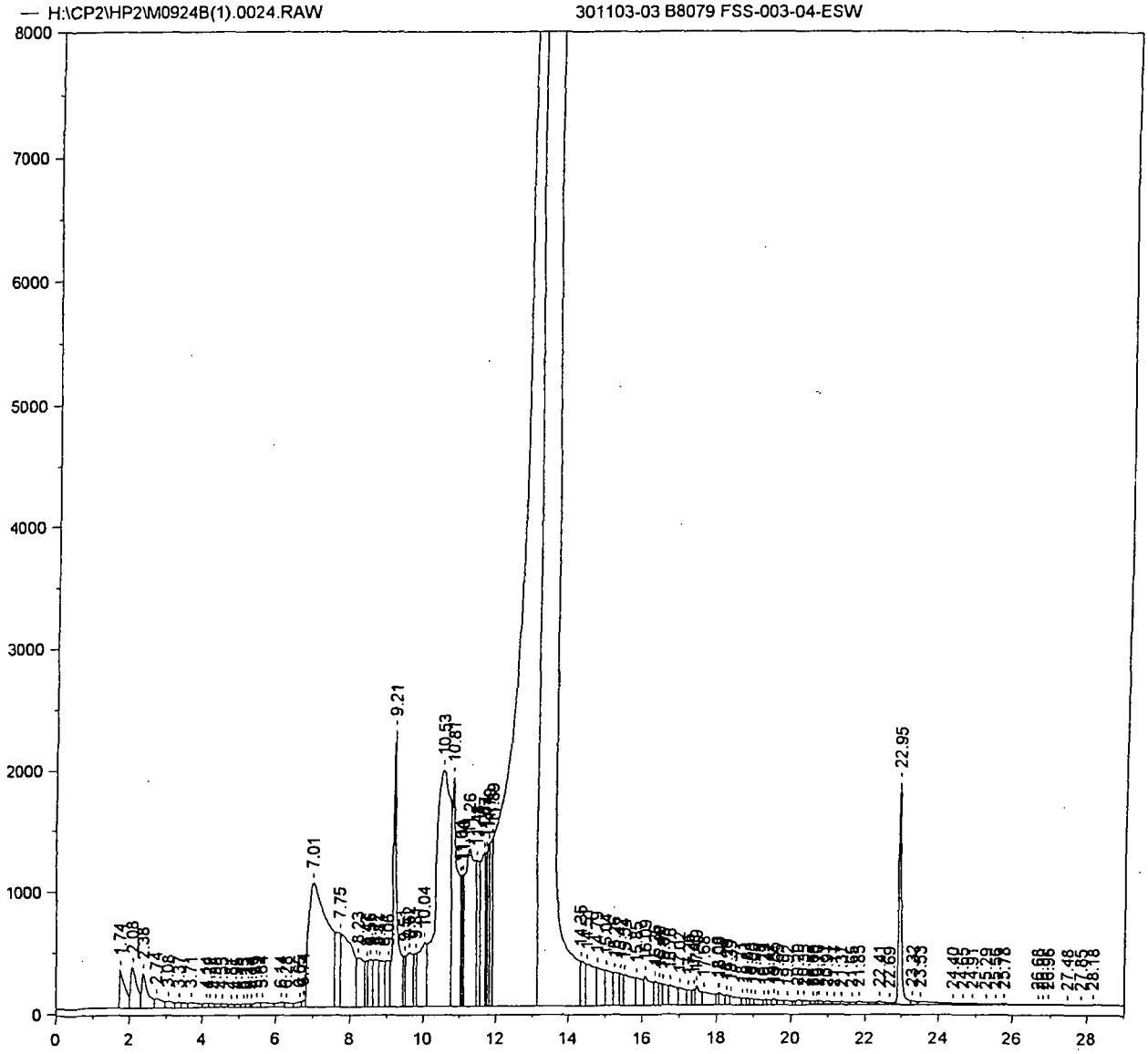


Before integration
excess area under peak
BJ
9/25/02

50050

Sample Name = **301103-03 B8079 FSS-003-04-ESW**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0924B(1).0024.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

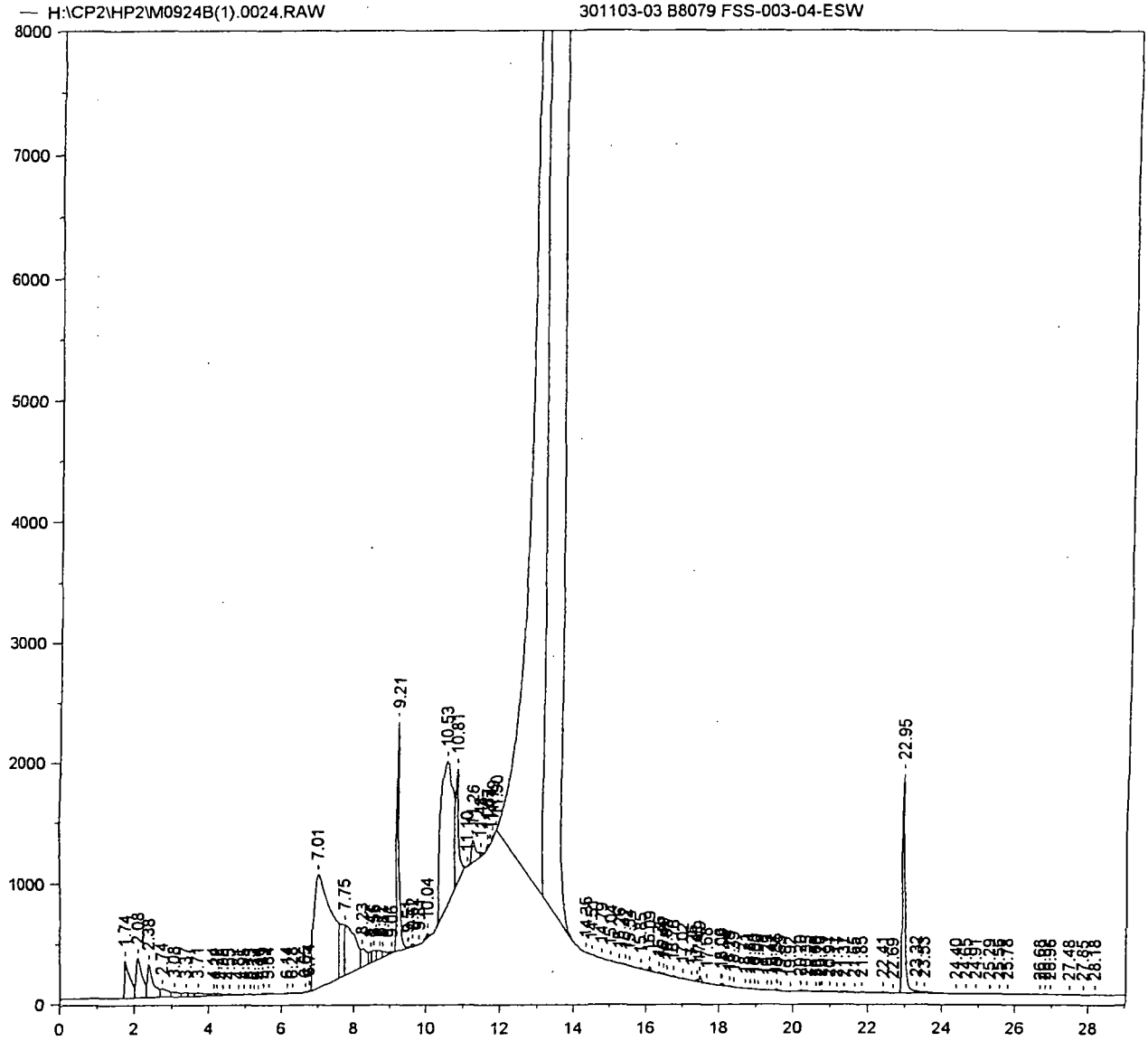
Date Taken (end) = 9/25/02 5:18:32 AM
Method Version = 569
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	3205135	0.280	BV	0.18
2	2.08		0.00	0.000	3945283	0.345	VV	0.14
3	2.38		0.00	0.000	3272719	0.286	VV	0.12
4	2.74		0.00	0.000	1155872	0.101	VV	0.21
5	3.08		0.00	0.000	798414	0.070	VV	0.15
6	3.37		0.00	0.000	478387	0.042	VV	0.09
7	3.71		0.00	0.000	922397	0.081	VV	0.20
8	4.14		0.00	0.000	386958	0.034	VV	0.12
9	4.22		0.00	0.000	333777	0.029	VV	0.10
10	4.38		0.00	0.000	335568	0.029	VV	0.08
11	4.55		0.00	0.000	336415	0.029	VV	0.12
12	4.81		0.00	0.000	278935	0.024	VV	0.08
13	4.95		0.00	0.000	274364	0.024	VV	0.09
14	5.13		0.00	0.000	217500	0.019	VV	0.09
15	5.23		0.00	0.000	235101	0.021	VV	0.06
16	5.34		0.00	0.000	96191	0.008	VV	0.04
17	5.49		0.00	0.000	455459	0.040	VV	0.13
18	5.64		0.00	0.000	768113	0.067	VV	0.18
19	6.14		0.00	0.000	555115	0.049	VV	0.15
20	6.28		0.00	0.000	530663	0.046	VV	0.11
21	6.65		0.00	0.000	484953	0.042	VV	0.12
22	6.74		0.00	0.000	324235	0.028	VV	0.07
23	7.01		0.00	0.000	35943352	3.142	VV	0.74
24	7.75		0.00	0.000	14007904	1.224	VV	0.30
25	8.23		0.00	0.000	4963129	0.434	VV	0.14
26	8.47		0.00	0.000	1859863	0.163	VV	0.05
27	8.56		0.00	0.000	3046013	0.266	VV	0.08
28	8.72		0.00	0.000	3953396	0.346	VV	0.10
29	8.81		0.00	0.000	3414050	0.298	VV	0.07
30	9.06		0.00	0.000	3423090	0.299	VV	0.08
31	9.21	CL4XYL	1.60	2.326	17051800	1.491	VV	0.06
32	9.51		0.00	0.000	1568389	0.137	VV	0.04
33	9.62		0.00	0.000	5577192	0.488	VV	0.16
34	9.81		0.00	0.000	1812624	0.158	VV	0.03
35	10.04		0.00	0.000	8119081	0.710	VV	0.14
36	10.53		0.00	0.000	54043552	4.724	VV	0.42
37	10.81		0.00	0.000	19840814	1.734	VV	0.08
38	11.04		0.00	0.000	2345879	0.205	VV	0.02
39	11.10		0.00	0.000	3863063	0.338	VV	0.04
40	11.26	AR1016#2	55.01	79.869	23865592	2.086	VV	0.24
41	11.48		0.00	0.000	7597240	0.664	VV	0.09
42	11.67		0.00	0.000	10006543	0.875	VV	0.07
43	11.74		0.00	0.000	3775579	0.330	VV	0.03
44	11.79		0.00	0.000	4953238	0.433	VV	0.04
45	11.89		0.00	0.000	7021567	0.614	VV	0.05
46	13.09		0.00	0.000	358622944	31.348	VV	0.25
47	13.58		0.00	0.000	456531680	39.906	VV	0.50
48	14.35		0.00	0.000	3383651	0.296	VV	0.08
49	14.51		0.00	0.000	5473907	0.478	VV	0.13
50	14.79		0.00	0.000	4178087	0.365	VV	0.09
51	15.04		0.00	0.000	3807738	0.333	VV	0.10
52	15.26		0.00	0.000	2723905	0.238	VV	0.10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	15.42		0.00	0.000	1804634	0.158	VV	0.06
54	15.54		0.00	0.000	4439860	0.388	VV	0.10
55	15.85		0.00	0.000	2891715	0.253	VV	0.08
56	16.09		0.00	0.000	3340102	0.292	VV	0.07
57	16.36		0.00	0.000	1588714	0.139	VV	0.06
58	16.49	AR1260#1	4.53	6.581	1218578	0.107	VV	0.07
59	16.58		0.00	0.000	1537967	0.134	VV	0.07
60	16.76	AR1260#2	4.59	6.657	2286160	0.200	VV	0.09
61	17.02		0.00	0.000	2002204	0.175	VV	0.13
62	17.26		0.00	0.000	967821	0.085	VV	0.08
63	17.41		0.00	0.000	614417	0.054	VV	0.05
64	17.49		0.00	0.000	1387587	0.121	VV	0.06
65	17.68		0.00	0.000	2054514	0.180	VV	0.15
66	18.06		0.00	0.000	420413	0.037	VV	0.04
67	18.09		0.00	0.000	820639	0.072	VV	0.06
68	18.29	AR1260#3	1.14	1.660	589429	0.052	VV	0.08
69	18.39		0.00	0.000	1117369	0.098	VV	0.10
70	18.71		0.00	0.000	435882	0.038	VV	0.08
71	18.84		0.00	0.000	339978	0.030	VV	0.07
72	18.95		0.00	0.000	338593	0.030	VV	0.07
73	19.06		0.00	0.000	594457	0.052	VV	0.07
74	19.29		0.00	0.000	247004	0.022	VV	0.07
75	19.41		0.00	0.000	306169	0.027	VV	0.07
76	19.55	AR1260#4	0.27	0.385	342513	0.030	VV	0.05
77	19.65		0.00	0.000	387402	0.034	VV	0.06
78	19.92		0.00	0.000	418131	0.037	VV	0.14
79	20.20		0.00	0.000	380979	0.033	VV	0.09
80	20.35		0.00	0.000	388920	0.034	VV	0.08
81	20.60		0.00	0.000	231910	0.020	VV	0.06
82	20.70		0.00	0.000	138377	0.012	VV	0.05
83	20.77		0.00	0.000	276857	0.024	VV	0.07
84	20.97		0.00	0.000	373655	0.033	VV	0.11
85	21.17		0.00	0.000	330355	0.029	VV	0.10
86	21.37		0.00	0.000	327183	0.029	VV	0.11
87	21.65	AR1260#5	0.79	1.146	229426	0.020	VV	0.06
88	21.85		0.00	0.000	465322	0.041	VV	0.08
89	22.41		0.00	0.000	383940	0.034	VV	0.07
90	22.69		0.00	0.000	129730	0.011	VV	0.10
91	22.95	CL10BP	0.95	1.376	9407448	0.822	VV	0.07
92	23.32		0.00	0.000	292571	0.026	VV	0.09
93	23.53		0.00	0.000	708871	0.062	VV	0.35
94	24.40		0.00	0.000	175349	0.015	VV	0.14
95	24.65		0.00	0.000	158465	0.014	VV	0.15
96	24.91		0.00	0.000	221637	0.019	VV	0.26
97	25.29		0.00	0.000	137646	0.012	VV	0.15
98	25.56		0.00	0.000	57478	0.005	VV	0.09
99	25.78		0.00	0.000	242027	0.021	VV	0.12
100	26.68		0.00	0.000	46227	0.004	VV	0.10
101	26.82		0.00	0.000	39868	0.003	VV	0.07
102	26.96		0.00	0.000	61515	0.005	VV	0.15
103	27.48		0.00	0.000	34767	0.003	VV	0.15
104	27.85		0.00	0.000	17294	0.002	VV	0.14
105	28.18		0.00	0.000	92641	0.008	VB	0.29

Total Area = 1.144009E+09 Total Height = 5.955608E+07 Total Amount = 68.88029

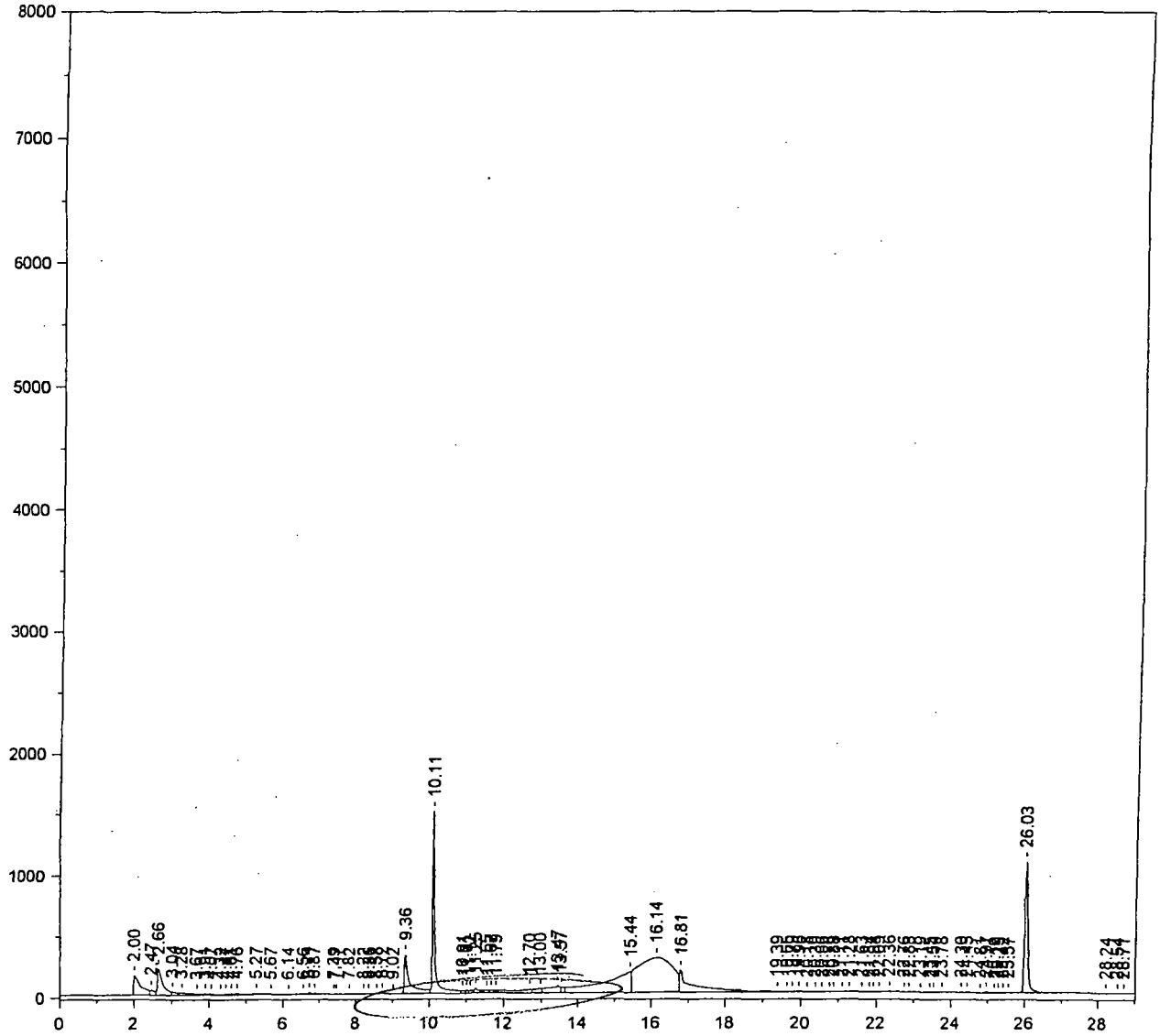
50052



After reintegration
KDT
9/25/2

BC 9/30/02

— H:\CP2\HP2\M0924.0013.RAW 301103-04 B8079 FSS-002-04-ESW



Primary Column

Before reintegration
peaks added under peak
BT 9/25/02

59059

Sample Name = **301103-04 B8079 FSS-002-04-ESW**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

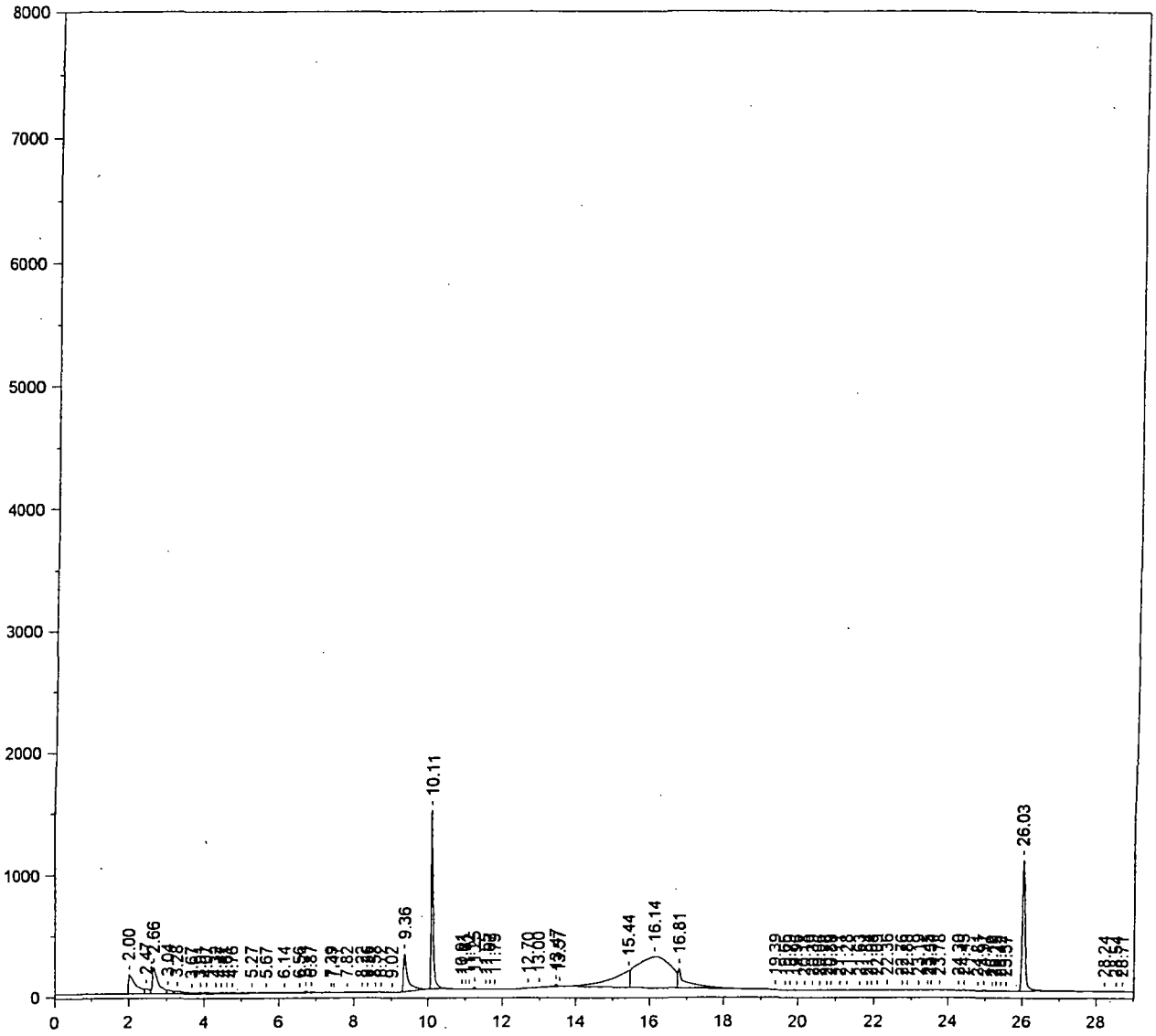
Raw File Name = **H:\CP2\HP2\M0924.0013.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/24/02 9:34:04 PM
Method Version = 620
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	2110016	3.448	BV	0.18
2	2.47		0.00	0.000	351093	0.574	VV	0.11
3	2.66		0.00	0.000	2264341	3.700	VV	0.12
4	3.04		0.00	0.000	240359	0.393	VV	0.09
5	3.28		0.00	0.000	369441	0.604	VV	0.22
6	3.67		0.00	0.000	77218	0.126	VV	0.09
7	3.91		0.00	0.000	111589	0.182	VV	0.17
8	4.07		0.00	0.000	100205	0.164	VV	0.08
9	4.32		0.00	0.000	110465	0.180	VV	0.10
10	4.47		0.00	0.000	71486	0.117	VV	0.06
11	4.61		0.00	0.000	45812	0.075	VV	0.05
12	4.76		0.00	0.000	166902	0.273	VV	0.19
13	5.27		0.00	0.000	121666	0.199	VV	0.17
14	5.67		0.00	0.000	126651	0.207	VV	0.24
15	6.14		0.00	0.000	124204	0.203	VV	0.21
16	6.56		0.00	0.000	63729	0.104	VV	0.17
17	6.71		0.00	0.000	80309	0.131	VV	0.06
18	6.87		0.00	0.000	110068	0.180	VV	0.20
19	7.39		0.00	0.000	36208	0.059	VV	0.08
20	7.47		0.00	0.000	39012	0.064	VV	0.11
21	7.82		0.00	0.000	28475	0.047	VV	0.18
22	8.22		0.00	0.000	15723	0.026	VV	0.16
23	8.36		0.00	0.000	6067	0.010	VB	0.08
24	8.58		0.00	0.000	6340	0.010	BV	0.11
25	8.72		0.00	0.000	23394	0.038	VB	0.08
26	9.02		0.00	0.000	11619	0.019	BV	0.12
27	9.36		0.00	0.000	3248799	5.308	VV	0.09
28	10.11	CL4XYL	0.91	1.718	7160825	11.700	VV	0.05
29	10.91		0.00	0.000	156192	0.255	VV	0.05
30	11.01		0.00	0.000	119861	0.196	VV	0.06
31	11.12		0.00	0.000	168013	0.275	VV	0.05
32	11.25		0.00	0.000	298498	0.488	VV	0.05
33	11.55	AR1016#1	1.30	2.440	230659	0.377	VV	0.06
34	11.67		0.00	0.000	171351	0.280	VV	0.05
35	11.79		0.00	0.000	109025	0.178	VV	0.06
36	12.70	AR1016#2	4.27	8.013	1350958	2.207	VV	0.19
37	13.00		0.00	0.000	525323	0.858	VV	0.12
38	13.47		0.00	0.000	1365045	2.230	VV	0.08
39	13.57		0.00	0.000	316930	0.518	VV	0.06
40	15.44	AR1016#5	45.82	86.085	9093812	14.858	VV	0.47
41	16.14		0.00	0.000	18381824	30.034	VV	0.90
42	16.81		0.00	0.000	4797490	7.839	VV	0.10
43	19.39		0.00	0.000	47378	0.077	VV	0.08
44	19.65		0.00	0.000	66517	0.109	VV	0.10
45	19.79		0.00	0.000	46290	0.076	VV	0.11
46	19.96		0.00	0.000	83511	0.136	VV	0.17
47	20.18		0.00	0.000	21596	0.035	VV	0.05
48	20.39		0.00	0.000	64147	0.105	VV	0.07
49	20.56		0.00	0.000	43405	0.071	VV	0.14
50	20.76		0.00	0.000	54578	0.089	VV	0.11
51	20.88		0.00	0.000	61940	0.101	VV	0.16
52	21.11	AR1260#4	0.05	0.098	40974	0.067	VV	0.11

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	21.28		0.00	0.000	46075	0.075	VV	0.18
54	21.63		0.00	0.000	71902	0.117	VV	0.34
55	21.84		0.00	0.000	8072	0.013	VV	0.04
56	21.94		0.00	0.000	20937	0.034	VV	0.14
57	22.09	AR1260#5	0.03	0.052	14897	0.024	VB	0.13
58	22.36		0.00	0.000	57443	0.094	BV	0.14
59	22.76		0.00	0.000	6058	0.010	VV	0.14
60	22.88		0.00	0.000	12871	0.021	VB	0.06
61	23.19		0.00	0.000	3722	0.006	BV	0.08
62	23.45		0.00	0.000	1757	0.003	VV	0.07
63	23.54		0.00	0.000	6766	0.011	VB	0.13
64	23.78		0.00	0.000	2484	0.004	BB	0.14
65	24.30		0.00	0.000	1070	0.002	BV	0.09
66	24.45		0.00	0.000	1655	0.003	VB	0.10
67	24.81		0.00	0.000	702	0.001	BV	0.06
68	24.97		0.00	0.000	32806	0.054	VB	0.08
69	25.19		0.00	0.000	1749	0.003	BV	0.08
70	25.29		0.00	0.000	2620	0.004	VV	0.05
71	25.42		0.00	0.000	4123	0.007	VV	0.11
72	25.57		0.00	0.000	3721	0.006	VB	0.16
73	26.03	CL10BP	0.85	1.594	6007200	9.815	BB	0.08
74	28.24		0.00	0.000	14151	0.023	BV	0.12
75	28.54		0.00	0.000	23272	0.038	VV	0.15
76	28.71		0.00	0.000	20471	0.033	VB	0.13

Total Area = 6.120386E+07 Total Height = 4561534 Total Amount = 53.23122

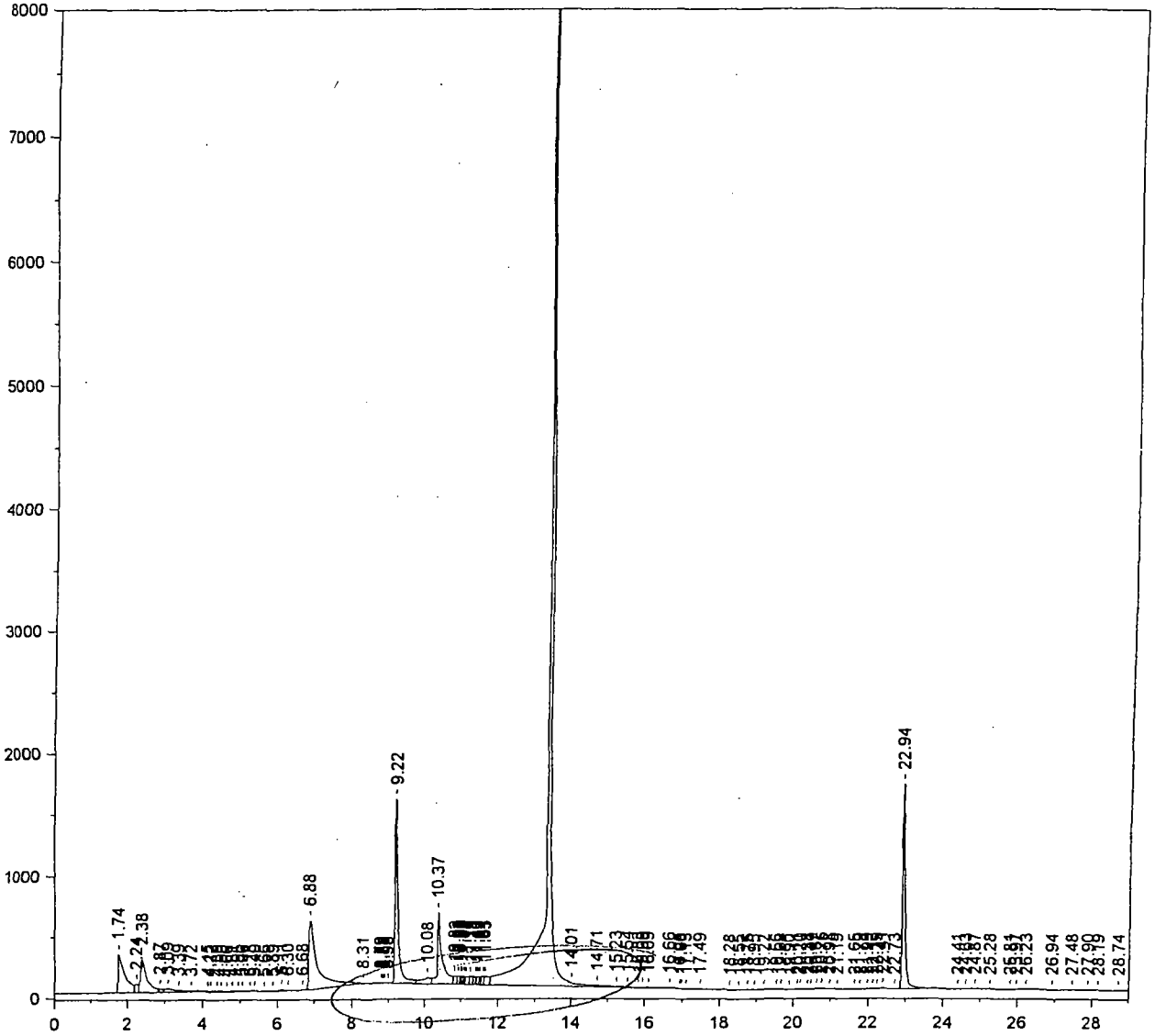


after reintegration
RAT
9/30/02

BR
9-30-02

50062

— H:\CP2\HP2\M0924B.0013.RAW 301103-04 B8079 FSS-002-04-ESW



Before reintegration
excess area under peaks
AJT
9/25/02

50066

Sample Name = **301103-04 B8079 FSS-002-04-ESW**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0924B.0013.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/24/02 9:34:04 PM
Method Version = 569
Calibration Version = 9

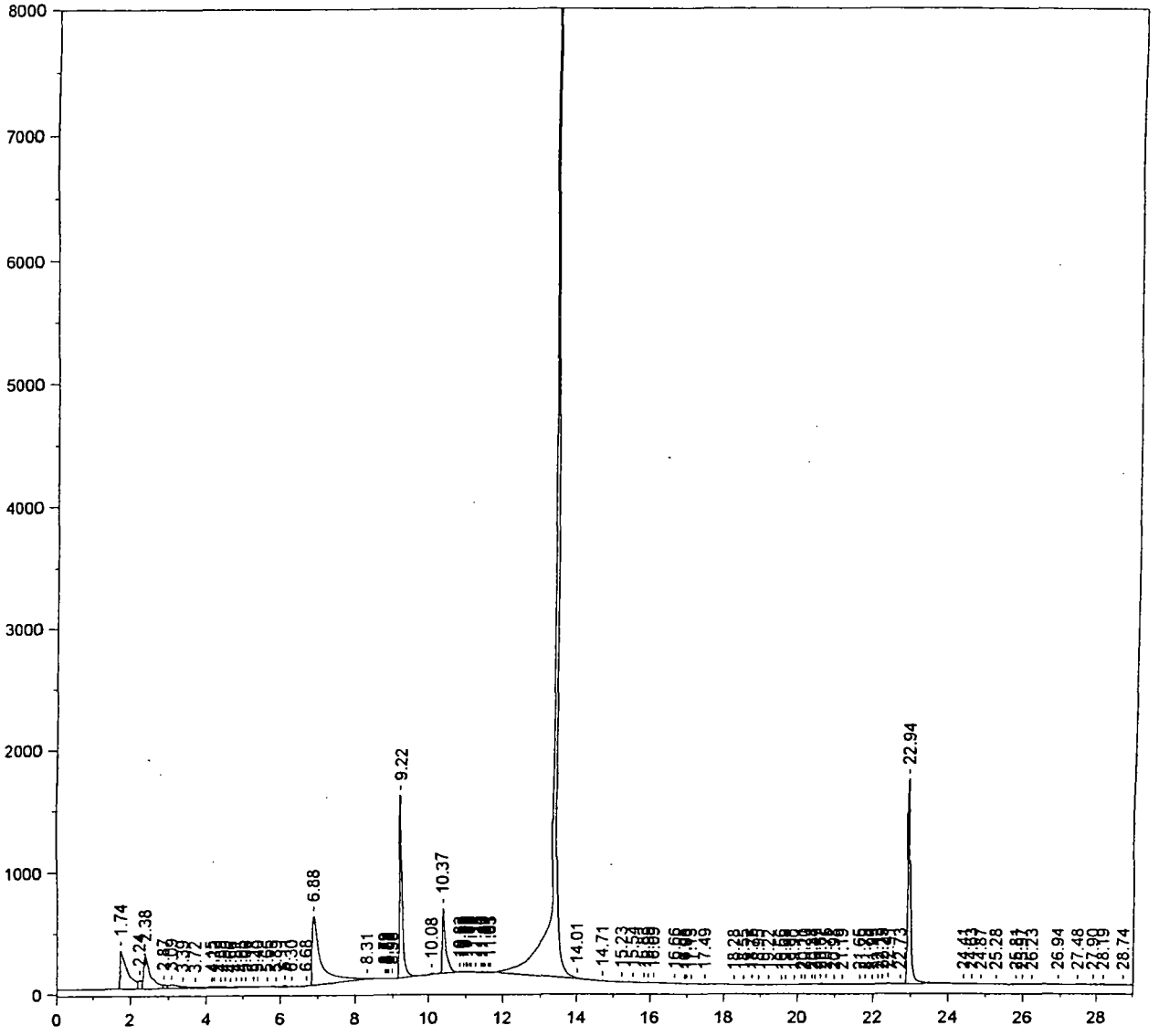
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	4105569	3.195	BV	0.17
2	2.24		0.00	0.000	445848	0.347	VV	0.06
3	2.38		0.00	0.000	3440719	2.678	VV	0.14
4	2.87		0.00	0.000	210761	0.164	VV	0.08
5	3.09		0.00	0.000	543389	0.423	VV	0.25
6	3.39		0.00	0.000	153206	0.119	VV	0.13
7	3.72		0.00	0.000	100534	0.078	VV	0.09
8	4.15		0.00	0.000	72194	0.056	VV	0.10
9	4.22		0.00	0.000	65451	0.051	VV	0.10
10	4.39		0.00	0.000	35265	0.027	VV	0.05
11	4.50		0.00	0.000	46773	0.036	VV	0.12
12	4.66		0.00	0.000	21617	0.017	VV	0.07
13	4.81		0.00	0.000	52764	0.041	VV	0.12
14	4.95		0.00	0.000	21073	0.016	VV	0.06
15	5.06		0.00	0.000	29641	0.023	VV	0.12
16	5.28		0.00	0.000	31758	0.025	VV	0.14
17	5.40		0.00	0.000	24467	0.019	VV	0.10
18	5.66		0.00	0.000	17277	0.013	VV	0.12
19	5.89		0.00	0.000	8687	0.007	VB	0.13
20	6.11		0.00	0.000	73979	0.058	BV	0.08
21	6.30		0.00	0.000	26530	0.021	VB	0.09
22	6.68		0.00	0.000	9227	0.007	BB	0.10
23	6.88		0.00	0.000	9250271	7.198	SBB	0.17
24	8.31		0.00	0.000	2215	0.002	TBB	0.09
25	8.79		0.00	0.000	3880	0.003	BV	0.05
26	8.84		0.00	0.000	4957	0.004	VV	0.03
27	8.88		0.00	0.000	8944	0.007	VV	0.03
28	8.98		0.00	0.000	23009	0.018	VV	0.05
29	9.22	CL4XYL	0.81	0.195	8567462	6.667	VV	0.07
30	10.08		0.00	0.000	1037379	0.807	VV	0.17
31	10.37	AR1016#1	22.69	5.484	5352867	4.166	VV	0.08
32	10.83		0.00	0.000	492774	0.383	VV	0.08
33	10.93		0.00	0.000	241906	0.188	VV	0.03
34	10.99		0.00	0.000	188799	0.147	VV	0.03
35	11.03		0.00	0.000	216003	0.168	VV	0.02
36	11.09		0.00	0.000	231588	0.180	VV	0.03
37	11.14		0.00	0.000	439316	0.342	VV	0.07
38	11.25	AR1016#2	0.93	0.226	405110	0.315	VV	0.06
39	11.40		0.00	0.000	153146	0.119	VV	0.02
40	11.45		0.00	0.000	277412	0.216	VV	0.04
41	11.51		0.00	0.000	179509	0.140	VV	0.03
42	11.61		0.00	0.000	348045	0.271	VV	0.03
43	11.65		0.00	0.000	668734	0.520	VV	0.07
44	13.41	AR1016#5	388.14	93.827	80835568	62.905	SBB	0.06
45	14.01		0.00	0.000	16681	0.013	TBV	0.14
46	14.71		0.00	0.000	27364	0.021	TVV	0.29
47	15.23		0.00	0.000	31054	0.024	TVV	0.18
48	15.54		0.00	0.000	27771	0.022	TVV	0.11
49	15.83		0.00	0.000	12646	0.010	TVV	0.08
50	15.95		0.00	0.000	21023	0.016	TVV	0.10
51	16.09		0.00	0.000	63797	0.050	TVV	0.31
52	16.66		0.00	0.000	16986	0.013	TVV	0.20

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.95		0.00	0.000	4010	0.003	TVV	0.03
54	17.00		0.00	0.000	7979	0.006	TVV	0.07
55	17.13		0.00	0.000	2664	0.002	TVV	0.10
56	17.49		0.00	0.000	7736	0.006	TVB	0.18
57	18.28	AR1260#3	0.01	0.001	2845	0.002	BV	0.13
58	18.55		0.00	0.000	1619	0.001	VB	0.10
59	18.76		0.00	0.000	9880	0.008	BV	0.05
60	18.95		0.00	0.000	5021	0.004	VB	0.18
61	19.22		0.00	0.000	7214	0.006	BV	0.14
62	19.56	AR1260#4	0.01	0.003	18190	0.014	VV	0.21
63	19.68		0.00	0.000	7961	0.006	VV	0.07
64	19.90		0.00	0.000	26138	0.020	VV	0.17
65	20.11		0.00	0.000	17067	0.013	VV	0.10
66	20.20		0.00	0.000	12369	0.010	VV	0.04
67	20.38		0.00	0.000	29461	0.023	VV	0.11
68	20.47		0.00	0.000	17498	0.014	VV	0.04
69	20.62		0.00	0.000	48744	0.038	VV	0.10
70	20.76		0.00	0.000	61383	0.048	VV	0.07
71	20.98		0.00	0.000	56993	0.044	VV	0.13
72	21.19		0.00	0.000	55184	0.043	VV	0.24
73	21.65	AR1260#5	0.19	0.046	55838	0.043	VV	0.26
74	21.79		0.00	0.000	21315	0.017	VV	0.10
75	21.99		0.00	0.000	38746	0.030	VV	0.17
76	22.13		0.00	0.000	15318	0.012	VV	0.07
77	22.25		0.00	0.000	15184	0.012	VV	0.08
78	22.41		0.00	0.000	72347	0.056	VV	0.07
79	22.73		0.00	0.000	14764	0.011	VV	0.07
80	22.94	CL10BP	0.90	0.217	8931147	6.950	VV	0.07
81	24.41		0.00	0.000	26618	0.021	VV	0.12
82	24.63		0.00	0.000	24344	0.019	VV	0.15
83	24.87		0.00	0.000	9540	0.007	VB	0.19
84	25.28		0.00	0.000	4585	0.004	BB	0.07
85	25.81		0.00	0.000	36918	0.029	BV	0.22
86	25.97		0.00	0.000	21899	0.017	VV	0.17
87	26.23		0.00	0.000	9643	0.008	VB	0.13
88	26.94		0.00	0.000	34453	0.027	BV	0.31
89	27.48		0.00	0.000	36980	0.029	VV	0.38
90	27.90		0.00	0.000	13041	0.010	VV	0.17
91	28.19		0.00	0.000	27275	0.021	VV	0.32
92	28.74		0.00	0.000	11643	0.009	VB	0.31

Total Area = 1.285045E+08 Total Height = 2.07613E+07 Total Amount = 413.6825

50068

— H:\CP2\HP2\M0924B.0013.RAW 301103-04 B8079 FSS-002-04-ESW

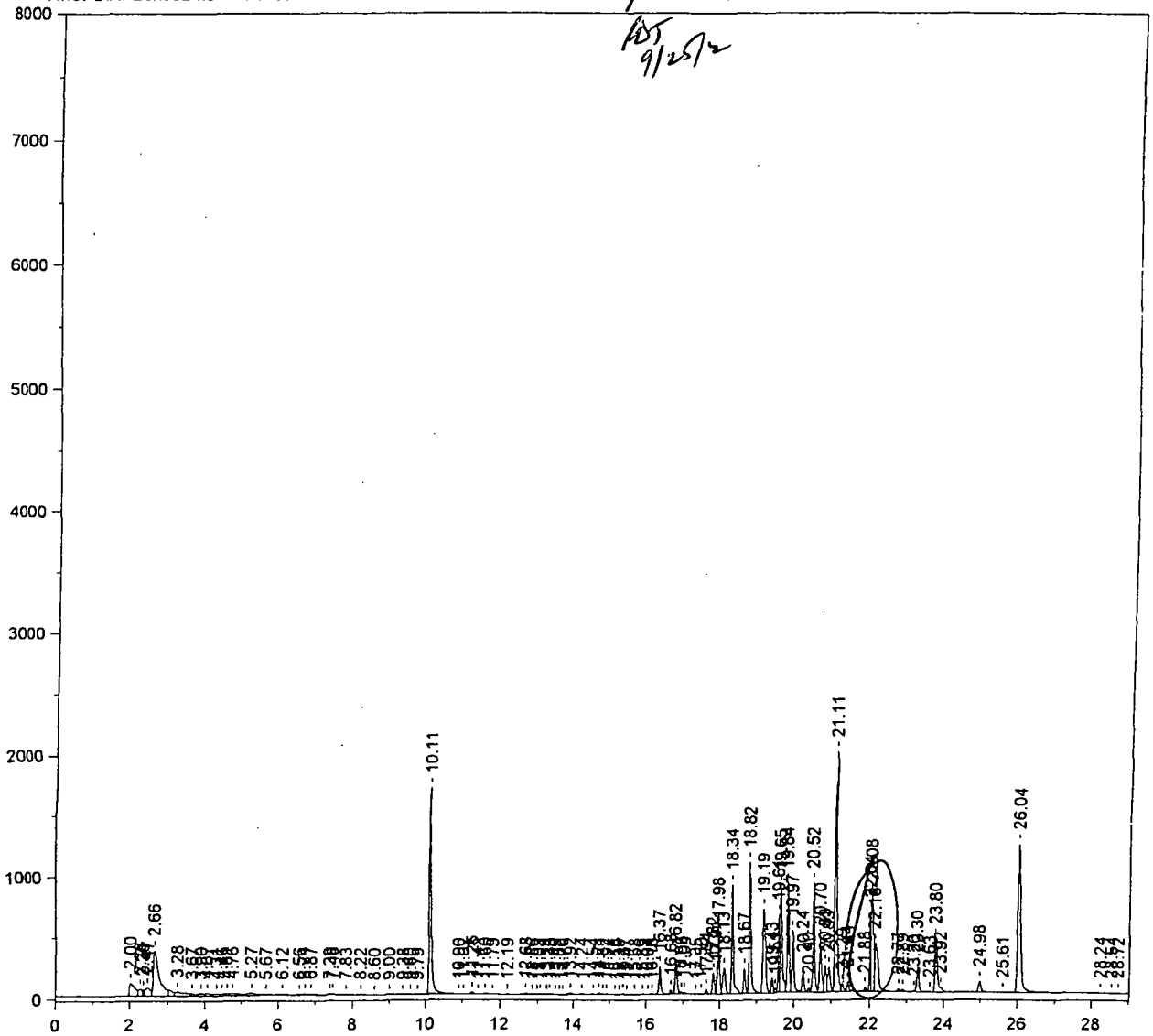


After reintegration
KST
9/25/2

Chrom Perfect Chromatogram Report

FSS-008-04 ESWMS

— H:\CP2\HP2\M0924.0025.RAW 301104-06MS B8079 ~~OWS-004-05-ESWMS~~



Primary Column

Before reintegration
peak not split in initial calibration

9/25/2

50092

Sample Name = **30110~~4~~3-06MS B8079** ~~OW3-004-05-ESWMS~~ FSS-008-24-ESWMS
ADT 9/27

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0924.0025.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/25/02 5:57:07 AM
Method Version = 620
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1042730	1.313	BV	0.19
2	2.28		0.00	0.000	364414	0.459	VV	0.08
3	2.36		0.00	0.000	134618	0.170	VV	0.03
4	2.47		0.00	0.000	654808	0.825	VV	0.09
5	2.66		0.00	0.000	3938503	4.961	VV	0.12
6	3.28		0.00	0.000	650351	0.819	VV	0.18
7	3.67		0.00	0.000	144613	0.182	VV	0.08
8	3.90		0.00	0.000	231392	0.291	VV	0.18
9	4.07		0.00	0.000	186529	0.235	VV	0.08
10	4.31		0.00	0.000	233202	0.294	VV	0.15
11	4.46		0.00	0.000	146096	0.184	VV	0.07
12	4.61		0.00	0.000	87223	0.110	VV	0.06
13	4.76		0.00	0.000	339022	0.427	VV	0.20
14	5.27		0.00	0.000	352888	0.445	VV	0.25
15	5.67		0.00	0.000	304892	0.384	VV	0.23
16	6.12		0.00	0.000	311745	0.393	VV	0.23
17	6.56		0.00	0.000	189843	0.239	VV	0.18
18	6.71		0.00	0.000	97868	0.123	VV	0.07
19	6.87		0.00	0.000	260046	0.328	VV	0.23
20	7.39		0.00	0.000	116608	0.147	VV	0.11
21	7.46		0.00	0.000	103762	0.131	VV	0.10
22	7.83		0.00	0.000	155567	0.196	VV	0.21
23	8.22		0.00	0.000	125231	0.158	VV	0.21
24	8.60		0.00	0.000	75991	0.096	VV	0.26
25	9.00		0.00	0.000	60946	0.077	VV	0.20
26	9.38		0.00	0.000	43844	0.055	VV	0.10
27	9.60		0.00	0.000	2958	0.004	VV	0.04
28	9.79		0.00	0.000	19543	0.025	VB	0.17
29	10.11	CL4XYL	0.86	1.951	6755949	8.510	BV	0.05
30	10.90		0.00	0.000	14049	0.018	VV	0.06
31	11.02		0.00	0.000	18402	0.023	VV	0.08
32	11.25		0.00	0.000	76122	0.096	VV	0.05
33	11.42		0.00	0.000	4188	0.005	VV	0.07
34	11.60	AR1016#1	0.23	0.530	41620	0.052	VV	0.14
35	11.79		0.00	0.000	2097	0.003	VB	0.04
36	12.19		0.00	0.000	5090	0.006	BB	0.06
37	12.68	AR1016#2	0.20	0.455	63744	0.080	BV	0.09
38	12.86		0.00	0.000	4732	0.006	VV	0.06
39	12.99		0.00	0.000	11424	0.014	VV	0.05
40	13.08		0.00	0.000	2632	0.003	VV	0.05
41	13.24		0.00	0.000	13118	0.017	VV	0.05
42	13.33		0.00	0.000	22106	0.028	VV	0.05
43	13.49		0.00	0.000	15971	0.020	VV	0.05
44	13.62		0.00	0.000	13211	0.017	VV	0.10
45	13.70		0.00	0.000	4871	0.006	VV	0.07
46	13.92	AR1016#3	0.23	0.510	109824	0.138	VV	0.14
47	14.24	AR1016#4	0.19	0.431	59967	0.076	VV	0.10
48	14.54		0.00	0.000	28497	0.036	VV	0.09
49	14.71		0.00	0.000	66216	0.083	VV	0.05
50	14.82		0.00	0.000	27864	0.035	VV	0.05
51	14.92		0.00	0.000	20766	0.026	VV	0.08
52	15.15		0.00	0.000	9172	0.012	VV	0.07

50093

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	15.25		0.00	0.000	1222	0.002	VB	0.05
54	15.37	AR1016#5	0.16	0.371	32582	0.041	BV	0.06
55	15.47		0.00	0.000	9172	0.012	VV	0.06
56	15.68		0.00	0.000	38538	0.049	VV	0.08
57	15.89		0.00	0.000	2513	0.003	VB	0.06
58	16.04		0.00	0.000	7409	0.009	BV	0.06
59	16.16		0.00	0.000	13962	0.018	VV	0.06
60	16.37		0.00	0.000	873582	1.100	VV	0.05
61	16.68		0.00	0.000	135728	0.171	VV	0.05
62	16.82		0.00	0.000	1035673	1.305	VV	0.05
63	16.96		0.00	0.000	61085	0.077	VV	0.05
64	17.04		0.00	0.000	94158	0.119	VV	0.07
65	17.35		0.00	0.000	3660	0.005	VB	0.07
66	17.50		0.00	0.000	21673	0.027	BV	0.05
67	17.64		0.00	0.000	154895	0.195	VV	0.05
68	17.82		0.00	0.000	564047	0.710	VV	0.05
69	17.91		0.00	0.000	374558	0.472	VV	0.04
70	17.98	AR1260#1	8.53	19.285	1698070	2.139	VV	0.05
71	18.13		0.00	0.000	1023777	1.290	VV	0.07
72	18.34		0.00	0.000	3172463	3.996	VV	0.05
73	18.67		0.00	0.000	702741	0.885	VV	0.05
74	18.82	AR1260#2	8.74	19.750	3773413	4.753	VV	0.05
75	19.19		0.00	0.000	3636230	4.580	VV	0.08
76	19.43		0.00	0.000	408358	0.514	VV	0.05
77	19.51		0.00	0.000	109090	0.137	VV	0.04
78	19.61		0.00	0.000	1582823	1.994	VV	0.04
79	19.65		0.00	0.000	3655331	4.604	VV	0.07
80	19.84	AR1260#3	8.96	20.253	2966822	3.737	VV	0.05
81	19.97		0.00	0.000	1771482	2.231	VV	0.05
82	20.24		0.00	0.000	732793	0.923	VV	0.05
83	20.40		0.00	0.000	101285	0.128	VV	0.04
84	20.52		0.00	0.000	3089229	3.891	VV	0.05
85	20.70		0.00	0.000	1662017	2.094	VV	0.05
86	20.83		0.00	0.000	871363	1.098	VV	0.05
87	20.93		0.00	0.000	956616	1.205	VV	0.09
88	21.11	AR1260#4	9.28	20.977	7318625	9.219	VV	0.05
89	21.29		0.00	0.000	276415	0.348	VV	0.07
90	21.44		0.00	0.000	293759	0.370	VB	0.05
91	21.88		0.00	0.000	120331	0.152	BV	0.05
92	22.04		0.00	0.000	1762824	2.220	VV	0.04
93	22.08	AR1260#5	5.89	13.310	3147274	3.964	VV	0.06
94	22.16		0.00	0.000	2598503	3.273	VV	0.11
95	22.77		0.00	0.000	109968	0.139	VV	0.06
96	22.89		0.00	0.000	98264	0.124	VV	0.07
97	23.20		0.00	0.000	50747	0.064	VV	0.06
98	23.30		0.00	0.000	907814	1.144	VV	0.06
99	23.63		0.00	0.000	41210	0.052	VV	0.16
100	23.80		0.00	0.000	2209730	2.783	SBB	0.07
101	23.92		0.00	0.000	21824	0.027	TBB	0.06
102	24.98		0.00	0.000	437532	0.551	BB	0.07
103	25.61		0.00	0.000	3183	0.004	BB	0.09
104	26.04	CL10BP	0.96	2.178	6823147	8.595	BB	0.08
105	28.24		0.00	0.000	21378	0.027	BV	0.13
106	28.54		0.00	0.000	24128	0.030	VV	0.14
107	28.72		0.00	0.000	17143	0.022	VB	0.14

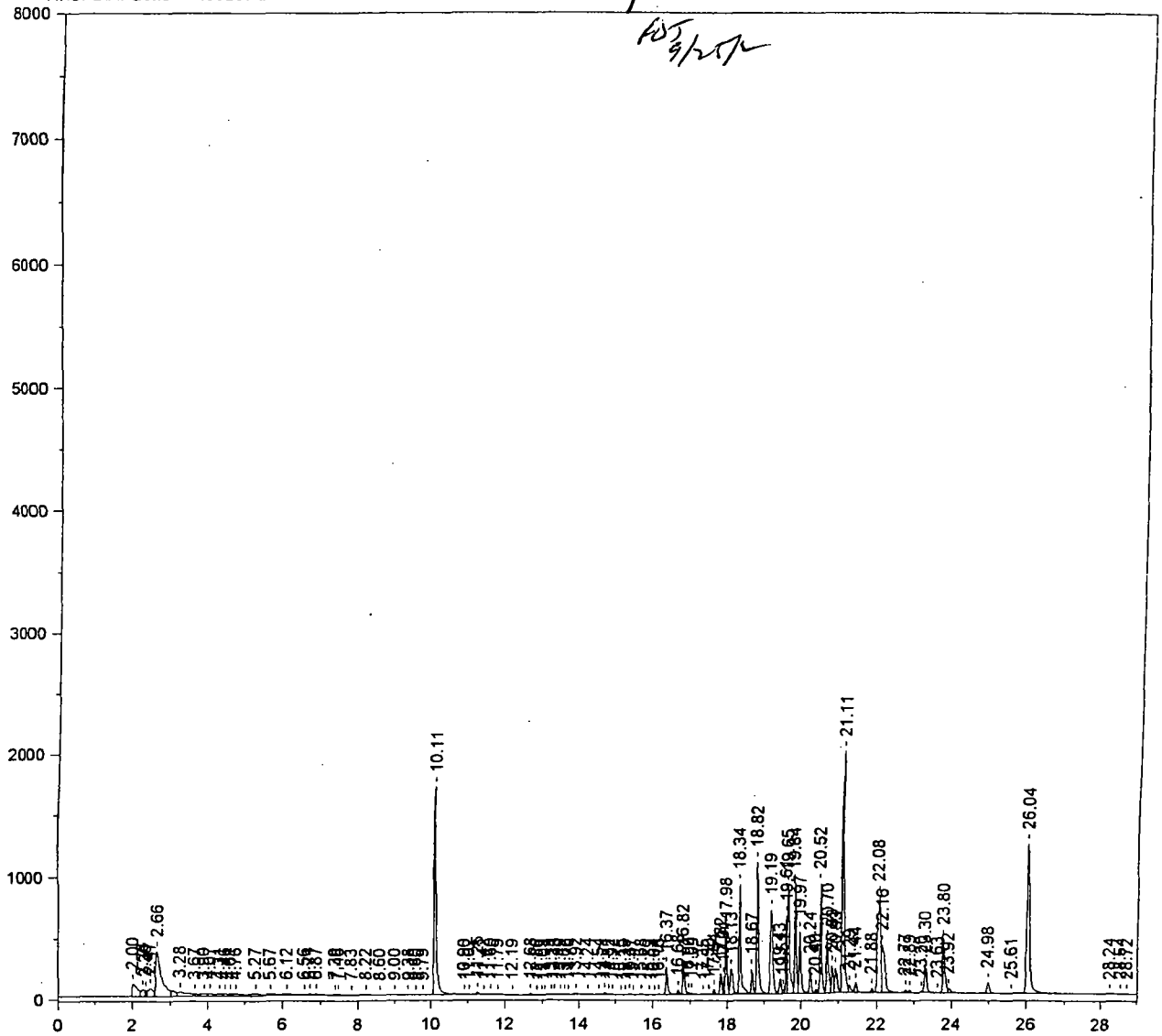
Total Area = 7.938901E+07 Total Height = 1.844934E+07 Total Amount = 44.24408

50094

— H:\CP2\HP2\M0924.0025.RAW

301104-06MS B8079 ~~OW3-004-05-ESWMS~~ FSJ-008-04-ESWMS

RST 9/25/02



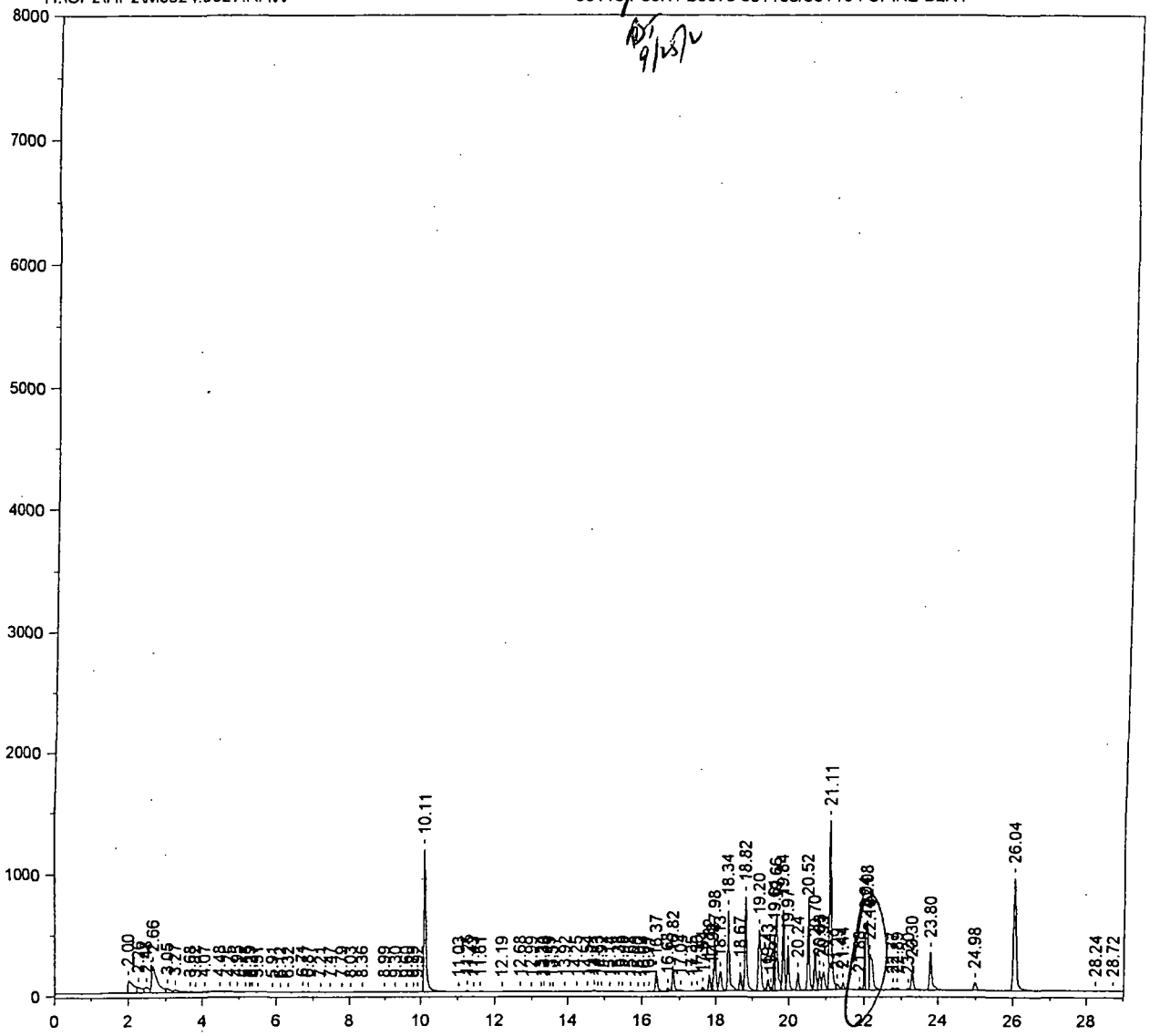
after reintegration

RST 9/25/02

RT 9-30-02

50157

Chrom Perfect Chromatogram Report



Primary Column

Before reintegration
peak not split in initial calibration
RDT 9/25/02

Sample Name = **301104-06K1 B8079 301103/301104 SPIKE BLK1**

Instrument = HP 2 Acquisition Port = 1
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Raw File Name = **H:\CP2\HP2\M0924.0027.RAW** Date Taken (end) = 9/25/02 7:14:16 AM
Method File Name = H:\CP2\HP2\Hp2pest.met Method Version = 620
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1091303	1.928	BV	0.20
2	2.26		0.00	0.000	462223	0.817	VV	0.09
3	2.48		0.00	0.000	421850	0.745	VV	0.09
4	2.66		0.00	0.000	2345046	4.143	VV	0.12
5	3.05		0.00	0.000	303863	0.537	VV	0.10
6	3.27		0.00	0.000	320323	0.566	VV	0.15
7	3.68		0.00	0.000	78618	0.139	VV	0.07
8	3.82		0.00	0.000	85197	0.151	VV	0.15
9	4.07		0.00	0.000	162027	0.286	VV	0.11
10	4.48		0.00	0.000	113025	0.200	VV	0.17
11	4.75		0.00	0.000	38311	0.068	VV	0.08
12	4.95		0.00	0.000	28098	0.050	VV	0.11
13	5.18		0.00	0.000	16180	0.029	VV	0.10
14	5.29		0.00	0.000	9319	0.016	VV	0.04
15	5.37		0.00	0.000	16098	0.028	VV	0.09
16	5.51		0.00	0.000	11031	0.019	VV	0.12
17	5.91		0.00	0.000	12771	0.023	VB	0.23
18	6.12		0.00	0.000	488	0.001	BB	0.07
19	6.32		0.00	0.000	1331	0.002	BB	0.09
20	6.71		0.00	0.000	34402	0.061	BV	0.06
21	6.87		0.00	0.000	34162	0.060	VV	0.08
22	7.21		0.00	0.000	5384	0.010	VV	0.10
23	7.47		0.00	0.000	16605	0.029	VB	0.08
24	7.79		0.00	0.000	904	0.002	BV	0.08
25	8.03		0.00	0.000	14752	0.026	VV	0.06
26	8.36		0.00	0.000	3368	0.006	VB	0.13
27	8.99		0.00	0.000	2827	0.005	BV	0.14
28	9.30		0.00	0.000	1930	0.003	VB	0.11
29	9.60		0.00	0.000	1782	0.003	BV	0.05
30	9.79		0.00	0.000	1599	0.003	VV	0.06
31	9.92		0.00	0.000	541	0.001	VB	0.07
32	10.11	CL4XYL	0.61	1.855	4761833	8.412	BV	0.05
33	11.03		0.00	0.000	15029	0.027	VV	0.12
34	11.25		0.00	0.000	53026	0.094	VV	0.06
35	11.43		0.00	0.000	2905	0.005	VB	0.08
36	11.61	AR1016#1	0.03	0.082	4753	0.008	BB	0.07
37	12.19		0.00	0.000	2702	0.005	BB	0.05
38	12.68	AR1016#2	0.14	0.436	45288	0.080	BV	0.09
39	12.99		0.00	0.000	4887	0.009	VV	0.05
40	13.24		0.00	0.000	8253	0.015	VV	0.06
41	13.33		0.00	0.000	15725	0.028	VV	0.06
42	13.49		0.00	0.000	9738	0.017	VV	0.05
43	13.57		0.00	0.000	12372	0.022	VV	0.07
44	13.92	AR1016#3	0.16	0.476	75934	0.134	VV	0.16
45	14.25	AR1016#4	0.14	0.423	43624	0.077	VV	0.13
46	14.54		0.00	0.000	22313	0.039	VV	0.09
47	14.71		0.00	0.000	52156	0.092	VV	0.06
48	14.83		0.00	0.000	21875	0.039	VV	0.05
49	14.92		0.00	0.000	16618	0.029	VV	0.08
50	15.14		0.00	0.000	8318	0.015	VB	0.09
51	15.38	AR1016#5	0.12	0.363	23635	0.042	BV	0.06
52	15.48		0.00	0.000	8721	0.015	VV	0.07

50146

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	15.68		0.00	0.000	26654	0.047	VV	0.09
54	15.90		0.00	0.000	1062	0.002	VB	0.07
55	16.04		0.00	0.000	4873	0.009	BV	0.06
56	16.17		0.00	0.000	8303	0.015	VV	0.07
57	16.37		0.00	0.000	671479	1.186	VV	0.05
58	16.68		0.00	0.000	103318	0.183	VV	0.05
59	16.82		0.00	0.000	833895	1.473	VV	0.05
60	17.04		0.00	0.000	71066	0.126	VV	0.07
61	17.35		0.00	0.000	3107	0.005	VB	0.07
62	17.50		0.00	0.000	15694	0.028	BB	0.05
63	17.64		0.00	0.000	111740	0.197	BV	0.05
64	17.82		0.00	0.000	437893	0.774	VV	0.05
65	17.92		0.00	0.000	257861	0.456	VV	0.03
66	17.98	AR1260#1	6.54	19.924	1300626	2.298	VV	0.05
67	18.13		0.00	0.000	792106	1.399	VV	0.07
68	18.34		0.00	0.000	2411592	4.260	VV	0.05
69	18.67		0.00	0.000	538147	0.951	VV	0.05
70	18.82	AR1260#2	6.61	20.164	2856100	5.046	VV	0.05
71	19.20		0.00	0.000	2729518	4.822	VV	0.09
72	19.43		0.00	0.000	317606	0.561	VV	0.05
73	19.51		0.00	0.000	79277	0.140	VV	0.04
74	19.61		0.00	0.000	1126298	1.990	VV	0.04
75	19.66		0.00	0.000	2766567	4.888	VV	0.07
76	19.84	AR1260#3	6.69	20.395	2214887	3.913	VV	0.05
77	19.97		0.00	0.000	1338388	2.364	VV	0.05
78	20.24		0.00	0.000	536401	0.948	VB	0.05
79	20.52		0.00	0.000	2283985	4.035	BV	0.05
80	20.70		0.00	0.000	1242469	2.195	VV	0.05
81	20.83		0.00	0.000	613652	1.084	VV	0.05
82	20.93		0.00	0.000	700458	1.237	VV	0.08
83	21.11	AR1260#4	6.72	20.484	5298259	9.360	VV	0.05
84	21.29		0.00	0.000	203059	0.359	VV	0.07
85	21.44		0.00	0.000	204041	0.360	VB	0.05
86	21.88		0.00	0.000	87912	0.155	BV	0.06
87	22.04		0.00	0.000	1245690	2.201	VV	0.04
88	22.08	AR1260#5	4.31	13.143	2303997	4.070	VV	0.06
89	22.16		0.00	0.000	1973169	3.486	VV	0.11
90	22.77		0.00	0.000	74238	0.131	VV	0.06
91	22.89		0.00	0.000	77362	0.137	VV	0.07
92	23.20		0.00	0.000	40208	0.071	VV	0.06
93	23.30		0.00	0.000	671482	1.186	VV	0.06
94	23.80		0.00	0.000	1621418	2.864	VB	0.07
95	24.98		0.00	0.000	318151	0.562	BB	0.07
96	26.04	CL10BP	0.74	2.257	5241473	9.260	BB	0.08
97	28.24		0.00	0.000	2373	0.004	BV	0.13
98	28.72		0.00	0.000	1488	0.003	VB	0.13

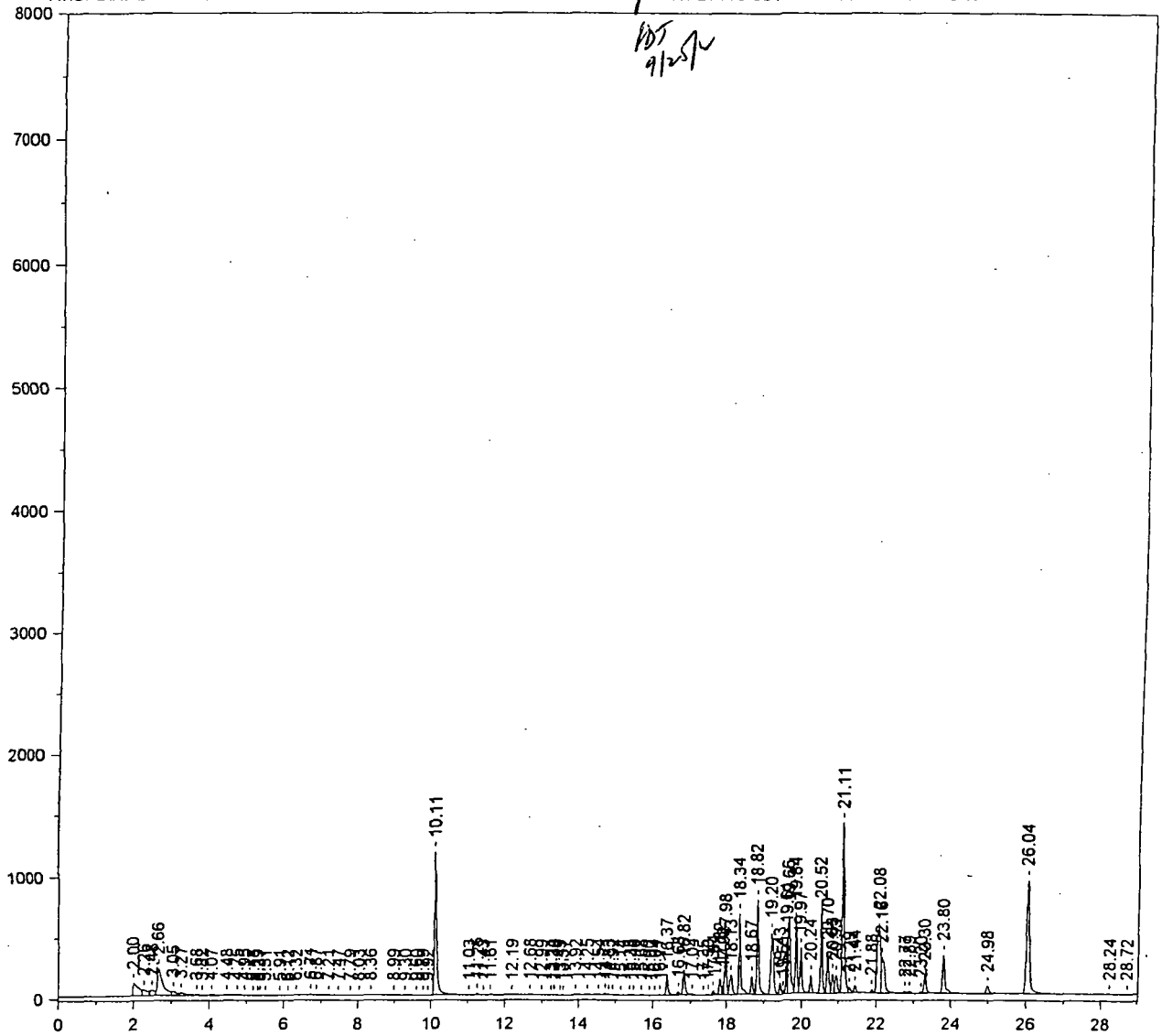
Total Area = 5.66044E+07 Total Height = 1.319751E+07 Total Amount = 32.80105

50147

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0924.0027.RAW 301104-06K1 B8079 301103/301104 SPIKE BLK1

BT 9/25/02



After reintegration
BT
9/25/02

9/26/02

50148

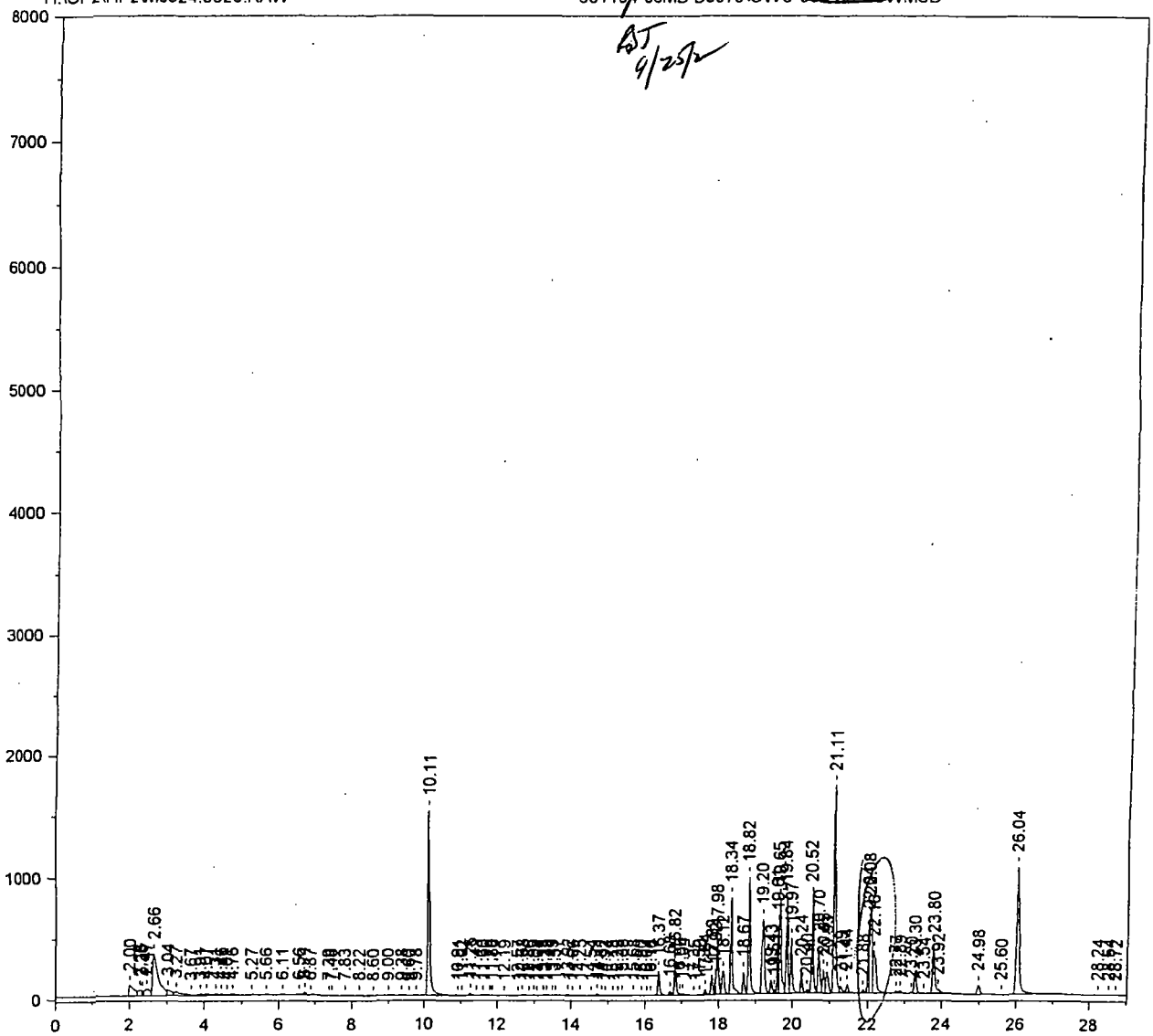
Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0924.0026.RAW

3. FSS-008-04-ESWMSD

301104-06MD B8079 ~~OWS-004-05-ESWMSD~~

BJ 9/25/02



Primary Column

Before reintegration
peak not split in initial calibration
BJ 9/25/02

50166

Sample Name = **30110~~4~~3-06MD B8079** ~~**OWS-004-05-ESWMSD**~~ FSS-008-04-ESWMSD
ADT 9/25/02

Instrument = HP 2 Acquisition Port = 1
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Raw File Name = **H:\CP2\HP2\M0924.0026.RAW** Date Taken (end) = 9/25/02 6:35:44 AM
Method File Name = H:\CP2\HP2\Hp2pest.met Method Version = 620
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	905190	1.301	BV	0.19
2	2.28		0.00	0.000	326842	0.470	VV	0.08
3	2.36		0.00	0.000	131936	0.190	VV	0.03
4	2.47		0.00	0.000	571644	0.821	VV	0.09
5	2.66		0.00	0.000	3705944	5.325	VV	0.13
6	3.04		0.00	0.000	398376	0.572	VV	0.10
7	3.27		0.00	0.000	595011	0.855	VV	0.17
8	3.67		0.00	0.000	116761	0.168	VV	0.09
9	3.91		0.00	0.000	178085	0.256	VV	0.17
10	4.07		0.00	0.000	154579	0.222	VV	0.08
11	4.31		0.00	0.000	1838[illegible]	0.264	VV	0.11
12	4.46		0.00	0.000	108[illegible]	0.156	VV	0.07
13	4.61		0.00	0.000	61715	0.089	VV	0.06
14	4.76		0.00	0.000	225567	0.324	VV	0.20
15	5.27		0.00	0.000	209642	0.301	VV	0.25
16	5.66		0.00	0.000	144745	0.208	VV	0.23
17	6.11		0.00	0.000	107560	0.155	VB	0.24
18	6.56		0.00	0.000	41306	0.059	BV	0.18
19	6.71		0.00	0.000	84938	0.122	VB	0.06
20	6.87		0.00	0.000	11446	0.016	BB	0.08
21	7.39		0.00	0.000	36013	0.052	BV	0.11
22	7.46		0.00	0.000	35404	0.051	VB	0.10
23	7.83		0.00	0.000	50607	0.073	BV	0.20
24	8.22		0.00	0.000	51477	0.074	VV	0.21
25	8.60		0.00	0.000	32199	0.046	VB	0.26
26	9.00		0.00	0.000	33388	0.048	BV	0.21
27	9.38		0.00	0.000	26350	0.038	VV	0.11
28	9.60		0.00	0.000	2749	0.004	VV	0.04
29	9.78		0.00	0.000	12978	0.019	VB	0.20
30	10.11	CL4XYL	0.80	2.026	6225750	8.945	SBB	0.05
31	10.91		0.00	0.000	4940	0.007	TBV	0.05
32	11.02		0.00	0.000	5801	0.008	TVV	0.11
33	11.25		0.00	0.000	60226	0.087	TVV	0.05
34	11.43		0.00	0.000	3346	0.005	TVV	0.06
35	11.60	AR1016#1	0.24	0.615	42911	0.062	TVV	0.13
36	11.79		0.00	0.000	7045	0.010	TVV	0.04
37	11.86		0.00	0.000	7608	0.011	TVB	0.09
38	12.19		0.00	0.000	4721	0.007	BB	0.06
39	12.57		0.00	0.000	2023	0.003	BV	0.07
40	12.68	AR1016#2	0.17	0.441	54852	0.079	VV	0.09
41	12.86		0.00	0.000	5687	0.008	VV	0.06
42	12.99		0.00	0.000	11373	0.016	VV	0.05
43	13.08		0.00	0.000	4043	0.006	VV	0.05
44	13.24		0.00	0.000	12651	0.018	VV	0.05
45	13.33		0.00	0.000	21349	0.031	VV	0.06
46	13.49		0.00	0.000	14422	0.021	VV	0.05
47	13.57		0.00	0.000	18278	0.026	VV	0.09
48	13.92	AR1016#3	0.19	0.477	91077	0.131	VV	0.14
49	14.06		0.00	0.000	19267	0.028	VV	0.07
50	14.25	AR1016#4	0.19	0.497	61340	0.088	VV	0.09
51	14.54		0.00	0.000	27094	0.039	VV	0.09
52	14.71		0.00	0.000	70768	0.102	VV	0.06

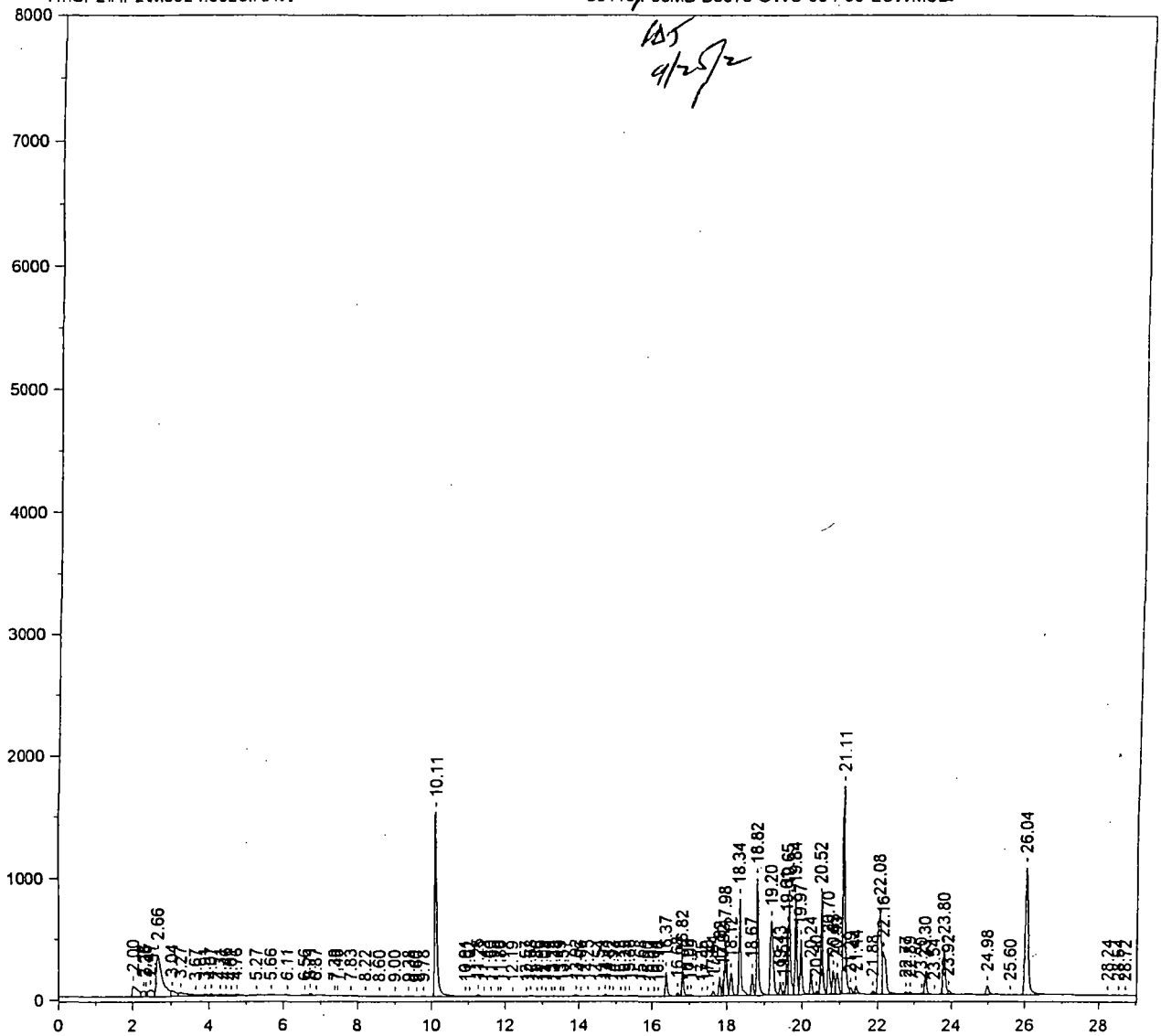
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	14.82		0.00	0.000	26521	0.038	VV	0.05
54	14.92		0.00	0.000	20212	0.029	VV	0.07
55	15.13		0.00	0.000	14601	0.021	VV	0.06
56	15.25		0.00	0.000	2911	0.004	VB	0.06
57	15.38	AR1016#5	0.17	0.444	34566	0.050	BV	0.06
58	15.68		0.00	0.000	34029	0.049	VV	0.08
59	15.90		0.00	0.000	2607	0.004	VB	0.07
60	16.04		0.00	0.000	7290	0.010	BV	0.06
61	16.16		0.00	0.000	12807	0.018	VV	0.06
62	16.37		0.00	0.000	770889	1.108	VV	0.05
63	16.68		0.00	0.000	119935	0.172	VV	0.05
64	16.82		0.00	0.000	915709	1.316	VV	0.05
65	16.96		0.00	0.000	58331	0.084	VV	0.05
66	17.04		0.00	0.000	92555	0.133	VV	0.07
67	17.35		0.00	0.000	3446	0.005	VB	0.06
68	17.50		0.00	0.000	18877	0.027	BV	0.05
69	17.64		0.00	0.000	140887	0.202	VV	0.05
70	17.82		0.00	0.000	509757	0.732	VV	0.05
71	17.92		0.00	0.000	331552	0.476	VV	0.04
72	17.98	AR1260#1	7.66	19.526	1525420	2.192	VV	0.05
73	18.12		0.00	0.000	923529	1.327	VV	0.07
74	18.34		0.00	0.000	2796556	4.018	VV	0.05
75	18.67		0.00	0.000	632092	0.908	VV	0.05
76	18.82	AR1260#2	7.79	19.833	3362058	4.831	VV	0.05
77	19.20		0.00	0.000	3238075	4.653	VV	0.08
78	19.43		0.00	0.000	369619	0.531	VV	0.05
79	19.51		0.00	0.000	92007	0.132	VV	0.04
80	19.61		0.00	0.000	1402329	2.015	VV	0.04
81	19.65		0.00	0.000	3238140	4.653	VV	0.07
82	19.84	AR1260#3	7.94	20.215	2627346	3.775	VV	0.05
83	19.97		0.00	0.000	1566565	2.251	VV	0.05
84	20.24		0.00	0.000	638251	0.917	VV	0.05
85	20.40		0.00	0.000	89900	0.129	VV	0.04
86	20.52		0.00	0.000	2722256	3.911	VV	0.05
87	20.70		0.00	0.000	1472410	2.116	VV	0.05
88	20.83		0.00	0.000	768402	1.104	VV	0.05
89	20.93		0.00	0.000	842863	1.211	VV	0.09
90	21.11	AR1260#4	8.12	20.686	6403084	9.200	VV	0.05
91	21.29		0.00	0.000	243718	0.350	VV	0.07
92	21.44		0.00	0.000	254060	0.365	VB	0.05
93	21.88		0.00	0.000	104759	0.151	BV	0.05
94	22.04		0.00	0.000	1536251	2.207	VV	0.04
95	22.08	AR1260#5	5.16	13.134	2755531	3.959	VV	0.06
96	22.16		0.00	0.000	2305403	3.313	VV	0.11
97	22.77		0.00	0.000	97024	0.139	VV	0.06
98	22.89		0.00	0.000	90356	0.130	VB	0.07
99	23.20		0.00	0.000	44522	0.064	BV	0.06
100	23.30		0.00	0.000	789580	1.135	VV	0.06
101	23.54		0.00	0.000	15923	0.023	VV	0.09
102	23.80		0.00	0.000	1880007	2.701	SBB	0.07
103	23.92		0.00	0.000	19802	0.028	TBB	0.06
104	24.98		0.00	0.000	382388	0.549	BB	0.07
105	25.60		0.00	0.000	1958	0.003	BB	0.10
106	26.04	CL10BP	0.83	2.106	5855446	8.413	BB	0.08
107	28.24		0.00	0.000	19527	0.028	BV	0.13
108	28.54		0.00	0.000	30809	0.044	VV	0.12
109	28.72		0.00	0.000	20043	0.029	VB	0.13

Total Area = 6.95967E+07 Total Height = 1.626016E+07 Total Amount = 39.25524

50168

— H:\CP2\HP2\M0924.0026.RAW 30110~~7~~3-06MD B8079 ~~CWS-004-03-ESWMSD~~ FSS-008-04-ESWMSD

RST 9/25/02



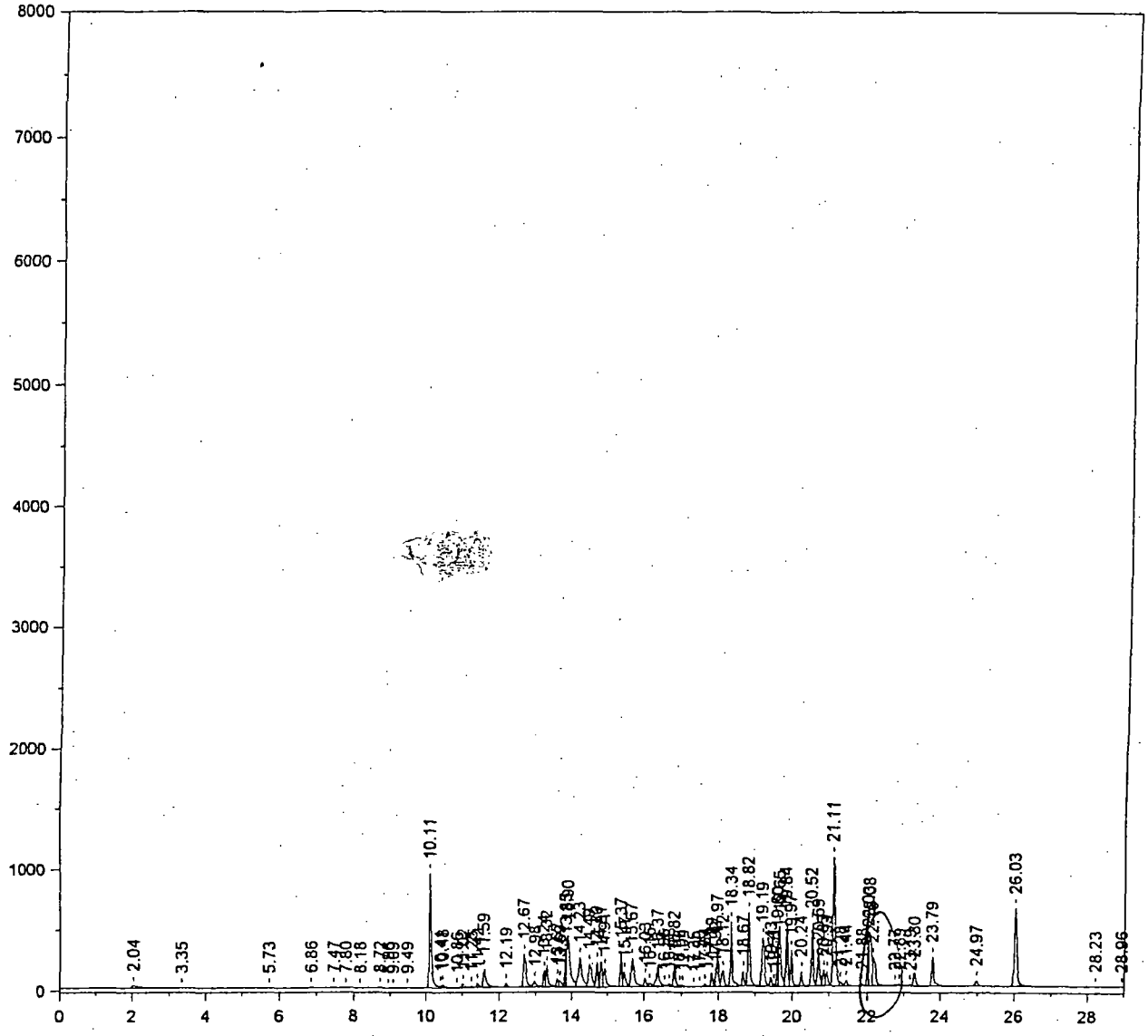
After reintegration
RST 9/25/02

RST 9/30/02

5 of 99

Pam ADT 9/25/2

Chrom Perfect Chromatogram Report



Primary Column

Before reintegration
Peak not split in initial calibration
ADT
9/25/2

Sample Name = **5PPM AR1660 CONTINUING CALIBRATION 1004369**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0924.0011.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

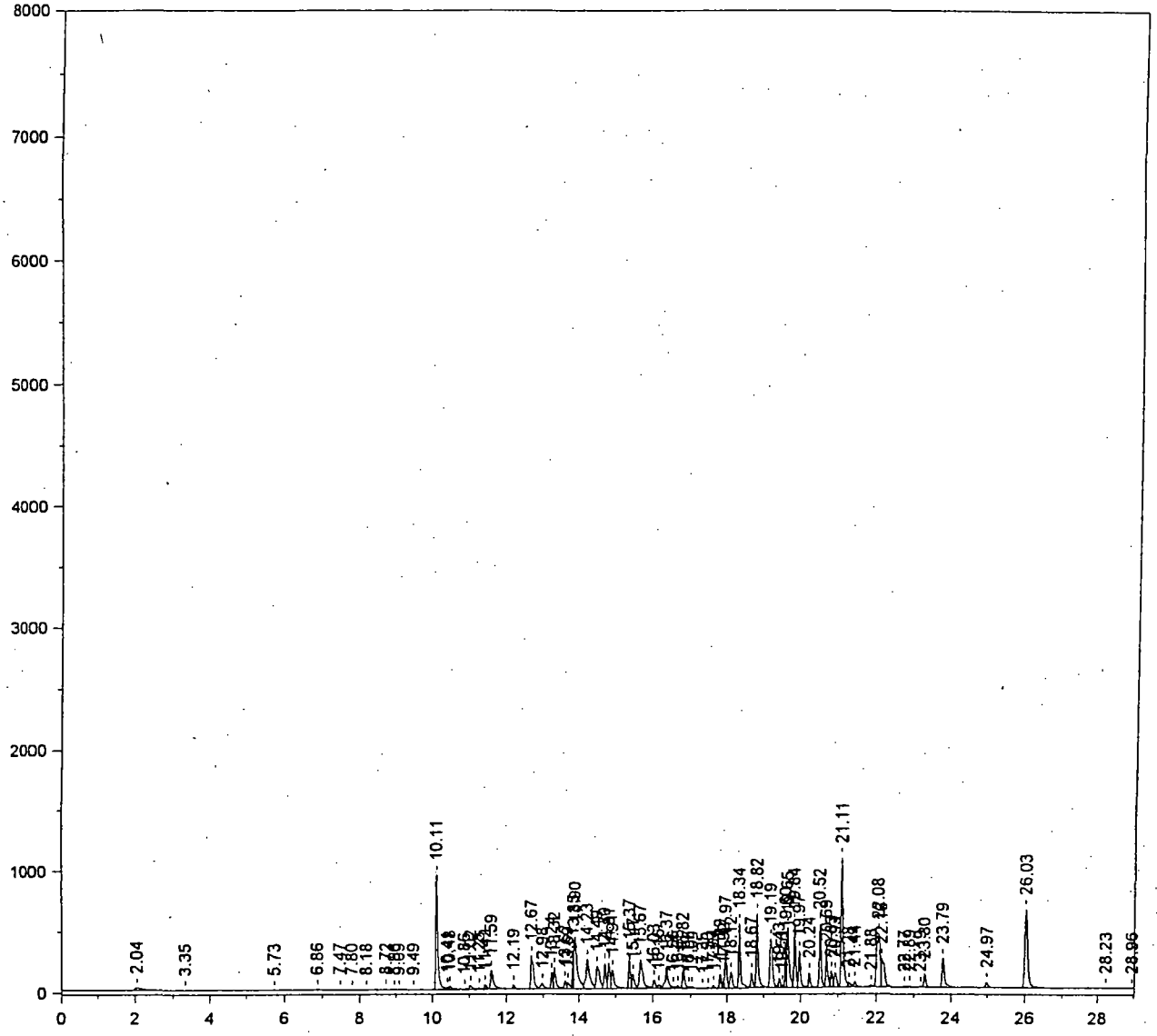
Date Taken (end) = 9/24/02 8:16:45 PM
Method Version = 619
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.04		0.00	0.000	266847	0.456	BV	0.22
2	3.35		0.00	0.000	3940	0.007	VB	0.43
3	5.73		0.00	0.000	2379	0.004	BB	0.33
4	6.86		0.00	0.000	19492	0.033	BB	0.07
5	7.47		0.00	0.000	7869	0.013	BB	0.07
6	7.80		0.00	0.000	1116	0.002	BB	0.09
7	8.18		0.00	0.000	452	0.001	BB	0.08
8	8.72		0.00	0.000	11585	0.020	BV	0.08
9	8.96		0.00	0.000	3760	0.006	VV	0.08
10	9.09		0.00	0.000	4556	0.008	VV	0.09
11	9.49		0.00	0.000	1576	0.003	VB	0.15
12	10.11	CL4XYL	0.51	0.984	3978055	6.796	SBB	0.05
13	10.41		0.00	0.000	14913	0.025	TBV	0.04
14	10.48		0.00	0.000	71205	0.122	TVV	0.06
15	10.86		0.00	0.000	2339	0.004	TVV	0.07
16	11.02		0.00	0.000	147749	0.252	TVV	0.07
17	11.25		0.00	0.000	42137	0.072	TVV	0.06
18	11.42		0.00	0.000	166852	0.285	TVV	0.07
19	11.59	AR1016#1	5.20	10.058	922905	1.577	TVV	0.07
20	12.19		0.00	0.000	137788	0.235	TVB	0.05
21	12.67	AR1016#2	4.90	9.475	1550373	2.649	BV	0.09
22	12.98		0.00	0.000	324505	0.554	VV	0.08
23	13.24		0.00	0.000	427922	0.731	VV	0.05
24	13.32		0.00	0.000	803007	1.372	VV	0.06
25	13.62		0.00	0.000	258875	0.442	VV	0.07
26	13.69		0.00	0.000	262752	0.449	VV	0.07
27	13.85		0.00	0.000	752362	1.285	VV	0.04
28	13.90	AR1016#3	5.33	10.323	2595716	4.435	VV	0.08
29	14.23	AR1016#4	5.38	10.405	1691464	2.890	VV	0.07
30	14.49		0.00	0.000	1237284	2.114	VV	0.10
31	14.70		0.00	0.000	772942	1.321	VV	0.05
32	14.81		0.00	0.000	812479	1.388	VV	0.05
33	14.91		0.00	0.000	906315	1.548	VV	0.08
34	15.37	AR1016#5	5.01	9.696	994153	1.698	VV	0.05
35	15.47		0.00	0.000	536657	0.917	VV	0.06
36	15.67		0.00	0.000	1563578	2.671	VV	0.09
37	16.03		0.00	0.000	310204	0.530	VV	0.05
38	16.16		0.00	0.000	169145	0.289	VV	0.06
39	16.37		0.00	0.000	996431	1.702	VV	0.05
40	16.56		0.00	0.000	75329	0.129	VV	0.06
41	16.68		0.00	0.000	107870	0.184	VV	0.05
42	16.82		0.00	0.000	663606	1.134	VV	0.05
43	16.96		0.00	0.000	59179	0.101	VV	0.04
44	17.04		0.00	0.000	93997	0.161	VV	0.07
45	17.35		0.00	0.000	3040	0.005	VB	0.07
46	17.50		0.00	0.000	12541	0.021	BB	0.05
47	17.64		0.00	0.000	85756	0.147	BV	0.05
48	17.82		0.00	0.000	361438	0.617	VV	0.05
49	17.92		0.00	0.000	199206	0.340	VV	0.03
50	17.97	AR1260#1	5.38	10.411	1070439	1.829	VV	0.05
51	18.12		0.00	0.000	648195	1.107	VV	0.07
52	18.34		0.00	0.000	1977263	3.378	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.67		0.00	0.000	434225	0.742	VV	0.05
54	18.82	AR1260#2	5.41	10.470	2335885	3.991	VV	0.05
55	19.19		0.00	0.000	2219589	3.792	VV	0.09
56	19.43		0.00	0.000	260623	0.445	VV	0.05
57	19.51		0.00	0.000	62004	0.106	VV	0.04
58	19.60		0.00	0.000	884222	1.511	VV	0.04
59	19.65		0.00	0.000	2240401	3.828	VV	0.07
60	19.84	AR1260#3	5.43	10.506	1797144	3.070	VV	0.05
61	19.97		0.00	0.000	1088412	1.859	VV	0.05
62	20.24		0.00	0.000	417274	0.713	VV	0.05
63	20.52		0.00	0.000	1831050	3.128	VV	0.05
64	20.69		0.00	0.000	1004502	1.716	VV	0.05
65	20.83		0.00	0.000	483417	0.826	VV	0.05
66	20.93		0.00	0.000	551431	0.942	VV	0.07
67	21.11	AR1260#4	5.28	10.220	4163654	7.113	VV	0.05
68	21.28		0.00	0.000	175090	0.299	VV	0.06
69	21.44		0.00	0.000	174659	0.298	VB	0.05
70	21.88		0.00	0.000	64711	0.111	BV	0.06
71	22.03		0.00	0.000	998841	1.706	VV	0.04
72	22.08	AR1260#5	3.33	6.437	1777284	3.036	VV	0.06
73	22.16		0.00	0.000	1554165	2.655	VV	0.11
74	22.77		0.00	0.000	56144	0.096	VV	0.07
75	22.89		0.00	0.000	62758	0.107	VV	0.07
76	23.19		0.00	0.000	29737	0.051	VV	0.06
77	23.30		0.00	0.000	515544	0.881	VV	0.06
78	23.79		0.00	0.000	1248788	2.133	VB	0.07
79	24.97		0.00	0.000	247508	0.423	BB	0.07
80	26.03	CL10BP	0.53	1.016	3718746	6.353	BV	0.08
81	28.23		0.00	0.000	2773	0.005	VB	0.16
82	28.96		0.00	0.000	521	0.001	BB	0.08

Total Area = 5.853263E+07 Total Height = 1.34404E+07 Total Amount = 51.66533

— H:\CP2\HP2\M0924.0011.RAW 5PPM AR1660 CONTINUING CALIBRATION 1004369



After investigation
KST
9/25/02

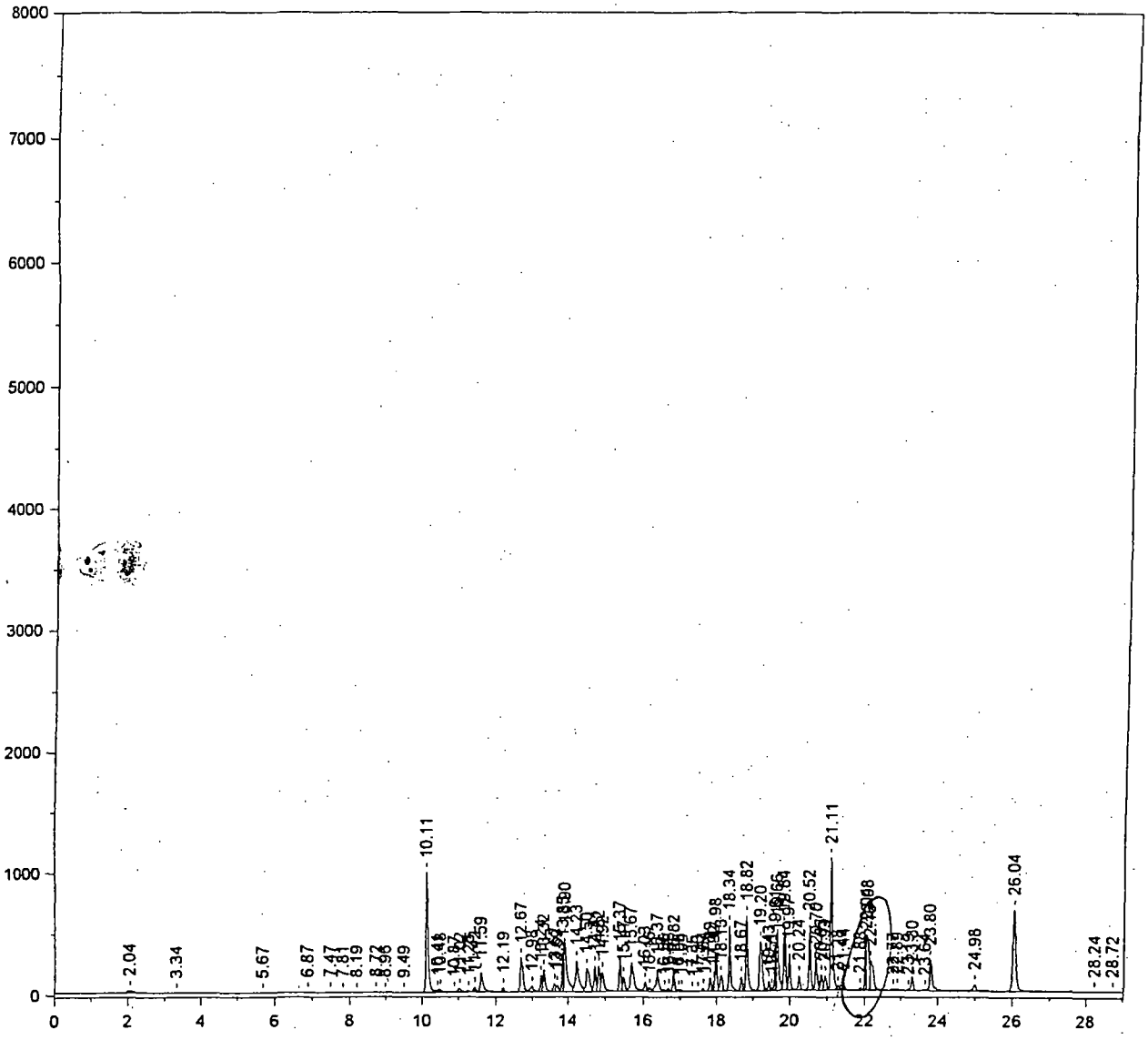
50269

Chrom Perfect Chromatogram Report

Pan DST 9/25/2

— H:\CP2\HP2\M0924.0022.RAW

5PPM AR1660 CONTINUING CALIBRATION 1004369



Primary Column

Before reintegration
Peak not split in initial calibration
PDT
9/25/2

50274

Sample Name = **5PPM AR1660 CONTINUING CALIBRATION 1004369**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0924.0022.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/25/02 3:22:48 AM
Method Version = 619
Calibration Version = 14

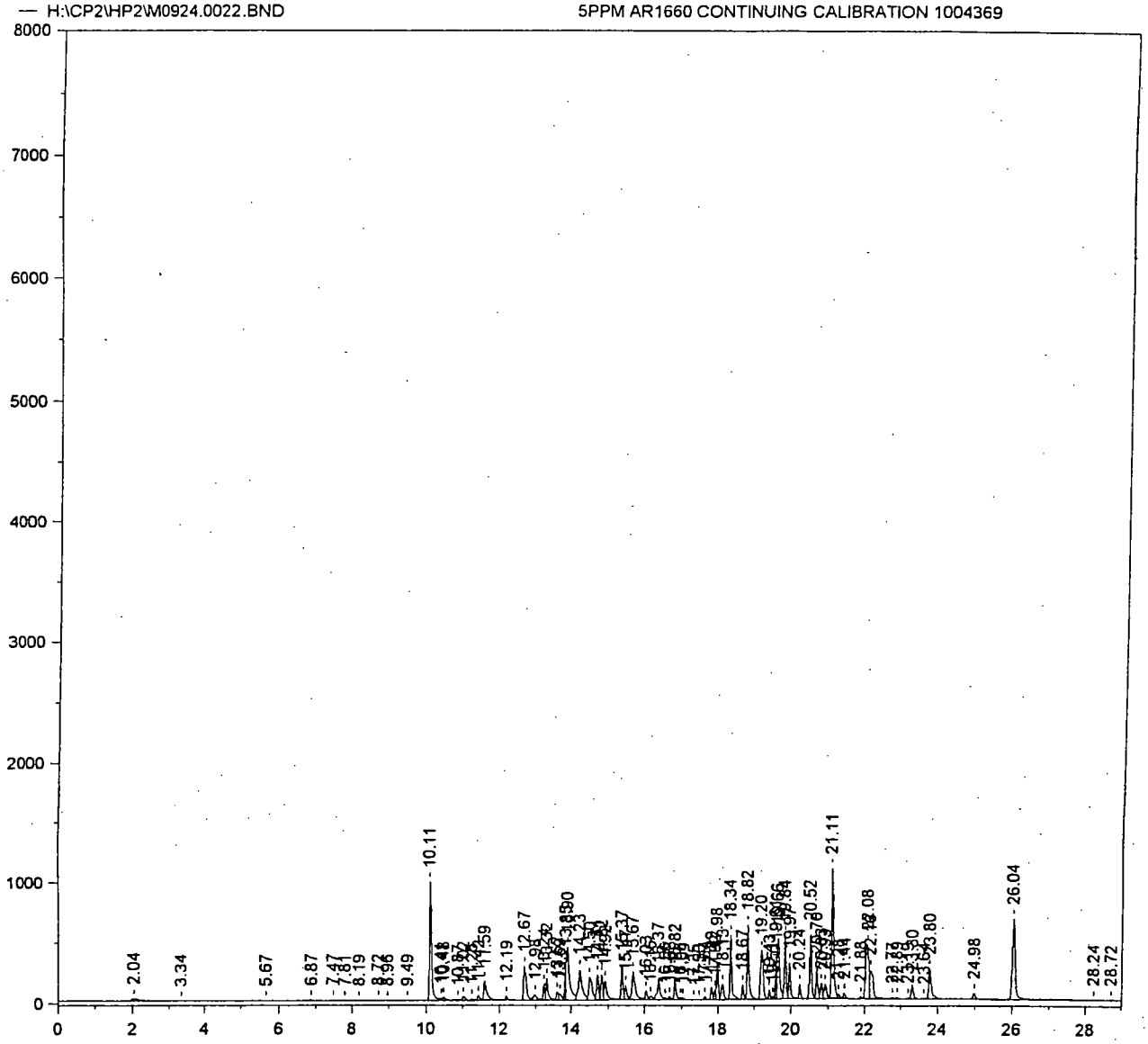
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.04		0.00	0.000	244426	0.412	BV	0.22
2	3.34		0.00	0.000	3007	0.005	VB	0.35
3	5.67		0.00	0.000	1176	0.002	BB	0.12
4	6.87		0.00	0.000	19594	0.033	BB	0.07
5	7.47		0.00	0.000	8442	0.014	BV	0.07
6	7.81		0.00	0.000	2052	0.003	VV	0.10
7	8.19		0.00	0.000	371	0.001	VB	0.07
8	8.72		0.00	0.000	10900	0.018	BV	0.08
9	8.96		0.00	0.000	1234	0.002	VB	0.08
10	9.49		0.00	0.000	1033	0.002	BB	0.16
11	10.11	CL4XYL	0.53	1.009	4126275	6.947	SBB	0.05
12	[illegible]		0.00	0.000	15407	0.026	TBV	0.04
13	10.48		0.00	0.000	72304	0.122	TVV	0.06
14	10.87		0.00	0.000	1790	0.003	TVV	0.08
15	11.02		0.00	0.000	153875	0.259	TVV	0.07
16	11.25		0.00	0.000	43148	0.073	TVV	0.06
17	11.42		0.00	0.000	172033	0.290	TVV	0.07
18	11.59	AR1016#1	5.31	10.158	942248	1.586	TVV	0.07
19	12.19		0.00	0.000	140424	0.236	TVB	0.05
20	12.67	AR1016#2	4.98	9.539	1578024	2.657	BV	0.09
21	12.98		0.00	0.000	340397	0.573	VV	0.08
22	13.24		0.00	0.000	441744	0.744	VV	0.05
23	13.32		0.00	0.000	811581	1.366	VV	0.06
24	13.62		0.00	0.000	262627	0.442	VV	0.07
25	13.69		0.00	0.000	270651	0.456	VV	0.07
26	13.85		0.00	0.000	802649	1.351	VV	0.04
27	13.90	AR1016#3	5.37	10.284	2614221	4.401	VV	0.08
28	14.23	AR1016#4	5.44	10.421	1712743	2.883	VV	0.07
29	14.50		0.00	0.000	1254363	2.112	VV	0.09
30	14.71		0.00	0.000	771996	1.300	VV	0.05
31	14.82		0.00	0.000	816711	1.375	VV	0.05
32	14.92		0.00	0.000	919927	1.549	VV	0.08
33	15.37	AR1016#5	5.07	9.707	1006200	1.694	VV	0.05
34	15.47		0.00	0.000	530277	0.893	VV	0.06
35	15.67		0.00	0.000	1574160	2.650	VV	0.09
36	16.03		0.00	0.000	311526	0.524	VV	0.05
37	16.16		0.00	0.000	168079	0.283	VV	0.06
38	16.37		0.00	0.000	1004812	1.692	VV	0.06
39	16.56		0.00	0.000	73882	0.124	VV	0.06
40	16.68		0.00	0.000	108186	0.182	VV	0.05
41	16.82		0.00	0.000	663535	1.117	VV	0.05
42	16.96		0.00	0.000	59334	0.100	VV	0.04
43	17.04		0.00	0.000	93563	0.158	VV	0.07
44	17.35		0.00	0.000	3173	0.005	VB	0.07
45	17.50		0.00	0.000	12709	0.021	BB	0.05
46	17.64		0.00	0.000	86554	0.146	BV	0.05
47	17.82		0.00	0.000	362012	0.609	VV	0.05
48	17.92		0.00	0.000	204060	0.344	VV	0.03
49	17.98	AR1260#1	5.36	10.265	1067054	1.796	VV	0.05
50	18.13		0.00	0.000	643692	1.084	VV	0.07
51	18.34		0.00	0.000	1972597	3.321	VV	0.05
52	18.67		0.00	0.000	432467	0.728	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.82	AR1260#2	5.40	10.346	2333597	3.929	VV	0.05
54	19.20		0.00	0.000	2212552	3.725	VV	0.09
55	19.43		0.00	0.000	258057	0.434	VV	0.05
56	19.51		0.00	0.000	60608	0.102	VV	0.04
57	19.61		0.00	0.000	914870	1.540	VV	0.04
58	19.66		0.00	0.000	2222802	3.742	VV	0.07
59	19.84	AR1260#3	5.44	10.423	1802423	3.034	VV	0.05
60	19.97		0.00	0.000	1093540	1.841	VV	0.05
61	20.24		0.00	0.000	431117	0.726	VB	0.05
62	20.52		0.00	0.000	1844958	3.106	BV	0.05
63	20.70		0.00	0.000	1001376	1.686	VV	0.05
64	20.83		0.00	0.000	495256	0.834	VV	0.05
65	20.93		0.00	0.000	550575	0.927	VV	0.07
66	21.11	AR1260#4	5.37	10.285	4236010	7.132	VV	0.05
67	21.28		0.00	0.000	166267	0.280	VV	0.06
68	21.44		0.00	0.000	162679	0.274	VB	0.05
69	21.88		0.00	0.000	68272	0.115	BV	0.05
70	22.04		0.00	0.000	1033265	1.740	VV	0.04
71	22.08	AR1260#5	3.41	6.522	1820666	3.065	VV	0.06
72	22.16		0.00	0.000	1575477	2.652	VV	0.11
73	22.77		0.00	0.000	59409	0.100	VV	0.07
74	22.89		0.00	0.000	63654	0.107	VV	0.07
75	23.19		0.00	0.000	31947	0.054	VV	0.06
76	23.30		0.00	0.000	526256	0.886	VV	0.06
77	23.64		0.00	0.000	46038	0.078	VV	0.13
78	23.80		0.00	0.000	1337154	2.251	VV	0.07
79	24.98		0.00	0.000	259428	0.437	VB	0.07
80	26.04	CL10BP	0.54	1.041	3850817	6.483	BV	0.08
81	28.24		0.00	0.000	3371	0.006	VV	0.12
82	28.72		0.00	0.000	684	0.001	VB	0.11

Total Area = 5.939837E+07 Total Height = 1.368894E+07 Total Amount = 52.23206

50276

— H:\CP2\HP2\M0924.0022.BND 5PPM AR1660 CONTINUING CALIBRATION 1004369



After reintegration
KDT
9/25/02

50277

Rev KDT 9/25/02

Chrom Perfect Chromatogram Report

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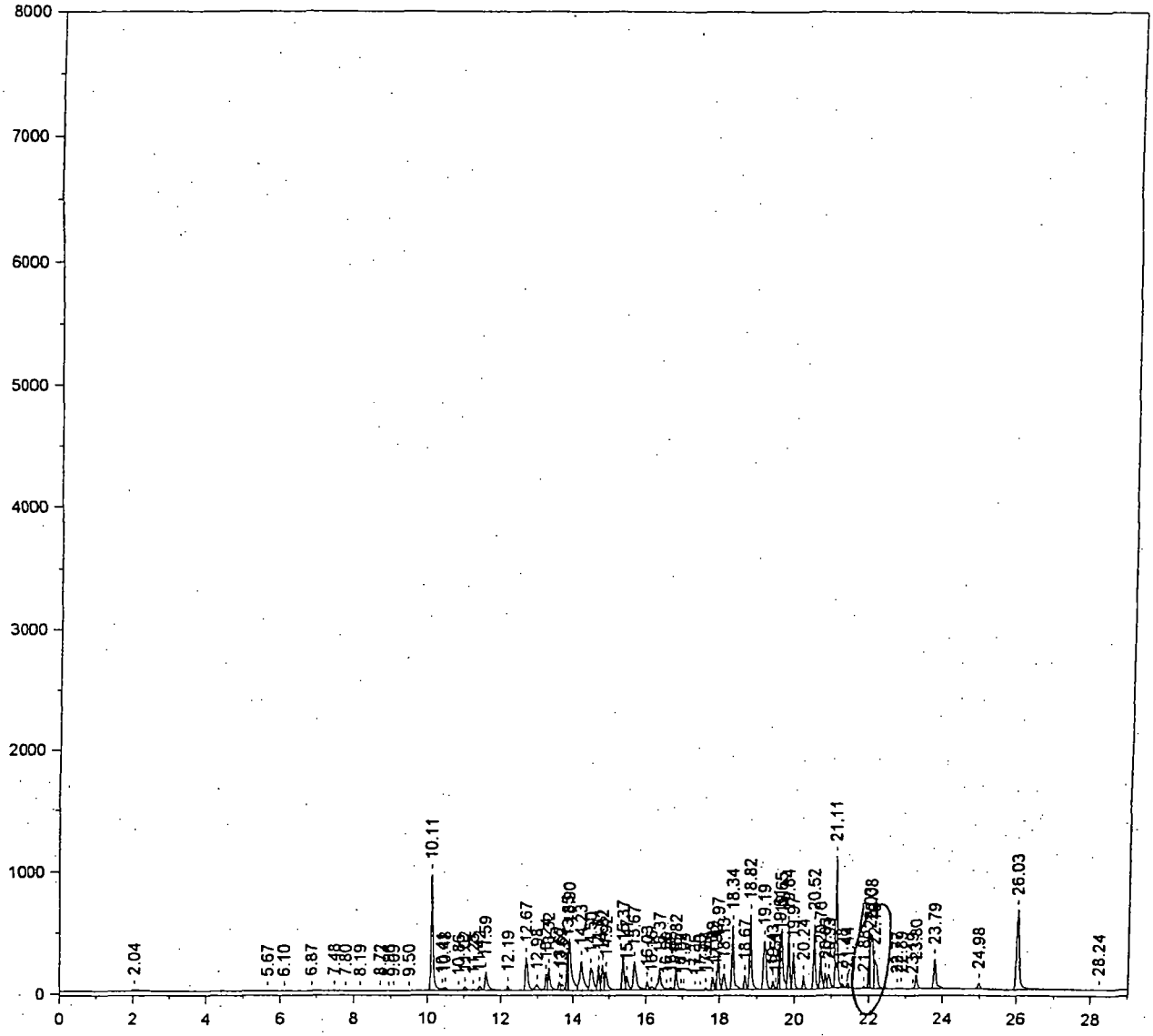
5PPM AR1660 CONTINUING CALIBRATION 1004369



Primary Column

Before reintegration
peak not split in initial calibration
KDT
9/25/02

50282

Sample Name = **5PPM AR1660 CONTINUING CALIBRATION 1004369**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0924.0029.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/25/02 8:36:48 AM
Method Version = 619
Calibration Version = 14

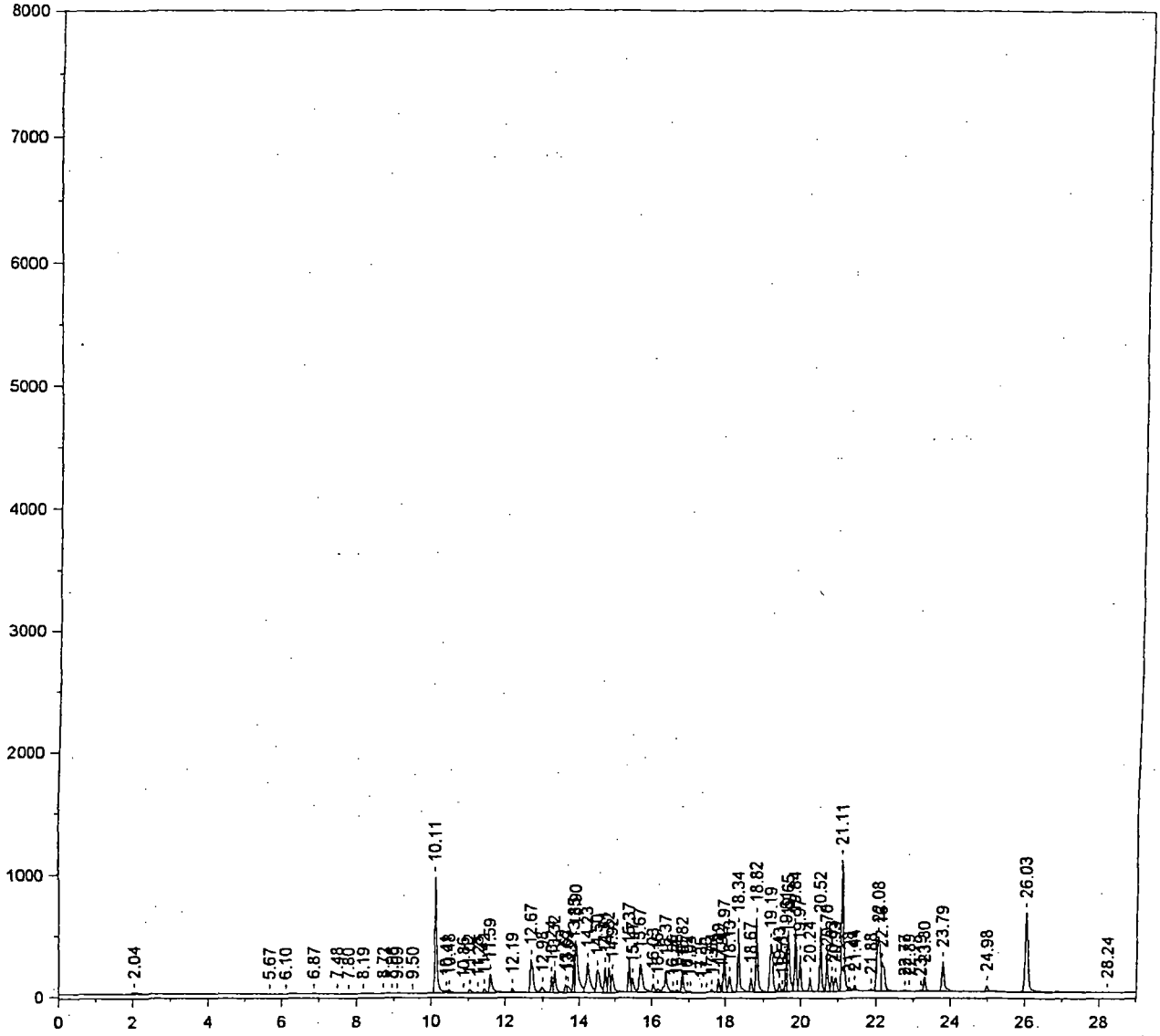
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.04		0.00	0.000	223345	0.378	BB	0.22
2	5.67		0.00	0.000	679	0.001	BB	0.12
3	6.10		0.00	0.000	258	0.000	BB	0.07
4	6.87		0.00	0.000	18997	0.032	BB	0.07
5	7.48		0.00	0.000	8273	0.014	BV	0.07
6	7.80		0.00	0.000	2147	0.004	VV	0.10
7	8.19		0.00	0.000	410	0.001	VB	0.08
8	8.72		0.00	0.000	12209	0.021	BV	0.08
9	8.96		0.00	0.000	3338	0.006	VV	0.08
10	9.09		0.00	0.000	4270	0.007	VV	0.09
11	9.50		0.00	0.000	2084	0.004	VB	0.18
12	10.11	CL4XYL	0.52	0.988	4056324	6.867	SBB	0.05
13	10.41		0.00	0.000	15114	0.026	TBV	0.04
14	10.48		0.00	0.000	70751	0.120	TVV	0.06
15	10.86		0.00	0.000	1034	0.002	TVV	0.08
16	11.02		0.00	0.000	151626	0.257	TVV	0.07
17	11.25		0.00	0.000	43818	0.074	TVV	0.06
18	11.42		0.00	0.000	170062	0.288	TVV	0.07
19	11.59	AR1016#1	5.36	10.207	951199	1.610	TVV	0.07
20	12.19		0.00	0.000	142606	0.241	TVB	0.05
21	12.67	AR1016#2	4.96	9.455	1571217	2.660	BV	0.09
22	12.98		0.00	0.000	335675	0.568	VV	0.08
23	13.24		0.00	0.000	438671	0.743	VV	0.05
24	13.32		0.00	0.000	809685	1.371	VV	0.06
25	13.62		0.00	0.000	257890	0.437	VV	0.07
26	13.69		0.00	0.000	270453	0.458	VV	0.07
27	13.85		0.00	0.000	779615	1.320	VV	0.04
28	13.90	AR1016#3	5.37	10.230	2612529	4.423	VV	0.08
29	14.23	AR1016#4	5.46	10.402	1717389	2.908	VV	0.07
30	14.50		0.00	0.000	1252825	2.121	VV	0.10
31	14.71		0.00	0.000	776452	1.315	VV	0.05
32	14.82		0.00	0.000	818795	1.386	VV	0.05
33	14.92		0.00	0.000	929171	1.573	VV	0.08
34	15.37	AR1016#5	5.08	9.688	1008827	1.708	VV	0.05
35	15.47		0.00	0.000	537353	0.910	VV	0.06
36	15.67		0.00	0.000	1573490	2.664	VV	0.09
37	16.03		0.00	0.000	313276	0.530	VV	0.05
38	16.16		0.00	0.000	167475	0.284	VV	0.06
39	16.37		0.00	0.000	1003415	1.699	VV	0.06
40	16.56		0.00	0.000	75560	0.128	VV	0.06
41	16.68		0.00	0.000	109154	0.185	VV	0.05
42	16.82		0.00	0.000	666016	1.128	VV	0.05
43	16.97		0.00	0.000	59472	0.101	VV	0.04
44	17.04		0.00	0.000	94214	0.160	VV	0.07
45	17.35		0.00	0.000	3303	0.006	VB	0.07
46	17.50		0.00	0.000	12722	0.022	BB	0.05
47	17.64		0.00	0.000	86767	0.147	BV	0.05
48	17.82		0.00	0.000	363326	0.615	VV	0.05
49	17.92		0.00	0.000	190165	0.322	VV	0.03
50	17.97	AR1260#1	5.44	10.364	1082231	1.832	VV	0.05
51	18.13		0.00	0.000	647925	1.097	VV	0.07
52	18.34		0.00	0.000	1981565	3.355	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.67		0.00	0.000	436858	0.740	VV	0.05
54	18.82	AR1260#2	5.44	10.369	2349428	3.978	VV	0.05
55	19.19		0.00	0.000	2222043	3.762	VV	0.09
56	19.43		0.00	0.000	259432	0.439	VV	0.05
57	19.51		0.00	0.000	64962	0.110	VV	0.04
58	19.61		0.00	0.000	926799	1.569	VV	0.04
59	19.65		0.00	0.000	2212647	3.746	VV	0.07
60	19.84	AR1260#3	5.46	10.411	1808556	3.062	VV	0.05
61	19.97		0.00	0.000	1097170	1.858	VV	0.05
62	20.24		0.00	0.000	425168	0.720	VB	0.05
63	20.52		0.00	0.000	1845215	3.124	BV	0.05
64	20.70		0.00	0.000	1002808	1.698	VV	0.05
65	20.83		0.00	0.000	483434	0.818	VV	0.05
66	20.93		0.00	0.000	561921	0.951	VV	0.07
67	21.11	AR1260#4	5.35	10.192	4216997	7.139	VV	0.05
68	21.28		0.00	0.000	170688	0.289	VV	0.07
69	21.44		0.00	0.000	160878	0.272	VB	0.05
70	21.88		0.00	0.000	66756	0.113	BV	0.05
71	22.03		0.00	0.000	968863	1.640	VV	0.04
72	22.08	AR1260#5	3.50	6.669	1870299	3.166	VV	0.06
73	22.16		0.00	0.000	1510372	2.557	VB	0.10
74	22.77		0.00	0.000	46880	0.079	BV	0.07
75	22.89		0.00	0.000	52819	0.089	VB	0.07
76	23.19		0.00	0.000	29369	0.050	BV	0.06
77	23.30		0.00	0.000	522980	0.885	VV	0.06
78	23.79		0.00	0.000	1267625	2.146	VB	0.07
79	24.98		0.00	0.000	254527	0.431	BB	0.07
80	26.03	CL10BP	0.54	1.024	3803474	6.439	BV	0.08
81	28.24		0.00	0.000	2686	0.005	VB	0.14

Total Area = 5.906682E+07 Total Height = 1.356569E+07 Total Amount = 52.47007

50284

— H:\CP2\HP2\M0924.0029.RAW 5PPM AR1660 CONTINUING CALIBRATION 1004369



after investigation
AST
9/25/02

50285

PAH-8270 SIM

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-001-04-ESW	ARDL Lab No.:	301103-05
Desc/Location:	NONE	Lab Filename:	Z3840
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	19.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.5	12.5	ND		UG/KG	1
Acenaphthylene	3	12.5	ND		UG/KG	1
Acenaphthene	3.4	12.5	ND		UG/KG	1
Fluorene	2.9	12.5	ND		UG/KG	1
Phenanthrene	3.2	12.5	ND		UG/KG	1
Anthracene	2.5	12.5	ND		UG/KG	1
Fluoranthene	3.2	12.5	ND		UG/KG	1
Pyrene	2.3	12.5	ND		UG/KG	1
Benzo(a)anthracene	2.4	12.5	ND		UG/KG	1
Chrysene	2.9	12.5	ND		UG/KG	1
Benzo(b)fluoranthene	3	12.5	ND		UG/KG	1
Benzo(k)fluoranthene	4.6	12.5	ND		UG/KG	1
Benzo(a)pyrene	2.8	12.5	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.5	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.5	ND		UG/KG	1
Benzo(g,h,i)perylene	3	12.5	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	33%
Nitrobenzene-d5	23-120	42%
Terphenyl-d14	18-137	81%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-002-04-ESW	ARDL Lab No.:	301103-04
Desc/Location:	NONE	Lab Filename:	Z3839
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0746	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	21.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.5	12.7	ND		UG/KG	1
Acenaphthylene	3	12.7	ND		UG/KG	1
Acenaphthene	3.5	12.7	ND		UG/KG	1
Fluorene	3	12.7	ND		UG/KG	1
Phenanthrene	3.2	12.7	ND		UG/KG	1
Anthracene	2.5	12.7	ND		UG/KG	1
Fluoranthene	3.3	12.7	ND		UG/KG	1
Pyrene	2.4	12.7	ND		UG/KG	1
Benzo(a)anthracene	2.5	12.7	ND		UG/KG	1
Chrysene	3	12.7	ND		UG/KG	1
Benzo(b)fluoranthene	3	12.7	ND		UG/KG	1
Benzo(k)fluoranthene	4.7	12.7	ND		UG/KG	1
Benzo(a)pyrene	2.8	12.7	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	3	12.7	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.8	12.7	ND		UG/KG	1
Benzo(g,h,i)perylene	3	12.7	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	62%
Nitrobenzene-d5	23-120	52%
Terphenyl-d14	18-137	81%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-003-04-ESW	ARDL Lab No.:	301103-03
Desc/Location:	NONE	Lab Filename:	Z3838
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0735	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	17.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.1	34.9		UG/KG	1
Acenaphthylene	2.9	12.1	ND		UG/KG	1
Acenaphthene	3.3	12.1	ND		UG/KG	1
Fluorene	2.8	12.1	5.2	J	UG/KG	1
Phenanthrene	3.1	12.1	15.4		UG/KG	1
Anthracene	2.4	12.1	5.1	J	UG/KG	1
Fluoranthene	3.1	12.1	20.2		UG/KG	1
Pyrene	2.3	12.1	26.8		UG/KG	1
Benzo(a)anthracene	2.4	12.1	11.6	J	UG/KG	1
Chrysene	2.9	12.1	16.1		UG/KG	1
Benzo(b)fluoranthene	2.9	12.1	11.7	J	UG/KG	1
Benzo(k)fluoranthene	4.5	12.1	7.5	J	UG/KG	1
Benzo(a)pyrene	2.7	12.1	10.5	J	UG/KG	1
Indeno(1,2,3-cd)pyrene	2.8	12.1	7.7	J	UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.1	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.1	13.2		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	72%
Nitrobenzene-d5	23-120	67%
Terphenyl-d14	18-137	80%

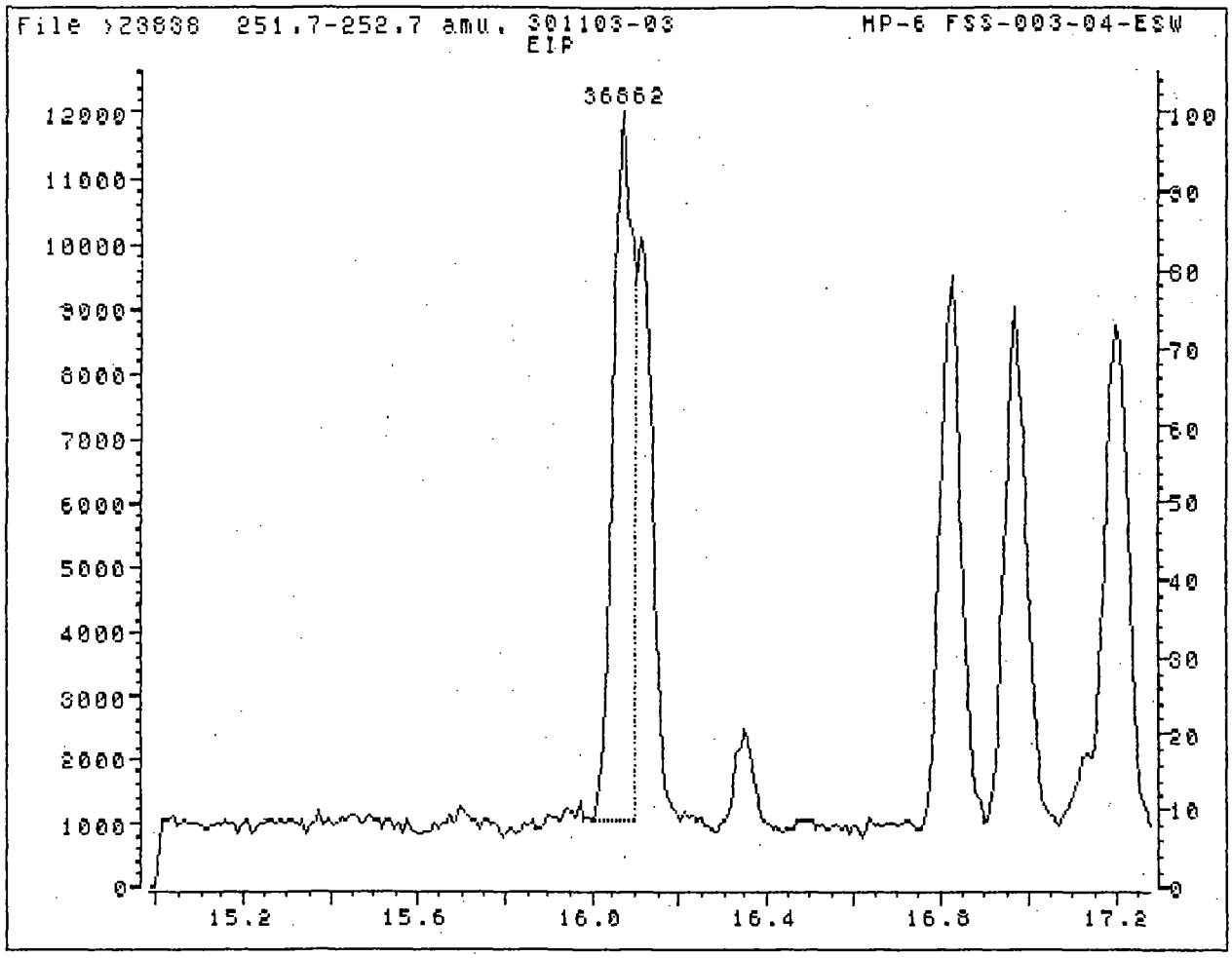
Surrogate recoveries marked with '*' indicates they are outside standard limits.

Operator ID: DOUG Quant Rev: 7 Quant Time: 020925 21:33
Output File: ^Z3838::D1 Injected at: 020925 21:10
Data File: >Z3838::D8 Dilution Factor: 1.00000
Name: 301103-03 Instrument ID: **HP*6
Misc: HP-6 FSS-003-04-ESW 8270 PNA/SIM SEMIVOLATILE

ID File: SIMPS6::SC
Title: PAH ANALYSIS
Last Calibration: 020924 15:56 Last Qcal Time: 020925 15:52

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*D8 Naphthalene (ISTD2)	5.51	136.0	2028439	333.00	ug/Kg	92
2)	D5 Nitrobenzene (Surr 3)	4.58	82.0	998612	444.63	ug/Kg	82
3)	Naphthalene	5.54	128.0	175353	28.81	ug/Kg	96
6)	*D10 Acenaphthene (ISTD3)	7.92	164.0	1057300	333.00	ug/Kg	94
7)	2-Fluorobiphenyl (Surr 4)	6.95	172.0	1746122	482.08	ug/Kg	97
10)	Fluorene	8.67	166.0	15602	4.31	ug/Kg	90
11)	*D10 Phenanthrene (ISTD4)	9.97	188.0	1629855	333.00	ug/Kg	97
12)	Phenanthrene	10.00	178.0	65831	12.73	ug/Kg	98
13)	Anthracene	10.07	178.0	22272	4.20	ug/Kg	93
14)	Fluoranthene	11.67	202.0	86362	16.69	ug/Kg	94
5)	*D12 Chrysene (ISTD 5)	13.80	240.0	1286298	333.00	ug/Kg	100
)	Pyrene	12.00	202.0	101582	22.13	ug/Kg	96
17)	D14 Terphenyl (Surr 6)	12.12	244.0	1510636	530.19	ug/Kg	87
18)	Benzo(a)Anthracene	13.77	228.0	40927	9.56	ug/Kg	95
19)	Chrysene	13.84	228.0	51565	13.33	ug/Kg	96
20)	*D12 Perylene (ISTD 6)	17.13	264.0	1064544	333.00	ug/Kg	96
21)	Benzo(b)Fluoranthene	16.07	252.0	36862	9.64	ug/Kg	97
22)	Benzo(k)Fluoranthene	16.11	252.0	20958M	6.20	ug/Kg	97
23)	Benzo(a)Pyrene	16.97	252.0	29606	8.69	ug/Kg	94
24)	Indeno(1,2,3-cd)Pyrene	20.90	276.0	21887	6.34	ug/Kg	79
26)	Benzo(g,h,i)Perylene	22.06	276.0	32177	10.87	ug/Kg	81

* Compound is ISTD



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Name: 301103-03 Instrument ID: **HP*6
Misc: HP-6 FSS-003-04-ESW 8270 PNA/SIM SEMIVOLATILE
Quant Time: 020925 21:33 Quant ID File: SIMPS6::SC
Injected at: 020925 21:10 Last Calibration: 020924 15:56

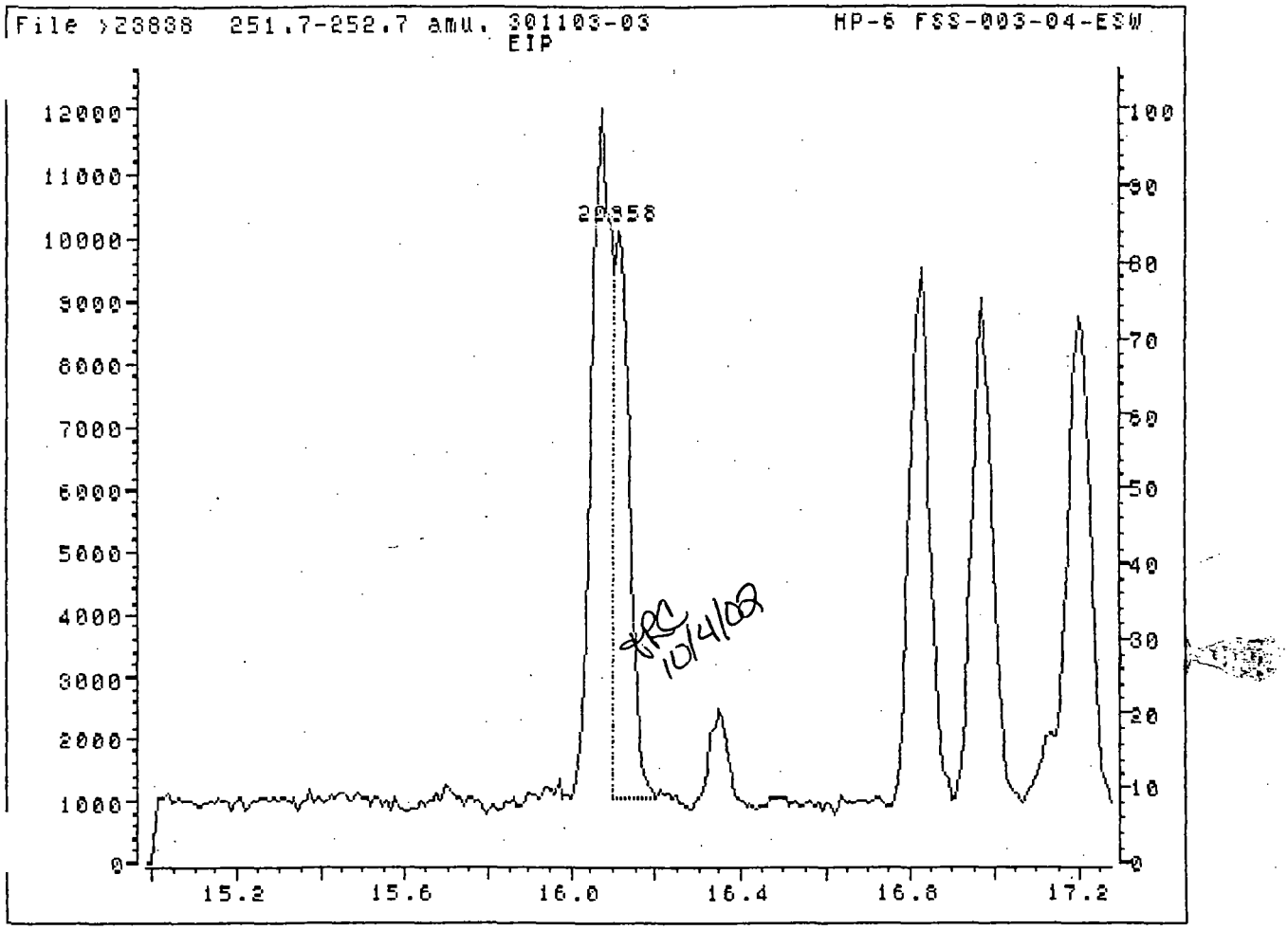
Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1324
Retention Time: 16.07 min.
Quant Ion: 252.0
Area: 36862
Concentration: 10.90 ug/Kg
q-value: 97

This report was produced by QAREA on: 021004 16:39

Incorrect peak integrated by computer

RC
10/4/02

40067



Data File: >Z3838::D8 Quant Output File: ^Z3838::D1
Name: 301103-03 Instrument ID: **HP*6
Misc: HP-6 FSS-003-04-ESW 8270 PNA/SIM SEMIVOLATILE
Quant Time: 020925 21:33 Quant ID File: SIMPS6::SC
Injected at: 020925 21:10 Last Calibration: 020924 15:56

Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1328
Retention Time: 16.11 min.
Quant Ion: 252.0
Area: 20958M
Concentration: 6.20 ug/Kg
q-value: 97

This report was produced by QAREA on: 021004 16:42

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-004-04-ESW	ARDL Lab No.:	301103-02
Desc/Location:	NONE	Lab Filename:	Z3837
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0730	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	18.4	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.3	ND		UG/KG	1
Acenaphthylene	2.9	12.3	ND		UG/KG	1
Acenaphthene	3.4	12.3	ND		UG/KG	1
Fluorene	2.9	12.3	4.8	J	UG/KG	1
Phenanthrene	3.1	12.3	30.2		UG/KG	1
Anthracene	2.5	12.3	5.8	J	UG/KG	1
Fluoranthene	3.2	12.3	29.6		UG/KG	1
Pyrene	2.3	12.3	26.3		UG/KG	1
Benzo(a)anthracene	2.4	12.3	9.1	J	UG/KG	1
Chrysene	2.9	12.3	12.6		UG/KG	1
Benzo(b)fluoranthene	2.9	12.3	7.7	J	UG/KG	1
Benzo(k)fluoranthene	4.5	12.3	6.4	J	UG/KG	1
Benzo(a)pyrene	2.7	12.3	6.7	J	UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.3	4.3	J	UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.3	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.3	6.5	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	67%
Nitrobenzene-d5	23-120	63%
Terphenyl-d14	18-137	81%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

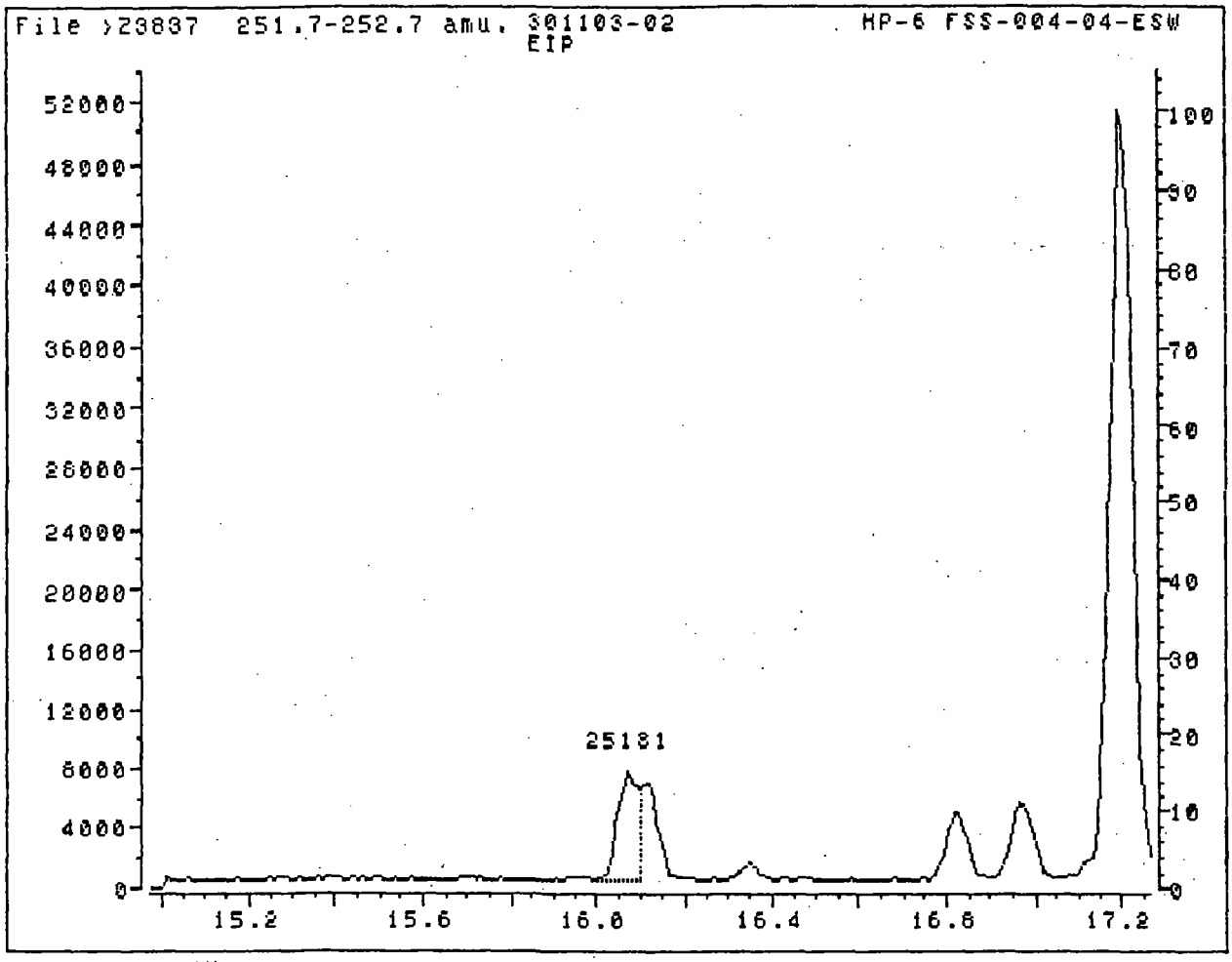
QUANT REPORT

Operator ID: DOUG Quant Rev: 7 Quant Time: 020925 21:04
Output File: ^Z3837::D1 Injected at: 020925 20:41
Data File: >Z3837::D8 Dilution Factor: 1.00000
Name: 301103-02 Instrument ID: **HP*6
Misc: HP-6 FSS-004-04-ESW 8270 PNA/SIM SEMIVOLATILE

ID File: SIMPS6::SC
Title: PAH ANALYSIS
Last Calibration: 020924 15:56 Last Qcal Time: 020925 15:52

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*D8 Naphthalene (ISTD2)	5.51	136.0	1931879	333.00	ug/Kg	96
2)	D5 Nitrobenzene (Surr 3)	4.59	82.0	904247	422.74	ug/Kg	75
6)	*D10 Acenaphthene (ISTD3)	7.93	164.0	1006070	333.00	ug/Kg	86
7)	2-Fluorobiphenyl (Surr 4)	6.95	172.0	1543446	447.82	ug/Kg	98
10)	Fluorene	8.67	166.0	13445	3.91	ug/Kg	90
11)	*D10 Phenanthrene (ISTD4)	9.98	188.0	1538883	333.00	ug/Kg	83
12)	Phenanthrene	10.00	178.0	120165	24.61	ug/Kg	99
13)	Anthracene	10.07	178.0	23884	4.77	ug/Kg	93
14)	Fluoranthene	11.67	202.0	117969	24.14	ug/Kg	93
15)	*D12 Chrysene (ISTD 5)	13.80	240.0	1288797	333.00	ug/Kg	100
)	Pyrene	12.00	202.0	98843	21.49	ug/Kg	97
,)	D14 Terphenyl (Surr 6)	12.12	244.0	1536097	538.08	ug/Kg	85
18)	Benzo(a)Anthracene	13.77	228.0	31735	7.40	ug/Kg	99
19)	Chrysene	13.84	228.0	39990	10.32	ug/Kg	96
20)	*D12 Perylene (ISTD 6)	17.12	264.0	1109902	333.00	ug/Kg	95
21)	Benzo(b)Fluoranthene	16.07	252.0	25181	6.32	ug/Kg	89
22)	Benzo(k)Fluoranthene	16.11	252.0	18285M	5.19	ug/Kg	89
23)	Benzo(a)Pyrene	16.97	252.0	19410	5.46	ug/Kg	93
24)	Indeno(1,2,3-cd)Pyrene	20.90	276.0	12572	3.49	ug/Kg	81
26)	Benzo(g,h,i)Perylene	22.06	276.0	16357	5.30	ug/Kg	89

* Compound is ISTD



Data File: >Z3837::D8 Quant Output File: ^Z3837::D1
Name: 301103-02 Instrument ID: **HP*6
Misc: HP-6 FSS-004-04-ESW 8270 PNA/SIM SEMIVOLATILE
Quant Time: 020925 21:04 Quant ID File: SIMPS6::SC
Injected at: 020925 20:41 Last Calibration: 020924 15:56

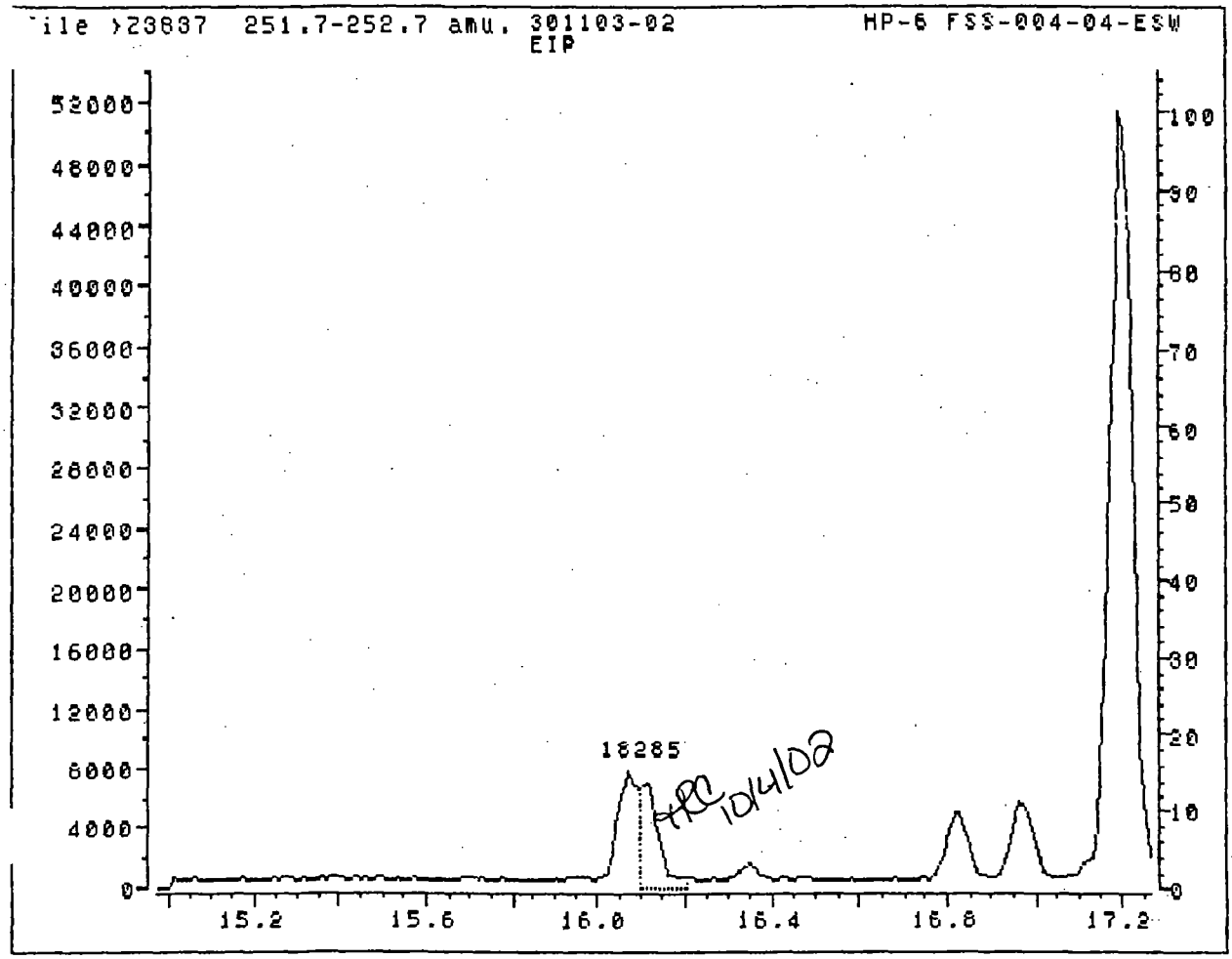
Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1324
Retention Time: 16.07 min.
Quant Ion: 252.0
Area: 25181
Concentration: 7.14 ug/Kg
q-value: 89

This report was produced by QAREA on: 021004 15:57

Incorrect peak integrated by computer

TRC 10/4/02

40047



Data File: >Z3837::D8 Quant Output File: ^Z3837::D1
Name: 301103-02 Instrument ID: **HP*6
Misc: HP-6 FSS-004-04-ESW 8270 PNA/SIM SEMIVOLATILE
Quant Time: 020925 21:04 Quant ID File: SIMPS6::SC
Injected at: 020925 20:41 Last Calibration: 020924 15:56

Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1328
Retention Time: 16.11 min.
Quant Ion: 252.0
Area: 18285M
Concentration: 5.19 ug/Kg
q-value: 89

This report was produced by QAREA on: 021004 16:03

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/14/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	VWR-001-03-ESW	ARDL Lab No.:	301103-07
Desc/Location:	NONE	Lab Filename:	Z3844
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0934	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	18.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.2	ND		UG/KG	1
Acenaphthylene	2.9	12.2	ND		UG/KG	1
Acenaphthene	3.3	12.2	ND		UG/KG	1
Fluorene	2.9	12.2	ND		UG/KG	1
Phenanthrene	3.1	12.2	ND		UG/KG	1
Anthracene	2.4	12.2	ND		UG/KG	1
Fluoranthene	3.2	12.2	8.2	J	UG/KG	1
Pyrene	2.3	12.2	8.8	J	UG/KG	1
Benzo(a)anthracene	2.4	12.2	4.7	J	UG/KG	1
Chrysene	2.9	12.2	5.2	J	UG/KG	1
Benzo(b)fluoranthene	2.9	12.2	ND		UG/KG	1
Benzo(k)fluoranthene	4.5	12.2	ND		UG/KG	1
Benzo(a)pyrene	2.7	12.2	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.2	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.2	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.2	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	53%
Nitrobenzene-d5	23-120	50%
Terphenyl-d14	18-137	73%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	FSS-008-04-ESW	ARDL Lab No.:	301103-06
Desc/Location:	NONE	Lab Filename:	Z3841
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0808	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	20.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.5	12.6	ND		UG/KG	1
Acenaphthylene	3	12.6	ND		UG/KG	1
Acenaphthene	3.4	12.6	ND		UG/KG	1
Fluorene	3	12.6	ND		UG/KG	1
Phenanthrene	3.2	12.6	ND		UG/KG	1
Anthracene	2.5	12.6	ND		UG/KG	1
Fluoranthene	3.3	12.6	ND		UG/KG	1
Pyrene	2.3	12.6	ND		UG/KG	1
Benzo(a)anthracene	2.5	12.6	ND		UG/KG	1
Chrysene	3	12.6	ND		UG/KG	1
Benzo(b)fluoranthene	3	12.6	ND		UG/KG	1
Benzo(k)fluoranthene	4.6	12.6	ND		UG/KG	1
Benzo(a)pyrene	2.8	12.6	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.6	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.8	12.6	ND		UG/KG	1
Benzo(g,h,i)perylene	3	12.6	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	50%
Nitrobenzene-d5	23-120	51%
Terphenyl-d14	18-137	80%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/04/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510B

Field ID:	VWR-002-02-ERB	ARDL Lab No.:	301103-01
Desc/Location:	NONE	Lab Filename:	Z3786
Sample Date:	09/12/2002	Received Date:	09/14/2002
Sample Time:	1500	Prep. Date:	09/18/2002
Matrix:	WATER	Analysis Date:	09/24/2002
Amount Used:	1000 mL	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5014
% Moisture:	NA	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	0.049	1.0	ND		UG/L	1
Acenaphthylene	0.052	1.0	ND		UG/L	1
Acenaphthene	0.059	1.0	ND		UG/L	1
Fluorene	0.051	1.0	ND		UG/L	1
Phenanthrene	0.06	1.0	ND		UG/L	1
Anthracene	0.05	1.0	ND		UG/L	1
Fluoranthene	0.062	1.0	ND		UG/L	1
Pyrene	0.045	1.0	ND		UG/L	1
Benzo(a)anthracene	0.055	1.0	ND		UG/L	1
Chrysene	0.058	1.0	ND		UG/L	1
Benzo(b)fluoranthene	0.068	1.0	ND		UG/L	1
Benzo(k)fluoranthene	0.055	1.0	ND		UG/L	1
Benzo(a)pyrene	0.048	1.0	ND		UG/L	1
Indeno(1,2,3-cd)pyrene	0.05	1.0	ND		UG/L	1
Dibenzo(a,h)anthracene	0.054	1.0	ND		UG/L	1
Benzo(g,h,i)perylene	0.049	1.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	43-116	72%
Nitrobenzene-d5	35-114	63%
Terphenyl-d14	33-141	69%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

8015M

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 09/25/2002

Project Name: USACE FT DEARBORN Analysis: MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.: 17297 Analytical Method: 8015
Prep Method: NONE

Field ID:	VWR-001-03-ESW	ARDL Lab No.:	301103-07
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/13/2002	Received Date:	09/14/2002
Sample Time:	0934	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/24/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B4999
% Moisture:	18.2	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	2	12.2	ND		MG/KG	1

INORGANICS

INORGANIC ANALYSIS DATA PACKAGE

FERGUSON HARBOR

Report Date: 10/01/02

Delivery Order No.: 17297

ARDL Report No.: 301103

Lab Name: ARDL, Inc.
Samples Received at ARDL: 14-Sep-02
Project Name: USACE Ft. Dearborn

CASE NARRATIVE

Sample ID No.	Date Collected	Lab ID No.	Analysis Requested
FSS-004-04-ESW	09/13/02	301103-02	Total Metals(1), Total Solids
FSS-003-04-ESW	09/13/02	301103-03	Total Metals(1), Total Solids
FSS-002-04-ESW	09/13/02	301103-04	Total Metals(1), Total Solids
FSS-001-04-ESW	09/13/02	301103-05	Total Metals(1), Total Solids
FSS-008-04-ESW	09/13/02	301103-06	Total Metals(1), Total Solids
VWR-001-03-ESW	09/13/02	301103-07	Total Metals(1), Total Solids

(1) Including aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, vanadium and zinc.

The quality control data are summarized as follows:

LABORATORY CONTROL SAMPLES
Percent recovery of all LCS analyses were within control limits.

PREPARATION BLANKS
Results of all preparation blanks were within acceptable limits.

MATRIX SPIKES
Percent recovery of all matrix spikes and matrix spike duplicates except 1 of 2 for zinc and 2 of 2 for antimony were within control limits. Sample results for aluminum, iron and manganese were greater than 4 times the spike amount; therefore, percent recovery was not considered.

DUPLICATES
RPD on all duplicate analyses were within control limits.
All duplicate analyses are reported as MS/MSD except calcium, magnesium, potassium, sodium and total solids which are reported as sample/duplicate.

Release of the data contained in this package has been authorized by the Technical Services Manager or his designee as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-001-04-ESW ARDL No: 301103-05
Sampling Loc'n: NONE Received: 09/14/2002
Sampling Date: 09/13/2002 Matrix: SOIL
Sampling Time: 0808 Moisture: 19.7

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.5	14800	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.62	1.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.37	11.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.2	94.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.12	0.86	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.5	0.62	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.5	3030	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.62	20.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.62	12.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.2	31.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6.2	26300	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.37	18.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.5	4770	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.62	651	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.1	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1639
Nickel	1.9	32.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	249	1590	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.62	0.94	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.62	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	49.8	81.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.37	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.62	27.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.62	54.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	80.3	%	NONE	160.3	NA	09/16/02	09179443

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-002-04-ESW ARDL No: 301103-04
Sampling Loc'n: NONE Received: 09/14/2002
Sampling Date: 09/13/2002 Matrix: SOIL
Sampling Time: 0746 Moisture: 21.2

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.7	14400	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.63	1.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.38	10.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.3	93.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.13	0.81	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.51	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.7	7930	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.63	21.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.63	13.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P400[illegible]
Copper	1.3	34.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P400[illegible]
Iron	6.3	26100	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.38	16.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.7	8290	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.63	541	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.1	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1639
Nickel	1.9	36.0	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	254	1620	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.63	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.63	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	50.8	90.1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.38	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.63	26.1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.63	53.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	78.8	%	NONE	160.3	NA	09/16/02	09179443

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-003-04-ESW ARDL No: 301103-03
Sampling Loc'n: NONE Received: 09/14/2002
Sampling Date: 09/13/2002 Matrix: SOIL
Sampling Time: 0735 Moisture: 17.4

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.1	8100	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.61	1.1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.36	9.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.2	56.1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.12	0.47	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.48	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.1	25000	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.61	12.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.61	8.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.2	25.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6.1	17000	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.36	21.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.1	16700	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.61	396	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.097	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1639
Nickel	1.8	17.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	242	1360	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.61	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.61	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	48.4	89.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.36	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.61	16.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.61	56.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	82.6	%	NONE	160.3	NA	09/16/02	09179443

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301103 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-004-04-ESW ARDL No: 301103-02
Sampling Loc'n: NONE Received: 09/14/2002
Sampling Date: 09/13/2002 Matrix: SOIL
Sampling Time: 0730 Moisture: 18.4

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.3	10300	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.61	1.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.37	7.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.2	85.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.12	0.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.49	0.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.3	14600	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.61	13.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.61	9	MG/KG	3050B	6010B	09/24/02	09/24/02	P400
Copper	1.2	23.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P400.
Iron	6.1	17000	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.37	102	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.3	9630	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.61	338	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.098	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1639
Nickel	1.8	18.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	245	1250	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.61	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.61	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	49	132	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.37	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.61	20.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.61	51.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	81.6	%	NONE	160.3	NA	09/16/02	09179443

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Lab Report No: 301103 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: VWR-001-03-ESW ARDL No: 301103-07
Sampling Loc'n: NONE Received: 09/14/2002
Sampling Date: 09/13/2002 Matrix: SOIL
Sampling Time: 0934 Moisture: 18.2

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.2	11800	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.61	1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.37	8.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.2	109	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.12	0.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.49	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.2	2850	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.61	14.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.61	10.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.2	16.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6.1	19300	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.37	16.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.2	2740	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.61	680	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.098	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1639
Nickel	1.8	13.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	244	889	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.61	1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.61	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	48.9	62.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.37	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.61	27.1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.61	41.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	81.8	%	NONE	160.3	NA	09/16/02	09179443

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Lab Report No: 301103 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-008-04-ESW ARDL No: 301103-06
Sampling Loc'n: NONE Received: 09/14/2002
Sampling Date: 09/13/2002 Matrix: SOIL
Sampling Time: 0808 Moisture: 20.5

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.6	14800	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.63	1.1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.38	12.0	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.3	95.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.13	0.86	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.5	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.6	3080	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.63	20.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.63	12.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P400
Copper	1.3	32.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P40
Iron	6.3	26800	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.38	16.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.6	4820	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.63	701	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.1	ND	MG/KG	7470A	7470A	09/16/02	09/16/02	C1639
Nickel	1.9	31.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	252	1520	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.63	0.79	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.63	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	50.3	77.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.38	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.63	26.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.63	56.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	79.5	%	NONE	160.3	NA	09/16/02	09179443

ORGANIC ANALYSIS DATA PACKAGE

›ntract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301104 Samples Received at ARDL: 9/18/02

CASE NARRATIVE

VOLATILE FRACTION - METHOD 8260

Soil samples were received by ARDL, Inc. on September 18, 2002, for VOA analysis for GC/MS. All analyses were performed within the method specified holding time.

No unusual problems were encountered during the sample analyses.

SEMIVOLATILE FRACTION -METHOD 8270

Soil samples were received by ARDL, Inc. on September 18, 2002, for BNA analysis by GC/MS. All analyses were performed according to low level protocol within method specified holding times.

No unusual problems were encountered during the sample extraction or sample analyses.

'NA-SIM FRACTION

Soil samples were received by ARDL, Inc. on September 18, 2002, for PNA-SIM analysis by GC/MS. All analyses were performed according to low level protocol within method specified holding times.

No unusual problems were encountered during the sample extraction or sample analyses.

GLYCOL FRACTION - METHOD 8015M

Soil samples were received by ARDL, Inc. on September 18, 2002,for Glycol analysis. The samples were extracted within the method specified holding time.

No additional problems were encountered during the analysis of these samples.

PCB FRACTION - METHOD 8082

Soil samples were received by ARDL, Inc. on September 18, 2002, for PCB analysis. The samples were extracted within holding time requirements.

The samples were cleaned up by acid hydrolysis.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301104 Samples Received at ARDL: 9/18/02

CASE NARRATIVE (Continued)

PCB FRACTION - METHOD 8082 (Continued)

These samples were extracted in the same batch as ARDL SDG 301103. Therefore, only one blank and spike blank were prepared. Due to software limitations, the blank and spike blank are designated as ARDL SDG 301103, although they are also applicable to ARDL SDG 301104. Additionally, the MS/MSD evaluation was performed on samples from ARDL SDG 301103. Refer to that data package for these results.

The columns used for PCB analysis are as follows: Primary column - RTX-CLP PESTICIDE II, 30 meter, 0.32 mm ID, 0.25 mm df; Confirmation column - RTX-CLP PESTICIDES, 30 meter, 0.32 mm ID, 0.50 mm df.

The following pages list manual intergrations performed on the data. (See hard copy for explanation of manual integrations):

Pages: 60147-60150
60153-60158
60163-60166
60272-60275

No additional problems were encountered in the analysis of these samples.

ORGANIC DATA REPORTING QUALIFIERS

The following organic data reporting qualifiers are used as required.

ND- Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns.

ORGANIC ANALYSIS DATA PACKAGE

ntract No. USACE FT DEARBORN Date:3/20/03

Lab Name: ARDL, Inc.

ARDL Report No.: 301104 Samples Received at ARDL: 9/18/02

CASE NARRATIVE (Continued)

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag; instead use a laboratory-defined flag.

B - This flag is used when the analyte is found in the blank as well as the sample. It indicates possible/probable blank contamination and warns

the data user to take appropriate action. This flag must by used for a TIC as well as for a positively identified target compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form 1 for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form 1. The Form 1 for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form 1 for the diluted sample, and all concentration values reported on that Form 1 are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized for the Laboratory Manager or his designee, as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

VOA-8260B

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17207 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	OWS-001-05-ESW	ARDL Lab No.:	301104-03
Desc/Location:	NONE	Lab Filename:	Y2646
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1505	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	20.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.4	12.6	ND		UG/KG	1
Vinyl Chloride	2.3	12.6	ND		UG/KG	1
Bromomethane	1.6	12.6	ND		UG/KG	1
Chloroethane	2	12.6	ND		UG/KG	1
1,1-Dichloroethene	1	6.3	ND		UG/KG	1
Methylene Chloride	3	6.3	5.3	J	UG/KG	1
trans-1,2-Dichloroethene	1	6.3	ND		UG/KG	1
1,1-Dichloroethane	0.29	6.3	ND		UG/KG	1
Carbon disulfide	1.1	6.3	ND		UG/KG	1
cis-1,2-Dichloroethene	0.42	6.3	ND		UG/KG	1
Bromochloromethane	1	6.3	ND		UG/KG	1
Chloroform	0.86	6.3	ND		UG/KG	1
1,1,1-Trichloroethane	0.39	6.3	ND		UG/KG	1
Carbon Tetrachloride	0.77	6.3	ND		UG/KG	1
Benzene	0.72	6.3	ND		UG/KG	1
1,2-Dichloroethane	0.47	6.3	ND		UG/KG	1
Trichloroethene	1.1	6.3	ND		UG/KG	1
1,2-Dichloropropane	0.43	6.3	ND		UG/KG	1
Bromodichloromethane	0.29	6.3	ND		UG/KG	1
cis-1,3-Dichloropropene	0.82	6.3	ND		UG/KG	1
Toluene	0.39	6.3	0.52	J	UG/KG	1
trans-1,3-Dichloropropene	0.78	6.3	ND		UG/KG	1
1,1,2-Trichloroethane	0.33	6.3	ND		UG/KG	1
Tetrachloroethene	0.59	6.3	ND		UG/KG	1
Dibromochloromethane	0.29	6.3	ND		UG/KG	1
Chlorobenzene	0.26	6.3	ND		UG/KG	1
Ethyl Benzene	0.45	6.3	ND		UG/KG	1
m & p-Xylene	1	6.3	ND		UG/KG	1
o-Xylene	1.1	6.3	ND		UG/KG	1
Styrene	0.44	6.3	ND		UG/KG	1

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Lab Report No: 301104 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN
Project No.: 17207
Analysis: VOLATILES, GC/MS (8260)
Analytical Method: 8260B
Prep Method: 5030A

Field ID:	OWS-001-05-ESW	ARDL Lab No.:	301104-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2646
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1505	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	20.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.28	6.3	ND		UG/KG	1
2-Hexanone	22.7	25.2	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.3	ND		UG/KG	1
Acetone	40.4	63.1	ND		UG/KG	1
2-Butanone	21.4	63.1	ND		UG/KG	1
4-Methyl-2-pentanone	18.9	25.2	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	94%
1,2-Dichloroethane-d4	78-135	100%
Toluene-d8	86-129	98%
4-Bromofluorobenzene	76-141	97%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17207 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	OWS-002-05-ESW	ARDL Lab No.:	301104-04
Desc/Location:	NONE	Lab Filename:	Y2647
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1522	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	20.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.4	12.5	ND		UG/KG	1
Vinyl Chloride	2.3	12.5	ND		UG/KG	1
Bromomethane	1.6	12.5	ND		UG/KG	1
Chloroethane	2	12.5	ND		UG/KG	1
1,1-Dichloroethene	1	6.3	ND		UG/KG	1
Methylene Chloride	3	6.3	ND		UG/KG	1
trans-1,2-Dichloroethene	0.99	6.3	ND		UG/KG	1
1,1-Dichloroethane	0.29	6.3	ND		UG/KG	1
Carbon disulfide	1.1	6.3	ND		UG/KG	1
cis-1,2-Dichloroethene	0.41	6.3	ND		UG/KG	1
Bromochloromethane	1	6.3	ND		UG/KG	1
Chloroform	0.85	6.3	ND		UG/KG	1
1,1,1-Trichloroethane	0.39	6.3	ND		UG/KG	1
Carbon Tetrachloride	0.76	6.3	ND		UG/KG	1
Benzene	0.71	6.3	ND		UG/KG	1
1,2-Dichloroethane	0.46	6.3	ND		UG/KG	1
Trichloroethene	1.1	6.3	ND		UG/KG	1
1,2-Dichloropropane	0.43	6.3	ND		UG/KG	1
Bromodichloromethane	0.29	6.3	ND		UG/KG	1
cis-1,3-Dichloropropene	0.81	6.3	ND		UG/KG	1
Toluene	0.39	6.3	ND		UG/KG	1
trans-1,3-Dichloropropene	0.78	6.3	ND		UG/KG	1
1,1,2-Trichloroethane	0.33	6.3	ND		UG/KG	1
Tetrachloroethene	0.59	6.3	ND		UG/KG	1
Dibromochloromethane	0.29	6.3	ND		UG/KG	1
Chlorobenzene	0.26	6.3	ND		UG/KG	1
Ethyl Benzene	0.45	6.3	ND		UG/KG	1
m & p-Xylene	1	6.3	ND		UG/KG	1
o-Xylene	1.1	6.3	ND		UG/KG	1
Styrene	0.44	6.3	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN
Project No.: 17207
Analysis: VOLATILES, GC/MS (8260)
Analytical Method: 8260B
Prep Method: 5030A

Field ID:	OWS-002-05-ESW	ARDL Lab No.:	301104-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2647
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1522	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	20.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.28	6.3	ND		UG/KG	1
2-Hexanone	22.5	25.0	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.9	6.3	ND		UG/KG	1
Acetone	40.1	62.6	ND		UG/KG	1
2-Butanone	21.3	62.6	ND		UG/KG	1
4-Methyl-2-pentanone	18.8	25.0	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	99%
1,2-Dichloroethane-d4	78-135	92%
Toluene-d8	86-129	98%
4-Bromofluorobenzene	76-141	99%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

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Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17207 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	OWS-003-04-ESW	ARDL Lab No.:	301104-05
Desc/Location:	NONE	Lab Filename:	Y2648
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1545	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	12.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.2	11.4	ND		UG/KG	1
Vinyl Chloride	2.1	11.4	ND		UG/KG	1
Bromomethane	1.5	11.4	ND		UG/KG	1
Chloroethane	1.8	11.4	ND		UG/KG	1
1,1-Dichloroethene	0.95	5.7	ND		UG/KG	1
Methylene Chloride	2.7	5.7	5.6	J	UG/KG	1
trans-1,2-Dichloroethene	0.9	5.7	ND		UG/KG	1
1,1-Dichloroethane	0.26	5.7	ND		UG/KG	1
Carbon disulfide	0.98	5.7	ND		UG/KG	1
cis-1,2-Dichloroethene	0.38	5.7	ND		UG/KG	1
Bromochloromethane	0.93	5.7	ND		UG/KG	1
Chloroform	0.78	5.7	ND		UG/KG	1
1,1,1-Trichloroethane	0.35	5.7	ND		UG/KG	1
Carbon Tetrachloride	0.7	5.7	ND		UG/KG	1
Benzene	0.65	5.7	ND		UG/KG	1
1,2-Dichloroethane	0.42	5.7	ND		UG/KG	1
Trichloroethene	1	5.7	ND		UG/KG	1
1,2-Dichloropropane	0.39	5.7	ND		UG/KG	1
Bromodichloromethane	0.26	5.7	ND		UG/KG	1
cis-1,3-Dichloropropene	0.74	5.7	ND		UG/KG	1
Toluene	0.35	5.7	ND		UG/KG	1
trans-1,3-Dichloropropene	0.71	5.7	ND		UG/KG	1
1,1,2-Trichloroethane	0.3	5.7	ND		UG/KG	1
Tetrachloroethene	0.54	5.7	ND		UG/KG	1
Dibromochloromethane	0.26	5.7	ND		UG/KG	1
Chlorobenzene	0.24	5.7	ND		UG/KG	1
Ethyl Benzene	0.41	5.7	ND		UG/KG	1
m & p-Xylene	0.92	5.7	ND		UG/KG	1
o-Xylene	0.98	5.7	ND		UG/KG	1
Styrene	0.4	5.7	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17207 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	OWS-003-04-ESW	ARDL Lab No.:	301104-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2648
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1545	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	12.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.25	5.7	ND		UG/KG	1
2-Hexanone	20.6	22.9	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.7	5.7	ND		UG/KG	1
Acetone	36.6	57.2	ND		UG/KG	1
2-Butanone	19.5	57.2	ND		UG/KG	1
4-Methyl-2-pentanone	17.2	22.9	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	106%
1,2-Dichloroethane-d4	78-135	98%
Toluene-d8	86-129	103%
4-Bromofluorobenzene	76-141	105%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17207 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	OWS-004-05-ESW	ARDL Lab No.:	301104-06
Desc/Location:	NONE	Lab Filename:	Y2649
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1530	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	18.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.2	ND		UG/KG	1
Vinyl Chloride	2.2	12.2	ND		UG/KG	1
Bromomethane	1.6	12.2	ND		UG/KG	1
Chloroethane	2	12.2	ND		UG/KG	1
1,1-Dichloroethene	1	6.1	ND		UG/KG	1
Methylene Chloride	2.9	6.1	8.2		UG/KG	1
trans-1,2-Dichloroethene	0.96	6.1	ND		UG/KG	1
1,1-Dichloroethane	0.28	6.1	ND		UG/KG	1
Carbon disulfide	1.1	6.1	ND		UG/KG	1
cis-1,2-Dichloroethene	0.4	6.1	ND		UG/KG	1
Bromochloromethane	0.99	6.1	ND		UG/KG	1
Chloroform	0.83	6.1	ND		UG/KG	1
1,1,1-Trichloroethane	0.38	6.1	ND		UG/KG	1
Carbon Tetrachloride	0.74	6.1	ND		UG/KG	1
Benzene	0.7	6.1	ND		UG/KG	1
1,2-Dichloroethane	0.45	6.1	ND		UG/KG	1
Trichloroethene	1.1	6.1	ND		UG/KG	1
1,2-Dichloropropane	0.42	6.1	ND		UG/KG	1
Bromodichloromethane	0.28	6.1	ND		UG/KG	1
cis-1,3-Dichloropropene	0.79	6.1	ND		UG/KG	1
Toluene	0.38	6.1	ND		UG/KG	1
trans-1,3-Dichloropropene	0.76	6.1	ND		UG/KG	1
1,1,2-Trichloroethane	0.32	6.1	ND		UG/KG	1
Tetrachloroethene	0.57	6.1	ND		UG/KG	1
Dibromochloromethane	0.28	6.1	ND		UG/KG	1
Chlorobenzene	0.26	6.1	ND		UG/KG	1
Ethyl Benzene	0.44	6.1	ND		UG/KG	1
m & p-Xylene	0.98	6.1	ND		UG/KG	1
o-Xylene	1.1	6.1	ND		UG/KG	1
Styrene	0.43	6.1	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17207 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	OWS-004-05-ESW	ARDL Lab No.:	301104-06 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2649
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1530	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	18.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.27	6.1	ND		UG/KG	1
2-Hexanone	22	24.4	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6.1	ND		UG/KG	1
Acetone	39.1	61.1	ND		UG/KG	1
2-Butanone	20.8	61.1	ND		UG/KG	1
4-Methyl-2-pentanone	18.3	24.4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	97%
1,2-Dichloroethane-d4	78-135	91%
Toluene-d8	86-129	92%
4-Bromofluorobenzene	76-141	103%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17207 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	OWS-005-08-EBT	ARDL Lab No.:	301104-01
Desc/Location:	NONE	Lab Filename:	Y2644
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1334	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	16.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.3	12.0	ND		UG/KG	1
Vinyl Chloride	2.2	12.0	ND		UG/KG	1
Bromomethane	1.6	12.0	ND		UG/KG	1
Chloroethane	1.9	12.0	ND		UG/KG	1
1,1-Dichloroethene	0.99	6	ND		UG/KG	1
Methylene Chloride	2.9	6	ND		UG/KG	1
trans-1,2-Dichloroethene	0.95	6	ND		UG/KG	1
1,1-Dichloroethane	0.28	6	ND		UG/KG	1
Carbon disulfide	1	6	ND		UG/KG	1
cis-1,2-Dichloroethene	0.4	6	ND		UG/KG	1
Bromochloromethane	0.97	6	ND		UG/KG	1
Chloroform	0.81	6	ND		UG/KG	1
1,1,1-Trichloroethane	0.37	6	ND		UG/KG	1
Carbon Tetrachloride	0.73	6	ND		UG/KG	1
Benzene	0.68	6	ND		UG/KG	1
1,2-Dichloroethane	0.44	6	ND		UG/KG	1
Trichloroethene	1	6	ND		UG/KG	1
1,2-Dichloropropane	0.41	6	ND		UG/KG	1
Bromodichloromethane	0.28	6	ND		UG/KG	1
cis-1,3-Dichloropropene	0.78	6	ND		UG/KG	1
Toluene	0.37	6	ND		UG/KG	1
trans-1,3-Dichloropropene	0.74	6	ND		UG/KG	1
1,1,2-Trichloroethane	0.31	6	ND		UG/KG	1
Tetrachloroethene	0.56	6	ND		UG/KG	1
Dibromochloromethane	0.28	6	ND		UG/KG	1
Chlorobenzene	0.25	6	ND		UG/KG	1
Ethyl Benzene	0.43	6	ND		UG/KG	1
m & p-Xylene	0.96	6	ND		UG/KG	1
o-Xylene	1	6	ND		UG/KG	1
Styrene	0.42	6	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17207 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	OWS-005-08-EBT	ARDL Lab No.:	301104-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2644
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1334	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0920JFSR
% Moisture:	16.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.26	6	ND		UG/KG	1
2-Hexanone	21.6	24.0	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.8	6	ND		UG/KG	1
Acetone	38.3	59.9	ND		UG/KG	1
2-Butanone	20.4	59.9	ND		UG/KG	1
4-Methyl-2-pentanone	18	24.0	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	117%
1,2-Dichloroethane-d4	78-135	104%
Toluene-d8	86-129	113%
4-Bromofluorobenzene	76-141	109%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17207 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	OWS-006-08-EBT	ARDL Lab No.:	301104-02
Desc/Location:	NONE	Lab Filename:	Y2645
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1320	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	11.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Chloromethane	2.2	11.3	ND		UG/KG	1
Vinyl Chloride	2	11.3	ND		UG/KG	1
Bromomethane	1.5	11.3	ND		UG/KG	1
Chloroethane	1.8	11.3	ND		UG/KG	1
1,1-Dichloroethene	0.94	5.7	ND		UG/KG	1
Methylene Chloride	2.7	5.7	4.8	J	UG/KG	1
trans-1,2-Dichloroethene	0.89	5.7	ND		UG/KG	1
1,1-Dichloroethane	0.26	5.7	ND		UG/KG	1
Carbon disulfide	0.97	5.7	ND		UG/KG	1
cis-1,2-Dichloroethene	0.37	5.7	ND		UG/KG	1
Bromochloromethane	0.92	5.7	ND		UG/KG	1
Chloroform	0.77	5.7	ND		UG/KG	1
1,1,1-Trichloroethane	0.35	5.7	ND		UG/KG	1
Carbon Tetrachloride	0.69	5.7	ND		UG/KG	1
Benzene	0.65	5.7	ND		UG/KG	1
1,2-Dichloroethane	0.42	5.7	ND		UG/KG	1
Trichloroethene	0.99	5.7	ND		UG/KG	1
1,2-Dichloropropane	0.39	5.7	ND		UG/KG	1
Bromodichloromethane	0.26	5.7	ND		UG/KG	1
cis-1,3-Dichloropropene	0.74	5.7	ND		UG/KG	1
Toluene	0.35	5.7	ND		UG/KG	1
trans-1,3-Dichloropropene	0.7	5.7	ND		UG/KG	1
1,1,2-Trichloroethane	0.29	5.7	ND		UG/KG	1
Tetrachloroethene	0.53	5.7	ND		UG/KG	1
Dibromochloromethane	0.26	5.7	ND		UG/KG	1
Chlorobenzene	0.24	5.7	ND		UG/KG	1
Ethyl Benzene	0.41	5.7	ND		UG/KG	1
m & p-Xylene	0.91	5.7	ND		UG/KG	1
o-Xylene	0.97	5.7	ND		UG/KG	1
Styrene	0.4	5.7	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/24/2002

Project Name: USACE FT DEARBORN Analysis: VOLATILES, GC/MS (8260)
Project No.: 17207 Analytical Method: 8260B
Prep Method: 5030A

Field ID:	OWS-006-08-EBT	ARDL Lab No.:	301104-02 (cont'd)
Desc/Location:	NONE	Lab Filename:	Y2645
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1320	Prep. Date:	09/18/2002
Matrix:	SOIL	Analysis Date:	09/18/2002
Amount Used:	5 g	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	0924JFSR
% Moisture:	11.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Bromoform	0.25	5.7	ND		UG/KG	1
2-Hexanone	20.4	22.7	ND		UG/KG	1
1,1,2,2-Tetrachloroethane	1.7	5.7	ND		UG/KG	1
Acetone	36.2	56.6	ND		UG/KG	1
2-Butanone	19.3	56.6	ND		UG/KG	1
4-Methyl-2-pentanone	17	22.7	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	86-125	106%
1,2-Dichloroethane-d4	78-135	102%
Toluene-d8	86-129	111%
4-Bromofluorobenzene	76-141	125%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

BNA-8270

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/17/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-001-05-ESW	ARDL Lab No.:	301104-03
Desc/Location:	NONE	Lab Filename:	T7114
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1505	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	20.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	144	416	ND		UG/KG	1
bis(2-Chloroethyl)ether	30.4	416	ND		UG/KG	1
2-Chlorophenol	132	416	ND		UG/KG	1
1,3-Dichlorobenzene	67.3	416	ND		UG/KG	1
1,4-Dichlorobenzene	53.7	416	ND		UG/KG	1
1,2-Dichlorobenzene	61.2	416	ND		UG/KG	1
2-Methylphenol	118	416	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	24.1	416	ND		UG/KG	1
4-Methylphenol	150	416	ND		UG/KG	1
N-Nitroso-di-n-propylamine	28.5	416	ND		UG/KG	1
Hexachloroethane	62.2	416	ND		UG/KG	1
Nitrobenzene	78.1	416	ND		UG/KG	1
Isophorone	62.5	416	ND		UG/KG	1
2-Nitrophenol	129	416	ND		UG/KG	1
2,4-Dimethylphenol	142	416	ND		UG/KG	1
bis(2-Chloroethoxy)methane	31.4	416	ND		UG/KG	1
2,4-Dichlorophenol	153	416	ND		UG/KG	1
1,2,4-Trichlorobenzene	64.2	416	ND		UG/KG	1
Naphthalene	17.3	416	ND		UG/KG	1
4-Chloroaniline	95.7	416	ND		UG/KG	1
Hexachlorobutadiene	73.3	416	ND		UG/KG	1
4-Chloro-3-methylphenol	124	416	ND		UG/KG	1
2-Methylnaphthalene	78.3	416	ND		UG/KG	1
Hexachlorocyclopentadiene	63.4	416	ND		UG/KG	1
2,4,6-Trichlorophenol	134	416	ND		UG/KG	1
2,4,5-Trichlorophenol	141	416	ND		UG/KG	1
2-Chloronaphthalene	61.5	416	ND		UG/KG	1
2-Nitroaniline	64.7	416	ND		UG/KG	1
Dimethylphthalate	26.1	416	ND		UG/KG	1
2,6-Dinitrotoluene	53.3	416	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/17/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-001-05-ESW	ARDL Lab No.:	301104-03 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7114
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1505	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	20.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	48.2	416	ND		UG/KG	1
2,4-Dinitrophenol	129	416	ND		UG/KG	1
4-Nitrophenol	113	416	ND		UG/KG	1
Dibenzofuran	84.4	416	ND		UG/KG	1
2,4-Dinitrotoluene	61.9	416	ND		UG/KG	1
Diethylphthalate	18.2	416	ND		UG/KG	1
4-Chlorophenyl-phenylether	27.1	416	ND		UG/KG	1
4-Nitroaniline	50.4	416	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	112	416	ND		UG/KG	1
N-Nitrosodiphenylamine	26.1	416	ND		UG/KG	1
4-Bromophenyl-phenylether	30.9	416	ND		UG/KG	1
Hexachlorobenzene	52.3	416	ND		UG/KG	1
Pentachlorophenol	104	416	ND		UG/KG	1
Di-n-butylphthalate	33.3	416	ND		UG/KG	1
Butylbenzylphthalate	25.6	416	ND		UG/KG	1
3,3'-Dichlorobenzidine	172	416	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.7	416	ND		UG/KG	1
Di-n-octylphthalate	55.5	416	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	67%
Phenol-d5	24-113	74%
Nitrobenzene-d5	23-120	58%
2-Fluorobiphenyl	30-115	73%
2,4,6-Tribromophenol	19-122	80%
Terphenyl-d14	18-137	74%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-002-05-ESW	ARDL Lab No.:	301104-04
Desc/Location:	NONE	Lab Filename:	T7115
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1522	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	20.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	143	413	ND		UG/KG	1
bis(2-Chloroethyl)ether	30.2	413	ND		UG/KG	1
2-Chlorophenol	131	413	ND		UG/KG	1
1,3-Dichlorobenzene	66.8	413	ND		UG/KG	1
1,4-Dichlorobenzene	53.3	413	ND		UG/KG	1
1,2-Dichlorobenzene	60.7	413	ND		UG/KG	1
2-Methylphenol	117	413	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.9	413	ND		UG/KG	1
4-Methylphenol	149	413	ND		UG/KG	1
N-Nitroso-di-n-propylamine	28.3	413	ND		UG/KG	1
Hexachloroethane	61.7	413	ND		UG/KG	1
Nitrobenzene	77.5	413	ND		UG/KG	1
Isophorone	62.1	413	ND		UG/KG	1
2-Nitrophenol	128	413	ND		UG/KG	1
2,4-Dimethylphenol	141	413	ND		UG/KG	1
bis(2-Chloroethoxy)methane	31.2	413	ND		UG/KG	1
2,4-Dichlorophenol	151	413	ND		UG/KG	1
1,2,4-Trichlorobenzene	63.7	413	ND		UG/KG	1
Naphthalene	17.1	413	ND		UG/KG	1
4-Chloroaniline	95	413	ND		UG/KG	1
Hexachlorobutadiene	72.7	413	ND		UG/KG	1
4-Chloro-3-methylphenol	123	413	ND		UG/KG	1
2-Methylnaphthalene	77.7	413	ND		UG/KG	1
Hexachlorocyclopentadiene	63	413	ND		UG/KG	1
2,4,6-Trichlorophenol	133	413	ND		UG/KG	1
2,4,5-Trichlorophenol	140	413	ND		UG/KG	1
2-Chloronaphthalene	61.1	413	ND		UG/KG	1
2-Nitroaniline	64.2	413	ND		UG/KG	1
Dimethylphthalate	25.9	413	ND		UG/KG	1
2,6-Dinitrotoluene	52.9	413	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-002-05-ESW	ARDL Lab No.:	301104-04 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7115
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1522	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	20.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	47.8	413	ND		UG/KG	1
2,4-Dinitrophenol	128	413	ND		UG/KG	1
4-Nitrophenol	112	413	ND		UG/KG	1
Dibenzofuran	83.7	413	ND		UG/KG	1
2,4-Dinitrotoluene	61.5	413	ND		UG/KG	1
Diethylphthalate	18	413	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.9	413	ND		UG/KG	1
4-Nitroaniline	50.1	413	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	112	413	ND		UG/KG	1
N-Nitrosodiphenylamine	25.9	413	ND		UG/KG	1
4-Bromophenyl-phenylether	30.7	413	ND		UG/KG	1
Hexachlorobenzene	51.9	413	ND		UG/KG	1
Pentachlorophenol	104	413	ND		UG/KG	1
Di-n-butylphthalate	33	413	ND		UG/KG	1
Butylbenzylphthalate	25.4	413	ND		UG/KG	1
3,3'-Dichlorobenzidine	170	413	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	27.5	413	ND		UG/KG	1
Di-n-octylphthalate	55.1	413	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	63%
Phenol-d5	24-113	71%
Nitrobenzene-d5	23-120	55%
2-Fluorobiphenyl	30-115	70%
2,4,6-Tribromophenol	19-122	80%
Terphenyl-d14	18-137	69%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-003-04-ESW	ARDL Lab No.:	301104-05
Desc/Location:	NONE	Lab Filename:	T7116
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1545	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	12.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	143	378	ND		UG/KG	1
bis(2-Chloroethyl)ether	27.6	378	ND		UG/KG	1
2-Chlorophenol	120	378	ND		UG/KG	1
1,3-Dichlorobenzene	61.1	378	ND		UG/KG	1
1,4-Dichlorobenzene	48.7	378	ND		UG/KG	1
1,2-Dichlorobenzene	55.5	378	ND		UG/KG	1
2-Methylphenol	107	378	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	21.9	378	ND		UG/KG	1
4-Methylphenol	136	378	ND		UG/KG	1
N-Nitroso-di-n-propylamine	25.9	378	ND		UG/KG	1
Hexachloroethane	56.4	378	ND		UG/KG	1
Nitrobenzene	70.8	378	ND		UG/KG	1
Isophorone	56.8	378	ND		UG/KG	1
2-Nitrophenol	117	378	ND		UG/KG	1
2,4-Dimethylphenol	129	378	ND		UG/KG	1
bis(2-Chloroethoxy)methane	28.5	378	ND		UG/KG	1
2,4-Dichlorophenol	138	378	ND		UG/KG	1
1,2,4-Trichlorobenzene	58.2	378	ND		UG/KG	1
Naphthalene	15.7	378	ND		UG/KG	1
4-Chloroaniline	86.8	378	ND		UG/KG	1
Hexachlorobutadiene	66.5	378	ND		UG/KG	1
4-Chloro-3-methylphenol	113	378	ND		UG/KG	1
2-Methylnaphthalene	71.1	378	ND		UG/KG	1
Hexachlorocyclopentadiene	57.6	378	ND		UG/KG	1
2,4,6-Trichlorophenol	121	378	ND		UG/KG	1
2,4,5-Trichlorophenol	128	378	ND		UG/KG	1
2-Chloronaphthalene	55.8	378	ND		UG/KG	1
2-Nitroaniline	58.7	378	ND		UG/KG	1
Dimethylphthalate	23.7	378	ND		UG/KG	1
2,6-Dinitrotoluene	48.4	378	ND		UG/KG	1

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Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-003-04-ESW	ARDL Lab No.:	301104-05 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7116
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1545	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	12.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	43.7	378	ND		UG/KG	1
2,4-Dinitrophenol	117	378	ND		UG/KG	1
4-Nitrophenol	103	378	ND		UG/KG	1
Dibenzofuran	76.5	378	ND		UG/KG	1
2,4-Dinitrotoluene	56.2	378	ND		UG/KG	1
Diethylphthalate	16.5	378	ND		UG/KG	1
4-Chlorophenyl-phenylether	24.6	378	ND		UG/KG	1
4-Nitroaniline	45.8	378	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	102	378	ND		UG/KG	1
N-Nitrosodiphenylamine	23.7	378	ND		UG/KG	1
4-Bromophenyl-phenylether	28	378	ND		UG/KG	1
Hexachlorobenzene	47.5	378	ND		UG/KG	1
Pentachlorophenol	94.7	378	ND		UG/KG	1
Di-n-butylphthalate	30.2	378	ND		UG/KG	1
Butylbenzylphthalate	23.2	378	ND		UG/KG	1
3,3'-Dichlorobenzidine	156	378	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	25.2	378	ND		UG/KG	1
Di-n-octylphthalate	50.3	378	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	43%
Phenol-d5	24-113	50%
Nitrobenzene-d5	23-120	36%
2-Fluorobiphenyl	30-115	54%
2,4,6-Tribromophenol	19-122	78%
Terphenyl-d14	18-137	70%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-004-05-ESW	ARDL Lab No.:	301104-06
Desc/Location:	NONE	Lab Filename:	T7117
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1530	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	18.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	139	403	ND		UG/KG	1
bis(2-Chloroethyl)ether	29.4	403	ND		UG/KG	1
2-Chlorophenol	128	403	ND		UG/KG	1
1,3-Dichlorobenzene	65.2	403	ND		UG/KG	1
1,4-Dichlorobenzene	52	403	ND		UG/KG	1
1,2-Dichlorobenzene	59.2	403	ND		UG/KG	1
2-Methylphenol	115	403	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	23.3	403	ND		UG/KG	1
4-Methylphenol	145	403	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.6	403	ND		UG/KG	1
Hexachloroethane	60.2	403	ND		UG/KG	1
Nitrobenzene	75.6	403	ND		UG/KG	1
Isophorone	60.6	403	ND		UG/KG	1
2-Nitrophenol	125	403	ND		UG/KG	1
2,4-Dimethylphenol	138	403	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.4	403	ND		UG/KG	1
2,4-Dichlorophenol	148	403	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.1	403	ND		UG/KG	1
Naphthalene	16.7	403	ND		UG/KG	1
4-Chloroaniline	92.7	403	ND		UG/KG	1
Hexachlorobutadiene	70.9	403	ND		UG/KG	1
4-Chloro-3-methylphenol	120	403	ND		UG/KG	1
2-Methylnaphthalene	75.8	403	ND		UG/KG	1
Hexachlorocyclopentadiene	61.4	403	ND		UG/KG	1
2,4,6-Trichlorophenol	129	403	ND		UG/KG	1
2,4,5-Trichlorophenol	137	403	ND		UG/KG	1
2-Chloronaphthalene	59.6	403	ND		UG/KG	1
2-Nitroaniline	62.6	403	ND		UG/KG	1
Dimethylphthalate	25.3	403	ND		UG/KG	1
2,6-Dinitrotoluene	51.6	403	ND		UG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-004-05-ESW	ARDL Lab No.:	301104-06 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7117
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1530	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	18.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	46.6	403	ND		UG/KG	1
2,4-Dinitrophenol	125	403	ND		UG/KG	1
4-Nitrophenol	110	403	ND		UG/KG	1
Dibenzofuran	81.7	403	ND		UG/KG	1
2,4-Dinitrotoluene	60	403	ND		UG/KG	1
Diethylphthalate	17.6	403	ND		UG/KG	1
4-Chlorophenyl-phenylether	26.3	403	ND		UG/KG	1
4-Nitroaniline	48.8	403	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	109	403	ND		UG/KG	1
N-Nitrosodiphenylamine	25.3	403	ND		UG/KG	1
4-Bromophenyl-phenylether	29.9	403	ND		UG/KG	1
Hexachlorobenzene	50.7	403	ND		UG/KG	1
Pentachlorophenol	101	403	ND		UG/KG	1
Di-n-butylphthalate	32.2	403	ND		UG/KG	1
Butylbenzylphthalate	24.8	403	ND		UG/KG	1
3,3'-Dichlorobenzidine	166	403	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.9	403	ND		UG/KG	1
Di-n-octylphthalate	53.7	403	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	53%
Phenol-d5	24-113	63%
Nitrobenzene-d5	23-120	48%
2-Fluorobiphenyl	30-115	66%
2,4,6-Tribromophenol	19-122	86%
Terphenyl-d14	18-137	73%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-005-08-EBT	ARDL Lab No.:	301104-01
Desc/Location:	NONE	Lab Filename:	T7063
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1334	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	16.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	137	395	ND		UG/KG	1
bis(2-Chloroethyl)ether	28.9	395	ND		UG/KG	1
2-Chlorophenol	126	395	ND		UG/KG	1
1,3-Dichlorobenzene	64	395	ND		UG/KG	1
1,4-Dichlorobenzene	51	395	ND		UG/KG	1
1,2-Dichlorobenzene	58.1	395	ND		UG/KG	1
2-Methylphenol	112	395	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	22.9	395	ND		UG/KG	1
4-Methylphenol	143	395	ND		UG/KG	1
N-Nitroso-di-n-propylamine	27.1	395	ND		UG/KG	1
Hexachloroethane	59	395	ND		UG/KG	1
Nitrobenzene	76	395	ND		UG/KG	1
Isophorone	60.9	395	ND		UG/KG	1
2-Nitrophenol	125	395	ND		UG/KG	1
2,4-Dimethylphenol	139	395	ND		UG/KG	1
bis(2-Chloroethoxy)methane	30.6	395	ND		UG/KG	1
2,4-Dichlorophenol	148	395	ND		UG/KG	1
1,2,4-Trichlorobenzene	62.5	395	ND		UG/KG	1
Naphthalene	16.8	395	ND		UG/KG	1
4-Chloroaniline	93.1	395	ND		UG/KG	1
Hexachlorobutadiene	71.3	395	ND		UG/KG	1
4-Chloro-3-methylphenol	121	395	ND		UG/KG	1
2-Methylnaphthalene	76.2	395	ND		UG/KG	1
Hexachlorocyclopentadiene	61.7	395	ND		UG/KG	1
2,4,6-Trichlorophenol	130	395	ND		UG/KG	1
2,4,5-Trichlorophenol	137	395	ND		UG/KG	1
2-Chloronaphthalene	59.9	395	ND		UG/KG	1
2-Nitroaniline	62.9	395	ND		UG/KG	1
Dimethylphthalate	25.4	395	ND		UG/KG	1
2,6-Dinitrotoluene	51.9	395	ND		UG/KG	1

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Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-005-08-EBT	ARDL Lab No.:	301104-01 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7063
Sample Date:	09/12/2002	Received Date:	09/18/2002
Sample Time:	1334	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	16.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	45.7	395	ND		UG/KG	1
2,4-Dinitrophenol	122	395	ND		UG/KG	1
4-Nitrophenol	108	395	ND		UG/KG	1
Dibenzofuran	80.1	395	ND		UG/KG	1
2,4-Dinitrotoluene	58.8	395	ND		UG/KG	1
Diethylphthalate	17.2	395	ND		UG/KG	1
4-Chlorophenyl-phenylether	25.7	395	ND		UG/KG	1
4-Nitroaniline	47.9	395	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	107	395	ND		UG/KG	1
N-Nitrosodiphenylamine	24.8	395	ND		UG/KG	1
4-Bromophenyl-phenylether	29.3	395	ND		UG/KG	1
Hexachlorobenzene	49.7	395	ND		UG/KG	1
Pentachlorophenol	99.2	395	ND		UG/KG	1
Di-n-butylphthalate	31.6	395	ND		UG/KG	1
Butylbenzylphthalate	24.3	395	ND		UG/KG	1
3,3'-Dichlorobenzidine	163	395	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	26.3	395	ND		UG/KG	1
Di-n-octylphthalate	52.7	395	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	48%
Phenol-d5	24-113	63%
Nitrobenzene-d5	23-120	48%
2-Fluorobiphenyl	30-115	73%
2,4,6-Tribromophenol	19-122	107%
Terphenyl-d14	18-137	65%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-006-08-EBT	ARDL Lab No.:	301104-02
Desc/Location:	NONE	Lab Filename:	T7064
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1320	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	11.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Phenol	129	374	ND		UG/KG	1
bis(2-Chloroethyl)ether	27.3	374	ND		UG/KG	1
2-Chlorophenol	119	374	ND		UG/KG	1
1,3-Dichlorobenzene	60.5	374	ND		UG/KG	1
1,4-Dichlorobenzene	48.2	374	ND		UG/KG	1
1,2-Dichlorobenzene	54.9	374	ND		UG/KG	1
2-Methylphenol	106	374	ND		UG/KG	1
bis(2-Chloroisopropyl)ether	21.6	374	ND		UG/KG	1
4-Methylphenol	135	374	ND		UG/KG	1
N-Nitroso-di-n-propylamine	25.6	374	ND		UG/KG	1
Hexachloroethane	55.8	374	ND		UG/KG	1
Nitrobenzene	70.1	374	ND		UG/KG	1
Isophorone	56.2	374	ND		UG/KG	1
2-Nitrophenol	116	374	ND		UG/KG	1
2,4-Dimethylphenol	128	374	ND		UG/KG	1
bis(2-Chloroethoxy)methane	28.2	374	ND		UG/KG	1
2,4-Dichlorophenol	137	374	ND		UG/KG	1
1,2,4-Trichlorobenzene	57.6	374	ND		UG/KG	1
Naphthalene	15.5	374	ND		UG/KG	1
4-Chloroaniline	86	374	ND		UG/KG	1
Hexachlorobutadiene	65.8	374	ND		UG/KG	1
4-Chloro-3-methylphenol	112	374	ND		UG/KG	1
2-Methylnaphthalene	70.3	374	ND		UG/KG	1
Hexachlorocyclopentadiene	57	374	ND		UG/KG	1
2,4,6-Trichlorophenol	120	374	ND		UG/KG	1
2,4,5-Trichlorophenol	127	374	ND		UG/KG	1
2-Chloronaphthalene	55.3	374	ND		UG/KG	1
2-Nitroaniline	58.1	374	ND		UG/KG	1
Dimethylphthalate	23.4	374	ND		UG/KG	1
2,6-Dinitrotoluene	47.9	374	ND		UG/KG	1

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Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S (METHOD 8270)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-006-08-EBT	ARDL Lab No.:	301104-02 (cont'd)
Desc/Location:	NONE	Lab Filename:	T7064
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1320	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	30 g	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5020
% Moisture:	11.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
3-Nitroaniline	43.3	374	ND		UG/KG	1
2,4-Dinitrophenol	116	374	ND		UG/KG	1
4-Nitrophenol	102	374	ND		UG/KG	1
Dibenzofuran	75.8	374	ND		UG/KG	1
2,4-Dinitrotoluene	55.6	374	ND		UG/KG	1
Diethylphthalate	16.3	374	ND		UG/KG	1
4-Chlorophenyl-phenylether	24.3	374	ND		UG/KG	1
4-Nitroaniline	45.3	374	ND		UG/KG	1
4,6-Dinitro-2-methylphenol	101	374	ND		UG/KG	1
N-Nitrosodiphenylamine	23.4	374	ND		UG/KG	1
4-Bromophenyl-phenylether	27.7	374	ND		UG/KG	1
Hexachlorobenzene	47	374	ND		UG/KG	1
Pentachlorophenol	93.8	374	ND		UG/KG	1
Di-n-butylphthalate	29.9	374	ND		UG/KG	1
Butylbenzylphthalate	23	374	ND		UG/KG	1
3,3'-Dichlorobenzidine	154	374	ND		UG/KG	1
bis(2-Ethylhexyl)phthalate	24.9	374	ND		UG/KG	1
Di-n-octylphthalate	49.8	374	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorophenol	25-121	58%
Phenol-d5	24-113	65%
Nitrobenzene-d5	23-120	57%
2-Fluorobiphenyl	30-115	72%
2,4,6-Tribromophenol	19-122	104%
Terphenyl-d14	18-137	61%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PCB's-8082

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/30/2002

Project Name:	USACE FT DEARBORN	Analysis:	PCB'S
Project No.:	17207	Analytical Method:	8082
		Prep Method:	3550A

Field ID:	OWS-001-05-ESW	ARDL Lab No.:	301104-03
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1505	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	20.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.4	41.6	ND		UG/KG	1
Aroclor 1221	17	84.5	ND		UG/KG	1
Aroclor 1232	10.5	41.6	ND		UG/KG	1
Aroclor 1242	11.7	41.6	ND		UG/KG	1
Aroclor 1248	7.8	41.6	ND		UG/KG	1
Aroclor 1254	5.4	41.6	ND		UG/KG	1
Aroclor 1260	7	41.6	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	87%
Tetrachloro-m-xylene	42-94	85%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/30/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17207 Analytical Method: 8082
Prep Method: 3550A

Field ID:	OWS-002-05-ESW	ARDL Lab No.:	301104-04
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1522	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	20.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.3	41.3	ND		UG/KG	1
Aroclor 1221	16.9	83.9	ND		UG/KG	1
Aroclor 1232	10.4	41.3	ND		UG/KG	1
Aroclor 1242	11.6	41.3	ND		UG/KG	1
Aroclor 1248	7.8	41.3	ND		UG/KG	1
Aroclor 1254	5.4	41.3	ND		UG/KG	1
Aroclor 1260	6.9	41.3	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	83%
Tetrachloro-m-xylene	42-94	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/30/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17207 Analytical Method: 8082
Prep Method: 3550A

Field ID:	OWS-003-04-ESW	ARDL Lab No.:	301104-05
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1545	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	12.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	8.5	37.8	ND		UG/KG	1
Aroclor 1221	15.4	76.7	ND		UG/KG	1
Aroclor 1232	9.5	37.8	ND		UG/KG	1
Aroclor 1242	10.6	37.8	ND		UG/KG	1
Aroclor 1248	7.1	37.8	ND		UG/KG	1
Aroclor 1254	4.9	37.8	ND		UG/KG	1
Aroclor 1260	6.3	37.8	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	93%
Tetrachloro-m-xylene	42-94	85%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/30/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17207 Analytical Method: 8082
Prep Method: 3550A

Field ID:	OWS-004-05-ESW	ARDL Lab No.:	301104-06
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1530	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	18.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	9.1	40.3	ND		UG/KG	1
Aroclor 1221	16.5	81.8	ND		UG/KG	1
Aroclor 1232	10.2	40.3	ND		UG/KG	1
Aroclor 1242	11.3	40.3	ND		UG/KG	1
Aroclor 1248	7.6	40.3	ND		UG/KG	1
Aroclor 1254	5.3	40.3	ND		UG/KG	1
Aroclor 1260	6.7	40.3	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	86%
Tetrachloro-m-xylene	42-94	79%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/30/2002

Project Name: USACE FT DEARBORN Analysis: PCB'S
Project No.: 17207 Analytical Method: 8082
Prep Method: 3550A

Field ID:	OWS-005-08-EBT	ARDL Lab No.:	301104-01
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1334	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	16.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	8.9	39.5	ND		UG/KG	1
Aroclor 1221	16.2	80.2	ND		UG/KG	1
Aroclor 1232	10	39.5	ND		UG/KG	1
Aroclor 1242	11.1	39.5	ND		UG/KG	1
Aroclor 1248	7.4	39.5	ND		UG/KG	1
Aroclor 1254	5.2	39.5	ND		UG/KG	1
Aroclor 1260	6.6	39.5	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	82%
Tetrachloro-m-xylene	42-94	76%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 09/30/2002

Project Name:	USACE FT DEARBORN	Analysis:	PCB'S
Project No.:	17207	Analytical Method:	8082
		Prep Method:	3550A

Field ID:	OWS-006-08-EBT	ARDL Lab No.:	301104-02
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1320	Prep. Date:	09/24/2002
Matrix:	SOIL	Analysis Date:	09/25/2002
Amount Used:	30 g	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5009
% Moisture:	11.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016	8.4	37.4	ND		UG/KG	1
Aroclor 1221	15.3	75.9	ND		UG/KG	1
Aroclor 1232	9.4	37.4	ND		UG/KG	1
Aroclor 1242	10.5	37.4	ND		UG/KG	1
Aroclor 1248	7	37.4	ND		UG/KG	1
Aroclor 1254	4.9	37.4	ND		UG/KG	1
Aroclor 1260	6.3	37.4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	51-107	92%
Tetrachloro-m-xylene	42-94	85%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

PCB's-8082

ARDL REPORT NO 301104

Volume 5

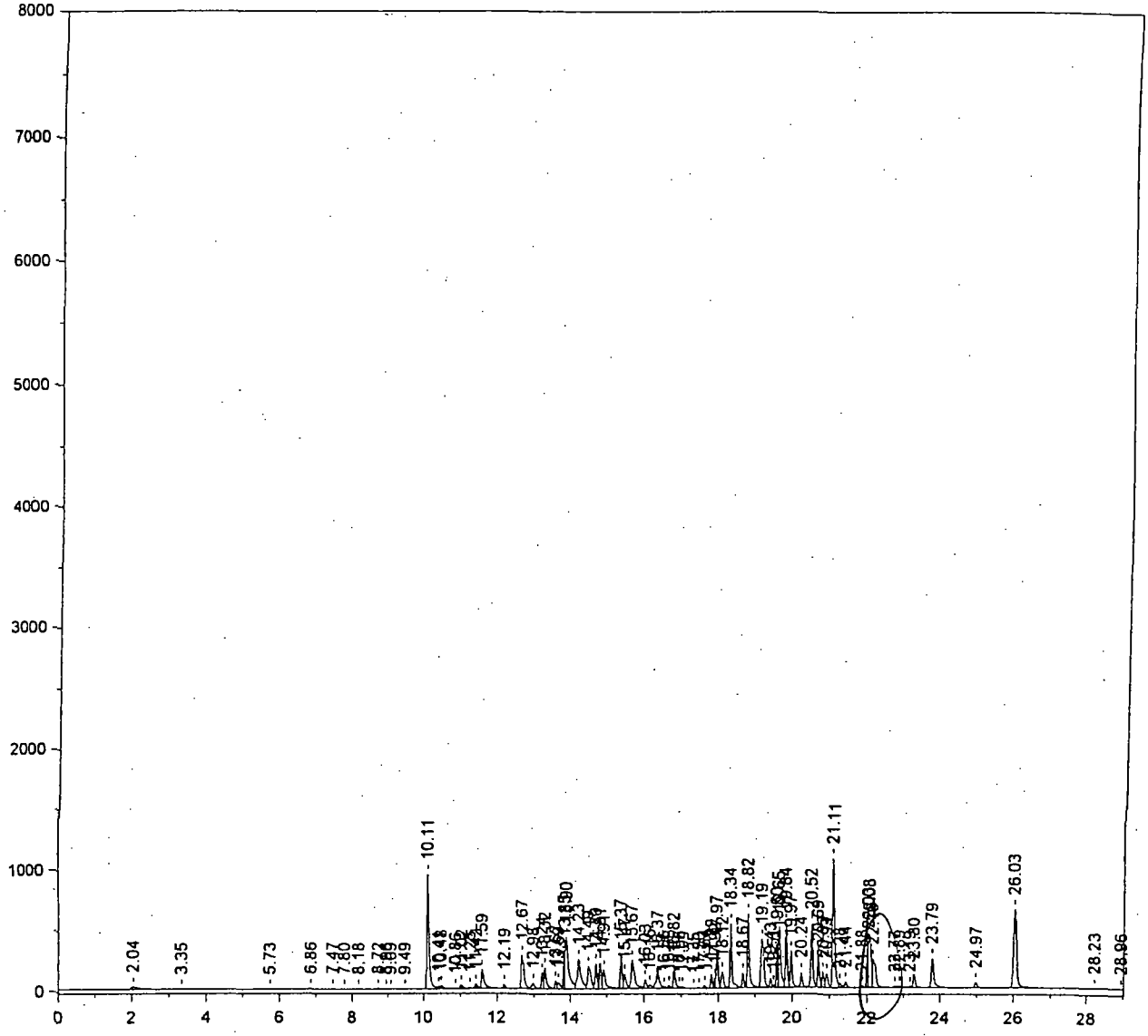
60000

Ran RDT 9/25/02

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0924.0011.RAW

5PPM AR1660 CONTINUING CALIBRATION 1004369



Primary Column

Before reintegration
Peak not split in initial calibration
RDT
9/25/02

60147

Sample Name = **5PPM AR1660 CONTINUING CALIBRATION 1004369**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0924.0011.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

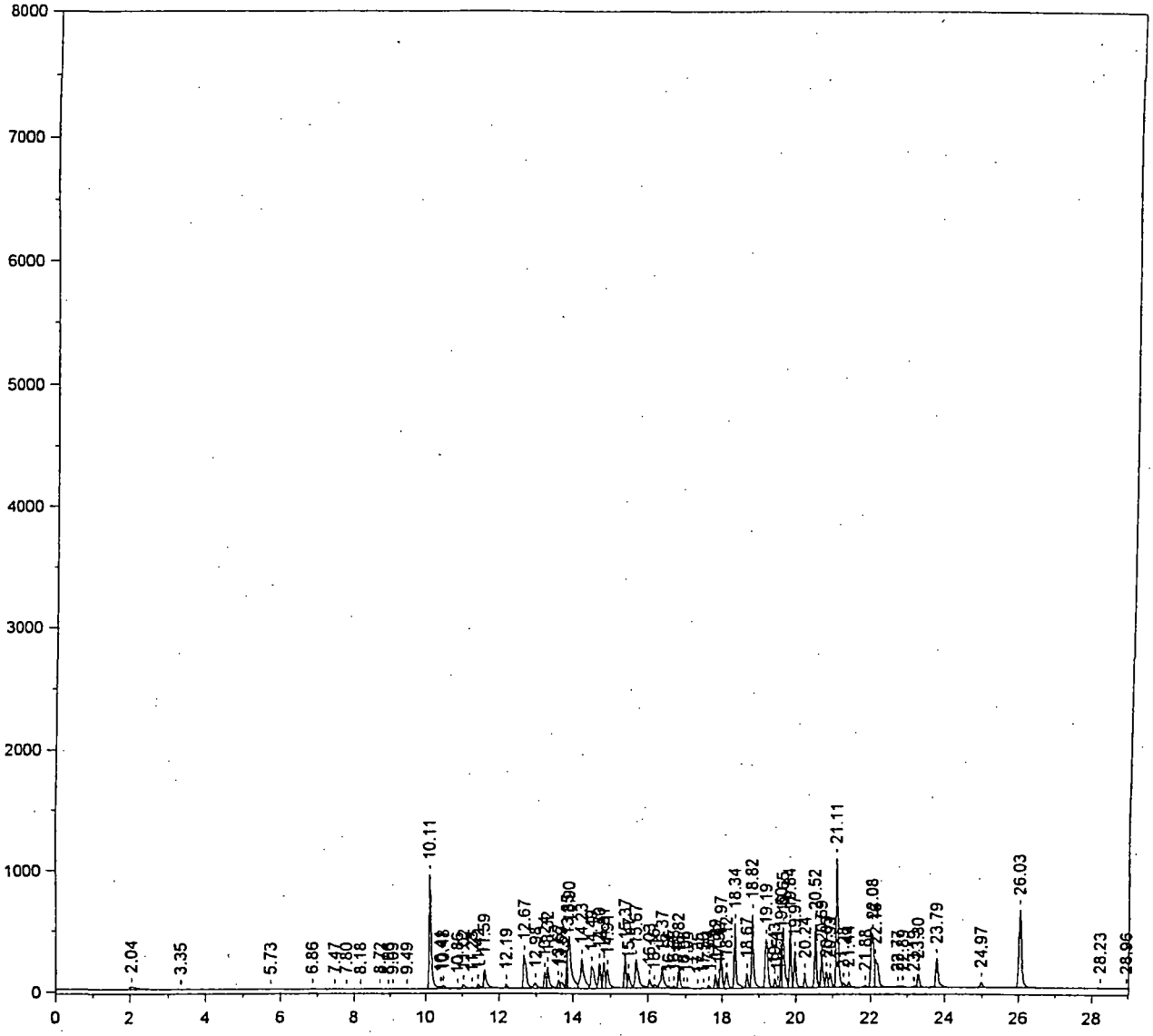
Date Taken (end) = 9/24/02 8:16:45 PM
Method Version = 619
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.04		0.00	0.000	266847	0.456	BV	0.22
2	3.35		0.00	0.000	3940	0.007	VB	0.43
3	5.73		0.00	0.000	2379	0.004	BB	0.33
4	6.86		0.00	0.000	19492	0.033	BB	0.07
5	7.47		0.00	0.000	7869	0.013	BB	0.07
6	7.80		0.00	0.000	1116	0.002	BB	0.09
7	8.18		0.00	0.000	452	0.001	BB	0.08
8	8.72		0.00	0.000	11585	0.020	BV	0.08
9	8.96		0.00	0.000	3760	0.006	VV	0.08
10	9.09		0.00	0.000	4556	0.008	VV	0.09
11	9.49		0.00	0.000	1576	0.003	VB	0.15
12	10.11	CL4XYL	0.51	0.984	3978055	6.796	SBB	0.05
13	10.41		0.00	0.000	14913	0.025	TBV	0.04
14	10.48		0.00	0.000	71205	0.122	TVV	0.06
15	10.86		0.00	0.000	2339	0.004	TVV	0.07
16	11.02		0.00	0.000	147749	0.252	TVV	0.07
17	11.25		0.00	0.000	42137	0.072	TVV	0.06
18	11.42		0.00	0.000	166852	0.285	TVV	0.07
19	11.59	AR1016#1	5.20	10.058	922905	1.577	TVV	0.07
20	12.19		0.00	0.000	137788	0.235	TVB	0.05
21	12.67	AR1016#2	4.90	9.475	1550373	2.649	BV	0.09
22	12.98		0.00	0.000	324505	0.554	VV	0.08
23	13.24		0.00	0.000	427922	0.731	VV	0.05
24	13.32		0.00	0.000	803007	1.372	VV	0.06
25	13.62		0.00	0.000	258875	0.442	VV	0.07
26	13.69		0.00	0.000	262752	0.449	VV	0.07
27	13.85		0.00	0.000	752362	1.285	VV	0.04
28	13.90	AR1016#3	5.33	10.323	2595716	4.435	VV	0.08
29	14.23	AR1016#4	5.38	10.405	1691464	2.890	VV	0.07
30	14.49		0.00	0.000	1237284	2.114	VV	0.10
31	14.70		0.00	0.000	772942	1.321	VV	0.05
32	14.81		0.00	0.000	812479	1.388	VV	0.05
33	14.91		0.00	0.000	906315	1.548	VV	0.08
34	15.37	AR1016#5	5.01	9.696	994153	1.698	VV	0.05
35	15.47		0.00	0.000	536657	0.917	VV	0.06
36	15.67		0.00	0.000	1563578	2.671	VV	0.09
37	16.03		0.00	0.000	310204	0.530	VV	0.05
38	16.16		0.00	0.000	169145	0.289	VV	0.06
39	16.37		0.00	0.000	996431	1.702	VV	0.05
40	16.56		0.00	0.000	75329	0.129	VV	0.06
41	16.68		0.00	0.000	107870	0.184	VV	0.05
42	16.82		0.00	0.000	663606	1.134	VV	0.05
43	16.96		0.00	0.000	59179	0.101	VV	0.04
44	17.04		0.00	0.000	93997	0.161	VV	0.07
45	17.35		0.00	0.000	3040	0.005	VB	0.07
46	17.50		0.00	0.000	12541	0.021	BB	0.05
47	17.64		0.00	0.000	85756	0.147	BV	0.05
48	17.82		0.00	0.000	361438	0.617	VV	0.05
49	17.92		0.00	0.000	199206	0.340	VV	0.03
50	17.97	AR1260#1	5.38	10.411	1070439	1.829	VV	0.05
51	18.12		0.00	0.000	648195	1.107	VV	0.07
52	18.34		0.00	0.000	1977263	3.378	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.67		0.00	0.000	434225	0.742	VV	0.05
54	18.82	AR1260#2	5.41	10.470	2335885	3.991	VV	0.05
55	19.19		0.00	0.000	2219589	3.792	VV	0.09
56	19.43		0.00	0.000	260623	0.445	VV	0.05
57	19.51		0.00	0.000	62004	0.106	VV	0.04
58	19.60		0.00	0.000	884222	1.511	VV	0.04
59	19.65		0.00	0.000	2240401	3.828	VV	0.07
60	19.84	AR1260#3	5.43	10.506	1797144	3.070	VV	0.05
61	19.97		0.00	0.000	1088412	1.859	VV	0.05
62	20.24		0.00	0.000	417274	0.713	VV	0.05
63	20.52		0.00	0.000	1831050	3.128	VV	0.05
64	20.69		0.00	0.000	1004502	1.716	VV	0.05
65	20.83		0.00	0.000	483417	0.826	VV	0.05
66	20.93		0.00	0.000	551431	0.942	VV	0.07
67	21.11	AR1260#4	5.28	10.220	4163654	7.113	VV	0.05
68	21.28		0.00	0.000	175090	0.299	VV	0.06
69	21.44		0.00	0.000	174659	0.298	VB	0.05
70	21.88		0.00	0.000	64711	0.111	BV	0.06
71	22.03		0.00	0.000	998841	1.706	VV	0.04
72	22.08	AR1260#5	3.33	6.437	1777284	3.036	VV	0.06
73	22.16		0.00	0.000	1554165	2.655	VV	0.11
74	22.77		0.00	0.000	56144	0.096	VV	0.07
75	22.89		0.00	0.000	62758	0.107	VV	0.07
76	23.19		0.00	0.000	29737	0.051	VV	0.06
77	23.30		0.00	0.000	515544	0.881	VV	0.06
78	23.79		0.00	0.000	1248788	2.133	VB	0.07
79	24.97		0.00	0.000	247508	0.423	BB	0.07
80	26.03	CL10BP	0.53	1.016	3718746	6.353	BV	0.08
81	28.23		0.00	0.000	2773	0.005	VB	0.16
82	28.96		0.00	0.000	521	0.001	BB	0.08

Total Area = 5.853263E+07 Total Height = 1.34404E+07 Total Amount = 51.66533

— H:\CP2\HP2\M0924.0011.RAW 5PPM AR1660 CONTINUING CALIBRATION 1004369



After investigation
KST
9/25/

60150

Chrom Perfect Chromatogram Report

Pass DST 9/25/2

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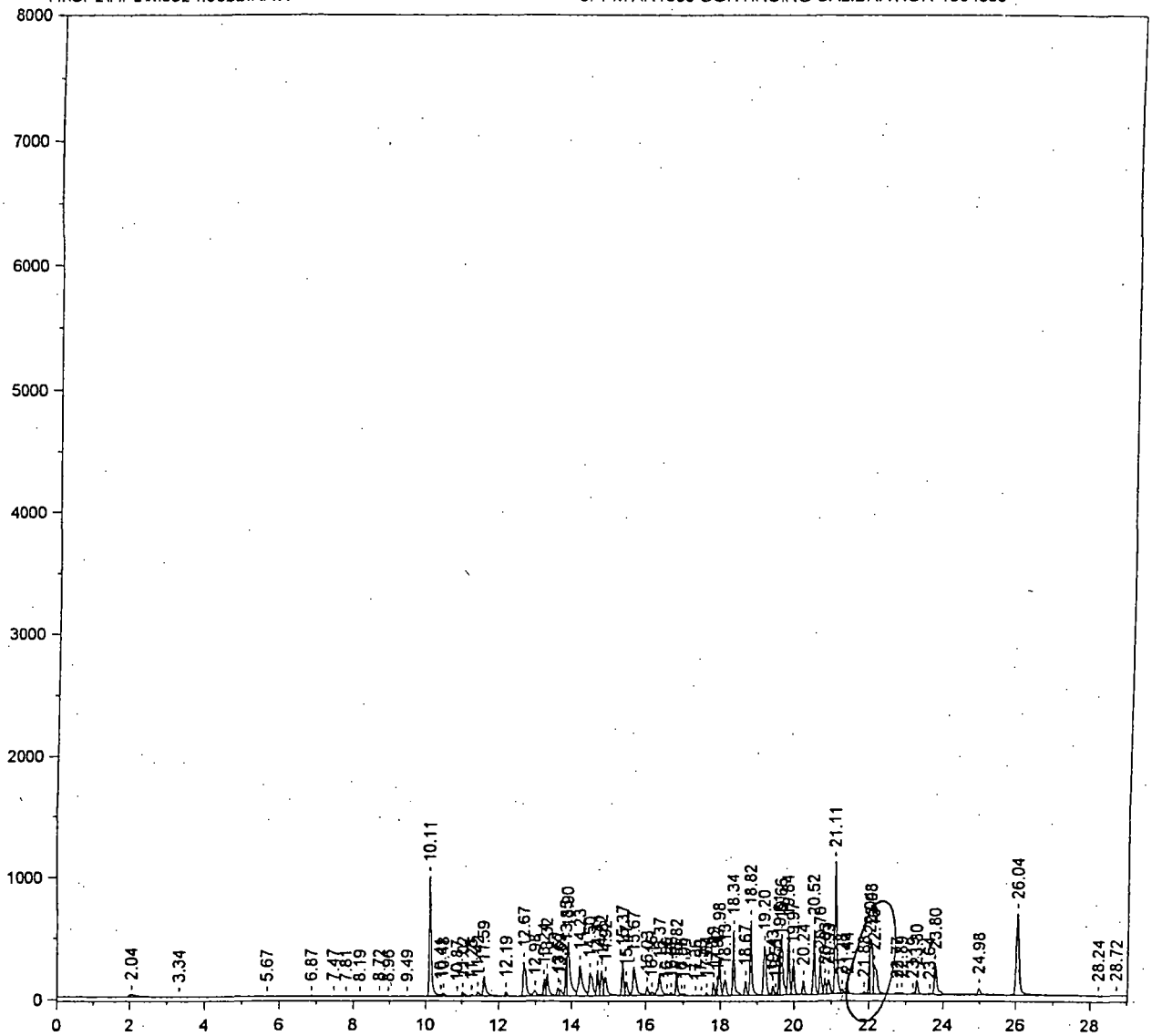
5PPM AR1660 CONTINUING CALIBRATION 1004369



Primary Column

Before reintegration
Peak not split in initial calibration
DST
9/25/2

60155

Sample Name = **5PPM AR1660 CONTINUING CALIBRATION 1004369**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0924.0022.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/25/02 3:22:48 AM
Method Version = 619
Calibration Version = 14

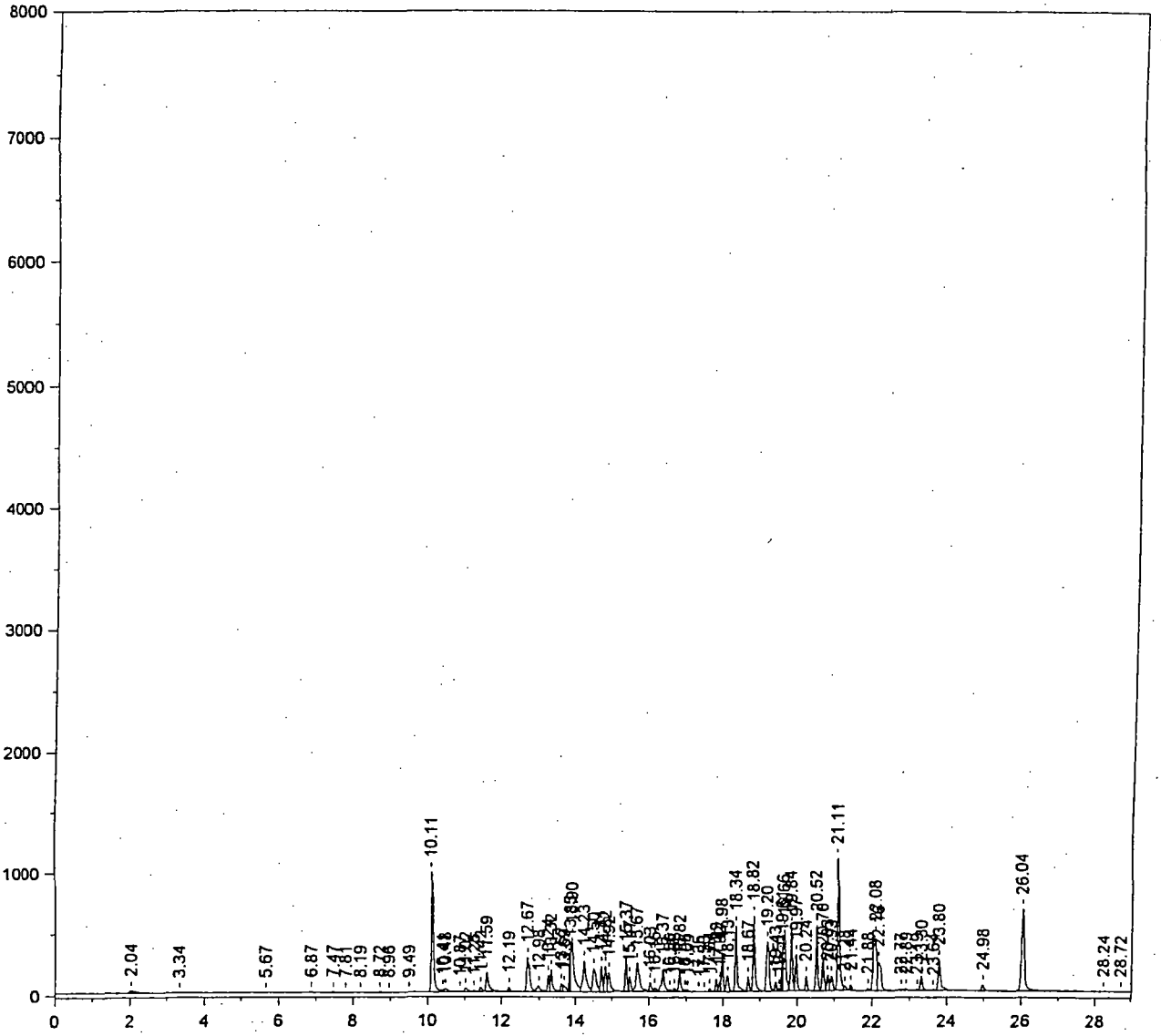
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.04		0.00	0.000	244426	0.412	BV	0.22
2	3.34		0.00	0.000	3007	0.005	VB	0.35
3	5.67		0.00	0.000	1176	0.002	BB	0.12
4	6.87		0.00	0.000	19594	0.033	BB	0.07
5	7.47		0.00	0.000	8442	0.014	BV	0.07
6	7.81		0.00	0.000	2052	0.003	VV	0.10
7	8.19		0.00	0.000	371	0.001	VB	0.07
8	8.72		0.00	0.000	10900	0.018	BV	0.08
9	8.96		0.00	0.000	1234	0.002	VB	0.08
10	9.49		0.00	0.000	1033	0.002	BB	0.16
11	10.11	CL4XYL	0.53	1.009	4126275	6.947	SBB	0.05
12	10.41		0.00	0.000	15407	0.026	TBV	0.04
13	10.48		0.00	0.000	72304	0.122	TVV	0.06
14	10.87		0.00	0.000	1790	0.003	TVV	0.08
15	11.02		0.00	0.000	153875	0.259	TVV	0.07
16	11.25		0.00	0.000	43148	0.073	TVV	0.06
17	11.42		0.00	0.000	172033	0.290	TVV	0.07
18	11.59	AR1016#1	5.31	10.158	942248	1.586	TVV	0.07
19	12.19		0.00	0.000	140424	0.236	TVB	0.05
20	12.67	AR1016#2	4.98	9.539	1578024	2.657	BV	0.09
21	12.98		0.00	0.000	340397	0.573	VV	0.08
22	13.24		0.00	0.000	441744	0.744	VV	0.05
23	13.32		0.00	0.000	811581	1.366	VV	0.06
24	13.62		0.00	0.000	262627	0.442	VV	0.07
25	13.69		0.00	0.000	270651	0.456	VV	0.07
26	13.85		0.00	0.000	802649	1.351	VV	0.04
27	13.90	AR1016#3	5.37	10.284	2614221	4.401	VV	0.08
28	14.23	AR1016#4	5.44	10.421	1712743	2.883	VV	0.07
29	14.50		0.00	0.000	1254363	2.112	VV	0.09
30	14.71		0.00	0.000	771996	1.300	VV	0.05
31	14.82		0.00	0.000	816711	1.375	VV	0.05
32	14.92		0.00	0.000	919927	1.549	VV	0.08
33	15.37	AR1016#5	5.07	9.707	1006200	1.694	VV	0.05
34	15.47		0.00	0.000	530277	0.893	VV	0.06
35	15.67		0.00	0.000	1574160	2.650	VV	0.09
36	16.03		0.00	0.000	311526	0.524	VV	0.05
37	16.16		0.00	0.000	168079	0.283	VV	0.06
38	16.37		0.00	0.000	1004812	1.692	VV	0.06
39	16.56		0.00	0.000	73882	0.124	VV	0.06
40	16.68		0.00	0.000	108186	0.182	VV	0.05
41	16.82		0.00	0.000	663535	1.117	VV	0.05
42	16.96		0.00	0.000	59334	0.100	VV	0.04
43	17.04		0.00	0.000	93563	0.158	VV	0.07
44	17.35		0.00	0.000	3173	0.005	VB	0.07
45	17.50		0.00	0.000	12709	0.021	BB	0.05
46	17.64		0.00	0.000	86554	0.146	BV	0.05
47	17.82		0.00	0.000	362012	0.609	VV	0.05
48	17.92		0.00	0.000	204060	0.344	VV	0.03
49	17.98	AR1260#1	5.36	10.265	1067054	1.796	VV	0.05
50	18.13		0.00	0.000	643692	1.084	VV	0.07
51	18.34		0.00	0.000	1972597	3.321	VV	0.05
52	18.67		0.00	0.000	432467	0.728	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.82	AR1260#2	5.40	10.346	2333597	3.929	VV	0.05
54	19.20		0.00	0.000	2212552	3.725	VV	0.09
55	19.43		0.00	0.000	258057	0.434	VV	0.05
56	19.51		0.00	0.000	60608	0.102	VV	0.04
57	19.61		0.00	0.000	914870	1.540	VV	0.04
58	19.66		0.00	0.000	2222802	3.742	VV	0.07
59	19.84	AR1260#3	5.44	10.423	1802423	3.034	VV	0.05
60	19.97		0.00	0.000	1093540	1.841	VV	0.05
61	20.24		0.00	0.000	431117	0.726	VB	0.05
62	20.52		0.00	0.000	1844958	3.106	BV	0.05
63	20.70		0.00	0.000	1001376	1.686	VV	0.05
64	20.83		0.00	0.000	495256	0.834	VV	0.05
65	20.93		0.00	0.000	550575	0.927	VV	0.07
66	21.11	AR1260#4	5.37	10.285	4236010	7.132	VV	0.05
67	21.28		0.00	0.000	166267	0.280	VV	0.06
68	21.44		0.00	0.000	162679	0.274	VB	0.05
69	21.88		0.00	0.000	68272	0.115	BV	0.05
70	22.04		0.00	0.000	1033265	1.740	VV	0.04
71	22.08	AR1260#5	3.41	6.522	1820666	3.065	VV	0.06
72	22.16		0.00	0.000	1575477	2.652	VV	0.11
73	22.77		0.00	0.000	59409	0.100	VV	0.07
74	22.89		0.00	0.000	63654	0.107	VV	0.07
75	23.19		0.00	0.000	31947	0.054	VV	0.06
76	23.30		0.00	0.000	526256	0.886	VV	0.06
77	23.64		0.00	0.000	46038	0.078	VV	0.13
78	23.80		0.00	0.000	1337154	2.251	VV	0.07
79	24.98		0.00	0.000	259428	0.437	VB	0.07
80	26.04	CL10BP	0.54	1.041	3850817	6.483	BV	0.08
81	28.24		0.00	0.000	3371	0.006	VV	0.12
82	28.72		0.00	0.000	684	0.001	VB	0.11

Total Area = 5.939837E+07 Total Height = 1.368894E+07 Total Amount = 52.23206

60157

— H:\CP2\HP2\M0924.0022.BND 5PPM AR1660 CONTINUING CALIBRATION 1004369



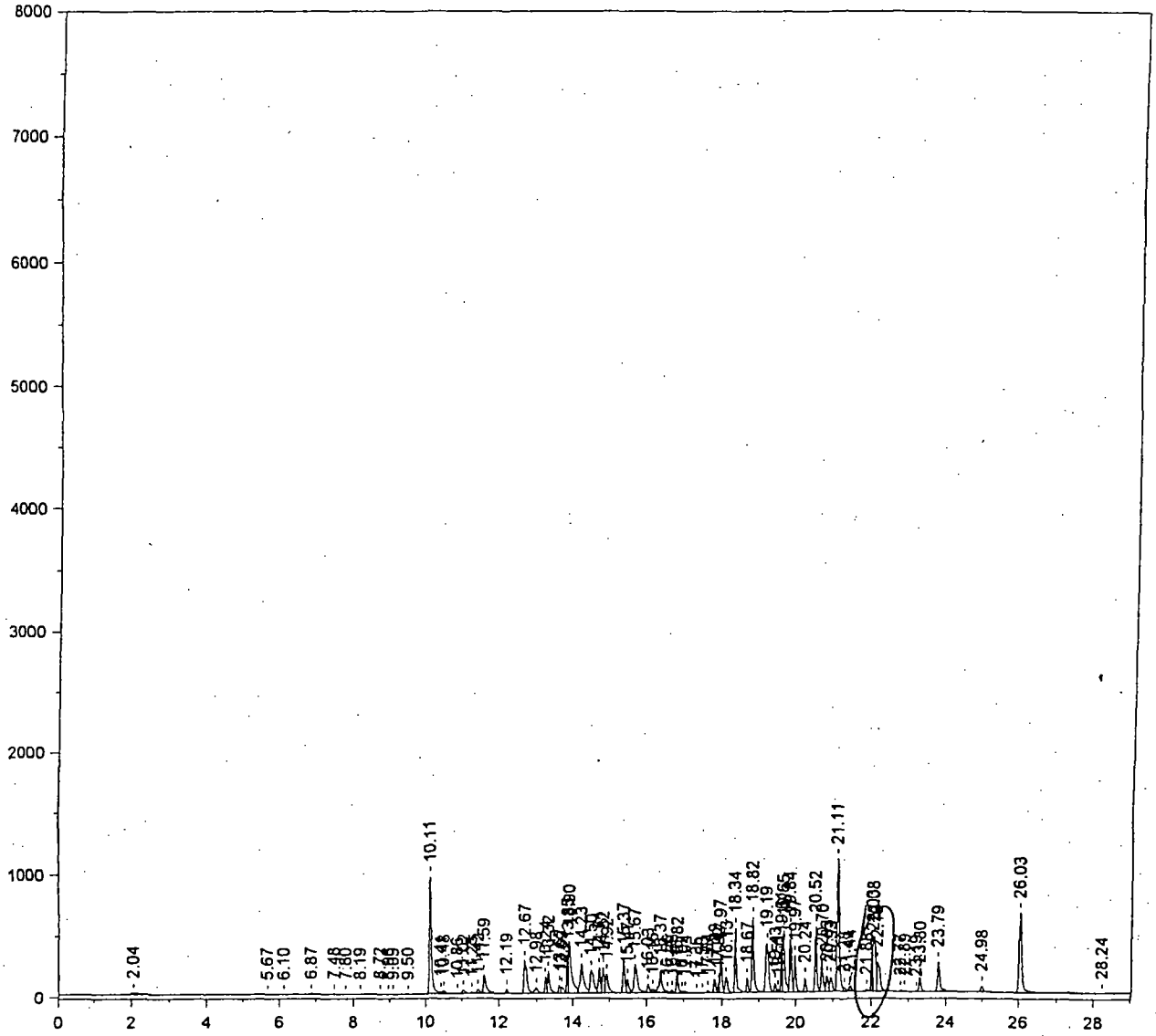
After reintegration
KDT
9/25/02

60158

Par DT 9/25/2

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0924.0029.RAW 5PPM AR1660 CONTINUING CALIBRATION 1004369



Primary Column

Before reintegration
peak not split in initial calibration
DT
9/25/2

60163

Sample Name = **5PPM AR1660 CONTINUING CALIBRATION 1004369**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0924.0029.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/25/02 8:36:48 AM
Method Version = 619
Calibration Version = 14

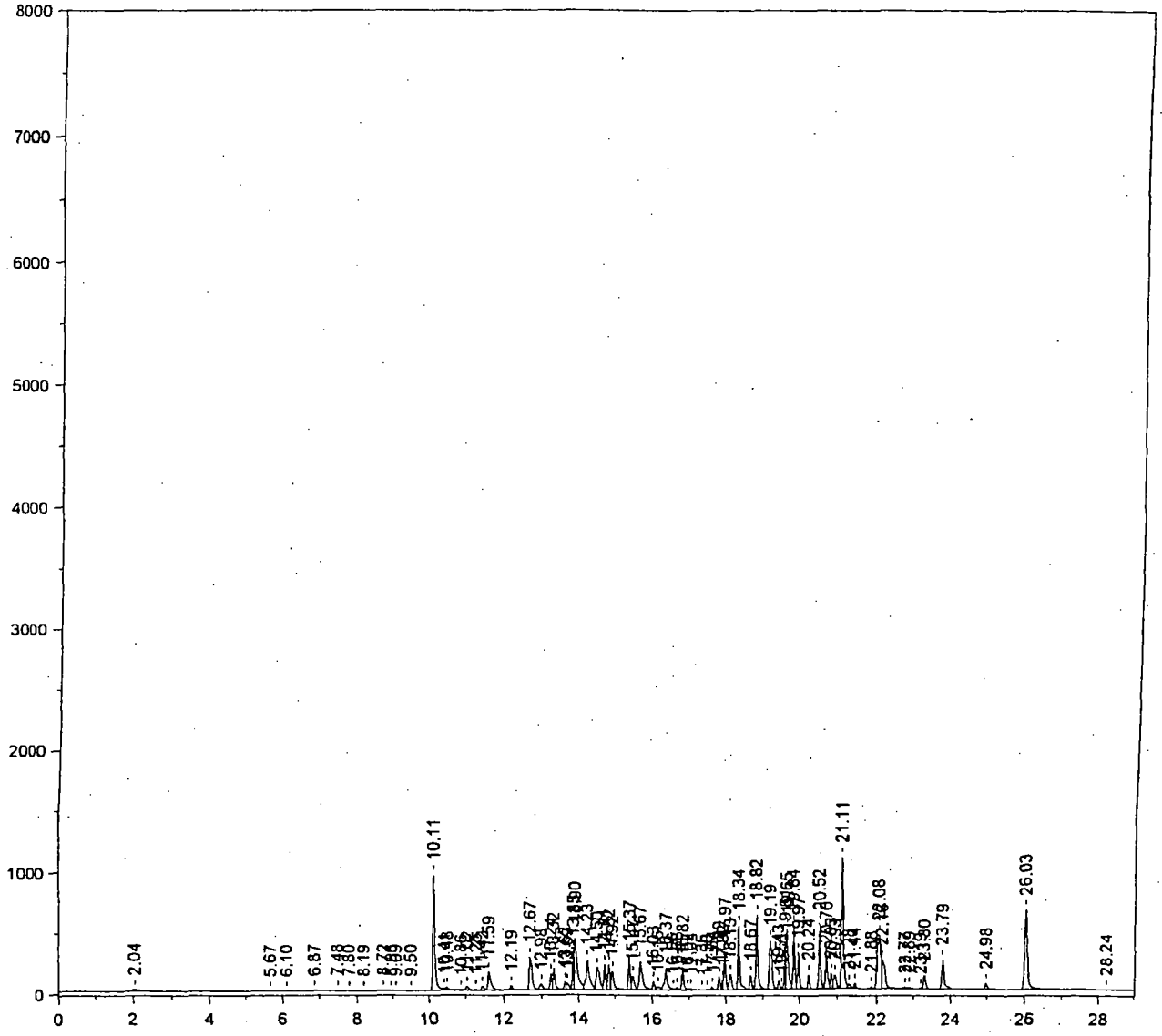
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.04		0.00	0.000	223345	0.378	BB	0.22
2	5.67		0.00	0.000	679	0.001	BB	0.12
3	6.10		0.00	0.000	258	0.000	BB	0.07
4	6.87		0.00	0.000	18997	0.032	BB	0.07
5	7.48		0.00	0.000	8273	0.014	BV	0.07
6	7.80		0.00	0.000	2147	0.004	VV	0.10
7	8.19		0.00	0.000	410	0.001	VB	0.08
8	8.72		0.00	0.000	12209	0.021	BV	0.08
9	8.96		0.00	0.000	3338	0.006	VV	0.08
10	9.09		0.00	0.000	4270	0.007	VV	0.09
11	9.50		0.00	0.000	2084	0.004	VB	0.18
12	10.11	CL4XYL	0.52	0.988	4056324	6.867	SBB	0.05
13	10.41		0.00	0.000	15114	0.026	TBV	0.04
14	10.48		0.00	0.000	70751	0.120	TVV	0.06
15	10.86		0.00	0.000	1034	0.002	TVV	0.08
16	11.02		0.00	0.000	151626	0.257	TVV	0.07
17	11.25		0.00	0.000	43818	0.074	TVV	0.06
18	11.42		0.00	0.000	170062	0.288	TVV	0.07
19	11.59	AR1016#1	5.36	10.207	951199	1.610	TVV	0.07
20	12.19		0.00	0.000	142606	0.241	TVB	0.05
21	12.67	AR1016#2	4.96	9.455	1571217	2.660	BV	0.09
22	12.98		0.00	0.000	335675	0.568	VV	0.08
23	13.24		0.00	0.000	438671	0.743	VV	0.05
24	13.32		0.00	0.000	809685	1.371	VV	0.06
25	13.62		0.00	0.000	257890	0.437	VV	0.07
26	13.69		0.00	0.000	270453	0.458	VV	0.07
27	13.85		0.00	0.000	779615	1.320	VV	0.04
28	13.90	AR1016#3	5.37	10.230	2612529	4.423	VV	0.08
29	14.23	AR1016#4	5.46	10.402	1717389	2.908	VV	0.07
30	14.50		0.00	0.000	1252825	2.121	VV	0.10
31	14.71		0.00	0.000	776452	1.315	VV	0.05
32	14.82		0.00	0.000	818795	1.386	VV	0.05
33	14.92		0.00	0.000	929171	1.573	VV	0.08
34	15.37	AR1016#5	5.08	9.688	1008827	1.708	VV	0.05
35	15.47		0.00	0.000	537353	0.910	VV	0.06
36	15.67		0.00	0.000	1573490	2.664	VV	0.09
37	16.03		0.00	0.000	313276	0.530	VV	0.05
38	16.16		0.00	0.000	167475	0.284	VV	0.06
39	16.37		0.00	0.000	1003415	1.699	VV	0.06
40	16.56		0.00	0.000	75560	0.128	VV	0.06
41	16.68		0.00	0.000	109154	0.185	VV	0.05
42	16.82		0.00	0.000	666016	1.128	VV	0.05
43	16.97		0.00	0.000	59472	0.101	VV	0.04
44	17.04		0.00	0.000	94214	0.160	VV	0.07
45	17.35		0.00	0.000	3303	0.006	VB	0.07
46	17.50		0.00	0.000	12722	0.022	BB	0.05
47	17.64		0.00	0.000	86767	0.147	BV	0.05
48	17.82		0.00	0.000	363326	0.615	VV	0.05
49	17.92		0.00	0.000	190165	0.322	VV	0.03
50	17.97	AR1260#1	5.44	10.364	1082231	1.832	VV	0.05
51	18.13		0.00	0.000	647925	1.097	VV	0.07
52	18.34		0.00	0.000	1981565	3.355	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.67		0.00	0.000	436858	0.740	VV	0.05
54	18.82	AR1260#2	5.44	10.369	2349428	3.978	VV	0.05
55	19.19		0.00	0.000	2222043	3.762	VV	0.09
56	19.43		0.00	0.000	259432	0.439	VV	0.05
57	19.51		0.00	0.000	64962	0.110	VV	0.04
58	19.61		0.00	0.000	926799	1.569	VV	0.04
59	19.65		0.00	0.000	2212647	3.746	VV	0.07
60	19.84	AR1260#3	5.46	10.411	1808556	3.062	VV	0.05
61	19.97		0.00	0.000	1097170	1.858	VV	0.05
62	20.24		0.00	0.000	425168	0.720	VB	0.05
63	20.52		0.00	0.000	1845215	3.124	BV	0.05
64	20.70		0.00	0.000	1002808	1.698	VV	0.05
65	20.83		0.00	0.000	483434	0.818	VV	0.05
66	20.93		0.00	0.000	561921	0.951	VV	0.07
67	21.11	AR1260#4	5.35	10.192	4216997	7.139	VV	0.05
68	21.28		0.00	0.000	170688	0.289	VV	0.07
69	21.44		0.00	0.000	160878	0.272	VB	0.05
70	21.88		0.00	0.000	66756	0.113	BV	0.05
71	22.03		0.00	0.000	968863	1.640	VV	0.04
72	22.08	AR1260#5	3.50	6.669	1870299	3.166	VV	0.06
73	22.16		0.00	0.000	1510372	2.557	VB	0.10
74	22.77		0.00	0.000	46880	0.079	BV	0.07
75	22.89		0.00	0.000	52819	0.089	VB	0.07
76	23.19		0.00	0.000	29369	0.050	BV	0.06
77	23.30		0.00	0.000	522980	0.885	VV	0.06
78	23.79		0.00	0.000	1267625	2.146	VB	0.07
79	24.98		0.00	0.000	254527	0.431	BB	0.07
80	26.03	CL10BP	0.54	1.024	3803474	6.439	BV	0.08
81	28.24		0.00	0.000	2686	0.005	VB	0.14

Total Area = 5.906682E+07 Total Height = 1.356569E+07 Total Amount = 52.47007

60165

— H:\CP2\HP2\M0924.0029.RAW 5PPM AR1660 CONTINUING CALIBRATION 1004369



after investigation
AST
9/25/02

60166

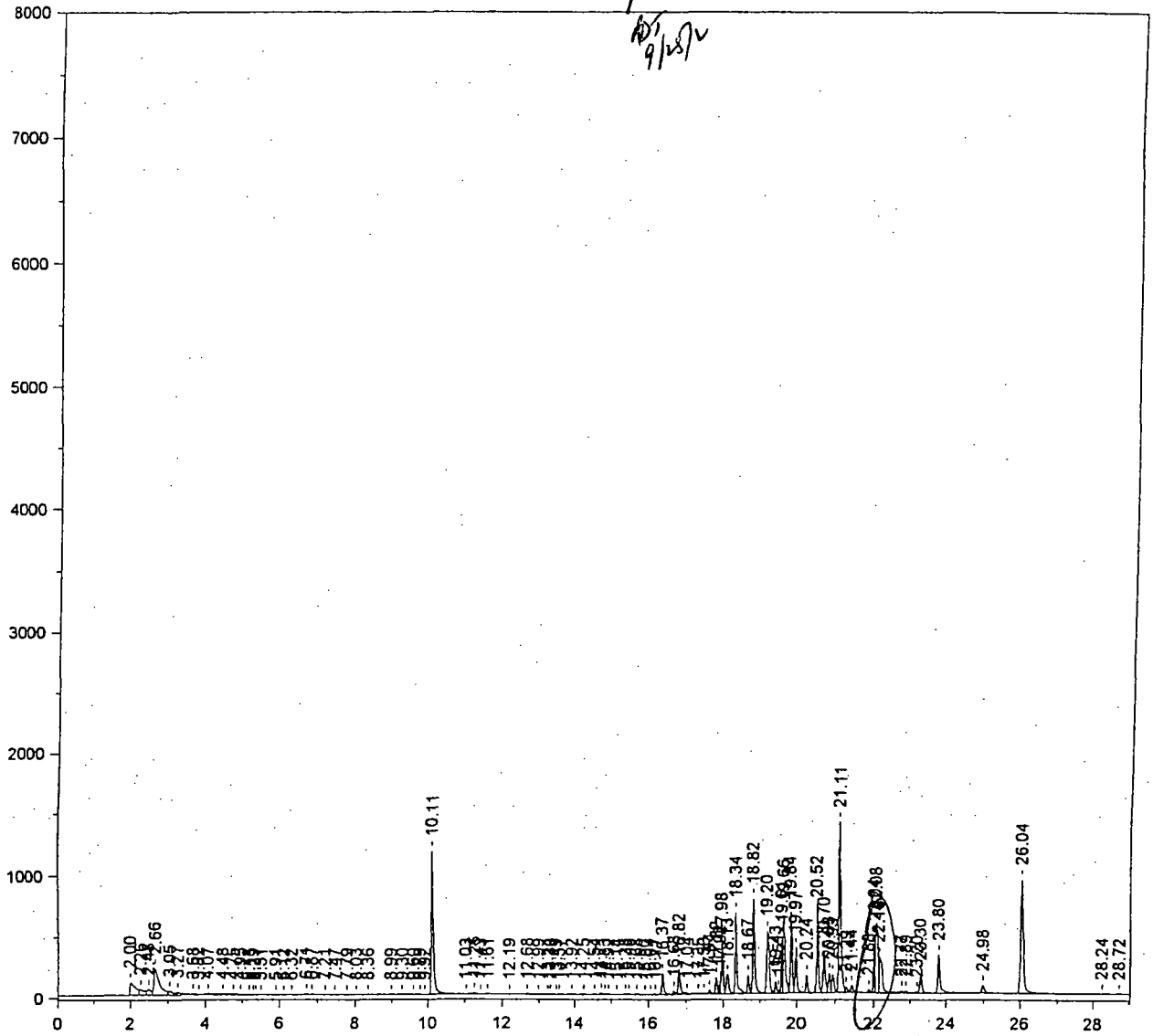
Chrom Perfect Chromatogram Report

-- H:\CP2\HP2\M0924.0027.RAW

301104-06K1 B8079 301103/301104 SPIKE BLK1

3

RDT 9/25/02



Primary Column

Before integration
peak not split in initial calibration
RDT 9/25/02

60272

Sample Name = **301104-06K1 B8079 301103/301104 SPIKE BLK1**

Instrument = HP 2 | Acquisition Port = 1

Heading 1 = RTX-CLPESTICIDEII SERIAL 213972

Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Raw File Name = **H:\CP2\HP2\M0924.0027.RAW** | Date Taken (end) = 9/25/02 7:14:16 AM

Method File Name = H:\CP2\HP2\Hp2pest.met | Method Version = 620

Calibration File Name = H:\CP2\HP2\PCBFD47A.cal | Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1091303	1.928	BV	0.20
2	2.26		0.00	0.000	462223	0.817	VV	0.09
3	2.48		0.00	0.000	421850	0.745	VV	0.09
4	2.66		0.00	0.000	2345046	4.143	VV	0.12
5	3.05		0.00	0.000	303863	0.537	VV	0.10
6	3.27		0.00	0.000	320323	0.566	VV	0.15
7	3.68		0.00	0.000	78618	0.139	VV	0.07
8	3.82		0.00	0.000	85197	0.151	VV	0.15
9	4.07		0.00	0.000	162027	0.286	VV	0.11
10	4.48		0.00	0.000	113025	0.200	VV	0.17
11	4.75		0.00	0.000	38311	0.068	VV	0.08
12	4.95		0.00	0.000	28098	0.050	VV	0.11
13	5.18		0.00	0.000	16180	0.029	VV	0.10
14	5.29		0.00	0.000	9319	0.016	VV	0.04
15	5.37		0.00	0.000	16098	0.028	VV	0.09
16	5.51		0.00	0.000	11031	0.019	VV	0.12
17	5.91		0.00	0.000	12771	0.023	VB	0.23
18	6.12		0.00	0.000	488	0.001	BB	0.07
19	6.32		0.00	0.000	1331	0.002	BB	0.09
20	6.71		0.00	0.000	34402	0.061	BV	0.06
21	6.87		0.00	0.000	34162	0.060	VV	0.08
22	7.21		0.00	0.000	5384	0.010	VV	0.10
23	7.47		0.00	0.000	16605	0.029	VB	0.08
24	7.79		0.00	0.000	904	0.002	BV	0.08
25	8.03		0.00	0.000	14752	0.026	VV	0.06
26	8.36		0.00	0.000	3368	0.006	VB	0.13
27	8.99		0.00	0.000	2827	0.005	BV	0.14
28	9.30		0.00	0.000	1930	0.003	VB	0.11
29	9.60		0.00	0.000	1782	0.003	BV	0.05
30	9.79		0.00	0.000	1599	0.003	VV	0.06
31	9.92		0.00	0.000	541	0.001	VB	0.07
32	10.11	CL4XYL	0.61	1.855	4761833	8.412	BV	0.05
33	11.03		0.00	0.000	15029	0.027	VV	0.12
34	11.25		0.00	0.000	53026	0.094	VV	0.06
35	11.43		0.00	0.000	2905	0.005	VB	0.08
36	11.61	AR1016#1	0.03	0.082	4753	0.008	BB	0.07
37	12.19		0.00	0.000	2702	0.005	BB	0.05
38	12.68	AR1016#2	0.14	0.436	45288	0.080	BV	0.09
39	12.99		0.00	0.000	4887	0.009	VV	0.05
40	13.24		0.00	0.000	8253	0.015	VV	0.06
41	13.33		0.00	0.000	15725	0.028	VV	0.06
42	13.49		0.00	0.000	9738	0.017	VV	0.05
43	13.57		0.00	0.000	12372	0.022	VV	0.07
44	13.92	AR1016#3	0.16	0.476	75934	0.134	VV	0.16
45	14.25	AR1016#4	0.14	0.423	43624	0.077	VV	0.13
46	14.54		0.00	0.000	22313	0.039	VV	0.09
47	14.71		0.00	0.000	52156	0.092	VV	0.06
48	14.83		0.00	0.000	21875	0.039	VV	0.05
49	14.92		0.00	0.000	16618	0.029	VV	0.08
50	15.14		0.00	0.000	8318	0.015	VB	0.09
51	15.38	AR1016#5	0.12	0.363	23635	0.042	BV	0.06
52	15.48		0.00	0.000	8721	0.015	VV	0.07

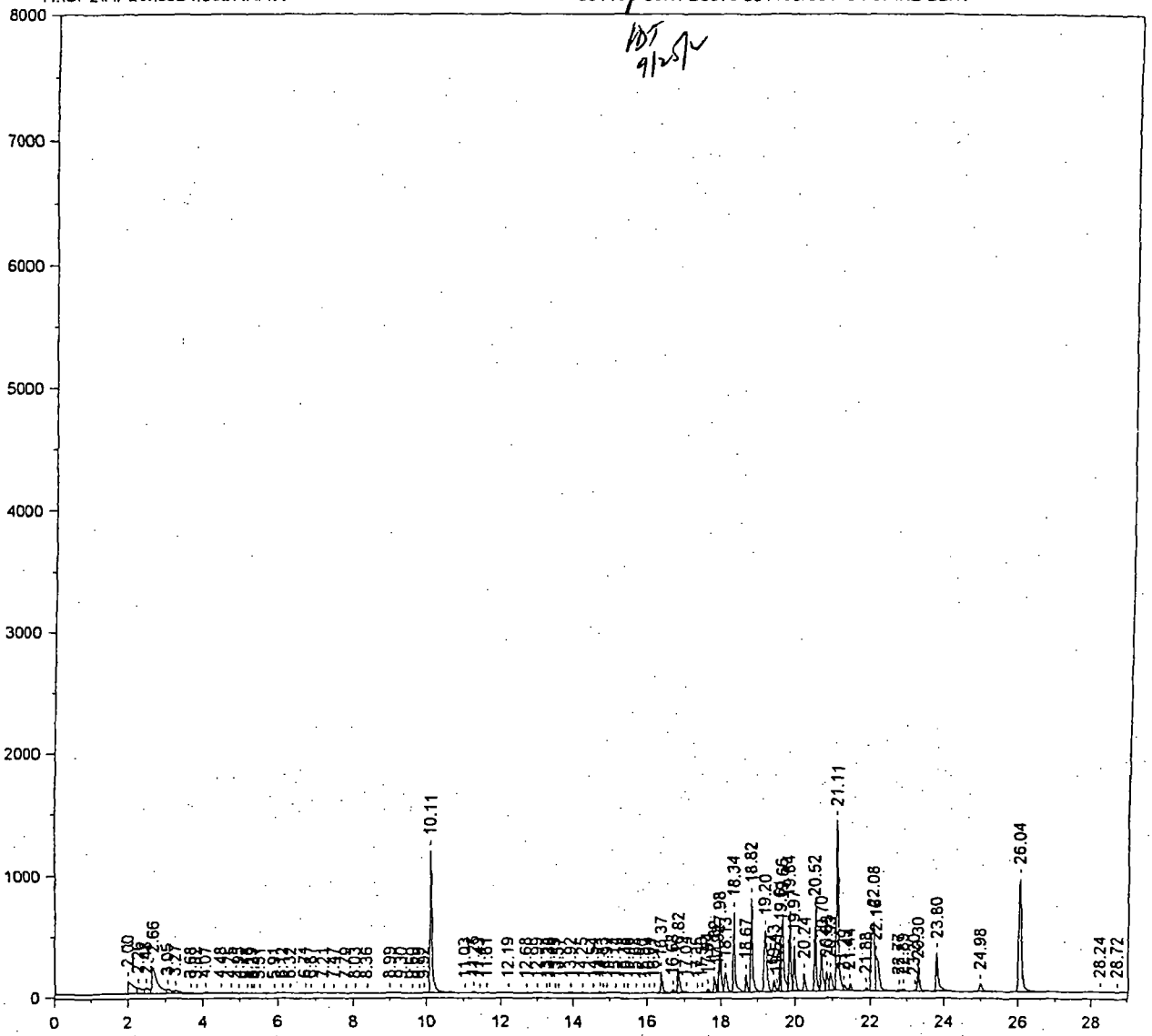
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	15.68		0.00	0.000	26654	0.047	VV	0.09
54	15.90		0.00	0.000	1062	0.002	VB	0.07
55	16.04		0.00	0.000	4873	0.009	BV	0.06
56	16.17		0.00	0.000	8303	0.015	VV	0.07
57	16.37		0.00	0.000	671479	1.186	VV	0.05
58	16.68		0.00	0.000	103318	0.183	VV	0.05
59	16.82		0.00	0.000	833895	1.473	VV	0.05
60	17.04		0.00	0.000	71066	0.126	VV	0.07
61	17.35		0.00	0.000	3107	0.005	VB	0.07
62	17.50		0.00	0.000	15694	0.028	BB	0.05
63	17.64		0.00	0.000	111740	0.197	BV	0.05
64	17.82		0.00	0.000	437893	0.774	VV	0.05
65	17.92		0.00	0.000	257861	0.456	VV	0.03
66	17.98	AR1260#1	6.54	19.924	1300626	2.298	VV	0.05
67	18.13		0.00	0.000	792106	1.399	VV	0.07
68	18.34		0.00	0.000	2411592	4.260	VV	0.05
69	18.67		0.00	0.000	538147	0.951	VV	0.05
70	18.82	AR1260#2	6.61	20.164	2856100	5.046	VV	0.05
71	19.20		0.00	0.000	2729518	4.822	VV	0.09
72	19.43		0.00	0.000	317606	0.561	VV	0.05
73	19.51		0.00	0.000	79277	0.140	VV	0.04
74	19.61		0.00	0.000	1126298	1.990	VV	0.04
75	19.66		0.00	0.000	2766567	4.888	VV	0.07
76	19.84	AR1260#3	6.69	20.395	2214887	3.913	VV	0.05
77	19.97		0.00	0.000	1338388	2.364	VV	0.05
78	20.24		0.00	0.000	536401	0.948	VB	0.05
79	20.52		0.00	0.000	2283985	4.035	BV	0.05
80	20.70		0.00	0.000	1242469	2.195	VV	0.05
81	20.83		0.00	0.000	613652	1.084	VV	0.05
82	20.93		0.00	0.000	700458	1.237	VV	0.08
83	21.11	AR1260#4	6.72	20.484	5298259	9.360	VV	0.05
84	21.29		0.00	0.000	203059	0.359	VV	0.07
85	21.44		0.00	0.000	204041	0.360	VB	0.05
86	21.88		0.00	0.000	87912	0.155	BV	0.06
87	22.04		0.00	0.000	1245690	2.201	VV	0.04
88	22.08	AR1260#5	4.31	13.143	2303997	4.070	VV	0.06
89	22.16		0.00	0.000	1973169	3.486	VV	0.11
90	22.77		0.00	0.000	74238	0.131	VV	0.06
91	22.89		0.00	0.000	77362	0.137	VV	0.07
92	23.20		0.00	0.000	40208	0.071	VV	0.06
93	23.30		0.00	0.000	671482	1.186	VV	0.06
94	23.80		0.00	0.000	1621418	2.864	VB	0.07
95	24.98		0.00	0.000	318151	0.562	BB	0.07
96	26.04	CL10BP	0.74	2.257	5241473	9.260	BB	0.08
97	28.24		0.00	0.000	2373	0.004	BV	0.13
98	28.72		0.00	0.000	1488	0.003	VB	0.13

Total Area = 5.66044E+07 Total Height = 1.319751E+07 Total Amount = 32.80105

60274

— H:\CP2\HP2\M0924.0027.RAW 301104-06K1 B8079 301103/301104 SPIKE BLK1

BT 9/25/02



after integration
BT
9/25/02

9/26/02

60275

PAH-8270 SIM

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-001-05-ESW	ARDL Lab No.:	301104-03
Desc/Location:	NONE	Lab Filename:	Z3847
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1505	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	20.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.5	12.6	ND		UG/KG	1
Acenaphthylene	3	12.6	ND		UG/KG	1
Acenaphthene	3.5	12.6	ND		UG/KG	1
Fluorene	3	12.6	4.4	J	UG/KG	1
Phenanthrene	3.2	12.6	67.7		UG/KG	1
Anthracene	2.5	12.6	10.4	J	UG/KG	1
Fluoranthene	3.3	12.6	152		UG/KG	1
Pyrene	2.3	12.6	136		UG/KG	1
Benzo(a)anthracene	2.5	12.6	64.7		UG/KG	1
Chrysene	3	12.6	84.2		UG/KG	1
Benzo(b)fluoranthene	3	12.6	70.0		UG/KG	1
Benzo(k)fluoranthene	4.7	12.6	60.2		UG/KG	1
Benzo(a)pyrene	2.8	12.6	69.6		UG/KG	1
Indeno(1,2,3-cd)pyrene	3	12.6	46.4		UG/KG	1
Dibenzo(a,h)anthracene	2.8	12.6	ND		UG/KG	1
Benzo(g,h,i)perylene	3	12.6	49.1		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	55%
Nitrobenzene-d5	23-120	54%
Terphenyl-d14	18-137	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/17/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-002-05-ESW	ARDL Lab No.:	301104-04
Desc/Location:	NONE	Lab Filename:	Z3848
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1522	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	20.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.5	12.5	ND		UG/KG	1
Acenaphthylene	3	12.5	ND		UG/KG	1
Acenaphthene	3.4	12.5	ND		UG/KG	1
Fluorene	2.9	12.5	ND		UG/KG	1
Phenanthrene	3.2	12.5	20.3		UG/KG	1
Anthracene	2.5	12.5	ND		UG/KG	1
Fluoranthene	3.2	12.5	46.1		UG/KG	1
Pyrene	2.3	12.5	44.4		UG/KG	1
Benzo(a)anthracene	2.5	12.5	21.6		UG/KG	1
Chrysene	3	12.5	27.8		UG/KG	1
Benzo(b)fluoranthene	3	12.5	20.8		UG/KG	1
Benzo(k)fluoranthene	4.6	12.5	24.3		UG/KG	1
Benzo(a)pyrene	2.8	12.5	22.9		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.5	15.6		UG/KG	1
Dibenzo(a,h)anthracene	2.8	12.5	ND		UG/KG	1
Benzo(g,h,i)perylene	3	12.5	16.9		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	45%
Nitrobenzene-d5	23-120	44%
Terphenyl-d14	18-137	72%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/17/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-003-04-ESW	ARDL Lab No.:	301104-05
Desc/Location:	NONE	Lab Filename:	Z3849
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1545	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	12.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.3	11.4	ND		UG/KG	1
Acenaphthylene	2.7	11.4	ND		UG/KG	1
Acenaphthene	3.1	11.4	ND		UG/KG	1
Fluorene	2.7	11.4	ND		UG/KG	1
Phenanthrene	2.9	11.4	ND		UG/KG	1
Anthracene	2.3	11.4	ND		UG/KG	1
Fluoranthene	3	11.4	ND		UG/KG	1
Pyrene	2.1	11.4	ND		UG/KG	1
Benzo(a)anthracene	2.2	11.4	ND		UG/KG	1
Chrysene	2.7	11.4	ND		UG/KG	1
Benzo(b)fluoranthene	2.7	11.4	ND		UG/KG	1
Benzo(k)fluoranthene	4.2	11.4	ND		UG/KG	1
Benzo(a)pyrene	2.6	11.4	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.7	11.4	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.5	11.4	ND		UG/KG	1
Benzo(g,h,i)perylene	2.7	11.4	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	66%
Nitrobenzene-d5	23-120	57%
Terphenyl-d14	18-137	82%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois. 62864

Lab Report No: 301104 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-004-05-ESW	ARDL Lab No.:	301104-06
Desc/Location:	NONE	Lab Filename:	Z3850
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1530	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	18.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.2	ND		UG/KG	1
Acenaphthylene	2.9	12.2	ND		UG/KG	1
Acenaphthene	3.3	12.2	ND		UG/KG	1
Fluorene	2.9	12.2	ND		UG/KG	1
Phenanthrene	3.1	12.2	ND		UG/KG	1
Anthracene	2.4	12.2	ND		UG/KG	1
Fluoranthene	3.2	12.2	ND		UG/KG	1
Pyrene	2.3	12.2	ND		UG/KG	1
Benzo(a)anthracene	2.4	12.2	ND		UG/KG	1
Chrysene	2.9	12.2	ND		UG/KG	1
Benzo(b)fluoranthene	2.9	12.2	ND		UG/KG	1
Benzo(k)fluoranthene	4.5	12.2	ND		UG/KG	1
Benzo(a)pyrene	2.7	12.2	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.9	12.2	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.7	12.2	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.2	ND		UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	51%
Nitrobenzene-d5	23-120	45%
Terphenyl-d14	18-137	61%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-005-08-EBT	ARDL Lab No.:	301104-01
Desc/Location:	NONE	Lab Filename:	Z3845
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1334	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	16.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.4	12.0	ND		UG/KG	1
Acenaphthylene	2.8	12.0	ND		UG/KG	1
Acenaphthene	3.3	12.0	ND		UG/KG	1
Fluorene	2.8	12.0	ND		UG/KG	1
Phenanthrene	3	12.0	ND		UG/KG	1
Anthracene	2.4	12.0	ND		UG/KG	1
Fluoranthene	3.1	12.0	ND		UG/KG	1
Pyrene	2.2	12.0	5.6	J	UG/KG	1
Benzo(a)anthracene	2.3	12.0	ND		UG/KG	1
Chrysene	2.8	12.0	12.2		UG/KG	1
Benzo(b)fluoranthene	2.8	12.0	ND		UG/KG	1
Benzo(k)fluoranthene	4.4	12.0	ND		UG/KG	1
Benzo(a)pyrene	2.7	12.0	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.8	12.0	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.6	12.0	ND		UG/KG	1
Benzo(g,h,i)perylene	2.9	12.0	6.6	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	55%
Nitrobenzene-d5	23-120	55%
Terphenyl-d14	18-137	56%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/17/2002

Project Name: USACE FT DEARBORN Analysis: PNA'S (METHOD 8270, SIM)
Project No.: 17207 Analytical Method: 8270C
Prep Method: 3550A

Field ID:	OWS-006-08-EBT	ARDL Lab No.:	301104-02
Desc/Location:	NONE	Lab Filename:	Z3846
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1320	Prep. Date:	09/25/2002
Matrix:	SOIL	Analysis Date:	09/26/2002
Amount Used:	30 g	Instrument ID:	HP6
Final Volume:	1 mL	QC Batch:	B5002
% Moisture:	11.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Naphthalene	2.2	11.3	ND		UG/KG	1
Acenaphthylene	2.7	11.3	ND		UG/KG	1
Acenaphthene	3.1	11.3	ND		UG/KG	1
Fluorene	2.7	11.3	ND		UG/KG	1
Phenanthrene	2.9	11.3	ND		UG/KG	1
Anthracene	2.3	11.3	ND		UG/KG	1
Fluoranthene	2.9	11.3	ND		UG/KG	1
Pyrene	2.1	11.3	5.2	J	UG/KG	1
Benzo(a)anthracene	2.2	11.3	12.1		UG/KG	1
Chrysene	2.7	11.3	13.4		UG/KG	1
Benzo(b)fluoranthene	2.7	11.3	ND		UG/KG	1
Benzo(k)fluoranthene	4.2	11.3	ND		UG/KG	1
Benzo(a)pyrene	2.5	11.3	ND		UG/KG	1
Indeno(1,2,3-cd)pyrene	2.7	11.3	ND		UG/KG	1
Dibenzo(a,h)anthracene	2.5	11.3	ND		UG/KG	1
Benzo(g,h,i)perylene	2.7	11.3	8.7	J	UG/KG	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	30-115	66%
Nitrobenzene-d5	23-120	54%
Terphenyl-d14	18-137	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

GLYCOL-8015

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/04/2002

Project Name: USACE FT DEARBORN Analysis: MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.: 17207 Analytical Method: 8015
Prep Method: NONE

Field ID:	OWS-001-05-ESW	ARDL Lab No.:	301104-03
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1505	Prep. Date:	09/27/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B5012
% Moisture:	20.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	2	12.6	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/04/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17207	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	OWS-002-05-ESW	ARDL Lab No.:	301104-04
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1522	Prep. Date:	09/27/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B5012
% Moisture:	20.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	2	12.5	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/04/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17207	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	OWS-003-04-ESW	ARDL Lab No.:	301104-05
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1545	Prep. Date:	09/27/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B5012
% Moisture:	12.6	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.8	11.4	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/04/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17207	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	OWS-004-05-ESW	ARDL Lab No.:	301104-06
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1530	Prep. Date:	09/27/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B5012
% Moisture:	18.1	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	2	12.2	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/04/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17207	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	OWS-005-08-EBT.	ARDL Lab No.:	301104-01
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1334	Prep. Date:	09/27/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B5012
% Moisture:	16.5	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.9	12.0	ND		MG/KG	1

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/04/2002

Project Name:	USACE FT DEARBORN	Analysis:	MISCELLANEOUS GAS CHROMATOGRAPHY
Project No.:	17207	Analytical Method:	8015
		Prep Method:	NONE

Field ID:	OWS-006-08-EBT	ARDL Lab No.:	301104-02
Desc/Location:	NONE	Lab Filename:	
Sample Date:	09/17/2002	Received Date:	09/18/2002
Sample Time:	1320	Prep. Date:	09/27/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	10 g	Instrument ID:	
Final Volume:	10 mL	QC Batch:	B5012
% Moisture:	11.7	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Ethylene Glycol	1.8	11.3	ND		MG/KG	1

INORGANICS

INORGANIC ANALYSIS DATA PACKAGE

FERGUSON HARBOR

Report Date: 10/01/02

Delivery Order No.: 17297

ARDL Report No.: 301104

Lab Name: ARDL, Inc.
Samples Received at ARDL: 18-Sep-02
Project Name: USACE Ft. Dearborn

CASE NARRATIVE

Sample ID No.	Date Collected	Lab ID No.	Analysis Requested
OWS-005-08-EBT	09/17/02	301104-01	Total Metals(1), Total Solids
OWS-006-08-EBT	09/17/02	301104-02	Total Metals(1), Total Solids
OWS-001-05-ESW	09/17/02	301104-03	Total Metals(1), Total Solids
OWS-002-05-ESW	09/17/02	301104-04	Total Metals(1), Total Solids
OWS-003-04-ESW	09/17/02	301104-05	Total Metals(1), Total Solids
OWS-004-05-ESW	09/17/02	301104-06	Total Metals(1), Total Solids

(1) Including aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, selenium, silver, sodium, thallium, vanadium and zinc.

The quality control data are summarized as follows:

LABORATORY CONTROL SAMPLES
Percent recovery of all LCS analyses were within control limits.

PREPARATION BLANKS
Results of all preparation blanks were within acceptable limits.

MATRIX SPIKES
Percent recovery of all matrix spikes and matrix spike duplicates except 2 of 2 for antimony, cobalt and nickel were within control limits. Sample results for aluminum, iron and manganese were greater than 4 times the spike amount; therefore, percent recovery was not considered.

DUPLICATES
RPD on all duplicate analyses were within control limits.
All duplicate analyses are reported as MS/MSD except calcium, magnesium, potassium, sodium and total solids which are reported as sample/duplicate.

Release of the data contained in this package has been authorized by the Technical Services Manager or his designee as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17207

Field ID: OWS-001-05-ESW ARDL No: 301104-03
Sampling Loc'n: NONE Received: 09/18/2002
Sampling Date: 09/17/2002 Matrix: SOIL
Sampling Time: 1505 Moisture: 20.7

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.6	11800	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.63	1.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.38	10.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.3	80.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.13	0.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.5	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.6	11900	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.63	16.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.63	8.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.3	29.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6.3	21800	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.38	43.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.6	8560	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.63	459	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.1	ND	MG/KG	7470A	7470A	09/23/02	09/23/02	C1641
Nickel	1.9	21.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	252	1320	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.63	0.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.63	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	50.4	101	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.38	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.63	26.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.63	60.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	79.3	%	NONE	160.3	NA	09/18/02	09199456

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17207

Field ID: OWS-002-05-ESW ARDL No: 301104-04
Sampling Loc'n: NONE Received: 09/18/2002
Sampling Date: 09/17/2002 Matrix: SOIL
Sampling Time: 1522 Moisture: 20.1

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.5	11500	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.63	1.1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.38	8.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.3	99.0	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.13	0.63	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.5	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.5	12400	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.63	14.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.63	9.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.3	20.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6.3	17300	MG/KG	3050B	6010B	09/24/02	09/24/02	P400
Lead	0.38	15.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.5	7230	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.63	518	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.1	ND	MG/KG	7470A	7470A	09/23/02	09/23/02	C1641
Nickel	1.9	15.0	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	250	1110	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.63	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.63	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	50.1	85.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.38	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.63	23.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.63	45.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	79.9	%	NONE	160.3	NA	09/18/02	09199456

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17207

Field ID: OWS-003-04-ESW ARDL No: 301104-05
Sampling Loc'n: NONE Received: 09/18/2002
Sampling Date: 09/17/2002 Matrix: SOIL
Sampling Time: 1545 Moisture: 12.6

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	11.4	5220	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.57	0.82	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.34	7.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.1	28.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.11	0.32	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.46	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	11.4	63400	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.57	9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.57	6.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.1	20.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	5.7	13600	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.34	8.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	11.4	38700	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.57	445	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.092	ND	MG/KG	7470A	7470A	09/23/02	09/23/02	C1641
Nickel	1.7	13.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	229	1050	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.57	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.57	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	45.8	128	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.34	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.57	12.1	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.57	29.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	87.4	%	NONE	160.3	NA	09/18/02	09199456

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17207

Field ID: OWS-004-05-ESW ARDL No: 301104-06
Sampling Loc'n: NONE Received: 09/18/2002
Sampling Date: 09/17/2002 Matrix: SOIL
Sampling Time: 1530 Moisture: 18.1

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12.2	9100	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.61	0.94	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.37	7.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.2	49.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.12	0.54	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.49	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12.2	56800	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.61	14.9	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.61	9.4	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.2	28.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6.1	17900	MG/KG	3050B	6010B	09/24/02	09/24/02	P400
Lead	0.37	10.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12.2	26900	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.61	343	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.098	ND	MG/KG	7470A	7470A	09/23/02	09/23/02	C1641
Nickel	1.8	23.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	244	2010	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.61	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.61	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	48.8	140	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.37	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.61	18.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.61	40.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	81.9	%	NONE	160.3	NA	09/18/02	09199456

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17207

Field ID: OWS-005-08-EBT ARDL No: 301104-01
Sampling Loc'n: NONE Received: 09/18/2002
Sampling Date: 09/17/2002 Matrix: SOIL
Sampling Time: 1334 Moisture: 16.5

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	12	6480	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.6	0.92	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.36	6.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.2	33.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.12	0.37	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.48	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	12	62500	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.6	11.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.6	15.0	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.2	22.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Iron	6	14000	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Lead	0.36	10.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	12	37600	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.6	676	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.096	ND	MG/KG	7470A	7470A	09/23/02	09/23/02	C1641
Nickel	1.8	26.6	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	240	1700	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.6	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.6	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	47.9	157	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.36	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.6	14.0	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.6	33.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	83.5	%	NONE	160.3	NA	09/18/02	09199456

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301104 Report Date: 10/01/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17207

Field ID: OWS-006-08-EBT ARDL No: 301104-02
Sampling Loc'n: NONE Received: 09/18/2002
Sampling Date: 09/17/2002 Matrix: SOIL
Sampling Time: 1320 Moisture: 11.7

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Aluminum	11.3	5080	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Antimony	0.57	0.99	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Arsenic	0.34	9.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Barium	1.1	26.0	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Beryllium	0.11	0.33	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cadmium	0.45	0.62	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Calcium	11.3	55400	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Chromium	0.57	9.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Cobalt	0.57	6.2	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Copper	1.1	24.3	MG/KG	3050B	6010B	09/24/02	09/24/02	P400[illegible]
Iron	5.7	17300	MG/KG	3050B	6010B	09/24/02	09/24/02	P400
Lead	0.34	11.7	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Magnesium	11.3	33700	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Manganese	0.57	359	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Mercury	0.091	ND	MG/KG	7470A	7470A	09/23/02	09/23/02	C1641
Nickel	1.7	17.8	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Potassium	227	1310	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Selenium	0.57	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Silver	0.57	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Sodium	45.3	137	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Thallium	0.34	ND	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Vanadium	0.57	11.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Zinc	0.57	52.5	MG/KG	3050B	6010B	09/24/02	09/24/02	P4002
Solids, Percent	1	88.3	%	NONE	160.3	NA	09/18/02	09199456

ORGANICS

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Organic Tests, Report No. 301105, 10/14/2002

Customer: FERGUSON HARBOUR INC
Address:
GROVEPORT, OH 43125

Sample Numbers ARDL	Customer	Analysis Method	Sampling Date	Preparation Date	Analysis Date
301105-01	OTH3-RO-CC-001	8270C	09/18/02	10/01/02	10/10/02
301105-01	OTH3-RO-CC-001	8082	09/18/02	09/30/02	10/02/02
301105-01	OTH3-RO-CC-001	8260B	09/18/02	10/01/02	10/08/02
301105-02	OTH3-RO-SO-001	8270C	09/18/02	10/01/02	10/10/02
301105-02	OTH3-RO-SO-001	8082	09/18/02	09/30/02	10/02/02
301105-02	OTH3-RO-SO-001	8260B	09/18/02	10/01/02	10/08/02
301105-03	OWS1-RO-SO-001	8270C	09/18/02	10/01/02	10/10/02
301105-03	OWS1-RO-SO-001	8082	09/18/02	09/30/02	10/02/02
301105-03	OWS1-RO-SO-001	8260B	09/18/02	10/01/02	10/08/02
301105-04	OWS1-RO-CC-001	8270C	09/18/02	10/01/02	10/10/02
301105-04	OWS1-RO-CC-001	8082	09/18/02	09/30/02	10/02/02
301105-04	OWS1-RO-CC-001	8260B	09/18/02	10/01/02	10/08/02
301105-05	FSS-DR-SO-001	8270C	09/18/02	10/01/02	10/10/02
301105-05	FSS-DR-SO-001	8082	09/18/02	09/30/02	10/02/02
301105-05	FSS-DR-SO-001	8260B	09/18/02	10/01/02	10/08/02

Standard USEPA data qualifiers may appear with results. These qualifiers and their meanings are listed below.

ND - Analyte concentration below method detection limit (MDL).
J - Estimated value. Analyte at or above MDL but below quantitation limit.
B - Analyte also detected in the Method Blank.
NC - Value not calculable.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:10/17/02

Lab Name: ARDL, Inc.

ARDL Report No.: 301105 Samples Received at ARDL: 9/19/02

CASE NARRATIVE

TCLP VOA FRACTION - METHOD 8260

Soil samples were received by ARDL, Inc. on September 19, 2002, for TCLP extraction and VOA analysis for GC/MS. All extractions were performed within the method specified holding time.

No problems were encountered during the sample analyses.

TCLP BNA FRACTION - METHOD 8270

Soil samples were received by ARDL, Inc. on September 19, 2002, BNA/TCLP analysis. All analyses were performed according to low level protocol within method specified holding times.

No problems were encountered during the sample analyses.

TCLP PCB FRACTION - METHOD 8082

Soil samples were received by ARDL, Inc. on September 19, 2002, for TCLP PCB analysis. The samples were extracted within holding time requirements.

No problems were encountered in the analysis of these samples.

ORGANIC DATA REPORTING QUALIFIERS

The following organic data reporting qualifiers are used as required.

ND- Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns.

ORGANIC ANALYSIS DATA PACKAGE

Contract No. USACE FT DEARBORN Date:10/17/02

Lab Name: ARDL, Inc.

ARDL Report No.: 301105 Samples Received at ARDL: 9/19/02

CASE NARRATIVE (Continued)

ORGANIC DATA REPORTING QUALIFIERS (Continued)

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag; instead use a laboratory-defined flag.

B - This flag is used when the analyte is found in the blank as well as the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must by used for a TIC as well as for a positively identified target compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form 1 for the origina analysis. If the dilution of the extract causes any compouna identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form 1. The Form 1 for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form 1 for the diluted sample, and all concentration values reported on that Form 1 are flagged with the "D" flag.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized for the Laboratory Manager or his designee, as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

TCLP VOA-8260B

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: VOA, TCLP
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030

Field ID:	FSS-DR-SO-001	ARDL Lab No.:	301105-05
Desc/Location:	GRAB FROM DRUM	Lab Filename:	Y3029
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1313	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	5 mL	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	1011AJRF
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Vinyl Chloride, TCLP	1.5	10.0	ND		UG/L	1
1,1-Dichloroethene, TCLP	0.54	5.0	ND		UG/L	1
2-Butanone, TCLP	19	50.0	ND		UG/L	1
Chloroform, TCLP	0.17	5.0	ND		UG/L	1
Carbon Tetrachloride, TCLP	0.35	5.0	ND		UG/L	1
Benzene, TCLP	0.8	5.0	ND		UG/L	1
1,2-Dichloroethane, TCLP	0.25	5.0	ND		UG/L	1
Trichloroethene, TCLP	0.75	5.0	ND		UG/L	1
Tetrachloroethene, TCLP	0.53	5.0	ND		UG/L	1
Chlorobenzene, TCLP	0.28	5.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	79-127	111%
1,2-Dichloroethane-d4	71-135	107%
Toluene-d8	89-133	108%
4-Bromofluorobenzene	72-129	101%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: VOA, TCLP
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030

Field ID:	OTH3-RO-CC-001	ARDL Lab No.:	301105-01
Desc/Location:	COMP 20-013,20-009,20-006	Lab Filename:	Y3025
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	0945	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	5 mL	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	1011AJRF
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Vinyl Chloride, TCLP	1.5	10.0	ND		UG/L	1
1,1-Dichloroethene, TCLP	0.54	5.0	ND		UG/L	1
2-Butanone, TCLP	19	50.0	ND		UG/L	1
Chloroform, TCLP	0.17	5.0	ND		UG/L	1
Carbon Tetrachloride, TCLP	0.35	5.0	ND		UG/L	1
Benzene, TCLP	0.8	5.0	ND		UG/L	1
1,2-Dichloroethane, TCLP	0.25	5.0	ND		UG/L	1
Trichloroethene, TCLP	0.75	5.0	ND		UG/L	1
Tetrachloroethene, TCLP	0.53	5.0	ND		UG/L	1
Chlorobenzene, TCLP	0.28	5.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	79-127	107%
1,2-Dichloroethane-d4	71-135	106%
Toluene-d8	89-133	106%
4-Bromofluorobenzene	72-129	103%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: VOA, TCLP
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030

Field ID:	OTH3-RO-SO-001	ARDL Lab No.:	301105-02
Desc/Location:	COMP 20-008,20-004,20-003	Lab Filename:	Y3026
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1058	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	5 mL	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	1011AJRF
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Vinyl Chloride, TCLP	1.5	10.0	ND		UG/L	1
1,1-Dichloroethene, TCLP	0.54	5.0	ND		UG/L	1
2-Butanone, TCLP	19	50.0	ND		UG/L	1
Chloroform, TCLP	0.17	5.0	ND		UG/L	1
Carbon Tetrachloride, TCLP	0.35	5.0	ND		UG/L	1
Benzene, TCLP	0.8	5.0	ND		UG/L	1
1,2-Dichloroethane, TCLP	0.25	5.0	ND		UG/L	1
Trichloroethene, TCLP	0.75	5.0	ND		UG/L	1
Tetrachloroethene, TCLP	0.53	5.0	ND		UG/L	1
Chlorobenzene, TCLP	0.28	5.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	79-127	113%
1,2-Dichloroethane-d4	71-135	108%
Toluene-d8	89-133	111%
4-Bromofluorobenzene	72-129	107%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: VOA, TCLP
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030

Field ID:	OWS1-RO-CC-001	ARDL Lab No.:	301105-04
Desc/Location:	COMP ROLL OFF R25353	Lab Filename:	Y3028
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1220	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	5 mL	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	1011AJRF
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Vinyl Chloride, TCLP	1.5	10.0	ND		UG/L	1
1,1-Dichloroethene, TCLP	0.54	5.0	ND		UG/L	1
2-Butanone, TCLP	19	50.0	ND		UG/L	1
Chloroform, TCLP	0.17	5.0	ND		UG/L	1
Carbon Tetrachloride, TCLP	0.35	5.0	ND		UG/L	1
Benzene, TCLP	0.8	5.0	ND		UG/L	1
1,2-Dichloroethane, TCLP	0.25	5.0	ND		UG/L	1
Trichloroethene, TCLP	0.75	5.0	ND		UG/L	1
Tetrachloroethene, TCLP	0.53	5.0	ND		UG/L	1
Chlorobenzene, TCLP	0.28	5.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	79-127	111%
1,2-Dichloroethane-d4	71-135	110%
Toluene-d8	89-133	101%
4-Bromofluorobenzene	72-129	107%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/15/2002

Project Name: USACE FT DEARBORN Analysis: VOA, TCLP
Project No.: 17297 Analytical Method: 8260B
Prep Method: 5030

Field ID:	OWS1-RO-SO-001	ARDL Lab No.:	301105-03
Desc/Location:	COMP R25239R,R25326RT	Lab Filename:	Y3027
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1147	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/08/2002
Amount Used:	5 mL	Instrument ID:	HP1
Final Volume:	5 mL	QC Batch:	1011AJRF
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Vinyl Chloride, TCLP	1.5	10.0	ND		UG/L	1
1,1-Dichloroethene, TCLP	0.54	5.0	ND		UG/L	1
2-Butanone, TCLP	19	50.0	ND		UG/L	1
Chloroform, TCLP	0.17	5.0	ND		UG/L	1
Carbon Tetrachloride, TCLP	0.35	5.0	ND		UG/L	1
Benzene, TCLP	0.8	5.0	ND		UG/L	1
1,2-Dichloroethane, TCLP	0.25	5.0	ND		UG/L	1
Trichloroethene, TCLP	0.75	5.0	ND		UG/L	1
Tetrachloroethene, TCLP	0.53	5.0	ND		UG/L	1
Chlorobenzene, TCLP	0.28	5.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Dibromofluoromethane	79-127	112%
1,2-Dichloroethane-d4	71-135	108%
Toluene-d8	89-133	102%
4-Bromofluorobenzene	72-129	104%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

TCLP BNA-8270

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/14/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S, TCLP
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510

Field ID:	FSS-DR-SO-001	ARDL Lab No.:	301105-05
Desc/Location:	GRAB FROM DRUM	Lab Filename:	T7128
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1313	Prep. Date:	10/01/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	1000 mL	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5025
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Pyridine, TCLP	2.1	10.0	ND		UG/L	1
1,4-Dichlorobenzene, TCLP	0.64	10.0	ND		UG/L	1
2-Methylphenol, TCLP	1.4	10.0	ND		UG/L	1
3 & 4-Methylphenol, TCLP	1.3	10.0	ND		UG/L	1
Hexachloroethane, TCLP	0.71	10.0	ND		UG/L	1
Nitrobenzene, TCLP	0.75	10.0	ND		UG/L	1
Hexachlorobutadiene, TCLP	0.59	10.0	ND		UG/L	1
2,4,6-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4,5-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4-Dinitrotoluene, TCLP	0.73	10.0	ND		UG/L	1
Hexachlorobenzene, TCLP	0.5	10.0	ND		UG/L	1
Pentachlorophenol, TCLP	1.2	10.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	51-117	74%
2-Fluorophenol	23-69	48%
Nitrobenzene-d5	29-143	71%
2,4,6-Tribromophenol	39-125	88%
Phenol-d5	14-55	35%
Terphenyl-d14	54-110	70%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/14/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S, TCLP
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510

Field ID:	OTH3-RO-CC-001	ARDL Lab No.:	301105-01
Desc/Location:	COMP 20-013,20-009,20-006	Lab Filename:	T7122
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	0945	Prep. Date:	10/01/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	1000 mL	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5025
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Pyridine, TCLP	2.1	10.0	ND		UG/L	1
1,4-Dichlorobenzene, TCLP	0.64	10.0	ND		UG/L	1
2-Methylphenol, TCLP	1.4	10.0	ND		UG/L	1
3 & 4-Methylphenol, TCLP	1.3	10.0	ND		UG/L	1
Hexachloroethane, TCLP	0.71	10.0	ND		UG/L	1
Nitrobenzene, TCLP	0.75	10.0	ND		UG/L	1
Hexachlorobutadiene, TCLP	0.59	10.0	ND		UG/L	1
2,4,6-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4,5-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4-Dinitrotoluene, TCLP	0.73	10.0	ND		UG/L	1
Hexachlorobenzene, TCLP	0.5	10.0	ND		UG/L	1
Pentachlorophenol, TCLP	1.2	10.0	9.2	J	UG/L	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	51-117	80%
2-Fluorophenol	23-69	57%
Nitrobenzene-d5	29-143	77%
2,4,6-Tribromophenol	39-125	115%
Phenol-d5	14-55	40%
Terphenyl-d14	54-110	71%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/14/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S, TCLP
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510

Field ID:	OTH3-RO-SO-001	ARDL Lab No.:	301105-02
Desc/Location:	COMP 20-008,20-004,20-003	Lab Filename:	T7123
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1058	Prep. Date:	10/01/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	1000 mL	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5025
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Pyridine, TCLP	2.1	10.0	ND		UG/L	1
1,4-Dichlorobenzene, TCLP	0.64	10.0	ND		UG/L	1
2-Methylphenol, TCLP	1.4	10.0	ND		UG/L	1
3 & 4-Methylphenol, TCLP	1.3	10.0	ND		UG/L	1
Hexachloroethane, TCLP	0.71	10.0	ND		UG/L	1
Nitrobenzene, TCLP	0.75	10.0	ND		UG/L	1
Hexachlorobutadiene, TCLP	0.59	10.0	ND		UG/L	1
2,4,6-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4,5-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4-Dinitrotoluene, TCLP	0.73	10.0	ND		UG/L	1
Hexachlorobenzene, TCLP	0.5	10.0	ND		UG/L	1
Pentachlorophenol, TCLP	1.2	10.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	51-117	75%
2-Fluorophenol	23-69	50%
Nitrobenzene-d5	29-143	71%
2,4,6-Tribromophenol	39-125	105%
Phenol-d5	14-55	34%
Terphenyl-d14	54-110	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/14/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S, TCLP
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510

Field ID:	OWS1-RO-CC-001	ARDL Lab No.:	301105-04
Desc/Location:	COMP ROLL OFF R25353	Lab Filename:	T7127
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1220	Prep. Date:	10/01/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	1000 mL	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5025
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Pyridine, TCLP	2.1	10.0	ND		UG/L	1
1,4-Dichlorobenzene, TCLP	0.64	10.0	ND		UG/L	1
2-Methylphenol, TCLP	1.4	10.0	ND		UG/L	1
3 & 4-Methylphenol, TCLP	1.3	10.0	ND		UG/L	1
Hexachloroethane, TCLP	0.71	10.0	ND		UG/L	1
Nitrobenzene, TCLP	0.75	10.0	ND		UG/L	1
Hexachlorobutadiene, TCLP	0.59	10.0	ND		UG/L	1
2,4,6-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4,5-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4-Dinitrotoluene, TCLP	0.73	10.0	ND		UG/L	1
Hexachlorobenzene, TCLP	0.5	10.0	ND		UG/L	1
Pentachlorophenol, TCLP	1.2	10.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	51-117	77%
2-Fluorophenol	23-69	49%
Nitrobenzene-d5	29-143	71%
2,4,6-Tribromophenol	39-125	97%
Phenol-d5	14-55	36%
Terphenyl-d14	54-110	73%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/14/2002

Project Name: USACE FT DEARBORN Analysis: BNA'S, TCLP
Project No.: 17297 Analytical Method: 8270C
Prep Method: 3510

Field ID:	OWS1-RO-SO-001	ARDL Lab No.:	301105-03
Desc/Location:	COMP R25239R,R25326RT	Lab Filename:	T7126
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1147	Prep. Date:	10/01/2002
Matrix:	SOIL	Analysis Date:	10/10/2002
Amount Used:	1000 mL	Instrument ID:	HP5
Final Volume:	1 mL	QC Batch:	B5025
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Pyridine, TCLP	2.1	10.0	ND		UG/L	1
1,4-Dichlorobenzene, TCLP	0.64	10.0	ND		UG/L	1
2-Methylphenol, TCLP	1.4	10.0	ND		UG/L	1
3 & 4-Methylphenol, TCLP	1.3	10.0	ND		UG/L	1
Hexachloroethane, TCLP	0.71	10.0	ND		UG/L	1
Nitrobenzene, TCLP	0.75	10.0	ND		UG/L	1
Hexachlorobutadiene, TCLP	0.59	10.0	ND		UG/L	1
2,4,6-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4,5-Trichlorophenol, TCLP	1.7	10.0	ND		UG/L	1
2,4-Dinitrotoluene, TCLP	0.73	10.0	ND		UG/L	1
Hexachlorobenzene, TCLP	0.5	10.0	ND		UG/L	1
Pentachlorophenol, TCLP	1.2	10.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
2-Fluorobiphenyl	51-117	69%
2-Fluorophenol	23-69	46%
Nitrobenzene-d5	29-143	65%
2,4,6-Tribromophenol	39-125	87%
Phenol-d5	14-55	32%
Terphenyl-d14	54-110	69%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

TCLP PCB's-8082

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: TCLP PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3510

Field ID:	FSS-DR-SO-001	ARDL Lab No.:	301105-05
Desc/Location:	GRAB FROM DRUM	Lab Filename:	
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1313	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	1000 mL	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5018
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016, TCLP	0.23	1.0	ND		UG/L	1
Aroclor 1221, TCLP	0.58	2.0	ND		UG/L	1
Aroclor 1232, TCLP	0.33	1.0	ND		UG/L	1
Aroclor 1242, TCLP	0.14	1.0	ND		UG/L	1
Aroclor 1248, TCLP	0.12	1.0	ND		UG/L	1
Aroclor 1254, TCLP	0.16	1.0	ND		UG/L	1
Aroclor 1260, TCLP	0.15	1.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	17-101	54%
Tetrachloro-m-xylene	45-92	69%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: TCLP PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3510

Field ID:	OTH3-RO-CC-001	ARDL Lab No.:	301105-01
Desc/Location:	COMP 20-013,20-009,20-006	Lab Filename:	
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	0945	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	1000 mL	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5018
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016, TCLP	0.23	1.0	ND		UG/L	1
Aroclor 1221, TCLP	0.58	2.0	ND		UG/L	1
Aroclor 1232, TCLP	0.33	1.0	ND		UG/L	1
Aroclor 1242, TCLP	0.14	1.0	ND		UG/L	1
Aroclor 1248, TCLP	0.12	1.0	ND		UG/L	1
Aroclor 1254, TCLP	0.16	1.0	ND		UG/L	1
Aroclor 1260, TCLP	0.15	1.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	17-101	63%
Tetrachloro-m-xylene	45-92	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: TCLP PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3510

Field ID:	OTH3-RO-SO-001	ARDL Lab No.:	301105-02
Desc/Location:	COMP 20-008,20-004,20-003	Lab Filename:	
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1058	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	1000 mL	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5018
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016, TCLP	0.23	1.0	ND		UG/L	1
Aroclor 1221, TCLP	0.58	2.0	ND		UG/L	1
Aroclor 1232, TCLP	0.33	1.0	ND		UG/L	1
Aroclor 1242, TCLP	0.14	1.0	ND		UG/L	1
Aroclor 1248, TCLP	0.12	1.0	ND		UG/L	1
Aroclor 1254, TCLP	0.16	1.0	ND		UG/L	1
Aroclor 1260, TCLP	0.15	1.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	17-101	76%
Tetrachloro-m-xylene	45-92	77%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: TCLP PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3510

Field ID:	OWS1-RO-CC-001	ARDL Lab No.:	301105-04
Desc/Location:	COMP ROLL OFF R25353	Lab Filename:	
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1220	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	1000 mL	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5018
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016, TCLP	0.23	1.0	ND		UG/L	1
Aroclor 1221, TCLP	0.58	2.0	ND		UG/L	1
Aroclor 1232, TCLP	0.33	1.0	ND		UG/L	1
Aroclor 1242, TCLP	0.14	1.0	ND		UG/L	1
Aroclor 1248, TCLP	0.12	1.0	ND		UG/L	1
Aroclor 1254, TCLP	0.16	1.0	ND		UG/L	1
Aroclor 1260, TCLP	0.15	1.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	17-101	78%
Tetrachloro-m-xylene	45-92	61%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/07/2002

Project Name: USACE FT DEARBORN Analysis: TCLP PCB'S
Project No.: 17297 Analytical Method: 8082
Prep Method: 3510

Field ID:	OWS1-RO-SO-001	ARDL Lab No.:	301105-03
Desc/Location:	COMP R25239R,R25326RT	Lab Filename:	
Sample Date:	09/18/2002	Received Date:	09/19/2002
Sample Time:	1147	Prep. Date:	09/30/2002
Matrix:	SOIL	Analysis Date:	10/02/2002
Amount Used:	1000 mL	Instrument ID:	
Final Volume:	1 mL	QC Batch:	B5018
% Moisture:	No Moisture Present	Level:	LOW

Parameter	Method Limit	Reporting Limit	Result	Data Flag	Units	Dilution Factor
Aroclor 1016, TCLP	0.23	1.0	ND		UG/L	1
Aroclor 1221, TCLP	0.58	2.0	ND		UG/L	1
Aroclor 1232, TCLP	0.33	1.0	ND		UG/L	1
Aroclor 1242, TCLP	0.14	1.0	ND		UG/L	1
Aroclor 1248, TCLP	0.12	1.0	ND		UG/L	1
Aroclor 1254, TCLP	0.16	1.0	ND		UG/L	1
Aroclor 1260, TCLP	0.15	1.0	ND		UG/L	1

SURROGATE RECOVERIES:	Limits	Results
Decachlorobiphenyl	17-101	66%
Tetrachloro-m-xylene	45-92	70%

Surrogate recoveries marked with '*' indicates they are outside standard limits.

INORGANICS

INORGANIC ANALYSIS DATA PACKAGE

FERGUSON HARBOR

Report Date: 10/03/02

Delivery Order No.: 17297

ARDL Report No.: 301105

Lab Name: ARDL, Inc.
Samples Received at ARDL: 19-Sep-02
Project Name: USACE Ft. Dearborn

CASE NARRATIVE

Sample ID No.	Date Collected	Lab ID No.	Analysis Requested
OTH3-RO-CC-001	09/18/02	301105-01	TCLP Metals(1), Other Inorganics(2)
OTH3-RO-SO-001	09/18/02	301105-02	TCLP Metals(1), Other Inorganics(2)
OWS1-RO-SO-001	09/18/02	301105-03	TCLP Metals(1), Other Inorganics(2)
OWS1-RO-CC-001	09/18/02	301105-04	TCLP Metals(1), Other Inorganics(2)
FSS-DR-SO-001	09/18/02	301105-05	TCLP Metals(1), Other Inorganics(2)
OWS1-BT-WT-001	09/18/02	301105-06	Other Inorganics(3)

(1) Including arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver.

(2) Including flashpoint, paint filter and pH.

(3) Including BOD, chloride, chromium +6 and total suspended solids.

NOTE: TCLP extraction was accomplished by Method 1311.

The quality control data are summarized as follows:

LABORATORY CONTROL SAMPLES
Percent recovery of all LCS analyses were within control limits.

PREPARATION BLANKS
Results of all preparation blanks were within acceptable limits.

MATRIX SPIKES
Percent recovery of all matrix spikes and matrix spike duplicates were within control limits.

DUPLICATES
RPD on all duplicate analyses except total suspended solids were within control limits.
All duplicate analyses are reported as MS/MSD except BOD, chloride, chromiuim +6, flashpoint, paint filter, pH and total suspended solids which are reported as sample/duplicate.

Release of the data contained in this package has been authorized by the Technical Services Manager or his designee as verified by the following signature.

Daniel J. Gillespie
Technical Services Manager

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/03/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: FSS-DR-SO-001 ARDL No: 301105-05
Sampling Loc'n: GRAB FROM DRUM Received: 09/19/2002
Sampling Date: 09/18/2002 Matrix: SOIL
Sampling Time: 1313 Moisture: No Moisture Present

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Arsenic, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Barium, TCLP	0.01	0.43	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Cadmium, TCLP	0.005	0.019	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Chromium, TCLP	0.005	0.0056	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Lead, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Mercury, TCLP	0.0002	ND	MG/L	7470A	7470A	09/27/02	09/27/02	C1649
Selenium, TCLP	0.05	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Silver, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Flash Point (Closed)	45	>200	DEG F	NONE	1010	NA	10/02/02	10039490
Paint Filter Test		PASSED		NONE	9095	NA	10/01/02	10029488
pH	0.2	8.0	PH UNITS	NONE	9045C	NA	09/19/02	09209461

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/03/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: OTH3-RO-CC-001 ARDL No: 301105-01
Sampling Loc'n: COMP 20-013,20-009,20-006 Received: 09/19/2002
Sampling Date: 09/18/2002 Matrix: SOIL
Sampling Time: 0945 Moisture: No Moisture Present

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Arsenic, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Barium, TCLP	0.01	0.11	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Cadmium, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Chromium, TCLP	0.005	0.026	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Lead, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Mercury, TCLP	0.0002	ND	MG/L	7470A	7470A	09/27/02	09/27/02	C1649
Selenium, TCLP	0.05	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Silver, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Flash Point (Closed)	45	>200	DEG F	NONE	1010	NA	10/02/02	10039490
Paint Filter Test		PASSED		NONE	9095	NA	10/01/02	1002[illegible]8
pH	0.2	8.1	PH UNITS	NONE	9045C	NA	09/19/02	092[illegible]

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/03/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: OTH3-RO-SO-001 ARDL No: 301105-02
Sampling Loc'n: COMP 20-008,20-004,20-003 Received: 09/19/2002
Sampling Date: 09/18/2002 Matrix: SOIL
Sampling Time: 1058 Moisture: No Moisture Present

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Arsenic, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Barium, TCLP	0.01	0.66	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Cadmium, TCLP	0.005	0.012	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Chromium, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Lead, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Mercury, TCLP	0.0002	ND	MG/L	7470A	7470A	09/27/02	09/27/02	C1649
Selenium, TCLP	0.05	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Silver, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Flash Point (Closed)	45	>200	DEG F	NONE	1010	NA	10/02/02	10039490
Paint Filter Test		PASSED		NONE	9095	NA	10/01/02	10029488
pH	0.2	7.7	PH UNITS	NONE	9045C	NA	09/19/02	09209461

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/03/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: OWS1-BT-WT-001 ARDL No: 301105-06
Sampling Loc'n: GRAB TANK P-4229 FROM BAKER Received: 09/19/2002
Sampling Date: 09/18/2002 Matrix: WATER
Sampling Time: 1345 Moisture: NA

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Biological Oxygen Demand	1	7.1	MG/L	NONE	405.1	NA	09/20/02	09269472
Chloride	2	25.5	MG/L	NONE	300.0	NA	09/20/02	09249466
Chromium (VI)	0.01	ND	MG/L	NONE	7196A	NA	09/20/02	09269471
Solids, Total Suspended	2.5	42.8	MG/L	NONE	160.2	NA	09/19/02	09209460

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/03/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: OWS1-RO-CC-001 ARDL No: 301105-04
Sampling Loc'n: COMP ROLL OFF R25353 Received: 09/19/2002
Sampling Date: 09/18/2002 Matrix: SOIL
Sampling Time: 1220 Moisture: No Moisture Present

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Arsenic, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Barium, TCLP	0.01	0.14	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Cadmium, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Chromium, TCLP	0.005	0.0051	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Lead, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Mercury, TCLP	0.0002	ND	MG/L	7470A	7470A	09/27/02	09/27/02	C1649
Selenium, TCLP	0.05	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Silver, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Flash Point (Closed)	45	>200	DEG F	NONE	1010	NA	10/02/02	10039490
Paint Filter Test		PASSED		NONE	9095	NA	10/01/02	10029488
pH	0.2	10.9	PH UNITS	NONE	9045C	NA	09/19/02	09209461

ARDL, INC.
Rt. 15E, Mt. Vernon Airport Industrial Park
Mt. Vernon, Illinois 62864

Lab Report No: 301105 Report Date: 10/03/2002

Project Name: USACE FT DEARBORN Analysis: Inorganics
Project No: 17297

Field ID: OWS1-RO-SO-001 ARDL No: 301105-03
Sampling Loc'n: COMP R25239R,R25326RT Received: 09/19/2002
Sampling Date: 09/18/2002 Matrix: SOIL
Sampling Time: 1147 Moisture: No Moisture Present

Analyte	Detection Limit	Result	Units	Prep Method	Analysis Method	Prep Date	Analysis Date	Run Number
Arsenic, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Barium, TCLP	0.01	0.51	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Cadmium, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Chromium, TCLP	0.005	0.0051	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Lead, TCLP	0.025	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Mercury, TCLP	0.0002	ND	MG/L	7470A	7470A	09/27/02	09/27/02	C1649
Selenium, TCLP	0.05	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Silver, TCLP	0.005	ND	MG/L	3010A	6010B	09/26/02	10/03/02	P4003
Flash Point (Closed)	45	>200	DEG F	NONE	1010	NA	10/02/02	10039490
Paint Filter Test		PASSED		NONE	9095	NA	10/01/02	1002[illegible]
pH	0.2	9.1	PH UNITS	NONE	9045C	NA	09/19/02	0920

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Reports/Billing To:

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Page ____ of ____

Project # 17297	P.O.#
Project Name USACE FT. DEARBORN	Laboratory ARDL, INC.
Project Location CHICAGO, IL	Address P.O. BOX 1566 400 AVIATION DA MT. VERNON, IL 62864
Project Manager JIM PACCI	Sampler(s) GREG KNIGHT

ANALYSES REQUESTED

Enter No. of Containers Submitted for Each Analysis

SAMPLE NUMBER/DESIGNATION ZZZZ-ZZ99-ZZ99	DATE 19__	TIME	COMP	GRAB	SAMPLE LOCATION/DESCRIPTION	TOTAL CONTAINERS	VOC	SVOC	PAH 8270C SIM	PCB	TAL METALS					Comments	SEALS INTACT AT LAB (Y, MINITIALS)
FIP-001-06-SSS	9/11/02	1545		X	OTH-1 SOUTHEAST HOLE	4	X	X	X	X	X						S
FIP-001-06-SSS-MS/MSD	9/11/02	1545		X	OTH-1 SOUTHEAST HOLE	1		X	X	X	X					MS/MSD	S
FIP-001-06-SSS-MS	9/11/02	1545		X	OTH-1 SOUTHEAST HOLE	3	X									MS	S
FIP-001-06-SSS-MSD	9/11/02	1545		X	OTH-1 SOUTHEAST HOLE	3	X									MSD	S
FIP-004-06-SSS	9/11/02	1650		X	OTH-1 NORTHEAST HOLE	4	X	X	X	X	X						S
FIP-002-06-SSS	9/11/02	1736		X	OTH-1 SOUTHWEST HOLE	4	X	X	X	X	X						S
FIP-003-06-ERB	9/11/02	1827		X	OTH-1 SOUTHWEST HOLE Rinsate	7	X	X	X	X	X						S
FIP-003-06-SSS	9/11/02	1849		X	OTH-1 NORTHWEST HOLE	4	X	X	X	X	X						S
					Total Containers												

Relinquished By (Print)	DATE	Received by (Print)	Relinquished By (Print)	DATE	Received by (Print)
GREGORY A. KNIGHT	9/11/02	FED EX AIRBILL #826319381158			
(Sign) Gregory A Knight	TIME 1949	(Sign) —	(Sign)	TIME	(Sign)
Relinquished By (Print)	DATE 9/12/02	Received by (Print) D L Cockrum	Relinquished By (Print)	DATE	Received by (Print)
(Sign)	TIME 0915	(Sign) D L Cockrum	(Sign)	TIME	(Sign)

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Page 1 of 1

Project # 17287	P.O.#
Project Name	Ft DEARBORN USACE
Project Location	CHICAGO, IL
Project Manager	JIM FACCI
Laboratory	ARDL, INC.
Address	P.O. BOX 1566 LOCKNUTTON DR
	MT. VERNON, IL 62864
Sampler(s)	GARELO KNIGHT

ANALYSES REQUESTED — Enter No. of Containers Submitted for Each Analysis

SAMPLE NUMBER/DESIGNATION ZZZZ-ZZ99-ZZ99	DATE 19__	TIME	COMP	GRAB	SAMPLE LOCATION/DESCRIPTION	TOTAL CONTAINERS	VOC	SVOC	PAH	PCB	TAL METALS	GLYCOL					Comments	SEALS INTACT AT LAB (Y,N/INITIALS)
VWR-002-02-EBT	9/12/02	1500		X	LOCATION #2 ON DRAWING													
VWR-004-02-ESW	9/12/02	1330		X	LOCATION #2 ON DRAWING	4	X	X	X	X	X							
VWR-004-02-ESW	9/12/02	1330		X	LOCATION #2 ON DRAWING	1						X						
VWR-002-02-EBB	9/12/02	1500		X	LOCATION #2 ON DRAWING	1					X							
FSJ-005-08-EBT	9/12/02	1605		X	LOCATION #5 ON DRAWING	4	X	X	X	X	X							
FSJ-006-05-EBT	9/12/02	1611		X	LOCATION #6 ON DRAWING	4	X	X	X	X	X							
FSJ-007-05-EBT	9/12/02	1611		X	LOCATION #6 ON DRAWING	4	X	X	X	X	X							
VWR-002-02-ESW	9/12/02	1715		X	LOCATION #2 ON DRAWING	5	X	X	X	X	X	X						
VWR-007-04-EBT	9/12/02	1722		X	LOCATION #7 ON DRAWING	5	X	X	X	X	X	X						
VWR-001-03-EBT	9/12/02	1730		X	LOCATION #1 ON DRAWINGS	5	X	X	X	X	X	X						
					Total Containers													

Relinquished By (Print)	DATE	Received by (Print)	Relinquished By (Print)	DATE	Received by (Print)
GARELO KNIGHT	9/12/02	FED EX AIRBILL 826319381125			
(Sign) Gregory A Knight	TIME 1945	(Sign) CAK 9/12/02	(Sign)	TIME	(Sign)
Relinquished By (Print)	DATE 9-13-02	Received by (Print)	Relinquished By (Print)	DATE	Received by (Print)
(Sign)	TIME 0900	(Sign) R.L. Lockman	(Sign)	TIME	(Sign)

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Project # 17297	P.O.#	Laboratory ARDL, INC.	
Project Name USACE FT. DEARBORN		Address P.O. BOX 1566 400 AVIATION DR.	
Project Location CHICAGO, IL		MT. VERNON, IL 62864	
Project Manager JIM TACLI		Sampler(s) GREG KNIGHT	

ANALYSES REQUESTED — Enter No. of Containers Submitted for Each Analysis

SAMPLE NUMBER/DESIGNATION ZZZZ-ZZ99-ZZ99	DATE 19__	TIME	COMP	GRAB	SAMPLE LOCATION/DESCRIPTION	TOTAL CONTAINERS	VOC	SVOC	PAH	PCB	TAL METALS	GLYCOL					Comments	SEALS INTACT AT LAB (Y, MINITIALS)
VWR-005-02-EBT	9/12/02	1058		X	LOCATION 5 ON DRAWING	4	X	X	X	X	X							
VWR-005-02-MS/MSD	9/12/02	1058		X	LOCATION #5 ON DRAWING	1		X	X	X	X							
VWR-005-02-MS	9/12/02	1058		X	LOCATION #5 ON DRAWING	3	X											
VWR-005-02-MSD	9/12/02	1058		X	LOCATION #5 ON DRAWING	3	X											
VWR-005-02-EBT	9/12/02	1058		X	LOCATION #5 ON DRAWING	1						X						
VWR-005-02-MS/MSD	9/12/02	1058		X	LOCATION #5 ON DRAWING	1						X						
VWR-006-02-EBT	9/12/02	1246		X	LOCATION #6 ON DRAWING	4	X	X	X	X	X							
9-12-02-TB	9/12/02	1500		X	TRIP BLANKS	2	X											
VWR-006-02-EBT	9/12/02	1246		X	LOCATION #6 ON DRAWINGS	1						X						
VWR-008-02-EBT	9/12/02	1246		X	LOCATION #6 ON DRAWING	4	X	X	X	X	X							
VWR-008-02-EBT	9/12/02	1246		X	LOCATION #6 ON DRAWING	1						X						
					Total Containers													

Relinquished By (Print)	DATE	Received by (Print)	Relinquished By (Print)	DATE	Received by (Print)
GREG KNIGHT	9/12/02	DJ Gillespie			
(Sign) Gregory A. Knight	TIME 15:40	(Sign) DJ Gillespie	(Sign)	TIME	(Sign)
Relinquished By (Print) DJ Gillespie	DATE 9/12/02	Received by (Print) Rob Dismang	Relinquished By (Print)	DATE	Received by (Print)
(Sign) DJ Gillespie	TIME 21:00	(Sign)	(Sign)	TIME	(Sign)

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Reports/Billing To:

CHAIN-OF-CUSTODY RECORD

Project # 17297 | P.O.#
Laboratory ARDL, INC.
Project Name USACE FT. DEARBORN
Address P.O. BOX 1566 400 AVIATION DR
Project Location CHICAGO, IL
MT. VERNON, IL 62864
Project Manager JIM FACCI
Sampler(s) GREG KNIGHT

ANALYSES REQUESTED

Enter No. of Containers Submitted for Each Analysis

SAMPLE NUMBER/DESIGNATION ZZZZ-ZZ99-ZZ99	DATE 19__	TIME	COMP	GRAB	SAMPLE LOCATION/DESCRIPTION	TOTAL CONTAINERS	VOC	SVOC	PAH	PCB	TAL METALS	~~METALS (TAL)~~ OAK 9/12/02	GLYCOL				Comments	SEALS INTACT AT LAB (Y,N/INITIALS)
VWR-003-02-ESW	9/12/02	1240		X	LOCATION # 3 ON DRAWING	4	X	X	X	X	X							
VWR-003-02-ESW	9/12/02	1240		X	LOCATION # 3 ON DRAWING	1							X					
~~VWR-006-02-EBT~~	~~9/12/02~~	~~1297~~		X	~~LOCATION # 6 ON DRAWING~~	~~1~~		X	X	X	X							
VWR-007-04-ERB	9/12/02	1430		X	LOCATION # 7 ON DRAWING	2	X										RINSATE	
VWR-002-02-ERB	9/12/02	1500		X	LOCATION # 2 ON DRAWING	2	X										RINSATE	
					Total Containers													

Relinquished By (Print)	DATE	Received by (Print)	Relinquished By (Print)	DATE	Received by (Print)
GREG KNIGHT	9/12/02	DJ Gillespie			
(Sign) Gregory A Knight	TIME 15:40	(Sign) D Gillespie	(Sign)	TIME	(Sign)
Relinquished By (Print) DJ Gillespie	DATE 9/12/02	Received by (Print) DL Cockrum	Relinquished By (Print)	DATE	Received by (Print)
(Sign) D Gillespie	TIME ~~15:40~~ 21:00	(Sign) DL Cockrum	(Sign)	TIME	(Sign)

REMARKS

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Project # 17297	P.O.#
Project Name FT. DEARBORN USACE	Laboratory ARDL, INC.
Project Location CHICAGO, IL	Address P.O. BOX 1566 400 AVIATION DR MT. VERNON, IL
Project Manager JIM PACCI	Sampler(s) GREG KNIGHT

ANALYSES REQUESTED

Enter No. of Containers Submitted for Each Analysis

SAMPLE NUMBER/DESIGNATION ZZZZ-ZZ99-ZZ99	DATE 10/2002	TIME	COMP	GRAB	SAMPLE LOCATION/DESCRIPTION	TOTAL CONTAINERS	VOC	SVOC	PAH	PCB	TAL METALS	GLYCOL					Comments	SEALS INTACT AT LAB (Y, N/INITIALS)
VWR-002-02-ERB	9/12	1500		X	LOCATION #2 ON DRAWING	4		X	X	X								
FSS-004-04-ESW	9/13	0730		X	LOCATION #4 ON DRAWING	4	X	X	X	X	X							
FSS-003-04-ESW	9/13	0735		X	LOCATION #3 ON DRAWING	4	X	X	X	X	X							
FSS-002-04-ESW	9/13	0746		X	LOCATION #2 ON DRAWING	4	X	X	X	X	X							
FSS-001-04-ESW	9/13	0808		X	LOCATION #1 ON DRAWING	4	X	X	X	X	X							
FSS-008-04-ESW MS MSD	9/13	0808		X	LOCATION #1 ON DRAWING	2	X	X	X	X	X							
VWR-001-03-ESW	9/13	0934		X	LOCATION #1 ON DRAWING	5	X	X	X	X	X	X		→	Containers shown # as VWR-001-03-EBT. Changed # per Tom Rinebolt dlc 9-16-02			
					Total Containers													

Relinquished By (Print)	DATE	Received by (Print)	Relinquished By (Print)	DATE	Received by (Print)
GREG KNIGHT	9/13/02	FED-X AZ# 826319381114			
(Sign) Gregory A Knight	TIME 1143	(Sign) NA	(Sign)	TIME	(Sign)
Relinquished By (Print)	DATE 9/14/02	Received by (Print) Rob Dismang	Relinquished By (Print)	DATE	Received by (Print)
(Sign)	TIME 0930	(Sign) [signature]	(Sign)	TIME	(Sign)

REMARKS

PLEASE FAX COPY OF COC TO: TOM RINEBOLT 419-425-5292

Figure 3–2 Chain of Custody Record

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CHAIN-OF-CUSTODY RECORD

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Project # 17297 | P.O.#

Laboratory ARDL, INC

Project Name USACE FT DEARBORN

Address P.O. BOX 1566 400 Aviation Dr.

Project Location Chicago, IL

MT Vernon, IL

Project Manager Jim Facci

Sampler(s) Tom Rinebolt / Gary Bays

ANALYSES REQUESTED — Enter No. of Containers Submitted for Each Analysis

SAMPLE NUMBER/DESIGNATION ZZZZ-ZZ99-ZZ99	DATE 2002	TIME	COMP	GRAB	SAMPLE LOCATION/DESCRIPTION	TOTAL CONTAINERS	VOCs	SVOCs	PAH 8270C SIM	PCB	TAL METALS	GLYCOL	TEMPERATURE				Comments	SEALS INTACT AT LAB (Y, N, INITIALS)
OWS-005-08-MSD	9/17	1334		X	OWS-1 W. BOTTOM	3	X										MSD	
OWS-005-08-EBT	9/17	1334		X	OWS-1-W. BOTTOM	5	X	X	X	X	X	X						
OWS-005-08-MS	9/17	1334		X	OWS-1-W. BOTTOM	3	X										MS	
OWS-006-08-EBT	9/17	1320		X	OWS-1-W-BOTTOM	5	X	X	X	X	X	X					Rapid TAT PAHs only	
OWS-005-08-MS/MSD	9/17	1334		X	OWS-1-W-BOTTOM	2		X	X	X	X	X	X				MS/MSD	
OWS-001-05-ESW	9/17	1505		X	OWS-1-E-SIDE WALL	5	X	X	X	X	X	X						
OWS-002-05-ESW	9/17	1520		X	OWS-1-S-SIDE WALL	5	X	X	X	X	X	X						
OWS-003-04-ESW	9/17	1545		X	OWS-1-W SIDE WALL	5	X	X	X	X	X	X						
OWS-004-05-ESW	9/17	1530		X	OWS-1-N SIDE WALL	5	X	X	X	X	X	X	X					
TEMPERATURE BLANK	9/17	1713		X	SAMPLE COOLER	1												
					Total Containers													

Relinquished By (Print)	DATE	Received by (Print)	Relinquished By (Print)	DATE	Received by (Print)
TOM RINEBOLT	9-17-02	FED 826319381103			
(Sign)	TIME 1737	(Sign) —	(Sign)	TIME	(Sign)
Relinquished By (Print)	DATE 9-18-02	Received by (Print) DL Cockrum	Relinquished By (Print)	DATE	Received by (Print)
(Sign)	TIME 1000	(Sign) DLCockrum	(Sign)	TIME	(Sign)

REMARKS OW-005-08-EBT - 1 Glycol CONTAINER Broken

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Reports/Billing To:

CHAIN-OF-CUSTODY RECORD

Page ____ of ____

Project # 17297	P.O.#
Project Name USACE Ft Dearborn	Laboratory ARDL, INC
Project Location Chicago, Il	Address 400 Aviation Dr. Mt Vernon, Il 62864
Project Manager Tim Kocel	Sampler(s) Tom Rinebolt / David Whisenant

ANALYSES REQUESTED

Enter No. of Containers Submitted for Each Analysis

SAMPLE NUMBER/DESIGNATION ZZZZ-ZZ99-ZZ99	DATE 2002	TIME	COMP	GRAB	SAMPLE LOCATION/DESCRIPTION	TOTAL CONTAINERS	TCLP VOC	TCLP SVOC	TCLP PCB	pH	PAINT FILTER	FLASH POINT	HOLD (BOD, TSS, Cat-Chloride)	TCLP METALS			Comments	SEALS INTACT AT LAB (Y, N/INITIALS)
OTH3-RO-CC-001	9/18	0945	X		COMPOSITE ROLL OFFS 20-013, 20-009, 20-026	1	X	X	X	X	X	X		X			DISPOSAL	
OTH3-RO-SO-001	9/18	1058	X		COMPOSITE ROLL OFFS 20-008, 20-004, 20-003	1	X	X	X	X	X	X		X			DISPOSAL	
OWS1-RO-SO-001	9/18	1147	X		COMPOSITE ROLL OFFS R25239B, R25326RT	1	X	X	X	X	X	X		X			DISPOSAL	
OWS1-RO-CC-001	9/18	1220	X		COMPOSITE ROLL OFF R25353	1	X	X	X	X	X	X		X			DISPOSAL	
FSS-DR-SO-001	9/18	1313		X	GRAB SAMPLE FROM DRUM	1	X	X	X	X	X	X		X			DISPOSAL	
OWS1-BT-WT-001	9/18	1345		X	GRAB SAMPLE FROM BAKER TANK R4229	2							X				DISPOSAL	
					Total Containers													

Relinquished By (Print)	DATE	Received by (Print)	Relinquished By (Print)	DATE	Received by (Print)
Tom Rinebolt	9-18-02	FED X 826319381099			
(Sign) [signature]	TIME 1540	(Sign) —	(Sign)	TIME	(Sign)
Relinquished By (Print)	DATE 9-19-02	Received by (Print) D L Cockrum	Relinquished By (Print)	DATE	Received by (Print)
(Sign)	TIME 0945	(Sign) D L Cockrum	(Sign)	TIME	(Sign)

REMARKS added parameters for water sample and added TCLP METALS to Rock + soil samples per Tom Rinebolt - 9-19-02 dlc

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Appendix E

MWH

RISK EVALUATION OF BENZO(A)PYRENE IN SOIL
FT DEARBORN USARC, CHICAGO, ILLINOIS

Background

During sampling activities at the Ft Dearborn USARC, Chicago, Illinois in September 2002, twenty-four soil samples were collected for laboratory analysis. Benzo(a)pyrene (167 μg/kg) marginally exceeded the residential criterion (90 μg/kg) in one sample at the Former Vehicle Wash Rack (OTH-3).

The presence of benzo(a)pyrene in the environment is ubiquitous since it is a product of incomplete combustion. Additionally, benzo(a)pyrene concentrations at the Ft Dearborn USARC are well below the City of Chicago background concentration (1,302 μg/kg) published in a study entitled *Polynuclear Aromatic Hydrocarbons Background Study, City of Chicago, Illinois* dated February 24, 2003. The IEPA at its website www.epa.state.il.us/land/site-remediation/urban-area-pah-study.pdf recognizes the widespread occurrence of PAHs in the environment and especially in urban areas. In referring to the City of Chicago study, the website states: "Illinois EPA finds these reports to be appropriately conducted studies yielding scientifically valid data regarding background levels of PAHs in Illinois urban surface soils." Moreover, the Illinois EPA finds that the City of Chicago study may be used by the regulated community in site decision making. Given the isolated and marginal exceedence of the TACO residential criterion and the results of the City of Chicago background study, the benzo(a)pyrene exceedance may not be site related.

A Tier 3 risk evaluation was conducted in accordance with Title 35 Illinois Administration Code (IAC) Part 742, Tiered Approach to Corrective Action Objectives (TACO) and USEPA (1989) guidance to assess whether the exceedance of residential criteria for benzo(a)pyrene in site soil poses an issue for property transfer. The approach, assumptions used, and the conclusions from the assessment are described below.

Risk Evaluation

Selected Exposure Areas: The maximum benzo(a)pyrene concentration at location (VWR-002-02-ESW) was selected as the center point. Any sample within a 0.5 acre area was included in the exposure point concentration calculation. The sample data includes all samples collected in OTH-1 (Former Vehicle Inspection Pit), OTH-2 (Former Shop Sink) and OTH-3 (Former Vehicle Wash Rack). The selected sample location and data are presented in Table A-1.

Exposure Pathways and Receptors: Ingestion, dermal contact, and particulate inhalation of PAH contaminated soils were selected as completed and significant exposure pathways for future residents (adult and child). The exposure parameters are presented in Table A-2.

Chemical of Potential Concern (COPCs): Benzo(a)pyrene is the only compound whose maximum concentration (167 μg/kg) exceeds the residential soil RO (90 μg/kg). In accordance with IEPA policy, benzo(a)pyrene and all other carcinogenic PAHs were selected as COPCs, although site-specific PAH concentrations of other carcinogenic PAHs were found to be lower than their soil ROs. The other carcinogenic PAHs include: benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene and indeno(1,2,3-c,d)pyrene.

Exposure Point Concentrations (EPCs): EPCs were calculated using procedures described in Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites (USEPA, 2002). The ProUCL software, discussed in USEPA (2002), was used to estimate 95 percent upper confidence limits (UCL) of the arithmetic mean. ProUCL recommends a preferred EPC to be used in evaluating risks. The 95 percent UCL values, recommended by ProUCL, were used in the risk assessment. The EPC of each PAH is presented in Table A-3. Toxicity values of each PAH are presented in Table A-4.

Quantification of Exposure: Equations used for quantitation of exposure estimates are presented in Table A-5. In accordance with IEPA policy, exposure and risk due to dermal contact with PAHs were not quantitated separately, but were assumed to be same as those from exposure due to soil ingestion.

Risk Calculations: Risk calculation spreadsheets are presented in Tables A-6 to A-8.

Risk Summary: Risk results are presented in Table A-9.

Discussion

The carcinogenic risk for an adult resident due to exposure to PAHs in soil was estimated to be 3×10^{-7}, while the cancer risk for a child resident was calculated as 1×10^{-6}. According to the National Contingency Plan (NCP), potentially acceptable risk levels span the range of one in a million (1×10^{-6}) to one in ten thousand (1×10^{-4}). Cancer risks that do not exceed 1×10^{-6} are considered *de minimis* risks, and do not require further attention. The NCP considers 1×10^{-6} as the point of departure in establishing the acceptable level of risk for a site. The estimated carcinogenic risks for adult and child residents do not exceed 1×10^{-6}. Therefore, risks from exposure to PAHs in site soils, including benzo(a)pyrene, are not significant.

References

U. S. Environmental Protection Agency, 1989. Risk Assessment Guidance for Superfund (RAGS): Volume I: Human Health Evaluation Manual (Part A). EPA/540/1-89/002.

U. S. Environmental Protection Agency, 1992. Dermal Exposure Assessment: Principles and Applications. EPA/600/8-91/011B. Washington D.

U. S. Environmental Protection Agency, 1997. Exposure Factors Handbook

U. S. Environmental Protection Agency, 2002. Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous waste Sites. OSWER 9285.6-10. Washington, D.C.

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Table A-1. Analytical Data for PAH Risk Evaluation
Fort Dearborn U.S. Army Reserve Center
Various Sites Remediations

	Former Vehicle Inspection Pit (OTH-1)				Former Shop Sink (OTH-2)					
Parameter	FIP-001-06-SSS	FIP-002-06-SSS	FIP-003-06-SSS	FIP-004-06-SSS	FSS-001-04-ESW	FSS-002-04-ESW	FSS-003-04-ESW	FSS-004-04-ESW	FSS-005-08-EBT	FSS-006-05-EBT
PAHs (ug/kg)										
Benzo(a)anthracene	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	11.6 J	9.1 J	12.3 U	32.6
Benzo(a)pyrene	12.3 U	32	12.3 U	10.7 J	12.5 U	12.7 U	10.5 J	6.7 J	12.3 U	28.8
Benzo(b)fluoranthene	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	11.7 J	7.7 J	12.3 U	28.3
Benzo(k)fluoranthene	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	7.5 J	6.4 J	12.3 U	24.9
Chrysene	12.3 U	12.8 U	12.3 U	16.3	12.5 U	12.7 U	16.1	12.6	3.8 J	40.6
Dibenz(a,h)anthracene	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	12.1 U	12.3 U	12.3 U	6.7 J
Indeno(1,2,3-c,d)pyrene	12.3 U	12.8 U	12.3 U	12.5 U	12.5 U	12.7 U	7.7 J	4.3 J	12.3 U	18.4

Table A-1. Analytical Data for PAH Risk Evaluation
Fort Dearborn U.S. Army Reserve Center
Various Sites Remediations

	Former Vehicle Wash Rack (OTH-3)							
Parameter	VWR-001-03-EBT	VWR-001-03-ESW	VWR-002-02-ESW	VWR-003-02-ESW	VWR-004-02-ESW	VWR-005-02-EBT	VWR-006-02-EBT	VWR-007-04-EBT
PAHs (ug/kg)								
Benzo(a)anthracene	5.1 J	4.7 J	138	47.1	10.1 J	9.2 J	26.9	12.3 U
Benzo(a)pyrene	5.4 J	12.2 U	167	58.8	10.3 J	7.5 J	27.7	12.3 U
Benzo(b)fluoranthene	12.5 U	12.2 U	11.5 U	72.4	12.1 U	9.5 J	22	12.3 U
Benzo(k)fluoranthene	12.5 U	12.2 U	11.5 U	39.8	12.1 U	6.2 J	23.5	12.3 U
Chrysene	6.7 J	5.2 J	190	66.1	14	11.3 J	33.6	12.3 U
Dibenz(a,h)anthracene	12.5 U	12.2 U	11.5 U	6 J	12.1 U	11.7 UJ	11.9 U	12.3 U
Indeno(1,2,3-c,d)pyrene	3.6 J	12.2 U	104	44.9	6.1 J	5.9 J	18.3	12.3 U

Table A-1. Analytical Data for PAH Risk Evaluation
Fort Dearborn U.S. Army Reserve Center
Various Sites Remediations

	Oil/Water Separator (OWS-1)					
Parameter	OWS-001-05-ESW	OWS-002-05-ESW	OWS-003-04-ESW	OWS-004-05-ESW	OWS-005-08-EBT	OWS-006-08-EBT
PAHs (ug/kg)						
Benzo(a)anthracene	64.7	21.6	11.4 U	12.2 U	12 U	12.1
Benzo(a)pyrene	69.6	22.9	11.4 U	12.2 U	12 U	11.3 U
Benzo(b)fluoranthene	70	20.8	11.4 U	12.2 U	12 U	11.3 U
Benzo(k)fluoranthene	60.2	24.3	11.4 U	12.2 U	12 U	11.3 U
Chrysene	84.2	27.8	11.4 U	12.2 U	12.2	13.4
Dibenz(a,h)anthracene	12.6 U	12.5 U	11.4 U	12.2 U	12 U	11.3 U
Indeno(1,2,3-c,d)pyrene	46.4	15.6	11.4 U	12.2 U	12 U	11.3 U

Notes:

Bold Analytical result exceeded TACO soil RO for residential ingestion pathway.

Selected data points for human health risk assessment (OTH-1, OTH-2 and OTH-3)

U Analyte was not detected.

J Reported concentration is estimated.

Table A-2. Exposure Parameters
Fort Dearborn U.S. Army Reserve Center
Various Sites Remediations

Parameter	Units	Residents	
		Adult	Child
General			
Exposure Frequency (EF)	days/year	350	350
Exposure Duration (ED)	years	24	6
Body Weight (BW)	kg	70	15
Averaging Time-noncarcinogenic effects (AT-n)[a]	days	8760	2190
Averaging Time-carcinogenic effects (AT-c)[a]	days	25550	25550
Ingestion of Soil			
Ingestion Rate (IRs)[b]	mg soil/day	50	200
Fraction Ingested[c]	unitless	1	1
Conversion Factor (CF)	kg/µg	1.0E-09	1.0E-09
Inhalation of Particulate in Soil			
Inhalation Rate (InhR)[d]	m^3/day	20	20
Particulate Emission Factor (PEF)	m^3/kg	1.24E+09	1.24E+09
Conversion Factor (CF)	mg/µg	1.0E-03	1.0E-03

Unless otherwise noted, parameter values are from Illinois Administrative Code Title 35, Part 742, Tiered Approach to Corrective Action Objectives.

(a) Noncarcinogenic: ED x 365 days/year; Carcinogenic: 70 years x 365 days/year
(b) USEPA, Exposure Factors Handbook (1997), Table 4-23. Use 200 mg soil/day as a conservative value for child.
(c) Assumed based on activity pattern and time spent on-site
(d) USEPA, 1989. Risk Assessment Guidance for Superfund Volume 1, Part A.

Table A-3
Exposure Point Concentrations (EPCs)
Fort Dearborn U.S. Army Reserve Center
Various Sites Remediations

Analyte Name	Units	Maximum Conc.	Minimum Conc.	Average Conc.	Number of Samples	Number of Non-Detects	Detection Frequency	Normal	LogNormal	UCL	EPC	Comment
Benzo(a)anthracene	µg/kg	138	<12.3	19.13	18	8	56	No	No	51.83	51.83	Use 95% Chebyshev (Mean, Sd) UCL
Benzo(a)pyrene	µg/kg	167	<12.2	22.71	18	7	61	No	No	62.43	62.43	Use 95% Chebyshev (Mean, Sd) UCL
Benzo(b)fluoranthene	µg/kg	72.4	<11.5	12.53	18	12	33	No	No	29.14	29.14	Use 95% Chebyshev (Mean, Sd) UCL
Benzo(k)fluoranthene	µg/kg	39.8	<11.5	10.13	18	12	33	No	No	19.79	19.79	Use 95% Chebyshev (Mean, Sd) UCL
Chrysene	µg/kg	190	<12.3	25.21	18	6	67	No	No	128.75	128.75	Use 99% Chebyshev (Mean, Sd) UCL
Dibenz(a,h)anthracene	µg/kg	6.7	<11.5	6.15	18	16	11	Yes	Yes	6.24	6.24	Use Student's-t UCL
Indeno(1,2,3-cd)pyrene	µg/kg	104	<12.2	14.95	18	9	50	No	No	39.86	39.86	Use 95% Chebyshev (Mean, Sd) UCL

Note:
EPC of each PAH used the recommended UCL value calculated from EPA ProUCL Version 3 Statistical Software.

Table A-4. Toxicity Values For Chemicals of Potential Concern
Fort Dearborn U.S. Army Reserve Center
Various Sites Remediations

	Cancer Effects						
	Oral SF (mg/kg-day)-1		Dermal SF (a) (mg/kg-day)-1	Inhalation URF ($\mu g/m^3$)-1		Inhalation SF (b) (mg/kg-day)-1	EPA Weight of Evidence Classification
Semivolatile Organic Compounds							
Benzo(a)anthracene	7.3E-01	E	7.3E-01	8.9E-05	E	3.1E-01	B2
Benzo(a)pyrene	7.3E+00	I	7.3E+00	8.9E-04	E	3.1E+00	B2
Benzo(b)fluoranthene	7.3E-01	E	7.3E-01	8.9E-05	E	3.1E-01	B2
Benzo(k)fluoranthene	7.3E-02	E	7.3E-02	8.9E-06	E	3.1E-02	B2
Chrysene	7.3E-03	E	7.3E-03	8.9E-07	E	3.1E-03	B2
Dibenz(a,h)anthracene	7.3E+00	E	7.3E+00	8.9E-04	E	3.1E+00	B2
Indeno(1,2,3-c,d)pyrene	7.3E-01	E	7.3E-01	8.9E-05	E	3.1E-01	B2

SF Slope Factor
URF Unit Risk Factor
a Dermal slope factor (SF) = Oral CSF/Oral Absorption if the oral absorption efficiency was less than 50 percent
b SF $(mg/kg\text{-}day)^{-1}$ = Unit Risk Factor (URF) $(ug/m^3)^{-1}$*70kg*1000(ug/mg)/20(m^3/day)
B2 Probable human carcinogen based on sufficient information in animals
E Provisional inhalation toxicity values have been developed by the National Center for Environmental Assessment (NCEA). RAGS: Region 4 Bulletins, Human Health Risk Assessment (Interim Guidance) (November 1995).
I Integrated Risk Information System (IRIS) database, searched July 2003

Table A-5. Equations Used for Quantitation of Exposure Estimates
Fort Dearborn U.S. Army Reserve Center
Various Sites Remediations

Incidental Ingestion of Soil:

$$LADD(mg/kg-day) = \frac{CS \times IngR \times CF \times EF \times ED}{BW \times AT_c}$$

where:

CS	=	Contaminant concentration in soil (mg/kg)
IngR	=	Soil ingestion rate (mg soil/day)
CF	=	Conversion factor (10^{-6} kg/mg)
EF	=	Exposure frequency (days/year)
ED	=	Exposure duration (years)
BW	=	Body weight (kg)
ATc	=	Averaging time for carcinogenic effects: 70 years x 365 days/yr
LADD	=	Lifetime average daily dose

Inhalation of Fugitive Dust:

$$LADD(mg/kg-day) = \frac{CA \times InhR \times EF \times ED}{BW \times AT_c \times PEF}$$

where:

CA	=	Contaminant concentration in air (mg/m^3)
InhR	=	Inhalation rate (m^3/day)
EF	=	Exposure frequency (days/year)
ED	=	Exposure duration (years)
PEF	=	Particulate emission factor (m^3/kg)
BW	=	Body weight (kg)
AT_c	=	Averaging time for carcinogenic effects: 70 years x 365 days/yr
LADD	=	Lifetime average daily dose

Carcinogenic Risk

ELCR = LADD x SF

Where:

ELCR	=	Excess Lifetime Cancer Risk
SF	=	Cancer Slope Factor or Slope Factor $(mg/kg\text{-}day)^{-1}$
LADD	=	Lifetime average daily dose

Table A-5. Equations Used for Quantitation of Exposure Estimates
Fort Dearborn U.S. Army Reserve Center
Various Sites Remediations

General Note:

1. The equations presented were used to calculate chemical intakes or absorbed doses and carcinogenic risks for the pathway and route of exposure indicated. Refer to Table A-2 and Table A-4 for the exposure factors (e.g., EF, BW, etc.) and toxicity factors (SF), respectively, used in conjunction with these equations to quantitate exposure estimates and carcinogenic risks.

2. In accordance with IEPA guidance, exposure and risks due to dermal contact with PAHs were not quantitated separately, but were assumed to be same as those from exposure due to soil ingestion

Table A-6. Toxicity Factors and EPCs for Chemicals of Potential Concern
Fort Dearborn U.S. Army Reserve Center
Various Sites Remediations

Carcinogenic Risk				
COPC	**Ingestion Slope Factor**	**EPC for Soil**	**Inhalation Slope Factor**	**Volatile Inhalation Risk Factor**
	(kg-day/mg)	**(µg/kg)**	**(kg-day/mg)**	**(m^3/µg)**
Benzo(a)anthracene	7.30E-01	51.83	3.10E-01	8.86E-05
Benzo(a)pyrene	7.30E+00	62.43	3.10E+00	8.86E-04
Benzo(b)fluoranthene	7.30E-01	29.14	3.10E-01	8.86E-05
Benzo(k)fluoranthene	7.30E-02	19.79	3.10E-02	8.86E-06
Chrysene	7.30E-03	128.75	3.10E-03	8.86E-07
Dibenz(a,h)anthracene	7.30E+00	6.24	3.10E+00	8.86E-04
Indeno(1,2,3-c,d)pyrene	7.30E-01	39.86	3.10E-01	8.86E-05

Table A-7. Soil Ingestion Exposure Evaluation
Fort Dearborn U.S. Army Reserve Center
Various Sites Remediations

	Carcinogenic Risk			
	Adult Resident		Child Resident	
COPC	LADD	ELCR	LADD	ELCR
Benzo(a)anthracene	1.22E-08	8.89E-09	5.68E-08	4.15E-08
Benzo(a)pyrene	1.47E-08	1.07E-07	6.84E-08	4.99E-07
Benzo(b)fluoranthene	6.84E-09	5.00E-09	3.19E-08	2.33E-08
Benzo(k)fluoranthene	4.65E-09	3.39E-10	2.17E-08	1.58E-09
Chrysene	3.02E-08	2.21E-10	1.41E-07	1.03E-09
Dibenz(a,h)anthracene	1.46E-09	1.07E-08	6.84E-09	4.99E-08
Indeno(1,2,3-c,d)pyrene	9.36E-09	6.83E-09	4.37E-08	3.19E-08
	Summary			
	Adult Resident		Child Resident	
ELCR	1.39E-07		6.49E-07	

Table A-8. Particulate Exposure Evaluation
Fort Dearborn U.S. Army Reserve Center
Various Sites Remediations

	Carcinogenic Risk			
	Adult Resident		Child Resident	
COPC	LADD	ELCR	LADD	ELCR
Benzo(a)anthracene	3.93E-12	1.22E-12	4.58E-12	1.42E-12
Benzo(a)pyrene	4.73E-12	1.47E-11	5.52E-12	1.71E-11
Benzo(b)fluoranthene	2.21E-12	6.84E-13	2.58E-12	7.98E-13
Benzo(k)fluoranthene	1.50E-12	4.65E-14	1.75E-12	5.42E-14
Chrysene	9.75E-12	3.02E-14	1.14E-11	3.53E-14
Dibenz(a,h)anthracene	4.72E-13	1.46E-12	5.51E-13	1.71E-12
Indeno(1,2,3-c,d)pyrene	3.02E-12	9.36E-13	3.52E-12	1.09E-12

	Summary	
	Adult Resident	Child Resident
ELCR	1.90E-11	2.22E-11

Table A-9. Summary of Human Risk Assessment for Soil

Fort Dearborn U.S. Army Reserve Center

Various Sites Remediations

	Adult Resident	**Child Resident**
Total ELCR	3E-07	1E-06

ELCR = Excess Lifetime Cancer Risk

Appendix F

MWH

RISK EVALUATION OF IRON IN SOIL
FT DEARBORN USARC, CHICAGO, ILLINOIS

Background

During sampling activities at the Ft Dearborn USARC, Chicago, Illinois in September 2002, iron in site soils exceeded the IEPA (2003) provisional residential ingestion criterion of 23,000 mg/kg in 5 of 24 soil samples analyzed at concentrations ranging from 23,900 to 31,600 mg/kg. Exceedances of the iron provisional objective were detected sporadically at the former vehicle inspection pit (OTH-1), former shop sink (OTH-2), and former vehicle washrack (OTH-3). Provided below is an evaluation of the potential human health risks due to iron in site soils. The approach, assumptions used, and the conclusions from the assessment are described below.

Risk Evaluation

Iron is an essential nutrient for all receptors and generally does not present a hazard to human health. On the contrary, iron is essential for good health and is routinely taken as dietary supplement. Information regarding adverse health impacts due to exposure to iron is limited to inhalation of iron oxide and handling of iron ore, where iron concentrations are significantly higher than those detected at this site.

Iron is evaluated as a separate constituent from other contaminants because it is an essential nutrient and a dose that is a substantial fraction of a toxic dose can be safe and even necessary. Information used to determine whether iron concentration measured at the site requires further action has been taken primarily from the Environmental Quality Risk Assessment Handbook (USACE, 1995) and from the National Academy of Sciences (NAS)(2000).

The USEPA recommends use of 95 percent upper confidence limits (UCL) of the arithmetic mean as the representative exposure point concentration (EPC) that a receptor is exposed to. The EPC was calculated using procedures described in Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous waste Sites

(USEPA, 2002). The ProUCL software, discussed in USEPA (2002), was used to estimate 95 percent upper confidence limits (UCL) of the arithmetic mean. ProUCL recommends a preferred EPC to be used in evaluating risks. The 95 percent UCL value of 22,589 mg/kg, recommended by ProUCL, was used in the risk assessment. The EPC calculation is presented in Table B-1.

The NAS (2000) defines a term Tolerable Upper intake Level (UL) as the highest level of daily nutrient intake that is likely to pose no risk of adverse health effects. The UL for children aged 1 to 13 is 40 mg/day, and UL for adults is 45 mg/day. The health of adult and child receptors is not expected to be adversely affected if iron intake from all sources is less than the corresponding UL.

Iron intake by receptors can come from a variety of sources, including diet (food and drink) and environmental sources such as incidental ingestion of soil. Iron intake through the air pathway is deemed insignificant compared to the other pathways. Information regarding iron in food and drinks are available in NAS (2000). The following equation from USACE (1995) was used to calculate a daily intake of iron from incidental ingestion of Fort Dearborn soil:

$$\text{Estimated Daily Intake (mg/day)} = CS \times CF \times IR$$

where:

CS = Representative concentration of the metal in soil (mg/kg)

CF = Conversion factor (1×10^{-6} kg per mg soil)

IR = Soil Ingestion rate.

Evaluations of iron intake for child and adult residents are presented below.

Child Receptor

Using the equation presented above, ingestion of 200 mg of soil per day (USEPA, 1997) with this concentration of iron would result in an additional intake of about 4.5 mg/day by children.

Receptors could get iron from drinking water and milk. The City of Chicago provides drinking water in the vicinity of Fort Dearborn. The City's water supply system is required to meet the secondary maximum contaminant level (MCL) of 0.3 mg/L of iron. Assuming an iron concentration of 0.3 mg/L and consumption of two liters of water per day, iron intake from drinking water is 0.6 mg per day. NAS (2000) refers to a study that found iron concentration in cow's milk to be between 0.2 and 0.3 mg/L. A child or an adult receptor is expected to drink less than 0.5 Liter of milk per day. Therefore, iron intake in drinks is expected to be about 0.7 mg per day.

Values for intake of iron from food for a child receptor (0 to 6 yrs old) is not available. However, values are available for 1 to 3 year olds, 4 to 8 year olds, and for all individuals from all ages (NAS, 2000). The 95th percentile value of 25.8 mg/day for all individuals, which is higher than those for the 1 to 3 year olds and 4 to 8 year olds, was conservatively assumed to represent the dietary intake of iron for a child receptor.

The total iron intake from all sources is then 31 mg per day (25.8 mg + 4.5 mg + 0.7 mg). This dose is much less than the UL of 40 mg per day for a child. Therefore, adverse effects to child from incidental ingestion of soil are not expected.

Adult Receptors

Iron intake from incidental ingestion of soil was calculated using the same procedure as that for a child receptor. Using ingestion of 50 mg of soil per day for adults (USEPA, 1997) would result in an additional intake of about 1.1 mg/day. Iron intake from drinks is expected to be the same as that for a child at about 0.7 mg per day.

The highest iron intake from food at 95th percentile is listed as 36.1 mg per day for male aged 14 to 18 years (NAS, 2000). Assuming iron intake for adults at 36.1 mg per day, the total intake from all sources is 37.9 mg (36.1 mg + 1.1 mg + 0.7 mg) per day. The UL for all adults and, also, for male aged 14 to 18 is 45 mg per day. Therefore, adverse effects to an adult from incidental ingestion of soil are not expected.

Discussion

Risk evaluation for iron indicates that residential (adult and child) receptors are not expected to be adversely affected due to exposure to iron in Ft Dearborn soils. Iron intake from incidental ingestion of soil constitutes a minor part of total iron intake; for adults, it is less than 5 percent of the total iron intake. Given the sporadic nature of the iron exceedances, the fact that iron is an essential nutrient, and concentrations in site soils are not known or expected to represent a hazard to human health, no further investigations or remedial actions are warranted due to iron in site soils.

References

Illinois Environmental Protection Agency. 2003. Internal Technical Memorandum from Tom Hornshaw to Andy Jankowski. August 8.

United States Army Corps of Engineers (USACE), 1995. Environmental Quality Risk Assessment Handbook, Volume I: Human Health Evaluation. EM 200-1-4.

U.S. Environmental Protection Agency, 1997. Exposure Factor Handbook.

U. S. Environmental Protection Agency, 2002. Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous waste Sites. OSWER 9285.6-10. Washington, D.C.

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Table B-1
Iron Statistical Analysis and EPC Calculation
ProUCL Version 3.0

Variable: **Iron**

Raw Statistics		Normal Distribution Test	
Number of Valid Samples	24	Shapiro-Wilk Test Statisitic	0.955852
Number of Unique Samples	21	Shapiro-Wilk 5% Critical Value	0.916
Minimum	13600	Data are normal at 5% significance level	
Maximum	31600		
Mean	21025	95% UCL (Assuming Normal Distribution)	
Median	20250	**Student's-t UCL**	**22589.31**
Standard Deviation	4471.48		
Variance	19994130	Gamma Distribution Test	
Coefficient of Variation	0.212674	A-D Test Statistic	0.314426
Skewness	0.601606	A-D 5% Critical Value	0.742257
		K-S Test Statistic	0.111273
Gamma Statistics		K-S 5% Critical Value	0.177505
k hat	23.75431	Data follow gamma distribution	
k star (bias corrected)	20.8128	at 5% significance level	
Theta hat	885.1027		
Theta star	1010.196	95% UCLs (Assuming Gamma Distribution)	
nu hat	1140.207	Approximate Gamma UCL	22667.39
nu star	999.0142	Adjusted Gamma UCL	22787.63
Approx.Chi Square Value (.05)	926.6296		
Adjusted Level of Significance	0.0392	Lognormal Distribution Test	
Adjusted Chi Square Value	921.7401	Shapiro-Wilk Test Statisitic	0.974504
		Shapiro-Wilk 5% Critical Value	0.916
Log-transformed Statistics		Data are lognormal at 5% significance level	
Minimum of log data	9.517825		
Maximum of log data	10.36091	95% UCLs (Assuming Lognormal Distribution)	
Mean of log data	9.932271	95% H-UCL	22736.3
Standard Deviation of log data	0.209993	95% Chebyshev (MVUE) UCL	24980.78
Variance of log data	0.044097	97.5% Chebyshev (MVUE) UCL	26693.22
		99% Chebyshev (MVUE) UCL	30056.97
		95% Non-parametric UCLs	
		CLT UCL	22526.32
		Adj-CLT UCL (Adjusted for skewness)	22646.08
		Mod-t UCL (Adjusted for skewness)	22607.99
		Jackknife UCL	22589.31
		Standard Bootstrap UCL	22450.74
		Bootstrap-t UCL	22827.18
RECOMMENDATION		Hall's Bootstrap UCL	22804.59
Data are normal (0.05)		Percentile Bootstrap UCL	22566.67
		BCA Bootstrap UCL	22270.83
Use Student's-t UCL		95% Chebyshev (Mean, Sd) UCL	25003.53
		97.5% Chebyshev (Mean, Sd) UCL	26725.04
		99% Chebyshev (Mean, Sd) UCL	30106.62

Appendix G

MWH

DATA VALIDATION REPORT, VARIOUS SITE REMEDIATIONS

FORT DEARBORN U.S. ARMY RESERVE CENTER CHICAGO, ILLINOIS

Prepared for

U.S. Army Corps of Engineers
Louisville, District

By

MWH

August 5, 2004

TABLE OF CONTENTS

CHAPTER PAGE

TABLE OF CONTENTS I

LIST OF TABLES II

ATTACHMENTS II

1.0 INTRODUCTION 1

2.0 DATA VALIDATION RESULTS 4

2.1 Gas Chromatograph/Mass Spectrometer (GC/MS) Tuning and Mass Calibration4

2.2 Initial Calibration 4

2.3 Initial Calibration Verification (ICV) 5

2.4 Continuing Calibration 5

2.5 Holding Time Evaluation 6

2.6 Internal Standard (IS) Recoveries 6

2.7 Surrogate Spike Recoveries 7

2.8 Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analyses 7

2.9 Matrix Spike/Matrix Spike (MS/MSD) Analyses 7

2.10 Method Blank Analyses 8

2.11 Trip Blank Analyses 8

2.12 Equipment Rinsate Blank Analyses 9

2.13 Manual Integration 9

2.14 Completeness 10

2.15 Field Duplicate Analyses 11

3.0 SUMMARY 12

4.0 REFERENCES 14

LIST OF TABLES

Table 1 Summary of Data Qualified Based on Initial and Continuing Calibration Results
Table 2 Summary of Data Qualified Based on Internal Standard Results
Table 3 Summary of Data Qualified Based on LCS/LCD Recoveries
Table 4 Summary of Data Qualified Based on MS Recoveries
Table 5 Summary of Data Qualified Based on Blank Results

ATTACHMENTS

Attachment 1 GC/MS Manual Integration Documentation

1.0 INTRODUCTION

This Data Validation Report details the assessment and verification of analytical data collected and generated from the field activities for September 2002 soil investigation at the Fort Dearborn U.S. Army Reserve Center, Chicago, Illinois. Analytical procedures for this project are outlined in the project Quality Assurance Project Plan (QAPP) prepared by Ferguson Harbour Inc. (Ferguson-Harbour, 2002). Applied Research & Development Laboratory (ARDL) located in Mount Vernon, Illinois was subcontracted by Ferguson Harbour, Inc. to perform chemical analyses of the soil and water-matrix samples.

The samples were collected September 11, 12, 13, and 17, 2002. Approximately 27 soil samples and 6 water-matrix field quality control (QC) samples were collected as part of this investigation.

All analytical methods for this investigation were referenced from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986. The samples were analyzed for one or more of the following parameters:

- Volatile organic compounds (VOCs) by SW8260B.
- Semi volatile organic compounds (SVOCs) by SW8270C
- Polynuclear aromatic compounds (PAHs) by modified SW8270C-selective ion monitoring (SIM)
- Polychlorinated biphenyls (PCBs) by SW8082
- Glycol by SW8015
- Metals by SW60101B/SW7470/SW7471A

Data validation of sample results was performed by MWH Americas, Inc. (MWH). Approximately 40 percent (12 soil and 1 water sample) of the total number of samples

collected underwent validation and systematic review, as specified in Section 9.2 of the project QAPP. The criteria checked included during this process included: chain-of-custody and cooler receipt forms, lab sample identification, contract sample identification (if different), sample results by sample and analytical fraction, analytical method performed, analytical reporting limits, lab data qualifiers, holding times, surrogate recoveries, lab control sample recoveries (LCS/LCSD), MS/MSD recoveries, laboratory duplicate results, method blank results, trip blank results, field blank results, instrument performance and calibration, correct qualitative and quantitative interpretation of raw data, and manually integrated peaks. Validation of the data submitted by ARDL was performed using the USEPA National Functional Guidelines for Organic (Inorganic) Data Review (USEPA, 1994a, 1994b) and QC acceptance criteria from SW-846 in accordance with the project QAPP. Data validation flags utilized in the validation process and the definitions of these qualifier flags are as follows:

- U — Indicates compound was analyzed for, but was not detected above the level of the associated value. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J — The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ — Indicates compound was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
- R — Indicates that the data are unusable.

All qualifier flags have been incorporated in the data tables presented in this report. The results of this data validation are presented in the following sections.

In addition, MWH conducted a data review on the remaining portion of the data generated by ARDL, as specified in Section 9.2 of the project QAPP. The following items were reviewed as part of MWH's data review: chain-of-custody forms to verify that samples were collected for the parameters specified in the FSP, appropriate analyses

were requested from the laboratory, and that the laboratory received all samples; sample collection and analysis dates to verify that samples were analyzed within the specified holding times; chain-of-custody forms and summary of analytical data to verify that all required analyses were completed; laboratory case narratives to identify potential data quality problems; laboratory case narratives to identify manually integrated data; surrogate, LCS, MS.MSD recoveries; blank results; and calibration and tunes (insofar as that they were performed at the appropriate frequencies). The results of MWH's data review are incorporated into this report.

TABLES

TABLE 1

SUMMARY OF DATA QUALIFIED
BASED ON INITIAL AND CONTINUING CALIBRATION RESULTS
SEPTEMBER 2002 FIELD EFFORT

FORT DEARBORN USARC
CHICAGO, ILLINOIS

Date	Fraction	Standard	Target Compound	%RSD or %D	Acceptance Criteria %	Associated Samples	Result	Qualifier
9/26/02	SVOC	IC	Dimethyl phthalate	41	30	FSS-004-04-ESW	ND/ND	UJ/UJ
						FSS-003-04-ESW	ND/ND	UJ/UJ
						FSS-002-04-ESW	ND/ND	UJ/UJ
						FSS-001-04-ESW	ND/ND	UJ/UJ
						FSS-008-04-ESW	ND/ND	UJ/UJ
						FSS-001-03-ESW	ND/ND	UJ/UJ
						FIP-003-06ERB	ND/ND	UJ/UJ
9/30/02	SVOC	ICV	Hexachlorocyclopentadiene	26.6	25	VWR-002-02-ERB	All ND	All UJ
			2,4-Dinitrophenol	35.6	25			
			Pentachlorophenol	39.1	25			
10/7/02	SVOC	CCV	2,4-Dinitrophenol	34	25	FSS-003-04-ESW	All ND	All UJ
			Pentachlorophenol	47	25	FSS-002-04-ESW	All ND	All UJ
			3,3'-Dichlorobenzidine	32	25	FSS-001-04-ESW	All ND	All UJ
						FSS-008-04-ESW	All ND	All UJ
						FSS-001-03-ESW	All ND	All UJ
						OWS-005-08-EBT	All ND	All UJ
						OWS-006-08-EBT	All ND	All UJ
9/9/02	VOC	IC	trans-1,2-Dichloroethene	39.5	30	OWS-005-08-EBT	ND	UJ
						OWS-006-08-EBT	ND	UJ
						OWS-001-05-ESW	ND	UJ
						OWS-002-05-ESW	ND	UJ
						OWS-003-04-ESW	ND	UJ
						OWS-004-05-ESW	ND	UJ
9/10/02	VOC	ICV	trans-1,2-Dichloroethene	23.9	25	OWS-005-08-EBT	ND/ND	UJ/UJ
9/18/02	VOC	CCV	trans-1,2-Dichloroethene	22.6	25	OWS-006-08-EBT	ND/ND	UJ/UJ
						OWS-001-05-ESW	ND/ND	UJ/UJ
						OWS-002-05-ESW	ND/ND	UJ/UJ
						OWS-003-04-ESW	ND/ND	UJ/UJ
						OWS-004-05-ESW	ND/ND	UJ/UJ
9/25/02	SVOC	IC	Dimethyl phthalate	41	30	OWS-006-08-EBT	ND/ND	UJ/UJ
10/9/02	SVOC	IC	2,4-Dinitrophenol	55	30	OWS-002-05-ESW	ND/ND	UJ/UJ
			4-Nitrophenol	33	30	OWS-003-04-ESW	ND/ND	UJ/UJ
9/10/02	VOC	IC	trans-1,2-Dichloroethene	39	30	FIP-001-06-SSS	ND	UJ
						FIP-004-06-SSS	ND	UJ
						FIP-002-06-SSS	ND	UJ
						FIP-003-06-SSS	ND	UJ
						VWR-005-02-EBT	ND	UJ
						VWR-008-02-EBT	ND	UJ
						VWR-003-02-EBT	ND	UJ
						VWR-006-02-EBT	ND	UJ
						VWR-004-02-ESW	ND	UJ
						FSS-005-08-EBT	ND	UJ
						FSS-006-05-EBT	ND	UJ
						FSS-007-05-EBT	ND	UJ
						VWR-002-02-ESW	ND	UJ
						VWR-007-04-EBT	ND	UJ
						VWR-001-03-EBT	ND	UJ
9/19/02	SVOC	IC	2,4-Dinitrophenol	42	30	FIP-004-06-SSS	ND/ND	UJ/UJ
						FIP-002-06-SSS	ND/ND	UJ/UJ
						FIP-003-06-SSS	ND/ND	UJ/UJ
						VWR-005-02-EBT	ND/ND	UJ/UJ
						VWR-006-02-EBT	ND/ND	UJ/UJ

TABLE 1

SUMMARY OF DATA QUALIFIED
BASED ON INITIAL AND CONTINUING CALIBRATION RESULTS
SEPTEMBER 2002 FIELD EFFORT

FORT DEARBORN USARC
CHICAGO, ILLINOIS
(Page 2 of 2)

Date	Fraction	Standard	Target Compound	%RSD or %D	Acceptance Criteria %	Associated Samples	Result	Qualifier
9/20/02	SVOC	CCV	n-Nitrosodimethylamine	31	25	FIP-001-06-SSS	All ND	All UJ
			bis(2-chloroisopropyl) Ether	41	25	FIP-004-06-SSS	All ND	All UJ
			Nitrobenzene	31	25	FIP-002-06-SSS	All ND	All UJ
			4-Chloroaniline	28	25			
			2,4-Dinitrophenol	38	25			
			4-Nitrophenol	52	25			
			Hexachlorobenzene	26	25			
			3,3'-Dichlorobenzidine	27	25			
10/3/02	SVOC	CCV	n-Nitroodimethylamine	31	25	VWR-005-02-EBT	All ND	All UJ
			bis (2-chloroisopropyl) Ether	41	25	VWR-006-02-EBT	All ND	All UJ
			4-Chloroaniline	28	25			
			2,4-Dinitrophenol	38	25			
			4-Nitrophenol	52	25			
			Hexachlorobenzene	27	25			
			3,3'-Dichlorobenzidine	27	25			
9/30/02	SVOC	CCV	Hexachlorocyclopentadiene	37	25	FIP-003-06ERB	All ND	All UJ
			2,4-Dinitrophenol	36	25			
			Pentachlorophenol	39	25			
9/6/02	VOC	ICV	trans-1,3-Dichloropropene	26	25	9-12-02-TB	ND	UJ
						VWR-007-04-ERB	ND	UJ
						VWR-002-02-ERB	ND	UJ
9/25/02	VOC	CCV	Bromoform	31	25	9-12-02-TB	All ND	All UJ
10/9/02	SVOC	IC	2,4-Dichlorophenol	33	30	VWR-003-02-ESW	ND/ND	UJ/UJ
						VWR-004-02-ESW	ND/ND	UJ/UJ
						FSS-005-08-EBT	ND/ND	UJ/UJ
						FSS-006-05-EBT	ND/ND	UJ/UJ
						FSS-007-05-EBT	ND/ND	UJ/UJ
						VWR-002-02-ESW	ND/ND	UJ/UJ
						VWR-007-04-EBT	ND/ND	UJ/UJ
						VWR-001-03-EBT	ND/ND	UJ/UJ

%D - Percent difference
%RSD - Percent relative standard deviation
CCV - Continuing calibration verification
IC - Initial Calibration
ICV - Initial calibration verfication
J - Reported result is an estimate.
ND - Non-detect
SVOCs - Semivolatile organic compounds
UJ - Reporting limit is an estimated limit
VOC - Volatile organic compounds

TABLE 2

SUMMARY OF DATA QUALIFIED BASED ON INTERNAL STANDARD RESULTS
SEPTEMBER 2002 FIELD EFFORT

FORT DEARBORN USARC
CHICAGO, ILLINOIS
(Page 1 of 1)

Sample ID	Method	Internal Standard	%R	Parameter	Qualifier
FIP-002-06-SSS	8270	Perylene-$_{d12}$	42.9	Di-n-octylphthalate	UJ
FIP-002-06-SSSRE	8270	Perylene-$_{d12}$	47.8	Di-n-octylphthalate	UJ
VWR-005-02-EBT	8270 SIM	Perylene-$_{d12}$	48.5	Benzo (b) fluoroanthene	J
				Benzo (k) fluoroanthene	J
				Benzo (a) pyrene	J
				Indeno (1,2,3-cd) pyrene	J
				Dibenzo (a,h) anthracene	UJ
				Benzo (g,h,i) perylene	J

Only analytes quantitated with the internal standard were qualified and are listed in this table.

%R - Percent recovery
UJ - Reported detection limit is estimated
SIM - Selective ion monitoring
J - Reported concentration is estimated

TABLE 3

SUMMARY OF DATA QUALIFIED BASED ON LCS/LCD RECOVERIES SEPTEMBER 2002 FIELD EFFORT

FORT DEARBORN USARC
CHICAGO, ILLINOIS

Sample ID	Parameter	Result		LCS (%R)	LCSD (%R)	Limit (%)	RPD	RPD Limit (%)	Qualifier
9/18/02 LCS/LCSD	1,4-Dichlorobenzene	ND	µg/kg	**28**	57		**32**	25	UJ
9/25/02 LCS	Pentachlorophenol	ND	µg/kg	121	NA	34 - 117			none
9/16/02 LCD	4-Nitrophenol	ND	µg/kg	120	NA	41 - 112			none

Bold text indicates a result outside of acceptable limits.

%R - Percent recovery
NA - Not analyzed
ND - Non-detect
LCS - Laboratory control sample
LCSD - Laboratory control sample duplicate
µg/kg - Micrograms per kilogram
UJ - Reported detection limit is estimated

SUMMARY OF DATA QUALIFIED BASED ON MS RECOVERIES FOR SEPTEMBER 2002 FIELD EFFORT

FORT DEARBORN USARC
CHICAGO, ILLINOIS
(Page 1 of 1)

Sample ID	Parameter	Result		MS (%R)	MSD (%R)	Limit (%)	RPD	RPD Limit (%)	Qualifier
FSS-008-04-ESW	1,4-Dichlorobenzene	ND	µg/kg	**26**	**25**	36 - 89	2	33	UJ
	Pentachlorophenol	ND	µg/kg	**121**	102	34 - 117	17	25	none
	Naphthalene	ND	µg/kg	64	49	21 - 133	**26.4**	25	UJ
	Fluorene	ND	µg/kg	83	63	59 - 121	**26.3**	25	UJ
	Phenanthrene	ND	µg/kg	82	59	54 - 120	**32.5**	25	UJ
	Anthracene	ND	µg/kg	81	58	27 - 133	**33.7**	25	UJ
	Fluoranthene	ND	µg/kg	82	59	26 - 137	**32.7**	25	UJ
	Pyrene	ND	µg/kg	91	65	52 - 115	**33.5**	25	UJ
	Benzo(a)anthracene	ND	µg/kg	83	58	33 - 143	**35.1**	25	UJ
	Chrysene	ND	µg/kg	91	63	17 - 168	**36.4**	25	UJ
	Benzo(b)fluoranthene	ND	µg/kg	78	60	24 - 159	**33.5**	25	UJ
	Benzo(k)fluoanthene	ND	µg/kg	88	61	11 - 162	**36**	25	UJ
	Benzo(a)pyrene	ND	µg/kg	83	59	17 - 163	**33.3**	25	UJ
	Indeno(1,2,3-cd)pyrene	ND	µg/kg	95	64	1 - 171	**38**	25	UJ
	Dibenzo(a,h)anthracene	ND	µg/kg	101	68	1 - 227	**39.2**	25	UJ
	Benzo(g,h,i)perylene	ND	µg/kg	88	61	1 - 219	**36.3**	25	UJ
	Zinc	56.7	mg/kg	**83**	**72**	75 - 125	7	20	J
OWS-005-08-EBT	Antimony	0.92	mg/kg	**35**	**29**	75 - 125	17	20	J
	Cobalt	15	mg/kg	**63**	**68**	75 - 125	5	20	J
	Nickel	26.6	mg/kg	**68**	**71**	75 - 125	3	20	J
FIP-001-06-SSS	1,4-Dichlorobenzene	ND	µg/kg	**38**	**30**	36 - 89	23	33	UJ
	4-Nitrophenol	ND	µg/kg	**141**	**131**	41 - 112	7	25	none
	Antimony	1	mg/kg	**27**	**25**	75 - 125	6	20	J
	Copper	56.3	mg/kg	82	**57**	75 - 125	10	20	J
	Nickel	39	mg/kg	78	**74**	75 - 125	3	20	J
VWR-005-02-EBT	1,4-Dichlorobenzene	ND	µg/kg	**32**	**23**	36 - 89	**35**	33	UJ
	4-Nitrophenol	ND	µg/kg	**123**	**114**	41 - 112	7	29	none
	Antimony	0.87	mg/kg	**27**	**26**	75 - 125	4	20	J
	Copper	38.1	mg/kg	**156**	79	75 - 125	31	20	J
VWR-002-02-ESW	Antimony	2.4	mg/kg	**27**	**28**	75 - 125	5	20	J
	Lead	158	mg/kg	68	115	75 - 125	13	20	J

[a] - *Sample result is more than 4 times the spike concentration, no qualification to the data is required.*
Bold text indicates a result outside of acceptable limits.

%R - Percent recovery
µg/kg - Micorgrams per kilogram
J - Reported concentration is estimated
mg/kg - Milligrams per kilogram
MS - Matrix spike
MSD - Matrix spike duplicate
ND - Non-detect
RPD - Relative percent difference
UJ - Reported detection limit is estimated

TABLE 5

SUMMARY OF DATA QUALIFIED BASED ON BLANK DATA
SEPTEMBER 2002 FIELD EFFORT

FORT DEARBORN USARC
CHICAGO, ILLINOIS
(Page 1 of 2)

Blank	Associated Samples	Parameter	Result	Units	Qualifier
0924JFSP (MB)		Methylene chloride	6.01	µg/kg	---
	FSS-004-04-ESW	Methylene chloride	5.5 JB	µg/kg	U
	FSS-003-04-ESW	Methylene chloride	4.7 JB	µg/kg	U
	FSS-002-04-ESW	Methylene chloride	6.2 JB	µg/kg	U
	FSS-001-04-ESW	Methylene chloride	7.6 JB	µg/kg	U
	FSS-008-04-ESW	Methylene chloride	6.2 JB	µg/kg	U
0924JFSQ (MB)		Methylene chloride	3.8 J	µg/kg	---
	OWS-006-08-EBT	Methylene chloride	4.8 J	µg/kg	U
	OWS-001-05-EBW	Methylene chloride	5.3 J	µg/kg	U
	OWS-003-04-ESW	Methylene chloride	5.6 J	µg/kg	U
	OWS-004-05-ESW	Methylene chloride	8.2 J	µg/kg	U
Y2541 MB	None	No target analytes reported			---
J6514 MB	None	No target analytes reported			---
FIP-003-06-ERB		Methylene chloride	6.5	µg/kg	---
		Chloroform	3.2 J	µg/kg	---
		Toluene	4.1 J	µg/kg	---
		Acetone	44.2	µg/kg	---
	FIP-001-06-SSS	Methylene chloride	8.0	µg/kg	U
	FIP-004-06-SSS	Methylene chloride	7.1	µg/kg	U
	FIP-002-06-SSS	Methylene chloride	6.7	µg/kg	U
	FIP-002-06-SSS	Acetone	71.9	µg/kg	U
Z3972 MB		No target analytes reported			---
	FIP-002-06-SSS	Butylbenzylphthalate	952	µg/kg	---
	FIP-002-06-SSS	bis(2-Ethylhhexyl) phthalate	124 J	µg/kg	---
	FIP-003-06-SSS	Butylbenzylphthalate	77.3 J	µg/kg	---
FIP-003-06-ERB	None	Calcium	0.33	mg/l	---
		Iron	0.13	mg/l	---
		Magnesium	0.11	mg/l	---
		Manganese	0.017	mg/l	---
		Zinc	0.0082	mg/l	---
Y2553 MB	None	No target analytes reported			---
Y2572 MB	None	No target analytes reported			---
9-12-02-TB		Methylene chloride	7.8	µg/l	---
	VWR-005-02-EBT	Methylene chloride	6.9	µg/kg	U
	VWR-006-02-EBT	Methylene chloride	7.9	µg/kg	U
	VWR-006-02-EBT	Acetone	57.4 J	µg/kg	---
	VWR-008-02-EBT	Methylene chloride	7.4	µg/kg	U
	VWR-003-02-ESW	Methylene chloride	6.8	µg/kg	U
Z3972 (MB)		No target analytes reported			---
	VWR-005-02-EBT	bis(2-Ethylhhexyl) phthalate	155 J	µg/kg	---
	VWR-006-02-EBT	bis(2-Ethylhhexyl) phthalate	775	µg/kg	---
	VWR-008-02-EBT	bis(2-Ethylhhexyl) phthalate	621	µg/kg	---
	VWR-003-02-ESW	bis(2-Ethylhhexyl) phthalate	69.1	µg/kg	---

TABLE 5

SUMMARY OF DATA QUALIFIED BASED ON BLANK DATA
SEPTEMBER 2002 FIELD EFFORT

FORT DEARBORN USARC
CHICAGO, ILLINOIS
(Page 2 of 2)

Blank	Associated Samples	Parameter	Result	Units	Qualifier
Z7393 (MB)		No target analytes reported			---
	FSS-005-08-EBT	Butylbenzylphthalate	1310	µg/kg	---
	FSS-006-05-EBT	Butylbenzylphthalate	123 J	µg/kg	---
	FSS-007-05-EBT	Di-n-butylphthalate	64.3 J	µg/kg	---
	FSS-007-05-EBT	Butylbenzylphthalate	274 J	µg/kg	---
	VWR-002-02-ESW	Butylbenzylphthalate	92.8 J	µg/kg	---
	VWR-001-03-EBT	Butylbenzylphthalate	410 J	µg/kg	---
VWR-002-02-ERB	None	Cadmium	0.15	mg/l	---
		Zinc	0.0065	mg/l	---

µg/kg = Micrograms per kilogram
µg/l = Mircograms per liter
ERB = Equipment rinsate blank
MB = Method blank
mg/l = Milligrams per liter
TB = Trip blank
--- = Not Applicable or None
U = Result should be considered non-detect at the reported concentration.

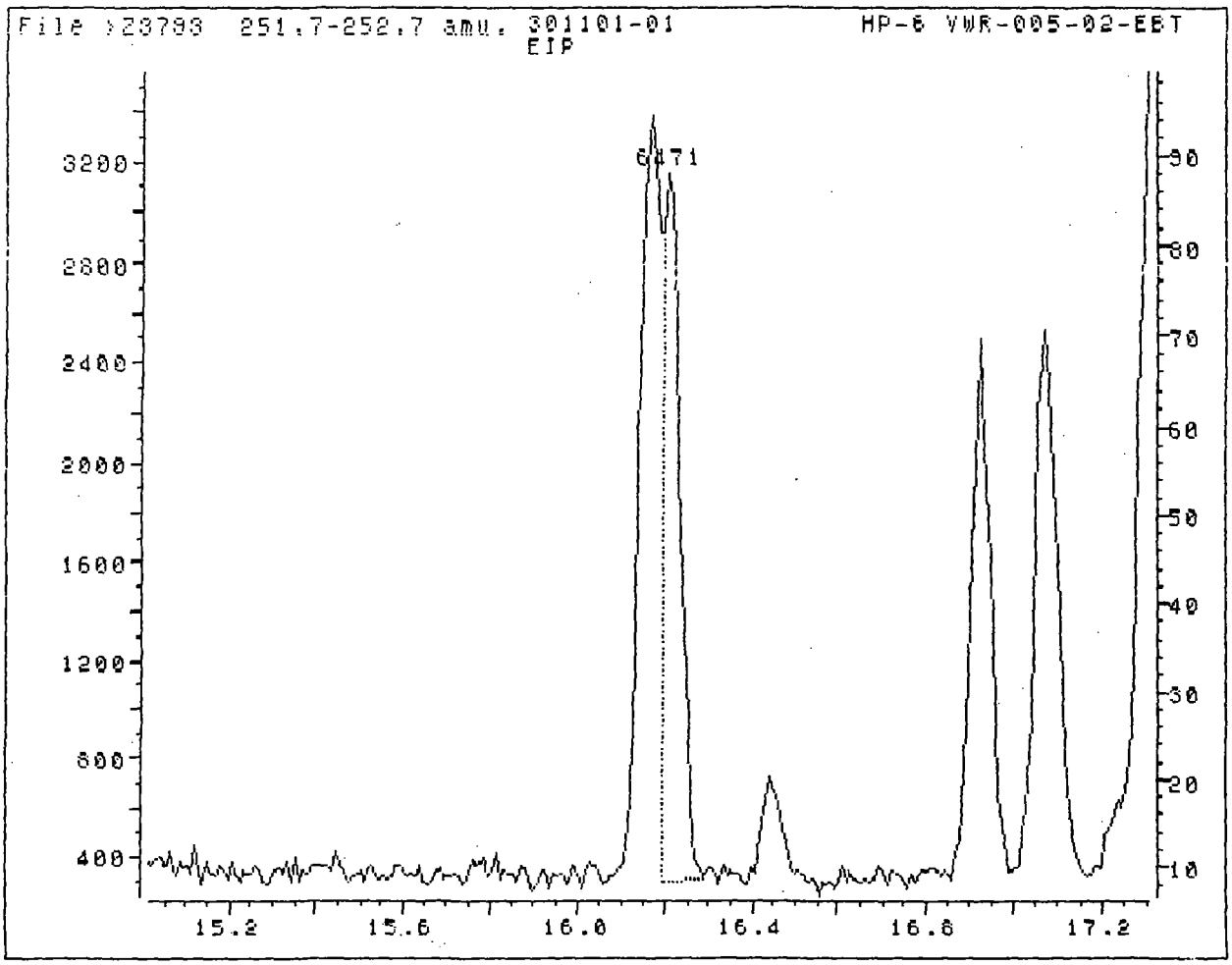
ATTACHMENT 1

(:ator ID: DOUG Quant Rev: 7 Quant Time: 020924 23:55
Output File: ^Z3793::D1 Injected at: 020924 23:29
Data File: >Z3793::D8 Dilution Factor: 1.00000
Name: 301101-01 Instrument ID: **HP*6
Misc: HP-6 VWR-005-02-EBT B8067 8270 PNA/SIM SEMIVO

ID File: SIMPS6::SC
Title: PAH ANALYSIS
Last Calibration: 020924 15:56 Last Qcal Time: 020924 13:34

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*D8 Naphthalene (ISTD2)	5.56	136.0	1102147	333.00	ug/Kg	96
2)	D5 Nitrobenzene (Surr 3)	4.62	82.0	569148	466.39	ug/Kg	79
6)	*D10 Acenaphthene (ISTD3)	7.97	164.0	559788	333.00	ug/Kg	86
7)	2-Fluorobiphenyl (Surr 4)	6.99	172.0	911704	475.42	ug/Kg	96
11)	*D10 Phenanthrene (ISTD4)	10.02	188.0	724824	333.00	ug/Kg	95
12)	Phenanthrene	10.05	178.0	17518	7.62	ug/Kg	94
14)	Fluoranthene	11.72	202.0	30052	13.06	ug/Kg	91
15)	*D12 Chrysene (ISTD 5)	13.86	240.0	539202	333.00	ug/Kg	100
16)	Pyrene	12.05	202.0	33984	17.66	ug/Kg	97
17)	D14 Terphenyl (Surr 6)	12.17	244.0	753871	631.19	ug/Kg	89
8)	Benzo(a)Anthracene	13.83	228.0	14109	7.86	ug/Kg	92
)	Chrysene	13.90	228.0	15715	9.69	ug/Kg	98
20)	*D12 Perylene (ISTD 6)	17.24	264.0	387358	333.00	ug/Kg	98
21)	Benzo(b)Fluoranthene	16.17	252.0	11296M	8.12	ug/Kg	93
22)	Benzo(k)Fluoranthene	16.20	252.0	6471	5.26	ug/Kg	93
23)	Benzo(a)Pyrene	17.07	252.0	7923	6.39	ug/Kg	88
24)	Indeno(1,2,3-cd)Pyrene	21.05	276.0	6303	5.02	ug/Kg	77
26)	Benzo(g,h,i)Perylene	22.26	276.0	6351	5.90	ug/Kg	86

* Compound is ISTD



Data File: >Z3793::D8 Quant Output File: ^Z3793::D1
Name: 301101-01 Instrument ID: **HP*6
Misc: HP-6 VWR-005-02-EBT B8067 8270 PNA/SIM SEMIVO
Quant Time: 020924 23:55 Quant ID File: SIMPS6::SC
Injected at: 020924 23:29 Last Calibration: 020924 15:56

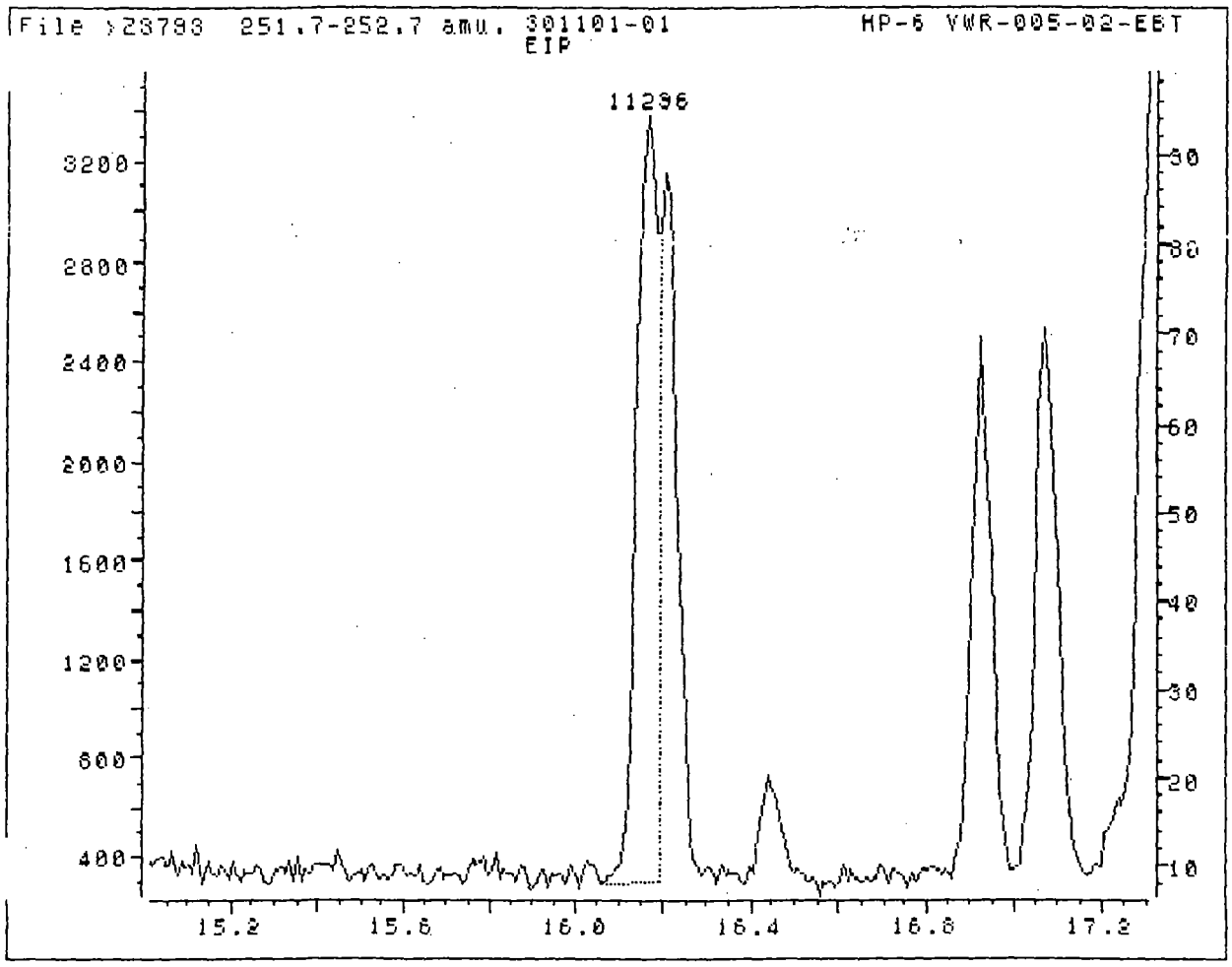
Compound No: 21
Compound Name: Benzo(b)Fluoranthene
Scan Number: 1338
Retention Time: 16.20 min.
Quant Ion: 252.0
Area: 6471
Concentration: 4.65 ug/Kg
q-value: 93

This report was produced by QAREA on: 021007 11:57

Wrong peak integrated by computer.

JB 10/7/02

400028G



Data File: >Z3793::D8 Quant Output File: ^Z3793::D1
Name: 301101-01 Instrument ID: **HP*6
Misc: HP-6 VWR-005-02-EBT B8067 8270 PNA/SIM SEMIVO
Quant Time: 020924 23:55 Quant ID File: SIMPS6::SC
Injected at: 020924 23:29 Last Calibration: 020924 15:56

Compound No: 21
Compound Name: Benzo(b)Fluoranthene
Scan Number: 1334
Retention Time: 16.17 min.
Quant Ion: 252.0
Area: 11296M
Concentration: 8.12 ug/Kg
q-value: 93

This report was produced by QAREA on: 021007 12:01

400028H

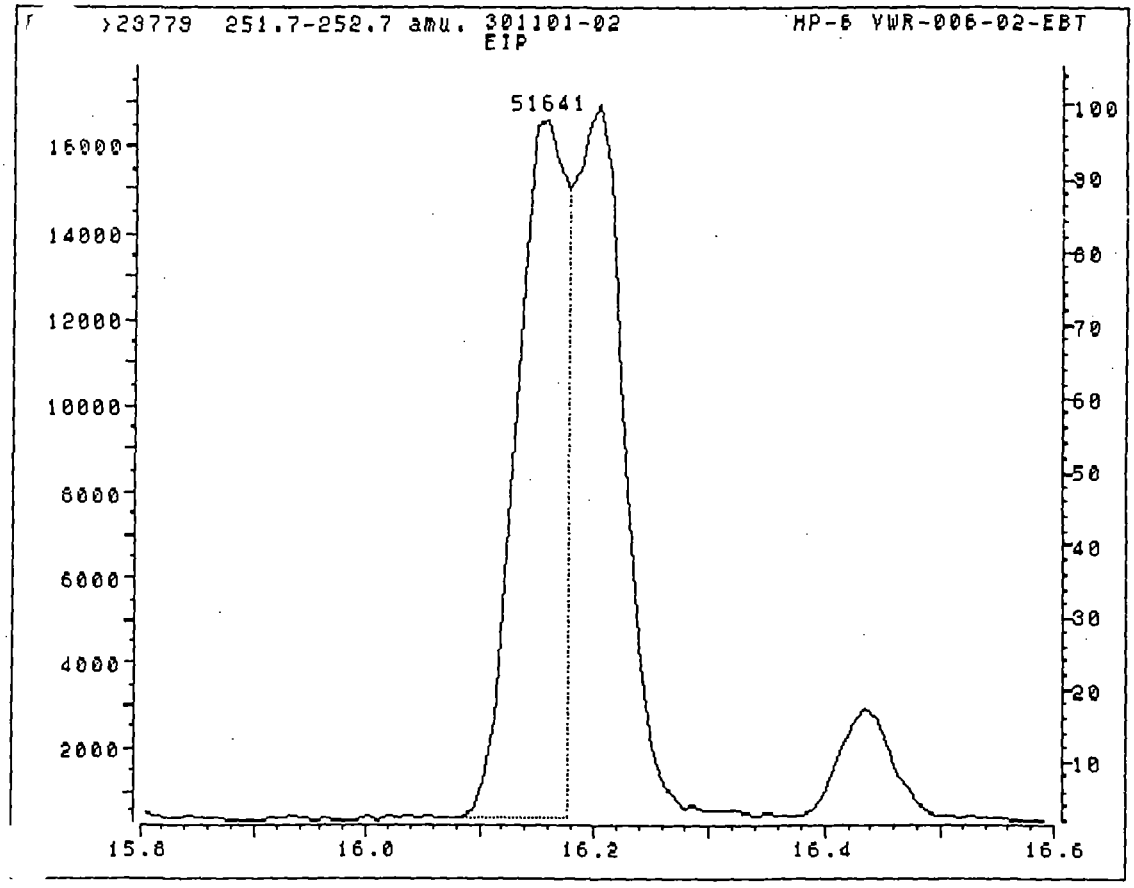
QUANT REPORT

Operator ID: DOUG
Quant Rev: 7
Quant Time: 020924 17:32
Output File: ^Z3779::D1
Injected at: 020924 15:25
Data File: >Z3779::D8
Dilution Factor: 1.00000
Name: 301101-02
Instrument ID: **HP*6
Misc: HP-6 VWR-006-02-EBT B8067 PNA/SIM SEMIVOLATIL

ID File: SIMPS6::SC
Title: PAH ANALYSIS
Last Calibration: 020924 15:56
Last Qcal Time: 020924 13:34

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*D8 Naphthalene (ISTD2)	5.55	136.0	1787094	333.00	ug/Kg	95
2)	D5 Nitrobenzene (Surr 3)	4.62	82.0	952015	481.13	ug/Kg	78
6)	*D10 Acenaphthene (ISTD3)	7.97	164.0	908203	333.00	ug/Kg	85
7)	2-Fluorobiphenyl (Surr 4)	6.99	172.0	1531657	492.29	ug/Kg	96
11)	*D10 Phenanthrene (ISTD4)	10.02	188.0	1173289	333.00	ug/Kg	90
12)	Phenanthrene	10.05	178.0	52459	14.09	ug/Kg	96
14)	Fluoranthene	11.71	202.0	119091	31.97	ug/Kg	81
15)	*D12 Chrysene (ISTD 5)	13.85	240.0	951330	333.00	ug/Kg	100
16)	Pyrene	12.05	202.0	138194	40.71	ug/Kg	96
17)	D14 Terphenyl (Surr 6)	12.16	244.0	1187681	563.62	ug/Kg	77
18)	Benzo(a)Anthracene	13.82	228.0	71838	22.68	ug/Kg	98
19)	Chrysene	13.90	228.0	80826	28.26	ug/Kg	9[illegible]
20)	*D12 Perylene (ISTD 6)	17.23	264.0	776773	333.00	ug/Kg	9[illegible]
21)	Benzo(b)Fluoranthene	16.16	252.0	51641	18.51	ug/Kg	98
22)	Benzo(k)Fluoranthene	16.20	252.0	48804M	19.78	ug/Kg	98
23)	Benzo(a)Pyrene	17.06	252.0	58043	23.34	ug/Kg	97
24)	Indeno(1,2,3-cd)Pyrene	21.04	276.0	38720	15.37	ug/Kg	78
26)	Benzo(g,h,i)Perylene	22.22	276.0	40004	18.52	ug/Kg	83

* Compound is ISTD



Data File: >Z3779::D8 Quant Output File: ^Z3779::D1
Name: 301101-02 Instrument ID: **HP*6
Misc: HP-6 VWR-006-02-EBT B8067 PNA/SIM SEMIVOLATIL
Quant Time: 020924 17:32 Quant ID File: SIMPS6::SC
Injected at: 020924 15:25 Last Calibration: 020924 15:56

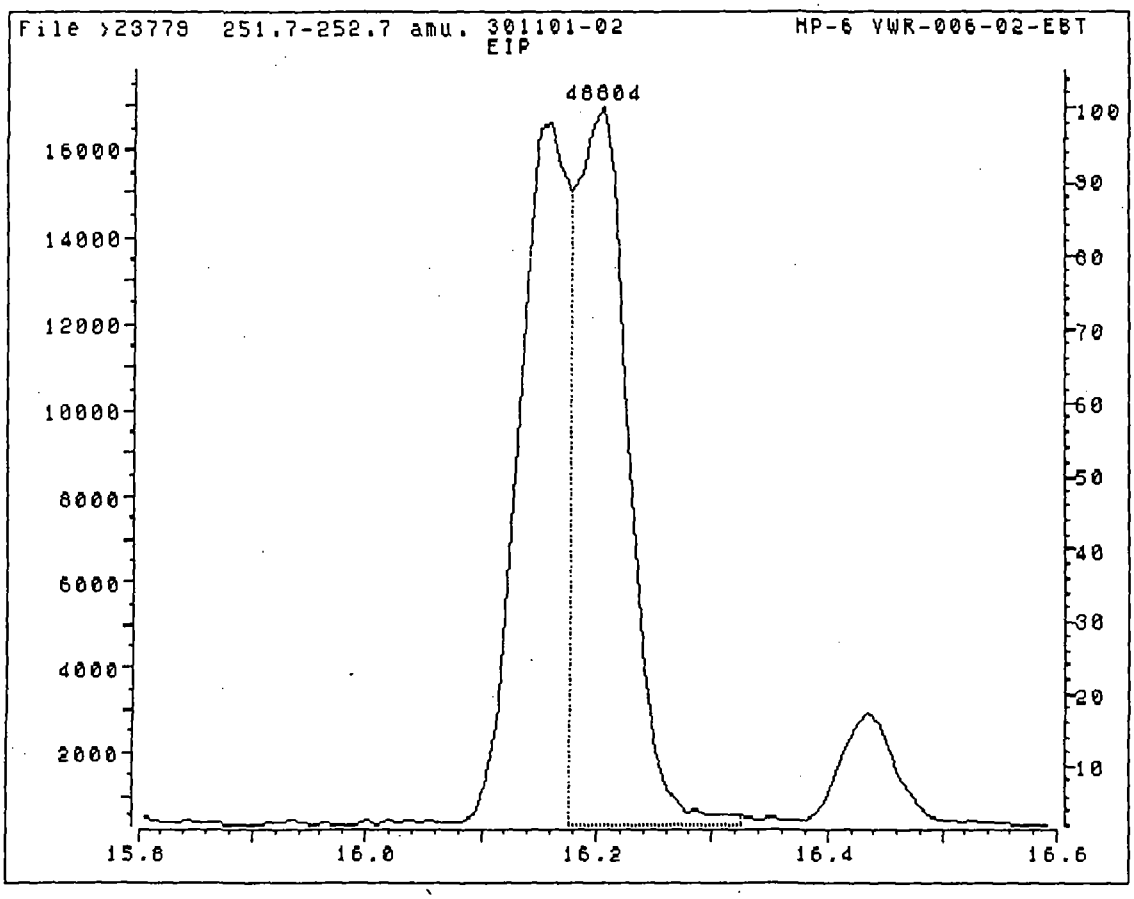
Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1333
Retention Time: 16.16 min.
Quant Ion: 252.0
Area: 51641
Concentration: 20.93 ug/Kg
q-value: 98

This report was produced by QAREA on: 020925 16:43

Incorrect peak was ~~integrated~~ picked by computer. JB 10/11/02

JB 10/11/02

40033H



Data File: >Z3779::D8 Quant Output File: ^Z3779::D1
Name: 301101-02 Instrument ID: **HP*6
Misc: HP-6 VWR-006-02-EBT B8067 PNA/SIM SEMIVOLATIL
Quant Time: 020924 17:32 Quant ID File: SIMPS6::SC
Injected at: 020924 15:25 Last Calibration: 020924 15:56

Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1338
Retention Time: 16.20 min.
Quant Ion: 252.0
Area: 48804M
Concentration: 19.78 ug/Kg
q-value: 98

This report was produced by QAREA on: 020925 16:45

10/4/02

40033I

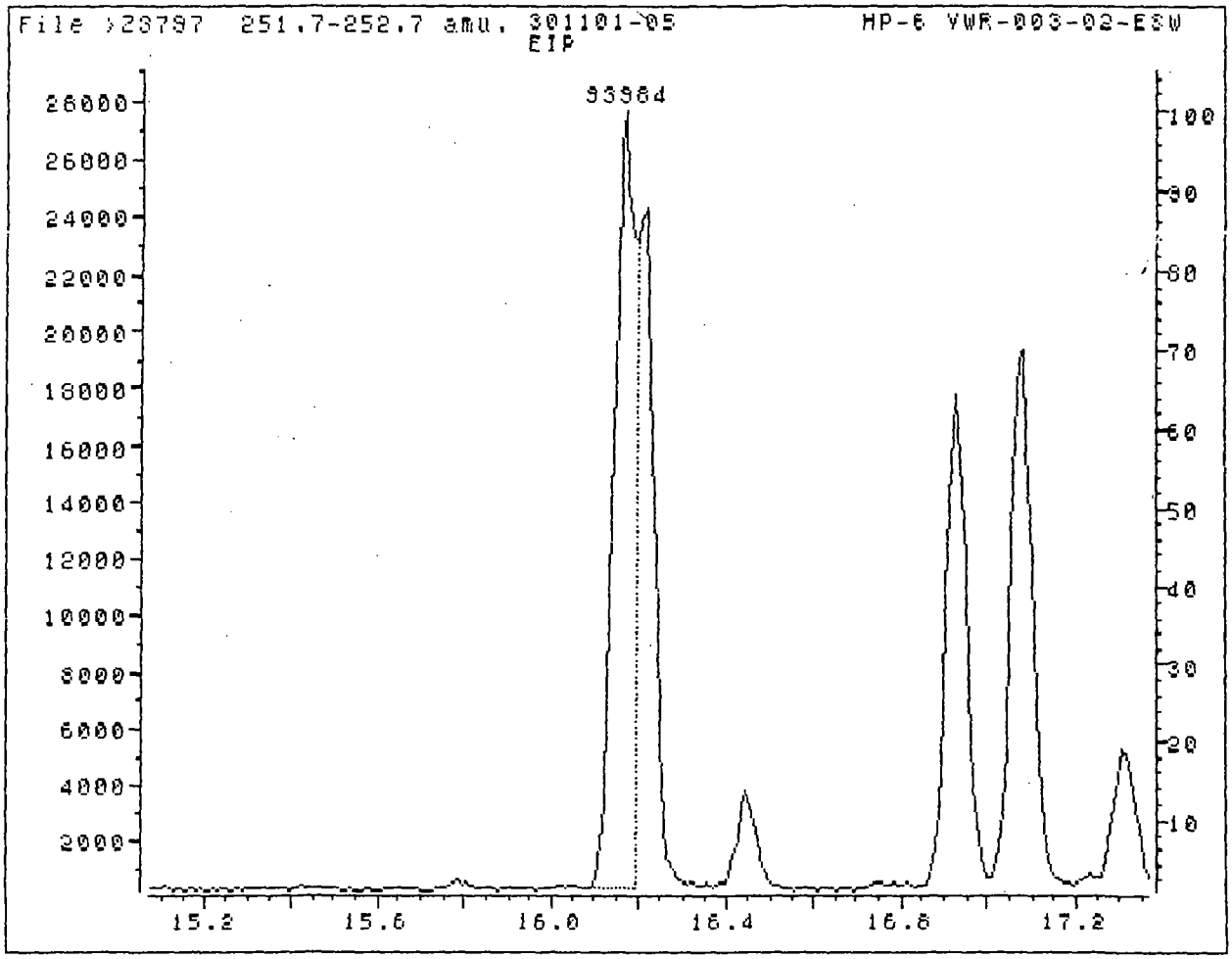
QUANT REPORT

Operator ID: DOUG Quant Rev: 7 Quant Time: 020925 01:51
Output File: ^Z3797::D1 Injected at: 020925 01:27
Data File: >Z3797::D8 Dilution Factor: 1.00000
Name: 301101-05 Instrument ID: **HP*6
Misc: HP-6 VWR-003-02-ESW B8067 8270 PNA/SIM SEMIVO

ID File: SIMPS6::SC
Title: PAH ANALYSIS
Last Calibration: 020924 15:56 Last Qcal Time: 020924 13:34

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*D8 Naphthalene (ISTD2)	5.56	136.0	1141946	333.00	ug/Kg	94
2)	D5 Nitrobenzene (Surr 3)	4.62	82.0	592104	468.29	ug/Kg	79
6)	*D10 Acenaphthene (ISTD3)	7.97	164.0	573027	333.00	ug/Kg	87
7)	2-Fluorobiphenyl (Surr 4)	6.99	172.0	958623	488.33	ug/Kg	96
11)	*D10 Phenanthrene (ISTD4)	10.02	188.0	798426	333.00	ug/Kg	95
12)	Phenanthrene	10.05	178.0	88367	34.88	ug/Kg	96
13)	Anthracene	10.11	178.0	15850	6.10	ug/Kg	92
14)	Fluoranthene	11.72	202.0	229788	90.65	ug/Kg	93
15)	*D12 Chrysene (ISTD 5)	13.86	240.0	593991	333.00	ug/Kg	100
16)	Pyrene	12.05	202.0	191220	90.22	ug/Kg	96
[illegible])	D14 Terphenyl (Surr 6)	12.17	244.0	813099	617.99	ug/Kg	87
[illegible])	Benzo(a)Anthracene	13.83	228.0	79827	40.37	ug/Kg	96
19)	Chrysene	13.90	228.0	101111	56.62	ug/Kg	97
20)	*D12 Perylene (ISTD 6)	17.24	264.0	421540	333.00	ug/Kg	97
21)	Benzo(b)Fluoranthene	16.17	252.0	93984	62.08	ug/Kg	93
22)	Benzo(k)Fluoranthene	16.21	252.0	45617M	34.07	ug/Kg	93
23)	Benzo(a)Pyrene	17.08	252.0	68008	50.40	ug/Kg	95
24)	Indeno(1,2,3-cd)Pyrene	21.07	276.0	52599	38.47	ug/Kg	76
25)	Dibenzo(a,h)Anthracene	21.50	278.0	5353	5.12	ug/Kg	73
26)	Benzo(g,h,i)Perylene	22.26	276.0	49135	41.91	ug/Kg	85

* Compound is ISTD



Data File: >Z3797::D8 Quant Output File: ^Z3797::D1
Name: 301101-05 Instrument ID: **HP*6
Misc: HP-6 VWR-003-02-ESW B8067 8270 PNA/SIM SEMIVO
Quant Time: 020925 01:51 Quant ID File: SIMPS6::SC
Injected at: 020925 01:27 Last Calibration: 020924 15:56

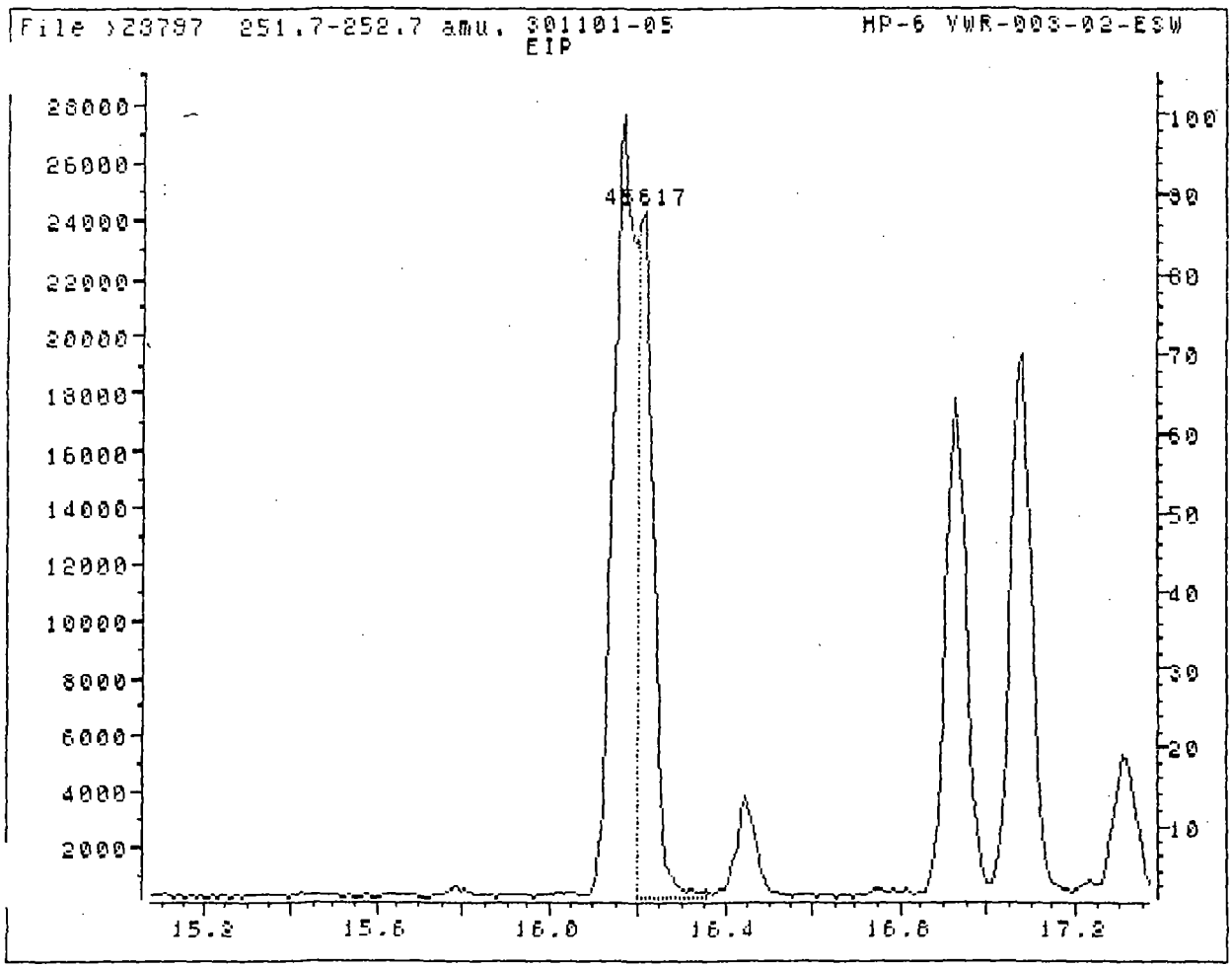
Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1334
Retention Time: 16.17 min.
Quant Ion: 252.0
Area: 93984
Concentration: 70.20 ug/Kg
q-value: 93

This report was produced by QAREA on: 021007 12:16

Incorrect peak integrated by computer.

10/7/02

40034 I



Data File: >Z3797::D8 Quant Output File: ^Z3797::D1
Name: 301101-05 Instrument ID: **HP*6
Misc: HP-6 VWR-003-02-ESW B8067 8270 PNA/SIM SEMIVO
Quant Time: 020925 01:51 Quant ID File: SIMPS6::SC
Injected at: 020925 01:27 Last Calibration: 020924 15:56

Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1339
Retention Time: 16.21 min.
Quant Ion: 252.0
Area: 45617M
Concentration: 34.07 ug/Kg
q-value: 93

This report was produced by QAREA on: 021007 12:19

gb 10/7/02

40034J

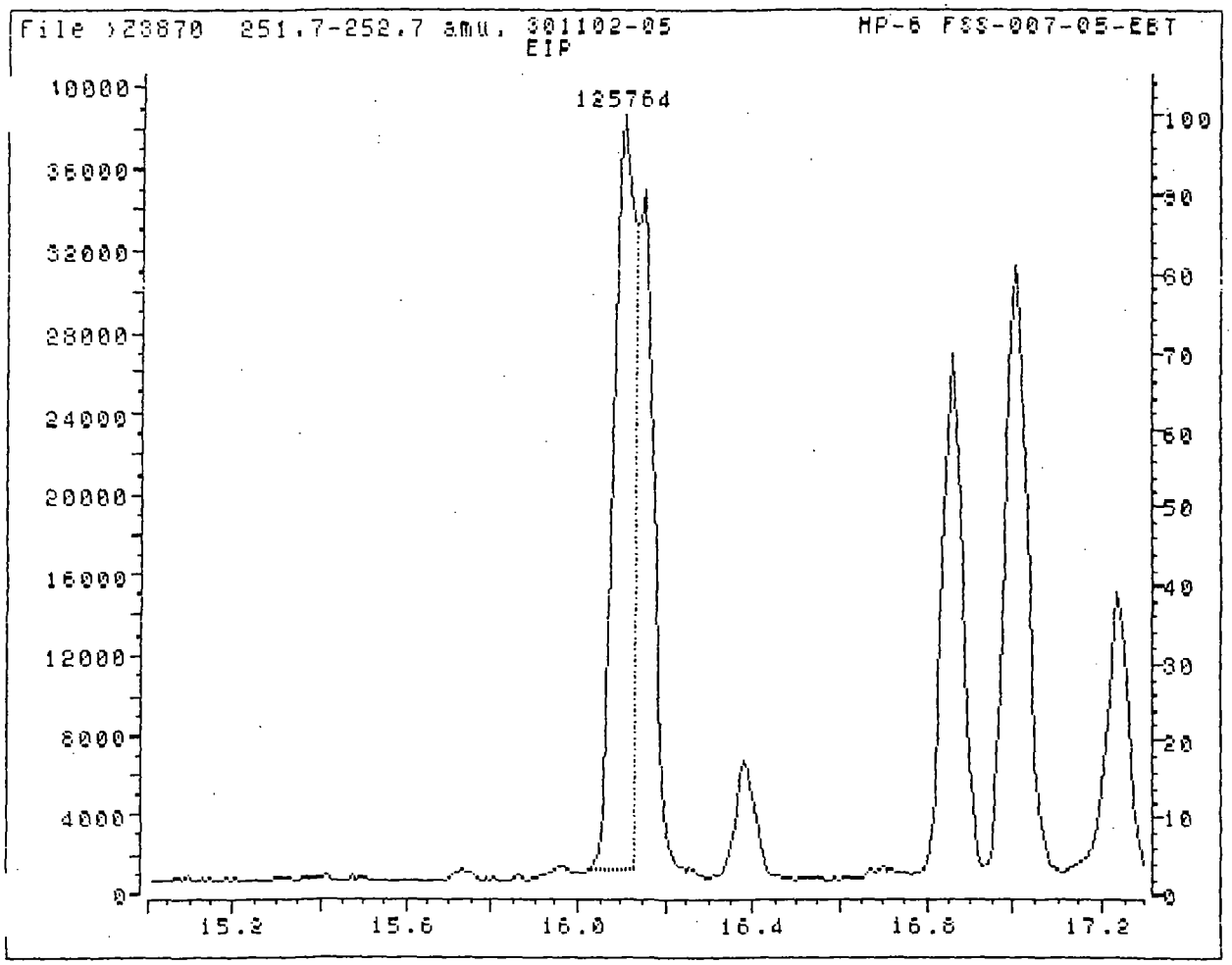
QUANT REPORT

Operator ID: DOUG Quant Rev: 7 Quant Time: 020926 17:30
Output File: ^Z3870::D1 Injected at: 020926 17:08
Data File: >Z3870::D8 Dilution Factor: 1.00000
Name: 301102-05 Instrument ID: **HP*6
Misc: HP-6 FSS-007-05-EBT B8067 8270 PNA/SIM ANALYS

ID File: SIMPS6::SC
Title: PAH ANALYSIS
Last Calibration: 020924 15:56 Last Qcal Time: 020926 09:38

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*D8 Naphthalene (ISTD2)	5.52	136.0	1731874	333.00	ug/Kg	95
2)	D5 Nitrobenzene (Surr 3)	4.60	82.0	1039553	542.12	ug/Kg	76
6)	*D10 Acenaphthene (ISTD3)	7.94	164.0	884315	333.00	ug/Kg	88
7)	2-Fluorobiphenyl (Surr 4)	6.96	172.0	1773062	585.27	ug/Kg	99
10)	Fluorene	8.68	166.0	13516	4.47	ug/Kg	93
11)	*D10 Phenanthrene (ISTD4)	9.99	188.0	1399528	333.00	ug/Kg	89
12)	Phenanthrene	10.02	178.0	85166	19.18	ug/Kg	98
13)	Anthracene	10.08	178.0	21857	4.80	ug/Kg	96
14)	Fluoranthene	11.69	202.0	203386	45.77	ug/Kg	95
15)	*D12 Chrysene (ISTD 5)	13.82	240.0	1056767	333.00	ug/Kg	100
16)	Pyrene	12.02	202.0	195642	51.88	ug/Kg	93
17)	D14 Terphenyl (Surr 6)	12.14	244.0	1520611	649.61	ug/Kg	9[illegible]
18)	Benzo(a)Anthracene	13.79	228.0	95753	27.22	ug/Kg	9[illegible]
19)	Chrysene	13.86	228.0	116753	36.75	ug/Kg	98
20)	*D12 Perylene (ISTD 6)	17.16	264.0	882816	333.00	ug/Kg	95
21)	Benzo(b)Fluoranthene	16.10	252.0	125764	39.67	ug/Kg	93
22)	Benzo(k)Fluoranthene	16.15	252.0	85781M	30.60	ug/Kg	93
23)	Benzo(a)Pyrene	17.00	252.0	113162	40.05	ug/Kg	95
24)	Indeno(1,2,3-cd)Pyrene	20.96	276.0	79676	27.83	ug/Kg	79
26)	Benzo(g,h,i)Perylene	22.12	276.0	80551	32.81	ug/Kg	82

* Compound is ISTD



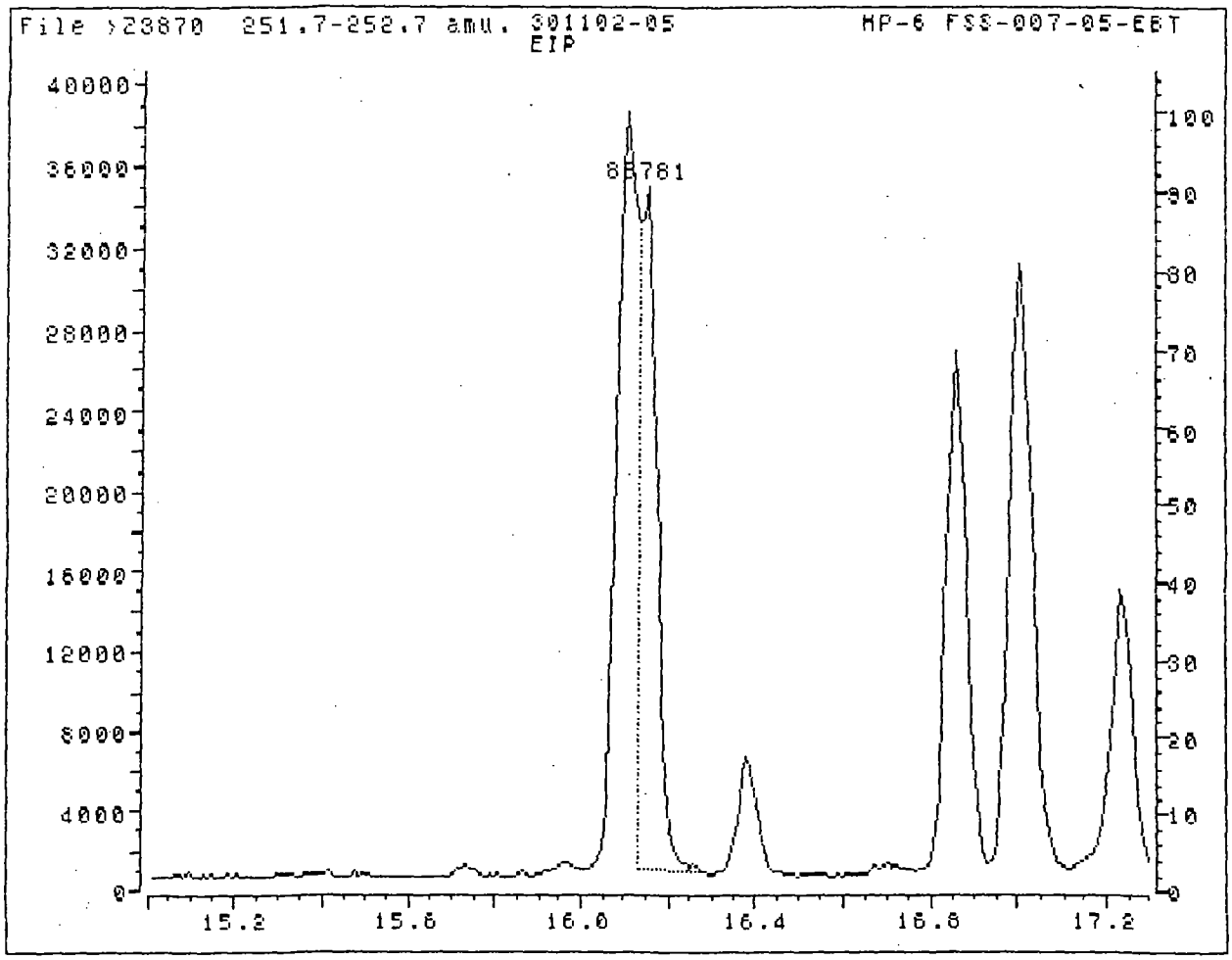
Data File: >Z3870::D8 Quant Output File: ^Z3870::D1
Name: 301102-05 Instrument ID: **HP*6
Misc: HP-6 FSS-007-05-EBT B8067 8270 PNA/SIM ANALYS
Quant Time: 020926 17:30 Quant ID File: SIMPS6::SC
Injected at: 020926 17:08 Last Calibration: 020924 15:56

Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1327
Retention Time: 16.10 min.
Quant Ion: 252.0
Area: 125764
Concentration: 44.86 ug/Kg
q-value: 93

This report was produced by QAREA on: 021007 11:12

Wrong peak integrated by computer.

10/7/02



Data File: >Z3870::D8 Quant Output File: ^Z3870::D1
Name: 301102-05 Instrument ID: **HP*6
Misc: HP-6 FSS-007-05-EBT B8067 8270 PNA/SIM ANALYS
Quant Time: 020926 17:30 Quant ID File: SIMPS6::SC
Injected at: 020926 17:08 Last Calibration: 020924 15:56

Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1332
Retention Time: 16.15 min.
Quant Ion: 252.0
Area: 85781M
Concentration: 30.60 ug/Kg
q-value: 93

This report was produced by QAREA on: 021007 11:18

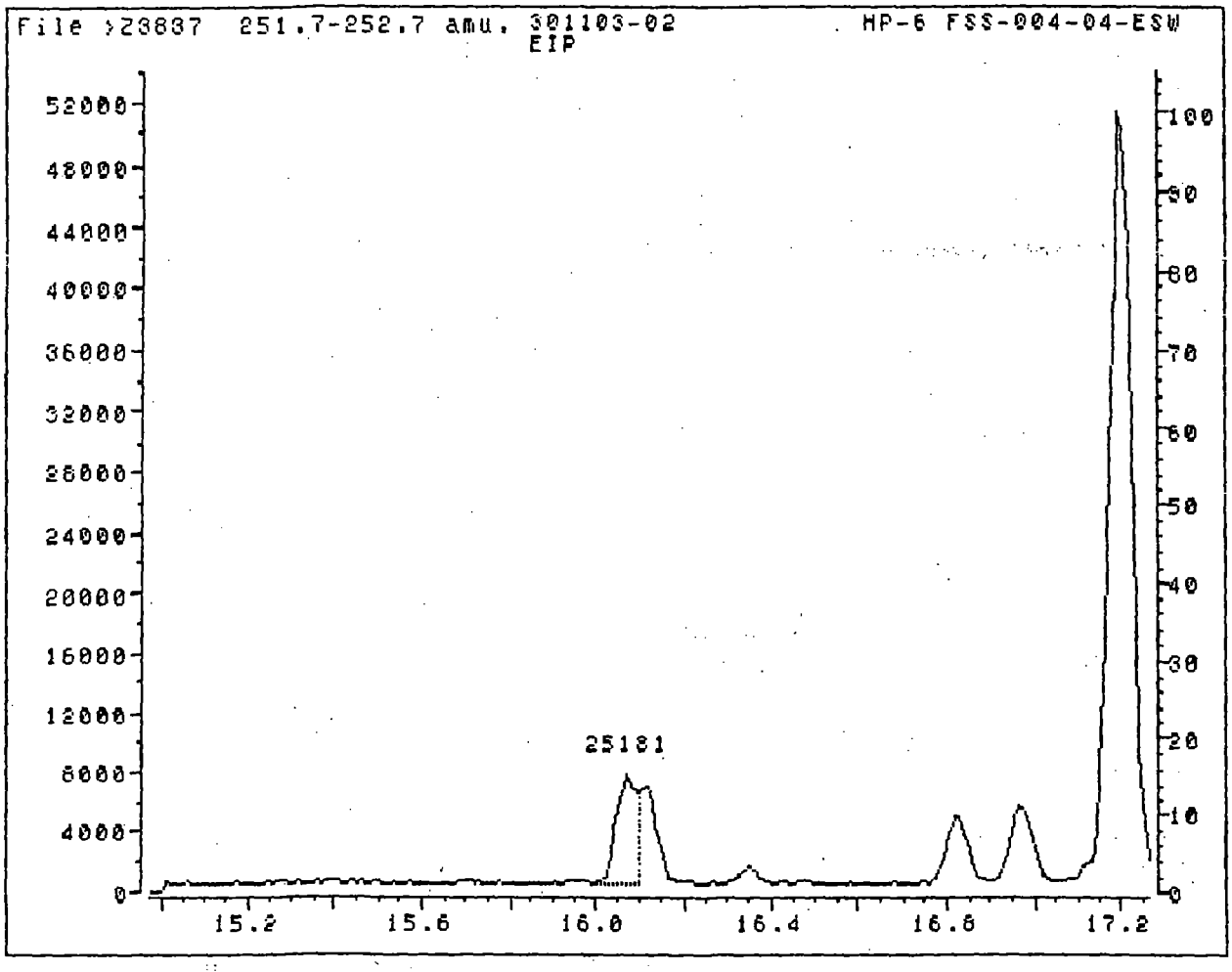
QUANT REPORT

Operator ID: DOUG
Quant Rev: 7
Quant Time: 020925 21:04
Output File: ^Z3837::D1
Injected at: 020925 20:41
Data File: >Z3837::D8
Dilution Factor: 1.00000
Name: 301103-02
Instrument ID: **HP*6
Misc: HP-6 FSS-004-04-ESW 8270 PNA/SIM SEMIVOLATILE

ID File: SIMPS6::SC
Title: PAH ANALYSIS
Last Calibration: 020924 15:56
Last Qcal Time: 020925 15:52

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*D8 Naphthalene (ISTD2)	5.51	136.0	1931879	333.00	ug/Kg	96
2)	D5 Nitrobenzene (Surr 3)	4.59	82.0	904247	422.74	ug/Kg	75
6)	*D10 Acenaphthene (ISTD3)	7.93	164.0	1006070	333.00	ug/Kg	86
7)	2-Fluorobiphenyl (Surr 4)	6.95	172.0	1543446	447.82	ug/Kg	98
10)	Fluorene	8.67	166.0	13445	3.91	ug/Kg	90
11)	*D10 Phenanthrene (ISTD4)	9.98	188.0	1538883	333.00	ug/Kg	83
12)	Phenanthrene	10.00	178.0	120165	24.61	ug/Kg	99
13)	Anthracene	10.07	178.0	23884	4.77	ug/Kg	93
14)	Fluoranthene	11.67	202.0	117969	24.14	ug/Kg	93
15)	*D12 Chrysene (ISTD 5)	13.80	240.0	1288797	333.00	ug/Kg	100
)	Pyrene	12.00	202.0	98843	21.49	ug/Kg	97
)	D14 Terphenyl (Surr 6)	12.12	244.0	1536097	538.08	ug/Kg	85
18)	Benzo(a)Anthracene	13.77	228.0	31735	7.40	ug/Kg	99
19)	Chrysene	13.84	228.0	39990	10.32	ug/Kg	96
20)	*D12 Perylene (ISTD 6)	17.12	264.0	1109902	333.00	ug/Kg	95
21)	Benzo(b)Fluoranthene	16.07	252.0	25181	6.32	ug/Kg	89
22)	Benzo(k)Fluoranthene	16.11	252.0	18285M	5.19	ug/Kg	89
23)	Benzo(a)Pyrene	16.97	252.0	19410	5.46	ug/Kg	93
24)	Indeno(1,2,3-cd)Pyrene	20.90	276.0	12572	3.49	ug/Kg	81
26)	Benzo(g,h,i)Perylene	22.06	276.0	16357	5.30	ug/Kg	89

* Compound is ISTD



Data File: >Z3837::D8 Quant Output File: ^Z3837::D1
Name: 301103-02 Instrument ID: **HP*6
Misc: HP-6 FSS-004-04-ESW 8270 PNA/SIM SEMIVOLATILE
Quant Time: 020925 21:04 Quant ID File: SIMPS6::SC
Injected at: 020925 20:41 Last Calibration: 020924 15:56

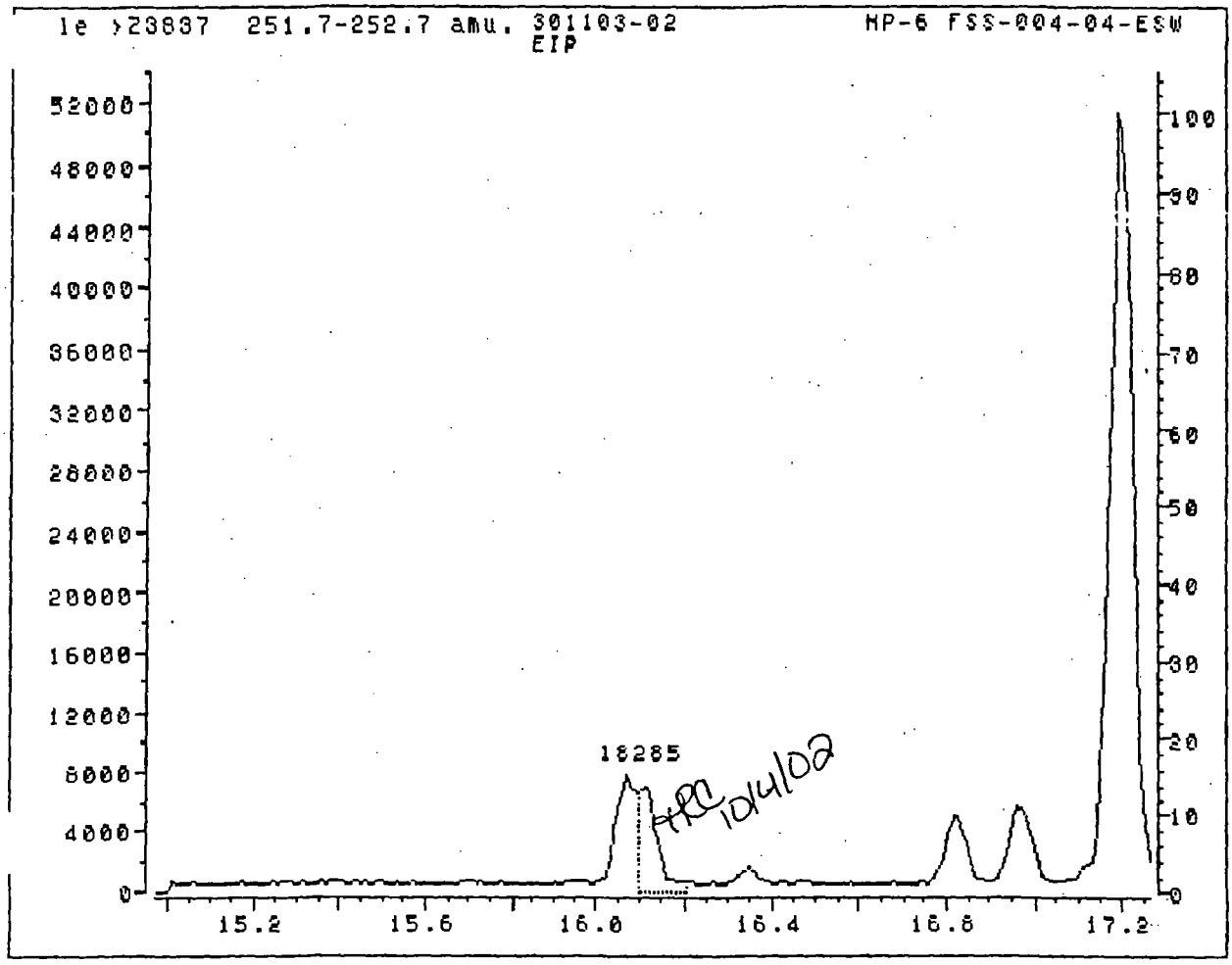
Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1324
Retention Time: 16.07 min.
Quant Ion: 252.0
Area: 25181
Concentration: 7.14 ug/Kg
q-value: 89

This report was produced by QAREA on: 021004 15:57

Incorrect peak integrated by computer

TRC 10/4/02

40047



Data File: >Z3837::D8 Quant Output File: ^Z3837::D1
Name: 301103-02 Instrument ID: **HP*6
Misc: HP-6 FSS-004-04-ESW 8270 PNA/SIM SEMIVOLATILE
Quant Time: 020925 21:04 Quant ID File: SIMPS6::SC
Injected at: 020925 20:41 Last Calibration: 020924 15:56

Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1328
Retention Time: 16.11 min.
Quant Ion: 252.0
Area: 18285M
Concentration: 5.19 ug/Kg
q-value: 89

This report was produced by QAREA on: 021004 16:03

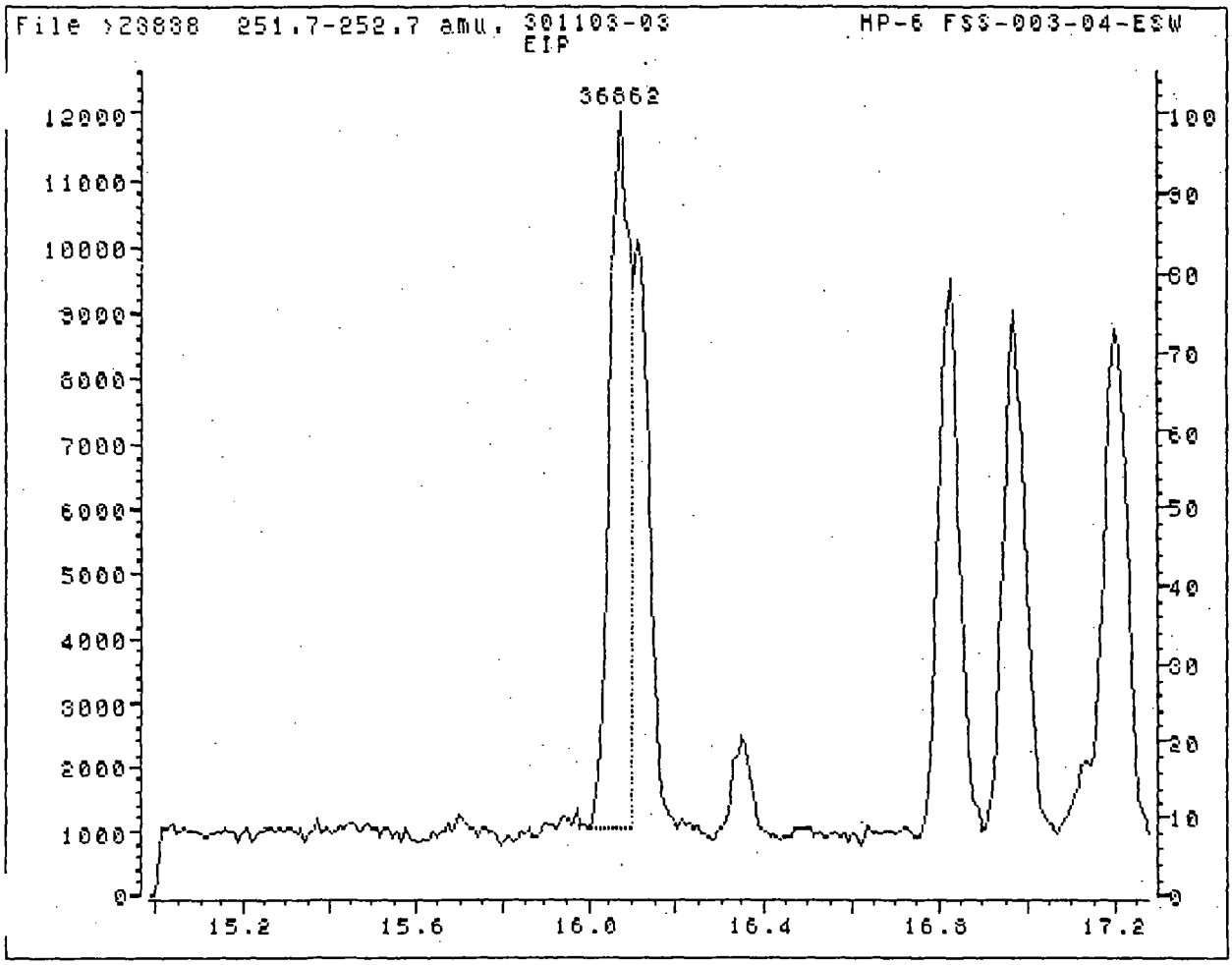
QUANT REPORT

Operator ID: DOUG
Quant Rev: 7
Quant Time: 020925 21:33
Output File: ^Z3838::D1
Injected at: 020925 21:10
Data File: >Z3838::D8
Dilution Factor: 1.00000
Name: 301103-03
Instrument ID: **HP*6
Misc: HP-6 FSS-003-04-ESW 8270 PNA/SIM SEMIVOLATILE

ID File: SIMPS6::SC
Title: PAH ANALYSIS
Last Calibration: 020924 15:56
Last Qcal Time: 020925 15:52

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*D8 Naphthalene (ISTD2)	5.51	136.0	2028439	333.00	ug/Kg	92
2)	D5 Nitrobenzene (Surr 3)	4.58	82.0	998612	444.63	ug/Kg	82
3)	Naphthalene	5.54	128.0	175353	28.81	ug/Kg	96
6)	*D10 Acenaphthene (ISTD3)	7.92	164.0	1057300	333.00	ug/Kg	94
7)	2-Fluorobiphenyl (Surr 4)	6.95	172.0	1746122	482.08	ug/Kg	97
10)	Fluorene	8.67	166.0	15602	4.31	ug/Kg	90
11)	*D10 Phenanthrene (ISTD4)	9.97	188.0	1629855	333.00	ug/Kg	97
12)	Phenanthrene	10.00	178.0	65831	12.73	ug/Kg	98
13)	Anthracene	10.07	178.0	22272	4.20	ug/Kg	93
14)	Fluoranthene	11.67	202.0	86362	16.69	ug/Kg	94
15)	*D12 Chrysene (ISTD 5)	13.80	240.0	1286298	333.00	ug/Kg	100
16)	Pyrene	12.00	202.0	101582	22.13	ug/Kg	
17)	D14 Terphenyl (Surr 6)	12.12	244.0	1510636	530.19	ug/Kg	
18)	Benzo(a)Anthracene	13.77	228.0	40927	9.56	ug/Kg	95
19)	Chrysene	13.84	228.0	51565	13.33	ug/Kg	96
20)	*D12 Perylene (ISTD 6)	17.13	264.0	1064544	333.00	ug/Kg	96
21)	Benzo(b)Fluoranthene	16.07	252.0	36862	9.64	ug/Kg	97
22)	Benzo(k)Fluoranthene	16.11	252.0	20958M	6.20	ug/Kg	97
23)	Benzo(a)Pyrene	16.97	252.0	29606	8.69	ug/Kg	94
24)	Indeno(1,2,3-cd)Pyrene	20.90	276.0	21887	6.34	ug/Kg	79
26)	Benzo(g,h,i)Perylene	22.06	276.0	32177	10.87	ug/Kg	81

* Compound is ISTD



Data File: >Z3838::D8 Quant Output File: ^Z3838::D1
Name: 301103-03 Instrument ID: **HP*6
Misc: HP-6 FSS-003-04-ESW 8270 PNA/SIM SEMIVOLATILE
Quant Time: 020925 21:33 Quant ID File: SIMPS6::SC
Injected at: 020925 21:10 Last Calibration: 020924 15:56

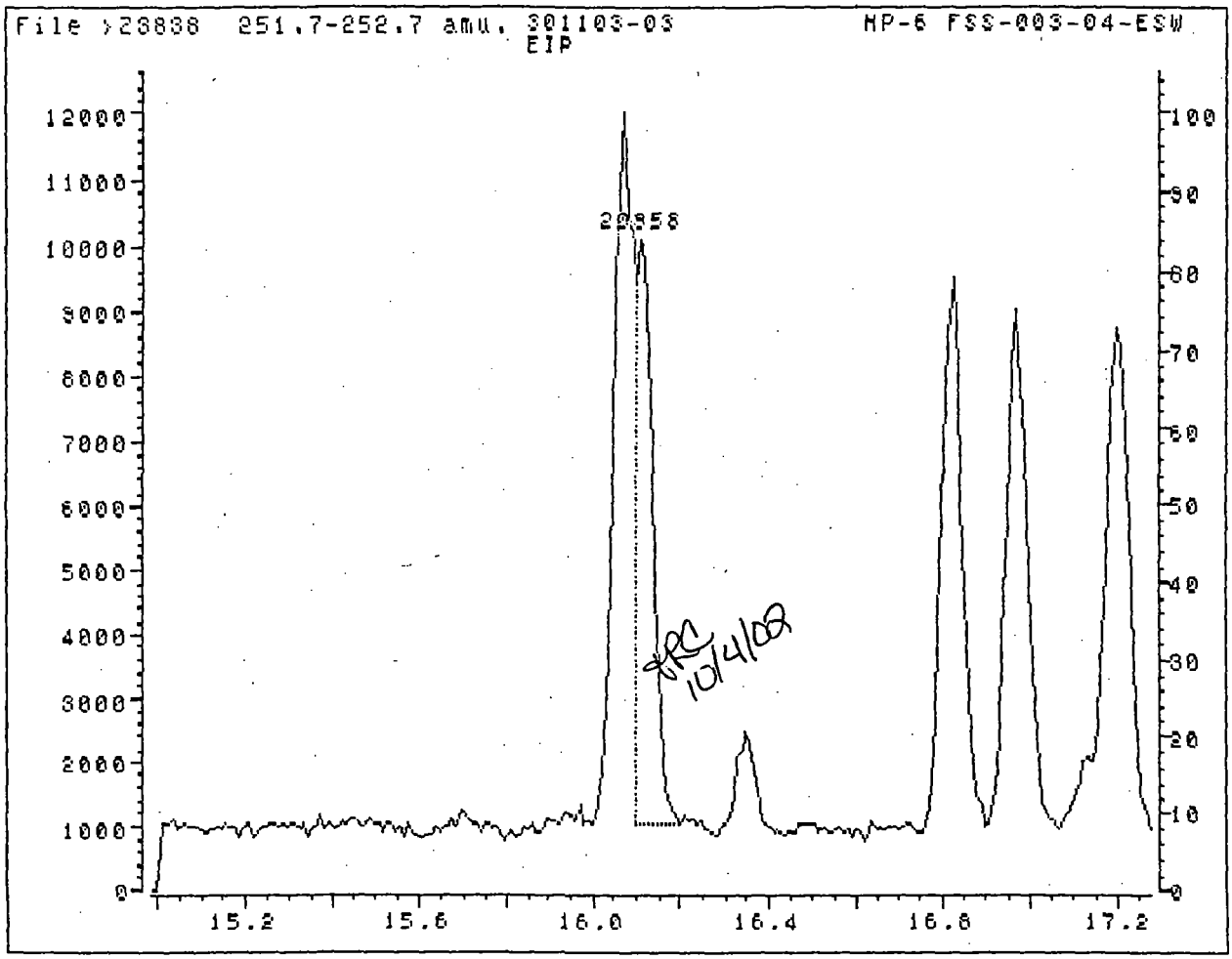
Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1324
Retention Time: 16.07 min.
Quant Ion: 252.0
Area: 36862
Concentration: 10.90 ug/Kg
q-value: 97

This report was produced by QAREA on: 021004 16:39

Incorrect peak integrated by computer

RC
10/4/02

40067



Data File: >Z3838::D8 Quant Output File: ^Z3838::D1
Name: 301103-03 Instrument ID: **HP*6
Misc: HP-6 FSS-003-04-ESW 8270 PNA/SIM SEMIVOLATILE
Quant Time: 020925 21:33 Quant ID File: SIMPS6::SC
Injected at: 020925 21:10 Last Calibration: 020924 15:56

Compound No: 22
Compound Name: Benzo(k)Fluoranthene
Scan Number: 1328
Retention Time: 16.11 min.
Quant Ion: 252.0
Area: 20958M
Concentration: 6.20 ug/Kg
q-value: 97

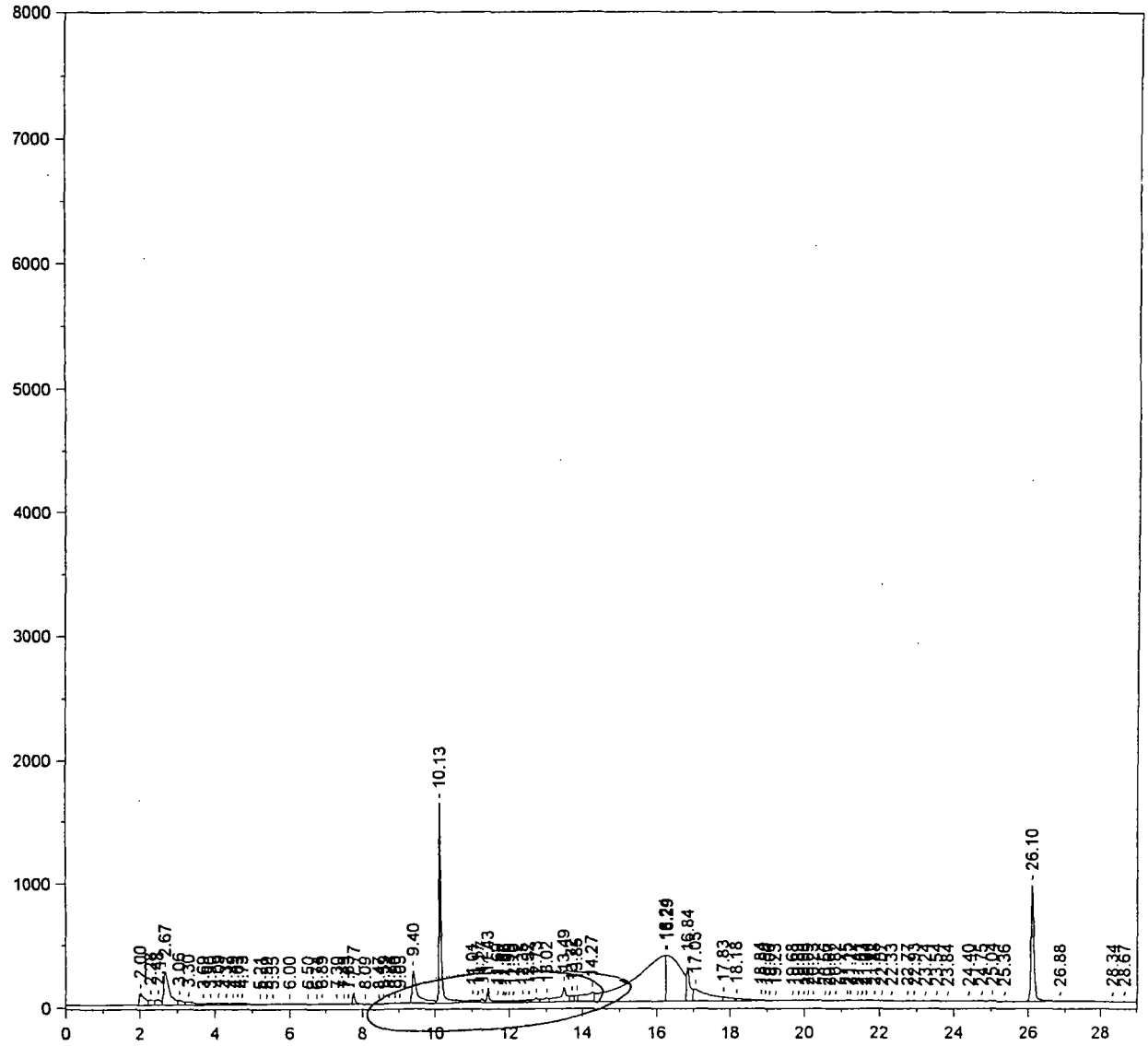
This report was produced by QAREA on: 021004 16:42

PCB's-8082

ARDL REPORT NO 301100
Volume 5

50000

— H:\CP2\HP2\M0919.0037.RAW 301100-01 B8068 FIP-001-06-SSS



Primary Column

Before reintegration
excess area under peaks
RJT 9/20/02

50014

Sample Name = **301100-01 B8068 FIP-001-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0037.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

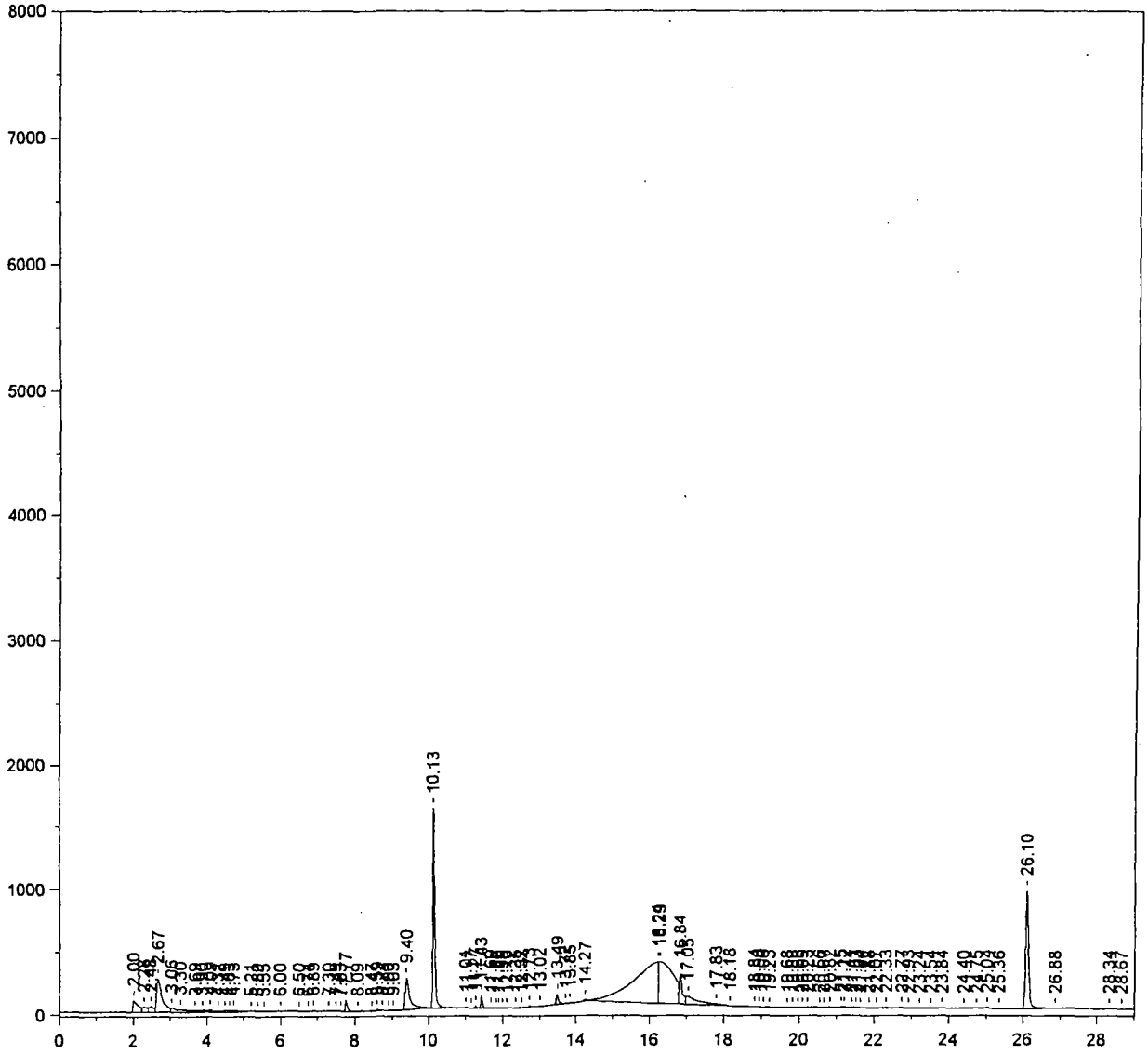
Date Taken (end) = 9/20/02 7:34:32 AM
Method Version = 618
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	889615	1.341	BV	0.17
2	2.28		0.00	0.000	389392	0.587	VV	0.09
3	2.48		0.00	0.000	416092	0.627	VV	0.09
4	2.67		0.00	0.000	2780910	4.192	VV	0.13
5	3.06		0.00	0.000	295967	0.446	VV	0.10
6	3.30		0.00	0.000	386065	0.582	VV	0.16
7	3.69		0.00	0.000	80736	0.122	VV	0.09
8	3.90		0.00	0.000	147057	0.222	VV	0.14
9	4.09		0.00	0.000	131536	0.198	VV	0.08
10	4.32		0.00	0.000	67812	0.102	VV	0.11
11	4.49		0.00	0.000	107853	0.163	VV	0.11
12	4.63		0.00	0.000	45076	0.068	VV	0.05
13	4.73		0.00	0.000	173305	0.261	VV	0.15
14	5.21		0.00	0.000	105586	0.159	VV	0.15
15	5.39		0.00	0.000	31191	0.047	VV	0.07
16	5.55		0.00	0.000	92454	0.139	VV	0.20
17	6.00		0.00	0.000	105140	0.158	VV	0.27
18	6.50		0.00	0.000	80315	0.121	VV	0.22
19	6.74		0.00	0.000	36475	0.055	VV	0.10
20	6.89		0.00	0.000	88912	0.134	VV	0.09
21	7.30		0.00	0.000	47188	0.071	VV	0.20
22	7.49		0.00	0.000	20396	0.031	VV	0.06
23	7.63		0.00	0.000	13838	0.021	VV	0.08
24	7.77		0.00	0.000	390931	0.589	VV	0.06
25	8.09		0.00	0.000	30520	0.046	VB	0.24
26	8.47		0.00	0.000	8361	0.013	BV	0.15
27	8.59		0.00	0.000	37268	0.056	VV	0.07
28	8.74		0.00	0.000	5878	0.009	VV	0.06
29	8.90		0.00	0.000	4595	0.007	VV	0.11
30	9.03		0.00	0.000	3492	0.005	VB	0.07
31	9.40		0.00	0.000	2724719	4.107	BV	0.11
32	10.13	CL4XYL	0.86	10.067	6704549	10.106	VV	0.05
33	11.01		0.00	0.000	244128	0.368	VV	0.11
34	11.17		0.00	0.000	115375	0.174	VV	0.08
35	11.27		0.00	0.000	220651	0.333	VV	0.05
36	11.43		0.00	0.000	610782	0.921	VV	0.05
37	11.69		0.00	0.000	182949	0.276	VV	0.07
38	11.82		0.00	0.000	61151	0.092	VV	0.03
39	11.90		0.00	0.000	97959	0.148	VV	0.05
40	11.99		0.00	0.000	62149	0.094	VV	0.04
41	12.10		0.00	0.000	171307	0.258	VV	0.11
42	12.35		0.00	0.000	216854	0.327	VV	0.07
43	12.52		0.00	0.000	192860	0.291	VV	0.09
44	12.73	AR1016#2	1.20	14.061	378859	0.571	VV	0.06
45	13.02		0.00	0.000	405622	0.611	VV	0.08
46	13.49		0.00	0.000	1641839	2.475	VV	0.07
47	13.72		0.00	0.000	341689	0.515	VV	0.09
48	13.85	AR1016#3	0.60	7.023	290778	0.438	VV	0.06
49	14.27	AR1016#4	4.95	58.157	1556831	2.347	VV	0.11
50	16.24		0.00	0.000	21560780	32.498	VV	0.70
51	16.29		0.00	0.000	9949416	14.996	VV	0.35
52	16.84		0.00	0.000	1965818	2.963	VV	0.08

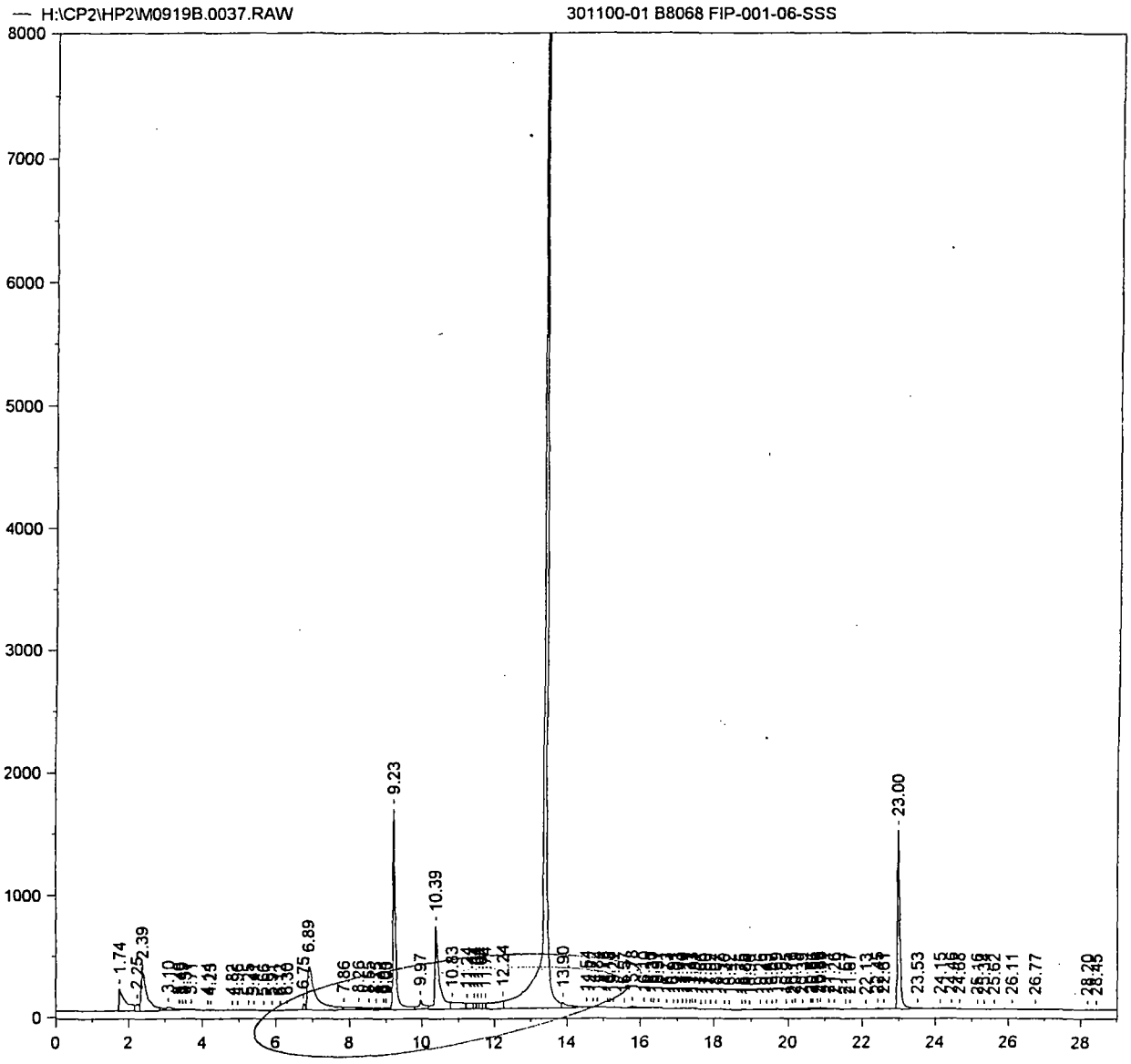
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	17.05		0.00	0.000	2816390	4.245	VV	0.24
54	17.83		0.00	0.000	560566	0.845	VV	0.14
55	18.18		0.00	0.000	556918	0.839	VV	0.26
56	18.84	AR1260#2	0.11	1.244	45689	0.069	VV	0.06
57	18.96		0.00	0.000	40917	0.062	VV	0.07
58	19.06		0.00	0.000	39116	0.059	VV	0.08
59	19.23		0.00	0.000	47396	0.071	VV	0.11
60	19.68		0.00	0.000	19735	0.030	VV	0.07
61	19.83	AR1260#3	0.03	0.382	10761	0.016	VV	0.05
62	19.98		0.00	0.000	5485	0.008	VV	0.05
63	20.09		0.00	0.000	2411	0.004	VB	0.05
64	20.23		0.00	0.000	7632	0.012	BB	0.05
65	20.56		0.00	0.000	1464	0.002	BV	0.11
66	20.67		0.00	0.000	12062	0.018	VV	0.14
67	20.82		0.00	0.000	12502	0.019	VB	0.05
68	21.15	AR1260#4	0.01	0.143	9567	0.014	BV	0.06
69	21.22		0.00	0.000	19577	0.030	VV	0.06
70	21.41		0.00	0.000	15812	0.024	VV	0.12
71	21.53		0.00	0.000	10491	0.016	VV	0.08
72	21.64		0.00	0.000	13622	0.021	VV	0.12
73	21.88		0.00	0.000	9746	0.015	VV	0.05
74	22.07	AR1260#5	0.02	0.271	12317	0.019	VV	0.12
75	22.33		0.00	0.000	21007	0.032	VB	0.09
76	22.77		0.00	0.000	35167	0.053	BV	0.07
77	22.93		0.00	0.000	16993	0.026	VB	0.08
78	23.24		0.00	0.000	1389	0.002	BB	0.06
79	23.54		0.00	0.000	5181	0.008	BB	0.07
80	23.84		0.00	0.000	4811	0.007	BB	0.07
81	24.40		0.00	0.000	245	0.000	BB	0.05
82	24.75		0.00	0.000	610	0.001	BV	0.07
83	25.04		0.00	0.000	28804	0.043	VV	0.07
84	25.36		0.00	0.000	5601	0.008	VB	0.11
85	26.10	CL10BP	0.74	8.653	5213064	7.857	BV	0.08
86	26.88		0.00	0.000	21912	0.033	VB	0.15
87	28.34		0.00	0.000	2916	0.004	BB	0.12
88	28.67		0.00	0.000	6599	0.010	BB	0.14

Total Area = 6.63455E+07 Total Height = 5474084 Total Amount = 8.507541

— H:\CP2\HP2\M0919.0037.RAW 301100-01 B8068 FIP-001-06-SSS



after reintegration
LDT
9/20/02



Before reintegration
excess area under peaks
RDT
9/20/2

50021

Sample Name = **301100-01 B8068 FIP-001-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0037.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/20/02 7:34:32 AM
Method Version = 567
Calibration Version = 5

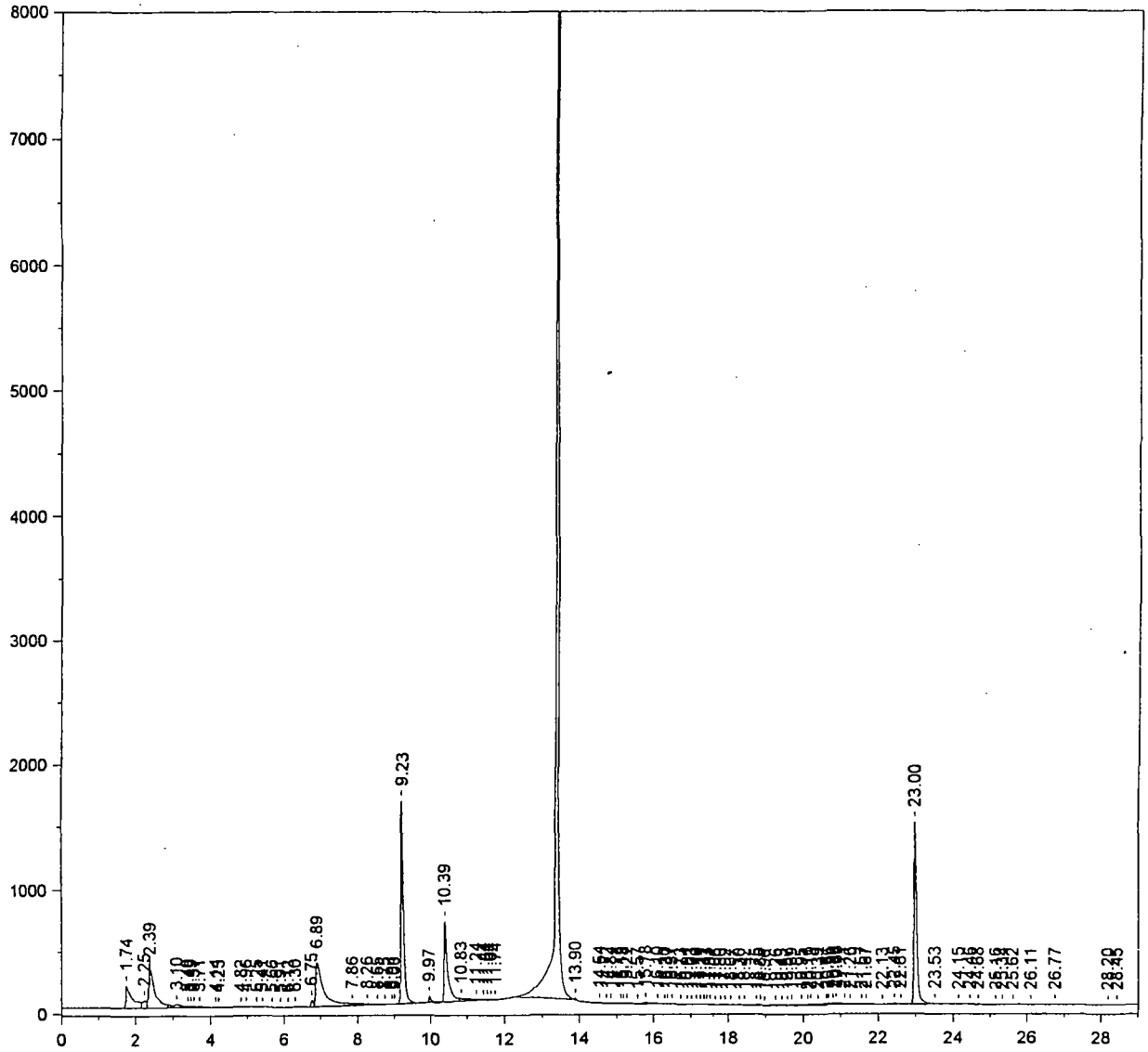
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	2102487	1.855	BV	0.14
2	2.25		0.00	0.000	455097	0.402	VV	0.08
3	2.39		0.00	0.000	3656839	3.227	VV	0.14
4	3.10		0.00	0.000	382378	0.337	VV	0.17
5	3.40		0.00	0.000	44943	0.040	VV	0.05
6	3.49		0.00	0.000	44187	0.039	VV	0.07
7	3.57		0.00	0.000	45861	0.040	VV	0.07
8	3.71		0.00	0.000	109573	0.097	VB	0.16
9	4.14		0.00	0.000	33803	0.030	BV	0.11
10	4.23		0.00	0.000	28554	0.025	VB	0.10
11	4.82		0.00	0.000	10889	0.010	BV	0.09
12	4.96		0.00	0.000	2405	0.002	VB	0.06
13	5.25		0.00	0.000	3173	0.003	BV	0.07
14	5.41		0.00	0.000	3796	0.003	VV	0.08
15	5.66		0.00	0.000	2819	0.002	VV	0.06
16	5.91		0.00	0.000	4078	0.004	VB	0.17
17	6.12		0.00	0.000	21238	0.019	BV	0.07
18	6.30		0.00	0.000	29538	0.026	VB	0.08
19	6.75		0.00	0.000	233440	0.206	BV	0.07
20	6.89		0.00	0.000	5770098	5.092	VV	0.18
21	7.86		0.00	0.000	511203	0.451	VV	0.22
22	8.26		0.00	0.000	268289	0.237	VV	0.14
23	8.55		0.00	0.000	138346	0.122	VV	0.07
24	8.75		0.00	0.000	273353	0.241	VV	0.19
25	8.94		0.00	0.000	53630	0.047	VV	0.04
26	9.00		0.00	0.000	101081	0.089	VV	0.05
27	9.23	CL4XYL	0.79	0.215	8376626	7.392	VV	0.06
28	9.97		0.00	0.000	807403	0.712	VV	0.06
29	10.39	AR1016#1	23.68	6.473	5586674	4.930	VV	0.08
30	10.83		0.00	0.000	1316748	1.162	VV	0.19
31	11.24	AR1016#2	1.27	0.347	551455	0.487	VV	0.12
32	11.44		0.00	0.000	169885	0.150	VV	0.03
33	11.54		0.00	0.000	178344	0.157	VV	0.05
34	11.64		0.00	0.000	291491	0.257	VV	0.05
35	11.74		0.00	0.000	112072	0.099	VV	0.03
36	12.24		0.00	0.000	1617616	1.427	VV	0.17
37	13.42	AR1016#5	339.17	92.709	70635128	62.331	VV	0.06
38	13.90		0.00	0.000	722020	0.637	VV	0.10
39	14.54		0.00	0.000	81988	0.072	VV	0.12
40	14.72		0.00	0.000	29797	0.026	VV	0.06
41	14.84		0.00	0.000	40413	0.036	VV	0.09
42	15.12		0.00	0.000	5107	0.005	VV	0.03
43	15.18		0.00	0.000	5531	0.005	VV	0.04
44	15.27		0.00	0.000	6458	0.006	VB	0.12
45	15.57		0.00	0.000	1548	0.001	BB	0.07
46	15.78		0.00	0.000	128401	0.113	BV	0.17
47	16.10		0.00	0.000	5308	0.005	VB	0.06
48	16.30		0.00	0.000	1204	0.001	BV	0.04
49	16.37		0.00	0.000	5659	0.005	VV	0.08
50	16.51	AR1260#1	0.03	0.007	6948	0.006	VV	0.10
51	16.73	AR1260#2	0.02	0.004	7527	0.007	VB	0.15
52	16.91		0.00	0.000	1755	0.002	BV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	17.03		0.00	0.000	9366	0.008	VV	0.05
54	17.16		0.00	0.000	7494	0.007	VV	0.05
55	17.27		0.00	0.000	2320	0.002	VB	0.06
56	17.37		0.00	0.000	1257	0.001	BV	0.04
57	17.43		0.00	0.000	4210	0.004	VV	0.04
58	17.51		0.00	0.000	8983	0.008	VB	0.07
59	17.66		0.00	0.000	4646	0.004	BV	0.07
60	17.80		0.00	0.000	3310	0.003	VV	0.09
61	17.92		0.00	0.000	2533	0.002	VV	0.08
62	18.07		0.00	0.000	7213	0.006	VB	0.11
63	18.30	AR1260#3	0.01	0.002	3031	0.003	BV	0.06
64	18.42		0.00	0.000	5412	0.005	VB	0.09
65	18.75		0.00	0.000	6729	0.006	BV	0.06
66	18.86		0.00	0.000	2510	0.002	VV	0.06
67	18.96		0.00	0.000	869	0.001	VB	0.04
68	19.26		0.00	0.000	37915	0.033	BV	0.18
69	19.43		0.00	0.000	13630	0.012	VV	0.06
70	19.57	AR1260#4	0.02	0.005	22425	0.020	VV	0.06
71	19.69		0.00	0.000	40014	0.035	VV	0.07
72	19.95		0.00	0.000	39426	0.035	VV	0.07
73	20.11		0.00	0.000	41271	0.036	VV	0.10
74	20.19		0.00	0.000	69030	0.061	VV	0.07
75	20.39		0.00	0.000	61536	0.054	VV	0.10
76	20.61		0.00	0.000	95605	0.084	VV	0.05
77	20.66		0.00	0.000	57447	0.051	VV	0.05
78	20.80		0.00	0.000	52840	0.047	VV	0.06
79	20.88		0.00	0.000	84857	0.075	VV	0.07
80	21.11		0.00	0.000	38130	0.034	VV	0.06
81	21.26		0.00	0.000	53144	0.047	VV	0.14
82	21.57		0.00	0.000	30646	0.027	VV	0.06
83	21.67	AR1260#5	0.13	0.036	38329	0.034	VV	0.12
84	22.13		0.00	0.000	2126	0.002	VB	0.05
85	22.45		0.00	0.000	38077	0.034	BV	0.07
86	22.61		0.00	0.000	7060	0.006	VB	0.06
87	23.00	CL10BP	0.74	0.203	7357008	6.492	SBB	0.07
88	23.53		0.00	0.000	6558	0.006	TBB	0.13
89	24.15		0.00	0.000	1517	0.001	BB	0.11
90	24.46		0.00	0.000	3331	0.003	BV	0.16
91	24.68		0.00	0.000	3546	0.003	VB	0.12
92	25.16		0.00	0.000	3335	0.003	BV	0.08
93	25.34		0.00	0.000	7312	0.006	VV	0.14
94	25.62		0.00	0.000	3915	0.003	VB	0.23
95	26.11		0.00	0.000	1186	0.001	BB	0.19
96	26.77		0.00	0.000	14240	0.013	BB	0.22
97	28.20		0.00	0.000	1955	0.002	BV	0.12
98	28.45		0.00	0.000	837	0.001	VB	0.10

Total Area = 1.133224E+08 Total Height = 2.016931E+07 Total Amount = 365.8397

50023

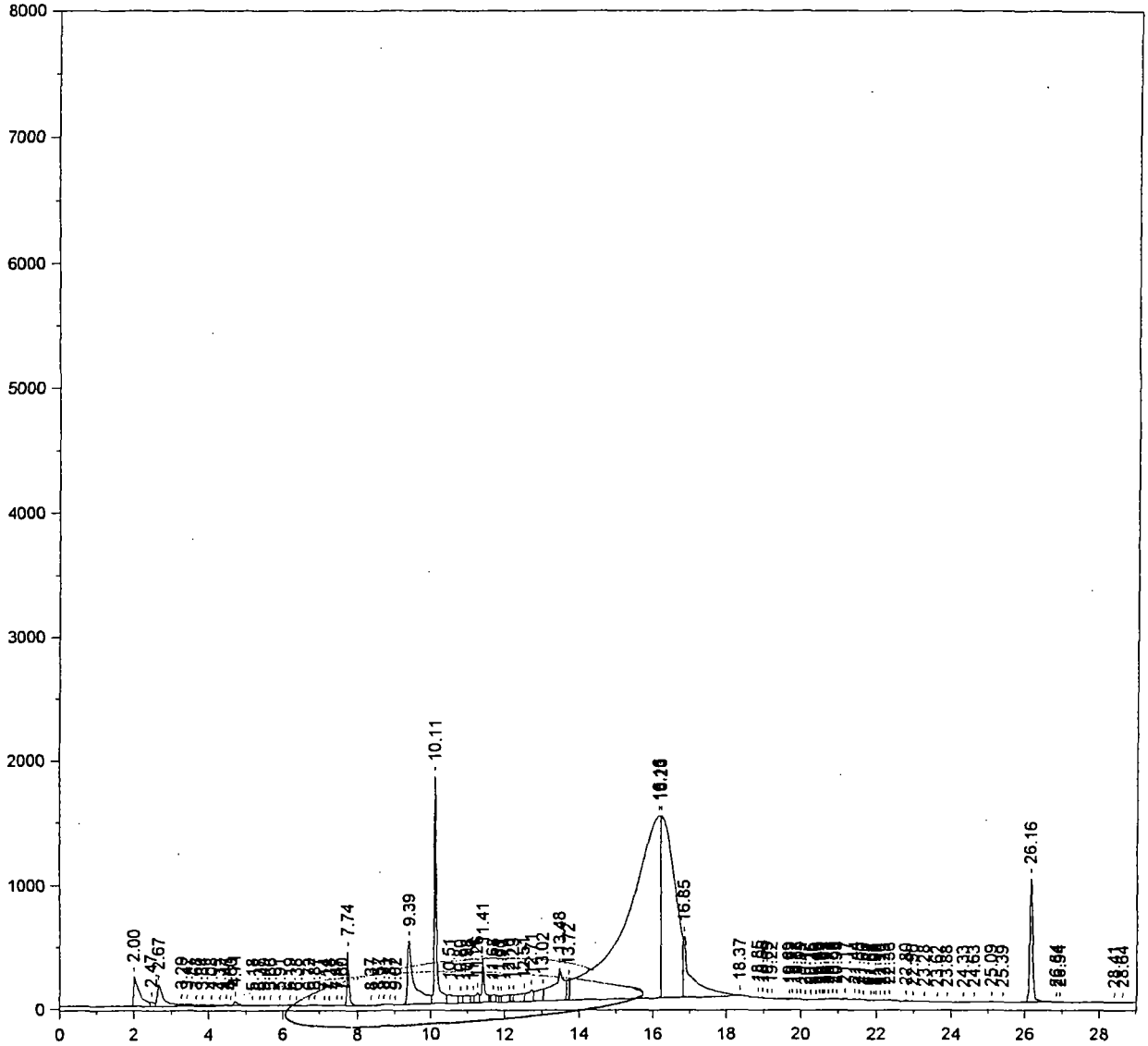
— H:\CP2\HP2\M0919B.0037.RAW 301100-01 B8068 FIP-001-06-SSS



After reintegration
BT
9/20/2

BL
9/20/02

50024



Primary Column

Before reintegration
excess area under peak
RDT
9/23/2

Sample Name = **301100-02 B8068 FIP-004-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN--;285C(15MIN)

Acquisition Port = 1

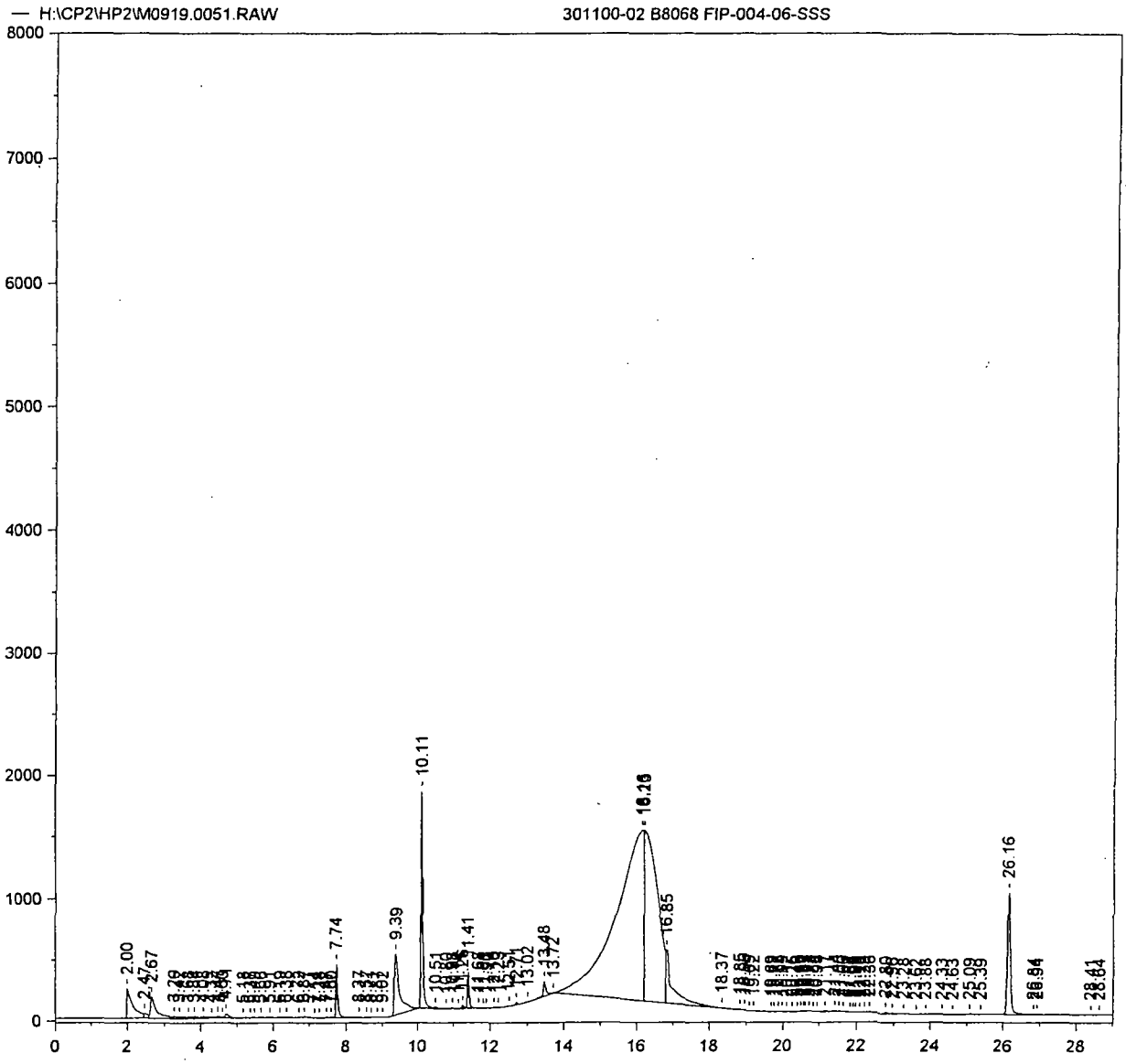
Raw File Name = **H:\CP2\HP2\M0919.0051.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/20/02 5:09:51 PM
Method Version = 618
Calibration Version = 11

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	2680562	1.465	BV	0.15
2	2.47		0.00	0.000	270769	0.148	VV	0.09
3	2.67		0.00	0.000	1936220	1.058	VV	0.12
4	3.29		0.00	0.000	119532	0.065	VV	0.10
5	3.42		0.00	0.000	140020	0.077	VV	0.15
6	3.68		0.00	0.000	59356	0.032	VV	0.07
7	3.84		0.00	0.000	131030	0.072	VV	0.18
8	4.08		0.00	0.000	139121	0.076	VV	0.08
9	4.32		0.00	0.000	41864	0.023	VV	0.07
10	4.47		0.00	0.000	86573	0.047	VV	0.13
11	4.60		0.00	0.000	29546	0.016	VV	0.05
12	4.71		0.00	0.000	306172	0.167	VV	0.09
13	5.18		0.00	0.000	46676	0.026	VV	0.15
14	5.37		0.00	0.000	25717	0.014	VV	0.06
15	5.49		0.00	0.000	30058	0.016	VV	0.11
16	5.66		0.00	0.000	17758	0.010	VV	0.10
17	5.91		0.00	0.000	33626	0.018	VV	0.14
18	6.19		0.00	0.000	13817	0.008	VV	0.11
19	6.38		0.00	0.000	22027	0.012	VB	0.14
20	6.72		0.00	0.000	14919	0.008	BB	0.07
21	6.87		0.00	0.000	18742	0.010	BB	0.06
22	7.14		0.00	0.000	3356	0.002	BV	0.07
23	7.28		0.00	0.000	3859	0.002	VB	0.09
24	7.47		0.00	0.000	16863	0.009	BV	0.06
25	7.60		0.00	0.000	10225	0.006	VV	0.06
26	7.74		0.00	0.000	1724109	0.942	VV	0.05
27	8.37		0.00	0.000	8958	0.005	VB	0.12
28	8.57		0.00	0.000	37128	0.020	BV	0.07
29	8.71		0.00	0.000	20510	0.011	VV	0.06
30	8.87		0.00	0.000	2396	0.001	VB	0.05
31	9.02		0.00	0.000	2917	0.002	BB	0.08
32	9.39		0.00	0.000	6850864	3.743	BV	0.13
33	10.11	CL4XYL	1.00	18.469	7819651	4.273	VV	0.05
34	10.51		0.00	0.000	1245981	0.681	VV	0.12
35	10.80		0.00	0.000	373484	0.204	VV	0.08
36	10.98		0.00	0.000	730819	0.399	VV	0.09
37	11.14		0.00	0.000	369950	0.202	VV	0.07
38	11.26		0.00	0.000	608549	0.333	VV	0.05
39	11.41		0.00	0.000	1847732	1.010	VV	0.05
40	11.68		0.00	0.000	444174	0.243	VV	0.09
41	11.81		0.00	0.000	225028	0.123	VV	0.05
42	11.90		0.00	0.000	236612	0.129	VV	0.04
43	12.10		0.00	0.000	689648	0.377	VV	0.11
44	12.23		0.00	0.000	314667	0.172	VV	0.07
45	12.51		0.00	0.000	1103542	0.603	VV	0.10
46	12.71	AR1016#2	3.45	63.831	1093400	0.597	VV	0.08
47	13.02		0.00	0.000	1357647	0.742	VV	0.10
48	13.48		0.00	0.000	5261589	2.875	VV	0.10
49	13.72		0.00	0.000	871955	0.476	VV	0.06
50	16.16		0.00	0.000	90928176	49.685	VV	0.74
51	16.23		0.00	0.000	38122076	20.831	VV	0.36
52	16.85		0.00	0.000	8333830	4.554	VV	0.09

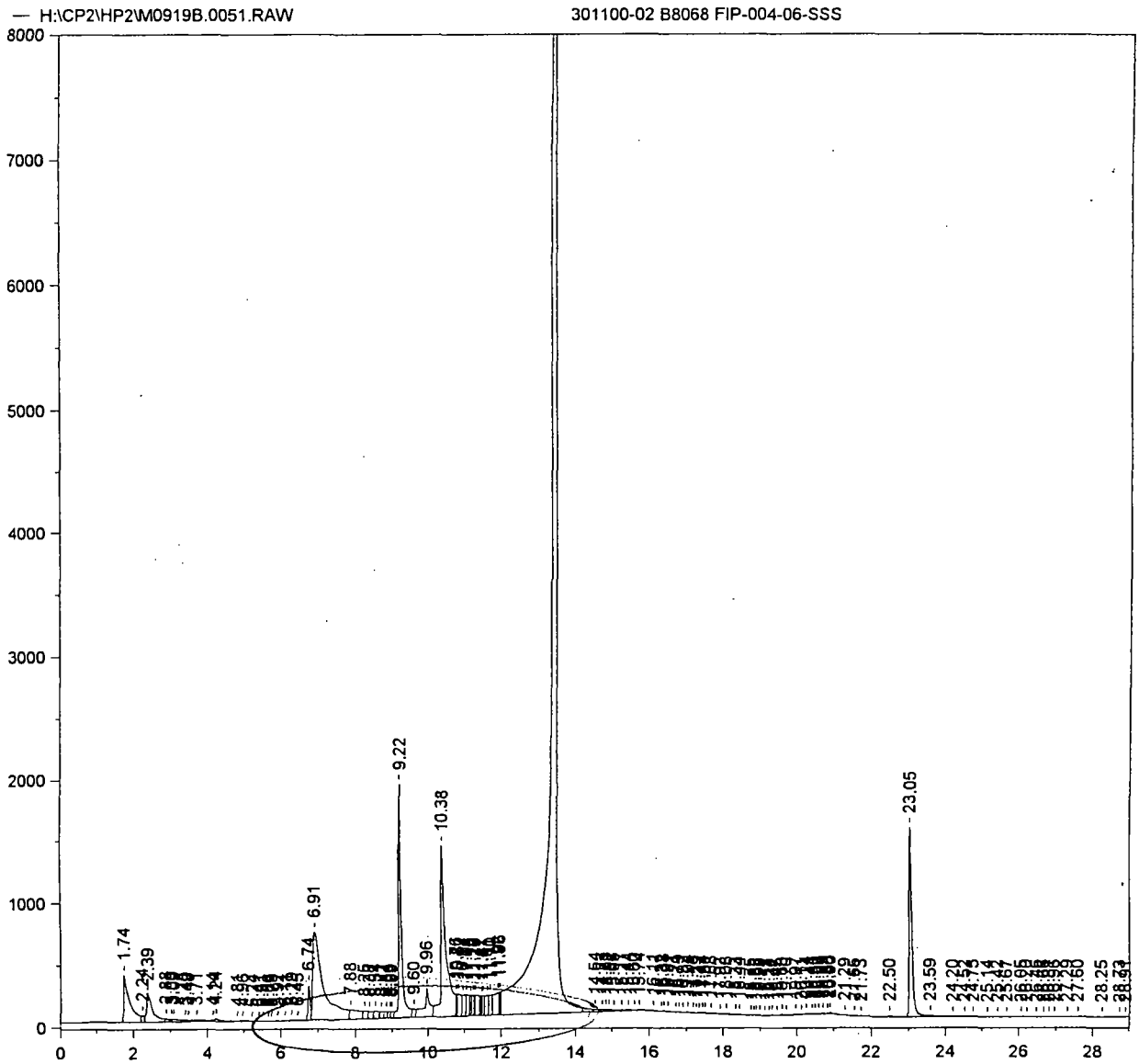
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.37		0.00	0.000	13315	0.007	VB	0.05
54	18.85	AR1260#2	0.02	0.447	10429	0.006	BB	0.06
55	18.96		0.00	0.000	13873	0.008	BB	0.06
56	19.09		0.00	0.000	10667	0.006	BB	0.09
57	19.22		0.00	0.000	13209	0.007	BB	0.13
58	19.69		0.00	0.000	26371	0.014	BV	0.09
59	19.77		0.00	0.000	6175	0.003	VV	0.05
60	19.88	AR1260#3	0.03	0.531	9504	0.005	VV	0.05
61	19.99		0.00	0.000	18191	0.010	VV	0.06
62	20.12		0.00	0.000	3618	0.002	VB	0.10
63	20.26		0.00	0.000	2878	0.002	BB	0.08
64	20.40		0.00	0.000	772	0.000	BV	0.04
65	20.50		0.00	0.000	7715	0.004	VV	0.06
66	20.57		0.00	0.000	5929	0.003	VV	0.04
67	20.63		0.00	0.000	10810	0.006	VV	0.05
68	20.73		0.00	0.000	6236	0.003	VV	0.06
69	20.85		0.00	0.000	17598	0.010	VV	0.07
70	20.95		0.00	0.000	1595	0.001	VB	0.04
71	21.17	AR1260#4	0.07	1.320	56318	0.031	BV	0.11
72	21.44		0.00	0.000	34399	0.019	VB	0.10
73	21.55		0.00	0.000	1367	0.001	BB	0.04
74	21.66		0.00	0.000	6825	0.004	BB	0.11
75	21.84		0.00	0.000	1378	0.001	BV	0.05
76	21.93		0.00	0.000	5600	0.003	VV	0.06
77	21.99		0.00	0.000	8496	0.005	VV	0.05
78	22.10	AR1260#5	0.04	0.658	19019	0.010	VB	0.11
79	22.23		0.00	0.000	209	0.000	BB	0.03
80	22.36		0.00	0.000	26816	0.015	BB	0.09
81	22.80		0.00	0.000	64289	0.035	BV	0.07
82	22.96		0.00	0.000	22110	0.012	VB	0.11
83	23.28		0.00	0.000	1348	0.001	BB	0.07
84	23.62		0.00	0.000	3192	0.002	BB	0.17
85	23.88		0.00	0.000	3987	0.002	BB	0.06
86	24.33		0.00	0.000	1536	0.001	BB	0.14
87	24.63		0.00	0.000	1018	0.001	BB	0.10
88	25.09		0.00	0.000	33104	0.018	BV	0.08
89	25.39		0.00	0.000	17296	0.009	VB	0.17
90	26.16	CL10BP	0.80	14.745	5647363	3.086	BV	0.08
91	26.84		0.00	0.000	13172	0.007	VV	0.05
92	26.94		0.00	0.000	27528	0.015	VB	0.14
93	28.41		0.00	0.000	8267	0.005	BV	0.18
94	28.64		0.00	0.000	3048	0.002	VB	0.13

Total Area = 1.830104E+08 Total Height = 9579992 Total Amount = 5.408716



after integration
RDT
9/23/02

50033



Before reintegration
excess area under peaks
RST
9/23/2

50037

Sample Name = **301100-02 B8068 FIP-004-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0051.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

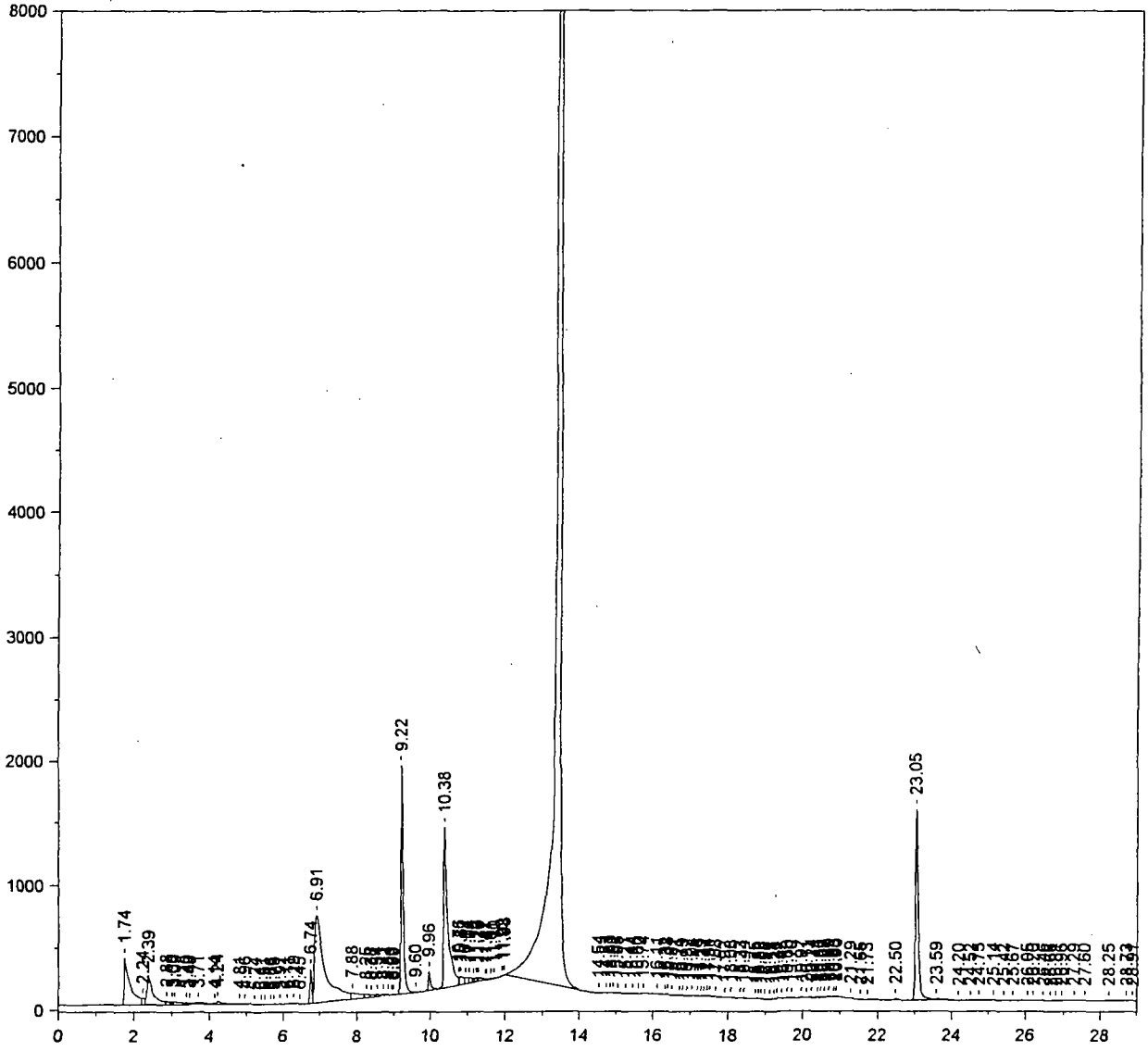
Date Taken (end) = 9/20/02 5:09:51 PM
Method Version = 567
Calibration Version = 7

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	4187760	1.807	BV	0.14
2	2.24		0.00	0.000	289217	0.125	VV	0.07
3	2.39		0.00	0.000	2575993	1.111	VV	0.13
4	2.88		0.00	0.000	173110	0.075	VV	0.08
5	3.03		0.00	0.000	87464	0.038	VV	0.05
6	3.09		0.00	0.000	306618	0.132	VV	0.18
7	3.40		0.00	0.000	82113	0.035	VV	0.05
8	3.48		0.00	0.000	77125	0.033	VV	0.05
9	3.71		0.00	0.000	258535	0.112	VV	0.17
10	4.14		0.00	0.000	82805	0.036	VV	0.09
11	4.24		0.00	0.000	335211	0.145	VV	0.10
12	4.81		0.00	0.000	38385	0.017	VV	0.07
13	4.96		0.00	0.000	40195	0.017	VV	0.11
14	5.24		0.00	0.000	10740	0.005	VV	0.07
15	5.41		0.00	0.000	12726	0.005	VV	0.09
16	5.51		0.00	0.000	7187	0.003	VV	0.06
17	5.66		0.00	0.000	6348	0.003	VV	0.06
18	5.75		0.00	0.000	4310	0.002	VV	0.07
19	5.92		0.00	0.000	6176	0.003	VB	0.05
20	6.11		0.00	0.000	24719	0.011	BV	0.11
21	6.29		0.00	0.000	28772	0.012	VV	0.07
22	6.45		0.00	0.000	3319	0.001	VB	0.06
23	6.74		0.00	0.000	1095116	0.472	BV	0.06
24	6.91		0.00	0.000	14366421	6.198	VV	0.21
25	7.88		0.00	0.000	1504668	0.649	VV	0.16
26	8.25		0.00	0.000	570582	0.246	VV	0.11
27	8.38		0.00	0.000	516662	0.223	VV	0.07
28	8.54		0.00	0.000	543380	0.234	VV	0.06
29	8.71		0.00	0.000	372092	0.161	VV	0.07
30	8.84		0.00	0.000	336462	0.145	VV	0.06
31	8.93		0.00	0.000	284331	0.123	VV	0.05
32	8.99		0.00	0.000	300254	0.130	VV	0.05
33	9.22	CL4XYL	0.92	1.477	9832039	4.242	VV	0.06
34	9.60		0.00	0.000	446906	0.193	VV	0.06
35	9.96		0.00	0.000	2649391	1.143	VV	0.06
36	10.38	AR1016#1	57.56	91.993	13580847	5.860	VV	0.09
37	10.76		0.00	0.000	351553	0.152	VV	0.02
38	10.81		0.00	0.000	1328081	0.573	VV	0.08
39	10.94		0.00	0.000	1155110	0.498	VV	0.09
40	11.04		0.00	0.000	1103472	0.476	VV	0.08
41	11.15		0.00	0.000	395529	0.171	VV	0.03
42	11.22		0.00	0.000	629564	0.272	VV	0.03
43	11.26		0.00	0.000	334387	0.144	VV	0.02
44	11.29	AR1016#2	3.01	4.803	1303835	0.563	VV	0.05
45	11.47		0.00	0.000	283975	0.123	VV	0.02
46	11.51		0.00	0.000	634840	0.274	VV	0.02
47	11.61		0.00	0.000	1090456	0.470	VV	0.08
48	11.70		0.00	0.000	838503	0.362	VV	0.06
49	11.92		0.00	0.000	1896874	0.818	VV	0.07
50	11.96		0.00	0.000	471550	0.203	VV	0.02
51	13.48		0.00	0.000	154711168	66.751	VV	0.12
52	14.54		0.00	0.000	217109	0.094	VV	0.12

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	14.73		0.00	0.000	85932	0.037	VV	0.08
54	14.83		0.00	0.000	95172	0.041	VV	0.06
55	14.92		0.00	0.000	78823	0.034	VV	0.08
56	15.05		0.00	0.000	79787	0.034	VV	0.11
57	15.27		0.00	0.000	56284	0.024	VV	0.12
58	15.44		0.00	0.000	41531	0.018	VV	0.15
59	15.60		0.00	0.000	7562	0.003	VB	0.08
60	15.74		0.00	0.000	4905	0.002	BB	0.07
61	16.11		0.00	0.000	21696	0.009	BB	0.13
62	16.32		0.00	0.000	6079	0.003	BV	0.05
63	16.38		0.00	0.000	24212	0.010	VV	0.06
64	16.51	AR1260#1	0.12	0.197	33130	0.014	VV	0.09
65	16.71		0.00	0.000	8174	0.004	VV	0.04
66	16.79	AR1260#2	0.04	0.064	20110	0.009	VV	0.08
67	16.92		0.00	0.000	13401	0.006	VV	0.07
68	17.04		0.00	0.000	22814	0.010	VV	0.08
69	17.18		0.00	0.000	8857	0.004	VV	0.07
70	17.29		0.00	0.000	3855	0.002	VB	0.05
71	17.37		0.00	0.000	2205	0.001	BV	0.03
72	17.44		0.00	0.000	19022	0.008	VV	0.05
73	17.51		0.00	0.000	27075	0.012	VV	0.07
74	17.68		0.00	0.000	36135	0.016	VV	0.12
75	17.92		0.00	0.000	10738	0.005	VV	0.07
76	18.08		0.00	0.000	43004	0.019	VV	0.12
77	18.33	AR1260#3	0.03	0.043	13910	0.006	VV	0.05
78	18.44		0.00	0.000	34972	0.015	VB	0.11
79	18.75		0.00	0.000	1773	0.001	BV	0.05
80	18.82		0.00	0.000	4397	0.002	VV	0.03
81	18.88		0.00	0.000	11167	0.005	VV	0.06
82	18.98		0.00	0.000	3100	0.001	VB	0.05
83	19.12		0.00	0.000	19720	0.009	BV	0.08
84	19.23		0.00	0.000	14545	0.006	VV	0.05
85	19.32		0.00	0.000	31551	0.014	VV	0.09
86	19.45		0.00	0.000	7954	0.003	VB	0.07
87	19.60	AR1260#4	0.02	0.036	29092	0.013	BV	0.05
88	19.70		0.00	0.000	34338	0.015	VV	0.06
89	19.97		0.00	0.000	32318	0.014	VV	0.06
90	20.11		0.00	0.000	35601	0.015	VV	0.09
91	20.24		0.00	0.000	65610	0.028	VV	0.12
92	20.41		0.00	0.000	68071	0.029	VV	0.09
93	20.50		0.00	0.000	42485	0.018	VV	0.06
94	20.58		0.00	0.000	29983	0.013	VV	0.05
95	20.69		0.00	0.000	74378	0.032	VV	0.05
96	20.83		0.00	0.000	25236	0.011	VV	0.04
97	20.90		0.00	0.000	62978	0.027	VB	0.10
98	21.29		0.00	0.000	20814	0.009	BB	0.15
99	21.55		0.00	0.000	1018	0.000	BB	0.05
100	21.73	AR1260#5	0.04	0.071	12987	0.006	BB	0.17
101	22.50		0.00	0.000	61266	0.026	BB	0.08
102	23.05	CL10BP	0.82	1 315	8170072	3.525	BV	0.07
103	23.59		0.00	0.000	207706	0.090	VV	0.20
104	24.20		0.00	0.000	29882	0.013	VV	0.15
105	24.52		0.00	0.000	13019	0.006	VV	0.12
106	24.75		0.00	0.000	9180	0.004	VB	0.10
107	25.14		0.00	0.000	4616	0.002	BB	0.10
108	25.42		0.00	0.000	11097	0.005	BV	0.12
109	25.67		0.00	0.000	1071	0.000	VB	0.06
110	26.05		0.00	0.000	588	0.000	BV	0.05
111	26.20		0.00	0.000	5309	0 002	VV	0.20
112	26.46		0.00	0.000	2321	0.001	VB	0.10
113	26.66		0.00	0.000	382	0.000	BV	0.06
114	26.81		0.00	0.000	7333	0.003	VV	0.11
115	26.96		0.00	0.000	7417	0.003	VB	0.15
116	27.29		0.00	0.000	276	0.000	BB	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	27.60		0.00	0.000	3231	0.001	BV	0.23
118	28.25		0.00	0.000	22096	0.010	VV	0.16
119	28.73		0.00	0.000	2638	0.001	VV	0.09
120	28.91		0.00	0.000	563	0.000	VB	0.07

Total Area = 2.317726E+08 Total Height = 2.458302E+07 Total Amount = 62.57283



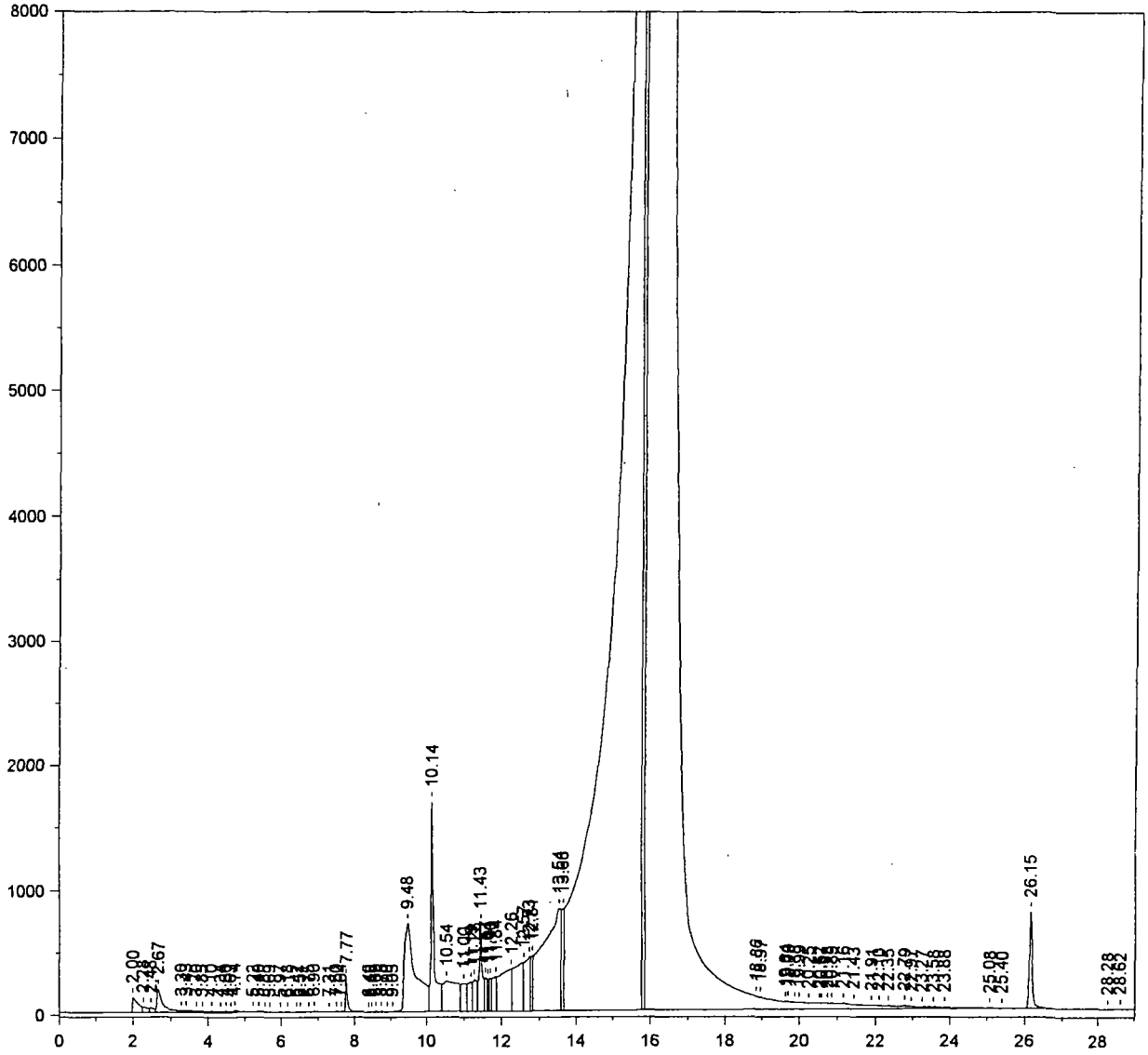
After reintegration
RST
9/23/2

Printed on 9/23/02 9:58:04 AM

Page 1 of 4

50041

— H:\CP2\HP2\M0919.0012.RAW 301100-03 B8068 FIP-002-06-SSS



Primary Column

Before reintegration
excess area under peaks
BT
9/20/2

50048

Sample Name = **301100-03 B8068 FIP-002-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0012.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

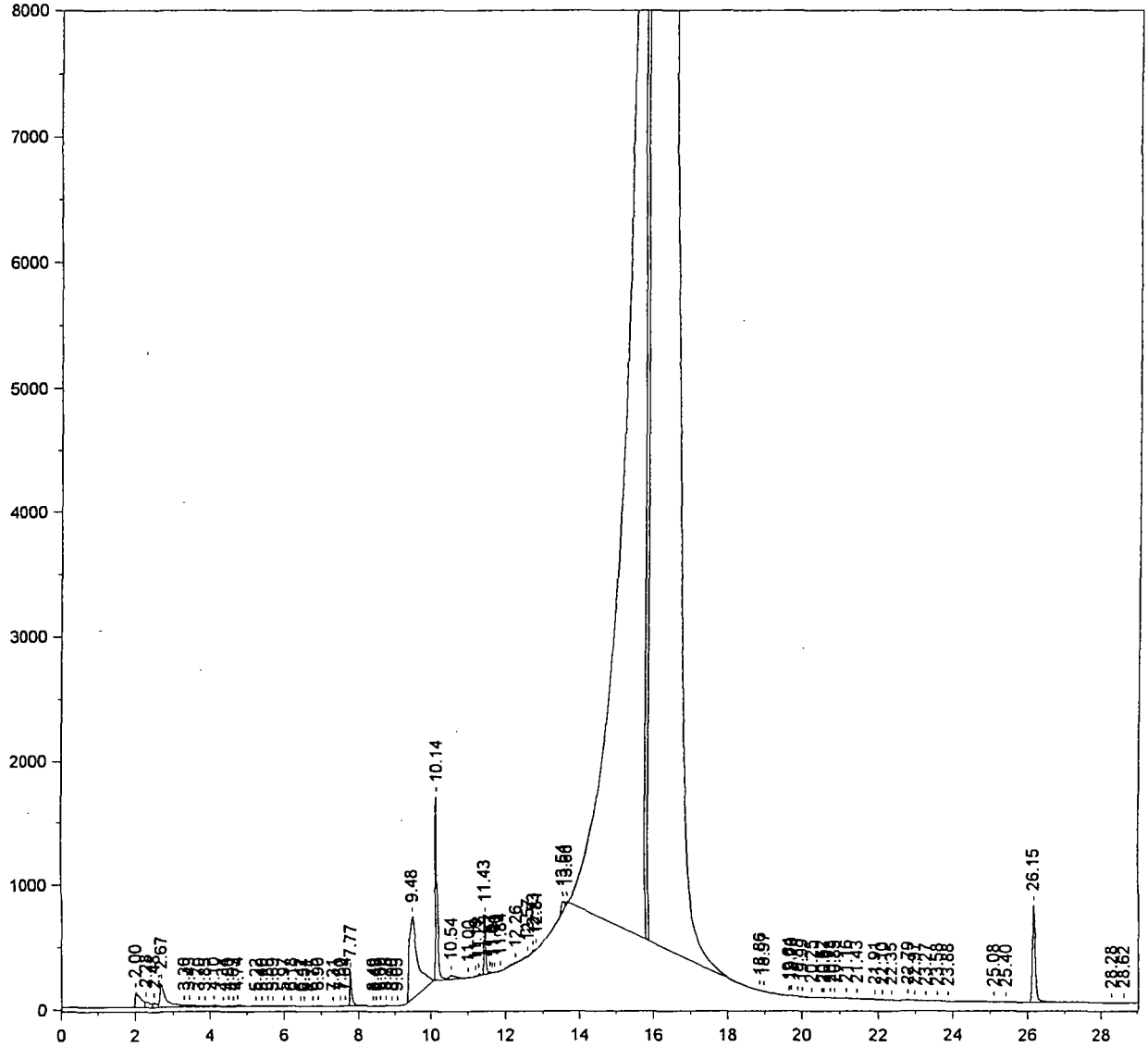
Date Taken (end) = 9/19/02 2:58:09 PM
Method Version = 618
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1248096	0.089	BV	0.18
2	2.28		0.00	0.000	430433	0.031	VV	0.09
3	2.48		0.00	0.000	305488	0.022	VV	0.10
4	2.67		0.00	0.000	2091213	0.150	VV	0.12
5	3.30		0.00	0.000	119943	0.009	VV	0.10
6	3.43		0.00	0.000	174075	0.012	VV	0.16
7	3.70		0.00	0.000	69311	0.005	VV	0.07
8	3.85		0.00	0.000	135722	0.010	VV	0.17
9	4.10		0.00	0.000	146048	0.010	VV	0.08
10	4.34		0.00	0.000	53962	0.004	VV	0.07
11	4.50		0.00	0.000	86957	0.006	VV	0.10
12	4.63		0.00	0.000	32544	0.002	VV	0.05
13	4.74		0.00	0.000	234751	0.017	VV	0.12
14	5.22		0.00	0.000	61984	0.004	VV	0.15
15	5.40		0.00	0.000	28493	0.002	VV	0.06
16	5.55		0.00	0.000	39708	0.003	VV	0.09
17	5.69		0.00	0.000	34764	0.002	VV	0.12
18	5.97		0.00	0.000	47718	0.003	VV	0.16
19	6.18		0.00	0.000	31427	0.002	VV	0.13
20	6.42		0.00	0.000	31128	0.002	VV	0.14
21	6.51		0.00	0.000	21970	0.002	VV	0.09
22	6.75		0.00	0.000	17819	0.001	VV	0.08
23	6.90		0.00	0.000	52558	0.004	VV	0.07
24	7.31		0.00	0.000	13086	0.001	VB	0.21
25	7.50		0.00	0.000	14116	0.001	BV	0.06
26	7.64		0.00	0.000	8352	0.001	VV	0.05
27	7.77		0.00	0.000	1054898	0.076	VV	0.05
28	8.40		0.00	0.000	1692	0.000	VV	0.07
29	8.48		0.00	0.000	884	0.000	VB	0.05
30	8.60		0.00	0.000	28165	0.002	BV	0.07
31	8.75		0.00	0.000	34816	0.002	VV	0.07
32	8.90		0.00	0.000	11149	0.001	VV	0.05
33	9.05		0.00	0.000	15184	0.001	VV	0.06
34	9.48		0.00	0.000	15363242	1.101	VV	0.24
35	10.14	CL4XYL	1.21	5.338	9467428	0.679	VV	0.05
36	10.54		0.00	0.000	6631531	0.475	VV	0.19
37	11.00		0.00	0.000	2252087	0.161	VV	0.12
38	11.19		0.00	0.000	2002313	0.144	VV	0.06
39	11.28		0.00	0.000	2040288	0.146	VV	0.05
40	11.43		0.00	0.000	4146713	0.297	VV	0.05
41	11.57	AR1016#1	6.80	30.016	1207707	0.087	VV	0.04
42	11.64		0.00	0.000	825684	0.059	VV	0.02
43	11.70		0.00	0.000	992128	0.071	VV	0.04
44	11.84		0.00	0.000	2145896	0.154	VV	0.06
45	12.26		0.00	0.000	7400305	0.531	VV	0.22
46	12.57		0.00	0.000	6860575	0.492	VV	0.15
47	12.73	AR1016#2	13.92	61.436	4408127	0.316	VV	0.08
48	12.81		0.00	0.000	1746793	0.125	VV	0.04
49	13.54		0.00	0.000	27663684	1.983	VV	0.28
50	13.66		0.00	0.000	3565509	0.256	VV	0.05
51	15.75		0.00	0.000	469771744	33.678	VV	0.29
52	15.84		0.00	0.000	66872352	4.794	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.52		0.00	0.000	748297472	53.645	SBB	0.76
54	18.86	AR1260#2	0.02	0.072	6997	0.001	TBV	0.05
55	18.97		0.00	0.000	10701	0.001	TVV	0.06
56	19.64		0.00	0.000	4491	0.000	TVV	0.04
57	19.70		0.00	0.000	16137	0.001	TVV	0.07
58	19.88	AR1260#3	0.02	0.090	6764	0.000	TVV	0.09
59	19.99		0.00	0.000	8207	0.001	TVV	0.07
60	20.25		0.00	0.000	4213	0.000	TVV	0.08
61	20.52		0.00	0.000	4524	0.000	TVV	0.04
62	20.57		0.00	0.000	7786	0.001	TVV	0.05
63	20.73		0.00	0.000	7172	0.001	TVV	0.08
64	20.85		0.00	0.000	22965	0.002	TVV	0.12
65	21.16	AR1260#4	0.05	0.213	37994	0.003	TVV	0.11
66	21.43		0.00	0.000	12017	0.001	TVV	0.11
67	21.91		0.00	0.000	6054	0.000	TVV	0.07
68	22.10	AR1260#5	0.04	0.176	21293	0.002	TVV	0.13
69	22.35		0.00	0.000	8292	0.001	TVV	0.10
70	22.79		0.00	0.000	49625	0.004	TVV	0.08
71	22.97		0.00	0.000	17873	0.001	TVV	0.12
72	23.27		0.00	0.000	4248	0.000	TVV	0.16
73	23.58		0.00	0.000	2628	0.000	TVV	0.14
74	23.88		0.00	0.000	5715	0.000	TVV	0.13
75	25.08		0.00	0.000	22936	0.002	TVV	0.08
76	25.40		0.00	0.000	2894	0.000	TVB	0.12
77	26.15	CL10BP	0.60	2.660	4267162	0.306	BB	0.08
78	28.28		0.00	0.000	2525	0.000	BV	0.12
79	28.62		0.00	0.000	4112	0.000	VB	0.19

Total Area = 1.394906E+09 Total Height = 5.360745E+07 Total Amount = 22.65561

Chrom Perfect Chromatogram Report



After reintegration
RDJ
9/20/2

Printed on 9/20/02 9:05:01 AM

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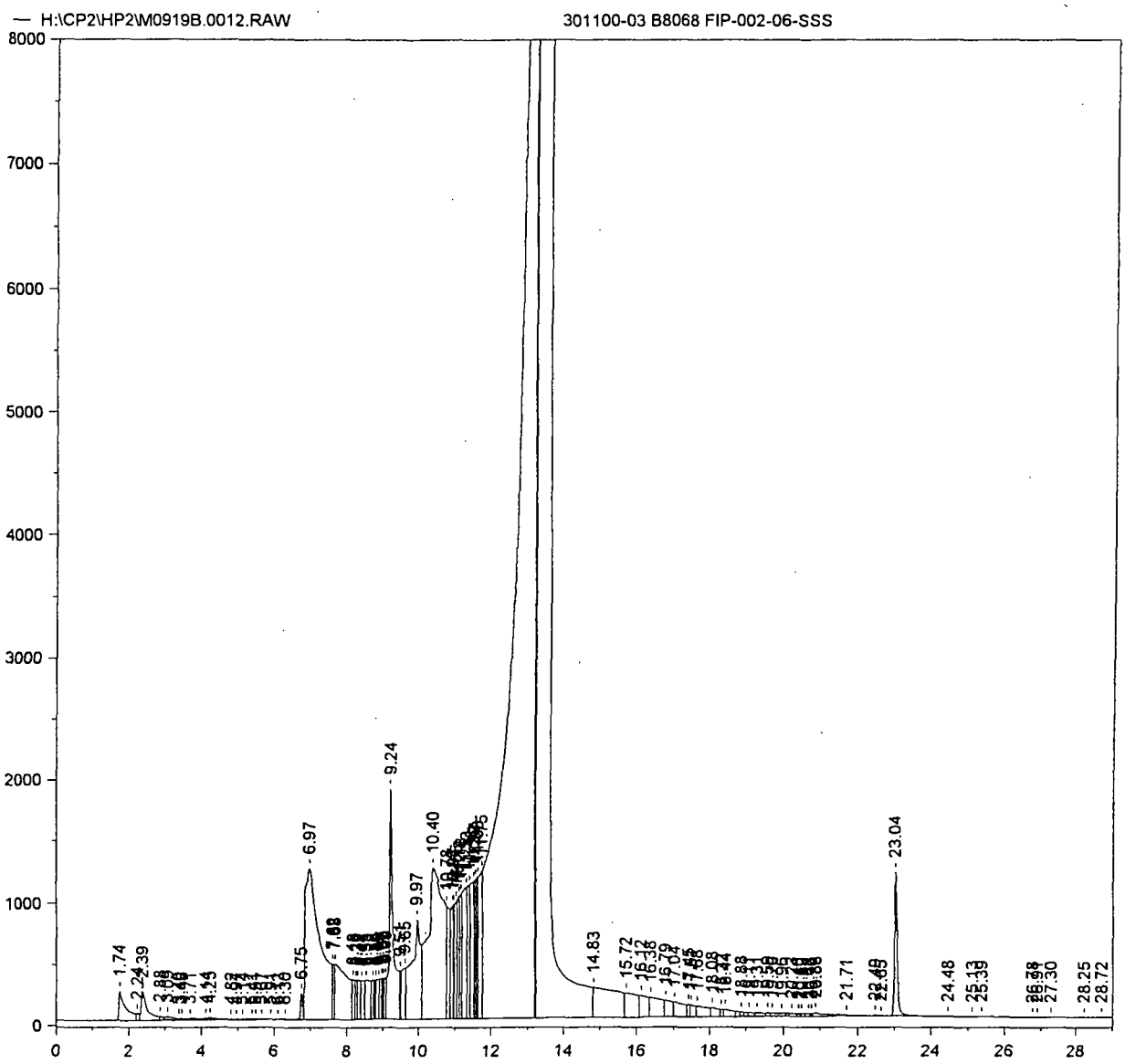


Before reintegration
excess area under peaks
RDT
9/20/2

50056

Sample Name = **301100-03 B8068 FIP-002-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0012.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/19/02 2:58:09 PM
Method Version = 567
Calibration Version = 5

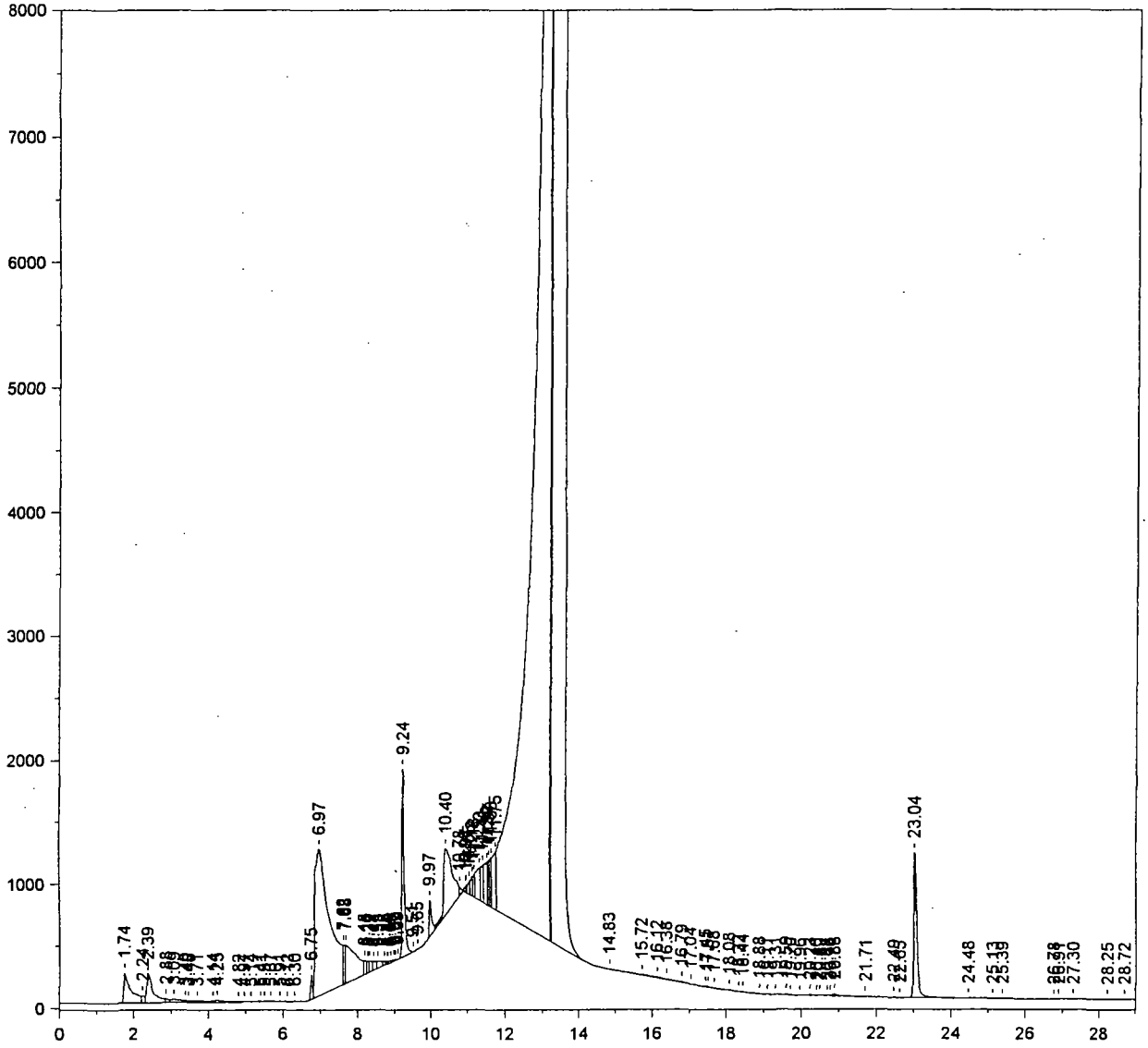
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	3160345	0.313	BV	0.16
2	2.24		0.00	0.000	338016	0.033	VV	0.08
3	2.39		0.00	0.000	2824149	0.280	VV	0.13
4	2.88		0.00	0.000	195012	0.019	VV	0.07
5	3.09		0.00	0.000	479327	0.047	VV	0.25
6	3.40		0.00	0.000	107047	0.011	VV	0.06
7	3.48		0.00	0.000	94995	0.009	VV	0.06
8	3.71		0.00	0.000	324590	0.032	VV	0.18
9	4.14		0.00	0.000	123488	0.012	VV	0.11
10	4.25		0.00	0.000	359755	0.036	VV	0.14
11	4.82		0.00	0.000	68489	0.007	VV	0.07
12	4.97		0.00	0.000	74467	0.007	VV	0.10
13	5.14		0.00	0.000	47432	0.005	VV	0.08
14	5.41		0.00	0.000	39502	0.004	VV	0.10
15	5.51		0.00	0.000	48089	0.005	VV	0.08
16	5.67		0.00	0.000	36440	0.004	VV	0.06
17	5.91		0.00	0.000	42647	0.004	VV	0.13
18	6.12		0.00	0.000	60228	0.006	VV	0.09
19	6.30		0.00	0.000	82621	0.008	VV	0.07
20	6.75		0.00	0.000	866639	0.086	VV	0.06
21	6.97		0.00	0.000	35838392	3.551	VV	0.41
22	7.62		0.00	0.000	1793468	0.178	VV	0.03
23	7.68		0.00	0.000	11096413	1.100	VV	0.24
24	8.18		0.00	0.000	1614123	0.160	VV	0.04
25	8.26		0.00	0.000	1415462	0.140	VV	0.06
26	8.32		0.00	0.000	1848220	0.183	VV	0.05
27	8.44		0.00	0.000	2092386	0.207	VV	0.07
28	8.55		0.00	0.000	3230953	0.320	VV	0.06
29	8.72		0.00	0.000	1392096	0.138	VV	0.05
30	8.80		0.00	0.000	1018694	0.101	VV	0.03
31	8.89		0.00	0.000	1684958	0.167	VV	0.07
32	8.97		0.00	0.000	1515264	0.150	VV	0.05
33	9.00		0.00	0.000	665120	0.066	VV	0.02
34	9.02		0.00	0.000	667291	0.066	VV	0.02
35	9.09		0.00	0.000	1139290	0.113	VV	0.02
36	9.24	CL4XYL	1.45	0.725	15390448	1.525	VV	0.06
37	9.51		0.00	0.000	789219	0.078	VV	0.02
38	9.65		0.00	0.000	3187779	0.316	VV	0.07
39	9.97		0.00	0.000	14107959	1.398	VV	0.11
40	10.40	AR1016#1	156.59	78.514	36945596	3.661	VV	0.41
41	10.78		0.00	0.000	5574008	0.552	VV	0.03
42	10.94		0.00	0.000	4331129	0.429	VV	0.05
43	10.97		0.00	0.000	2031443	0.201	VV	0.02
44	11.05		0.00	0.000	4147749	0.411	VV	0.05
45	11.12		0.00	0.000	4115123	0.408	VV	0.04
46	11.18		0.00	0.000	3416761	0.339	VV	0.03
47	11.33	AR1016#2	21.71	10.887	9419670	0.933	VV	0.09
48	11.41		0.00	0.000	4958685	0.491	VV	0.06
49	11.52		0.00	0.000	7698724	0.763	VV	0.07
50	11.57		0.00	0.000	3598784	0.357	VV	0.03
51	11.63		0.00	0.000	3887709	0.385	VV	0.03
52	11.75		0.00	0.000	8457817	0.838	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	13.17		0.00	0.000	390485472	38.693	VV	0.26
54	13.56		0.00	0.000	367483168	36.414	VV	0.39
55	14.83		0.00	0.000	11385395	1.128	VV	0.41
56	15.72		0.00	0.000	4586030	0.454	VV	0.24
57	16.12		0.00	0.000	2814939	0.279	VV	0.13
58	16.38	AR1260#1	13.46	6.749	3618806	0.359	VV	0.20
59	16.79	AR1260#2	3.87	1.938	1927489	0.191	VV	0.10
60	17.04		0.00	0.000	2602035	0.258	VV	0.19
61	17.45		0.00	0.000	505544	0.050	VV	0.04
62	17.51		0.00	0.000	878170	0.087	VV	0.07
63	17.68		0.00	0.000	1870683	0.185	VV	0.18
64	18.08		0.00	0.000	1022830	0.101	VV	0.13
65	18.32	AR1260#3	0.70	0.350	359467	0.036	VV	0.06
66	18.44		0.00	0.000	960059	0.095	VV	0.11
67	18.88		0.00	0.000	250843	0.025	VV	0.06
68	19.11		0.00	0.000	351825	0.035	VV	0.08
69	19.31		0.00	0.000	505677	0.050	VV	0.14
70	19.59	AR1260#4	0.17	0.083	213950	0.021	VV	0.05
71	19.70		0.00	0.000	330846	0.033	VV	0.09
72	19.96		0.00	0.000	248375	0.025	VV	0.04
73	20.23		0.00	0.000	300337	0.030	VV	0.09
74	20.40		0.00	0.000	150169	0.015	VV	0.06
75	20.49		0.00	0.000	167963	0.017	VV	0.07
76	20.68		0.00	0.000	164527	0.016	VV	0.08
77	20.76		0.00	0.000	94609	0.009	VV	0.05
78	20.88		0.00	0.000	793278	0.079	VV	0.18
79	21.71	AR1260#5	0.87	0.434	251752	0.025	VV	0.30
80	22.49		0.00	0.000	48208	0.005	VV	0.07
81	22.65		0.00	0.000	4263	0.000	VB	0.07
82	23.04	CL10BP	0.64	0.319	6323024	0.627	BV	0.07
83	24.48		0.00	0.000	2335	0.000	VB	0.12
84	25.13		0.00	0.000	5581	0.001	BV	0.13
85	25.39		0.00	0.000	6574	0.001	VB	0.13
86	26.78		0.00	0.000	7436	0.001	BV	0.14
87	26.91		0.00	0.000	7853	0.001	VB	0.16
88	27.30		0.00	0.000	989	0.000	BB	0.14
89	28.25		0.00	0.000	17316	0.002	BV	0.12
90	28.72		0.00	0.000	1955	0.000	VB	0.15

Total Area = 1.009194E+09 Total Height = 5.63235E+07 Total Amount = 199.4474

30058

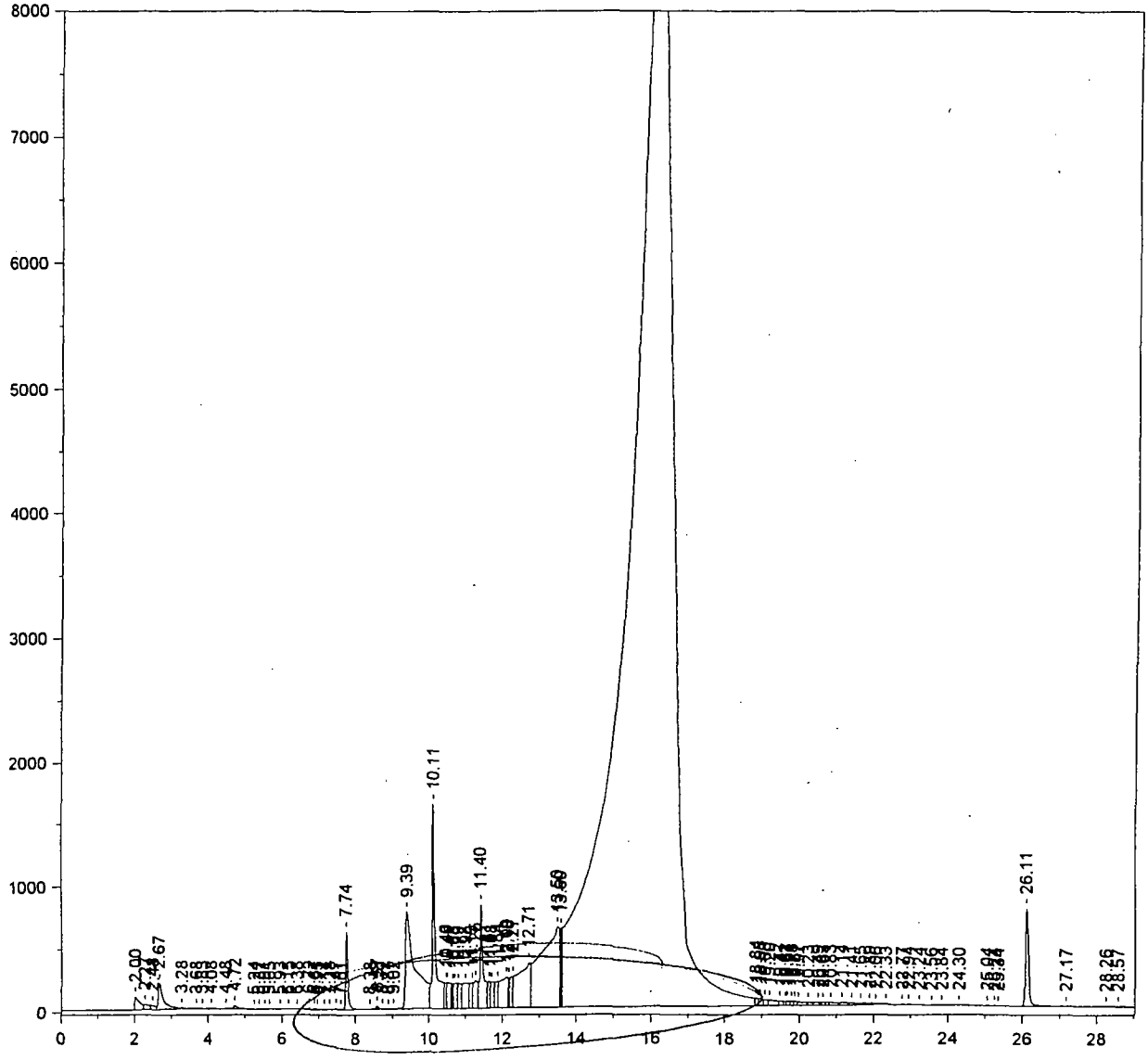
— H:\CP2\HP2\M0919B.0012.RAW 301100-03 B8068 FIP-002-06-SSS



After reintegration
RDT
9/20/2

50059

— H:\CP2\HP2\M0920.0004.RAW 301100-04 B8068 FIP-003-06-SSS



Primary Column

Before reintegration
excess area under peaks
RST 9/23/2

50065

Sample Name = **301100-04 B8068 FIP-003-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

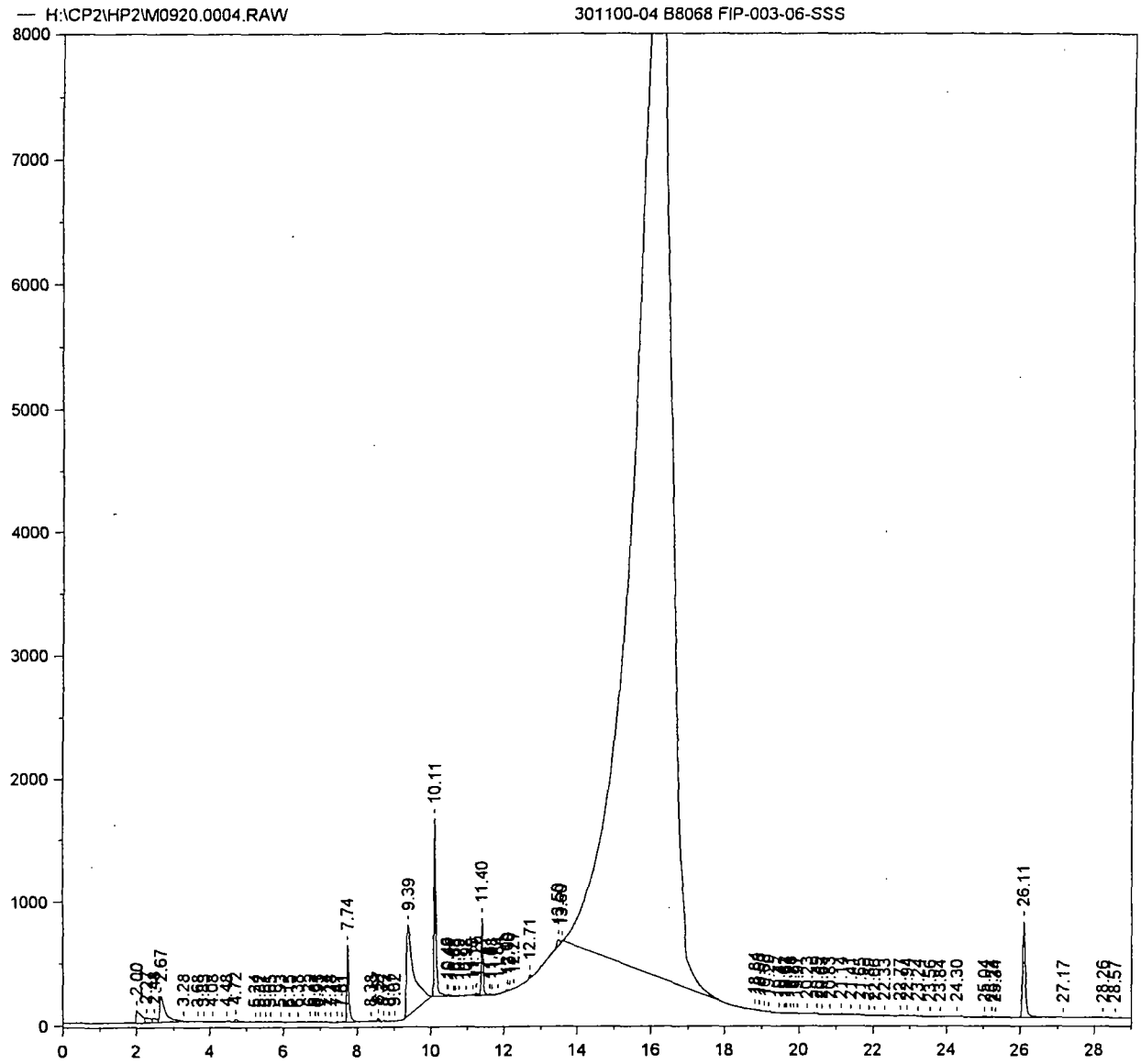
Raw File Name = **H:\CP2\HP2\M0920.0004.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/20/02 9:02:05 PM
Method Version = 618
Calibration Version = 12

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1001269	0.124	BV	0.18
2	2.27		0.00	0.000	416436	0.052	VV	0.11
3	2.48		0.00	0.000	278675	0.034	VV	0.10
4	2.67		0.00	0.000	2161670	0.267	VV	0.13
5	3.28		0.00	0.000	43659	0.005	VB	0.12
6	3.68		0.00	0.000	5885	0.001	BV	0.07
7	3.83		0.00	0.000	16663	0.002	VB	0.18
8	4.08		0.00	0.000	27531	0.003	BB	0.09
9	4.48		0.00	0.000	26228	0.003	BV	0.11
10	4.72		0.00	0.000	177391	0.022	VV	0.11
11	5.24		0.00	0.000	11501	0.001	VV	0.15
12	5.37		0.00	0.000	6036	0.001	VV	0.06
13	5.51		0.00	0.000	6360	0.001	VV	0.11
14	5.65		0.00	0.000	3521	0.000	VB	0.11
15	5.93		0.00	0.000	8914	0.001	BV	0.13
16	6.15		0.00	0.000	8348	0.001	VV	0.12
17	6.38		0.00	0.000	15594	0.002	VV	0.10
18	6.72		0.00	0.000	23476	0.003	VV	0.06
19	6.87		0.00	0.000	31410	0.004	VV	0.06
20	6.95		0.00	0.000	19891	0.002	VV	0.08
21	7.14		0.00	0.000	4854	0.001	VV	0.10
22	7.28		0.00	0.000	5135	0.001	VB	0.10
23	7.47		0.00	0.000	30687	0.004	BV	0.07
24	7.61		0.00	0.000	12675	0.002	VV	0.06
25	7.74		0.00	0.000	2484226	0.307	VV	0.05
26	8.38		0.00	0.000	8358	0.001	VB	0.12
27	8.57		0.00	0.000	106224	0.013	BV	0.07
28	8.72		0.00	0.000	35900	0.004	VV	0.07
29	8.87		0.00	0.000	9374	0.001	VV	0.05
30	9.02		0.00	0.000	16468	0.002	VV	0.08
31	9.39		0.00	0.000	14686061	1.816	VV	0.19
32	10.11	CL4XYL	1.25	3.415	9756722	1.207	VV	0.05
33	10.46		0.00	0.000	871445	0.108	VV	0.04
34	10.49		0.00	0.000	1558333	0.193	VV	0.07
35	10.63		0.00	0.000	725990	0.090	VV	0.04
36	10.68		0.00	0.000	1285253	0.159	VV	0.05
37	10.79		0.00	0.000	1271146	0.157	VV	0.05
38	10.98		0.00	0.000	2354974	0.291	VV	0.10
39	11.15		0.00	0.000	1283962	0.159	VV	0.06
40	11.25		0.00	0.000	1775918	0.220	VV	0.06
41	11.40		0.00	0.000	5078233	0.628	VV	0.05
42	11.61	AR1016#1	6.16	16.877	1093848	0.135	VV	0.04
43	11.68		0.00	0.000	1330515	0.165	VV	0.09
44	11.84		0.00	0.000	1210512	0.150	VV	0.07
45	12.09		0.00	0.000	3814112	0.472	VV	0.11
46	12.16		0.00	0.000	526434	0.065	VV	0.02
47	12.27		0.00	0.000	1523613	0.188	VV	0.06
48	12.71	AR1016#2	26.51	72.630	8394444	1.038	VV	0.16
49	13.50		0.00	0.000	22749738	2.814	VV	0.32
50	13.60		0.00	0.000	2368409	0.293	VV	0.03
51	16.14		0.00	0.000	708061760	87.572	VV	1.03
52	18.84	AR1260#2	0.79	2.169	341848	0.042	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.95		0.00	0.000	422636	0.052	VV	0.08
54	19.08		0.00	0.000	370130	0.046	VV	0.08
55	19.20		0.00	0.000	664600	0.082	VV	0.13
56	19.47		0.00	0.000	278208	0.034	VV	0.08
57	19.62		0.00	0.000	134728	0.017	VV	0.04
58	19.67		0.00	0.000	199183	0.025	VV	0.06
59	19.78		0.00	0.000	164968	0.020	VV	0.05
60	19.87	AR1260#3	0.52	1.430	172754	0.021	VV	0.07
61	19.97		0.00	0.000	427035	0.053	VV	0.09
62	20.23		0.00	0.000	227214	0.028	VV	0.08
63	20.49		0.00	0.000	274177	0.034	VV	0.05
64	20.63		0.00	0.000	173031	0.021	VV	0.07
65	20.83		0.00	0.000	364915	0.045	VV	0.09
66	21.14	AR1260#4	0.40	1.102	317060	0.039	VV	0.09
67	21.41		0.00	0.000	180523	0.022	VV	0.12
68	21.65		0.00	0.000	196765	0.024	VV	0.11
69	21.89		0.00	0.000	108133	0.013	VV	0.12
70	22.06	AR1260#5	0.24	0.665	129700	0.016	VV	0.13
71	22.33		0.00	0.000	97431	0.012	VV	0.11
72	22.77		0.00	0.000	48779	0.006	VV	0.07
73	22.94		0.00	0.000	16697	0.002	VB	0.08
74	23.24		0.00	0.000	3132	0.000	BB	0.13
75	23.56		0.00	0.000	6370	0.001	BB	0.18
76	23.84		0.00	0.000	5541	0.001	BB	0.19
77	24.30		0.00	0.000	8929	0.001	BB	0.30
78	25.04		0.00	0.000	28792	0.004	BV	0.08
79	25.24		0.00	0.000	7536	0.001	VV	0.06
80	25.34		0.00	0.000	9001	0.001	VB	0.12
81	26.11	CL10BP	0.62	1.712	4424820	0.547	SBB	0.08
82	27.17		0.00	0.000	2264	0.000	TBB	0.16
83	28.26		0.00	0.000	9419	0.001	BV	0.25
84	28.57		0.00	0.000	2688	0.000	VB	0.22

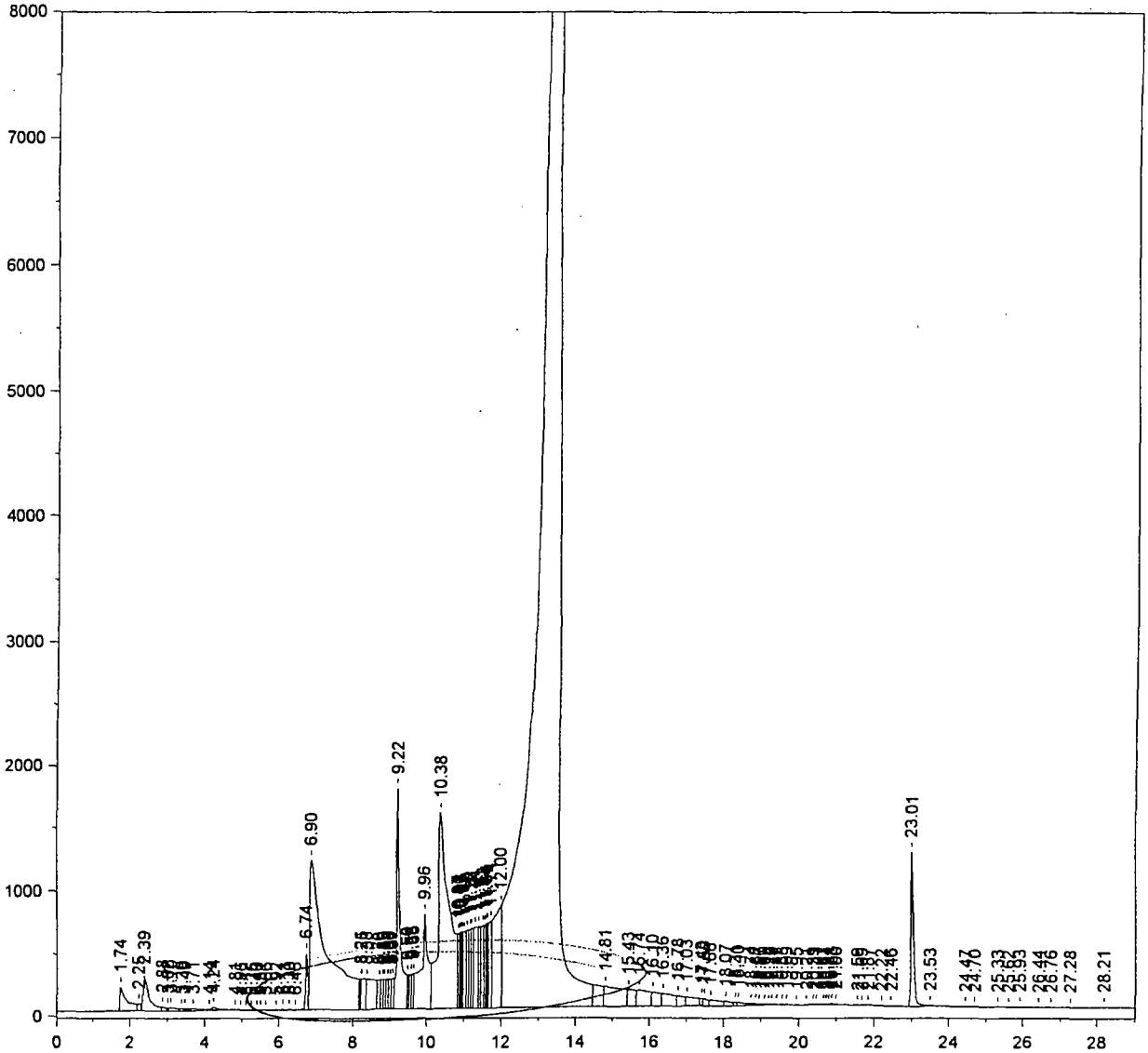
Total Area = 8.085448E+08 Total Height = 1.941533E+07 Total Amount = 36 4941



After reintegration
BT
9/23/2

50068

— H:\CP2\HP2\M0920B.0004.RAW 301100-04 B8068 FIP-003-06-SSS



Before reintegration
excess area under peaks
RT 9/25/2

50073

Sample Name = **301100-04 B8068 FIP-003-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0920B.0004.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

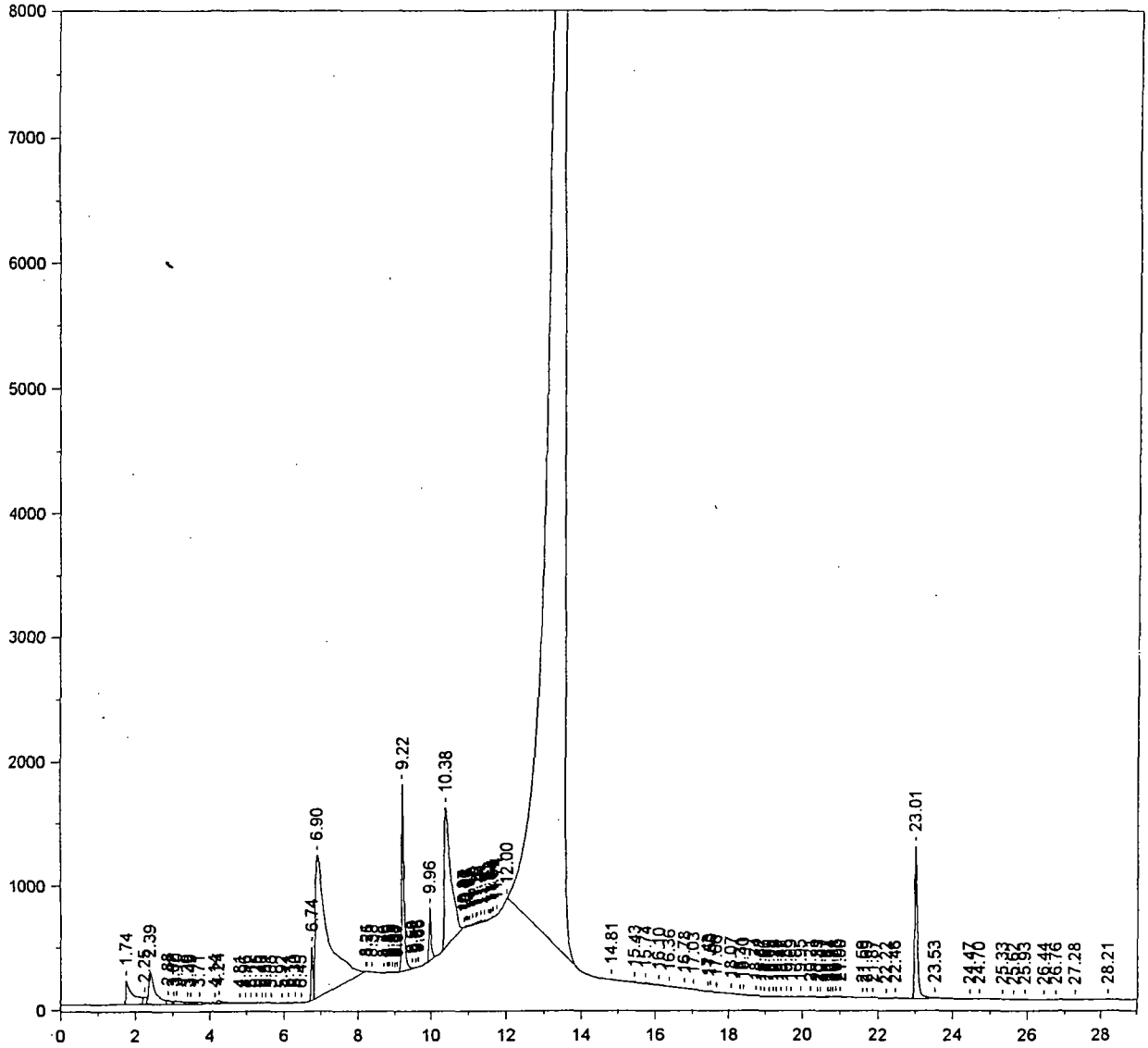
Date Taken (end) = 9/20/02 9:02:05 PM
Method Version = 567
Calibration Version = 8

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	2499667	0.388	BV	0.15
2	2.25		0.00	0.000	345818	0.054	VV	0.06
3	2.39		0.00	0.000	3228286	0.501	VV	0.13
4	2.88		0.00	0.000	223947	0.035	VV	0.08
5	3.02		0.00	0.000	86570	0.013	VV	0.04
6	3.10		0.00	0.000	380081	0.059	VV	0.18
7	3.39		0.00	0.000	102507	0.016	VV	0.05
8	3.49		0.00	0.000	91677	0.014	VV	0.07
9	3.71		0.00	0.000	308108	0.048	VV	0.17
10	4.14		0.00	0.000	104241	0.016	VV	0.10
11	4.24		0.00	0.000	379421	0.059	VV	0.12
12	4.81		0.00	0.000	46988	0.007	VV	0.07
13	4.96		0.00	0.000	45209	0.007	VV	0.10
14	5.12		0.00	0.000	21238	0.003	VV	0.08
15	5.26		0.00	0.000	13559	0.002	VV	0.07
16	5.40		0.00	0.000	15459	0.002	VV	0.09
17	5.51		0.00	0.000	16698	0.003	VV	0.07
18	5.66		0.00	0.000	20341	0.003	VV	0.13
19	5.92		0.00	0.000	9479	0.001	VB	0.06
20	6.11		0.00	0.000	30111	0.005	BV	0.08
21	6.30		0.00	0.000	37345	0.006	VV	0.08
22	6.45		0.00	0.000	3715	0.001	VV	0.06
23	6.74		0.00	0.000	1721119	0.267	VV	0.06
24	6.90		0.00	0.000	38374848	5.950	VV	0.27
25	8.21		0.00	0.000	729287	0.113	VV	0.03
26	8.25		0.00	0.000	2081460	0.323	VV	0.10
27	8.38		0.00	0.000	3897037	0.604	VV	0.16
28	8.70		0.00	0.000	1299544	0.201	VV	0.06
29	8.80		0.00	0.000	1216483	0.189	VV	0.06
30	8.85		0.00	0.000	938783	0.146	VV	0.04
31	8.93		0.00	0.000	941843	0.146	VV	0.05
32	9.00		0.00	0.000	901733	0.140	VV	0.03
33	9.07		0.00	0.000	1145653	0.178	VV	0.05
34	9.22	CL4XYL	1.17	0.750	12458147	1.932	VV	0.06
35	9.50		0.00	0.000	802718	0.124	VV	0.04
36	9.58		0.00	0.000	1023163	0.159	VV	0.04
37	9.65		0.00	0.000	1149901	0.178	VV	0.04
38	9.96		0.00	0.000	10309698	1.598	VV	0.06
39	10.38	AR1016#1	140.34	89.862	33111606	5.134	VV	0.19
40	10.87		0.00	0.000	1530694	0.237	VV	0.02
41	10.90		0.00	0.000	1432590	0.222	VV	0.02
42	10.94		0.00	0.000	1086971	0.169	VV	0.02
43	10.97		0.00	0.000	1455324	0.226	VV	0.03
44	11.01		0.00	0.000	2547448	0.395	VV	0.06
45	11.10		0.00	0.000	2579712	0.400	VV	0.05
46	11.18		0.00	0.000	2485855	0.385	VV	0.03
47	11.22		0.00	0.000	2522814	0.391	VV	0.05
48	11.31	AR1016#2	11.48	7.351	4980300	0.772	VV	0.10
49	11.41		0.00	0.000	2832053	0.439	VV	0.04
50	11.52		0.00	0.000	2853221	0.442	VV	0.04
51	11.57		0.00	0.000	1702432	0.264	VV	0.02
52	11.61		0.00	0.000	1730537	0.268	VV	0.03

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	11.64		0.00	0.000	1209081	0.187	VV	0.02
54	11.74		0.00	0.000	3806071	0.590	VV	0.03
55	12.00		0.00	0.000	11952553	1.853	VV	0.11
56	13.53		0.00	0.000	450995872	69.924	VV	0.35
57	14.81		0.00	0.000	5512028	0.855	VV	0.29
58	15.43		0.00	0.000	1900495	0.295	VV	0.13
59	15.74		0.00	0.000	2951133	0.458	VV	0.23
60	16.10		0.00	0.000	1732481	0.269	VV	0.14
61	16.36		0.00	0.000	2232083	0.346	VV	0.22
62	16.78	AR1260#2	2.16	1.383	1077139	0.167	VV	0.10
63	17.03		0.00	0.000	1521414	0.236	VV	0.20
64	17.43		0.00	0.000	262237	0.041	VV	0.05
65	17.50		0.00	0.000	534097	0.083	VV	0.07
66	17.66		0.00	0.000	931919	0.144	VV	0.22
67	18.07		0.00	0.000	482314	0.075	VV	0.13
68	18.31	AR1260#3	0.27	0.170	137090	0.021	VV	0.06
69	18.40		0.00	0.000	403348	0.063	VV	0.12
70	18.74		0.00	0.000	90942	0.014	VV	0.07
71	18.87		0.00	0.000	73034	0.011	VV	0.06
72	18.96		0.00	0.000	60594	0.009	VV	0.06
73	19.09		0.00	0.000	71399	0.011	VV	0.08
74	19.22		0.00	0.000	43836	0.007	VV	0.04
75	19.29		0.00	0.000	57737	0.009	VV	0.07
76	19.42		0.00	0.000	44915	0.007	VV	0.08
77	19.58	AR1260#4	0.03	0.022	44136	0.007	VV	0.05
78	19.69		0.00	0.000	48107	0.007	VV	0.05
79	19.95		0.00	0.000	34909	0.005	VV	0.05
80	20.21		0.00	0.000	47253	0.007	VV	0.10
81	20.39		0.00	0.000	28695	0.004	VV	0.07
82	20.47		0.00	0.000	29685	0.005	VV	0.05
83	20.67		0.00	0.000	33679	0.005	VV	0.05
84	20.74		0.00	0.000	11196	0.002	VV	0.04
85	20.81		0.00	0.000	19552	0.003	VV	0.04
86	20.88		0.00	0.000	50285	0.008	VV	0.07
87	21.00		0.00	0.000	13659	0.002	VB	0.08
88	21.59		0.00	0.000	16850	0.003	BV	0.10
89	21.69	AR1260#5	0.08	0.052	23413	0.004	VV	0.09
90	21.87		0.00	0.000	8512	0.001	VB	0.08
91	22.22		0.00	0.000	20793	0.003	BV	0.25
92	22.46		0.00	0.000	35575	0.006	VB	0.07
93	23.01	CL10BP	0.64	0.410	6364028	0.987	SBB	0.07
94	23.53		0.00	0.000	15607	0.002	TBB	0.19
95	24.47		0.00	0.000	6664	0.001	BV	0.17
96	24.70		0.00	0.000	5093	0.001	VB	0.17
97	25.33		0.00	0.000	41022	0.006	BV	0.32
98	25.62		0.00	0.000	4827	0.001	VV	0.09
99	25.93		0.00	0.000	41566	0.006	VB	0.43
100	26.44		0.00	0.000	849	0.000	BB	0.10
101	26.76		0.00	0.000	4790	0.001	BB	0.12
102	27.28		0.00	0.000	5323	0.001	BB	0.30
103	28.21		0.00	0.000	87865	0.014	BB	0.32

Total Area = 6.449809E+08 Total Height = 3.672893E+07 Total Amount = 156.1773

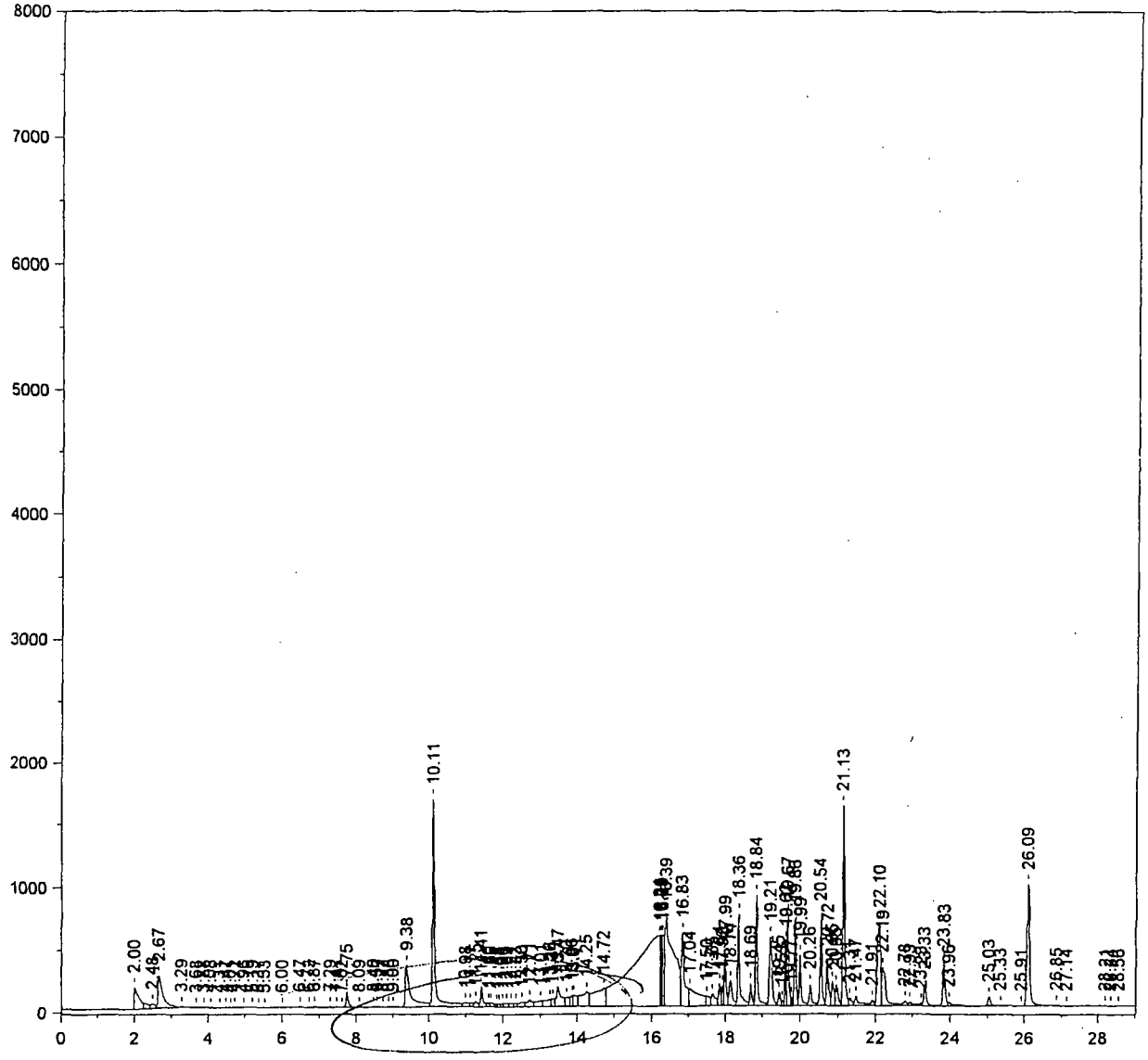
— H:\CP2\HP2\M0920B.0004.RAW 301100-04 B8068 FIP-003-06-SSS



After reintegration
RDT
9/23/02

50076

— H:\CP2\HP2\M0919.0016.RAW 301100-01MS B8068 FIP-001-06-SSSMS



Primary Column

Before reintegration
excess area under peaks

BT
9/20/2

50345

Sample Name = **301100-01MS B8068 FIP-001-06-SSSMS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0016.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/19/02 5:50:34 PM
Method Version = 618
Calibration Version = 9

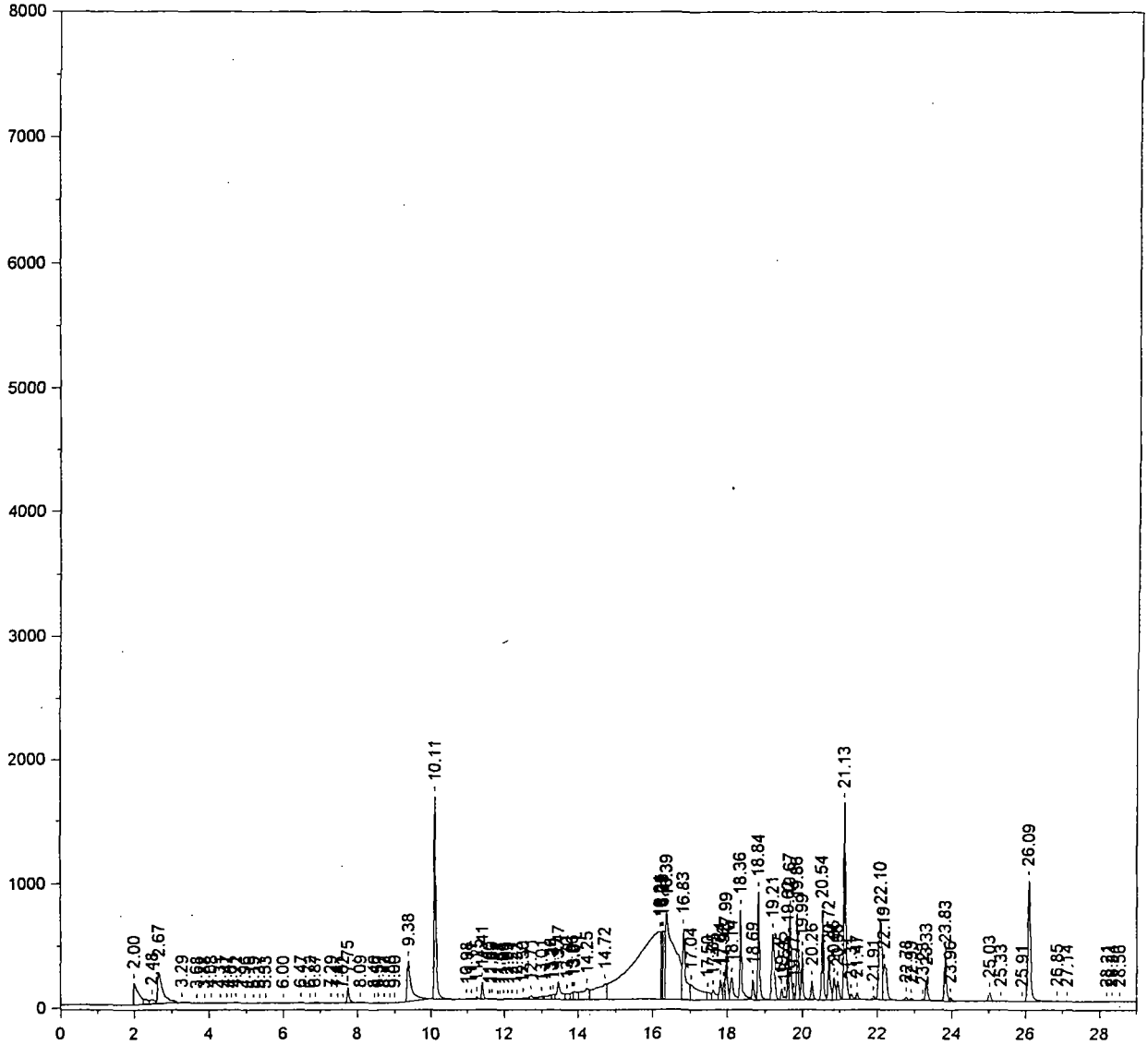
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1545582	1.122	BV	0.14
2	2.48		0.00	0.000	322321	0.234	VV	0.09
3	2.67		0.00	0.000	2596967	1.886	VV	0.12
4	3.29		0.00	0.000	48315	0.035	VB	0.15
5	3.68		0.00	0.000	5352	0.004	BB	0.08
6	3.88		0.00	0.000	21300	0.015	BV	0.14
7	4.08		0.00	0.000	28707	0.021	VV	0.07
8	4.31		0.00	0.000	12759	0.009	VV	0.14
9	4.47		0.00	0.000	22041	0.016	VV	0.11
10	4.61		0.00	0.000	13941	0.010	VV	0.06
11	4.72		0.00	0.000	58196	0.042	VV	0.12
12	4.96		0.00	0.000	543	0.000	VB	0.05
13	5.19		0.00	0.000	32768	0.024	BV	0.17
14	5.37		0.00	0.000	3331	0.002	VB	0.06
15	5.53		0.00	0.000	9126	0.007	BB	0.13
16	6.00		0.00	0.000	56288	0.041	BV	0.31
17	6.47		0.00	0.000	63964	0.046	VV	0.21
18	6.72		0.00	0.000	34815	0.025	VV	0.10
19	6.87		0.00	0.000	91232	0.066	VV	0.10
20	7.29		0.00	0.000	55430	0.040	VV	0.21
21	7.47		0.00	0.000	19350	0.014	VV	0.05
22	7.62		0.00	0.000	15645	0.011	VV	0.06
23	7.75		0.00	0.000	528673	0.384	VV	0.06
24	8.09		0.00	0.000	62766	0.046	VV	0.25
25	8.46		0.00	0.000	27814	0.020	VV	0.14
26	8.57		0.00	0.000	48147	0.035	VV	0.07
27	8.72		0.00	0.000	18461	0.013	VV	0.07
28	8.88		0.00	0.000	19464	0.014	VV	0.07
29	9.00		0.00	0.000	28518	0.021	VV	0.09
30	9.38		0.00	0.000	3687756	2.678	VV	0.11
31	10.11	CL4XYL	0.94	1.921	7388362	5.365	VV	0.05
32	10.98		0.00	0.000	390199	0.283	VV	0.12
33	11.11		0.00	0.000	184300	0.134	VV	0.08
34	11.25		0.00	0.000	317637	0.231	VV	0.05
35	11.41		0.00	0.000	808974	0.587	VV	0.05
36	11.60	AR1016#1	1.09	2.223	193990	0.141	VV	0.06
37	11.66		0.00	0.000	234284	0.170	VV	0.06
38	11.81		0.00	0.000	106335	0.077	VV	0.03
39	11.88		0.00	0.000	141773	0.103	VV	0.06
40	11.98		0.00	0.000	132769	0.096	VV	0.04
41	12.09		0.00	0.000	273271	0.198	VV	0.09
42	12.21		0.00	0.000	223460	0.162	VV	0.05
43	12.33		0.00	0.000	165669	0.120	VV	0.06
44	12.50		0.00	0.000	470429	0.342	VV	0.12
45	12.71	AR1016#2	1.87	3.806	592156	0.430	VV	0.07
46	13.01		0.00	0.000	651837	0.473	VV	0.09
47	13.26		0.00	0.000	682730	0.496	VV	0.07
48	13.34		0.00	0.000	357653	0.260	VV	0.06
49	13.47		0.00	0.000	1546655	1.123	VV	0.06
50	13.70		0.00	0.000	572630	0.416	VV	0.10
51	13.86		0.00	0.000	430711	0.313	VV	0.04
52	13.91	AR1016#3	1.48	3.023	722737	0.525	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	14.25	AR1016#4	5.57	11.339	1752845	1.273	VV	0.11
54	14.72		0.00	0.000	3259675	2.367	VV	0.14
55	16.21		0.00	0.000	29626634	21.512	VV	0.64
56	16.25		0.00	0.000	1577611	1.146	VV	0.03
57	16.29		0.00	0.000	2135205	1.550	VV	0.05
58	16.39		0.00	0.000	12314571	8.942	VV	0.13
59	16.83		0.00	0.000	3793045	2.754	VV	0.06
60	17.04		0.00	0.000	2893346	2.101	VV	0.15
61	17.50		0.00	0.000	548903	0.399	VV	0.06
62	17.65		0.00	0.000	775472	0.563	VV	0.05
63	17.84		0.00	0.000	753279	0.547	VV	0.05
64	17.92		0.00	0.000	530128	0.385	VV	0.05
65	17.99	AR1260#1	7.65	15.580	1523291	1.106	VV	0.05
66	18.14		0.00	0.000	1261484	0.916	VV	0.07
67	18.36		0.00	0.000	3012515	2.187	VV	0.05
68	18.69		0.00	0.000	750954	0.545	VV	0.05
69	18.84	AR1260#2	7.61	15.487	3285419	2.386	VV	0.05
70	19.21		0.00	0.000	3061339	2.223	VV	0.08
71	19.45		0.00	0.000	419931	0.305	VV	0.05
72	19.53		0.00	0.000	152170	0.110	VV	0.04
73	19.62		0.00	0.000	1323889	0.961	VV	0.04
74	19.67		0.00	0.000	2731278	1.983	VV	0.06
75	19.77		0.00	0.000	192661	0.140	VV	0.04
76	19.86	AR1260#3	7.17	14.585	2372320	1.723	VV	0.05
77	19.99		0.00	0.000	1550835	1.126	VV	0.05
78	20.26		0.00	0.000	821051	0.596	VV	0.05
79	20.54		0.00	0.000	2654099	1.927	VV	0.05
80	20.72		0.00	0.000	1449055	1.052	VV	0.05
81	20.85		0.00	0.000	889351	0.646	VV	0.05
82	20.95		0.00	0.000	810300	0.588	VV	0.08
83	21.13	AR1260#4	7.47	15.203	5889367	4.276	VV	0.05
84	21.31		0.00	0.000	362514	0.263	VV	0.06
85	21.47		0.00	0.000	722869	0.525	VV	0.06
86	21.91		0.00	0.000	245634	0.178	VV	0.06
87	22.10	AR1260#5	7.49	15.255	4005427	2.908	VV	0.10
88	22.19		0.00	0.000	2306516	1.675	VV	0.11
89	22.78		0.00	0.000	265372	0.193	VV	0.07
90	22.93		0.00	0.000	244337	0.177	VV	0.07
91	23.23		0.00	0.000	97177	0.071	VV	0.05
92	23.33		0.00	0.000	928727	0.674	VV	0.06
93	23.83		0.00	0.000	1607001	1.167	VV	0.07
94	23.96		0.00	0.000	506724	0.368	VV	0.08
95	25.03		0.00	0.000	440081	0.320	VV	0.07
96	25.33		0.00	0.000	104180	0.076	VV	0.17
97	25.91		0.00	0.000	23816	0.017	VV	0.06
98	26.09	CL10BP	0.77	1.578	5488050	3.985	VV	0.08
99	26.85		0.00	0.000	86966	0.063	VV	0.16
100	27.14		0.00	0.000	91932	0.067	VV	0.25
101	28.21		0.00	0.000	4716	0.003	VV	0.08
102	28.34		0.00	0.000	7443	0.005	VV	0.15
103	28.56		0.00	0.000	2365	0.002	VB	0.17

Total Area = 1.37722E+08 Total Height = 1.951321E+07 Total Amount = 49.12722

50347

— H:\CP2\HP2\M0919.0016.RAW 301100-01MS B8068 FIP-001-06-SSSMS

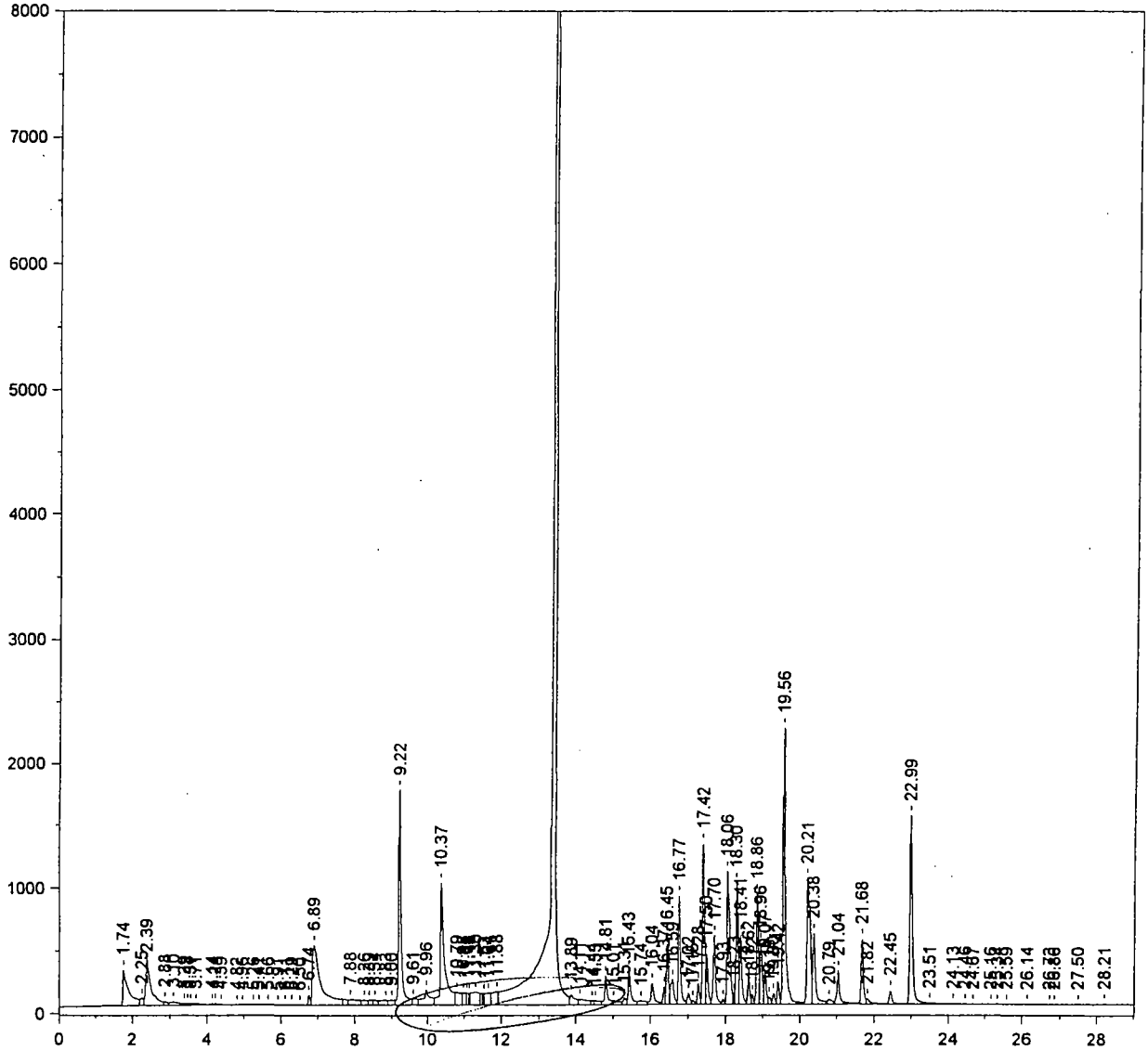


After reintegration
AJT
9/20/02
BL 9/20/02

Primary Column

50348

— H:\CP2\HP2\M0919B.0016.RAW 301100-01MS B8068 FIP-001-06-SSSMS



Before reintegration
excess area under peaks
BJ
9/20/02

50352

Sample Name = **301100-01MS B8068 FIP-001-06-SSSMS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0016.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/19/02 5:50:34 PM
Method Version = 567
Calibration Version = 5

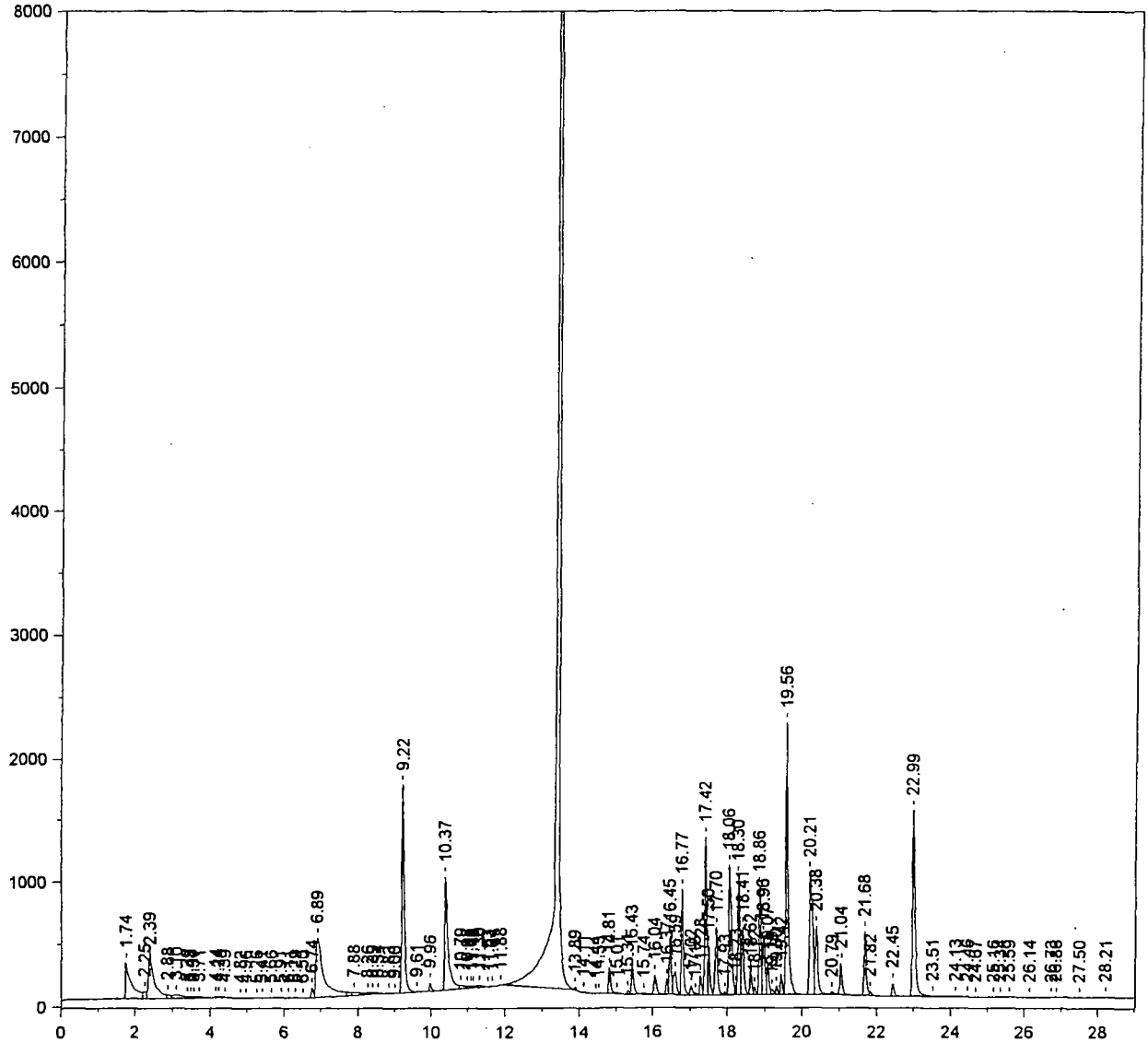
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	3143677	1.431	BV	0.13
2	2.25		0.00	0.000	373801	0.170	VV	0.06
3	2.39		0.00	0.000	3642123	1.658	VV	0.13
4	2.88		0.00	0.000	170483	0.078	VV	0.07
5	3.10		0.00	0.000	406283	0.185	VV	0.25
6	3.39		0.00	0.000	59755	0.027	VV	0.05
7	3.48		0.00	0.000	59634	0.027	VV	0.05
8	3.57		0.00	0.000	45716	0.021	VV	0.06
9	3.71		0.00	0.000	113391	0.052	VV	0.13
10	4.14		0.00	0.000	39662	0.018	VV	0.10
11	4.24		0.00	0.000	43026	0.020	VV	0.10
12	4.39		0.00	0.000	5497	0.003	VB	0.06
13	4.82		0.00	0.000	8973	0.004	BB	0.08
14	4.96		0.00	0.000	3501	0.002	BB	0.07
15	5.26		0.00	0.000	3736	0.002	BV	0.08
16	5.41		0.00	0.000	5973	0.003	VB	0.10
17	5.66		0.00	0.000	4703	0.002	BV	0.08
18	5.91		0.00	0.000	8891	0.004	VV	0.19
19	6.11		0.00	0.000	42870	0.020	VV	0.08
20	6.29		0.00	0.000	43653	0.020	VV	0.07
21	6.50		0.00	0.000	5763	0.003	VV	0.05
22	6.74		0.00	0.000	347473	0.158	VV	0.06
23	6.89		0.00	0.000	7629850	3.473	VV	0.17
24	7.88		0.00	0.000	828270	0.377	VV	0.20
25	8.26		0.00	0.000	422239	0.192	VV	0.12
26	8.39		0.00	0.000	315251	0.143	VV	0.11
27	8.54		0.00	0.000	276124	0.126	VV	0.08
28	8.83		0.00	0.000	559932	0.255	VV	0.19
29	9.00		0.00	0.000	429276	0.195	VV	0.05
30	9.22	CL4XYL	0.82	0.150	8683206	3.952	VV	0.06
31	9.61		0.00	0.000	455876	0.207	VV	0.07
32	9.96		0.00	0.000	1629259	0.742	VV	0.06
33	10.37	AR1016#1	33.71	6.204	7953683	3.620	VV	0.08
34	10.79		0.00	0.000	1133227	0.516	VV	0.12
35	10.98		0.00	0.000	617498	0.281	VV	0.05
36	11.08		0.00	0.000	370360	0.169	VV	0.03
37	11.13		0.00	0.000	258604	0.118	VV	0.02
38	11.30	AR1016#2	3.45	0.635	1497123	0.681	VV	0.10
39	11.53		0.00	0.000	310905	0.142	VV	0.05
40	11.64		0.00	0.000	983379	0.448	VV	0.10
41	11.88		0.00	0.000	1151369	0.524	VV	0.11
42	13.43	AR1016#5	468.38	86.198	97546168	44.396	VV	0.08
43	13.89		0.00	0.000	771315	0.351	VV	0.07
44	14.11		0.00	0.000	753354	0.343	VV	0.16
45	14.44		0.00	0.000	134172	0.061	VV	0.05
46	14.53		0.00	0.000	333207	0.152	VV	0.09
47	14.81		0.00	0.000	1300252	0.592	VV	0.06
48	15.01		0.00	0.000	401131	0.183	VV	0.08
49	15.31		0.00	0.000	295484	0.134	VV	0.08
50	15.43		0.00	0.000	1447923	0.659	VV	0.06
51	15.74		0.00	0.000	448939	0.204	VV	0.16
52	16.04		0.00	0.000	1156915	0.527	VV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.37		0.00	0.000	531941	0.242	VV	0.06
54	16.45	AR1260#1	6.83	1.256	1834859	0.835	VV	0.05
55	16.59		0.00	0.000	1285690	0.585	VV	0.11
56	16.77	AR1260#2	6.97	1.283	3476319	1.582	VV	0.05
57	17.02		0.00	0.000	471163	0.214	VV	0.06
58	17.15		0.00	0.000	154167	0.070	VV	0.06
59	17.28		0.00	0.000	675886	0.308	VV	0.06
60	17.42		0.00	0.000	5037931	2.293	VV	0.06
61	17.50		0.00	0.000	1489451	0.678	VV	0.05
62	17.70		0.00	0.000	2530378	1.152	VV	0.06
63	17.93		0.00	0.000	182556	0.083	VV	0.05
64	18.06		0.00	0.000	5726440	2.606	VV	0.09
65	18.23		0.00	0.000	221282	0.101	VV	0.03
66	18.30	AR1260#3	7.02	1.292	3617661	1.646	VV	0.05
67	18.41		0.00	0.000	2286928	1.041	VV	0.06
68	18.62		0.00	0.000	789186	0.359	VV	0.05
69	18.72		0.00	0.000	310540	0.141	VV	0.05
70	18.86		0.00	0.000	3272242	1.489	VV	0.06
71	18.96		0.00	0.000	2009953	0.915	VV	0.05
72	19.07		0.00	0.000	1106552	0.504	VV	0.06
73	19.18		0.00	0.000	262732	0.120	VV	0.07
74	19.30		0.00	0.000	387226	0.176	VV	0.05
75	19.42		0.00	0.000	734533	0.334	VV	0.05
76	19.56	AR1260#4	7.52	1.384	9704617	4.417	VV	0.05
77	20.21		0.00	0.000	5890816	2.681	VV	0.10
78	20.38		0.00	0.000	3356928	1.528	VV	0.08
79	20.79		0.00	0.000	323315	0.147	VV	0.06
80	21.04		0.00	0.000	1660883	0.756	VV	0.06
81	21.68	AR1260#5	7.90	1.453	2295401	1.045	VV	0.06
82	21.82		0.00	0.000	466393	0.212	VV	0.08
83	22.45		0.00	0.000	594115	0.270	VV	0.07
84	22.99	CL10BP	0.78	0.144	7785196	3.543	VV	0.07
85	23.51		0.00	0.000	292681	0.133	VV	0.19
86	24.13		0.00	0.000	64634	0.029	VV	0.15
87	24.46		0.00	0.000	41618	0.019	VV	0.13
88	24.67		0.00	0.000	51935	0.024	VV	0.14
89	25.16		0.00	0.000	10457	0.005	VV	0.08
90	25.34		0.00	0.000	31417	0.014	VV	0.13
91	25.59		0.00	0.000	17586	0.008	VV	0.20
92	26.14		0.00	0.000	5289	0.002	VB	0.29
93	26.73		0.00	0.000	6523	0.003	BV	0.16
94	26.86		0.00	0.000	4651	0.002	VB	0.15
95	27.50		0.00	0.000	491	0.000	BB	0.09
96	28.21		0.00	0.000	45406	0.021	BB	0.15

Total Area = 2.197189E+08 Total Height = 3.623376E+07 Total Amount = 543.3782

50354

— H:\CP2\HP2\M0919B.0016.RAW 301100-01MS B8068 FIP-001-06-SSSMS

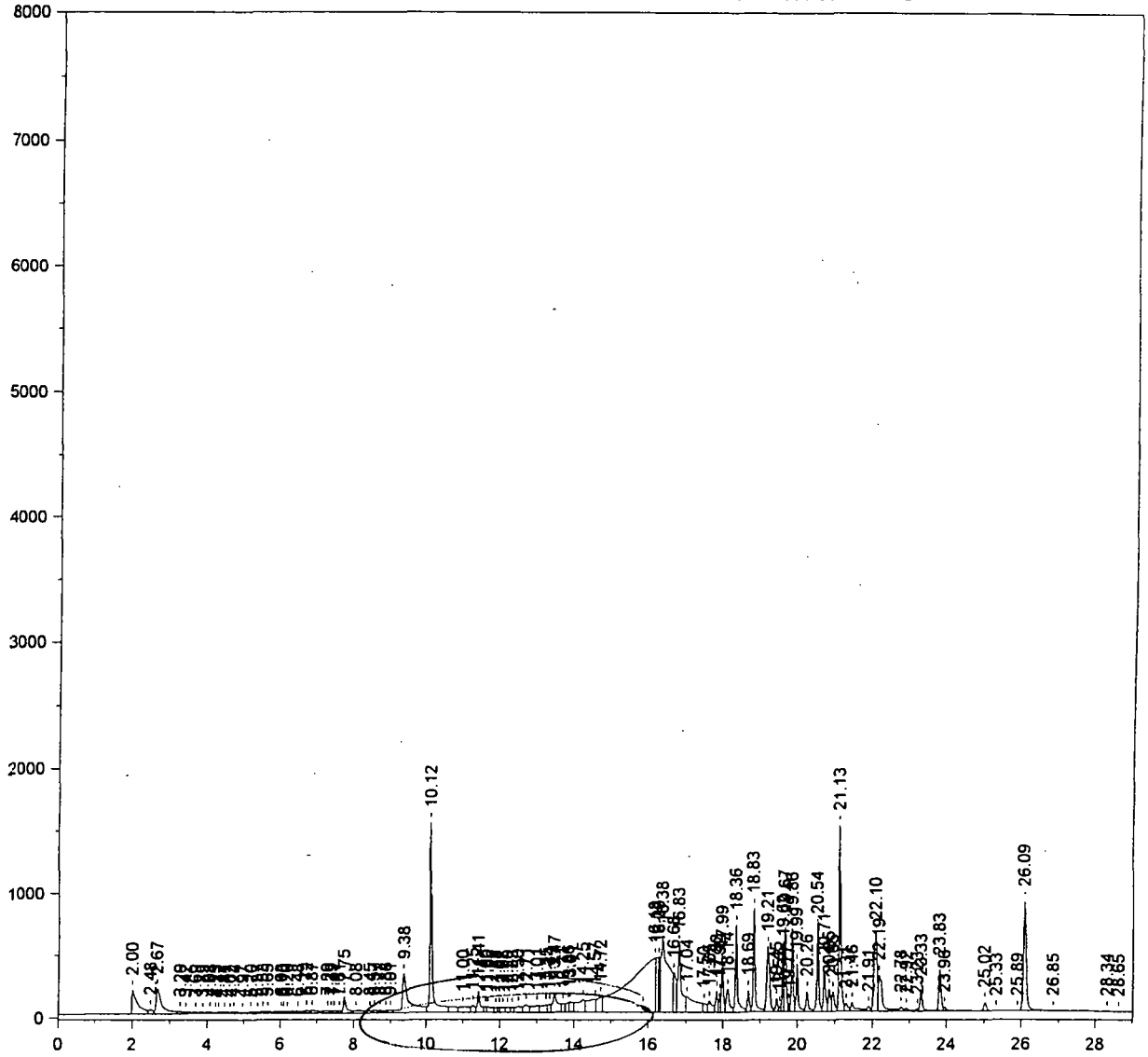


After reintegration
BJT
9/20/2

BL
9/20/02

50355

— H:\CP2\HP2\M0919.0018.RAW 301100-01MD B8068 FIP-001-06-SSSMSD



Primary Column

Before reintegration
excess area under peak
KJT
9/20/2

50361

Sample Name = **301100-01MD B8068 FIP-001-06-SSSMSD**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0018.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

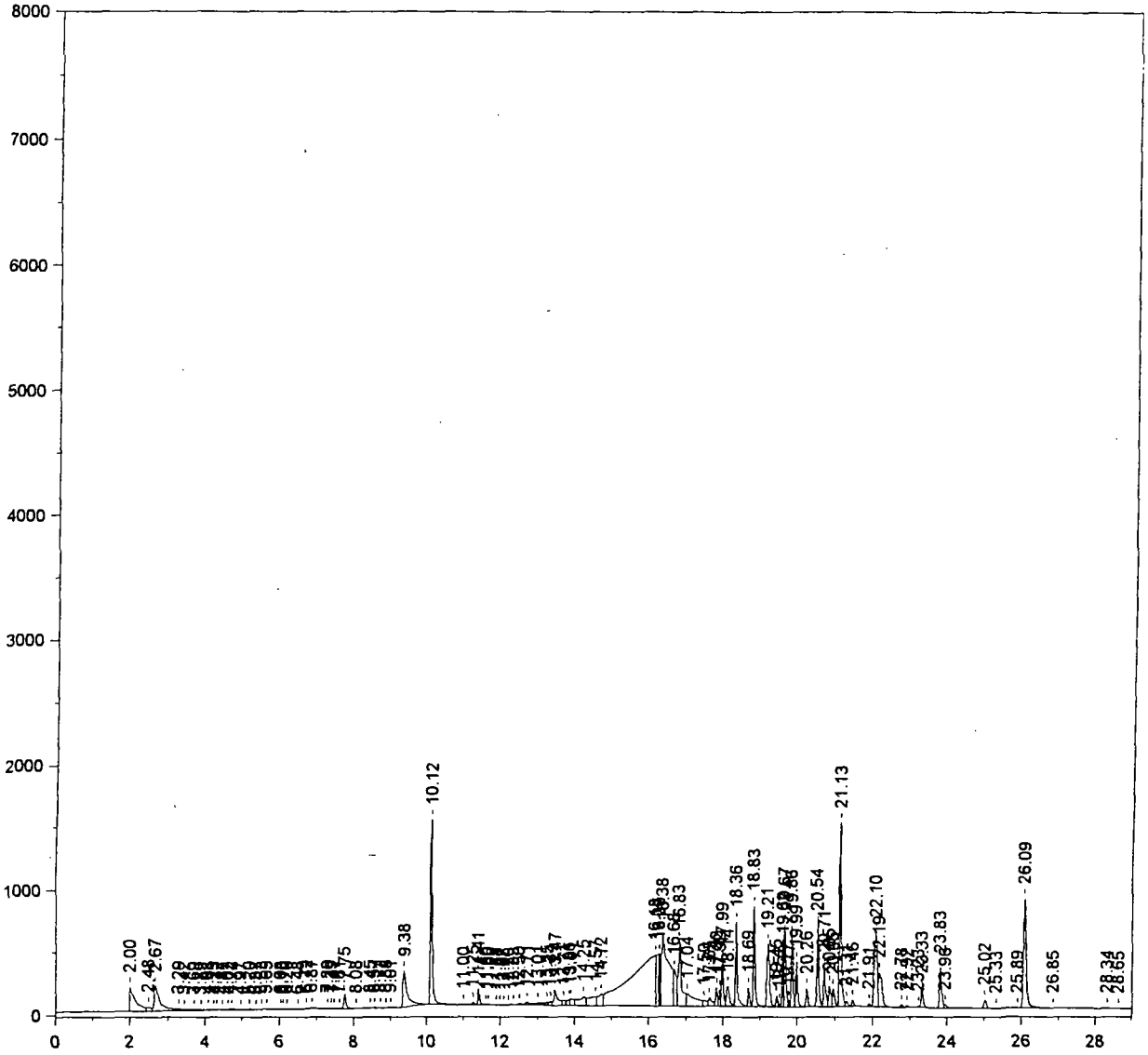
Date Taken (end) = 9/19/02 7:08:18 PM
Method Version = 618
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	2107297	1.645	BV	0.14
2	2.48		0.00	0.000	291013	0.227	VV	0.11
3	2.67		0.00	0.000	2287031	1.785	VV	0.12
4	3.29		0.00	0.000	192451	0.150	VV	0.12
5	3.42		0.00	0.000	207985	0.162	VV	0.16
6	3.69		0.00	0.000	96641	0.075	VV	0.08
7	3.89		0.00	0.000	177648	0.139	VV	0.14
8	4.08		0.00	0.000	166905	0.130	VV	0.08
9	4.23		0.00	0.000	52256	0.041	VV	0.05
10	4.32		0.00	0.000	89714	0.070	VV	0.09
11	4.47		0.00	0.000	151641	0.118	VV	0.12
12	4.62		0.00	0.000	69521	0.054	VV	0.06
13	4.72		0.00	0.000	255147	0.199	VV	0.11
14	4.97		0.00	0.000	68026	0.053	VV	0.07
15	5.20		0.00	0.000	253833	0.198	VV	0.18
16	5.37		0.00	0.000	84689	0.066	VV	0.06
17	5.53		0.00	0.000	113694	0.089	VV	0.10
18	5.65		0.00	0.000	173123	0.135	VV	0.15
19	6.03		0.00	0.000	246516	0.192	VV	0.18
20	6.10		0.00	0.000	85339	0.067	VV	0.04
21	6.20		0.00	0.000	96965	0.076	VV	0.06
22	6.48		0.00	0.000	380019	0.297	VV	0.28
23	6.72		0.00	0.000	172841	0.135	VV	0.07
24	6.87		0.00	0.000	320704	0.250	VV	0.08
25	7.29		0.00	0.000	275258	0.215	VV	0.16
26	7.39		0.00	0.000	70509	0.055	VV	0.03
27	7.47		0.00	0.000	141280	0.110	VV	0.06
28	7.61		0.00	0.000	129431	0.101	VV	0.08
29	7.75		0.00	0.000	787334	0.615	VV	0.06
30	8.08		0.00	0.000	387786	0.303	VV	0.26
31	8.45		0.00	0.000	248624	0.194	VV	0.15
32	8.57		0.00	0.000	214880	0.168	VV	0.06
33	8.72		0.00	0.000	157822	0.123	VV	0.07
34	8.88		0.00	0.000	124471	0.097	VV	0.06
35	9.01		0.00	0.000	208513	0.163	VV	0.08
36	9.38		0.00	0.000	4239793	3.309	VV	0.11
37	10.12	CL4XYL	0.87	1.889	6827991	5.330	VV	0.05
38	11.00		0.00	0.000	831275	0.649	VV	0.11
39	11.25		0.00	0.000	412721	0.322	VV	0.05
40	11.41		0.00	0.000	938180	0.732	VV	0.05
41	11.60	AR1016#1	1.36	2.949	241873	0.189	VV	0.06
42	11.66		0.00	0.000	441988	0.345	VV	0.06
43	11.88		0.00	0.000	240198	0.187	VV	0.05
44	11.97		0.00	0.000	155343	0.121	VV	0.04
45	12.08		0.00	0.000	343826	0.268	VV	0.06
46	12.20		0.00	0.000	328590	0.256	VV	0.06
47	12.33		0.00	0.000	236750	0.185	VV	0.06
48	12.50		0.00	0.000	582118	0.454	VV	0.11
49	12.71	AR1016#2	1.93	4.171	610051	0.476	VV	0.07
50	13.01		0.00	0.000	740112	0.578	VV	0.08
51	13.25		0.00	0.000	701966	0.548	VV	0.07
52	13.34		0.00	0.000	346453	0.270	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	13.47		0.00	0.000	1520628	1.187	VV	0.06
54	13.71		0.00	0.000	450430	0.352	VV	0.05
55	13.86		0.00	0.000	447532	0.349	VV	0.04
56	13.91	AR1016#3	1.32	2.851	640787	0.500	VV	0.05
57	14.25	AR1016#4	5.04	10.919	1586617	1.238	VV	0.10
58	14.57		0.00	0.000	1620161	1.265	VV	0.12
59	14.72		0.00	0.000	1213861	0.947	VV	0.08
60	16.18		0.00	0.000	21981090	17.157	VV	0.58
61	16.27		0.00	0.000	2347876	1.833	VV	0.06
62	16.30		0.00	0.000	1308386	1.021	VV	0.04
63	16.38		0.00	0.000	8157801	6.367	VV	0.07
64	16.68		0.00	0.000	1885175	1.471	VV	0.06
65	16.83		0.00	0.000	3477925	2.715	VV	0.06
66	17.04		0.00	0.000	2497098	1.949	VV	0.15
67	17.50		0.00	0.000	476969	0.372	VV	0.06
68	17.65		0.00	0.000	702598	0.548	VV	0.05
69	17.83		0.00	0.000	697586	0.544	VV	0.05
70	17.92		0.00	0.000	487504	0.381	VV	0.04
71	17.99	AR1260#1	7.24	15.675	1440607	1.124	VV	0.05
72	18.14		0.00	0.000	1167646	0.911	VV	0.07
73	18.36		0.00	0.000	2828212	2.208	VV	0.05
74	18.69		0.00	0.000	700118	0.546	VV	0.05
75	18.83	AR1260#2	7.15	15.491	3089353	2.411	VV	0.05
76	19.21		0.00	0.000	2871040	2.241	VV	0.08
77	19.45		0.00	0.000	403231	0.315	VV	0.05
78	19.52		0.00	0.000	137560	0.107	VV	0.04
79	19.62		0.00	0.000	1210736	0.945	VV	0.04
80	19.67		0.00	0.000	2581502	2.015	VV	0.06
81	19.77		0.00	0.000	192829	0.151	VV	0.04
82	19.86	AR1260#3	6.68	14.464	2211580	1.726	VV	0.05
83	19.99		0.00	0.000	1458985	1.139	VV	0.05
84	20.26		0.00	0.000	776840	0.606	VV	0.05
85	20.54		0.00	0.000	2472043	1.930	VV	0.05
86	20.71		0.00	0.000	1367063	1.067	VV	0.05
87	20.85		0.00	0.000	838047	0.654	VV	0.05
88	20.95		0.00	0.000	745971	0.582	VV	0.07
89	21.13	AR1260#4	6.94	15.027	5472302	4.271	VV	0.05
90	21.31		0.00	0.000	338850	0.264	VV	0.06
91	21.46		0.00	0.000	663774	0.518	VV	0.06
92	21.91		0.00	0.000	224707	0.175	VV	0.06
93	22.10	AR1260#5	6.96	15.077	3721179	2.905	VV	0.10
94	22.19		0.00	0.000	2129033	1.662	VV	0.11
95	22.78		0.00	0.000	238854	0.186	VV	0.07
96	22.92		0.00	0.000	206375	0.161	VV	0.07
97	23.23		0.00	0.000	83480	0.065	VV	0.05
98	23.33		0.00	0.000	824368	0.643	VV	0.06
99	23.83		0.00	0.000	1478317	1.154	VV	0.07
100	23.96		0.00	0.000	349855	0.273	VV	0.08
101	25.02		0.00	0.000	357403	0.279	VV	0.07
102	25.33		0.00	0.000	32895	0.026	VV	0.19
103	25.89		0.00	0.000	1195	0.001	VB	0.06
104	26.09	CL10BP	0.69	1.487	4861413	3.795	BV	0.08
105	26.85		0.00	0.000	24935	0.019	VB	0.16
106	28.34		0.00	0.000	4679	0.004	BB	0.24
107	28.65		0.00	0.000	3731	0.003	BB	0.22

Total Area = 1.281169E+08 Total Height = 1.872634E+07 Total Amount = 46.18085

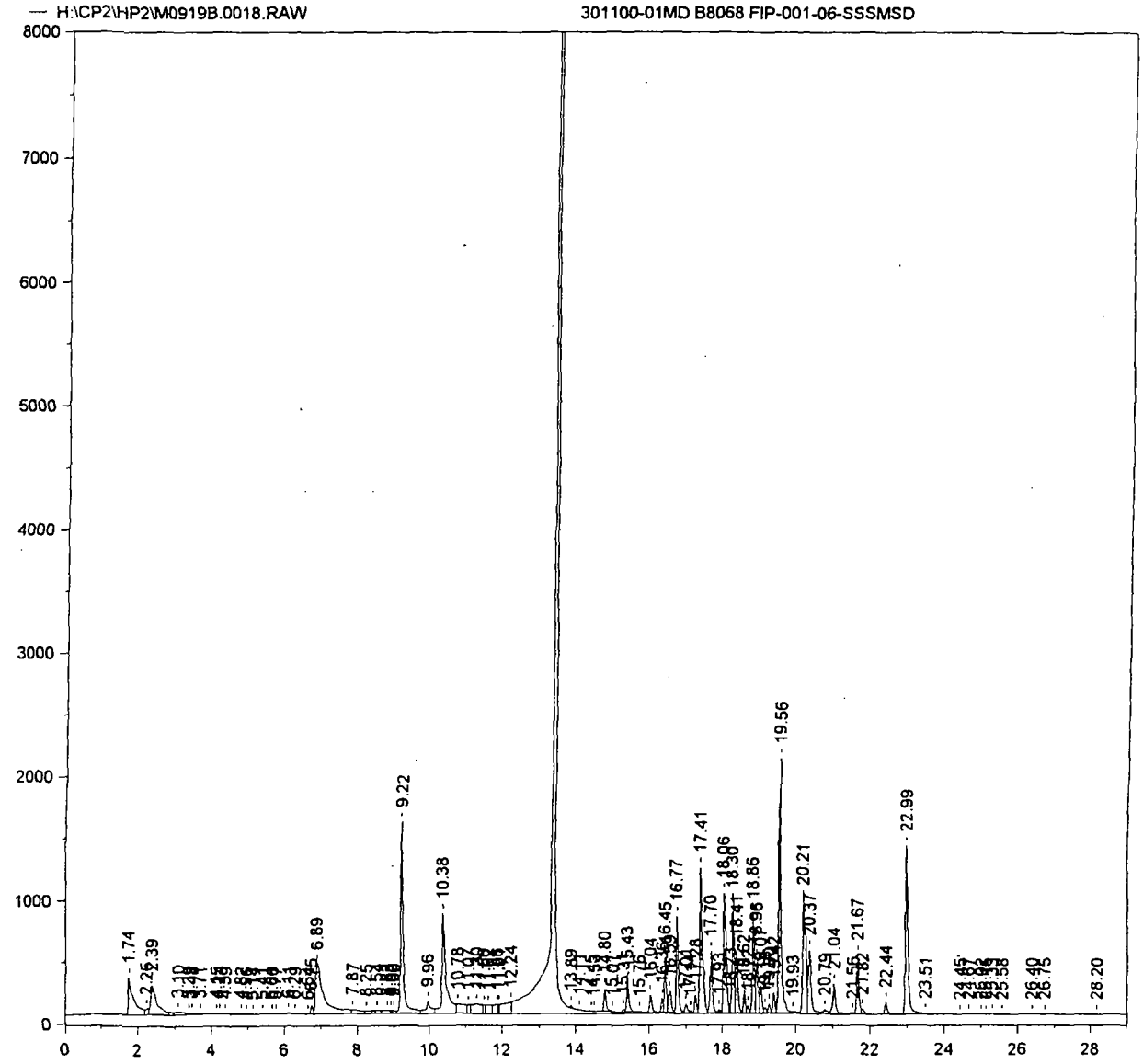
— H:\CP2\HP2\M0919.0018.RAW 301100-01MD B8068 FIP-001-06-SSSMSD



After reintegration
KJT 9/20/02

Primary Column

50364



Before reintegration
excess area under peaks

AST
9/20/02

50368

Sample Name = **301100-01MD B8068 FIP-001-06-SSSMSD**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0018.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

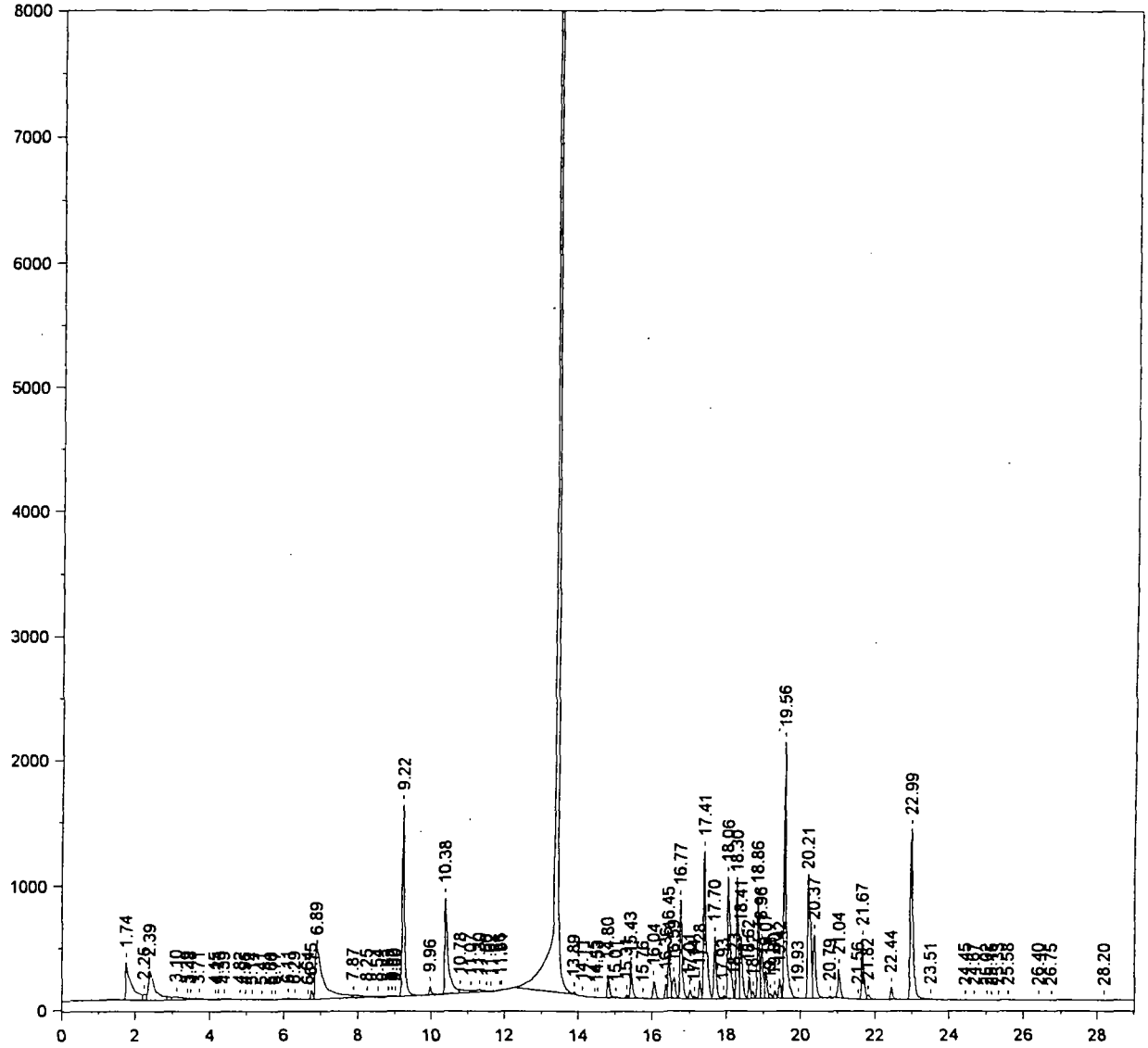
Date Taken (end) = 9/19/02 7:08:18 PM
Method Version = 567
Calibration Version = 5

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	3199507	1.687	BV	0.12
2	2.25		0.00	0.000	294628	0.155	VV	0.06
3	2.39		0.00	0.000	2778082	1.465	VV	0.13
4	3.10		0.00	0.000	376148	0.198	VV	0.26
5	3.39		0.00	0.000	65933	0.035	VV	0.05
6	3.48		0.00	0.000	67957	0.036	VV	0.06
7	3.71		0.00	0.000	134349	0.071	VV	0.16
8	4.15		0.00	0.000	55593	0.029	VV	0.09
9	4.24		0.00	0.000	71529	0.038	VV	0.10
10	4.39		0.00	0.000	70751	0.037	VV	0.20
11	4.82		0.00	0.000	18986	0.010	VV	0.08
12	4.96		0.00	0.000	17334	0.009	VV	0.07
13	5.14		0.00	0.000	9453	0.005	VV	0.08
14	5.41		0.00	0.000	8900	0.005	VV	0.10
15	5.66		0.00	0.000	2156	0.001	VB	0.06
16	5.77		0.00	0.000	772	0.000	BB	0.07
17	6.11		0.00	0.000	44933	0.024	BV	0.08
18	6.29		0.00	0.000	30840	0.016	VV	0.08
19	6.64		0.00	0.000	6158	0.003	VV	0.08
20	6.75		0.00	0.000	295638	0.156	VV	0.06
21	6.89		0.00	0.000	6661010	3.513	VV	0.18
22	7.87		0.00	0.000	611527	0.323	VV	0.18
23	8.25		0.00	0.000	330882	0.174	VV	0.12
24	8.54		0.00	0.000	219380	0.116	VV	0.07
25	8.83		0.00	0.000	347130	0.183	VV	0.09
26	8.92		0.00	0.000	88758	0.047	VV	0.03
27	9.00		0.00	0.000	178066	0.094	VV	0.05
28	9.22	CL4XYL	0.75	0.156	7988500	4.213	VV	0.06
29	9.96		0.00	0.000	1161016	0.612	VV	0.06
30	10.38	AR1016#1	27.68	5.768	6531618	3.445	VV	0.08
31	10.78		0.00	0.000	1316139	0.694	VV	0.12
32	11.07		0.00	0.000	373649	0.197	VV	0.05
33	11.30	AR1016#2	3.34	0.696	1448603	0.764	VV	0.11
34	11.50		0.00	0.000	256240	0.135	VV	0.05
35	11.62		0.00	0.000	731276	0.386	VV	0.05
36	11.86		0.00	0.000	667822	0.352	VV	0.09
37	11.91		0.00	0.000	182830	0.096	VV	0.02
38	12.24		0.00	0.000	1649772	0.870	VV	0.12
39	13.42	AR1016#5	415.09	86.486	86447864	45.590	SBB	0.07
40	13.89		0.00	0.000	67973	0.036	TBV	0.07
41	14.11		0.00	0.000	21469	0.011	TVV	0.11
42	14.45		0.00	0.000	2714	0.001	TVV	0.05
43	14.53		0.00	0.000	9929	0.005	TVV	0.09
44	14.80		0.00	0.000	787437	0.415	TVV	0.06
45	15.01		0.00	0.000	35121	0.019	TVV	0.08
46	15.31		0.00	0.000	110041	0.058	TVV	0.08
47	15.43		0.00	0.000	1019283	0.538	TVV	0.06
48	15.76		0.00	0.000	64245	0.034	TVV	0.18
49	16.04		0.00	0.000	696352	0.367	TVV	0.07
50	16.36		0.00	0.000	373631	0.197	TVV	0.06
51	16.45	AR1260#1	6.05	1.260	1625366	0.857	TVV	0.05
52	16.59		0.00	0.000	1015580	0.536	TVV	0.11

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.77	AR1260#2	6.09	1.268	3034272	1.600	TVV	0.05
54	17.01		0.00	0.000	312967	0.165	TVV	0.06
55	17.14		0.00	0.000	62291	0.033	TVV	0.06
56	17.28		0.00	0.000	527599	0.278	TVV	0.06
57	17.41		0.00	0.000	5896915	3.110	TVV	0.06
58	17.70		0.00	0.000	2174842	1.147	TVV	0.06
59	17.93		0.00	0.000	95968	0.051	TVV	0.05
60	18.06		0.00	0.000	5176628	2.730	TVV	0.09
61	18.23		0.00	0.000	178929	0.094	TVV	0.03
62	18.30	AR1260#3	6.38	1.329	3286114	1.733	TVV	0.05
63	18.41		0.00	0.000	2019048	1.065	TVV	0.06
64	18.62		0.00	0.000	650097	0.343	TVV	0.05
65	18.72		0.00	0.000	230727	0.122	TVV	0.05
66	18.86		0.00	0.000	2958499	1.560	TVV	0.06
67	18.96		0.00	0.000	1807004	0.953	TVV	0.05
68	19.07		0.00	0.000	961565	0.507	TVV	0.06
69	19.18		0.00	0.000	192421	0.101	TVV	0.07
70	19.30		0.00	0.000	286861	0.151	TVV	0.05
71	19.42		0.00	0.000	610354	0.322	TVV	0.05
72	19.56	AR1260#4	6.81	1.418	8784623	4.633	TVV	0.05
73	19.93		0.00	0.000	89461	0.047	TVV	0.06
74	20.21		0.00	0.000	5366063	2.830	TVV	0.10
75	20.37		0.00	0.000	2935753	1.548	TVV	0.08
76	20.79		0.00	0.000	223411	0.118	TVV	0.06
77	21.04		0.00	0.000	1286985	0.679	TVV	0.06
78	21.56		0.00	0.000	10511	0.006	TVV	0.04
79	21.67	AR1260#5	7.07	1.474	2056381	1.084	TVV	0.06
80	21.82		0.00	0.000	242452	0.128	TVV	0.08
81	22.44		0.00	0.000	457237	0.241	TVV	0.07
82	22.99	CL10BP	0.70	0.145	6907357	3.643	TVV	0.07
83	23.51		0.00	0.000	148283	0.078	TVV	0.19
84	24.45		0.00	0.000	9203	0.005	TVV	0.12
85	24.67		0.00	0.000	6984	0.004	TVV	0.15
86	25.02		0.00	0.000	1766	0.001	TVV	0.11
87	25.15		0.00	0.000	2982	0.002	TVV	0.09
88	25.33		0.00	0.000	12200	0.006	TVV	0.14
89	25.58		0.00	0.000	5808	0.003	TVB	0.19
90	26.40		0.00	0.000	1032	0.001	BB	0.14
91	26.75		0.00	0.000	12024	0.006	BB	0.30
92	28.20		0.00	0.000	24831	0.013	BB	0.15

Total Area = 1.896193E+08 Total Height = 3.326381E+07 Total Amount = 479.9508

— H:\CP2\HP2\M0919B.0018.RAW 301100-01MD B8068 FIP-001-06-SSSMSD



After reintegration
LST
9/20/02

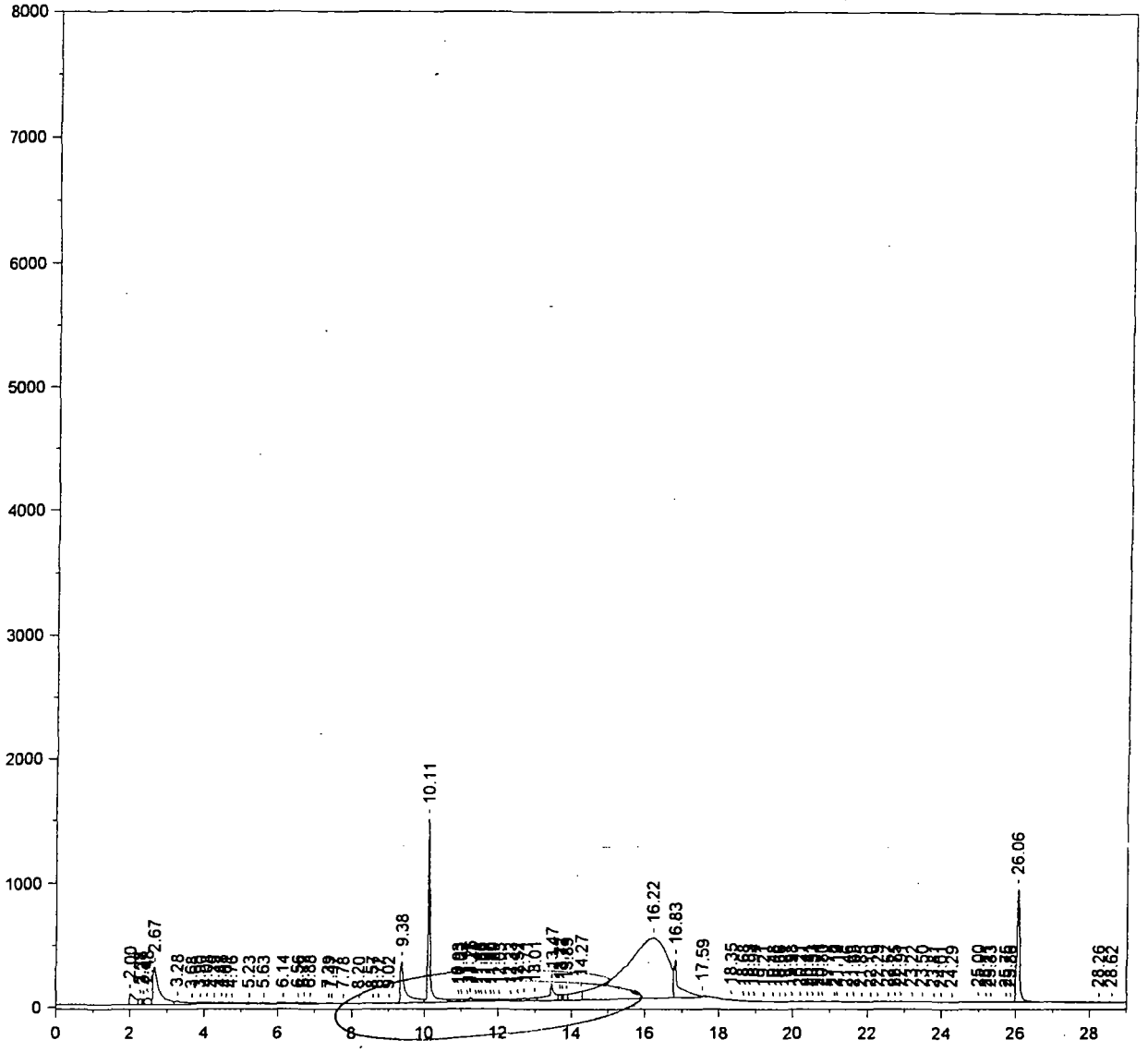
50371

PCB's-8082

ARDL Report No. 301101
Volume 5

50000

— H:\CP2\HP2\M0919.0039.RAW 301101-01 B8068 VWR-005-02-EBT



Primary Column

Before reintegration
excess area under peak
DT
9/20/2

50012

Sample Name = **301101-01 B8068 VWR-005-02-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0039.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

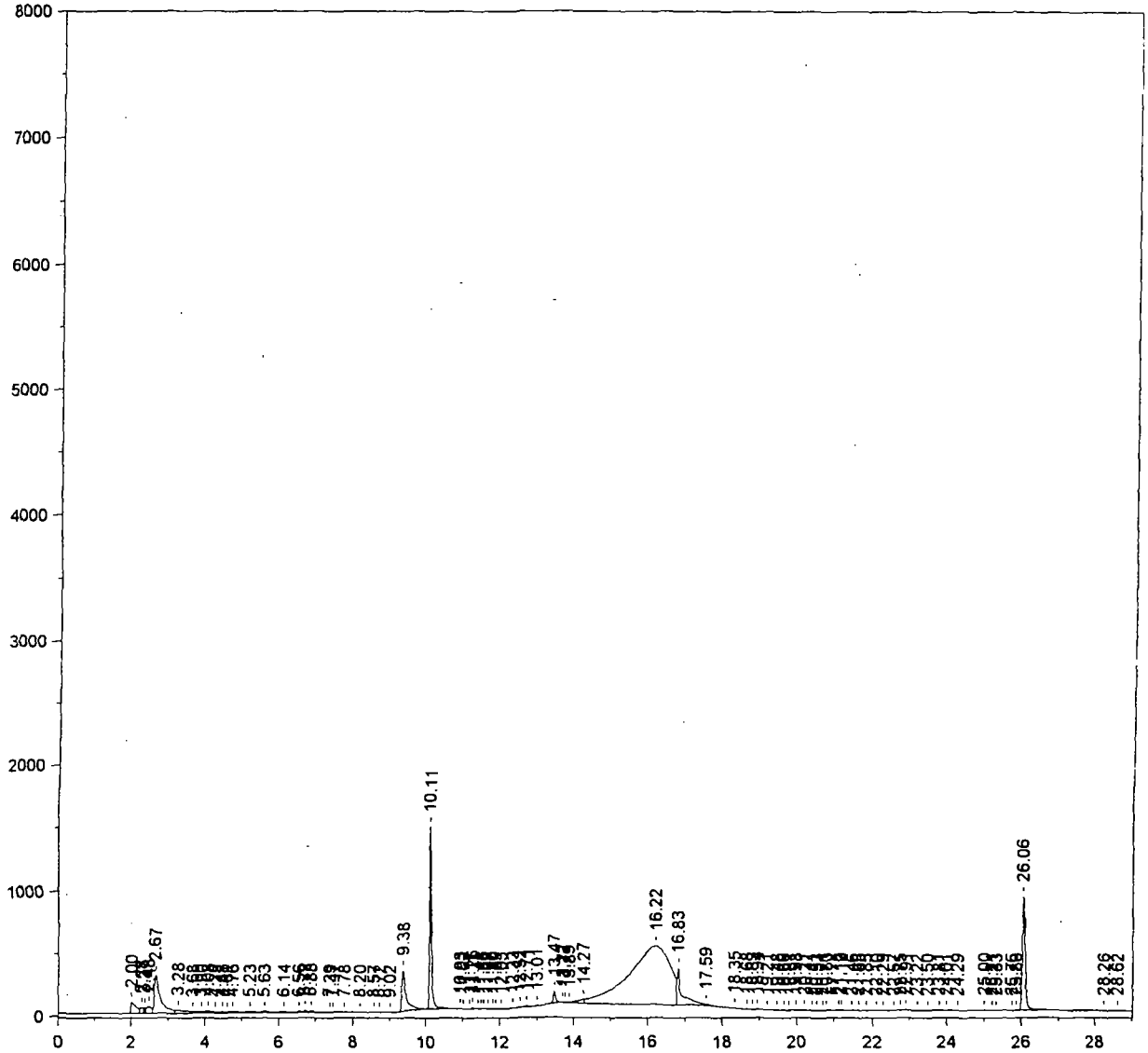
Date Taken (end) = 9/20/02 8:51:49 AM
Method Version = 618
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	860643	1.181	BV	0.18
2	2.28		0.00	0.000	306095	0.420	VV	0.08
3	2.37		0.00	0.000	111033	0.152	VV	0.03
4	2.48		0.00	0.000	532743	0.731	VV	0.09
5	2.67		0.00	0.000	3570575	4.898	VV	0.13
6	3.28		0.00	0.000	493182	0.677	VV	0.17
7	3.68		0.00	0.000	108329	0.149	VV	0.09
8	3.90		0.00	0.000	145309	0.199	VV	0.14
9	4.08		0.00	0.000	152033	0.209	VV	0.08
10	4.29		0.00	0.000	125834	0.173	VV	0.11
11	4.48		0.00	0.000	136825	0.188	VV	0.09
12	4.61		0.00	0.000	58225	0.080	VV	0.05
13	4.76		0.00	0.000	207396	0.284	VV	0.17
14	5.23		0.00	0.000	217827	0.299	VV	0.24
15	5.63		0.00	0.000	179452	0.246	VV	0.25
16	6.14		0.00	0.000	175187	0.240	VV	0.25
17	6.56		0.00	0.000	126737	0.174	VV	0.20
18	6.72		0.00	0.000	93540	0.128	VV	0.06
19	6.88		0.00	0.000	159054	0.218	VV	0.19
20	7.39		0.00	0.000	76264	0.105	VV	0.15
21	7.47		0.00	0.000	46243	0.063	VV	0.09
22	7.78		0.00	0.000	84255	0.116	VV	0.18
23	8.20		0.00	0.000	58945	0.081	VV	0.19
24	8.57		0.00	0.000	35170	0.048	VV	0.11
25	8.72		0.00	0.000	15099	0.021	VB	0.09
26	9.02		0.00	0.000	17763	0.024	BB	0.19
27	9.38		0.00	0.000	3322060	4.557	BV	0.10
28	10.11	CL4XYL	0.81	10.335	6358278	8.722	VV	0.05
29	10.93		0.00	0.000	67383	0.092	VV	0.04
30	11.02		0.00	0.000	142708	0.196	VV	0.08
31	11.17		0.00	0.000	102980	0.141	VV	0.06
32	11.26		0.00	0.000	228186	0.313	VV	0.05
33	11.41		0.00	0.000	57636	0.079	VV	0.04
34	11.48		0.00	0.000	62947	0.086	VV	0.06
35	11.56	AR1016#1	0.38	4.820	67272	0.092	VV	0.04
36	11.67		0.00	0.000	134447	0.184	VV	0.06
37	11.80		0.00	0.000	62993	0.086	VV	0.04
38	11.89		0.00	0.000	49675	0.068	VV	0.05
39	12.03		0.00	0.000	114029	0.156	VV	0.10
40	12.33		0.00	0.000	197099	0.270	VV	0.08
41	12.52		0.00	0.000	209921	0.288	VV	0.12
42	12.71	AR1016#2	0.75	9.569	238178	0.327	VV	0.06
43	13.01		0.00	0.000	312191	0.428	VV	0.07
44	13.47		0.00	0.000	1697343	2.328	VV	0.07
45	13.72		0.00	0.000	263625	0.362	VV	0.05
46	13.77		0.00	0.000	161769	0.222	VV	0.05
47	13.89	AR1016#3	0.71	9.021	345074	0.473	VV	0.06
48	14.27	AR1016#4	4.38	55.728	1378148	1.890	VV	0.14
49	16.22		0.00	0.000	40036828	54.920	VV	1.17
50	16.83		0.00	0.000	3420270	4.692	VV	0.09
51	17.59		0.00	0.000	100652	0.138	VB	0.10
52	18.35		0.00	0.000	3859	0.005	BB	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.68		0.00	0.000	1461	0.002	BV	0.06
54	18.83	AR1260#2	0.01	0.073	2494	0.003	VB	0.06
55	18.94		0.00	0.000	4649	0.006	BB	0.07
56	19.21		0.00	0.000	8377	0.011	BB	0.09
57	19.48		0.00	0.000	4143	0.006	BB	0.05
58	19.66		0.00	0.000	12562	0.017	BV	0.08
59	19.81	AR1260#3	0.02	0.290	7537	0.010	VB	0.09
60	19.98		0.00	0.000	5619	0.008	BB	0.06
61	20.21		0.00	0.000	9357	0.013	BV	0.05
62	20.41		0.00	0.000	14489	0.020	VV	0.05
63	20.53		0.00	0.000	11597	0.016	VV	0.07
64	20.71		0.00	0.000	8945	0.012	VV	0.07
65	20.80		0.00	0.000	28930	0.040	VV	0.06
66	21.12	AR1260#4	0.02	0.281	17416	0.024	VV	0.06
67	21.19		0.00	0.000	30552	0.042	VV	0.08
68	21.46		0.00	0.000	9401	0.013	VV	0.10
69	21.65		0.00	0.000	22842	0.031	VV	0.08
70	21.85		0.00	0.000	10178	0.014	VV	0.05
71	22.10	AR1260#5	0.03	0.361	15181	0.021	VV	0.10
72	22.29		0.00	0.000	15084	0.021	VV	0.11
73	22.57		0.00	0.000	6059	0.008	VV	0.09
74	22.75		0.00	0.000	8762	0.012	VV	0.08
75	22.91		0.00	0.000	22982	0.032	VV	0.07
76	23.22		0.00	0.000	3902	0.005	VV	0.07
77	23.50		0.00	0.000	8188	0.011	VV	0.07
78	23.81		0.00	0.000	3645	0.005	VV	0.08
79	24.01		0.00	0.000	2362	0.003	VB	0.12
80	24.29		0.00	0.000	812	0.001	BB	0.09
81	25.00		0.00	0.000	27790	0.038	BB	0.07
82	25.21		0.00	0.000	2209	0.003	BV	0.07
83	25.33		0.00	0.000	1060	0.001	VB	0.06
84	25.75		0.00	0.000	430	0.001	BV	0.07
85	25.86		0.00	0.000	1202	0.002	VV	0.06
86	26.06	CL10BP	0.75	9.522	5299255	7.269	VV	0.08
87	28.26		0.00	0.000	18329	0.025	VV	0.25
88	28.62		0.00	0.000	23119	0.032	VB	0.40

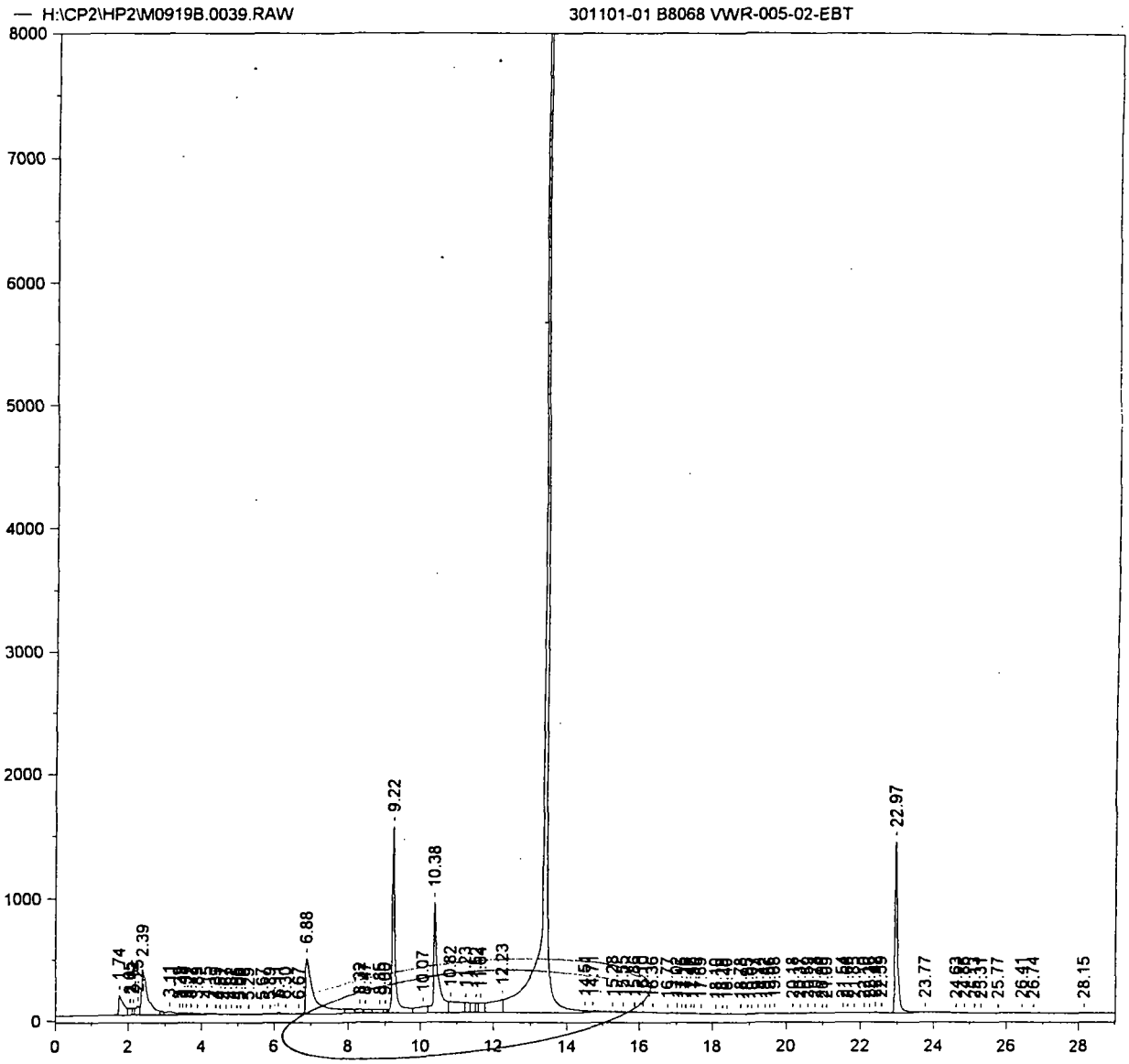
Total Area = 7.290022E+07 Total Height = 4977498 Total Amount = 7.859298

— H:\CP2\HP2\M0919.0039.RAW 301101-01 B8068 VWR-005-02-EBT



After reintegration
RST
9/20/02

50015



Before reintegration
excess area under peak
AJT
9/20/2

50019

Sample Name = **301101-01 B8068 VWR-005-02-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0039.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

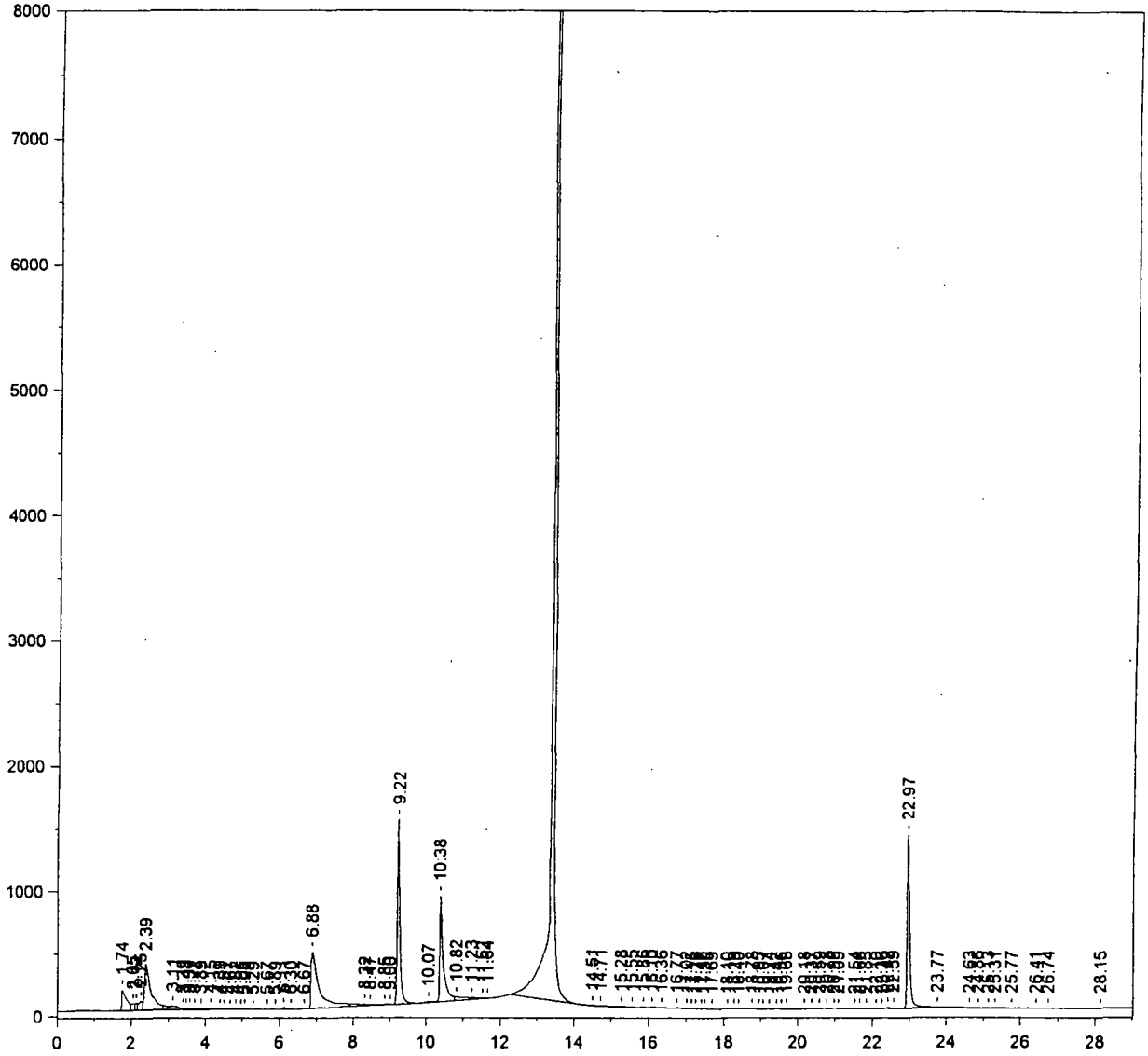
Date Taken (end) = 9/20/02 8:51:49 AM
Method Version = 567
Calibration Version = 5

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	1514440	1.116	BV	0.15
2	2.05		0.00	0.000	346465	0.255	VV	0.08
3	2.12		0.00	0.000	226868	0.167	VV	0.05
4	2.25		0.00	0.000	556723	0.410	VV	0.09
5	2.39		0.00	0.000	4444396	3.274	VV	0.14
6	3.11		0.00	0.000	525257	0.387	VV	0.26
7	3.39		0.00	0.000	70040	0.052	VV	0.06
8	3.48		0.00	0.000	72756	0.054	VV	0.05
9	3.57		0.00	0.000	73498	0.054	VV	0.06
10	3.72		0.00	0.000	110781	0.082	VV	0.12
11	3.89		0.00	0.000	78029	0.057	VV	0.13
12	4.15		0.00	0.000	143855	0.106	VV	0.19
13	4.39		0.00	0.000	28989	0.021	VV	0.07
14	4.51		0.00	0.000	35430	0.026	VV	0.12
15	4.67		0.00	0.000	11485	0.008	VV	0.07
16	4.82		0.00	0.000	33729	0.025	VV	0.10
17	4.96		0.00	0.000	10990	0.008	VV	0.06
18	5.06		0.00	0.000	13777	0.010	VB	0.13
19	5.29		0.00	0.000	3158	0.002	BB	0.12
20	5.67		0.00	0.000	9878	0.007	BV	0.15
21	5.89		0.00	0.000	8485	0.006	VB	0.15
22	6.11		0.00	0.000	82855	0.061	BV	0.07
23	6.30		0.00	0.000	42684	0.031	VV	0.08
24	6.67		0.00	0.000	31466	0.023	VV	0.12
25	6.88		0.00	0.000	7419274	5.465	VV	0.17
26	8.32		0.00	0.000	408127	0.301	VV	0.13
27	8.47		0.00	0.000	390016	0.287	VV	0.11
28	8.85		0.00	0.000	565673	0.417	VV	0.22
29	9.00		0.00	0.000	206581	0.152	VV	0.06
30	9.22	CL4XYL	0.80	0.180	8563822	6.308	VV	0.07
31	10.07		0.00	0.000	1143066	0.842	VV	0.19
32	10.38	AR1016#1	31.45	7.042	7419968	5.466	VV	0.08
33	10.82		0.00	0.000	2186422	1.611	VV	0.15
34	11.23		0.00	0.000	742629	0.547	VV	0.10
35	11.52		0.00	0.000	369654	0.272	VV	0.04
36	11.64		0.00	0.000	854191	0.629	VV	0.16
37	12.23		0.00	0.000	2629706	1.937	VV	0.18
38	13.42	AR1016#5	413.55	92.600	86127704	63.445	VV	0.07
39	14.51		0.00	0.000	188994	0.139	VV	0.11
40	14.71		0.00	0.000	280888	0.207	VV	0.25
41	15.28		0.00	0.000	106526	0.078	VV	0.22
42	15.55		0.00	0.000	37967	0.028	VV	0.09
43	15.86		0.00	0.000	56043	0.041	VV	0.17
44	16.10		0.00	0.000	14848	0.011	VB	0.05
45	16.36		0.00	0.000	12399	0.009	BB	0.19
46	16.77	AR1260#2	0.02	0.005	10152	0.007	BV	0.09
47	17.02		0.00	0.000	8204	0.006	VV	0.06
48	17.15		0.00	0.000	7217	0.005	VB	0.07
49	17.26		0.00	0.000	2886	0.002	BV	0.08
50	17.42		0.00	0.000	6366	0.005	VV	0.05
51	17.50		0.00	0.000	14950	0.011	VV	0.08
52	17.69		0.00	0.000	16241	0.012	VB	0.12

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.10		0.00	0.000	16133	0.012	BV	0.10
54	18.29	AR1260#3	0.03	0.006	14402	0.011	VV	0.09
55	18.40		0.00	0.000	2077	0.002	VB	0.07
56	18.78		0.00	0.000	25175	0.019	BV	0.06
57	18.95		0.00	0.000	4604	0.003	VV	0.05
58	19.07		0.00	0.000	2082	0.002	VB	0.06
59	19.24		0.00	0.000	5456	0.004	BV	0.06
60	19.42		0.00	0.000	3998	0.003	VV	0.10
61	19.56	AR1260#4	0.01	0.002	12494	0.009	VV	0.06
62	19.68		0.00	0.000	12864	0.009	VB	0.05
63	20.18		0.00	0.000	25205	0.019	BV	0.13
64	20.37		0.00	0.000	5883	0.004	VV	0.07
65	20.59		0.00	0.000	23077	0.017	VV	0.06
66	20.78		0.00	0.000	25945	0.019	VV	0.06
67	20.99		0.00	0.000	6772	0.005	VV	0.09
68	21.09		0.00	0.000	3989	0.003	VB	0.04
69	21.54		0.00	0.000	6847	0.005	BV	0.08
70	21.66	AR1260#5	0.02	0.003	4466	0.003	VV	0.07
71	21.85		0.00	0.000	5646	0.004	VV	0.10
72	22.10		0.00	0.000	2730	0.002	VV	0.05
73	22.26		0.00	0.000	7090	0.005	VV	0.11
74	22.42		0.00	0.000	39582	0.029	VV	0.07
75	22.59		0.00	0.000	9693	0.007	VB	0.07
76	22.97	CL10BP	0.72	0.162	7179912	5.289	SBB	0.07
77	23.77		0.00	0.000	3642	0.003	TBB	0.10
78	24.63		0.00	0.000	2138	0.002	BB	0.12
79	24.86		0.00	0.000	2035	0.001	BV	0.14
80	25.13		0.00	0.000	2227	0.002	VV	0.11
81	25.31		0.00	0.000	2940	0.002	VB	0.12
82	25.77		0.00	0.000	7510	0.006	BB	0.19
83	26.41		0.00	0.000	696	0.001	BB	0.08
84	26.74		0.00	0.000	9221	0.007	BB	0.16
85	28.15		0.00	0.000	8509	0.006	BB	0.22

Total Area = 1.357516E+08 Total Height = 2.041644E+07 Total Amount = 446.6059

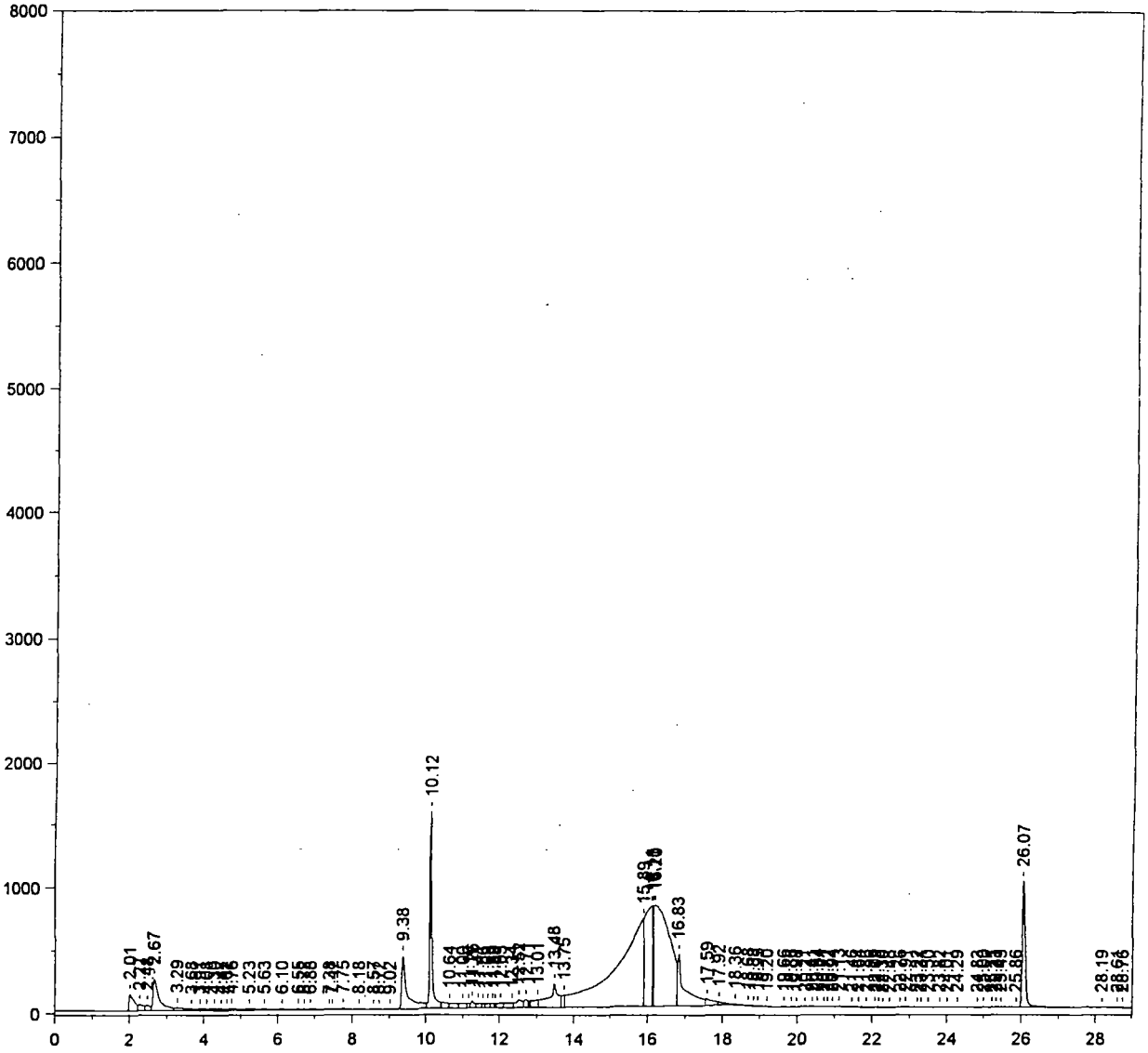
— H:\CP2\HP2\M0919B.0039.RAW 301101-01 B8068 VWR-005-02-EBT



After integration
BJT
9/20/02

50022

— H:\CP2\HP2\M0919.0043.RAW . 301101-02 B8068 VWR-006-02-EBT



Primary Column

Before reintegration
excess area under peaks
BT
9/20/2

50028

Sample Name = **301101-02 B8068 VWR-006-02-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0043.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

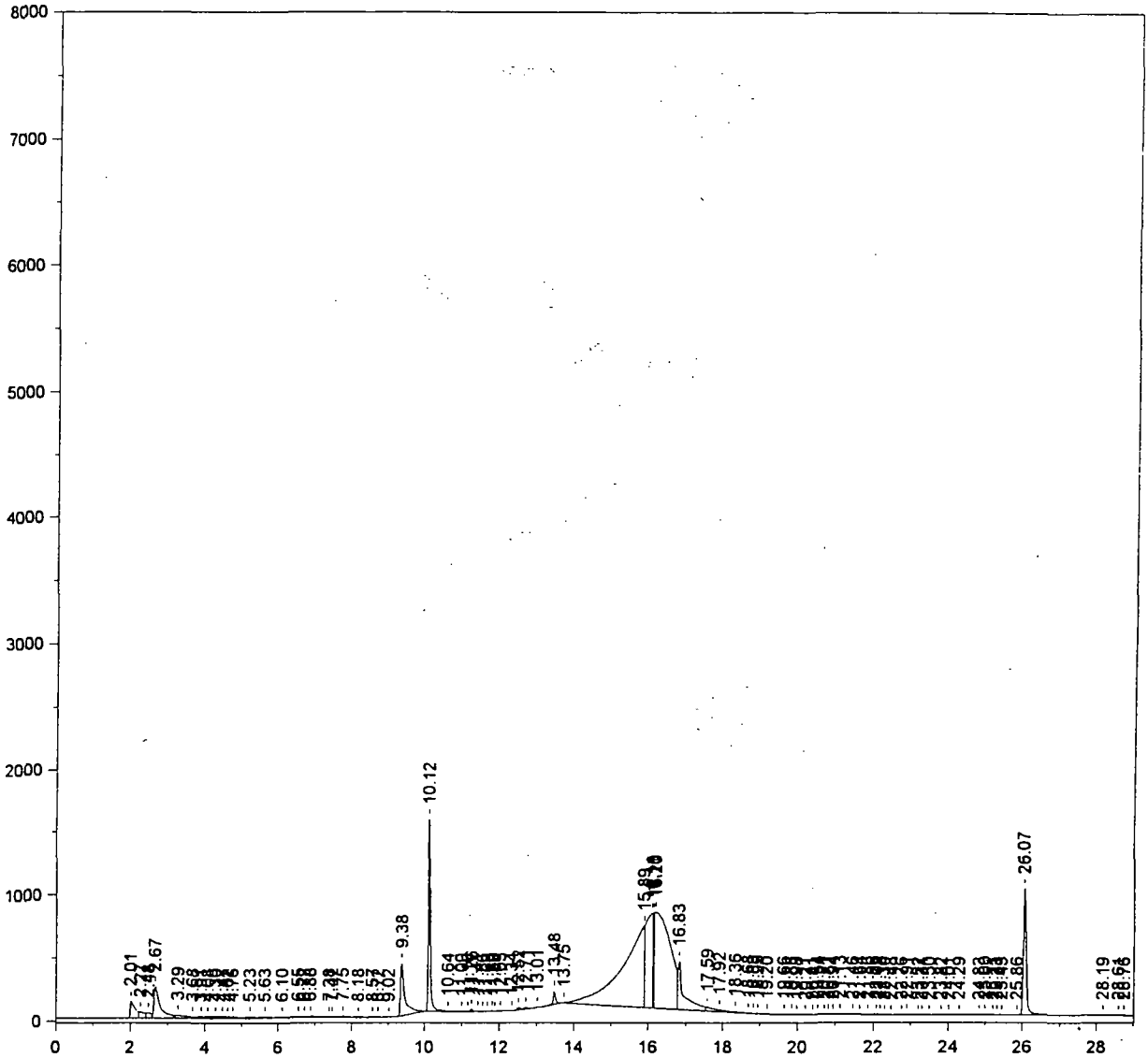
Date Taken (end) = 9/20/02 11:26:54 AM
Method Version = 618
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.01		0.00	0.000	1264242	1.125	BV	0.16
2	2.27		0.00	0.000	448839	0.399	VV	0.09
3	2.48		0.00	0.000	372849	0.332	VV	0.09
4	2.67		0.00	0.000	2892731	2.574	VV	0.13
5	3.29		0.00	0.000	414145	0.369	VV	0.19
6	3.68		0.00	0.000	90593	0.081	VV	0.09
7	3.91		0.00	0.000	131793	0.117	VV	0.17
8	4.08		0.00	0.000	112917	0.100	VV	0.08
9	4.30		0.00	0.000	132916	0.118	VV	0.14
10	4.47		0.00	0.000	100680	0.090	VV	0.08
11	4.62		0.00	0.000	52245	0.046	VV	0.06
12	4.76		0.00	0.000	189945	0.169	VV	0.18
13	5.23		0.00	0.000	209099	0.186	VV	0.23
14	5.63		0.00	0.000	163737	0.146	VV	0.24
15	6.10		0.00	0.000	157789	0.140	VV	0.26
16	6.55		0.00	0.000	118336	0.105	VV	0.20
17	6.72		0.00	0.000	52172	0.046	VV	0.06
18	6.88		0.00	0.000	138145	0.123	VV	0.18
19	7.38		0.00	0.000	68956	0.061	VV	0.17
20	7.47		0.00	0.000	34626	0.031	VV	0.08
21	7.75		0.00	0.000	91889	0.082	VV	0.10
22	8.18		0.00	0.000	42619	0.038	VV	0.19
23	8.57		0.00	0.000	29149	0.026	VV	0.09
24	8.72		0.00	0.000	13568	0.012	VB	0.07
25	9.02		0.00	0.000	16510	0.015	BB	0.12
26	9.38		0.00	0.000	4546751	4.046	BV	0.10
27	10.12	CL4XYL	0.85	19.831	6625921	5.896	VV	0.05
28	10.64		0.00	0.000	619003	0.551	VV	0.14
29	11.00		0.00	0.000	502923	0.447	VV	0.11
30	11.16		0.00	0.000	172888	0.154	VV	0.06
31	11.26		0.00	0.000	416299	0.370	VV	0.05
32	11.41		0.00	0.000	346330	0.308	VV	0.05
33	11.56	AR1016#1	0.93	21.874	165812	0.148	VV	0.04
34	11.68		0.00	0.000	318703	0.284	VV	0.06
35	11.80		0.00	0.000	217536	0.194	VV	0.05
36	11.88		0.00	0.000	111945	0.100	VV	0.03
37	12.03		0.00	0.000	414488	0.369	VV	0.13
38	12.34		0.00	0.000	595890	0.530	VV	0.12
39	12.52		0.00	0.000	807247	0.718	VV	0.17
40	12.71	AR1016#2	1.49	35.007	473214	0.421	VV	0.06
41	13.01		0.00	0.000	754438	0.671	VV	0.08
42	13.48		0.00	0.000	3262636	2.903	VV	0.08
43	13.75		0.00	0.000	623672	0.555	VV	0.07
44	15.89		0.00	0.000	35971332	32.007	VV	0.54
45	16.11		0.00	0.000	9955333	8.858	VV	0.14
46	16.15		0.00	0.000	1748551	1.556	VV	0.02
47	16.20		0.00	0.000	23416764	20.836	VV	0.41
48	16.83		0.00	0.000	5676418	5.051	VV	0.09
49	17.59		0.00	0.000	722876	0.643	VV	0.11
50	17.92		0.00	0.000	365065	0.325	VV	0.18
51	18.36		0.00	0.000	32324	0.029	VB	0.08
52	18.68		0.00	0.000	4227	0.004	BV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.83	AR1260#2	0.02	0.379	6979	0.006	VB	0.07
54	18.95		0.00	0.000	9205	0.008	BB	0.06
55	19.20		0.00	0.000	16092	0.014	BB	0.11
56	19.66		0.00	0.000	29479	0.026	BV	0.08
57	19.86	AR1260#3	0.04	1.000	14132	0.013	VV	0.05
58	19.98		0.00	0.000	12489	0.011	VB	0.07
59	20.21		0.00	0.000	6504	0.006	BV	0.06
60	20.41		0.00	0.000	6703	0.006	VV	0.05
61	20.54		0.00	0.000	21629	0.019	VV	0.06
62	20.71		0.00	0.000	13020	0.012	VV	0.05
63	20.82		0.00	0.000	19075	0.017	VV	0.07
64	20.94		0.00	0.000	9607	0.009	VV	0.06
65	21.13	AR1260#4	0.08	1.817	61155	0.054	VV	0.09
66	21.46		0.00	0.000	8778	0.008	VV	0.06
67	21.64		0.00	0.000	23039	0.020	VV	0.08
68	21.86		0.00	0.000	9759	0.009	VV	0.05
69	22.09	AR1260#5	0.05	1.083	24714	0.022	VV	0.10
70	22.18		0.00	0.000	9325	0.008	VV	0.06
71	22.30		0.00	0.000	10092	0.009	VV	0.11
72	22.48		0.00	0.000	5174	0.005	VV	0.06
73	22.76		0.00	0.000	9187	0.008	VV	0.07
74	22.91		0.00	0.000	21235	0.019	VB	0.07
75	23.22		0.00	0.000	3782	0.003	BV	0.08
76	23.31		0.00	0.000	3695	0.003	VV	0.08
77	23.50		0.00	0.000	4443	0.004	VV	0.12
78	23.82		0.00	0.000	7267	0.006	VV	0.06
79	24.01		0.00	0.000	3798	0.003	VB	0.13
80	24.29		0.00	0.000	1730	0.002	BB	0.07
81	24.83		0.00	0.000	541	0.000	BV	0.07
82	25.00		0.00	0.000	34427	0.031	VV	0.07
83	25.21		0.00	0.000	7018	0.006	VV	0.07
84	25.33		0.00	0.000	2432	0.002	VV	0.07
85	25.45		0.00	0.000	3981	0.004	VB	0.18
86	25.86		0.00	0.000	1359	0.001	BV	0.07
87	26.07	CL10BP	0.81	19.010	5745812	5.113	VB	0.08
88	28.19		0.00	0.000	517	0.000	BB	0.08
89	28.61		0.00	0.000	4555	0.004	BV	0.13
90	28.76		0.00	0.000	4320	0.004	VB	0.14

Total Area = 1.123861E+08 Total Height = 8206395 Total Amount = 4.268284

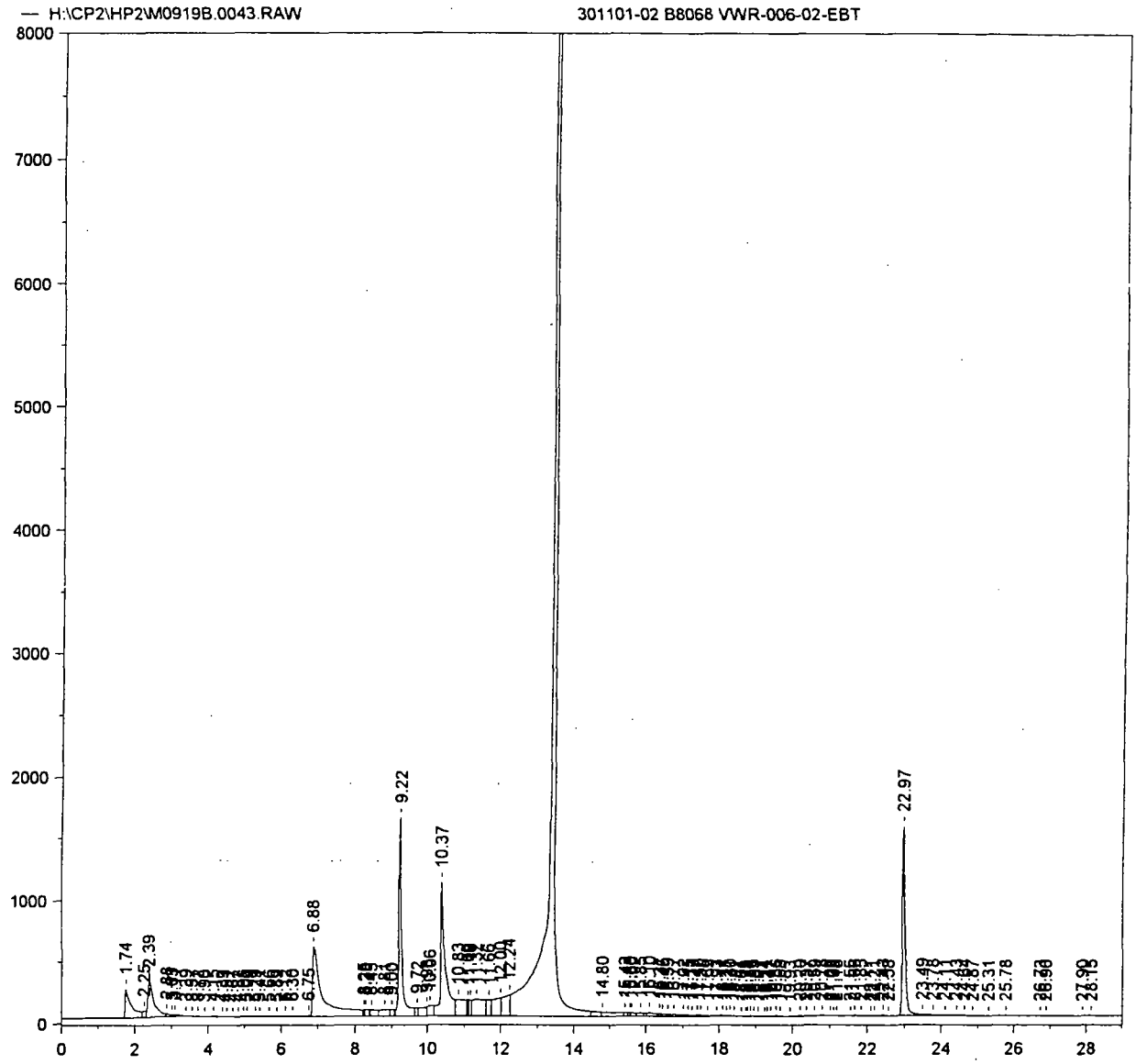
— H:\CP2\HP2\M0919.0043.RAW 301101-02 B8068 VWR-006-02-EBT



After reintegration
BT
9/20/02

BT
9/20/02

50031



Before reintegration
Excess area under peaks
RBT 9/20/02

50035

Sample Name = **301101-02 B8068 VWR-006-02-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0043.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/20/02 11:26:54 AM
Method Version = 567
Calibration Version = 5

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	2705091	1.548	BV	0.14
2	2.25		0.00	0.000	337489	0.193	VV	0.07
3	2.39		0.00	0.000	3391131	1.941	VV	0.14
4	2.88		0.00	0.000	133162	0.076	VV	0.08
5	3.03		0.00	0.000	49375	0.028	VV	0.04
6	3.11		0.00	0.000	155620	0.089	VV	0.20
7	3.39		0.00	0.000	4934	0.003	VB	0.05
8	3.57		0.00	0.000	1127	0.001	BB	0.06
9	3.72		0.00	0.000	11252	0.006	BB	0.13
10	3.90		0.00	0.000	5308	0.003	BB	0.12
11	4.15		0.00	0.000	33223	0.019	BV	0.11
12	4.39		0.00	0.000	8563	0.005	VV	0.06
13	4.51		0.00	0.000	8645	0.005	VV	0.12
14	4.67		0.00	0.000	1682	0.001	VV	0.06
15	4.82		0.00	0.000	14895	0.009	VV	0.10
16	4.96		0.00	0.000	6016	0.003	VV	0.07
17	5.06		0.00	0.000	7357	0.004	VV	0.13
18	5.29		0.00	0.000	4742	0.003	VV	0.11
19	5.41		0.00	0.000	5088	0.003	VB	0.11
20	5.66		0.00	0.000	9458	0.005	BV	0.15
21	5.89		0.00	0.000	12197	0.007	VV	0.13
22	6.12		0.00	0.000	46387	0.027	VV	0.08
23	6.30		0.00	0.000	46862	0.027	VV	0.08
24	6.75		0.00	0.000	104056	0.060	VV	0.09
25	6.88		0.00	0.000	10903907	6.240	VV	0.17
26	8.25		0.00	0.000	166107	0.095	VV	0.03
27	8.30		0.00	0.000	386411	0.221	VV	0.07
28	8.45		0.00	0.000	706751	0.404	VV	0.13
29	8.81		0.00	0.000	979390	0.560	VV	0.23
30	9.00		0.00	0.000	348695	0.200	VV	0.05
31	9.22	CL4XYL	0.89	0.155	9426043	5.394	VV	0.07
32	9.72		0.00	0.000	318174	0.182	VV	0.07
33	9.98		0.00	0.000	1032667	0.591	VV	0.06
34	10.06		0.00	0.000	944191	0.540	VV	0.16
35	10.37	AR1016#1	40.92	7.179	9653172	5.524	VV	0.08
36	10.83		0.00	0.000	2503023	1.432	VV	0.08
37	11.09		0.00	0.000	306343	0.175	VV	0.02
38	11.16		0.00	0.000	637369	0.365	VV	0.07
39	11.32	AR1016#2	7.04	1.236	3054843	1.748	VV	0.18
40	11.66		0.00	0.000	1147496	0.657	VV	0.12
41	12.00		0.00	0.000	2364731	1.353	VV	0.13
42	12.24		0.00	0.000	2329405	1.333	VV	0.08
43	13.43	AR1016#5	519.17	91.094	108122344	61.877	VV	0.08
44	14.80		0.00	0.000	1188768	0.680	VV	0.22
45	15.43		0.00	0.000	184879	0.106	VV	0.06
46	15.55		0.00	0.000	110041	0.063	VV	0.04
47	15.60		0.00	0.000	241223	0.138	VV	0.09
48	15.85		0.00	0.000	313736	0.180	VV	0.11
49	16.10		0.00	0.000	452229	0.259	VV	0.07
50	16.37		0.00	0.000	122855	0.070	VV	0.05
51	16.45	AR1260#1	0.64	0.112	170914	0.098	VV	0.08
52	16.59		0.00	0.000	137477	0.079	VV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.77	AR1260#2	0.35	0.061	172424	0.099	VV	0.06
54	17.02		0.00	0.000	115687	0.066	VV	0.07
55	17.15		0.00	0.000	83744	0.048	VV	0.06
56	17.27		0.00	0.000	83298	0.048	VV	0.08
57	17.42		0.00	0.000	68307	0.039	VV	0.06
58	17.50		0.00	0.000	99732	0.057	VV	0.07
59	17.69		0.00	0.000	110813	0.063	VV	0.14
60	17.93		0.00	0.000	21945	0.013	VV	0.04
61	18.11		0.00	0.000	80272	0.046	VV	0.10
62	18.21		0.00	0.000	17762	0.010	VV	0.05
63	18.30	AR1260#3	0.08	0.013	39126	0.022	VV	0.06
64	18.41		0.00	0.000	23003	0.013	VV	0.07
65	18.61		0.00	0.000	6470	0.004	VV	0.05
66	18.73		0.00	0.000	8539	0.005	VV	0.05
67	18.78		0.00	0.000	8374	0.005	VV	0.03
68	18.85		0.00	0.000	17939	0.010	VV	0.05
69	18.95		0.00	0.000	11269	0.006	VV	0.05
70	19.07		0.00	0.000	5472	0.003	VB	0.07
71	19.24		0.00	0.000	2266	0.001	BV	0.05
72	19.31		0.00	0.000	3165	0.002	VV	0.05
73	19.42		0.00	0.000	9822	0.006	VV	0.06
74	19.56	AR1260#4	0.03	0.005	33257	0.019	VV	0.05
75	19.68		0.00	0.000	8091	0.005	VB	0.06
76	19.93		0.00	0.000	4946	0.003	BB	0.15
77	20.20		0.00	0.000	40533	0.023	BV	0.11
78	20.37		0.00	0.000	17111	0.010	VV	0.06
79	20.59		0.00	0.000	12152	0.007	VV	0.06
80	20.78		0.00	0.000	35119	0.020	VV	0.07
81	21.02		0.00	0.000	13715	0.008	VV	0.10
82	21.09		0.00	0.000	3697	0.002	VV	0.05
83	21.18		0.00	0.000	2872	0.002	VB	0.05
84	21.55		0.00	0.000	4822	0.003	BV	0.09
85	21.66	AR1260#5	0.04	0.008	12619	0.007	VV	0.06
86	21.85		0.00	0.000	13890	0.008	VV	0.07
87	22.11		0.00	0.000	1604	0.001	VV	0.06
88	22.21		0.00	0.000	8904	0.005	VV	0.10
89	22.43		0.00	0.000	46790	0.027	VV	0.06
90	22.58		0.00	0.000	5864	0.003	VB	0.08
91	22.97	CL10BP	0.79	0.138	7798051	4.463	BV	0.07
92	23.49		0.00	0.000	154949	0.089	VV	0.19
93	23.78		0.00	0.000	72401	0.041	VV	0.12
94	24.11		0.00	0.000	29690	0.017	VV	0.12
95	24.43		0.00	0.000	13556	0.008	VV	0.13
96	24.64		0.00	0.000	7703	0.004	VV	0.14
97	24.87		0.00	0.000	1330	0.001	VB	0.08
98	25.31		0.00	0.000	6557	0.004	BB	0.14
99	25.78		0.00	0.000	9812	0.006	BB	0.16
100	26.73		0.00	0.000	1882	0.001	BV	0.11
101	26.90		0.00	0.000	5515	0.003	VB	0.25
102	27.90		0.00	0.000	1110	0.001	BV	0.14
103	28.15		0.00	0.000	22985	0.013	VB	0.27

Total Area = 1.747377E+08 Total Height = 2.2063E+07 Total Amount = 569.9204

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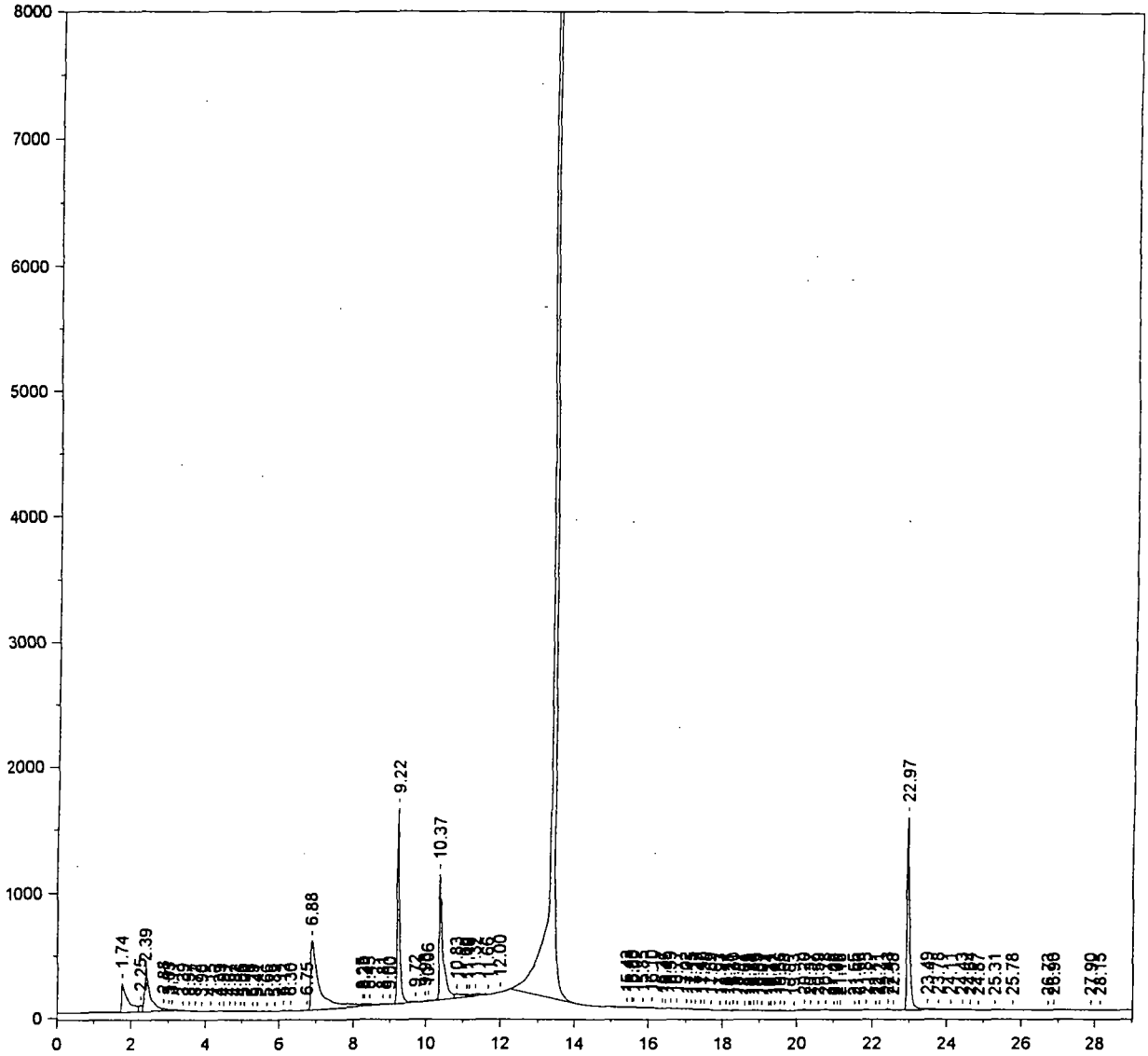

After reintegration
RDT
9/20/02

50038

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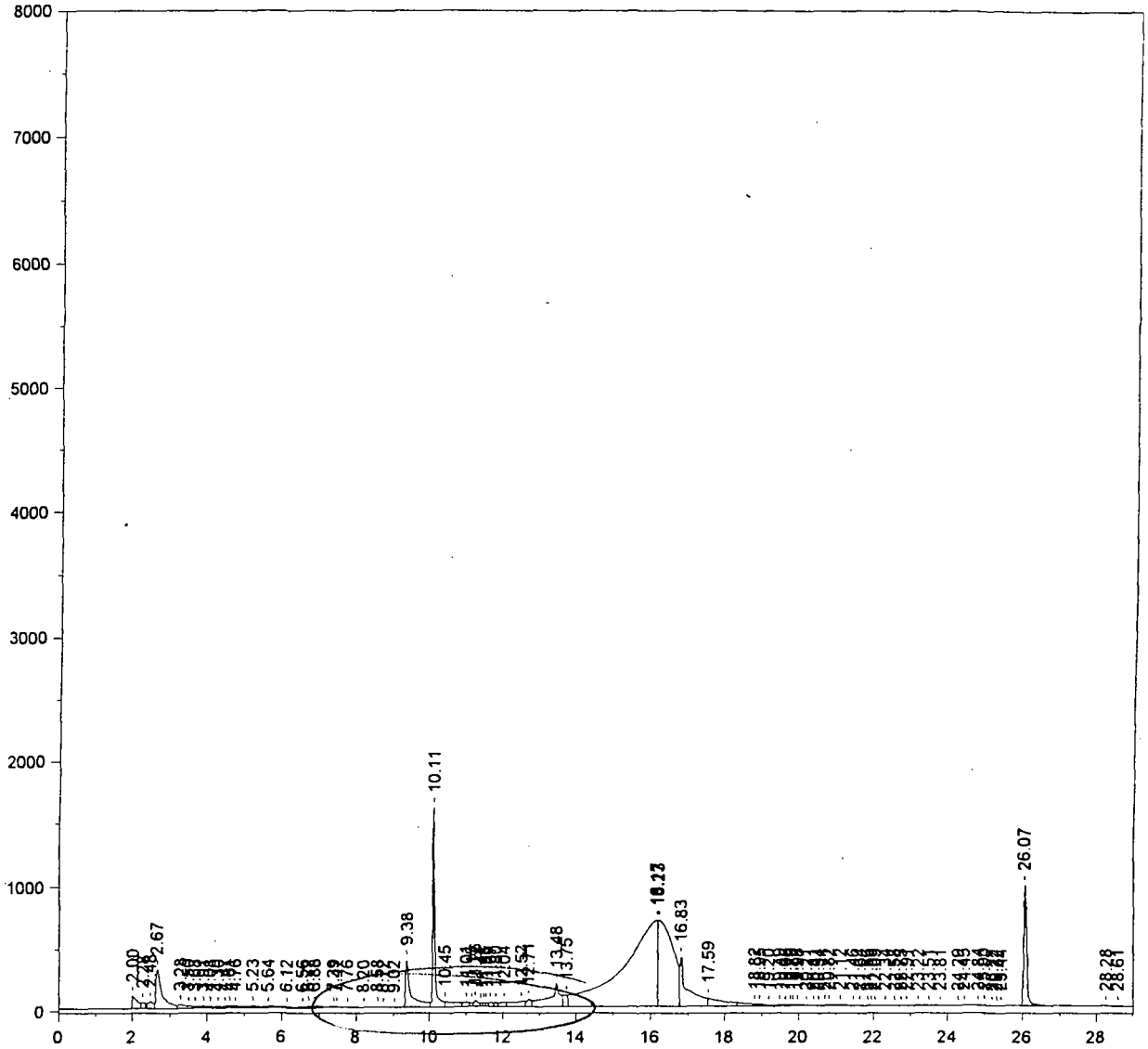

Primary Column

Before reintegration
excess area under peaks
RDT
9/23/2

50043

Sample Name = **301101-04 B8068 VWR-008-02-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0045.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/20/02 12:44:21 PM
Method Version = 618
Calibration Version = 13

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	955585	0.898	BV	0.17
2	2.28		0.00	0.000	337230	0.317	VV	0.08
3	2.48		0.00	0.000	541185	0.509	VV	0.08
4	2.67		0.00	0.000	3681480	3.460	VV	0.13
5	3.28		0.00	0.000	368229	0.346	VV	0.15
6	3.50		0.00	0.000	173609	0.163	VV	0.13
7	3.68		0.00	0.000	118738	0.112	VV	0.08
8	3.91		0.00	0.000	174848	0.164	VV	0.17
9	4.08		0.00	0.000	157626	0.148	VV	0.08
10	4.30		0.00	0.000	159013	0.149	VV	0.14
11	4.47		0.00	0.000	150438	0.141	VV	0.07
12	4.61		0.00	0.000	66459	0.062	VV	0.05
13	4.76		0.00	0.000	252582	0.237	VV	0.18
14	5.23		0.00	0.000	276307	0.260	VV	0.24
15	5.64		0.00	0.000	225137	0.212	VV	0.24
16	6.12		0.00	0.000	218527	0.205	VV	0.25
17	6.56		0.00	0.000	160793	0.151	VV	0.21
18	6.72		0.00	0.000	92139	0.087	VV	0.06
19	6.88		0.00	0.000	192076	0.181	VV	0.20
20	7.39		0.00	0.000	94034	0.088	VV	0.16
21	7.47		0.00	0.000	54302	0.051	VV	0.08
22	7.76		0.00	0.000	105652	0.099	VV	0.17
23	8.20		0.00	0.000	69313	0.065	VV	0.20
24	8.58		0.00	0.000	39033	0.037	VV	0.11
25	8.72		0.00	0.000	20491	0.019	VB	0.09
26	9.02		0.00	0.000	26096	0.025	BV	0.15
27	9.38		0.00	0.000	4025580	3.783	VV	0.10
28	10.11	CL4XYL	0.85	18.544	6654189	6.254	VV	0.05
29	10.45		0.00	0.000	1037635	0.975	VV	0.15
30	11.01		0.00	0.000	420315	0.395	VV	0.11
31	11.15		0.00	0.000	200504	0.188	VV	0.08
32	11.26		0.00	0.000	413105	0.388	VV	0.05
33	11.41		0.00	0.000	151981	0.143	VV	0.04
34	11.48		0.00	0.000	153054	0.144	VV	0.04
35	11.55	AR1016#1	0.97	21.089	171680	0.161	VV	0.04
36	11.67		0.00	0.000	291909	0.274	VV	0.05
37	11.80		0.00	0.000	200954	0.189	VV	0.06
38	12.04		0.00	0.000	468364	0.440	VV	0.12
39	12.52		0.00	0.000	1251234	1.176	VV	0.15
40	12.71	AR1016#2	1.66	36.213	525714	0.494	VV	0.06
41	13.48		0.00	0.000	3987023	3.747	VV	0.08
42	13.75		0.00	0.000	807634	0.759	VV	0.10
43	16.17		0.00	0.000	42927216	40.345	VV	0.71
44	16.23		0.00	0.000	19586432	18.408	VV	0.39
45	16.83		0.00	0.000	6089270	5.723	VV	0.09
46	17.59		0.00	0.000	1904430	1.790	VV	0.28
47	18.82	AR1260#2	0.19	4.151	82158	0.077	VV	0.06
48	18.95		0.00	0.000	159721	0.150	VV	0.09
49	19.20		0.00	0.000	100880	0.095	VV	0.12
50	19.49		0.00	0.000	37863	0.036	VV	0.07
51	19.66		0.00	0.000	66507	0.063	VV	0.08
52	19.79		0.00	0.000	26255	0.025	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	19.85	AR1260#3	0.08	1.705	25878	0.024	VV	0.05
54	19.98		0.00	0.000	62842	0.059	VV	0.06
55	20.21		0.00	0.000	28647	0.027	VV	0.05
56	20.41		0.00	0.000	38015	0.036	VV	0.05
57	20.54		0.00	0.000	37922	0.036	VV	0.08
58	20.71		0.00	0.000	25123	0.024	VV	0.06
59	20.82		0.00	0.000	54221	0.051	VV	0.09
60	21.12	AR1260#4	0.07	1.425	51515	0.048	VV	0.12
61	21.46		0.00	0.000	13430	0.013	VV	0.12
62	21.64		0.00	0.000	18955	0.018	VV	0.13
63	21.86		0.00	0.000	1069	0.001	VV	0.04
64	21.96		0.00	0.000	294	0.000	VB	0.06
65	22.05	AR1260#5	0.00	0.030	727	0.001	BB	0.05
66	22.34		0.00	0.000	13045	0.012	BV	0.17
67	22.58		0.00	0.000	5838	0.005	VV	0.07
68	22.75		0.00	0.000	11916	0.011	VV	0.07
69	22.91		0.00	0.000	25333	0.024	VB	0.08
70	23.22		0.00	0.000	4624	0.004	BV	0.09
71	23.51		0.00	0.000	5328	0.005	VB	0.20
72	23.81		0.00	0.000	2127	0.002	BB	0.07
73	24.29		0.00	0.000	850	0.001	BV	0.12
74	24.45		0.00	0.000	2812	0.003	VB	0.26
75	24.84		0.00	0.000	1101	0.001	BV	0.09
76	25.00		0.00	0.000	34036	0.032	VV	0.07
77	25.22		0.00	0.000	3385	0.003	VV	0.07
78	25.32		0.00	0.000	2730	0.003	VV	0.06
79	25.44		0.00	0.000	4203	0.004	VB	0.21
80	26.07	CL10BP	0.77	16.844	5467398	5.138	BB	0.08
81	28.28		0.00	0.000	3053	0.003	BB	0.16
82	28.61		0.00	0.000	2392	0.002	BB	0.18

Total Area = 1.064014E+08 Total Height = 6466073 Total Amount = 4.583855

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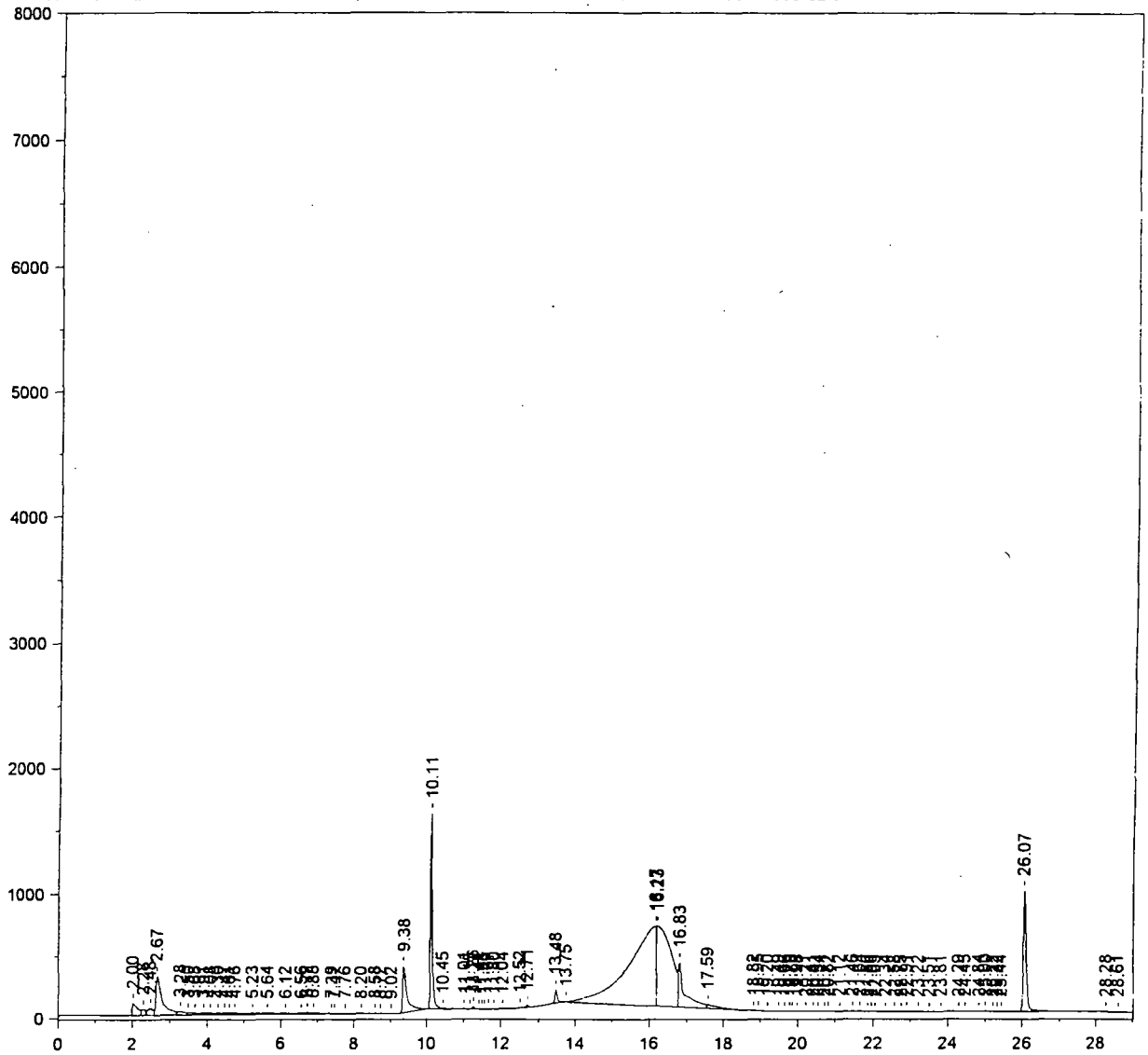

after reintegration
KDT
9/23/2

50047

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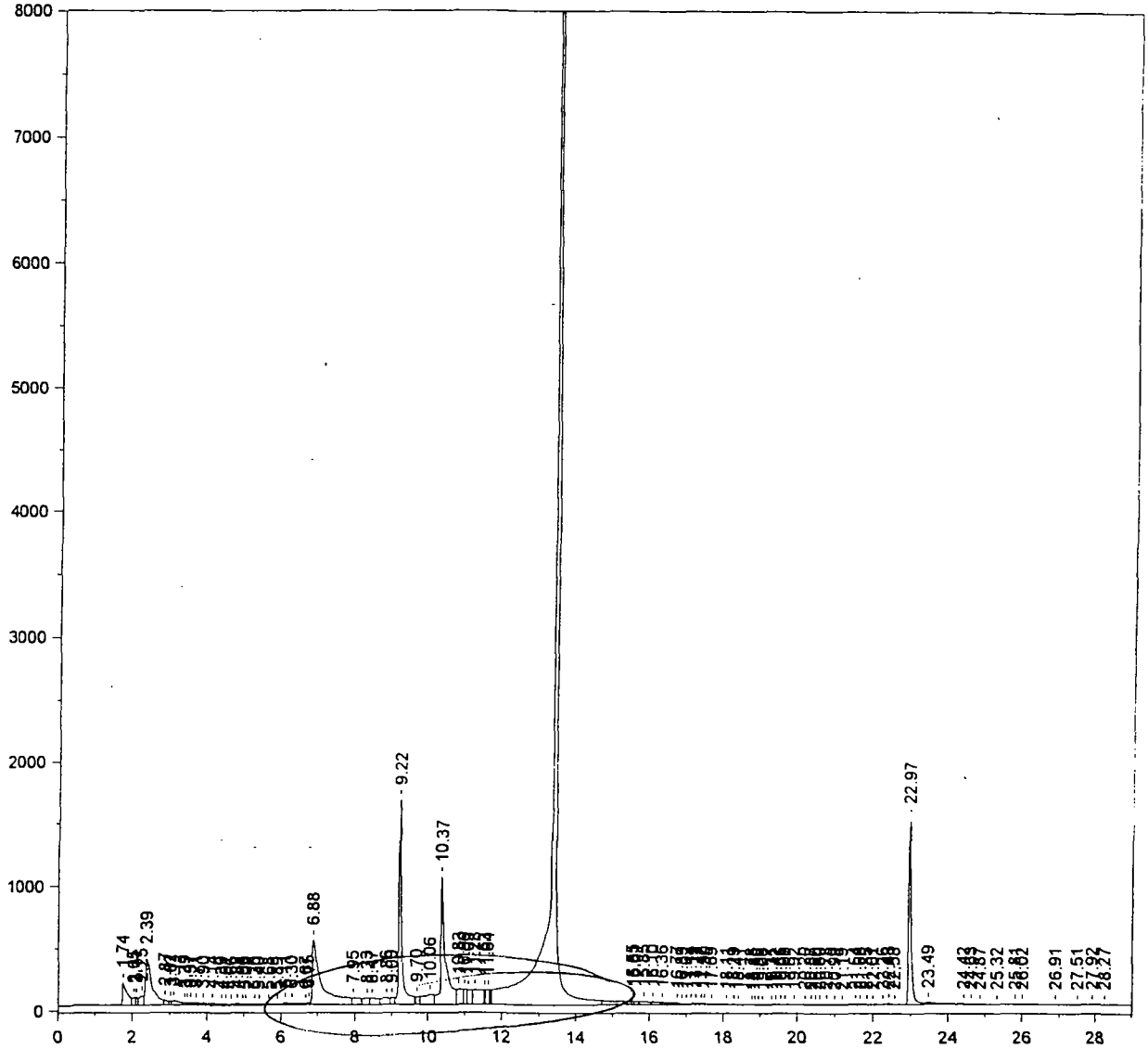


Before reintegration
excess area under peaks
BT
9/23/02

50051

Sample Name = **301101-04 B8068 VWR-008-02-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

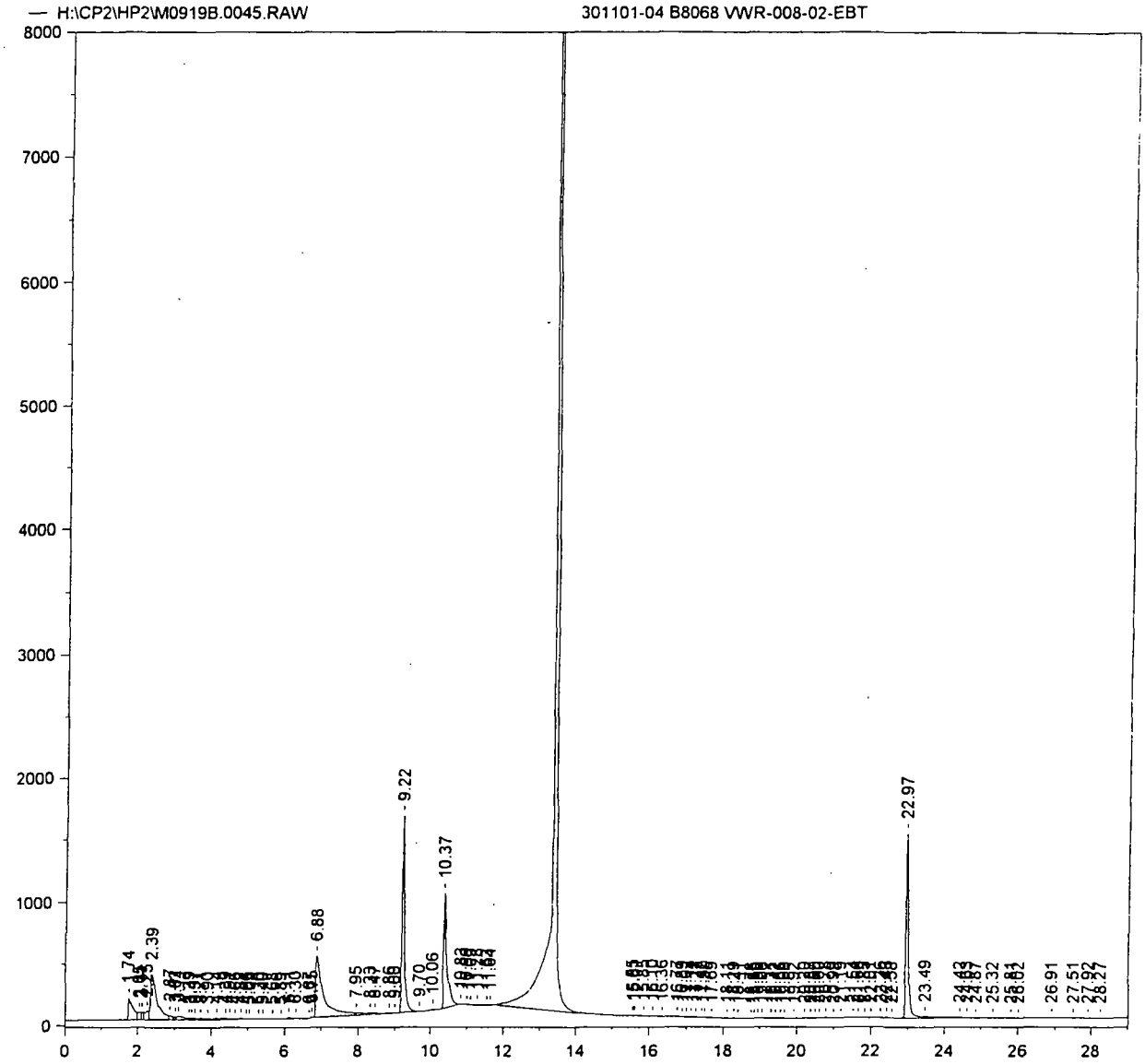
Raw File Name = **H:\CP2\HP2\M0919B.0045.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/20/02 12:44:21 PM
Method Version = 567
Calibration Version = 8

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	1652243	0.993	BV	0.14
2	2.05		0.00	0.000	355393	0.214	VV	0.07
3	2.11		0.00	0.000	251056	0.151	VV	0.05
4	2.25		0.00	0.000	567373	0.341	VV	0.08
5	2.39		0.00	0.000	4614086	2.774	VV	0.14
6	2.87		0.00	0.000	244288	0.147	VV	0.08
7	3.02		0.00	0.000	122349	0.074	VV	0.05
8	3.11		0.00	0.000	461763	0.278	VV	0.19
9	3.39		0.00	0.000	87552	0.053	VV	0.05
10	3.47		0.00	0.000	92568	0.056	VV	0.06
11	3.57		0.00	0.000	99110	0.060	VV	0.07
12	3.71		0.00	0.000	142299	0.086	VV	0.10
13	3.90		0.00	0.000	124625	0.075	VV	0.13
14	4.14		0.00	0.000	243912	0.147	VV	0.20
15	4.39		0.00	0.000	61405	0.037	VV	0.06
16	4.51		0.00	0.000	94958	0.057	VV	0.12
17	4.66		0.00	0.000	45053	0.027	VV	0.07
18	4.82		0.00	0.000	104489	0.063	VV	0.12
19	4.96		0.00	0.000	56553	0.034	VV	0.06
20	5.05		0.00	0.000	97805	0.059	VV	0.13
21	5.30		0.00	0.000	56279	0.034	VV	0.08
22	5.40		0.00	0.000	101857	0.061	VV	0.14
23	5.68		0.00	0.000	113121	0.068	VV	0.15
24	5.89		0.00	0.000	110880	0.067	VV	0.13
25	6.11		0.00	0.000	191054	0.115	VV	0.08
26	6.30		0.00	0.000	139128	0.084	VV	0.08
27	6.67		0.00	0.000	158667	0.095	VV	0.10
28	6.75		0.00	0.000	72299	0.043	VV	0.06
29	6.88		0.00	0.000	9107028	5.475	VV	0.16
30	7.95		0.00	0.000	858218	0.516	VV	0.15
31	8.33		0.00	0.000	612161	0.368	VV	0.15
32	8.47		0.00	0.000	838407	0.504	VV	0.16
33	8.86		0.00	0.000	841205	0.506	VV	0.22
34	9.00		0.00	0.000	430387	0.259	VV	0.06
35	9.22	CL4XYL	0.89	0.162	9449523	5.681	VV	0.07
36	9.70		0.00	0.000	430041	0.259	VV	0.08
37	10.06		0.00	0.000	1711234	1.029	VV	0.18
38	10.37	AR1016#1	38.34	6.979	9045985	5.438	VV	0.08
39	10.83		0.00	0.000	1393449	0.838	VV	0.09
40	10.99		0.00	0.000	773264	0.465	VV	0.08
41	11.09		0.00	0.000	944712	0.568	VV	0.08
42	11.28	AR1016#2	4.92	0.896	2135064	1.284	VV	0.21
43	11.53		0.00	0.000	225067	0.135	VV	0.02
44	11.64		0.00	0.000	820302	0.493	VV	0.08
45	13.43	AR1016#5	503.94	91.733	104951440	63.097	VV	0.08
46	15.55		0.00	0.000	102254	0.061	VV	0.03
47	15.61		0.00	0.000	210909	0.127	VV	0.09
48	15.85		0.00	0.000	492824	0.296	VV	0.16
49	16.10		0.00	0.000	374816	0.225	VV	0.07
50	16.36		0.00	0.000	400145	0.241	VV	0.19
51	16.77	AR1260#2	0.28	0.051	139447	0.084	VV	0.10
52	16.89		0.00	0.000	93796	0.056	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	17 02		0 00	0 000	102442	0.062	VV	0.09
54	17.14		0.00	0.000	70809	0.043	VV	0 06
55	17.27		0.00	0.000	91472	0.055	VV	0.09
56	17.42		0.00	0.000	46604	0.028	VV	0.04
57	17.50		0.00	0.000	96188	0.058	VV	0.08
58	17.69		0.00	0.000	126631	0.076	VV	0 16
59	18.11		0.00	0.000	54998	0.033	VV	0.11
60	18.29	AR1260#3	0.08	0.015	41157	0.025	VV	0.08
61	18.41		0.00	0.000	31841	0.019	VV	0.09
62	18.78		0.00	0.000	17156	0.010	VV	0.06
63	18.85		0.00	0.000	10762	0.006	VV	0.06
64	18.95		0.00	0.000	8955	0.005	VV	0.05
65	19.06		0.00	0.000	3001	0.002	VB	0 06
66	19 31		0.00	0.000	8488	0.005	BV	0.14
67	19.42		0.00	0.000	8490	0.005	VV	0.07
68	19.56	AR1260#4	0.01	0.002	14408	0 009	VV	0.05
69	19.68		0.00	0.000	8450	0.005	VV	0.05
70	19.92		0.00	0 000	25590	0.015	VV	0.19
71	20.20		0.00	0 000	47216	0.028	VV	0 16
72	20.37		0.00	0.000	21615	0.013	VV	0.08
73	20.50		0.00	0.000	19679	0.012	VV	0.06
74	20.60		0.00	0.000	30500	0 018	VV	0 08
75	20.78		0.00	0.000	77707	0.047	VV	0.06
76	20.99		0.00	0.000	43706	0.026	VV	0.09
77	21.19		0.00	0.000	47016	0.028	VV	0 17
78	21.54		0.00	0.000	35467	0.021	VV	0.11
79	21.66	AR1260#5	0 13	0.023	36513	0.022	VV	0.08
80	21.85		0 00	0.000	48944	0.029	VV	0.15
81	22.01		0.00	0.000	28886	0.017	VV	0 11
82	22.26		0.00	0.000	52424	0.032	VV	0 11
83	22.43		0.00	0.000	83525	0.050	VV	0 06
84	22.58		0.00	0.000	47903	0.029	VV	0.09
85	22.97	CL10BP	0.76	0.139	7592248	4.564	VV	0.07
86	23.49		0.00	0.000	359853	0.216	VV	0.25
87	24.42		0.00	0.000	31199	0.019	VV	0.13
88	24.63		0.00	0.000	25986	0 016	VV	0.14
89	24.87		0.00	0.000	17514	0.011	VV	0.17
90	25.32		0.00	0.000	3153	0.002	VB	0.07
91	25.81		0.00	0.000	14654	0.009	BV	0.21
92	26.02		0.00	0.000	24562	0.015	VV	0.22
93	26.91		0.00	0.000	11521	0.007	VV	0.26
94	27.51		0.00	0.000	4628	0.003	VB	0.29
95	27.92		0.00	0.000	1781	0.001	BV	0.17
96	28 27		0.00	0.000	13742	0.008	VB	0.20

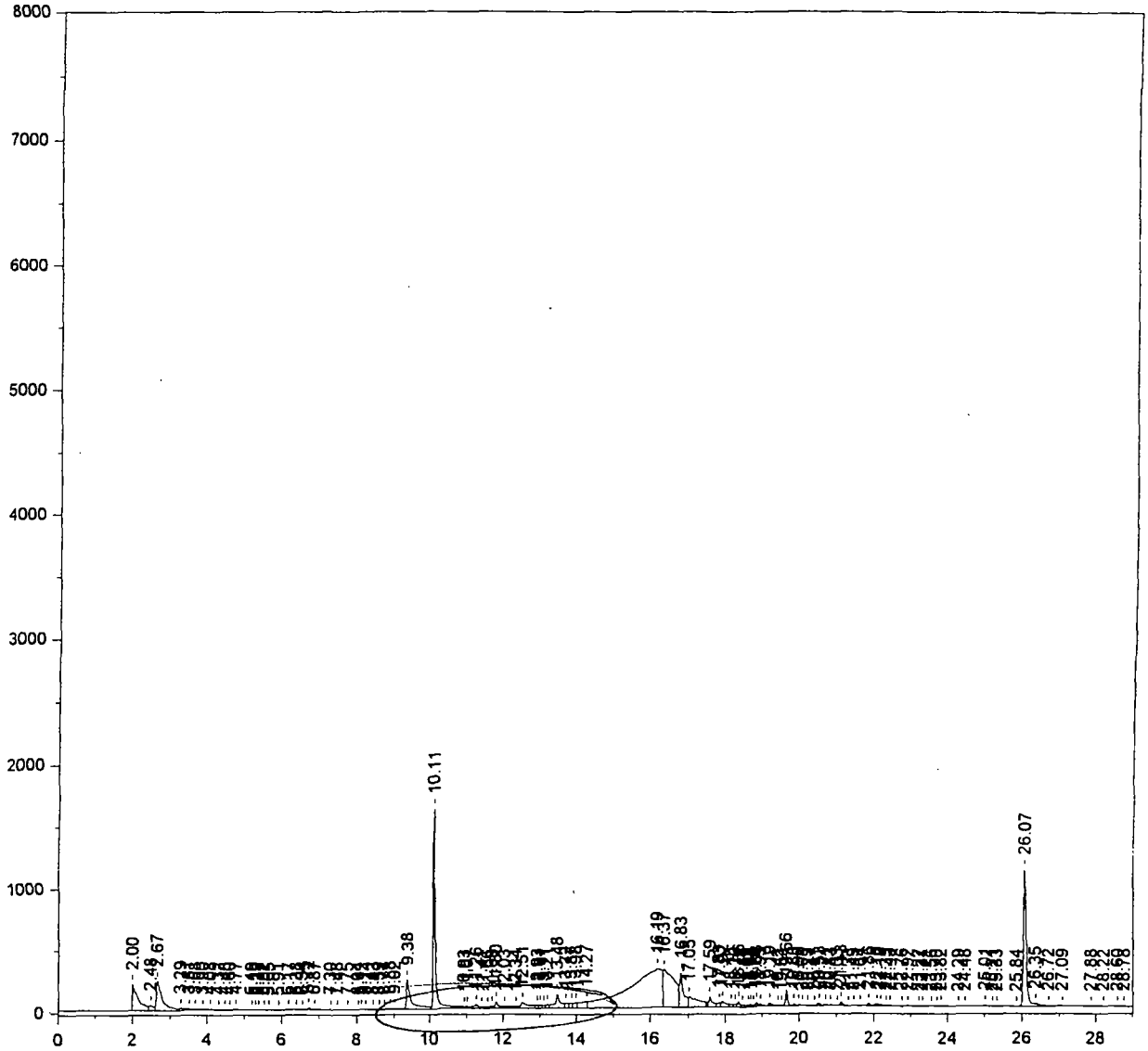
Total Area = 1.663333E+08 Total Height = 2.18608E+07 Total Amount = 549.3521



After reintegration
AST
9/23/02

50051

— H:\CP2\HP2\M0919.0041.RAW 301101-05 B8068 FSS-007-05-EBT



Primary Column

Before reintegration
effects over under peaks
BT
9/20/2

50060

Sample Name = **301101-05 B8068 FSS-007-05-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0041.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

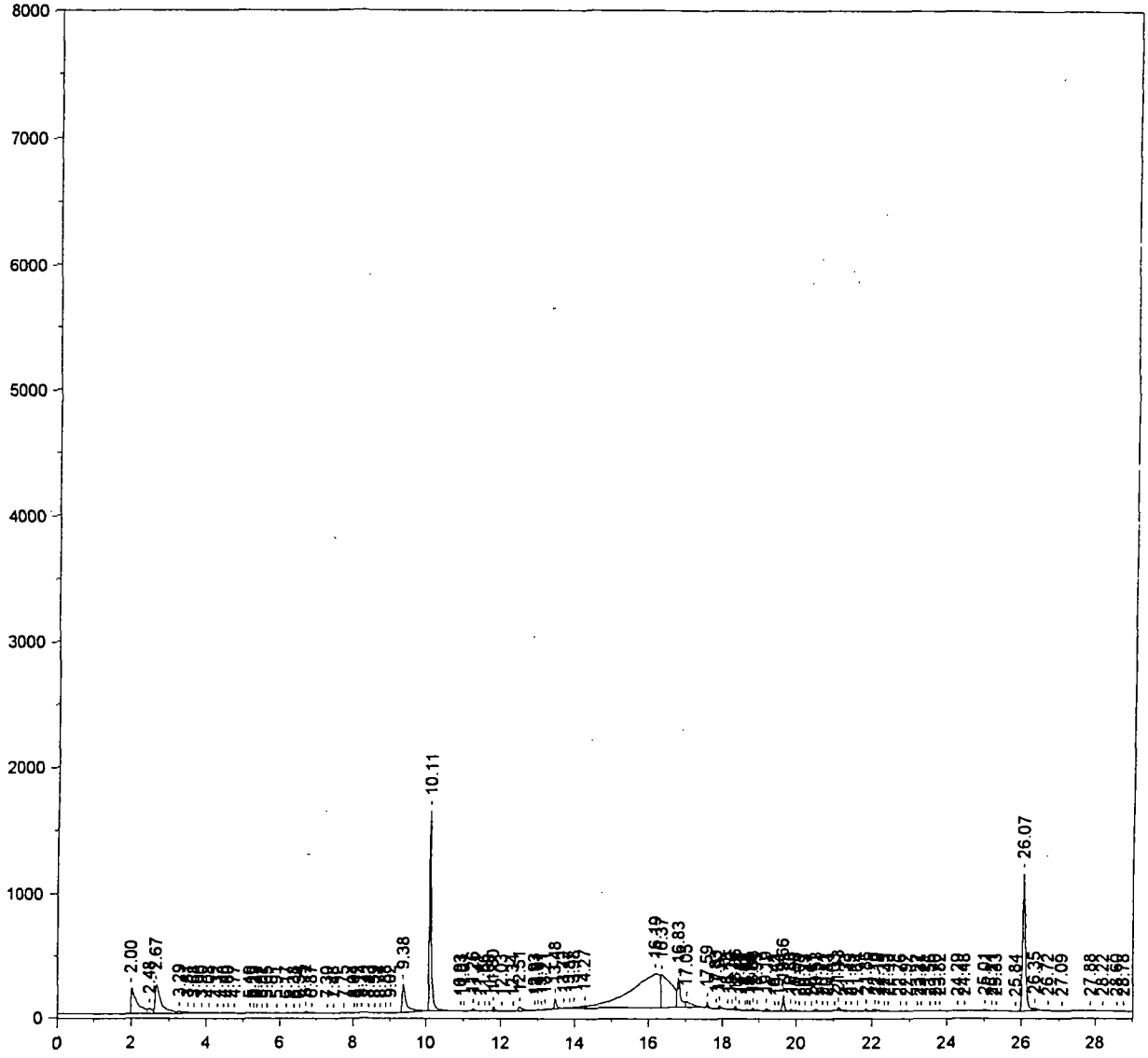
Date Taken (end) = 9/20/02 10:09:21 AM
Method Version = 618
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	2266971	3.795	BV	0.14
2	2.48		0.00	0.000	323568	0.542	VV	0.11
3	2.67		0.00	0.000	2563700	4.292	VV	0.13
4	3.29		0.00	0.000	186427	0.312	VV	0.16
5	3.51		0.00	0.000	64275	0.108	VV	0.11
6	3.68		0.00	0.000	34353	0.058	VV	0.09
7	3.90		0.00	0.000	33638	0.056	VV	0.13
8	4.08		0.00	0.000	54724	0.092	VV	0.08
9	4.32		0.00	0.000	10933	0.018	VV	0.07
10	4.48		0.00	0.000	34764	0.058	VV	0.13
11	4.60		0.00	0.000	12297	0.021	VV	0.06
12	4.77		0.00	0.000	12770	0.021	VB	0.12
13	5.19		0.00	0.000	7242	0.012	BV	0.10
14	5.29		0.00	0.000	4881	0.008	VV	0.05
15	5.37		0.00	0.000	6858	0.011	VV	0.08
16	5.52		0.00	0.000	2734	0.005	VV	0.09
17	5.65		0.00	0.000	5102	0.009	VV	0.09
18	5.91		0.00	0.000	2940	0.005	VB	0.10
19	6.17		0.00	0.000	8231	0.014	BV	0.10
20	6.38		0.00	0.000	2451	0.004	VV	0.07
21	6.54		0.00	0.000	651	0.001	VB	0.05
22	6.72		0.00	0.000	62793	0.105	BV	0.06
23	6.87		0.00	0.000	40416	0.068	VV	0.08
24	7.30		0.00	0.000	1712	0.003	VB	0.07
25	7.48		0.00	0.000	11183	0.019	BB	0.07
26	7.75		0.00	0.000	12809	0.021	BV	0.12
27	8.04		0.00	0.000	3737	0.006	VV	0.05
28	8.12		0.00	0.000	4295	0.007	VV	0.06
29	8.24		0.00	0.000	5199	0.009	VV	0.07
30	8.43		0.00	0.000	9502	0.016	VV	0.06
31	8.59		0.00	0.000	1511	0.003	VB	0.10
32	8.74		0.00	0.000	2175	0.004	BB	0.08
33	8.88		0.00	0.000	17840	0.030	BV	0.07
34	9.02		0.00	0.000	18172	0.030	VV	0.07
35	9.38		0.00	0.000	2224916	3.725	VV	0.10
36	10.11	CL4XYL	0.86	10.580	6771029	11.335	VV	0.05
37	10.93		0.00	0.000	93375	0.156	VV	0.07
38	11.01		0.00	0.000	133541	0.224	VV	0.09
39	11.26		0.00	0.000	302118	0.506	VV	0.05
40	11.41		0.00	0.000	101815	0.170	VV	0.06
41	11.56	AR1016#1	0.55	6.690	97137	0.163	VV	0.05
42	11.68		0.00	0.000	94629	0.158	VV	0.05
43	11.80		0.00	0.000	305877	0.512	VV	0.05
44	12.03		0.00	0.000	89456	0.150	VV	0.06
45	12.34		0.00	0.000	167229	0.280	VV	0.07
46	12.51		0.00	0.000	728516	1.220	VV	0.11
47	12.93		0.00	0.000	120962	0.202	VV	0.05
48	13.01		0.00	0.000	142610	0.239	VV	0.06
49	13.11		0.00	0.000	111049	0.186	VV	0.05
50	13.21		0.00	0.000	189107	0.317	VV	0.07
51	13.48		0.00	0.000	1158637	1.940	VV	0.06
52	13.72		0.00	0.000	275002	0.460	VV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	13.87	AR1016#3	0.46	5.592	222509	0.372	VV	0.05
54	13.98		0.00	0.000	314196	0.526	VV	0.07
55	14.27	AR1016#4	2.52	30.863	793972	1.329	VV	0.11
56	16.19		0.00	0.000	19347972	32.390	VV	0.78
57	16.37		0.00	0.000	6385236	10.689	VV	0.25
58	16.83		0.00	0.000	1949239	3.263	VV	0.07
59	17.05		0.00	0.000	1659084	2.777	VV	0.19
60	17.59		0.00	0.000	598127	1.001	VV	0.05
61	17.83		0.00	0.000	193353	0.324	VV	0.06
62	17.92	AR1260#1	2.03	24.810	403685	0.676	VV	0.06
63	18.15		0.00	0.000	137736	0.231	VV	0.07
64	18.26		0.00	0.000	117677	0.197	VV	0.05
65	18.36		0.00	0.000	189140	0.317	VV	0.05
66	18.45		0.00	0.000	131490	0.220	VV	0.09
67	18.62		0.00	0.000	36398	0.061	VV	0.04
68	18.68		0.00	0.000	66779	0.112	VV	0.04
69	18.76		0.00	0.000	46077	0.077	VV	0.04
70	18.83	AR1260#2	0.28	3.412	120462	0.202	VV	0.05
71	18.95		0.00	0.000	71641	0.120	VV	0.05
72	19.19		0.00	0.000	152741	0.256	VV	0.10
73	19.42		0.00	0.000	29793	0.050	VV	0.05
74	19.52		0.00	0.000	25670	0.043	VV	0.04
75	19.66		0.00	0.000	527681	0.883	VV	0.05
76	19.86	AR1260#3	0.23	2.831	76625	0.128	VV	0.05
77	19.98		0.00	0.000	46451	0.078	VV	0.05
78	20.08		0.00	0.000	17479	0.029	VV	0.06
79	20.23		0.00	0.000	23535	0.039	VB	0.07
80	20.41		0.00	0.000	8685	0.015	BV	0.06
81	20.53		0.00	0.000	94817	0.159	VB	0.08
82	20.71		0.00	0.000	33014	0.055	BB	0.08
83	20.83		0.00	0.000	5564	0.009	BB	0.06
84	21.03		0.00	0.000	991	0.002	BV	0.03
85	21.13	AR1260#4	0.18	2.236	144165	0.241	VV	0.06
86	21.33		0.00	0.000	4648	0.008	VB	0.07
87	21.45		0.00	0.000	5974	0.010	BB	0.06
88	21.64		0.00	0.000	22082	0.037	BB	0.07
89	21.86		0.00	0.000	66319	0.111	BB	0.06
90	22.10	AR1260#5	0.17	2.039	89106	0.149	BV	0.10
91	22.18		0.00	0.000	41369	0.069	VV	0.10
92	22.33		0.00	0.000	4338	0.007	VV	0.05
93	22.43		0.00	0.000	9650	0.016	VB	0.05
94	22.76		0.00	0.000	16239	0.027	BV	0.08
95	22.92		0.00	0.000	31962	0.054	VV	0.07
96	23.22		0.00	0.000	5903	0.010	VV	0.07
97	23.31		0.00	0.000	11472	0.019	VB	0.07
98	23.56		0.00	0.000	4302	0.007	BV	0.08
99	23.70		0.00	0.000	1529	0.003	VV	0.07
100	23.82		0.00	0.000	37862	0.063	VB	0.07
101	24.29		0.00	0.000	2736	0.005	BB	0.07
102	24.48		0.00	0.000	2232	0.004	BB	0.22
103	25.01		0.00	0.000	56446	0.094	BV	0.07
104	25.21		0.00	0.000	9211	0.015	VV	0.07
105	25.33		0.00	0.000	1597	0.003	VB	0.07
106	25.84		0.00	0.000	420	0.001	BB	0.08
107	26.07	CL10BP	0.89	10.946	6337392	10.609	SBB	0.08
108	26.35		0.00	0.000	29265	0.049	TBV	0.13
109	26.72		0.00	0.000	2135	0.004	TVV	0.10
110	27.09		0.00	0.000	2536	0.004	TVB	0.15
111	27.88		0.00	0.000	1238	0.002	BB	0.14
112	28.22		0.00	0.000	12092	0.020	BV	0.19
113	28.60		0.00	0.000	9304	0.016	VV	0.19
114	28.78		0.00	0.000	6076	0.010	VB	0.15

Total Area = 5.973528E+07 Total Height = 5833607 Total Amount = 8.175701

— H:\CP2\HP2\M0919.0041.RAW 301101-05 B8068 FSS-007-05-EBT



after investigation
AST
9/20/02

50063

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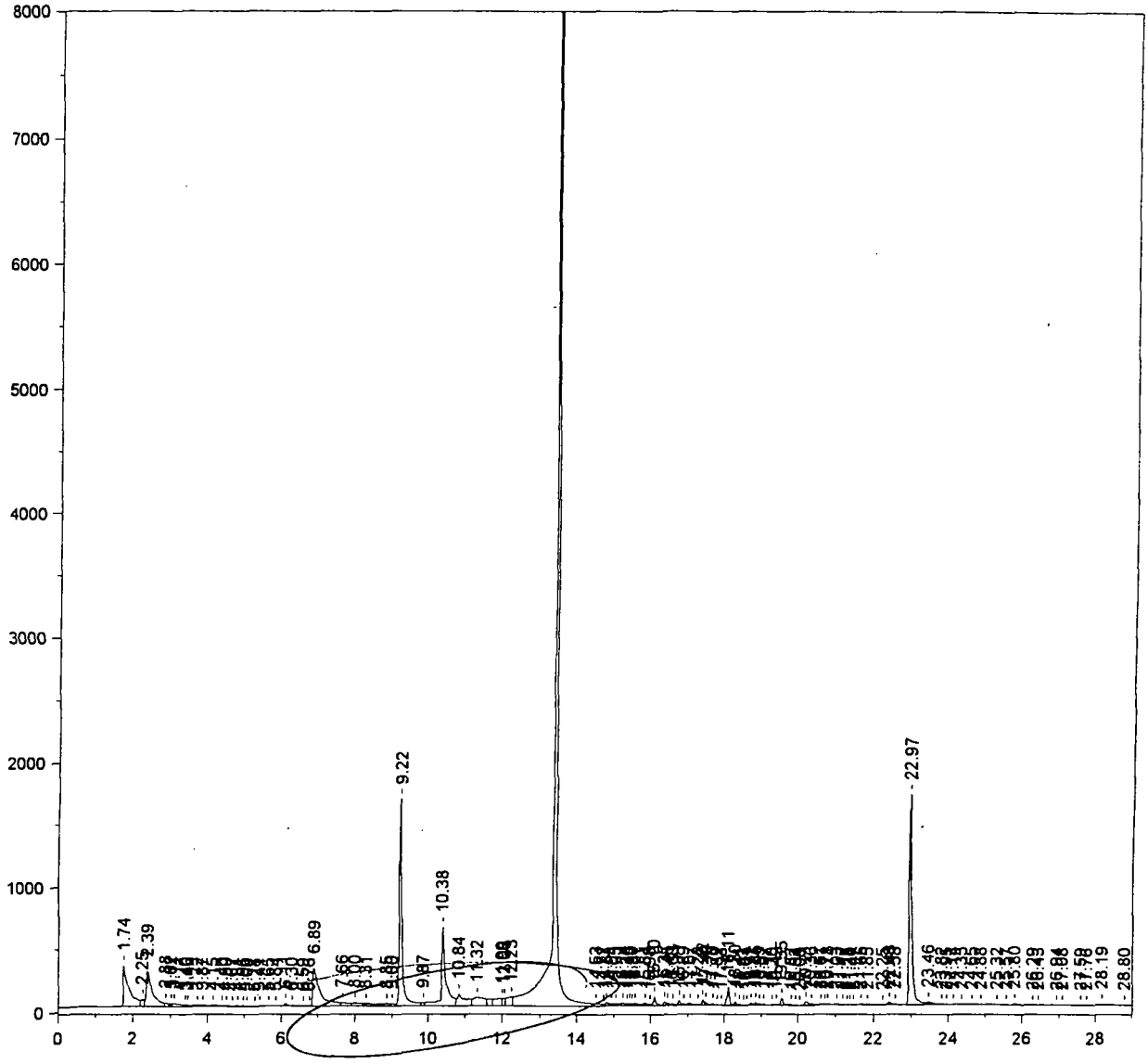


Before investigation
excess area under peak
ABT
9/20/02

50068

Sample Name = **301101-05 B8068 FSS-007-05-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

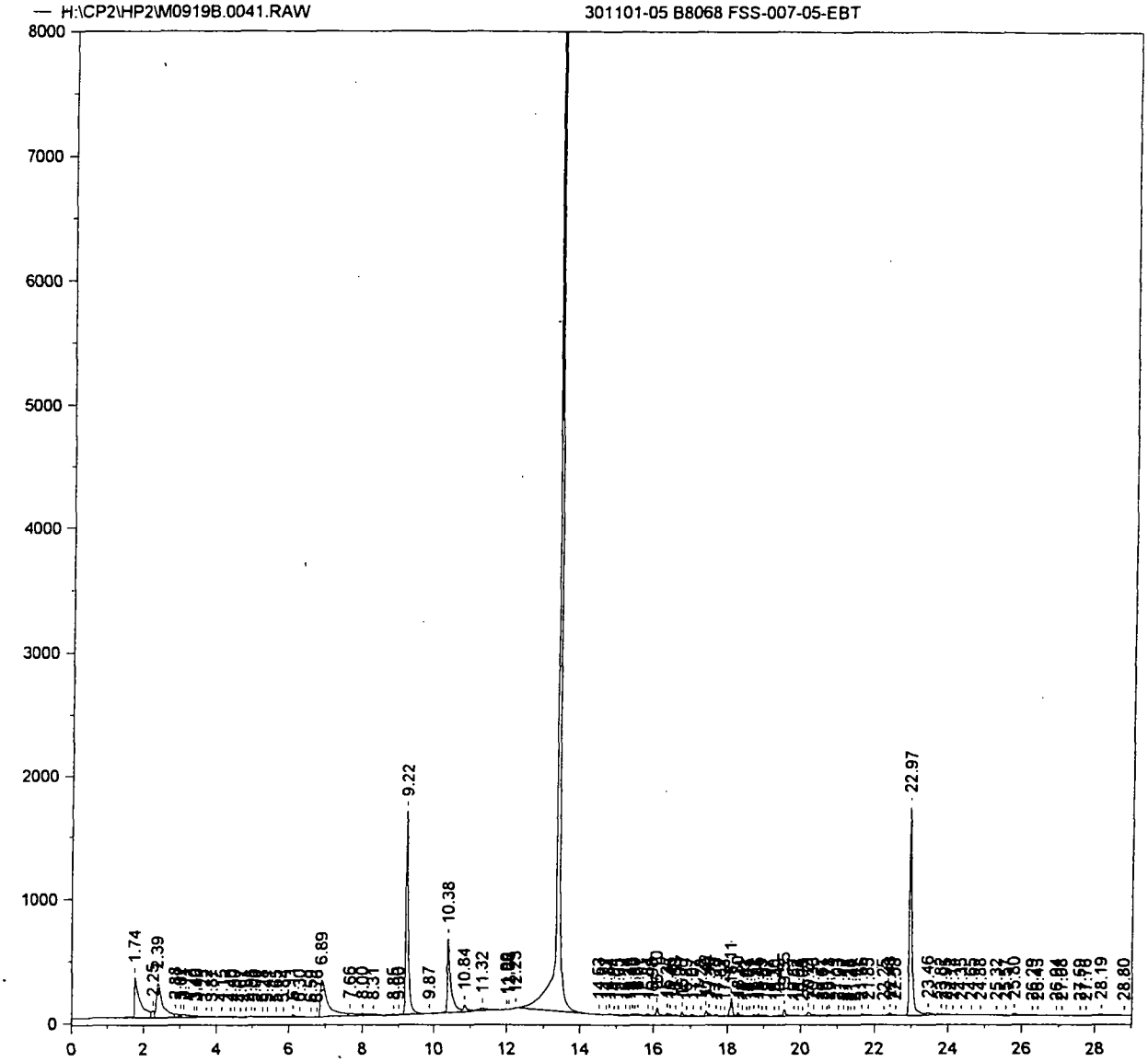
Raw File Name = **H:\CP2\HP2\M0919B.0041.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/20/02 10:09:21 AM
Method Version = 567
Calibration Version = 5

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	3513197	3.049	BV	0.13
2	2.25		0.00	0.000	352176	0.306	VV	0.06
3	2.39		0.00	0.000	3322813	2.884	VV	0.14
4	2.88		0.00	0.000	179431	0.156	VV	0.08
5	3.02		0.00	0.000	80396	0.070	VV	0.04
6	3.11		0.00	0.000	336133	0.292	VV	0.20
7	3.40		0.00	0.000	61543	0.053	VV	0.04
8	3.46		0.00	0.000	111589	0.097	VV	0.07
9	3.72		0.00	0.000	92778	0.081	VV	0.14
10	3.87		0.00	0.000	69899	0.061	VV	0.13
11	4.15		0.00	0.000	78400	0.068	VV	0.11
12	4.40		0.00	0.000	38911	0.034	VV	0.06
13	4.50		0.00	0.000	55111	0.048	VV	0.12
14	4.67		0.00	0.000	29092	0.025	VV	0.06
15	4.81		0.00	0.000	58415	0.051	VV	0.08
16	4.96		0.00	0.000	32782	0.028	VV	0.05
17	5.06		0.00	0.000	46672	0.041	VV	0.12
18	5.28		0.00	0.000	37094	0.032	VV	0.08
19	5.41		0.00	0.000	34347	0.030	VV	0.09
20	5.65		0.00	0.000	33969	0.029	VV	0.16
21	5.84		0.00	0.000	21445	0.019	VV	0.14
22	6.11		0.00	0.000	117310	0.102	VV	0.08
23	6.30		0.00	0.000	44543	0.039	VV	0.08
24	6.59		0.00	0.000	22713	0.020	VV	0.09
25	6.76		0.00	0.000	15291	0.013	VV	0.06
26	6.89		0.00	0.000	4339810	3.766	VV	0.17
27	7.66		0.00	0.000	398622	0.346	VV	0.12
28	8.00		0.00	0.000	398843	0.346	VV	0.12
29	8.31		0.00	0.000	251232	0.218	VV	0.08
30	8.85		0.00	0.000	315090	0.273	VV	0.17
31	9.00		0.00	0.000	153469	0.133	VV	0.08
32	9.22	CL4XYL	0.82	0.234	8697535	7.548	VV	0.06
33	9.87		0.00	0.000	159305	0.138	VV	0.07
34	10.38	AR1016#1	23.15	6.634	5462020	4.740	VV	0.08
35	10.84		0.00	0.000	1554480	1.349	VV	0.07
36	11.32	AR1016#2	3.29	0.941	1425162	1.237	VV	0.21
37	11.99		0.00	0.000	863503	0.749	VV	0.12
38	12.06		0.00	0.000	254275	0.221	VV	0.03
39	12.23		0.00	0.000	753300	0.654	VV	0.08
40	13.40	AR1016#5	319.35	91.506	66507956	57.717	VV	0.05
41	14.53		0.00	0.000	236977	0.206	VV	0.11
42	14.72		0.00	0.000	64162	0.056	VV	0.04
43	14.81		0.00	0.000	172852	0.150	VV	0.06
44	14.94		0.00	0.000	102215	0.089	VV	0.05
45	15.05		0.00	0.000	107741	0.094	VV	0.09
46	15.24		0.00	0.000	220659	0.191	VV	0.13
47	15.36		0.00	0.000	63303	0.055	VV	0.04
48	15.43		0.00	0.000	78414	0.068	VV	0.04
49	15.50		0.00	0.000	63943	0.055	VV	0.04
50	15.57		0.00	0.000	168358	0.146	VV	0.09
51	15.84		0.00	0.000	207355	0.180	VV	0.07
52	15.98		0.00	0.000	49209	0.043	VV	0.04

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.10		0.00	0.000	431449	0.374	VV	0.06
54	16.37		0.00	0.000	145416	0.126	VV	0.06
55	16.45	AR1260#1	0.42	0.121	113473	0.098	VV	0.06
56	16.60		0.00	0.000	100886	0.088	VV	0.07
57	16.77	AR1260#2	0.34	0.098	170405	0.148	VV	0.05
58	16.89		0.00	0.000	46307	0.040	VV	0.05
59	17.07		0.00	0.000	161042	0.140	VV	0.10
60	17.28		0.00	0.000	45589	0.040	VV	0.05
61	17.42		0.00	0.000	174942	0.152	VV	0.06
62	17.49		0.00	0.000	106393	0.092	VV	0.06
63	17.70		0.00	0.000	82048	0.071	VV	0.07
64	17.82		0.00	0.000	23753	0.021	VV	0.05
65	17.93		0.00	0.000	33346	0.029	VV	0.05
66	18.11		0.00	0.000	678069	0.588	VV	0.06
67	18.30	AR1260#3	0.25	0.073	130433	0.113	VV	0.05
68	18.41		0.00	0.000	37531	0.033	VV	0.05
69	18.53		0.00	0.000	15573	0.014	VV	0.05
70	18.61		0.00	0.000	11770	0.010	VV	0.06
71	18.72		0.00	0.000	72895	0.063	VV	0.08
72	18.85		0.00	0.000	82683	0.072	VV	0.05
73	18.95		0.00	0.000	48445	0.042	VV	0.05
74	19.07		0.00	0.000	41627	0.036	VB	0.06
75	19.30		0.00	0.000	21304	0.018	BV	0.08
76	19.42		0.00	0.000	46618	0.040	VV	0.06
77	19.55	AR1260#4	0.22	0.062	278161	0.241	VV	0.06
78	19.82		0.00	0.000	24017	0.021	VV	0.06
79	19.93		0.00	0.000	16489	0.014	VV	0.08
80	20.05		0.00	0.000	7247	0.006	VV	0.06
81	20.21		0.00	0.000	189902	0.165	VV	0.10
82	20.36		0.00	0.000	112667	0.098	VV	0.06
83	20.61		0.00	0.000	49049	0.043	VV	0.05
84	20.71		0.00	0.000	19532	0.017	VV	0.04
85	20.78		0.00	0.000	51065	0.044	VV	0.05
86	21.03		0.00	0.000	75627	0.066	VV	0.09
87	21.17		0.00	0.000	30926	0.027	VV	0.08
88	21.28		0.00	0.000	15413	0.013	VV	0.04
89	21.38		0.00	0.000	20217	0.018	VV	0.06
90	21.47		0.00	0.000	23642	0.021	VV	0.07
91	21.66	AR1260#5	0.29	0.084	85700	0.074	VV	0.06
92	21.85		0.00	0.000	65955	0.057	VV	0.10
93	22.25		0.00	0.000	19061	0.017	VV	0.07
94	22.43		0.00	0.000	125910	0.109	VV	0.07
95	22.58		0.00	0.000	24067	0.021	VV	0.08
96	22.97	CL10BP	0.86	0.248	8580444	7.446	VV	0.07
97	23.46		0.00	0.000	318176	0.276	VV	0.17
98	23.82		0.00	0.000	61088	0.053	VV	0.11
99	23.95		0.00	0.000	44884	0.039	VV	0.09
100	24.14		0.00	0.000	39286	0.034	VV	0.14
101	24.35		0.00	0.000	25019	0.022	VV	0.19
102	24.65		0.00	0.000	5092	0.004	VB	0.11
103	24.88		0.00	0.000	1593	0.001	BB	0.10
104	25.32		0.00	0.000	21292	0.018	BV	0.10
105	25.57		0.00	0.000	5538	0.005	VB	0.10
106	25.80		0.00	0.000	90994	0.079	BV	0.10
107	26.29		0.00	0.000	3824	0.003	VV	0.10
108	26.43		0.00	0.000	1588	0.001	VB	0.10
109	26.94		0.00	0.000	5995	0.005	BV	0.16
110	27.08		0.00	0.000	4141	0.004	VB	0.12
111	27.59		0.00	0.000	2426	0.002	BV	0.14
112	27.76		0.00	0.000	3562	0.003	VV	0.08
113	28.19		0.00	0.000	97079	0.084	VV	0.24
114	28.80		0.00	0.000	6073	0.005	VB	0.13

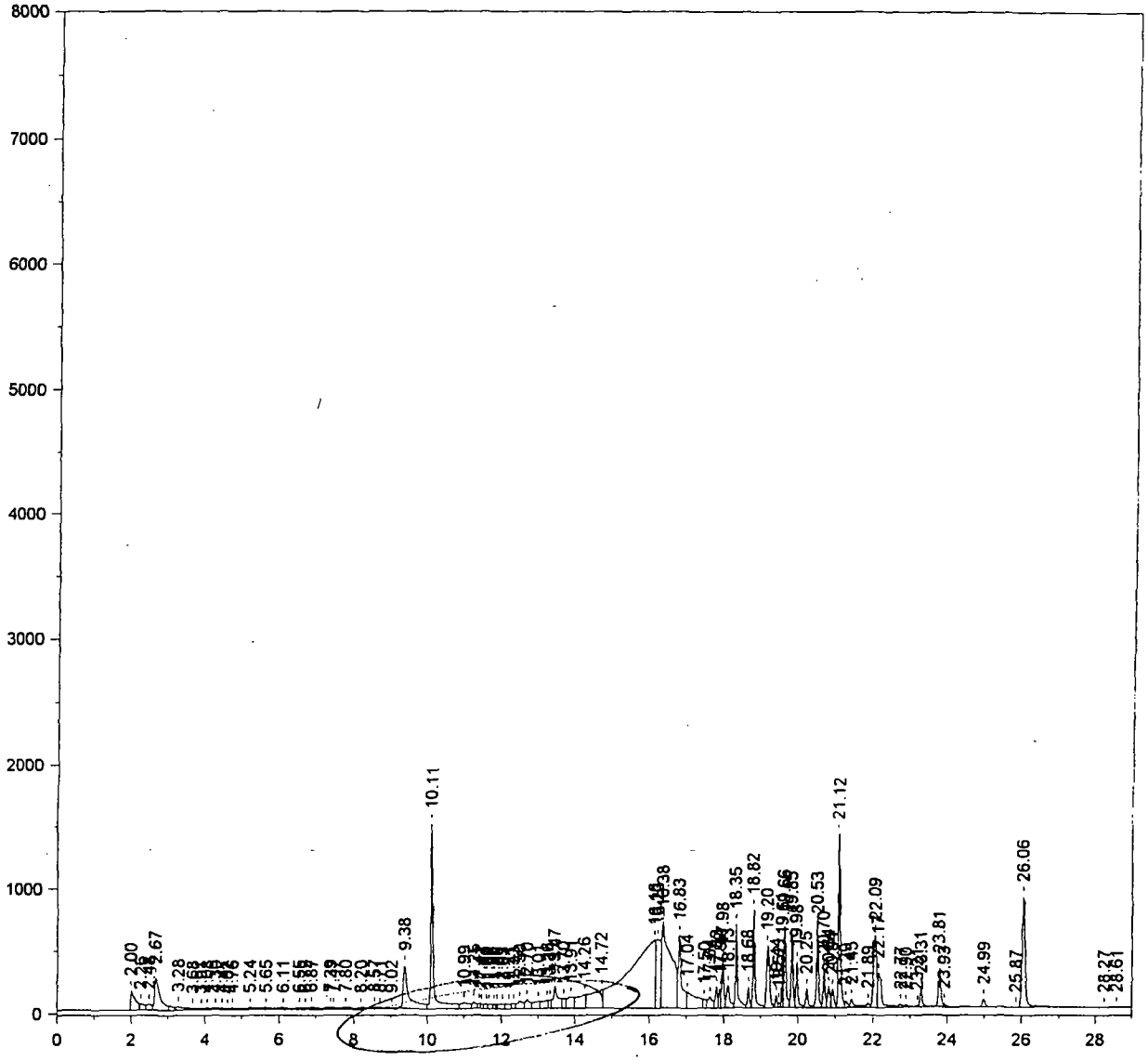
Total Area = 1.152306E+08 Total Height = 2.127327E+07 Total Amount = 348.9928



After integration
BT
9/20/2

50071

— H:\CP2\HP2\M0919.0020.RAW 301101-01MS B8068 VWR-005-02-EBTMS



Primary Column

Before reintegration
excess area under peaks
BT 9/20/2

50299

Sample Name = **301101-01MS B8068 VWR-005-02-EBTMS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0020.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

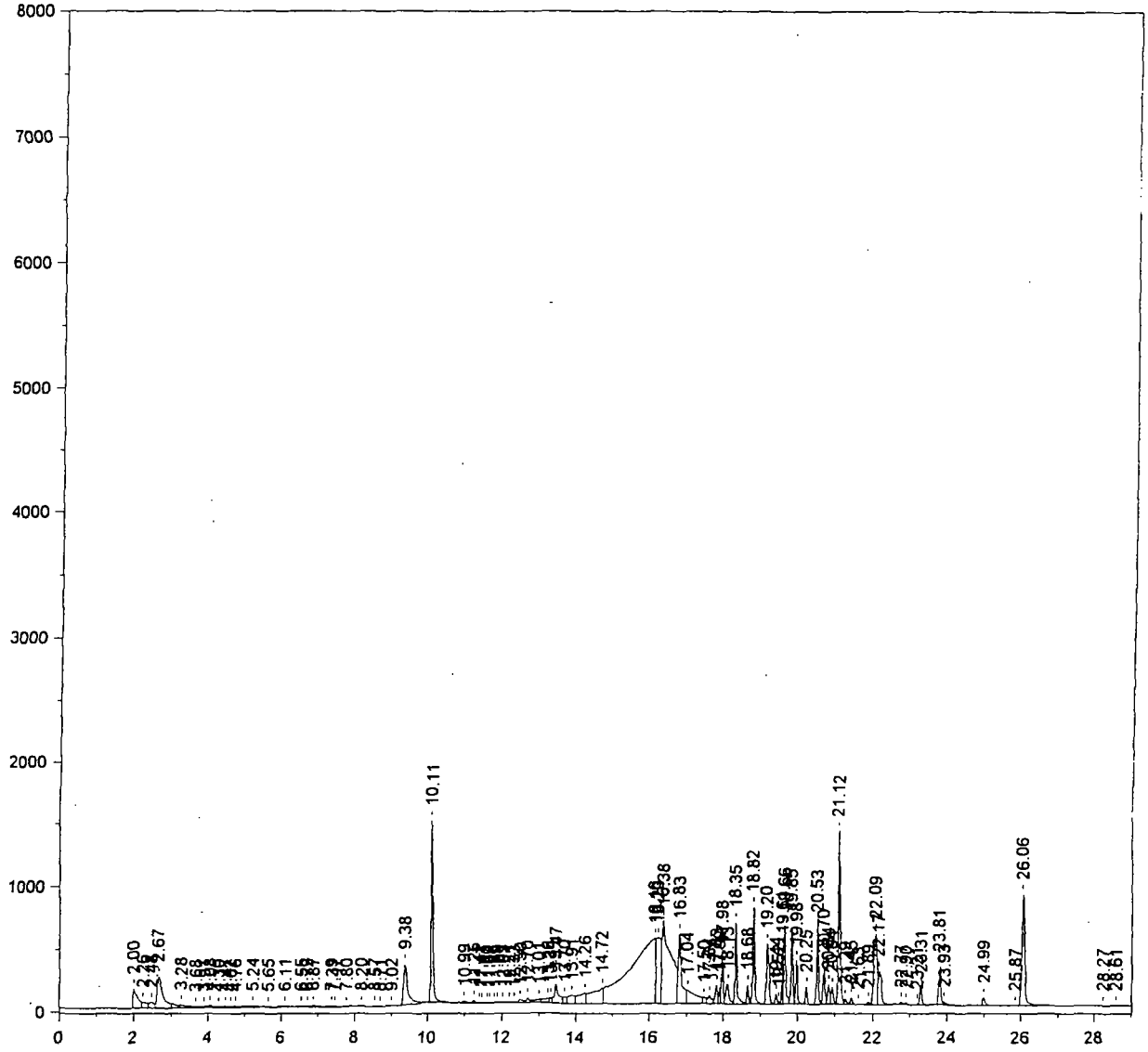
Date Taken (end) = 9/19/02 8:25:53 PM
Method Version = 618
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1365563	1.030	BV	0.14
2	2.26		0.00	0.000	442206	0.333	VV	0.09
3	2.48		0.00	0.000	447341	0.337	VV	0.09
4	2.67		0.00	0.000	2717818	2.049	VV	0.13
5	3.28		0.00	0.000	479798	0.362	VV	0.16
6	3.68		0.00	0.000	117105	0.088	VV	0.09
7	3.91		0.00	0.000	150984	0.114	VV	0.14
8	4.08		0.00	0.000	161544	0.122	VV	0.08
9	4.30		0.00	0.000	157460	0.119	VV	0.14
10	4.47		0.00	0.000	157253	0.119	VV	0.07
11	4.62		0.00	0.000	65770	0.050	VV	0.06
12	4.76		0.00	0.000	252317	0.190	VV	0.17
13	5.24		0.00	0.000	313275	0.236	VV	0.24
14	5.65		0.00	0.000	277160	0.209	VV	0.24
15	6.11		0.00	0.000	297905	0.225	VV	0.23
16	6.55		0.00	0.000	242634	0.183	VV	0.21
17	6.72		0.00	0.000	91653	0.069	VV	0.06
18	6.87		0.00	0.000	287941	0.217	VV	0.18
19	7.39		0.00	0.000	174168	0.131	VV	0.15
20	7.47		0.00	0.000	107162	0.081	VV	0.08
21	7.80		0.00	0.000	265140	0.200	VV	0.19
22	8.20		0.00	0.000	236278	0.178	VV	0.19
23	8.57		0.00	0.000	175176	0.132	VV	0.09
24	8.71		0.00	0.000	95078	0.072	VV	0.09
25	9.02		0.00	0.000	195073	0.147	VV	0.22
26	9.38		0.00	0.000	3927293	2.961	VV	0.10
27	10.11	CL4XYL	0.93	1.998	7253697	5.470	VV	0.05
28	10.99		0.00	0.000	798767	0.602	VV	0.10
29	11.25		0.00	0.000	409135	0.309	VV	0.05
30	11.41		0.00	0.000	169630	0.128	VV	0.05
31	11.47		0.00	0.000	178390	0.135	VV	0.05
32	11.60	AR1016#1	1.46	3.146	259105	0.195	VV	0.07
33	11.67		0.00	0.000	266203	0.201	VV	0.06
34	11.80		0.00	0.000	179943	0.136	VV	0.04
35	11.88		0.00	0.000	103699	0.078	VV	0.03
36	12.03		0.00	0.000	421932	0.318	VV	0.11
37	12.21		0.00	0.000	364313	0.275	VV	0.09
38	12.33		0.00	0.000	249770	0.188	VV	0.07
39	12.50		0.00	0.000	689794	0.520	VV	0.12
40	12.70	AR1016#2	2.00	4.319	634208	0.478	VV	0.06
41	13.01		0.00	0.000	682363	0.515	VV	0.08
42	13.26		0.00	0.000	747183	0.563	VV	0.08
43	13.34		0.00	0.000	354666	0.267	VV	0.06
44	13.47		0.00	0.000	1702846	1.284	VV	0.06
45	13.70		0.00	0.000	559684	0.422	VV	0.09
46	13.91	AR1016#3	2.39	5.156	1163462	0.877	VV	0.16
47	14.26	AR1016#4	5.46	11.766	1716662	1.294	VV	0.10
48	14.72		0.00	0.000	3322031	2.505	VV	0.13
49	16.16		0.00	0.000	26844550	20.243	VV	0.58
50	16.23		0.00	0.000	5188452	3.912	VV	0.14
51	16.38		0.00	0.000	11841271	8.929	VV	0.14
52	16.83		0.00	0.000	3829715	2.888	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	17.04		0.00	0.000	2570811	1 939	VV	0.17
54	17.50		0.00	0.000	366217	0 276	VV	0.06
55	17.64		0.00	0.000	813538	0.613	VV	0.06
56	17.83		0.00	0.000	684564	0.516	VV	0.05
57	17.92		0.00	0.000	455312	0 343	VV	0.04
58	17.98	AR1260#1	7.16	15 438	1424624	1 074	VV	0.05
59	18.13		0.00	0.000	1128669	0.851	VV	0.07
60	18.35		0 00	0.000	2705910	2.040	VV	0.05
61	18.68		0.00	0.000	653792	0 493	VV	0.05
62	18.82	AR1260#2	6.83	14.727	2948772	2.224	VV	0.05
63	19.20		0.00	0.000	2737843	2.065	VV	0.08
64	19.44		0.00	0.000	368405	0.278	VV	0.05
65	19.52		0.00	0.000	118003	0.089	VV	0.04
66	19.61		0.00	0.000	1179460	0.889	VV	0.04
67	19.66		0.00	0.000	2627801	1.982	VV	0.06
68	19.85	AR1260#3	6.38	13.762	2112750	1.593	VV	0.05
69	19.98		0.00	0.000	1367353	1.031	VV	0.05
70	20.25		0.00	0.000	693766	0.523	VV	0.05
71	20.53		0 00	0.000	2283166	1.722	VV	0.05
72	20 70		0.00	0.000	1253189	0.945	VV	0.05
73	20.84		0.00	0.000	744016	0.561	VV	0.05
74	20.94		0.00	0.000	684667	0.516	VV	0.08
75	21.12	AR1260#4	6.53	14.075	5146432	3 881	VV	0.05
76	21.29		0.00	0.000	279635	0 211	VV	0.07
77	21.45		0.00	0.000	347333	0.262	VV	0.05
78	21.89		0.00	0.000	178760	0.135	VV	0.05
79	22.09	AR1260#5	6.52	14.063	3484992	2.628	VV	0.10
80	22.17		0.00	0.000	1992124	1.502	VV	0.11
81	22.77		0.00	0.000	146120	0.110	VV	0 06
82	22.90		0.00	0.000	156912	0 118	VV	0 07
83	23.21		0.00	0.000	63351	0 048	VV	0.06
84	23.31		0.00	0 000	737841	0.556	VV	0.06
85	23.81		0 00	0.000	1389285	1.048	VV	0.07
86	23.93		0.00	0.000	231789	0.175	VV	0.08
87	24.99		0.00	0.000	308755	0.233	VB	0.07
88	25.87		0.00	0 000	1152	0.001	BV	0.07
89	26 06	CL10BP	0.72	1.550	5088044	3.837	VV	0.08
90	28.27		0.00	0.000	2886	0.002	VB	0.14
91	28.61		0.00	0.000	2576	0.002	BB	0.09

Total Area = 1.326132E+08 Total Height = 1.716059E+07 Total Amount = 46.36821

— H:\CP2\HP2\M0919.0020.RAW 301101-01MS B8068 VWR-005-02-EBTMS



After reintegration
ADT
9/20/02

50302

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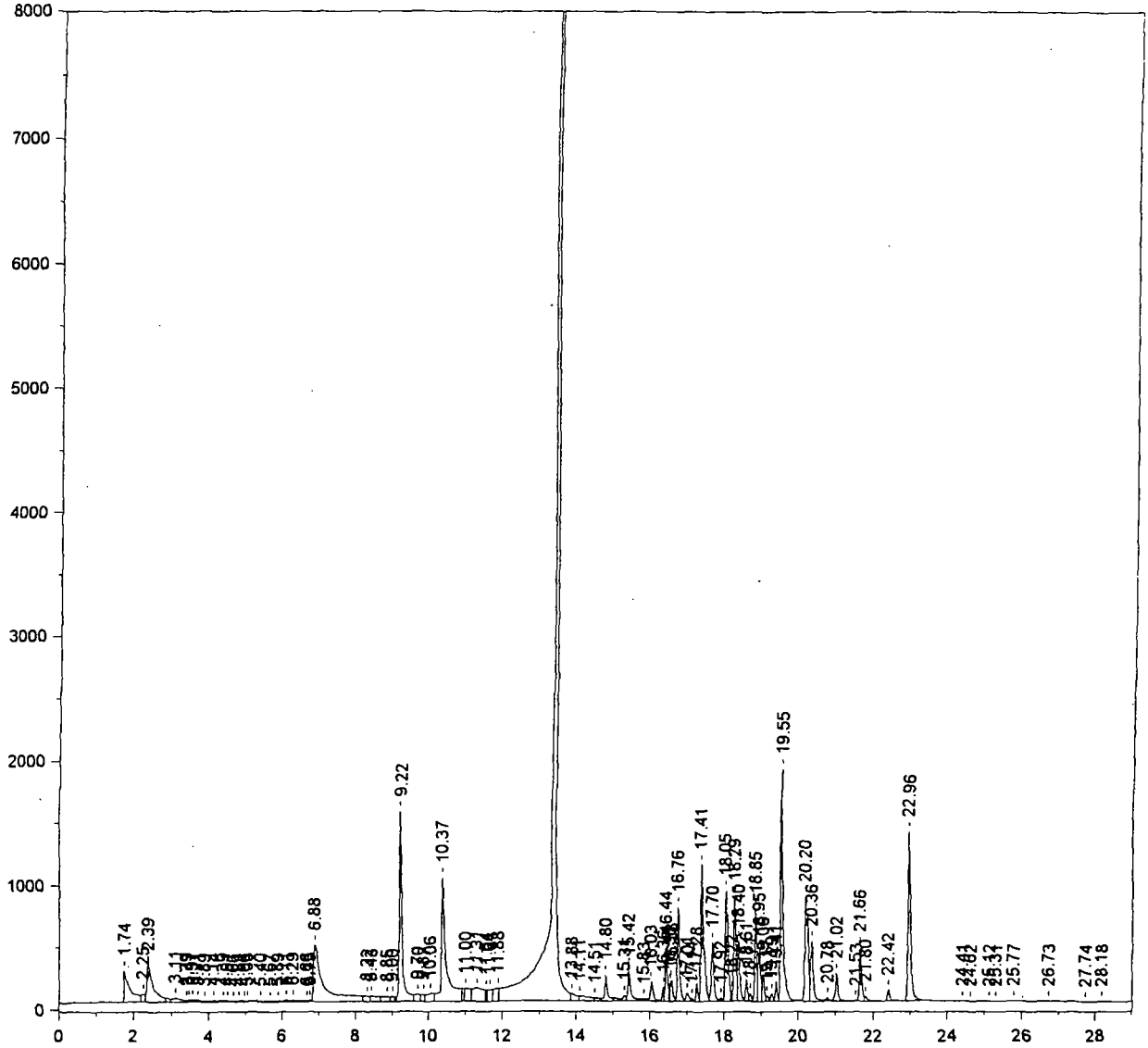


Before integration
excess area under peaks

DT
9/20/02

50306

Sample Name = **301101-01MS B8068 VWR-005-02-EBTMS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0020.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/19/02 8:25:53 PM
Method Version = 567
Calibration Version = 5

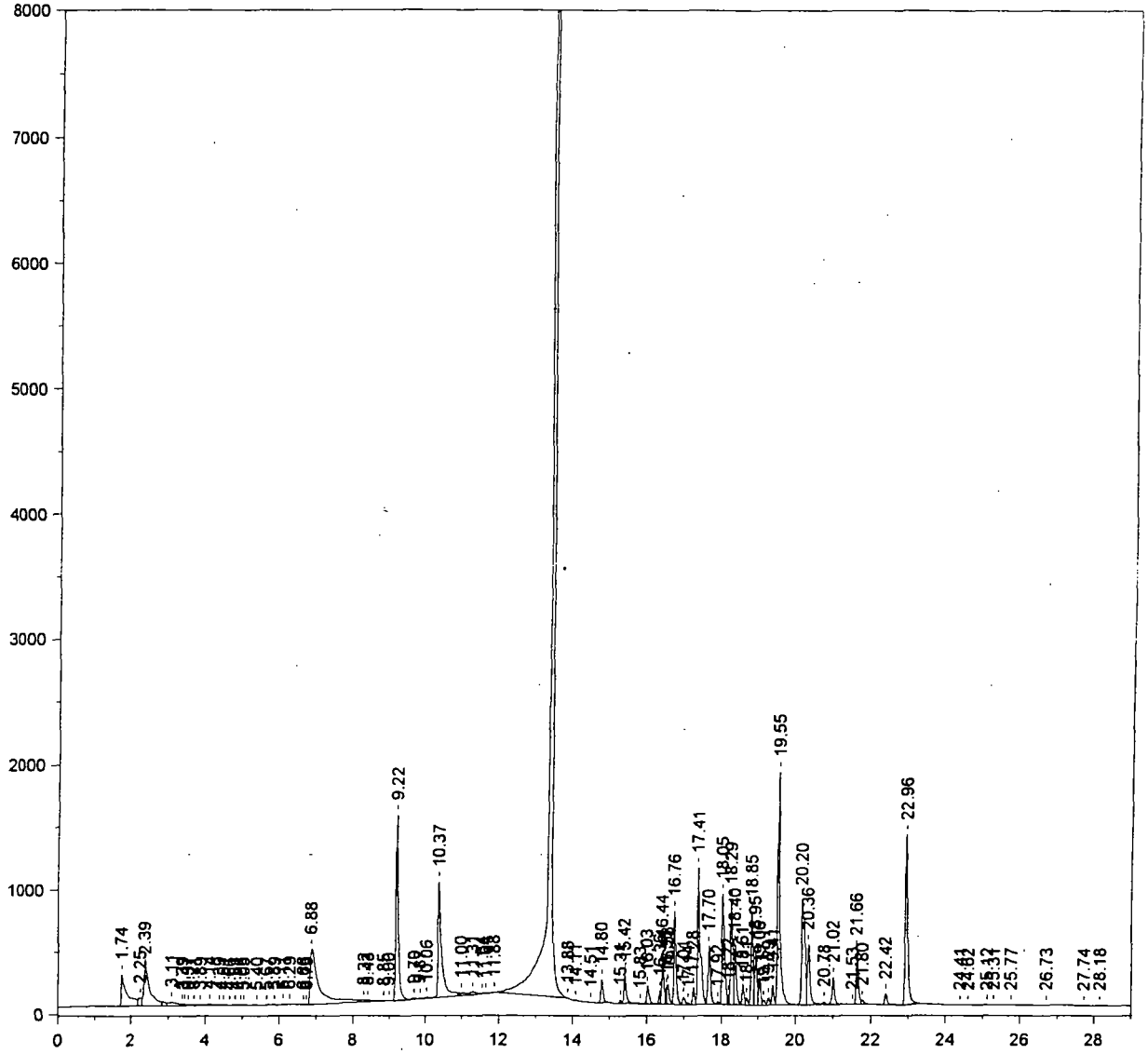
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	2865868	1.409	BV	0.13
2	2.25		0.00	0.000	412098	0.203	VV	0.07
3	2.39		0.00	0.000	3733040	1.835	VV	0.14
4	3.11		0.00	0.000	549588	0.270	VV	0.25
5	3.39		0.00	0.000	84008	0.041	VV	0.07
6	3.47		0.00	0.000	85230	0.042	VV	0.06
7	3.57		0.00	0.000	64165	0.032	VV	0.05
8	3.71		0.00	0.000	114315	0.056	VV	0.09
9	3.89		0.00	0.000	109490	0.054	VV	0.13
10	4.14		0.00	0.000	199868	0.098	VV	0.18
11	4.39		0.00	0.000	54170	0.027	VV	0.06
12	4.51		0.00	0.000	79082	0.039	VV	0.12
13	4.66		0.00	0.000	40306	0.020	VV	0.07
14	4.81		0.00	0.000	85589	0.042	VV	0.11
15	4.96		0.00	0.000	50610	0.025	VV	0.06
16	5.05		0.00	0.000	81152	0.040	VV	0.12
17	5.40		0.00	0.000	134605	0.066	VV	0.22
18	5.67		0.00	0.000	95851	0.047	VV	0.13
19	5.89		0.00	0.000	86256	0.042	VV	0.13
20	6.11		0.00	0.000	119236	0.059	VV	0.08
21	6.29		0.00	0.000	123199	0.061	VV	0.08
22	6.66		0.00	0.000	131755	0.065	VV	0.11
23	6.75		0.00	0.000	37050	0.018	VV	0.04
24	6.88		0.00	0.000	8808719	4.330	VV	0.18
25	8.32		0.00	0.000	447423	0.220	VV	0.13
26	8.43		0.00	0.000	644744	0.317	VV	0.16
27	8.85		0.00	0.000	625890	0.308	VV	0.20
28	9.00		0.00	0.000	254372	0.125	VV	0.06
29	9.22	CL4XYL	0.77	0.148	8220697	4.041	VV	0.06
30	9.70		0.00	0.000	614045	0.302	VV	0.15
31	9.87		0.00	0.000	369041	0.181	VV	0.09
32	10.06		0.00	0.000	917696	0.451	VV	0.15
33	10.37	AR1016#1	38.61	7.374	9108224	4.478	VV	0.08
34	11.00		0.00	0.000	1110109	0.546	VV	0.13
35	11.31	AR1016#2	5.05	0.964	2189873	1.077	VV	0.13
36	11.54		0.00	0.000	315022	0.155	VV	0.03
37	11.64		0.00	0.000	781473	0.384	VV	0.07
38	11.88		0.00	0.000	1035683	0.509	VV	0.09
39	13.42	AR1016#5	446.72	85.327	93035280	45.736	VV	0.07
40	13.88		0.00	0.000	645054	0.317	VV	0.10
41	14.11		0.00	0.000	799465	0.393	VV	0.16
42	14.51		0.00	0.000	274184	0.135	VV	0.09
43	14.80		0.00	0.000	1180725	0.580	VV	0.06
44	15.31		0.00	0.000	282033	0.139	VV	0.08
45	15.42		0.00	0.000	1352513	0.665	VV	0.06
46	15.83		0.00	0.000	187450	0.092	VV	0.17
47	16.03		0.00	0.000	942260	0.463	VV	0.07
48	16.36		0.00	0.000	387598	0.191	VV	0.06
49	16.44	AR1260#1	6.21	1.187	1670292	0.821	VV	0.05
50	16.55		0.00	0.000	339693	0.167	VV	0.03
51	16.58		0.00	0.000	763842	0.376	VV	0.07
52	16.76	AR1260#2	6.21	1.186	3094900	1.521	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	17.01		0.00	0.000	355916	0.175	VV	0.07
54	17.14		0.00	0.000	95275	0.047	VV	0.06
55	17.28		0.00	0.000	545613	0.268	VV	0.06
56	17.41		0.00	0.000	5807403	2.855	VV	0.06
57	17.70		0.00	0.000	2192293	1.078	VV	0.06
58	17.92		0.00	0.000	112523	0.055	VV	0.05
59	18.05		0.00	0.000	4999508	2.458	VV	0.09
60	18.22		0.00	0.000	184111	0.091	VV	0.03
61	18.29	AR1260#3	6.22	1.188	3204405	1.575	VV	0.05
62	18.40		0.00	0.000	2010601	0.988	VV	0.06
63	18.61		0.00	0.000	645690	0.317	VV	0.05
64	18.71		0.00	0.000	236017	0.116	VV	0.05
65	18.85		0.00	0.000	2839185	1.396	VV	0.06
66	18.95		0.00	0.000	1805471	0.888	VV	0.05
67	19.06		0.00	0.000	905976	0.445	VV	0.07
68	19.17		0.00	0.000	187598	0.092	VV	0.07
69	19.29		0.00	0.000	242964	0.119	VV	0.05
70	19.41		0.00	0.000	580431	0.285	VV	0.05
71	19.55	AR1260#4	6.45	1.232	8324602	4.092	VV	0.06
72	20.20		0.00	0.000	5005214	2.461	VV	0.10
73	20.36		0.00	0.000	2664837	1.310	VV	0.08
74	20.78		0.00	0.000	132123	0.065	VV	0.05
75	21.02		0.00	0.000	1151985	0.566	VV	0.06
76	21.53		0.00	0.000	9896	0.005	VV	0.04
77	21.66	AR1260#5	6.62	1.264	1924083	0.946	VV	0.06
78	21.80		0.00	0.000	241205	0.119	VV	0.08
79	22.42		0.00	0.000	438171	0.215	VB	0.07
80	22.96	CL10BP	0.68	0.131	6796404	3.341	BB	0.07
81	24.41		0.00	0.000	1894	0.001	BB	0.12
82	24.62		0.00	0.000	1730	0.001	BB	0.12
83	25.12		0.00	0.000	1605	0.001	BV	0.12
84	25.31		0.00	0.000	3107	0.002	VB	0.14
85	25.77		0.00	0.000	3508	0.002	BB	0.21
86	26.73		0.00	0.000	2544	0.001	BB	0.13
87	27.74		0.00	0.000	873	0.000	BV	0.13
88	28.18		0.00	0.000	29226	0.014	VB	0.16

Total Area = 2.034188E+08 Total Height = 3.309936E+07 Total Amount = 523.5402

50308

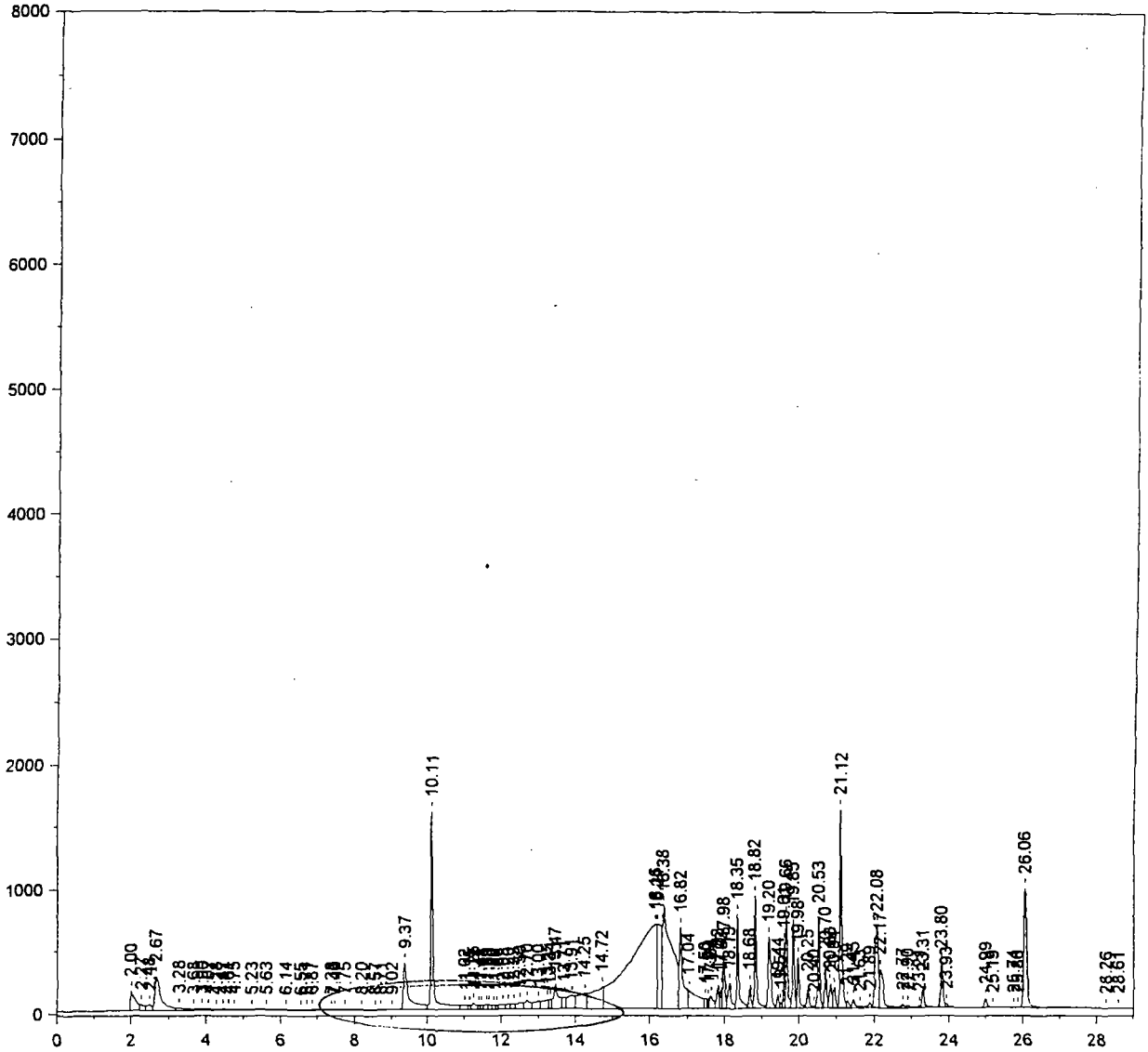
— H:\CP2\HP2\M0919B.0020.RAW 301101-01MS B8068 VWR-005-02-EBTMS



After reintegration
KDT
9/20/02

50309

— H:\CP2\HP2\M0919.0022.RAW 301101-01MD B8068 VWR-005-02-EBTMSD



Primary Column

Before reintegration
excess area underpeaks
KDT
9/20/2

50315

Sample Name = **301101-01MD B8068 VWR-005-02-EBTMSD**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0022.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/19/02 9:43:13 PM
Method Version = 618
Calibration Version = 9

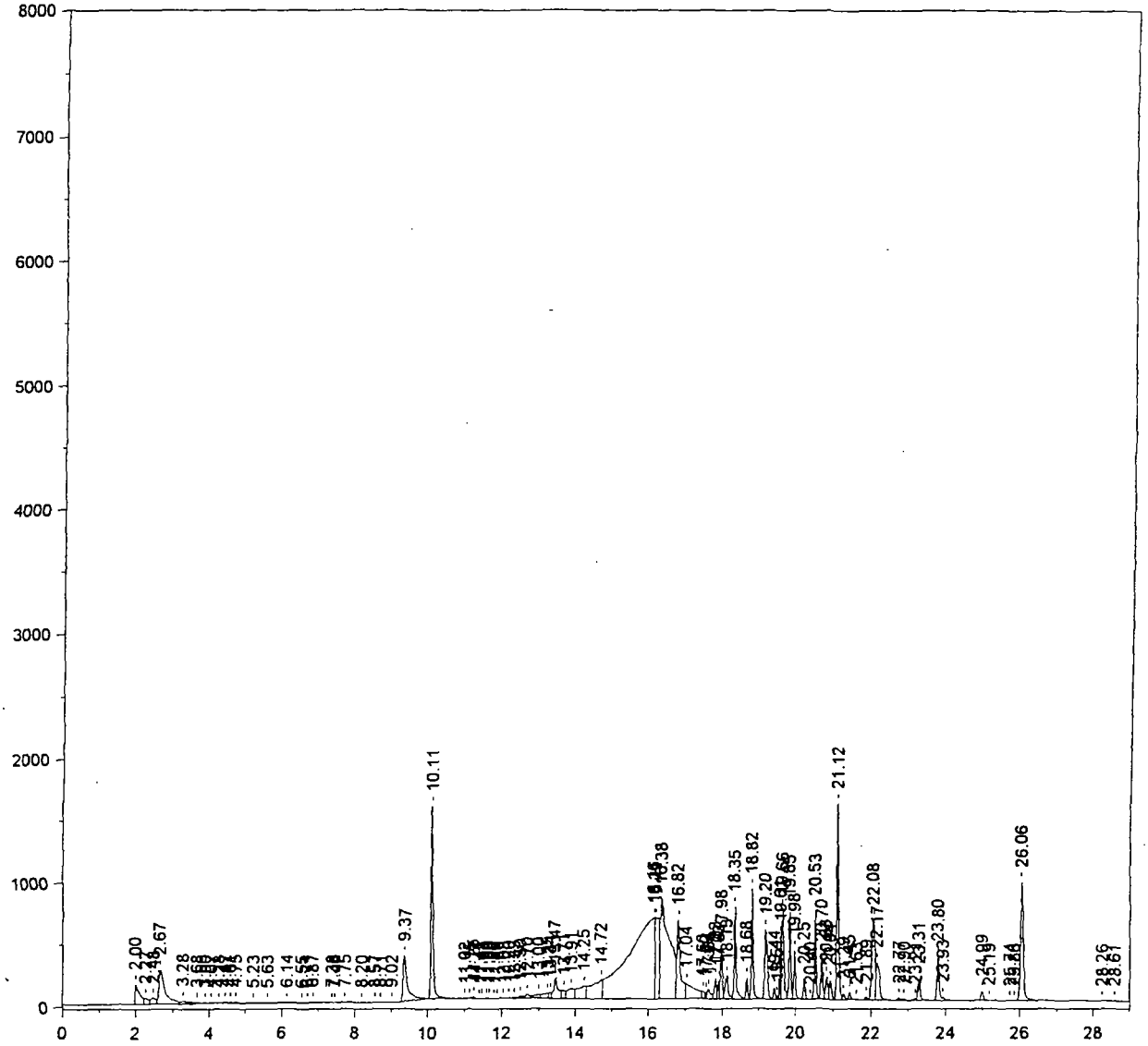
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1382971	0.916	BV	0.14
2	2.27		0.00	0.000	433162	0.287	VV	0.09
3	2.48		0.00	0.000	475022	0.314	VV	0.09
4	2.67		0.00	0.000	3238153	2.144	VV	0.13
5	3.28		0.00	0.000	455923	0.302	VV	0.17
6	3.68		0.00	0.000	103512	0.069	VV	0.09
7	3.90		0.00	0.000	131192	0.087	VV	0.16
8	4.07		0.00	0.000	143877	0.095	VV	0.08
9	4.28		0.00	0.000	116422	0.077	VV	0.11
10	4.47		0.00	0.000	132025	0.087	VV	0.09
11	4.61		0.00	0.000	57630	0.038	VV	0.05
12	4.75		0.00	0.000	205503	0.136	VV	0.16
13	5.23		0.00	0.000	209999	0.139	VV	0.24
14	5.63		0.00	0.000	174446	0.115	VV	0.25
15	6.14		0.00	0.000	179669	0.119	VV	0.23
16	6.55		0.00	0.000	132866	0.088	VV	0.21
17	6.71		0.00	0.000	57775	0.038	VV	0.06
18	6.87		0.00	0.000	167265	0.111	VV	0.17
19	7.38		0.00	0.000	79475	0.053	VV	0.15
20	7.46		0.00	0.000	54972	0.036	VV	0.09
21	7.75		0.00	0.000	101448	0.067	VV	0.16
22	8.20		0.00	0.000	68157	0.045	VV	0.18
23	8.57		0.00	0.000	56717	0.038	VV	0.09
24	8.71		0.00	0.000	34127	0.023	VV	0.08
25	9.02		0.00	0.000	63392	0.042	VV	0.21
26	9.37		0.00	0.000	4014668	2.658	VV	0.10
27	10.11	CL4XYL	0.98	1.836	7647222	5.063	VV	0.05
28	11.02		0.00	0.000	450542	0.298	VV	0.09
29	11.15		0.00	0.000	170824	0.113	VV	0.06
30	11.25		0.00	0.000	435930	0.289	VV	0.05
31	11.41		0.00	0.000	165202	0.109	VV	0.05
32	11.48		0.00	0.000	145095	0.096	VV	0.04
33	11.60	AR1016#1	1.56	2.941	277894	0.184	VV	0.07
34	11.66		0.00	0.000	234995	0.156	VV	0.06
35	11.80		0.00	0.000	201637	0.133	VV	0.05
36	11.88		0.00	0.000	123742	0.082	VV	0.04
37	12.03		0.00	0.000	416028	0.275	VV	0.14
38	12.20		0.00	0.000	274841	0.182	VV	0.06
39	12.33		0.00	0.000	307295	0.203	VV	0.06
40	12.50		0.00	0.000	626566	0.415	VV	0.14
41	12.70	AR1016#2	2.21	4.148	699068	0.463	VV	0.07
42	13.00		0.00	0.000	746239	0.494	VV	0.08
43	13.25		0.00	0.000	855612	0.566	VV	0.08
44	13.34		0.00	0.000	384665	0.255	VV	0.05
45	13.47		0.00	0.000	1919933	1.271	VV	0.06
46	13.71		0.00	0.000	540961	0.358	VV	0.07
47	13.91	AR1016#3	3.05	5.726	1482825	0.982	VV	0.16
48	14.25	AR1016#4	6.61	12.417	2078988	1.376	VV	0.11
49	14.72		0.00	0.000	3919039	2.595	VV	0.13
50	16.16		0.00	0.000	34673676	22.956	VV	0.61
51	16.21		0.00	0.000	5515471	3.651	VV	0.11
52	16.38		0.00	0.000	14304479	9.470	VV	0.15

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.82		0.00	0.000	4362466	2.888	VV	0.06
54	17.04		0.00	0.000	2876781	1.905	VV	0.16
55	17.50		0.00	0.000	379334	0.251	VV	0.05
56	17.59		0.00	0.000	188874	0.125	VV	0.03
57	17.64		0.00	0.000	737855	0.488	VV	0.06
58	17.83		0.00	0.000	764571	0.506	VV	0.05
59	17.92		0.00	0.000	532370	0.352	VV	0.04
60	17.98	AR1260#1	8.07	15.169	1606317	1.063	VV	0.05
61	18.13		0.00	0.000	1269053	0.840	VV	0.08
62	18.35		0.00	0.000	3057625	2.024	VV	0.05
63	18.68		0.00	0.000	746220	0.494	VV	0.05
64	18.82	AR1260#2	7.75	14.559	3345262	2.215	VV	0.05
65	19.20		0.00	0.000	3120460	2.066	VV	0.08
66	19.44		0.00	0.000	411046	0.272	VV	0.05
67	19.51		0.00	0.000	139872	0.093	VV	0.04
68	19.61		0.00	0.000	1282809	0.849	VV	0.04
69	19.66		0.00	0.000	3068411	2.031	VV	0.07
70	19.85	AR1260#3	7.27	13.664	2407236	1.594	VV	0.05
71	19.98		0.00	0.000	1542643	1.021	VV	0.05
72	20.25		0.00	0.000	732632	0.485	VV	0.05
73	20.40		0.00	0.000	53177	0.035	VV	0.04
74	20.53		0.00	0.000	2593889	1.717	VV	0.05
75	20.70		0.00	0.000	1411656	0.935	VV	0.05
76	20.83		0.00	0.000	838522	0.555	VV	0.05
77	20.94		0.00	0.000	790007	0.523	VV	0.08
78	21.12	AR1260#4	7.48	14.050	5894961	3.903	VV	0.05
79	21.29		0.00	0.000	305308	0.202	VV	0.07
80	21.45		0.00	0.000	383520	0.254	VV	0.05
81	21.63		0.00	0.000	139951	0.093	VV	0.09
82	21.89		0.00	0.000	195158	0.129	VV	0.06
83	22.08	AR1260#5	7.49	14.072	4001942	2.649	VV	0.10
84	22.17		0.00	0.000	2227294	1.475	VV	0.11
85	22.77		0.00	0.000	157449	0.104	VV	0.06
86	22.90		0.00	0.000	166900	0.110	VV	0.06
87	23.21		0.00	0.000	66661	0.044	VV	0.05
88	23.31		0.00	0.000	833394	0.552	VV	0.06
89	23.80		0.00	0.000	1593270	1.055	VV	0.07
90	23.93		0.00	0.000	247561	0.164	VV	0.07
91	24.99		0.00	0.000	348192	0.231	VV	0.07
92	25.19		0.00	0.000	6310	0.004	VB	0.08
93	25.74		0.00	0.000	525	0.000	BB	0.07
94	25.86		0.00	0.000	735	0.000	BV	0.07
95	26.06	CL10BP	0.75	1.418	5344869	3.539	VB	0.08
96	28.26		0.00	0.000	1814	0.001	BB	0.13
97	28.61		0.00	0.000	3308	0.002	BB	0.09

Total Area = 1.510473E+08 Total Height = 1.94659E+07 Total Amount = 53.21012

50317

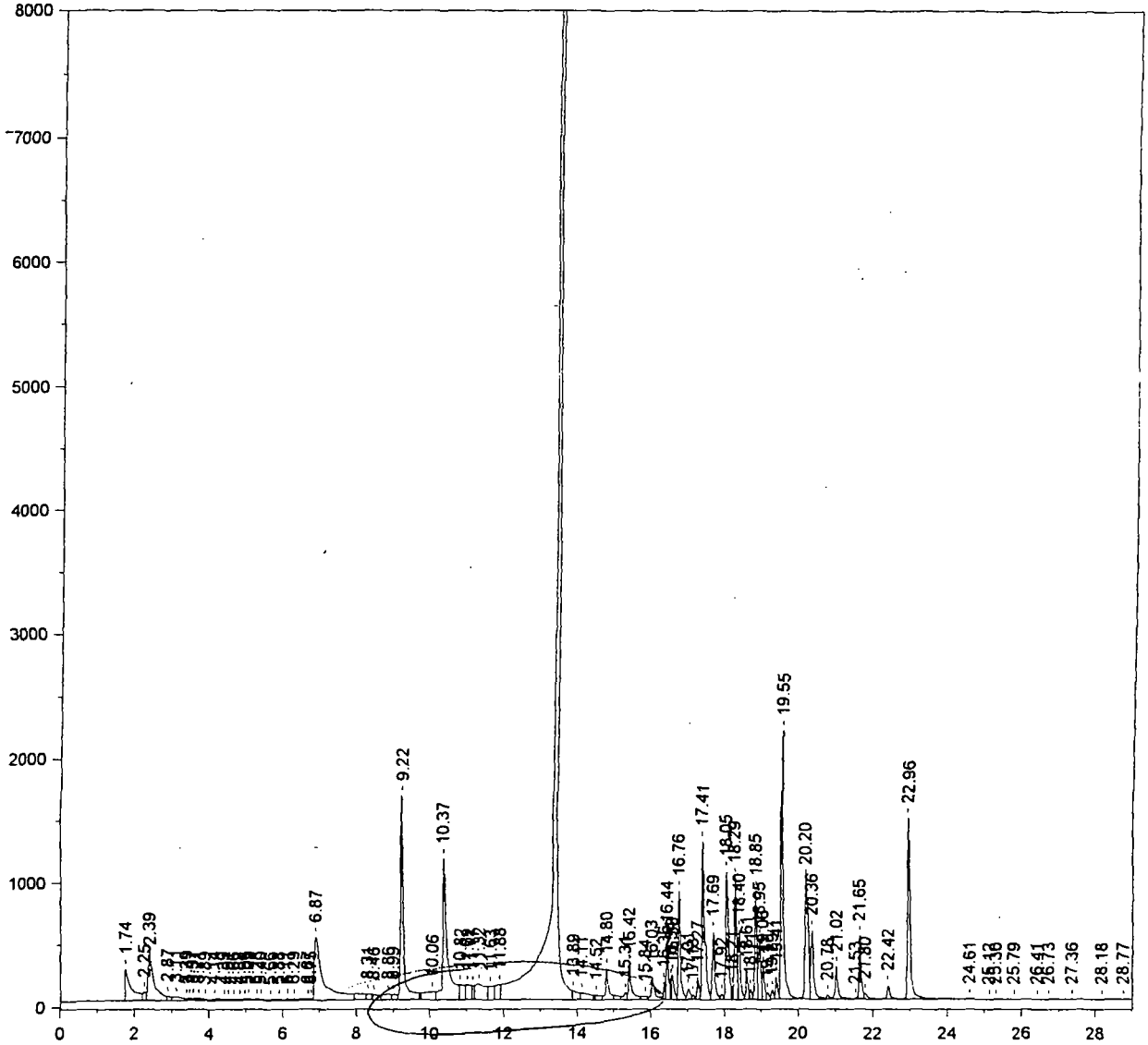
— H:\CP2\HP2\M0919.0022.RAW 301101-01MD B8068 VWR-005-02-EBTMSD



After integration
AJT
9/20/

50318

— H:\CP2\HP2\M0919B.0022.RAW 301101-01MD B8068 VWR-005-02-EBTMSD



Before reintegration
excess area under peaks
RST
9/20/2

50322

Sample Name = **301101-01MD B8068 VWR-005-02-EBTMSD**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

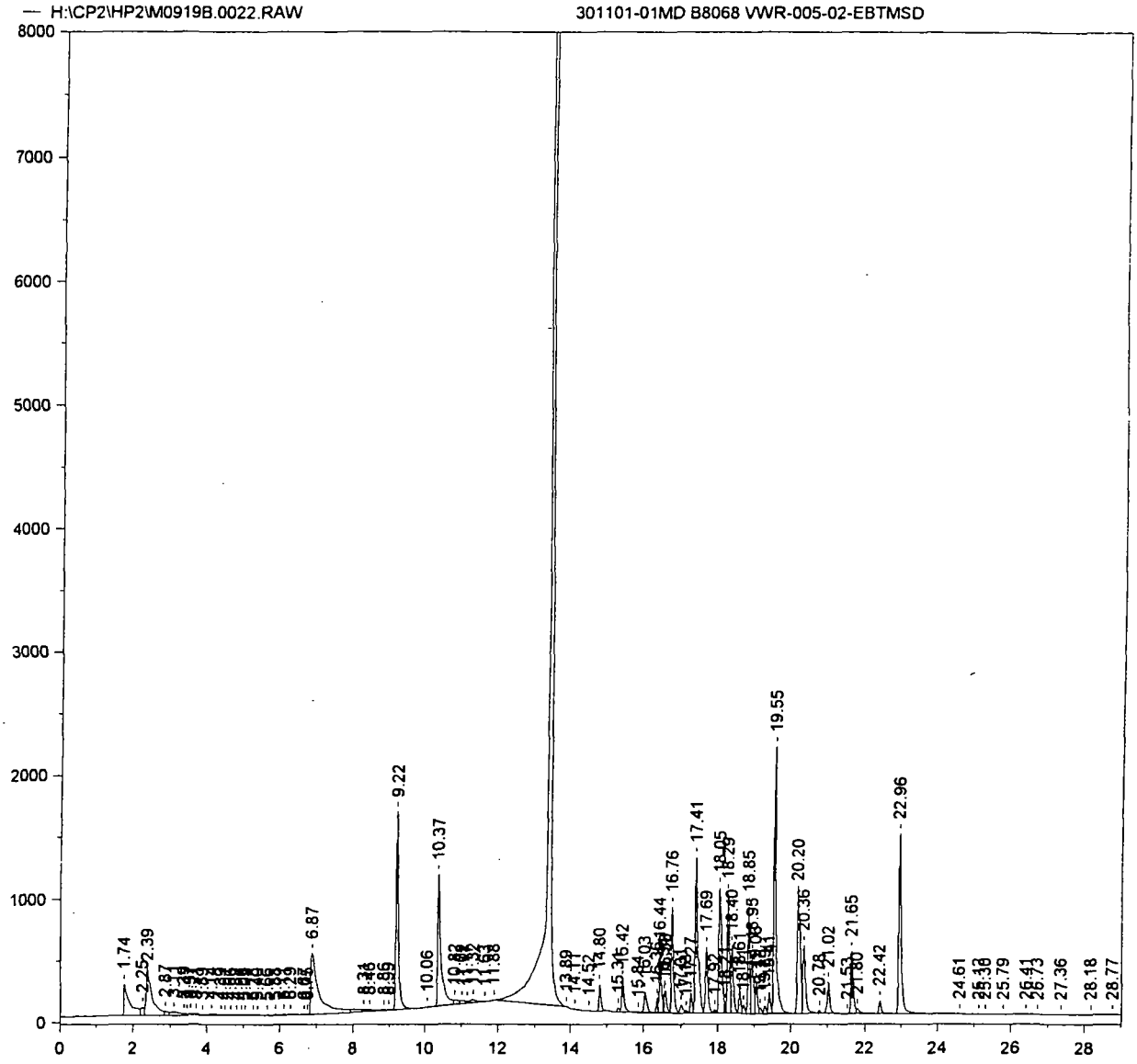
Raw File Name = **H:\CP2\HP2\M0919B.0022.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/19/02 9:43:13 PM
Method Version = 567
Calibration Version = 5

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	2939064	1.279	BV	0.13
2	2.25		0.00	0.000	429293	0.187	VV	0.07
3	2.39		0.00	0.000	4122779	1.793	VV	0.14
4	2.87		0.00	0.000	231319	0.101	VV	0.07
5	3.11		0.00	0.000	569149	0.248	VV	0.26
6	3.39		0.00	0.000	92840	0.040	VV	0.05
7	3.47		0.00	0.000	94478	0.041	VV	0.06
8	3.57		0.00	0.000	86103	0.037	VV	0.06
9	3.71		0.00	0.000	161642	0.070	VV	0.13
10	3.89		0.00	0.000	131912	0.057	VV	0.13
11	4.14		0.00	0.000	239068	0.104	VV	0.20
12	4.39		0.00	0.000	61950	0.027	VV	0.06
13	4.51		0.00	0.000	95558	0.042	VV	0.12
14	4.66		0.00	0.000	43001	0.019	VV	0.06
15	4.82		0.00	0.000	103285	0.045	VV	0.11
16	4.96		0.00	0.000	49411	0.021	VV	0.06
17	5.05		0.00	0.000	95598	0.042	VV	0.12
18	5.28		0.00	0.000	80658	0.035	VV	0.12
19	5.40		0.00	0.000	74522	0.032	VV	0.09
20	5.66		0.00	0.000	99868	0.043	VV	0.11
21	5.88		0.00	0.000	81496	0.035	VV	0.16
22	6.11		0.00	0.000	123941	0.054	VV	0.08
23	6.29		0.00	0.000	104560	0.045	VV	0.08
24	6.67		0.00	0.000	101790	0.044	VV	0.10
25	6.75		0.00	0.000	43577	0.019	VV	0.05
26	6.87		0.00	0.000	8824533	3.839	VV	0.17
27	8.31		0.00	0.000	379571	0.165	VV	0.08
28	8.46		0.00	0.000	512386	0.223	VV	0.12
29	8.86		0.00	0.000	768255	0.334	VV	0.20
30	8.99		0.00	0.000	413346	0.180	VV	0.05
31	9.22	CL4XYL	0.87	0.151	9282996	4.038	VV	0.06
32	10.06		0.00	0.000	1454253	0.633	VV	0.15
33	10.37	AR1016#1	41.24	7.120	9730742	4.233	VV	0.07
34	10.82		0.00	0.000	1132040	0.492	VV	0.08
35	11.02		0.00	0.000	1296870	0.564	VV	0.14
36	11.17		0.00	0.000	380892	0.166	VV	0.03
37	11.32	AR1016#2	5.80	1.001	2516471	1.095	VV	0.12
38	11.63		0.00	0.000	1142019	0.497	VV	0.10
39	11.88		0.00	0.000	1163222	0.506	VV	0.09
40	13.42	AR1016#5	493.48	85.185	102774016	44.707	VV	0.08
41	13.89		0.00	0.000	786793	0.342	VV	0.10
42	14.11		0.00	0.000	895012	0.389	VV	0.15
43	14.52		0.00	0.000	381347	0.166	VV	0.09
44	14.80		0.00	0.000	1462364	0.636	VV	0.06
45	15.31		0.00	0.000	393625	0.171	VV	0.08
46	15.42		0.00	0.000	1665528	0.725	VV	0.06
47	15.84		0.00	0.000	289379	0.126	VV	0.13
48	16.03		0.00	0.000	1228954	0.535	VV	0.07
49	16.36		0.00	0.000	497625	0.216	VV	0.06
50	16.44	AR1260#1	7.29	1.258	1958880	0.852	VV	0.05
51	16.54		0.00	0.000	411000	0.179	VV	0.03
52	16.58		0.00	0.000	908731	0.395	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.76	AR1260#2	7.29	1.258	3632775	1.580	VV	0.05
54	17.01		0.00	0.000	476044	0.207	VV	0.07
55	17.13		0.00	0.000	150283	0.065	VV	0.06
56	17.27		0.00	0.000	682681	0.297	VV	0.06
57	17.41		0.00	0.000	6788908	2.953	VV	0.06
58	17.69		0.00	0.000	2626184	1.142	VV	0.06
59	17.92		0.00	0.000	170241	0.074	VV	0.05
60	18.05		0.00	0.000	5867979	2.553	VV	0.09
61	18.21		0.00	0.000	225208	0.098	VV	0.03
62	18.29	AR1260#3	7.21	1.245	3718174	1.617	VV	0.05
63	18.40		0.00	0.000	2370481	1.031	VV	0.06
64	18.61		0.00	0.000	795706	0.346	VV	0.05
65	18.71		0.00	0.000	310635	0.135	VV	0.05
66	18.85		0.00	0.000	3321867	1.445	VV	0.06
67	18.95		0.00	0.000	2103265	0.915	VV	0.05
68	19.06		0.00	0.000	1081443	0.470	VV	0.07
69	19.17		0.00	0.000	251487	0.109	VV	0.07
70	19.29		0.00	0.000	324793	0.141	VV	0.05
71	19.41		0.00	0.000	727760	0.317	VV	0.05
72	19.55	AR1260#4	7.56	1.306	9761178	4.246	VV	0.06
73	20.20		0.00	0.000	5787436	2.518	VV	0.10
74	20.36		0.00	0.000	3049070	1.326	VV	0.08
75	20.78		0.00	0.000	195126	0.085	VV	0.05
76	21.02		0.00	0.000	1470698	0.640	VV	0.06
77	21.53		0.00	0.000	28427	0.012	VV	0.04
78	21.65	AR1260#5	7.77	1.342	2259294	0.983	VV	0.06
79	21.80		0.00	0.000	329696	0.143	VV	0.08
80	22.42		0.00	0.000	622631	0.271	VV	0.07
81	22.96	CL10BP	0.78	0.135	7776030	3.383	VV	0.07
82	24.61		0.00	0.000	21371	0.009	VV	0.13
83	25.12		0.00	0.000	6145	0.003	VV	0.12
84	25.30		0.00	0.000	2151	0.001	VB	0.08
85	25.79		0.00	0.000	8140	0.004	BB	0.12
86	26.41		0.00	0.000	653	0.000	BB	0.13
87	26.73		0.00	0.000	7594	0.003	BB	0.16
88	27.36		0.00	0.000	880	0.000	BB	0.11
89	28.18		0.00	0.000	20283	0.009	BV	0.24
90	28.77		0.00	0.000	1086	0.000	VB	0.12

Total Area = 2.298816E+08 Total Height = 3.581887E+07 Total Amount = 579.3076



After integration
RJT
9/20/02

for
9/24/02

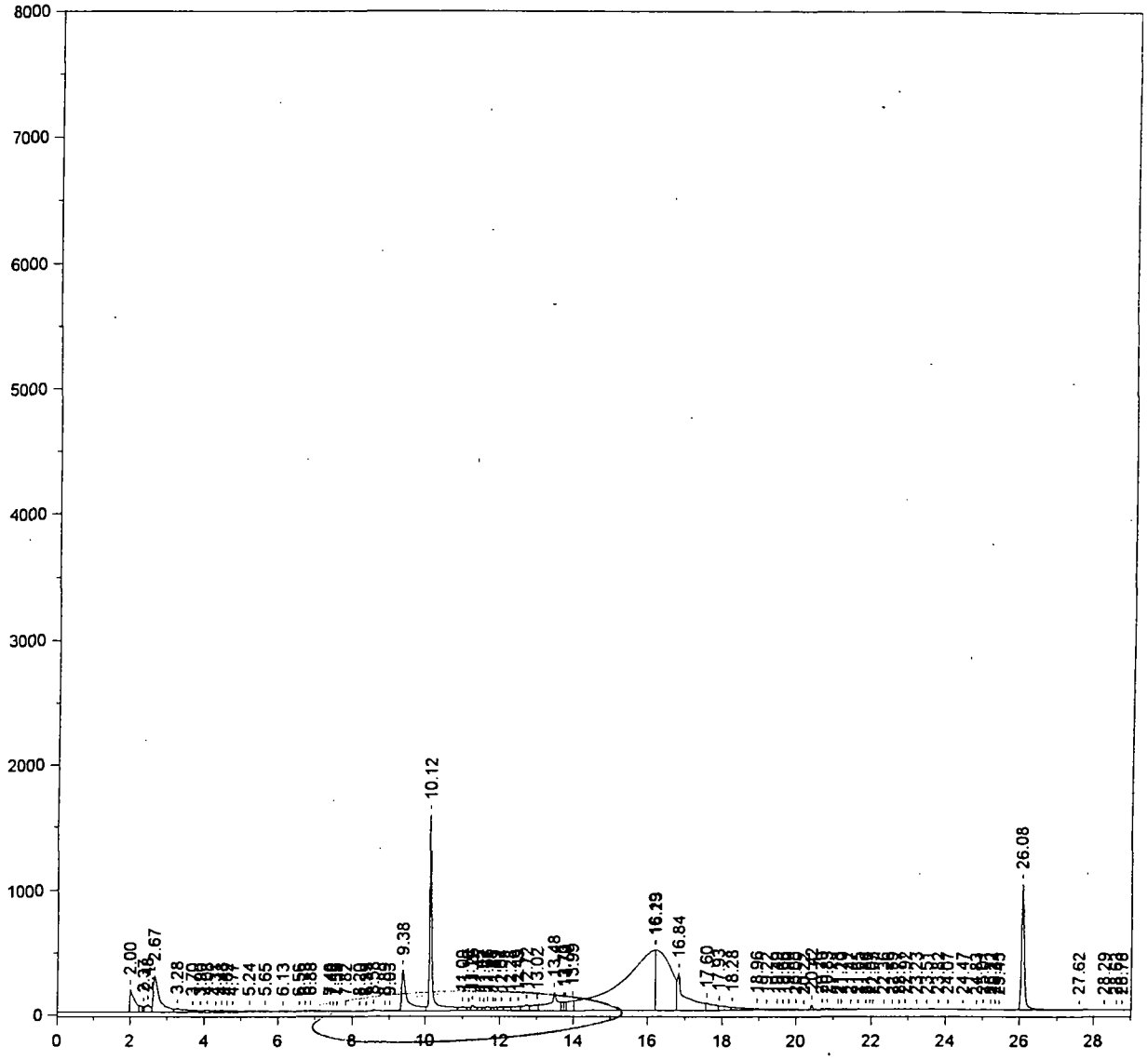
50325

PCB's-8082

ARDL Report No. 301102
Volume 5

50000
~~50005~~

— H:\CP2\HP2\M0919.0049.RAW 301102-01 B8068 VWR-004-02-ESW



Before reintegration
excess area under peaks
AJT
9/23/2

Primary Column

50018

Sample Name = **301102-01 B8068 VWR-004-02-ESW**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0049.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/20/02 3:52:35 PM
Method Version = 618
Calibration Version = 11

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1601100	1.888	BV	0.14
2	2.37		0.00	0.000	128931	0.152	VV	0.04
3	2.48		0.00	0.000	549241	0.648	VV	0.09
4	2.67		0.00	0.000	3419368	4.031	VV	0.13
5	3.28		0.00	0.000	512247	0.604	VV	0.18
6	3.70		0.00	0.000	122492	0.144	VV	0.10
7	3.90		0.00	0.000	143238	0.169	VV	0.13
8	4.08		0.00	0.000	188446	0.222	VV	0.08
9	4.31		0.00	0.000	124138	0.146	VV	0.14
10	4.48		0.00	0.000	138206	0.163	VV	0.09
11	4.62		0.00	0.000	61518	0.073	VV	0.05
12	4.77		0.00	0.000	215216	0.254	VV	0.17
13	5.24		0.00	0.000	160282	0.189	VV	0.19
14	5.65		0.00	0.000	167478	0.197	VV	0.26
15	6.13		0.00	0.000	160515	0.189	VV	0.23
16	6.56		0.00	0.000	109184	0.129	VV	0.18
17	6.73		0.00	0.000	50892	0.060	VV	0.06
18	6.88		0.00	0.000	128008	0.151	VV	0.17
19	7.40		0.00	0.000	49202	0.058	VV	0.15
20	7.48		0.00	0.000	31306	0.037	VV	0.09
21	7.58		0.00	0.000	15956	0.019	VV	0.07
22	7.82		0.00	0.000	46608	0.055	VV	0.16
23	8.20		0.00	0.000	23345	0.028	VV	0.17
24	8.39		0.00	0.000	4383	0.005	VB	0.05
25	8.58		0.00	0.000	49092	0.058	BB	0.08
26	8.89		0.00	0.000	6932	0.008	BV	0.08
27	9.03		0.00	0.000	24699	0.029	VV	0.08
28	9.38		0.00	0.000	3387760	3.994	VV	0.10
29	10.12	CL4XYL	0.92	11.551	7234776	8.530	VV	0.05
30	11.00		0.00	0.000	388291	0.458	VV	0.10
31	11.16		0.00	0.000	141994	0.167	VV	0.06
32	11.26		0.00	0.000	360884	0.425	VV	0.05
33	11.45		0.00	0.000	183718	0.217	VV	0.04
34	11.57	AR1016#1	0.80	10.050	142812	0.168	VV	0.06
35	11.66		0.00	0.000	249401	0.294	VV	0.06
36	11.81		0.00	0.000	134924	0.159	VV	0.05
37	11.89		0.00	0.000	147866	0.174	VV	0.04
38	12.04		0.00	0.000	249890	0.295	VV	0.08
39	12.28		0.00	0.000	359760	0.424	VV	0.06
40	12.49		0.00	0.000	457707	0.540	VV	0.10
41	12.72	AR1016#2	1.77	22.100	560033	0.660	VV	0.06
42	13.02		0.00	0.000	584559	0.689	VV	0.11
43	13.48		0.00	0.000	2500796	2.948	VV	0.07
44	13.73		0.00	0.000	285097	0.336	VV	0.04
45	13.79		0.00	0.000	233472	0.275	VV	0.02
46	13.99		0.00	0.000	912552	1.076	VV	0.07
47	16.19		0.00	0.000	29829398	35.168	VV	0.72
48	16.23		0.00	0.000	13547352	15.972	VV	0.38
49	16.84		0.00	0.000	4872291	5.744	VV	0.09
50	17.60		0.00	0.000	962528	1.135	VV	0.10
51	17.93	AR1260#1	3.32	41.552	661674	0.780	VV	0.15
52	18.28		0.00	0.000	650278	0.767	VV	0.19

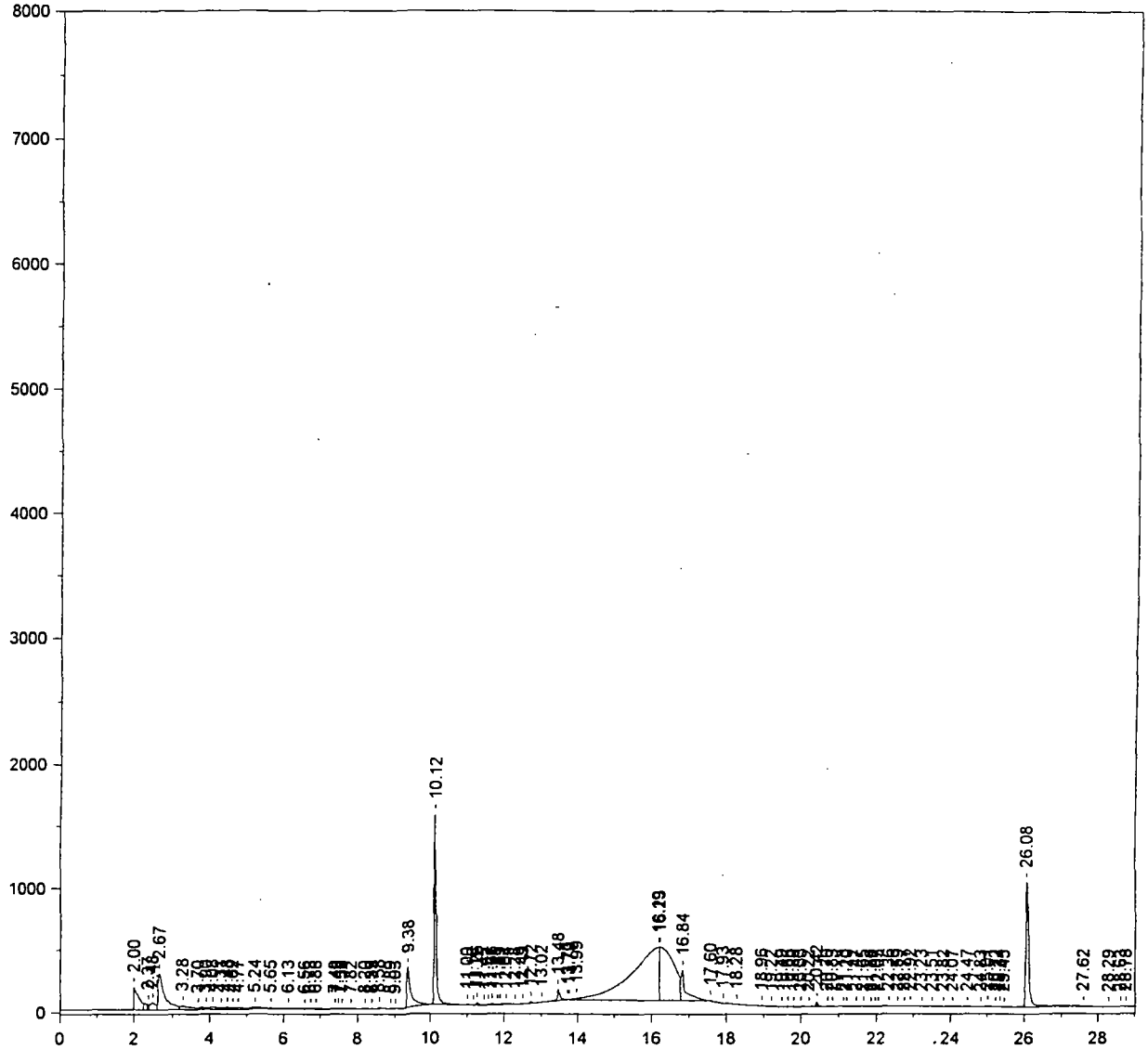
5001

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.96		0.00	0.000	182731	0.215	VV	0.07
54	19.22		0.00	0.000	167574	0.198	VV	0.13
55	19.49		0.00	0.000	55647	0.066	VV	0.07
56	19.66		0.00	0.000	81949	0.097	VV	0.08
57	19.80	AR1260#3	0.24	2.995	79349	0.094	VV	0.07
58	20.00		0.00	0.000	108326	0.128	VV	0.06
59	20.22		0.00	0.000	44111	0.052	VV	0.04
60	20.42		0.00	0.000	241149	0.284	VV	0.05
61	20.70		0.00	0.000	58409	0.069	VV	0.08
62	20.83		0.00	0.000	106490	0.126	VV	0.07
63	21.13	AR1260#4	0.06	0.778	49083	0.058	VV	0.09
64	21.20		0.00	0.000	76661	0.090	VV	0.09
65	21.47		0.00	0.000	39720	0.047	VV	0.09
66	21.65		0.00	0.000	70113	0.083	VV	0.13
67	21.86		0.00	0.000	19666	0.023	VV	0.06
68	21.97		0.00	0.000	19832	0.023	VV	0.07
69	22.05	AR1260#5	0.06	0.703	30042	0.035	VV	0.12
70	22.36		0.00	0.000	43370	0.051	VV	0.11
71	22.59		0.00	0.000	23134	0.027	VV	0.07
72	22.77		0.00	0.000	13815	0.016	VV	0.07
73	22.92		0.00	0.000	35075	0.041	VV	0.07
74	23.23		0.00	0.000	6678	0.008	VB	0.12
75	23.51		0.00	0.000	367	0.000	BB	0.06
76	23.82		0.00	0.000	1075	0.001	BV	0.10
77	24.07		0.00	0.000	884	0.001	VB	0.13
78	24.47		0.00	0.000	1385	0.002	BB	0.11
79	24.83		0.00	0.000	1273	0.002	BV	0.11
80	25.01		0.00	0.000	31655	0.037	VV	0.07
81	25.22		0.00	0.000	1516	0.002	VV	0.07
82	25.34		0.00	0.000	1366	0.002	VV	0.06
83	25.45		0.00	0.000	686	0.001	VB	0.07
84	26.08	CL10BP	0.82	10.272	5820398	6.862	BV	0.08
85	27.62		0.00	0.000	72835	0.086	VV	0.28
86	28.29		0.00	0.000	27348	0.032	VV	0.13
87	28.63		0.00	0.000	18919	0.022	VV	0.11
88	28.78		0.00	0.000	15055	0.018	VB	0.15

Total Area = 8.481953E+07 Total Height = 6030068 Total Amount = 8.001463

50020

— H:\CP2\HP2\M0919.0049.RAW 301102-01 B8068 VWR-004-02-ESW

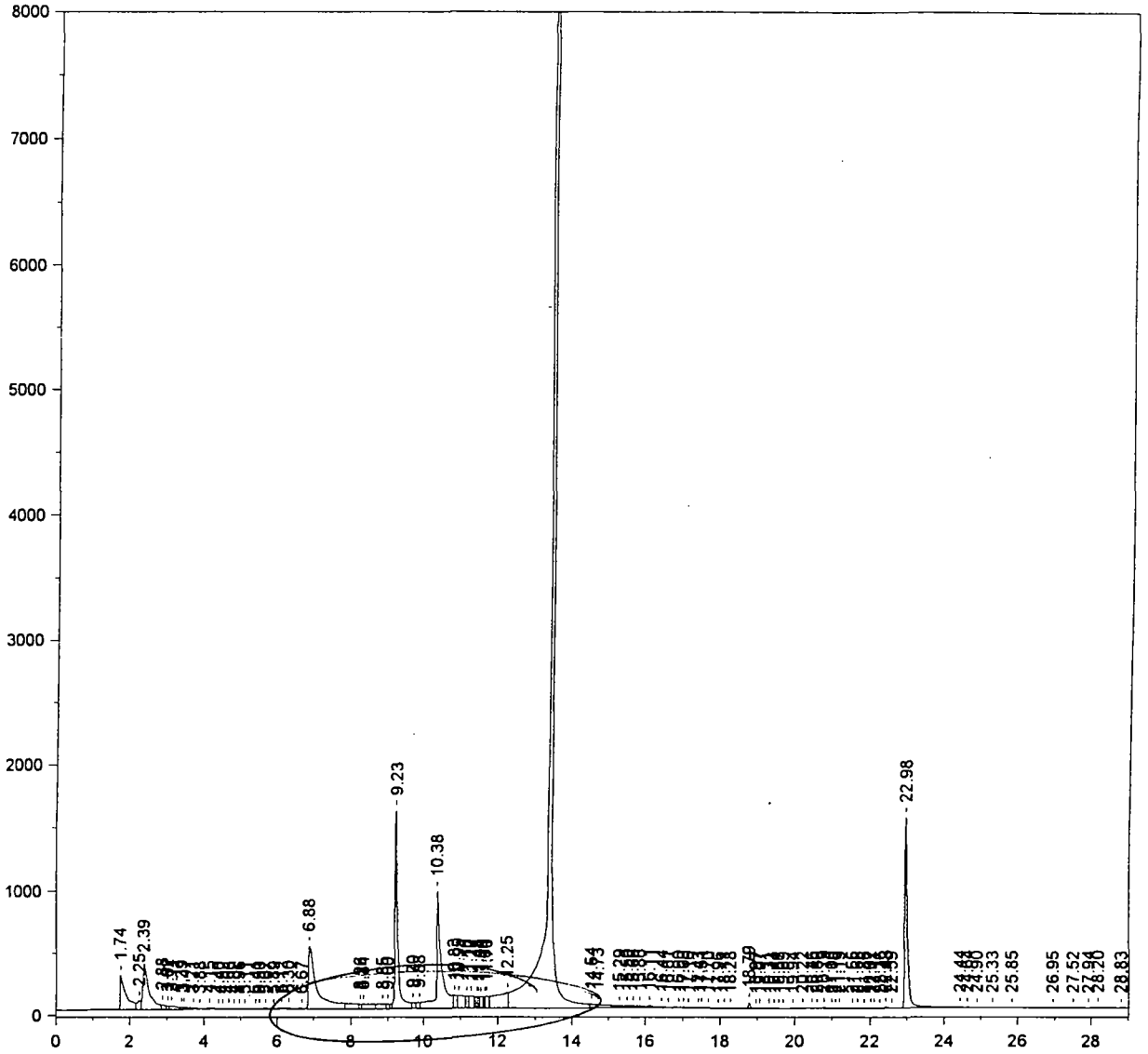


after reintegration
BT
9/23/2

AL
9/24/02

50021

— H:\CP2\HP2\M0919B.0049.RAW 301102-01 B8068 VWR-004-02-ESW



Before reintegration
excess area under peaks
BT
9/23/2

50025

Sample Name = **301102-01 B8068 VWR-004-02-ESW**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0049.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/20/02 3:52:35 PM
Method Version = 567
Calibration Version = 7

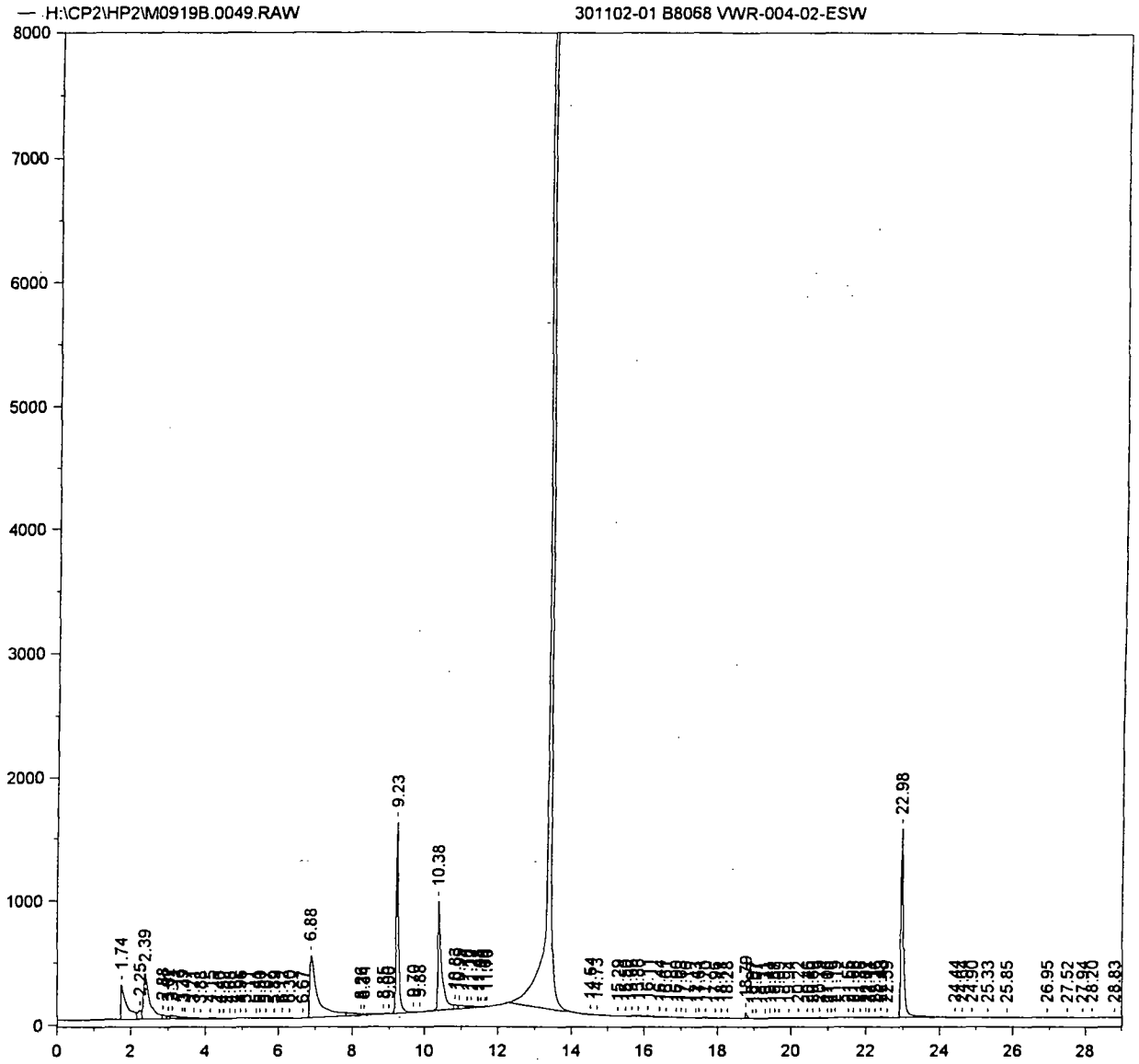
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	3064578	2.029	BV	0.13
2	2.25		0.00	0.000	558632	0.370	VV	0.09
3	2 39		0.00	0.000	4291642	2.842	VV	0.14
4	2.88		0.00	0.000	256299	0.170	VV	0.08
5	3.02		0.00	0.000	112486	0.074	VV	0.05
6	3.11		0.00	0.000	424973	0.281	VV	0.18
7	3.39		0.00	0.000	104559	0.069	VV	0.05
8	3.47		0.00	0.000	151586	0.100	VV	0.07
9	3.71		0.00	0.000	177293	0.117	VV	0.14
10	3.88		0.00	0.000	110648	0.073	VV	0.13
11	4 15		0.00	0.000	204839	0.136	VV	0.20
12	4.40		0.00	0.000	50973	0.034	VV	0.06
13	4.52		0.00	0.000	71810	0.048	VV	0.12
14	4.68		0.00	0.000	34688	0.023	VV	0.06
15	4.82		0.00	0.000	82494	0 055	VV	0.11
16	4.96		0.00	0.000	41447	0.027	VV	0.05
17	5.11		0.00	0.000	75471	0.050	VV	0.14
18	5 41		0.00	0.000	81344	0 054	VV	0.19
19	5.50		0.00	0.000	36292	0.024	VV	0.07
20	5.67		0.00	0.000	85313	0.056	VV	0.11
21	5.89		0.00	0.000	61270	0.041	VV	0.15
22	6.12		0.00	0.000	114005	0.075	VV	0.08
23	6.30		0.00	0.000	106404	0.070	VV	0.08
24	6.67		0.00	0.000	91794	0.061	VV	0.12
25	6.88		0.00	0.000	8248137	5.461	VV	0.17
26	8.26		0.00	0.000	157538	0.104	VV	0.04
27	8.34		0.00	0.000	858863	0.569	VV	0.25
28	8.85		0.00	0.000	676840	0.448	VV	0.20
29	9.00		0.00	0.000	215177	0.142	VV	0.05
30	9.23	CL4XYL	0.84	0.174	8921375	5.907	VV	0.07
31	9.70		0.00	0.000	315231	0.209	VV	0.09
32	9.88		0.00	0.000	329446	0.218	VV	0.06
33	10.38	AR1016#1	39.45	8.165	9308236	6.163	VV	0.08
34	10.83		0.00	0.000	652280	0.432	VV	0.06
35	10.95		0.00	0.000	1244155	0.824	VV	0.13
36	11.16		0.00	0.000	442051	0.293	VV	0.06
37	11.27	AR1016#2	1.97	0.409	856721	0.567	VV	0 11
38	11 43		0.00	0.000	334492	0.221	VV	0.04
39	11.48		0.00	0.000	296073	0.196	VV	0.04
40	11.54		0.00	0.000	458672	0.304	VV	0 07
41	11.64		0.00	0.000	350590	0.232	VV	0.04
42	11.70		0.00	0.000	579074	0.383	VV	0.04
43	12 25		0.00	0.000	3190694	2.113	VV	0.17
44	13.43	AR1016#5	439.55	90.965	91540560	60.612	VV	0.07
45	14 54		0.00	0.000	327844	0.217	VV	0.11
46	14.73		0.00	0.000	642513	0.425	VV	0.24
47	15.29		0.00	0.000	253595	0.168	VV	0.17
48	15.50		0.00	0.000	143109	0.095	VV	0.08
49	15.66		0.00	0.000	103333	0.068	VV	0.07
50	15.86		0.00	0 000	145578	0.096	VV	0.1[illegible]
51	16.11		0.00	0.000	218212	0.144	VV	0.0[illegible]
52	16.44	AR1260#1	0 35	0.072	94031	0.062	VV	0.14

50026

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.61		0.00	0.000	66030	0.044	VV	0.11
54	16.90		0.00	0.000	22988	0.015	VV	0.07
55	17.03		0.00	0.000	19956	0.013	VV	0.08
56	17.16		0.00	0.000	6900	0.005	VB	0.06
57	17.43		0.00	0.000	2895	0.002	BV	0.05
58	17.51		0.00	0.000	23762	0.016	VV	0.06
59	17.70		0.00	0.000	11972	0.008	VB	0.14
60	17.96		0.00	0.000	1213	0.001	BV	0.05
61	18.11		0.00	0.000	16239	0.011	VV	0.10
62	18.28	AR1260#3	0.06	0.013	32312	0.021	VB	0.12
63	18.79		0.00	0.000	163241	0.108	BV	0.05
64	18.97		0.00	0.000	9951	0.007	VV	0.05
65	19.07		0.00	0.000	5491	0.004	VB	0.07
66	19.31		0.00	0.000	6535	0.004	BV	0.13
67	19.44		0.00	0.000	8387	0.006	VV	0.10
68	19.57	AR1260#4	0.01	0.002	12257	0.008	VV	0.05
69	19.69		0.00	0.000	13179	0.009	VV	0.06
70	19.94		0.00	0.000	22329	0.015	VV	0.08
71	20.22		0.00	0.000	45283	0.030	VV	0.15
72	20.46		0.00	0.000	35210	0.023	VV	0.07
73	20.60		0.00	0.000	44603	0.030	VV	0.06
74	20.79		0.00	0.000	80264	0.053	VV	0.06
75	21.00		0.00	0.000	47982	0.032	VV	0.11
76	21.10		0.00	0.000	22443	0.015	VV	0.05
77	21.19		0.00	0.000	58610	0.039	VV	0.13
78	21.55		0.00	0.000	46177	0.031	VV	0.12
79	21.68	AR1260#5	0.12	0.025	35139	0.023	VV	0.08
80	21.86		0.00	0.000	57079	0.038	VV	0.15
81	22.02		0.00	0.000	30844	0.020	VV	0.09
82	22.11		0.00	0.000	36614	0.024	VV	0.05
83	22.26		0.00	0.000	32760	0.022	VV	0.05
84	22.43		0.00	0.000	91992	0.061	VV	0.06
85	22.59		0.00	0.000	62022	0.041	VV	0.08
86	22.98	CL10BP	0.85	0.176	8421072	5.576	SBB	0.07
87	24.44		0.00	0.000	1439	0.001	TBV	0.11
88	24.64		0.00	0.000	4152	0.003	TVV	0.13
89	24.90		0.00	0.000	27089	0.018	TVV	0.22
90	25.33		0.00	0.000	33149	0.022	TVB	0.28
91	25.85		0.00	0.000	7497	0.005	BB	0.20
92	26.95		0.00	0.000	11987	0.008	BV	0.30
93	27.52		0.00	0.000	8797	0.006	VV	0.33
94	27.94		0.00	0.000	3370	0.002	VV	0.15
95	28.20		0.00	0.000	40264	0.027	VB	0.15
96	28.83		0.00	0.000	478	0.000	BB	0.10

Total Area = 1.510272E+08 Total Height = 2.167028E+07 Total Amount = 483.203

50027

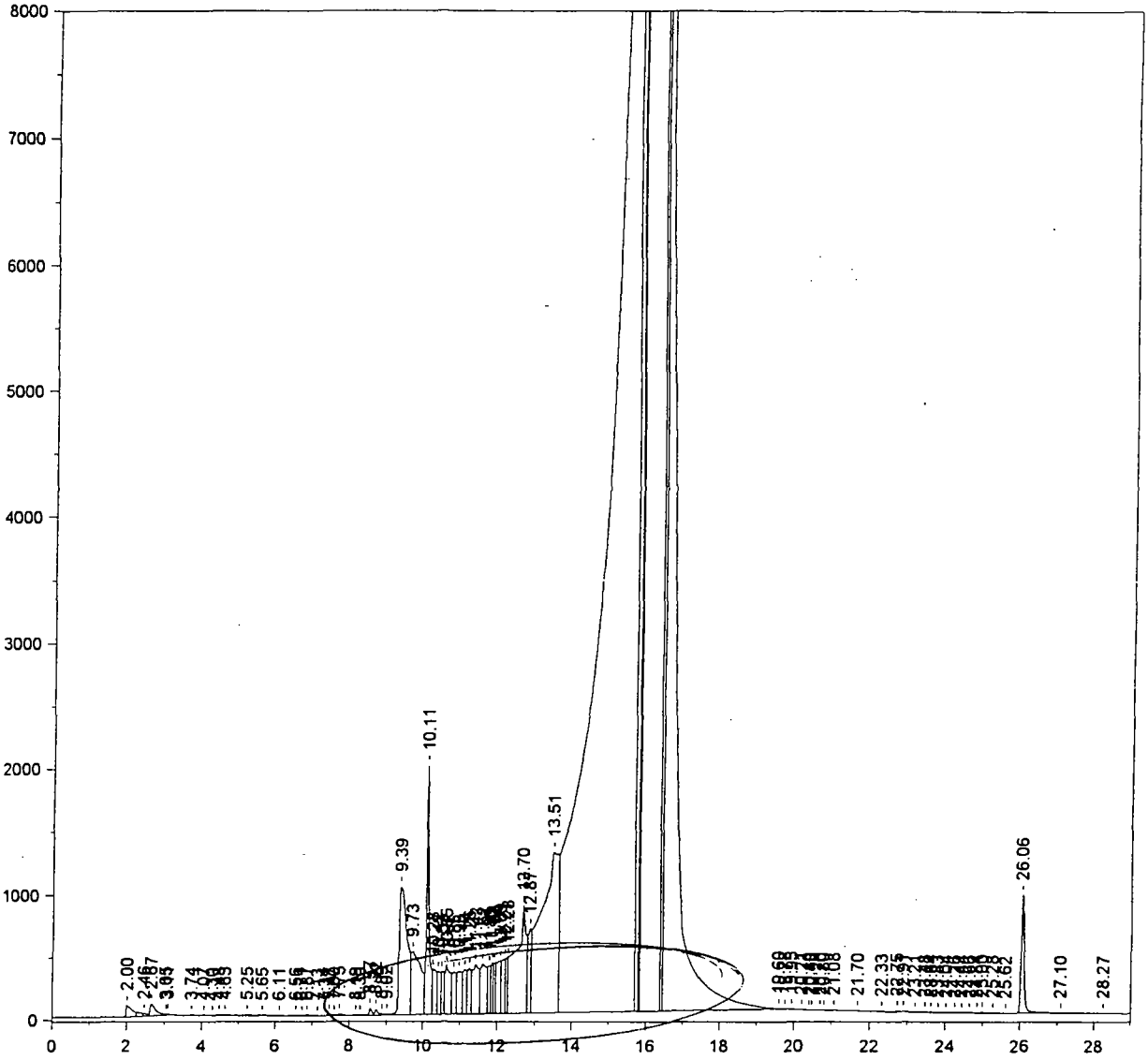


After reintegration
BT
9/23/2

BT
9/24/02

50028

— H:\CP2\HP2\M0920.0008.RAW 301102-03 B8068 FSS-005-08-EBT



Primary Column

Before reintegration
excess area under peak
RBT
9/23/02

50034

Sample Name = **301102-03 B8068 FSS-005-08-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0920.0008.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/20/02 11:37:05 PM
Method Version = 618
Calibration Version = 12

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	976476	0.063	BV	0.19
2	2.46		0.00	0.000	145285	0.009	VV	0.08
3	2.67		0.00	0.000	1014493	0.066	VV	0.14
4	3.05		0.00	0.000	23885	0.002	VV	0.04
5	3.11		0.00	0.000	38913	0.003	VB	0.08
6	3.74		0.00	0.000	52756	0.003	BV	0.22
7	4.07		0.00	0.000	29205	0.002	VV	0.08
8	4.30		0.00	0.000	21203	0.001	VV	0.18
9	4.48		0.00	0.000	36945	0.002	VV	0.10
10	4.63		0.00	0.000	87497	0.006	VB	0.23
11	5.25		0.00	0.000	53180	0.003	BB	0.14
12	5.65		0.00	0.000	9589	0.001	BB	0.18
13	6.11		0.00	0.000	33965	0.002	BV	0.18
14	6.56		0.00	0.000	36108	0.002	VV	0.17
15	6.71		0.00	0.000	8393	0.001	VV	0.06
16	6.87		0.00	0.000	57593	0.004	VV	0.09
17	7.13		0.00	0.000	2275	0.000	VV	0.05
18	7.34		0.00	0.000	11732	0.001	VV	0.13
19	7.47		0.00	0.000	47689	0.003	VV	0.07
20	7.60		0.00	0.000	21078	0.001	VV	0.08
21	7.75		0.00	0.000	76662	0.005	VB	0.10
22	8.19		0.00	0.000	12698	0.001	BV	0.15
23	8.30		0.00	0.000	21240	0.001	VB	0.06
24	8.57		0.00	0.000	247520	0.016	BV	0.07
25	8.72		0.00	0.000	269568	0.018	VV	0.07
26	8.89		0.00	0.000	41400	0.003	VV	0.07
27	9.02		0.00	0.000	49300	0.003	VV	0.05
28	9.39		0.00	0.000	15535171	1.010	VV	0.28
29	9.73		0.00	0.000	9462911	0.615	VV	0.23
30	10.11	CL4XYL	1.29	1.564	10109457	0.657	VV	0.05
31	10.28		0.00	0.000	2727759	0.177	VV	0.09
32	10.42		0.00	0.000	2291714	0.149	VV	0.04
33	10.53		0.00	0.000	1791236	0.116	VV	0.06
34	10.65		0.00	0.000	4044189	0.263	VV	0.05
35	10.85		0.00	0.000	2299407	0.149	VV	0.08
36	10.98		0.00	0.000	3390795	0.220	VV	0.12
37	11.14		0.00	0.000	2466187	0.160	VV	0.08
38	11.26		0.00	0.000	2391160	0.155	VV	0.05
39	11.42		0.00	0.000	5007494	0.325	VV	0.08
40	11.62	AR1016#1	25.78	31.221	4578557	0.298	VV	0.07
41	11.80		0.00	0.000	1952536	0.127	VV	0.06
42	11.88		0.00	0.000	1652909	0.107	VV	0.05
43	11.93		0.00	0.000	1280015	0.083	VV	0.03
44	12.09		0.00	0.000	3673843	0.239	VV	0.08
45	12.21		0.00	0.000	2884068	0.187	VV	0.06
46	12.28		0.00	0.000	1921745	0.125	VV	0.04
47	12.70	AR1016#2	54.75	66.306	17339654	1.127	VV	0.08
48	12.87		0.00	0.000	3506082	0.228	VV	0.06
49	13.51		0.00	0.000	42736268	2.778	VV	0.30
50	15.67		0.00	0.000	564482752	36.691	VV	0.35
51	15.77		0.00	0.000	98871912	6.427	VV	0.10
52	16.30		0.00	0.000	482677856	31.374	VV	0.45

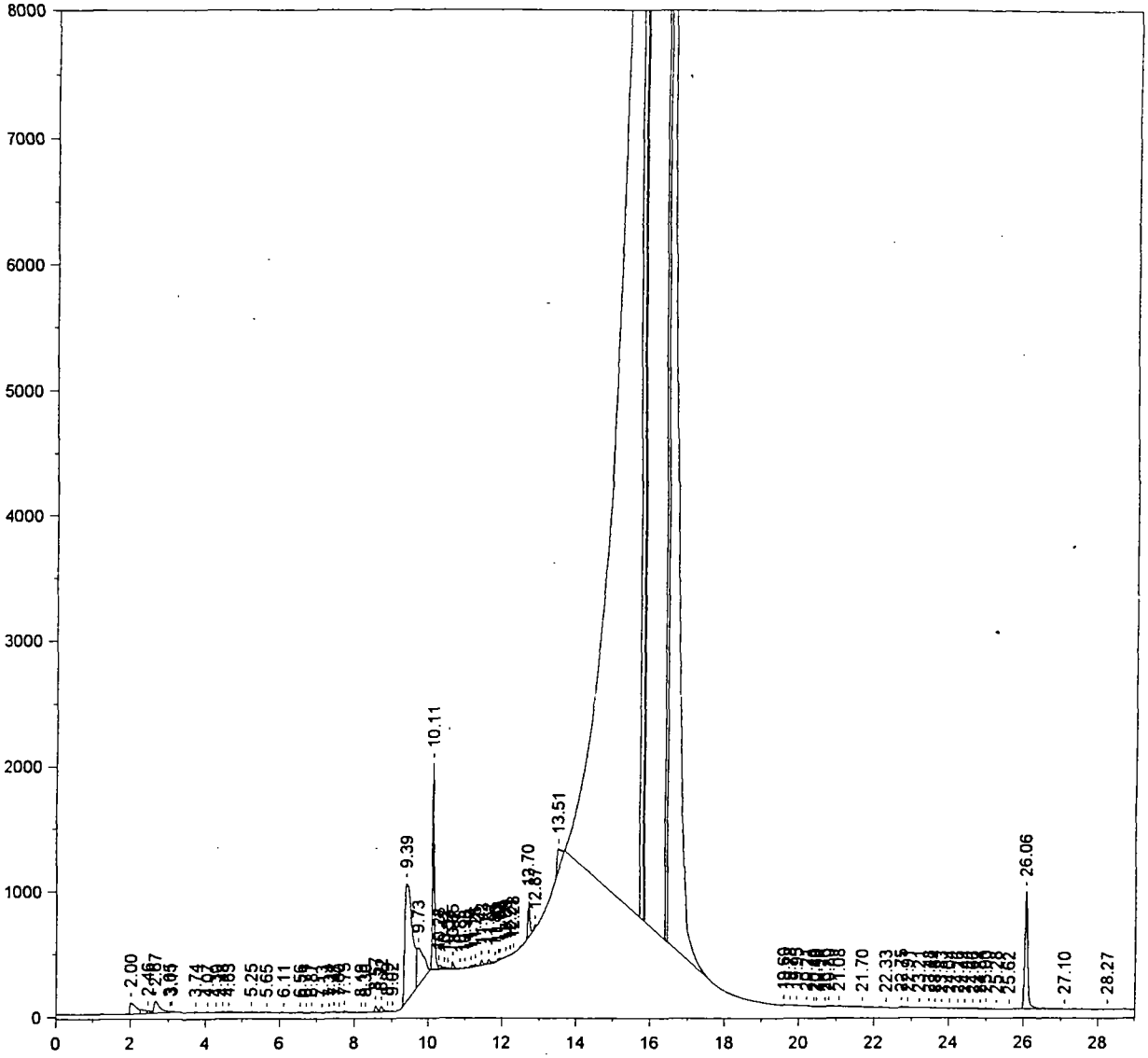
5003

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.44		0.00	0.000	63963756	4.158	VV	0.04
54	16.50		0.00	0.000	176438912	11.468	VV	0.13
55	19.60		0.00	0.000	1814	0.000	VB	0.04
56	19.78		0.00	0.000	5473	0.000	BV	0.08
57	19.95		0.00	0.000	14272	0.001	VB	0.09
58	20.21		0.00	0.000	2117	0.000	BV	0.09
59	20.40		0.00	0.000	2027	0.000	VB	0.06
60	20.48		0.00	0.000	2499	0.000	BB	0.11
61	20.70		0.00	0.000	3506	0.000	BV	0.09
62	20.80		0.00	0.000	5838	0.000	VB	0.09
63	21.08	AR1260#4	0.00	0.002	1064	0.000	BB	0.04
64	21.70		0.00	0.000	4396	0.000	BB	0.12
65	22.33		0.00	0.000	3531	0.000	BB	0.13
66	22.75		0.00	0.000	54545	0.004	BV	0.08
67	22.91		0.00	0.000	20293	0.001	VB	0.09
68	23.21		0.00	0.000	750	0.000	BB	0.05
69	23.48		0.00	0.000	3536	0.000	BV	0.09
70	23.64		0.00	0.000	6431	0.000	VB	0.12
71	23.83		0.00	0.000	4939	0.000	BV	0.11
72	24.04		0.00	0.000	5770	0.000	VB	0.10
73	24.26		0.00	0.000	3767	0.000	BB	0.13
74	24.44		0.00	0.000	10140	0.001	BV	0.13
75	24.66		0.00	0.000	6383	0.000	VV	0.08
76	24.84		0.00	0.000	4821	0.000	VV	0.06
77	25.00		0.00	0.000	32763	0.002	VB	0.08
78	25.28		0.00	0.000	5210	0.000	BV	0.18
79	25.62		0.00	0.000	2912	0.000	VB	0.15
80	26.06	CL10BP	0.75	0.907	5306308	0.345	BV	0.08
81	27.10		0.00	0.000	51937	0.003	VV	0.41
82	28.27		0.00	0.000	2898	0.000	VB	0.14

Total Area = 1.538475E+09 Total Height = 8.645446E+07 Total Amount = 82.57271

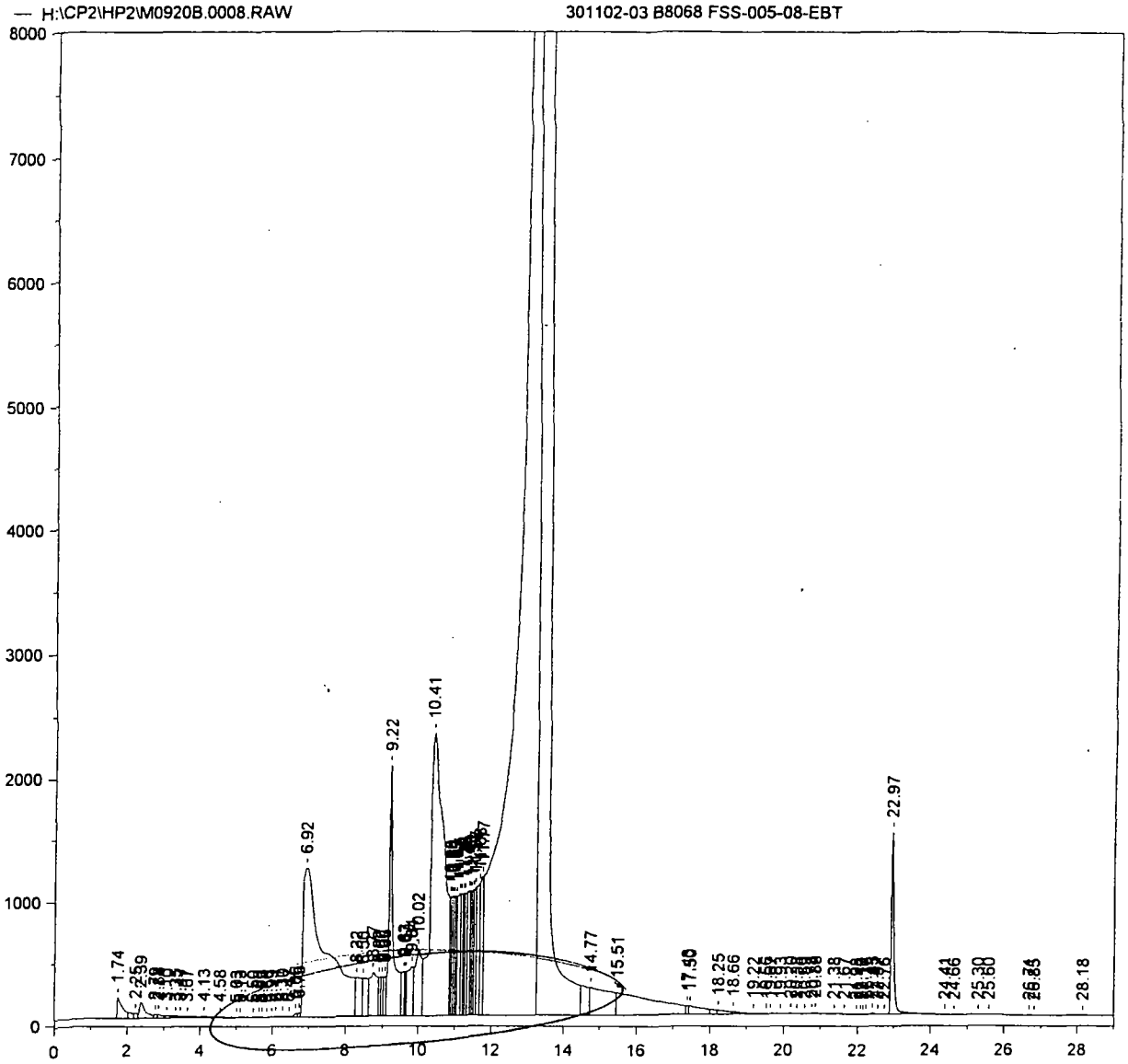
50036

— H:\CP2\HP2\M0920.0008.RAW 301102-03 B8068 FSS-005-08-EBT



After reintegration
RJT
9/23/02

5003



Before reintegration
Excess area under peak
BDT
9/23/02

50042

Sample Name = **301102-03 B8068 FSS-005-08-EBT**

Instrument = HP 2
Acquisition Port = 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Raw File Name = ***H:\CP2\HP2\M0920B.0008.RAW***
Date Taken (end) = *9/20/02 11:37:05 PM*
Method File Name = H:\CP2\HP2\Hp2pestB.met
Method Version = 567
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal
Calibration Version = 8

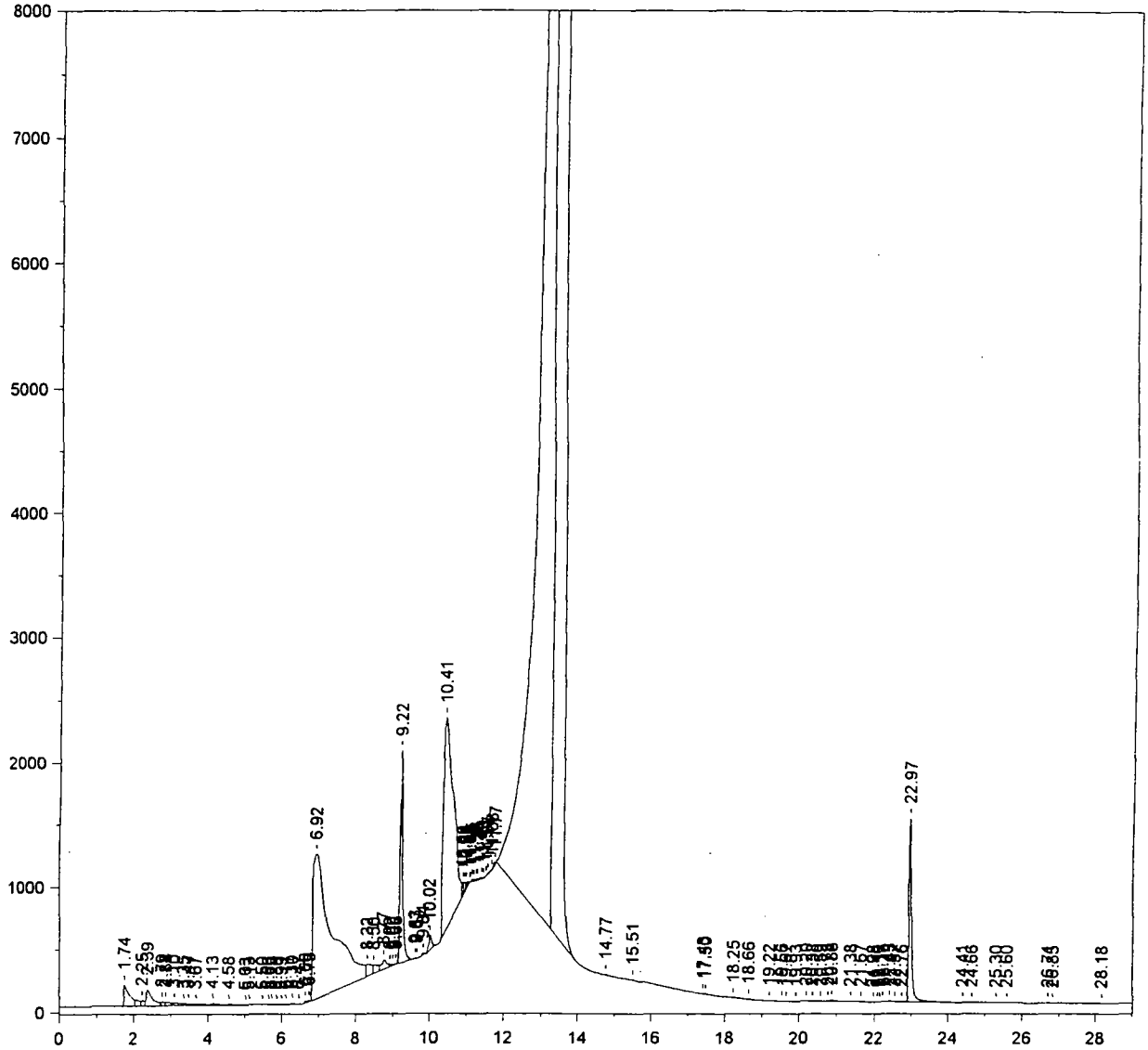
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	1752188	0.185	BV	0.16
2	2.25		0.00	0.000	256905	0.027	VV	0.06
3	2.39		0.00	0.000	1577405	0.167	VV	0.13
4	2.79		0.00	0.000	221506	0.023	VV	0.06
5	2.88		0.00	0.000	283578	0.030	VV	0.09
6	3.10		0.00	0.000	313958	0.033	VV	0.12
7	3.35		0.00	0.000	99849	0.011	VV	0.08
8	3.47		0.00	0.000	132514	0.014	VV	0.11
9	3.67		0.00	0.000	238715	0.025	VV	0.20
10	4.13		0.00	0.000	283413	0.030	VV	0.17
11	4.58		0.00	0.000	132034	0.014	VV	0.12
12	5.03		0.00	0.000	37071	0.004	VV	0.12
13	5.13		0.00	0.000	52277	0.006	VV	0.11
14	5.50		0.00	0.000	56933	0.006	VV	0.14
15	5.66		0.00	0.000	27244	0.003	VV	0.07
16	5.73		0.00	0.000	40289	0.004	VV	0.07
17	5.86		0.00	0.000	26364	0.003	VV	0.08
18	5.99		0.00	0.000	11543	0.001	VV	0.05
19	6.11		0.00	0.000	63296	0.007	VV	0.12
20	6.30		0.00	0.000	99976	0.011	VV	0.09
21	6.47		0.00	0.000	34135	0.004	VV	0.06
22	6.66		0.00	0.000	204563	0.022	VV	0.10
23	6.75		0.00	0.000	153563	0.016	VV	0.05
24	6.92		0.00	0.000	51775384	5.478	VV	0.42
25	8.32		0.00	0.000	3652025	0.386	VV	0.06
26	8.50		0.00	0.000	3047033	0.322	VV	0.04
27	8.77		0.00	0.000	4818880	0.510	VV	0.08
28	8.92		0.00	0.000	1243707	0.132	VV	0.05
29	9.00		0.00	0.000	1427800	0.151	VV	0.04
30	9.08		0.00	0.000	1505652	0.159	VV	0.06
31	9.22	CL4XYL	1.55	0.599	16445175	1.740	VV	0.07
32	9.63		0.00	0.000	2118342	0.224	VV	0.06
33	9.67		0.00	0.000	929470	0.098	VV	0.03
34	9.84		0.00	0.000	4348080	0.460	VV	0.08
35	10.02		0.00	0.000	6979252	0.738	VV	0.12
36	10.41	AR1016#1	244.85	94.924	57767788	6.112	VV	0.37
37	10.90		0.00	0.000	2679993	0.284	VV	0.03
38	10.94		0.00	0.000	3459053	0.366	VV	0.04
39	10.99		0.00	0.000	2111045	0.223	VV	0.02
40	11.05		0.00	0.000	3461810	0.366	VV	0.05
41	11.15		0.00	0.000	5641418	0.597	VV	0.04
42	11.19		0.00	0.000	3338338	0.353	VV	0.04
43	11.26		0.00	0.000	2748987	0.291	VV	0.02
44	11.28	AR1016#2	9.56	3.706	4147147	0.439	VV	0.05
45	11.40		0.00	0.000	4984322	0.527	VV	0.04
46	11.45		0.00	0.000	2592473	0.274	VV	0.02
47	11.51		0.00	0.000	3218582	0.341	VV	0.04
48	11.57		0.00	0.000	4507860	0.477	VV	0.04
49	11.68		0.00	0.000	6076570	0.643	VV	0.05
50	11.77		0.00	0.000	6384571	0.675	VV	0.06
51	13.25		0.00	0.000	392712928	41.550	VV	0.2[illegible]
52	13.54		0.00	0.000	300959520	31.842	VV	0.32

50043

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	14.77		0.00	0.000	8745160	0.925	VV	0.29
54	15.51		0.00	0.000	14114298	1.493	VV	0.92
55	17.43		0.00	0.000	295658	0.031	VV	0.06
56	17.50		0.00	0.000	1763885	0.187	VV	0.23
57	18.25	AR1260#3	1.18	0.457	608027	0.064	VV	0.21
58	18.66		0.00	0.000	451894	0.048	VV	0.24
59	19.22		0.00	0.000	106885	0.011	VV	0.16
60	19.56	AR1260#4	0.02	0.008	26697	0.003	VV	0.06
61	19.67		0.00	0.000	21654	0.002	VV	0.08
62	19.93		0.00	0.000	3324	0.000	VB	0.07
63	20.20		0.00	0.000	28275	0.003	BV	0.10
64	20.38		0.00	0.000	4256	0.000	VV	0.06
65	20.59		0.00	0.000	7688	0.001	VV	0.06
66	20.78		0.00	0.000	15636	0.002	VV	0.06
67	20.88		0.00	0.000	59344	0.006	VB	0.09
68	21.38		0.00	0.000	1792	0.000	BV	0.08
69	21.67	AR1260#5	0.02	0.009	6528	0.001	VB	0.14
70	21.98		0.00	0.000	1268	0.000	BV	0.05
71	22.10		0.00	0.000	1574	0.000	VV	0.06
72	22.17		0.00	0.000	2091	0.000	VV	0.04
73	22.26		0.00	0.000	7129	0.001	VB	0.07
74	22.43		0.00	0.000	37110	0.004	BV	0.07
75	22.57		0.00	0.000	1150	0.000	VB	0.06
76	22.76		0.00	0.000	3355	0.000	BB	0.07
77	22.97	CL10BP	0.77	0.297	7606269	0.805	BV	0.07
78	24.41		0.00	0.000	9732	0.001	VV	0.13
79	24.66		0.00	0.000	4850	0.001	VB	0.13
80	25.30		0.00	0.000	2537	0.000	BB	0.15
81	25.60		0.00	0.000	954	0.000	BB	0.09
82	26.71		0.00	0.000	10039	0.001	BV	0.12
83	26.85		0.00	0.000	16088	0.002	VB	0.25
84	28.18		0.00	0.000	18157	0.002	BB	0.17

Total Area = 9.451659E+08 Total Height = 5.500413E+07 Total Amount = 257.944

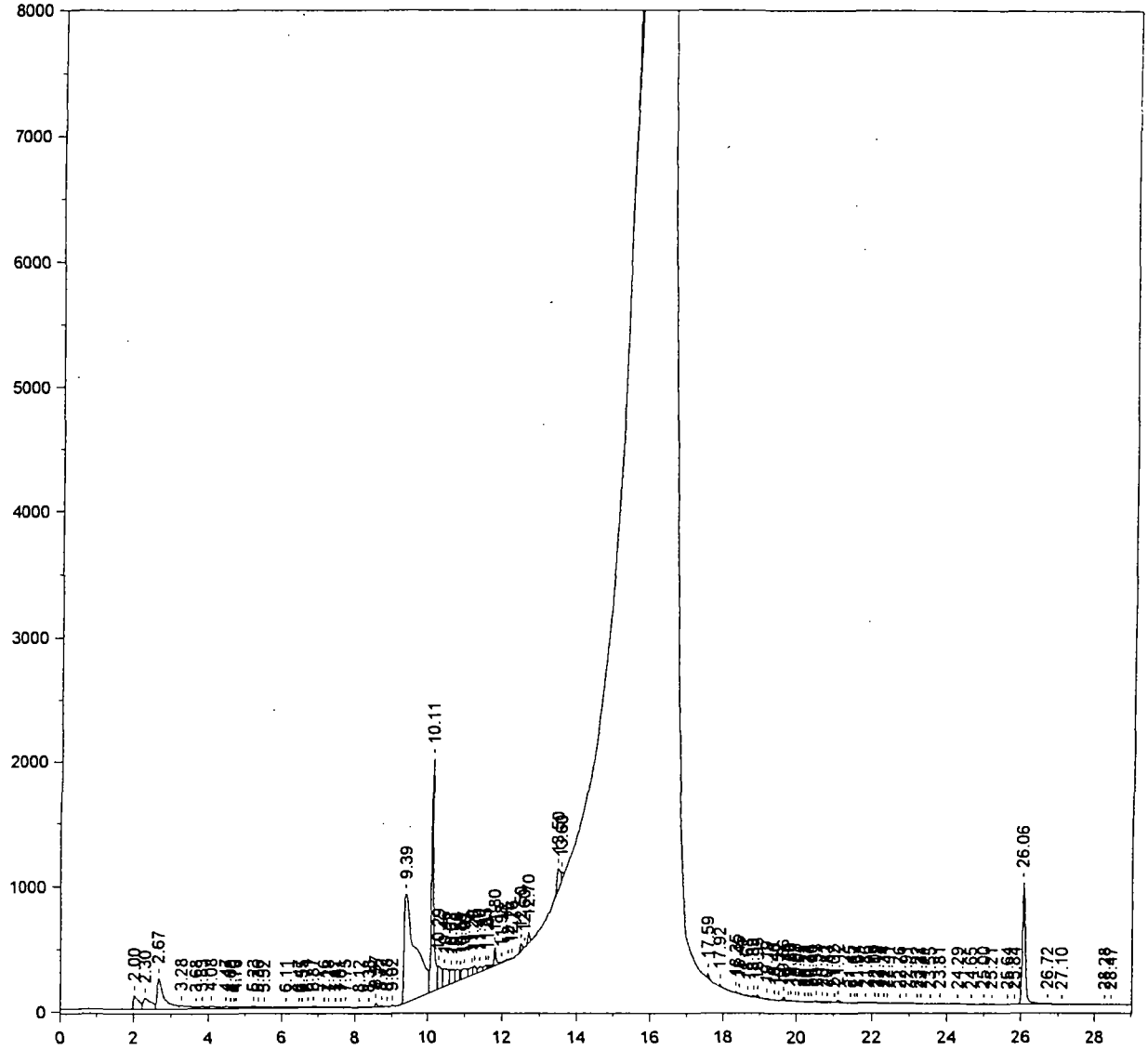
50044



After [illegible]
FDT
9/23/2

5004[illegible]

— H:\CP2\HP2\M0920.0010.RAW 301102-04 B8068 FIP-002-06-SSS



Before reintegration
excess over under peaks
KDT
9/23/2

Primary Column

50051

Sample Name = **301102-04 B8068 FIP-002-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0920.0010.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/21/02 12:54:22 AM
Method Version = 618
Calibration Version = 13

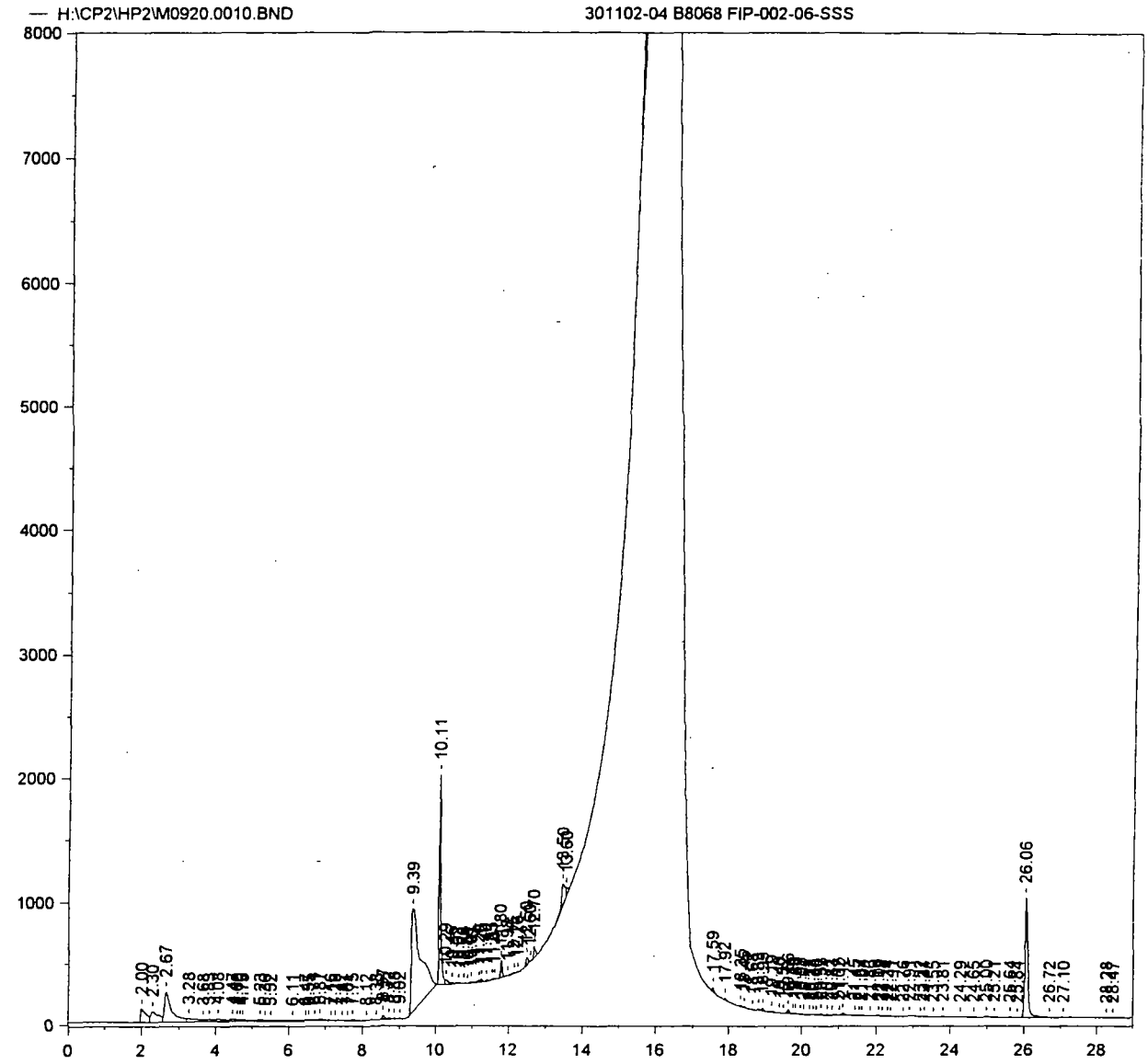
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1071633	0.644	BV	0.18
2	2.30		0.00	0.000	1285815	0.773	VV	0.15
3	2.67		0.00	0.000	3177609	1.910	VV	0.14
4	3.28		0.00	0.000	488005	0.293	VV	0.13
5	3.68		0.00	0.000	104344	0.063	VV	0.07
6	3.83		0.00	0.000	235484	0.142	VV	0.17
7	4.08		0.00	0.000	366264	0.220	VV	0.10
8	4.47		0.00	0.000	175380	0.105	VV	0.13
9	4.60		0.00	0.000	70189	0.042	VV	0.06
10	4.70		0.00	0.000	44831	0.027	VV	0.04
11	4.75		0.00	0.000	180592	0.109	VV	0.10
12	5.23		0.00	0.000	172532	0.104	VV	0.19
13	5.36		0.00	0.000	43774	0.026	VV	0.06
14	5.52		0.00	0.000	178031	0.107	VV	0.27
15	6.11		0.00	0.000	155958	0.094	VV	0.24
16	6.47		0.00	0.000	75791	0.046	VV	0.13
17	6.55		0.00	0.000	35012	0.021	VV	0.07
18	6.71		0.00	0.000	62058	0.037	VV	0.07
19	6.87		0.00	0.000	130860	0.079	VV	0.10
20	7.16		0.00	0.000	15238	0.009	VV	0.05
21	7.28		0.00	0.000	37417	0.022	VV	0.09
22	7.47		0.00	0.000	27187	0.016	VV	0.06
23	7.61		0.00	0.000	20365	0.012	VV	0.07
24	7.75		0.00	0.000	62092	0.037	VB	0.09
25	8.12		0.00	0.000	26718	0.016	BB	0.20
26	8.38		0.00	0.000	3973	0.002	BB	0.11
27	8.57		0.00	0.000	145393	0.087	BV	0.07
28	8.72		0.00	0.000	59717	0.036	VV	0.07
29	8.88		0.00	0.000	22911	0.014	VV	0.05
30	9.02		0.00	0.000	31806	0.019	VB	0.07
31	9.39		0.00	0.000	18566930	11.163	BV	0.37
32	10.11	CL4XYL	1.06	26.213	8295887	4.988	VV	0.05
33	10.29		0.00	0.000	1568251	0.943	VV	0.09
34	10.46		0.00	0.000	1376151	0.827	VV	0.14
35	10.63		0.00	0.000	929786	0.559	VV	0.11
36	10.78		0.00	0.000	726321	0.437	VV	0.08
37	10.88		0.00	0.000	200709	0.121	VV	0.03
38	10.97		0.00	0.000	728083	0.438	VV	0.14
39	11.20		0.00	0.000	526961	0.317	VV	0.09
40	11.25		0.00	0.000	369147	0.222	VV	0.05
41	11.40		0.00	0.000	332347	0.200	VV	0.10
42	11.55		0.00	0.000	215903	0.130	VV	0.07
43	11.61	AR1016#1	0.51	12.691	91123	0.055	VV	0.03
44	11.80		0.00	0.000	710882	0.427	VV	0.05
45	11.98		0.00	0.000	44988	0.027	VV	0.06
46	12.15		0.00	0.000	100247	0.060	VV	0.11
47	12.26		0.00	0.000	55370	0.033	VB	0.09
48	12.50		0.00	0.000	264359	0.159	BV	0.09
49	12.60		0.00	0.000	32808	0.020	VB	0.03
50	12.70	AR1016#2	0.99	24.368	312007	0.188	BB	0.08
51	13.50		0.00	0.000	1164113	0.700	BV	0.14
52	13.60		0.00	0.000	182829	0.110	VB	0.06

5005

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	15.84		0.00	0.000	50915804	30.611	BV	0.20
54	15.91		0.00	0.000	20201206	12.145	VV	0.07
55	15.97		0.00	0.000	17008342	10.226	VV	0.07
56	16.17		0.00	0.000	19658838	11.819	VV	0.14
57	16.24		0.00	0.000	6069348	3.649	VV	0.06
58	16.36		0.00	0.000	469040	0.282	VB	0.02
59	17.59		0.00	0.000	130962	0.079	BB	0.07
60	17.92	AR1260#1	0.31	7.572	60922	0.037	BB	0.07
61	18.35		0.00	0.000	43064	0.026	BB	0.07
62	18.45		0.00	0.000	22833	0.014	BB	0.09
63	18.68		0.00	0.000	7732	0.005	BB	0.05
64	18.83	AR1260#2	0.07	1.711	29876	0.018	BB	0.06
65	18.95		0.00	0.000	68946	0.041	BB	0.05
66	19.19		0.00	0.000	64916	0.039	BB	0.13
67	19.40		0.00	0.000	4183	0.003	BB	0.08
68	19.52		0.00	0.000	2615	0.002	BB	0.05
69	19.66		0.00	0.000	146669	0.088	BV	0.06
70	19.79		0.00	0.000	7552	0.005	VV	0.03
71	19.86	AR1260#3	0.10	2.390	31997	0.019	VV	0.05
72	19.98		0.00	0.000	22232	0.013	VV	0.06
73	20.07		0.00	0.000	3318	0.002	VB	0.05
74	20.22		0.00	0.000	8031	0.005	BV	0.09
75	20.33		0.00	0.000	1681	0.001	VV	0.03
76	20.40		0.00	0.000	5130	0.003	VV	0.04
77	20.53		0.00	0.000	52823	0.032	VV	0.08
78	20.71		0.00	0.000	23414	0.014	VV	0.05
79	20.83		0.00	0.000	27837	0.017	VV	0.07
80	21.02		0.00	0.000	5763	0.003	VV	0.04
81	21.12	AR1260#4	0.13	3.329	106131	0.064	VV	0.07
82	21.45		0.00	0.000	3439	0.002	VV	0.08
83	21.57		0.00	0.000	2410	0.001	VV	0.04
84	21.64		0.00	0.000	16833	0.010	VV	0.07
85	21.86		0.00	0.000	2637	0.002	VV	0.09
86	22.09	AR1260#5	0.09	2.306	49820	0.030	VV	0.10
87	22.18		0.00	0.000	20428	0.012	VV	0.09
88	22.34		0.00	0.000	9714	0.006	VV	0.05
89	22.41		0.00	0.000	7687	0.005	VB	0.07
90	22.76		0.00	0.000	7494	0.005	BV	0.08
91	22.91		0.00	0.000	24758	0.015	VB	0.09
92	23.22		0.00	0.000	5188	0.003	BV	0.07
93	23.31		0.00	0.000	7287	0.004	VB	0.08
94	23.55		0.00	0.000	2434	0.001	BB	0.14
95	23.81		0.00	0.000	12099	0.007	BB	0.06
96	24.29		0.00	0.000	5057	0.003	BV	0.08
97	24.65		0.00	0.000	3778	0.002	VB	0.08
98	25.00		0.00	0.000	37358	0.022	BV	0.08
99	25.21		0.00	0.000	17108	0.010	VB	0.09
100	25.64		0.00	0.000	8617	0.005	BB	0.09
101	25.84		0.00	0.000	1887	0.001	BV	0.06
102	26.06	CL10BP	0.79	19.419	5559330	3.342	SBB	0.08
103	26.72		0.00	0.000	4902	0.003	TBV	0.18
104	27.10		0.00	0.000	3307	0.002	TVB	0.13
105	28.28		0.00	0.000	9421	0.006	BV	0.20
106	28.47		0.00	0.000	6249	0.004	VB	0.21

Total Area = 1.663326E+08 Total Height = 2.068753E+07 Total Amount = 4.042835

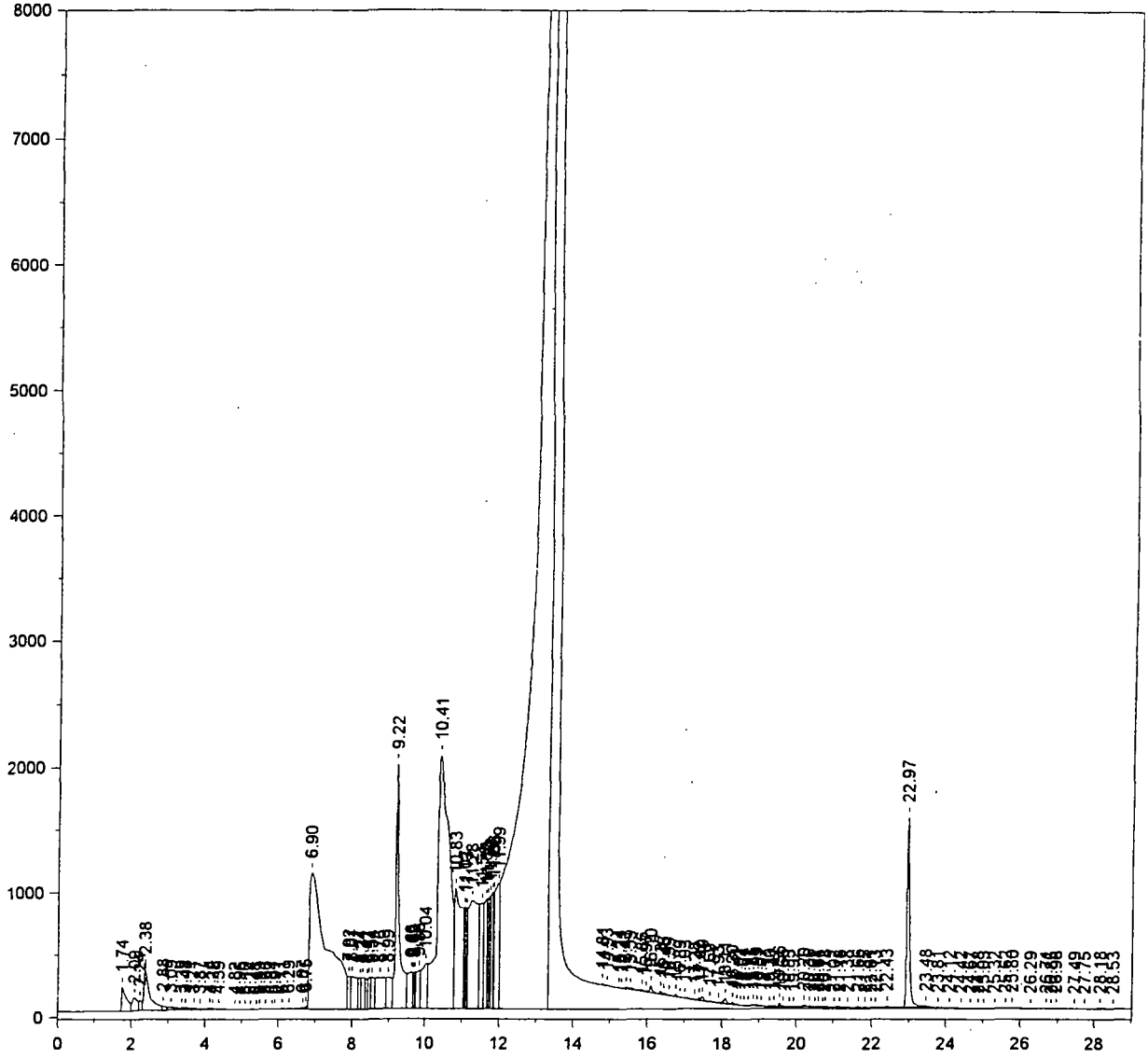
50053



After reintegration
LDT
9/23/02

5005

— H:\CP2\HP2\M0920B.0010.RAW 301102-04 B8068 FIP-002-06-SSS



Before reintegration
excess area under peaks
BT
9/23/2

50060

Sample Name = **301102-04 B8068 FIP-002-06-SSS**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0920B.0010.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/21/02 12:54:22 AM
Method Version = 567
Calibration Version = 8

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	1746988	0.220	BV	0.15
2	2.09		0.00	0.000	1057057	0.133	VV	0.13
3	2.24		0.00	0.000	445052	0.056	VV	0.07
4	2.38		0.00	0.000	3637967	0.458	VV	0.12
5	2.88		0.00	0.000	230598	0.029	VV	0.08
6	3.09		0.00	0.000	246511	0.031	VV	0.16
7	3.39		0.00	0.000	80214	0.010	VV	0.06
8	3.48		0.00	0.000	65712	0.008	VV	0.05
9	3.71		0.00	0.000	129341	0.016	VV	0.11
10	3.87		0.00	0.000	46844	0.006	VV	0.12
11	4.14		0.00	0.000	66871	0.008	VV	0.12
12	4.22		0.00	0.000	44332	0.006	VV	0.10
13	4.39		0.00	0.000	7092	0.001	VB	0.06
14	4.82		0.00	0.000	18319	0.002	BV	0.10
15	4.96		0.00	0.000	14643	0.002	VV	0.11
16	5.10		0.00	0.000	10992	0.001	VV	0.11
17	5.24		0.00	0.000	581	0.000	VV	0.04
18	5.41		0.00	0.000	2865	0.000	VV	0.08
19	5.49		0.00	0.000	6796	0.001	VV	0.07
20	5.66		0.00	0.000	11163	0.001	VV	0.10
21	5.84		0.00	0.000	2844	0.000	VV	0.03
22	5.91		0.00	0.000	7238	0.001	VV	0.06
23	6.11		0.00	0.000	55856	0.007	VV	0.10
24	6.29		0.00	0.000	69642	0.009	VV	0.08
25	6.67		0.00	0.000	122949	0.015	VV	0.09
26	6.75		0.00	0.000	91380	0.012	VV	0.06
27	6.90		0.00	0.000	36833700	4.641	VV	0.37
28	7.92		0.00	0.000	1409733	0.178	VV	0.05
29	8.01		0.00	0.000	3093281	0.390	VV	0.12
30	8.24		0.00	0.000	1241855	0.156	VV	0.05
31	8.31		0.00	0.000	1697466	0.214	VV	0.08
32	8.42		0.00	0.000	877941	0.111	VV	0.04
33	8.47		0.00	0.000	1134108	0.143	VV	0.05
34	8.54		0.00	0.000	1724570	0.217	VV	0.08
35	8.76		0.00	0.000	4338984	0.547	VV	0.18
36	8.99		0.00	0.000	2654688	0.334	VV	0.09
37	9.22	CL4XYL	1.34	0.058	14296773	1.801	VV	0.07
38	9.63		0.00	0.000	2831946	0.357	VV	0.08
39	9.69		0.00	0.000	746294	0.094	VV	0.02
40	9.75		0.00	0.000	633492	0.080	VV	0.02
41	9.86		0.00	0.000	2239328	0.282	VV	0.06
42	10.04		0.00	0.000	4037164	0.509	VV	0.10
43	10.41	AR1016#1	192.39	8.351	45391336	5.719	VV	0.33
44	10.83		0.00	0.000	13346569	1.681	VV	0.06
45	11.07		0.00	0.000	2250683	0.284	VV	0.03
46	11.13		0.00	0.000	2724196	0.343	VV	0.04
47	11.28	AR1016#2	35.94	1.560	15592128	1.964	VV	0.24
48	11.54		0.00	0.000	5867272	0.739	VV	0.09
49	11.65		0.00	0.000	5326379	0.671	VV	0.06
50	11.70		0.00	0.000	2286946	0.288	VV	0.03
51	11.76		0.00	0.000	2861155	0.360	VV	0.03
52	11.82		0.00	0.000	3307814	0.417	VV	0.04

50061

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	11.86		0.00	0.000	1860348	0.234	VV	0.02
54	11.99		0.00	0.000	8173116	1.030	VV	0.09
55	13.30	AR1016#4	2072.74	89.967	322228096	40.596	VV	0.22
56	13.52		0.00	0.000	263914832	33.250	SBB	0.24
57	14.81		0.00	0.000	33796	0.004	TBV	0.08
58	14.93		0.00	0.000	5128	0.001	TVV	0.05
59	15.24		0.00	0.000	7205	0.001	TVV	0.04
60	15.31		0.00	0.000	33153	0.004	TVV	0.09
61	15.43		0.00	0.000	64780	0.008	TVV	0.05
62	15.55		0.00	0.000	95213	0.012	TVV	0.11
63	15.86		0.00	0.000	72574	0.009	TVV	0.09
64	15.97		0.00	0.000	37330	0.005	TVV	0.06
65	16.10		0.00	0.000	260601	0.033	TVV	0.06
66	16.37		0.00	0.000	96085	0.012	TVV	0.05
67	16.45	AR1260#1	0.25	0.011	66138	0.008	TVV	0.09
68	16.59		0.00	0.000	25538	0.003	TVV	0.08
69	16.77	AR1260#2	0.14	0.006	68192	0.009	TVV	0.06
70	16.89		0.00	0.000	8680	0.001	TVV	0.06
71	17.03		0.00	0.000	64488	0.008	TVV	0.14
72	17.28		0.00	0.000	12972	0.002	TVV	0.08
73	17.42		0.00	0.000	73839	0.009	TVV	0.06
74	17.49		0.00	0.000	133495	0.017	TVV	0.07
75	17.69		0.00	0.000	43094	0.005	TVV	0.12
76	17.93		0.00	0.000	4904	0.001	TVV	0.06
77	18.11		0.00	0.000	211817	0.027	TVV	0.10
78	18.30	AR1260#3	0.11	0.005	58040	0.007	TVV	0.06
79	18.41		0.00	0.000	19870	0.003	TVV	0.07
80	18.52		0.00	0.000	2894	0.000	TVV	0.05
81	18.61		0.00	0.000	4462	0.001	TVV	0.06
82	18.72		0.00	0.000	26523	0.003	TVV	0.05
83	18.85		0.00	0.000	39327	0.005	TVV	0.05
84	18.95		0.00	0.000	25654	0.003	TVV	0.06
85	19.07		0.00	0.000	11735	0.001	TVV	0.07
86	19.30		0.00	0.000	11512	0.001	TVV	0.06
87	19.41		0.00	0.000	27381	0.003	TVV	0.06
88	19.56	AR1260#4	0.07	0.003	94491	0.012	TVV	0.05
89	19.66		0.00	0.000	13692	0.002	TVV	0.06
90	19.83		0.00	0.000	1351	0.000	TVV	0.05
91	19.92		0.00	0.000	4125	0.001	TVV	0.08
92	20.20		0.00	0.000	106331	0.013	TVV	0.10
93	20.36		0.00	0.000	45940	0.006	TVV	0.07
94	20.51		0.00	0.000	12131	0.002	TVV	0.04
95	20.61		0.00	0.000	29619	0.004	TVV	0.06
96	20.72		0.00	0.000	16651	0.002	TVV	0.04
97	20.78		0.00	0.000	50759	0.006	TVV	0.06
98	21.02		0.00	0.000	48889	0.006	TVV	0.10
99	21.18		0.00	0.000	24885	0.003	TVV	0.07
100	21.38		0.00	0.000	19437	0.002	TVV	0.09
101	21.66	AR1260#5	0.13	0.006	37181	0.005	TVV	0.06
102	21.85		0.00	0.000	38798	0.005	TVV	0.07
103	22.01		0.00	0.000	9800	0.001	TVV	0.08
104	22.13		0.00	0.000	8906	0.001	TVV	0.15
105	22.43		0.00	0.000	52351	0.007	TVV	0.07
106	22.97	CL10BP	0.78	0.034	7775836	0.980	TVV	0.07
107	23.48		0.00	0.000	187662	0.024	TVV	0.21
108	23.81		0.00	0.000	78494	0.010	TVV	0.12
109	24.12		0.00	0.000	32222	0.004	TVV	0.15
110	24.42		0.00	0.000	23057	0.003	TVV	0.16
111	24.67		0.00	0.000	18670	0.002	TVV	0.09
112	24.88		0.00	0.000	8252	0.001	TVV	0.08
113	25.03		0.00	0.000	9206	0.001	TVV	0.13
114	25.32		0.00	0.000	9906	0.001	TVV	0.10
115	25.62		0.00	0.000	9629	0.001	TVV	0.09
116	25.80		0.00	0.000	51839	0.007	TVV	0.12

50062

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
117	26.29		0.00	0.000	2552	0.000	TVV	0.13
118	26.71		0.00	0.000	7286	0.001	TVV	0.11
119	26.85		0.00	0.000	6329	0.001	TVV	0.06
120	26.98		0.00	0.000	16927	0.002	TVV	0.15
121	27.49		0.00	0.000	1350	0.000	TVV	0.11
122	27.75		0.00	0.000	1935	0.000	TVV	0.08
123	28.18		0.00	0.000	80000	0.010	TVV	0.16
124	28.53		0.00	0.000	12445	0.002	TVB	0.15

Total Area = 7.937372E+08 Total Height = 5.076062E+07 Total Amount = 2303.898

50063

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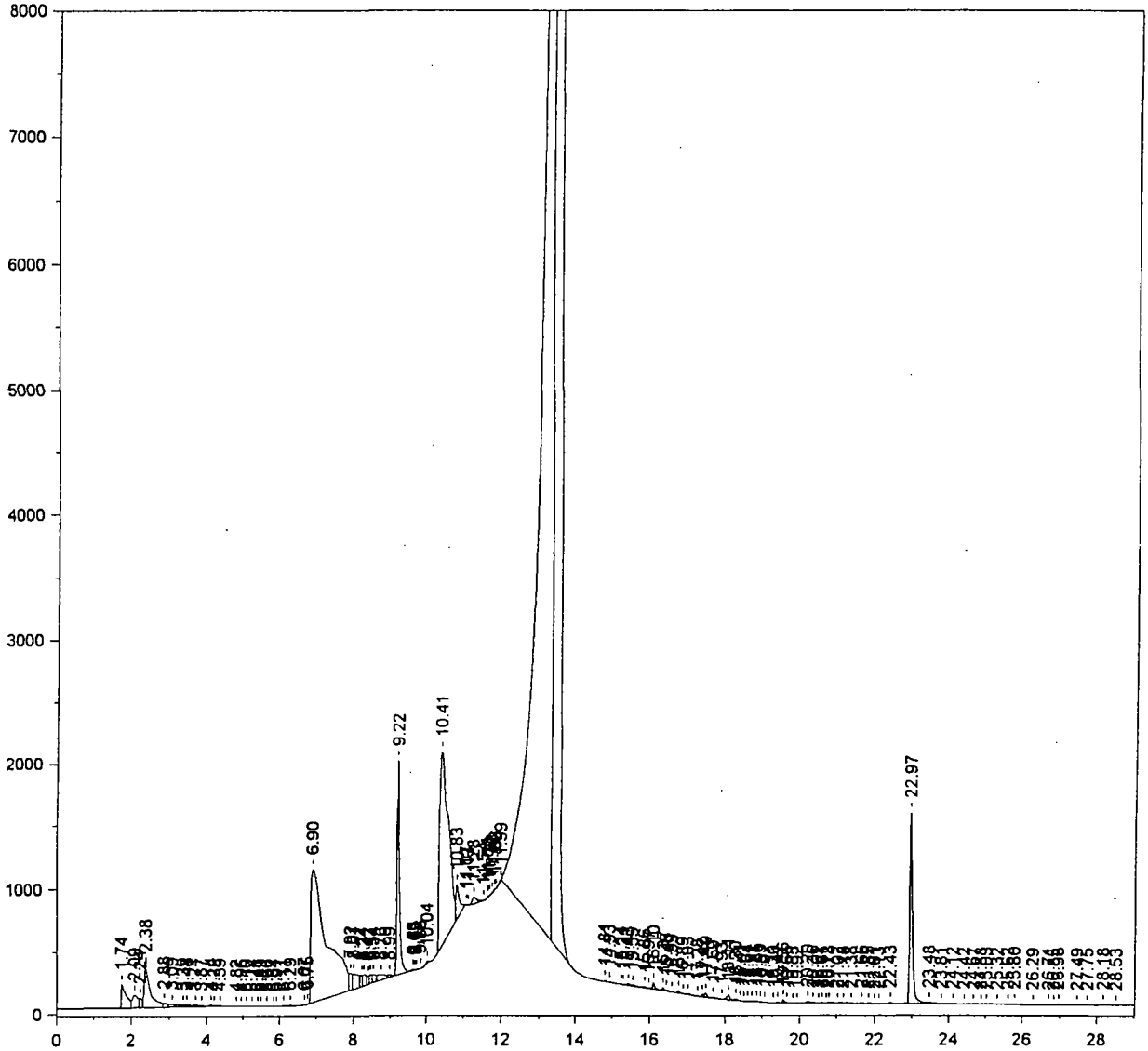
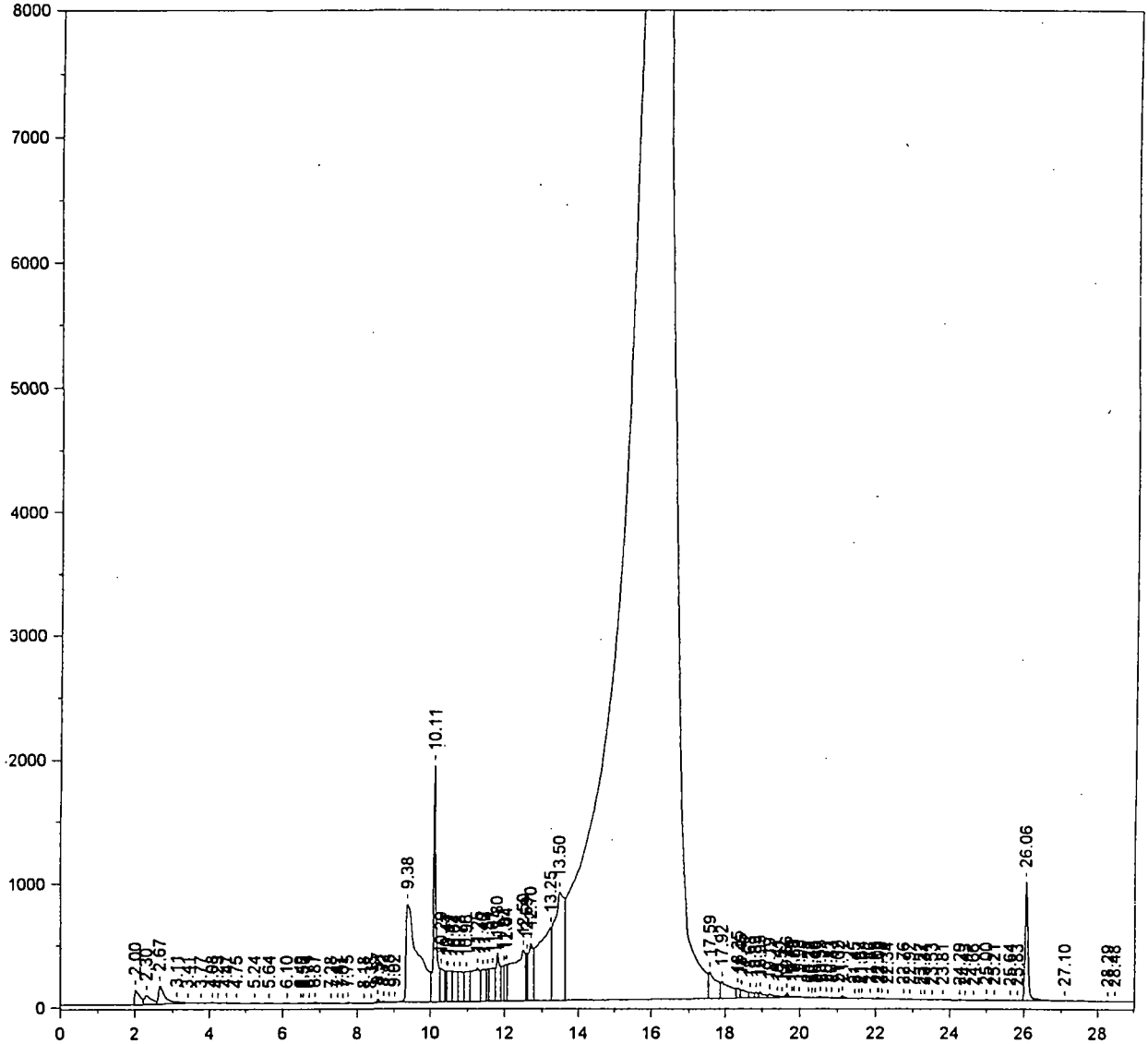


after reintegration
AST
9/23/02

50064

— H:\CP2\HP2\M0920.0006.RAW 301102-05 B8068 FSS-007-05-EBT



Primary Column

Before reintegration
excess area under peaks
AST
9/23/02

50071

Sample Name = **301102-05 B8068 FSS-007-05-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

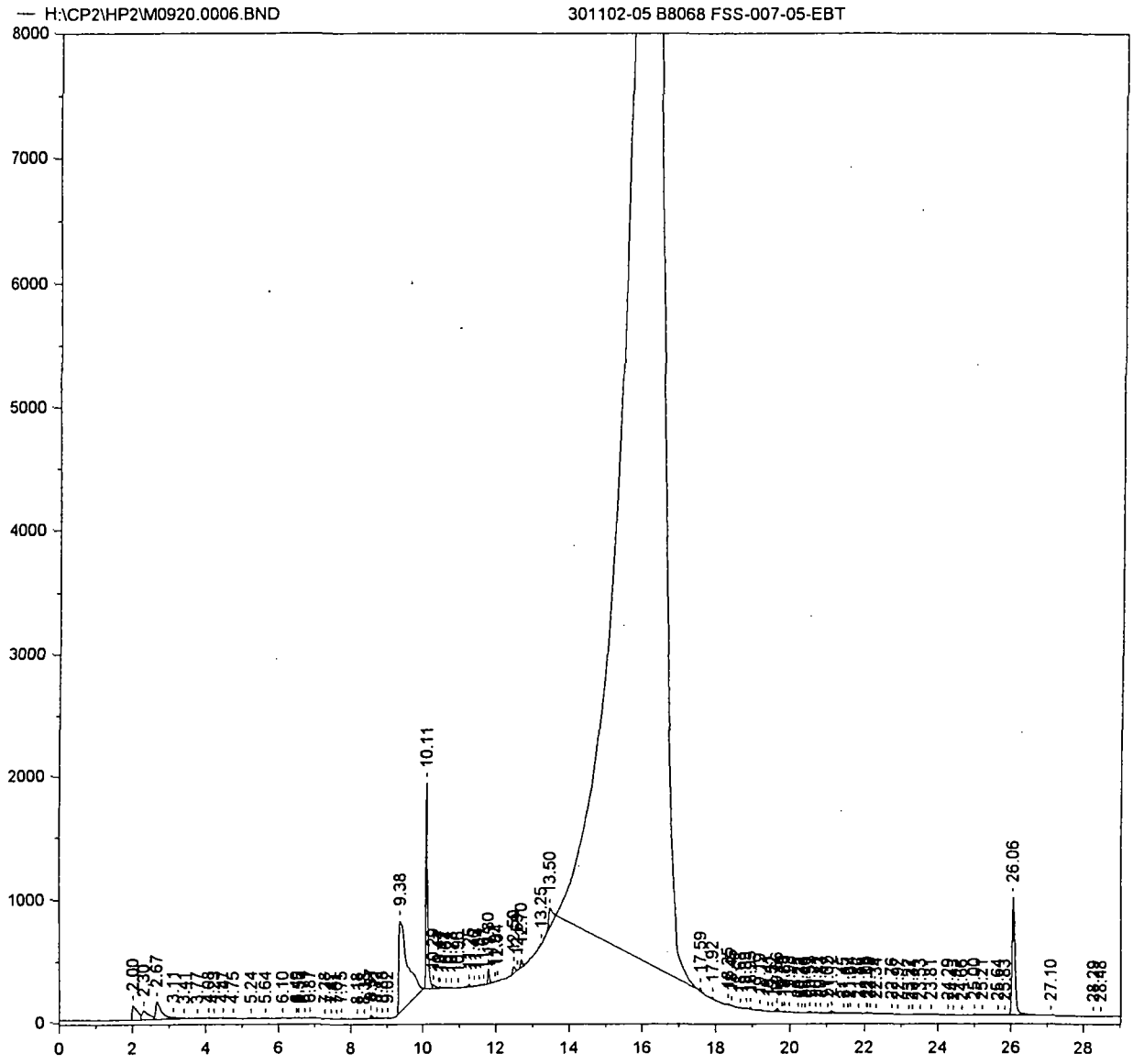
Raw File Name = **H:\CP2\HP2\M0920.0006.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/20/02 10:19:21 PM
Method Version = 618
Calibration Version = 13

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1165001	0.107	BV	0.17
2	2.30		0.00	0.000	946594	0.087	VV	0.14
3	2.67		0.00	0.000	1663406	0.152	VV	0.14
4	3.11		0.00	0.000	186701	0.017	VV	0.20
5	3.41		0.00	0.000	39897	0.004	VB	0.16
6	3.77		0.00	0.000	772	0.000	BB	0.04
7	4.08		0.00	0.000	37176	0.003	BV	0.09
8	4.23		0.00	0.000	27876	0.003	VV	0.15
9	4.47		0.00	0.000	55724	0.005	VV	0.11
10	4.75		0.00	0.000	36653	0.003	VB	0.17
11	5.24		0.00	0.000	47605	0.004	BV	0.21
12	5.64		0.00	0.000	45224	0.004	VB	0.30
13	6.10		0.00	0.000	43455	0.004	BV	0.21
14	6.49		0.00	0.000	24098	0.002	VV	0.11
15	6.55		0.00	0.000	20449	0.002	VV	0.08
16	6.71		0.00	0.000	18802	0.002	VV	0.06
17	6.87		0.00	0.000	83658	0.008	VV	0.10
18	7.28		0.00	0.000	16784	0.002	VV	0.10
19	7.47		0.00	0.000	18131	0.002	VV	0.06
20	7.61		0.00	0.000	11067	0.001	VV	0.07
21	7.75		0.00	0.000	58295	0.005	VB	0.10
22	8.18		0.00	0.000	22890	0.002	BV	0.20
23	8.38		0.00	0.000	1376	0.000	VB	0.06
24	8.57		0.00	0.000	123040	0.011	BV	0.07
25	8.72		0.00	0.000	59178	0.005	VV	0.07
26	8.88		0.00	0.000	27861	0.003	VV	0.05
27	9.02		0.00	0.000	55888	0.005	VV	0.08
28	9.38		0.00	0.000	18219022	1.668	VV	0.30
29	10.11	CL4XYL	1.20	3.287	9370473	0.858	VV	0.05
30	10.29		0.00	0.000	1956322	0.179	VV	0.07
31	10.44		0.00	0.000	791289	0.072	VV	0.03
32	10.47		0.00	0.000	2121447	0.194	VV	0.11
33	10.64		0.00	0.000	1982297	0.181	VV	0.09
34	10.78		0.00	0.000	2395796	0.219	VV	0.08
35	10.96		0.00	0.000	2407116	0.220	VV	0.11
36	11.25		0.00	0.000	4248197	0.389	VV	0.06
37	11.40		0.00	0.000	2386604	0.218	VV	0.12
38	11.54	AR1016#1	6.44	17.673	1143034	0.105	VV	0.05
39	11.67		0.00	0.000	2424809	0.222	VV	0.13
40	11.80		0.00	0.000	3149012	0.288	VV	0.05
41	11.97		0.00	0.000	1407648	0.129	VV	0.04
42	12.04		0.00	0.000	1448675	0.133	VV	0.05
43	12.50		0.00	0.000	9698095	0.888	VV	0.11
44	12.59		0.00	0.000	1133175	0.104	VV	0.04
45	12.70	AR1016#2	14.48	39.772	4587054	0.420	VV	0.07
46	13.25		0.00	0.000	14126842	1.293	VV	0.21
47	13.50		0.00	0.000	17063866	1.562	VV	0.21
48	16.22		0.00	0.000	970888512	88.871	VV	0.82
49	17.59		0.00	0.000	3160820	0.289	VV	0.11
50	17.92	AR1260#1	12.63	34.675	2513081	0.230	VV	0.14
51	18.35		0.00	0.000	514246	0.047	VV	0.08
52	18.45		0.00	0.000	759662	0.070	VV	0.10

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.68		0.00	0.000	362837	0.033	VV	0.06
54	18.83	AR1260#2	0.60	1.634	257011	0.024	VV	0.06
55	18.95		0.00	0.000	406995	0.037	VV	0.06
56	19.19		0.00	0.000	287004	0.026	VV	0.13
57	19.41		0.00	0.000	78271	0.007	VV	0.08
58	19.52		0.00	0.000	43514	0.004	VV	0.06
59	19.66		0.00	0.000	188592	0.017	VV	0.06
60	19.79		0.00	0.000	21705	0.002	VV	0.03
61	19.86	AR1260#3	0.14	0.373	44915	0.004	VV	0.05
62	19.98		0.00	0.000	23215	0.002	VB	0.06
63	20.22		0.00	0.000	6603	0.001	BV	0.09
64	20.33		0.00	0.000	3086	0.000	VV	0.04
65	20.40		0.00	0.000	4245	0.000	VV	0.04
66	20.53		0.00	0.000	51091	0.005	VV	0.08
67	20.71		0.00	0.000	23766	0.002	VV	0.05
68	20.83		0.00	0.000	35743	0.003	VV	0.11
69	21.02		0.00	0.000	7195	0.001	VV	0.04
70	21.12	AR1260#4	0.12	0.320	91786	0.008	VV	0.07
71	21.45		0.00	0.000	5126	0.000	VV	0.07
72	21.57		0.00	0.000	4671	0.000	VV	0.04
73	21.64		0.00	0.000	25094	0.002	VV	0.07
74	21.86		0.00	0.000	8447	0.001	VV	0.09
75	22.05		0.00	0.000	18462	0.002	VV	0.04
76	22.09	AR1260#5	0.05	0.149	28963	0.003	VV	0.06
77	22.18		0.00	0.000	20059	0.002	VV	0.09
78	22.34		0.00	0.000	16846	0.002	VB	0.16
79	22.76		0.00	0.000	8934	0.001	BV	0.08
80	22.92		0.00	0.000	24517	0.002	VB	0.10
81	23.22		0.00	0.000	4720	0.000	BV	0.06
82	23.31		0.00	0.000	6371	0.001	VB	0.08
83	23.53		0.00	0.000	1749	0.000	BB	0.13
84	23.81		0.00	0.000	10901	0.001	BB	0.06
85	24.29		0.00	0.000	4860	0.000	BV	0.07
86	24.43		0.00	0.000	4210	0.000	VV	0.15
87	24.66		0.00	0.000	4365	0.000	VB	0.08
88	25.00		0.00	0.000	37249	0.003	BV	0.07
89	25.21		0.00	0.000	21060	0.002	VV	0.08
90	25.64		0.00	0.000	5364	0.000	VB	0.09
91	25.83		0.00	0.000	2682	0.000	BV	0.06
92	26.06	CL10BP	0.77	2.117	5459292	0.500	VV	0.08
93	27.10		0.00	0.000	51823	0.005	VV	0.37
94	28.29		0.00	0.000	11207	0.001	VV	0.21
95	28.48		0.00	0.000	5362	0.000	VB	0.18

Total Area = 1.092465E+09 Total Height = 2.576543E+07 Total Amount = 36.4168

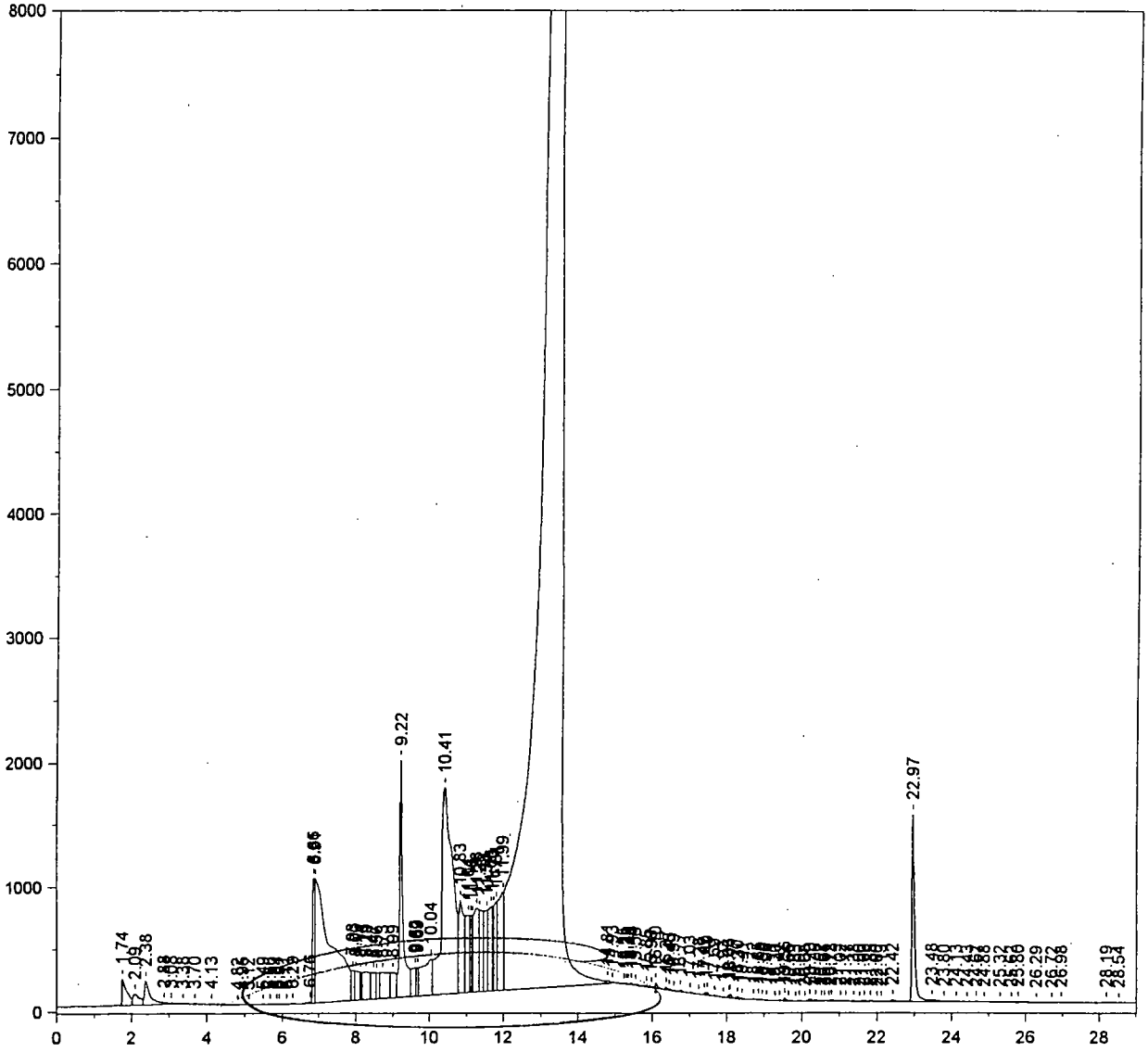


After reintegration
RST
9/23/02

50074

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0920B.0006.RAW 301102-05 B8068 FSS-007-05-EBT



Before reintegration
excess area underpeak
RST
9/23/02

50080

Sample Name = **301102-05 B8068 FSS-007-05-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

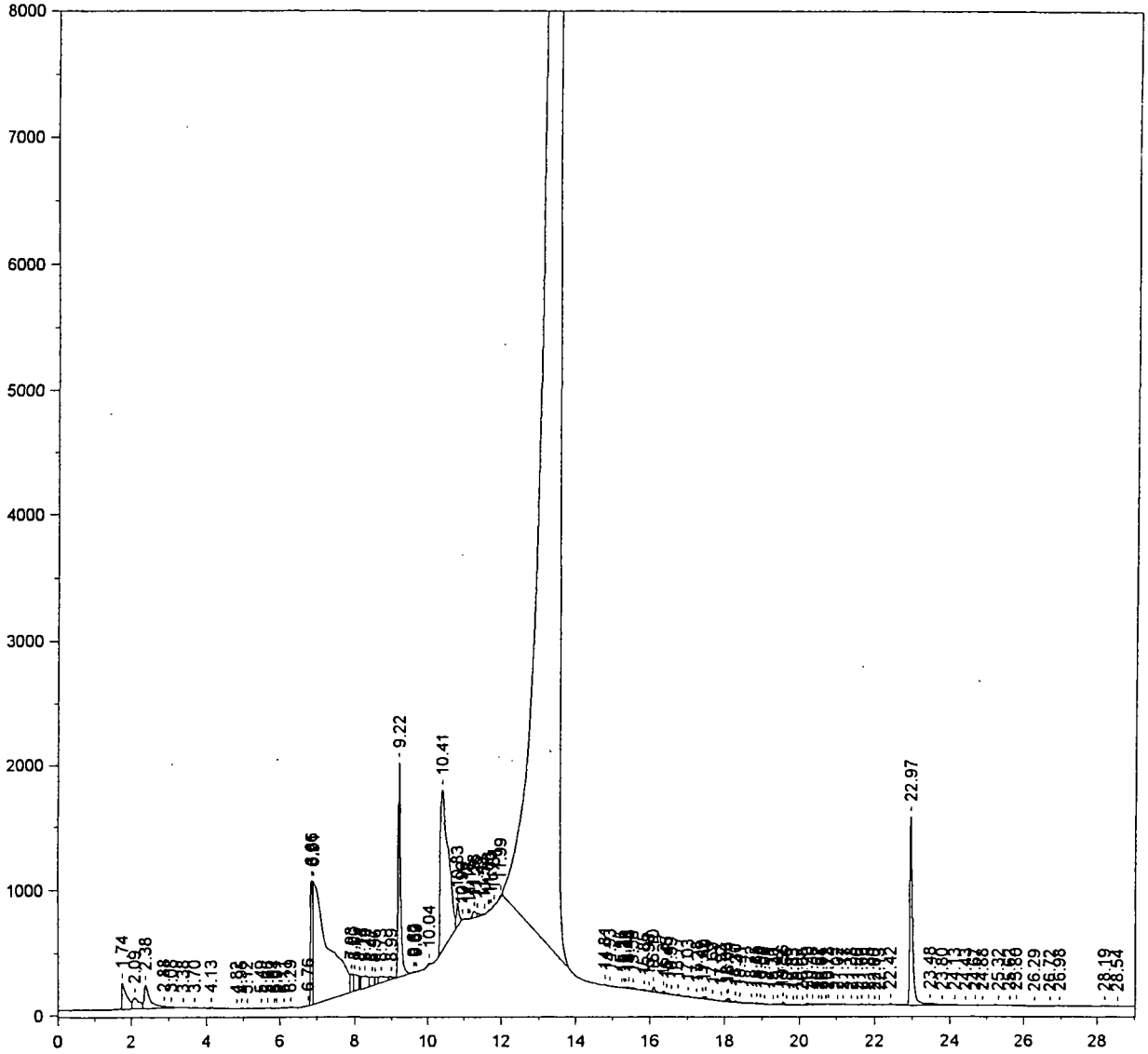
Raw File Name = **H:\CP2\HP2\M0920B.0006.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/20/02 10:19:21 PM
Method Version = 567
Calibration Version = 8

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	1955089	0.299	BV	0.15
2	2.09		0.00	0.000	1152643	0.176	VV	0.13
3	2.38		0.00	0.000	2110929	0.323	VV	0.12
4	2.88		0.00	0.000	100708	0.015	VV	0.08
5	3.08		0.00	0.000	111404	0.017	VV	0.18
6	3.38		0.00	0.000	7665	0.001	VB	0.07
7	3.70		0.00	0.000	23277	0.004	BB	0.13
8	4.13		0.00	0.000	116783	0.018	BB	0.28
9	4.82		0.00	0.000	9515	0.001	BV	0.09
10	4.95		0.00	0.000	13218	0.002	VV	0.11
11	5.12		0.00	0.000	9598	0.001	VB	0.12
12	5.49		0.00	0.000	13568	0.002	BV	0.14
13	5.66		0.00	0.000	8013	0.001	VV	0.09
14	5.84		0.00	0.000	1188	0.000	VV	0.03
15	5.91		0.00	0.000	4275	0.001	VB	0.06
16	6.11		0.00	0.000	16098	0.002	BV	0.12
17	6.29		0.00	0.000	32818	0.005	VB	0.08
18	6.76		0.00	0.000	74957	0.011	BV	0.14
19	6.86		0.00	0.000	3957710	0.605	VV	0.07
20	6.91		0.00	0.000	30381578	4.645	VV	0.25
21	7.93		0.00	0.000	1511737	0.231	VV	0.08
22	8.00		0.00	0.000	1948664	0.298	VV	0.11
23	8.14		0.00	0.000	651069	0.100	VV	0.03
24	8.29		0.00	0.000	2886716	0.441	VV	0.13
25	8.47		0.00	0.000	1792762	0.274	VV	0.09
26	8.56		0.00	0.000	1189806	0.182	VV	0.05
27	8.73		0.00	0.000	3366434	0.515	VV	0.20
28	8.99		0.00	0.000	2266724	0.347	VV	0.16
29	9.22	CL4XYL	1 17	0.692	12468088	1.906	VV	0.06
30	9.62		0.00	0.000	1949855	0.298	VV	0.06
31	9.69		0.00	0.000	944759	0.144	VV	0.05
32	10.04		0.00	0.000	5681510	0.869	VV	0.14
33	10.41	AR1016#1	150.93	89.104	35608988	5.444	VV	0.31
34	10.83		0.00	0.000	6759506	1.033	VV	0.06
35	11.04		0.00	0.000	4914946	0.751	VV	0.09
36	11.11		0.00	0.000	1840519	0.281	VV	0.03
37	11.16		0.00	0.000	1352733	0.207	VV	0.02
38	11.28	AR1016#2	15.93	9.402	6908785	1.056	VV	0.13
39	11.36		0.00	0.000	4535827	0.693	VV	0.04
40	11.54		0.00	0.000	3998579	0.611	VV	0.09
41	11.66		0.00	0.000	5697873	0.871	VV	0.09
42	11.73		0.00	0.000	1221216	0.187	VV	0.02
43	11.81		0.00	0.000	3771114	0.577	VV	0.05
44	11.99		0.00	0.000	8085600	1.236	VV	0.09
45	13.55		0.00	0.000	482389760	73.746	VV	0.42
46	14.81		0.00	0.000	137538	0.021	VV	0.07
47	14.93		0.00	0.000	22046	0.003	VB	0.06
48	15.25		0.00	0.000	7168	0.001	BV	0.05
49	15.31		0.00	0.000	12184	0.002	VV	0.03
50	15.36		0.00	0.000	19237	0.003	VV	0.04
51	15.43		0.00	0.000	62909	0.010	VV	0.05
52	15.56		0 00	0.000	119408	0.018	VV	0.13

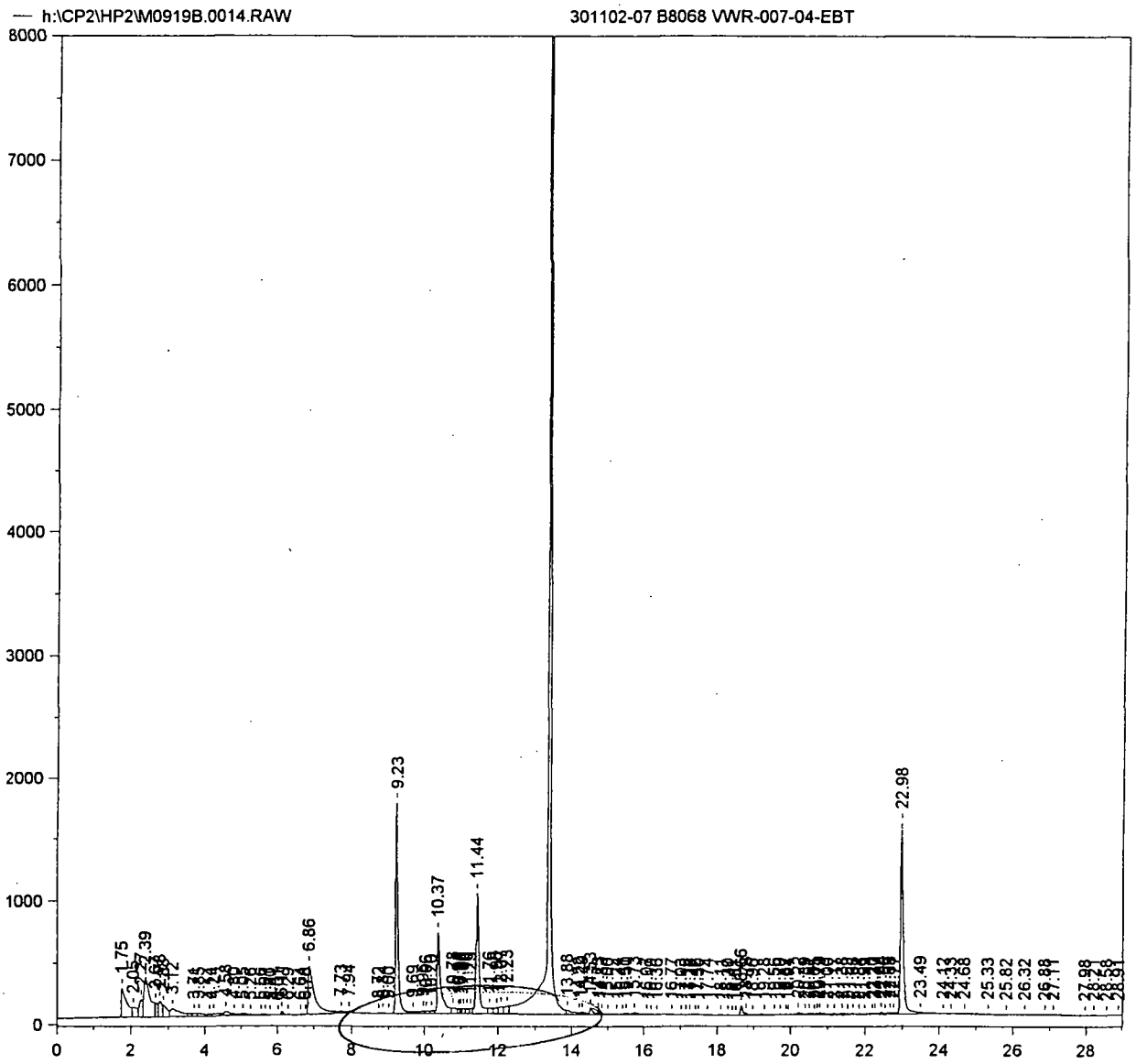
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	15.85		0.00	0.000	53687	0.008	VV	0.09
54	15.98		0.00	0.000	31852	0.005	VV	0.05
55	16.10		0.00	0.000	196552	0.030	VV	0.06
56	16.37		0.00	0.000	80534	0.012	VV	0.05
57	16.45	AR1260#1	0.18	0.109	49482	0.008	VV	0.08
58	16.59		0.00	0.000	17632	0.003	VB	0.08
59	16.77	AR1260#2	0.10	0.062	52188	0.008	BB	0.06
60	17.03		0.00	0.000	55828	0.009	BB	0.13
61	17.28		0.00	0.000	10856	0.002	BB	0.07
62	17.42		0.00	0.000	63372	0.010	BV	0.06
63	17.49		0.00	0.000	95726	0.015	VV	0.07
64	17.69		0.00	0.000	38923	0.006	VB	0.12
65	17.93		0.00	0.000	5500	0.001	BB	0.07
66	18.06		0.00	0.000	53671	0.008	BV	0.04
67	18.11		0.00	0.000	115463	0.018	VV	0.06
68	18.30	AR1260#3	0.10	0.057	49511	0.008	VV	0.06
69	18.41		0.00	0.000	17718	0.003	VB	0.07
70	18.72		0.00	0.000	22542	0.003	BV	0.05
71	18.85		0.00	0.000	33895	0.005	VV	0.05
72	18.95		0.00	0.000	21504	0.003	VV	0.06
73	19.06		0.00	0.000	10281	0.002	VB	0.07
74	19.30		0.00	0.000	12481	0.002	BV	0.07
75	19.41		0.00	0.000	25629	0.004	VV	0.06
76	19.56	AR1260#4	0.06	0.038	82615	0.013	VV	0.05
77	19.66		0.00	0.000	11393	0.002	VB	0.06
78	19.83		0.00	0.000	1647	0.000	BV	0.06
79	19.92		0.00	0.000	3965	0.001	VV	0.08
80	20.08		0.00	0.000	3297	0.001	VV	0.07
81	20.20		0.00	0.000	83104	0.013	VV	0.10
82	20.36		0.00	0.000	40966	0.006	VV	0.06
83	20.52		0.00	0.000	13053	0.002	VV	0.05
84	20.61		0.00	0.000	31195	0.005	VV	0.06
85	20.72		0.00	0.000	18511	0.003	VV	0.04
86	20.78		0.00	0.000	56400	0.009	VV	0.06
87	21.02		0.00	0.000	54342	0.008	VV	0.10
88	21.17		0.00	0.000	34689	0.005	VV	0.08
89	21.38		0.00	0.000	25245	0.004	VV	0.08
90	21.56		0.00	0.000	9776	0.001	VV	0.06
91	21.66	AR1260#5	0.14	0.083	40992	0.006	VV	0.06
92	21.85		0.00	0.000	42034	0.006	VV	0.07
93	22.00		0.00	0.000	13558	0.002	VV	0.08
94	22.13		0.00	0.000	17247	0.003	VV	0.15
95	22.42		0.00	0.000	62524	0.010	VB	0.07
96	22.97	CL10BP	0.77	0.454	7639281	1.168	BV	0.07
97	23.48		0.00	0.000	210731	0.032	VV	0.21
98	23.80		0.00	0.000	69310	0.011	VV	0.12
99	24.13		0.00	0.000	24800	0.004	VV	0.15
100	24.43		0.00	0.000	14002	0.002	VV	0.17
101	24.67		0.00	0.000	12222	0.002	VB	0.09
102	24.88		0.00	0.000	1451	0.000	BB	0.09
103	25.32		0.00	0.000	7852	0.001	BV	0.12
104	25.62		0.00	0.000	7915	0.001	VV	0.09
105	25.80		0.00	0.000	41815	0.006	VB	0.12
106	26.29		0.00	0.000	1218	0.000	BB	0.12
107	26.72		0.00	0.000	6714	0.001	BV	0.13
108	26.98		0.00	0.000	26014	0.004	VB	0.15
109	28.19		0.00	0.000	62644	0.010	BV	0.19
110	28.54		0.00	0.000	6787	0.001	VB	0.13

Total Area = 6.541194E+08 Total Height = 3.252111E+07 Total Amount = 169.3861



After reintegration
RDT
9/23/2

50083



Before reintegration
express area under peaks
BT
9/20/02

50107

Sample Name = **301102-07 B8068 VWR-007-04-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **h:\CP2\HP2\M0919B.0014.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/19/02 4:31:26 PM
Method Version = 566
Calibration Version = 4

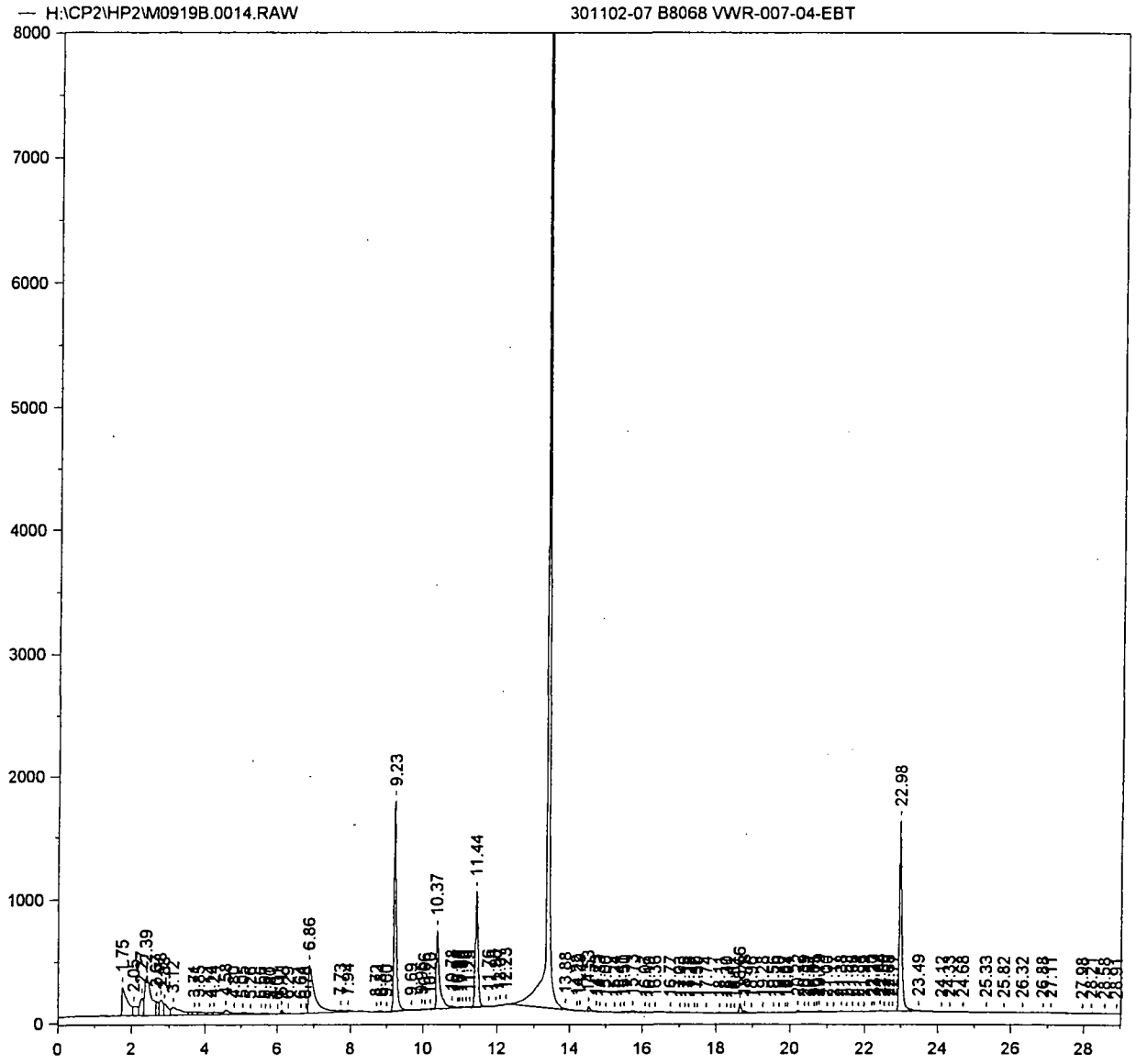
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.75		0.00	0.000	2415322	2.135	BV	0.15
2	2.05		0.00	0.000	732080	0.647	VV	0.08
3	2.27		0.00	0.000	888294	0.785	VV	0.08
4	2.39		0.00	0.000	3817205	3.374	VV	0.13
5	2.67		0.00	0.000	538197	0.476	VV	0.06
6	2.78		0.00	0.000	878585	0.777	VV	0.07
7	2.88		0.00	0.000	784380	0.693	VV	0.09
8	3.12		0.00	0.000	1223670	1.082	VV	0.18
9	3.71		0.00	0.000	201498	0.178	VV	0.07
10	3.85		0.00	0.000	301026	0.266	VV	0.16
11	4.14		0.00	0.000	175201	0.155	VV	0.11
12	4.24		0.00	0.000	300166	0.265	VV	0.12
13	4.58		0.00	0.000	419323	0.371	VV	0.12
14	4.80		0.00	0.000	112062	0.099	VV	0.08
15	5.05		0.00	0.000	240854	0.213	VV	0.13
16	5.26		0.00	0.000	128787	0.114	VV	0.15
17	5.56		0.00	0.000	53669	0.047	VV	0.10
18	5.67		0.00	0.000	67563	0.060	VV	0.12
19	5.80		0.00	0.000	41945	0.037	VV	0.09
20	6.01		0.00	0.000	31138	0.028	VV	0.06
21	6.11		0.00	0.000	161071	0.142	VV	0.07
22	6.29		0.00	0.000	48678	0.043	VB	0.10
23	6.64		0.00	0.000	15355	0.014	BV	0.11
24	6.76		0.00	0.000	16448	0.015	VV	0.06
25	6.86		0.00	0.000	4796960	4.240	VV	0.15
26	7.73		0.00	0.000	152198	0.135	VV	0.10
27	7.94		0.00	0.000	107735	0.095	VB	0.10
28	8.72		0.00	0.000	20103	0.018	BV	0.05
29	8.84		0.00	0.000	32405	0.029	VV	0.07
30	9.00		0.00	0.000	4642	0.004	VV	0.04
31	9.23	CL4XYL	0.74	0.239	7883333	6.968	VV	0.06
32	9.69		0.00	0.000	185279	0.164	VV	0.13
33	9.96		0.00	0.000	195952	0.173	VV	0.09
34	10.06		0.00	0.000	147267	0.130	VV	0.09
35	10.20		0.00	0.000	178050	0.157	VV	0.10
36	10.37	AR1016#1	18.95	6.117	4470613	3.951	VV	0.07
37	10.78		0.00	0.000	419572	0.371	VV	0.11
38	10.94		0.00	0.000	162146	0.143	VV	0.05
39	10.98		0.00	0.000	131397	0.116	VV	0.03
40	11.06		0.00	0.000	227827	0.201	VV	0.05
41	11.16		0.00	0.000	261790	0.231	VV	0.08
42	11.25	AR1016#2	0.54	0.175	235151	0.208	VV	0.06
43	11.44		0.00	0.000	5901834	5.217	VV	0.09
44	11.76		0.00	0.000	376624	0.333	VV	0.06
45	11.96		0.00	0.000	409606	0.362	VV	0.07
46	12.07		0.00	0.000	482154	0.426	VV	0.08
47	12.23		0.00	0.000	515511	0.456	VV	0.09
48	13.40	AR1016#5	288.32	93.072	60045452	53.073	VV	0.05
49	13.88		0.00	0.000	437555	0.387	VV	0.10
50	14.22		0.00	0.000	59250	0.052	VV	0.04
51	14.29		0.00	0.000	171316	0.151	VV	0.12
52	14.53		0.00	0.000	294842	0.261	VV	0.07

50108

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	14.73		0.00	0.000	75727	0.067	VV	0.05
54	14.83		0.00	0.000	62837	0.056	VV	0.07
55	15.00		0.00	0.000	56381	0.050	VV	0.14
56	15.24		0.00	0.000	19934	0.018	VV	0.06
57	15.41		0.00	0.000	24047	0.021	VV	0.05
58	15.50		0.00	0.000	97132	0.086	VV	0.12
59	15.73		0.00	0.000	184729	0.163	VV	0.13
60	16.07		0.00	0.000	38557	0.034	VV	0.07
61	16.19		0.00	0.000	15588	0.014	VV	0.07
62	16.36		0.00	0.000	3063	0.003	VB	0.06
63	16.77	AR1260#2	0.04	0.014	22169	0.020	BB	0.18
64	17.03		0.00	0.000	4975	0.004	BV	0.08
65	17.15		0.00	0.000	1771	0.002	VB	0.05
66	17.28		0.00	0.000	1868	0.002	BB	0.07
67	17.42		0.00	0.000	7726	0.007	BV	0.06
68	17.50		0.00	0.000	16111	0.014	VV	0.08
69	17.74		0.00	0.000	17444	0.015	VB	0.22
70	18.11		0.00	0.000	18643	0.016	BB	0.10
71	18.30	AR1260#3	0.01	0.004	6820	0.006	BB	0.06
72	18.41		0.00	0.000	5197	0.005	BV	0.05
73	18.51		0.00	0.000	3294	0.003	VB	0.08
74	18.66		0.00	0.000	337068	0.298	BV	0.06
75	18.78		0.00	0.000	88210	0.078	VV	0.06
76	18.96		0.00	0.000	12399	0.011	VV	0.08
77	19.28		0.00	0.000	108690	0.096	VV	0.23
78	19.56	AR1260#4	0.02	0.006	24977	0.022	VV	0.05
79	19.70		0.00	0.000	40249	0.036	VV	0.13
80	19.87		0.00	0.000	21045	0.019	VV	0.07
81	19.94		0.00	0.000	22354	0.020	VV	0.06
82	20.22		0.00	0.000	182452	0.161	VV	0.09
83	20.39		0.00	0.000	32689	0.029	VV	0.04
84	20.51		0.00	0.000	66709	0.059	VV	0.09
85	20.65		0.00	0.000	64507	0.057	VV	0.06
86	20.71		0.00	0.000	45671	0.040	VV	0.05
87	20.79		0.00	0.000	146546	0.130	VV	0.08
88	21.00		0.00	0.000	67055	0.059	VV	0.08
89	21.17		0.00	0.000	101740	0.090	VV	0.12
90	21.38		0.00	0.000	127175	0.112	VV	0.12
91	21.53		0.00	0.000	49076	0.043	VV	0.05
92	21.68	AR1260#5	0.34	0.111	100130	0.089	VV	0.10
93	21.84		0.00	0.000	69215	0.061	VV	0.09
94	21.99		0.00	0.000	43542	0.038	VV	0.07
95	22.20		0.00	0.000	83181	0.074	VV	0.07
96	22.27		0.00	0.000	79517	0.070	VV	0.05
97	22.44		0.00	0.000	113855	0.101	VV	0.06
98	22.55		0.00	0.000	55143	0.049	VV	0.07
99	22.68		0.00	0.000	40548	0.036	VV	0.05
100	22.77		0.00	0.000	53069	0.047	VV	0.05
101	22.98	CL10BP	0.81	0.260	8008433	7.079	VV	0.07
102	23.49		0.00	0.000	219417	0.194	VV	0.21
103	24.12		0.00	0.000	17863	0.016	VV	0.09
104	24.33		0.00	0.000	4444	0.004	VB	0.09
105	24.68		0.00	0.000	13163	0.012	BB	0.23
106	25.33		0.00	0.000	12301	0.011	BV	0.13
107	25.82		0.00	0.000	2842	0.003	VB	0.13
108	26.32		0.00	0.000	7922	0.007	BB	0.19
109	26.88		0.00	0.000	23050	0.020	BV	0.27
110	27.11		0.00	0.000	41069	0.036	VB	0.43
111	27.98		0.00	0.000	3846	0.003	BV	0.14
112	28.21		0.00	0.000	15874	0.014	VB	0.16
113	28.58		0.00	0.000	6854	0.006	BV	0.19
114	28.91		0.00	0.000	303	0.000	VB	0.03

Total Area = 1.131373E+08 Total Height = 2.246006E+07 Total Amount = 309.7769

50109

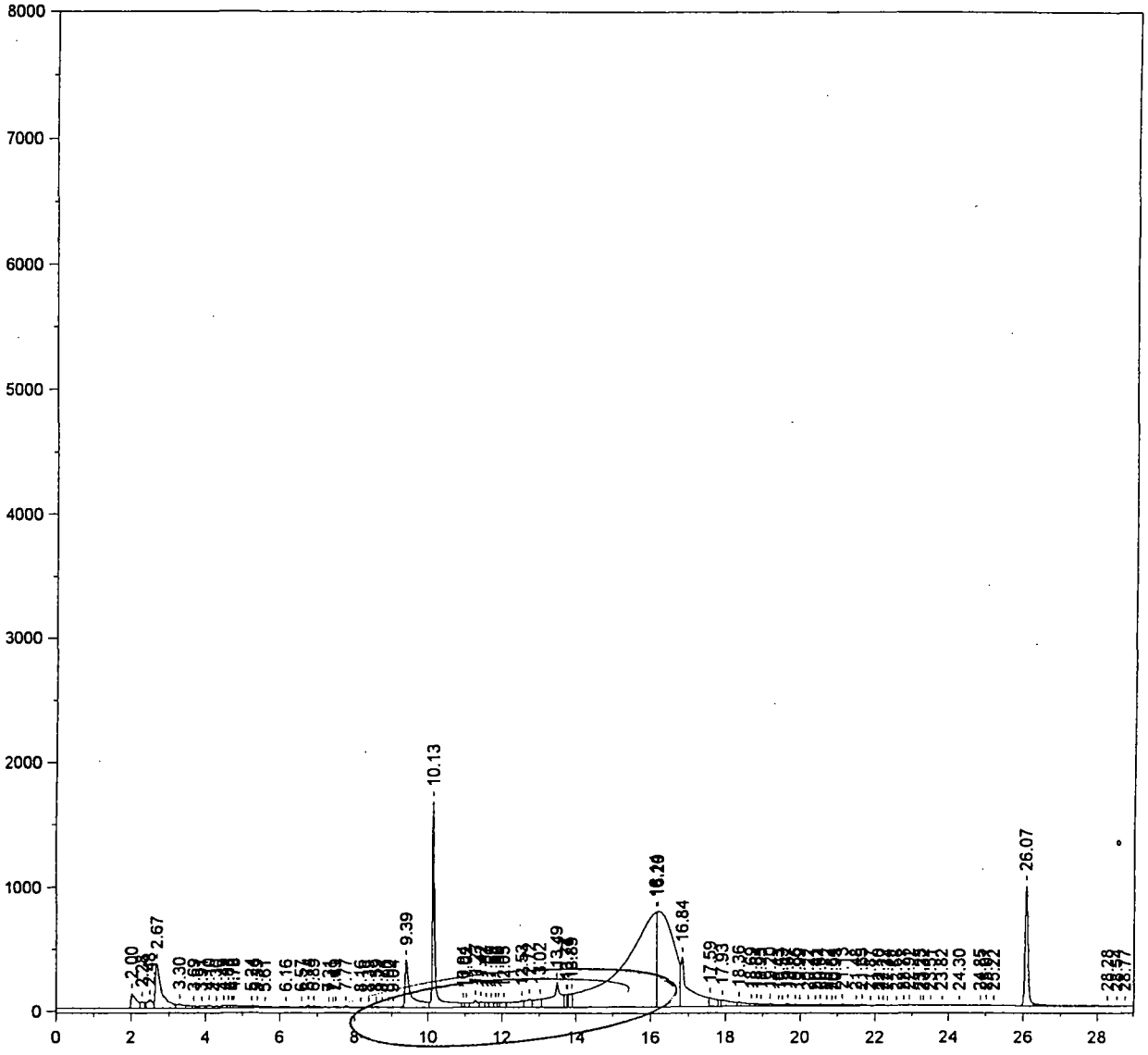


After reintegration
RBT
9/20/02

50110

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0919.0047.RAW 301102-08 B8068 VWR-001-03-EBT



Primary Column

Before integration
excess area under peaks
BT 9/20/02

Sample Name = **301102-08 B8068 VWR-001-03-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0919.0047.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/20/02 2:14:17 PM
Method Version = 618
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1102277	0.944	BV	0.17
2	2.28		0.00	0.000	354255	0.303	VV	0.07
3	2.48		0.00	0.000	630664	0.540	VV	0.09
4	2.67		0.00	0.000	4325206	3.703	VV	0.14
5	3.30		0.00	0.000	398268	0.341	VV	0.16
6	3.69		0.00	0.000	128525	0.110	VV	0.09
7	3.91		0.00	0.000	175813	0.151	VV	0.15
8	4.10		0.00	0.000	185060	0.158	VV	0.08
9	4.30		0.00	0.000	138389	0.118	VV	0.12
10	4.49		0.00	0.000	151575	0.130	VV	0.12
11	4.63		0.00	0.000	85321	0.073	VV	0.05
12	4.72		0.00	0.000	48508	0.042	VV	0.04
13	4.78		0.00	0.000	215598	0.185	VV	0.10
14	5.24		0.00	0.000	176554	0.151	VV	0.18
15	5.39		0.00	0.000	71923	0.062	VV	0.08
16	5.61		0.00	0.000	189884	0.163	VV	0.26
17	6.16		0.00	0.000	182785	0.157	VV	0.26
18	6.57		0.00	0.000	125458	0.107	VV	0.17
19	6.74		0.00	0.000	102972	0.088	VV	0.06
20	6.89		0.00	0.000	151828	0.130	VV	0.16
21	7.31		0.00	0.000	37007	0.032	VV	0.08
22	7.41		0.00	0.000	34225	0.029	VV	0.06
23	7.49		0.00	0.000	39798	0.034	VV	0.08
24	7.77		0.00	0.000	92295	0.079	VV	0.07
25	8.16		0.00	0.000	35076	0.030	VV	0.19
26	8.39		0.00	0.000	5025	0.004	VV	0.05
27	8.59		0.00	0.000	42059	0.036	VV	0.07
28	8.74		0.00	0.000	12365	0.011	VB	0.09
29	8.90		0.00	0.000	4578	0.004	BV	0.07
30	9.04		0.00	0.000	13796	0.012	VV	0.07
31	9.39		0.00	0.000	4191378	3.589	VV	0.10
32	10.13	CL4XYL	1.02	7.959	7960721	6.816	VV	0.05
33	10.94		0.00	0.000	174450	0.149	VV	0.06
34	11.02		0.00	0.000	266021	0.228	VV	0.10
35	11.27		0.00	0.000	611761	0.524	VV	0.05
36	11.42		0.00	0.000	373222	0.320	VV	0.05
37	11.57	AR1016#1	1.32	10.341	234662	0.201	VV	0.05
38	11.69		0.00	0.000	272760	0.234	VV	0.05
39	11.82		0.00	0.000	192203	0.165	VV	0.06
40	11.90		0.00	0.000	150486	0.129	VV	0.05
41	12.05		0.00	0.000	413854	0.354	VV	0.13
42	12.53		0.00	0.000	1176494	1.007	VV	0.11
43	12.72	AR1016#2	2.26	17.682	715577	0.613	VV	0.06
44	13.02		0.00	0.000	860811	0.737	VV	0.12
45	13.49		0.00	0.000	3489635	2.988	VV	0.08
46	13.74		0.00	0.000	498093	0.426	VV	0.05
47	13.77		0.00	0.000	201346	0.172	VV	0.03
48	13.89	AR1016#3	1.53	11.985	745350	0.638	VV	0.06
49	16.14		0.00	0.000	45127756	38.640	VV	0.67
50	16.20		0.00	0.000	23219908	19.882	VV	0.42
51	16.84		0.00	0.000	6359346	5.445	VV	0.09
52	17.59		0.00	0.000	835261	0.715	VV	0.10

50117

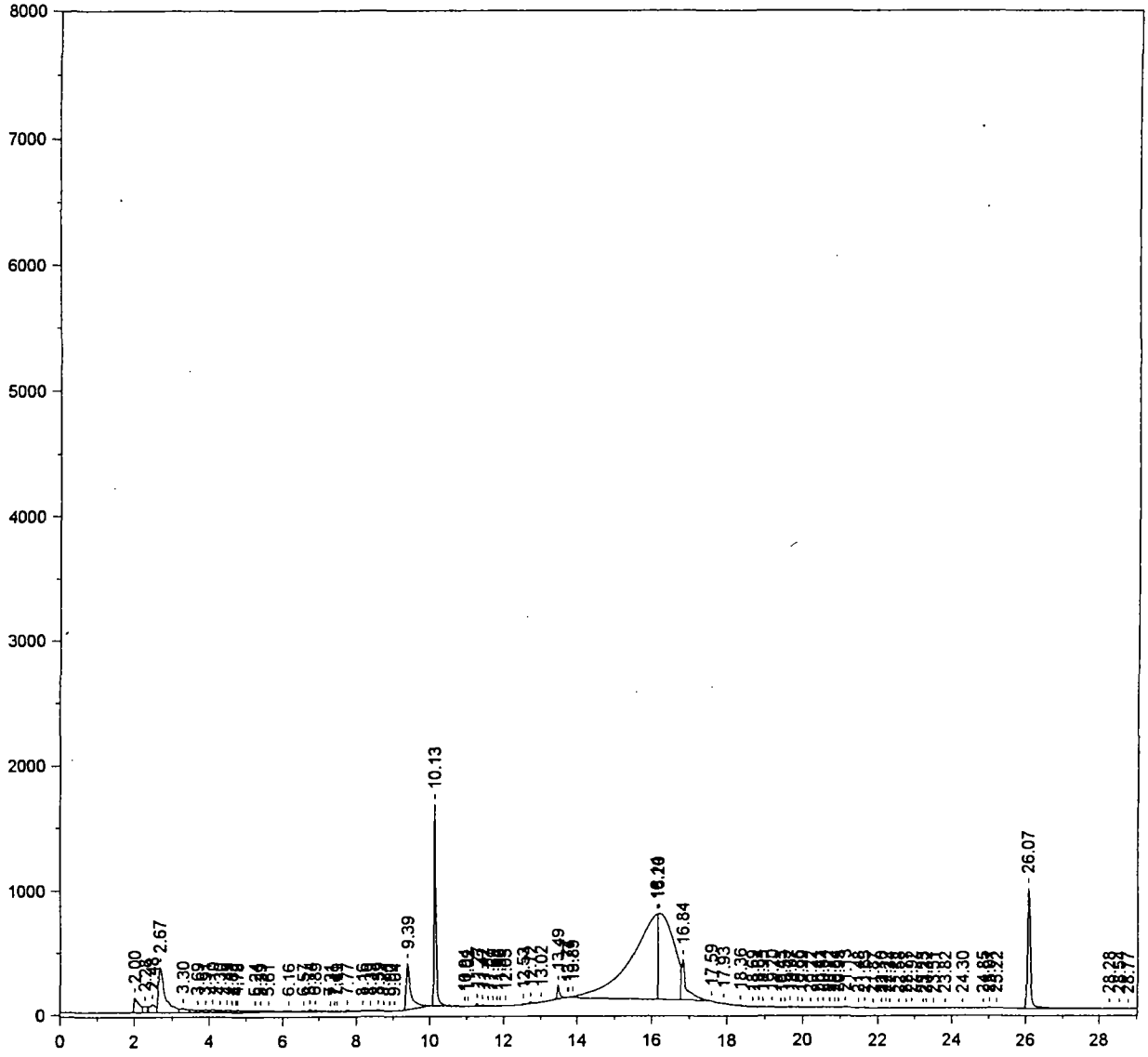
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	17.93	AR1260#1	4.96	38.849	987922	0.846	VV	0.15
54	18.36		0.00	0.000	521384	0.446	VV	0.09
55	18.69		0.00	0.000	172078	0.147	VV	0.07
56	18.84	AR1260#2	0.33	2.610	144021	0.123	VV	0.06
57	18.95		0.00	0.000	187655	0.161	VV	0.08
58	19.20		0.00	0.000	194943	0.167	VV	0.08
59	19.43		0.00	0.000	76691	0.066	VV	0.09
60	19.53		0.00	0.000	46036	0.039	VV	0.05
61	19.67		0.00	0.000	189717	0.162	VV	0.08
62	19.86	AR1260#3	0.26	1.996	84432	0.072	VV	0.05
63	19.99		0.00	0.000	108208	0.093	VV	0.05
64	20.22		0.00	0.000	73768	0.063	VV	0.08
65	20.41		0.00	0.000	60573	0.052	VV	0.05
66	20.54		0.00	0.000	106598	0.091	VV	0.07
67	20.72		0.00	0.000	62306	0.053	VV	0.05
68	20.84		0.00	0.000	67202	0.058	VV	0.06
69	20.95		0.00	0.000	53032	0.045	VV	0.06
70	21.13	AR1260#4	0.17	1.335	134488	0.115	VV	0.06
71	21.48		0.00	0.000	39033	0.033	VV	0.10
72	21.65		0.00	0.000	107684	0.092	VV	0.07
73	21.87		0.00	0.000	42133	0.036	VV	0.08
74	22.10	AR1260#5	0.13	0.997	68113	0.058	VV	0.10
75	22.22		0.00	0.000	38833	0.033	VV	0.09
76	22.34		0.00	0.000	40214	0.034	VV	0.12
77	22.58		0.00	0.000	20513	0.018	VV	0.08
78	22.77		0.00	0.000	19815	0.017	VV	0.06
79	22.92		0.00	0.000	36126	0.031	VV	0.07
80	23.23		0.00	0.000	5880	0.005	VV	0.07
81	23.32		0.00	0.000	6086	0.005	VB	0.09
82	23.51		0.00	0.000	494	0.000	BB	0.07
83	23.82		0.00	0.000	10274	0.009	BB	0.08
84	24.30		0.00	0.000	5981	0.005	BB	0.07
85	24.85		0.00	0.000	340	0.000	BV	0.07
86	25.01		0.00	0.000	31203	0.027	VV	0.07
87	25.22		0.00	0.000	21835	0.019	VB	0.08
88	26.07	CL10BP	0.80	6.246	5651949	4.839	BV	0.08
89	28.28		0.00	0.000	14995	0.013	VV	0.15
90	28.54		0.00	0.000	20275	0.017	VV	0.21
91	28.77		0.00	0.000	8861	0.008	VB	0.14

Total Area = 1.167899E+08 Total Height = 7296104 Total Amount = 12.7779

50118

Chrom Perfect Chromatogram Report

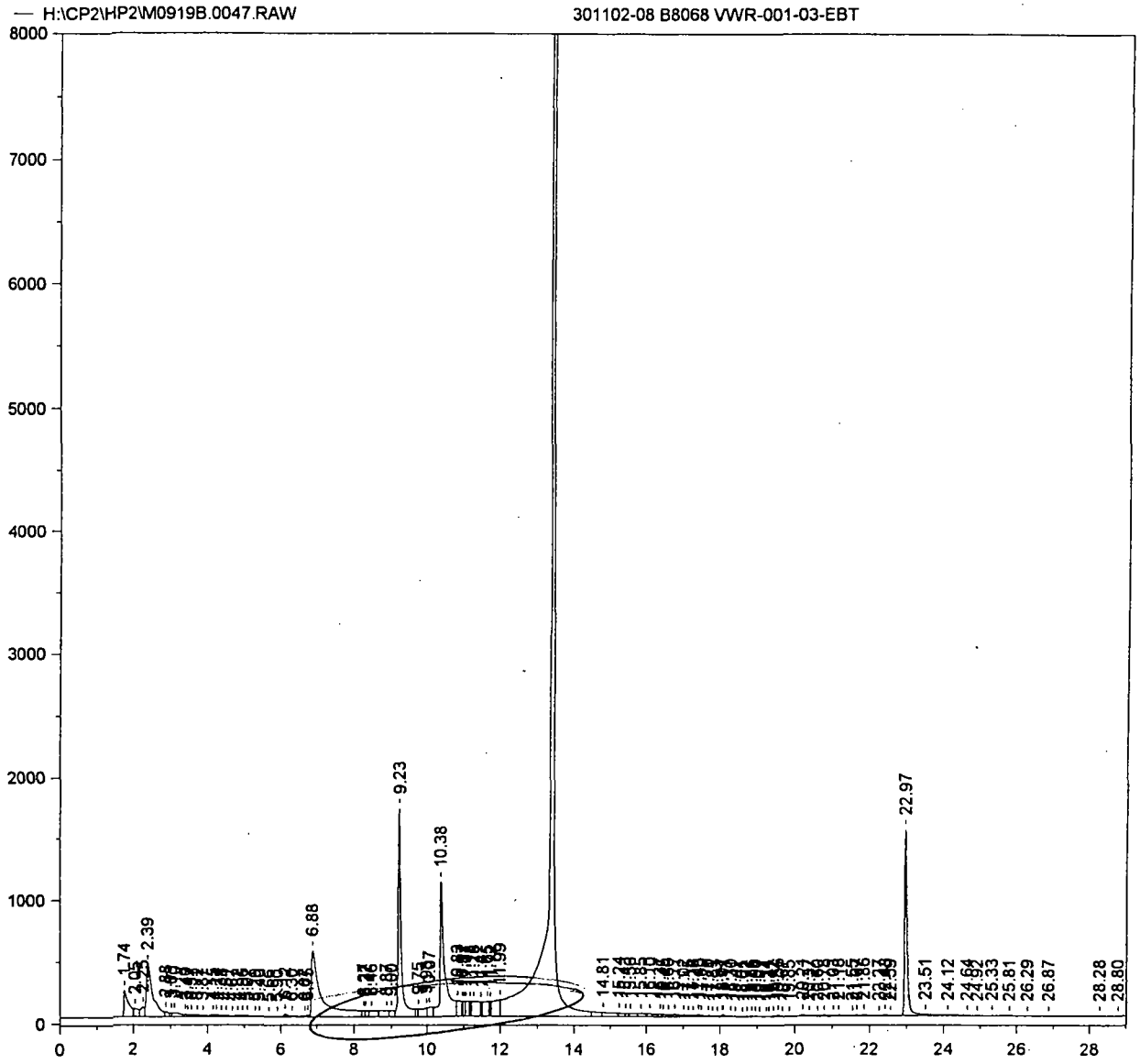
— H:\CP2\HP2\M0919.0047.RAW 301102-08 B8068 VWR-001-03-EBT



after reintegration
AST
9/20/2

50119

Chrom Perfect Chromatogram Report



Before reintegration
excess area under peaks
KST
9/20/2

50123

Sample Name = **301102-08 B8068 VWR-001-03-EBT**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0919B.0047.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/20/02 2:14:17 PM
Method Version = 567
Calibration Version = 5

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	1903907	1.096	BV	0.14
2	2.05		0.00	0.000	636571	0.366	VV	0.14
3	2.25		0.00	0.000	559036	0.322	VV	0.09
4	2.39		0.00	0.000	5251260	3.022	VV	0.14
5	2.88		0.00	0.000	260278	0.150	VV	0.08
6	3.03		0.00	0.000	117368	0.068	VV	0.04
7	3.10		0.00	0.000	459911	0.265	VV	0.20
8	3.40		0.00	0.000	89586	0.052	VV	0.05
9	3.47		0.00	0.000	84570	0.049	VV	0.06
10	3.57		0.00	0.000	85489	0.049	VV	0.07
11	3.72		0.00	0.000	143970	0.083	VV	0.09
12	3.87		0.00	0.000	104953	0.060	VV	0.13
13	4.15		0.00	0.000	112726	0.065	VV	0.10
14	4.24		0.00	0.000	133203	0.077	VV	0.11
15	4.38		0.00	0.000	50803	0.029	VV	0.06
16	4.51		0.00	0.000	75228	0.043	VV	0.12
17	4.67		0.00	0.000	38722	0.022	VV	0.05
18	4.82		0.00	0.000	104002	0.060	VV	0.10
19	4.96		0.00	0.000	42049	0.024	VV	0.06
20	5.07		0.00	0.000	79027	0.045	VV	0.13
21	5.29		0.00	0.000	52378	0.030	VV	0.10
22	5.40		0.00	0.000	47878	0.028	VV	0.09
23	5.66		0.00	0.000	70856	0.041	VV	0.08
24	5.90		0.00	0.000	58974	0.034	VV	0.13
25	6.12		0.00	0.000	166630	0.096	VV	0.07
26	6.30		0.00	0.000	109738	0.063	VV	0.08
27	6.67		0.00	0.000	104619	0.060	VV	0.11
28	6.75		0.00	0.000	81548	0.047	VV	0.07
29	6.88		0.00	0.000	10272670	5.911	VV	0.17
30	8.27		0.00	0.000	252731	0.145	VV	0.07
31	8.32		0.00	0.000	288890	0.166	VV	0.06
32	8.46		0.00	0.000	694275	0.399	VV	0.18
33	8.87		0.00	0.000	742588	0.427	VV	0.17
34	9.00		0.00	0.000	492699	0.284	VV	0.06
35	9.23	CL4XYL	0.90	0.159	9568663	5.506	VV	0.06
36	9.75		0.00	0.000	105164	0.061	VV	0.02
37	9.98		0.00	0.000	933977	0.537	VV	0.07
38	10.07		0.00	0.000	722407	0.416	VV	0.13
39	10.38	AR1016#1	42.20	7.461	9955201	5.728	VV	0.08
40	10.83		0.00	0.000	1078864	0.621	VV	0.06
41	10.97		0.00	0.000	296423	0.171	VV	0.02
42	11.01		0.00	0.000	443372	0.255	VV	0.05
43	11.07		0.00	0.000	824247	0.474	VV	0.05
44	11.18		0.00	0.000	336188	0.193	VV	0.04
45	11.28	AR1016#2	4.14	0.732	1795978	1.033	VV	0.18
46	11.47		0.00	0.000	374944	0.216	VV	0.04
47	11.65		0.00	0.000	1370187	0.788	VV	0.10
48	11.72		0.00	0.000	261448	0.150	VV	0.01
49	11.99		0.00	0.000	1971051	1.134	VV	0.13
50	13.43	AR1016#5	516.19	91.274	107501632	61.857	VV	0.08
51	14.81		0.00	0.000	820259	0.472	VV	0.19
52	15.24		0.00	0.000	310460	0.179	VV	0.[illegible]

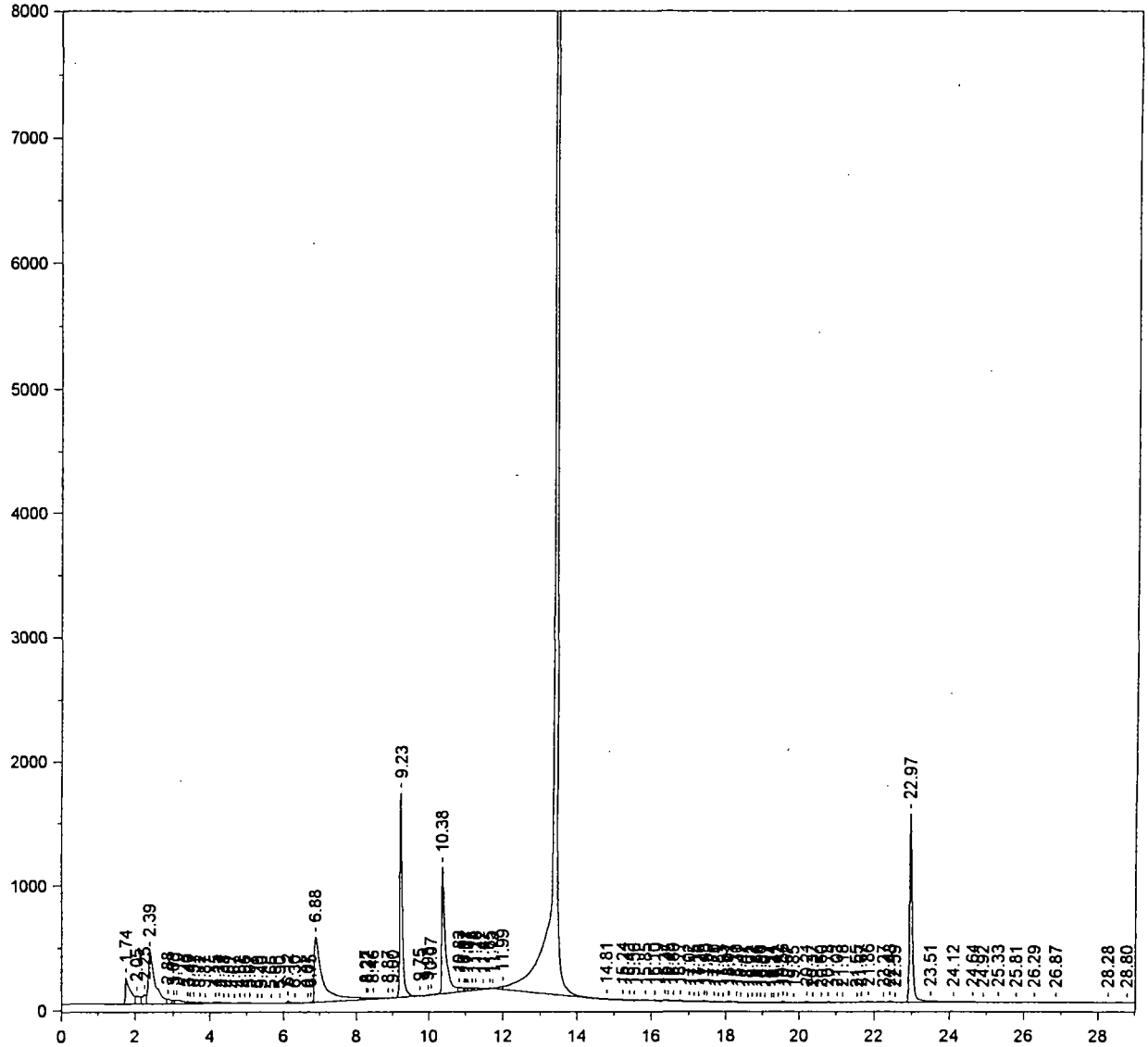
50124

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	15.43		0.00	0.000	161630	0.093	VV	0.06
54	15.56		0.00	0.000	358269	0.206	VV	0.16
55	15.85		0.00	0.000	359888	0.207	VV	0.10
56	16.10		0.00	0.000	234612	0.135	VV	0.10
57	16.37		0.00	0.000	136448	0.079	VV	0.05
58	16.45	AR1260#1	0.58	0.102	154589	0.089	VV	0.06
59	16.60		0.00	0.000	148738	0.086	VV	0.08
60	16.77	AR1260#2	0.48	0.084	236871	0.136	VV	0.06
61	17.02		0.00	0.000	114337	0.066	VV	0.07
62	17.15		0.00	0.000	75325	0.043	VV	0.06
63	17.28		0.00	0.000	75606	0.044	VV	0.06
64	17.43		0.00	0.000	96488	0.056	VV	0.06
65	17.50		0.00	0.000	80995	0.047	VV	0.06
66	17.70		0.00	0.000	68288	0.039	VV	0.08
67	17.81		0.00	0.000	32540	0.019	VV	0.06
68	17.93		0.00	0.000	27168	0.016	VV	0.06
69	18.07		0.00	0.000	53394	0.031	VV	0.05
70	18.11		0.00	0.000	66820	0.038	VV	0.05
71	18.30	AR1260#3	0.10	0.017	50622	0.029	VV	0.05
72	18.41		0.00	0.000	26855	0.015	VV	0.06
73	18.61		0.00	0.000	6038	0.003	VV	0.05
74	18.72		0.00	0.000	18908	0.011	VV	0.07
75	18.86		0.00	0.000	24197	0.014	VV	0.05
76	18.96		0.00	0.000	15766	0.009	VV	0.05
77	19.07		0.00	0.000	7069	0.004	VB	0.06
78	19.24		0.00	0.000	709	0.000	BV	0.05
79	19.31		0.00	0.000	1999	0.001	VV	0.05
80	19.42		0.00	0.000	32680	0.019	VV	0.07
81	19.56	AR1260#4	0.04	0.008	57380	0.033	VV	0.05
82	19.67		0.00	0.000	14548	0.008	VV	0.06
83	19.85		0.00	0.000	16782	0.010	VV	0.13
84	20.21		0.00	0.000	74643	0.043	VV	0.09
85	20.37		0.00	0.000	37330	0.021	VV	0.06
86	20.60		0.00	0.000	39037	0.022	VV	0.07
87	20.78		0.00	0.000	53721	0.031	VV	0.06
88	21.03		0.00	0.000	63978	0.037	VV	0.13
89	21.18		0.00	0.000	37591	0.022	VV	0.07
90	21.55		0.00	0.000	29407	0.017	VV	0.11
91	21.67	AR1260#5	0.15	0.026	43387	0.025	VV	0.06
92	21.86		0.00	0.000	88855	0.051	VV	0.08
93	22.27		0.00	0.000	19567	0.011	VV	0.06
94	22.43		0.00	0.000	68282	0.039	VV	0.06
95	22.59		0.00	0.000	35449	0.020	VV	0.08
96	22.97	CL10BP	0.77	0.136	7653397	4.404	VV	0.07
97	23.51		0.00	0.000	245899	0.141	VV	0.23
98	24.12		0.00	0.000	45442	0.026	VV	0.14
99	24.64		0.00	0.000	9115	0.005	VV	0.13
100	24.92		0.00	0.000	1634	0.001	VB	0.09
101	25.33		0.00	0.000	11930	0.007	BB	0.27
102	25.81		0.00	0.000	14272	0.008	BV	0.13
103	26.29		0.00	0.000	1916	0.001	VB	0.08
104	26.87		0.00	0.000	2708	0.002	BB	0.16
105	28.28		0.00	0.000	15553	0.009	BB	0.24
106	28.80		0.00	0.000	1372	0.001	BB	0.13

Total Area = 1.737896E+08 Total Height = 2.2724E+07 Total Amount = 565.5324

50125'

— H:\CP2\HP2\M0919B.0047.RAW 301102-08 B8068 VWR-001-03-EBT



After reintegration
KST
9/20/02

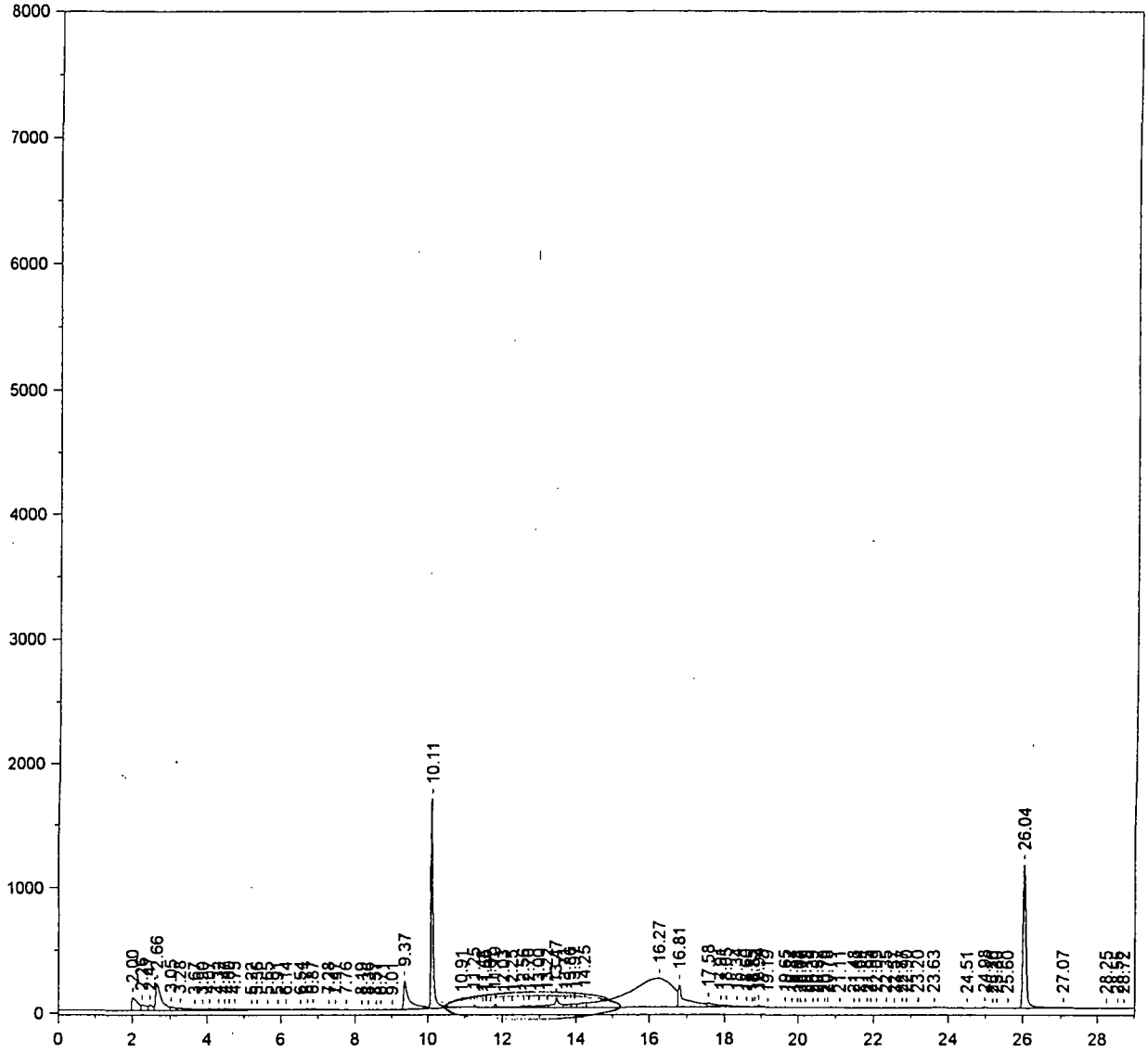
50126

PCB's-8082

ARDL REPORT NO 301103
Volume 5

50000

— H:\CP2\HP2\M0924.0019.RAW 301103-02 B8079 FSS-004-04-ESW



Primary Column

Before reintegration
excess area under peaks
BT
9/25/02

50026

Sample Name = **301103-02 B8079 FSS-004-04-ESW**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0924.0019.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/25/02 1:26:16 AM
Method Version = 620
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1044811	2.209	BV	0.18
2	2.26		0.00	0.000	429360	0.908	VV	0.10
3	2.47		0.00	0.000	344573	0.729	VV	0.10
4	2.66		0.00	0.000	2272071	4.804	VV	0.12
5	3.05		0.00	0.000	254074	0.537	VV	0.10
6	3.28		0.00	0.000	339353	0.718	VV	0.18
7	3.67		0.00	0.000	72919	0.154	VV	0.09
8	3.90		0.00	0.000	107856	0.228	VV	0.15
9	4.07		0.00	0.000	98180	0.208	VV	0.07
10	4.32		0.00	0.000	115384	0.244	VV	0.09
11	4.47		0.00	0.000	81375	0.172	VV	0.11
12	4.60		0.00	0.000	49776	0.105	VV	0.05
13	4.75		0.00	0.000	158664	0.335	VV	0.16
14	5.22		0.00	0.000	78176	0.165	VV	0.11
15	5.36		0.00	0.000	42020	0.089	VV	0.07
16	5.65		0.00	0.000	119809	0.253	VV	0.27
17	5.91		0.00	0.000	27468	0.058	VV	0.07
18	6.14		0.00	0.000	87527	0.185	VV	0.26
19	6.54		0.00	0.000	95478	0.202	VV	0.20
20	6.71		0.00	0.000	71530	0.151	VV	0.07
21	6.87		0.00	0.000	113037	0.239	VV	0.10
22	7.28		0.00	0.000	26884	0.057	VV	0.09
23	7.47		0.00	0.000	36845	0.078	VV	0.08
24	7.76		0.00	0.000	24348	0.051	VV	0.16
25	8.19		0.00	0.000	14971	0.032	VB	0.17
26	8.36		0.00	0.000	867	0.002	BB	0.05
27	8.57		0.00	0.000	6729	0.014	BV	0.07
28	8.71		0.00	0.000	5427	0.011	VB	0.08
29	9.01		0.00	0.000	11403	0.024	BB	0.21
30	9.37		0.00	0.000	2403183	5.081	BV	0.11
31	10.11	CL4XYL	0.86	19.798	6695291	14.157	VV	0.05
32	10.91		0.00	0.000	11471	0.024	VB	0.05
33	11.25		0.00	0.000	69553	0.147	BB	0.05
34	11.48		0.00	0.000	13983	0.030	BV	0.06
35	11.55	AR1016#1	0.14	3.308	25380	0.054	VV	0.05
36	11.67		0.00	0.000	10589	0.022	VV	0.05
37	11.79		0.00	0.000	103606	0.219	VV	0.05
38	12.03		0.00	0.000	7627	0.016	VV	0.06
39	12.25		0.00	0.000	23058	0.049	VV	0.11
40	12.56		0.00	0.000	120135	0.254	VV	0.16
41	12.70	AR1016#2	0.31	7.196	98453	0.208	VV	0.05
42	13.00		0.00	0.000	142917	0.302	VV	0.08
43	13.22		0.00	0.000	184882	0.391	VV	0.11
44	13.47		0.00	0.000	743153	1.571	VV	0.07
45	13.71		0.00	0.000	126978	0.268	VV	0.05
46	13.86	AR1016#3	0.34	7.940	166951	0.353	VV	0.05
47	13.97		0.00	0.000	218080	0.461	VV	0.08
48	14.25	AR1016#4	1.64	37.970	516138	1.091	VV	0.12
49	16.27		0.00	0.000	19217272	40.633	VV	1.20
50	16.81		0.00	0.000	2595240	5.487	VV	0.09
51	17.58		0.00	0.000	373949	0.791	VV	0.06
52	17.91		0.00	0.000	129869	0.275	VV	0.08

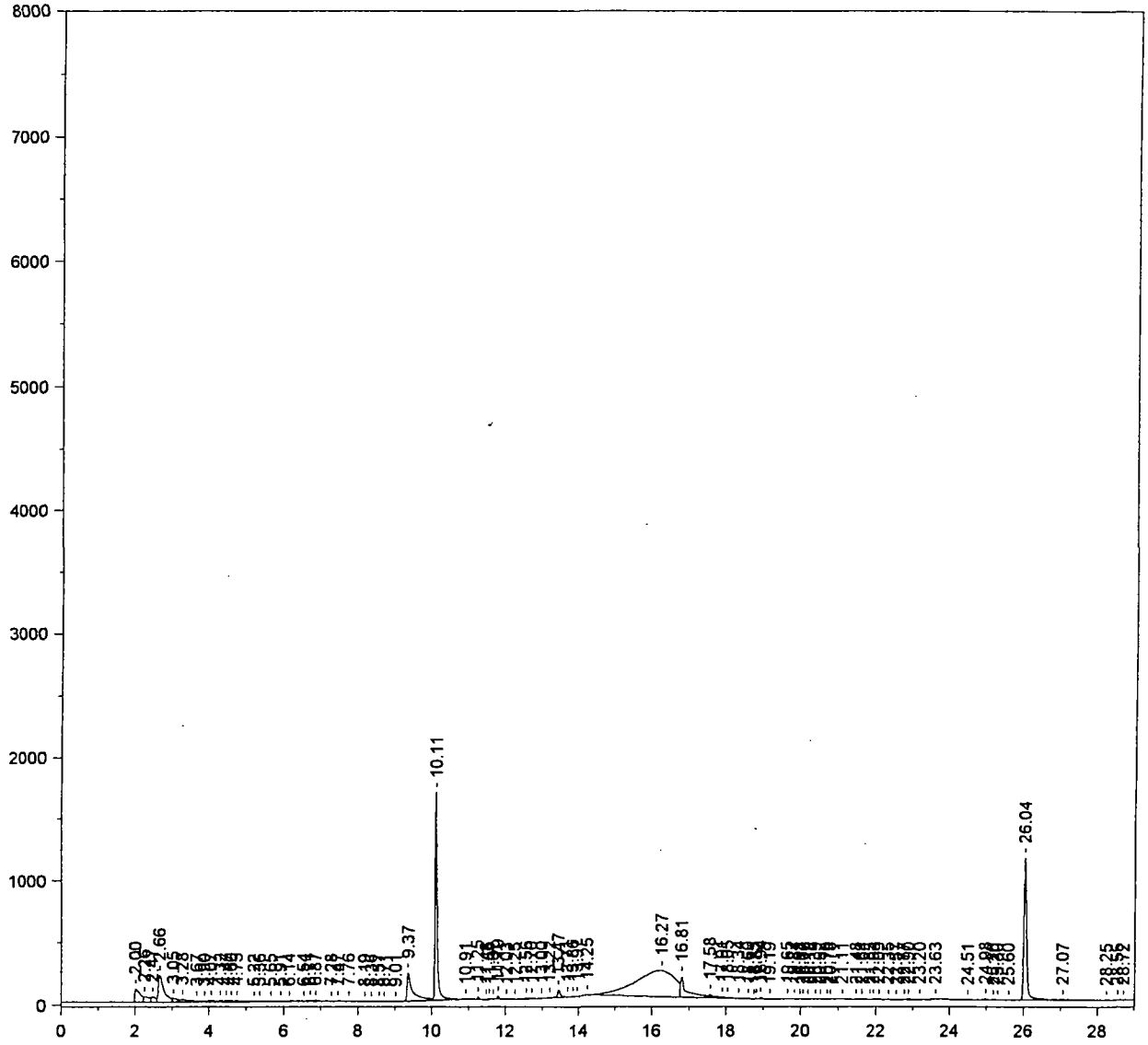
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.05		0.00	0.000	183140	0.387	VV	0.08
54	18.34		0.00	0.000	100723	0.213	VV	0.09
55	18.60		0.00	0.000	35661	0.075	VV	0.12
56	18.75		0.00	0.000	13452	0.028	VV	0.04
57	18.82	AR1260#2	0.05	1.057	19712	0.042	VV	0.06
58	18.94		0.00	0.000	66603	0.141	VV	0.05
59	19.19		0.00	0.000	13305	0.028	VB	0.12
60	19.65		0.00	0.000	18673	0.039	BV	0.06
61	19.84	AR1260#3	0.02	0.351	5020	0.011	VV	0.06
62	19.98		0.00	0.000	14716	0.031	VV	0.08
63	20.07		0.00	0.000	12896	0.027	VV	0.06
64	20.19		0.00	0.000	32998	0.070	VV	0.13
65	20.39		0.00	0.000	7455	0.016	VV	0.06
66	20.52		0.00	0.000	8301	0.018	VB	0.08
67	20.70		0.00	0.000	834	0.002	BB	0.05
68	20.78		0.00	0.000	315	0.001	BB	0.04
69	21.11	AR1260#4	0.03	0.611	20822	0.044	BB	0.08
70	21.48		0.00	0.000	6007	0.013	BV	0.13
71	21.64		0.00	0.000	13939	0.029	VV	0.17
72	21.85		0.00	0.000	3412	0.007	VV	0.06
73	21.94		0.00	0.000	6129	0.013	VV	0.05
74	22.09	AR1260#5	0.04	0.854	19711	0.042	VB	0.19
75	22.35		0.00	0.000	19105	0.040	BV	0.17
76	22.57		0.00	0.000	6868	0.015	VV	0.08
77	22.77		0.00	0.000	6941	0.015	VV	0.08
78	22.90		0.00	0.000	24474	0.052	VB	0.07
79	23.20		0.00	0.000	2634	0.006	BB	0.09
80	23.63		0.00	0.000	22421	0.047	BB	0.24
81	24.51		0.00	0.000	2837	0.006	BB	0.20
82	24.98		0.00	0.000	35246	0.075	BB	0.07
83	25.20		0.00	0.000	1751	0.004	BV	0.09
84	25.30		0.00	0.000	1881	0.004	VV	0.06
85	25.60		0.00	0.000	4496	0.010	VB	0.21
86	26.04	CL10BP	0.90	20.915	6398161	13.528	SBB	0.08
87	27.07		0.00	0.000	2079	0.004	TBB	0.17
88	28.25		0.00	0.000	7345	0.016	BV	0.10
89	28.55		0.00	0.000	14263	0.030	VV	0.13
90	28.72		0.00	0.000	11491	0.024	VB	0.14

Total Area = 4.729449E+07 Total Height = 4525314 Total Amount = 4.32003

50028

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0924.0019.RAW 301103-02 B8079 FSS-004-04-ESW

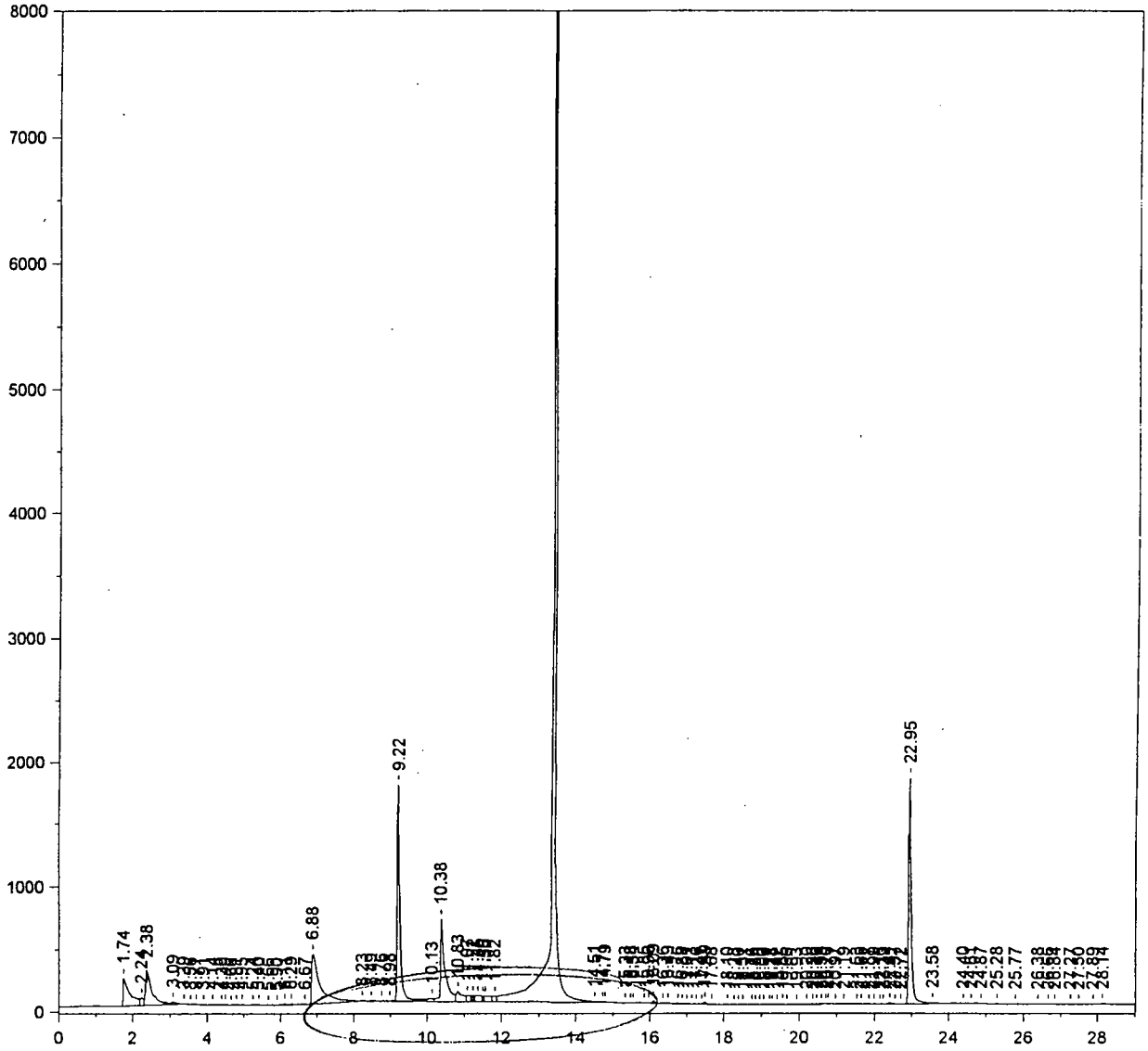


After reintegration
DST
9/25/02

9/26/02

50029

— H:\CP2\HP2\M0924B.0019.RAW 301103-02 B8079 FSS-004-04-ESW



Before reintegration
excess area under peaks
KDT
9/25/02

Sample Name = **301103-02 B8079 FSS-004-04-ESW**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0924B.0019.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

Date Taken (end) = 9/25/02 1:26:16 AM
Method Version = 569
Calibration Version = 9

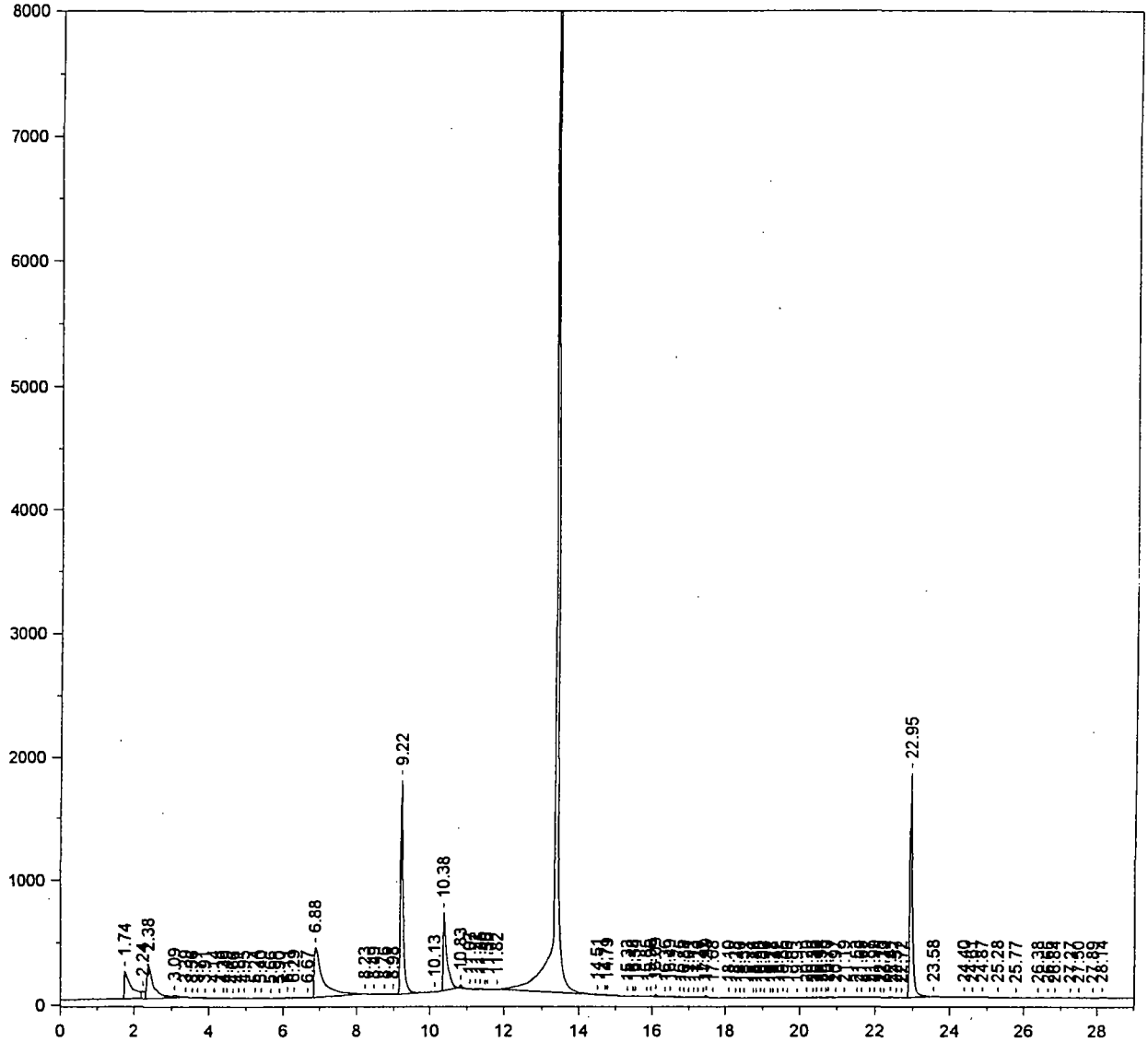
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	2833178	2.539	BV	0.16
2	2.24		0.00	0.000	365685	0.328	VV	0.06
3	2.38		0.00	0.000	3203198	2.870	VV	0.14
4	3.09		0.00	0.000	258505	0.232	VV	0.20
5	3.39		0.00	0.000	7021	0.006	VB	0.06
6	3.56		0.00	0.000	1022	0.001	BB	0.06
7	3.71		0.00	0.000	15941	0.014	BV	0.09
8	3.91		0.00	0.000	4986	0.004	VB	0.12
9	4.14		0.00	0.000	26055	0.023	BV	0.10
10	4.39		0.00	0.000	10724	0.010	VV	0.06
11	4.49		0.00	0.000	8515	0.008	VV	0.12
12	4.66		0.00	0.000	893	0.001	VB	0.06
13	4.81		0.00	0.000	13373	0.012	BV	0.11
14	4.95		0.00	0.000	3595	0.003	VB	0.06
15	5.24		0.00	0.000	22335	0.020	BV	0.10
16	5.40		0.00	0.000	10331	0.009	VB	0.10
17	5.66		0.00	0.000	8345	0.007	BV	0.15
18	5.90		0.00	0.000	6364	0.006	VB	0.15
19	6.11		0.00	0.000	56172	0.050	BV	0.09
20	6.29		0.00	0.000	47564	0.043	VV	0.08
21	6.67		0.00	0.000	7694	0.007	VB	0.18
22	6.88		0.00	0.000	6564600	5.882	BV	0.18
23	8.23		0.00	0.000	2948	0.003	VB	0.04
24	8.49		0.00	0.000	17623	0.016	BV	0.14
25	8.76		0.00	0.000	56333	0.050	VV	0.14
26	8.98		0.00	0.000	37143	0.033	VV	0.08
27	9.22	CL4XYL	0.84	0.232	8920303	7.993	VV	0.07
28	10.13		0.00	0.000	411892	0.369	VV	0.17
29	10.38	AR1016#1	23.09	6.387	5446701	4.880	VV	0.09
30	10.83		0.00	0.000	970958	0.870	VV	0.07
31	11.07		0.00	0.000	366135	0.328	VV	0.08
32	11.22		0.00	0.000	142305	0.128	VV	0.04
33	11.35	AR1016#2	1.18	0.326	511288	0.458	VV	0.12
34	11.49		0.00	0.000	122461	0.110	VV	0.03
35	11.55		0.00	0.000	576718	0.517	VV	0.17
36	11.82		0.00	0.000	295708	0.265	VV	0.07
37	13.41	AR1016#5	335.20	92.732	69808600	62.550	VV	0.05
38	14.51		0.00	0.000	64429	0.058	VV	0.11
39	14.71		0.00	0.000	21165	0.019	VV	0.05
40	14.79		0.00	0.000	11523	0.010	VB	0.06
41	15.33		0.00	0.000	12670	0.011	BV	0.08
42	15.48		0.00	0.000	9190	0.008	VV	0.04
43	15.54		0.00	0.000	7774	0.007	VB	0.06
44	15.85		0.00	0.000	14789	0.013	BV	0.07
45	15.96		0.00	0.000	12892	0.012	VV	0.06
46	16.09		0.00	0.000	85562	0.077	VV	0.06
47	16.36		0.00	0.000	12947	0.012	VV	0.05
48	16.49	AR1260#1	0.11	0.030	29576	0.027	VV	0.06
49	16.76	AR1260#2	0.02	0.005	8448	0.008	VB	0.07
50	16.88		0.00	0.000	1144	0.001	BB	0.06
51	17.01		0.00	0.000	1082	0.001	BB	0.04
52	17.13		0.00	0.000	2484	0.002	BB	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	17.26		0.00	0.000	4164	0.004	BB	0.09
54	17.41		0.00	0.000	6818	0.006	BV	0.05
55	17.49		0.00	0.000	64743	0.058	VV	0.06
56	17.68		0.00	0.000	4906	0.004	VB	0.10
57	18.10		0.00	0.000	26721	0.024	BV	0.09
58	18.28	AR1260#3	0.02	0.005	10013	0.009	VV	0.07
59	18.40		0.00	0.000	2405	0.002	VB	0.06
60	18.51		0.00	0.000	497	0.000	BV	0.04
61	18.76		0.00	0.000	8737	0.008	VV	0.08
62	18.84		0.00	0.000	5849	0.005	VV	0.07
63	18.95		0.00	0.000	3321	0.003	VV	0.06
64	19.06		0.00	0.000	2185	0.002	VB	0.06
65	19.22		0.00	0.000	2267	0.002	BV	0.05
66	19.28		0.00	0.000	2812	0.003	VV	0.06
67	19.42		0.00	0.000	5812	0.005	VV	0.10
68	19.55	AR1260#4	0.01	0.003	15338	0.014	VV	0.05
69	19.66		0.00	0.000	6534	0.006	VV	0.05
70	19.93		0.00	0.000	11519	0.010	VV	0.08
71	20.20		0.00	0.000	34779	0.031	VV	0.15
72	20.36		0.00	0.000	17925	0.016	VV	0.08
73	20.46		0.00	0.000	10368	0.009	VV	0.05
74	20.58		0.00	0.000	25178	0.023	VV	0.09
75	20.70		0.00	0.000	20274	0.018	VV	0.05
76	20.77		0.00	0.000	45205	0.041	VV	0.06
77	20.97		0.00	0.000	46748	0.042	VV	0.10
78	21.19		0.00	0.000	46760	0.042	VV	0.23
79	21.53		0.00	0.000	24611	0.022	VV	0.13
80	21.65	AR1260#5	0.09	0.024	24769	0.022	VV	0.06
81	21.87		0.00	0.000	22320	0.020	VV	0.11
82	21.99		0.00	0.000	18256	0.016	VV	0.11
83	22.16		0.00	0.000	14261	0.013	VV	0.09
84	22.23		0.00	0.000	10782	0.010	VV	0.06
85	22.41		0.00	0.000	70426	0.063	VV	0.07
86	22.57		0.00	0.000	14983	0.013	VV	0.06
87	22.72		0.00	0.000	14380	0.013	VV	0.08
88	22.95	CL10BP	0.93	0.256	9192680	8.237	VV	0.07
89	23.58		0.00	0.000	180477	0.162	VV	0.22
90	24.40		0.00	0.000	26192	0.023	VV	0.14
91	24.61		0.00	0.000	13934	0.012	VV	0.13
92	24.87		0.00	0.000	2296	0.002	VB	0.09
93	25.28		0.00	0.000	8130	0.007	BB	0.14
94	25.77		0.00	0.000	12574	0.011	BB	0.24
95	26.38		0.00	0.000	1089	0.001	BB	0.12
96	26.66		0.00	0.000	1704	0.002	BB	0.08
97	26.84		0.00	0.000	8436	0.008	BB	0.25
98	27.27		0.00	0.000	1918	0.002	BB	0.15
99	27.50		0.00	0.000	1439	0.001	BB	0.22
100	27.89		0.00	0.000	3859	0.003	BV	0.15
101	28.14		0.00	0.000	44404	0.040	VB	0.15

Total Area = 1.116047E+08 Total Height = 2.034488E+07 Total Amount = 361.4686

Chrom Perfect Chromatogram Report

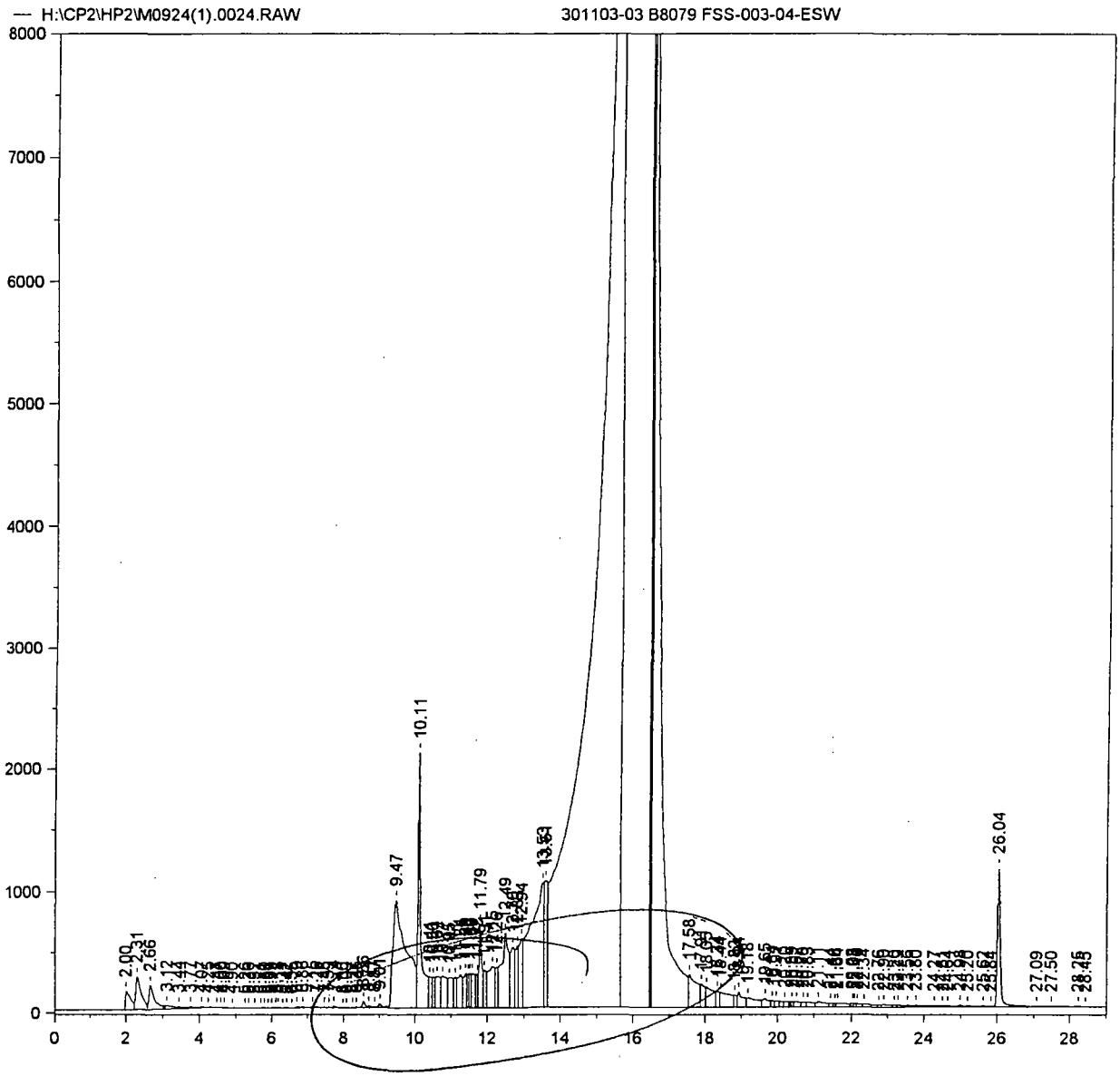
— H:\CP2\HP2\M0924B.0019.RAW 301103-02 B8079 FSS-004-04-ESW



After reintegration
AJT
9/25/02

Ok
9/30/02

50036



Primary Column

Before integration
excess area under peaks
BT
9/25/02

50042

Sample Name = **301103-03 B8079 FSS-003-04-ESW**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0924(1).0024.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

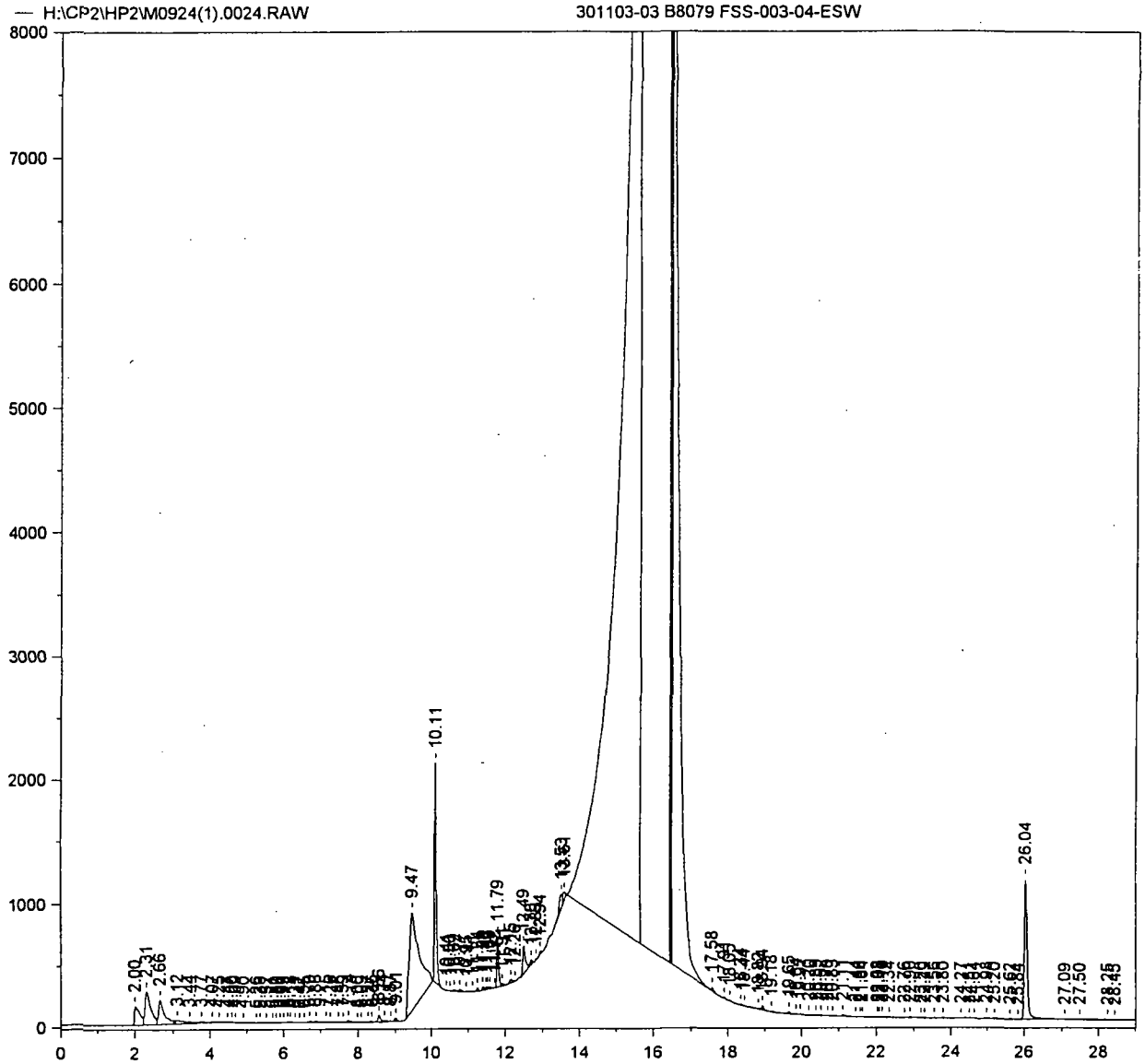
Date Taken (end) = 9/25/02 5:18:32 AM
Method Version = 620
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1502307	0.099	BV	0.17
2	2.31		0.00	0.000	2873059	0.190	VV	0.13
3	2.66		0.00	0.000	2151698	0.142	VV	0.13
4	3.12		0.00	0.000	355132	0.023	VV	0.18
5	3.44		0.00	0.000	133139	0.009	VV	0.14
6	3.77		0.00	0.000	117884	0.008	VB	0.26
7	4.07		0.00	0.000	27278	0.002	BB	0.09
8	4.25		0.00	0.000	1544	0.000	BB	0.06
9	4.47		0.00	0.000	20592	0.001	BV	0.12
10	4.60		0.00	0.000	10071	0.001	VV	0.05
11	4.69		0.00	0.000	23370	0.002	VB	0.14
12	4.90		0.00	0.000	5317	0.000	BB	0.14
13	5.26		0.00	0.000	27400	0.002	BV	0.16
14	5.36		0.00	0.000	10874	0.001	VB	0.07
15	5.52		0.00	0.000	1921	0.000	BV	0.05
16	5.71		0.00	0.000	4708	0.000	VV	0.11
17	5.80		0.00	0.000	4011	0.000	VV	0.05
18	5.91		0.00	0.000	5948	0.000	VV	0.06
19	5.99		0.00	0.000	11282	0.001	VV	0.08
20	6.12		0.00	0.000	27692	0.002	VV	0.07
21	6.18		0.00	0.000	30065	0.002	VV	0.06
22	6.31		0.00	0.000	23052	0.002	VV	0.05
23	6.42		0.00	0.000	28906	0.002	VV	0.09
24	6.55		0.00	0.000	16714	0.001	VV	0.07
25	6.70		0.00	0.000	77408	0.005	VV	0.09
26	6.86		0.00	0.000	97783	0.006	VV	0.08
27	7.15		0.00	0.000	57132	0.004	VV	0.07
28	7.26		0.00	0.000	36142	0.002	VV	0.08
29	7.46		0.00	0.000	25915	0.002	VV	0.07
30	7.59		0.00	0.000	37675	0.002	VV	0.06
31	7.74		0.00	0.000	97254	0.006	VB	0.09
32	8.00		0.00	0.000	667	0.000	BV	0.05
33	8.09		0.00	0.000	10659	0.001	VV	0.08
34	8.27		0.00	0.000	20369	0.001	VV	0.07
35	8.36		0.00	0.000	21147	0.001	VV	0.08
36	8.56		0.00	0.000	289404	0.019	VV	0.07
37	8.71		0.00	0.000	109568	0.007	VV	0.08
38	8.87		0.00	0.000	40966	0.003	VV	0.05
39	9.01		0.00	0.000	186077	0.012	VV	0.07
40	9.47		0.00	0.000	23174118	1.532	VV	0.43
41	10.11	CL4XYL	1.53	3.788	11949879	0.790	VV	0.05
42	10.41		0.00	0.000	1471072	0.097	VV	0.05
43	10.50		0.00	0.000	1154367	0.076	VV	0.06
44	10.62		0.00	0.000	2538326	0.168	VV	0.08
45	10.77		0.00	0.000	2762445	0.183	VV	0.08
46	10.95		0.00	0.000	2254434	0.149	VV	0.10
47	11.11		0.00	0.000	1386218	0.092	VV	0.07
48	11.24		0.00	0.000	2408412	0.159	VV	0.05
49	11.39		0.00	0.000	1905927	0.126	VV	0.06
50	11.46		0.00	0.000	1103700	0.073	VV	0.04
51	11.53		0.00	0.000	1062661	0.070	VV	0.04
52	11.59	AR1016#1	10.90	27.043	1935316	0.128	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	11.72		0.00	0.000	931746	0.062	VV	0.03
54	11.79		0.00	0.000	3952818	0.261	VV	0.05
55	11.91		0.00	0.000	1814757	0.120	VV	0.07
56	12.15		0.00	0.000	4062989	0.269	VV	0.11
57	12.26		0.00	0.000	1721369	0.114	VV	0.05
58	12.49		0.00	0.000	8819278	0.583	VV	0.11
59	12.70	AR1016#2	11.12	27.600	3522285	0.233	VV	0.08
60	12.83		0.00	0.000	2755221	0.182	VV	0.04
61	12.94		0.00	0.000	4434985	0.293	VV	0.07
62	13.53		0.00	0.000	26204332	1.733	VV	0.19
63	13.61		0.00	0.000	6828504	0.452	VV	0.06
64	15.65		0.00	0.000	478506304	31.639	VV	0.28
65	16.38		0.00	0.000	695808896	46.008	VV	0.70
66	16.49		0.00	0.000	46581564	3.080	VV	0.02
67	16.54		0.00	0.000	133084728	8.800	VV	0.10
68	17.58		0.00	0.000	4326556	0.286	VV	0.11
69	17.91		0.00	0.000	1595584	0.106	VV	0.07
70	18.05	AR1260#1	12.26	30.431	2440440	0.161	VV	0.12
71	18.34		0.00	0.000	821198	0.054	VV	0.07
72	18.44		0.00	0.000	2450029	0.162	VV	0.19
73	18.82	AR1260#2	1.37	3.398	591275	0.039	VV	0.07
74	18.94		0.00	0.000	1286395	0.085	VV	0.06
75	19.18		0.00	0.000	1640632	0.108	VV	0.16
76	19.65		0.00	0.000	841377	0.056	VV	0.08
77	19.84	AR1260#3	1.05	2.608	347921	0.023	VV	0.06
78	19.97		0.00	0.000	337368	0.022	VV	0.07
79	20.20		0.00	0.000	354633	0.023	VV	0.10
80	20.39		0.00	0.000	196613	0.013	VV	0.06
81	20.52		0.00	0.000	449855	0.030	VV	0.09
82	20.70		0.00	0.000	331445	0.022	VV	0.06
83	20.83		0.00	0.000	511565	0.034	VV	0.12
84	21.11	AR1260#4	0.91	2.254	716114	0.047	VV	0.09
85	21.44		0.00	0.000	201706	0.013	VV	0.08
86	21.56		0.00	0.000	96197	0.006	VV	0.03
87	21.64		0.00	0.000	587230	0.039	VV	0.11
88	22.03		0.00	0.000	126619	0.008	VV	0.05
89	22.08	AR1260#5	0.23	0.571	123056	0.008	VV	0.05
90	22.16		0.00	0.000	210811	0.014	VV	0.09
91	22.34		0.00	0.000	302826	0.020	VV	0.15
92	22.76		0.00	0.000	128199	0.008	VV	0.09
93	22.90		0.00	0.000	314150	0.021	VV	0.08
94	23.20		0.00	0.000	112947	0.007	VV	0.06
95	23.29		0.00	0.000	159058	0.011	VV	0.08
96	23.56		0.00	0.000	196386	0.013	VV	0.15
97	23.80		0.00	0.000	324039	0.021	VV	0.12
98	24.27		0.00	0.000	103024	0.007	VV	0.11
99	24.51		0.00	0.000	79281	0.005	VV	0.10
100	24.64		0.00	0.000	128184	0.008	VV	0.10
101	24.98		0.00	0.000	136739	0.009	VV	0.07
102	25.20		0.00	0.000	178751	0.012	VV	0.09
103	25.62		0.00	0.000	124647	0.008	VV	0.09
104	25.84		0.00	0.000	37009	0.002	VV	0.06
105	26.04	CL10BP	0.93	2.307	6583493	0.435	VV	0.08
106	27.09		0.00	0.000	101472	0.007	VV	0.17
107	27.50		0.00	0.000	83649	0.006	VV	0.35
108	28.25		0.00	0.000	24536	0.002	VV	0.16
109	28.45		0.00	0.000	9310	0.001	VB	0.20

Total Area = 1.512371E+09 Total Height = 7.435259E+07 Total Amount = 40.29617

Chrom Perfect Chromatogram Report



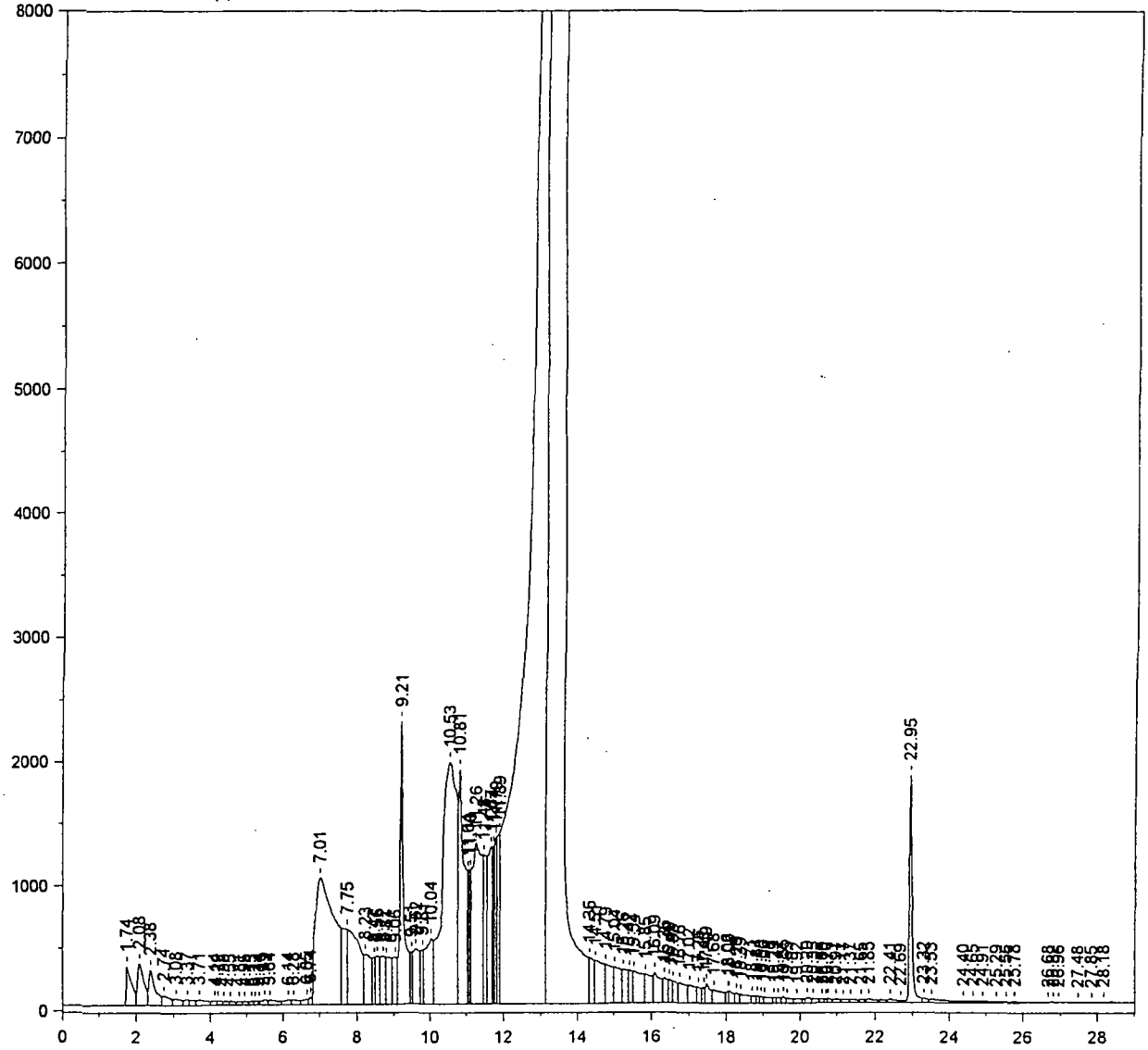
after reintegration
LDT
9/25/02

BC
9/30/02

50045

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0924B(1).0024.RAW 301103-03 B8079 FSS-003-04-ESW



Before integration
excess area under peak
BT
9/25/02

50050

Sample Name = **301103-03 B8079 FSS-003-04-ESW**

Instrument = HP 2
Acquisition Port = 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Raw File Name = **H:\CP2\HP2\M0924B(1).0024.RAW**
Date Taken (end) = 9/25/02 5:18:32 AM
Method File Name = H:\CP2\HP2\Hp2pestB.met
Method Version = 569
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal
Calibration Version = 9

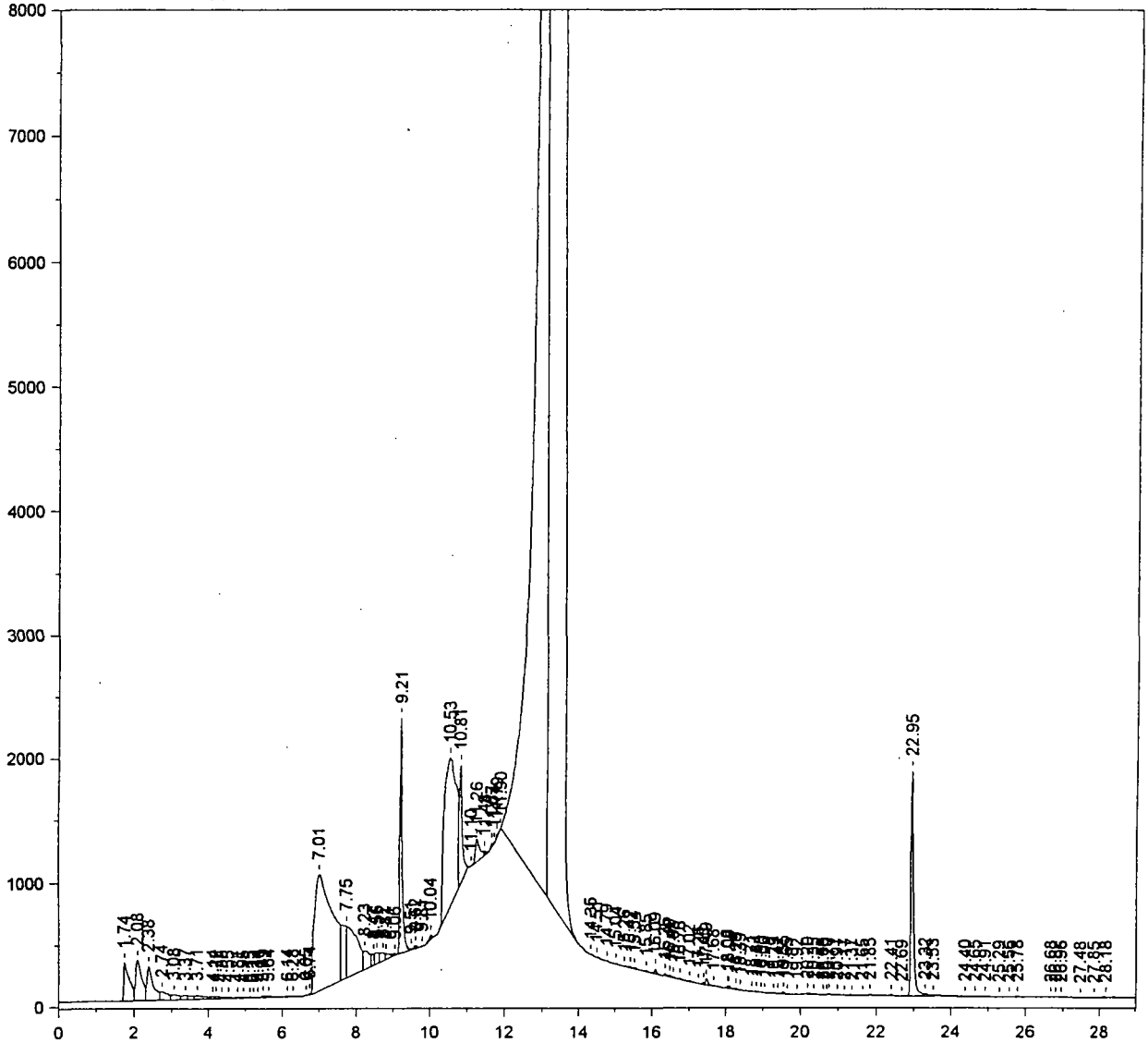
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	3205135	0.280	BV	0.18
2	2.08		0.00	0.000	3945283	0.345	VV	0.14
3	2.38		0.00	0.000	3272719	0.286	VV	0.12
4	2.74		0.00	0.000	1155872	0.101	VV	0.21
5	3.08		0.00	0.000	798414	0.070	VV	0.15
6	3.37		0.00	0.000	478387	0.042	VV	0.09
7	3.71		0.00	0.000	922397	0.081	VV	0.20
8	4.14		0.00	0.000	386958	0.034	VV	0.12
9	4.22		0.00	0.000	333777	0.029	VV	0.10
10	4.38		0.00	0.000	335568	0.029	VV	0.08
11	4.55		0.00	0.000	336415	0.029	VV	0.12
12	4.81		0.00	0.000	278935	0.024	VV	0.08
13	4.95		0.00	0.000	274364	0.024	VV	0.09
14	5.13		0.00	0.000	217500	0.019	VV	0.09
15	5.23		0.00	0.000	235101	0.021	VV	0.06
16	5.34		0.00	0.000	96191	0.008	VV	0.04
17	5.49		0.00	0.000	455459	0.040	VV	0.13
18	5.64		0.00	0.000	768113	0.067	VV	0.18
19	6.14		0.00	0.000	555115	0.049	VV	0.15
20	6.28		0.00	0.000	530663	0.046	VV	0.11
21	6.65		0.00	0.000	484953	0.042	VV	0.12
22	6.74		0.00	0.000	324235	0.028	VV	0.07
23	7.01		0.00	0.000	35943352	3.142	VV	0.74
24	7.75		0.00	0.000	14007904	1.224	VV	0.30
25	8.23		0.00	0.000	4963129	0.434	VV	0.14
26	8.47		0.00	0.000	1859863	0.163	VV	0.05
27	8.56		0.00	0.000	3046013	0.266	VV	0.08
28	8.72		0.00	0.000	3953396	0.346	VV	0.10
29	8.81		0.00	0.000	3414050	0.298	VV	0.07
30	9.06		0.00	0.000	3423090	0.299	VV	0.08
31	9.21	CL4XYL	1.60	2.326	17051800	1.491	VV	0.06
32	9.51		0.00	0.000	1568389	0.137	VV	0.04
33	9.62		0.00	0.000	5577192	0.488	VV	0.16
34	9.81		0.00	0.000	1812624	0.158	VV	0.03
35	10.04		0.00	0.000	8119081	0.710	VV	0.14
36	10.53		0.00	0.000	54043552	4.724	VV	0.42
37	10.81		0.00	0.000	19840814	1.734	VV	0.08
38	11.04		0.00	0.000	2345879	0.205	VV	0.02
39	11.10		0.00	0.000	3863063	0.338	VV	0.04
40	11.26	AR1016#2	55.01	79.869	23865592	2.086	VV	0.24
41	11.48		0.00	0.000	7597240	0.664	VV	0.09
42	11.67		0.00	0.000	10006543	0.875	VV	0.07
43	11.74		0.00	0.000	3775579	0.330	VV	0.03
44	11.79		0.00	0.000	4953238	0.433	VV	0.04
45	11.89		0.00	0.000	7021567	0.614	VV	0.05
46	13.09		0.00	0.000	358622944	31.348	VV	0.25
47	13.58		0.00	0.000	456531680	39.906	VV	0.50
48	14.35		0.00	0.000	3383651	0.296	VV	0.08
49	14.51		0.00	0.000	5473907	0.478	VV	0.13
50	14.79		0.00	0.000	4178087	0.365	VV	0.09
51	15.04		0.00	0.000	3807738	0.333	VV	0.10
52	15.26		0.00	0.000	2723905	0.238	VV	0.10

50051

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	15.42		0.00	0.000	1804634	0.158	VV	0.06
54	15.54		0.00	0.000	4439860	0.388	VV	0.10
55	15.85		0.00	0.000	2891715	0.253	VV	0.08
56	16.09		0.00	0.000	3340102	0.292	VV	0.07
57	16.36		0.00	0.000	1588714	0.139	VV	0.06
58	16.49	AR1260#1	4.53	6.581	1218578	0.107	VV	0.07
59	16.58		0.00	0.000	1537967	0.134	VV	0.07
60	16.76	AR1260#2	4.59	6.657	2286160	0.200	VV	0.09
61	17.02		0.00	0.000	2002204	0.175	VV	0.13
62	17.26		0.00	0.000	967821	0.085	VV	0.08
63	17.41		0.00	0.000	614417	0.054	VV	0.05
64	17.49		0.00	0.000	1387587	0.121	VV	0.06
65	17.68		0.00	0.000	2054514	0.180	VV	0.15
66	18.06		0.00	0.000	420413	0.037	VV	0.04
67	18.09		0.00	0.000	820639	0.072	VV	0.06
68	18.29	AR1260#3	1.14	1.660	589429	0.052	VV	0.08
69	18.39		0.00	0.000	1117369	0.098	VV	0.10
70	18.71		0.00	0.000	435882	0.038	VV	0.08
71	18.84		0.00	0.000	339978	0.030	VV	0.07
72	18.95		0.00	0.000	338593	0.030	VV	0.07
73	19.06		0.00	0.000	594457	0.052	VV	0.07
74	19.29		0.00	0.000	247004	0.022	VV	0.07
75	19.41		0.00	0.000	306169	0.027	VV	0.07
76	19.55	AR1260#4	0.27	0.385	342513	0.030	VV	0.05
77	19.65		0.00	0.000	387402	0.034	VV	0.06
78	19.92		0.00	0.000	418131	0.037	VV	0.14
79	20.20		0.00	0.000	380979	0.033	VV	0.09
80	20.35		0.00	0.000	388920	0.034	VV	0.08
81	20.60		0.00	0.000	231910	0.020	VV	0.06
82	20.70		0.00	0.000	138377	0.012	VV	0.05
83	20.77		0.00	0.000	276857	0.024	VV	0.07
84	20.97		0.00	0.000	373655	0.033	VV	0.11
85	21.17		0.00	0.000	330355	0.029	VV	0.10
86	21.37		0.00	0.000	327183	0.029	VV	0.11
87	21.65	AR1260#5	0.79	1.146	229426	0.020	VV	0.06
88	21.85		0.00	0.000	465322	0.041	VV	0.08
89	22.41		0.00	0.000	383940	0.034	VV	0.07
90	22.69		0.00	0.000	129730	0.011	VV	0.10
91	22.95	CL10BP	0.95	1.376	9407448	0.822	VV	0.07
92	23.32		0.00	0.000	292571	0.026	VV	0.09
93	23.53		0.00	0.000	708871	0.062	VV	0.35
94	24.40		0.00	0.000	175349	0.015	VV	0.14
95	24.65		0.00	0.000	158465	0.014	VV	0.15
96	24.91		0.00	0.000	221637	0.019	VV	0.26
97	25.29		0.00	0.000	137646	0.012	VV	0.15
98	25.56		0.00	0.000	57478	0.005	VV	0.09
99	25.78		0.00	0.000	242027	0.021	VV	0.12
100	26.68		0.00	0.000	46227	0.004	VV	0.10
101	26.82		0.00	0.000	39868	0.003	VV	0.07
102	26.96		0.00	0.000	61515	0.005	VV	0.15
103	27.48		0.00	0.000	34767	0.003	VV	0.15
104	27.85		0.00	0.000	17294	0.002	VV	0.14
105	28.18		0.00	0.000	92641	0.008	VB	0.29

Total Area = 1.144009E+09 Total Height = 5.955608E+07 Total Amount = 68.88029

Chrom Perfect Chromatogram Report

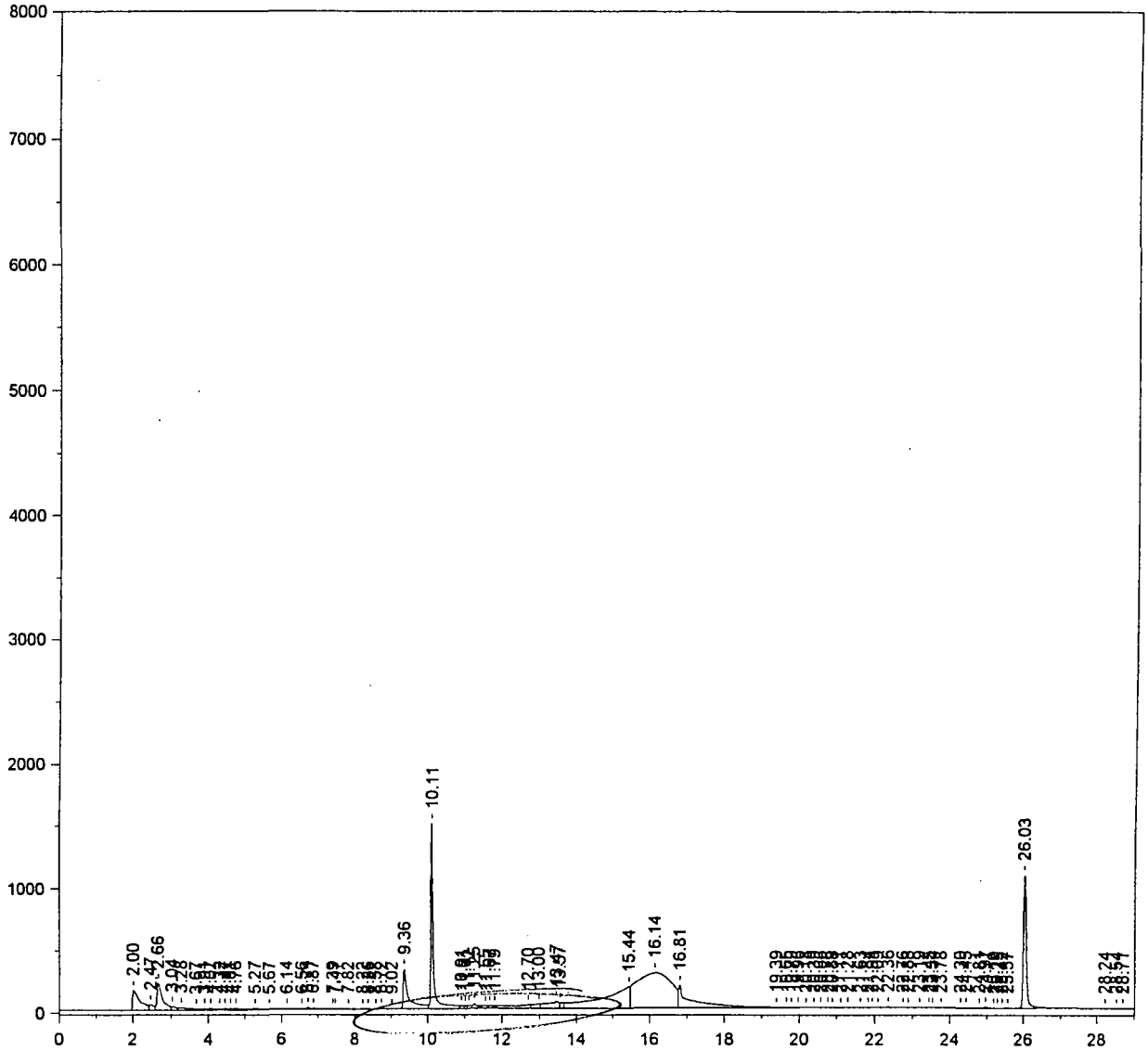


After reintegration
KDT
9/25/2

BC
9/30/02

50053

— H:\CP2\HP2\M0924.0013.RAW 301103-04 B8079 FSS-002-04-ESW



Primary Column

Before reintegration
eyes on under peak
BT 9/25/02

Sample Name = **301103-04 B8079 FSS-002-04-ESW**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0924.0013.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/24/02 9:34:04 PM
Method Version = 620
Calibration Version = 14

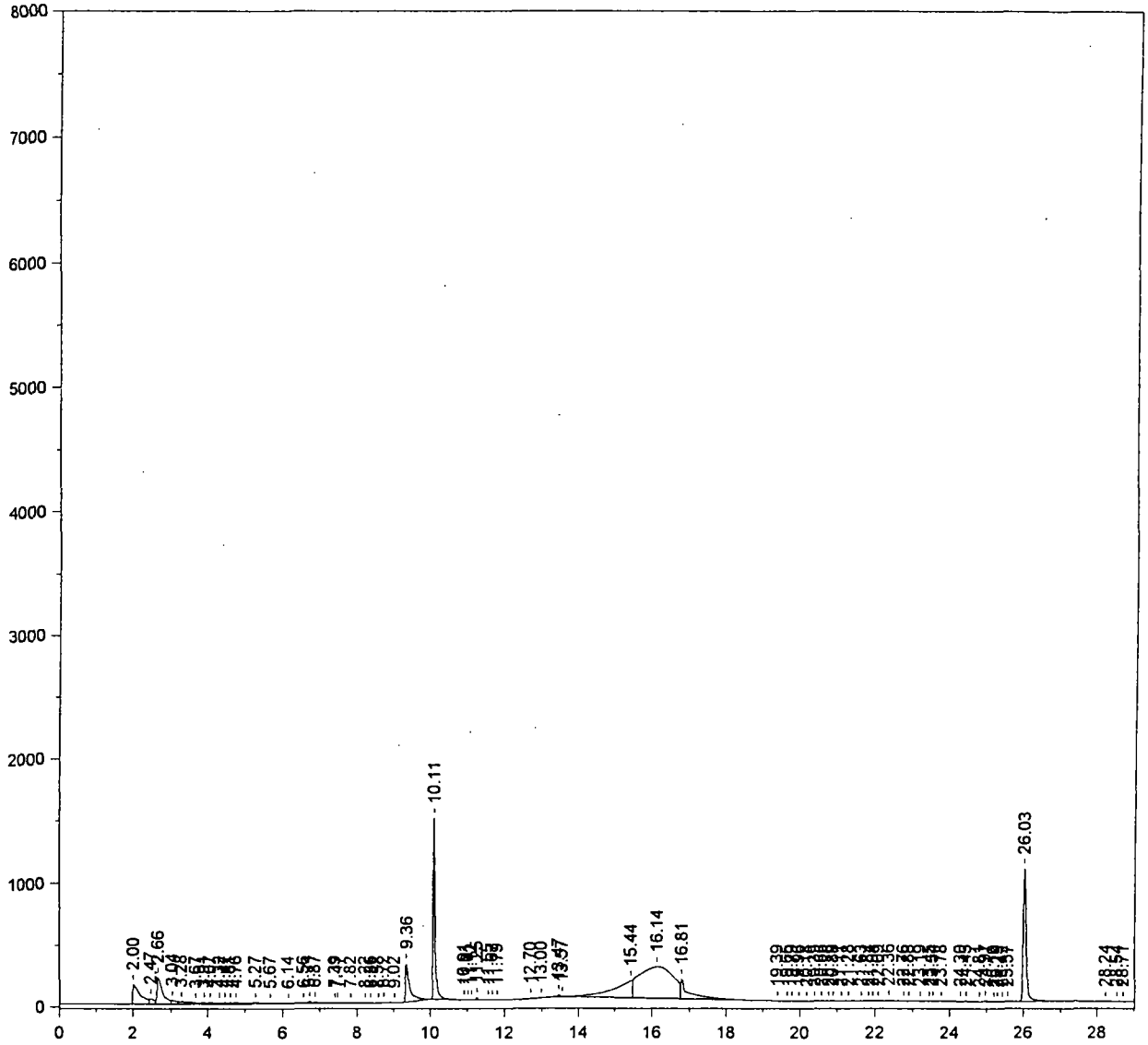
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	2110016	3.448	BV	0.18
2	2.47		0.00	0.000	351093	0.574	VV	0.11
3	2.66		0.00	0.000	2264341	3.700	VV	0.12
4	3.04		0.00	0.000	240359	0.393	VV	0.09
5	3.28		0.00	0.000	369441	0.604	VV	0.22
6	3.67		0.00	0.000	77218	0.126	VV	0.09
7	3.91		0.00	0.000	111589	0.182	VV	0.17
8	4.07		0.00	0.000	100205	0.164	VV	0.08
9	4.32		0.00	0.000	110465	0.180	VV	0.10
10	4.47		0.00	0.000	71486	0.117	VV	0.06
11	4.61		0.00	0.000	45812	0.075	VV	0.05
12	4.76		0.00	0.000	166902	0.273	VV	0.19
13	5.27		0.00	0.000	121666	0.199	VV	0.17
14	5.67		0.00	0.000	126651	0.207	VV	0.24
15	6.14		0.00	0.000	124204	0.203	VV	0.21
16	6.56		0.00	0.000	63729	0.104	VV	0.17
17	6.71		0.00	0.000	80309	0.131	VV	0.06
18	6.87		0.00	0.000	110068	0.180	VV	0.20
19	7.39		0.00	0.000	36208	0.059	VV	0.08
20	7.47		0.00	0.000	39012	0.064	VV	0.11
21	7.82		0.00	0.000	28475	0.047	VV	0.18
22	8.22		0.00	0.000	15723	0.026	VV	0.16
23	8.36		0.00	0.000	6067	0.010	VB	0.08
24	8.58		0.00	0.000	6340	0.010	BV	0.11
25	8.72		0.00	0.000	23394	0.038	VB	0.08
26	9.02		0.00	0.000	11619	0.019	BV	0.12
27	9.36		0.00	0.000	3248799	5.308	VV	0.09
28	10.11	CL4XYL	0.91	1.718	7160825	11.700	VV	0.05
29	10.91		0.00	0.000	156192	0.255	VV	0.05
30	11.01		0.00	0.000	119861	0.196	VV	0.06
31	11.12		0.00	0.000	168013	0.275	VV	0.05
32	11.25		0.00	0.000	298498	0.488	VV	0.05
33	11.55	AR1016#1	1.30	2.440	230659	0.377	VV	0.06
34	11.67		0.00	0.000	171351	0.280	VV	0.05
35	11.79		0.00	0.000	109025	0.178	VV	0.06
36	12.70	AR1016#2	4.27	8.013	1350958	2.207	VV	0.19
37	13.00		0.00	0.000	525323	0.858	VV	0.12
38	13.47		0.00	0.000	1365045	2.230	VV	0.08
39	13.57		0.00	0.000	316930	0.518	VV	0.06
40	15.44	AR1016#5	45.82	86.085	9093812	14.858	VV	0.47
41	16.14		0.00	0.000	18381824	30.034	VV	0.90
42	16.81		0.00	0.000	4797490	7.839	VV	0.10
43	19.39		0.00	0.000	47378	0.077	VV	0.08
44	19.65		0.00	0.000	66517	0.109	VV	0.10
45	19.79		0.00	0.000	46290	0.076	VV	0.11
46	19.96		0.00	0.000	83511	0.136	VV	0.17
47	20.18		0.00	0.000	21596	0.035	VV	0.05
48	20.39		0.00	0.000	64147	0.105	VV	0.07
49	20.56		0.00	0.000	43405	0.071	VV	0.14
50	20.76		0.00	0.000	54578	0.089	VV	0.11
51	20.88		0.00	0.000	61940	0.101	VV	0.16
52	21.11	AR1260#4	0.05	0.098	40974	0.067	VV	0.11

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	21.28		0.00	0.000	46075	0.075	VV	0.18
54	21.63		0.00	0.000	71902	0.117	VV	0.34
55	21.84		0.00	0.000	8072	0.013	VV	0.04
56	21.94		0.00	0.000	20937	0.034	VV	0.14
57	22.09	AR1260#5	0.03	0.052	14897	0.024	VB	0.13
58	22.36		0.00	0.000	57443	0.094	BV	0.14
59	22.76		0.00	0.000	6058	0.010	VV	0.14
60	22.88		0.00	0.000	12871	0.021	VB	0.06
61	23.19		0.00	0.000	3722	0.006	BV	0.08
62	23.45		0.00	0.000	1757	0.003	VV	0.07
63	23.54		0.00	0.000	6766	0.011	VB	0.13
64	23.78		0.00	0.000	2484	0.004	BB	0.14
65	24.30		0.00	0.000	1070	0.002	BV	0.09
66	24.45		0.00	0.000	1655	0.003	VB	0.10
67	24.81		0.00	0.000	702	0.001	BV	0.06
68	24.97		0.00	0.000	32806	0.054	VB	0.08
69	25.19		0.00	0.000	1749	0.003	BV	0.08
70	25.29		0.00	0.000	2620	0.004	VV	0.05
71	25.42		0.00	0.000	4123	0.007	VV	0.11
72	25.57		0.00	0.000	3721	0.006	VB	0.16
73	26.03	CL10BP	0.85	1.594	6007200	9.815	BB	0.08
74	28.24		0.00	0.000	14151	0.023	BV	0.12
75	28.54		0.00	0.000	23272	0.038	VV	0.15
76	28.71		0.00	0.000	20471	0.033	VB	0.13

Total Area = 6.120386E+07 Total Height = 4561534 Total Amount = 53.23122

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0924.0013.RAW 301103-04 B8079 FSS-002-04-ESW



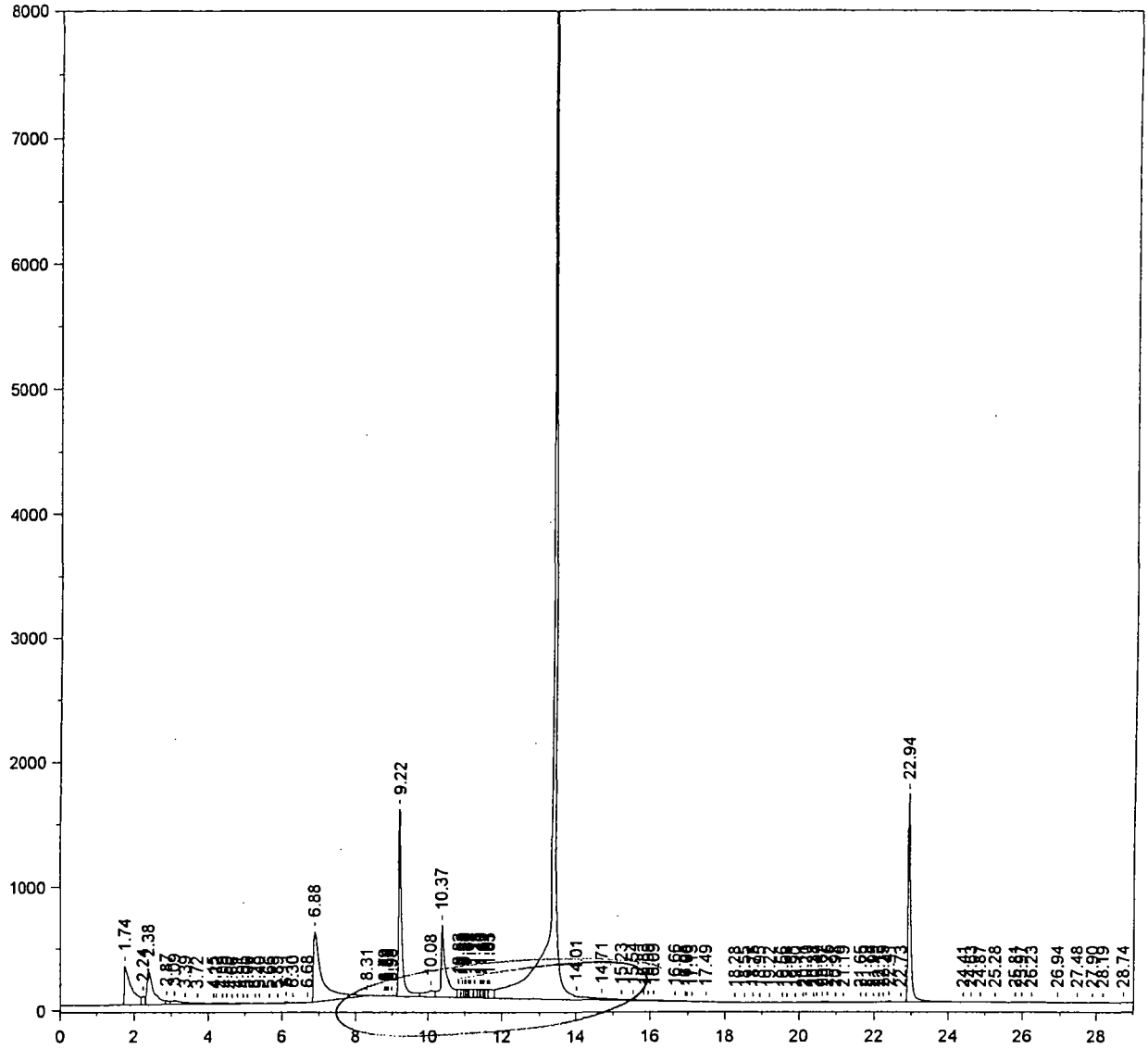
after reintegration
AAT
9/25/02

BOL
9-30-02

50062

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0924B.0013.RAW 301103-04 B8079 FSS-002-04-ESW



Before reintegration
excess area under peaks
RST 9/25/02

50066

Sample Name = **301103-04 B8079 FSS-002-04-ESW**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDES SERIAL 3212802
Heading 2 = 120C(1MIN)---8.5C/MIN--285C(15MIN)

Acquisition Port = 2

Raw File Name = **H:\CP2\HP2\M0924B.0013.RAW**
Method File Name = H:\CP2\HP2\Hp2pestB.met
Calibration File Name = H:\CP2\HP2\PCBFD47B.cal

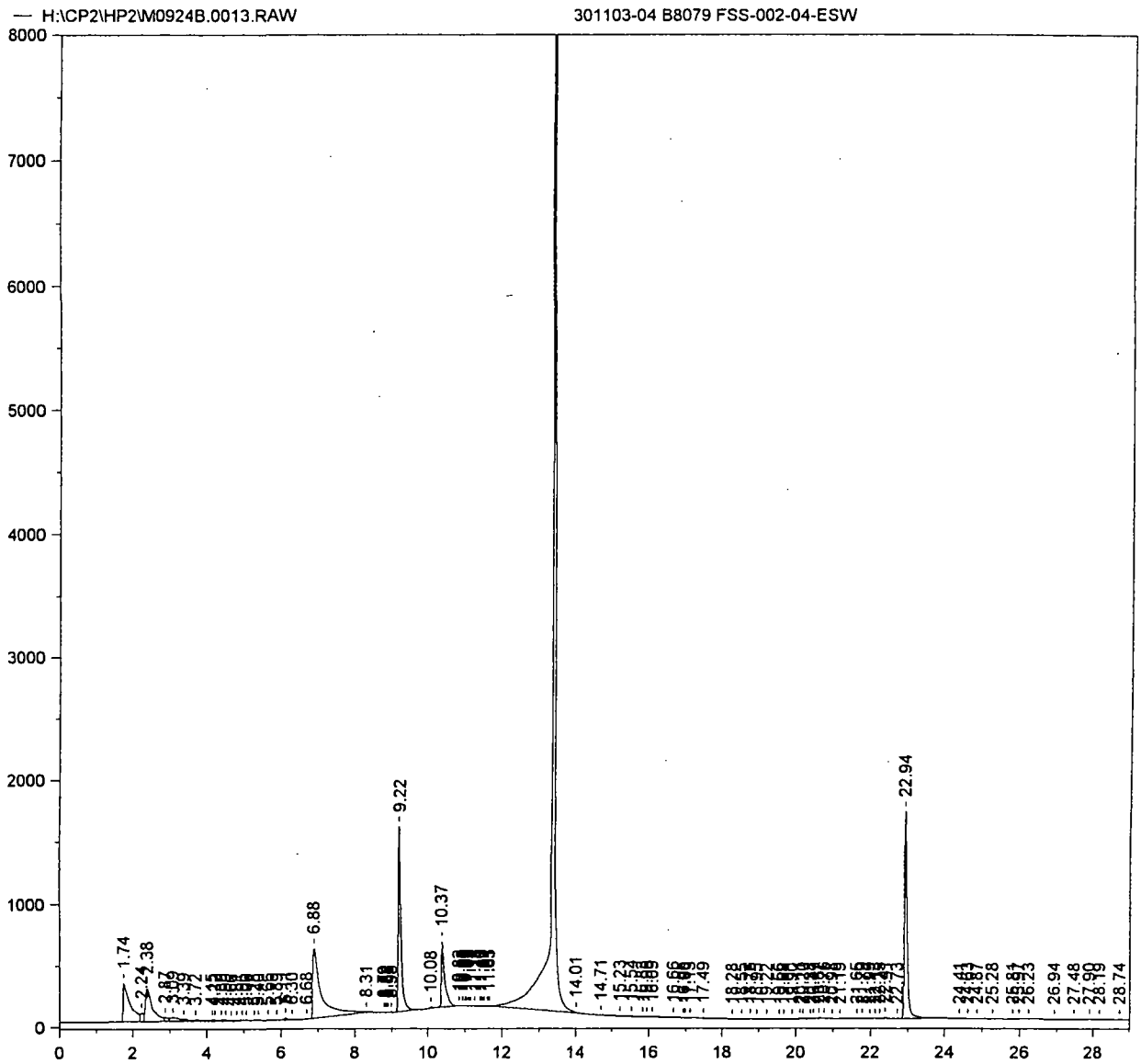
Date Taken (end) = 9/24/02 9:34:04 PM
Method Version = 569
Calibration Version = 9

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	1.74		0.00	0.000	4105569	3.195	BV	0.17
2	2.24		0.00	0.000	445848	0.347	VV	0.06
3	2.38		0.00	0.000	3440719	2.678	VV	0.14
4	2.87		0.00	0.000	210761	0.164	VV	0.08
5	3.09		0.00	0.000	543389	0.423	VV	0.25
6	3.39		0.00	0.000	153206	0.119	VV	0.13
7	3.72		0.00	0.000	100534	0.078	VV	0.09
8	4.15		0.00	0.000	72194	0.056	VV	0.10
9	4.22		0.00	0.000	65451	0.051	VV	0.10
10	4.39		0.00	0.000	35265	0.027	VV	0.05
11	4.50		0.00	0.000	46773	0.036	VV	0.12
12	4.66		0.00	0.000	21617	0.017	VV	0.07
13	4.81		0.00	0.000	52764	0.041	VV	0.12
14	4.95		0.00	0.000	21073	0.016	VV	0.06
15	5.06		0.00	0.000	29641	0.023	VV	0.12
16	5.28		0.00	0.000	31758	0.025	VV	0.14
17	5.40		0.00	0.000	24467	0.019	VV	0.10
18	5.66		0.00	0.000	17277	0.013	VV	0.12
19	5.89		0.00	0.000	8687	0.007	VB	0.13
20	6.11		0.00	0.000	73979	0.058	BV	0.08
21	6.30		0.00	0.000	26530	0.021	VB	0.09
22	6.68		0.00	0.000	9227	0.007	BB	0.10
23	6.88		0.00	0.000	9250271	7.198	SBB	0.17
24	8.31		0.00	0.000	2215	0.002	TBB	0.09
25	8.79		0.00	0.000	3880	0.003	BV	0.05
26	8.84		0.00	0.000	4957	0.004	VV	0.03
27	8.88		0.00	0.000	8944	0.007	VV	0.03
28	8.98		0.00	0.000	23009	0.018	VV	0.05
29	9.22	CL4XYL	0.81	0.195	8567462	6.667	VV	0.07
30	10.08		0.00	0.000	1037379	0.807	VV	0.17
31	10.37	AR1016#1	22.69	5.484	5352867	4.166	VV	0.08
32	10.83		0.00	0.000	492774	0.383	VV	0.08
33	10.93		0.00	0.000	241906	0.188	VV	0.03
34	10.99		0.00	0.000	188799	0.147	VV	0.03
35	11.03		0.00	0.000	216003	0.168	VV	0.02
36	11.09		0.00	0.000	231588	0.180	VV	0.03
37	11.14		0.00	0.000	439316	0.342	VV	0.07
38	11.25	AR1016#2	0.93	0.226	405110	0.315	VV	0.06
39	11.40		0.00	0.000	153146	0.119	VV	0.02
40	11.45		0.00	0.000	277412	0.216	VV	0.04
41	11.51		0.00	0.000	179509	0.140	VV	0.03
42	11.61		0.00	0.000	348045	0.271	VV	0.03
43	11.65		0.00	0.000	668734	0.520	VV	0.07
44	13.41	AR1016#5	388.14	93.827	80835568	62.905	SBB	0.06
45	14.01		0.00	0.000	16681	0.013	TBV	0.14
46	14.71		0.00	0.000	27364	0.021	TVV	0.29
47	15.23		0.00	0.000	31054	0.024	TVV	0.18
48	15.54		0.00	0.000	27771	0.022	TVV	0.11
49	15.83		0.00	0.000	12646	0.010	TVV	0.08
50	15.95		0.00	0.000	21023	0.016	TVV	0.10
51	16.09		0.00	0.000	63797	0.050	TVV	0.31
52	16.66		0.00	0.000	16986	0.013	TVV	0.20

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	16.95		0.00	0.000	4010	0.003	TVV	0.03
54	17.00		0.00	0.000	7979	0.006	TVV	0.07
55	17.13		0.00	0.000	2664	0.002	TVV	0.10
56	17.49		0.00	0.000	7736	0.006	TVB	0.18
57	18.28	AR1260#3	0.01	0.001	2845	0.002	BV	0.13
58	18.55		0.00	0.000	1619	0.001	VB	0.10
59	18.76		0.00	0.000	9880	0.008	BV	0.05
60	18.95		0.00	0.000	5021	0.004	VB	0.18
61	19.22		0.00	0.000	7214	0.006	BV	0.14
62	19.56	AR1260#4	0.01	0.003	18190	0.014	VV	0.21
63	19.68		0.00	0.000	7961	0.006	VV	0.07
64	19.90		0.00	0.000	26138	0.020	VV	0.17
65	20.11		0.00	0.000	17067	0.013	VV	0.10
66	20.20		0.00	0.000	12369	0.010	VV	0.04
67	20.38		0.00	0.000	29461	0.023	VV	0.11
68	20.47		0.00	0.000	17498	0.014	VV	0.04
69	20.62		0.00	0.000	48744	0.038	VV	0.10
70	20.76		0.00	0.000	61383	0.048	VV	0.07
71	20.98		0.00	0.000	56993	0.044	VV	0.13
72	21.19		0.00	0.000	55184	0.043	VV	0.24
73	21.65	AR1260#5	0.19	0.046	55838	0.043	VV	0.26
74	21.79		0.00	0.000	21315	0.017	VV	0.10
75	21.99		0.00	0.000	38746	0.030	VV	0.17
76	22.13		0.00	0.000	15318	0.012	VV	0.07
77	22.25		0.00	0.000	15184	0.012	VV	0.08
78	22.41		0.00	0.000	72347	0.056	VV	0.07
79	22.73		0.00	0.000	14764	0.011	VV	0.07
80	22.94	CL10BP	0.90	0.217	8931147	6.950	VV	0.07
81	24.41		0.00	0.000	26618	0.021	VV	0.12
82	24.63		0.00	0.000	24344	0.019	VV	0.15
83	24.87		0.00	0.000	9540	0.007	VB	0.19
84	25.28		0.00	0.000	4585	0.004	BB	0.07
85	25.81		0.00	0.000	36918	0.029	BV	0.22
86	25.97		0.00	0.000	21899	0.017	VV	0.17
87	26.23		0.00	0.000	9643	0.008	VB	0.13
88	26.94		0.00	0.000	34453	0.027	BV	0.31
89	27.48		0.00	0.000	36980	0.029	VV	0.38
90	27.90		0.00	0.000	13041	0.010	VV	0.17
91	28.19		0.00	0.000	27275	0.021	VV	0.32
92	28.74		0.00	0.000	11643	0.009	VB	0.31

Total Area = 1.285045E+08 Total Height = 2.07613E+07 Total Amount = 413.6825

50068

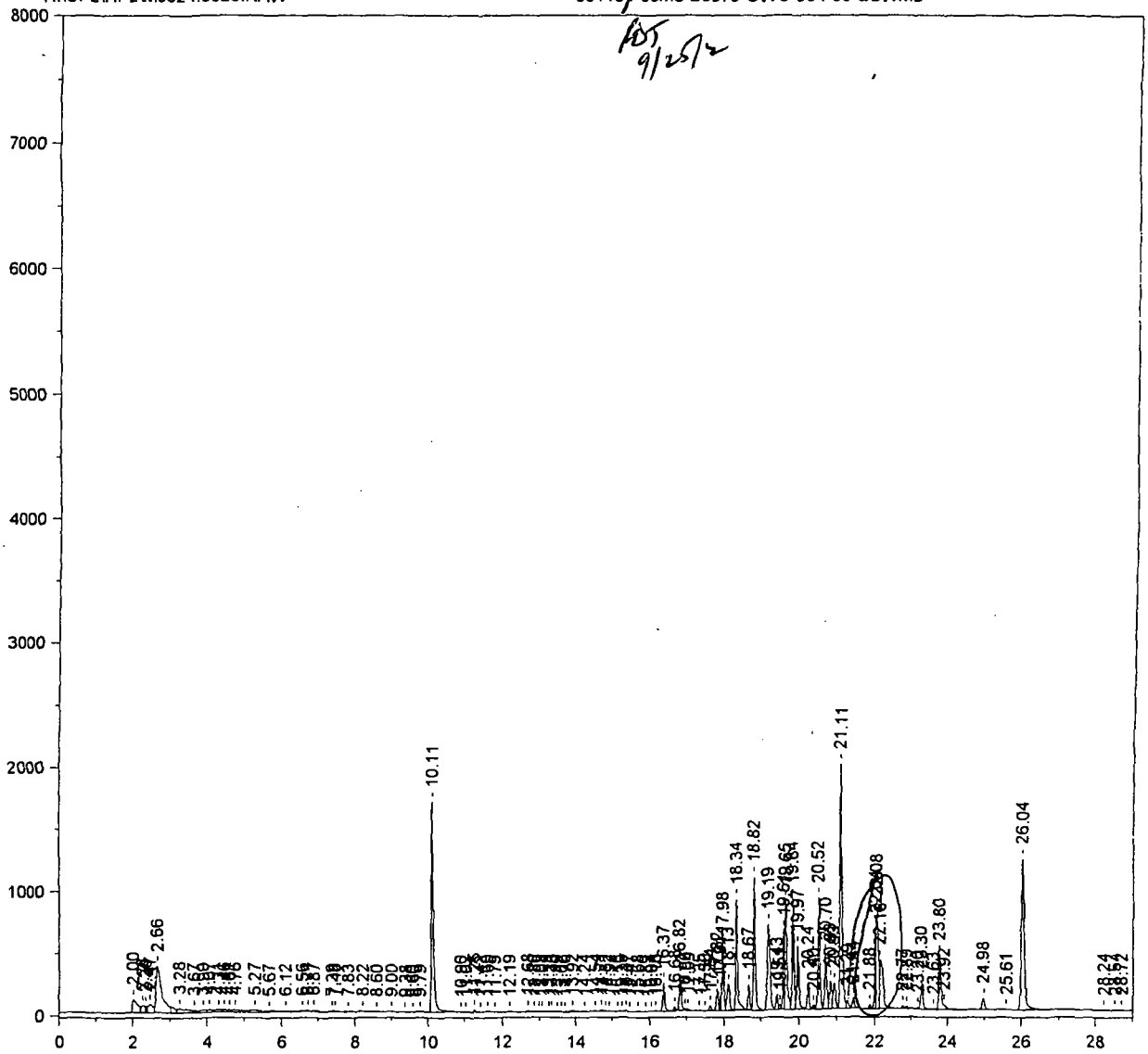


After reintegration
KST
9/25/2

3 FSS-001-04 ESWMS

— H:\CP2\HP2\M0924.0025.RAW 301104-06MS B8079 ~~OWS-004-05-ESWMS~~

KJS 9/25/02



Primary Column

Before reintegration
Peak not split in initial calibration

KJS 9/25/02

Sample Name = **30110~~4~~3-06MS B8079** ~~OW3-004-05-E3WMS~~ FSS-008-24-E3WMS
ADT 9/27

Instrument = HP 2 Acquisition Port = 1
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Raw File Name = **H:\CP2\HP2\M0924.0025.RAW** Date Taken (end) = 9/25/02 5:57:07 AM
Method File Name = H:\CP2\HP2\Hp2pest.met Method Version = 620
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1042730	1.313	BV	0.19
2	2.28		0.00	0.000	364414	0.459	VV	0.08
3	2.36		0.00	0.000	134618	0.170	VV	0.03
4	2.47		0.00	0.000	654808	0.825	VV	0.09
5	2.66		0.00	0.000	3938503	4.961	VV	0.12
6	3.28		0.00	0.000	650351	0.819	VV	0.18
7	3.67		0.00	0.000	144613	0.182	VV	0.08
8	3.90		0.00	0.000	231392	0.291	VV	0.18
9	4.07		0.00	0.000	186529	0.235	VV	0.08
10	4.31		0.00	0.000	233202	0.294	VV	0.15
11	4.46		0.00	0.000	146096	0.184	VV	0.07
12	4.61		0.00	0.000	87223	0.110	VV	0.06
13	4.76		0.00	0.000	339022	0.427	VV	0.20
14	5.27		0.00	0.000	352888	0.445	VV	0.25
15	5.67		0.00	0.000	304892	0.384	VV	0.23
16	6.12		0.00	0.000	311745	0.393	VV	0.23
17	6.56		0.00	0.000	189843	0.239	VV	0.18
18	6.71		0.00	0.000	97868	0.123	VV	0.07
19	6.87		0.00	0.000	260046	0.328	VV	0.23
20	7.39		0.00	0.000	116608	0.147	VV	0.11
21	7.46		0.00	0.000	103762	0.131	VV	0.10
22	7.83		0.00	0.000	155567	0.196	VV	0.21
23	8.22		0.00	0.000	125231	0.158	VV	0.21
24	8.60		0.00	0.000	75991	0.096	VV	0.26
25	9.00		0.00	0.000	60946	0.077	VV	0.20
26	9.38		0.00	0.000	43844	0.055	VV	0.10
27	9.60		0.00	0.000	2958	0.004	VV	0.04
28	9.79		0.00	0.000	19543	0.025	VB	0.17
29	10.11	CL4XYL	0.86	1.951	6755949	8.510	BV	0.05
30	10.90		0.00	0.000	14049	0.018	VV	0.06
31	11.02		0.00	0.000	18402	0.023	VV	0.08
32	11.25		0.00	0.000	76122	0.096	VV	0.05
33	11.42		0.00	0.000	4188	0.005	VV	0.07
34	11.60	AR1016#1	0.23	0.530	41620	0.052	VV	0.14
35	11.79		0.00	0.000	2097	0.003	VB	0.04
36	12.19		0.00	0.000	5090	0.006	BB	0.06
37	12.68	AR1016#2	0.20	0.455	63744	0.080	BV	0.09
38	12.86		0.00	0.000	4732	0.006	VV	0.06
39	12.99		0.00	0.000	11424	0.014	VV	0.05
40	13.08		0.00	0.000	2632	0.003	VV	0.05
41	13.24		0.00	0.000	13118	0.017	VV	0.05
42	13.33		0.00	0.000	22106	0.028	VV	0.05
43	13.49		0.00	0.000	15971	0.020	VV	0.05
44	13.62		0.00	0.000	13211	0.017	VV	0.10
45	13.70		0.00	0.000	4871	0.006	VV	0.07
46	13.92	AR1016#3	0.23	0.510	109824	0.138	VV	0.14
47	14.24	AR1016#4	0.19	0.431	59967	0.076	VV	0.10
48	14.54		0.00	0.000	28497	0.036	VV	0.09
49	14.71		0.00	0.000	66216	0.083	VV	0.05
50	14.82		0.00	0.000	27864	0.035	VV	0.05
51	14.92		0.00	0.000	20766	0.026	VV	0.08
52	15.15		0.00	0.000	9172	0.012	VV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	15.25		0.00	0.000	1222	0.002	VB	0 05
54	15.37	AR1016#5	0.16	0.371	32582	0 041	BV	0 06
55	15.47		0.00	0.000	9172	0.012	VV	0.06
56	15.68		0.00	0.000	38538	0.049	VV	0.08
57	15.89		0.00	0.000	2513	0 003	VB	0.06
58	16.04		0.00	0.000	7409	0.009	BV	0.06
59	16.16		0.00	0.000	13962	0.018	VV	0.06
60	16.37		0.00	0.000	873582	1.100	VV	0.05
61	16.68		0.00	0.000	135728	0.171	VV	0.05
62	16.82		0.00	0.000	1035673	1.305	VV	0.05
63	16.96		0.00	0.000	61085	0.077	VV	0.05
64	17.04		0.00	0.000	94158	0.119	VV	0.07
65	17.35		0.00	0.000	3660	0.005	VB	0.07
66	17.50		0.00	0.000	21673	0.027	BV	0.05
67	17.64		0.00	0.000	154895	0.195	VV	0.05
68	17.82		0.00	0.000	564047	0.710	VV	0.05
69	17.91		0.00	0.000	374558	0.472	VV	0.04
70	17.98	AR1260#1	8.53	19.285	1698070	2.139	VV	0.05
71	18.13		0.00	0.000	1023777	1.290	VV	0.07
72	18.34		0.00	0.000	3172463	3.996	VV	0.05
73	18.67		0.00	0.000	702741	0.885	VV	0.05
74	18.82	AR1260#2	8.74	19.750	3773413	4.753	VV	0.05
75	19.19		0.00	0.000	3636230	4.580	VV	0.08
76	19.43		0.00	0.000	408358	0.514	VV	0.05
77	19.51		0.00	0.000	109090	0.137	VV	0.04
78	19.61		0.00	0.000	1582823	1.994	VV	0.04
79	19.65		0.00	0.000	3655331	4.604	VV	0.07
80	19.84	AR1260#3	8.96	20.253	2966822	3.737	VV	0.05
81	19.97		0.00	0.000	1771482	2.231	VV	0.05
82	20.24		0.00	0.000	732793	0.923	VV	0.05
83	20.40		0.00	0.000	101285	0.128	VV	0.04
84	20.52		0.00	0.000	3089229	3.891	VV	0.05
85	20.70		0.00	0.000	1662017	2.094	VV	0.05
86	20.83		0.00	0.000	871363	1.098	VV	0.05
87	20.93		0.00	0.000	956616	1.205	VV	0.09
88	21.11	AR1260#4	9.28	20.977	7318625	9.219	VV	0.05
89	21.29		0.00	0.000	276415	0.348	VV	0.07
90	21.44		0.00	0.000	293759	0.370	VB	0.05
91	21.88		0.00	0.000	120331	0.152	BV	0.05
92	22.04		0.00	0.000	1762824	2.220	VV	0.04
93	22.08	AR1260#5	5.89	13.310	3147274	3.964	VV	0.06
94	22.16		0.00	0.000	2598503	3.273	VV	0.11
95	22.77		0.00	0.000	109968	0.139	VV	0.06
96	22.89		0.00	0.000	98264	0.124	VV	0.07
97	23.20		0.00	0.000	50747	0.064	VV	0.06
98	23.30		0.00	0.000	907814	1.144	VV	0.06
99	23.63		0.00	0.000	41210	0.052	VV	0.16
100	23.80		0.00	0.000	2209730	2.783	SBB	0.07
101	23.92		0.00	0.000	21824	0.027	TBB	0.06
102	24.98		0.00	0.000	437532	0.551	BB	0.07
103	25.61		0.00	0.000	3183	0.004	BB	0.09
104	26.04	CL10BP	0.96	2.178	6823147	8.595	BB	0.08
105	28.24		0.00	0.000	21378	0.027	BV	0.13
106	28.54		0 00	0.000	24128	0.030	VV	0.14
107	28.72		0.00	0.000	17143	0.022	VB	0 14

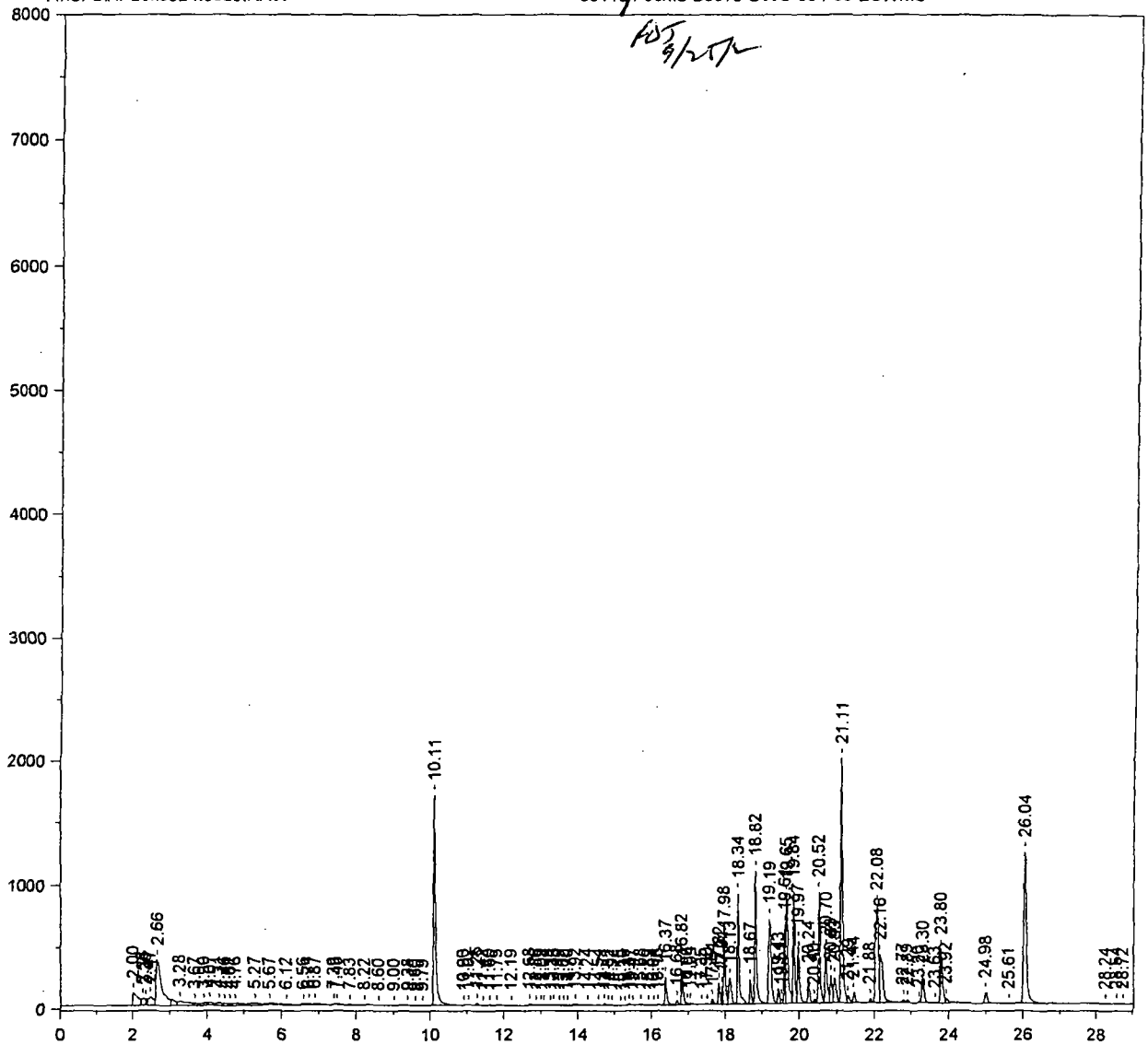
Total Area = 7.938901E+07 Total Height = 1.844934E+07 Total Amount = 44.24408

50094

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0924.0025.RAW 301104-06MS B8079 ~~OWS-004-05-ESWMS~~ ESS-008-04-ESWMS

RDT 9/25/2



After reintegration
RDT
9/25/2

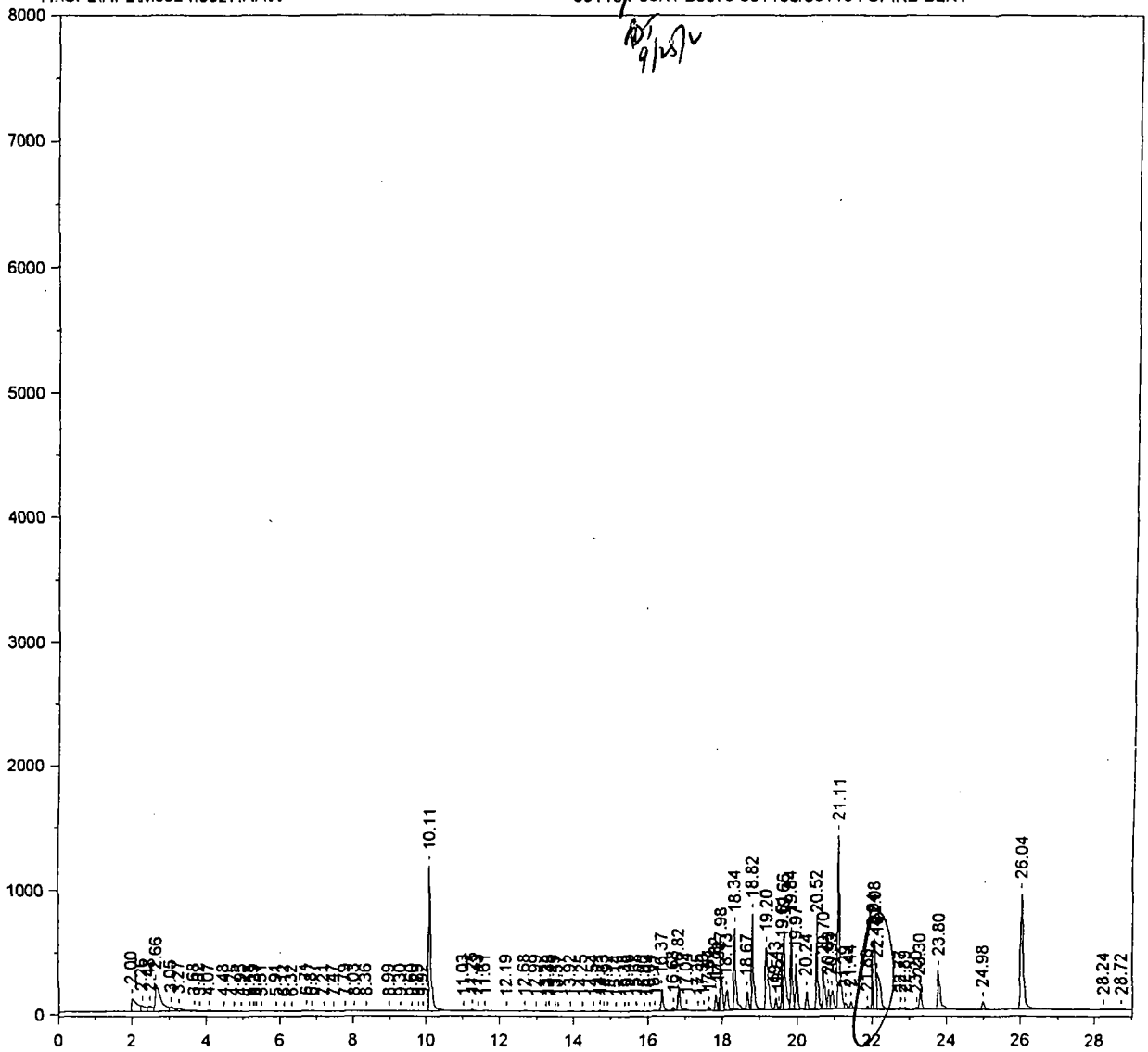
9/30/02

50157

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0924.0027.RAW 301104-06K1 B8079 301103/301104 SPIKE BLK1

3
RDT 9/25/02



Primary Column

Before reintegration
peak not split in initial calibration
RDT 9/25/02

50145

Sample Name = **301104-06K1 B8079 301103/301104 SPIKE BLK1**

Instrument = HP 2 Acquisition Port = 1
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Raw File Name = **H:\CP2\HP2\M0924.0027.RAW** Date Taken (end) = 9/25/02 7:14:16 AM
Method File Name = H:\CP2\HP2\Hp2pest.met Method Version = 620
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal Calibration Version = 14

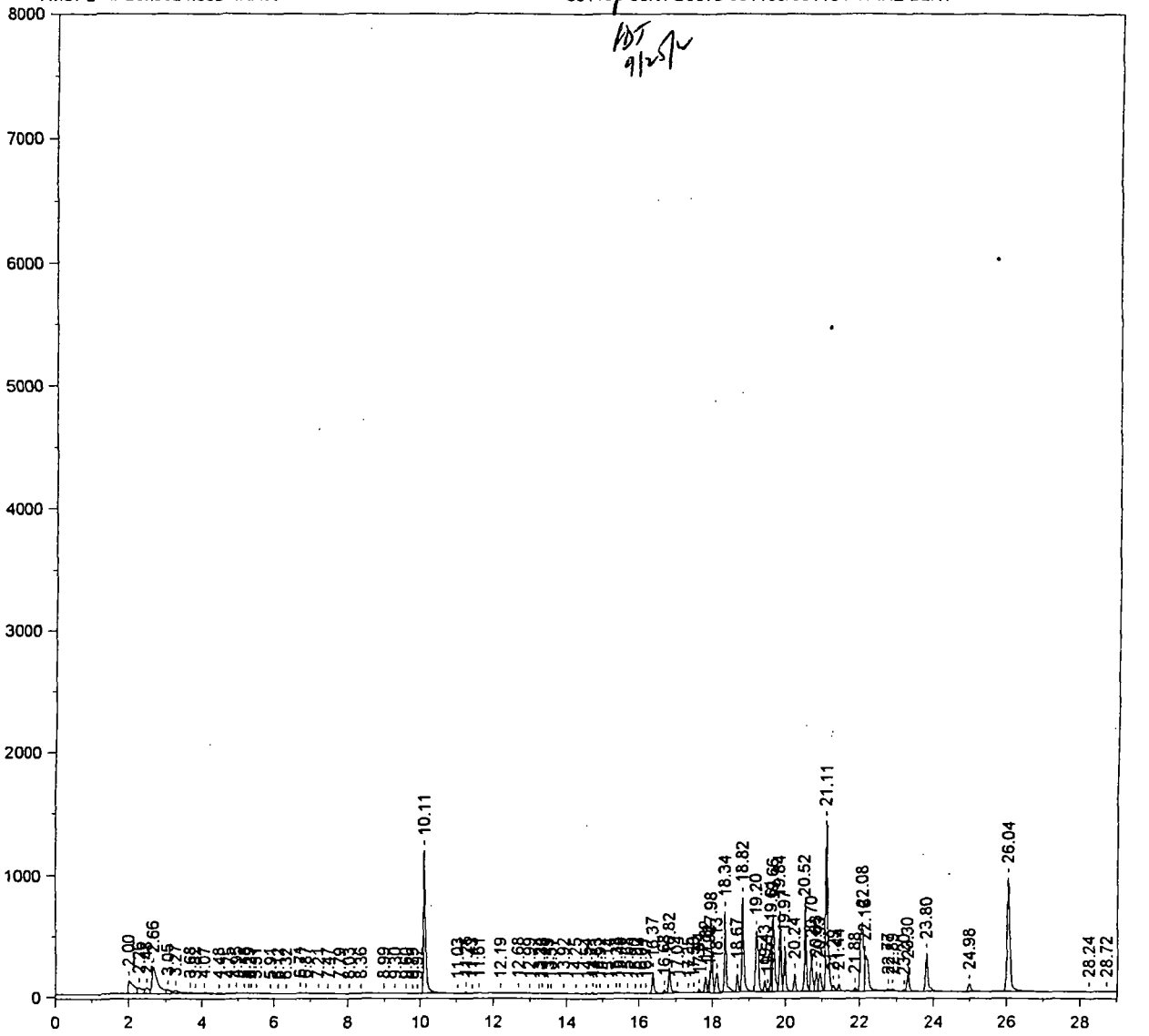
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1091303	1.928	BV	0.20
2	2.26		0.00	0.000	462223	0.817	VV	0.09
3	2.48		0.00	0.000	421850	0.745	VV	0.09
4	2.66		0.00	0.000	2345046	4.143	VV	0.12
5	3.05		0.00	0.000	303863	0.537	VV	0.10
6	3.27		0.00	0.000	320323	0.566	VV	0.15
7	3.68		0.00	0.000	78618	0.139	VV	0.07
8	3.82		0.00	0.000	85197	0.151	VV	0.15
9	4.07		0.00	0.000	162027	0.286	VV	0.11
10	4.48		0.00	0.000	113025	0.200	VV	0.17
11	4.75		0.00	0.000	38311	0.068	VV	0.08
12	4.95		0.00	0.000	28098	0.050	VV	0.11
13	5.18		0.00	0.000	16180	0.029	VV	0.10
14	5.29		0.00	0.000	9319	0.016	VV	0.04
15	5.37		0.00	0.000	16098	0.028	VV	0.09
16	5.51		0.00	0.000	11031	0.019	VV	0.12
17	5.91		0.00	0.000	12771	0.023	VB	0.23
18	6.12		0.00	0.000	488	0.001	BB	0.07
19	6.32		0.00	0.000	1331	0.002	BB	0.09
20	6.71		0.00	0.000	34402	0.061	BV	0.06
21	6.87		0.00	0.000	34162	0.060	VV	0.08
22	7.21		0.00	0.000	5384	0.010	VV	0.10
23	7.47		0.00	0.000	16605	0.029	VB	0.08
24	7.79		0.00	0.000	904	0.002	BV	0.08
25	8.03		0.00	0.000	14752	0.026	VV	0.06
26	8.36		0.00	0.000	3368	0.006	VB	0.13
27	8.99		0.00	0.000	2827	0.005	BV	0.14
28	9.30		0.00	0.000	1930	0.003	VB	0.11
29	9.60		0.00	0.000	1782	0.003	BV	0.05
30	9.79		0.00	0.000	1599	0.003	VV	0.06
31	9.92		0.00	0.000	541	0.001	VB	0.07
32	10.11	CL4XYL	0.61	1.855	4761833	8.412	BV	0.05
33	11.03		0.00	0.000	15029	0.027	VV	0.12
34	11.25		0.00	0.000	53026	0.094	VV	0.06
35	11.43		0.00	0.000	2905	0.005	VB	0.08
36	11.61	AR1016#1	0.03	0.082	4753	0.008	BB	0.07
37	12.19		0.00	0.000	2702	0.005	BB	0.05
38	12.68	AR1016#2	0.14	0.436	45288	0.080	BV	0.09
39	12.99		0.00	0.000	4887	0.009	VV	0.05
40	13.24		0.00	0.000	8253	0.015	VV	0.06
41	13.33		0.00	0.000	15725	0.028	VV	0.06
42	13.49		0.00	0.000	9738	0.017	VV	0.05
43	13.57		0.00	0.000	12372	0.022	VV	0.07
44	13.92	AR1016#3	0.16	0.476	75934	0.134	VV	0.16
45	14.25	AR1016#4	0.14	0.423	43624	0.077	VV	0.13
46	14.54		0.00	0.000	22313	0.039	VV	0.09
47	14.71		0.00	0.000	52156	0.092	VV	0.06
48	14.83		0.00	0.000	21875	0.039	VV	0.05
49	14.92		0.00	0.000	16618	0.029	VV	0.08
50	15.14		0.00	0.000	8318	0.015	VB	0.09
51	15.38	AR1016#5	0.12	0.363	23635	0.042	BV	0.06
52	15.48		0.00	0.000	8721	0.015	VV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	15.68		0.00	0.000	26654	0.047	VV	0.09
54	15.90		0.00	0.000	1062	0.002	VB	0.07
55	16.04		0.00	0.000	4873	0.009	BV	0.06
56	16.17		0.00	0.000	8303	0.015	VV	0.07
57	16.37		0.00	0.000	671479	1.186	VV	0.05
58	16.68		0.00	0.000	103318	0.183	VV	0.05
59	16.82		0.00	0.000	833895	1.473	VV	0.05
60	17.04		0.00	0.000	71066	0.126	VV	0.07
61	17.35		0.00	0.000	3107	0.005	VB	0.07
62	17.50		0.00	0.000	15694	0.028	BB	0.05
63	17.64		0.00	0.000	111740	0.197	BV	0.05
64	17.82		0.00	0.000	437893	0.774	VV	0.05
65	17.92		0.00	0.000	257861	0.456	VV	0.03
66	17.98	AR1260#1	6.54	19.924	1300626	2.298	VV	0.05
67	18.13		0.00	0.000	792106	1.399	VV	0.07
68	18.34		0.00	0.000	2411592	4.260	VV	0.05
69	18.67		0.00	0.000	538147	0.951	VV	0.05
70	18.82	AR1260#2	6.61	20.164	2856100	5.046	VV	0.05
71	19.20		0.00	0.000	2729518	4.822	VV	0.09
72	19.43		0.00	0.000	317606	0.561	VV	0.05
73	19.51		0.00	0.000	79277	0.140	VV	0.04
74	19.61		0.00	0.000	1126298	1.990	VV	0.04
75	19.66		0.00	0.000	2766567	4.888	VV	0.07
76	19.84	AR1260#3	6.69	20.395	2214887	3.913	VV	0.05
77	19.97		0.00	0.000	1338388	2.364	VV	0.05
78	20.24		0.00	0.000	536401	0.948	VB	0.05
79	20.52		0.00	0.000	2283985	4.035	BV	0.05
80	20.70		0.00	0.000	1242469	2.195	VV	0.05
81	20.83		0.00	0.000	613652	1.084	VV	0.05
82	20.93		0.00	0.000	700458	1.237	VV	0.08
83	21.11	AR1260#4	6.72	20.484	5298259	9.360	VV	0.05
84	21.29		0.00	0.000	203059	0.359	VV	0.07
85	21.44		0.00	0.000	204041	0.360	VB	0.05
86	21.88		0.00	0.000	87912	0.155	BV	0.06
87	22.04		0.00	0.000	1245690	2.201	VV	0.04
88	22.08	AR1260#5	4.31	13.143	2303997	4.070	VV	0.06
89	22.16		0.00	0.000	1973169	3.486	VV	0.11
90	22.77		0.00	0.000	74238	0.131	VV	0.06
91	22.89		0.00	0.000	77362	0.137	VV	0.07
92	23.20		0.00	0.000	40208	0.071	VV	0.06
93	23.30		0.00	0.000	671482	1.186	VV	0.06
94	23.80		0.00	0.000	1621418	2.864	VB	0.07
95	24.98		0.00	0.000	318151	0.562	BB	0.07
96	26.04	CL10BP	0.74	2.257	5241473	9.260	BB	0.08
97	28.24		0.00	0.000	2373	0.004	BV	0.13
98	28.72		0.00	0.000	1488	0.003	VB	0.13

Total Area = 5.66044E+07 Total Height = 1.319751E+07 Total Amount = 32.80105

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0924.0027.RAW 301104-06K1 B8079 301103/301104 SPIKE BLK1



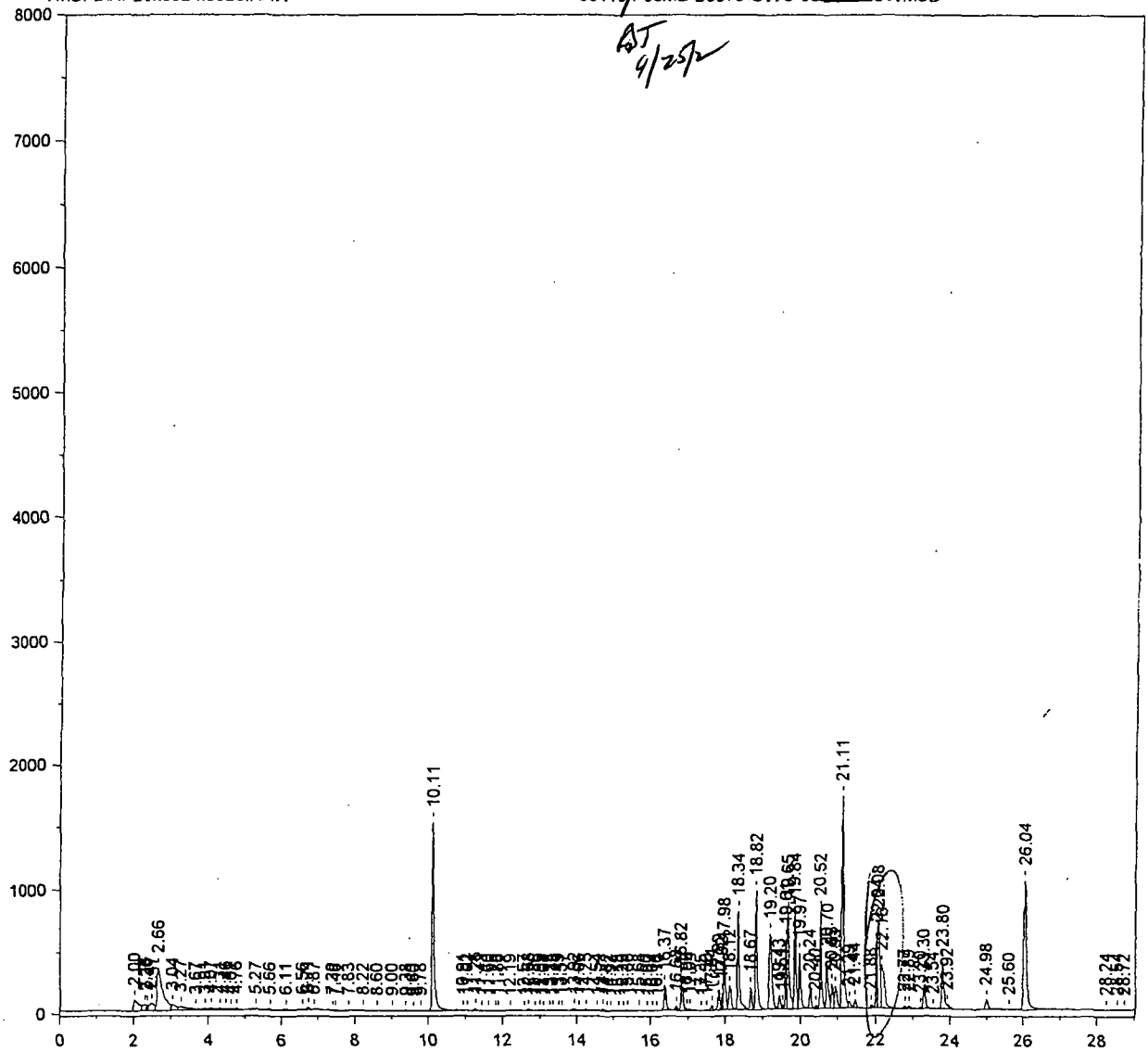
After reintegration
BT
9/25/02

9/26/02

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0924.0026.RAW 3 301104-06MD B8079 ~~OWS-004-05-ESWMSD~~ FSS-008-04-ESWMSD

BJT 9/25/2



Primary Column

Before reintegration
peak not split in initial calibrati

BJT 9/25/2

50166

Chrom Perfect Chromatogram Report

Sample Name = **301104-06MD B8079** ~~OWS-004-05-ESWMSD~~ FSS-008-04-ESWMSD
ADT 9/25/02

Instrument = HP 2 Acquisition Port = 1
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Raw File Name = **H:\CP2\HP2\M0924.0026.RAW** Date Taken (end) = 9/25/02 6:35:44 AM
Method File Name = H:\CP2\HP2\Hp2pest.met Method Version = 620
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	905190	1.301	BV	0.19
2	2.28		0.00	0.000	326842	0.470	VV	0.08
3	2.36		0.00	0.000	131936	0.190	VV	0.03
4	2.47		0.00	0.000	571644	0.821	VV	0.09
5	2.66		0.00	0.000	3705944	5.325	VV	0.13
6	3.04		0.00	0.000	398376	0.572	VV	0.10
7	3.27		0.00	0.000	595011	0.855	VV	0.17
8	3.67		0.00	0.000	116761	0.168	VV	0.09
9	3.91		0.00	0.000	178085	0.256	VV	0.17
10	4.07		0.00	0.000	154579	0.222	VV	0.08
11	4.31		0.00	0.000	183814	0.264	VV	0.11
12	4.46		0.00	0.000	108381	0.156	VV	0.07
13	4.61		0.00	0.000	61715	0.089	VV	0.06
14	4.76		0.00	0.000	225567	0.324	VV	0.20
15	5.27		0.00	0.000	209642	0.301	VV	0.25
16	5.66		0.00	0.000	144745	0.208	VV	0.23
17	6.11		0.00	0.000	107560	0.155	VB	0.24
18	6.56		0.00	0.000	41306	0.059	BV	0.18
19	6.71		0.00	0.000	84938	0.122	VB	0.06
20	6.87		0.00	0.000	11446	0.016	BB	0.08
21	7.39		0.00	0.000	36013	0.052	BV	0.11
22	7.46		0.00	0.000	35404	0.051	VB	0.10
23	7.83		0.00	0.000	50607	0.073	BV	0.20
24	8.22		0.00	0.000	51477	0.074	VV	0.21
25	8.60		0.00	0.000	32199	0.046	VB	0.26
26	9.00		0.00	0.000	33388	0.048	BV	0.21
27	9.38		0.00	0.000	26350	0.038	VV	0.11
28	9.60		0.00	0.000	2749	0.004	VV	0.04
29	9.78		0.00	0.000	12978	0.019	VB	0.20
30	10.11	CL4XYL	0.80	2.026	6225750	8.945	SBB	0.05
31	10.91		0.00	0.000	4940	0.007	TBV	0.05
32	11.02		0.00	0.000	5801	0.008	TVV	0.11
33	11.25		0.00	0.000	60226	0.087	TVV	0.05
34	11.43		0.00	0.000	3346	0.005	TVV	0.06
35	11.60	AR1016#1	0.24	0.615	42911	0.062	TVV	0.13
36	11.79		0.00	0.000	7045	0.010	TVV	0.04
37	11.86		0.00	0.000	7608	0.011	TVB	0.09
38	12.19		0.00	0.000	4721	0.007	BB	0.06
39	12.57		0.00	0.000	2023	0.003	BV	0.07
40	12.68	AR1016#2	0.17	0.441	54852	0.079	VV	0.09
41	12.86		0.00	0.000	5687	0.008	VV	0.06
42	12.99		0.00	0.000	11373	0.016	VV	0.05
43	13.08		0.00	0.000	4043	0.006	VV	0.05
44	13.24		0.00	0.000	12651	0.018	VV	0.05
45	13.33		0.00	0.000	21349	0.031	VV	0.06
46	13.49		0.00	0.000	14422	0.021	VV	0.05
47	13.57		0.00	0.000	18278	0.026	VV	0.09
48	13.92	AR1016#3	0.19	0.477	91077	0.131	VV	0.14
49	14.06		0.00	0.000	19267	0.028	VV	0.07
50	14.25	AR1016#4	0.19	0.497	61340	0.088	VV	0.09
51	14.54		0.00	0.000	27094	0.039	VV	0.09
52	14.71		0.00	0.000	70768	0.102	VV	0.06

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	14.82		0.00	0.000	26521	0.038	VV	0.05
54	14.92		0.00	0.000	20212	0.029	VV	0.07
55	15.13		0.00	0.000	14601	0.021	VV	0.06
56	15.25		0.00	0.000	2911	0.004	VB	0.06
57	15.38	AR1016#5	0.17	0.444	34566	0.050	BV	0.06
58	15.68		0.00	0.000	34029	0.049	VV	0.08
59	15.90		0.00	0.000	2607	0.004	VB	0.07
60	16.04		0.00	0.000	7290	0.010	BV	0.06
61	16.16		0.00	0.000	12807	0.018	VV	0.06
62	16.37		0.00	0.000	770889	1.108	VV	0.05
63	16.68		0.00	0.000	119935	0.172	VV	0.05
64	16.82		0.00	0.000	915709	1.316	VV	0.05
65	16.96		0.00	0.000	58331	0.084	VV	0.05
66	17.04		0.00	0.000	92555	0.133	VV	0.07
67	17.35		0.00	0.000	3446	0.005	VB	0.06
68	17.50		0.00	0.000	18877	0.027	BV	0.05
69	17.64		0.00	0.000	140887	0.202	VV	0.05
70	17.82		0.00	0.000	509757	0.732	VV	0.05
71	17.92		0.00	0.000	331552	0.476	VV	0.04
72	17.98	AR1260#1	7.66	19.526	1525420	2.192	VV	0.05
73	18.12		0.00	0.000	923529	1.327	VV	0.07
74	18.34		0.00	0.000	2796556	4.018	VV	0.05
75	18.67		0.00	0.000	632092	0.908	VV	0.05
76	18.82	AR1260#2	7.79	19.833	3362058	4.831	VV	0.05
77	19.20		0.00	0.000	3238075	4.653	VV	0.08
78	19.43		0.00	0.000	369619	0.531	VV	0.05
79	19.51		0.00	0.000	92007	0.132	VV	0.04
80	19.61		0.00	0.000	1402329	2.015	VV	0.04
81	19.65		0.00	0.000	3238140	4.653	VV	0.07
82	19.84	AR1260#3	7.94	20.215	2627346	3.775	VV	0.05
83	19.97		0.00	0.000	1566565	2.251	VV	0.05
84	20.24		0.00	0.000	638251	0.917	VV	0.05
85	20.40		0.00	0.000	89900	0.129	VV	0.04
86	20.52		0.00	0.000	2722256	3.911	VV	0.05
87	20.70		0.00	0.000	1472410	2.116	VV	0.05
88	20.83		0.00	0.000	768402	1.104	VV	0.05
89	20.93		0.00	0.000	842863	1.211	VV	0.09
90	21.11	AR1260#4	8.12	20.686	6403084	9.200	VV	0.05
91	21.29		0.00	0.000	243718	0.350	VV	0.07
92	21.44		0.00	0.000	254060	0.365	VB	0.05
93	21.88		0.00	0.000	104759	0.151	BV	0.05
94	22.04		0.00	0.000	1536251	2.207	VV	0.04
95	22.08	AR1260#5	5.16	13.134	2755531	3.959	VV	0.06
96	22.16		0.00	0.000	2305403	3.313	VV	0.11
97	22.77		0.00	0.000	97024	0.139	VV	0.06
98	22.89		0.00	0.000	90356	0.130	VB	0.07
99	23.20		0.00	0.000	44522	0.064	BV	0.06
100	23.30		0.00	0.000	789580	1.135	VV	0.06
101	23.54		0.00	0.000	15923	0.023	VV	0.09
102	23.80		0.00	0.000	1880007	2.701	SBB	0.07
103	23.92		0.00	0.000	19802	0.028	TBB	0.06
104	24.98		0.00	0.000	382388	0.549	BB	0.07
105	25.60		0.00	0.000	1958	0.003	BB	0.10
106	26.04	CL10BP	0.83	2.106	5855446	8.413	BB	0.08
107	28.24		0.00	0.000	19527	0.028	BV	0.13
108	28.54		0.00	0.000	30809	0.044	VV	0.12
109	28.72		0.00	0.000	20043	0.029	VB	0.13

Total Area = 6.95967E+07 Total Height = 1.626016E+07 Total Amount = 39.25524

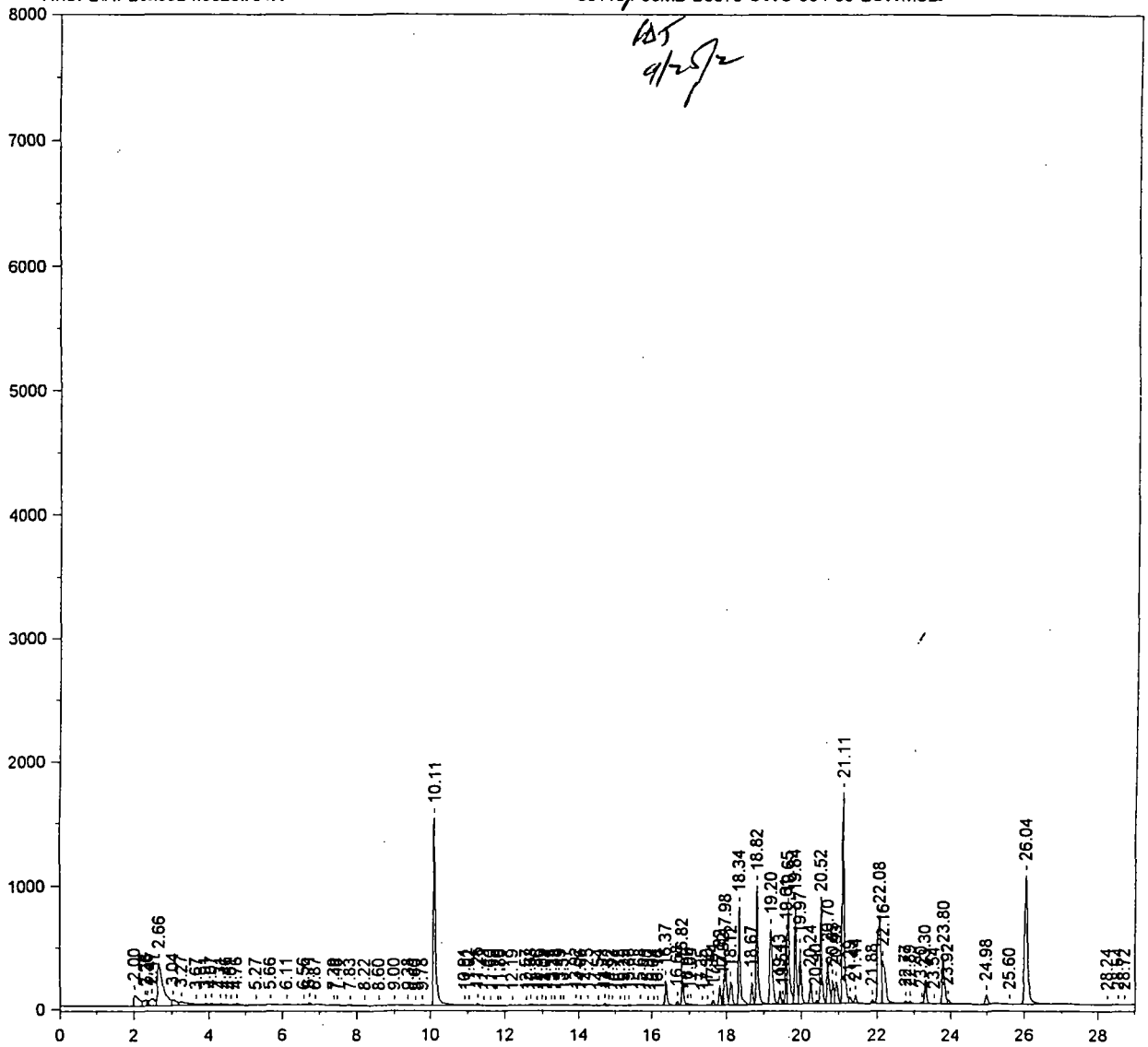
50168

Chrom Perfect Chromatogram Report

FSS-008-04-ESWMSD

— H:\CP2\HP2\M0924.0026.RAW 301103-06MD B8079 ~~OWS-004-05-ESWMSD~~

RDT 9/25/02



After reintegration

RDT 9/25/02

VBR 9/30/02

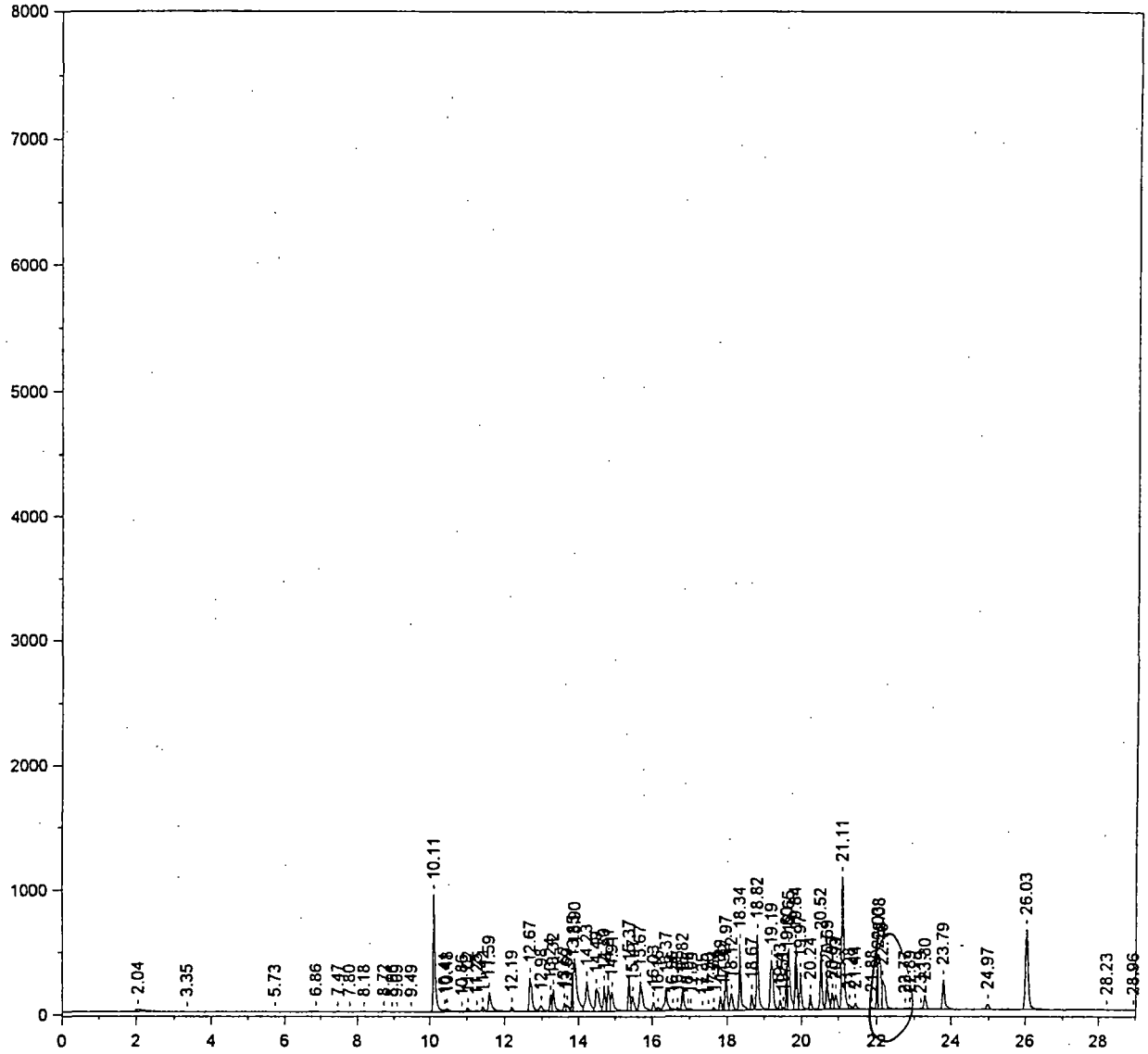
50169

Pan ADT 9/25/2

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0924.0011.RAW

5PPM AR1660 CONTINUING CALIBRATION 1004369



Primary Column

Before reintegration
Peak not split in initial calibration.
ADT
9/25/2

50266

Sample Name = **5PPM AR1660 CONTINUING CALIBRATION 1004369**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0924.0011.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/24/02 8:16:45 PM
Method Version = 619
Calibration Version = 14

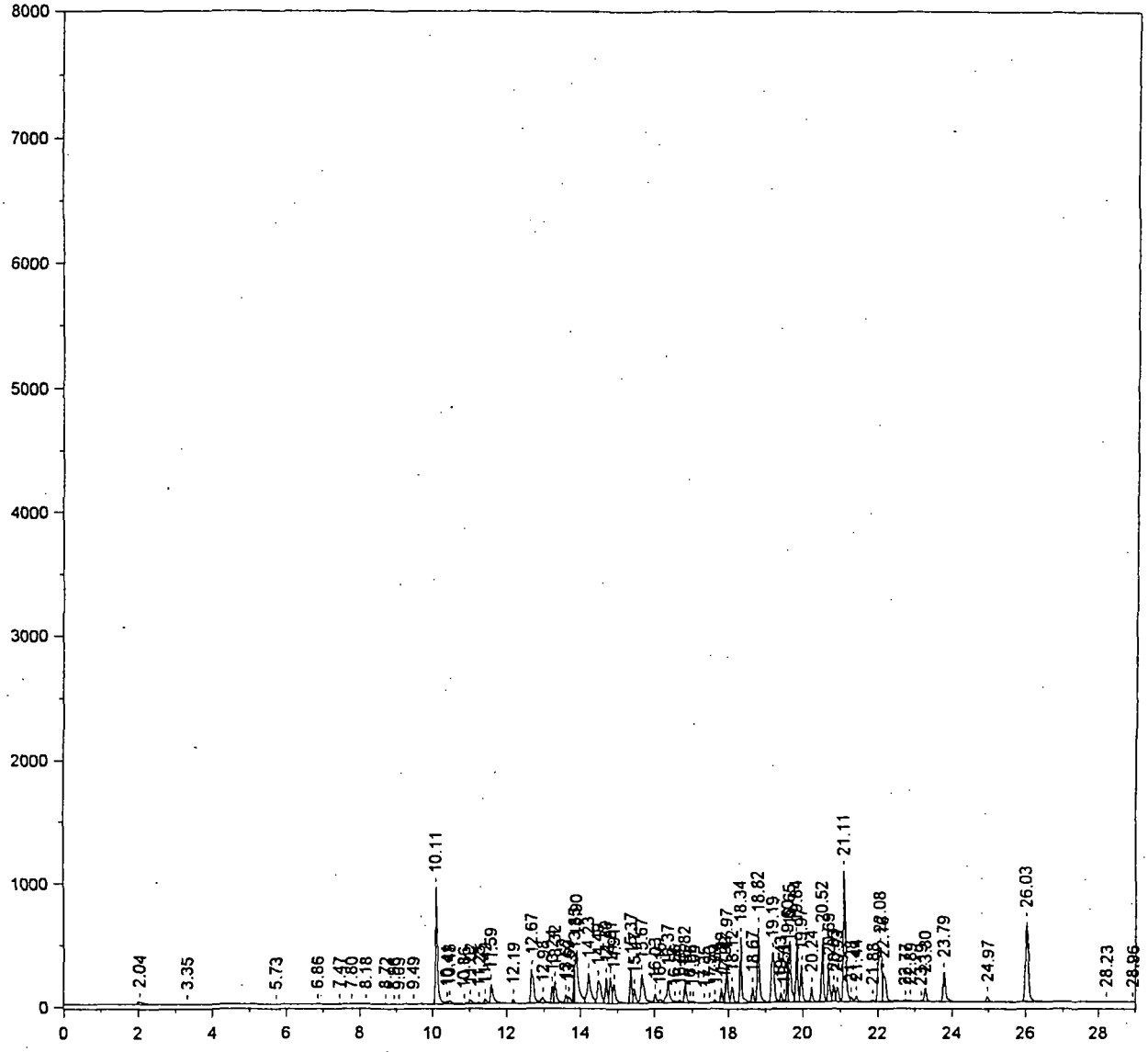
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.04		0.00	0.000	266847	0.456	BV	0.22
2	3.35		0.00	0.000	3940	0.007	VB	0.43
3	5.73		0.00	0.000	2379	0.004	BB	0.33
4	6.86		0.00	0.000	19492	0.033	BB	0.07
5	7.47		0.00	0.000	7869	0.013	BB	0.07
6	7.80		0.00	0.000	1116	0.002	BB	0.09
7	8.18		0.00	0.000	452	0.001	BB	0.08
8	8.72		0.00	0.000	11585	0.020	BV	0.08
9	8.96		0.00	0.000	3760	0.006	VV	0.08
10	9.09		0.00	0.000	4556	0.008	VV	0.09
11	9.49		0.00	0.000	1576	0.003	VB	0.15
12	10.11	CL4XYL	0.51	0.984	3978055	6.796	SBB	0.05
13	10.41		0.00	0.000	14913	0.025	TBV	0.04
14	10.48		0.00	0.000	71205	0.122	TVV	0.06
15	10.86		0.00	0.000	2339	0.004	TVV	0.07
16	11.02		0.00	0.000	147749	0.252	TVV	0.07
17	11.25		0.00	0.000	42137	0.072	TVV	0.06
18	11.42		0.00	0.000	166852	0.285	TVV	0.07
19	11.59	AR1016#1	5.20	10.058	922905	1.577	TVV	0.07
20	12.19		0.00	0.000	137788	0.235	TVB	0.05
21	12.67	AR1016#2	4.90	9.475	1550373	2.649	BV	0.09
22	12.98		0.00	0.000	324505	0.554	VV	0.08
23	13.24		0.00	0.000	427922	0.731	VV	0.05
24	13.32		0.00	0.000	803007	1.372	VV	0.06
25	13.62		0.00	0.000	258875	0.442	VV	0.07
26	13.69		0.00	0.000	262752	0.449	VV	0.07
27	13.85		0.00	0.000	752362	1.285	VV	0.04
28	13.90	AR1016#3	5.33	10.323	2595716	4.435	VV	0.08
29	14.23	AR1016#4	5.38	10.405	1691464	2.890	VV	0.07
30	14.49		0.00	0.000	1237284	2.114	VV	0.10
31	14.70		0.00	0.000	772942	1.321	VV	0.05
32	14.81		0.00	0.000	812479	1.388	VV	0.05
33	14.91		0.00	0.000	906315	1.548	VV	0.08
34	15.37	AR1016#5	5.01	9.696	994153	1.698	VV	0.05
35	15.47		0.00	0.000	536657	0.917	VV	0.06
36	15.67		0.00	0.000	1563578	2.671	VV	0.09
37	16.03		0.00	0.000	310204	0.530	VV	0.05
38	16.16		0.00	0.000	169145	0.289	VV	0.06
39	16.37		0.00	0.000	996431	1.702	VV	0.05
40	16.56		0.00	0.000	75329	0.129	VV	0.06
41	16.68		0.00	0.000	107870	0.184	VV	0.05
42	16.82		0.00	0.000	663606	1.134	VV	0.05
43	16.96		0.00	0.000	59179	0.101	VV	0.04
44	17.04		0.00	0.000	93997	0.161	VV	0.07
45	17.35		0.00	0.000	3040	0.005	VB	0.07
46	17.50		0.00	0.000	12541	0.021	BB	0.05
47	17.64		0.00	0.000	85756	0.147	BV	0.05
48	17.82		0.00	0.000	361438	0.617	VV	0.05
49	17.92		0.00	0.000	199206	0.340	VV	0.03
50	17.97	AR1260#1	5.38	10.411	1070439	1.829	VV	0.05
51	18.12		0.00	0.000	648195	1.107	VV	0.07
52	18.34		0.00	0.000	1977263	3.378	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.67		0.00	0.000	434225	0.742	VV	0.05
54	18.82	AR1260#2	5.41	10.470	2335885	3.991	VV	0.05
55	19.19		0.00	0.000	2219589	3.792	VV	0.09
56	19.43		0.00	0.000	260623	0.445	VV	0.05
57	19.51		0.00	0.000	62004	0.106	VV	0.04
58	19.60		0.00	0.000	884222	1.511	VV	0.04
59	19.65		0.00	0.000	2240401	3.828	VV	0.07
60	19.84	AR1260#3	5.43	10.506	1797144	3.070	VV	0.05
61	19.97		0.00	0.000	1088412	1.859	VV	0.05
62	20.24		0.00	0.000	417274	0.713	VV	0.05
63	20.52		0.00	0.000	1831050	3.128	VV	0.05
64	20.69		0.00	0.000	1004502	1.716	VV	0.05
65	20.83		0.00	0.000	483417	0.826	VV	0.05
66	20.93		0.00	0.000	551431	0.942	VV	0.07
67	21.11	AR1260#4	5.28	10.220	4163654	7.113	VV	0.05
68	21.28		0.00	0.000	175090	0.299	VV	0.06
69	21.44		0.00	0.000	174659	0.298	VB	0.05
70	21.88		0.00	0.000	64711	0.111	BV	0.06
71	22.03		0.00	0.000	998841	1.706	VV	0.04
72	22.08	AR1260#5	3.33	6.437	1777284	3.036	VV	0.06
73	22.16		0.00	0.000	1554165	2.655	VV	0.11
74	22.77		0.00	0.000	56144	0.096	VV	0.07
75	22.89		0.00	0.000	62758	0.107	VV	0.07
76	23.19		0.00	0.000	29737	0.051	VV	0.06
77	23.30		0.00	0.000	515544	0.881	VV	0.06
78	23.79		0.00	0.000	1248788	2.133	VB	0.07
79	24.97		0.00	0.000	247508	0.423	BB	0.07
80	26.03	CL10BP	0.53	1.016	3718746	6.353	BV	0.08
81	28.23		0.00	0.000	2773	0.005	VB	0.16
82	28.96		0.00	0.000	521	0.001	BB	0.08

Total Area = 5.853263E+07 Total Height = 1.34404E+07 Total Amount = 51.66533

— H:\CP2\HP2\M0924.0011.RAW

5PPM AR1660 CONTINUING CALIBRATION 1004369



After investigation
KST
9/25/

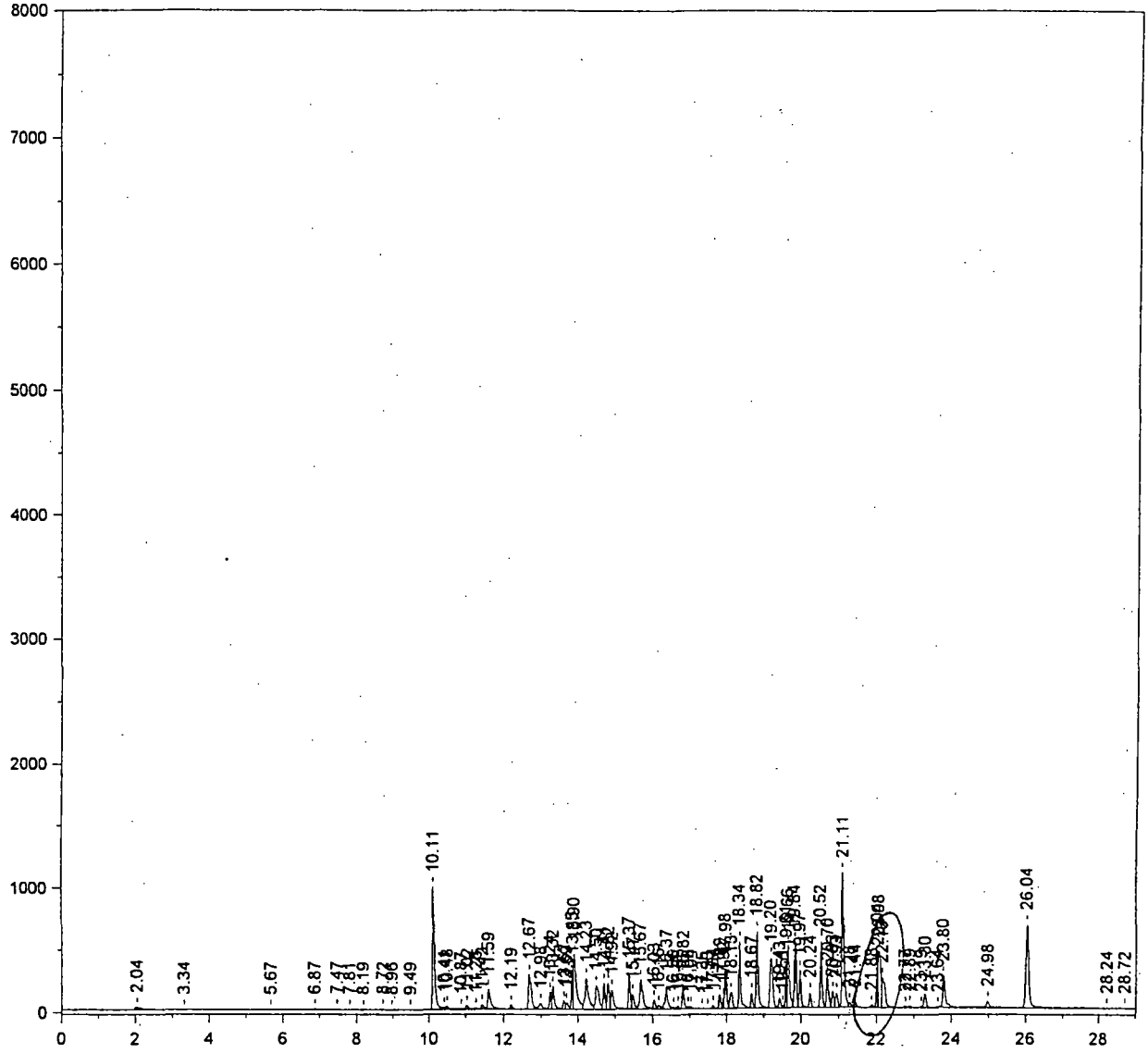
50269

Pass KST 9/25/02

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0924.0022.RAW

5PPM AR1660 CONTINUING CALIBRATION 1004369



Primary Colu

Before reintegration
Peak not split in initial calibration
KST
9/25/02

50274

Sample Name = **5PPM AR1660 CONTINUING CALIBRATION 1004369**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0924.0022.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/25/02 3:22:48 AM
Method Version = 619
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.04		0.00	0.000	244426	0.412	BV	0.22
2	3.34		0.00	0.000	3007	0.005	VB	0.35
3	5.67		0.00	0.000	1176	0.002	BB	0.12
4	6.87		0.00	0.000	19594	0.033	BB	0.07
5	7.47		0.00	0.000	8442	0.014	BV	0.07
6	7.81		0.00	0.000	2052	0.003	VV	0.10
7	8.19		0.00	0.000	371	0.001	VB	0.07
8	8.72		0.00	0.000	10900	0.018	BV	0.08
9	8.96		0.00	0.000	1234	0.002	VB	0.08
10	9.49		0.00	0.000	1033	0.002	BB	0.16
11	10.11	CL4XYL	0.53	1.009	4126275	6.947	SBB	0.05
12	10.41		0.00	0.000	15407	0.026	TBV	0.04
13	10.48		0.00	0.000	72304	0.122	TVV	0.06
14	10.87		0.00	0.000	1790	0.003	TVV	0.08
15	11.02		0.00	0.000	153875	0.259	TVV	0.07
16	11.25		0.00	0.000	43148	0.073	TVV	0.06
17	11.42		0.00	0.000	172033	0.290	TVV	0.07
18	11.59	AR1016#1	5.31	10.158	942248	1.586	TVV	0.07
19	12.19		0.00	0.000	140424	0.236	TVB	0.05
20	12.67	AR1016#2	4.98	9.539	1578024	2.657	BV	0.09
21	12.98		0.00	0.000	340397	0.573	VV	0.08
22	13.24		0.00	0.000	441744	0.744	VV	0.05
23	13.32		0.00	0.000	811581	1.366	VV	0.06
24	13.62		0.00	0.000	262627	0.442	VV	0.07
25	13.69		0.00	0.000	270651	0.456	VV	0.07
26	13.85		0.00	0.000	802649	1.351	VV	0.04
27	13.90	AR1016#3	5.37	10.284	2614221	4.401	VV	0.08
28	14.23	AR1016#4	5.44	10.421	1712743	2.883	VV	0.07
29	14.50		0.00	0.000	1254363	2.112	VV	0.09
30	14.71		0.00	0.000	771996	1.300	VV	0.05
31	14.82		0.00	0.000	816711	1.375	VV	0.05
32	14.92		0.00	0.000	919927	1.549	VV	0.08
33	15.37	AR1016#5	5.07	9.707	1006200	1.694	VV	0.05
34	15.47		0.00	0.000	530277	0.893	VV	0.06
35	15.67		0.00	0.000	1574160	2.650	VV	0.09
36	16.03		0.00	0.000	311526	0.524	VV	0.05
37	16.16		0.00	0.000	168079	0.283	VV	0.06
38	16.37		0.00	0.000	1004812	1.692	VV	0.06
39	16.56		0.00	0.000	73882	0.124	VV	0.06
40	16.68		0.00	0.000	108186	0.182	VV	0.05
41	16.82		0.00	0.000	663535	1.117	VV	0.05
42	16.96		0.00	0.000	59334	0.100	VV	0.04
43	17.04		0.00	0.000	93563	0.158	VV	0.07
44	17.35		0.00	0.000	3173	0.005	VB	0.07
45	17.50		0.00	0.000	12709	0.021	BB	0.05
46	17.64		0.00	0.000	86554	0.146	BV	0.05
47	17.82		0.00	0.000	362012	0.609	VV	0.05
48	17.92		0.00	0.000	204060	0.344	VV	0.03
49	17.98	AR1260#1	5.36	10.265	1067054	1.796	VV	0.05
50	18.13		0.00	0.000	643692	1.084	VV	0.07
51	18.34		0.00	0.000	1972597	3.321	VV	0.05
52	18.67		0.00	0.000	432467	0.728	VV	0.05

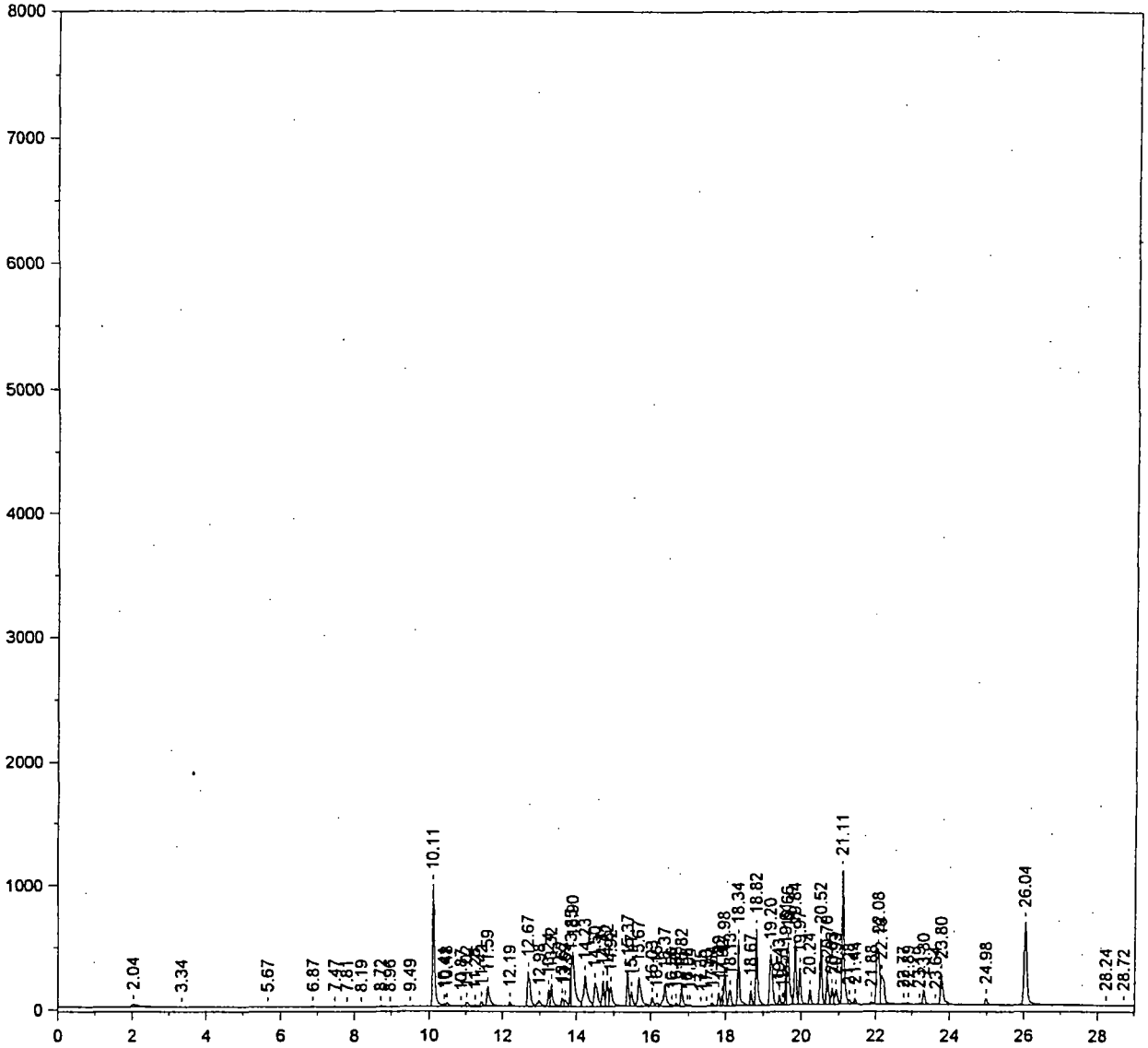
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.82	AR1260#2	5.40	10.346	2333597	3.929	VV	0.05
54	19.20		0.00	0.000	2212552	3.725	VV	0.09
55	19.43		0.00	0.000	258057	0.434	VV	0.05
56	19.51		0.00	0.000	60608	0.102	VV	0.04
57	19.61		0.00	0.000	914870	1.540	VV	0.04
58	19.66		0.00	0.000	2222802	3.742	VV	0.07
59	19.84	AR1260#3	5.44	10.423	1802423	3.034	VV	0.05
60	19.97		0.00	0.000	1093540	1.841	VV	0.05
61	20.24		0.00	0.000	431117	0.726	VB	0.05
62	20.52		0.00	0.000	1844958	3.106	BV	0.05
63	20.70		0.00	0.000	1001376	1.686	VV	0.05
64	20.83		0.00	0.000	495256	0.834	VV	0.05
65	20.93		0.00	0.000	550575	0.927	VV	0.07
66	21.11	AR1260#4	5.37	10.285	4236010	7.132	VV	0.05
67	21.28		0.00	0.000	166267	0.280	VV	0.06
68	21.44		0.00	0.000	162679	0.274	VB	0.05
69	21.88		0.00	0.000	68272	0.115	BV	0.05
70	22.04		0.00	0.000	1033265	1.740	VV	0.04
71	22.08	AR1260#5	3.41	6.522	1820666	3.065	VV	0.06
72	22.16		0.00	0.000	1575477	2.652	VV	0.11
73	22.77		0.00	0.000	59409	0.100	VV	0.07
74	22.89		0.00	0.000	63654	0.107	VV	0.07
75	23.19		0.00	0.000	31947	0.054	VV	0.06
76	23.30		0.00	0.000	526256	0.886	VV	0.06
77	23.64		0.00	0.000	46038	0.078	VV	0.13
78	23.80		0.00	0.000	1337154	2.251	VV	0.07
79	24.98		0.00	0.000	259428	0.437	VB	0.07
80	26.04	CL10BP	0.54	1.041	3850817	6.483	BV	0.08
81	28.24		0.00	0.000	3371	0.006	VV	0.12
82	28.72		0.00	0.000	684	0.001	VB	0.11

Total Area = 5.939837E+07 Total Height = 1.368894E+07 Total Amount = 52.23206

50276

— H:\CP2\HP2\M0924.0022.BND

5PPM AR1660 CONTINUING CALIBRATION 1004369



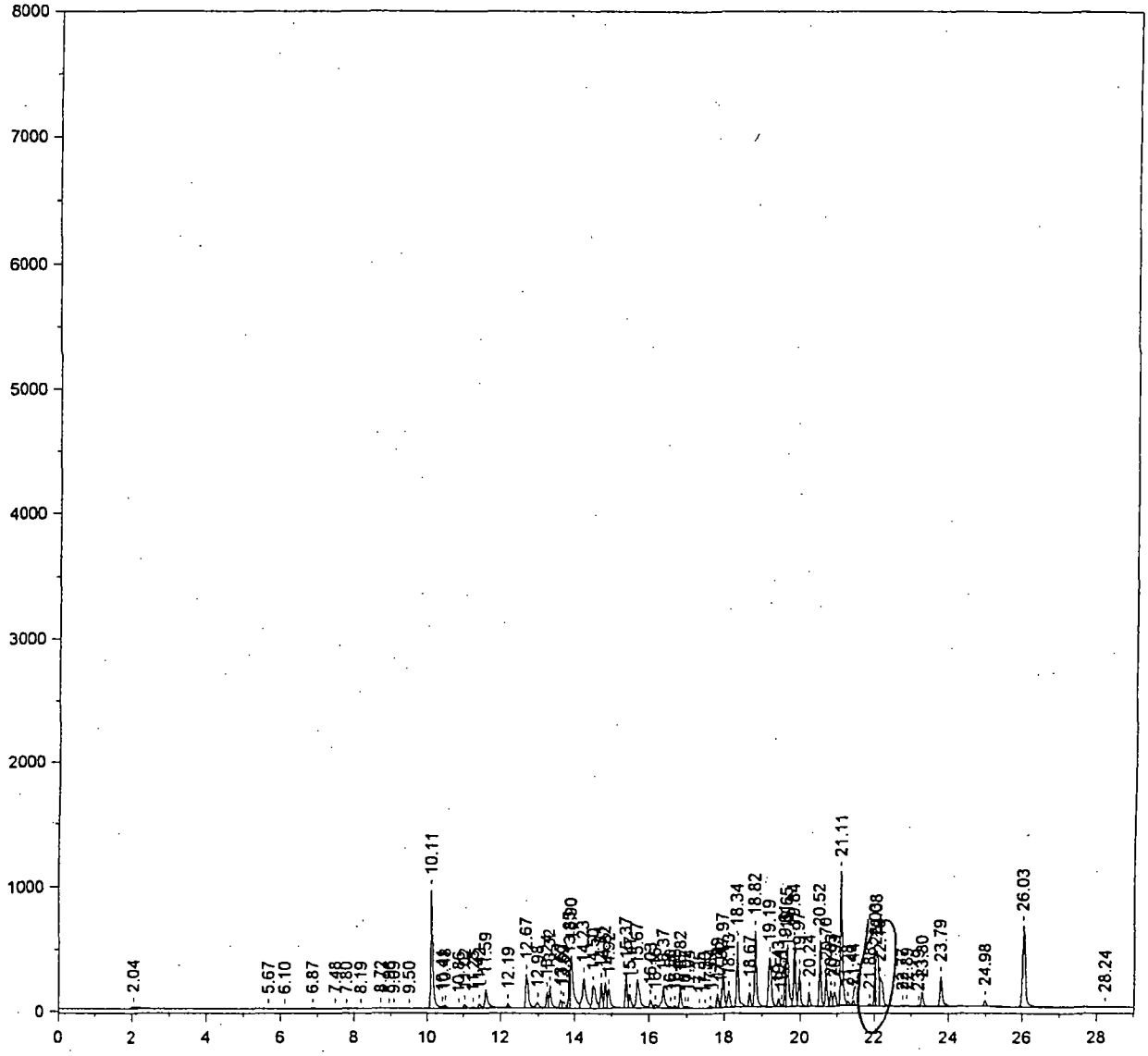
After reintegration
KDT
9/25/02

50277

Par ADT 9/25/02

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0924.0029.RAW 5PPM AR1660 CONTINUING CALIBRATION 1004369



Primary Column

Before reintegration
peak not split in initial calibration
ADT
9/25/02

50282

Sample Name = **5PPM AR1660 CONTINUING CALIBRATION 1004369**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0924.0029.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

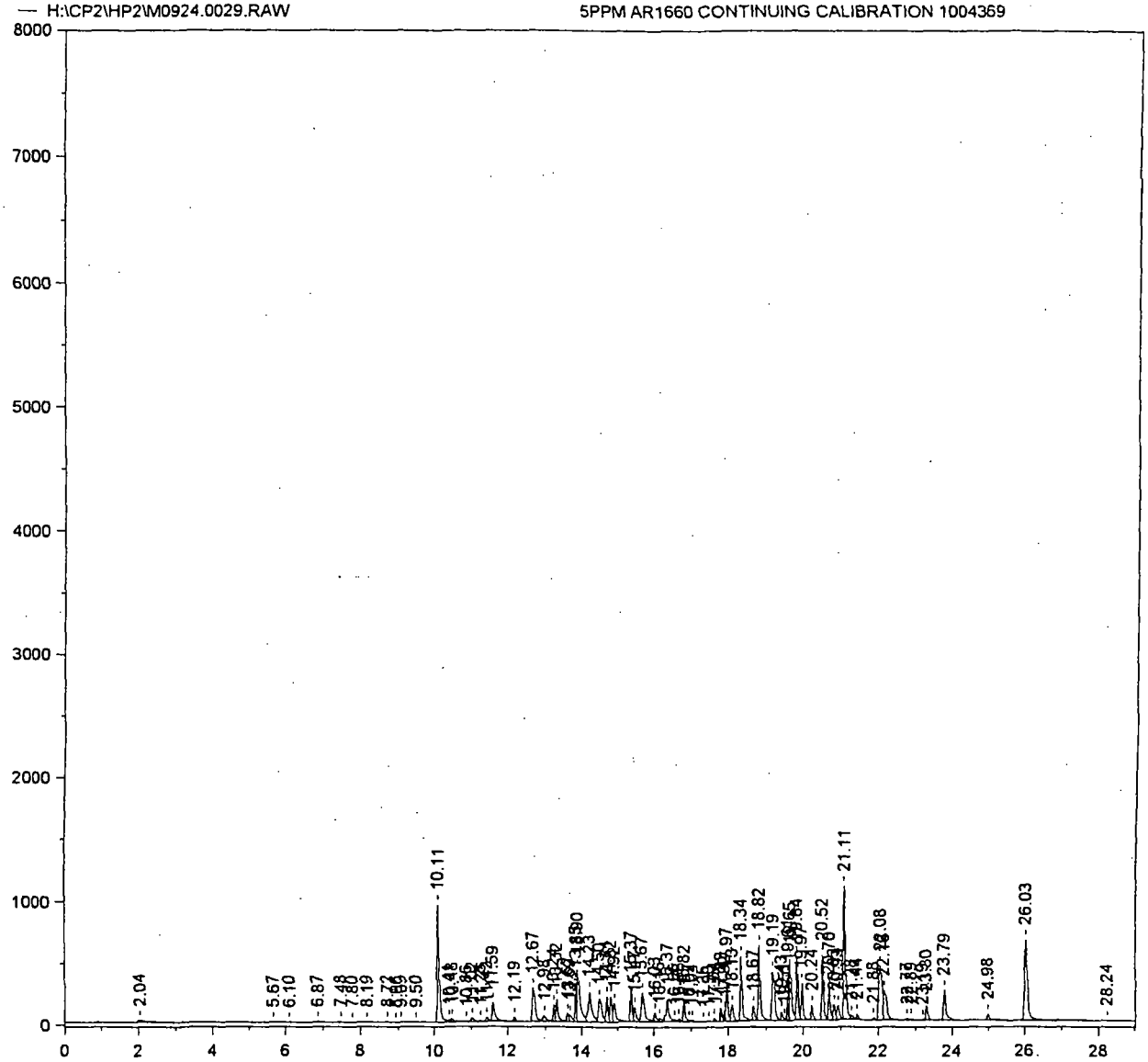
Date Taken (end) = 9/25/02 8:36:48 AM
Method Version = 619
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.04		0.00	0.000	223345	0.378	BB	0.22
2	5.67		0.00	0.000	679	0.001	BB	0.12
3	6.10		0.00	0.000	258	0.000	BB	0.07
4	6.87		0.00	0.000	18997	0.032	BB	0.07
5	7.48		0.00	0.000	8273	0.014	BV	0.07
6	7.80		0.00	0.000	2147	0.004	VV	0.10
7	8.19		0.00	0.000	410	0.001	VB	0.08
8	8.72		0.00	0.000	12209	0.021	BV	0.08
9	8.96		0.00	0.000	3338	0.006	VV	0.08
10	9.09		0.00	0.000	4270	0.007	VV	0.09
11	9.50		0.00	0.000	2084	0.004	VB	0.18
12	10.11	CL4XYL	0.52	0.988	4056324	6.867	SBB	0.05
13	10.41		0.00	0.000	15114	0.026	TBV	0.04
14	10.48		0.00	0.000	70751	0.120	TVV	0.06
15	10.86		0.00	0.000	1034	0.002	TVV	0.08
16	11.02		0.00	0.000	151626	0.257	TVV	0.07
17	11.25		0.00	0.000	43818	0.074	TVV	0.06
18	11.42		0.00	0.000	170062	0.288	TVV	0.07
19	11.59	AR1016#1	5.36	10.207	951199	1.610	TVV	0.07
20	12.19		0.00	0.000	142606	0.241	TVB	0.05
21	12.67	AR1016#2	4.96	9.455	1571217	2.660	BV	0.09
22	12.98		0.00	0.000	335675	0.568	VV	0.08
23	13.24		0.00	0.000	438671	0.743	VV	0.05
24	13.32		0.00	0.000	809685	1.371	VV	0.06
25	13.62		0.00	0.000	257890	0.437	VV	0.07
26	13.69		0.00	0.000	270453	0.458	VV	0.07
27	13.85		0.00	0.000	779615	1.320	VV	0.04
28	13.90	AR1016#3	5.37	10.230	2612529	4.423	VV	0.08
29	14.23	AR1016#4	5.46	10.402	1717389	2.908	VV	0.07
30	14.50		0.00	0.000	1252825	2.121	VV	0.10
31	14.71		0.00	0.000	776452	1.315	VV	0.05
32	14.82		0.00	0.000	818795	1.386	VV	0.05
33	14.92		0.00	0.000	929171	1.573	VV	0.08
34	15.37	AR1016#5	5.08	9.688	1008827	1.708	VV	0.05
35	15.47		0.00	0.000	537353	0.910	VV	0.06
36	15.67		0.00	0.000	1573490	2.664	VV	0.09
37	16.03		0.00	0.000	313276	0.530	VV	0.05
38	16.16		0.00	0.000	167475	0.284	VV	0.06
39	16.37		0.00	0.000	1003415	1.699	VV	0.06
40	16.56		0.00	0.000	75560	0.128	VV	0.06
41	16.68		0.00	0.000	109154	0.185	VV	0.05
42	16.82		0.00	0.000	666016	1.128	VV	0.05
43	16.97		0.00	0.000	59472	0.101	VV	0.04
44	17.04		0.00	0.000	94214	0.160	VV	0.07
45	17.35		0.00	0.000	3303	0.006	VB	0.07
46	17.50		0.00	0.000	12722	0.022	BB	0.05
47	17.64		0.00	0.000	86767	0.147	BV	0.05
48	17.82		0.00	0.000	363326	0.615	VV	0.05
49	17.92		0.00	0.000	190165	0.322	VV	0.03
50	17.97	AR1260#1	5.44	10.364	1082231	1.832	VV	0.05
51	18.13		0.00	0.000	647925	1.097	VV	0.07
52	18.34		0.00	0.000	1981565	3.355	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.67		0.00	0.000	436858	0.740	VV	0.05
54	18.82	AR1260#2	5.44	10.369	2349428	3.978	VV	0.05
55	19.19		0.00	0.000	2222043	3.762	VV	0.09
56	19.43		0.00	0.000	259432	0.439	VV	0.05
57	19.51		0.00	0.000	64962	0.110	VV	0.04
58	19.61		0.00	0.000	926799	1.569	VV	0.04
59	19.65		0.00	0.000	2212647	3.746	VV	0.07
60	19.84	AR1260#3	5.46	10.411	1808556	3.062	VV	0.05
61	19.97		0.00	0.000	1097170	1.858	VV	0.05
62	20.24		0.00	0.000	425168	0.720	VB	0.05
63	20.52		0.00	0.000	1845215	3.124	BV	0.05
64	20.70		0.00	0.000	1002808	1.698	VV	0.05
65	20.83		0.00	0.000	483434	0.818	VV	0.05
66	20.93		0.00	0.000	561921	0.951	VV	0.07
67	21.11	AR1260#4	5.35	10.192	4216997	7.139	VV	0.05
68	21.28		0.00	0.000	170688	0.289	VV	0.07
69	21.44		0.00	0.000	160878	0.272	VB	0.05
70	21.88		0.00	0.000	66756	0.113	BV	0.05
71	22.03		0.00	0.000	968863	1.640	VV	0.04
72	22.08	AR1260#5	3.50	6.669	1870299	3.166	VV	0.06
73	22.16		0.00	0.000	1510372	2.557	VB	0.10
74	22.77		0.00	0.000	46880	0.079	BV	0.07
75	22.89		0.00	0.000	52819	0.089	VB	0.07
76	23.19		0.00	0.000	29369	0.050	BV	0.06
77	23.30		0.00	0.000	522980	0.885	VV	0.06
78	23.79		0.00	0.000	1267625	2.146	VB	0.07
79	24.98		0.00	0.000	254527	0.431	BB	0.07
80	26.03	CL10BP	0.54	1.024	3803474	6.439	BV	0.08
81	28.24		0.00	0.000	2686	0.005	VB	0.14

Total Area = 5.906682E+07 Total Height = 1.356569E+07 Total Amount = 52.47007

— H:\CP2\HP2\M0924.0029.RAW 5PPM AR1660 CONTINUING CALIBRATION 1004369



After reintegration
AST
9/25/02

50285

PCB's-8082

ARDL REPORT NO 301104

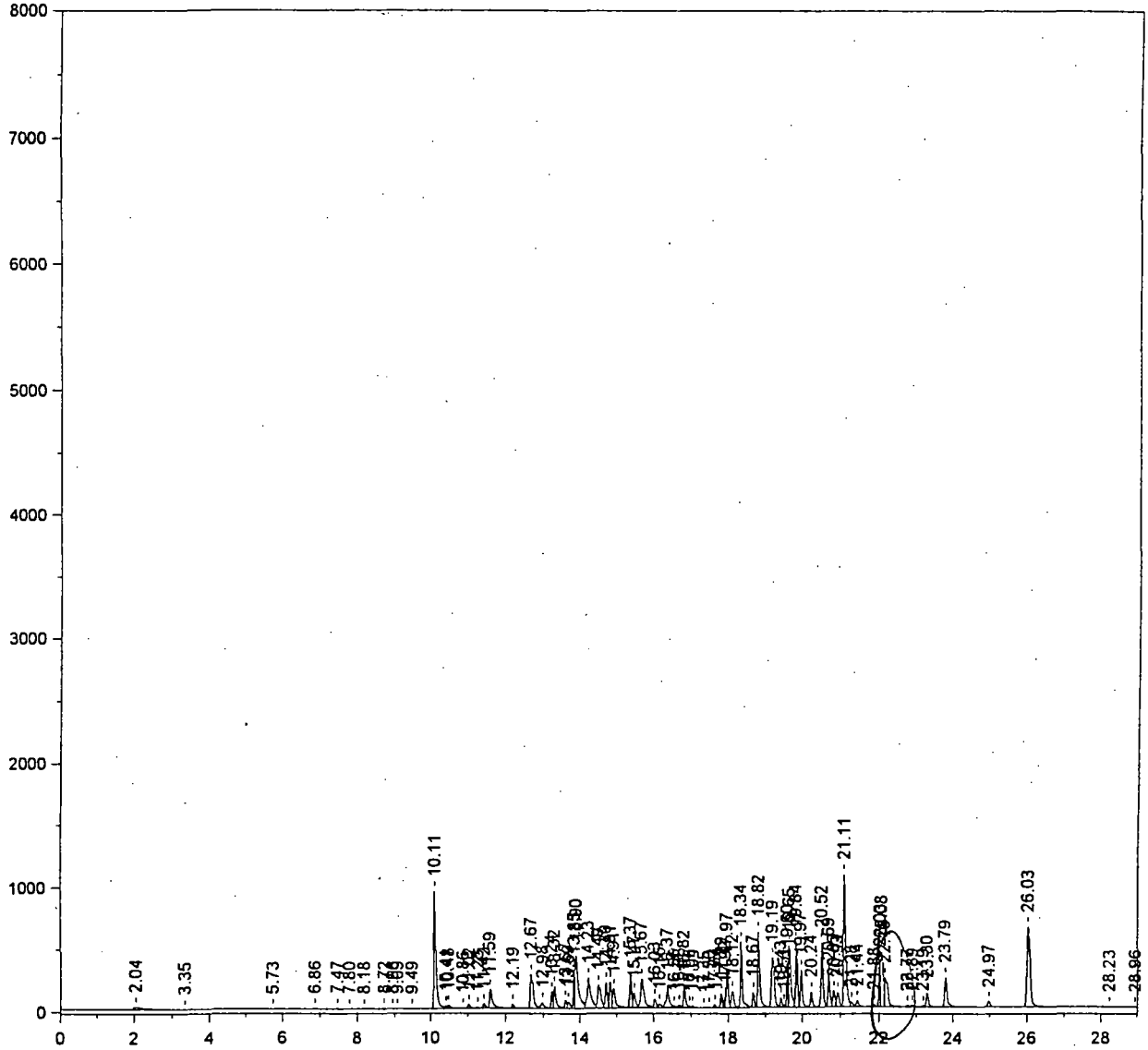
Volume 5

60000

Chrom Perfect Chromatogram Report

Pam PDT 9/25/2

— H:\CP2\HP2\M0924.0011.RAW 5PPM AR1660 CONTINUING CALIBRATION 1004369



Primary Column

Before reintegration
Peak not split in initial calibration
PDT
9/25/2

60147

Sample Name = **5PPM AR1660 CONTINUING CALIBRATION 1004369**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0924.0011.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/24/02 8:16:45 PM
Method Version = 619
Calibration Version = 14

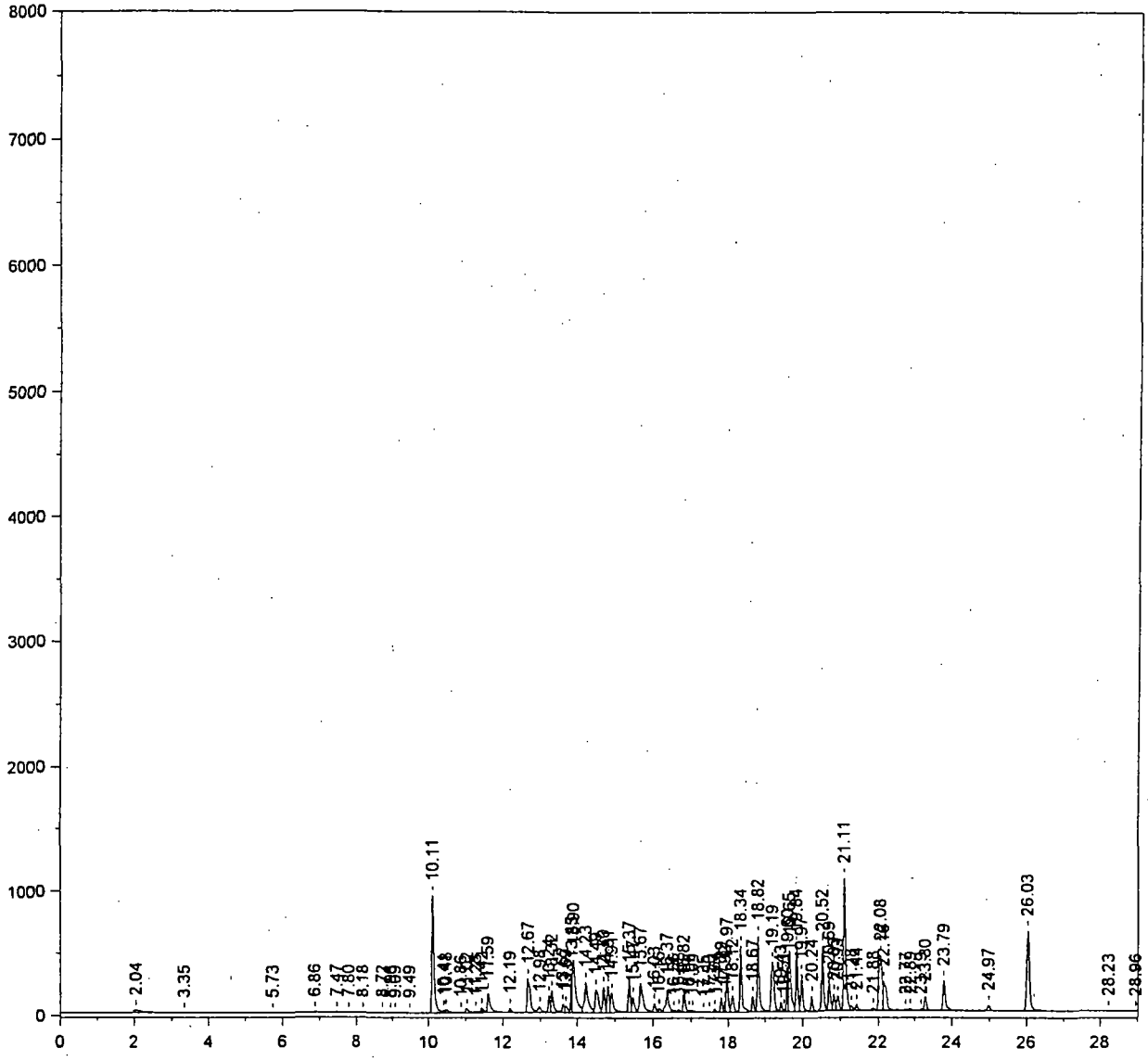
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.04		0.00	0.000	266847	0.456	BV	0.22
2	3.35		0.00	0.000	3940	0.007	VB	0.43
3	5.73		0.00	0.000	2379	0.004	BB	0.33
4	6.86		0.00	0.000	19492	0.033	BB	0.07
5	7.47		0.00	0.000	7869	0.013	BB	0.07
6	7.80		0.00	0.000	1116	0.002	BB	0.09
7	8.18		0.00	0.000	452	0.001	BB	0.08
8	8.72		0.00	0.000	11585	0.020	BV	0.08
9	8.96		0.00	0.000	3760	0.006	VV	0.08
10	9.09		0.00	0.000	4556	0.008	VV	0.09
11	9.49		0.00	0.000	1576	0.003	VB	0.15
12	10.11	CL4XYL	0.51	0.984	3978055	6.796	SBB	0.05
13	10.41		0.00	0.000	14913	0.025	TBV	0.04
14	10.48		0.00	0.000	71205	0.122	TVV	0.06
15	10.86		0.00	0.000	2339	0.004	TVV	0.07
16	11.02		0.00	0.000	147749	0.252	TVV	0.07
17	11.25		0.00	0.000	42137	0.072	TVV	0.06
18	11.42		0.00	0.000	166852	0.285	TVV	0.07
19	11.59	AR1016#1	5.20	10.058	922905	1 577	TVV	0.07
20	12.19		0.00	0.000	137788	0.235	TVB	0.05
21	12.67	AR1016#2	4.90	9.475	1550373	2.649	BV	0.09
22	12.98		0.00	0.000	324505	0.554	VV	0.08
23	13.24		0.00	0.000	427922	0.731	VV	0.05
24	13.32		0.00	0.000	803007	1.372	VV	0.06
25	13.62		0.00	0.000	258875	0.442	VV	0.07
26	13.69		0.00	0.000	262752	0.449	VV	0.07
27	13.85		0.00	0.000	752362	1.285	VV	0.04
28	13.90	AR1016#3	5.33	10.323	2595716	4.435	VV	0.08
29	14.23	AR1016#4	5.38	10.405	1691464	2.890	VV	0.07
30	14.49		0.00	0.000	1237284	2.114	VV	0.10
31	14.70		0.00	0.000	772942	1.321	VV	0.05
32	14.81		0.00	0.000	812479	1.388	VV	0.05
33	14.91		0.00	0.000	906315	1.548	VV	0.08
34	15.37	AR1016#5	5.01	9.696	994153	1.698	VV	0.05
35	15.47		0.00	0.000	536657	0.917	VV	0.06
36	15.67		0.00	0.000	1563578	2.671	VV	0.09
37	16.03		0.00	0.000	310204	0.530	VV	0.05
38	16.16		0.00	0.000	169145	0.289	VV	0.06
39	16.37		0.00	0.000	996431	1.702	VV	0.05
40	16.56		0.00	0.000	75329	0.129	VV	0.06
41	16.68		0.00	0.000	107870	0.184	VV	0.05
42	16.82		0.00	0.000	663606	1.134	VV	0.05
43	16.96		0.00	0.000	59179	0.101	VV	0.04
44	17.04		0.00	0.000	93997	0.161	VV	0.07
45	17.35		0.00	0.000	3040	0.005	VB	0.07
46	17.50		0.00	0.000	12541	0.021	BB	0.05
47	17.64		0.00	0.000	85756	0.147	BV	0.05
48	17.82		0.00	0.000	361438	0.617	VV	0.05
49	17.92		0.00	0.000	199206	0.340	VV	0.03
50	17.97	AR1260#1	5.38	10.411	1070439	1.829	VV	0.05
51	18.12		0.00	0.000	648195	1.107	VV	0.07
52	18.34		0.00	0.000	1977263	3.378	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.67		0.00	0.000	434225	0.742	VV	0.05
54	18.82	AR1260#2	5.41	10.470	2335885	3.991	VV	0.05
55	19.19		0.00	0.000	2219589	3.792	VV	0.09
56	19.43		0.00	0.000	260623	0.445	VV	0.05
57	19.51		0.00	0.000	62004	0.106	VV	0.04
58	19.60		0.00	0.000	884222	1.511	VV	0.04
59	19.65		0.00	0.000	2240401	3.828	VV	0.07
60	19.84	AR1260#3	5.43	10.506	1797144	3.070	VV	0.05
61	19.97		0.00	0.000	1088412	1.859	VV	0.05
62	20.24		0.00	0.000	417274	0.713	VV	0.05
63	20.52		0.00	0.000	1831050	3.128	VV	0.05
64	20.69		0.00	0.000	1004502	1.716	VV	0.05
65	20.83		0.00	0.000	483417	0.826	VV	0.05
66	20.93		0.00	0.000	551431	0.942	VV	0.07
67	21.11	AR1260#4	5.28	10.220	4163654	7.113	VV	0.05
68	21.28		0.00	0.000	175090	0.299	VV	0.06
69	21.44		0.00	0.000	174659	0.298	VB	0.05
70	21.88		0.00	0.000	64711	0.111	BV	0.06
71	22.03		0.00	0.000	998841	1.706	VV	0.04
72	22.08	AR1260#5	3.33	6.437	1777284	3.036	VV	0.06
73	22.16		0.00	0.000	1554165	2.655	VV	0.11
74	22.77		0.00	0.000	56144	0.096	VV	0.07
75	22.89		0.00	0.000	62758	0.107	VV	0.07
76	23.19		0.00	0.000	29737	0.051	VV	0.06
77	23.30		0.00	0.000	515544	0.881	VV	0.06
78	23.79		0.00	0.000	1248788	2.133	VB	0.07
79	24.97		0.00	0.000	247508	0.423	BB	0.07
80	26.03	CL10BP	0.53	1.016	3718746	6.353	BV	0.08
81	28.23		0.00	0.000	2773	0.005	VB	0.16
82	28.96		0.00	0.000	521	0.001	BB	0.08

Total Area = 5.853263E+07 Total Height = 1.34404E+07 Total Amount = 51.66533

— H:\CP2\HP2\M0924.0011.RAW

5PPM AR1660 CONTINUING CALIBRATION 1004369



After investigation
KST
9/25/02

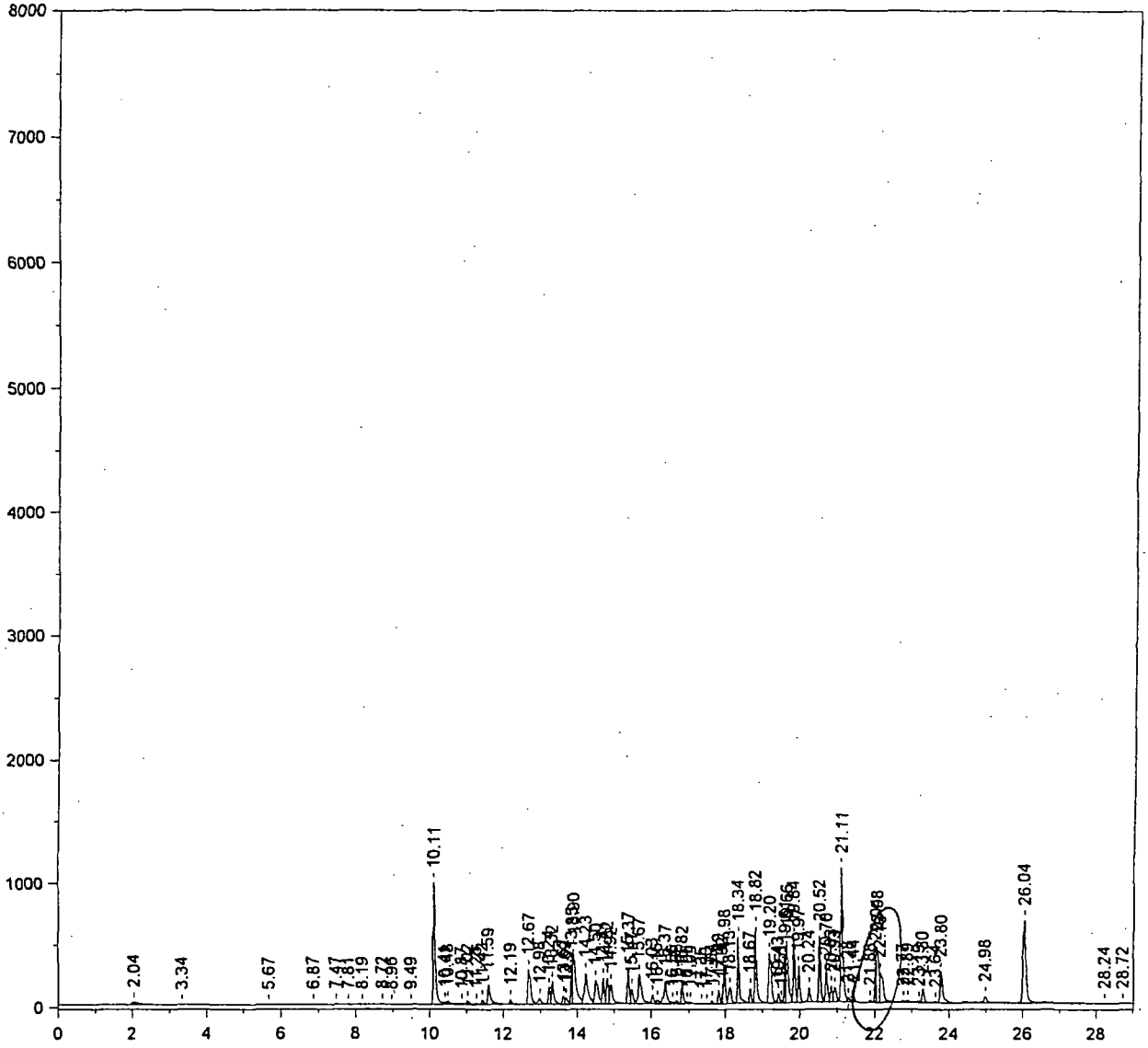
60150

Chrom Perfect Chromatogram Report

Pass DST 9/25/2

— H:\CP2\HP2\M0924.0022.RAW

5PPM AR1660 CONTINUING CALIBRATION 1004369



Primary Column

Before reintegration
Peak not split in initial calibration
PDT
9/25/2

Sample Name = **5PPM AR1660 CONTINUING CALIBRATION 1004369**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0924.0022.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/25/02 3:22:48 AM
Method Version = 619
Calibration Version = 14

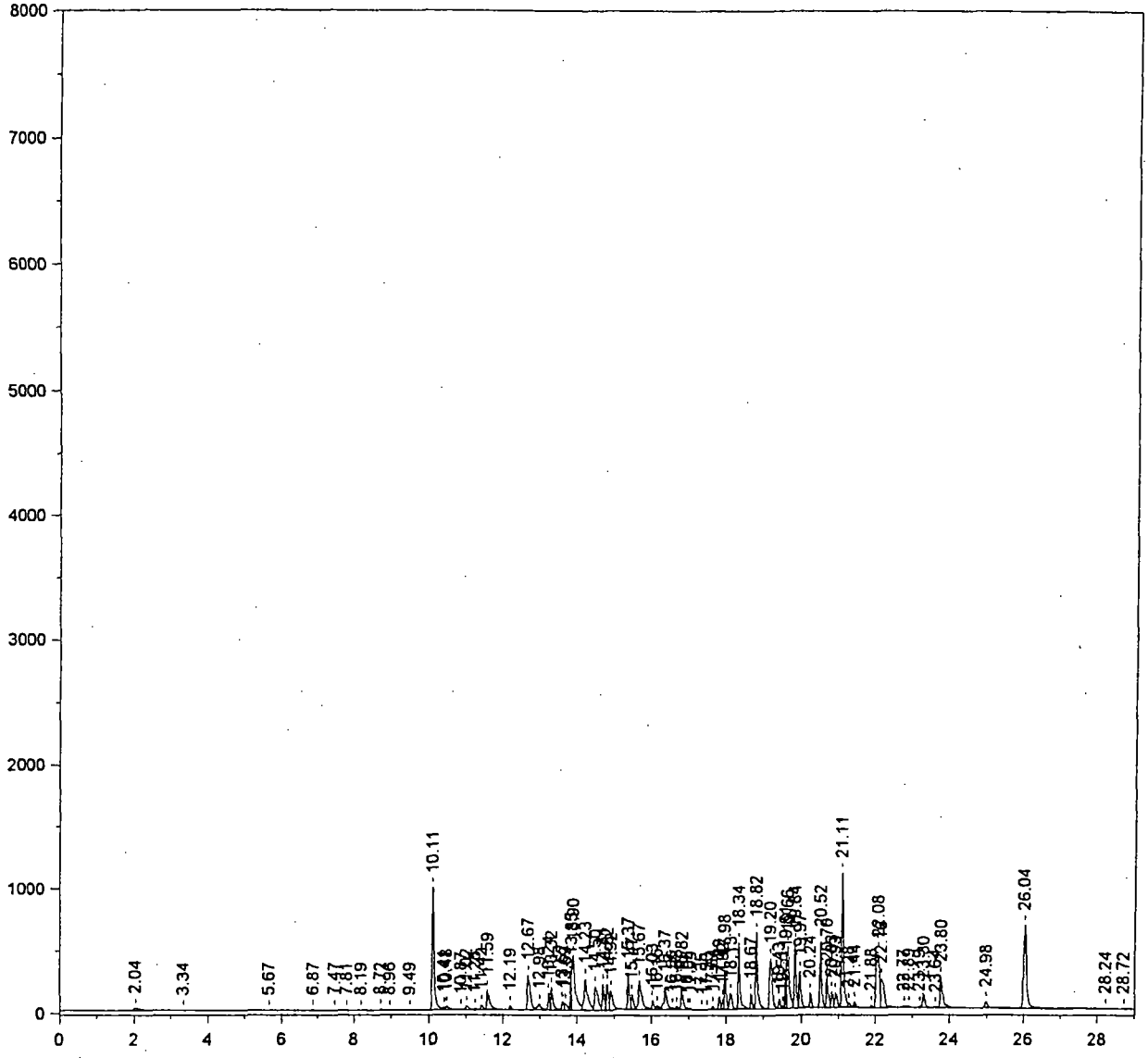
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.04		0.00	0.000	244426	0.412	BV	0.22
2	3.34		0.00	0.000	3007	0.005	VB	0.35
3	5.67		0.00	0.000	1176	0.002	BB	0.12
4	6.87		0.00	0.000	19594	0.033	BB	0.07
5	7.47		0.00	0.000	8442	0.014	BV	0.07
6	7.81		0.00	0.000	2052	0.003	VV	0.10
7	8.19		0.00	0.000	371	0.001	VB	0.07
8	8.72		0.00	0.000	10900	0.018	BV	0.08
9	8.96		0.00	0.000	1234	0.002	VB	0.08
10	9.49		0.00	0.000	1033	0.002	BB	0.16
11	10.11	CL4XYL	0.53	1.009	4126275	6.947	SBB	0.05
12	10.41		0.00	0.000	15407	0.026	TBV	0.04
13	10.48		0.00	0.000	72304	0.122	TVV	0.06
14	10.87		0.00	0.000	1790	0.003	TVV	0.08
15	11.02		0.00	0.000	153875	0.259	TVV	0.07
16	11.25		0.00	0.000	43148	0.073	TVV	0.06
17	11.42		0.00	0.000	172033	0.290	TVV	0.07
18	11.59	AR1016#1	5.31	10.158	942248	1.586	TVV	0.07
19	12.19		0.00	0.000	140424	0.236	TVB	0.05
20	12.67	AR1016#2	4.98	9.539	1578024	2.657	BV	0.09
21	12.98		0.00	0.000	340397	0.573	VV	0.08
22	13.24		0.00	0.000	441744	0.744	VV	0.05
23	13.32		0.00	0.000	811581	1.366	VV	0.06
24	13.62		0.00	0.000	262627	0.442	VV	0.07
25	13.69		0.00	0.000	270651	0.456	VV	0.07
26	13.85		0.00	0.000	802649	1.351	VV	0.04
27	13.90	AR1016#3	5.37	10.284	2614221	4.401	VV	0.08
28	14.23	AR1016#4	5.44	10.421	1712743	2.883	VV	0.07
29	14.50		0.00	0.000	1254363	2.112	VV	0.09
30	14.71		0.00	0.000	771996	1.300	VV	0.05
31	14.82		0.00	0.000	816711	1.375	VV	0.05
32	14.92		0.00	0.000	919927	1.549	VV	0.08
33	15.37	AR1016#5	5.07	9.707	1006200	1.694	VV	0.05
34	15.47		0.00	0.000	530277	0.893	VV	0.06
35	15.67		0.00	0.000	1574160	2.650	VV	0.09
36	16.03		0.00	0.000	311526	0.524	VV	0.05
37	16.16		0.00	0.000	168079	0.283	VV	0.06
38	16.37		0.00	0.000	1004812	1.692	VV	0.06
39	16.56		0.00	0.000	73882	0.124	VV	0.06
40	16.68		0.00	0.000	108186	0.182	VV	0.05
41	16.82		0.00	0.000	663535	1.117	VV	0.05
42	16.96		0.00	0.000	59334	0.100	VV	0.04
43	17.04		0.00	0.000	93563	0.158	VV	0.07
44	17.35		0.00	0.000	3173	0.005	VB	0.07
45	17.50		0.00	0.000	12709	0.021	BB	0.05
46	17.64		0.00	0.000	86554	0.146	BV	0.05
47	17.82		0.00	0.000	362012	0.609	VV	0.05
48	17.92		0.00	0.000	204060	0.344	VV	0.03
49	17.98	AR1260#1	5.36	10.265	1067054	1.796	VV	0.05
50	18.13		0.00	0.000	643692	1.084	VV	0.07
51	18.34		0.00	0.000	1972597	3.321	VV	0.05
52	18.67		0.00	0.000	432467	0.728	VV	0.05

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.82	AR1260#2	5.40	10.346	2333597	3.929	VV	0.05
54	19.20		0.00	0.000	2212552	3.725	VV	0.09
55	19.43		0.00	0.000	258057	0.434	VV	0.05
56	19.51		0.00	0.000	60608	0.102	VV	0.04
57	19.61		0.00	0.000	914870	1.540	VV	0.04
58	19.66		0.00	0.000	2222802	3.742	VV	0.07
59	19.84	AR1260#3	5.44	10.423	1802423	3.034	VV	0.05
60	19.97		0.00	0.000	1093540	1.841	VV	0.05
61	20.24		0.00	0.000	431117	0.726	VB	0.05
62	20.52		0.00	0.000	1844958	3.106	BV	0.05
63	20.70		0.00	0.000	1001376	1.686	VV	0.05
64	20.83		0.00	0.000	495256	0.834	VV	0.05
65	20.93		0.00	0.000	550575	0.927	VV	0.07
66	21.11	AR1260#4	5.37	10.285	4236010	7.132	VV	0.05
67	21.28		0.00	0.000	166267	0.280	VV	0.06
68	21.44		0.00	0.000	162679	0.274	VB	0.05
69	21.88		0.00	0.000	68272	0.115	BV	0.05
70	22.04		0.00	0.000	1033265	1.740	VV	0.04
71	22.08	AR1260#5	3.41	6.522	1820666	3.065	VV	0.06
72	22.16		0.00	0.000	1575477	2.652	VV	0.11
73	22.77		0.00	0.000	59409	0.100	VV	0.07
74	22.89		0.00	0.000	63654	0.107	VV	0.07
75	23.19		0.00	0.000	31947	0.054	VV	0.06
76	23.30		0.00	0.000	526256	0.886	VV	0.06
77	23.64		0.00	0.000	46038	0.078	VV	0.13
78	23.80		0.00	0.000	1337154	2.251	VV	0.07
79	24.98		0.00	0.000	259428	0.437	VB	0.07
80	26.04	CL10BP	0.54	1.041	3850817	6.483	BV	0.08
81	28.24		0.00	0.000	3371	0.006	VV	0.12
82	28.72		0.00	0.000	684	0.001	VB	0.11

Total Area = 5.939837E+07 Total Height = 1.368894E+07 Total Amount = 52.23206

— H:\CP2\HP2\M0924.0022.BND

5PPM AR1660 CONTINUING CALIBRATION 1004369



After reintegration
KST
9/25/02

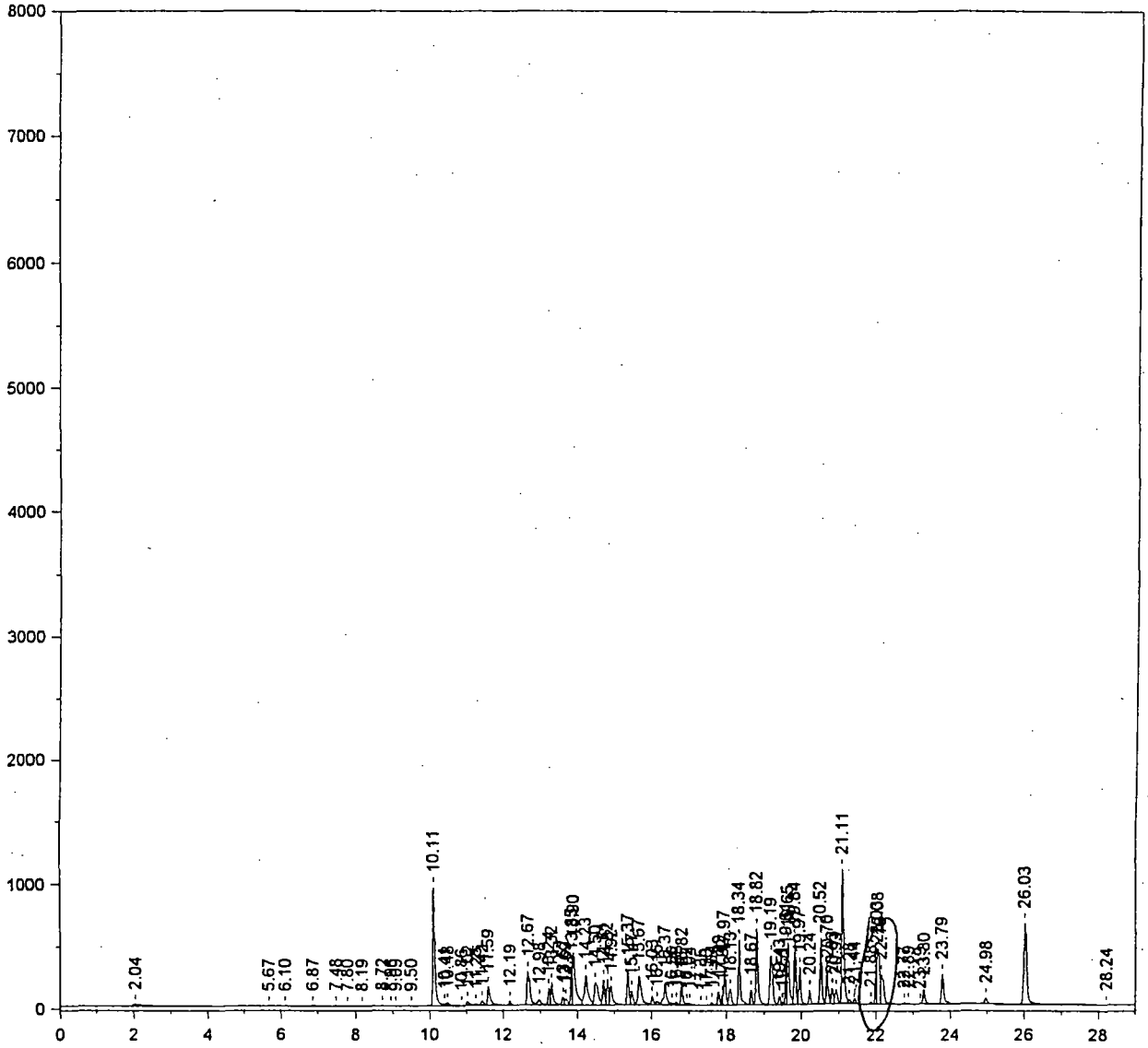
60158

Per DT 9/25/02

Chrom Perfect Chromatogram Report

— H:\CP2\HP2\M0924.0029.RAW

5PPM AR1660 CONTINUING CALIBRATION 1004369



Primary Column

Before reintegration
peak not split in initial calibration
DT
9/25/02

60163

Sample Name = **5PPM AR1660 CONTINUING CALIBRATION 1004369**

Instrument = HP 2
Heading 1 = RTX-CLPESTICIDEII SERIAL 213972
Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Acquisition Port = 1

Raw File Name = **H:\CP2\HP2\M0924.0029.RAW**
Method File Name = H:\CP2\HP2\Hp2pest.met
Calibration File Name = H:\CP2\HP2\PCBFD47A.cal

Date Taken (end) = 9/25/02 8:36:48 AM
Method Version = 619
Calibration Version = 14

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.04		0.00	0.000	223345	0.378	BB	0.22
2	5.67		0.00	0.000	679	0.001	BB	0.12
3	6.10		0.00	0.000	258	0.000	BB	0.07
4	6.87		0.00	0.000	18997	0.032	BB	0.07
5	7.48		0.00	0.000	8273	0.014	BV	0.07
6	7.80		0.00	0.000	2147	0.004	VV	0.10
7	8.19		0.00	0.000	410	0.001	VB	0.08
8	8.72		0.00	0.000	12209	0.021	BV	0.08
9	8.96		0.00	0.000	3338	0.006	VV	0.08
10	9.09		0.00	0.000	4270	0.007	VV	0.09
11	9.50		0.00	0.000	2084	0.004	VB	0.18
12	10.11	CL4XYL	0.52	0.988	4056324	6.867	SBB	0.05
13	10.41		0.00	0.000	15114	0.026	TBV	0.04
14	10.48		0.00	0.000	70751	0.120	TVV	0.06
15	10.86		0.00	0.000	1034	0.002	TVV	0.08
16	11.02		0.00	0.000	151626	0.257	TVV	0.07
17	11.25		0.00	0.000	43818	0.074	TVV	0.06
18	11.42		0.00	0.000	170062	0.288	TVV	0.07
19	11.59	AR1016#1	5.36	10.207	951199	1.610	TVV	0.07
20	12.19		0.00	0.000	142606	0.241	TVB	0.05
21	12.67	AR1016#2	4.96	9.455	1571217	2.660	BV	0.09
22	12.98		0.00	0.000	335675	0.568	VV	0.08
23	13.24		0.00	0.000	438671	0.743	VV	0.05
24	13.32		0.00	0.000	809685	1.371	VV	0.06
25	13.62		0.00	0.000	257890	0.437	VV	0.07
26	13.69		0.00	0.000	270453	0.458	VV	0.07
27	13.85		0.00	0.000	779615	1.320	VV	0.04
28	13.90	AR1016#3	5.37	10.230	2612529	4.423	VV	0.08
29	14.23	AR1016#4	5.46	10.402	1717389	2.908	VV	0.07
30	14.50		0.00	0.000	1252825	2.121	VV	0.10
31	14.71		0.00	0.000	776452	1.315	VV	0.05
32	14.82		0.00	0.000	818795	1.386	VV	0.05
33	14.92		0.00	0.000	929171	1.573	VV	0.08
34	15.37	AR1016#5	5.08	9.688	1008827	1.708	VV	0.05
35	15.47		0.00	0.000	537353	0.910	VV	0.06
36	15.67		0.00	0.000	1573490	2.664	VV	0.09
37	16.03		0.00	0.000	313276	0.530	VV	0.05
38	16.16		0.00	0.000	167475	0.284	VV	0.06
39	16.37		0.00	0.000	1003415	1.699	VV	0.06
40	16.56		0.00	0.000	75560	0.128	VV	0.06
41	16.68		0.00	0.000	109154	0.185	VV	0.05
42	16.82		0.00	0.000	666016	1.128	VV	0.05
43	16.97		0.00	0.000	59472	0.101	VV	0.04
44	17.04		0.00	0.000	94214	0.160	VV	0.07
45	17.35		0.00	0.000	3303	0.006	VB	0.07
46	17.50		0.00	0.000	12722	0.022	BB	0.05
47	17.64		0.00	0.000	86767	0.147	BV	0.05
48	17.82		0.00	0.000	363326	0.615	VV	0.05
49	17.92		0.00	0.000	190165	0.322	VV	0.03
50	17.97	AR1260#1	5.44	10.364	1082231	1.832	VV	0.05
51	18.13		0.00	0.000	647925	1.097	VV	0.07
52	18.34		0.00	0.000	1981565	3.355	VV	0.05

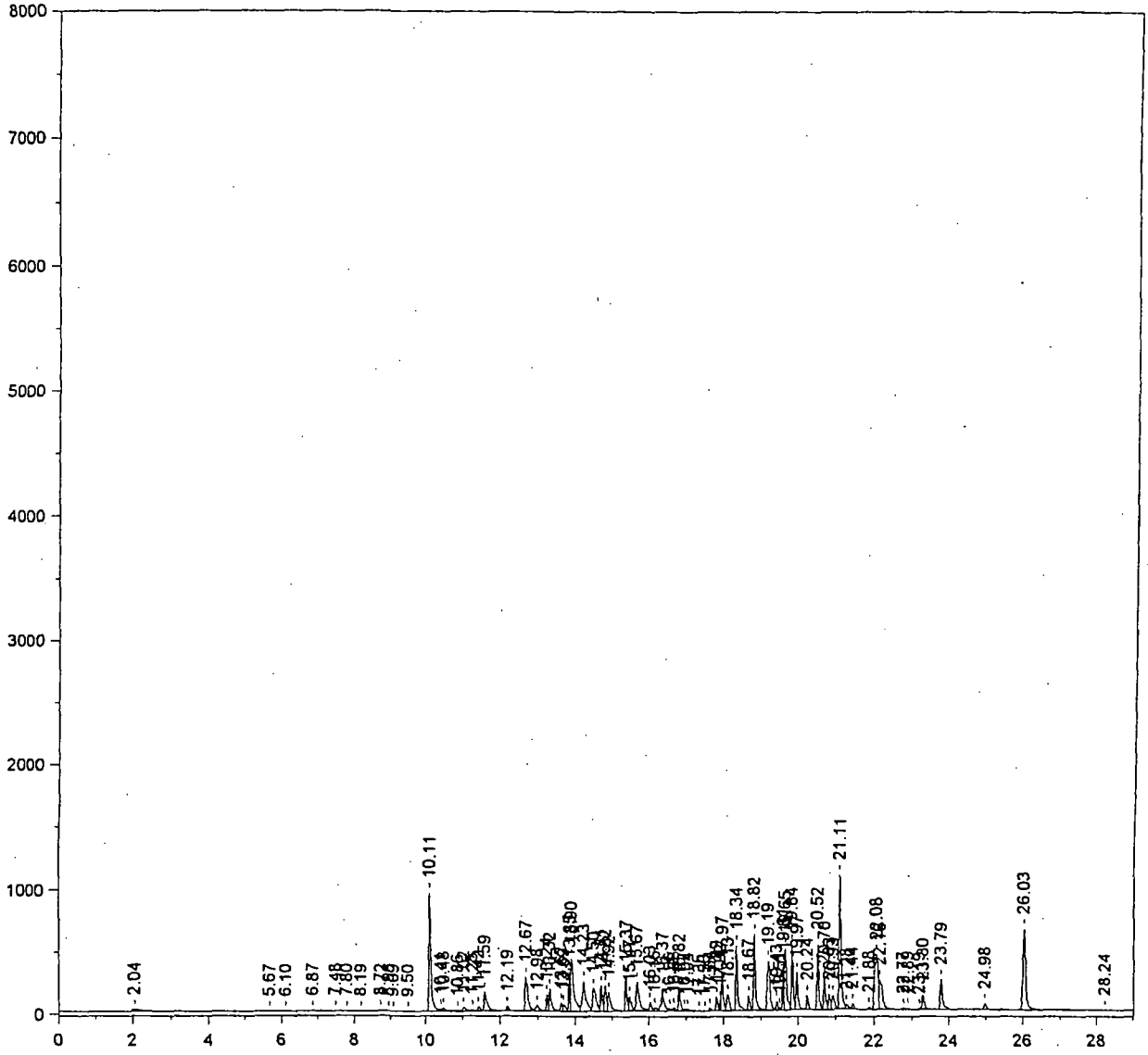
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	18.67		0.00	0.000	436858	0.740	VV	0.05
54	18.82	AR1260#2	5.44	10.369	2349428	3.978	VV	0.05
55	19.19		0.00	0.000	2222043	3.762	VV	0.09
56	19.43		0.00	0.000	259432	0.439	VV	0.05
57	19.51		0.00	0.000	64962	0.110	VV	0.04
58	19.61		0.00	0.000	926799	1.569	VV	0.04
59	19.65		0.00	0.000	2212647	3.746	VV	0.07
60	19.84	AR1260#3	5.46	10.411	1808556	3.062	VV	0.05
61	19.97		0.00	0.000	1097170	1.858	VV	0.05
62	20.24		0.00	0.000	425168	0.720	VB	0.05
63	20.52		0.00	0.000	1845215	3.124	BV	0.05
64	20.70		0.00	0.000	1002808	1.698	VV	0.05
65	20.83		0.00	0.000	483434	0.818	VV	0.05
66	20.93		0.00	0.000	561921	0.951	VV	0.07
67	21.11	AR1260#4	5.35	10.192	4216997	7.139	VV	0.05
68	21.28		0.00	0.000	170688	0.289	VV	0.07
69	21.44		0.00	0.000	160878	0.272	VB	0.05
70	21.88		0.00	0.000	66756	0.113	BV	0.05
71	22.03		0.00	0.000	968863	1.640	VV	0.04
72	22.08	AR1260#5	3.50	6.669	1870299	3.166	VV	0.06
73	22.16		0.00	0.000	1510372	2.557	VB	0.10
74	22.77		0.00	0.000	46880	0.079	BV	0.07
75	22.89		0.00	0.000	52819	0.089	VB	0.07
76	23.19		0.00	0.000	29369	0.050	BV	0.06
77	23.30		0.00	0.000	522980	0.885	VV	0.06
78	23.79		0.00	0.000	1267625	2.146	VB	0.07
79	24.98		0.00	0.000	254527	0.431	BB	0.07
80	26.03	CL10BP	0.54	1.024	3803474	6.439	BV	0.08
81	28.24		0.00	0.000	2686	0.005	VB	0.14

Total Area = 5.906682E+07 Total Height = 1.356569E+07 Total Amount = 52.47007

60165

— H:\CP2\HP2\M0924.0029.RAW

5PPM AR1660 CONTINUING CALIBRATION 1004369

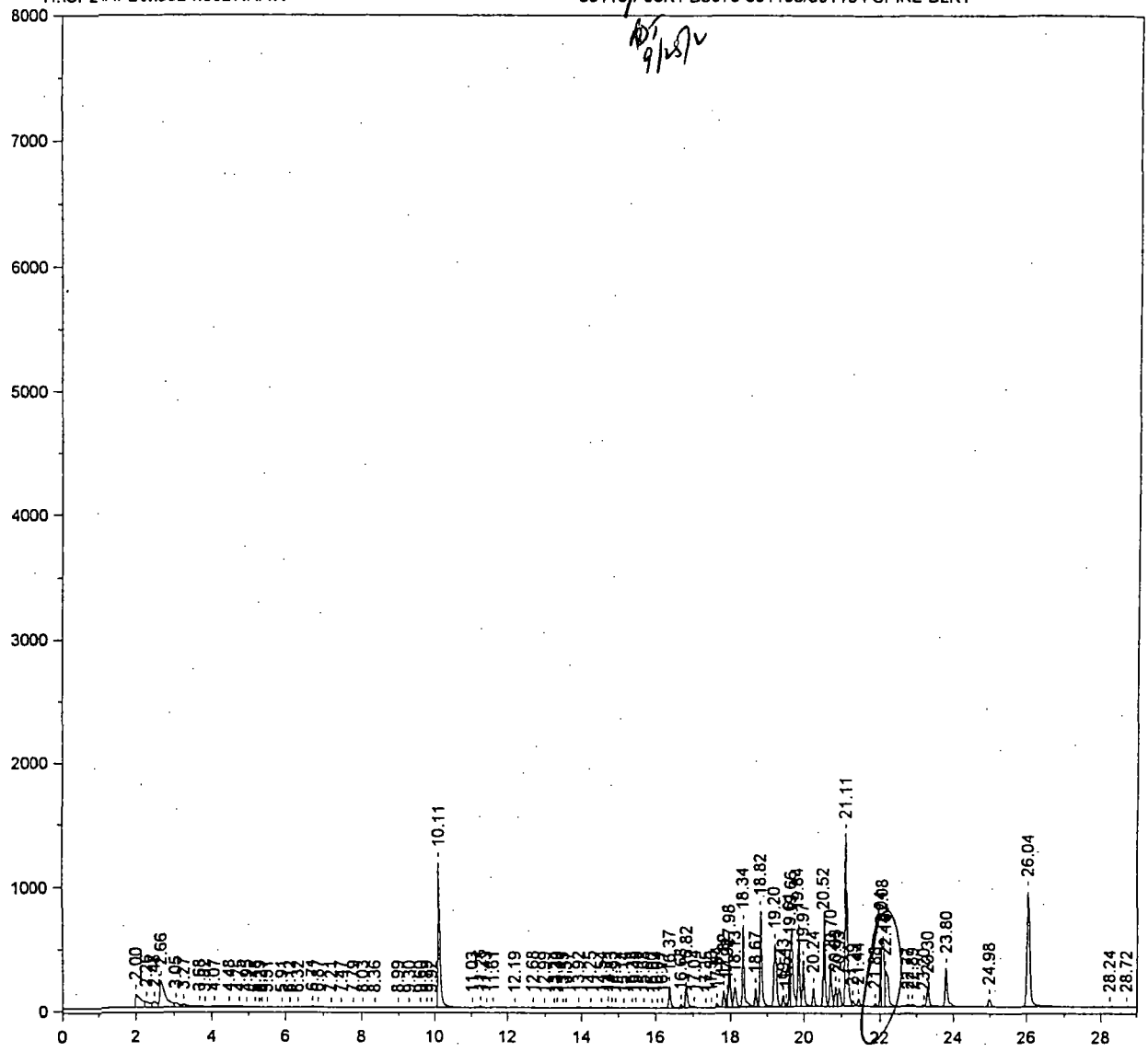


after investigation
AST
9/25/02

60166

— H:\CP2\HP2\M0924.0027.RAW

3
301101-06K1 B8079 301103/301104 SPIKE BLK1
RDT 9/25/02



Primary Column

Before reintegration
peak not split in initial calibration
RDT 9/25/02

60272

Sample Name = **301104-06K1 B8079 301103/301104 SPIKE BLK1**

Instrument = HP 2 | Acquisition Port = 1

Heading 1 = RTX-CLPESTICIDEII SERIAL 213972

Heading 2 = 120C(1MIN) 8.5C/MIN---285C(15MIN)

Raw File Name = **H:\CP2\HP2\M0924.0027.RAW** | Date Taken (end) = 9/25/02 7:14:16 AM

Method File Name = H:\CP2\HP2\Hp2pest.met | Method Version = 620

Calibration File Name = H:\CP2\HP2\PCBFD47A.cal | Calibration Version = 14

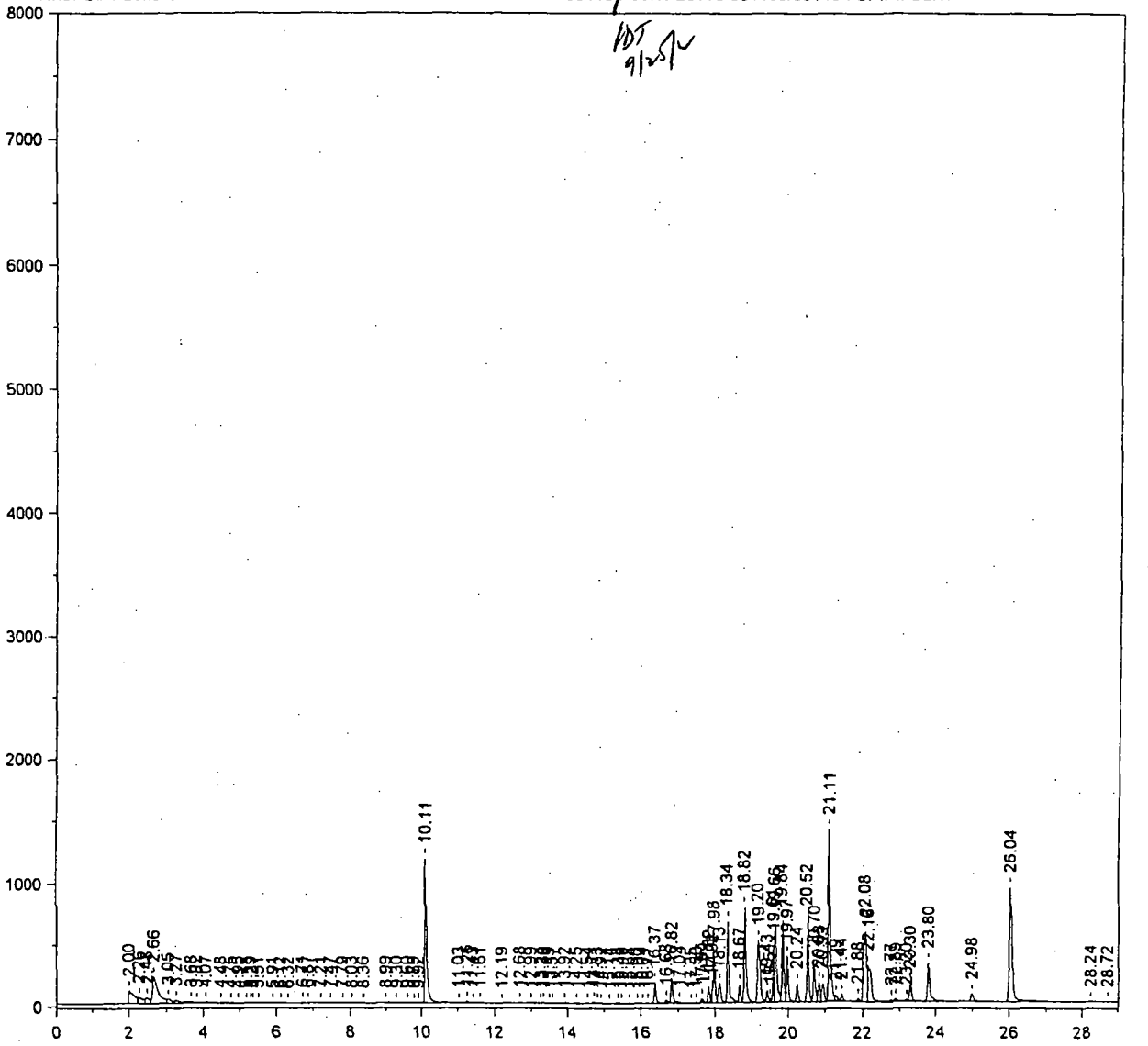
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.00		0.00	0.000	1091303	1.928	BV	0.20
2	2.26		0.00	0.000	462223	0.817	VV	0.09
3	2.48		0.00	0.000	421850	0.745	VV	0.09
4	2.66		0.00	0.000	2345046	4.143	VV	0.12
5	3.05		0.00	0.000	303863	0.537	VV	0.10
6	3.27		0.00	0.000	320323	0.566	VV	0.15
7	3.68		0.00	0.000	78618	0.139	VV	0.07
8	3.82		0.00	0.000	85197	0.151	VV	0.15
9	4.07		0.00	0.000	162027	0.286	VV	0.11
10	4.48		0.00	0.000	113025	0.200	VV	0.17
11	4.75		0.00	0.000	38311	0.068	VV	0.08
12	4.95		0.00	0.000	28098	0.050	VV	0.11
13	5.18		0.00	0.000	16180	0.029	VV	0.10
14	5.29		0.00	0.000	9319	0.016	VV	0.04
15	5.37		0.00	0.000	16098	0.028	VV	0.09
16	5.51		0.00	0.000	11031	0.019	VV	0.12
17	5.91		0.00	0.000	12771	0.023	VB	0.23
18	6.12		0.00	0.000	488	0.001	BB	0.07
19	6.32		0.00	0.000	1331	0.002	BB	0.09
20	6.71		0.00	0.000	34402	0.061	BV	0.06
21	6.87		0.00	0.000	34162	0.060	VV	0.08
22	7.21		0.00	0.000	5384	0.010	VV	0.10
23	7.47		0.00	0.000	16605	0.029	VB	0.08
24	7.79		0.00	0.000	904	0.002	BV	0.08
25	8.03		0.00	0.000	14752	0.026	VV	0.06
26	8.36		0.00	0.000	3368	0.006	VB	0.13
27	8.99		0.00	0.000	2827	0.005	BV	0.14
28	9.30		0.00	0.000	1930	0.003	VB	0.11
29	9.60		0.00	0.000	1782	0.003	BV	0.05
30	9.79		0.00	0.000	1599	0.003	VV	0.06
31	9.92		0.00	0.000	541	0.001	VB	0.07
32	10.11	CL4XYL	0.61	1.855	4761833	8.412	BV	0.05
33	11.03		0.00	0.000	15029	0.027	VV	0.12
34	11.25		0.00	0.000	53026	0.094	VV	0.06
35	11.43		0.00	0.000	2905	0.005	VB	0.08
36	11.61	AR1016#1	0.03	0.082	4753	0.008	BB	0.07
37	12.19		0.00	0.000	2702	0.005	BB	0.05
38	12.68	AR1016#2	0.14	0.436	45288	0.080	BV	0.09
39	12.99		0.00	0.000	4887	0.009	VV	0.05
40	13.24		0.00	0.000	8253	0.015	VV	0.06
41	13.33		0.00	0.000	15725	0.028	VV	0.06
42	13.49		0.00	0.000	9738	0.017	VV	0.05
43	13.57		0.00	0.000	12372	0.022	VV	0.07
44	13.92	AR1016#3	0.16	0.476	75934	0.134	VV	0.16
45	14.25	AR1016#4	0.14	0.423	43624	0.077	VV	0.13
46	14.54		0.00	0.000	22313	0.039	VV	0.09
47	14.71		0.00	0.000	52156	0.092	VV	0.06
48	14.83		0.00	0.000	21875	0.039	VV	0.05
49	14.92		0.00	0.000	16618	0.029	VV	0.08
50	15.14		0.00	0.000	8318	0.015	VB	0.09
51	15.38	AR1016#5	0.12	0.363	23635	0.042	BV	0.06
52	15.48		0.00	0.000	8721	0.015	VV	0.07

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
53	15.68		0.00	0.000	26654	0.047	VV	0.09
54	15.90		0.00	0.000	1062	0.002	VB	0.07
55	16.04		0.00	0.000	4873	0.009	BV	0.06
56	16.17		0.00	0.000	8303	0.015	VV	0.07
57	16.37		0.00	0.000	671479	1.186	VV	0.05
58	16.68		0.00	0.000	103318	0.183	VV	0.05
59	16.82		0.00	0.000	833895	1.473	VV	0.05
60	17.04		0.00	0.000	71066	0.126	VV	0.07
61	17.35		0.00	0.000	3107	0.005	VB	0.07
62	17.50		0.00	0.000	15694	0.028	BB	0.05
63	17.64		0.00	0.000	111740	0.197	BV	0.05
64	17.82		0.00	0.000	437893	0.774	VV	0.05
65	17.92		0.00	0.000	257861	0.456	VV	0.03
66	17.98	AR1260#1	6.54	19.924	1300626	2.298	VV	0.05
67	18.13		0.00	0.000	792106	1.399	VV	0.07
68	18.34		0.00	0.000	2411592	4.260	VV	0.05
69	18.67		0.00	0.000	538147	0.951	VV	0.05
70	18.82	AR1260#2	6.61	20.164	2856100	5.046	VV	0.05
71	19.20		0.00	0.000	2729518	4.822	VV	0.09
72	19.43		0.00	0.000	317606	0.561	VV	0.05
73	19.51		0.00	0.000	79277	0.140	VV	0.04
74	19.61		0.00	0.000	1126298	1.990	VV	0.04
75	19.66		0.00	0.000	2766567	4.888	VV	0.07
76	19.84	AR1260#3	6.69	20.395	2214887	3.913	VV	0.05
77	19.97		0.00	0.000	1338388	2.364	VV	0.05
78	20.24		0.00	0.000	536401	0.948	VB	0.05
79	20.52		0.00	0.000	2283985	4.035	BV	0.05
80	20.70		0.00	0.000	1242469	2.195	VV	0.05
81	20.83		0.00	0.000	613652	1.084	VV	0.05
82	20.93		0.00	0.000	700458	1.237	VV	0.08
83	21.11	AR1260#4	6.72	20.484	5298259	9.360	VV	0.05
84	21.29		0.00	0.000	203059	0.359	VV	0.07
85	21.44		0.00	0.000	204041	0.360	VB	0.05
86	21.88		0.00	0.000	87912	0.155	BV	0.06
87	22.04		0.00	0.000	1245690	2.201	VV	0.04
88	22.08	AR1260#5	4.31	13.143	2303997	4.070	VV	0.06
89	22.16		0.00	0.000	1973169	3.486	VV	0.11
90	22.77		0.00	0.000	74238	0.131	VV	0.06
91	22.89		0.00	0.000	77362	0.137	VV	0.07
92	23.20		0.00	0.000	40208	0.071	VV	0.06
93	23.30		0.00	0.000	671482	1.186	VV	0.06
94	23.80		0.00	0.000	1621418	2.864	VB	0.07
95	24.98		0.00	0.000	318151	0.562	BB	0.07
96	26.04	CL10BP	0.74	2.257	5241473	9.260	BB	0.08
97	28.24		0.00	0.000	2373	0.004	BV	0.13
98	28.72		0.00	0.000	1488	0.003	VB	0.13

Total Area = 5.66044E+07 Total Height = 1.319751E+07 Total Amount = 32.80105

60274

— H:\CP2\HP2\M0924.0027.RAW 301104-06K1 B8079 301103/301104 SPIKE BLK1



After reintegration
AST
9/25/02

9/26/02

60275

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3590

REPLY TO ATTENTION OF:
SR-6J

September 3, 2004

MAJ David Quivey, Project Officer
Department of the Army
Assistant Chief of Staff for Installation Management
600 Army Pentagon
Washington, DC 20310-0600

SUBJECT: Approval of *Final Construction Completion Report and Third-Party Data Validation Report for Fort Dearborn U.S. Army Reserve Center, Chicago, IL, August 2004*

Dear MAJ Quivey:

The United States Environmental Protection Agency Region 5 (USEPA) has reviewed the Army's *Final Construction Completion Report and Third-Party Data Validation Report for Fort Dearborn U.S. Army Reserve Center, Chicago, IL, dated August 2004.* We also reviewed the Army's response to comments (RTC) dated October 27, 200,3 and revised reports dated August 12, 2004. The RTC and revised reports appear to adequately address all of USEPA's comments. U.S. EPA deferred the human health risk assessment review to Illinois Environmental Protection Agency (IEPA) and provided a conditional-concurrence letter to the Army on December 22, 2003. Based on a concurrence letter submitted by IEPA during the summer of 2004, it appears that the Army has resolved all human health risk assessment comments on the Draft Construction Completion Report.

Based upon our review, U.S. EPA approves the subject documents. Thank you for the opportunity to review the subject documents. An electronic copy of this letter will also be submitted to you to expedite its receipt. If you have any questions, please feel free to call me at (312) 886-6150.

Sincerely,

Karen L. Mason-Smith/**signed/**
Remedial Project Manager

cc: C. Falco, IEPA
J. Vranicar, Field and Golan Company
C. Wilinski, City of Chicago, Dept. of Aviation
D. Meadors, ACOE-Louisville
D. Graham, City of Chicago, Dept. of Environment

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276, 217-782-3397
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601, 312-814-6026

ROD R. BLAGOJEVICH, GOVERNOR RENEE CIPRIANO, DIRECTOR

217-785-2891

August 31, 2004

RECEIVED
SEP 08 2004
REMEDIAL RESPONSE BR. 2
FEDERAL FACILITIES

Major David Quivey
Chief, Military Construction Division
Department of the Army
Assistant Chief of Staff for Installation Management
Army Reserve Division
600 Army Pentagon
Washington, DC 20310-0600

Refer to: 0312765079—Cook County
Fort Dearborn Army Reserve
Superfund/Technical Reports

Dear Major Quivey:

The Illinois Environmental Protection Agency (Illinois EPA) has received the *Final Construction Completion Report for Various Site Remediations for the Former Fort Dearborn Army Reserve Center, Chicago, Illinois (August 2004)*. This submittal also includes a comprehensive set of responses to comments and the *Data Validation Report*.

In our June 30, 2004 correspondence, Illinois EPA indicated our acceptance of responses to comments. Our review of the *Final Construction Completion Report* indicates the responses have been incorporated into the *Report*. We have no further comment on the *Report* and accept it as final.

If you have any questions or require additional information, please contact me.

Sincerely,

Charlene Falco
Remedial Project Manager
Federal Facilities Unit
Federal Site Remediation Section

CAF:BAC:RAC:h:\ohare\ftdearborn\finalccr.doc

cc: Karen Mason-Smith, SRF-6J/USEPA, Region 5/77 W. Jackson Blvd./Chicago, IL 60604
John Vranicar, Field & Golan/Suite 1500/70 W. Madison St./Chicago, IL 60602
Doug Meadors, US Army Corps of Engineers – Louisville District/ATTN: CELRL-ED-E/PO Box 59/Louisville, KY 40201-0059

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3590

REPLY TO ATTENTION OF:
SR-6J

December 22, 2003

MAJ David Quivey, Project Officer
Department of the Army
Assistant Chief of Staff for Installation Management
600 Army Pentagon
Washington, DC 20310-0600

SUBJECT: Conditional-Concurrence on *Response to Comments on Draft Construction Completion Report and Third-Party Data Validation Report for Fort Dearborn U.S. Army Reserve Center, Chicago, IL, October 27, 2003*

Dear MAJ Quivey:

The United States Environmental Protection Agency Region 5 (USEPA) has reviewed the Army's *Response to Comments on Draft Construction Completion Report and Third-Party Data Validation Report for Fort Dearborn U.S. Army Reserve Center, Chicago, IL, dated October 27, 2003* (RTC). As cited in the RTC, USEPA submitted comments on June 17, 2003, September 10, 2003 and September 12, 2003. The RTC appears to adequately address all of USEPA's comments. Because we deferred human health risk assessment review to Illinois Environmental Protection Agency (IEPA), USEPA can only provide a conditional-concurrence at this time. USEPA recommends that the Army resolve any outstanding comments on the Draft Construction Completion Report with IEPA. Once the outstanding issues with IEPA have been resolved, USEPA will submit a concurrence letter for the RTC.

Thank you for the opportunity to review the RTC. An electronic copy of this letter will also be submitted to you to expedite its receipt. Please place a copy of this letter in Fort Dearborn's Administrative Record. If you have any questions, please feel free to call me at (312) 886-6150.

Sincerely,

Karen L. Mason-Smith
Remedial Project Manager

cc: A. Jankowski, IEPA
J. Vranicar, Ironwood Company
C. Wilinski, City of Chicago, Dept. of Aviation
M. Chrystof, USEPA
D. Graham, City of Chicago, Dept. of Environment
D. Meadors, ACOE-Louisville

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

SRF-5J

January 22, 2001

Mr. Mark E. Buck, P.E.
88th Regional Support Command
Environmental/Real Estate Division Chief
506 Roeder Circle
Ft. Snelling, Minnesota 55111-4009

Subject: ***Approval of Final Work Plan & Field Sampling Plan for Various Site Remediations Fort Dearborn U.S. Army Reserve Center, Chicago, Illinois***

Dear Mr. Buck:

The United States Environmental Protection Agency (U.S. EPA) has reviewed the Final Work Plan and Field Sampling Plan for Various Site Remediations dated December 2001. We also reviewed the U.S. Army Corps of Engineers responses, dated January 2, 2002, to U.S. EPA comments dated November 30, 2001. Based upon our review, U.S. EPA approves the above referenced document. Please note comments on the draft final Quality Assurance Project Plan are forthcoming.

If you have any questions, please feel free to contact me at (312) 886-6151.

Sincerely,

Shari Kolak

Shari Kolak
Remedial Project Manager
Federal Facilities Response Section
Superfund Division

cc: Andrew Jankowski, IEPA
Carol Wilinski, City of Chicago
John Vranicar, Ironwood Company
Douglas Meadors, U.S. Army Corps of Engineers

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IEPA Comments dated 08 July 2003, 03 November 2003, and 20 May 2004:

1. IEPA Comment: Section 2.2.1, Page 6: The text references a possible connection between the former shop sink and a nearby downspout. However, no post-excavation discussion was included regarding the potential for this connection to have been active and if this connection would have served as an avenue for waste to have been released into the environment. The potential exists that this connection may have been in place before, or after the installation of the shop sink drum. Since no contamination was found upon the removal of the shop sink drum, this leads one to question if the shop sink drum actually received waste. This newly discovered "alternative route" to drain the shop sink should be investigated to determine its outfall, and if necessary, to sample that outfall.

   Army Response: The Army recognizes that the nearby downspout may have at one time been connected to the shop sink, based on remaining evidence at the site. Assuming this to be the case, the downspout could have received wastewater from the shop sink. Despite this, the Army does not believe that the wastewater that may have been discharged into the downspout from the shop sink would pose a significant risk to human health or the environment or merit further investigation. This is based on the following:

   (1) Evidence at the site corroborates the verbal reports from former Army Reserve personnel that the shop sink drained into a 55 gallon drum buried outside the building (as detailed in the April 2000 EBS Report). The 2nd paragraph in Section 2.2.1 of the Construction Completion Report indicates that, after the drum was excavated, staining was visually observed in soil immediately beneath the former drum location. This visual observation indicates that the drum had received discharge from the former shop sink. At the time that the drum was removed, there was no PID readings detected above background in the excavation. Subsequent analysis of soil samples collected in close vicinity to the drum indicated no contamination. This evidence leads to the conclusion that the wastewater discharged from the shop sink into the drum did not contain substances of a nature or in a quantity that posed a significant risk to human health or the environment.

   (2) Given that the soil samples and PID reading indicate that the waste from the shop sink discharged into the 55-gallon drum did not contain substances of concern, a similar conclusion is reached for any shop sink wastewater discharged via the downspout. Therefore, there is no evidence that any wastewater discharged from the shop sink via the downspout would be more likely to pose a contamination risk to human health or the environment than the wastewater discharged from the shop sink into the 55-gallon drum.

(3) Current information indicates that the downspout is connected to a storm sewer that likely discharges into a drainage swale to the west of the OMS Building. This is on property that is adjacent to a public right of way, one of which is Higgins Rd., a heavily traveled urban state highway. Conditions at the sewer outfall would likely be affected by adjacent property usage and runoff from adjacent roadways. Thus, even in the unlikely event that the discharge from the shop sink into the downspout contained substances of concern, any investigation of the drainage swale would be inconclusive as to the source of any contaminants that might be found there.

Based on the evidence, further investigation of the shop sink, the 55-gallon drum or the downspout pathway is not warranted.

2. IEPA Comment: Section 3.1.3, Page 13: Please add the term: "commercial" to the term "industrial" when used in the text to describe the industrial/commercial remedial objectives.

   Army Response: The text has been revised as requested, in this section and elsewhere in the report, as appropriate.

3. IEPA Comment: Section 3.1.3, Page 13: The term: "ingestion" should be inserted in place of "inhalation" when referring to the residential criteria that was exceeded for Benzo(a)pyrene. Please also correct the same reference on page 17.

   Army Response: The text has been revised as requested.

4. IEPA Comment: Section 4.0, Page 17: In item 6, the term: "industrial/construction" is used. Please correct this to read: "industrial/commercial." Also in this same item, the term: "ingestion" is omitted from the text. Please correct.

   Army Response: The text has been revised as requested.

5. IEPA Comment: Section 4.0, Page 17: The text makes no recommendations as to how to address the sample results that exceed the remedial objectives. In addition, no discussion is included regarding the potential for institutional controls to be placed on the property since the residential objectives were not met.

   Army Response: The sampling results support the conclusion that the site meets the soil remediation objectives, even in the residential scenario. Of the 24 samples collected for laboratory analysis, all results met TACO residential remedial objectives except one analyte in each of two samples. Benzo(a)pyrene (167 μg/kg) marginally exceeded the residential criterion (90 μg/kg) in one sample at the Former Vehicle Wash Rack and arsenic (14 mg/kg) marginally exceeded the residential and regional background criterion (13 mg/kg) in one sample at the

Former Vehicle Inspection Pit. The presence of benzo(a)pyrene in the environment is ubiquitous since it is a product of incomplete combustion1. Additionally, benzo(a)pyrene concentrations at the Ft Dearborn USARC are well below the City of Chicago background concentration (1,302 μg/kg) as published in "Polynuclear Aromatic Hydrocarbon Background Study, City of Chicago, Illinois, February 24, 2003". Similarly, the arsenic level of 14 mg/kg may be considered merely a marginal exceedance of the residential ingestion soil remediation objective of 13 mg/kg, while arsenic concentrations in remaining samples were well below the residential criterion. Given these marginal and isolated exceedances, the Ft. Dearborn USARC property is suitable for future unrestricted land use and no further investigations or remedial actions are warranted. Section 4.0 of the report has been revised to provide additional support for the lack of need for institutional controls.

IEPA's comment on RTC (November 3, 2003): The Polynuclear Aromatic Hydrocarbon Background Study, City of Chicago, Illinois February 24, 2003 the Army cites in their response is just that, a study. The study does indeed target the Chicago urban area, and the area around the site is part of that urban area. However, the study is at present, not part of any published regulations. Therefore, the Agency is precluded from utilizing them as such, as the Army appears to imply. As a result, the 167 parts per billion (ppb) benzo(a)pyrene concentration which exceeded the residential remedial objective of 90 ppb is still a concern. The Army is going to have to make a determination as to how to address this, either through additional soil removal, or to revise the land use of the property to be restricted to industrial and/or commercial.

Army Response: It is the Army's position that the property is suitable for future unrestricted land use and no further actions are required at the site. Since receipt of the IEPA comment expressing concern about the 167 μg/kg benzo(a)pyrene concentration, a Tier 3 Human Health Risk Assessment calculation was completed to address the this exceedance of the Tiered Approach to Corrective Action Objectives (TACO) Tier I Remediation Objective (RO). The risk calculation was completed consistent with TACO (35 Illinois Administrative Code Part 742) requirements and USEPA's (1989) *Risk Assessment Guidance for Superfund (RAGS): Volume I: Human Health Evaluation Manual (Part A)*. The detailed risk assessment procedure and calculations are included as Attachment A of this response.

Results indicate the carcinogenic risk for an adult resident due to exposure to PAHs, including benz(a)pyrene, in site soil is estimated to be 2×10^{-7}, while the cancer risk for a child resident was calculated as 8×10^{-7}. According to the National Oil and Hazardous Substance Pollution Contingency Plan (NCP), potentially acceptable risk levels span the range of one in a million

1 National Library of Medicine. 2003. Hazardous Substances Data Bank, U.S. National Library of Medicine, 8600 Rockville Pike, Bethesda, MD 20894, National Institutes of Health, Department of Health & Human Services.]

(1×10^{-6}) to one in ten thousand (1×10^{-4}). Cancer risks less than 1×10^{-6} are considered *de minimis* risks and do not require further attention. The NCP considers 1×10^{-6} as the point of departure in establishing the acceptable level of risk for a site. The estimated carcinogenic risks for adult and child residents due to PAHs in site soils are less than 1×10^{-6}. Therefore, risks from exposure to PAHs, including benzo(a)pyrene, are not significant and do not require further action.

The results of the risk calculations, along with assumptions and calculation inputs provided as Attachment A to this letter, will be appended to the final Construction Completion Report (CCR). In addition, the following text will be inserted into Section 3.1.3 and 4.0 of the final CCR to provide reference to the calculations and findings, as follows: "A TACO Tier 3 risk calculation was performed to evaluate the potential significance of this exceedance. Results are presented in Appendix F and indicate risks from exposure to PAHs (including benzo(a)pyrene) in site soils are not significant.".

IEPA Comment on RTC (May 20, 2004): The Polycyclic Aromatic Hydrocarbon ("PAH") risk evaluation contained in Attachment A has been developed in accordance with Agency procedures with the exception of the calculation of the exposure point concentrations ("EPCs"). The EPCs have been calculated according to outdated United States Environmental Protection Agency ("USEPA") guidance from 1992. However, the Agency now specifies that guidance from 2002 (*Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites*, OSWER 9285.6-10, December 2002) be used for EPCs.

Army Response: The risk evaluation has been revised to utilize the methodology referenced by IEPA for calculation of the EPCs. The results of the risk calculations, along with assumptions and calculation inputs provided as Attachment A to this letter, will be appended to the final Construction Completion Report (CCR). In addition, the following text will be inserted into Section 3.1.3 and 4.0 of the final CCR to provide reference to the calculations and findings, as follows: "A TACO Tier 3 risk calculation was performed to evaluate the potential significance of this exceedance. Results are presented in Appendix F and indicate risks from exposure to PAHs (including benzo(a)pyrene) in site soils are not significant.".

6. IEPA Comment: Figure 3: In this figure, the confirmation sample locations are shown. However, the excavation is really two separate excavations, one 7.8 feet deep and another 4.5 feet deep. According to the guidance the work plan was following, it states that in no case is less than one sample on each sidewall acceptable. Since the excavation was irregular, three sidewalls were left not sampled in the 7.8 feet deep excavation, and one sidewall was not sampled in the 4.5 feet deep excavation. In addition, since there were two excavations, there should have been two floor samples per excavation. The sampling approach used on these two excavations is obviously

contrary to that specified in the guidance and what was agreed upon in the work plan. Please explain.

Army Response: The Army considered and considers the excavation to be a single excavation and believes the sampling that was performed is consistent with the sampling methodology of the work plan. This view is based on the very small size of the excavation floor (4 ft x 6 ft) and the fact that the northern portion of the excavation was performed primarily to assess the location and physical condition of the sewer, rather than removal related to contamination. Also, the sampling performed at the site is adequate to characterize the site conditions given that six soil samples were collected in the small area and that two samples were collected immediately adjacent to the former drum; one sample immediately below and one immediately adjacent.

7. IEPA Comment: Figure 4: Please explain the dispersal pattern of the floor and wall confirmation samples. In addition, Figure 2-3A in the work plan specified a slightly different sample layout.

   Army Response: The Army believes that the sampling performed at the site was consistent with that specified in the Work Plan. Planned wall and floor sample locations are illustrated in plan and section view on Figures 2 and 3A of the Work Plan, respectively. The wall samples were collected at the locations and depths specified. Floor sample locations were adjusted in the field based on site conditions. The presence of large gravel in the excavation prevented samples from being collected at the planned locations. In the absence of any obvious evidence of contamination, samples were collected as close as possible to the planned locations. Section 2.2.2 of the text has been revised to include the statement: "*Samples were collected at the locations specified in the Work Plan with exception of the floor samples, which were adjusted based on field conditions. The presence of large gravel required the samples to be relocated. Samples were collected from locations as close as possible to the planned sample locations.*"

   IEPA Comment on RTC (November 3, 2003): The Illinois EPA was unable to locate the work plan figures (Figures 2 and 3A) the Army refers to in their response. In addition, the floor and wall confirmation samples proposed in Figure 2-3A (attached) of the work plan contradict the Army's claim the wall samples were collected at the locations and depths specified. In fact, as shown in Figure 4 of the Construction Completion Report, two of the excavation walls received no confirmatory sampling at all. It is apparent the Army disregarded Figure 2-3A of the work plan, choosing instead to locate samples as shown in Figure 2-3. However, the Illinois EPA provided Figure 2-3A as a replacement figure to clarify sample locations shown in Figure 2-3. Obviously, the Army committed to utilizing Figure 2-3A since it was part of the final work plan. But, upon completion of the sampling, nothing even faintly resembling Figure 2-3A was received. Please explain.

Army Response: It was the full intent of the Army and its agent to perform the sampling consistent with the approved Work Plan. In response to this comment, review of the Army's letter and attachments dated April 2, 2002 indicates that both Figures 2-3 and 2-3A were submitted for inclusion into the final Work Plan (copy provided as Attachment B). Figure 2-3A was added at the request of the IEPA with the Army's understanding to provide further clarification of the planned sample locations, not to serve as a replacement figure as suggested. It is also noted that no inconsistencies in the planned sample locations at the Former Wash Rack site were apparent to the Army, its contractor, or IEPA personnel at the time of approval of the Work Plan or during subsequent implementation of the planned fieldwork.

Notwithstanding this noted inconsistency and the apparent misunderstanding regarding the use of Figure 2-3A, the Army maintains that it fulfilled the intent of the sampling by collecting soil samples at a frequency and locations appropriate to assess the possible presence of contamination at the site, as follows:

- A total of four sidewall samples were collected, the frequency specified in Section 3.3 of the final Work Plan.
- Each of the samples was collected from the midpoint of the wall, halfway between the ground surface and bottom of the excavation (as shown on Figure 2-3A of the final Work Plan).
- Sample locations were roughly evenly distributed around the perimeter of the excavation, in the absence of any field indications of the presence of contamination.
- A total of three floor samples were collected, two from the main excavation and one from the gravel area further to the south, at the frequency specified in Section 3.3 of the final Work Plan.

On this basis, it is the Army's position that the completed sampling is adequate to assess the possible presence of contamination at the site and that the results obtained are representative of site conditions.

IEPA Comment on RTC (May 20, 2004): Response Acceptable.

8. IEPA Comment: Figure 5: The figure shows no floor samples were collected. Please explain.

Army Response: Figure 5 has been revised to illustrate the locations of the floor samples collected at the time of excavation, which were inadvertently omitted from the figure. Samples were collected at the locations specified in the Work Plan.

9. IEPA Comment: Figure 6: The sample depths of the four samples collected from outside the former vehicle inspection pit were deeper than as specified in Figure 2-2 of the work plan. Please explain.

   Army Response: As specified in Section 3.1 of the final approved Work Plan, soil samples were to be collected at a depth of 6 feet. In the event that sub-base rock/gravel was encountered at this depth, the sampler was to be advanced until the soil beneath the base rock was accessible and the sample then was to be collected immediately beneath the sub-base rock/gravel. The sampler was advanced to a depth of 6 feet at each sample location and no sub-base gravel/rock was encountered while drilling. Accordingly, each sample was collected from a depth beginning at 6 feet to a depth of 7 feet to provide adequate sample volume for the required analyses. A sample depth of 6 to 7 feet is appropriately indicated at each sample location on Figure 6.

10. IEPA Comment: Appendix A: All the inspection photographs in this appendix were taken by Rebecca Oswald, Illinois EPA. However, she is credited with none of them. Please correct.

    Army Response: The 2nd to last sentence of the 1st paragraph in Section 2.0 has been revised as follows: "Photographs taken during the field work were provided by Ms. Rebecca Oswald, Illinois EPA. Selected representative photographs are provided in Appendix A."

11. IEPA Comment: Table 1: Please explain how the pH dependent migration to groundwater soil remediation objective was determined for the inorganic constituents listed in this table.

    Army Response: As indicated in the table footnotes, the soil component of the groundwater ingestion pathway for metals depends on the pH. The TACO Tier 1 Soil RO for soil component of the groundwater ingestion pathway (Class I) pH ranges from 8 to 10. The RO values provided in Table 1 use a pH value equal to 8. This approach results in the use of the most conservative RO values for data screening purposes.

12. IEPA Comment: Table 1: It was noted that many constituents in the table did not have remedial objectives. However, a number of these constituents have provisional remedial objectives available through the Illinois EPA's Toxicity Assessment Unit. Please visit the Agency's web page and click on the *Bureau of Land* link. In the body of the page, click on the *"Chemicals not in TACO Tier I Tables"* link. On this page, there are links to the soil remediation objectives for both residential and industrial/commercial properties. Please review Table I in the completion report and compare the remedial objectives listed with those found on the Agency's web page. If Table I shows a chemical has no remedial objective, but a remedial objective is available through the web page table, please include it with a footnote. In those cases where gray-shaded rows are shown, this indicates there are provisional objectives available for that particular chemical. Please compile a list of the chemicals from Table I for which provisional objectives

are required and submit that to the Agency. Provisional objectives will be provided based on the list submitted.

Army Response: The Illinois EPA provided the Army with provisional objectives for ten analytes [aluminum, chloroethane, chloromethane, dibenzofuran, 1,3-dichlorobenzene, dimethylphthalate, 2-hexanone, iron, 2-nitroaniline, 2,4,6-tribromophenol] in an internal memorandum dated August 8, 2003 from Tom Hornshaw to Andy Jankowski. The applicable remedial objectives for these analytes have been added to Table 1, as requested.

Comparison of these remedial objectives with site data indicates that all detected concentrations were below the provisional objectives except iron. Exceedances of the iron provisional objective were detected at the former vehicle inspection pit OTH-1), former shop sink (OTH-2), and former vehicle washrack (OTH-3). Iron exceeded the provisional residential ingestion criterion of 23,000 mg/kg in 5 of 24 samples analyzed at concentrations ranging from 23,900 to 31,600 mg/kg. These concentrations are well within the regional background concentration range of 5,000 to 80,000 mg/kg published by the IEPA[2]. In addition, iron is an essential nutrient for all receptors and generally does not present a hazard to human health. On the contrary, iron is essential for good health and is routinely taken as dietary supplement. Information regarding adverse health impact due to exposure to iron is limited to inhalation of iron oxide and handling of iron ore, where iron concentrations are significantly higher than those detected at this site.

Given the sporadic nature of the iron exceedances, the fact that detected concentrations are within the regional background range (which suggest that iron may not be site related), and the fact that iron is an essential nutrient and on site concentrations are not known or expected to represent a hazard to human health, the Ft Dearborn USARC property is suitable for future unrestricted use and no further investigations or remedial actions are warranted due to iron.

IEPA Comment on RTC (November 3, 2003): The Army's response indicates the concentrations are well within the regional background concentration range of 5,000 to 80,000 mg/kg as published by Illinois EPA in the Technical Report, A Summary of Background Conditions for Inorganics in Soil, August 1994. Please be advised, the Army is misquoting the document. In Table 2 of the document, a listing of the inorganic parameters is provided, including iron. For iron, a total of 105 data points were utilized from across the entire state, and the range of values from those 105 data points was 5,000 to 80,000 mg/kg. This means the lowest concentration of the inorganic parameter, iron that went into the data set was 5,000 mg/kg, and the highest concentration of iron that went into the data set was to 80,000 mg/kg. In Table G of Appendix A found in Title 35 of the Illinois Administrative Code ("35 IAC") Part 742 "Tiered Approach to Corrective Action Objectives" ("TACO"), a concentration of 15,900 mg/kg is provided as the

2 Illinois Environmental Protection Agency, Office of Chemical Safety. Technical Report, A Summary of Background Conditions for Inorganics in Soil. August 1994.

soil background concentration of iron for counties within the Metropolitan Statistical Areas ("MSA"). This concentration is the highest background concentration of iron in soils for counties within the MSA. The Army will need to revise their argument in support of the elevated concentrations of iron in the soils at this facility.

Army Response: To further support the Army's position that no further action is required to address iron in site soils, a calculation was performed to compare site-specific iron data to the U.S Food and Drug Administration (FDA) recommended daily allowance (RDA). The RDA is a recommended dose necessary to maintain good health. This approach was utilized since iron is considered to be an essential nutrient and given the absence of chemical specific toxicity information necessary to perform a risk calculation. The RDA calculation was performed in accordance with U.S. Army Corps of Engineers (USACE) (1995) *Environmental Quality Risk Assessment Handbook.* Detailed description of procedure and calculations are included in Attachment C of this response. The maximum concentration of iron detected in site soil was used to calculate the estimated daily intake of iron from incidental ingestion. Results indicate that the estimated daily intake is 6 mg/kg, well below the RDA of 10 mg/kg. Therefore, iron concentrations in site soils are not expected to represent a hazard to human health and no further investigations or remedial actions are warranted.

The results of the calculations, along with assumptions and calculation inputs provided as Attachment C to this letter, will be appended to the final Construction Completion Report (CCR). Text will be inserted into Sections 3.1.1, 3.1.2, 3.1.3, and 4.0 to list the exceedances of the provisional remediation objective for iron. Text will also be added to provide reference to the risk calculation and findings, as follows: "A risk calculation was performed to evaluate the potential significance of this iron exceedance. Results are presented in Appendix E and indicate iron concentrations in site soils are not expected to represent a hazard to human health."

IEPA Comment on RTC (May 20, 2004): The evaluation of risks due to the essential nutrient iron contained in Attachment C has been developed inappropriately. The evaluation correctly determines the level of iron exposure from ingesting soil, but there is no evaluation of the total amount of daily iron intake. The evaluation of the total daily intake of nutrients from all sources (diet, drinking water, and air if appropriate) for risk assessments of nutrient chemicals is required.

Army Response: The iron risk evaluation has been revised to consider the total daily iron intake as requested by IEPA. The results of the calculations, along with assumptions and calculation inputs provided as Attachment B to this letter, will be appended to the final Construction Completion Report (CCR). Text will be inserted into Sections 3.1.1, 3.1.2, 3.1.3, and 4.0 to list the exceedances of the provisional remediation objective for iron. Text will also be added to

provide reference to the risk calculation and findings, as follows: "A risk calculation was performed to evaluate the potential significance of this iron exceedance. Results are presented in Appendix E and indicate iron concentrations in site soils are not expected to represent a hazard to human health."

13. IEPA Comment: Table 1: Please revise the table to include the remedial objectives for cis-1,3-Dichloropropene and trans-1,3-Dichloropropene as listed in Title 35 of the Illinois Administrative Code ("35 IAC") Part 742 "Tiered Approach to Corrective Action Objectives" ("TACO").

    Army Response: The remedial objectives for cis-1,3-Dichloropropene and trans-1,3-Dichloropropene have been added to the table as requested. No additional changes to the report were required based on this revision since neither chemical was detected.

14. IEPA Comment: Table 1: The analysis results show many of the residential, and migration-to-groundwater remedial objectives were not met by virtue of the detection limits. The text offers no explanation regarding this, nor does the text draw a conclusion regarding the reuse classification for the property based on these results. Please clarify.

    Army Response: There are nine compounds [2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 3,3'-Dichlorobenzidine, Bis(2-chloroethyl) ether, Nitrobenzene, N-Nitrosodi-n-propylamine, Pentachlorophenol, and Vinyl chloride] for which the reporting limits exceed the applicable remedial objectives. Due to limitations in laboratory methods, it is not always possible to sense a constituent at or below its remedial objective concentration. This is a common occurrence in environmental investigations. Furthermore, matrix affects due to the presence of other chemicals may result in raising the reporting limits. Of these nine compounds, three are explosive residues and are not compounds associated with the mission of a Reserve Center. None of these nine compounds were detected above their respective detection limit, which is less than the reporting limit.

    The inability to sense all the compounds at their lowest remedial objective contributes to the overall uncertainty associated with the results of the investigation but is not considered significant. Therefore, the reuse classification is not affected by this uncertainty. It is noted that the approved QAPP provided method reporting limits for these nine compounds that were above the corresponding TACO remedial objectives.

    Section 3.1.5 of the report has been revised to incorporate the following statement: "The reporting limits for *2,4-Dinotrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 3,3'-Dichlorobenzidine, bis(2-chloroethyl)ether, nitrobenzene, n-nitrosodi-n-propylamine, pentachlorophenol, and vinyl chloride* were above the TACO residential and/or migration to

Class I groundwater criteria due to limitations inherent in available laboratory testing methods. Best available technology and standard analytical methods, with normal reporting limits, were utilized. However, this is a common occurrence in environmental investigations. This contributes to the overall uncertainty associated with the results of the investigation but is not considered significant."

USEPA Comments dated 17 June 2003 and 10 September 2003:

1. USEPA Comment: Section 1.1 Background, 3rd paragraph, p.2: Why was the fifth Category 7 site (Indoor Firing Range) not included in this Construction Completion Report (CCR)? The Indoor Firing Range (Site ORD-1) was included in the December 2001 Final Work Plan For Various Site Remediations at Fort Dearborn. Please add a section to the CCR to include any deviations from the work plan and unplanned occurrences

   Army Response: As stated in Section 2.0 of the Final Work Plan, "This Work Plan addresses the collection of soil samples and/or the removal of equipment associated with four of the five identified Category 7 locations. The fifth area, the firing range, was removed and remediated by Cape Environmental in November 1999. The remaining four sites addressed in this Work Plan include the former vehicle inspection pit (OTH-1), the former shop sink (OTH-2), the former vehicle wash rack (OTH-3), and the oil-water separator (OWS-1). This Work Plan also addresses removal of a 250-gallon aboveground storage tank (AST) located north of the Organizational Maintenance Shop (OMS) Building." Accordingly, the last sentence in Section 1.1 of the Construction Completion Report states "A fifth Category 7 Area, the Indoor Firing Range, was remediated by Cape Environmental, Inc. in November 1999 and is not addressed herein." To provide clarity, the text has been revised to add the statement "Results of the remediation are presented in *Final Closure Report, Industrial Hygiene Surveillance and Air Monitoring Conducted During Range Decommissioning at Fort Dearborn Army Reserve Center, Small Arms Firing Range, Rosemont, Illinois,* dated May 2000." at the end of Section 1.1.

   U.S. EPA's Comment on RTC (September 10, 2003): The Army's response appears adequate. It was agreed by the Army, Illinois Environmental Protection Agency (IEPA) and U.S. EPA that the Army and its consultant (Montgomery Watson Harza) would go back and check the *Final Closure Report, Industrial Hygiene Surveillance...., dated May 2000* and files for any concurrence correspondence from U.S. EPA and IEPA. (Action Item: Doug Meadors (Army) and Bob Suda (Montgomery Watson Harza) agreed to follow-up with this item.)

   Army Response: The USEPA documented their review *of Final Closure Report, Industrial Hygiene Surveillance and Air Monitoring Conducted During Range Decommissioning at Fort Dearborn U.S. Army Reserve Center, Chicago, Illinois* in a letter dated March 5, 2001 from Ms. Shari Kolak (USEPA) to Mr. Mark Buck (U.S. Army, 88th Regional Support Command). This letter states: "The United States Environmental Protection Agency (U.S. EPA) has reviewed the Final Closure Report, Industrial Hygiene Surveillance and Air Monitoring Conducted During Range Decommissioning, which we received on December 28, 2000, for the Fort Dearborn U.S. Army Reserve Center in Chicago, Illinois. We also looked at the companion Phase I Indoor

Firing Range Site Survey report which was attached to the Final Closure Report. U.S. EPA has no comments and approves the Final Closure Report as submitted."

2. USEPA Comment: Section 1.3 Project Scope and Objectives, 3rd paragraph, p.4: The CCR states that the "scope of work also included removal of an empty unattached 250-gallon above-ground storage tank (AST) that was resting on the ground near the north side of the OMS Building. No further information regarding the disposition of the tank is available."

   Did the Army's contractor perform any sampling near the north side of the OMS Building, or suspect any potential contamination in this area?

   Army Response: The above ground storage tank was apparently abandoned on the property. Since the tank was empty and there was no evidence of any spills or leaks associated with the tank, no environmental concerns were noted and no environmental sampling was included in the approved work plan. However, to properly dispose of the tank, the scope of the demolition project included provisions for disposal of the tank. To provide clarity, the text has been revised to include the following statement: "No evidence of spills or leaks were observed to be associated with the tank. Therefore, no environmental sampling was required as part of this project."

   U.S. EPA's Comment on RTC (September 10, 2003): Concur.

   Army Response: No further response is needed.

3. USEPA Comment: Section 3.1.5 Analytical Data Validation, p.15: Text states that the independent third-party validation (to be done by USACE contractor Lee A. Knupple and Assoc.), on at least 10% of the data, was submitted separately from this document. US-EPA has not received this data validation report as yet. Please be advised that our review of this Construction Completion Report will not be complete without our ability to review the third-party data validation report, and findings.

   Army Response: The third-party data validation report is pending and will be provided in a separate submission as soon as it is available.

   U.S. EPA's Comment on RTC (September 10, 2003): Understood. Please provide the 3rd-party data validation report so that U.S. EPA may continue our review process.

   Army Response: The third party data validation report prepared by Lee Knupple & Associates was submitted to the USEPA on 07 August 2003.

4. USEPA Comment: Tables Section/all SVOCs: It was noted that for all the SVOC data tables, significant hits were listed for 2,4,6 Tribromophenol (listed as a surrogate in the SVOC analytical reports provided in Appendix D), but no listing or values for 2,4,6 Trichlorophenol (which was an actual analyte listed in the Appendix D SVOC reports). Is this a typo, or is the surrogate being reported out here?

   Army Response: The table has been corrected to replace 2,4,6 Tribromophenol with 2,4,6-Trichlorophenol. Other changes made to this table to address errata identified while reviewing this comment are: correct the result for benzo(g,h,i)perylene in sample FIP-003-06-SSS; and correct the reporting limits for 1,2,4-trichlorobenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, and hexachlorobutadiene.

   U.S. EPA's Comment on RTC (September 10, 2003): Understood. Please provide the revised table(s) so that U.S. EPA may continue our review process.

   Army Response: The revised tables have been provided.

5. USEPA Comment: Appendix D, Case Narratives, Manual Integration: It was noted for every case narrative, under PCB Fraction - Method 8082, there were listing of pages where manual integration took place, and the only explanation provided was a statement to "See hard copy for explanations of manual integrations". There were no hard copy provided, nor any explanations of why any of this manual integration took place in this report. Please provide an explanation of what manual integrations took place, why they were necessary, and if it was deemed justified.

   Army Response: The project QAPP specifies that ARDL will follow the procedures outlined USEPA Region V Policy on Manual Integration (USEPA, 2001). The Region V Manual Integration Policy states that it is "limited only to GC/MS methodologies, specifically for Volatiles and Semi-Volatiles analysis." Polychorinated biphenyls are analyzed by Method SW8082, which is a GC method, therefore, manual integration documentation is not required under the Region V Manual Integration Policy. PCB manual integration documentation can be provided upon request.

   Benzo(b)fluoranthene (sample VWR-005-02-EBT) and benzo(k)fluoranthene (samples VWR-006-02-EBT, VWR-003-02-ESW, FSS-007-05-EBT, FSS-004-040ESW, and FSS-003-04-ESW) analyzed by GC/MS using Method SW8270C SIM were manually integrated. These compounds were manually integrated due to an incorrect peak selected by the computer. Manual integration documentation for these samples is provided in the revised Appendix D.

   U.S. EPA's Comment on RTC (September 10, 2003): Understood. Although the U.S. EPA Region 5 Manual Integration Policy lists GC/MS methods; both logic and the desire for

meaningful project data would encourage data reviewers/validators to be vigilant to ensure the proper use of manual integration at any time or for any method in which it is being utilized. Please provide the documentation in Appendix D (as mentioned), and include feedback as to the reasons for, necessity of and proper performance of manual integrations for all methodologies for which it is performed.

Army Response: Manual integration documentation for both GC and GC/MS analyses has been included in the revised Appendix D.

6. USEPA Comment: Appendix D, Lab Report 301101: The sample VWR-008-02-EBT appears on the chain of custody forms, and has analytical data output forms for VOCs, SVOCs, PCBs, PAHs, Glycol, and Inorganics. However, there is no listing of this data in the Tables section of this report, nor a mention in either the text of the report, or indication on the sampling Figure 4 (Former Vehicle Wash Rack) area, as to where this sample was taken or what impact (if any) this data had. Please explain.

   Army Response: Sample VWR-008-02-EBT is a field duplicate of sample VWR-006-02-EBT. Section 2.15 has been added to the Data Validation Report to discuss quality control (QC) sample results. The results have no impact on the findings presented in the Construction Completion Report.

   U.S. EPA's Comment on RTC (September 10, 2003): Understood. No further response is needed.

7. USEPA Comment: Appendix D, Lab Report 301104: The sample OWS-005-08-EBT appears to have been run three times for VOCs (there are three separate VOC data sheets, numbered ARDL lab no.301104-01, 301104-01MS, and 301104-MD). The Tables section of the report, shows only the data for one of the samples, not the MS/MD pair. Are the hits for 1,1 dichloroethene, benzene, trichloroethene, toluene, and chlorobenzene shown in the MS and MD samples due only to the matrix spike?

   Army Response: An MS/MSD was conducted on sample OWS-005-08-EBT, which was non-detect for all target VOC analytes. The MS/MSD spike included 1,1-dichloroethene, benzene, trichloroethene, toluene, and chlorobenzene. The detections of these compounds in the MS and MSD samples were due to the spike. To avoid confusion potentially arising from this, the MS and MSD results have been removed from the revised Appendix D.

   U.S. EPA's Comment on RTC (September 10, 2003): Understood. No further response is needed.

8. USEPA Comment: Appendix E, Data Validation Report: In Section 2.13 Manual Integration, text states that the laboratory case narratives did not provide any documentation of manual integration for GC or GC/MS analysis. The raw data for only two SDGs were reviewed for evidence of manual integration. There is little or no indication from this Validation Report of why the manual integrations were done, if the manual integrations were done properly, or if they were even necessary. Furthermore, this level of review does not satisfy the requirements of the Region V Manual Integration Policy, as the text infers in the Summary Section 3.0 of this Data Validation Report. The validation did not even satisfy the requirements of the Final Project QAPP (see Final Project QAPP, June 2002, Section 6.2.5 Manual Integration, p.32 -34). All manually integrated data (100%) must be validated by an independent third party validator. US-EPA has not yet seen the third party validation report, nor any indication that 100% of the manually integrated data has, or ever will be, validated.

   Army Response: The text in Section 2.13 was incorrect. The case narratives included in Appendix D list all instances of manual integration. All GC and GC/MS manual integration documentation is provided in the revised Appendix D. For clarity and correctness, Section 2.13 has been revised to state:

   "*Manual integration of analytical data produced by GC or GC/MS is defined as replacing the automatically generated output of the data handling system of an analytical instrument with an analyst-generated estimation of the area under the peak. The laboratory case narratives listed instances of manual integration. All GC/MS manual integrations were clearly identified on the raw data quantitation reports with an "M" flag. The before and after chromatograms that were signed and dated by the analyst were provided for all instances of GC and GC/MS manual integration.*

   Polychlorinated biphenyls analyzed by SW8082, a GC method, required manual integration due to excess area under the peaks (SDG #301100, #301101, #301102, and #301103) and because the peaks did not split in the initial calibration (SDG #301103 and #301104). Benzo(b)fluoranthene (sample VWR-005-02-EBT) and benzo(k)fluoranthene (samples VWR-006-02-EBT, VWR-003-02-ESW, FSS-007-05-EBT, FSS-004-04-ESW, and FSS-003-04-ESW) analyzed by GC/MS using SW8270C SIM were manually integrated due to incorrect peaks integrated by the computer. Manual integration was performed in a consistent and scientifically valid manner and had no impact on data quality. All GC and GC/MS manual integration documentation is provided in Attachment 1."

   The third-party data validation report is pending and will be provided in a separate submission as soon as it is available.

   U.S. EPA's Comment on RTC (September 10, 2003): Understood. Please provide the revisions

and 3rd-party data validation report so that U.S. EPA may continue our review process.

Army Response: The third party data validation report prepared by Lee Knupple & Associates was submitted to the USEPA on 07 August 2003.

USEPA Comments dated 12 September 2003:

1. USEPA Comment: Section 4.7 Data Review Comments/Surrogate Recovery Limits Sub-Sections: There is a minor typo in several of these sub-sections, stating that "The total number of samples analyzed was twenty-seventy". Please correct.

   Army Response: The typo was corrected in several of the subsections.

2. USEPA Comment: Attachment 2 - Checklists: PCB Checklists: For all PCB checklists, there is an "N/A" (not applicable) notification for Item 4d (pertains to Retention Time Window specs).. Looking back at the Sample Analysis Subsection for PCBs (see p.25), text notes that the RRT were within control limits. Please explain.

   Army Response: The polychlorinated biphenyls (PCB's) checklists have the "N/A" checked since a PCB analyte was not detected in the samples. The Relative Retention Time (RRT) were within control limits for the standards and therefore it was stated that the RRT were within control limits.

3. USEPA Comment: Attachment 2 - Checklists: Glycol Checklists: For the Glycol checklists, there is an "N/A" (not applicable) notification for Item 4d (pertains to Retention Time Window specs).. Looking back at the Sample Analysis Subsection for Glycol (see p.26), text notes that the RRT were within control limits. Please explain.

   Army Response: The glycol checklists have the "N/A" checked since the glycol analyte was not detected in the samples. The RRT were within control limits for the standards and therefore it was stated that the RRT were within control limits.

4. USEPA Comment: Attachment 5 - Chain of Custodies: Cooler Receipt Report/ADRL #301101/Cooler #N011. Report indicates that there was no Custody Seal date or name, and states "No" to Item 5: "Were custody papers sealed in a plastic bag, and taped inside to the lid?". If this is a typo, please correct. If not, this practice should be revised for future sampling efforts so that the seals are dated and named, and that the C.O.C. form is included in the cooler as required by Item 5.

   Army Response: The custody papers were provided in sealed plastic bag in each cooler. However, for this specific cooler, it is unclear if the custody papers were taped to the top of the cooler, the tape did not adequately adhere to the top of the cooler, or whether the papers were inadvertently not taped to the cooler. Future sampling efforts will place greater emphasis on

ensuring that the custody papers are taped to the top of each cooler and the custody seals are named and dated.

5. USEPA Comment: Attachment 5 - Chain of Custodies: Cooler Receipt Report/ADRL #301103/Cooler #N004. Report indicates that there was only one custody seal on the cooler. Aren't two seals normally utilized? Please explain. It would also be helpful if the signature/name on the seal(s) was more legible to the sample custodian, as several sample receipt forms noted that the seal name could not be read.

   Army Response: It is normal practice to apply two custody seals to each cooler. In this instance, it is unclear whether only one custody seal was inadvertently not applied or whether the second custody seal became dislodged from the cooler during transit. Given that one intact seal was on the cooler at the time it was received at the analytical laboratory, there are no concerns with the integrity of the samples. Future sampling efforts will place greater emphasis on ensuring that two custody seals are affixed to each cooler and that the signature/name on the seal(s) is more legible to the sample custodian

6. USEPA Comment: Attachment 6 - Data Qualifiers: Semivolatile Tables: It was noted that the values reported out as "U" were slightly higher than the RL list in the QAPP. There is not an indication in the tables here, but did these samples require an adjustment that thereby raised

   Army Response: The Reporting Limits (RL) in the Final Quality Assurance Project Plan (QAPP) (August 2002) are dry weight reporting limits derived from laboratory studies. For the soil samples, some moisture is normally present. The raised reporting limits were based on the percent moisture of the samples.

DATA VALIDATION REPORT, VARIOUS SITE REMEDIATIONS

FORT DEARBORN U.S. ARMY RESERVE CENTER CHICAGO, ILLINOIS

Prepared for

U.S. Army Corps of Engineers
Louisville, District

By

MWH

August 5, 2004

TABLE OF CONTENTS

CHAPTER PAGE

TABLE OF CONTENTS I

LIST OF TABLES II

ATTACHMENTS II

1.0 INTRODUCTION 1

2.0 DATA VALIDATION RESULTS 4

2.1 Gas Chromatograph/Mass Spectrometer (GC/MS) Tuning and Mass Calibration 4

2.2 Initial Calibration 4

2.3 Initial Calibration Verification (ICV) 5

2.4 Continuing Calibration 5

2.5 Holding Time Evaluation 6

2.6 Internal Standard (IS) Recoveries 6

2.7 Surrogate Spike Recoveries 7

2.8 Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analyses 7

2.9 Matrix Spike/Matrix Spike (MS/MSD) Analyses 7

2.10 Method Blank Analyses 8

2.11 Trip Blank Analyses 8

2.12 Equipment Rinsate Blank Analyses 9

2.13 Manual Integration 9

2.14 Completeness 10

2.15 Field Duplicate Analyses 11

3.0 SUMMARY 12

4.0 REFERENCES 14

LIST OF TABLES

Table 1 Summary of Data Qualified Based on Initial and Continuing Calibration Results
Table 2 Summary of Data Qualified Based on Internal Standard Results
Table 3 Summary of Data Qualified Based on LCS/LCD Recoveries
Table 4 Summary of Data Qualified Based on MS Recoveries
Table 5 Summary of Data Qualified Based on Blank Results

ATTACHMENTS

Attachment 1 GC/MS Manual Integration Documentation

1.0 INTRODUCTION

This Data Validation Report details the assessment and verification of analytical data collected and generated from the field activities for September 2002 soil investigation at the Fort Dearborn U.S. Army Reserve Center, Chicago, Illinois. Analytical procedures for this project are outlined in the project Quality Assurance Project Plan (QAPP) prepared by Ferguson Harbour Inc. (Ferguson-Harbour, 2002). Applied Research & Development Laboratory (ARDL) located in Mount Vernon, Illinois was subcontracted by Ferguson Harbour, Inc. to perform chemical analyses of the soil and water-matrix samples.

The samples were collected September 11, 12, 13, and 17, 2002. Approximately 27 soil samples and 6 water-matrix field quality control (QC) samples were collected as part of this investigation.

All analytical methods for this investigation were referenced from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986. The samples were analyzed for one or more of the following parameters:

- Volatile organic compounds (VOCs) by SW8260B.
- Semi volatile organic compounds (SVOCs) by SW8270C
- Polynuclear aromatic compounds (PAHs) by modified SW8270C-selective ion monitoring (SIM)
- Polychlorinated biphenyls (PCBs) by SW8082
- Glycol by SW8015
- Metals by SW60101B/SW7470/SW7471A

Data validation of sample results was performed by MWH Americas, Inc. (MWH). Approximately 40 percent (12 soil and 1 water sample) of the total number of samples

collected underwent validation and systematic review, as specified in Section 9.2 of the project QAPP. The criteria checked included during this process included: chain-of-custody and cooler receipt forms, lab sample identification, contract sample identification (if different), sample results by sample and analytical fraction, analytical method performed, analytical reporting limits, lab data qualifiers, holding times, surrogate recoveries, lab control sample recoveries (LCS/LCSD), MS/MSD recoveries, laboratory duplicate results, method blank results, trip blank results, field blank results, instrument performance and calibration, correct qualitative and quantitative interpretation of raw data, and manually integrated peaks. Validation of the data submitted by ARDL was performed using the USEPA National Functional Guidelines for Organic (Inorganic) Data Review (USEPA, 1994a, 1994b) and QC acceptance criteria from SW-846 in accordance with the project QAPP. Data validation flags utilized in the validation process and the definitions of these qualifier flags are as follows:

- U — Indicates compound was analyzed for, but was not detected above the level of the associated value. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J — The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ — Indicates compound was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
- R — Indicates that the data are unusable.

All qualifier flags have been incorporated in the data tables presented in this report. The results of this data validation are presented in the following sections.

In addition, MWH conducted a data review on the remaining portion of the data generated by ARDL, as specified in Section 9.2 of the project QAPP. The following items were reviewed as part of MWH's data review: chain-of-custody forms to verify that samples were collected for the parameters specified in the FSP, appropriate analyses

were requested from the laboratory, and that the laboratory received all samples; sample collection and analysis dates to verify that samples were analyzed within the specified holding times; chain-of-custody forms and summary of analytical data to verify that all required analyses were completed; laboratory case narratives to identify potential data quality problems; laboratory case narratives to identify manually integrated data; surrogate, LCS, MS.MSD recoveries; blank results; and calibration and tunes (insofar as that they were performed at the appropriate frequencies). The results of MWH's data review are incorporated into this report.

2.0 DATA VALIDATION RESULTS

This section provides a summary of the laboratory quality control (QC) sample results, which were used to meet the project data quality objectives (DQO) for the investigation. The following subsections summarize the validation and assessment findings in terms precision, accuracy, representativeness, comparability, and completeness (PARCC) criteria as defined in the project QAPP.

2.1 Gas Chromatograph/Mass Spectrometer (GC/MS) Tuning and Mass Calibration

Prior to analysis, GC/MS instrumentation is tuned to ensure optimization over the mass range of interest. To evaluate instrument tuning, the VOC, SVOC, and PAH methods require the analysis of specific tuning compounds. The resulting spectra must meet the criteria cited in the reference method and project QAPP before analysis is initiated. Analysis of the tuning compound must then be repeated every twelve hours throughout sample analysis to ensure the continued optimization of the instrument. Instrument tuning data were reviewed as part of the data validation. All tuning criteria met method and project QAPP requirements for the VOC, SVOC, and PAH analyses, indicating proper optimization of the instrumentation. Tuning compounds were analyzed at the required frequency.

2.2 Initial Calibration

To quantify compounds of interest in samples, calibration of the instrument over a specific concentration range must be performed. Initially, a calibration curve containing all compounds of interest is analyzed to characterize instrument response for each analyte over a specific concentration range. The average response factor (RF) and relative standard deviation (RSD) were calculated for each of the compounds analyzed. For the inductively coupled argon plasma (ICP) instrument, only one calibration standard and one blank sample were required for the initial calibration. For the initial calibration of

PCBs, only two specific PCB aroclors are required for calibration. Calibration of the remaining 4 aroclors is not required unless detected in a project sample.

The initial calibration data were compared against the criteria specified in the project QAPP for each of the methods. The initial calibration data reviewed included relative standard deviations (RSD), relative response factors (RRF), and correlation coefficients. The majority of the initial calibration data met the project QAPP requirements. Data associated with an analyte that did not meet calibration requirements were qualified following the project QAPP criteria. Table 1 lists the analytes that did not meet criteria for initial calibration, associated samples, and the applied flag.

2.3 Initial Calibration Verification (ICV)

To verify the accuracy of the initial calibration a standard from a second source or different vendor is analyzed. This standard as well as the initial calibration blank should be analyzed immediately after completing the ICV. The results from the reported ICVs were compared to the RRF and %D criteria listed in the project QAPP. Analytes in the ICVs that did not meet the criteria specified the project QAPP and the associated samples are listed in Table 1. The affected data were qualified following the project QAPP criteria.

2.4 Continuing Calibration

To ensure that instrument calibration is acceptable throughout the sample analysis period, continuing calibration standards must be analyzed and compared to the initial calibration curve every 12 hours. The continuing calibration verification (CCV) percent differences (%Ds) for several VOC and SVOCs were above the %D criteria specified in the project QAPP. Table 1 lists analytes, associated samples, and applied data flags for CCV data that did not meet project QAPP specified criteria for instrument sensitivity.

2.5 Holding Time Evaluation

To ensure results are representative of site conditions, each of the methods used to extract and analyze samples for this investigation has a prescribed time period in which the sample should be extracted and analyzed. The investigative samples were all extracted and analyzed within the holding time criteria listed in the project QAPP, with one exception. The VOC analysis for sample VWR-001-03-ESW was performed six days after sample collection. The VOC data for this sample were rejected following the criteria specified in the project QAPP. As stated above, all but one soil sample was analyzed for VOCs within the holding time of 48 hours of sample collection as specified by the project QAPP.

2.6 Internal Standard (IS) Recoveries

To correct for changes in GC/MS response and sensitivity, internal standard compounds are added to investigative samples and quality control samples prior to VOC, SVOC, and PAH analysis. All results are calculated as a ratio of the internal standard response. The criteria by which the internal standard results are assessed are as follows:

- Internal standard area counts must not vary by more than a factor of two (-50 percent to +150 percent) from the associated continuing calibration standard.

- The retention time of the internal standard must not vary more than ± 30 seconds from the associated continuing calibration standard.

The majority of the VOC, SVOC, and PAH sample results met this criteria. The sample results that did not meet these criteria are listed in Table 2, along with the internal standard percent recovery (%R) and the applied data flag for each of the affected analytes.

2.7 Surrogate Spike Recoveries

All samples, blanks, and standards analyzed for VOCs, SVOCs, PAHs, and PCBs were spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries are used to evaluate the effects of individual sample matrices on analytical efficiency and are evaluated using method control limits specified in the project QAPP. All of the investigative sample surrogate recoveries were within the acceptable limits specified in the project QAPP.

2.8 Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analyses

The LCS and LCSD are used to assess overall analytical performance. LCSs are prepared and analyzed with each analytical batch. The RPD between the LCS and LCSD is used to assess analytical precision. The LCS/LCSD recoveries and RPDs were compared to the limits specified in the project QAPP for spike samples. All but three of the LCS recoveries and one LCS/LCSD RPD were within acceptable limits. The out-of-limit LCS recoveries and RPD are listed in Table 3. It should be noted that because two of the three LCS recoveries were above the control limit and the associated investigative sample results for these two analytes were non-detect, none of the data associated with these two LCS samples required qualification. The data associated with the one low LCS recovery and elevated RPD were qualified following the project QAPP criteria.

2.9 Matrix Spike/Matrix Spike (MS/MSD) Analyses

The recoveries of MS/MSD analyses are used to assess analytical accuracy for the individual sample matrices. The RPD between the MS and MSD is used to assess matrix homogeneity and analytical precision. The quality control criteria for MS/MSD recoveries and RPDs for each of the analytical methods are listed in the project QAPP. The majority of the project sample MS/MSD recoveries and RPDs were within

acceptable limits. MS/MSD recoveries and/or RPDs that were outside of acceptable criteria are listed in Table 4 as well as the applied data flag.

2.10 Method Blank Analyses

Method blank samples are prepared from a clean control sample matrix, they are prepared and analyzed with the investigative samples to monitor for potential sample contamination introduced during laboratory processing. Method blanks were performed and reported with each analytical batch.

The method blank results were free of target analyte detections with the exception of methylene chloride, which has been defined by the USEPA as a common laboratory contaminant. Sample methylene chloride results associated with the contaminated method blank data were qualified following the criteria in the project QAPP and are listed in Table 5. Several sample detections of analytes recognized by the USEPA as common laboratory contaminants, including methylene chloride, acetone, and phthalates, have been listed in Table 5. The method blank results associated with these samples did not contain detections of these analytes.

2.11 Trip Blank Analyses

Trip blank samples are transported, stored, and analyzed with investigative samples to identify potential cross-contamination of VOC samples. Trip blank sample 9-12-02-TB was transported and submitted for analysis with the investigative samples collected on September 12, 2002. The common laboratory contaminant, methylene chloride, was reported in the trip blank data. Methylene chloride sample detections associated with the trip blank were qualified following the project QAPP criteria and are listed in Table 5.

2.12 Equipment Rinsate Blank Analyses

Equipment rinsate blank samples are prepared by pouring a clean, control water sample through decontaminated sample collection equipment. Rinsate blanks are used to monitor the efficiency of the equipment decontamination procedure. Five rinsate blank samples were collected and submitted for analysis for this investigation. One of the rinsate blanks was submitted for the full suite of analyses. Two of the four other rinsate blanks were submitted for VOC analysis only, for metals analysis, and one for SVOCs, PAHs, and PCBs analyses.

Target analytes were reported in two of the rinsate blank results. The common laboratory contaminants methylene chloride and acetone were reported in rinsate blank FIP-003-06-ERB. The common drinking water contaminant chloroform was reported in this sample as well as the target analyte toluene. Chloroform and toluene were not detected in any of the associated samples. Methylene chloride and acetone results in associated samples were qualified following the project QAPP criteria and are listed in Table 5.

Low concentrations of metals were reported in rinsate blanks FIP-003-06-ERB and VWR-002-02-ERB. The concentrations of metals reported in samples associated with these two rinsate samples were more than 5-times the rinsate concentration. Therefore, no qualification to the associated data was required.

2.13 Manual Integration

Manual integration of analytical data produced by GC or GC/MS is defined as replacing the automatically generated output of the data handling system of an analytical instrument with an analyst-generated estimation of the area under the peak. The laboratory case narratives listed instances of manual integration. All GC/MS manual integrations were clearly identified on the raw data quantitation reports with an "M" flag.

The before and after chromatograms that were signed and dated by the analyst were provided for all instances of GC and GC/MS manual integration.

Polychlorinated biphenyls analyzed by SW8082, a GC method, required manual integration due to excess area under the peaks (SDG #301100, #301101, #301102, and #301103) and because the peaks did not split in the initial calibration (SDG #301103 and #301104). Benzo(b)fluoranthene (sample VWR-005-02-EBT) and benzo(k)fluoranthene (samples VWR-006-02-EBT, VWR-003-02-ESW, FSS-007-05-EBT, FSS-004-04-ESW, and FSS-003-04-ESW) analyzed by GC/MS using SW8270C SIM were manually integrated due to incorrect peaks integrated by the computer. Manual integration was performed in a consistent and scientifically valid manner and had no impact on data quality. All GC and GC/MS manual integration documentation is provided in Attachment 1."

2.14 Completeness

Analytical completeness is used to monitor and assess the amount of data required to meet project DQOs and the data usability. Taking the number of valid, usable data points, and dividing them by the total number of data points for each method yields the calculated completeness. Based on the results of the data validation described in the above paragraphs, all soil data are considered valid as qualified, with one exception. The VOC data for sample VWR-001-03-ESW were rejected due to an exceeded holding time. Therefore the completeness for VOCs is 96 percent, which meets the project completeness goal of 90 percent. The completeness for the other methods performed for this investigation was 100 percent.

2.15 Field Duplicate Analyses

The accuracy of the field duplicates are evaluated by calculating the relative percent difference (RPD) between the normal and field duplicate samples using the following equation:

$$RPD = \left(\frac{|A - B|}{[A + B]/2} \right) \times 100$$

Where: A and B = reported concentrations for sample duplicate analyses

Field duplicate samples were collected and analyzed to evaluate sampling and analytical representativeness and precision. Three field duplicates were collected including:

- VWR-008-02-EBT (field duplicate of VWR-006-02-EBT);
- FSS-007-05-EBT (field duplicate of FSS-006-05-EBT); and
- FSS-008-04-ESW (field duplicate of VWR-001-04-ESW).

Sample data were not qualified based on field duplicate sample results because precision was impacted by several factors such as collection, analytical procedures, and sample heterogeneity. These data were used qualitatively as additional evidence to support data comparability and quality. A comparison of actual sample results and RPDs indicates good agreement between parent samples and their respective duplicates.

3.0 SUMMARY

This data validation report verified and validated the site characterization analytical data reported by the fixed laboratory, ARDL of Mt. Vernon, Illinois. The data validation was completed based on the criteria presented in the Quality Assurance Project Plan (Ferguson-Harbour, 2002).

MWH performed data validation and systematic review for approximately forty percent of the total number of samples collected and a data review for the remaining portions of the data, as specified in Section 9.2 of the project QAPP. In addition to the data validation performed by MWH, a minimum of 10 percent of the data was fully validated by an independent USACE contractor, Lee A. Knupple and Associates, Inc. of Montgomery, Ohio. Copies of the independent data validation report are being submitted separately. Principal findings and conclusions of MWH's data validation process are highlighted below:

- Based on the results of equipment tuning, initial calibration, initial calibration verification, and continuing calibration the data are considered precise as qualified.

- Based on the results of the holding time evaluation, the data for this project were considered accurate as qualified, except for those data that were qualified with an "R" flag. All extraction and holding times were met except for soil VOC sample VWR-001-03-ESW.

- Based on the results for internal standard recoveries, surrogate spike recoveries, laboratory control sample/laboratory control sample duplicate analyses, and matrix spike/matrix spike duplicate analyses the results are precise as qualified.

- Trace concentrations of methylene chloride were detected in the method and trip blanks. Methylene chloride is recognized by the USEPA as common laboratory contaminant. Methylene chloride is attributed to laboratory contamination and is not representative of site conditions.

- Trace concentrations of methylene chloride, acetone, chloroform and toluene were detected in the equipment rinseate blanks. Methylene chloride and acetone are attributed to laboratory contamination and are not representative of site conditions. Chloroform and toluene were not detected in any of the associated samples.

- The case narratives provided a summary of manual integration. This documentation is required by the *Final Version 2.0 of GC/MS Manual Integration Policy for Region 5 Federal Facilities Response Section* (USEPA, 2001). Before and after chromatograms were provided by the laboratory. The raw data was reviewed for evidence of manual integration and were validated.

- All investigative and QC samples were collected as scheduled. Sample completeness is 100 percent.

- A comparison of actual sample results and RPDs indicates good agreement between parent samples and their respective duplicates.

- The analytical completeness was 100 percent for all analyses except soil VOCs. The soil VOCs had a completeness of 96 percent, which was greater than the completeness goal of 90 percent.

Overall, the data collected were of sufficient quality and quantity for intended data end use.

4.0 REFERENCES

Ferguson-Harbour, Inc. 2002. *Final Quality Assurance Project Plan, Ft. Dearborn USARC, Chicago, IL, Various Site Remediations*. Prepared for the U.S. Army Corps of Engineers. Contract No. DACA27-97-D-0007, Delivery Order No. 0016. August.

U.S. Environmental Protection Agency. 1994a. USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review. February.

U.S. Environmental Protection Agency. 1994b. USEPA Contract Laboratory Program, National Functional Guidelines for Organic Data Review, February.

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CONSTRUCTION COMPLETION REPORT, VARIOUS SITE REMEDIATIONS

FINAL

FORT DEARBORN U.S. ARMY RESERVE CENTER CHICAGO, ILLINOIS

Prepared for

U.S. Army Corps of Engineers
Louisville, District

By

MWH

August 5, 2004

TABLE OF CONTENTS

CHAPTER	PAGE
TABLE OF CONTENTS	i
LIST OF TABLES	ii
LIST OF FIGURES	ii
LIST OF APPENDICES	ii
ACRONYMS AND ABBREVIATIONS	iii
1.0 INTRODUCTION	1
1.1. BACKGROUND	1
1.2. SITE DESCRIPTIONS	2
1.2.1 Former Vehicle Inspection Pit (OTH-1)	2
1.2.2 Former Shop Sink (OTH-2)	3
1.2.3 Former Vehicle Wash Rack (OTH-3)	3
1.2.4 Oil-Water Separator (OWS-1)	3
1.3. PROJECT SCOPE AND OBJECTIVES	4
2.0 DEMOLITION ACTIVITIES	6
2.1. SITE PREPARATION	6
2.2. EXCAVATION	6
2.2.1 Former Shop Sink (OTH-2)	6
2.2.2 Former Vehicle Wash Rack (OTH-3)	8
2.2.3 Oil-Water Separator (OWS-1)	8
2.3. DRILLING AND SOIL SAMPLING	9
2.4. MATERIAL LOADING, TRANSPORTATION, AND DISPOSAL	9
2.5. EXCAVATION BACKFILLING	10
2.6. EMISSION AND EROSION CONTROL	10
2.7. SITE RESORATION AND EQUIPMENT DECONTAMINATION	11
2.8. INSPECTION AND OVERSIGHT	11
3.0 SAMPLING AND LABORATORY ANALYSIS	12
3.1. SITE CHARACTERIZATION SAMPLING	12
3.1.1 Former Vehicle Inspection Pit (OTH-1)	12
3.1.2 Former Shop Sink (OTH-2)	13
3.1.3 Former Vehicle Wash Rack (OTH-3)	14
3.1.4 Oil-Water Separator (OWS-1)	15
3.1.5 Analytical Data Validation	15
3.2. WASTE DISPOSAL SAMPLING	17
4.0 FINDINGS AND RECOMENDATIONS	19
5.0 REFERENCES	21

LIST OF TABLES

Table 1 Analytical Data Summary

LIST OF FIGURES

Figure 1 Fort Dearborn USARC Location Map
Figure 2 Work Area Location Map
Figure 3 Former Shop Sink (OTH-2), Excavation Area and Sample Locations
Figure 4 Former Vehicle Wash Rack (OTH-3), Excavation Area and Sample Locations
Figure 5 Oil-Water Separator (OWS-1), Excavation Area and Sample Locations
Figure 6 Former Vehicle Inspection Pit (OTH-1), Sample Locations

LIST OF APPENDICES

Appendix A Photograph Log
Appendix B Contractor's Field Notes
Appendix C Waste Manifests
Appendix D Laboratory Analytical Reports and Chain-of-Custody Forms
Appendix E Iron Risk Evaluation
Appendix F PAH Risk Evaluation
Appendix G Data Validation Report

ACRONYMS AND ABBREVIATIONS

ARDL	Applied Research & Development Laboratory
ARS	O'Hare Air Reserve Station
AST	Above Ground Storage Tank
bgs	below ground surface
BCT	Base Closure Team
BRAC	Base Realignment and Closure Act
CCR	Construction Completion Report
DOT	Department of Transportation
EBS	Environmental Baseline Survey
Harza	Harza Engineering Company
IAC	Illinois Administrative Code
IEPA	Illinois Environmental Protection Agency
mg/kg	milligrams per kilogram
MDEQ	Michigan Department of Environmental Quality
MWH	MWH Americas, Inc.
NPDES	National Pollutant Discharge Elimination System
OMS	Organizational Maintenance Shop
OTH-1	Former Vehicle Inspection Pit
OTH-2	Former Shop Sink
OTH-3	Former Vehicle Wash Rack
OWS-1	Oil-Water Separator
PAH	Polynuclear Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
PID	Photoionization Detector
POV	Personal Owned Vehicle
QC	Quality Control
PRG	Preliminary Remediation Goal
SVOC	Semi-Volatile Organic Compound
TACO	Tiered Approach to Corrective Action Objectives
TAL	Target Analyte List
TCLP	Toxicity Characteristics Leaching Procedure
µg/kg	micrograms per kilogram
USACE	U.S. Army Corps of Engineers
USAR	U.S. Army Reserve
USARC	U.S. Army Reserve Center
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound

1.0 INTRODUCTION

This Construction Completion Report (CCR) summarizes demolition activities completed at the Former Vehicle Inspection Pit (OTH-1), Former Shop Sink (OTH-2), Former Vehicle Wash Rack (OTH-3), and Oil-Water Separator (OWS-1) sites at the Fort Dearborn U.S. Army Reserve Center (USARC), 6540 N. Mannheim Road, Chicago, Illinois. The demolition activities were completed between 10 September 2002 and 18 September 2002 by Ferguson-Harbour, Inc. (Ferguson-Harbour), Groveport, Ohio under Contract No. DACA27-97-D-007, Delivery Order No. 0016. The U.S. Army Corps of Engineers, Louisville District (USACE) contracted MWH Americas, Inc (MWH) to prepare this CCR under Contract No. DACW45-94-D-0044, Delivery Order No. 0026.

This CCR was prepared in accordance with the requirements detailed in Section 9.0 of *Final Work Plan for Various Site Remediations, Fort Dearborn USARC, Chicago, Illinois* (Ferguson-Harbour, 2001a) as approved by the Illinois Environmental Protection Agency (IEPA) and United States Environmental Protection Agency – Region V (USEPA).

1.1. BACKGROUND

The Fort Dearborn USARC is an inactive facility that occupied 16.48 acres at the northeast corner of O'Hare International Airport, City of Chicago, Cook County, Illinois (Figure 1). The USARC property is bound on the east by Mannheim Road, on the north by Higgins Road, on the west by the former U.S. Air Force O'Hare Air Reserve Station (ARS), and on the south by the former O'Hare ARS and Bessie Coleman Drive. Two buildings are located on the USARC property, a Reserve Center Building and the Organizational Maintenance Shop (OMS). The Reserve Center Building was constructed for use as an administration office and drill hall. It is a multiple level irregular shaped building consisting of one, one and one-half, and two story rectangular building sections. The OMS Building was constructed for use as a vehicle maintenance facility. It is a one story rectangular building with concrete block walls and a brick façade. The parcel of property located between the Reserve Center Building and the OMS Building has historically been used for military and personnel owned vehicle (POV) parking. Remaining portions of the property have remained undeveloped since the time the property was first developed.

Under terms of the Base Realignment and Closure (BRAC) Act of 1995, the Fort Dearborn USARC was to be closed and the land transferred from the U.S. Army Reserve (USAR) to the

City of Chicago. In 1999, the USACE retained Harza Engineering Company (Harza), Chicago, Illinois to complete a Phase I Environmental Baseline Survey (EBS) for the USARC property. The purpose of the Phase I EBS was to document the environmental condition of the property, resulting from the storage, release, and disposal of hazardous substances and petroleum products, and their derivatives, over the installation's history. In part, results of the Phase I EBS (Harza, 2000) identified five (5) sites requiring further investigation to resolve data gaps. These sites were placed in Category 7 because available information was insufficient to make determination of the environmental condition at these sites. A Category 7 property is defined as a geographically continuous and mapable area where the presence of sources or releases of hazardous substances or petroleum products (including derivatives) is suspected, but not well characterized, based on the results of a properly scoped records search, chain of title review, aerial photograph review, physical inspection, set of employee interviews and possibly sampling and analysis. To date, the portion of the USARC property located south of the Reserve Center Building has been transferred by deed to the City of Chicago. Transfer by lease or deed of the remaining portion of the USARC property containing the Category 7 sites is pending.

This CCR addresses the removal of equipment and collection of associated soil samples for laboratory chemical analysis at four of the five identified Category 7 locations [i.e., Former Vehicle Inspection Pit (OTH-1), the Former Shop Sink (OTH-2), the Former Vehicle Wash Rack (OTH-3), and the Oil-Water Separator (OWS-1)] as shown on Figure 2. The goal of the sampling was to obtain sufficient site data to support a determination of suitability for transfer by deed or lease of the Category 7 property and/or identify previously unknown environmental concerns that would require further actions. A fifth Category 7 area, the Indoor Firing Range, was remediated by Cape Environmental, Inc. in November 1999 and is not addressed herein. Results of the remediation are presented in *Final Closure Report, Industrial Hygiene Surveillance and Air Monitoring Conducted During Range Decommissioning at Fort Dearborn Army Reserve Center, Small Arms Firing Range, Rosemont, Illinois* prepared by Cape Environmental, Inc. and dated May 2000.

1.2. SITE DESCRIPTIONS

1.2.1 Former Vehicle Inspection Pit (OTH-1)

OTH-1 is a former vehicle inspection pit located inside the west side of the OMS Building. Available records indicate that the pit was installed during construction of the OMS Building in 1961 and has been closed (i.e. filled and capped with concrete) since at least 1987. Construction specifications indicate that walls and floor of the pit were constructed of 8-inch thick concrete with stairways at each end to provide physical access. The pit was approximately 27 feet long,

including the descending stairways, 2.5 feet wide and 5 feet deep. The pit floor sloped toward a small sump in the center of the floor. No documentary evidence was found during the Phase I EBS (Harza, 2000) that the pit had been inspected to determine its integrity or assess the presence of possible spills prior to being filled.

1.2.2 Former Shop Sink (OTH-2)

OTH-2 is described as an improvised sink installed in 1989 along the west wall inside the OMS Building. The sink reportedly drained to a 55-gallon drum that had holes punched in it and was buried in the ground, west of the OMS Building. During an April 1999 visual site inspection, the sink was found to have been removed; however, a paint silhouette was observed along the west wall inside the OMS Building and an open hole in the exterior of the OMS Building wall was observed near the silhouette.

1.2.3 Former Vehicle Wash Rack (OTH-3)

OTH-3 is a former vehicle wash rack located near the southwest corner of the OMS Building. The wash rack is currently not in use and has reportedly not been used since cancellation of the facility's National Pollutant Discharge Elimination System (NPDES) permit in January 1978. Construction drawings indicate that the wash rack is 15 feet wide, 30 feet long and constructed of 12-inch thick concrete. The wash rack slopes to the south and drains along a riprap protected drainage way toward a shallow ditch near the property boundary. During an April 1999 visual site inspection, the concrete surface of the former wash rack was observed to be in poor condition with numerous cracks and surface spalling.

1.2.4 Oil-Water Separator (OWS-1)

OWS-1 is an approximate 1900-gallon capacity concrete oil-water separator near the northwest corner of the Reserve Center Building. The separator was installed in approximately 1977 and was used to pre-treat wash water from an adjacent wash rack prior to discharge to the municipal storm sewer system. Construction specifications indicate that the separator is 4 feet wide, 8 feet long, and 8 feet deep, with the unit installed at grade level [i.e. the bottom of the separator is approximately 8 feet below ground surface (bgs)]. Results of an interior inspection of OWS-1 in April 1999 indicated that the unit was generally in good condition, except water was noted seeping through the walls near the inlet and outlet pipes on the west and east ends of the unit.

1.3. PROJECT SCOPE AND OBJECTIVES

Field work completed for this project consisted of removing facilities and/or collecting soil samples for laboratory chemical analysis associated with the Former Vehicle Inspection Pit (OTH-1), the Former Shop Sink (OTH-2), the Former Vehicle Wash Rack (OTH-3), and the Oil-Water Separator (OWS-1) sites. Site-specific scope and objectives were as follows:

- Sample soils at the Former Vehicle Inspection Pit (OTH-1) for identification of possible contamination.
- Perform an investigative excavation to determine if a buried drum is located at the Former Shop Sink (OTH-2) site, remove the drum (if present), and sample surrounding soils to identify possible contamination.
- Remove the Former Vehicle Wash Rack (OTH-3) and sample surrounding soils to identify possible contamination.
- Remove the Oil-Water Separator (OWS-1) and sample surrounding soils to identify possible contamination.
- Remove any visually obvious contaminated soil found during equipment removal and restore each area to near original condition.

Principal work activities completed to meet these objectives included removal of concrete pavement and sidewalks to facilitate excavation, transporting and disposal of excavated materials, collecting soil samples for laboratory chemical analysis, and backfilling the excavations. Detailed discussion of the field activities performed by Ferguson-Harbour at individual site locations is provided in Section 2.0.

The scope of work also included removal of an empty, unattached 250-gallon aboveground storage tank (AST) that was resting on the ground near the north side of the OMS Building. No evidence of spills or leaks were observed to be associated with the tank. Therefore, no environmental sampling was required as part of this project. Upon mobilization, Ferguson-Harbour personnel noted that the tank was not present on the Ft Dearborn USARC property. No further information regarding the disposition of the tank is available

The USACE separately contracted MWH to prepare this CCR to document the demolition activities and associated sampling results. For purposes of this CCR, sample results are compared to USEPA Region IX Preliminary Remediation Goals (PRGs) for industrial soils

(USEPA, 2002), Title 35 Illinois Administration Code (IAC) Part 742, Tiered Approach to Corrective Action Objectives (TACO) Tier I residential and industrial-commercial criteria, and IEPA Provisional Remediation Objectives (for chemicals not listed in the TACO Tier I tables).

2.0 DEMOLITION ACTIVITIES

Demolition and associated sampling activities were performed in accordance with the Work Plan (Ferguson-Harbour, 2001a) and Field Sampling Plan (Ferguson-Harbour, 2002a). Principal work activities included: site preparation; excavation; drilling and soil sampling; material loading, transportation and disposal; excavation backfilling; emission and erosion control; site restoration and equipment decontamination; and inspection and oversight. Work completed at each site is described below, organized in accordance with the general type of work activity. Photographs taken during the fieldwork were provided by Ms. Rebecca Oswald, Illinois EPA. Selected representative photographs are provided in Appendix A. Copies of the contractor's field notes are provided in Appendix B.

2.1. SITE PREPARATION

In accordance with O'Hare International Airport requirements and the Illinois Underground Utility Facilities Damage Prevention Act (220 Illinois Compiled Statutes 50), an underground utilities search was conducted at each site prior to excavation. Utility lines were field marked by the owner of each utility and available utility maps for the USARC property were provided to Ferguson-Harbour field personnel for additional reference during implementation of the demolition activities.

An initial site health and safety meeting was held with site personnel to discuss the planned field operations and associated safety issues. A site walkthrough was conducted to familiarize site workers with the work areas. The field crews deployed and staged the necessary equipment to perform the planned field activities. Principal equipment used included a trackhoe excavator, rubber tire loader, core drill, compactor, and roll-off containers.

Other site preparation activities included removal of a portion of the fence near the Oil-Water Separator (OWS-1) site to allow access for excavation activities and coring holes in the concrete floor inside the OMS Building to facilitate drilling of boreholes at the Former Vehicle Inspection Pit (OTH-1).

2.2. EXCAVATION

2.2.1 Former Shop Sink (OTH-2)

The objective of the excavation at OTH-2 was to perform an investigative excavation to determine if a buried drum is located at the site, remove the drum (if present), and sample

surrounding soils to identify possible contamination. Excavation at the Former Shop Sink (OTH-2) began on 11 September 2002 and was completed on 13 September 2002. The initial excavation was completed to a depth of 42-inches below ground surface (bgs) across an area measuring 6 feet by 6 feet immediately adjacent to the northwest corner of the OMS Building. At the depth of 42-inches, a 4-inch diameter, clay sewer pipe was encountered and vertical excavation ceased. The sewer pipe was observed to connect into and receive water from the roof drain at the northwest corner of the OMS Building. The sewer pipe then proceeds westward to an undetermined location. An approximate 2-inch diameter round hole in the downspout and a broken bracket on the exterior wall of the OMS Building were observed during excavation, suggesting that the former shop sink might have connected to the downspout at some time. Excavation then resumed southward along the west wall of the OMS Building in an effort to locate the suspected buried 55-gallon drum. The 55-gallon drum was encountered approximately 3 feet south of the northwest corner of the OMS Building immediately adjacent to the building. The top of the drum was buried approximately 5-inches bgs and was filled with fine sand. The drum and its contents were removed in one piece and placed into a 85-gallon over-pack drum. Visual observation indicated that the drum was intact, with 6 drilled holes in the bottom of the drum and no apparent corrosion.

Following removal of the drum, staining was visually observed in soils immediately beneath the former drum location were detected but no photoionization detector (PID) readings above background were detected. Excavation proceeded to remove the stained soil. At completion, an area of approximately 6 feet long and 4 feet wide depth had been excavated and no PID readings above background were observed. The northern part of the excavation was terminated at a depth of 54-inches and the southern part, in the area of the former buried drum, was excavated to a depth of approximately 7.8 feet bgs. During excavation, water was observed to very slowly enter the floor of the southern part of the excavation. The excavation was left open overnight and was observed to contain approximately 5-inches of water in the bottom of the southern part of the excavation. The final limits of the excavation, as determined using a measured tape and referenced to existing surface features, are illustrated on Figure 3.

Following excavation, confirmation soil samples were collected from the sidewalls and floors of the excavation at the frequency specified in the Michigan Department of Environmental Quality (MDEQ) Waste Management Division Verification of Soil Remediation Guidance Document of April 1994, Revision 1 (MDEQ, 1994), as agreed by the Ft Dearborn USARC Base Closure Team (BCT). Four soil samples were collected from the walls and two from the floor of excavation as shown on Figure 3. The samples were shipped via overnight delivery service to Applied Research & Development Laboratory (ARDL) in Mt. Vernon, IL for analysis. Analytical results are discussed in Section. 3.1.2.

2.2.2 Former Vehicle Wash Rack (OTH-3)

The objective of the excavation at OTH-3 was to remove the former vehicle wash rack and sample surrounding soils to identify possible contamination. Excavation at the Former Vehicle Wash Rack began on 10 September 2002 and was completed on 12 September 2002. Excavation was performed to remove the concrete surface of the wash rack and the underlying baserock. During excavation, no obvious visual or olfactory evidence of contamination was observed and no PID readings above background were detected. At completion, the excavation was completed to a depth of 2-3 feet bgs over an area measuring 14.5 feet wide and 30 feet long. The final limits of the excavation, as determined using a measured tape and referenced to existing surface features, are illustrated on Figure 4.

Following excavation, confirmation soil samples were collected from the sidewalls and floors of the excavation at the frequency specified in MDEQ (1994) guidance. Four soil samples were collected from the walls and four from the floor of excavation as shown on Figure 4. Samples were collected at the locations specified in the Work Plan with exception of the floor samples, which were adjusted based on field conditions. The presence of large gravel required the samples to be relocated. Samples were collected as close as possible to the planned sample locations. The samples were shipped via overnight delivery service to Applied Research & Development Laboratory (ARDL) in Mt. Vernon, IL for analysis. Analytical results are discussed in Section 3.1.3.

2.2.3 Oil-Water Separator (OWS-1)

The objective of the sampling at OWS-1 was to remove the oil-water separator and sample surrounding soils to identify possible contamination. Excavation to remove the oil-water separator and the existing surrounding backfill materials began and was completed on 17 September 2003. During excavation, no obvious visual or olfactory evidence of contamination was observed and no PID readings above background were detected. However, over-excavation was required to address the dry, unstable soil surrounding the oil-water separator. Excavation was conducted to a depth of 8.5 feet over an area measuring approximately 12 feet by 7 feet. The limits of the excavation, as determined using a measured tape and referenced to existing surface features, are illustrated on Figure 5.

Confirmation samples were collected from the sidewalls and floors of the excavation at the frequency specified in MDEQ (1994) guidance. Four soil samples were collected from the walls and two from the floors of excavation as shown on Figure 5. The samples were then shipped via overnight delivery service to Applied Research & Development Laboratory (ARDL) in Mt. Vernon, IL for analysis. Analytical results are discussed in Section 3.1.3.

2.3. DRILLING AND SOIL SAMPLING

Four soil borings, as shown on Figure 6, were drilled in the area of the Former Vehicle Inspection Pit (OTH-1) to sample soils for identification of possible contamination. Borings were advanced using a hand auger to a depth of 6 feet bgs. During drilling, no base rock/gravel was encountered, which would have prevented sample collection at the planned depth interval. One soil sample was collected for laboratory chemical analysis from a depth of 6 feet bgs from each boring. The samples were shipped via overnight delivery service to Applied Research & Development Laboratory (ARDL) in Mt. Vernon, IL for analysis. Analytical results are discussed in Section 3.1.4.

2.4. MATERIAL LOADING, TRANSPORTATION, AND DISPOSAL

All excavated materials (contaminated soil and concrete) were placed by the trackhoe excavator into a front-end loader and then directly into roll-off containers. Following completion of excavation, samples were collected for disposal profiling in accordance with the Work Plan (Ferguson-Harbour, 2001a). The roll-off containers were temporarily held on-site until the disposal analytical results had been obtained, waste profiles generated, and acceptance by disposal facility obtained. Following acceptance from the waste disposal facility, roll-off boxes were transported and the contents disposed. Transportation of the excavated materials was conducted in accordance with the Work Plan (Ferguson-Harbour, 2001a). The roll-off containers were lined with plastic prior to loading to eliminate the need for decontamination, and the loaded containers were tarped to contain wind borne particulate matter that could escape during transport. The excavated soils were transported to Woodland Landfill, South Elgin, Illinois and the concrete was transported to Vulcan Materials Company, Elk Grove Village, Illinois.

Soil cuttings from borings at the Former Vehicle Inspection Pit (OTH-1) were placed in a single U.S. Department of Transportation (DOT) steel 55-gallon drum and staged inside the OMS Building until transportation and disposal was arranged. Following completion of field activities, a sample of the soil cuttings was collected for disposal profiling in accordance with the Work Plan (Ferguson-Harbour, 2001a). Following acceptance from the waste disposal facility, the 55-gallon drum was placed into a contaminated soil roll-off container, transported, and the contents disposed at the Woodland Landfill, South Elgin, Illinois.

The buried drum from the Former Shop Sink (OTH-2) excavation was placed in a 75-gallon over pack drum and staged inside the OMS Building until transportation and disposal was arranged. Following completion of field activities, a sample of the drum contents (pea gravel) was collected for disposal profiling. Following acceptance from the waste disposal facility, the drum

was placed into a contaminated soil roll-off container, transported, and the contents disposed at the Woodland Landfill, South Elgin, Illinois.

All wastewater (i.e., decontamination water and tank cleaning fluids) generated during the field work was collected and placed in a single fully enclosed poly tank, staged near the Oil-Water Separator (OWS-1) excavation. Following completion of field activities, a sample of the water was collected for disposal profiling in accordance with the Work Plan (Ferguson-Harbour, 2001a). Following acceptance from the waste disposal facility, the wastewater was transported by vacuum truck to RS Used Oil Services Inc, Chicago, IL for disposal.

Copies of the waste manifests and shipping manifests are included in Appendix C.

2.5. EXCAVATION BACKFILLING

The excavations at the Former Shop Sink (OTH-2), Former Vehicle Wash Rack (OTH-3), and Oil-Water Separator (OWS-1) were backfilled with CA-6 crushed limestone gravel obtained from an off-site source. Approximately 60 cubic yards of CA-6 gravel was used as backfill. The backfill material was placed in the excavation in approximately 1-foot lifts and compacted in-place using a gasoline powered vibrating compactor. To prevent rainwater from direct contact with any potentially contaminated soil remaining in the excavation area, the open excavations were lined with poly sheeting and were weighed down while the excavations were open after sampling and before the backfilling.

2.6. EMISSION AND EROSION CONTROL

Organic vapors did not pose a concern during the demolition activities and did not require any upgrades in the level of personal protection based on the criteria specified in the Health and Safety Plan (Ferguson-Harbour, 2001b). Dust was monitored by visually during soil excavation, loading, and transportation activities. Due to the limited amount of excavated soils and the limited traffic, dust generation did not pose a problem. Roll-off containers were tarped prior to leaving the site to control particulate emissions during transportation.

The need for erosion controls was reduced by the use of roll-off containers for construction debris and excavated soils. There was no rainfall throughout the fieldwork. Therefore, no additional erosion control measures were required.

2.7. SITE RESORATION AND EQUIPMENT DECONTAMINATION

At the Oil-Water Separator (OWS-1), topsoil was placed at the ground surface in the immediate area of the excavation. Grass seed was then raked into the topsoil. All other excavated areas were dressed out with CA-6 crushed limestone gravel and compacted at the surface. A fencing contractor repaired the portion of fence removed during the excavation at the Oil-Water Separator (OWS-1) site. The boreholes at the Former Vehicle Inspection Pit (OTH-1) were backfilled with CA-6 crushed limestone gravel and the holes in the concrete were plugged using an epoxy grout.

Prior to removal from the Ft Dearborn USARC and between each work site, excavation equipment was scraped clean to remove any potentially contaminated soil. Potentially contaminated soil removed during this process was collected and handled in the same manner as excavated soils (see Section 2.4). Decontamination of field sampling equipment was performed in accordance with the Field Sampling Plan (Ferguson-Harbour, 2002a).

2.8. INSPECTION AND OVERSIGHT

Inspections were performed by Ferguson-Harbour personnel on a continuous basis throughout the duration of field activities. Inspections were performed to identify the presence of visually contaminated soils, to check that the required excavation depths were maintained, to check that the required samples were collected and appropriate sampling procedures utilized, to check for safe work practices and personal protective equipment (PPE) guidelines, and to check that proper decontamination of equipment was performed.

The IEPA provided regular field oversight throughout the project. The IEPA oversight person, Ms. Rebecca Oswald, Environmental Protection Specialist, collected photographic documentation of the project, communicated with the IEPA Project Manager regarding field decisions and observations, and oversaw sample collection activities.

The USACE provided regular field oversight throughout the project. USACE personnel checked that the field activities were being performed in accordance with the Work Plan (Ferguson-Harbour, 2001a), provided additional health and safety and site control inspections, and communicated with the USACE Project Manager regarding the status and general quality of the fieldwork. USACE personnel were supported by MWH during portions of the fieldwork to observe the work.

3.0 SAMPLING AND LABORATORY ANALYSIS

Site characterization and waste characterization samples were collected at the locations and frequency specified in the Work Plan (Ferguson-Harbour, 2001a). Sample collection and handling was completed in accordance with the methods and procedures specified in the Field Sampling Plan (Ferguson-Harbour, 2002a). Samples were analyzed for chemicals of potential concern using the analytical methods outlined in the Quality Assurance Project Plan (Ferguson-Harbour, 2002b). Samples were shipped via overnight delivery service to Applied Research & Development Laboratory (ARDL) in Mt. Vernon, IL for analysis. A summary of the sampling activities conducted for site characterization at individual site locations is outlined in Section 3.1. Waste disposal characterization sampling is summarized in Section 3.2. Copies of the laboratory analytical reports and the accompanying chain-of-custody forms are presented in Appendix D. A summary of the site characterization sample results is presented in Table 1.

3.1. SITE CHARACTERIZATION SAMPLING

3.1.1 Former Vehicle Inspection Pit (OTH-1)

Four soil borings were drilled to depths of six feet each in the area of the Former Vehicle Inspection Pit (OTH-1). One soil sample from each boring (FIP-001-06-SSS, FIP-002-06-SSS, FIP-003-06-SSS, FIP-004-06-SSS) was collected at the locations and depths indicated on Figure 6. Samples were analyzed for Target Analyte List (TAL) metals, semi-volatile organic compounds (SVOCs), polynuclear aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), and polychlorinated biphenyls (PCBs).

No organic chemicals were detected exceeding USEPA Region IX PRGs (industrial), TACO Tier 1 (industrial-commercial and residential) criteria were detected. Organic chemicals detected at the site below USEPA Region IX PRGs and TACO Tier 1 criteria included: the VOCs *methylene chloride in samples FIP-001-06-SSS, FIP-002-06-SSS, and FIP-004-06-SSS*, and *acetone* in sample FIP-002-06-SSS; the PAHs *benzo(a)pyrene* and benzo(g,h,i)perylene in samples FIP-002-06-SSS and FIP-004-06-SSS, *chrysene* in sample FIP-004-06-SSS, and *fluoranthene* and *pyrene* in each sample; and the SVOCs *benzylbutylphthalate* in samples FIP-002-06-SSS and FIP-003-06-SSS, and *bis(2-ethylhexyl)phthalate* in sample FIP-002-06-SSS. No PCBs were detected in any sample.

Arsenic exceeded the USEPA Region IX industrial PRG of 1.6 mg/kg in each sample. The highest detected arsenic concentration detected at the site (14 mg/kg) was reported in sample FIP-001-06-SSS and marginally exceeded the TACO Tier 1 residential (ingestion) criteria and

the background concentration for the region of 13 mg/kg, as provided in 35 IAC §724.405(b). Arsenic concentrations in the three other samples analyzed at this site ranged from 8.6 to 9.8 mg/kg, below the TACO comparative criteria used. All detected arsenic concentrations were below TACO Tier 1 construction worker, industrial-commercial worker, residential inhalation, and migration to Class I groundwater pathways. No other inorganic chemicals exceeded either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial-commercial and residential) criteria.

No organic or inorganic chemicals exceeded the IEPA Provisional Remediation Objectives, except iron. Iron exceeded only the residential ingestion Provisional Remediation Objective of 23,000 mg/kg in sample FIP-001-06-SSS at 27,600 mg/kg. A risk calculation was performed to evaluate the potential significance of this iron exceedance. Results are presented in Appendix E and indicate iron concentrations in site soils are not expected to represent a hazard to human health.

3.1.2 Former Shop Sink (OTH-2)

A total of six field soil samples (FSS-001-04-ESW, FSS-002-04-ESW, FSS-003-04-ESW, FSS-004-04-ESW, FSS-005-08-EBT, and FSS-006-05-EBT) were collected for laboratory chemical analysis from the walls and floor of the excavation at OTH-2. Sample locations and depths are illustrated on Figure 3. Each sample was analyzed for TAL metals, SVOCs, PAHs, VOCs, and PCBs.

No organic chemicals exceeding USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial-commercial and residential) criteria were detected. Organic chemicals detected in one or more samples at the site below USEPA Region IX PRGs and TACO Tier 1 criteria included: the VOC *ethylbenzene, and m,p-xylene*; the PAHs *acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluorathene, benzo(g,h,i)perylene, benzo(k)fluorathene, chrysene, dibenzo(a,h)anthracene, flouranthene, fluorene, indeno(1,2,3-c,d)pyrene, naphthalene, phenanthrene,* and *pyrene*; and the SVOCs *2-methylnaphthalene, and benzylbutylphthalate.*. No PCBs were detected in any sample.

Arsenic exceeded the USEPA Region IX industrial PRG of 1.6 mg/kg in each sample. The detected arsenic concentrations ranged from 7.4 to 11.6 mg/kg, below the TACO Tier 1 construction worker, industrial-commercial worker, residential, and migration to Class I groundwater pathways, and the background concentration for the region of 13 mg/kg. No other inorganic chemicals exceeded either USEPA Region IX PRGs (industrial), TACO Tier 1 (industrial-commercial and residential) criteria.

No organic or inorganic chemicals exceeded the IEPA Provisional Remediation Objectives, except iron. Iron exceeded only the residential ingestion Provisional Remediation Objective of 23,000 mg/kg in samples FSS-001-04-ESW and FSS-002-04-ESW at concentrations of 26,300 mg/kg and 26,100 mg/kg. A risk calculation was performed to evaluate the potential significance of this exceedance. Results are presented in Appendix E and indicate iron concentrations in site soils are not expected to represent a hazard to human health.

3.1.3 Former Vehicle Wash Rack (OTH-3)

A total of eight field soil samples (VWR-001-03-EBT, VWR-001-03-ESW, VWR-002-02-ESW, VWR-003-02-ESW, VWR-004-02-ESW, VWR-005-02-EBT, VWR-006-02-EBT and VWR-007-04-EBT) were collected for laboratory chemical analysis from the walls and floor of the excavation at OTH-3. Sample locations and depths are illustrated on Figure 4. Each sample was analyzed for TAL metals, SVOCs, PAHs, VOCs, ethylene glycol, and PCBs.

No organic chemicals exceeding either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial) criteria were detected. *Benzo(a)pyrene* (167 µg/kg) in sample VWR-002-02-ESW was the only organic chemical detected that exceeded TACO Tier 1 (residential) criteria and marginally exceeded the ingestion pathway criterion (90 µg/kg). A TACO Tier 3 risk calculation was performed to evaluate the potential significance of this exceedance. Results are presented in Appendix F and indicate risks from exposure to PAHs in site soils, including benzo(a)pyrene, are not significant. Organic chemicals detected in one or more samples at the site below USEPA Region IX PRGs and TACO Tier 1 (industrial-commercial) criteria included: the VOC *acetone* in sample VWR-006-02-EBT; the PAHs *acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluorathene, benzo(g,h,i)perylene, benzo(k)fluorathene, chrysene, dibenzo(a,h)anthracene, flouranthene, fluorene, indeno(1,2,3-c,d)pyrene, phenanthrene,* and *pyrene*; and the SVOCs *benzylbutylphthalate* and *bis(2-ethylhexyl)phthalate*; and the PCB *Arochlor-1260*. No *Ethylene Glycol* was detected in any sample.

Arsenic exceeded the USEPA Region IX industrial PRG of 1.6 mg/kg in each sample. The detected arsenic concentrations ranged from 7.5 to 12.9 mg/kg, below the TACO Tier 1 construction worker, industrial-commercial worker, residential, and migration to Class I groundwater pathways, and the background concentration for the region of 13 mg/kg. No other inorganic chemicals exceeded either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial-commercial and residential) criteria.

No organic or inorganic chemicals exceeded the IEPA Provisional Remediation Objectives, except iron. Iron exceeded only the residential ingestion Provisional Remediation Objective of 23,000 mg/kg in samples VWR-001-03-EBT and VWR-005-02-EBT at concentrations of 28,400 mg/kg and 23,900 mg/kg. A risk calculation was performed to evaluate the potential significance of this iron exceedance. Results are presented in Appendix E and indicate iron concentrations in site soils are not expected to represent a hazard to human health.

3.1.4 Oil-Water Separator (OWS-1)

A total of six field soil samples (OWS-001-05-ESW, OWS-002-05-ESW, OWS-003-04-ESW, OWS-004-05-ESW, OWS-005-08-EBT, and OWS-006-08-EBT) were collected for laboratory chemical analysis from the walls and floor of the excavation at OWS-1. Sample locations and depths are illustrated on Figure 5. Each sample was analyzed for TAL metals, SVOCs, PAHs, VOCs, ethylene glycol, and PCBs.

No organic chemicals exceeding either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial-commercial and residential) criteria were detected. Organic chemicals detected in one or more samples at the site below USEPA Region IX PRGs and TACO Tier 1 criteria included: the VOC *toluene*; the PAHs *anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluorathene, benzo(g,h,i)perylene, benzo(k)fluorathene, chrysene, flouranthene, fluorene, indeno(1,2,3-c,d)pyrene, phenanthrene,* and *pyrene*. No SVOCs or PCBs were detected in any sample.

Arsenic exceeded the USEPA Region IX industrial PRG of 1.6 mg/kg in each sample analyzed. The detected arsenic concentrations ranged from 6.3 to 10.3 mg/kg, well below the TACO Tier 1 construction worker, industrial-commercial worker, residential, and migration to Class I groundwater pathways, and the background concentration for the region of 13 mg/kg. No other inorganic chemicals exceeded either USEPA Region IX PRGs (industrial) or TACO Tier 1 (industrial-commercial and residential) criteria.

3.1.5 Analytical Data Validation

All analytical data used in this report were subjected to data validation and found to be usable, except as specifically noted herein. A data validation report entitled *Data Validation Report for Various Site Remediations, Fort Dearborn USARC, Illinois* (MWH, 2003) was prepared and is included in Appendix G. The data validation report verified and validated the site characterization analytical data reported by the fixed laboratory, ARDL of Mt. Vernon, Illinois. The data validation was completed based on the criteria presented in the Quality Assurance

Project Plan (Ferguson-Harbour, 2002b). Principal findings and conclusions of the data validation process are highlighted below:

- Based on the results of equipment tuning, initial calibration, initial calibration verification, and continuing calibration the data are considered precise as qualified.

- Based on the results of the holding time evaluation, the data for this project were considered accurate as qualified, except for those data that were qualified with an "R" flag. All extraction and holding times were met except for soil VOC sample VWR-001-03-ESW. The results were rejected and are not usable.

- Based on the results for internal standard recoveries, surrogate spike recoveries, laboratory control sample/laboratory control sample duplicate analyses, and matrix spike/matrix spike duplicate analyses the results are precise as qualified.

- Trace concentrations of methylene chloride were detected in the method and trip blanks. Methylene chloride is recognized by the USEPA as a common laboratory contaminant. The reported methylene chloride values are attributed to laboratory contamination and not representative of site conditions.

- Trace concentrations of methylene chloride, acetone, chloroform and toluene were detected in the equipment rinseate blanks. Methylene chloride and acetone are attributed to laboratory contamination and are not representative of site conditions. Chloroform and toluene were not detected in any of the associated samples.

- All investigative and quality control (QC) samples were collected as scheduled. Sample collection completeness is 100 percent.

- A comparison of sample results and relative percent differences (RPDs) indicates good agreement between parent samples and their respective duplicates.

- The analytical completeness was 100 percent for all analyses except soil VOCs. The soil VOCs had a completeness of 96 percent due to the rejected soil VOC sample, which exceeded the completeness goal of 90 percent.

- The reporting limits for 2-4-Dinitrophenol, 2-4-Dinitrotoluene, 2,6-Dinitrotoluene, 3-3'-Dichlorobenzidine, bis(2-chloroethyl)ether, nitrobenzene, n-nitrosodi-n-propylamine, pentachlorophenol, and vinyl chloride were above the TACO residential and/or migration

to Class I groundwater criteria due to limitations inherent in available laboratory testing methods. Best available technology and standard analytical methods, with normal reporting limits, were utilized. However, this is a common occurrence in environmental investigations. This contributes to the overall uncertainty associated with the results of the investigation but is not considered significant.

Overall, the data collected were of sufficient quality and quantity for intended data end use.

In addition, a minimum of 10% of the data was fully validated by an independent USACE contractor, Lee A. Knupple and Associates, Inc. of Montgomery, Ohio. Copies of the independent validation report were submitted separately.

3.2. WASTE DISPOSAL SAMPLING

A total of 75 cubic yards of soil and 90 cubic yards of concrete were excavated from the Former Shop Sink (OTH-2), the Former Vehicle Wash Rack (OTH-3), and the Oil-Water Separator (OWS-1) sites. Five roll-off containers were filled with soil and six containers were filled with concrete. Composite and discrete samples of the excavated soil were collected for disposal profiling. Two composite and discrete samples of the soil and two composite and discrete samples of the concrete were collected for waste characterization purposes. The composite samples were analyzed for Toxicity Characteristics Leaching Procedure (TCLP) SVOCs, TCLP metals, TCLP PCBs, pH, paint filter, and flash point. The discrete samples were analyzed for TCLP VOCs. Based on the analytical results, the soil was determined to be non-hazardous waste in accordance with the criteria specified in 35 IAC §721.121, §721.122 and §721.124. The loading, transportation, and disposal of the waste materials are discussed in Section 2.4.

A total of 790 gallons of wastewater was generated during this project and was placed in a single fully enclosed poly tank. One sample of the wastewater was collected for waste characterization purposes. The sample was analyzed for TAL metals, VOCs, PCBs, SVOCs, flashpoint, and pH. Based on the analytical results, the water was determined to be non-hazardous waste in accordance with the criteria specified in 35 IAC §721.121, §721.122 and §721.124. The loading, transportation, and disposal of the waste materials are discussed in Section 2.4.

One 55-gallon drum of soil cuttings from the former vehicle inspection pit (OTH-1) investigation was generated during this project. One composite and one discrete sample of the soil cuttings were collected for waste characterization purposes. The composite sample was analyzed for TCLP SVOCs, TCLP metals, TCLP PCBs, pH, paint filter, and flash point and the discrete sample was analyzed for TCLP VOCs. Based on the analytical results, the soil cuttings were

determined to be non-hazardous waste in accordance with the criteria specified in 35 IAC §721.121, §721.122 and §721.124. The loading, transportation, and disposal of the waste materials are discussed in Section 2.4.

One composite sample and one discrete sample of the contents of the former buried drum at the Former Shop Sink (OTH-2) were collected for waste characterization purposes. The composite sample was analyzed for TCLP SVOCs, TCLP metals, TCLP PCBs, pH, paint filter, and flash point and the discrete sample was analyzed for TCLP VOCs. Based on the analytical results, the drum contents were determined to be non-hazardous waste in accordance with the criteria specified in 35 IAC §721.121, §721.122 and §721.124. The loading, transportation, and disposal of the waste materials are discussed in Section 2.4.

4.0 FINDINGS AND RECOMENDATIONS

This CCR presents the results of demolition activities completed at the Former Vehicle Inspection Pit (OTH-1), Former Shop Sink (OTH-2), Former Vehicle Wash Rack (OTH-3), and Oil-Water Separator (OWS-1) sites at the Fort Dearborn U.S. Army Reserve Center (USARC) 6540 N. Mannheim Road, Chicago, Illinois. Demolition activities were completed between 10 September 2002 and 18 September 2002 by Ferguson-Harbour, Inc., Groveport, Ohio under contract to the USACE. Principal findings are summarized below:

1. No obvious visual evidence of contamination was observed during field activities at the Former Vehicle Inspection Pit (OTH-1), the Former Vehicle Wash Rack (OTH-3), and the Oil-Water Separator (OWS-1) sites.

2. Stained soils in the immediate vicinity of the buried drum at the Former Shop Sink (OTH-2) were observed during excavation activities and removed.

3. No organic chemicals exceeding either USEPA Region IX PRGs (industrial) or TACO Tier 1 industrial-commercial criteria were detected. All organic chemicals detected were also below TACO Tier 1 residential criteria, except benzo(a)pyrene (167 μg/kg) in sample VWR-002-02-ESW at the Former Vehicle Wash Rack (OTH-3) which marginally exceeded the ingestion pathway criterion (90 μg/kg). A TACO Tier 3 risk calculation was performed to evaluate the potential significance of this exceedance. Results are presented in Appendix F and indicate risks due to exposure to PAHs, including benzo(a)pyrene, in site soils are not significant.

4. No metals, except arsenic, were detected at concentrations exceeding USEPA Region IX (industrial) PRGs and/or regional background concentrations.

5. Arsenic exceeded the USEPA Region IX PRG (industrial) of 1.6 mg/kg in each of the 24 samples analyzed. Concentrations ranged from 6.3 to 14 mg/kg. All arsenic concentrations were below the regional background concentration (13 mg/kg) except sample FIP-001-06-SSS at the Former Vehicle Inspection Pit (OTH-1), which marginally exceeded the regional background concentration at 14 mg/kg. Arsenic concentrations in the three other samples analyzed at OTH-1 ranged from 8.6 to 9.8 mg/kg, below the regional background concentration.

6. All metal concentrations were below TACO Tier 1 construction worker, industrial-commercial worker, residential inhalation, and migration to Class I groundwater pathway criteria.

7. All detected chemicals were below IEPA Provisional Remediation Objectives except iron. Iron exceeded only the residential ingestion Provisional Remediation Objective of 23,000 mg/kg in samples VWR-001-03-EBT and VWR-005-02-EBT at the Former Vehicle Wash Rack (OTH-3), FSS-001-04-ESW and FSS-002-04-ESW at the Former Shop Sink (OTH-2), and FIP-001-06-SSS at Former Vehicle Inspection Pit (OTH-1). A risk calculation was performed to evaluate the potential significance of these exceedances. Results are presented in Appendix E and indicate iron concentrations in site soils are not expected to represent a hazard to human health.

Based on these findings, no further action is recommended at the Former Vehicle Inspection Pit (OTH-1), the Former Shop Sink (OTH-2), the Former Vehicle Wash Rack (OTH-3) and the Oil/Water Separator (OWS-1) sites. The USARC property is suitable for future unrestricted reuse and institutional controls are not required given the marginal and sporadic exceedances of comparative criteria and results of the risk evaluations completed.

5.0 REFERENCES

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