FINAL

CLOSURE REPORT
EXCAVATION OF SOLID WASTE DEBRIS LANDFILLS
C&D: OTH-3505-1 and STUMP DUMP: OTH-3505-2

PLATTSBURGH AIR FORCE BASE
PLATTSBURGH, NEW YORK

Contract No. F41624-97-D-8011
Delivery Order No. 0021

Prepared for

Air Force Center for Environmental Excellence (AFCEE)
Environmental Restoration Division
Brooks Air Force Base, Texas

and the

Air Force Base Conversion Agency
Plattsburgh Air Force Base, New York

Prepared by

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January 2003

DRAFT CLOSURE REPORT FOR THE EXCAVATION OF SOLID WASTE DEBRIS LANDFILLS C&D: OTH-3505-1 AND STUMP DUMP OTH-3505-2

RESPONSE TO USEPA COMMENTS (October 30, 2002)

1. ***Section 3.4, Page 3-2.*** *In the Soil Screening Section, the text indicates that the screening process was used to "support the separation and stockpiling of excavated soils/fill material," yet it appears that no readings exceeded the background levels. Clarification is needed regarding how the negative screening results were used in separating materials. .*

Response: If PID readings exceeded background levels by 5 ppm, the soil was placed in a separate stockpile for VOC testing. Since no elevated PID readings were observed, all soil stockpiles were considered "clean", subject to analytical testing. The text was revised to read ..... "readings never exceeded the background levels. Consequently, all soils were considered "clean", subject to analytical testing".

2. **Section 4.1.4. Page 4-4.** *This section includes text describing characterization samples collected at the Stump Dump. The text indicates that Stockpile No. 14 was selectively re-sampled for statistical analysis. No explanation is provided, however, as to the protocol that followed. It would be helpful if additional explanation could be provided regarding the way that a particular pile was selected for "statistical analysis" along with the criterion used to decide whether re-sampling objectives were achieved.*

Response: In accordance with the Work Plan, all sampling and QA/QC protocols and procedures as outlined in EPA SW 846 were followed. As stated on page 4-4, paragraph 3 (TAL Metals), the re-sampling was performed to show the wide variation in Selenium concentrations within a soil stockpile. Stockpile No. 14 was selected because it had the highest reported selenium concentration. This paragraph and referenced Appendix D Section entitled "Characterization Samples for Metal Analysis – Statistical Variability" go on to explain the number of samples collected and statistical analysis of variance to demonstrate the variability of selenium within a soil stockpile was within acceptable limits; thereby meeting the re-sampling objective.

3. ***Section 4.3, Page 4-5.*** *The second paragraph of this Section includes a sentence which appears to contain a typographical error (While AFCEEE may not consider all "R" qualified data to be usable...") The previous paragraph indicated that any unusable data was qualified with an "R" or rejection qualifier. Therefore, it is unclear why the AFCEE would consider any "R" qualified data as usable. The text needs to be revised. .*

Response: The text in the first paragraph has been revised to read "Potentially unusable data was qualified with an "R" or rejection qualifier..." Data usability is dependent upon project objectives.

4. ***Section 5.2, Page 5-1 and Section 6.2, Page 6-1.*** *The volume and disposal location of the asphalt and concrete debris is unclear. The firs sentence of Section 5.2 indicates that only a portion, 560 tons, of the material from the C&D Landfill was removed. However, the end of this paragraph indicates that 1250 tons were removed and disposed. Section 6.2 in the first paragraph last sentence indicates that the entire 1,250 tons of material was disposed. Clarification is needed.*

Response: Section 5.2 has been revised to read as follows:

> "Only a portion (560 tons) of the concrete and asphalt uncovered at the C&D Landfill was removed and disposed off-site by Valley Sanitation to the Frank Gates' Property, Route 9 North, Plattsburgh, NY; a registered fill area (Appendix B). Following the determination by NYSDEC to allow the C&D Landfill to be closed as a non-permitted construction and demolition debris landfill under 6 NYCRR Section 360-7.1(b), off-site disposal ceased and the remaining asphalt and concrete fill material was permitted to stay within the landfill.
>
> All the excavated concrete and asphalt were removed from the three Stump Dump fill areas. Approximately 1250 tons of stockpiled concrete and asphalt were transported off-site in roll-off containers from the Stump Dump by Valley Sanitation and were also disposed of at "Frank Gates' Property".

Section 6 is divided in two sections: C&D Landfill -- Section 6.1 and Stump Dump -- Section 6.2. Each section quantifies the amount of asphalt and concrete removed and disposed off-site from each area (C&D Landfill – 560 tons and Stump Dump – 1250 tons).

5. ***Figure 3.*** *This figure needs to be revised to show Areas 1, 2, and 3, as called out in Section 2.1*

Response: Figure 3 has been revised to show the three areas.

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LIST OF ACRONYMS AND ABBREVIATIONS

AFB	Air Force Base
AFBCA	Air Force Base Conversion Agency
AFCEE	Air Force Center for Environmental Excellence
amsl	above mean sea level
ARAR	Applicable or Relevant and Appropriate Requirement
AST	above ground storage tank
BTEX	benzene, toluene, ethyl benzene, xylenes
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOD	Department of Defense
EE/CA	Engineering Evaluation/Cost Analysis
EPA	U.S. Environmental Protection Agency
FFA	Federal Facilities Agreement
HQ	Headquarters
IRP	Installation Restoration Program
MTBE	methyl tertiary butyl ether
NCP	National Contingency Plan
NPL	National Priorities List
NYSDEC	New York State Department of Environmental Conservation
PAH	polycyclic aromatic hydrocarbons
PARC	Plattsburgh Airbase Redevelopment Corporation
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RCO	Recommended Cleanup Objective
RI	Remedial Investigation
QAPP	Quality Assurance Project Plan
QA/QC	quality assurance/quality control
SARA	Superfund Amendments and Reauthorization Act
SI	site investigation
SS	spill site
SVOC	semivolatile organic compound
TAGM	Technical and Administrative Guidance Memorandum
TCLP	Toxicity Characteristic Leaching Procedure
USAF	United States Air Force
USEPA	U.S. Environmental Protection Agency
UST	underground storage tank
VOC	volatile organic compound

LIST OF UNITS OF MEASURE

bgs	below ground surface
ft/ft	foot per feet
ft^2	square feet
ft/d	feet per day
gpm	gallons per minute
kg	kilogram
K_{oc}	organic carbon-water partition coefficient
L	liter
mg	milligram
mg/kg	Milligram per Kilogram
MSL	mean sea level
ppb	parts per billion
ppm	parts per million
yd^3	cubic yard (CY)
µg/kg	micrograms per kilogram
µg/l	micrograms per liter
$µg/m^3$	micrograms per cubic meter
mg/m^3	milligrams per cubic meter

1.0 INTRODUCTION

This Closure Report summarizes the activities performed to close the Construction and Demolition (C&D) Debris Landfill (OTH-3505-1) and the Stump Dump (OTH-3505-2), at Plattsburgh Air Force Base (PAFB), New York.

1.1 Background

The Final Supplemental Evaluation to the Environmental Baseline Survey (SEBS) Report (URS May 2001) recommended remediation of the C&D Landfill and Stump Dump. During site investigations, an electromagnetic conductivity survey was performed at the two sites and a partial characterization of the fill material based on the results of the survey was accomplished by the excavation of exploratory trenches through each site and representative soil and fill samples collected. These investigations uncovered asbestos-containing material (ACM), metal, concrete, asphalt, miscellaneous C&D debris, and household wastes. Elevated levels of polycyclic aromatic compounds and metals were observed in the fill material.

1.2 Objective

The objectives of these removal activities were to excavate, separate (screen) and stockpile the waste materials from both landfills; conduct confirmation sampling and waste characterization; dispose of the waste materials; and complete site restoration.

1.3 Report Organization

Section 1.0 presents an Introduction. Section 2.0 provides background information and a general description of the C&D Landfill and Stump Dump. Section 3.0 describes the field activities. Section 4.0 summarizes the analytical results of the confirmatory and characterization sampling. Section 5.0 discusses the management of waste material. Section 6.0 presents the conclusions and recommendations. Section 7.0 provides a list of references.

2.0 SITE BACKGROUND AND ENVIRONMENTAL SETTING

2.1 Site Location

PAFB is located in Clinton County in the northeastern corner of New York State. It is bordered by the City of Plattsburgh to the north, Lake Champlain to the east, the Salmon River, and agricultural land to the south, and Interstate 87 to the west. (Figure 1)

The C&D Landfill is located west of the north end of the runway and was formerly a sand and gravel pit used for the disposal of construction and demolition debris such as asphalt, concrete, and waste building materials. The 1.3-acre site also contained ACM transite pipe, tree trunks and stumps, and miscellaneous metal material (wire, cans, re-bar). A site layout is provided in Figure 2.

The Stump Dump is located in the southwest corner of the base and was used for the disposal of vegetative wastes, such as tree stumps and branches. It contains three separate non-contiguous fill areas, covering approximately 0.3 acres. As shown in Figure 3, the areas are designated Area 1, Area 2, and Area 3. Area 1 contained tree trunks, tree stumps, and a large concrete vault. Area 2 contained tree trunks and branches, while Area 3 contained minor amounts of household debris, yard waste, asphalt, concrete, metal, wallboard, and dimensional lumber.

Figure 1 presents a map of Plattsburgh, NY, PAFB, and location of the two sites.

2.2 Previous Investigations

2.2.1 Fill Delineation and Sampling

In order to delineate the depth and lateral extent of fill material at the two sites, the Air Force and its contractor, URS, conducted an electromagnetic conductivity survey and excavated a series a test trenches at each site, as shown in Figures 2 and 3. During these investigation activities, the concentrations of several PAH and metal constituents (Table 1) were in excess of the respective Recommended Cleanup Objectives (RCOs) presented in NYSDEC Technical and Administrative Guidance Memorandum HWR-94-4046 "Determination of Soil Clean-up Objectives and Clean-up Levels" (TAGM #4046, Appendix A, Table 1, Column 9 – VOCs; Table 2, Column 9 – SVOCs; and Table 4, Column 5 – Metals). Two (2) volatile organic compounds (VOCs), methylene chloride and toluene, were found in trace amounts at the C&D Landfill, each below their respective TAGM #4046 RCOs.

Nineteen (19) semi-volatile organic compounds (SVOCs), primarily PAHs, were detected in the C&D Landfill fill material, with seven (7) of the PAHs exceeding the respective TAGM #4046 RCOs: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene. Only one sample at the Stump Dump had a single PAH analyte, benzo(a)pyrene, in excess of the respective TAGM #4046 RCO.

Metals detected in the C&D Landfill included: arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. Only barium was detected at a concentration greater than the respective RCO. Metals detected in the Stump Dump included: arsenic, barium, cadmium, chromium, lead, and mercury. Of these metals, cadmium, chromium, and lead exceeded the established site background levels for PAFB (URS, 1996).

2.2.2 Federal, State, and Local Actions to Date

There have been no federal, state, or local actions implemented at the C&D Landfill or Stump Dump other than the reported field investigations (URS, May 2001).

2.3 Environmental Setting

2.3.1 Site Hydrology

Groundwater in the Plattsburgh area generally occurs in both the overburden deposits (unconfined aquifer) and in the bedrock (confined aquifer). The Adirondack Mountains to the southwest of Plattsburgh represent the major recharge area for the region, and Lake Champlain represents the regional discharge area. Other locally significant discharge areas include the Salmon and Saranac Rivers.

PAFB obtains its potable water from the City of Plattsburgh municipal water system. Some residences adjacent to the base, however, rely on private wells for drinking water. These private wells are not influenced by the groundwater flow from these sites, because local groundwater flow is away from the residential wells and towards Lake Champlain and the Salmon River.

2.3.2 Site Stratigraphy

Stratigraphy in the C&D Landfill and Stump Dump areas generally consists of four hydrogeologic units: an upper unconsolidated sand aquifer, an underlying confining layer formed by a silt and clay unit, a glacial till unit water-bearing zone, and a thinly bedded dolomite bedrock aquifer.

The shallow sand aquifer consists of fine to medium grain sand with variable amounts of silts, coarse sand, and gravel. This aquifer ranges from 10 to 30 feet (ft) thick in the vicinity of the site. The sand unit typically becomes finer grained with depth, grading textually into the underlying silt and clay unit.

Glacial tile overlies the bedrock in the vicinity of the site and consists of a poorly sorted gray sand, silt and clay matrix intermixed with gravel, cobbles, and boulders. The till is reported to be 3 to 15 ft thick. The till is a water-bearing unit; however, it is separated hydraulically from the overlying water table aquifer by the aforementioned silty-clay

confining unit. The bedrock, which underlies the till in the area, is described as thinly, horizontally to sub-horizontally bedded dolomite.

3.0 REMOVAL ACTIVITIES NARRATIVE

Project plans were prepared to support the removal activities, including a Work Plan (WP), Field Sampling Plan (FSP), Quality Assurance Project Plan (QAPP) and Site-Specific Environmental Health and Safety Plan (SSEHSP). The WP was submitted to the NYSDEC and USEPA for review in August 2000. After regulatory comments were addressed, the WP was finalized in October 2000, which served as the basis for the removal activities. Versar mobilized to the site on October 23, 2000. Appendix A, Photo Log, provides photographs of the field activities.

3.1 Site Preparation

The following site preparation activities were conducted:

- Access to the site for Versar representatives and subcontractors was coordinated,
- Site utility maps were reviewed,
- Clearing and grubbing were performed at both site locations,
- Containment areas were constructed with 6 ml Visqueen to stage removed soil for characterization, and
- Roll-off containers were staged for separated waste components.

3.2 Site Utilities and Sensitive Features

A mark-out was performed for all active utilities. No electric, water, sewer, storm water or gas lines were identified at either site. An active communications line was identified and marked near the southwest corner of the C&D landfill. Utility poles with high voltage electrical service were protected during the excavation activities at the Stump Dump.

3.3 Health and Safety

The Versar site superintendent served as the Site Health and Safety (H&S) Officer. The site superintendent insured that all Versar and subcontractor personnel were familiar with the SSEHSP (Versar, 2000b) and conducted a site orientation to familiarize them with site-specific hazards. The site superintendent also conducted daily H&S meetings each morning prior to beginning work.

The onsite work was conducted utilizing Level D personal protection (hard hat, safety glasses, steel-toed work boots, and work gloves). Noise protection was worn when the Tub Grinder was deployed to chip wood. Access to open excavation areas was restricted using both high-visibility fencing and caution tape.

3.3.1 Volatile Organic Vapor Air Monitoring

Due to the potential presence of the VOCs, air monitoring was conducted at regular intervals using a photo ionization detector (PID). No elevated PID readings were observed within the breathing zone during removal activities.

3.3.2 Particulate Air Monitoring

Air monitoring for airborne particulates was conducted at the C&D Landfill site using a PDR-1000 particulate air-monitoring device. The device was activated during the excavation and soil screening activities during the first two weeks of remedial activities. Airborne particulates were monitored to be no higher than 0.040 mg/m^3 over an eight-hour day. Background levels ranged from 0.030 – 0.040 mg/m^3.

3.4 Soil Screening

Soil samples were collected periodically during the excavations from random discrete locations and screened for volatile organic vapor concentrations. Samples were also collected from excavation pit sidewalls and bottoms. Approximately 4 to 8 ounces of soil were placed in a sample jar and covered with plastic wrap and aluminum foil. The sample was then warmed using a vehicle-heating vent for 10 to 15 minutes allowing the volatile organic vapors to collect in the headspace above the soil. The aluminum/plastic cover was then punctured using the wand of the PID and the highest concentrations of vapor were recorded.

In accordance with the WP, if the headspace volatile organic vapor concentration was 5 parts per million (ppm) above native background levels, the soil was categorized as "suspected contaminated," if the headspace analysis was below the background level, the soil was considered "clean", subject to analytical testing. This screening process was used to support the separation and stockpiling of excavated soils/fill material; however, readings never exceeded the background levels. Consequently, all soils were considered "clean", subject to analytical testing.

3.5 Excavation, Separation, and Removal Activities

3.5.1 C&D Landfill

Versar initiated site activities on October 26, 2000 (Photo No. 1). Prior to excavation, a tub-grinder was employed to process the approximately 800 cubic yards (CY) of stumps and dead trees that had been stockpiled atop the landfill (Photo No. 2). Excavation and screening of the fill material then began in the southwest area of the landfill using a track excavator, backhoe, skid steer loader, front-end loader, and a power shaker screen (Photo No. 3). After 2,000 CY of material were processed, only rocks, sheets of asphalt paving,

concrete, and a few pieces of metal and transite pipe were uncovered (Photo Nos. 3 and 4). The excavated soil was stockpiled and staged (Photo No. 6). The concrete, asphalt, and rock were separated from the soil using the power shaker screen (Photo No. 3) and stockpiled. Metal pieces and the transite pipe were also staged in separate piles. No other waste material was observed, nor were there any observed PID headspace readings above native background soil, stained soil, or odor emitting from the fill material.

The lack of non-C&D waste material or potentially contaminated soil prompted Air Force personnel to notify NYSDEC and request an inspection of the site and a modification to the WP. Specifically, the Air Force requested NYSDEC to characterize the site for classification as a non-permitted construction and demolition debris fill, under Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Section 360-7.1(b) applicable to non-permitted concrete and asphalt fill areas.

Rather than continuing a complete excavation and soil separation of the site, exploratory trenching (Photo No. 5) was performed within the fill area to further demonstrate that the fill material was predominantly composed of rocks, concrete, and asphalt (Figure 4) in preparation of the NYSDEC site inspection. After an on-site inspection in late November, NYSDEC personnel agreed in-principle to allow in-place closure of the landfill, exempt from permit requirements, but requested the Air Force to submit a proposal to modify the WP and its associated sampling plan. An amended confirmation sampling plan was submitted to the regulatory agencies for review and approval on November 29, 2000 to collect VOCs, SVOCs and TAL metals sidewall and bottom samples, the sidewalls and bottoms from the existing excavation and test pits (Figure 4). A formal letter was submitted by the Air Force on December 6, 2000 (Appendix B) that requested the following changes to the work plan:

- Closure of the C&D Landfill as a non-permitted fill area under 6 NYCRR 360,
- Confirmation sampling in accordance with the November 29, 2000 sampling plan, with VOCs samples collected approximately 1-foot below the bottom or into the sidewall of the trenches in the locations shown in Figure 4,
- Excavation and inspection of the undisturbed soil between the trenches and removal and separation of all material not in compliance with the definition of C&D debris as stated in 6 NYCRR 360,
- Consultation with regulatory agencies as the nature and extent of material found, and
- Sampling of soil stockpiles prior to use as backfill.

Confirmation and soil stockpile characterization was conducted on December 7, 2000 (Sections 4.1.1 and 4.1.2) and the site secured for the winter months. Analytical results indicated PAH exceedences of the TAGM #4046 RCOs, all of which were attributed to presence of asphalt (Section 4.1.1).

Following review of the confirmation sampling results by the regulatory agencies, Versar resumed excavation activities in October 2001 to investigate the remaining in-place material (Photo Nos. 7 and 8) and remove non-compliance C&D material. The excavation uncovered pieces of metal and transite pipe (Photo No. 3). No other waste material was observed, other than concrete and asphalt.

All stockpiles soils were acceptable for use as backfill for site restoration. In addition, Versar was directed to mix the stockpiled soil with the 800 CY of wood chips generated from the tub-grinder operation prior to backfilling the stockpiles into the open excavation. In addition, NYSDEC granted the transfer of 3,500 CY of C&D contaminated soils from the Stump Dump for placement into the C&D Landfill. The site was then graded for proper drainage utilizing a loader and bulldozer (Photo No. 9). Field activities were completed on November 8, 2001.

3.5.2 Stump Dump

Excavation activities began November 15, 2000 (Photo No. 10), using a tub-grinder to chip a few dead trees and stumps that were stockpiled atop of the site. Excavation and soil screening began at Area 1 (Figure 3, Photo Nos. 10 and 11), which is along the northwest boundary of the site using the same operational equipment and procedures employed at the C&D Landfill. Area 1 contained a large concrete vault, several large tree stumps (Photo No. 11), a few bags of dead leaves, and burnt logs. The excavation continued onto Areas 2 and 3. Area 2 contained tree roots and a few burnt logs (Photo No. 12), while Area 3 contained a wide range of material including household debris, empty crushed metal drums, construction and demolition debris, and miscellaneous household debris (Photo Nos. 13 and 14). The excavated soil was separated and stockpiled into 23 piles (Photo No. 12). Excavated concrete (including the vault found in Area 1) and asphalt were reduced to a manageable size and stockpiled (Photo No. 13). Household, other debris, and metal were also separated and stockpiled for off site disposal (Photo No. 15). Unlike the C&D Landfill, all fill material was excavated, screened, and separated with all waste material removed off-site prior to securing the site for the winter months. The combined excavations total 4,025 CY.

No other waste material was observed, nor were there any PID headspace readings above native background soil levels, observed stained soil, or odor emitting from the fill material. Post-excavation/confirmation and soil stockpile characterization samples were collected on May 7, 2001, and selective re-sampling was performed on May 23, 2001 (Sections 4.1.3 and 4.1.4).

After regulatory agency review of the analytical results, it was concluded that the limits of excavation were "clean" and acceptable for clean closure. However, restrictions were placed on the soil stockpiles. The stockpiles showing no TAGM #4046 exceedences (525 cy) were permitted to be backfilled in the Stump Dump (Photo No. 16), while the

remaining stockpiles containing PAH exceedences were transferred (Photo No. 17) for placement in the C&D Landfill (3,500 cy).

As part of site restoration, Versar was directed to mix the "clean" stockpiled soil with the wood chips (100 CY) generated from the tub-grinder operation prior to backfilling the clean soil stockpiles. The site was then graded for proper drainage utilizing a loader and bulldozer (Photo No. 16). Field activities were completed on November 8, 2001.

4.0 CONFIRMATION AND CHARACTERIZATION SAMPLING

4.1 Sampling and Analysis

Confirmation sampling performed at the C&D Landfill and Stump Dump was used to determine the adequacy of contaminated soil removal at the limits of the excavation areas, while characterization sampling was used to characterize the soil stockpiles generated from the excavation activities. The Data Validation/Usability Reports, dated March 28, 2001, and July 10, 2001, addressing the confirmation sampling are provided in Appendix C for the C&D Landfill and Stump Dump, respectively. Data validation reports were not required for the characterization samples.

All confirmation samples were analyzed for VOCs, SVOCs, and Target Analyte List (TAL) Metals in accordance with EPA Methods SW846-8260B, SW846-8270C, and SW846-6010B/7471, respectively. Characterization samples were analyzed for SVOCs and TAL Metals in accordance with the respective above-referenced EPA Method. Analyte concentrations were compared to the respective TAGM #4046 (Appendix B) RCOs for soil to determine if clean conditions were achieved and to determine possible disposal requirements.

4.1.1 C&D Landfill Confirmation Samples

On December 7, 2000, confirmation soil sampling was performed in accordance with a modified sampling plan. Confirmation samples were collected from the bottom and sidewalls of trenches, test pit bottoms, and excavation areas. There were no chemical odors or discoloration of the soils encountered. All samples were discrete and collected approximately 12 inches below the soil surface. The sampling locations are shown on Figure 4, and the analytical results are summarized in Tables 2 through 4.

VOCs

There were no exceedences of the respective TAGM #4046 RCOs for VOCs in confirmation samples collected at the C&D Landfill (Tables 2A, 2B, and 2C).

SVOCs

Concentrations of benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)flouranthene, benzo(a)pyrene, and chrysene exceeded the respective TAGM #4046 RCOs in several of the confirmation samples (Tables 3A, 3B and 3C). All compounds that exceeded the RCOs are typical constituents of asphalt products, as reported in the Hazard Review Report by the U.S. Department of Health and Human Services entitled, Health Effects of Occupational Exposure to Asphalt, December 2000 (Table 10). The excavation and trenching activities conducted at the C&D Landfill uncovered large sheets of asphalt paving and, as a result, the SVOC detections exceeding the respective RCOs can be assumed to originate from asphalt present in the fill material.

TAL Metals

The TAL metals results for confirmation samples collected at the C&D Landfill showed exceedences of the respective TAGM #4046 RCOs for selenium (Se), calcium (Ca), and magnesium (Mg) in select bottom, sidewall, and pit samples (Tables 4A, 4B, and 4C). The two selenium exceedences at Sample Locations P-03 and B-13 (2.9 and 2.7 mg/kg), were only slightly greater than the RCO of 2.0 mg/kg and can be considered to represent natural background levels (URS, 1996). Similarly, Zinc exceedences at Sample Locations B-13 and P-03 (73.9 and 87.8 mg/kg) were only slightly greater than the RCO of 63.4 mg/kg. The exceedence for calcium at Sample Location B-01 (41,000 mg/kg) and the magnesium concentration at Sample Location B-10 (8,430 mg/kg), were compared to the established background levels for PAFB of 30,200 mg/kg for calcium and 3,340 mg/kg for magnesium and were also evaluated according to TAGM #4046 guidelines (pages 1 and 2) pose no apparent carcinogenic (Item a) or systemic (Item b) threat to human health and/or the environment. However, the detections exceed the RCO average site background levels (Item d) for native soils by factors of 1.3 and 2.5, respectively. The presence of calcium and magnesium in the soil poses no apparent threat to groundwater supplies. Appendix D provides a detailed discussion regarding the detected metals concentrations versus established site background levels for PAFB.

4.1.2 C&D Landfill Characterization Samples

Characterization samples (two-point composites) were collected on December 7, 2000. During the course of excavation activities, PID readings did not exceed observed background levels of 4-5 ppm (Photo No. 18). The twelve (12) soil stockpile locations are shown on Figure 5. The analytical results are summarized in Table 8A and 8B.

SVOCs

The SVOC analytical results for characterization samples (Table 8A) showed several PAH analytes exceeding the respective TAGM #4046 RCOs. As previously discussed, the SVOC detections can be assumed to originate from asphalt present in the fill material.

TAL Metals

The TAL Metals results for characterization samples showed concentrations exceeding the respective TAGM #4046 RCOs for barium, calcium, and magnesium. The barium exceedence, Soil Stockpile SP-01 (369 mg/kg, Table 8B-TAL Metals) was only slightly above the RCO of 300 mg/kg. The exceedences for calcium at Soil Stockpiles SP-05, SP-09, and SP-12 (31,800 mg/kg, 32,600 mg/kg and 61,100 mg/kg, respectively) and the magnesium exceedences at Soil Stockpiles SP-05 and SP–12 (5,380 mg/kg and 4,460 mg/kg), were compared to established background concentrations of 30,200 mg/kg for calcium and 3,340 mg/kg for magnesium. The presence of calcium and magnesium in the fill area is unlikely to threaten human health or the environment. As previously discussed, these concentrations pose no apparent carcinogenic or systemic threat to

human health and/or the environment, although they exceed the RCO background levels for native soils by factors of 2.0 and 1.6, respectively. The presence of calcium and magnesium in the fill area is unlikely to threaten human health or the environment.

4.1.3 Stump Dump Confirmation Samples

On May 7, 2001, confirmation soil sampling was conducted in accordance with the WP that included several re-tests of select TAL Metals. A selective re-sampling event was performed on May 23, 2001. Sampling locations are shown on Figure 7. Sample A1-01 was collected in the southwest corner of Area 1, where the soil was a dark shade of brown compared to the reddish brown sandy soil in the other portions of Area 1. All other samples were collected randomly throughout the excavation areas. The analytical results are summarized in Tables 5, 6 and 7.

VOCs

There were no exceedences of the respective TAGM #4046 RCOs for VOCs in confirmation samples collected at the Stump Dump Landfill (Table 5).

SVOCs

The only SVOC analyte exceedence of the respective RCOs occurred in Area 1, Sample No. A1-01. Benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, and chrysene exceeded the respective RCOs. The previously reported presence of charred logs within the fill material of the Stump Dump (URS, 2000) indicates a possible source of PAH by-products in the soil (i.e., due to incomplete combustion) at Location A1-01. A second set of samples (No. A1-01A and A1-01B – Table 6, were collected immediately adjacent to Location A1-01 (Figure 7) on June 23, 2001 and analyzed for SVOCs to demonstrate that the contamination was confined to a limited area or was a possible anomaly. No SVOCs were found in these samples above the method detection limits (Table 6). Therefore, it appears that the elevated levels of SVOC analytes reported in Sample A1-01 can be considered a "deminimis" quantity.

TAL Metals

The only TAL Metal exceedences of the respective RCOs also occurred in Area 1. The selenium concentrations at Locations A1-01, A1-02, A1-02 (duplicate) and A1-03 (2.91 mg/kg, 2.06 mg/kg, 2.63 mg/kg and 2.23 mg/kg, respectively, Table 7), were only slightly greater than the respective TAGM #4046 RCO of 2.0 mg/kg. The samples were collected from the native soil beneath the fill area, approximately 12-inches below the soil surface. The collected samples were retested twice to demonstrate the inherent variability of soil metal concentration due the heterogeneity of the soil matrix. In each case, the retests were below the respective RCO.

4.1.4 Stump Dump Characterization Samples

Characterization samples (two-point composites) were collected on May 7, 2001 and a selective re-sampling of Stockpile No. 14 was completed on May 23, 2001 for statistical analysis. Twenty-three (23) soil stockpiles were sampled at locations depicted in Figure 6. The analytical results are summarized in Tables 9A and 9B.

SVOCs

The SVOC analytical results showed several PAH analytes exceeded the TAGM #4046 RCOs associated only with soil from Area 3 (Table 9A). Soil stockpiles from Area 1 and 2 had no exceedences. The compounds that exceeded the TAGM #4046 RCOs are all constituents of asphalt products, as reported in the Hazard Review Report by the U.S. Department of Health and Human Services entitled, Health Effects of Occupational Exposure to Asphalt (December 2000) - Table 10. The excavation activities at Area 3 uncovered asphalt paving throughout the fill material, and the smaller pieces could not be screened and separated. As a result, it can be concluded that the PAH analytes exceeding the TAGM #4046 RCOs are likely due to the asphalt material present in the fill material.

TAL Metals

The analytical results of several soil stockpile samples reported TAL Metals exceeding the respective TAGM #4046 RCOs for selenium, lead, and zinc, as shown in Table 9B. The selenium exceedences were greater than the RCO of 2.0 mg/kg, but resampling showed the sample concentrations to be below the RCO value. Stockpile SP-14, which showed the highest selenium value, was re-sampled to demonstrate the inherent variability of soil metal concentrations due to such factors as the heterogeneity of the soil matrix and/or presence of an anomaly. The original sample was rerun for selenium, and three additional samples were collected that consisted of a grab sample, and two identical split composite samples. One of the split samples was sub-sampled and tested seven times. The results and associated data analysis are presented in Appendix D. The section entitled "Characterization Samples for Metal Analysis – Statistical Variability" shows the wide variability in sampling results and that the results are considered to be within the RCO guideline value. A similar case can be established for lead and zinc. Two Stockpiles, SP-16 and SP-21, showed lead levels slightly above the RCO of 79.4 mg/kg (90.3 and 96.9 mg/kg, respectively -- Table 9B); however, retests of the samples produced results of 32 mg/kg and 15.9 mg/kg, respectively, which are well below the guideline value. Zinc was also reported above the RCO in samples collected from five of the stockpiles (Table 9B), but retests of the same sample from the respective stockpiles also showed results below the RCO, again demonstrating the wide variability in reported metal concentrations for the same sample.

4.2 Sample Handling and Documentation

The soil samples collected during the course of this project were submitted for analysis to Kemron Environmental Services, Inc. (Kemron) located at 109 Starlite Park, in Marietta,

OH as prescribed in the QAPP. All collected samples were immediately placed into appropriate laboratory-supplied sample jars. Labels with all pertinent data were fixed to each sample jar for identification. Samples were then placed on ice in sample coolers to maintain a temperature of 4°C. All sample locations, dates, times, depths (if needed) and other observations were recorded in the field logbook. Strict chain-of-custody (COC) procedures were followed to establish a complete sample custody record from the time of sample collection until laboratory receipt.

4.3 Data Validation

A data validation usability report was produced for all confirmation samples (Appendix C). The results were reviewed and "qualified" if there were any concerns regarding the usability of the data. Potentially unusable data was qualified with an "R" or rejection qualifier as shown in the tables referenced in Sections 4.1.1 and 4.1.3 and in Appendix C.

AFCEE data qualification protocols rely heavily on evaluating contract compliance in addition to evaluating data quality impacts and can result in significantly more data receiving an "R" qualifier than if current USEPA protocols were utilized. While AFCEE may not consider all "R" qualified data to be usable, depending on project objectives, it can lead to confusion when submitted to state and federal regulatory agencies where the "R" qualifier is only applied to data with serious QC deficiencies. The "R" qualified data was the result of minor QC excursions that under USEPA protocols might not even have been qualified as estimated based on the data reviewer judgment. Many of the "R" qualifiers were placed on chemical compounds considered to be of no concern, with the exception of four SVOC samples at the C&D Landfill, all of which was attributed to the asphalt/PAH contamination. The qualifiers had no impact on the conclusions presented in this report. The validation packages were provided to the regulatory agencies for review and comment.

The AFCEE-QAPP quality control limits are more conservative than the guidance limits provided in the USEPA's SW-846 individual analytical methods. Additionally, the AFCEE protocols for evaluating data quality are significantly more stringent than those provided in USEPA's national functional guidelines for organic data review (EPA 540/R-99/008, October 1999), especially in regards to calibration non-compliance and suspected matrix effects.

Duplicate analyses demonstrated the non-homogeneity of the soil, which showed a sample may have analyte(s) exceedences of TAGM #4046 RCOs, while the duplicate sample showed analyte(s) concentrations below the guideline value.

5.0 WASTE MANAGEMENT

5.1 Contaminated Soil

Asphalt-contaminated soil stockpiles at the C&D Landfill identified as containing exceedences of the respective TAGM #4046 RCOs for PAH were allowed to be backfilled into the C&D Landfill following a change in closure classification and concurrence with NYSDEC. Similarly, approximately 3,500 CY of C&D-contaminated soil stockpiles from the Stump Dump were transported to the C&D landfill, and used as backfill.

5.2 Concrete and Asphalt

Only a portion (560 tons) of the concrete and asphalt uncovered at the C&D Landfill was removed and disposed off-site by Valley Sanitation to the Frank Gates' Property, Route 9 North, Plattsburgh, NY; a registered fill area (Appendix B). Following the determination by NYSDEC to allow the C&D Landfill to be closed as a non-permitted construction and demolition debris landfill under 6 NYCRR Section 360-7.1(b), off-site disposal ceased and the remaining asphalt and concrete fill material was permitted to stay within the landfill.

All the excavated concrete and asphalt was removed from the three Stump Dump fill areas. Approximately 1250 tons of stockpiled concrete and asphalt were transported off-site in roll-off containers from the Stump Dump by Valley Sanitation and also disposed at the Frank Gates' Property.

5.3 C&D Material

No C&D material or household wastes were found at the C&D Landfill, while 6.96 tons of C&D debris and household wastes were excavated and staged/stockpiled at the Stump Dump. The materials were subsequently transported in a roll off container by Valley Sanitation to the Franklin County Landfill, a permitted solid waste disposal facility. The bill of lading is presented in Appendix E.

5.4 Asbestos Containing Material

Approximately 200 pounds of transite-pipe was removed from the C&D Landfill. The separated and stockpiled material was transported by MC Environmental Services to the Chemical Waste Services, Inc. disposal facility located in Model City, NY. The bill of lading is presented in Appendix E.

5.5 Recyclable Metal

Approximately 20 tons of recyclable metal was removed from the C&D Landfill and Stump Dump and transported in roll-off containers by Valley Sanitation to Atkinsons' Scrap Metal, 1239 Route 22B, Morrisonville, NY.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 C&D Landfill

A total of approximately 12,000 CY of fill material within the C&D Landfill were excavated and inspected, comprised predominately of asphalt and concrete. Off-site disposal and recycling were limited to the removal of approximately 5 tons of recyclable metal, 200 pounds of transite pipe, and 560 tons of concrete and asphalt.

The lack of non-C&D waste material and potentially contaminated soils prompted Air Force personnel to contact the regulatory agencies and request consideration of the C&D Landfill for closure as a non-permitted construction and demolition debris landfill exempt from 6 NYCRR Section 360-7.1(b). With the concurrence of NYSDEC, it was decided that the C&D Landfill would be closed under this exemption, allowing the twelve (12) asphalt-attributed PAH-laden soil stockpiles generated from excavation activities to be backfilled along with the placement of approximately 3,500 cubic yards of C&D contaminated soils from the Stump Dump prior to final grading and site restoration (Photo No. 19). As part of the closure, however, it is recommended that a deed notification for the C&D Landfill be provided to note the former site history, past investigation/removal activities, and residual contamination should future development be considered.

6.2 Stump Dump

Approximately 4,025 CY of fill material were excavated, screened and source separated from the three non-contiguous fill areas. The excavation uncovered concrete, asphalt, rock, trees, stumps, logs, household debris, empty crushed metal drums, and C&D debris. Off-site disposal and recycling consisted of the removal of 15 tons of recyclable metal, 6.96 tons of miscellaneous C&D and household wastes, and 1,250 tons of concrete and asphalt.

Analytical results of confirmation sampling performed at the limits of excavation within Areas 2 and 3 showed all analyte levels below the respective TAGM #4046 RCOs. Area 1 showed selenium concentrations slightly above the RCO, but they were considered statistically equivalent to background levels as noted in Section 4.1.3 and Appendix D. One sample from Area 1 also contained PAHs exceeding their respective RCOs; however, re-sampling confirmed that the contamination was limited to a small area and considered a "deminimis" quantity.

The characterization samples collected from the stockpiled soils indicated the presence of PAHs and TAL Metals above the respective TAGM #4046 RCOs. The PAH contamination was attributed to the presence of asphalt in the soil. TAL Metal analytes that exceeded the RCOs were retested to demonstrate the wide variability in metal levels

for the same samples, and showed the exceedences were within the tolerance limits for the guideline value.

Clean closure of the Stump Dump was therefore considered a viable option. The C&D-contaminated soil stockpiles (3,500 CY) that were not suitable for backfill were transferred to the C&D Landfill with the concurrence of the NYSDEC. The remaining 525 CY of soil was used as clean fill to achieve proper grading for drainage (Photo No. 20). No further action is recommended for the Stump Dump.

7.0 REFERENCE

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8. SW-846. U.S. Environmental Protection Agency (USEPA), 1986, *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,* SW-846, Third edition, Final Update I (July 1992), Final Updates II and IIA (September 1994), Update III (December 1996), and Draft Update IVA (January 1998).

TABLE 1
VOCs, SVOCs, AND METALS DETECTED IN THE SOIL SAMPLES COLLECTED FROM THE C&D LANDFILL AND STUMP DUMP (Maximum Values)*-- URS, May 2001 Final Supplemental Evaluation EBS Report

Parameter (Analyte)	Fill Material Concentration C&D Landfill (mg/kg)	Fill Material Concentration Stump Dump (mg/kg)	Recommended Soil Cleanup Objective (mg/kg)**
VOCs			
Methylene Chloride	0.00376	ND	0.1
Toluene	0.00156	ND	1.5
SVOCs			
Acenaphthylene	0.217	ND	41
Acenaphthene	0.781	ND	50
Anthracene	3.3	ND	50
Benzo(a)anthracene	6.353***	0.194	0.224 or MDL
Benzo(a)pyrene	25.168***	0.222***	0.061 or MDL
Benzo(b)fluoranthene	20.022***	0.264	1.1
Benzo(g,h)perylene	8.557	0.081	50
Benzo(k)fluoranthene	20.134***	0.382	1.1
Bis(2-Ethylhxeyl)phthalate	ND	5.039	50
Butylbenzylphthalate	0.102	ND	50
Carbazole	1.02	ND	--
Chrysene	8.870***	0.269	0.4
Dibenzofuran	0.928	ND	6.2
Fluoranthene	13.647	0.376	50
Fluorene	2.058	ND	50
Dibenzo(a,h)anthracene	0.644***	ND	14
Indeno(1,2,3-cd)pyrene	3.937***	ND	3.2
Naphthalene	2.08	ND	13
Phenanthrene	13.87	0.189	50
Pyrene	17.45	0.551	50
METALS			
Arsenic	3.15	3.500	7.5
Barium	1,186 ***	0.724	300
Cadmium	1.2	79+++	1.3 (SB)
Chromium	10.88	780+++	19.4 (SB)
Lead	45	2,025+++	79.4 (SB)
Mercury	0.08	0.110	0.65 (SB)
Selenium	1.86	ND	2.0
Silver	1.14+++	ND	ND (SB)

* Analytical data obtained from URS Consultants, Inc., Draft Supplemental Evaluation to the Environmental Baseline Survey Report, May 2000.
** NYSDEC TAGM 4046: recommended soil cleanup objective
** *Shaded block identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM cleanup objective
(SB): Site background levels. Source: URS Consultants Inc., 1995 Background Surface Soil & Groundwater Survey for the Plattsburgh AFB.

+++ Fill material metal analyte exceeds the historical site background levels.

TABLE 2A

VOCs - C&D LANDFILL CONFIRMATION SAMPLING RESULTS BOTTOM SOILS - (mg/kg)*

SAMPLE LOCATION* (sample no.) / ANALYTE	MDL *(mg/kg)*	B-01	B-02	B-03	B-04	B-05	B-06	B-07	B-08	B-09A	B-09B sample duplicate	B-10	B-11	B-12	B-13	NYSDEC TAGM Soil Clean-up Objective *(mg/kg)*
Acetone	0.0045	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.200
Benzene	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.060
2-Butanone	0.0042	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.300
Chloroform	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.300
Chloroethane	0.0015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.900
1,2 Dichloroethane	0.0006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.100
1,2 Dichloroethene	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.300
Ethylbenzene	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.500
Methylene Chloride	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.100
Tetrachloroethene	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.400
Toluene	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.500
1,2,4 Trimethylbenzene	0.0005	0.00031 F	0.00029 F	0.00033 F	0.00028 F	0.00032 F	0.00027 F	0.00030 F	0.00032 F	0.00030 F	ND	0.00028 F	0.00029 F	0.00029 F	0.00025 F	--
Styrene	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
Vinyl Chloride	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.200
Xylene (total)	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.200

ND: Not Detected; MDL: Minimum Detection Level

* Refer to Figure 4, Sample Location Map of C&D Landfill for specific location of soil samples.

Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM 4046 cleanup objective, Appendix A, Table 1, Column 9.

F - Results are qualitatively acceptable but quantitatively unreliable due to uncertainty in precision near the lower limit of detection (i.e., results above the MDL but below the RL).

TABLE 2B

VOCs - C&D LANDFILL CONFIRMATION SAMPLING RESULTS SIDEWALL SOILS -(mg/kg)*

SAMPLE LOCATION* (sample no.) / ANALYTE	MDL *(mg/kg)*	S-01	S-02	S-03	S-04	S-05	S-06	S-07B sample duplicate	S-07A	S-08	S-09	S-10	S-11	S-12	Site Background or NYSDEC TAGM Soil Clean-up Objective *(mg/kg)*
Acetone	0.0045	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.200
Benzene	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.060
2-Butanone	0.0042	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.300
Chloroform	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.300
Chloroethane	0.0015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.900
1,2 Dichloroethane	0.0006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.100
1,2 Dichloroethene (total)	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.300
Ethylbenzene	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.500
Methylene Chloride	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.100
Tetrachloroethene	0.0005	0.00087 F	ND	0.00063 F	0.00047 F	ND	ND	0.00071 F	0.00120 F	ND	ND	ND	ND	ND	1.400
Toluene	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.500
1,2,4 Trimethylbenzene	0.0005	ND	ND	0.00029 F	0.00038 F	0.00036 F	0.00030 F	0.00030 F	0.00031 F	0.00032 F	0.00031 F	0.00027 F	0.00026 F	0.00027 F	--
Styrene	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
Vinyl Chloride	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.200
Xylene (total)	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.200

ND: Not Detected; MDL: Minimum Detection Level

* Refer to Figure 4, Sample Location Map of C&D Landfill, for specific location of soil samples.

Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM 4046 cleanup objective, Appendix A, Table 1, Column 9.

F - Results are qualitatively acceptable but quantitatively unreliable due to uncertainty in precision near the lower limit of detection (i.e., results above the MDL but below the RL).

TABLE 2C

VOCs - C&D LANDFILL CONFIRMATION SAMPLING RESULTS FOR TEST PIT SOILS -(mg/kg)*

SAMPLE LOCATION* (sample no.) / ANALYTE	MDL (mg/kg)	P-01	P-02	P-03	P-04	P-05A	P-05B sample duplicate	P-06	P-07	P-08	NYSDEC TAGM Soil Clean-up Objective (mg/kg)
Acetone	0.0045	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.200
Benzene	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.060
2-Butanone	0.0042	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.300
Chloroform	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.300
Chloroethane	0.0015	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.900
1,2 Dichloroethane	0.0006	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.100
1,2 Dichloroethene (total)	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.300
Ethylbenzene	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.500
Methylene Chloride	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.100
Tetrachloroethene	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.400
Toluene	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.500
1,2,4 Trimethylbenzene	0.0005	0.00031 F	0.00029 F	0.00033 F	0.00028 F	0.00032 F	0.00027 F	0.00030 F	0.32 F	0.00030 F	--
Styrene	0.0005	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
Vinyl Chloride	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.200
Xylene (total)	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.200

ND: Not Detected; MDL: Minimum Detection Level

* Refer to Figure 4, Sample Location Map of C&D Landfill, for specific location of soil samples.

TABLE 3A

SVOCs - C&D LANDFILL CONFIRMATION SAMPLING RESULTS BOTTOM SOILS -(mg/kg)*

SAMPLE LOCATION* (sample no.) / ANALYTE	MDL (mg/kg)	B-01	B-02	B-03	B-04	B-05	B-06	B-07	B-08	B-09A	B-09B sample duplicate	B-10	B-11	B-12	B-13	NYSDEC TAGM Soil Clean-up Objective (mg/kg)
Acenaphthene	0.083	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.057	ND	ND	ND	ND	50.0
Acenaphthylene	0.083	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	41.0
Anthracene	0.083	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.341	ND	ND	ND	ND	50.0
Benzoic Acid	0.33	ND R	ND R	ND R	ND R	ND R	ND R	ND R	ND R	ND R	ND R	ND R	ND R	ND R	ND R	2.7
Benzo(a)anthracene	0.083	ND	0.113 F	ND	0.038 F	ND	ND	ND	ND	0.057 F	**0.803**	ND	ND	ND	0.042 F	0.224 or MDL
Benzo(b)fluoranthene	0.083	ND	0.129 F	ND	0.048 F	ND	ND	ND	ND	0.058 F	0.549 F	ND	ND	0.035 F	0.062 F	1.1
Benzo(k)fluoranthene	0.083	ND	0.107 F	ND	ND	ND	ND	ND	ND	0.035 F	0.414 F	ND	ND	ND	ND	1.1
Benzo(g,h,I)perylene	0.083	ND	ND	ND	ND	ND	ND	ND	ND	0.033 F	0.309 F	ND	ND	ND	ND	50.0
Benzo(a)pyrene	0.083	ND	**0.112 F**	ND	ND	ND	ND	ND	ND	0.050 F	**0.546 F**	ND	ND	0.030 F	0.050 F	0.061 or MDL
Bis(2-ethylhexyl) phalate	0.083	ND	0.062 F	ND	ND	ND	ND	ND	ND	0.043 F	ND	43 F	ND	ND	0.041 F	50.0
Carbazole		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
Chrysene	0.083	ND	**0.114 F**	ND	0.039 F	ND	ND	ND	ND	0.059 F	**0.802**	ND	ND	ND	0.046 F	0.400
Dibenzo(a,h)anthracene	0.083	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.014 or MDL
Dibenzofuran	0.083	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.072 F	ND	ND	ND	ND	6.2
Fluoranthene	0.083	ND	0.195 F	ND	0.057 F	ND	ND	ND	ND	0.073 F	1.98	ND	ND	0.041 F	0.071 F	50.0
Fluorene	0.083	ND	ND	ND	ND F	ND	ND	ND	ND	ND	0.224 F	ND	ND	ND	ND	50.0
Indeno(1,2,3-cd)pyrene	0.083	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.267 F	ND	ND	ND	ND	3.2
Naphthalene	0.083	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.0
2-Methylnaphthalene	0.083	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36.4
Phenanthrene	0.083	ND	0.101 F	ND	ND	ND	ND	ND	ND	ND	2.35	ND	ND	ND	ND	50.0
Pyrene	0.083	ND	0.164 F	ND	0.047 F	ND	ND	ND	ND	0.094 F	1.75	ND	ND	0.039 F	0.064 F	50.0

ND: Not Deteeted; MDL: Minimum Detection Level

* Refer to Figure 4, Sample Location Map of C&D Landfill, for specific location of soil samples.

Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM 4046 cleanup objective, Appendix A, Table 2, Column 9.

F - Results are qualitatively acceptable but quantitatively unreliable due to uncertainty in precision near the lower limit of detection (I.e., results above the MDL but below the RL).

M - A matrix interference was present. Reported value or quantitiation limit may be an estimate due to matrix spike below the lower control limit or above the upper control limit.

R - Reported value or quantitation limit is rejected due to Internal Standard Area less than lower control limit or calibration verification % difference greater than the control limit.

J - Results are estimated and the data are valid for limited purposes. These results are qualitatively acceptable, but quantitatively unreliable.

Shaded block identifies samples with analyte(s) in excess of NYSDEC TAGM 4046 Recommeded Cleanup Objectives.

TABLE 3B

SVOCs - C&D LANDFILL CONFIRMATION SAMPLING RESULTS SIDEWALL SOILS -(mg/kg)*

SAMPLE LOCATION* (sample no.) / ANALYTE	MDL (mg/kg)	S-01	S-02	S-03	S-04	S-05	S-06	S-07B sample duplicate	S-07A	S-08	S-09	S-10	S-11	S-12	NYSDEC TAGM Soil Clean-up Objective (mg/kg)
Acenaphthene	0.083	ND	ND	ND	ND	705 F	ND	ND	ND	ND	ND	ND	ND	ND	50.0
Acenaphthylene	0.083	ND	38	ND	ND	424 F	ND	ND	ND	ND	ND	ND	ND	ND	41.0
Anthracene	0.083	ND	37	ND	ND	2260 F	ND	80 F	ND	ND	110 F	ND	ND	ND	50.0
Benzoic Acid	0.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND R	ND R	2.7
Benzo(a)anthracene	0.083	**241 F**	164 F	144 F	58 F	**8,940**	49 F	**398 F**	55 F	ND	**940 F**	41 F	137 F	59 F	0.224 or MDL
Benzo(b)fluoranthene	0.083	ND R	211 F	214 R	76 F	**7,840**	77 F	394 R	72 R	ND	**1290 R**	58 F	171 F	65 F	1.1
Benzo(k)fluoranthene	0.083	ND R	153 F	168 R	47 F	**6,930**	48 F	373 R	52 R	ND	830 R	ND	148 F	44 F	1.1
Benzo(g,h,I)perylene	0.083	ND R	93 F	ND R	ND	2,120	ND	107 R	ND	ND	251 R	ND	ND	31 F	50.0
Benzo(a)pyrene	0.083	ND R	**234 F**	**168 R**	60 F	**7,040**	58 F	**357 R**	53 R	ND	**1040 R**	43 F	**133 F**	**63 F**	0.061 or MDL
Bis(2-ethylhexyl) phalate	0.083	ND	ND	ND	ND	ND	85 F	138 F	59 F	ND	1070 F	66 F	91 F	76 F	50.0
Carbazole		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
Chrysene	0.083	257 F	169 F	181 F	66 F	**8,670**	56 F	355 F	56 F	ND	**959 F**	45 F	150 F	58 F	0.400
Dibenzo(a,h)anthracene	0.083	ND	ND	ND R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.014 or MDL
Dibenzofuran	0.083	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2
Fluoranthene	0.083	ND	318 F	307 F	150 F	20,000	89 F	711 F	99 F	ND	1,550	74 F	242 F	97 F	50.0
Fluorene	0.083	480 F	ND	ND	ND	1,110 F	ND	ND	ND	ND	ND	ND	ND	ND	50.0
Indeno(1,2,3-cd)pyrene	0.083	ND R	98 F	ND	ND	ND	ND	113 R	ND	ND	224 R	ND	ND	ND	3.2
Naphthalene	0.083	ND	ND	ND M	ND	ND	ND	ND	ND M	ND	ND	ND	ND	ND	13.0
2-Methylnaphthalene	0.083	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36.4
Phenanthrene	0.083	374 F	135 F	180 F	99 F	8,390	ND	267 F	ND	ND	278 F	ND	115 F	37 F	50.0
Pyrene	0.083	580 F	245 F	353 F	109 F	27,000	79 F	740 F	86 F	ND	1,820	66 F	238 F	89 F	50.0

ND: Not Detected; MDL: Minimum Detection Level

* Refer to Figure 4, Sample Location Map of C&D Landfill, for specific location of soil sample.

Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM 4046 cleanup objective, Appendix A, Table 2, Column 9.

F - Results are qualitatively acceptable but quantitatively unreliable due to uncertainty in precision near the lower limit of detection (I.e., results above the MDL but below the RL).

M - A matrix interference was present. Reported value or quantitiation limit may be an estimate due to matrix spike below the lower control limit or above the upper control limit.

R - Reported value or quantitation limit is rejected due to Internal Standard Area less than lower control limit or calibration verification % difference greater than the control limit.

J - Results are estimated and the data are valid for limited purposes. These results are qualitatively acceptable, but quantitatively unreliable.

Shaded block identifies samples with analyte(s) in excess of NYSDEC TAGM 4046 Recommeded Cleanup Objectives.

TABLE 3C

SVOCs - C&D LANDFILL CONFIRMATION SAMPLING RESULTS TEST PIT SOILS -(mg/kg)*

SAMPLE LOCATION* (sample no.) / ANALYTE	MDL *(mg/kg)*	P-01	P-02	P-03	P-04	P-05A	P-05B sample duplicate	P-06	P-07	P-08	NYSDEC TAGM Soil Clean-up Objective *(mg/kg)*
Acenaphthene	0.083	ND	ND	0.408	ND	ND	ND	ND	ND	ND	50.0
Acenaphthylene	0.083	ND	ND	ND	0.097 F	ND	ND	ND	ND	ND	41.0
Anthracene	0.083	ND	ND	0.666	0.129 F	ND	ND R	ND	ND	ND	50.0
Benzoic Acid	0.33	ND	ND	ND	ND	ND	ND R	ND	ND	ND	2.7
Benzo(a)anthracene	0.083	ND	0.100 F	**2.11**	**0.542 F**	0.052 F	0.203 F	**0.559 F**	ND	0.037 F	0.224 or MDL
Benzo(b)fluoranthene	0.083	ND	0.135 F	**2.40 R**	0.691 R	0.082 R	0.268 F	0.989 R	ND	0.044 F	1.1
Benzo(k)fluoranthene	0.083	ND	0.098 F	**1.71 R**	0.533 R	0.073 R	0.175 F	0.651 R	ND	ND	1.1
Benzo(g,h,I)perylene	0.083	ND	0.049 F	0.545	0.167 R	ND R	0.093 F	ND R	ND	0.038 F	50.0
Benzo(a)pyrene	0.083	ND	**0.120 F**	**1.85 R**	**0.588 R**	ND R	**0.175 F**	**0.692 R**	ND	ND	0.061 or MDL
Bis(2-ethylhexyl) phalate	0.083	ND	ND	ND	ND	0.052 F	0.097 F	ND	ND	0.052 F	50.0
Chrysene	0.083	ND	0.111 F	**1.89**	**0.559 F**	0.060	0.210 F	**0.653 F**	ND	ND	0.400
Dibenzo(a,h)anthracene	0.083	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.014 or MDL
Dibenzofuran	0.083	ND	ND	0.119 F	ND	ND	ND	ND	ND	ND	6.2
Fluoranthene	0.083	ND	0.194 F	4.41	1.23	0.079 F	0.323 J	1.04 F	ND	0.068 F	50.0
Fluorene	0.083	ND	ND	0.250 F	0.055 F	ND	ND	ND	ND	ND	50.0
Indeno(1,2,3-cd)pyrene	0.083	ND	0.049 F	0.559 R	0.184 R	ND R	0.086 F	ND	ND	ND	3.2
Naphthalene	0.083	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.0
2-Methylnaphthalene	0.083	ND	ND	ND	ND	ND	ND	ND	ND	ND	36.4
Phenanthrene	0.083	ND	0.098 F	2.76	0.552 F	ND	0.164 J	0.377 F	ND	ND	50.0
Pyrene	0.083	ND	0.165 F	4.75	0.958	0.094 F	0.354 F	1.36	ND	0.050 F	50.0

ND: Not Detected; MDL: Minimum Detection Level

* Refer to Figure 4, Sample Location Map of C&D Landfill, for specific location of soil samples.

Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM 4046 cleanup objective, Appendix A, Table 2, Column 9.

F - Results are qualitatively acceptable but quantitatively unreliable due to uncertainty in precision near the lower limit of detection (i.e., results above the MDL but below the RDL).

TABLE 4A

TAL METALS - C&D LANDFILL CONFIRMATION SAMPLING RESULTS BOTTOM SOILS - (mg/kg)*

SAMPLE LOCATION* (sample no.) / ANALYTE	MDL *(mg/kg)*	B-01	B-02	B-03	B-04	B-05	B-06	B-07	B-08	B-09A	B-09B sample duplicate	B-10	B-11	B-12	B-13	Site Background or NYSDEC TAGM Soil Clean-up Objective *(mg/kg)*
Silver, Total	0.103	ND	0.16 F	ND	ND	ND	ND	0.12 F	ND	ND	ND	ND	ND	ND	ND	N/A
Aluminum, Total	3.2	3,320	2,940 M	1,840	3,420	1,690	2,360	2,390	1,890	3,490	2650 J	2,290	2,480	3,190	3,850	30,200
Arsenic, Total	0.35	1.7	1.5	0.92 F	1.4	1.2	0.94 F	1.4	0.94 F	1.7	1.2	1.5	1.4	1.5	1.7	7.5
Barium, Total	0.014	98.4	12.7	8.5	18	12	10.7	14.9	11.1	19.1 J	10.7 J	12.2	9.2	15.8	294	300 (TAGM)
Beryllium, Total	0.008	0.14 F	0.18 F	0.11 F	0.19 F	0.10 F	0.10 F	0.12 F	0.10 F	0.19 F	0.14 F	0.16 F	0.18 F	0.20 F	0.20 F	1.3
Calcium, Total	2.8	41,000	15,500 M	10,200	19,602	4,840	4,890	22,600	4,000	15,900 J	10,200	19,100	3,520	8,170	9,160	30,200
Cadmium, Total	0.032	0.11	ND	ND	ND	ND	ND	0.044 F	ND	0.038 F	ND	0.055 F	ND	0.046 F	0.15	1.3
Cobalt, Total	0.043	2.4 F	2.5 F	1.7 F	2.4 F	1.8 F	22.1	2.3 F	1.9 F	2.7 F	2.0 F	2.1 F	2.3 F	2.3 F	2.5 F	9.2
Chromium, Total	0.06	7.2 F	5.2 F	3.0 F	4.9 F	3.2 F	3.8 F	3.7 F	3.3 F	4.6 F	3.5 F	4.0 F	3.4 F	4.3 F	6.5 F	19.5
Copper, Total	0.145	7.5	4.5	1.8 F	2.9	1.6 F	2.2	3.2	1.8 F	3.6	2.6 J	4.4	2.6	3.5	5.5	44.1
Iron, Total	1.12	6,290	6,350	4,130	6,790	5,130	5,420	6,370	4,940	7,710	5,360	5,270	6,640	6,410	7,400	36,700
Mercury, Total	0.018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02 F	0.65
Potassium, Total	5.9	603	883	418 F	514 F	327 F	484 F	544 F	371 F	641	483 F	487 F	413 F	614 F	651	929
Magnesium, Total	4.57	5,060	5,550	2,530	1,060	2,620	2,900	7,280	2,340	4,860	4,990	8,430	2,880	2,290	2,550	3340
Manganese, Total	0.007	121	185	57.3	99.6	61.2	73.6	191	66.3	249 J	152 J	160	113	148	132	474
Sodium, Total	0.859	50.5	50.5	45.6	56.4	53.3	56.7	49	44.8	40.4	47.6	82.2	51.4	31	43	520
Nickel, Total	0.104	6.0	4.5	2.3	3.7	2	2.8	6	2.6	3.7	3.3	3	3.9	3.8	4.8	12.6
Lead, Total	0.331	24.4	3.9	1.4	1.8	0.6	0.8	2.4	0.8	7.1	2.6	4.5	0.8	7.3	14.3	79.4
Antimony, Total	0.45	0.50 F	ND	ND	0.9	ND	ND	0.5	0.6	0.5	0.7	ND	ND	0.4	ND	12.6
Selenium, Total	0.256	0.61 F	0.47 F	ND	0.83 F	0.34 F	ND	0.50 F	0.59 F	0.78 F	0.66 F	0.52 F	0.76 F	0.75 F	2.7	2.0 (TAGM)
Thallium, Total	0.037	ND	ND	ND	0.17 F	ND	0.16 F	0.31 F	ND	0.18 F	0.18 F	ND	ND	ND	ND	N/A
Vanadium, Total	0.228	9.4	6.9	5.4	8.9	6.9	6.9	5.6	6.3	9.8 J	5.6	6.3	5.8	9.3	9.9	90.2
Zinc, Total	0.465	29.4	13.8	7.2	14.5	14.3	8.3	16.4	14.9	14	18.4	12.1	10.7	16.7	73.9	63.4

ND: Not Detected; MDL: Minimum Detection Level

* Refer to Figure 4, Sample Location Map of C&D Landfill, for specific location of soil samples.

Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM 4046 cleanup objective, Appendix A, Table 4, Column 5.

F - Results are qualitatively acceptable but quantitatively unreliable due to uncertainty in precision near the lower limit of detection (i.e., results above the MDL but below the RL).

TABLE 4B

TAL METALS - C&D LANDFILL CONFIRMATION SAMPLING RESULTS SIDEWALL SOILS -(mg/kg)*

SAMPLE LOCATION* (sample no.) / ANALYTE	MDL *(mg/kg)*	S-01	S-02	S-03	S-04	S-05	S-06	S-07A	S-07B sample duplicate	S-08	S-09	S-10	S-11	S-12	Site Background or NYSDEC TAGM Soil Clean-up Objective *(mg/kg)*
Silver, Total	0.103	ND	ND	ND	ND	ND	ND	ND	0.1	ND	ND	ND	ND	ND	N/A
Aluminum, Total	3.2	2,860	2,840	3,710	3,220	3,300	3,400	2,840	3,020	1,250	3,670	3,050	2,860	3,020	30,200
Arsenic, Total	0.35	1.5	1.1	1.7	1.6	1.4	1.4	1	1.1	0.9	1.8	1.5	1.8	1.7	7.5
Barium, Total	0.014	23.5	9.3	21.4	35.7	28.2	20.4	13.3	14.3	5.6	29.7	16.9	20.8	17.5	300 (TAGM)
Beryllium, Total	0.008	0.13 F	0.13 F	0.17 F	0.16 F	0.17 F	0.13 F	0.13 F	0.16 F	0.077 F	0.17 F	0.16 F	0.14 F	0.18 F	1.3
Calcium, Total	2.8	29,700	7,220	17,000	3,180	16,800	16,100	2290 J	3340 J	3,630	13,500	2,450	15,100	8,520	30,200
Cadmium, Total	0.032	0.075 F	ND	0.09	0.31	0.47	0.053	ND	ND	ND	0.086 F	0.059 F	0.104 F	0.23	1.3
Cobalt, Total	0.043	2.3 F	1.8 F	2.3 F	1.8 F	2.6 F	2.3 F	1.8 F	1.8 F	1.3 F	2.4 F	2 F	2.2 F	2.4 F	9.2
Chromium, Total	0.06	3.9 F	3.5 F	5.1 F	8.6 F	4.9 F	5.7 F	4.0 F	3.9 F	1.7 F	5.6 F	4.5 F	7.3 F	5.3 F	19.5
Copper, Total	0.145	5.5	3.9	4.8	4.2	4.6	4.5	3	3.1	1.4	8.8	3.3	4.3	4.8	44.1
Iron, Total	1.12	5,070	4,310	5,660	5,740	5,990	5,710	4,860	4,680	2,970	6,650	6,040	6,250	7,310	36,700
Mercury, Total	0.018	ND	0.02	0.036 F	0.039 F	ND	ND	ND	ND	ND	0.022 F	ND	0.023 F	ND	0.65
Potassium, Total	5.9	462 F	276 F	510 F	246 F	600 F	645	362 F	382 F	247 F	513 F	356 F	557 F	558 F	929
Magnesium, Total	4.57	1,820	1,150	1,530	1,210	3,850	2,420	1,020	966	2,130	3,040	922	2,120	3,080	3340
Manganese, Total	0.007	304	65.6	90.9	71.8	172	96.9	61.5	63.1	71.4	138	65.8	87.6	149	474
Sodium, Total	0.859	36.8	35.4	35.7	26.1	48.4	70.5	26.4 J	40.8 J	26.5	46.8	30.8	44.2	14.5	520
Nickel, Total	0.104	4.2	2.7	3.7	4.8	4.2	4	3.3	3.7	2.1	5.5	3.8	3.7	3.9	12.6
Lead, Total	0.331	16	11.1	21.7	35.9	10.6	7.5	13.3	15.8	0.44 F	23.4	13.9	29.5	7.3	79.4
Antimony, Total	0.45	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.61 F	12.6
Selenium, Total	0.256	1.2	0.50 F	1.03 F	0.64 F	0.71 F	0.58 F	0.57 F	0.68 F	ND	1.7	0.68 F	0.76 F	0.96 F	2.0 (TAGM)
Thallium, Total	0.037	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A
Vanadium, Total	0.228	17.1	5.5	9	10.2	8.4	8.2	11.4	11.3	2.7	11.2	12.8	11.2	8.5	90.2
Zinc, Total	0.465	31.6	21.4	23.4	26.7	23.6	18.3	25.3	24.1	6.1	41.1	24.6	26.7	17.4	63.4

ND: Not Detected; MDL: Minimum Detection Level

* Refer to Figure 4, Sample Location Map of C&D Landfill, for specific location of soil samples.

Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM 4046 cleanup objective, Appendix A, Table 4, Column 5.

F - Results are qualitatively acceptable but quantitatively unreliable due to uncertainty in precision near the lower limit of detection (i.e., results above the MDL but below the RDL).

M - A matrix interference was present. Reported value or quantitiation limit may be an estimate due to matrix spike below the lower control limit or above the upper control limit.

R - Reported value or quantitation limit is rejected due to Internal Standard Area less than lower control limit or calibration verification % difference greater than the control limit.

TABLE 4C

TAL METALS - C&D LANDFILL CONFIRMATION SAMPLING RESULTS TEST PIT SOILS -(mg/kg)*

SAMPLE LOCATION* (sample no.) / ANALYTE	MDL *(mg/kg)*	P-01	P-02	P-03	P-04	P-05A	P-05B sample duplicate	P-06	P-07	P-08	Site Background or NYSDEC TAGM Soil Clean-up Objective *(mg/kg)*
Silver, Total	0.103	ND	ND	ND	ND	0.11 F	ND	ND	ND	ND	N/A
Aluminum, Total	3.2	2,500	3,590	2,710	2,920	2,590	2,900	3,890	2,020	1,910	30,200
Arsenic, Total	0.35	1.03 F	1.9	1.4	1.8	1.1	1.2	2	1.3	1.3	7.5
Barium, Total	0.014	13.4	23.5	16	14.5	49.4	57.7	39.9	10.7	8.8	300 (TAGM)
Beryllium, Total	0.008	0.15 F	0.19 F	0.15 F	0.16 F	0.13 F	0.12 F	0.17 F	0.12 F	0.13 F	1.3
Calcium, Total	2.8	3,580	12,200	3,590	5,370	21,000	18,300	28,900	28,900	15,900	30,200
Cadmium	0.032	ND	0.090 F	0.29	ND	0.10 F	0.11 F	0.13	ND	ND	1.3
Cobalt, Total	0.043	2.1 F	2.6 F	2.2 F	2.1 F	1.8 F	1.8 F	2.3 F	1.8 F	1.7 F	9.2
Chromium, Total	0.06	3.5 F	5.8 F	4.9 F	4.3 F	4.4 F	5.4 F	6.8 F	2.9 F	2.8 F	19.5
Copper, Total	0.145	3.2	6.7	4.9	4..0	3.0	3.0	6.5	3.0	2.7	44.1
Iron, Total	1.12	4,720	6,600	8,490	5,820	5,000	4,890	6,110	4,220	4,300	36,700
Mercury, Total	0.018	ND	ND	ND	ND	ND	ND	0.030 F	ND	0.023 F	0.65
Potassium, Total	5.9	509 F	599 F	362 F	452 F	490 F	528 F	511 F	566 F	564 F	929
Magnesium, Total	4.57	1,370	2,240	1,060	1,670	**3610 J**	2660 J	2,900	**4,900**	**7,470**	3340
Manganese, Total	0.007	71.5	130	78.7	84.5	136 J	106 J	99.3	185	163	474
Sodium, Total	0.859	48	63	25.8	34.5	49.3	49.7	50.7	47.8	39	520
Nickel, Total	0.104	2.9	4.6	3.6	3.6	5.2 J	3.4 J	4.5	2.8	2.6	12.6
Lead, Total	0.331	4.5 M	14.2	20.8	5.9	19.6	18.8	17.1	2	1.6	79.4
Antimony, Total	0.45	ND M	ND	ND	ND	ND	ND	0.64 F	ND	ND	12.6
Selenium, Total	0.256	0.81 F	1.9	**2.9**	0.71 F	ND	0.58 F	0.90 F	ND	ND	2.0 (TAGM)
Thallium, Total	0.037	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A
Vanadium, Total	0.228	5.9	9.5	9	7.2	6.8	7.1	11.9	4.3	4.5	90.2
Zinc, Total	0.465	10.6	31.1	87.8	15.6	14.8	16.1	28.8	8.3	7.4	63.4

ND: Not Detected; MDL: Minimum Detection Level

* Refer to Figure 4, Sample Location Map of C&D Landfill, for specific location of soil samples.

Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM 4046 cleanup objective, Appendix A, Table 2, Column 9.

F - Results are qualitatively acceptable but quantitatively unreliable due to uncertainty in precision near the lower limit of detection (i.e., results above the MDL but below the RDL).

M - A matrix interference was present. Reported value or quantitiation limit may be an estimate due to matrix spike below the lower control limit or above the upper control limit.

R - Reported value or quantitation limit is rejected due to Internal Standard Area less than lower control limit or calibration verification % difference greater than the control limit.

TABLE 5

VOCs - STUMP DUMP CONFIRMATION SAMPLING RESULTS -(mg/kg)*

SAMPLE LOCATION (Sample No.) / ANALYTE	MDL (mg/kg)	A1-01	A1-02	A1-02B sample duplicate	A1-03	A2-01	A2-02	A3-01	A3-02	A3-03	A3-04	A3-05	A3-06A	A3-06B sample duplicate	NYSDEC TAGM Soil Clean-up Objective (mg/kg)
Acetone	0.0025	ND	ND	0.0046	ND	0.0156	ND	0.0034	0.0096	0.0206	ND	ND	ND	ND	0.2
Benzene	0.00045	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.06
2-Butanone	0.0025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3
Chloroform	0.00045	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3
Chloroethane	0.00009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.9
1,2 Dichloroethane	0.00045	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1
1,2 Dichloroethene	0.00045	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.3
Ethylbenzene	0.0004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5
Methylene Chloride	0.0008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1
Tetrachloroethene	0.00045	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4
Toluene	0.00045	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.5
Styrene	0.00045	ND	0.0018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
Vinyl Chloride	0.0009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2
Xylene (total)	0.00045	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2
1,3,5 – Trimethylbenzene	0.00045	ND	0.0024	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
Naphtalene	0.0004	ND	0.0007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13

ND: Not Detected above MDL, MDL: Minimum Detection Level, CRDL: Contract Required Detection Limit, A1: Area 1, A2: Area 2, A3: Area 3

* Refer to Figure 7, Sample Location Map of Stump Dump Landfill (OTH-3505-2) for specific location of soil sample analyte concentrations.

Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM cleanup objective, Appendix A, Table 1, Column 9.

TABLE 6

SVOCs - STUMP DUMP CONFIRMATION SAMPLING RESULTS -(mg/kg)*

SAMPLE LOCATION (Sample No.) / ANALYTE	MDL (mg/kg)	A1-01 [1]	A1-01A [2] resample	A1-01B [2] resample	A1-02	A1-02B sample duplicate	A1-03	A2-01	A2-02	A3-01	A3-02	A3-03	A3-04	A3-05	A3-06A	A3-06B sample duplicate	Site Background or NYSDEC TAGM Soil Clean-up Objective (mg/kg)
Acenaphthene	0.042	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Acenaphthylene	0.042	0.190 F	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	41
Anthracene	0.035	0.108 F	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Benzoic Acid	0.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7
Benzo(a)anthracene	0.029	**0.836 F**	ND	ND	ND	ND	ND	ND	ND	ND	0.031 F	ND	ND	ND	ND	ND	0.224 or MDL
Benzo(b)fluoranthene	0.028	**1.3 R**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1
Benzo(k)fluoranthene	0.043	0.803 R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.1
Benzo(g,h,I)perylene	0.037	0.130 R	ND	ND	ND R	ND R	ND R	ND R	ND R	ND R	ND R	ND R	ND R	ND R	ND R	ND R	50
Benzo(a)pyrene	0.026	**0.836 R**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.061 or MDL
Bis(2-ethylhexyl) phalate	0.039	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Chrysene	0.041	**1.11 F**	ND R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.4
Dibenzo(a,h)anthracene	0.039	ND R	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.014 or MDL
Dibenzofuran	0.043	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2
Fluoranthene	0.028	1.73	ND	ND	ND	ND	0.032 F	ND	ND	ND	0.058 F	ND	ND	ND	ND	ND	50
Fluorene	0.044	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Indeno(1,2,3-cd)pyrene	0.036	0.194 R	ND	ND	ND R	ND R	ND R	ND R	ND R	ND	ND R	ND R	ND R	ND R	ND	ND	3.2
Naphthalene	0.034	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13
Phenanthrene	0.042	0.883 F	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50
Pyrene	0.03	1.98	ND	ND	ND	ND	ND	ND	ND	ND	0.046 F	ND	ND	ND	ND	ND	50

ND: Not Detected above MDL, MDL: Minimum Detection Level, CQDL: Contract Required Detection Limit, A1: Area 1, A2: Area 2, A3: Area 3

F: - Result is above the MDL but below the CRDL and is subject to poor precision.

R – QAPP QA/QC criteria (typically calibration) were not met and result may not be usable.

* Refer to Figure 7, Sample Location Map of Stump Dump Landfill (OTH-3505-2) for specific location of soil samples.

Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM cleanup objective, Appendix A, Table 2, Column 9.

[1] MDL values for A1-01 are double value listed due to a 2 fold dilution.

[2] Samples were collected immediately adjacent to Location A-01 at a later date.

TABLE 7
TAL METALS - STUMP DUMP CONFIRMATION SAMPLING RESULTS - (mg/kg)*

SAMPLE LOCATION (Sample No.) / ANALYTE	MDL (mg/kg)	A1-01	A1-02	A1-02B sample duplicate	A1-03	A2-01	A2-02	A3-03	A3-01	A3-02	A3-03	A3-04	A3-05	A3-06B sample duplicate	Site Background or NYSDEC TAGM Soil Clean-up Objective (mg/kg)
Aluminum, Total	3.23	4,880	3,620	3,860	2,860	3,430	3,330	1,800	2,240	2,080	2,660	3,460	5,180 J	3,610 J	30,200
Antimony, Total	0.45	ND M	ND	0.712 F	ND	ND	0.567 F	ND	ND	ND	ND	0.551 F	ND	ND	12.6
Arsenic, Total	0.35	1.76	1.92	1.57	1.68	1.23	1.54	1.26	1.54	1.21	1.49	1.36	1.99	1.54	7.5
Barium, Total	0.01	19.2 M	15.9	14	10.7	13.3	12.5	7.65	13.4	7.75	9.54	19.5	17.4 J	11.9 J	300 (TAGM)
Beryllium, Total	0.01	0.198	0.218 F	0.200 F	0.186 F	0.148 F	0.165 F	0.120 F	0.227 F	0.130 F	0.148 F	0.201 F	0.283 F	0.205 F	1.3
Cadmium	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.057 F	ND	ND	1.3
Calcium, Total	2.83	1,720 M	1,510	902 J	1,740	792	1,240	961	934	1,230	1,440	1,180	1,650	1,430	30,200
Chromium, Total	0.06	7.34 F	6.68 F	5.55 F	6.57 F	4.32 F	5.08 F	2.87 F	3.47 F	3.68 F	4.79 F	4.49 F	7.15 F	5.16 F	19.5
Cobalt, Total	0.04	2.02 F	2.24 F	2.19 F	1.91 F	1.65 F	1.88 F	1.59 F	2.75 F	1.58 F	2.16 F	2.20 F	2.70 F	2.14 F	9.2
Copper, Total	0.15	4.41	2.34	1.28 F	1.92 F	1.36 F	1.77 F	1.60 F	1.81 F	1.87 F	2.79	2.36	4.15	2.71	44.1
Iron, Total	1.11	7,780	7,950	10,600 F	9,830	5,720	6,780	4,260	4,950	5,100	6,190	5,200	8,560 F	6,770 J	36,700
Lead, Total	0.33	12.3 M,F	4.3	2.2	2	1.61	3.51	1.49	1.42	1.31	1.75	2.61	2.04	2.01	79.4
Magnesium, Total	0.02	757 M	946	574	864	639	732	641	1,160	731	908	1,080	1,307	1,140	3340
Manganese, Total	4.65	81.7	137	169 J	73.4	63.8	97.9	57.8	98	36	37.5	84	155 F	95.8 J	474
Mercury, Total	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.65
Nickel, Total	0.1	3.06	3.23	2.15	2.53 F	2.58	2.81	1.91 F	2.73	5.31	4.84	3.51	4.8	3.6	12.6
Potassium, Total	5.96	370 F	468 F	213 F	500 F	335 F	399 F	375 F	493 F	436 F	578 F	713 F	928 F	629 F	929
Selenium, Total	0.26	**2.91**	**2.06**	**2.63 J**	**2.23**	1.41	1.74	0.992 F	1.29	1.15	1.25	1.2	1.98	1.7	2.0 (TAGM)
	0.26	1.58**	1.47**	1.37**	0.775 F**										
	0.26	1.97**	1.15 F**	1.75**	1.25 F**										
Silver, Total	0.1	0.134 F	0.139 F	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	N/A
Sodium, Total	0.87	36.6	51.1	26.9	56	35.6	37	31.3	41.3	43.8	53.5	43.1	62.6 J	47.6 J	520
Thallium, Total	0.06	0.166 F	0.165 F	0.148	0.162 F	0.134	0.121 F	0.110 F	0.123 F	0.115 F	0.128 F	0.110 F	0.150 F	0.155 F	N/A
Vanadium, Total	0.23	12.1	11.7	13.4	13.4	8.41	9.94	5.55	6.35	7.18	8.87	6.78	12.4 J	9.27 J	90.2
Zinc, Total	0.47	30.5 F	11.2	9.53	8.75	7.16	10.5	6.44	7.88	6.77	8.48	12.3	14.5 J	11.1 J	63.4

ND: Not Detected above MDL, MDL: Minimum Detection Level, CRDL: Contract Required Detection Limit, A1: Area 1, A2: Area 2, A3: Area 3
F: - Result is above the MDL but below the CRDL and is subject to poor precision.
J – Estimated value
M – Result is associated with an observed matrix effect and is an estimate.
* Refer to Figure 7, Sample Location Map of Stump Dump Landfill (OTH-3505-2) for specific location of soil samples.
** Reanalysis of selenium from same sample jar.
Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM cleanup objective, Appendix A, Table 4, Column 5.

TABLE 8A
SVOCs - C&D LANDFILL CHARACTERIZATION SAMPLE RESULTS SOIL STOCKPILES -(mg/kg)*

SAMPLE LOCATION (sample no.) / ANALYTE	SP-01	SP-02	SP-03	SP-04	SP-05	SP-06	SP-07	SP-08	SP-09	SP-10	SP-11	SP-12	NYSDEC TAGM SOIL CLEAN-UP OBJECTIVE (mg/kg)
Acenaphthene	ND	ND	ND	0.17	ND	ND	ND	ND	ND	0.192	ND	ND	50
Acenaphthylene	ND	ND	0.234	ND	ND	0.099	0.144	0.087	ND	ND	ND	ND	41
Anthracene	ND	0.472	0.519	0.509	ND	0.147	0.221	0.163	0.121	0.997	ND	0.343	50
Benzo(a)anthracene	0.266	2.9	3.02	1.62	0.187	0.565	1.84	1.25	0.534	3.14	0.367	1.29	0.224 or MDL
Benzo(b)fluoranthene	0.271	2.61	3.46	1.84	0.301	0.506	2.06	1.44	0.707	3.02	0.493	1.51	1.1
Benzo(k)fluoranthene	0.25	2.35	3.04	1.28	0.185	0.432	1.57	0.946	0.543	2.11	0.417	1.27	1.1
Benzo(g,h,I)perylene	0.118	0.561	0.634	0.435	ND	0.274	0.421	0.243	0.129	0.767	ND	ND	50
Benzo(a)pyrene	0.281	2.69	2.89	1.58	0.225	0.514	1.7	1.11	0.56	2.96	0.404	1.22	0.061 or MDL
Bis(2-ethylhexyl) phalate	ND	0.247	0.21	0.278	0.155	ND	0.09	0.119	0.102	0.191	0.159	0.308	50
Carbazole	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
Chrysene	0.278	2.86	2.97	1.49	0.217	0.577	1.77	1.2	0.543	2.78	0.382	1.22	0.4
Dibenzo(a,h)anthracene	ND	0.231	0.242	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.014 or MDL
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.14	ND	ND	6.2
Fluoranthene	0.506	5.25	5.45	3.5	0.324	1.06	3.2	2.6	0.968	7.025	0.641	2.43	50
Fluorene	ND	ND	ND	0.181	ND	ND	ND	ND	ND	0.307	ND	ND	50
Indeno(1,2,3-cd)pyrene	0.115	0.583	0.666	0.438	0.072	0.24	0.439	0.249	0.146	0.789	ND	0.268	3.2
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36.4
Phenanthrene	0.292	1.73	0.21	1.97	0.126	0.408	0.727	0.448	0.373	3.2	0.272	1.24	50
Pyrene	0.434	5.67	5.71	2.92	0.3	0.77	3.26	2.058	0.886	5.24	0.616	2.25	50

ND: Not Detected

* Refer to Figure 5, Soil Stockpile Sample Location Map of the C&D Landfill for specific location of soil sample.

Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM cleanup objective

TABLE 8B
TAL METALS - C&D LANDFILL CHARACTERIZATION SAMPLE RESULTS SOIL STOCKPILES – (mg/kg)

SAMPLE LOCATION (sample no.) / ANALYTE	MDL (mg/kg)	SP-01	SP-02	SP-03	SP-04	SP-05	SP-06	SP-07	SP-08	SP-09	SP-10	SP-11	SP-12	NYSDEC TAGM Soil Clean-up Objectives (mg/kg)
Silver, Total		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.2	N/A
Aluminum, Total		3460	3700	3520	3670	2710	1840	3400	3430	3760	2990	3590	3670	30,200
Arsenic, Total		2	2.1	1.7	1.7	1.7	0.6	1.7	1.6	1.8	1.4	1.6	2.5	3.4
Barium, Total		369	33.2	31.6	73.3	50.4	12.8	39.1	18.3	29.2	17.7	20.2	22.3	300 (TAGM)
Beryllium, Total		0.2	0.2	0.2	0.2	0.1	0.08	0.2	0.2	0.2	0.2	0.1	0.2	1.3
Calcium, Total		15,300	12,800	16,500	16,200	31,800	8,430	1,100	14,300	32,600	8,540	24,700	61,100	30,200
Cadmium		0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	1.3
Cobalt, Total		2.6	2.9	2.4	2.4	1.9	2.6	2.3	2.3	2.6	2.3	2.6	2.6	9.2
Chromium, Total		6.8	7	6.2	8	6.6	6.3	7.3	6.1	10	5.7	7.7	7.1	19.5
Copper, Total		5.7	8.8	6.5	5.2	6.5	3	4.8	4.4	7.8	4.3	5.8	5.8	44.1
Iron, Total		8,390	8,100	6,890	6,990	5,710	7,900	6,920	6,820	7,240	6,590	7,770	9,390	36,700
Mercury, Total		ND	0.03	0.03	0.02	0.05	0.05	ND	ND	ND	0.021	ND	0.027	0.65
Potassium, Total		618	624	638	6077	463	330	639	602	779	476	622	903	929
Magnesium, Total		3,120	2,320	3,260	2,270	5,380	1,100	1,920	1,690	2,530	1,960	2,350	4,460	3,340
Manganese, Total		128	160	125	110	118	189	97.5	98.5	137	100	105	147	474
Sodium, Total		48.1	44.5	44.3	43.8	50.5	22.4	41.6	40.5	48.8	37.5	45.5	54.9	520
Nickel, Total		6.8	5.21	4.3	4.52	3.8	4.32	3.87	3.8	7	3.9	4.5	4.8	12.6
Lead, Total		18.2	47.7	19.3	22.4	35.8	15.2	15.6	14.3	20.6	16	21.9	16.5	79.4
Antimony, Total		1.1	0.6	ND	0.06	0.6	ND	ND	ND	ND	ND	ND	ND	12.6
Selenium, Total		1.1	1.9	0.5	0.06	1.2	0.5	0.4	0.5	0.5	0.5	0.6	0.6	2.0 (TAGM)
Thallium, Total		ND	ND	0.2	ND	ND	0.2	0.2	0.2	0.2	0.2	0.2	0.2	N/A
Vanadium, Total		12.9	11.7	11.6	11.4	10.5	5.7	11	10.9	11.6	12.3	16.1	3.6	90.2
Zinc, Total		27.3	45.3	29.9	29.8	43.9	25.2	24.6	24.2	29.7	23.5	25.4	23.7	63.4

ND: Not Detected; MDL: Minimum Detection Limit

* Refer to Figure 5, Soil Stockpile Sample Location Map of the C&D Landfill for specific location of soil samples.

Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM cleanup objective

TABLE 9A

SVOCs - STUMP DUMP CHARACTERIZATION SAMPLING RESULTS SOIL STOCKPILES - (mg/kg)*

SAMPLE LOCATION (Sample No.) / ANALYTE	MDL *(mg/kg)*	SP 01 AREA 1	SP 02 AREA 1	SP 02A sample duplicate AREA 1	SP 03 AREA 3	SP 04 AREA 3	SP 05 AREA 3	SP 06 AREA 3	SP 07 AREA 3	SP 08 AREA 3	SP 09 AREA 3	SP 10 AREA 3	SP 11 AREA 1	SP 12 AREA 3	NYSDEC TAGM Soil Clean-up Objective *(mg/kg)*
Acenaphthene	0.840	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50.0
Acenaphthylene	0.840	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	41.0
Anthracene	0.070	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.09	0.30	ND	0.14	50.0
Benzoic Acid	0.040	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7
Benzo(a)anthracene	0.030	ND	ND	ND	**0.23**	0.17	**1.26**	**0.50**	0.28	**0.86**	0.30	**1.24**	ND	**0.55**	0.224 or MDL
Benzo(b)fluoranthene	0.056	ND	ND	ND	0.45	0.38	**1.41**	0.71	0.33	**1.64**	0.34	**1.78**	ND	0.80	1.1
Benzo(k)fluoranthene	0.085	ND	ND	ND	0.33	0.32	1.07	0.55	0.25	0.67	0.27	0.99	ND	0.56	1.1
Benzo(g,h,I)perylene	0.074	ND	ND	ND	ND	ND	0.26	ND	ND	ND	ND	ND	ND	ND	50.0
Benzo(a)pyrene	0.052	ND	ND	ND	**0.33**	**0.29**	**1.18**	**0.52**	**0.24**	**1.11**	**0.29**	**1.11**	ND	**0.57**	0.061 or MDL
Bis(2-ethylhexyl) phalate	0.078	ND	ND	ND	0.24	0.13	0.18	0.21	0.11	0.11	0.28	0.22	ND	0.24	50.0
Butylbenzlphtalate	0.068	ND	ND	ND	ND	0.19	ND	ND	ND	ND	ND	ND	ND	0.69	50.0
Chrysene	0.082	ND	ND	ND	0.24	0.20	**1.11**	**0.43**	0.35	**0.84**	0.27	**1.18**	ND	**0.52**	0.4
Dibenzo(a,h)anthracene	0.078	ND	ND	ND	ND	ND	**0.25**	ND	ND	ND	ND	ND	ND	ND	0.014 or MDL
Dibenzofuran	0.086	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2
Fluoranthene	0.029	ND	ND	ND	0.40	0.33	3.03	1.06	0.61	1.11	0.66	3.29	ND	1.13	50.0
Fluorene	0.088	ND	ND	ND	ND	ND	0.14	0.05	ND	ND	ND	0.12	ND	ND	50.0
Indeno(1,2,3-cd)pyrene	0.072	ND	ND	ND	ND	ND	0.36	ND	ND	ND	ND	ND	ND	ND	3.2
Naphthalene	0.068	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.0
Phenanthrene	0.086	ND	ND	ND	0.12	0.10	1.36	0.45	ND	0.31	0.25	1.23	ND	0.47	50.0
Pyrene	0.031	ND	ND	ND	0.37	0.30	2.26	1.25	0.62	1.30	0.49	3.23	ND	1.26	50.0

ND: Not Detected, MDL: Minimum Detection Level. A1: Area 1, A2: Area 2, and A3: Area 3.

* Refer to Figure 6, Sample Location Map of Stump Dump Landfill (OTH-3505-2) for specific location of soil sample analyte concentrations.

Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM 4046 cleanup objective, Appendix A, Table 2, Column 9.

TABLE 9A (cont'd)
SVOCs - STUMP DUMP CHARACTERIZATION SAMPLING RESULTS SOIL STOCKPILES - (mg/kg)*

SAMPLE LOCATION (Sample No.) / ANALYTE	MDL *(mg/kg)*	SP 13 AREA 1	SP 14 AREA 1	SP 15 AREA 1	SP 16 AREA 3	SP 17 AREA 3	SP 18 AREA 3	SP 19 AREA 3	SP 20 AREA 3	SP 20B duplicate sample AREA 3	SP 21 AREA 3	SP 22 AREA 3	SP 23 AREA 2	NYSDEC TAGM Soil Clean-up Objective *(mg/kg)*
Acenaphthene	0.084	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50.0
Acenaphthylene	0.084	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	41.0
Anthracene	0.070	0.0396	ND	ND	0.182	ND	0.122	ND	ND	0.491	0.321	0.154	ND	50.0
Benzoic Acid	0.040	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.7
Benzo(a)anthracene	0.030	0.985	ND	ND	0.467	0.094	0.405	0.059	0.216	0.333	0.892	0.413	ND	0.224 or MDL
Benzo(b)fluoranthene	0.056	0.139	ND	ND	ND	0.157	0.469	0.08	0.271	0.389	0.927	0.434	ND	1.1
Benzo(k)fluoranthene	0.085	0.0964	ND	ND	ND	0.134	0.339	ND	0.18	0.227	0.675	0.293	ND	1.1
Benzo(g,h,I)perylene	0.074	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.084	ND	ND	50.0
Benzo(a)pyrene	0.052	0.0411	ND	ND	ND	0.125	0.322	0.054	0.196	0.223	0.705	0.312	ND	0.061 or MDL
Bis(2-ethylhexyl) phalate	0.078	ND	ND	ND	0.298	0.061	0.236	0.059	ND	0.06	0.107	0.064	ND	50.0
Butylbenzlphtalate	0.068	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	50.0
Chrysene	0.082	0.0749	ND	ND	0.45	0.098	0.37	0.073	0.234	0.407	0.816	0.369	ND	0.4
Dibenzo(a,h)anthracene	0.078	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.014 or MDL
Dibenzofuran	0.086	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2
Fluoranthene	0.029	0.197	0.26	0.0347	1	0.14	0.812	0.122	0.448	0.508	2	0.913	0.035	50.0
Fluorene	0.088	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.159	0.063	ND	50.0
Indeno(1,2,3-cd)pyrene	0.072	ND	ND	ND	ND	ND	0.087	ND	ND	ND	0.171	0.075	ND	3.2
Naphthalene	0.068	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.0
Phenanthrene	0.086	0.129	ND	ND	0.299	ND	0.391	ND	0.163	0.14	1	0.534	ND	50.0
Pyrene	0.031	0.151	0.198	ND	1	0.133	0.807	0.108	0.492	0.521	1	0.743	ND	50.0

ND: Not Detected, MDL: Minimum Detection Level. A1: Area 1, A2: Area 2, and A3: Area 3.

* Refer to Figure 6, Sample Location Map of Stump Dump Landfill (OTH-3505-2) for specific location of soil sample analyte concentrations.

Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM 4046 cleanup objective, Appendix A, Table 2, Column 9.

TABLE 9B

TAL METALS - STUMP DUMP CHARACTERIZATION SAMPLING RESULTS SOIL STOCKPILES - (mg/kg)*

SAMPLE LOCATION (Sample No.) / ANALYTE	MDL (mg/kg)	SP 01 AREA 1	SP 02 AREA 1	SP 02A duplicate sample AREA 1	SP 03 AREA 3	SP 04 AREA 3	SP 05 AREA 3	SP 06 AREA 3	SP 07 AREA 3	SP 08 AREA 3	SP 09 AREA 3	SP 10 AREA 3	SP 11 AREA 1	SP 12 AREA 3	Site Background or NYSDEC TAGM Soil Clean-up Objective (mg/kg)
Aluminum, Total	4	2,120	2,210	2,270	2,740	2,760	2,320	2,280	2,390	2,590	2,340	1,720	2,510	3,580	30,200
Antimony, Total	0.52	ND	ND	ND	0.569	0.76	6.46	ND	0.693	0.538	0.494	0.507	ND	3.93	12.6
Arsenic, Total	0.45	1.2	0.978	1.18	1.39	1.66	1.59	1.27	1.72	3.7	1.96	1.3	1.29	1.96	7.5
Barium, Total	0.2	9.7	12.8	12.9	30	74.5	32.5	21.3	18.9	20	64.1	56	12.9	24.9	300 (TAGM)
Beryllium, Total	0.02	0.133	0.127	0.125	0.198	0.169	0.125	0.12	0.152	0.146	0.25	0.0983	0.144	0.174	1.3
Cadmium	0.4	ND	ND	ND	0.158	0.177	0.167	0.231	0.176	0.146	ND	0.125	ND	0.379	1.3
Calcium, Total	3.4	1,110	888	856	8,630	10,500	12.1	6,780	8,130	6,840	5,440	6,020	1,060	14,700	30,200
Chromium, Total	0.08	4.36	3.76	3.6	6.54	4.55	6.41	7.15	6.74	4.57	4.81	9.8	3.73	6.52	19.5
Cobalt, Total	0.06	2.48	1.34	1.38	2.19	2	1.63	1.48	1.97	1.85	1.79	1.18	1.51	2.1	9.2
Copper, Total	0.2	2.18	1.04	1.16	8.29	5.18	9.58	5.97	10.1	6.63	4.39	5.83	1.67	6.93	44.1
Iron, Total	1.4	5,410	5,000	5,250	4,910	5,010	4,610	3,920	4,700	5,450	7,200	3,140	5,460	6,900	36,700
Lead, Total	0.4	1.6	1.57	1.71	26.5	14.9	29.5	27.5	29.2	18.9	12.7	15.1	2.64	17.4	79.4
Magnesium, Total	6	711	509	484	1,420	1,410	1,590	1,030	1,130	1,590	1,380	835	593	2,000	3340
Manganese, Total	0.1	91.1	89.9	96.8	120	106	84.5	74.9	93.9	102	70.7	61.3	111	105	474
Mercury, Total	0.01	0.0441	ND	ND	0.0301	0.0209	0.0282	0.0217	ND	0.042	0.0214	0.051	ND	0.0362	0.65
Nickel, Total	0.2	3.03	1.88	1.89	5.34	3.68	3.68	3.14	5.37	3.79	2.85	2.45	2.16	3.96	12.6
Potassium, Total	8	125	150	132	360	327	324	257	284	379	270	245	147	684	929
Selenium, Total	0.4	1.4	1.4	1.44	**2.84**	**2.29**	**2.65**	**2.11**	**2.75**	**2.53**	**4.77**	1.96	1.65	**3.36**	2.0 (TAGM)
Silver, Total	0.13	ND	0.127	ND	0.134	ND	0.176	ND	0.128	ND	0.127	ND	0.114	ND	N/A
Sodium, Total	1	16.8	11.4	12	29.1	25.6	25.2	22.7	20.6	37.7	18.4	20.2	12.7	50.9	520
Thallium, Total	0.07	0.142	0.193	0.157	0.131	0.0911	0.134	0.131	0.0698	0.127	0.103	0.0741	0.0103	0.199	N/A
Vanadium, Total	0.3	7.23	6.46	6.19	7.9	8.8	7.03	6.38	6.74	8.7	18.7	5.32	6.93	12.1	90.2
Zinc, Total	0.6	10.6	6.28	6.4	**70.1**	37.7	51.5	38.9	**70.4**	45.5	**120**	32.9	7.61	**64.4**	63.4
					55.3**				48.4**		27**			56.6**	

ND: Not Detected, MDL: Minimum Detection Level. A1: Area 1, A2: Area 2, and A3: Area 3.

* Refer to Figure 6, Sample Location Map of Stump Dump Landfill (OTH-3505-2) for specific location of soil samples.

** Retest from same sample bottle.

Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM 4046 cleanup objective, Appendix A, Table 4, Column 5.

TABLE 9B (cont'd)

TAL METALS - STUMP DUMP CHARACTERIZATION SAMPLING RESULTS SOIL STOCKPILES - (mg/kg)*

SAMPLE LOCATION (Sample No.) / ANALYTE	MDL (ug/kg)	SP 13 AREA 1	SP 14 AREA 1	SP 14 re-sample AREA 1	SP 15 AREA 1	SP 16 AREA 3	SP 17 AREA 3	SP 18 AREA 3	SP 19 AREA 3	SP 20 AREA 3	SP 20B duplicate sample AREA 3	SP 21 AREA 3	SP 22 AREA 3	SP 23 AREA 2	Site Background or NYSDEC TAGM Soil Clean-up Objective (mg/kg)
Aluminum, Total	4	2,650	3,450		3,670	3,570	3,550	2,890	3,050	3,810	3,070	3,280	3,320	3,420	30,200
Antimony, Total	0.52	ND	1.27		ND	575	1.38	0.549	ND	0.803	ND	0.878	9.38	ND	12.6
Arsenic, Total	0.45	1.19	1.73		1.45	4	1.62	1.59	1.55	1.81	1.58	1.58	1.5	1.27	7.5
Barium, Total	0.2	13.7	22.3		13.5	67.4	16.3	34	16.3	245 16.7**	15.7 47.3**	17.5	17.3	14	300 (TAGM)
Beryllium, Total	0.02	0.16	0.171		0.175	0.174	0.181	0.167	0.16	0.181	0.167	0.196	0.233	0.17	1.3
Cadmium	0.4	0.0329	0.19		ND	0.162	0.106	0.0668	0.371	0.0897	0.0497	0.0989	ND	ND	1.3
Calcium, Total	3.4	3,020	11,800		1,280	12,000	2,990	4,840	6,370	22,900	4,980	4,800	4,040	1,160	30,200
Chromium, Total	0.08	4.75	7.8		5.28	17.6	5.6	6.97	5.14	6.41	5.05	6.38	6.01	5.35	19.5
Cobalt, Total	0.06	1.63	2.52		1.68	1.93	2.19	1.97	2.14	2.14	1.8	2.07	2.09	1.86	9.2
Copper, Total	0.2	3.37	6.19		2.2	43.2	4.56	10.1	4.71	6.1	3.76	4.93	4.5	2.31	44.1
Iron, Total	1.4	5,570	7,330		7,150	6,540	7,370	6,630	6,210	7,670	6,400	7,150	7,830	7190	36,700
Lead, Total	0.4	7.27	23		4.9	**90.3** 32**	12.3	18	25.7	21.1	9.85	**96.9** 15.9**	10.8	3.23	79.4
Magnesium, Total	6	954	1,570		688	2,160	1,080	1,130	1,190	1,860	1,010	1,260	1,140	74.3	3340
Manganese, Total	0.1	104	97.8		71.1	89.7	87.8	75.7	83.9	89.1	88.4	86.2	76	7.37	474
Mercury, Total	0.01	ND	0.0276		ND	0.0208	ND	0.0225	ND	ND	ND	0.0222	0.0233	ND	0.65
Nickel, Total	0.2	2.73	4.02		2.5	4.08	3.82	3.68	3.95	4.9	2.96	3.62	3.59	2.87	12.6
Potassium, Total	8	386	613		351	653	522	508	500	637	544	672	648	375	929
Selenium, Total	0.4	1.29	**12.3** **2.82****	**2.412** **0.81-8.5**[1]	1.96	**3.05**	**2.63**	**2.41**	**2.69**	**3.56**	**2.22**	**2.65**	**3.57**	1.89	2.0 (TAGM)
Silver, Total	0.13	ND	ND		ND	ND	ND	ND	ND	ND	ND	0.13	ND	ND	N/A
Sodium, Total	1	33.2	50.9		32.1	50.7	43.4	39.7	39.4	56.5	45	58.7	52.8	35.1	520
Thallium, Total	0.07	0.132	0.16		0.166	0.17	0.16	0.168	0.182	0.183	0.173	0.191	0.21	0.188	N/A
Vanadium, Total	0.3	7.69	11.8		10.3	11.2	10.6	9.78	10.6	21.8	9.7	11.8	10.6	10.5	90.2
Zinc, Total	0.6	21.1	**391** 59**	32[2] 42 **215**[2]	13.4	62	30.2	45.5	38.3	47.4	28.6	35.6	57.1	11.4	63.4

ND: Not Detected, MDL: Minimum Detection Level. A1: Area 1, A2: Area 2, and A3: Area 3.

* Refer to Figure 6, Sample Location Map of Stump Dump Landfill (OTH-3505-2) for specific location of soil sample analyte concentrations;

** Retest from same sample bottle.

Shaded block and bold font identifies sample and associated constituent concentration that exceeds the NYSDEC TAGM 4046 cleanup objective, Appendix A, Table 4, Column 5.

1 The selenium average value and range is reported from ten tests from three sample bottles (1- grab, 2&3-split composite).

2 The zinc values are from a split composite sample, i.e. the same sample.

TABLE 10
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)
COMPONENTS OF APHALT PRODUCTS

Naphthalene
Fluorene
Carbazote
Anthracene/Phenenthene
Fluranthene
Pyrene
Benzo(a)anthracene
Chrysene/triphenylene
Benzofluoranthenes
Benzo(e)pyrene
Benzo(a)pyrene
Indeno(cd)pyrene
Benzo(ghi)perylene
Dibenzanthracenes
Coronene
Dibenzopyrenes

Source: Hazard Review Report "Health Effects of Occupational Exposure to Asphalt" Prepared by U.S. Department of Health and Human Services, December, 2000, DDHHS Publication No. 2001-110.

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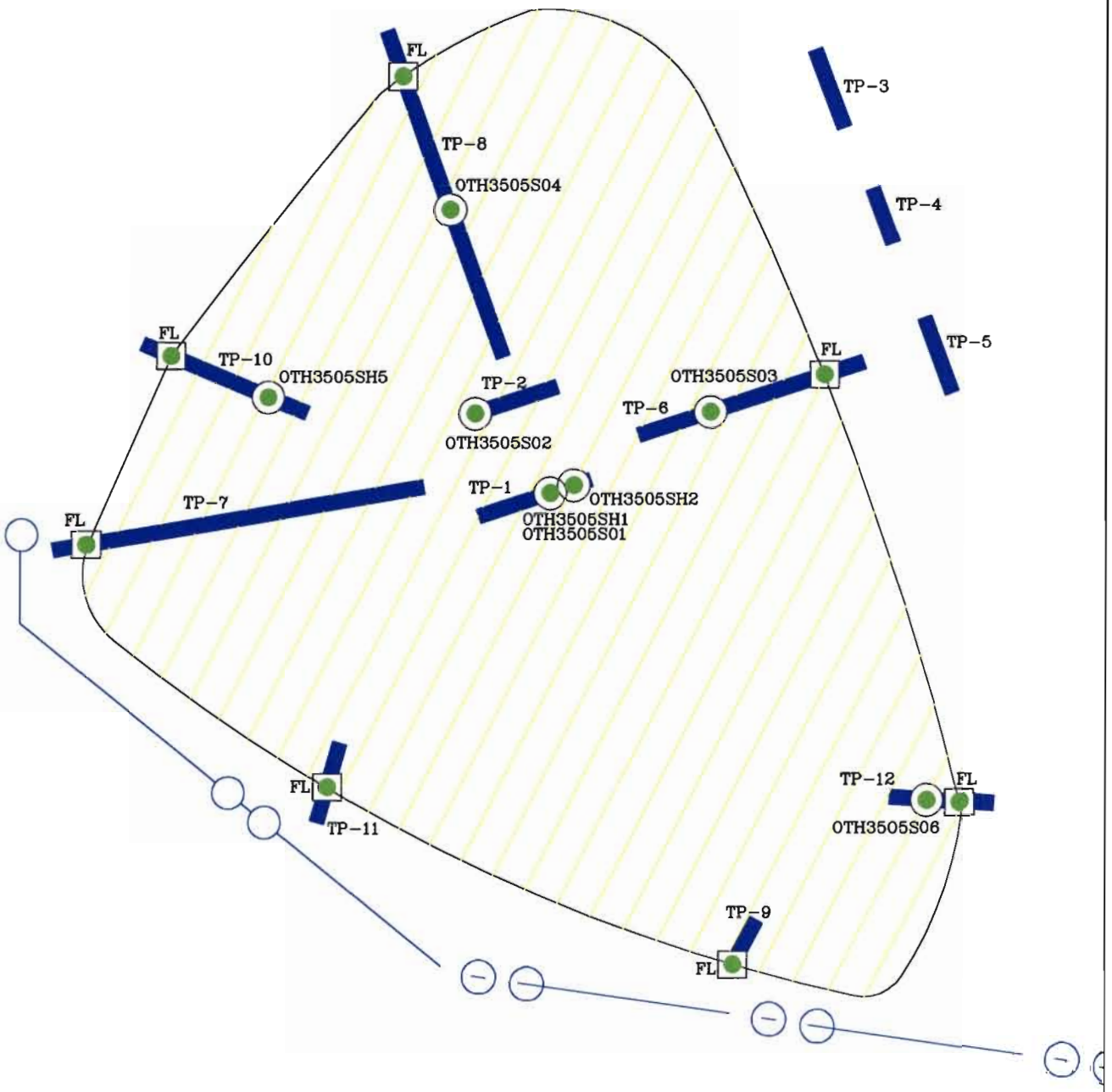
FIGURE 1

PLATTSBURGH AIR FORCE BASE
QUADRANGLE LOCATION

PLATTSBURGH, NEW YORK

DATE:	01/30/02
DESIGNED BY:	
SCALE:	NO SCALE
JOB NO.:	4521.141
DWG. NO.:	FIGURE 1



LEGEND

- ESTIMATED EXTENT OF CONSTRUCTION DEBRIS/WASTE
- TP-1 — TEST TRENCH LOCATION AND NUMBER
- 0TH3506S04 — ANALYTICAL SAMPLE LOCATION
- FL — FILL LIMIT

N

RCE: DRAFT SUPPLEMENTAL EVALUATION TO THE ENVIRONMENTAL
ILINE SURVEY REPORT, MAY 2000

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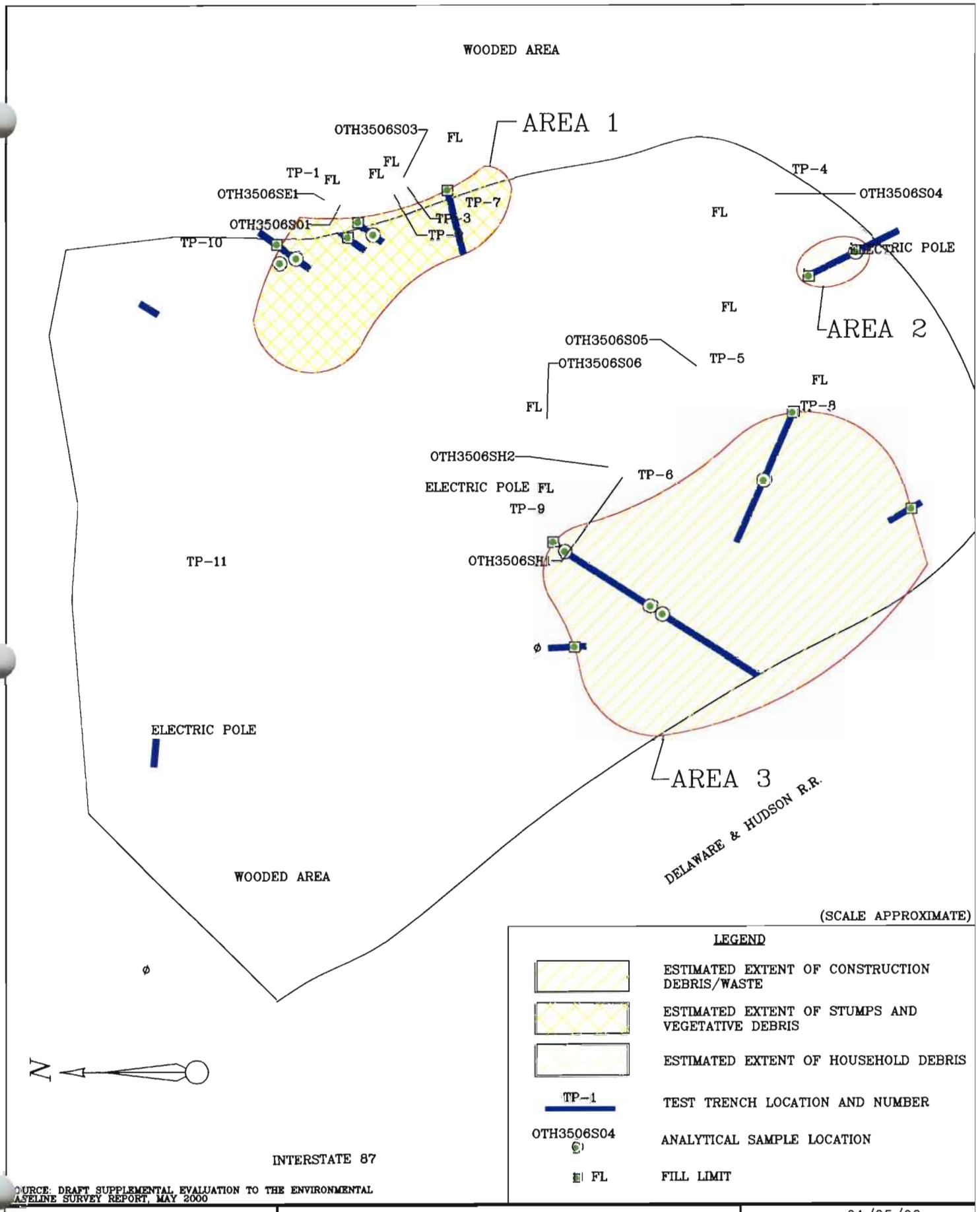
FIGURE 2

C & D LANDFILL
FILL AREA

PLATTSBURGH AIR FORCE BASE, PLATTSBURGH, NEW YORK

DATE:	01/25/02
DESIGNED BY:	
SCALE:	1" = 100'
JOB NO.:	4521.141
DWG. NO.:	FIGURE 2



SOURCE: DRAFT SUPPLEMENTAL EVALUATION TO THE ENVIRONMENTAL BASELINE SURVEY REPORT, MAY 2000

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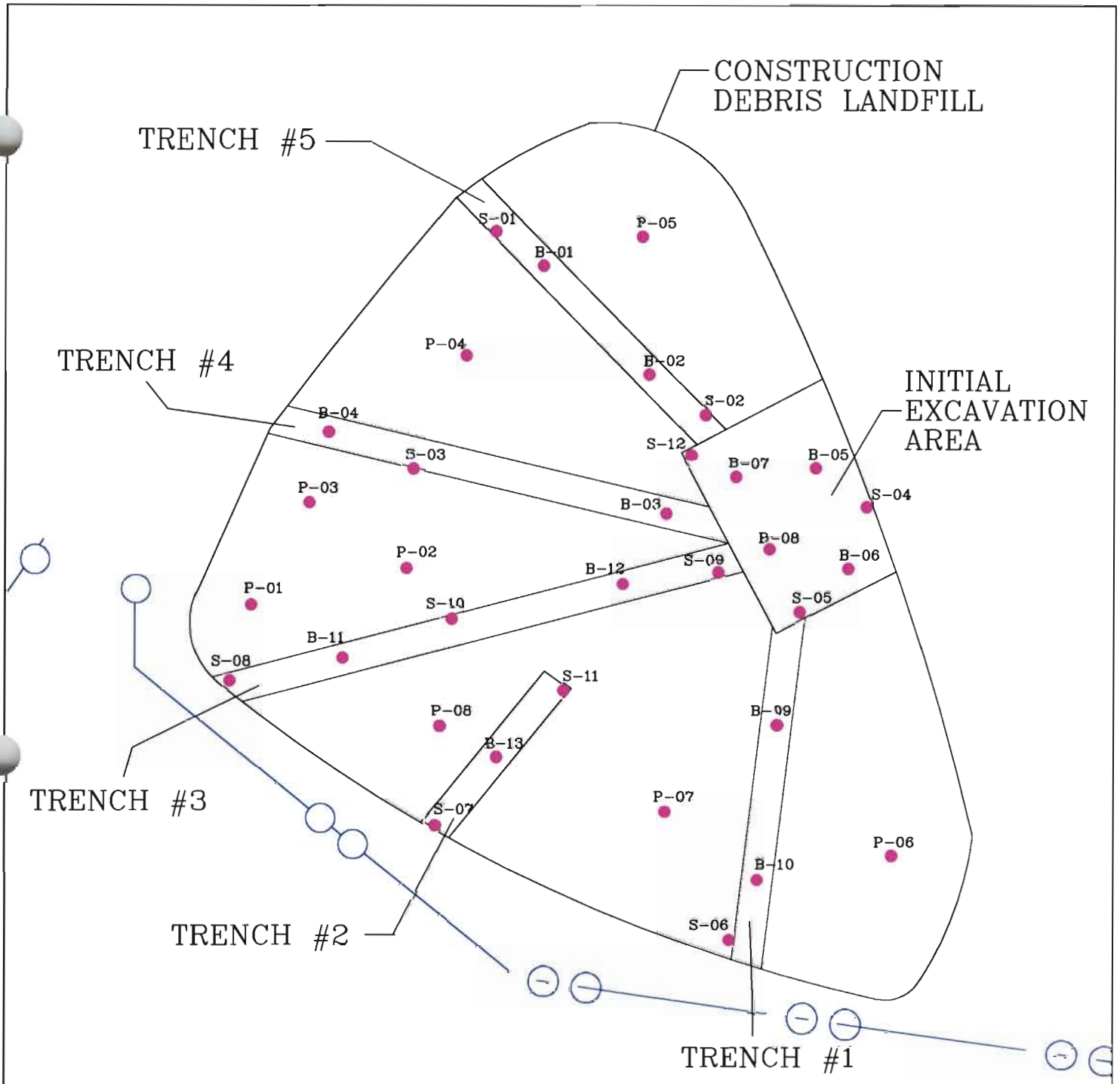
FIGURE 3

STUMP DUMP
FILL AREAS

PLATTSBURGH AIR FORCE BASE, PLATTSBURGH, NEW YORK

DATE:	01/25/02
DESIGNED BY:	
SCALE:	1" = 100'
JOB NO.:	4521.141
DWG. NO.:	FIGURE 3



(SCALE APPROXIMATE)

LEGEND

B = BOTTOM SAMPLE LOCATION

S = SIDEWALL SAMPLE LOCATION

P = BACKHOE PIT SAMPLE LOCATION

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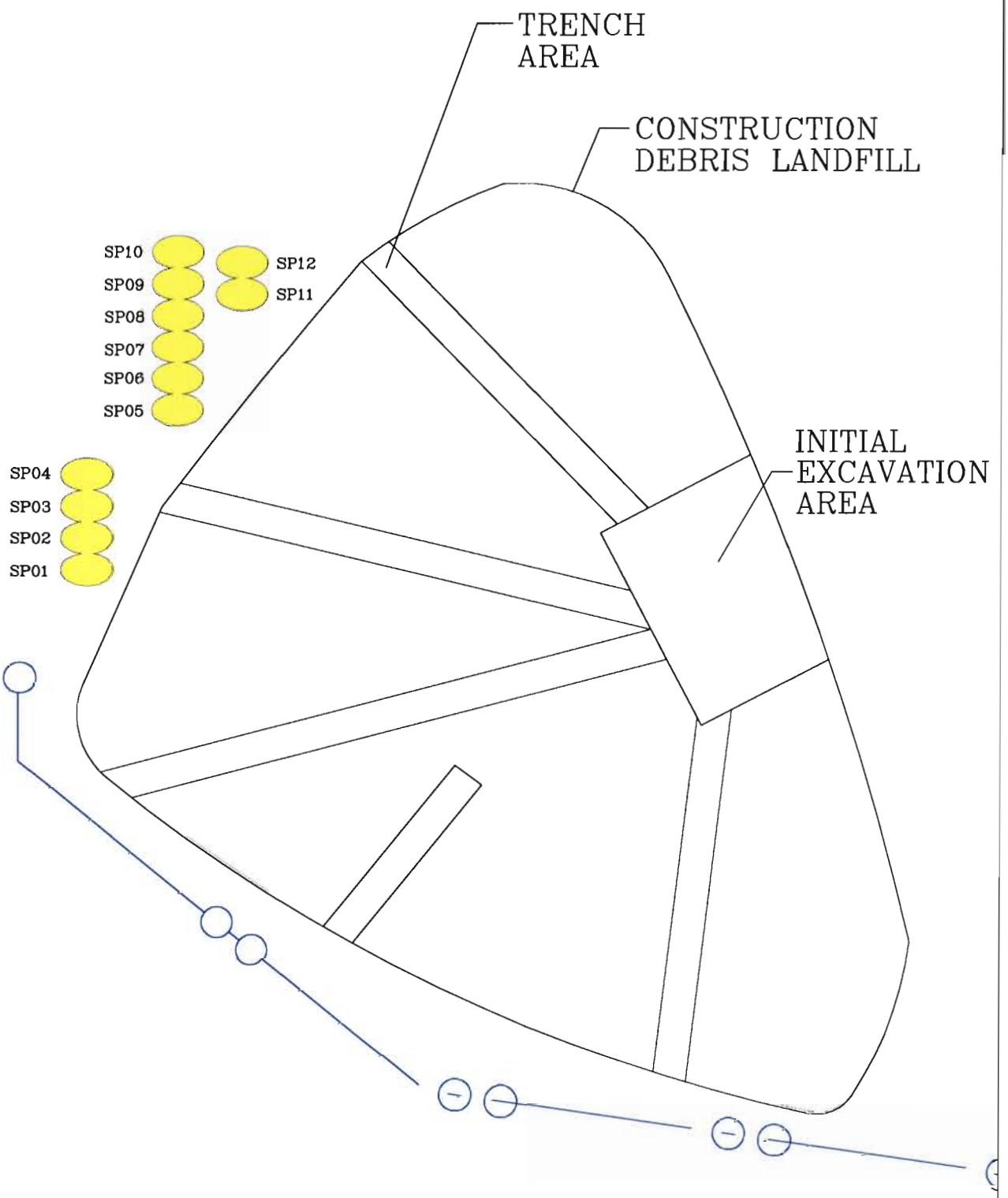
FIGURE 4

C & D LANDFILL

CONFIRMATION SAMPLE LOCATIONS

PLATTSBURGH AIR FORCE BASE, PLATTSBURGH, NEW YORK

DATE:	05/16/02
DESIGNED BY:	
SCALE:	1" = 100'
JOB NO.:	4521.141
DWG. NO.:	FIGURE 4



(SCALE APPROXIMATE)

LEGEND

SP = SOIL STOCKPILE SAMPLE LOCATION

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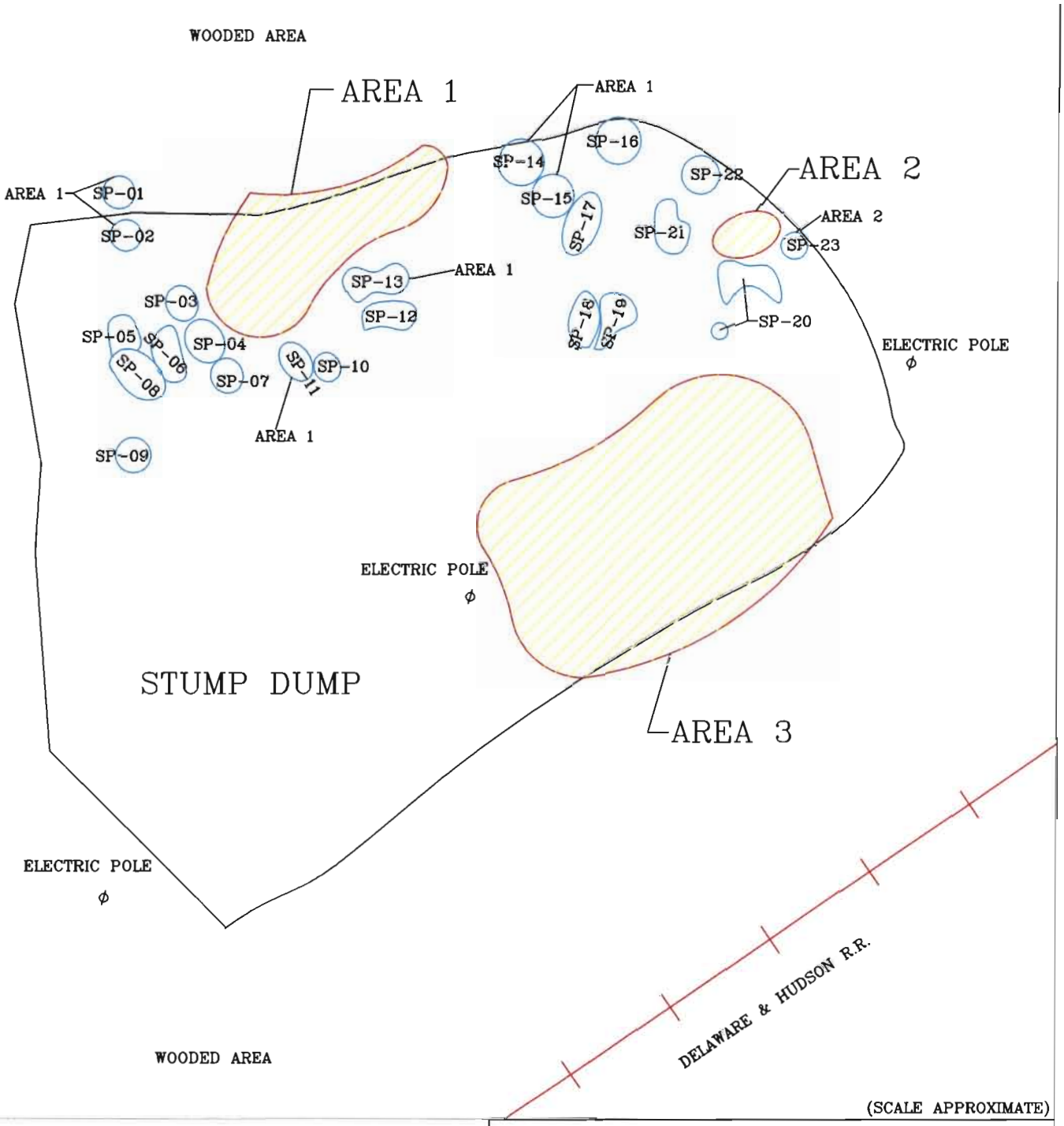
FIGURE 5

C & D LANDFILL

CHARACTERIZATION SOIL STOCKPILE AND SAMPLE LOCATIONS

PLATTSBURGH AIR FORCE BASE, PLATTSBURGH, NEW YORK

DATE:	01/25/02
DESIGNED BY:	
SCALE:	1" = 100'
JOB NO.:	4521.141
DWG. NO.:	FIGURE 5



LEGEND

FINAL LIMITS OF EXCAVATION

SP-XX — SOIL STOCKPILE AND SAMPLE NUMBER

NOTE: UNLABELED SOIL STOCKPILES ARE FROM AREA 3

SOURCE: DRAFT SUPPLEMENTAL EVALUATION TO THE ENVIRONMENTAL SEDIMENT SURVEY REPORT, MAY 2000

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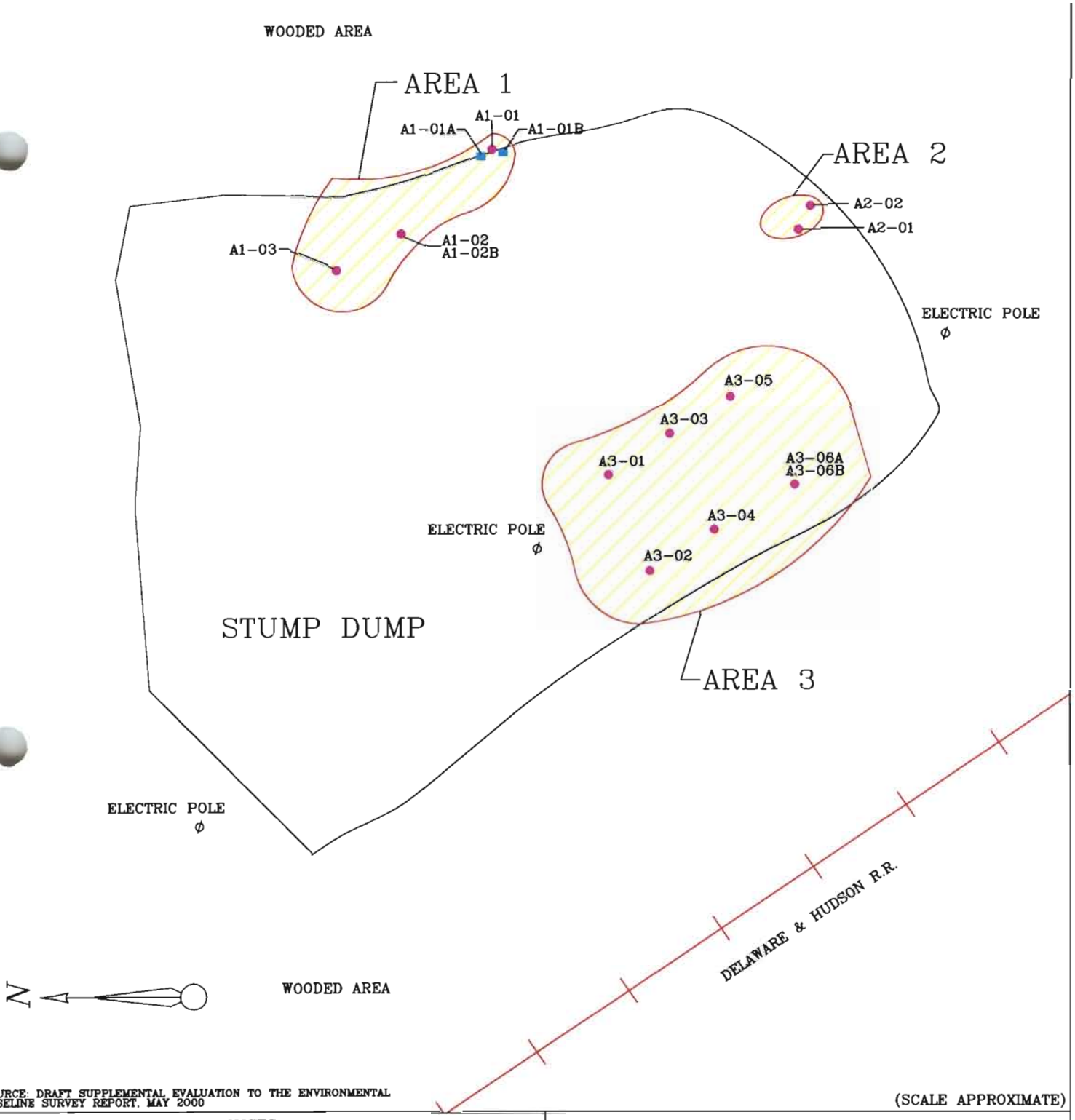
FIGURE 6

STUMP DUMP

CHARACTERIZATION SAMPLE LOCATIONS

PLATTSBURGH AIR FORCE BASE, PLATTSBURGH, NEW YORK

DATE:	01/25/02
DESIGNED BY:	
SCALE:	1" = 100'
JOB NO.:	4521.141
DWG. NO.:	FIGURE 6



SOURCE: DRAFT SUPPLEMENTAL EVALUATION TO THE ENVIRONMENTAL BASELINE SURVEY REPORT, MAY 2000

(SCALE APPROXIMATE)

NOTES:

NO ANALYTE EXCEEDANCES OF NYSDEC TAGM 4046, EXCEPT SAMPLE NO. A1-01

RESAMPLING OF A1-01A AND A1-01B SHOWED NO SVOCS ABOVE DETECTION LIMITS

LEGEND

FINAL LIMITS OF EXCAVATION

SAMPLE LOCATION AND NUMBER (7 MAY 2001)

SAMPLE LOCATION AND NUMBER (23 JUNE 2001)

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FIGURE 7

STUMP DUMP

CONFIRMATION SAMPLE LOCATIONS

PLATTSBURGH AIR FORCE BASE, PLATTSBURGH, NEW YORK

DATE:	01/25/02
DESIGNED BY:	
SCALE:	1" = 100'
JOB NO.:	4521.141
DWG. NO.:	FIGURE 7

Photography Log C&D Landfill and Stump Dump

1. C&D Landfill at beginning of excavation.

2. C&D Landfill. Tub Grinder chipping wood.

3. C&D Landfill. Field operations at the initial excavation area.

4. C&D Landfill. Excavation of Trench #4

5. C&D Landfill. Trench #3

6. C&D Landfill. Loader staging soil piles.

7. C&D Landfill. Excavator turning dirt at western wedge

8. C&D Landfill. Excavator turning dirt at southern wedge.

9. C&D Landfill. Bulldozer grading.

10. Stump Dump. Excavation of Area 1.

11. Stump Dump. Concrete vault during excavation of Area 1.

12. Stump Dump. Excavator, Loader, and Shaker Screen during excavation of Area 2.

13. Stump Dump. Excavator, Loader, Shaker Screen and Bulldozer during excavation of Area 3

14. Stump Dump. Empty metal drums found in Area 3.

15. Stump Dump. Metal drums in containment area.

16. Stump Dump. Loader removing material and grading site.

17. Stump Dump. Loader loading soil to dump truck.

18. Versar screening soil with the PID.

19. C&D Landfill. Site restoration complete.

20. Stump Dump. Site restoration complete.

Fire

DEPARTMENT OF THE AIR FORCE
AIR FORCE BASE CONVERSION AGENCY

December 6, 2000

MEMORANDUM FOR NYS DEPARTMENT OF ENVMTL CONSERVATION
ATTN: MR. JAMES QUINN
Bureau of Eastern Remedial Action
50 Wolf Road
Albany NY 12233-7010

FROM: AFBCA/DA Plattsburgh
22 US Oval Suite 2200
Plattsburgh NY 12903

SUBJECT: Confirmational Sampling at C&D Landfill (OTH-3505-1)

Attached for your records is our proposal concerning the subject landfill.

At the present time, over 2000 cubic yards have been excavated, and all indications are that this area can be closed as a non-regulated C&D landfill in accordance with 6NYCRR Part 360, and the project completed. Several items of concern were raised by the NYSDEC to VERSAR's proposed sampling plan that was faxed on November 29, 2000, and are addressed as follows.

- The samples to be analyzed for VOCs will be taken approximately 1-foot below the bottom or into the sidewall of the trenches in the locations shown in Figure 1.

- The unexcavated islands between the trenches will be bulldozed and all materials found which are not in compliance with the definition of C&D debris as stated in 6NYCRR Part 360 will be separated and removed. Before removal, however, the regulatory agencies will be consulted as to the nature and extent of said material. Additional sampling may be required.

- Prior to use as backfill material, the excavated, sifted, and staged soil piles will be sampled as outlined in the original work plan.

Due to the onset of winter weather, we are performing confirmational sampling on December 7 and 8, 2000. Any questions or comments can be directed to Steve Gagnier at (518) 563-2871, ext 14, or Joe Szot at (518) 563-2871, ext 26.

MICHAEL D. SOREL, PE
Site Manager/BRAC Environmental Coordinator

Attachment:
Proposal, Nov 29, 2000 (4 cys)

cc:
USEPA (Mr. Robert Morse) (Atch under sep cover))

Valley Sanitation
(518) 566-0453
P.O. Box 946 Peru, NY 12972

April 24, 2002

To: Versar

Attn: Brian Foley

Re: Attached please find the C&D exemption as per the D.E.C. regulations for our area. Please note subpart 360-7 section b which states that uncontaminated concrete and concrete products, ashpait pavement, brick, glass, soil and rock are exempt from requiring a permit. If you have any further questions you may contact Dan Sterrberge of the DEC at 897-1241.

Thank you.

SUBPART 360-7

CONSTRUCTION AND DEMOLITION DEBRIS LANDFILLS

Section 360-7.1 Applicability, exemptions and definitions
360-7.2 Registration
360-7.3 C&D debris landfills three acres or less
360-7.4 C&D debris landfills greater than three acres
360-7.5 Operation requirements
360-7.6 Closure and post-closure criteria
360-7.7 Corrective measures

Section 360-7.1 Applicability, exemptions and definitions.

(a) Applicability. This Subpart regulates landfills (except those located in Nassau or Suffolk County) into which only construction and demolition (C&D) debris is placed. As used in this Subpart, *landfill* refers only to such a landfill. C&D debris landfills in Nassau and Suffolk Counties are regulated under Subpart 360-8 of this Part.

(b) Exemptions.

(1) The following facilities are exempt from the permit requirements of this Part provided the facilities operate only between the hours of sunrise and sunset, and (if the allowable waste comes from an off-site source) no fee or other form of consideration is required for the privilege of using the facility for disposal purposes:

(i) A site at which only the following C&D debris is placed: recognizable uncontaminated concrete and concrete products (including steel or fiberglass reinforcing rods that are embedded in the concrete), asphalt pavement, brick, glass, soil and rock.

(ii) A landfill for the disposal of trees, stumps, yard waste and wood chips generated from these materials is exempt when origin and disposal of such waste occur on properties under the same ownership or control.

(iii) A C&D debris landfill is exempt if it meets the requirements of section 809 of the Adirondack Park Agency Act and is under the jurisdiction of, and constructed and operated pursuant to, a permit issued by the Adirondack Park Agency. However, C&D debris landfills under the jurisdiction of the Adirondack Park Agency operating without written authorization from the Adirondack Park Agency are subject to regulation under this Part.

(2) A landfill that falls under the jurisdiction and is located on the property of either the New York State Thruway Authority (TA) or the New York State Department of Transportation (DOT) is exempt from regulation under this Part if it meets the specifications contained in a memorandum of understanding executed by the TA and the department or the DOT and the department. Until such memorandums are executed, the TA and DOT must comply with the requirements of this Part.

(3) Definitions. The following terms have the following meanings when used in this Subpart:

(i) *Local need* means that no other facility is available to the project sponsor for the disposal of C&D debris within a five-mile radius of the location of the proposed facility.

(ii) *Pulverized* means processed by mechanical means such as, but not limited to crushing, grinding, chopping or shredding that breaks and intermixes the components of C&D debris into small fragments so that the basic constituents of these fragments cannot be readily identified by the department through visual observation.

(iii) *Recognizable* means solid waste that can be easily identified as C&D debris by visual observation.

(iv) *Uncontaminated* means C&D debris that is not mixed or commingled with other solid waste at the point of generation, processing or disposal, and that is not contaminated with spills of a petroleum product, hazardous waste or industrial waste. Contamination from spills of a petroleum product does not include asphalt or concrete pavement that has come into contact with petroleum products through normal

Revised August 10, 2001

Versar INC.

MEMORANDUM

TO: Rich Habrukowich, Versar, Bristol, PA

FROM: Donna Oswald, Versar, Lombard, IL

DATE: July 10, 2001

RE: **Data Validation/Usability Report for Plattsburgh AFB**
Stump Dump Landfill, Excavation Soil Samples

1.0 INTRODUCTION

On May 7, 2001, thirteen soil samples including two field duplicate pairs were collected at Plattsburgh AFB from the limits of the excavation areas of the Sump Dump Landfill. The samples were sent to Kemron Environmental Services (Kemron), located in Marietta, Ohio, for analysis of volatiles (VOCs) by EPA Method SW8260B, semivolatiles (SVOCs) by EPA Method SW8270C and TAL metals by EPA methods 6010B and 7000 series. Analyses were preformed in accordance with Air Force Center for Environmental Excellence (AFCEE) Quality Assurance Project Plan (QAPP) Version 3.0 (March 1998) with the exception of several laboratory variances for VOCs and SVOCs. Several compounds that are not part of the AFCEE target analyte list for VOCs and SVOC were also included to satisfy NYDEC reporting requirements. The additional compounds are the VOCs, acetone and 2-butanone, 2-hexanone, 4-methyl-2-pentanone by EPA method SW8260B and the SVOC, benzo(k)fluoranthene by EPA Method SW8270C. As these compounds are not included in the AFCEE QAPP, laboratory historical statistical limits were used to evaluate the VOC analytical results while benzo(k)fluoranthene was evaluated according to QAPP limits for its isomer benzo(b)fluoranthene. The analytical results are presented in Table 1. The approved laboratory variations from the AFCEE QAPP and case narratives are included as attachments to this memorandum.

The data were qualified in accordance with the validation protocols in the AFCEE QAPP, Version 3.0 (March 1998). Qualifiers resulting from the validation process were incorporated into Tables 1A – 1C. The laboratory performed the initial review of the data package, and qualified the data in accordance with the AFCEE QAPP requirements. Final qualification of the data was made by the Versar project chemist based on the results of the data validation. The following items were reviewed during the data validation process: chain of custody, sample condition upon receipt, extraction/analysis holding times, method detection/reporting limits, internal standards, surrogates, matrix spike/matrix spike duplicate (MS/MSD) analysis results, laboratory control sample (LCS) recoveries, initial and continuing calibrations, second source calibration verification standards, laboratory method and field QC blank contamination, instrument tuning, and report completeness. Table 2 is a summary of qualifications resulting from the data validation process and includes results and the rationale behind the data qualification.

The hierarchy of AFCEE qualifiers from most to least severe are as follows; "R" (rejected), "M" (matrix effect present), "F" (results above method detection limit, but below reporting limit), "J" (estimated value), "B" (blank contamination), "U" (not detected) and "D" (sample analyzed at a dilution). "B" and "D" are informational qualifiers that do not provide information regarding the usability of a data point. Evaluation of other factors (such as the magnitude of the blank contamination relevant to the sample concentration or sample result to the elevated RLD) is required to determine the usability of the qualified data point.

The samples were received by Kemron intact and under proper chain-of-custody. The temperature of the sample cooler upon receipt at the laboratory was 1°C. This was outside the normal recommended range of 4 $\pm$ 2°C but should not impact the samples. Laboratory sample receipt records indicate that the sample cooler contained ice upon receipt. The chain-of-custody forms are included as an attachment to this report.

2.0 VALIDATION

Volatile Data (Method 8260B)

All project specific QC criteria were met and all results are acceptable for use, except as indicated below:

All calibration requirements as specified in attachment A were run and met criteria specified in the QAPP. The laboratory determined that some target analytes were more accurately quantitated using a linear regression (AQUEOUS: chloromethane; SOIL: chloromethane, acetone, 4-methyl-2-pentanone (MIBK), cis-1,3-dichloropropene, 1-chlorohexane, styrene, 1,3,5-trimethylbenzene, tert-butylbenzene) or a quadratic curve (SOIL: vinyl chloride). All acceptance criteria as specific in Table 7.2.9-3 were met. The added compounds are not present in the QAPP. These compounds are noted for their instability, however the %difference of continuing calibration from the initial calibration was within method guidelines of $\pm$25%. Laboratory qualification of these compounds was not warranted and the flags mentioned in the case narrative were removed.

No target analytes were detected above the reporting limit (RL) in the laboratory method blanks. The laboratory reported trace levels (> MDL but < RL) of 1,2,4-trichlorobenzene (0.53 ug/L), methylene chloride (0.51 ug/L), naphthalene (0.89 ug/L) and styrene (1.8 ug/L) in the method blank associated with the soil samples. Per the QAPP, qualification is only required for blank contamination above the PQL. Naphthalene and styrene were detected in one sample (PAFB-SD-A1-02) at a trace level similar to that detected in the laboratory blank. The positive results for these compounds in this sample, while not qualified "B" should be considered either artifacts and/or biased high as a result of the observed laboratory contamination and therefore not representative of actual field conditions.

In the Volatile Laboratory Control Sample (LCS) criteria, were met for all target analytes for both soil and aqueous analyses. Volatile surrogate recovery was acceptable for all samples.

In the MS/MSD analyses (performed on sample PAFB-SD-A1-01), low bias was observed for a number of volatile compounds (tert-butylbenzene, sec-butylbenzene, n-butylbenzene, p-isopropyl toluene, hexachlorobutadiene, naphthalene and 1,2,4-trichlorobenzene). The associated LCS results were acceptable indicating a matrix effect was likely responsible for the other observed out of control recoveries and poor precision. Associated results in this sample have been qualified with an "M". None of these compounds were detected in any of the other field samples. The bias should not preclude the use of these results to demonstrate compliance with action levels.

Several target analytes were detected below the RL but above the MDL. They are considered to be trace levels and were qualified "F" in accordance with the QAPP. Results for naphthalene and styrene are suspected to be artifacts of laboratory blank contamination. The results for the other compounds are considered to be qualitatively acceptable but quantitatively suspect due to poor analytical precision near the limit of detection.

Semivolatile Data (Method 8270C)

All project specific QC criteria were met and all results are acceptable for use, except as indicated below.

All calibration requirements as specified in attachment A were run and met criteria specified in the QAPP. The laboratory determined that some of the target analytes were more accurately quantitated using a linear regression (hexachlorocyclopentadiene, 2,4-dinitrophenol, 2,4,6-dinitro-2-methylphenol, pentachlorophenol) or a quadratic curve (benzoic acid, benzo(ghi)perylene, 3,3'-dichlorobenzidine). All acceptance criteria as specific in Table 7.2.10-3 of the QAPP were met.

In the Continuing Calibration Verification (CCV) analyses, the % difference (%D) for benzo(ghi)perylene (24.5%) on 5/18/01 at 8:57 (associated with samples PAFB-SD-A3-01, PAFB-SD-A3-06A and PAFB-SD-A3-06B), Indeno(1,2,3-cd)perylene (21.3%) and benzo(ghi)perylene (28.3%) on 5/18/01 at 13:26 (associated with all other soil samples) and dibenza(ah)anthracene (31.8%) on 5/21/01 at 10:50 (associated with the re-analysis of PAFB-SD-A1-01) exceeded calibration quality control criteria (%D $\leq$ 20%). Calibration results indicate that instrument sensitivity for these compounds was marginally lower on the dates in question relative to the initial calibration. In accordance with the AFCEE QAPP, the results for these compounds in the associated samples are qualified "R". None of these compounds were detected in any of the associated samples. Minor exceedences of daily calibration drift or SSC criteria typically have no impact on the laboratory's ability to detect a compound providing that sensitivity is acceptable. Sensitivity criteria for these compounds were met. The non-detect results for these analytes should be acceptable for use. Positive results for benzo(ghi)perylene and indeno(1,2,3-cd)perylene while associated with an uncertainity of less than 30% are at least an order of magnitude below the applicable TAGMS criteria and should be acceptable for use.

No target analytes were detected above the MDL in the method blanks associated with this project.

QC acceptance criteria for the semi-volatile LCS were not met for 2-chloronaphthalene in the LCS sample associated with the soil samples. Associated samples are qualified "R" per the QAPP. This compound was not detected in any of the associated samples and the LCS result is indicative of low bias. There are no TAGMs cleanup objectives for this compound.

Sample PAFB-SD-A2-01 was selected by the laboratory for MS/MSD analysis. 2-Chloronaphthalene was biased low. Calibration criteria were met for this compound, however the associated LCS was biased low, indicating a lack of analytical control. The low bias in the matrix spike sample is therefore believed to be due to an analytical problem as opposed to a matrix effect. No additional qualification was required.

A matrix effect resulting in suppression of the last internal standard was observed for sample PAFB-SD-A1-01. This sample was analyzed at a 2-fold dilution in an attempt to dilute out suspected interferents as internal standards are added *after* sample preparation just prior to sample analysis. The sample was reanalyzed at a 2-fold dilution on a later date with similar results. Examination of the sample chromotograms show the presence of a hydrocarbon-like hump eluting late in the run that is likely responsible for the suppression of the recovery of the 6^{th} internal standard. Per the QAPP the associated results and or reporting limits are qualified "R". Positive results above an action level (benzo(a)pyrene and benzo(b)fluoranthene), while quantitatively suspect are qualitatively acceptable for use as estimates but are likely to be biased low by 50% or more (based on observed low bias of the internal standard). Results for benzo(ghi)perylene and di-n-octylphthalate are acceptable for use as estimates as result or reporting limit are more than an order of magnitude below the applicable TAGMS level. Results for benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene and dibenzo(a,h)anthracene are not acceptable for use to demonstrate compliance with the TAGMS level.

Numerous target analytes were detected below the RL but above the MDL. They are considered trace levels and were qualified "F" in accordance with the QAPP. These results are qualitatively acceptable but quantitatively suspect due to poor analytical precision near the limit of detection. These were mainly compounds of the polynuclear aromatic hydrocarbon (PAH) class.

Metals Data (Methods 6010B, 7841, 7471)

All project specific QC criteria were met and all results are acceptable for use, except as indicated below.

Sample PAFB-SD-A1-01 was selected by the laboratory for matrix spike analysis. Calcium and magnesium were biased high; lead, antimony and were biased low and barium and calcium exhibited poor precision. Analytical control was demonstrated by acceptable LCS recoveries, therefore the observed biases are likely due to a matrix effect. Metals associated with matrix spike bias and or poor precision are qualified "M" for use as estimates per the QAPP.

Sample PAFB-SD-A1-02B was selected by the laboratory for duplicate analysis. Two aliquots were selected from the same sample jar and submitted for analysis. The RPD of the 2 results is calculated and compared against precision criteria. No QAPP criteria exist for duplicate analyses, therefore matrix spike/matrix spike RPD criteria as defined in the QAPP were used for evaluation purposes for results greater than 2 x RDL (other results were evaluated against criteria of $\pm$ 2 x RDL). This evaluation scheme is based on guidance presented for the evaluation of field duplicates in "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", EPA-540/R-94-013. Acceptable precision (RPD $\leq$ 20% or $\pm$ 2 x RDL) was demonstrated for all metals except calcium, cobalt, iron, manganese and selenium. As the daily LCS met criteria, the poor precision is likely due to sample heterogeneity. Metals associated with poor field precision are qualified "J" for use as estimates. The actual concentration is somewhere in the range bordered by the results from the 2 sample analyses.

Numerous target analytes were detected below the RL but above the MDL. They are considered trace levels and were qualified "F" in accordance with the QAPP. These results are qualitatively acceptable but quantitatively suspect due to poor analytical precision near the limit of detection.

Field Duplicate Evaluations

Samples PAFB-SD-A1-02 / PAFB-SD-A1-02B and PAFB-SD-A3-06A / PAFB-SD-A3-06B were field duplicate pairs. No QAPP criteria exist for field duplicate analyses, therefore matrix spike/matrix spike RPD criteria as defined in the QAPP were used for evaluation purposes for results greater than 5 x RDL (other results were evaluated against criteria of $\pm$ 2 x RDL). This evaluation scheme is based on guidance presented for the evaluation of field duplicates in "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", EPA-540/R-94-013. Field duplicate results are summarized in Table 3.

No VOC target analytes were detected above the RDL in any of the samples. Trace levels of several analytes were detected in PAGF-SD-A1-02 and its duplicate. No criteria in the QAPP exists for the evaluation of field duplicates. For results less than 5 x RDL, criteria of $\pm$ 2 x RDL is commonly used. All positive results met guidance of $\pm$ 2 x RDL, therefore acceptable field precision was demonstrated for VOCs.

No SVOC target analytes were detected above the MDL in any of the samples, therefore acceptable field precision was demonstrated for SVOCs.

Acceptable precision (RPD $\leq$ 20% or $\pm$ 2 x RDL) was demonstrated for all metals except aluminum, barium, manganese, sodium, vanadium and zinc in the samples collected from location A3-06 and calcium, iron, lead, magnesium, manganese and zinc in the samples collected from location A1-02. As the daily LCS met criteria, the poor precision is likely due to sample heterogeneity. Metals associated with poor field precision are qualified "J" for use as estimates. The actual concentration is somewhere in the range bordered by the results from the 2 sample analyses.

3.0 COMPLETENESS

The AFCEE QAPP goal for completeness is 90% for soil matrixes. Percent completeness is defined as the number of valid results divided by the total number of individual target compound results. Valid results are those that have not been rejected (qualified "R"). The percent completeness for each method and matrix is as follows:

Method	Matrix	Percent Completeness
Volatiles (SW8260B)	Soil	100%
Semivolatiles (SW8270C)	Soil	94.6%
Metals	Soil	100%

The completeness goal of 90% was met for the soil samples. Overall percent completeness for all parameters was over 97%.

ATTACHMENTS

Attachment A

Initial Calibration quality control requirements for reportable analytes

QC requirement	multi-point calib.	Multi-point %RSD or r OK	Low standard < RL	Second Source Standard (SSC)	SSC %D OK	Tune within 12 hours & tune OK	CCC RSD OK	SPCC RRFs OK
Analytical Method								
8260B	x	x	x	X	x	x	x	x
8270C	x	x	x	X	x	x	x	x
6010B/7000	x	x	x	X	x			

Continuing Calibration quality control requirements for reportable analytes

QC requirement	Acceptable tune within 12 hours	CCC %D OK	SPCC RF(50) OK	Column Breakdown Check ok	Continuing Calibration Verification Standard (CCV)	CCV %D OK
Analytical Method						
8260B	x	X	x			
8270C	x	X	x			
6010B/7000					x	x

ATTACHMENT

CHAIN OF CUSTODIES

COC No. B(04255

109 Starlite Park
Marietta, OH 45750

KEMRON
ENVIRONMENTAL SERVICES
CHAIN-OF-CUSTODY RECORD

Phone: 740-373-4071
Fax: 740-373-4835

Company Name: VERSAR

Project Contact: RICH HADRUKOWICH
Contact Phone #: 215 356 3506

Turn Around Requirements: STANDARD
Location: PLATTSBURGH, NY

Project #: 4521.441
Project Name: C & D / Stump Dump Landfill

Sampler (print): BRYAN FOLEY
Signature:

Program
- ☐ NPDES
- ☒ AFCEE
- ☐ RCRA
- ☐ USACE
- ☐ Other

Mail Report To: VERSAR
RICH HADRUKOWICH
2258 PEARL BUCK RD
SUITE 1
BRISTOL, PA. 19007

Sample I.D. No	Date	Time	Comp*	Grab	NUMBER of CONTAINERS	TAL METALS	VOC	SVOC	Comments
PAFB-SD-AA-0001	5/7/01	16:37		X	3	X	X	X	
PAFB-SD-AA-0002		16:40		X					
PAFB-SD-AA-0003		16:40		X					
PAFB-SD-AA-0004		16:45							
PAFB-SD-AA-0005		16:53							
PAFB-SD-AA-0006		16:58							
PAFB-SD-AA-0007		17:05							
PAFB-SD-AA-0008		17:07							
PAFB-SD-AA-0009		17:09							
PAFB-SD-AA-0010		17:11							
PAFB-SD-AA-0011		17:12							
PAFB-SD-AA-0012		17:17							
PAFB-SD-AA-0013		17:17							
TRIP BLANK									

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
	5/8/01	11:00					

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Cooler Temp in °C	Remarks
			Rhonda Megony	5/9/01	1217	1	C/C Sealed Sample intact

* Homogenize all composite samples prior to analysis

Page ____ of ____

CASE NARRATIVES

KEMRON ENVIRONMENTAL SERVICES
REPORT NARRATIVE

L0105181

CHAIN OF CUSTODY:

The chain of custody number was 104255.

SHIPMENT CONDITIONS:

The chain of custody was received sealed in a cooler. The cooler temperature was 1° C.

SAMPLE MANAGEMENT:

All samples were received intact. Sample PAFB-SD-A3-04 had a time collected of 1711 on the chain of custody and a time collected on the bottle of 1709. Kemron was instructed to use 1711 as the time collected.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

REVIEWED: M Thomas DATE: 5-12-01

REPORT NARRATIVE
GC/MS VOLATILE ORGANICS

KEMRON Login No: L0105181

METHOD

Preparation: SW- 846 5030B
Analysis: SW-846 8260B

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: The CCV analyzed on 05/11/01 on HPMS-9 yielded % D's for 2-butanone and 2-hexanone that exceeded the criteria of less than +/- 20 %. AFCEE flagging was applied;however, criteria for these particular compounds is not discussed in the AFCEE QAPP. All other acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Samples: All acceptance criteria were met.

Matrix Spikes: Sample fraction 01 was chosen internally for MS/MSD analyses and yielded % recoveries for several compounds that were outside of the advisory limits. All other acceptance criteria were met.

SAMPLES

Internal Standards: All acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: RSS REVIEWED: Stephanie L Tyler DATE: 5/17/01

REPORT NARRATIVE
GC/MS SEMIVOLATILE ORGANICS

KEMRON Report No.: L0105181

METHOD

Preparation: SW- 846 3550B(Soils) 3510C(Waters)
Analysis: SW-846 8270C

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: The CCV analyzed on 5/18/01 at 8:57 yielded a %D for benzo[ghi]perylene that exceeded the limit of less than +/-20%.

The CCV analyzed on 5/18/01 at 13:26 yielded %D's for indeno[1,2,3-cd]pyrene and benzo[ghi]perylene that exceeded the limit of less than +/-20%.

The CCV analyzed on 5/21/01 yielded a %D for indeno[1,2,3-cd]pyrene that exceeded the limit of less than +/-20%. Samples were flagged accordingly. All other acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Samples: The LCS associated with these samples yielded a % recovery for 2-chloronaphthalene that was below the lower advisory limit. All other acceptance criteria were met.

Matrix Spikes: Sample 05 was chosen internally for MS/MSD analysis.

SAMPLES

Internal Standards: Sample 01 yielded an area for p-terphenyl-d14 that was below the lower acceptance limit. The sample was reanalyzed with similar results. Both sets of results were reported. All other acceptance criteria were met.

Surrogates: All acceptance criteria were met.

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: mdc

REVIEWED Stephanie Siegel DATE: 5/25/01

Rev. 6/00

REPORT NARRATIVE
METALS

KEMRON Login No: L0105181

METHOD

Analysis: SW-846 6010/6020/7000

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: All acceptance criteria were met.
Alternate Source Standards: All acceptance criteria were met.
Continuing Calibration : All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Sample: All acceptance criteria were met

SAMPLES

All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: SLP REVIEWED Maren Berry DATE: 05/22/01

Rev. 6/00

VARIANCES

AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE
ENVIRONMENTAL RESTORATION SERVICES
BROOKS AFB, TX 78235

29 Nov 00

MEMORANDUM FOR HQ AFCEE/ERB
ATTENTION: Roy Willis/RTC/Plattsburg AFB

FROM: Burt Harrison
Environmental Chemistry Consultant
AFCEE/ERC
3207 North Road
Brooks AFB, Tx 78235

SUBJECT: Environmental Chemistry Review of the Kemron Laboratory QAPP Variances Prepared by Versar for the Plattsburg AFB Project.

References: (a) Handbook for the Installation Restoration Program (IRP) - Remedial Investigation/Feasability Studies (RI/FS), AFCEE, Sept. 1993. (b) U.S. EPA Test Methods for Evaluating Solid Wastes (SW 846), third edition, July 1992. (c) HQ AFCEE Quality Assurance Project Plan, March 1998.

A review of the Quality Assurance Project Plan variances for the Plattsburg AFB, NY project prepared by Versar are acceptable with the following exceptions. Recommend sample results be reported on a dry weight basis except for SW5035 samples where it is not possible. Concur with all Reporting Limit variances if approved by the New York State RPM and the USEPA RPM. Do not concur with calibration variances. Do not concur with recovery limits lower than 20% for any analyte for any analytical procedure. Concur with the MDL variance request after a survey of a number of AFCEE laboratories concerning this MDL issue requirement.

If you have any questions regarding this review or these comments, please contact me at (210) 536-5226.

Burt Harrison
Environmental Chemistry Consultant
Consultant Operations Division
AFCEE/ERC

KEMRON Environmental Services, Inc.
Variance Request AFCEE QAPP Version 3.0, March 1998
Versar – Plattsburgh, NY
Revised 11/20/00

QAPP Section 4.3.1: MDL Spike Levels

AFCEE REQUIREMENT:

Item (6) of Section 4.3.1 states "If the spike level in step 2 is more than five times the calculated MDL, repeat the process using a smaller spiking level."

VARIANCE REQUEST:

The laboratory requests a variance to change "five times" to read "ten times".

JUSTIFICATION:

The analytes that fail the "five times" criteria are on those instruments or methods that are very precise and have low relative standard deviations. Any procedure with a relative standard deviation less than 6.67% (at the spiked level) will produce MDLs that do not meet the "fives times" criteria. Furthermore, this process tends to underestimate the MDL, so repeating the process at a lower spiking level may not produce meaningful data, particularly, if the spike level is below the quantitation limit (lowest calibration standard).

If so desired, the MDLs for those few analytes that fail the "five times" criteria MDL could be assigned a value equal to one-tenth the spike level, or one-half the project required RL, whichever is higher. This will assure that all project DQOs related to the MDLs and RLs will be met.

KEMRON meets the EPA criteria that the spike concentration should not exceed ten times the estimated MDL and AFCEE has accepted this interpretation on previous projects.

QAPP Section 8.2 – Wet Weight vs. Dry Weight

AFCEE REQUIREMENT:

Section 8.2 of the AFCEE QAPP V3.0 requires that "A wet weight aliquot of sample equivalent to the method specified dry weight aliquot of sample shall be taken for analysis."

KEMRON VARIANCE REQUEST:

The laboratory requests a variance to allow the method prescribed sample weights to be determined on the "as-received" basis, as specified in SW846.

JUSTIFICATION:

1) Increasing the amount of wet weight changes the sample/solvent ratios, which may significantly reduce the recovery of analytes from the matrix, resulting in poor surrogate recovery and more R flagged data. Altering the sample/solvent reagent ratios is a direct violation of the SW-846 methods.2) Organic extraction methods such as 3540, 3545 and 3550 have a limit on the quantity of sample they can effectively process. 3) The QAPP procedure cannot be applied to samples collected by method 5035 for volatile organic analysis.

QAPP Section 7.3.9.1 SW8260 Reporting Limits

KEMRON VARIANCE REQUEST:

Reporting limit (RL) variances for the following analytes:

Analyte	AFCEE RL (ug/L)	Proposed RL (ug/L)
1,1,2,2 Tetrachloroethane	0.4	0.8
1,1-Dichloroethane	0.4	0.5
1,2,3-Trichlorobenzene	0.3	1
1,2,4-Trichlorobenzene	0.4	2
1,2-Dichlorobenzene	0.3	1
1,2-Dichloropropane	0.4	0.5
1,3-Dichloropropane	0.4	0.5
1-Chlorohexane	0.5	1
1,4-Dichlorobenzene	0.3	1

2-Chlorotoluene	0.4	1
Benzene	0.4	0.5
Bromobenzene	0.3	1
Bromochloromethane	0.4	0.5
Bromodichloromethane	0.8	1
Chlorobenzene	0.4	0.5
Chloroform	0.3	0.5
Ethylbenzene	0.6	1
Methylene Chloride	0.3	2
n-propylbenzene	0.4	1
Naphthalene	0.4	1
Styrene	0.4	1
Trichlorofluoromethane	0.8	1
Dibromochloromethane	0.5	0.6
1,2-Dichloroethane	0.6	0.7
m,p-Xylene		1

JUSTIFICATION:

The laboratory low calibration standard is not at the AFCEE RL. The proposed RL will meet the project requirements.

AFCEE REQUIREMENT:

Table 7.2.9-1 lists m-Xylene and p-Xylene as separate analytes.

KEMRON VARIANCE REQUEST:

KEMRON requests a variance to report m-Xylene and p-Xylene as one analyte, since the compounds co-elute.

QAPP Section 7.2.9 SW5035 Preservation

VARIANCE REQUEST:

KEMRON requests that method 5035 soil preservation be limited to freezing and that the holding time be accepted as 14 days.

JUSTIFICATION:

This variance is needed to prevent the degradation of performance of several (8260) target analytes and the failure of these analytes to meet the QAPP 3.0 quality control requirements for the second source verification and continuing calibration verification (CCV). The analytes most affected by affected by the sodium bisulfate are clorodifluoromethane, chloromethane, vinyl chloride, bromomethane, chloroethane, and trichlorofluromethane. These compounds have a high probability of failing ICV/CCV criteria, resulting in R flags on all samples. Using the freezing option will eliminate these problems. The freezing option and 14-day hold time is being accepted by some states and selected US-EPA regions.

QAPP Section 7.2.9 SW5035 Preservation

VARIANCE REQUEST:

KEMRON requests a variance to change the second source initial calibration verification (ICV) and continuing calibration verification (CCV) criteria from +/- 25 % to +/- 40% for clorodifluoromethane, chloromethane, vinyl chloride, bromomethane, chloroethane, and trichlorofluromethane.

JUSTIFICATION:

These compounds are very prone to ICV/CCV failure when sodium bisulfate is used as a preservative. Without the variance these compounds will probably have to be R-flagged.

QAPP Section 7.2.10 SW8270 Surrogate Control Limit

AFCEE REQUIREMENT:

Table 7.2.10-2 lists the acceptance limit for phenol-D5 as 25-125 % recovery in water.

KEMRON VARIANCE REQUEST:

KEMRON requests a variance to use 10 – 125 % recovery as the acceptance limit in water

JUSTIFICATION:

Phenol recovery above 10% is not achievable routinely due to poor extraction efficiency. Industry-wide statistics do not support the 25 – 125 % recovery limit.

QAPP Section 7.2.10 SW8270 LCS Control Limits

AFCEE REQUIREMENT: see table below

VARIANCE REQUEST:

LCS Control Limit variances for 8270 compounds in water:

Compound	AFCEE LCS LIMITS	PROPOSED LCS LIMITS
Phenol	25-125	20-125
2-Chloronaphthalene	60-125	49-120
Hexachlorocyclopentadiene	Delete as a target analyte	
Benzoic Acid	25-162	20-125
3,3'-Dichlorobenzidine	29-175	20-125
Phenol-d5 (surrogate)	25-125	20-125

JUSTIFICATION:

These compounds are industry-wide poor performers and consistently give recoveries below the AFCEE lower control limits. Hexachlorocyclopentadiene has been proposed for deletion as an analyte from the AFCEE 3.1 QAPP. The proposed limits are taken from the AFCEE 3.1 QAPP.

QAPP Section 7.2.15.1 SW6010B ICP

KEMRON VARIANCE REQUEST:

Reporting limit (RL) variances for the following analytes in water:

Analyte	AFCEE RL (mg/L)	Proposed RL (mg/L)
Zinc	0.01	0.02

JUSTIFICATION:

The proposed RL will meet the project requirements.

QAPP Section 7.2.17.17 SW7000 Method Variance - Water

AFCEE REQUIREMENT:

AFCEE projects often specify that arsenic, antimony, chromium, cadmium, lead, selenium, thallium and vanadium shall be performed by their respective 7000 – GFAA methods:

Metal	Method	AFCEE RL (mg/L)
Arsenic	7060A	0.005
Chromium	7191	0.005
Cadmium	7131A	0.001
Lead	7421	0.005
Vanadium	7911	0.004
Antimony	7041	0.005
Selenium	7740	0.005
Thallium	7841	0.001

KEMRON VARIANCE REQUEST:

Method Variance:
KEMRON requests a variance to use Method 6010B or 6020A in lieu of the GFAA methods. Analyzing these metals by ICP-AES or ICP-MS will not elevate the reporting limits, but will eliminate the inherent errors of GFAA methods:

Metal	Method	Proposed RL (mg/L)
Arsenic	6010B/6020A	0.005
Chromium	6010B	0.005
Cadmium	6010B	0.001
Lead	6010B/6020A	0.005
Vanadium	6010B	0.004
Antimony	6020A	0.005
Selenium	6020A	0.005
Thallium	6020A	0.001

JUSTIFICATION:

The proposed RLs are equal to the 7000 method RLs and meet the project DQOs.

QAPP Section 12.1.1.7.5/SW7000 Method Variance - Soil

AFCEE REQUIREMENT:

AFCEE DQOs often specifies that arsenic, antimony, selenium, thallium, chromium, cadmium, lead and vanadium be performed by their respective 7000 – GFAA methods:

KEMRON VARIANCE REQUEST:

Method Variance:
KEMRON requests a variance to use Method 6010B or 6020A in lieu of the GFAA methods. KEMRON will use a method that will meet the project action limits, either by ICP-AES or ICP-MS. The following RLs are proposed:

	AFCEE 7000 RL (mg/kg)	Proposed 6010 RL (mg/kg)	Proposed 6020A RL (mg/kg)
Antimony	0.5	1	0.2
Arsenic	0.5	1	0.5
Lead	0.5	1	0.5
Selenium	0.5	1	0.5
Vanadium	0.4	0.5	N/A
Chromium	0.5	0.5	N/A
Cadmium	0.1	0.1	N/A
Thallium	0.1	2	0.1

JUSTIFICATION:

Project DQOs will not be affected, and the inherent errors of GFAA methods will be eliminated.

QAPP Section 12.1.7.2.5/SW7000 Reporting Limits - Soil

KEMRON VARIANCE REQUEST:

Reporting limit variance for the following analyte:

Analyte	AFCEE RL (mg/kg)	Proposed RL (mg/kg)
Thallium	0.1	0.25

JUSTIFICATION:

The laboratory MDL does not support the AFCEE RL.This variance is needed if 7000 methods are required.

KEMRON VARIANCE REQUEST:

Reporting limit variance for the following analyte:

Analyte	AFCEE RL (mg/L)	Proposed RL (mg/L)
Thallium	0.001	0.005
Antimony	0.005	0.006

JUSTIFICATION:

The laboratory MDLs for the 7000 methods do not support the AFCEE RL.This variance is needed if 7000 methods are required.

TABLES

Table 1A
Analytical Results for Volatiles by Method 8260B
(mg/kg)

Field Sample ID:		PAFB-SD-A1-01				PAFB-SD-A1-02 (FD1)[1]			
Lab Number:	TAGMS	L0105181-01				L0105181-02			
analysis date:	Cleanup	5/11/01				5/12/01			
Analyte	Objective[2]	Result	QUAL	RDL	MDL	Result	QUAL	RDL	MDL
% Solids	NA	86%				79%			
1,1,1,2-Tetrachloroethane	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,1,1-Trichloroethane	0.8		U	0.0033	0.0004		U	0.0033	0.0004
1,1,2,2-Tetrachloroethane	0.6		U	0.0017	0.0004		U	0.0017	0.0004
1,1,2-Trichloroethane	6		U	0.004	0.0004		U	0.004	0.0004
1,1-Dichloroethane	0.2		U	0.0017	0.0008		U	0.0017	0.0008
1,1-Dichloroethene	0.4		U	0.0051	0.0004		U	0.0051	0.0004
1,1-Dichloropropene	NL		U	0.004	0.0004		U	0.004	0.0004
1,2,3-Trichlorobenzene	NL		U	0.0017	0.0004		U	0.0017	0.0004
1,2,3-Trichloropropane	0.4		U	0.016	0.0005		U	0.016	0.0005
1,2,4-Trichlorobenzene	3.4		U	0.0016	0.0004		U	0.0016	0.0004
1,2,4-Trimethylbenzene	NL		U	0.0056	0.0004		U	0.0056	0.0004
1,2-Dibromo-3-chloropropane	NL		U	0.0080	0.0004		U	0.0080	0.0004
1,2-Dibromoethane	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,2-Dichlorobenzene	7.9		U	0.0016	0.0004		U	0.0016	0.0004
1,2-Dichloroethane	0.1		U	0.0024	0.0004		U	0.0024	0.0004
1,2-Dichloropropane	NL		U	0.0016	0.0004		U	0.0016	0.0004
1,3,5-Trimethylbenzene	NL		U	0.0024	0.0004	0.00238	F	0.0024	0.0004
1,3-Dichlorobenzene	1.6		U	0.0048	0.0004		U	0.0048	0.0004
1,3-Dichloropropane	0.3		U	0.0016	0.0004		U	0.0016	0.0004
1,4-Dichlorobenzene	8.5		U	0.0016	0.0004		U	0.0016	0.0004
1-Chlorohexane	NL		U	0.0024	0.0000		U	0.0024	0.0000
2,2-Dichloropropane	NL		U	0.016	0.0004		U	0.016	0.0004
2-Butanone (MEK)	0.3		U	0.008	0.0021		U	0.008	0.0021
2-Chlorotoluene	NL		U	0.002	0.0004		U	0.002	0.0004
2-Hexanone	NL		U	0.008	0.0021		U	0.008	0.0021
4-Chlorotoluene	NL		U	0.0024	0.0004		U	0.0024	0.0004
4-Methyl-2-pentanone (MIBK)	1		U	0.008	0.0021		U	0.008	0.0021
Acetone	0.2		U	0.008	0.0021		U	0.008	0.0021
Benzene	0.06		U	0.0016	0.0004		U	0.0016	0.0004
Bromobenzene	NL		U	0.0017	0.0004		U	0.0017	0.0004
Bromochloromethane	NL		U	0.0017	0.0004		U	0.0017	0.0004
Bromodichloromethane	NL		U	0.0033	0.0004		U	0.0033	0.0004
Bromoform	NL		U	0.0051	0.0004		U	0.0051	0.0004
Bromomethane	NL		U	0.0042	0.0008		U	0.0042	0.0008
Carbon tetrachloride	0.6		U	0.0066	0.0004		U	0.0066	0.0004
Chlorobenzene	1.7		U	0.0017	0.0004		U	0.0017	0.0004
Chloroethane	1.9		U	0.0042	0.0008		U	0.0042	0.0008
Chloroform	0.3		U	0.0017	0.0004		U	0.0017	0.0004
Chloromethane	NL		U	0.0059	0.0017		U	0.0059	0.0017
cis-1,2-Dichloroethene	NL		U	0.0048	0.0004		U	0.0048	0.0004
cis-1,3-Dichloropropene	NL		U	0.004	0.0004		U	0.004	0.0004
Dibromochloromethane	N/a		U	0.0025	0.0004		U	0.0025	0.0004
Dibromomethane	NL		U	0.0066	0.0004		U	0.0066	0.0004
Dichlorodifluoromethane	NL		U	0.0042	0.0008		U	0.0042	0.0008
Ethylbenzene	5.5		U	0.0025	0.0004		U	0.0025	0.0004
Hexachlorobutadiene	NL		M	0.0042	0.0004		U	0.0042	0.0004
Isopropylbenzene	NL		U	0.0067	0.0004		U	0.0067	0.0004
m-,p-Xylene	1.2 (TOTAL)		U	0.004	0.0004		U	0.004	0.0004
Methylene chloride	0.1		U	0.0016	0.0008		U	0.0016	0.0008
n-Butylbenzene	NL		M	0.0042	0.0004		U	0.0042	0.0004
n-Propylbenzene	NL		U	0.0016	0.0004		U	0.0016	0.0004
Naphthalene	13		M	0.0016	0.0004	0.000684		0.0016	0.0004
o-Xylene	1.2 (TOTAL)		U	0.0042	0.0004		U	0.0042	0.0004
p-Isopropyltoluene	NL		M	0.0048	0.0004		U	0.0048	0.0004
sec-Butylbenzene	NL		M	0.0056	0.0004		U	0.0056	0.0004
Styrene	NL		U	0.0016	0.0004	0.00182	F	0.0016	0.0004
tert-Butylbenzene	NL		M	0.0056	0.0004		U	0.0056	0.0004
Tetrachloroethene	1.4		U	0.0056	0.0004		U	0.0056	0.0004
Toluene	1.5		U	0.0040	0.0004		U	0.0040	0.0004
trans-1,2-Dichloroethene	0.3		U	0.0024	0.0004		U	0.0024	0.0004
trans-1,3-Dichloropropene	NL		U	0.0040	0.0004		U	0.0040	0.0004
Trichloroethene	0.7		U	0.0080	0.0004		U	0.0080	0.0004
Trichlorofluoromethane	NL		U	0.0032	0.0008		U	0.0032	0.0008
Vinyl chloride	0.2		U	0.0072	0.0008		U	0.0072	0.0008

Table 1A
Analytical Results for Volatiles by Method 8260B
(mg/kg)

Field Sample ID:		PAFB-SD-A1-02B (FD1[1])				PAFB-SD-A1-03			
Lab Number:	TAGMS	L0105181-03				L0105181-04			
analysis date:	Cleanup	5/12/01				5/12/01			
Analyte	Objective[2]	Result	QUAL	RDL	MDL	Result	QUAL	RDL	MDL
% Solids	NA	93%				77%			
1,1,1,2-Tetrachloroethane	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,1,1-Trichloroethane	0.8		U	0.0033	0.0004		U	0.0033	0.0004
1,1,2,2-Tetrachloroethane	0.6		U	0.0017	0.0004		U	0.0017	0.0004
1,1,2-Trichloroethane	6		U	0.004	0.0004		U	0.004	0.0004
1,1-Dichloroethane	0.2		U	0.0017	0.0008		U	0.0017	0.0008
1,1-Dichloroethene	0.4		U	0.0051	0.0004		U	0.0051	0.0004
1,1-Dichloropropene	NL		U	0.004	0.0004		U	0.004	0.0004
1,2,3-Trichlorobenzene	NL		U	0.0017	0.0004		U	0.0017	0.0004
1,2,3-Trichloropropane	0.4		U	0.016	0.0005		U	0.016	0.0005
1,2,4-Trichlorobenzene	3.4		U	0.0016	0.0004		U	0.0016	0.0004
1,2,4-Trimethylbenzene	NL		U	0.0056	0.0004		U	0.0056	0.0004
1,2-Dibromo-3-chloropropane	NL		U	0.0080	0.0004		U	0.0080	0.0004
1,2-Dibromoethane	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,2-Dichlorobenzene	7.9		U	0.0016	0.0004		U	0.0016	0.0004
1,2-Dichloroethane	0.1		U	0.0024	0.0004		U	0.0024	0.0004
1,2-Dichloropropane	NL		U	0.0016	0.0004		U	0.0016	0.0004
1,3,5-Trimethylbenzene	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,3-Dichlorobenzene	1.6		U	0.0048	0.0004		U	0.0048	0.0004
1,3-Dichloropropane	0.3		U	0.0016	0.0004		U	0.0016	0.0004
1,4-Dichlorobenzene	8.5		U	0.0016	0.0004		U	0.0016	0.0004
1-Chlorohexane	NL		U	0.0024	0.0000		U	0.0024	0.0000
2,2-Dichloropropane	NL		U	0.016	0.0004		U	0.016	0.0004
2-Butanone (MEK)	0.3		U	0.008	0.0021		U	0.008	0.0021
2-Chlorotoluene	NL		U	0.002	0.0004		U	0.002	0.0004
2-Hexanone	NL		U	0.008	0.0021		U	0.008	0.0021
4-Chlorotoluene	NL		U	0.0024	0.0004		U	0.0024	0.0004
4-Methyl-2-pentanone (MIBK)	1		U	0.008	0.0021		U	0.008	0.0021
Acetone	0.2	0.00458	F	0.008	0.0021		U	0.008	0.0021
Benzene	0.06		U	0.0016	0.0004		U	0.0016	0.0004
Bromobenzene	NL		U	0.0017	0.0004		U	0.0017	0.0004
Bromochloromethane	NL		U	0.0017	0.0004		U	0.0017	0.0004
Bromodichloromethane	NL		U	0.0033	0.0004		U	0.0033	0.0004
Bromoform	NL		U	0.0051	0.0004		U	0.0051	0.0004
Bromomethane	NL		U	0.0042	0.0008		U	0.0042	0.0008
Carbon tetrachloride	0.6		U	0.0066	0.0004		U	0.0066	0.0004
Chlorobenzene	1.7		U	0.0017	0.0004		U	0.0017	0.0004
Chloroethane	1.9		U	0.0042	0.0008		U	0.0042	0.0008
Chloroform	0.3		U	0.0017	0.0004		U	0.0017	0.0004
Chloromethane	NL		U	0.0059	0.0017		U	0.0059	0.0017
cis-1,2-Dichloroethene	NL		U	0.0048	0.0004		U	0.0048	0.0004
cis-1,3-Dichloropropene	NL		U	0.004	0.0004		U	0.004	0.0004
Dibromochloromethane	N/a		U	0.0025	0.0004		U	0.0025	0.0004
Dibromomethane	NL		U	0.0066	0.0004		U	0.0066	0.0004
Dichlorodifluoromethane	NL		U	0.0042	0.0008		U	0.0042	0.0008
Ethylbenzene	5.5		U	0.0025	0.0004		U	0.0025	0.0004
Hexachlorobutadiene	NL		U	0.0042	0.0004		U	0.0042	0.0004
Isopropylbenzene	NL		U	0.0067	0.0004		U	0.0067	0.0004
m-,p-Xylene	1.2 (TOTAL)		U	0.004	0.0004		U	0.004	0.0004
Methylene chloride	0.1		U	0.0016	0.0008		U	0.0016	0.0008
n-Butylbenzene	NL		U	0.0042	0.0004		U	0.0042	0.0004
n-Propylbenzene	NL		U	0.0016	0.0004		U	0.0016	0.0004
Naphthalene	13		U	0.0016	0.0004		U	0.0016	0.0004
o-Xylene	1.2 (TOTAL)		U	0.0042	0.0004		U	0.0042	0.0004
p-Isopropyltoluene	NL		U	0.0048	0.0004		U	0.0048	0.0004
sec-Butylbenzene	NL		U	0.0056	0.0004		U	0.0056	0.0004
Styrene	NL		U	0.0016	0.0004		U	0.0016	0.0004
tert-Butylbenzene	NL		U	0.0056	0.0004		U	0.0056	0.0004
Tetrachloroethene	1.4		U	0.0056	0.0004		U	0.0056	0.0004
Toluene	1.5		U	0.0040	0.0004		U	0.0040	0.0004
trans-1,2-Dichloroethene	0.3		U	0.0024	0.0004		U	0.0024	0.0004
trans-1,3-Dichloropropene	NL		U	0.0040	0.0004		U	0.0040	0.0004
Trichloroethene	0.7		U	0.0080	0.0004		U	0.0080	0.0004
Trichlorofluoromethane	NL		U	0.0032	0.0008		U	0.0032	0.0008
Vinyl chloride	0.2		U	0.0072	0.0008		U	0.0072	0.0008

Table 1A
Analytical Results for Volatiles by Method 8260B
(mg/kg)

Field Sample ID:		PAFB-SD-A2-01				PAFB-SD-A2-02			
Lab Number:	TAGMS	L0105181-05				L0105181-06			
analysis date:	Cleanup	5/12/01				5/12/01			
Analyte	Objective[2]	Result	QUAL	RDL	MDL	Result	QUAL	RDL	MDL
% Solids	NA	97%				99%			
1,1,1,2-Tetrachloroethane	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,1,1-Trichloroethane	0.8		U	0.0033	0.0004		U	0.0033	0.0004
1,1,2,2-Tetrachloroethane	0.6		U	0.0017	0.0004		U	0.0017	0.0004
1,1,2-Trichloroethane	6		U	0.004	0.0004		U	0.004	0.0004
1,1-Dichloroethane	0.2		U	0.0017	0.0008		U	0.0017	0.0008
1,1-Dichloroethene	0.4		U	0.0051	0.0004		U	0.0051	0.0004
1,1-Dichloropropene	NL		U	0.004	0.0004		U	0.004	0.0004
1,2,3-Trichlorobenzene	NL		U	0.0017	0.0004		U	0.0017	0.0004
1,2,3-Trichloropropane	0.4		U	0.016	0.0005		U	0.016	0.0005
1,2,4-Trichlorobenzene	3.4		U	0.0016	0.0004		U	0.0016	0.0004
1,2,4-Trimethylbenzene	NL		U	0.0056	0.0004		U	0.0056	0.0004
1,2-Dibromo-3-chloropropane	NL		U	0.0080	0.0004		U	0.0080	0.0004
1,2-Dibromoethane	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,2-Dichlorobenzene	7.9		U	0.0016	0.0004		U	0.0016	0.0004
1,2-Dichloroethane	0.1		U	0.0024	0.0004		U	0.0024	0.0004
1,2-Dichloropropane	NL		U	0.0016	0.0004		U	0.0016	0.0004
1,3,5-Trimethylbenzene	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,3-Dichlorobenzene	1.6		U	0.0048	0.0004		U	0.0048	0.0004
1,3-Dichloropropane	0.3		U	0.0016	0.0004		U	0.0016	0.0004
1,4-Dichlorobenzene	8.5		U	0.0016	0.0004		U	0.0016	0.0004
1-Chlorohexane	NL		U	0.0024	0.0000		U	0.0024	0.0000
2,2-Dichloropropane	NL		U	0.016	0.0004		U	0.016	0.0004
2-Butanone (MEK)	0.3		U	0.008	0.0021		U	0.008	0.0021
2-Chlorotoluene	NL		U	0.002	0.0004		U	0.002	0.0004
2-Hexanone	NL		U	0.008	0.0021		U	0.008	0.0021
4-Chlorotoluene	NL		U	0.0024	0.0004		U	0.0024	0.0004
4-Methyl-2-pentanone (MIBK)	1		U	0.008	0.0021		U	0.008	0.0021
Acetone	0.2	0.0156		0.008	0.0021		U	0.008	0.0021
Benzene	0.06		U	0.0016	0.0004		U	0.0016	0.0004
Bromobenzene	NL		U	0.0017	0.0004		U	0.0017	0.0004
Bromochloromethane	NL		U	0.0017	0.0004		U	0.0017	0.0004
Bromodichloromethane	NL		U	0.0033	0.0004		U	0.0033	0.0004
Bromoform	NL		U	0.0051	0.0004		U	0.0051	0.0004
Bromomethane	NL		U	0.0042	0.0008		U	0.0042	0.0008
Carbon tetrachloride	0.6		U	0.0066	0.0004		U	0.0066	0.0004
Chlorobenzene	1.7		U	0.0017	0.0004		U	0.0017	0.0004
Chloroethane	1.9		U	0.0042	0.0008		U	0.0042	0.0008
Chloroform	0.3		U	0.0017	0.0004		U	0.0017	0.0004
Chloromethane	NL		U	0.0059	0.0017		U	0.0059	0.0017
cis-1,2-Dichloroethene	NL		U	0.0048	0.0004		U	0.0048	0.0004
cis-1,3-Dichloropropene	NL		U	0.004	0.0004		U	0.004	0.0004
Dibromochloromethane	N/a		U	0.0025	0.0004		U	0.0025	0.0004
Dibromomethane	NL		U	0.0066	0.0004		U	0.0066	0.0004
Dichlorodifluoromethane	NL		U	0.0042	0.0008		U	0.0042	0.0008
Ethylbenzene	5.5		U	0.0025	0.0004		U	0.0025	0.0004
Hexachlorobutadiene	NL		U	0.0042	0.0004		U	0.0042	0.0004
Isopropylbenzene	NL		U	0.0067	0.0004		U	0.0067	0.0004
m-,p-Xylene	1.2 (TOTAL)		U	0.004	0.0004		U	0.004	0.0004
Methylene chloride	0.1		U	0.0016	0.0008		U	0.0016	0.0008
n-Butylbenzene	NL		U	0.0042	0.0004		U	0.0042	0.0004
n-Propylbenzene	NL		U	0.0016	0.0004		U	0.0016	0.0004
Naphthalene	13		U	0.0016	0.0004		U	0.0016	0.0004
o-Xylene	1.2 (TOTAL)		U	0.0042	0.0004		U	0.0042	0.0004
p-Isopropyltoluene	NL		U	0.0048	0.0004		U	0.0048	0.0004
sec-Butylbenzene	NL		U	0.0056	0.0004		U	0.0056	0.0004
Styrene	NL		U	0.0016	0.0004		U	0.0016	0.0004
tert-Butylbenzene	NL		U	0.0056	0.0004		U	0.0056	0.0004
Tetrachloroethene	1.4		U	0.0056	0.0004		U	0.0056	0.0004
Toluene	1.5		U	0.0040	0.0004		U	0.0040	0.0004
trans-1,2-Dichloroethene	0.3		U	0.0024	0.0004		U	0.0024	0.0004
trans-1,3-Dichloropropene	NL		U	0.0040	0.0004		U	0.0040	0.0004
Trichloroethene	0.7		U	0.0080	0.0004		U	0.0080	0.0004
Trichlorofluoromethane	NL		U	0.0032	0.0008		U	0.0032	0.0008
Vinyl chloride	0.2		U	0.0072	0.0008		U	0.0072	0.0008

Table 1A
Analytical Results for Volatiles by Method 8260B
(mg/kg)

Field Sample ID:		PAFB-SD-A3-01				PAFB-SD-A3-02			
Lab Number:	TAGMS	L0105181-07				L0105181-08			
analysis date:	Cleanup	5/12/01				5/12/01			
Analyte	Objective[2]	Result	QUAL	RDL	MDL	Result	QUAL	RDL	MDL
% Solids	NA	85%				83%			
1,1,1,2-Tetrachloroethane	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,1,1-Trichloroethane	0.8		U	0.0033	0.0004		U	0.0033	0.0004
1,1,2,2-Tetrachloroethane	0.6		U	0.0017	0.0004		U	0.0017	0.0004
1,1,2-Trichloroethane	6		U	0.004	0.0004		U	0.004	0.0004
1,1-Dichloroethane	0.2		U	0.0017	0.0008		U	0.0017	0.0008
1,1-Dichloroethene	0.4		U	0.0051	0.0004		U	0.0051	0.0004
1,1-Dichloropropene	NL		U	0.004	0.0004		U	0.004	0.0004
1,2,3-Trichlorobenzene	NL		U	0.0017	0.0004		U	0.0017	0.0004
1,2,3-Trichloropropane	0.4		U	0.016	0.0005		U	0.016	0.0005
1,2,4-Trichlorobenzene	3.4		U	0.0016	0.0004		U	0.0016	0.0004
1,2,4-Trimethylbenzene	NL		U	0.0056	0.0004		U	0.0056	0.0004
1,2-Dibromo-3-chloropropane	NL		U	0.0080	0.0004		U	0.0080	0.0004
1,2-Dibromoethane	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,2-Dichlorobenzene	7.9		U	0.0016	0.0004		U	0.0016	0.0004
1,2-Dichloroethane	0.1		U	0.0024	0.0004		U	0.0024	0.0004
1,2-Dichloropropane	NL		U	0.0016	0.0004		U	0.0016	0.0004
1,3,5-Trimethylbenzene	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,3-Dichlorobenzene	1.6		U	0.0048	0.0004		U	0.0048	0.0004
1,3-Dichloropropane	0.3		U	0.0016	0.0004		U	0.0016	0.0004
1,4-Dichlorobenzene	8.5		U	0.0016	0.0004		U	0.0016	0.0004
1-Chlorohexane	NL		U	0.0024	0.0000		U	0.0024	0.0000
2,2-Dichloropropane	NL		U	0.016	0.0004		U	0.016	0.0004
2-Butanone (MEK)	0.3		U	0.008	0.0021		U	0.008	0.0021
2-Chlorotoluene	NL		U	0.002	0.0004		U	0.002	0.0004
2-Hexanone	NL		U	0.008	0.0021		U	0.008	0.0021
4-Chlorotoluene	NL		U	0.0024	0.0004		U	0.0024	0.0004
4-Methyl-2-pentanone (MIBK)	1		U	0.008	0.0021		U	0.008	0.0021
Acetone	0.2		U	0.008	0.0021	0.00964	F	0.008	0.0021
Benzene	0.06		U	0.0016	0.0004		U	0.0016	0.0004
Bromobenzene	NL		U	0.0017	0.0004		U	0.0017	0.0004
Bromochloromethane	NL		U	0.0017	0.0004		U	0.0017	0.0004
Bromodichloromethane	NL		U	0.0033	0.0004		U	0.0033	0.0004
Bromoform	NL		U	0.0051	0.0004		U	0.0051	0.0004
Bromomethane	NL		U	0.0042	0.0008		U	0.0042	0.0008
Carbon tetrachloride	0.6		U	0.0066	0.0004		U	0.0066	0.0004
Chlorobenzene	1.7		U	0.0017	0.0004		U	0.0017	0.0004
Chloroethane	1.9		U	0.0042	0.0008		U	0.0042	0.0008
Chloroform	0.3		U	0.0017	0.0004		U	0.0017	0.0004
Chloromethane	NL		U	0.0059	0.0017		U	0.0059	0.0017
cis-1,2-Dichloroethene	NL		U	0.0048	0.0004		U	0.0048	0.0004
cis-1,3-Dichloropropene	NL		U	0.004	0.0004		U	0.004	0.0004
Dibromochloromethane	N/a		U	0.0025	0.0004		U	0.0025	0.0004
Dibromomethane	NL		U	0.0066	0.0004		U	0.0066	0.0004
Dichlorodifluoromethane	NL		U	0.0042	0.0008		U	0.0042	0.0008
Ethylbenzene	5.5		U	0.0025	0.0004		U	0.0025	0.0004
Hexachlorobutadiene	NL		M	0.0042	0.0004		U	0.0042	0.0004
Isopropylbenzene	NL		U	0.0067	0.0004		U	0.0067	0.0004
m-,p-Xylene	1.2 (TOTAL)		U	0.004	0.0004		U	0.004	0.0004
Methylene chloride	0.1		U	0.0016	0.0008		U	0.0016	0.0008
n-Butylbenzene	NL		M	0.0042	0.0004		U	0.0042	0.0004
n-Propylbenzene	NL		U	0.0016	0.0004		U	0.0016	0.0004
Naphthalene	13		M	0.0016	0.0004		U	0.0016	0.0004
o-Xylene	1.2 (TOTAL)		U	0.0042	0.0004		U	0.0042	0.0004
p-Isopropyltoluene	NL		M	0.0048	0.0004		U	0.0048	0.0004
sec-Butylbenzene	NL		M	0.0056	0.0004		U	0.0056	0.0004
Styrene	NL		U	0.0016	0.0004		U	0.0016	0.0004
tert-Butylbenzene	NL		M	0.0056	0.0004		U	0.0056	0.0004
Tetrachloroethene	1.4		U	0.0056	0.0004		U	0.0056	0.0004
Toluene	1.5		U	0.0040	0.0004		U	0.0040	0.0004
trans-1,2-Dichloroethene	0.3		U	0.0024	0.0004		U	0.0024	0.0004
trans-1,3-Dichloropropene	NL		U	0.0040	0.0004		U	0.0040	0.0004
Trichloroethene	0.7		U	0.0080	0.0004		U	0.0080	0.0004
Trichlorofluoromethane	NL		U	0.0032	0.0008		U	0.0032	0.0008
Vinyl chloride	0.2		U	0.0072	0.0008		U	0.0072	0.0008

Table 1A
Analytical Results for Volatiles by Method 8260B
(mg/kg)

Field Sample ID:		PAFB-SD-A3-03				PAFB-SD-A3-04			
Lab Number:	TAGMS	L0105181-09				L0105181-10			
analysis date:	Cleanup	5/12/01				5/12/01			
Analyte	Objective[2]	Result	QUAL	RDL	MDL	Result	QUAL	RDL	MDL
% Solids	NA	84%				85%			
1,1,1,2-Tetrachloroethane	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,1,1-Trichloroethane	0.8		U	0.0033	0.0004		U	0.0033	0.0004
1,1,2,2-Tetrachloroethane	0.6		U	0.0017	0.0004		U	0.0017	0.0004
1,1,2-Trichloroethane	6		U	0.004	0.0004		U	0.004	0.0004
1,1-Dichloroethane	0.2		U	0.0017	0.0008		U	0.0017	0.0008
1,1-Dichloroethene	0.4		U	0.0051	0.0004		U	0.0051	0.0004
1,1-Dichloropropene	NL		U	0.004	0.0004		U	0.004	0.0004
1,2,3-Trichlorobenzene	NL		U	0.0017	0.0004		U	0.0017	0.0004
1,2,3-Trichloropropane	0.4		U	0.016	0.0005		U	0.016	0.0005
1,2,4-Trichlorobenzene	3.4		U	0.0016	0.0004		U	0.0016	0.0004
1,2,4-Trimethylbenzene	NL		U	0.0056	0.0004		U	0.0056	0.0004
1,2-Dibromo-3-chloropropane	NL		U	0.0080	0.0004		U	0.0080	0.0004
1,2-Dibromoethane	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,2-Dichlorobenzene	7.9		U	0.0016	0.0004		U	0.0016	0.0004
1,2-Dichloroethane	0.1		U	0.0024	0.0004		U	0.0024	0.0004
1,2-Dichloropropane	NL		U	0.0016	0.0004		U	0.0016	0.0004
1,3,5-Trimethylbenzene	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,3-Dichlorobenzene	1.6		U	0.0048	0.0004		U	0.0048	0.0004
1,3-Dichloropropane	0.3		U	0.0016	0.0004		U	0.0016	0.0004
1,4-Dichlorobenzene	8.5		U	0.0016	0.0004		U	0.0016	0.0004
1-Chlorohexane	NL		U	0.0024	0.0000		U	0.0024	0.0000
2,2-Dichloropropane	NL		U	0.016	0.0004		U	0.016	0.0004
2-Butanone (MEK)	0.3		U	0.008	0.0021		U	0.008	0.0021
2-Chlorotoluene	NL		U	0.002	0.0004		U	0.002	0.0004
2-Hexanone	NL		U	0.008	0.0021		U	0.008	0.0021
4-Chlorotoluene	NL		U	0.0024	0.0004		U	0.0024	0.0004
4-Methyl-2-pentanone (MIBK)	1		U	0.008	0.0021		U	0.008	0.0021
Acetone	0.2	0.00458		0.008	0.0021		U	0.008	0.0021
Benzene	0.06		U	0.0016	0.0004		U	0.0016	0.0004
Bromobenzene	NL		U	0.0017	0.0004		U	0.0017	0.0004
Bromochloromethane	NL		U	0.0017	0.0004		U	0.0017	0.0004
Bromodichloromethane	NL		U	0.0033	0.0004		U	0.0033	0.0004
Bromoform	NL		U	0.0051	0.0004		U	0.0051	0.0004
Bromomethane	NL		U	0.0042	0.0008		U	0.0042	0.0008
Carbon tetrachloride	0.6		U	0.0066	0.0004		U	0.0066	0.0004
Chlorobenzene	1.7		U	0.0017	0.0004		U	0.0017	0.0004
Chloroethane	1.9		U	0.0042	0.0008		U	0.0042	0.0008
Chloroform	0.3		U	0.0017	0.0004		U	0.0017	0.0004
Chloromethane	NL		U	0.0059	0.0017		U	0.0059	0.0017
cis-1,2-Dichloroethene	NL		U	0.0048	0.0004		U	0.0048	0.0004
cis-1,3-Dichloropropene	NL		U	0.004	0.0004		U	0.004	0.0004
Dibromochloromethane	N/a		U	0.0025	0.0004		U	0.0025	0.0004
Dibromomethane	NL		U	0.0066	0.0004		U	0.0066	0.0004
Dichlorodifluoromethane	NL		U	0.0042	0.0008		U	0.0042	0.0008
Ethylbenzene	5.5		U	0.0025	0.0004		U	0.0025	0.0004
Hexachlorobutadiene	NL		U	0.0042	0.0004		U	0.0042	0.0004
Isopropylbenzene	NL		U	0.0067	0.0004		U	0.0067	0.0004
m-,p-Xylene	1.2 (TOTAL)		U	0.004	0.0004		U	0.004	0.0004
Methylene chloride	0.1		U	0.0016	0.0008		U	0.0016	0.0008
n-Butylbenzene	NL		U	0.0042	0.0004		U	0.0042	0.0004
n-Propylbenzene	NL		U	0.0016	0.0004		U	0.0016	0.0004
Naphthalene	13		U	0.0016	0.0004		U	0.0016	0.0004
o-Xylene	1.2 (TOTAL)		U	0.0042	0.0004		U	0.0042	0.0004
p-Isopropyltoluene	NL		U	0.0048	0.0004		U	0.0048	0.0004
sec-Butylbenzene	NL		U	0.0056	0.0004		U	0.0056	0.0004
Styrene	NL		U	0.0016	0.0004		U	0.0016	0.0004
tert-Butylbenzene	NL		U	0.0056	0.0004		U	0.0056	0.0004
Tetrachloroethene	1.4		U	0.0056	0.0004		U	0.0056	0.0004
Toluene	1.5		U	0.0040	0.0004		U	0.0040	0.0004
trans-1,2-Dichloroethene	0.3		U	0.0024	0.0004		U	0.0024	0.0004
trans-1,3-Dichloropropene	NL		U	0.0040	0.0004		U	0.0040	0.0004
Trichloroethene	0.7		U	0.0080	0.0004		U	0.0080	0.0004
Trichlorofluoromethane	NL		U	0.0032	0.0008		U	0.0032	0.0008
Vinyl chloride	0.2		U	0.0072	0.0008		U	0.0072	0.0008

Table 1A
Analytical Results for Volatiles by Method 8260B
(mg/kg)

Field Sample ID:		PAFB-SD-A3-05				PAFB-SD-A3-06A (FD2)[1]			
Lab Number:	TAGMS	L0105181-11				L0105181-12			
analysis date:	Cleanup	5/12/01				5/12/01			
Analyte	Objective[2]	Result	QUAL	RDL	MDL	Result	QUAL	RDL	MDL
% Solids	NA	83%				84%			
1,1,1,2-Tetrachloroethane	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,1,1-Trichloroethane	0.8		U	0.0033	0.0004		U	0.0033	0.0004
1,1,2,2-Tetrachloroethane	0.6		U	0.0017	0.0004		U	0.0017	0.0004
1,1,2-Trichloroethane	6		U	0.004	0.0004		U	0.004	0.0004
1,1-Dichloroethane	0.2		U	0.0017	0.0008		U	0.0017	0.0008
1,1-Dichloroethene	0.4		U	0.0051	0.0004		U	0.0051	0.0004
1,1-Dichloropropene	NL		U	0.004	0.0004		U	0.004	0.0004
1,2,3-Trichlorobenzene	NL		U	0.0017	0.0004		U	0.0017	0.0004
1,2,3-Trichloropropane	0.4		U	0.016	0.0005		U	0.016	0.0005
1,2,4-Trichlorobenzene	3.4		U	0.0016	0.0004		U	0.0016	0.0004
1,2,4-Trimethylbenzene	NL		U	0.0056	0.0004		U	0.0056	0.0004
1,2-Dibromo-3-chloropropane	NL		U	0.0080	0.0004		U	0.0080	0.0004
1,2-Dibromoethane	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,2-Dichlorobenzene	7.9		U	0.0016	0.0004		U	0.0016	0.0004
1,2-Dichloroethane	0.1		U	0.0024	0.0004		U	0.0024	0.0004
1,2-Dichloropropane	NL		U	0.0016	0.0004		U	0.0016	0.0004
1,3,5-Trimethylbenzene	NL		U	0.0024	0.0004		U	0.0024	0.0004
1,3-Dichlorobenzene	1.6		U	0.0048	0.0004		U	0.0048	0.0004
1,3-Dichloropropane	0.3		U	0.0016	0.0004		U	0.0016	0.0004
1,4-Dichlorobenzene	8.5		U	0.0016	0.0004		U	0.0016	0.0004
1-Chlorohexane	NL		U	0.0024	0.0000		U	0.0024	0.0000
2,2-Dichloropropane	NL		U	0.016	0.0004		U	0.016	0.0004
2-Butanone (MEK)	0.3		U	0.008	0.0021		U	0.008	0.0021
2-Chlorotoluene	NL		U	0.002	0.0004		U	0.002	0.0004
2-Hexanone	NL		U	0.008	0.0021		U	0.008	0.0021
4-Chlorotoluene	NL		U	0.0024	0.0004		U	0.0024	0.0004
4-Methyl-2-pentanone (MIBK)	1		U	0.008	0.0021		U	0.008	0.0021
Acetone	0.2		U	0.008	0.0021		U	0.008	0.0021
Benzene	0.06		U	0.0016	0.0004		U	0.0016	0.0004
Bromobenzene	NL		U	0.0017	0.0004		U	0.0017	0.0004
Bromochloromethane	NL		U	0.0017	0.0004		U	0.0017	0.0004
Bromodichloromethane	NL		U	0.0033	0.0004		U	0.0033	0.0004
Bromoform	NL		U	0.0051	0.0004		U	0.0051	0.0004
Bromomethane	NL		U	0.0042	0.0008		U	0.0042	0.0008
Carbon tetrachloride	0.6		U	0.0066	0.0004		U	0.0066	0.0004
Chlorobenzene	1.7		U	0.0017	0.0004		U	0.0017	0.0004
Chloroethane	1.9		U	0.0042	0.0008		U	0.0042	0.0008
Chloroform	0.3		U	0.0017	0.0004		U	0.0017	0.0004
Chloromethane	NL		U	0.0059	0.0017		U	0.0059	0.0017
cis-1,2-Dichloroethene	NL		U	0.0048	0.0004		U	0.0048	0.0004
cis-1,3-Dichloropropene	NL		U	0.004	0.0004		U	0.004	0.0004
Dibromochloromethane	N/a		U	0.0025	0.0004		U	0.0025	0.0004
Dibromomethane	NL		U	0.0066	0.0004		U	0.0066	0.0004
Dichlorodifluoromethane	NL		U	0.0042	0.0008		U	0.0042	0.0008
Ethylbenzene	5.5		U	0.0025	0.0004		U	0.0025	0.0004
Hexachlorobutadiene	NL		U	0.0042	0.0004		U	0.0042	0.0004
Isopropylbenzene	NL		U	0.0067	0.0004		U	0.0067	0.0004
m-,p-Xylene	1.2 (TOTAL)		U	0.004	0.0004		U	0.004	0.0004
Methylene chloride	0.1		U	0.0016	0.0008		U	0.0016	0.0008
n-Butylbenzene	NL		U	0.0042	0.0004		U	0.0042	0.0004
n-Propylbenzene	NL		U	0.0016	0.0004		U	0.0016	0.0004
Naphthalene	13		U	0.0016	0.0004		U	0.0016	0.0004
o-Xylene	1.2 (TOTAL)		U	0.0042	0.0004		U	0.0042	0.0004
p-Isopropyltoluene	NL		U	0.0048	0.0004		U	0.0048	0.0004
sec-Butylbenzene	NL		U	0.0056	0.0004		U	0.0056	0.0004
Styrene	NL		U	0.0016	0.0004		U	0.0016	0.0004
tert-Butylbenzene	NL		U	0.0056	0.0004		U	0.0056	0.0004
Tetrachloroethene	1.4		U	0.0056	0.0004		U	0.0056	0.0004
Toluene	1.5		U	0.0040	0.0004		U	0.0040	0.0004
trans-1,2-Dichloroethene	0.3		U	0.0024	0.0004		U	0.0024	0.0004
trans-1,3-Dichloropropene	NL		U	0.0040	0.0004		U	0.0040	0.0004
Trichloroethene	0.7		U	0.0080	0.0004		U	0.0080	0.0004
Trichlorofluoromethane	NL		U	0.0032	0.0008		U	0.0032	0.0008
Vinyl chloride	0.2		U	0.0072	0.0008		U	0.0072	0.0008

Table 1A
Analytical Results for Volatiles by Method 8260B
(mg/kg)

Field Sample ID:		PAFB-SD-A3-06B (FD2)[1]				TRIP BLANK			
Lab Number:	TAGMS	L0105181-13				L0105181-14			
analysis date:	Cleanup	5/12/01				5/11/01			
Analyte	Objective[2]	Result	QUAL	RDL	MDL	Result	QUAL	RDL (ug/L)	MDL (ug/L)
% Solids	NA	83%							
1,1,1,2-Tetrachloroethane	NL		U	0.0024	0.0004		U	0.5	0.25
1,1,1-Trichloroethane	0.8		U	0.0033	0.0004		U	0.8	0.25
1,1,2,2-Tetrachloroethane	0.6		U	0.0017	0.0004		U	0.8	0.13
1,1,2-Trichloroethane	6		U	0.004	0.0004		U	1	0.25
1,1-Dichloroethane	0.2		U	0.0017	0.0008		U	0.5	0.13
1,1-Dichloroethene	0.4		U	0.0051	0.0004		U	1.2	0.5
1,1-Dichloropropene	NL		U	0.004	0.0004		U	1	0.25
1,2,3-Trichlorobenzene	NL		U	0.0017	0.0004		U	1	0.13
1,2,3-Trichloropropane	0.4		U	0.016	0.0005		U	3.2	0.75
1,2,4-Trichlorobenzene	3.4		U	0.0016	0.0004		U	2	0.2
1,2,4-Trimethylbenzene	NL		U	0.0056	0.0004		U	1.3	0.25
1,2-Dibromo-3-chloropropane	NL		U	0.0080	0.0004		U	2.6	1
1,2-Dibromoethane	NL		U	0.0024	0.0004		U	0.6	0.25
1,2-Dichlorobenzene	7.9		U	0.0016	0.0004		U	1	0.13
1,2-Dichloroethane	0.1		U	0.0024	0.0004		U	0.7	0.25
1,2-Dichloropropane	NL		U	0.0016	0.0004		U	0.5	0.13
1,3,5-Trimethylbenzene	NL		U	0.0024	0.0004		U	0.5	0.25
1,3-Dichlorobenzene	1.6		U	0.0048	0.0004		U	1.2	0.25
1,3-Dichloropropane	0.3		U	0.0016	0.0004		U	0.5	0.2
1,4-Dichlorobenzene	8.5		U	0.0016	0.0004		U	1	0.13
1-Chlorohexane	NL		U	0.0024	0.0000		U	1	0.13
2,2-Dichloropropane	NL		U	0.016	0.0004		U	3.5	0.25
2-Butanone (MEK)	0.3		U	0.008	0.0021		U	10	2.5
2-Chlorotoluene	NL		U	0.002	0.0004		U	1	0.13
2-Hexanone	NL		U	0.008	0.0021		U	10	2.5
4-Chlorotoluene	NL		U	0.0024	0.0004		U	0.6	0.25
4-Methyl-2-pentanone (MIBK)	1		U	0.008	0.0021		U	10	2.5
Acetone	0.2		U	0.008	0.0021		U	10	2.5
Benzene	0.06		U	0.0016	0.0004		U	0.5	0.13
Bromobenzene	NL		U	0.0017	0.0004		U	1	0.13
Bromochloromethane	NL		U	0.0017	0.0004		U	0.5	0.2
Bromodichloromethane	NL		U	0.0033	0.0004		U	1	0.25
Bromoform	NL		U	0.0051	0.0004		U	1.2	0.54
Bromomethane	NL		U	0.0042	0.0008		U	1.1	0.5
Carbon tetrachloride	0.6		U	0.0066	0.0004		U	2.1	0.25
Chlorobenzene	1.7		U	0.0017	0.0004		U	0.5	0.13
Chloroethane	1.9		U	0.0042	0.0008		U	1	0.5
Chloroform	0.3		U	0.0017	0.0004		U	0.5	0.13
Chloromethane	NL		U	0.0059	0.0017		U	1.3	0.25
cis-1,2-Dichloroethene	NL		U	0.0048	0.0004		U	1.2	0.25
cis-1,3-Dichloropropene	NL		U	0.004	0.0004		U	1	0.25
Dibromochloromethane	N/a		U	0.0025	0.0004		U	0.6	0.25
Dibromomethane	NL		U	0.0066	0.0004		U	2.4	0.25
Dichlorodifluoromethane	NL		U	0.0042	0.0008		U	1	0.25
Ethylbenzene	5.5		U	0.0025	0.0004		U	1	0.25
Hexachlorobutadiene	NL		U	0.0042	0.0004		U	1.1	0.25
Isopropylbenzene	NL		U	0.0067	0.0004		U	0.5	0.25
m-,p-Xylene	1.2 (TOTAL)		U	0.004	0.0004		U	1	0.5
Methylene chloride	0.1		U	0.0016	0.0008	0.74	F	2	0.25
n-Butylbenzene	NL		U	0.0042	0.0004		U	1.1	0.25
n-Propylbenzene	NL		U	0.0016	0.0004		U	1	0.13
Naphthalene	13		U	0.0016	0.0004		U	1	0.2
o-Xylene	1.2 (TOTAL)		U	0.0042	0.0004		U	1.1	0.25
p-Isopropyltoluene	NL		U	0.0048	0.0004		U	1.2	0.25
sec-Butylbenzene	NL		U	0.0056	0.0004		U	1.3	0.25
Styrene	NL		U	0.0016	0.0004		U	1	0.13
tert-Butylbenzene	NL		U	0.0056	0.0004		U	1.4	0.25
Tetrachloroethene	1.4		U	0.0056	0.0004		U	1.4	0.25
Toluene	1.5		U	0.0040	0.0004		U	1.1	0.25
trans-1,2-Dichloroethene	0.3		U	0.0024	0.0004		U	0.6	0.25
trans-1,3-Dichloropropene	NL		U	0.0040	0.0004		U	1	0.5
Trichloroethene	0.7		U	0.0080	0.0004		U	1	0.25
Trichlorofluoromethane	NL		U	0.0032	0.0008		U	1	0.25
Vinyl chloride	0.2		U	0.0072	0.0008		U	1.1	0.25

Table 1B
Analytical Results for Semivolatiles by Method 8270C
(mg/kg)

Field Sample ID		PAFB-SD-A1-01				PAFB-SD-A1-01 (Re-analysis)			
Lab Number	TAGMS	L0105181-01				L0105181-01			
analysis date	Cleanup	5/18/01				5/21/01			
Analyte	Objective[2]	Result	QUAL	CRQL	MDL	Result	QUAL	CRQL	MDL
% Solids	NA	86%				86%			
1,2,4-Trichlorobenzene	3.4		U	1.6	0.066		U	1.4	0.066
1,2-Dichlorobenzene	7.9		U	1.6	0.066		U	1.4	0.066
1,3-Dichlorobenzene	1.6		U	1.6	0.064		U	1.4	0.064
1,4-Dichlorobenzene	8.5		U	1.6	0.068		U	1.4	0.068
2,4,5-Trichlorophenol	0.1		U	7.7	0.094		U	6.6	0.094
2,4,6-Trichlorophenol	NL		U	0.7	0.084		U	0.6	0.084
2,4-Dichlorophenol	0.4		U	0.7	0.082		U	0.6	0.082
2,4-Dimethylphenol	NL		U	0.7	0.074		U	0.6	0.074
2,4-Dinitrophenol	0.2 or MDL		U	7.7	0.22		U	6.6	0.22
2,4-Dinitrotoluene	1		U	1.6	0.084		U	1.4	0.084
2,6-Dinitrotoluene	1		U	1.6	0.08		U	1.4	0.08
2-Chloronaphthalene	NL		R	1.6	0.08		R	1.4	0.08
2-Chlorophenol	0.8		U	0.7	0.068		U	0.6	0.068
2-Methylnaphthalene	36.4		U	1.6	0.074		U	1.4	0.074
2-Methylphenol	0.1 or MDL		U	0.7	0.126		U	0.6	0.126
2-Nitroaniline	0.43 or MDL		U	7.7	0.092		U	6.6	0.092
2-Nitrophenol	0.33 or MDL		U	0.7	0.064		U	0.6	0.064
3,3'-Dichlorobenzidine	NL		U	3	0.3		U	2.6	0.3
3-Nitroaniline	0.5 or MDL		U	7.7	0.144		U	6.6	0.144
4,6-Dinitro-2-methylphenol	NL		U	7.7	0.072		U	6.6	0.072
4-Bromophenyl-phenylether	NL		U	1.6	0.076		U	1.4	0.076
4-Chloro-3-methylphenol	0.24 or MDL		U	3	0.092		U	2.6	0.092
4-Chloroaniline	0.22 or MDL		U	3	0.106		U	2.6	0.106
4-Chlorophenyl-phenyl ether	NL		U	1.6	0.088		U	1.4	0.088
4-Methylphenol	0.9		U	0.7	0.082		U	0.6	0.082
4-Nitroaniline	NL		U	7.7	0.08		U	6.6	0.08
p-Nitrophenol	0.1 or MDL		U	3.7	0.114		U	3.2	0.114
Acenaphthene	50		U	1.6	0.084		U	1.4	0.084
Acenaphthylene	41	0.19	F	1.6	0.084	0.211	F	1.4	0.084
Anthracene	50	0.108	F	1.6	0.07	0.114	F	1.4	0.07
Benzo(a)anthracene	0.224 or MDL	0.836	F	1.6	0.058	0.837	F	1.4	0.058
Benzo(a)pyrene	0.061 or MDL	0.836	R	1.6	0.052	0.848	R	1.4	0.052
Benzo(b)fluoranthene	1.1	1.3	R	1.6	0.056	1.27	R	1.4	0.056
Benzo(g,h,i)Perylene	50	0.13	R	1.6	0.074	0.199	R	1.4	0.074
Benzo(k)fluoranthene	1.1	0.803	R	1.6	0.086	0.75	R	1.4	0.086
Benzoic acid	NL		U	3.7	0.04		U	3.2	0.04
Benzyl alcohol	NL		U	3	0.12		U	2.6	0.12
bis(2-Chloroethoxy)Methane	NL		U	1.6	0.094		U	1.4	0.094
bis(2-Chloroethyl)ether	NL		U	1.6	0.082		U	1.4	0.082
bis(2-Chloroisopropyl)ether	NL		U	1.6	0.082		U	1.4	0.082
bis(2-Ethylhexyl)phthalate	50		U	1.6	0.078		U	1.4	0.078
Butylbenzylphthalate	50		U	1.6	0.062		U	1.4	0.062
Chrysene	0.4	1.01	F	1.6	0.082	1.02	F	1.4	0.082
Di-n-butylphthalate	8.1		U	1.6	0.062		U	1.4	0.062
Di-n-octylphthalate	50		R	1.6	0.062		R	1.4	0.062
Dibenzo(a,h)anthracene	0.014 or MDL		U	1.6	0.078		R	1.4	0.078
Dibenzofuran	6.2		U	1.6	0.086		U	1.4	0.086
Diethylphthalate	7.1		U	1.6	0.098		U	1.4	0.098
Dimethylphthalate	2		U	1.6	0.092		U	1.4	0.092
Fluoranthene	50	1.73		1.6	0.056	1.79		1.4	0.056
Fluorene	50		U	1.6	0.088		U	1.4	0.088
Hexachlorobenzene	0.41		U	1.6	0.08		U	1.4	0.08
Hexachlorobutadiene	NL		U	1.6	0.074		U	1.4	0.074
Hexachlorocyclopentadiene	NL		U	1.6	0.174		U	1.4	0.174
Hexachloroethane	NL		U	1.6	0.066		U	1.4	0.066
Indeno(1,2,3-cd)pyrene	3.2	0.194	R	1.6	0.072	0.254	R	1.4	0.072
Isophorone	4.4		U	1.6	0.086		U	1.4	0.086
n-Nitrosodiphenylamine	NL		U	1.6	0.096		U	1.4	0.096
n-Nitroso-di-n-propylamine	NL		U	1.6	0.07		U	1.4	0.07
Naphthalene	13		U	1.6	0.072		U	1.4	0.072
Nitrobenzene	0.2 or MDL		U	1.6	0.068		U	1.4	0.068
Pentachlorophenol	1.0 or MDL		U	7.7	0.04		U	6.6	0.04
Phenanthrene	50	0.883	F	1.6	0.086	0.902	F	1.4	0.086
Phenol	0.03 or MDL		U	0.7	0.064		U	0.6	0.064
Pyrene	50	1.98		1.6	0.060	1.96		1.4	0.060

Table 1B
Analytical Results for Semivolatiles by Method 8270C
(mg/kg)

Field Sample ID		PAFB-SD-A1-02 (FD1)[1]				PAFB-SD-A1-02B (FD1[1])			
Lab Number	TAGMS	L0105181-02				L0105181-03			
analysis date	Cleanup	5/18/01				5/18/01			
Analyte	Objective[2]	Result	QUAL	CRQL	MDL	Result	QUAL	CRQL	MDL
% Solids	NA	79%				93%			
1,2,4-Trichlorobenzene	3.4		U	0.7	0.033		U	0.7	0.033
1,2-Dichlorobenzene	7.9		U	0.7	0.033		U	0.7	0.033
1,3-Dichlorobenzene	1.6		U	0.7	0.032		U	0.7	0.032
1,4-Dichlorobenzene	8.5		U	0.7	0.034		U	0.7	0.034
2,4,5-Trichlorophenol	0.1		U	3.3	0.047		U	3.3	0.047
2,4,6-Trichlorophenol	NL		U	0.3	0.042		U	0.3	0.042
2,4-Dichlorophenol	0.4		U	0.3	0.041		U	0.3	0.041
2,4-Dimethylphenol	NL		U	0.3	0.037		U	0.3	0.037
2,4-Dinitrophenol	0.2 or MDL		U	3.3	0.11		U	3.3	0.11
2,4-Dinitrotoluene	1		U	0.7	0.042		U	0.7	0.042
2,6-Dinitrotoluene	1		U	0.7	0.04		U	0.7	0.04
2-Chloronaphthalene	NL		R	0.7	0.04		R	0.7	0.04
2-Chlorophenol	0.8		U	0.3	0.034		U	0.3	0.034
2-Methylnaphthalene	36.4		U	0.7	0.037		U	0.7	0.037
2-Methylphenol	0.1 or MDL		U	0.3	0.063		U	0.3	0.063
2-Nitroaniline	0.43 or MDL		U	3.3	0.046		U	3.3	0.046
2-Nitrophenol	0.33 or MDL		U	0.3	0.032		U	0.3	0.032
3,3'-Dichlorobenzidine	NL		U	1.3	0.15		U	1.3	0.15
3-Nitroaniline	0.5 or MDL		U	3.3	0.072		U	3.3	0.072
4,6-Dinitro-2-methylphenol	NL		U	3.3	0.036		U	3.3	0.036
4-Bromophenyl-phenylether	NL		U	0.7	0.038		U	0.7	0.038
4-Chloro-3-methylphenol	0.24 or MDL		U	1.3	0.046		U	1.3	0.046
4-Chloroaniline	0.22 or MDL		U	1.3	0.053		U	1.3	0.053
4-Chlorophenyl-phenyl ether	NL		U	0.7	0.044		U	0.7	0.044
4-Methylphenol	0.9		U	0.3	0.041		U	0.3	0.041
4-Nitroaniline	NL		U	3.3	0.04		U	3.3	0.04
p-Nitrophenol	0.1 or MDL		U	1.6	0.057		U	1.6	0.057
Acenaphthene	50		U	0.7	0.042		U	0.7	0.042
Acenaphthylene	41		U	0.7	0.042		U	0.7	0.042
Anthracene	50		U	0.7	0.035		U	0.7	0.035
Benzo(a)anthracene	0.224 or MDL		U	0.7	0.029		U	0.7	0.029
Benzo(a)pyrene	0.061 or MDL		U	0.7	0.026		U	0.7	0.026
Benzo(b)fluoranthene	1.1		U	0.7	0.028		U	0.7	0.028
Benzo(g,h,i)Perylene	50		R	0.7	0.037		R	0.7	0.037
Benzo(k)fluoranthene	1.1		U	0.7	0.043		U	0.7	0.043
Benzoic acid	NL		U	1.6	0.02		U	1.6	0.02
Benzyl alcohol	NL		U	1.3	0.06		U	1.3	0.06
bis(2-Chloroethoxy)Methane	NL		U	0.7	0.047		U	0.7	0.047
bis(2-Chloroethyl)ether	NL		U	0.7	0.041		U	0.7	0.041
bis(2-Chloroisopropyl)ether	NL		U	0.7	0.041		U	0.7	0.041
bis(2-Ethylhexyl)phthalate	50		U	0.7	0.039		U	0.7	0.039
Butylbenzylphthalate	50		U	0.7	0.031		U	0.7	0.031
Chrysene	0.4		U	0.7	0.041		U	0.7	0.041
Di-n-butylphthalate	8.1		U	0.7	0.031		U	0.7	0.031
Di-n-octylphthalate	50		U	0.7	0.031		U	0.7	0.031
Dibenzo(a,h)anthracene	0.014 or MDL		U	0.7	0.039		U	0.7	0.039
Dibenzofuran	6.2		U	0.7	0.043		U	0.7	0.043
Diethylphthalate	7.1		U	0.7	0.049		U	0.7	0.049
Dimethylphthalate	2		U	0.7	0.046		U	0.7	0.046
Fluoranthene	50		U	0.7	0.028		U	0.7	0.028
Fluorene	50		U	0.7	0.044		U	0.7	0.044
Hexachlorobenzene	0.41		U	0.7	0.04		U	0.7	0.04
Hexachlorobutadiene	NL		U	0.7	0.037		U	0.7	0.037
Hexachlorocyclopentadiene	NL		U	0.7	0.087		U	0.7	0.087
Hexachloroethane	NL		U	0.7	0.033		U	0.7	0.033
Indeno(1,2,3-cd)pyrene	3.2		R	0.7	0.036		R	0.7	0.036
Isophorone	4.4		U	0.7	0.043		U	0.7	0.043
n-Nitrosodiphenylamine	NL		U	0.7	0.048		U	0.7	0.048
n-Nitroso-di-n-propylamine	NL		U	0.7	0.035		U	0.7	0.035
Naphthalene	13		U	0.7	0.036		U	0.7	0.036
Nitrobenzene	0.2 or MDL		U	0.7	0.034		U	0.7	0.034
Pentachlorophenol	1.0 or MDL		U	3.3	0.02		U	3.3	0.02
Phenanthrene	50		U	0.7	0.043		U	0.7	0.043
Phenol	0.03 or MDL		U	0.3	0.032		U	0.3	0.032
Pyrene	50		U	0.7	0.03		U	0.7	0.03

Table 1B
Analytical Results for Semivolatiles by Method 8270C
(mg/kg)

Field Sample ID Lab Number analysis date	TAGMS Cleanup	PAFB-SD-A1-03 L0105181-04 5/18/01				PAFB-SD-A2-01 L0105181-05 5/18/01			
Analyte	Objective[2]	Result	QUAL	CRQL	MDL	Result	QUAL	CRQL	MDL
% Solids	NA	77%				97%			
1,2,4-Trichlorobenzene	3.4		U	0.7	0.033		U	0.7	0.033
1,2-Dichlorobenzene	7.9		U	0.7	0.033		U	0.7	0.033
1,3-Dichlorobenzene	1.6		U	0.7	0.032		U	0.7	0.032
1,4-Dichlorobenzene	8.5		U	0.7	0.034		U	0.7	0.034
2,4,5-Trichlorophenol	0.1		U	3.3	0.047		U	3.3	0.047
2,4,6-Trichlorophenol	NL		U	0.3	0.042		U	0.3	0.042
2,4-Dichlorophenol	0.4		U	0.3	0.041		U	0.3	0.041
2,4-Dimethylphenol	NL		U	0.3	0.037		U	0.3	0.037
2,4-Dinitrophenol	0.2 or MDL		U	3.3	0.11		U	3.3	0.11
2,4-Dinitrotoluene	1		U	0.7	0.042		U	0.7	0.042
2,6-Dinitrotoluene	1		U	0.7	0.04		U	0.7	0.04
2-Chloronaphthalene	NL		R	0.7	0.04		R	0.7	0.04
2-Chlorophenol	0.8		U	0.3	0.034		U	0.3	0.034
2-Methylnaphthalene	36.4		U	0.7	0.037		U	0.7	0.037
2-Methylphenol	0.1 or MDL		U	0.3	0.063		U	0.3	0.063
2-Nitroaniline	0.43 or MDL		U	3.3	0.046		U	3.3	0.046
2-Nitrophenol	0.33 or MDL		U	0.3	0.032		U	0.3	0.032
3,3'-Dichlorobenzidine	NL		U	1.3	0.15		U	1.3	0.15
3-Nitroaniline	0.5 or MDL		U	3.3	0.072		U	3.3	0.072
4,6-Dinitro-2-methylphenol	NL		U	3.3	0.036		U	3.3	0.036
4-Bromophenyl-phenylether	NL		U	0.7	0.038		U	0.7	0.038
4-Chloro-3-methylphenol	0.24 or MDL		U	1.3	0.046		U	1.3	0.046
4-Chloroaniline	0.22 or MDL		U	1.3	0.053		U	1.3	0.053
4-Chlorophenyl-phenyl ether	NL		U	0.7	0.044		U	0.7	0.044
4-Methylphenol	0.9		U	0.3	0.041		U	0.3	0.041
4-Nitroaniline	NL		U	3.3	0.04		U	3.3	0.04
p-Nitrophenol	0.1 or MDL		U	1.6	0.057		U	1.6	0.057
Acenaphthene	50		U	0.7	0.042		U	0.7	0.042
Acenaphthylene	41		U	0.7	0.042		U	0.7	0.042
Anthracene	50		U	0.7	0.035		U	0.7	0.035
Benzo(a)anthracene	0.224 or MDL		U	0.7	0.029		U	0.7	0.029
Benzo(a)pyrene	0.061 or MDL		U	0.7	0.026		U	0.7	0.026
Benzo(b)fluoranthene	1.1		U	0.7	0.028		U	0.7	0.028
Benzo(g,h,i)Perylene	50		R	0.7	0.037		R	0.7	0.037
Benzo(k)fluoranthene	1.1		U	0.7	0.043		U	0.7	0.043
Benzoic acid	NL		U	1.6	0.02		U	1.6	0.02
Benzyl alcohol	NL		U	1.3	0.06		U	1.3	0.06
bis(2-Chloroethoxy)Methane	NL		U	0.7	0.047		U	0.7	0.047
bis(2-Chloroethyl)ether	NL		U	0.7	0.041		U	0.7	0.041
bis(2-Chloroisopropyl)ether	NL		U	0.7	0.041		U	0.7	0.041
bis(2-Ethylhexyl)phthalate	50		U	0.7	0.039		U	0.7	0.039
Butylbenzylphthalate	50		U	0.7	0.031		U	0.7	0.031
Chrysene	0.4		U	0.7	0.041		U	0.7	0.041
Di-n-butylphthalate	8.1		U	0.7	0.031		U	0.7	0.031
Di-n-octylphthalate	50		U	0.7	0.031		U	0.7	0.031
Dibenzo(a,h)anthracene	0.014 or MDL		U	0.7	0.039		U	0.7	0.039
Dibenzofuran	6.2		U	0.7	0.043		U	0.7	0.043
Diethylphthalate	7.1		U	0.7	0.049		U	0.7	0.049
Dimethylphthalate	2		U	0.7	0.046		U	0.7	0.046
Fluoranthene	50		U	0.7	0.028		U	0.7	0.028
Fluorene	50		U	0.7	0.044		U	0.7	0.044
Hexachlorobenzene	0.41		U	0.7	0.04		U	0.7	0.04
Hexachlorobutadiene	NL		U	0.7	0.037		U	0.7	0.037
Hexachlorocyclopentadiene	NL		U	0.7	0.087		U	0.7	0.087
Hexachloroethane	NL		U	0.7	0.033		U	0.7	0.033
Indeno(1,2,3-cd)pyrene	3.2		R	0.7	0.036		R	0.7	0.036
Isophorone	4.4		U	0.7	0.043		U	0.7	0.043
n-Nitrosodiphenylamine	NL		U	0.7	0.048		U	0.7	0.048
n-Nitroso-di-n-propylamine	NL		U	0.7	0.035		U	0.7	0.035
Naphthalene	13		U	0.7	0.036		U	0.7	0.036
Nitrobenzene	0.2 or MDL		U	0.7	0.034		U	0.7	0.034
Pentachlorophenol	1.0 or MDL		U	3.3	0.02		U	3.3	0.02
Phenanthrene	50		U	0.7	0.043		U	0.7	0.043
Phenol	0.03 or MDL		U	0.3	0.032		U	0.3	0.032
Pyrene	50		U	0.7	0.03		U	0.7	0.03

Table 1B
Analytical Results for Semivolatiles by Method 8270C
(mg/kg)

Field Sample ID Lab Number analysis date	TAGMS Cleanup	PAFB-SD-A2-02 L0105181-06 5/18/01				PAFB-SD-A3-01 L0105181-07 5/18/01			
Analyte	Objective[2]	Result	QUAL	CRQL	MDL	Result	QUAL	CRQL	MDL
% Solids	NA	99%				85%			
1,2,4-Trichlorobenzene	3.4		U	0.7	0.033		U	0.7	0.033
1,2-Dichlorobenzene	7.9		U	0.7	0.033		U	0.7	0.033
1,3-Dichlorobenzene	1.6		U	0.7	0.032		U	0.7	0.032
1,4-Dichlorobenzene	8.5		U	0.7	0.034		U	0.7	0.034
2,4,5-Trichlorophenol	0.1		U	3.3	0.047		U	3.3	0.047
2,4,6-Trichlorophenol	NL		U	0.3	0.042		U	0.3	0.042
2,4-Dichlorophenol	0.4		U	0.3	0.041		U	0.3	0.041
2,4-Dimethylphenol	NL		U	0.3	0.037		U	0.3	0.037
2,4-Dinitrophenol	0.2 or MDL		U	3.3	0.11		U	3.3	0.11
2,4-Dinitrotoluene	1		U	0.7	0.042		U	0.7	0.042
2,6-Dinitrotoluene	1		U	0.7	0.04		U	0.7	0.04
2-Chloronaphthalene	NL		R	0.7	0.04		R	0.7	0.04
2-Chlorophenol	0.8		U	0.3	0.034		U	0.3	0.034
2-Methylnaphthalene	36.4		U	0.7	0.037		U	0.7	0.037
2-Methylphenol	0.1 or MDL		U	0.3	0.063		U	0.3	0.063
2-Nitroaniline	0.43 or MDL		U	3.3	0.046		U	3.3	0.046
2-Nitrophenol	0.33 or MDL		U	0.3	0.032		U	0.3	0.032
3,3'-Dichlorobenzidine	NL		U	1.3	0.15		U	1.3	0.15
3-Nitroaniline	0.5 or MDL		U	3.3	0.072		U	3.3	0.072
4,6-Dinitro-2-methylphenol	NL		U	3.3	0.036		U	3.3	0.036
4-Bromophenyl-phenylether	NL		U	0.7	0.038		U	0.7	0.038
4-Chloro-3-methylphenol	0.24 or MDL		U	1.3	0.046		U	1.3	0.046
4-Chloroaniline	0.22 or MDL		U	1.3	0.053		U	1.3	0.053
4-Chlorophenyl-phenyl ether	NL		U	0.7	0.044		U	0.7	0.044
4-Methylphenol	0.9		U	0.3	0.041		U	0.3	0.041
4-Nitroaniline	NL		U	3.3	0.04		U	3.3	0.04
p-Nitrophenol	0.1 or MDL		U	1.6	0.057		U	1.6	0.057
Acenaphthene	50		U	0.7	0.042		U	0.7	0.042
Acenaphthylene	41		U	0.7	0.042		U	0.7	0.042
Anthracene	50		U	0.7	0.035		U	0.7	0.035
Benzo(a)anthracene	0.224 or MDL		U	0.7	0.029		U	0.7	0.029
Benzo(a)pyrene	0.061 or MDL		U	0.7	0.026		U	0.7	0.026
Benzo(b)fluoranthene	1.1		U	0.7	0.028		U	0.7	0.028
Benzo(g,h,i)Perylene	50		R	0.7	0.037		R	0.7	0.037
Benzo(k)fluoranthene	1.1		U	0.7	0.043		U	0.7	0.043
Benzoic acid	NL		U	1.6	0.02		U	1.6	0.02
Benzyl alcohol	NL		U	1.3	0.06		U	1.3	0.06
bis(2-Chloroethoxy)Methane	NL		U	0.7	0.047		U	0.7	0.047
bis(2-Chloroethyl)ether	NL		U	0.7	0.041		U	0.7	0.041
bis(2-Chloroisopropyl)ether	NL		U	0.7	0.041		U	0.7	0.041
bis(2-Ethylhexyl)phthalate	50		U	0.7	0.039		U	0.7	0.039
Butylbenzylphthalate	50		U	0.7	0.031		U	0.7	0.031
Chrysene	0.4		U	0.7	0.041		U	0.7	0.041
Di-n-butylphthalate	8.1		U	0.7	0.031		U	0.7	0.031
Di-n-octylphthalate	50		U	0.7	0.031		U	0.7	0.031
Dibenzo(a,h)anthracene	0.014 or MDL		U	0.7	0.039		U	0.7	0.039
Dibenzofuran	6.2		U	0.7	0.043		U	0.7	0.043
Diethylphthalate	7.1		U	0.7	0.049		U	0.7	0.049
Dimethylphthalate	2		U	0.7	0.046		U	0.7	0.046
Fluoranthene	50	0.0323	F	0.7	0.028		U	0.7	0.028
Fluorene	50		U	0.7	0.044		U	0.7	0.044
Hexachlorobenzene	0.41		U	0.7	0.04		U	0.7	0.04
Hexachlorobutadiene	NL		U	0.7	0.037		U	0.7	0.037
Hexachlorocyclopentadiene	NL		U	0.7	0.087		U	0.7	0.087
Hexachloroethane	NL		U	0.7	0.033		U	0.7	0.033
Indeno(1,2,3-cd)pyrene	3.2		R	0.7	0.036		U	0.7	0.036
Isophorone	4.4		U	0.7	0.043		U	0.7	0.043
n-Nitrosodiphenylamine	NL		U	0.7	0.048		U	0.7	0.048
n-Nitroso-di-n-propylamine	NL		U	0.7	0.035		U	0.7	0.035
Naphthalene	13		U	0.7	0.036		U	0.7	0.036
Nitrobenzene	0.2 or MDL		U	0.7	0.034		U	0.7	0.034
Pentachlorophenol	1.0 or MDL		U	3.3	0.02		U	3.3	0.02
Phenanthrene	50		U	0.7	0.043		U	0.7	0.043
Phenol	0.03 or MDL		U	0.3	0.032		U	0.3	0.032
Pyrene	50		U	0.7	0.03		U	0.7	0.03

Table 1B
Analytical Results for Semivolatiles by Method 8270C
(mg/kg)

Field Sample ID Lab Number analysis date	TAGMS Cleanup	PAFB-SD-A3-02 L0105181-08 5/18/01				PAFB-SD-A3-03 L0105181-09 5/18/01			
Analyte	Objective[2]	Result	QUAL	CRQL	MDL	Result	QUAL	CRQL	MDL
% Solids	NA	83%				84%			
1,2,4-Trichlorobenzene	3.4		U	0.7	0.033		U	0.7	0.033
1,2-Dichlorobenzene	7.9		U	0.7	0.033		U	0.7	0.033
1,3-Dichlorobenzene	1.6		U	0.7	0.032		U	0.7	0.032
1,4-Dichlorobenzene	8.5		U	0.7	0.034		U	0.7	0.034
2,4,5-Trichlorophenol	0.1		U	3.3	0.047		U	3.3	0.047
2,4,6-Trichlorophenol	NL		U	0.3	0.042		U	0.3	0.042
2,4-Dichlorophenol	0.4		U	0.3	0.041		U	0.3	0.041
2,4-Dimethylphenol	NL		U	0.3	0.037		U	0.3	0.037
2,4-Dinitrophenol	0.2 or MDL		U	3.3	0.11		U	3.3	0.11
2,4-Dinitrotoluene	1		U	0.7	0.042		U	0.7	0.042
2,6-Dinitrotoluene	1		U	0.7	0.04		U	0.7	0.04
2-Chloronaphthalene	NL		R	0.7	0.04		R	0.7	0.04
2-Chlorophenol	0.8		U	0.3	0.034		U	0.3	0.034
2-Methylnaphthalene	36.4		U	0.7	0.037		U	0.7	0.037
2-Methylphenol	0.1 or MDL		U	0.3	0.063		U	0.3	0.063
2-Nitroaniline	0.43 or MDL		U	3.3	0.046		U	3.3	0.046
2-Nitrophenol	0.33 or MDL		U	0.3	0.032		U	0.3	0.032
3,3'-Dichlorobenzidine	NL		U	1.3	0.15		U	1.3	0.15
3-Nitroaniline	0.5 or MDL		U	3.3	0.072		U	3.3	0.072
4,6-Dinitro-2-methylphenol	NL		U	3.3	0.036		U	3.3	0.036
4-Bromophenyl-phenylether	NL		U	0.7	0.038		U	0.7	0.038
4-Chloro-3-methylphenol	0.24 or MDL		U	1.3	0.046		U	1.3	0.046
4-Chloroaniline	0.22 or MDL		U	1.3	0.053		U	1.3	0.053
4-Chlorophenyl-phenyl ether	NL		U	0.7	0.044		U	0.7	0.044
4-Methylphenol	0.9		U	0.3	0.041		U	0.3	0.041
4-Nitroaniline	NL		U	3.3	0.04		U	3.3	0.04
p-Nitrophenol	0.1 or MDL		U	1.6	0.057		U	1.6	0.057
Acenaphthene	50		U	0.7	0.042		U	0.7	0.042
Acenaphthylene	41		U	0.7	0.042		U	0.7	0.042
Anthracene	50		U	0.7	0.035		U	0.7	0.035
Benzo(a)anthracene	0.224 or MDL	0.0307	F	0.7	0.029		U	0.7	0.029
Benzo(a)pyrene	0.061 or MDL		U	0.7	0.026		U	0.7	0.026
Benzo(b)fluoranthene	1.1		U	0.7	0.028		U	0.7	0.028
Benzo(g,h,i)Perylene	50		R	0.7	0.037		R	0.7	0.037
Benzo(k)fluoranthene	1.1		U	0.7	0.043		U	0.7	0.043
Benzoic acid	NL		U	1.6	0.02		U	1.6	0.02
Benzyl alcohol	NL		U	1.3	0.06		U	1.3	0.06
bis(2-Chloroethoxy)Methane	NL		U	0.7	0.047		U	0.7	0.047
bis(2-Chloroethyl)ether	NL		U	0.7	0.041		U	0.7	0.041
bis(2-Chloroisopropyl)ether	NL		U	0.7	0.041		U	0.7	0.041
bis(2-Ethylhexyl)phthalate	50		U	0.7	0.039		U	0.7	0.039
Butylbenzylphthalate	50		U	0.7	0.031		U	0.7	0.031
Chrysene	0.4		U	0.7	0.041		U	0.7	0.041
Di-n-butylphthalate	8.1		U	0.7	0.031		U	0.7	0.031
Di-n-octylphthalate	50		U	0.7	0.031		U	0.7	0.031
Dibenzo(a,h)anthracene	0.014 or MDL		U	0.7	0.039		U	0.7	0.039
Dibenzofuran	6.2		U	0.7	0.043		U	0.7	0.043
Diethylphthalate	7.1		U	0.7	0.049		U	0.7	0.049
Dimethylphthalate	2		U	0.7	0.046		U	0.7	0.046
Fluoranthene	50	0.0577	F	0.7	0.028		U	0.7	0.028
Fluorene	50		U	0.7	0.044		U	0.7	0.044
Hexachlorobenzene	0.41		U	0.7	0.04		U	0.7	0.04
Hexachlorobutadiene	NL		U	0.7	0.037		U	0.7	0.037
Hexachlorocyclopentadiene	NL		U	0.7	0.087		U	0.7	0.087
Hexachloroethane	NL		U	0.7	0.033		U	0.7	0.033
Indeno(1,2,3-cd)pyrene	3.2		R	0.7	0.036		R	0.7	0.036
Isophorone	4.4		U	0.7	0.043		U	0.7	0.043
n-Nitrosodiphenylamine	NL		U	0.7	0.048		U	0.7	0.048
n-Nitroso-di-n-propylamine	NL		U	0.7	0.035		U	0.7	0.035
Naphthalene	13		U	0.7	0.036		U	0.7	0.036
Nitrobenzene	0.2 or MDL		U	0.7	0.034		U	0.7	0.034
Pentachlorophenol	1.0 or MDL		U	3.3	0.02		U	3.3	0.02
Phenanthrene	50		U	0.7	0.043		U	0.7	0.043
Phenol	0.03 or MDL		U	0.3	0.032		U	0.3	0.032
Pyrene	50	0.0458	F	0.7	0.03		U	0.7	0.03

Table 1B
Analytical Results for Semivolatiles by Method 8270C
(mg/kg)

Field Sample ID Lab Number analysis date	TAGMS Cleanup	PAFB-SD-A3-04 L0105181-10 5/18/01				PAFB-SD-A3-05 L0105181-11 5/18/01			
Analyte	Objective[2]	Result	QUAL	CRQL	MDL	Result	QUAL	CRQL	MDL
% Solids	NA	85%				83%			
1,2,4-Trichlorobenzene	3.4		U	0.7	0.033		U	0.7	0.033
1,2-Dichlorobenzene	7.9		U	0.7	0.033		U	0.7	0.033
1,3-Dichlorobenzene	1.6		U	0.7	0.032		U	0.7	0.032
1,4-Dichlorobenzene	8.5		U	0.7	0.034		U	0.7	0.034
2,4,5-Trichlorophenol	0.1		U	3.3	0.047		U	3.3	0.047
2,4,6-Trichlorophenol	NL		U	0.3	0.042		U	0.3	0.042
2,4-Dichlorophenol	0.4		U	0.3	0.041		U	0.3	0.041
2,4-Dimethylphenol	NL		U	0.3	0.037		U	0.3	0.037
2,4-Dinitrophenol	0.2 or MDL		U	3.3	0.11		U	3.3	0.11
2,4-Dinitrotoluene	1		U	0.7	0.042		U	0.7	0.042
2,6-Dinitrotoluene	1		U	0.7	0.04		U	0.7	0.04
2-Chloronaphthalene	NL		R	0.7	0.04		R	0.7	0.04
2-Chlorophenol	0.8		U	0.3	0.034		U	0.3	0.034
2-Methylnaphthalene	36.4		U	0.7	0.037		U	0.7	0.037
2-Methylphenol	0.1 or MDL		U	0.3	0.063		U	0.3	0.063
2-Nitroaniline	0.43 or MDL		U	3.3	0.046		U	3.3	0.046
2-Nitrophenol	0.33 or MDL		U	0.3	0.032		U	0.3	0.032
3,3'-Dichlorobenzidine	NL		U	1.3	0.15		U	1.3	0.15
3-Nitroaniline	0.5 or MDL		U	3.3	0.072		U	3.3	0.072
4,6-Dinitro-2-methylphenol	NL		U	3.3	0.036		U	3.3	0.036
4-Bromophenyl-phenylether	NL		U	0.7	0.038		U	0.7	0.038
4-Chloro-3-methylphenol	0.24 or MDL		U	1.3	0.046		U	1.3	0.046
4-Chloroaniline	0.22 or MDL		U	1.3	0.053		U	1.3	0.053
4-Chlorophenyl-phenyl ether	NL		U	0.7	0.044		U	0.7	0.044
4-Methylphenol	0.9		U	0.3	0.041		U	0.3	0.041
4-Nitroaniline	NL		U	3.3	0.04		U	3.3	0.04
p-Nitrophenol	0.1 or MDL		U	1.6	0.057		U	1.6	0.057
Acenaphthene	50		U	0.7	0.042		U	0.7	0.042
Acenaphthylene	41		U	0.7	0.042		U	0.7	0.042
Anthracene	50		U	0.7	0.035		U	0.7	0.035
Benzo(a)anthracene	0.224 or MDL		U	0.7	0.029		U	0.7	0.029
Benzo(a)pyrene	0.061 or MDL		U	0.7	0.026		U	0.7	0.026
Benzo(b)fluoranthene	1.1		U	0.7	0.028		U	0.7	0.028
Benzo(g,h,i)Perylene	50		R	0.7	0.037		R	0.7	0.037
Benzo(k)fluoranthene	1.1		U	0.7	0.043		U	0.7	0.043
Benzoic acid	NL		U	1.6	0.02		U	1.6	0.02
Benzyl alcohol	NL		U	1.3	0.06		U	1.3	0.06
bis(2-Chloroethoxy)Methane	NL		U	0.7	0.047		U	0.7	0.047
bis(2-Chloroethyl)ether	NL		U	0.7	0.041		U	0.7	0.041
bis(2-Chloroisopropyl)ether	NL		U	0.7	0.041		U	0.7	0.041
bis(2-Ethylhexyl)phthalate	50		U	0.7	0.039		U	0.7	0.039
Butylbenzylphthalate	50		U	0.7	0.031		U	0.7	0.031
Chrysene	0.4		U	0.7	0.041		U	0.7	0.041
Di-n-butylphthalate	8.1		U	0.7	0.031		U	0.7	0.031
Di-n-octylphthalate	50		U	0.7	0.031		U	0.7	0.031
Dibenzo(a,h)anthracene	0.014 or MDL		U	0.7	0.039		U	0.7	0.039
Dibenzofuran	6.2		U	0.7	0.043		U	0.7	0.043
Diethylphthalate	7.1		U	0.7	0.049		U	0.7	0.049
Dimethylphthalate	2		U	0.7	0.046		U	0.7	0.046
Fluoranthene	50		U	0.7	0.028		U	0.7	0.028
Fluorene	50		U	0.7	0.044		U	0.7	0.044
Hexachlorobenzene	0.41		U	0.7	0.04		U	0.7	0.04
Hexachlorobutadiene	NL		U	0.7	0.037		U	0.7	0.037
Hexachlorocyclopentadiene	NL		U	0.7	0.087		U	0.7	0.087
Hexachloroethane	NL		U	0.7	0.033		U	0.7	0.033
Indeno(1,2,3-cd)pyrene	3.2		R	0.7	0.036		R	0.7	0.036
Isophorone	4.4		U	0.7	0.043		U	0.7	0.043
n-Nitrosodiphenylamine	NL		U	0.7	0.048		U	0.7	0.048
n-Nitroso-di-n-propylamine	NL		U	0.7	0.035		U	0.7	0.035
Naphthalene	13		U	0.7	0.036		U	0.7	0.036
Nitrobenzene	0.2 or MDL		U	0.7	0.034		U	0.7	0.034
Pentachlorophenol	1.0 or MDL		U	3.3	0.02		U	3.3	0.02
Phenanthrene	50		U	0.7	0.043		U	0.7	0.043
Phenol	0.03 or MDL		U	0.3	0.032		U	0.3	0.032
Pyrene	50		U	0.7	0.03		U	0.7	0.03

Table 1B
Analytical Results for Semivolatiles by Method 8270C
(mg/kg)

Field Sample ID Lab Number analysis date	TAGMS Cleanup	PAFB-SD-A3-06A (FD2)[1] L0105181-12 5/18/01			PAFB-SD-A3-06B (FD2)[1] L0105181-13 5/18/01			
Analyte	Objective[2]	Result QUAL	CRQL	MDL	Result	QUAL	CRQL	MDL
% Solids	NA	84%			83%			
1,2,4-Trichlorobenzene	3.4	U	0.7	0.033		U	0.7	0.033
1,2-Dichlorobenzene	7.9	U	0.7	0.033		U	0.7	0.033
1,3-Dichlorobenzene	1.6	U	0.7	0.032		U	0.7	0.032
1,4-Dichlorobenzene	8.5	U	0.7	0.034		U	0.7	0.034
2,4,5-Trichlorophenol	0.1	U	3.3	0.047		U	3.3	0.047
2,4,6-Trichlorophenol	NL	U	0.3	0.042		U	0.3	0.042
2,4-Dichlorophenol	0.4	U	0.3	0.041		U	0.3	0.041
2,4-Dimethylphenol	NL	U	0.3	0.037		U	0.3	0.037
2,4-Dinitrophenol	0.2 or MDL	U	3.3	0.11		U	3.3	0.11
2,4-Dinitrotoluene	1	U	0.7	0.042		U	0.7	0.042
2,6-Dinitrotoluene	1	U	0.7	0.04		U	0.7	0.04
2-Chloronaphthalene	NL	R	0.7	0.04		R	0.7	0.04
2-Chlorophenol	0.8	U	0.3	0.034		U	0.3	0.034
2-Methylnaphthalene	36.4	U	0.7	0.037		U	0.7	0.037
2-Methylphenol	0.1 or MDL	U	0.3	0.063		U	0.3	0.063
2-Nitroaniline	0.43 or MDL	U	3.3	0.046		U	3.3	0.046
2-Nitrophenol	0.33 or MDL	U	0.3	0.032		U	0.3	0.032
3,3'-Dichlorobenzidine	NL	U	1.3	0.15		U	1.3	0.15
3-Nitroaniline	0.5 or MDL	U	3.3	0.072		U	3.3	0.072
4,6-Dinitro-2-methylphenol	NL	U	3.3	0.036		U	3.3	0.036
4-Bromophenyl-phenylether	NL	U	0.7	0.038		U	0.7	0.038
4-Chloro-3-methylphenol	0.24 or MDL	U	1.3	0.046		U	1.3	0.046
4-Chloroaniline	0.22 or MDL	U	1.3	0.053		U	1.3	0.053
4-Chlorophenyl-phenyl ether	NL	U	0.7	0.044		U	0.7	0.044
4-Methylphenol	0.9	U	0.3	0.041		U	0.3	0.041
4-Nitroaniline	NL	U	3.3	0.04		U	3.3	0.04
p-Nitrophenol	0.1 or MDL	U	1.6	0.057		U	1.6	0.057
Acenaphthene	50	U	0.7	0.042		U	0.7	0.042
Acenaphthylene	41	U	0.7	0.042		U	0.7	0.042
Anthracene	50	U	0.7	0.035		U	0.7	0.035
Benzo(a)anthracene	0.224 or MDL	U	0.7	0.029		U	0.7	0.029
Benzo(a)pyrene	0.061 or MDL	U	0.7	0.026		U	0.7	0.026
Benzo(b)fluoranthene	1.1	U	0.7	0.028		U	0.7	0.028
Benzo(g,h,i)Perylene	50	R	0.7	0.037		R	0.7	0.037
Benzo(k)fluoranthene	1.1	U	0.7	0.043		U	0.7	0.043
Benzoic acid	NL	U	1.6	0.02		U	1.6	0.02
Benzyl alcohol	NL	U	1.3	0.06		U	1.3	0.06
bis(2-Chloroethoxy)Methane	NL	U	0.7	0.047		U	0.7	0.047
bis(2-Chloroethyl)ether	NL	U	0.7	0.041		U	0.7	0.041
bis(2-Chloroisopropyl)ether	NL	U	0.7	0.041		U	0.7	0.041
bis(2-Ethylhexyl)phthalate	50	U	0.7	0.039		U	0.7	0.039
Butylbenzylphthalate	50	U	0.7	0.031		U	0.7	0.031
Chrysene	0.4	U	0.7	0.041		U	0.7	0.041
Di-n-butylphthalate	8.1	U	0.7	0.031		U	0.7	0.031
Di-n-octylphthalate	50	U	0.7	0.031		U	0.7	0.031
Dibenzo(a,h)anthracene	0.014 or MDL	U	0.7	0.039		U	0.7	0.039
Dibenzofuran	6.2	U	0.7	0.043		U	0.7	0.043
Diethylphthalate	7.1	U	0.7	0.049		U	0.7	0.049
Dimethylphthalate	2	U	0.7	0.046		U	0.7	0.046
Fluoranthene	50	U	0.7	0.028		U	0.7	0.028
Fluorene	50	U	0.7	0.044		U	0.7	0.044
Hexachlorobenzene	0.41	U	0.7	0.04		U	0.7	0.04
Hexachlorobutadiene	NL	U	0.7	0.037		U	0.7	0.037
Hexachlorocyclopentadiene	NL	U	0.7	0.087		U	0.7	0.087
Hexachloroethane	NL	U	0.7	0.033		U	0.7	0.033
Indeno(1,2,3-cd)pyrene	3.2	U	0.7	0.036		U	0.7	0.036
Isophorone	4.4	U	0.7	0.043		U	0.7	0.043
n-Nitrosodiphenylamine	NL	U	0.7	0.048		U	0.7	0.048
n-Nitroso-di-n-propylamine	NL	U	0.7	0.035		U	0.7	0.035
Naphthalene	13	U	0.7	0.036		U	0.7	0.036
Nitrobenzene	0.2 or MDL	U	0.7	0.034		U	0.7	0.034
Pentachlorophenol	1.0 or MDL	U	3.3	0.02		U	3.3	0.02
Phenanthrene	50	U	0.7	0.043		U	0.7	0.043
Phenol	0.03 or MDL	U	0.3	0.032		U	0.3	0.032
Pyrene	50	U	0.7	0.03		U	0.7	0.03

Table 1C
Analytical Results for Metals by Method 6010B/7841/7471
(mg/kg)

Field Sample ID Lab Number analysis date	TAGMS	PAFB-SD-A1-01 L0105181-01 5/19/01				PAFB-SD-A1-02 (FD1)[1] L0105181-02 5/19/01				PAFB-SD-A1-02B (FD1[1]) L0105181-03 5/19/01				PAFB-SD-A1-03 L0105181-04 5/19/01			
Analyte	Cleanup Objective[2]	Result	QUAL	RDL	MDL	Result	QUAL	RDL	MDL	Result	QUAL	RDL	MDL	Result	QUAL	RDL	MDL
% Solids	NA	86%				79%				93%				77%			
Aluminum	SB	4880		22	3.23	3620		22	3.23	3860		22	3.23	2860		22	3.23
Antimony	SB		U, M	1	0.45	0.57	F	1	0.45	0.712	F	1	0.45		U	1	0.45
Arsenic	7.5 or SB	1.76		1	0.35	1.92		1	0.35	1.57		1	0.35	1.68		1	0.35
Barium	300 or SB	19.2	M	1	0.01	15.9		1	0.01	14		1	0.01	10.7		1	0.01
Beryllium	0.16 or SB	0.198	F	0.3	0.01	0.218	F	0.3	0.01	0.20	F	0.3	0.01	0.186	F	0.3	0.01
Cadmium	1 or SB		U	0.1	0.03		U	0.1	0.03		U	0.1	0.03		U	0.1	0.03
Calcium	SB	1720	M	100	2.83	1510	J	100	2.83	902	J	100	2.83	1740		100	2.83
Chromium	10 or SB	7.34	F	20	0.06	6.68	F	20	0.06	5.55	F	20	0.06	6.57	F	20	0.06
Cobalt	30 or SB	2.02	F	10	0.04	2.28	F	10	0.04	2.19	F, J	10	0.04	1.91	F	10	0.04
Copper	25 or SB	4.41		2	0.15	2.34		2	0.15	1.28	F	2	0.15	1.92	F	2	0.15
Iron	2000 or SB	7880		3	1.11	7950	J	3	1.11	10600	J	3	1.11	9830		3	1.11
Lead	SB	12.3	M	1	0.33	4.3	J	1	0.33	2.2	J	1	0.33	2		1	0.33
Mercury	0.1		U	0.1	0.02		U	0.1	0.02		U	0.1	0.02		U	0.1	0.02
Magnesium	SB	757	M	100	4.65	946	J	100	4.65	574	J	100	4.65	864		100	4.65
Manganese	SB	81.7		2	0.01	137	J	2	0.01	169	J	2	0.01	73.4		2	0.01
Nickel	13 or SB	3.06		2	0.10	3.23		2	0.10	2.15		2	0.10	2.53	F	2	0.10
Potassium	SB	370	F	610	5.96	468	F	610	5.96	213	F	610	5.96	500	F	610	5.96
Selenium	2 or SB	2.91		1	0.26	2.06		1	0.26	2.63	J	1	0.26	2.23		1	0.26
Silver	SB	0.134	F	1	0.10	0.132	F	1	0.10		U	1	0.10		U	1	0.10
Sodium	SB	36.6		10	0.87	51.1		10	0.87	26.9		10	0.87	56		10	0.87
Thallium	SB	0.166	F	0.3	0.06	0.165	F	0.3	0.06	0.148	F	0.3	0.06	0.162	F	0.3	0.06
Vanadium	150 or SB	12.1		1	0.23	11.7		1	0.23	13.4		1	0.23	13.4		1	0.23
Zinc	20 or SB	30.5	30.5	1	0.47	11.2	J	1	0.47	9.53	J	1	0.47	8.75		1	0.47

Table 1C
Analytical Results for Metals by Method 6010B/7841/7471
(mg/kg)

Field Sample ID / Lab Number / analysis date	TAGMS Cleanup	PAFB-SD-A2-01 L0105181-05 5/19/01				PAFB-SD-A2-02 L0105181-06 5/19/01				PAFB-SD-A3-01 L0105181-07 5/19/01				PAFB-SD-A3-02 L0105181-08 5/19/01			
Analyte	Objective[2]	Result	QUAL	RDL	MDL	Result	QUAL	RDL	MDL	Result	QUAL	RDL	MDL	Result	QUAL	RDL	MDL
% Solids	NA	97%				99%				85%				83%			
Aluminum	SB	3430		22	3.23	3330		22	3.23	1800		22	3.23	2240		22	3.23
Antimony	SB		U	1	0.45	0.567	F	1	0.45		U	1	0.45		U	1	0.45
Arsenic	7.5 or SB	1.23		1	0.35	1.54		1	0.35	1.26		1	0.35	1.54		1	0.35
Barium	300 or SB	13.3		1	0.01	12.5		1	0.01	7.65		1	0.01	13.4		1	0.01
Beryllium	0.16 or SB	0.148	F	0.3	0.01	0.165	F	0.3	0.01	0.12	F	0.3	0.01	0.227	F	0.3	0.01
Cadmium	1 or SB		U	0.1	0.03		U	0.1	0.03		U	0.1	0.03		U	0.1	0.03
Calcium	SB	792		100	2.83	1240		100	2.83	961		100	2.83	934		100	2.83
Chromium	10 or SB	4.32	F	20	0.06	5.08	F	20	0.06	2.87	F	20	0.06	3.47	F	20	0.06
Cobalt	30 or SB	1.65	F	10	0.04	1.88	F	10	0.04	1.59	F	10	0.04	2.75	F	10	0.04
Copper	25 or SB	1.36	F	2	0.15	1.77	F	2	0.15	1.6	F	2	0.15	1.81	F	2	0.15
Iron	2000 or SB	5720		3	1.11	6780		3	1.11	4260		3	1.11	4950		3	1.11
Lead	SB	1.61		1	0.33	3.51		1	0.33	1.49		1	0.33	1.42		1	0.33
Mercury	0.1		U	0.1	0.02		U	0.1	0.02		U	0.1	0.02		U	0.1	0.02
Magnesium	SB	639		100	4.65	732		100	4.65	641		100	4.65	1160		100	4.65
Manganese	SB	63.8		2	0.01	97.9		2	0.01	57.8		2	0.01	98		2	0.01
Nickel	13 or SB	2.58		2	0.10	2.81		2	0.10	1.91	F	2	0.10	2.73		2	0.10
Potassium	SB	335	F	610	5.96	399	F	610	5.96	375	F	610	5.96	493	F	610	5.96
Selenium	2 or SB	1.41		1	0.26	1.74		1	0.26	0.992	F	1	0.26	1.29		1	0.26
Silver	SB		U	1	0.10		U	1	0.10		U	1	0.10		U	1	0.10
Sodium	SB	35.8		10	0.87	37		10	0.87	31.3		10	0.87	41.3		10	0.87
Thallium	SB	0.134	F	0.3	0.06	0.121	F	0.3	0.06	0.11	F	0.3	0.06	0.123	F	0.3	0.06
Vanadium	150 or SB	8.41		1	0.23	9.94		1	0.23	5.55		1	0.23	6.35		1	0.23
Zinc	20 or SB	7.16		1	0.47	10.5		1	0.47	6.44		1	0.47	7.88		1	0.47

Table 1C
Analytical Results for Metals by Method 6010B/7841/7471
(mg/kg)

Field Sample ID / Lab Number / analysis date / Analyte	TAGMS Cleanup Objective[2]	PAFB-SD-A3-03 L0105181-09 5/19/01				PAFB-SD-A3-04 L0105181-10 5/19/01				PAFB-SD-A3-05 L0105181-11 5/19/01				PAFB-SD-A3-06A (FD2)[1] L0105181-12 5/19/01				PAFB-SD-A3-06B (FD2)[1] L0105181-13 5/19/01			
		Result	QUAL	RDL	MDL	Result	QUAL	RDL	MDL	Result	QUAL	RDL	MDL	Result	QUAL	RDL	MDL	Result	QUAL	RDL	MDL
% Solids	NA	84%				85%				83%				84%				83%			
Aluminum	SB	2080		22	3.23	2660		22	3.23	3460		22	3.23	5180	J	22	3.23	3610	J	22	3.23
Antimony	SB		U	1	0.45		U	1	0.45	0.551	F	1	0.45		U	1	0.45		U	1	0.45
Arsenic	7.5 or SB	1.21		1	0.35	1.49		1	0.35	1.36		1	0.35	1.99		1	0.35	1.54		1	0.35
Barium	300 or SB	7.75		1	0.01	9.54		1	0.01	19.5		1	0.01	17.4	J	1	0.01	11.9	J	1	0.01
Beryllium	0.16 or SB	0.13	F	0.3	0.01	0.148	F	0.3	0.01	0.201	F	0.3	0.01	0.283	F	0.3	0.01	0.205	F	0.3	0.01
Cadmium	1 or SB		U	0.1	0.03		U	0.1	0.03	0.0567	F	0.1	0.03		U	0.1	0.03		U	0.1	0.03
Calcium	SB		U	100	2.83	1440		100	2.83	1180		100	2.83	1650		100	2.83	1430		100	2.83
Chromium	10 or SB	3.68	F	20	0.06	4.79	F	20	0.06	4.49	F	20	0.06	7.15	F	20	0.06	5.16	F	20	0.06
Cobalt	30 or SB	1.58	F	10	0.04	2.16	F	10	0.04	2.2	F	10	0.04	2.7	F	10	0.04	2.14	F	10	0.04
Copper	25 or SB	1.87	F	2	0.15	2.79		2	0.15	2.36		2	0.15	4.15		2	0.15	2.71		2	0.15
Iron	2000 or SB	5100		3	1.11	6190		3	1.11	5200		3	1.11	8560	J	3	1.11	6770	J	3	1.11
Lead	SB	1.31		1	0.33	1.75		1	0.33	2.61		1	0.33	2.04		1	0.33	2.01		1	0.33
Mercury	0.1		U	0.1	0.02		U	0.1	0.02		U	0.1	0.02		U	0.1	0.02		U	0.1	0.02
Magnesium	SB	731		100	4.65	908		100	4.65	1080		100	4.65	1370		100	4.65	1140		100	4.65
Manganese	SB	36		2	0.01	37.5		2	0.01	84		2	0.01	155	J	2	0.01	95.8	J	2	0.01
Nickel	13 or SB	5.31		2	0.10	4.84		2	0.10	3.51		2	0.10	4.8		2	0.10	3.6		2	0.10
Potassium	SB	436	F	610	5.96	578	F	610	5.96	713	F	610	5.96	968		610	5.96	629		610	5.96
Selenium	2 or SB	1.15	F	1	0.26	1.25		1	0.26	1.2		1	0.26	1.98		1	0.26	1.7		1	0.26
Silver	SB		U	1	0.10		U	1	0.10		U	1	0.10		U	1	0.10		U	1	0.10
Sodium	SB	43.8		10	0.87	53.5		10	0.87	43.1		10	0.87	62.6	J	10	0.87	47.6	J	10	0.87
Thallium	SB	0.115	F	0.3	0.06	0.128	F	0.3	0.06	0.11	F	0.3	0.06	0.15	F	0.3	0.06	0.155	F	0.3	0.06
Vanadium	150 or SB	7.18		1	0.23	8.87		1	0.23	6.78		1	0.23	12.4	J	1	0.23	9.27	J	1	0.23
Zinc	20 or SB	6.77		1	0.47	8.48		1	0.47	12.3		1	0.47	14.5	J	1	0.47	11.1	J	1	0.47

Table 1
Summary of Analytical Results
(footnotes)

FOOTNOTES:
(1) The following are field duplicate pairs :
PAFB-SD-A1-02 & PAFB-SD-A1-02B
PAFB-SD-A3-06A & PAFB-SD-A3-06B

TAGMS Cleanup Objective: Recommended Soil cleanup Objective (NYSDEC TAGM #4046 - Appendix A, Tables 1-4

Abbreviations used in the Table:
SB - Site Background
N/A - Not applicable
NL - no TAGM value listed in table.
CRQL -Contract Required Detection Limit
MDL - Method Detection Limit

Qualifier Footnotes:

J -	Results are estimated and the data are valid for limited purposes. The results are qualitatively acceptable but quantitatively unreliable.
UJ -	The reported quantitation limit is estimated because associated quality control criteria were not met.
B -	Results are estimated because the compound was detected in an associated blank.
R-	Reported value or quantitation limit is rejected. Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
M-	A matrix interference was present. Reported value or quantitation limit may be an estimate.
F -	Results are qualitatively acceptable but quantitatively unreliable due to uncertainity in precision near the limit of detection.

Table 2
Summary of Qualified Results

Field Sample ID	Analysis	Method	Target Analyte	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier	Data Impact[2]
TRIP BLANK	VOC	8260B	Methylene chloride	0.74 ug/L	Result < RDL	F	Precision
PAFB-SD-A1-01	VOC	8260B	tert-Butyl-benzene	<0.0071	MS < CL	M	Low Bias
PAFB-SD-A1-01	VOC	8260B	sec-Butyl-benzene	<0.0071	MS < CL	M	Low Bias
PAFB-SD-A1-01	VOC	8260B	p-Isopropyl toluene	< 0.0061	MS < CL	M	Low Bias
PAFB-SD-A1-01	VOC	8260B	n-Butyl-benzene	< 0.0051	MS < CL	M	Low Bias
PAFB-SD-A1-01	VOC	8260B	1,2,4-Trichlorobenzene	< 0.002	MS < CL	M	Low Bias
PAFB-SD-A1-01	VOC	8260B	Hexachlorobutadiene	< 0.0051	MS < CL	M	Low Bias
PAFB-SD-A1-01	VOC	8260B	Naphthalene	< 0.002	MS < CL	M	Low Bias
PAFB-SD-A1-01	SVOC	8270C	Benzo(ghi)perylene	0.199	CCV > CL	R	None
PAFB-SD-A1-02	SVOC	8270C	Benzo(ghi)perylene	<0.7	CCV > CL	R	None
PAFB-SD-A1-02B	SVOC	8270C	Benzo(ghi)perylene	<0.7	CCV > CL	R	None
PAFB-SD-A1-03	SVOC	8270C	Benzo(ghi)perylene	<0.7	CCV > CL	R	None
PAFB-SD-A2-01	SVOC	8270C	Benzo(ghi)perylene	<0.7	CCV > CL	R	None
PAFB-SD-A2-02	SVOC	8270C	Benzo(ghi)perylene	<0.7	CCV > CL	R	None
PAFB-SD-A3-01	SVOC	8270C	Benzo(ghi)perylene	<0.7	CCV > CL	R	None
PAFB-SD-A3-02	SVOC	8270C	Benzo(ghi)perylene	<0.7	CCV > CL	R	None
PAFB-SD-A3-03	SVOC	8270C	Benzo(ghi)perylene	<0.7	CCV > CL	R	None
PAFB-SD-A3-04	SVOC	8270C	Benzo(ghi)perylene	<0.7	CCV > CL	R	None
PAFB-SD-A3-05	SVOC	8270C	Benzo(ghi)perylene	<0.7	CCV > CL	R	None
PAFB-SD-A3-06A	SVOC	8270C	Benzo(ghi)perylene	<0.7	CCV > CL	R	None
PAFB-SD-A3-06B	SVOC	8270C	Benzo(ghi)perylene	<0.7	CCV > CL	R	None
PAFB-SD-A1-01	SVOC	8270C	Indeno(1,2,3-cd)pyrene	0.194	CCV > CL	R	None
PAFB-SD-A1-02	SVOC	8270C	Indeno(1,2,3-cd)pyrene	<0.7	CCV > CL	R	None
PAFB-SD-A1-02B	SVOC	8270C	Indeno(1,2,3-cd)pyrene	<0.7	CCV > CL	R	None
PAFB-SD-A1-03	SVOC	8270C	Indeno(1,2,3-cd)pyrene	<0.7	CCV > CL	R	None
PAFB-SD-A2-01	SVOC	8270C	Indeno(1,2,3-cd)pyrene	<0.7	CCV > CL	R	None
PAFB-SD-A2-02	SVOC	8270C	Indeno(1,2,3-cd)pyrene	<0.7	CCV > CL	R	None
PAFB-SD-A3-02	SVOC	8270C	Indeno(1,2,3-cd)pyrene	<0.7	CCV > CL	R	None
PAFB-SD-A3-03	SVOC	8270C	Indeno(1,2,3-cd)pyrene	<0.7	CCV > CL	R	None
PAFB-SD-A3-04	SVOC	8270C	Indeno(1,2,3-cd)pyrene	<0.7	CCV > CL	R	None
PAFB-SD-A3-05	SVOC	8270C	Indeno(1,2,3-cd)pyrene	<0.7	CCV > CL	R	None

Summary of Qualified Results

Field Sample ID	Analysis	Method	Target Analyte	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier	Data Impact[2]
PAFB-SD-A1-01-Reanalysis (RA)	SVOC	8270C	Dibenz(ah)athracene	<0.7	CCV > CL	R	None
PAFB-SD-A1-01	SVOC	8270C	Di-n-octylphthalate,	<1.6	IS < CL	R	Low Bias
PAFB-SD-A1-01	SVOC	8270C	Benzo(b)fluoranthene*,	1.3	IS < CL	R	Low Bias
PAFB-SD-A1-01	SVOC	8270C	Benzo(k)fluoranthene*,	0.803	IS < CL	R	Low Bias
PAFB-SD-A1-01	SVOC	8270C	Benzo(a)pyrene*,	0.836	IS < CL	R	Low Bias
PAFB-SD-A1-01	SVOC	8270C	Indeno(123-cd)pyrene*,	0.254	IS < CL	R	Low Bias
PAFB-SD-A1-01	SVOC	8270C	Dibenz(ah)anthracene,	<1.6	IS < CL	R	Low Bias
PAFB-SD-A1-01	SVOC	8270C	Benzo(ghi)perylene*	0.13	IS < CL	R	Low Bias
PAFB-SD-A1-01-Reanalysis (RA)	SVOC	8270C	Di-n-octylphthalate,	<1.6	IS < CL	R	Low Bias
PAFB-SD-A1-01-Reanalysis (RA)	SVOC	8270C	Benzo(b)fluoranthene*,	1.27	IS < CL	R	Low Bias
PAFB-SD-A1-01-Reanalysis (RA)	SVOC	8270C	Benzo(k)fluoranthene*,	0.75	IS < CL	R	Low Bias
PAFB-SD-A1-01-Reanalysis (RA)	SVOC	8270C	Benzo(a)pyrene*,	0.848	IS < CL	R	Low Bias
PAFB-SD-A1-01-Reanalysis (RA)	SVOC	8270C	Indeno(123-cd)pyrene*,	0.254	IS < CL	R	Low Bias
PAFB-SD-A1-01-Reanalysis (RA)	SVOC	8270C	Dibenz(ah)anthracene,	<1.6	IS < CL	R	Low Bias
PAFB-SD-A1-01-Reanalysis (RA)	SVOC	8270C	Benzo(ghi)perylene*	0.199	IS < CL	R	Low Bias
All Samples	SVOC	8270C	2-Chloronaphthalene	< 1.6	LCS < CL	R	Low Bias
PAFB-SD-A1-01	SVOC	8270C	Acenaphthylene	0.211	Result < RDL	F	Precision
PAFB-SD-A1-01	SVOC	8270C	Anthracene	0.114	Result < RDL	F	Precision
PAFB-SD-A1-01	SVOC	8270C	Benzo(a)anthracene	0.837	Result < RDL	F	Precision
PAFB-SD-A1-01	SVOC	8270C	Chrysene	1.02	Result < RDL	F	Precision
PAFB-SD-A1-01	SVOC	8270C	Phenanthrene	0.902	Result < RDL	F	Precision
PAFB-SD-A1-01 (RA)	SVOC	8270C	Acenaphthylene	0.19	Result < RDL	F	Precision
PAFB-SD-A1-01 (RA)	SVOC	8270C	Anthracene	0.108	Result < RDL	F	Precision
PAFB-SD-A1-01 (RA)	SVOC	8270C	Benzo(a)anthracene	0.836	Result < RDL	F	Precision
PAFB-SD-A1-01 (RA)	SVOC	8270C	Benzo(a)pyrene	0.836	Result < RDL	F	Precision
PAFB-SD-A1-01 (RA)	SVOC	8270C	Benzo(b)fluoranthene	1.3	Result < RDL	F	Precision
PAFB-SD-A1-01 (RA)	SVOC	8270C	Benzo(k)fluoranthene	0.803	Result < RDL	F	Precision
PAFB-SD-A1-01 (RA)	SVOC	8270C	Chrysene	1.01	Result < RDL	F	Precision

Table 2
Summary of Qualified Results

Field Sample ID	Analysis	Method	Target Analyte	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier	Data Impact[2]
PAFB-SD-A1-01 (RA)	SVOC	8270C	Phenanthrene	0.883	Result < RDL	F	Precision
PAFB-SD-A1-03	SVOC	8270C	Fluoranthene	0.0323	Result < RDL	F	Precision
PAFB-SD-A3-02	SVOC	8270C	Benzo(a)anthracene	0.0307	Result < RDL	F	Precision
PAFB-SD-A3-02	SVOC	8270C	Fluoranthene	0.0577	Result < RDL	F	Precision
PAFB-SD-A3-02	SVOC	8270C	Pyrene	0.0458	Result < RDL	F	Precision
PAFB-SD-A1-01	Metals	6010B	Lead	12.3	MS < CL	M	Low Bias
PAFB-SD-A1-01	Metals	6010B	Antimony	< 0.523	MS < CL	M	Low Bias
PAFB-SD-A1-01	Metals	6010B	Zinc	30.5	MS < CL	M	Low Bias
PAFB-SD-A1-01	Metals	6010B	Calcium	1720	MS > CL	M	High Bias
PAFB-SD-A1-01	Metals	6010B	Magnesium	757	MS > CL	M	High Bias
PAFB-SD-A1-01	Metals	6010B	Barium	19.2	MS RPD > CL	M	Precision
PAFB-SD-A1-01	Metals	6010B	Calcium	1720	MS RPD > CL	M	Precision
PAFB-SD-A1-02B	Metals	6010B	Calcium	902	DUP RPD > CL	J	Precision
PAFB-SD-A1-02B	Metals	6010B	Iron	10600	DUP RPD > CL	J	Precision
PAFB-SD-A1-02B	Metals	6010B	Manganese	169	DUP RPD > CL	J	Precision
PAFB-SD-A1-02B	Metals	6010B	Selenium	2.63	DUP RPD > CL	J	Precision
PAFB-SD-A1-02	Metals	6010B	Calcium	1510	FD RPD > CL	J	Precision
PAFB-SD-A1-02	Metals	6010B	Iron	7950	FD RPD > CL	J	Precision
PAFB-SD-A1-02	Metals	6010B	Lead	4.3	FD RPD > CL	J	Precision
PAFB-SD-A1-02	Metals	6010B	Magnesium	946	FD RPD > CL	J	Precision
PAFB-SD-A1-02	Metals	6010B	Manganese	137	FD RPD > CL	J	Precision
PAFB-SD-A1-02	Metals	6010B	Zinc	11.2	DUP RPD > CL	J	Precision
PAFB-SD-A1-02B	Metals	6010B	Calcium	902	FD RPD > CL	J	Precision
PAFB-SD-A1-02B	Metals	6010B	Iron	10600	FD RPD > CL	J	Precision
PAFB-SD-A1-02B	Metals	6010B	Lead	12.2	FD RPD > CL	J	Precision
PAFB-SD-A1-02B	Metals	6010B	Magnesium	574	FD RPD > CL	J	Precision
PAFB-SD-A1-02B	Metals	6010B	Manganese	169	FD RPD > CL	J	Precision
PAFB-SD-A1-02B	Metals	6010B	Zinc	9.53	FD RPD > CL	J	Precision
PAFB-SD-A3-06A	Metals	6010B	Aluminum	5180	FD RPD > CL	J	Precision
PAFB-SD-A3-06A	Metals	6010B	Barium	17.4	FD RPD > CL	J	Precision
PAFB-SD-A3-06A	Metals	6010B	Iron	8560	FD RPD > CL	J	Precision
PAFB-SD-A3-06A	Metals	6010B	Manganese	155	FD RPD > CL	J	Precision
PAFB-SD-A3-06A	Metals	6010B	Vanadium	12.4	FD RPD > CL	J	Precision
PAFB-SD-A3-06A	Metals	6010B	Zinc	14.5	FD RPD > CL	J	Precision
PAFB-SD-A3-06B	Metals	6010B	Aluminum	3610	FD RPD > CL	J	Precision
PAFB-SD-A3-06B	Metals	6010B	Barium	11.9	FD RPD > CL	J	Precision
PAFB-SD-A3-06B	Metals	6010B	Iron	6770	FD RPD > CL	J	Precision

Table 2
Summary of Qualified Results

Field Sample ID	Analysis	Method	Target Analyte	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier	Data Impact[2]
PAFB-SD-A3-06B	Metals	6010B	Manganese	95.8	FD RPD > CL	J	Precision
PAFB-SD-A3-06B	Metals	6010B	Vanadium	9.27	FD RPD > CL	J	Precision
PAFB-SD-A3-06B	Metals	6010B	Zinc	11.1	FD RPD > CL	J	Precision
PAFB-SD-A1-01	Metals	6010B	Beryllium	0.198	Result < RDL	F	Precision
PAFB-SD-A1-01	Metals	6010B	Chromium	7.34	Result < RDL	F	Precision
PAFB-SD-A1-01	Metals	6010B	Cobalt	2.02	Result < RDL	F	Precision
PAFB-SD-A1-01	Metals	6010B	Potassium	370	Result < RDL	F	Precision
PAFB-SD-A1-01	Metals	6010B	Silver	0.134	Result < RDL	F	Precision
PAFB-SD-A1-01	Metals	7841	Thallium	0.166	Result < RDL	F	Precision
PAFB-SD-A1-02	Metals	6010B	Beryllium	0.218	Result < RDL	F	Precision
PAFB-SD-A1-02	Metals	6010B	Chromium	6.68	Result < RDL	F	Precision
PAFB-SD-A1-02	Metals	6010B	Cobalt	2.28	Result < RDL	F	Precision
PAFB-SD-A1-02	Metals	6010B	Potassium	468	Result < RDL	F	Precision
PAFB-SD-A1-02	Metals	6010B	Silver	0.132	Result < RDL	F	Precision
PAFB-SD-A1-02	Metals	7841	Thallium	0.165	Result < RDL	F	Precision
PAFB-SD-A1-02B	Metals	6010B	Antimony	0.712	Result < RDL	F	Precision
PAFB-SD-A1-02B	Metals	6010B	Beryllium	0.2	Result < RDL	F	Precision
PAFB-SD-A1-02B	Metals	6010B	Chromium	5.55	Result < RDL	F	Precision
PAFB-SD-A1-02B	Metals	6010B	Cobalt	2.19	Result < RDL	F	Precision
PAFB-SD-A1-02B	Metals	6010B	Copper	1.28	Result < RDL	F	Precision
PAFB-SD-A1-02B	Metals	6010B	Potassium	213	Result < RDL	F	Precision
PAFB-SD-A1-02B	Metals	7841	Thallium	0.148	Result < RDL	F	Precision
PAFB-SD-A1-03	Metals	6010B	Beryllium	0.186	Result < RDL	F	Precision
PAFB-SD-A1-03	Metals	6010B	Chromium	6.57	Result < RDL	F	Precision
PAFB-SD-A1-03	Metals	6010B	Cobalt	1.91	Result < RDL	F	Precision
PAFB-SD-A1-03	Metals	6010B	Copper	1.92	Result < RDL	F	Precision
PAFB-SD-A1-03	Metals	6010B	Nickel	2.53	Result < RDL	F	Precision
PAFB-SD-A1-03	Metals	6010B	Potassium	500	Result < RDL	F	Precision
PAFB-SD-A1-03	Metals	7841	Thallium	0.162	Result < RDL	F	Precision
PAFB-SD-A2-01	Metals	6010B	Beryllium	0.148	Result < RDL	F	Precision
PAFB-SD-A2-01	Metals	6010B	Chromium	4.32	Result < RDL	F	Precision
PAFB-SD-A2-01	Metals	6010B	Cobalt	1.65	Result < RDL	F	Precision
PAFB-SD-A2-01	Metals	6010B	Copper	1.36	Result < RDL	F	Precision
PAFB-SD-A2-01	Metals	6010B	Potassium	335	Result < RDL	F	Precision
PAFB-SD-A2-01	Metals	7841	Thallium	0.134	Result < RDL	F	Precision
PAFB-SD-A2-02	Metals	6010B	Antimony	0.567	Result < RDL	F	Precision
PAFB-SD-A2-02	Metals	6010B	Beryllium	0.165	Result < RDL	F	Precision

Table 2
Summary of Qualified Results

Field Sample ID	Analysis	Method	Target Analyte	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier	Data Impact[2]
PAFB-SD-A2-02	Metals	6010B	Chromium	5.08	Result < RDL	F	Precision
PAFB-SD-A2-02	Metals	6010B	Cobalt	1.88	Result < RDL	F	Precision
PAFB-SD-A2-02	Metals	6010B	Copper	1.77	Result < RDL	F	Precision
PAFB-SD-A2-02	Metals	6010B	Potassium	399	Result < RDL	F	Precision
PAFB-SD-A2-02	Metals	7841	Thallium	0.121	Result < RDL	F	Precision
PAFB-SD-A3-01	Metals	6010B	Beryllium	0.12	Result < RDL	F	Precision
PAFB-SD-A3-01	Metals	6010B	Chromium	2.87	Result < RDL	F	Precision
PAFB-SD-A3-01	Metals	6010B	Cobalt	1.59	Result < RDL	F	Precision
PAFB-SD-A3-01	Metals	6010B	Copper	1.6	Result < RDL	F	Precision
PAFB-SD-A3-01	Metals	6010B	Nickel	1.91	Result < RDL	F	Precision
PAFB-SD-A3-01	Metals	6010B	Potassium	375	Result < RDL	F	Precision
PAFB-SD-A3-01	Metals	6010B	Selenium	0.992	Result < RDL	F	Precision
PAFB-SD-A3-01	Metals	7841	Thallium	0.11	Result < RDL	F	Precision
PAFB-SD-A3-02	Metals	6010B	Beryllium	0.227	Result < RDL	F	Precision
PAFB-SD-A3-02	Metals	6010B	Chromium	3.47	Result < RDL	F	Precision
PAFB-SD-A3-02	Metals	6010B	Cobalt	2.75	Result < RDL	F	Precision
PAFB-SD-A3-02	Metals	6010B	Copper	1.81	Result < RDL	F	Precision
PAFB-SD-A3-02	Metals	6010B	Potassium	493	Result < RDL	F	Precision
PAFB-SD-A3-02	Metals	7841	Thallium	0.123	Result < RDL	F	Precision
PAFB-SD-A3-03	Metals	6010B	Beryllium	0.13	Result < RDL	F	Precision
PAFB-SD-A3-03	Metals	6010B	Chromium	3.68	Result < RDL	F	Precision
PAFB-SD-A3-03	Metals	6010B	Cobalt	1.58	Result < RDL	F	Precision
PAFB-SD-A3-03	Metals	6010B	Copper	1.87	Result < RDL	F	Precision
PAFB-SD-A3-03	Metals	6010B	Potassium	436	Result < RDL	F	Precision
PAFB-SD-A3-03	Metals	6010B	Selenium	1.15	Result < RDL	F	Precision
PAFB-SD-A3-03	Metals	7841	Thallium	0.115	Result < RDL	F	Precision
PAFB-SD-A3-04	Metals	6010B	Beryllium	0.148	Result < RDL	F	Precision
PAFB-SD-A3-04	Metals	6010B	Chromium	4.79	Result < RDL	F	Precision
PAFB-SD-A3-04	Metals	6010B	Cobalt	2.16	Result < RDL	F	Precision
PAFB-SD-A3-04	Metals	6010B	Potassium	578	Result < RDL	F	Precision
PAFB-SD-A3-04	Metals	7841	Thallium	0.128	Result < RDL	F	Precision
PAFB-SD-A3-05	Metals	6010B	Antimony	0.551	Result < RDL	F	Precision
PAFB-SD-A3-05	Metals	6010B	Beryllium	0.201	Result < RDL	F	Precision
PAFB-SD-A3-05	Metals	6010B	Cadmium	0.0567	Result < RDL	F	Precision
PAFB-SD-A3-05	Metals	6010B	Chromium	4.49	Result < RDL	F	Precision
PAFB-SD-A3-05	Metals	6010B	Cobalt	2.2	Result < RDL	F	Precision
PAFB-SD-A3-05	Metals	6010B	Potassium	713	Result < RDL	F	Precision

Table 2
Summary of Qualified Results

Field Sample ID	Analysis	Method	Target Analyte	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier	Data Impact[2]
PAFB-SD-A3-05	Metals	7841	Thallium	0.11	Result < RDL	F	Precision
PAFB-SD-A3-06A	Metals	6010B	Beryllium	0.283	Result < RDL	F	Precision
PAFB-SD-A3-06A	Metals	6010B	Chromium	7.15	Result < RDL	F	Precision
PAFB-SD-A3-06A	Metals	6010B	Cobalt	2.7	Result < RDL	F	Precision
PAFB-SD-A3-06A	Metals	7841	Thallium	0.15	Result < RDL	F	Precision
PAFB-SD-A3-06B	Metals	6010B	Beryllium	0.205	Result < RDL	F	Precision
PAFB-SD-A3-06B	Metals	6010B	Chromium	5.16	Result < RDL	F	Precision
PAFB-SD-A3-06B	Metals	6010B	Cobalt	2.14	Result < RDL	F	Precision
PAFB-SD-A3-06B	Metals	6010B	Potassium	629	Result < RDL	F	Precision
PAFB-SD-A3-06B	Metals	7841	Thallium	0.155	Result < RDL	F	Precision

FOOTNOTES:

1) Reason for Qualification

CCV > CL:	Continuing Calibration %Difference > control limit (> 20%)
DUP RPD > CL	Duplicate analysis RPD greater than control limit (> 20%)
FD RPD > CL	Blind field duplicate analysis RPD > control limit (> 20%)
IS < CL	Internal Standard Area less than lower control limit
LCS < CL	LCS Recovery below the lower control limit
MS > CL	Matrix spike %Recovery above upper control limit
MS < CL	Matrix spike %Recovery below lower control limit
MS RPD > CL	Matrix spike/matrix spike duplicate analysis RPD greater than control limit
Result < RDL	Result above the MDL but less than the RDL and subject to poor preciison.

(2) Data Impact:

None:	The observed non-compliance does not impact the laboratory's abilty to detect this compound.
High Bias:	The associated reported result may overestimate the true value.
Low Bias:	The associated reported result may underestimate the true value or the possibility of a false non-detect exists.
Precision:	The associated reported result is subject to high variability.

Summary of Field Duplicate Results

Field Sample ID	Target Analytes	Sample Result (mg/kg)	Duplicate Result (mg/kg)	RDL (mg/kg)	RPD or Difference	Criteria (% or mg/kg)[1]	Qualifier
PAFB-SD-A1-02/ -02B (site A1-02)							
	VOCs						
	1,3,5-Trimethylbenzene	0.00238	< 0.003	0.003	0.001	± 0.006	
	Naphthalene	0.000684	< 0.002	0.002	0.001	± 0.004	
	Styrene	0.00182	< 0.002	0.002	0.000	± 0.004	
	Acetone	0.008	0.00458	0.008	-0.003	± 0.016	
	METALS						
	Aluminum	3620	3860	22	6.4%	0 - 20%	
	Antimony	0.57	0.712	1	0.43	± 2	
	Arsenic	1.92	1.57	1	0.35	± 2	
	Barium	15.9	14	1	-12.7%	0 - 20%	
	Beryllium	0.218	0.20	0.3	0.02	± 0.6	
	Calcium	1510	902	100	-50.4%	0 - 20%	J
	Chromium	6.68	5.55	20	1.1	± 40	
	Cobalt	2.28	2.19	10	0.1	± 20	
	Copper	2.34	1.28	2	1.1	± 4	
	Iron	7950	10600	3	28.6%	0 - 20%	J
	Lead	4.3	2.2	1	2.1	± 2	J
	Magnesium	946	574	100	-48.9%	0 - 20%	J
	Manganese	137	169	2	20.9%	0 - 20%	J
	Nickel	3.23	2.15	2	1.1	± 4	
	Potassium	468	213	610	255.0	± 1220	
	Selenium	2.06	2.63	1	-0.6	± 2	
	Silver	0.132	< 1	1	0.868	± 2	
	Sodium	51.1	26.9	10	24.2	± 20	
	Thallium	0.165	0.148	0.3	0.017	± 0.6	
	Vanadium	11.7	13.4	1	13.5%	0 - 20%	
	Zinc	11.2	9.53	1	-16.1%	0 - 20%	J

Table 3
Summary of Field Duplicate Results

Field Sample ID	Target Analytes	Sample Result (mg/kg)	Duplicate Result (mg/kg)	RDL (mg/kg)	RPD or Difference	Criteria (% or mg/kg)[1]	Qualifier
PAFB-SD-A3-06A/ -06B (site A3-06)							
	METALS						
	Aluminum	5180	3610	22	-35.7%	0 - 20%	J
	Arsenic	1.99	1.54	1	0.5	± 2	
	Barium	17.4	11.9	1	-37.5%	0 - 20%	J
	Beryllium	0.283	0.205	0.3	0.1	± 0.6	
	Calcium	1650	1430	100	-14.3%	0 - 20%	
	Chromium	7.15	5.16	20	2.0	± 40	
	Cobalt	2.7	2.14	10	0.6	± 20	
	Copper	4.15	2.71	2	1.4	± 4	
	Iron	8560	6770	3	-23.4%	0 - 20%	J
	Lead	2.04	2.01	1	0.03	± 2	
	Magnesium	1370	1140	100	-18.3%	0 - 20%	
	Manganese	155	95.8	2	-47.2%	0 - 20%	J
	Nickel	4.8	3.6	2	1.20	± 4	
	Potassium	968	629	610	339	± 1220	
	Selenium	1.98	1.7	1	0.28	± 2	
	Sodium	62.6	47.6	10	15	± 20	
	Thallium	0.15	0.155	0.3	-0.01	± 0.6	
	Vanadium	12.4	9.27	1	-28.9%	0 - 20%	J
	Zinc	14.5	11.1	1	-26.6%	0 - 20%	J

MEMORANDUM

TO: Rich Habrukowich, Versar, Bristol, PA

FROM: Donna Oswald/Harvey Pokorny, Versar, Lombard, IL

DATE: March 28, 2001

RE: **Data Validation/Usability Report for Plattsburgh AFB**
Construction and Demolition Debris Landfill, Confirmation Soil Samples

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1.0 INTRODUCTION

On December 7, 2000, thirty-three soil samples and three duplicate samples were collected at Plattsburgh AFB (Construction and Demolition Debris Landfill) from the sidewalls and bottom of trenches and excavation areas as well as test pits. Soil samples were sent to Kemron Environmental Services (Kemron), located in Marietta, Ohio, for analysis of volatiles (VOCs) by EPA Method SW8260B, semivolatiles (SVOCs) by EPA Method SW8270C and TAL metals by EPA methods 6010B and 7000 series. Analyses were preformed in accordance with Air Force Center for Environmental Excellence (AFCEE) Quality Assurance Project Plan (QAPP) Version 3.0 (March 1998) with the exception of several laboratory variances for VOCs and SVOCs. Several compounds not part of the AFCEE target analyte list for VOCs and SVOC were also included to satisfy NYDEC reporting requirements. Additional compounds are the VOCs acetone and 2-butanone, and the SVOC benzo(k)fluoranthene by EPA Method SW8270C. As these compounds are not included in the AFCEE QAPP, laboratory historical statistical limits were used to evaluate the VOC analytical results while benzo(k)fluoranthene was evaluated according to QAPP limits for its isomer benzo(b)fluoranthene. The analytical results are presented in Table 1. The laboratory variations from the AFCEE QAPP and case narratives are included as attachments to this memorandum.

The data were qualified in accordance with the validation protocols in the AFCEE QAPP, Version 3.0 (March 1998). Qualifiers resulting from the validation process were incorporated into Table 1. Table 2 is a summary of qualified results and the rationale behind the data qualification. The laboratory performed the initial review of the data package, and qualified the data in accordance with the AFCEE QAPP requirements. Final qualification of the data was made by the Versar project chemist based on results of the data validation. The following items were reviewed during the data validation process: chain of custody, sample condition upon receipt, extraction/analysis holding times, method detection/reporting limits, internal standards, surrogates, matrix spike/matrix spike duplicate (MS/MSD) analysis results, laboratory control sample (LCS) recoveries, initial and continuing calibrations, second source calibration verification standards, laboratory method and field QC blank contamination, instrument tuning, and report completeness.

The hierarchy of AFCEE qualifiers from most to least severe are as follows; "R" (rejected), "M" (matrix effect present), "F" (results above method detection limit, but below reporting limit), "J" (estimated value), "B" (blank contamination), "U" (not detected) and "D" (sample analyzed at a dilution).

Samples were received by Kemron intact and under proper chain-of-custody. The temperatures of the sample coolers upon receipt at the laboratory were 4 and 6°C.

2.0 VALIDATION

Volatile Data (Method 8260B)

All project specific QC criteria were met, except as indicated below:

In the Volatile Second Source Calibration standard (SSC), %difference (%D) results for Dichlorodifluoromethane exceeded the control limits specified in the AFCEE QAPP (25.6% versus criteria of %D $\leq$ 25%). Excessive variations in the results for the second source standard may indicate problems with the initial calibration for that compound. This compound was not detected in any of the associated samples. Per the QAPP non-detects (reporting limits) for Dichlorodifluoromethane are qualified "R". However, the deviation from criteria is minimal and should not impact the laboratory's ability to detect this compound.

In the Continuing Calibration Verification (CCV) run on 12/13/00, %D results for the compounds Chloromethane (28.8%), Bromomethane(29.1%) and Dichlorodifluoromethane (21.7%) exceeded the %D limits ($\leq$ 20%) specified in the AFCEE QAPP. In the CCV run on 12/14/00 the results for the compound Dichlorodifluoromethane (23%) and Bromomethane (20.9%) exceeded the control limits specified by the AFCEE QAPP. Positive results for these compounds in the samples run on the same date as the non-compliant CCV are qualified "R" per the QAPP. None of these compounds were detected in the associated samples. The deviation from criteria was minimal and should not impact the laboratory's ability to detect these compounds.

No target analytes were detected above the reporting limit (RL) in the laboratory method blanks. Trace levels (> MDL but < RL) of several target analytes were detected. 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, Naphthalene and 1,2,4-Trimethylbenzene were detected in each of the method blanks. Per the QAPP, qualification is only required for blank contamination above the PQL. The field results however are similar in magnitude to the observed blank contamination, therefore positive results for these compounds in the associated field samples should be considered either artifacts or biased high as a result of the observed laboratory contamination and therefore not representative of actual field conditions.

In the Volatile Laboratory Control Sample (LCS) analyzed on 12/14/00, the results for Dichlorodifluoromethane, was greater than the control limits in the AFCEE QAPP. The LCS analyzed on 12/15/00 yielded results for Dichlorodifluoromethane and 1,1,1,2-Tetrachloroethane that were all above the control limits specified in the

AFCEE QAPP. These results indicate the possibility of high bias; none of these compounds were reported in any of the associated samples, therefore no qualification is required.

Volatile surrogate recovery was acceptable for all samples.

In the MS/MSD analyses (performed on sample PAFB-SS03), poor precision and/or low bias was observed for a number of volatile compounds. The associated LCS results were acceptable indicating a matrix effect is likely responsible for the other observed out of control recoveries and poor precision. Associated results in this sample have been qualified with a "M". None of these compounds were detected in any of the other field samples. The bias should not preclude the use of these results to demonstrate compliance with action levels.

Several target analytes were detected below the RL but above the MDL. They are considered to be trace levels and were qualified "F" in accordance with the QAPP. Results for 1,2,4-Trimethylbenzene are suspected to be an artifact of laboratory blank contamination. The results for the other compounds are considered to be qualitatively acceptable but quantitatively suspect due to poor analytical precision near the limit of detection.

Semivolatile Data (Method 8270C)

All project specific QC criteria were met, except as indicated below.

In the initial calibration, the laboratory reported that several target compounds were more accurately quantitated using a linear regression (hexachlorocyclopentadiene, 2,4,6-tribromophenol and di-n-octyl phthalate), or a quadratic 2nd order curve (benzoic acid, 2,4-dinitrophenol, 4,6-dinitro-2-methyl phenol and pentachlorophenol) than by using an average response factor. Linearity acceptance criteria as specified in Table 7.2.10-3 of the AFCEE QAPP were met for these compounds. Minimum response factor and % relative standard deviation (%RSD) criteria as specified in Table 7.2.10-3 of the AFCEE QAPP were met for all other compounds.

The second source calibration (SSC) standard results did not meet criteria (%D $\leq$ 25%) for several target analytes in the initial calibrations associated with this project. The following exceeded the QC acceptance limits for % difference relative to the initial calibration: 4-chloroaniline (-56.6%), 3,3'-dichlorobenzidine (27.7%) and 3-nitroaniline (50.9%, 12/8/00 calibration on instrument MS4); 4-chloroaniline (-44.4%), 2-nitrophenol (29.6%), and 3-nitroaniline (-71.6%, 12/16/00 calibration on instrument MS5); and benzoic acid (-25.9%) and di-n-octylphthalate (28.4%) (12/21/00 on instrument MS5). Per the AFCEE QAPP, the results for these compounds are qualified "R" in the associated samples.

In the Continuing Calibration Verification (CCV) analyses, the % difference for hexachlorocyclopentadiene (29.5%) on 12/17/00 (MS5); bis(2-chloroisopropyl)ether (24.9%) on 12/19/00(MS4) and 4-Nitroaniline (22.8%) on 12/22/00 (MS5) exceeded calibration quality control criteria ($\leq$ 20%). Calibration results indicate that instrument sensitivity

for these compounds was marginally lower on the dates in question. In accordance with the AFCEE QAPP, the results for these compounds in the associated samples are qualified "R". None of these compounds were detected in any of the associated samples. Minor exceedences of daily calibration drift or SSC criteria typically have no impact on the laboratory's ability to detect a compound providing that sensitivity is acceptable. The non-detect results for these analytes should be acceptable for use.

No target analytes were detected above the MDL in the method blanks associated with this project.

QC acceptance criteria for the semi-volatile LCS were not met for 2-chloronaphthalene and hexachlorocyclopentadiene in the first LCS sample prepared on 12/14/00, while Benzoic acid was non-compliant in the second LCS prepared on that date. Associated samples are qualified "R" per the QAPP. See Table 2 for specific samples qualified. None of these compounds were detected in any of the associated samples and the LCS results are indicative of low bias.

Sample PAFB-05B exhibited low recovery for one surrogate. The sample was re-extracted and reanalyzed with similar results confirming a matrix effect. The results from the re-analysis were reported by the laboratory. Compounds associated with this surrogate, as specified in the QAPP, have been qualified R and are subject to low bias. See Table 2 for a listing of the impacted analytes.

A suspected matrix effect resulting in suppression of the recovery of the last internal standard was observed for numerous samples mostly from the pit (PAFB-P##) and sidewall (PAFB-S##) locations. Compounds of the polynuclear aromatic hydrocarbon (PNA) class were directly affected. It is suspected that this matrix effect is the result of asphaltic background particulate contained within the samples. All samples with non-compliant internal standard recoveries (typically carcinogenic PNAs) were re-analyzed by the laboratory with similar results. Results from the re-analysis were reported. Many of these samples with non-compliant internal standard areas were initially analyzed at a 2-fold or 5-fold dilution based on the color and viscosity of the sample extracts, resulting in a corresponding two to five-fold elevation of the reporting limits. Compounds quantitated using the non-compliant internal standard are qualified "R" per the QAPP. Specific compounds qualified are listed in Table 2. Multiple compounds were detected in the affected samples. Sample PAFB-S05 was also analyzed at a subsequent 20-fold dilution and the internal standard recovery was acceptable. Results for the impacted analytes in PAFB-S05 should be used from the 20-fold dilution even though they are associated with elevated reporting limits. All other analytes are reported from the original five-fold dilution. These PNA results should be considered qualitative identification of the target analytes, are quantitatively suspect, but serve as a lower estimate of the actual level of analyte present in the sample. Eleven of thirty PNA sample runs were flagged "R".

Qualified "R" PNA results were evaluated using general parameters outlined in Chapter 6 of *EPA-QA/G-4*, *Guidance for the Data Quality Objectives Process* (EPA/600/R-96/055, August 2000). Chapter 6 of this guidance

document deals with specifying tolerable limits on decision errors. Specifically, seven activities should be conducted to determine a tolerable probability for the occurrence of decision errors. These are:

- Determine source of error in the sample set data (described above)
- Establish a plausible range of values (assume a range of value from non-detect to cleanup objective order of magnitude)
- Evaluate two types of potential errors & their consequences (1: include data as lower estimate of value {conditionally accept}. This could lead to false negatives, or values with a low bias. 2: reject all R-flagged data. This would result in a data set diminished by 1/3, and a re-sampling event {possibly using different SW-846 methodology, such as Method 8310} might be required for PNAs.
- Determine how to handle decision errors: (Decision errors will be minimized due to minimal human exposure with the proposed remedial solution).
- Select the baseline condition of the environment assumed to be true in the absence of overwhelming evidence to the contrary (obtained valued will be compared to valid PNA data within the same sample. PNA contaminants usually exist together at similar concentrations. In most cases, a deduction of precision can be made within a sample based on concentrations of other PNAs).
- Specify a range of possible parameter values where consequences of a false acceptance decision error (gray region) are considered tolerable (assume a range of value from non-detect to cleanup objective order of magnitude as gray area. Most R-flagged samples are within this range. Exception to this are carcinogenic PNAs contained in sample PAFB-S05, with a 20-fold dilution, which falls outside of the above-defined "gray area".)

Based on the above criteria, it is recommended to conditionally accept R-flagged carcinogenic PNAs, with the exception of sample PAFB-S05, as shown on Table 2.

Samples PAFB-S08 and PAFB-B01 were selected by the laboratory for MS/MSD analysis. Naphthalene, hexachlorocyclopentadiene and 2-chloronaphthalene were biased low in PAFB-S08, while benzoic acid was biased low in PAFB-B01. Naphthalene was acceptable in the associated LCS while the other compounds were non-compliant. All of these compounds were acceptable in the associated continuing calibration verifications. All results are qualified "M" per the QAPP, however only naphthalene has been confirmed as a matrix effect as acceptable system control was not demonstrated for the other "M" flagged compounds.

Numerous target analytes were detected below the RL but above the MDL. They are considered to be trace levels and were qualified "F" in accordance with the QAPP. These are considered to be qualitatively acceptable but quantitatively suspect due to poor analytical precision near the limit of detection. These were mainly compounds of the PNA class. See discussion above for an evaluation of PNAs. All F-flagged PNA analyses are deemed to be conditionally acceptable.

Metals Data (Methods 6010B, 7841, 7471)

All project specific QC criteria were met and all results are acceptable for use, except as indicated below.

Samples PAFB-P01, and PAFB-B02 was used as the MS/MSD for samples analyzed for metals by Method 6010B, 7841, and 7471. Lead and antimony exhibited low bias in PAFB-P01, while aluminum, magnesium, manganese, calcium and iron had poor precision and antimony were biased low in PAFB-B02. Analytical control was demonstrated by acceptable LCS recoveries, therefore the observed biases are likely due to a matrix effect. Metals associated with matrix spike bias and or poor precision are qualified "M" for use as estimates per the QAPP.

Numerous target analytes were detected below the RL but above the MDL. They are considered trace levels and were qualified "F" in accordance with the QAPP. These results are qualitatively acceptable but quantitatively suspect due to poor analytical precision near the limit of detection.

Field Duplicate Evaluations

Samples PAFB-B09A/ PAFB-B09B, PAFB-P05A / PAFB-P05B and PAFB-S07A/PAFB-S07B were field duplicate pairs. No QAPP criteria exist for field duplicate analyses, therefore matrix spike/matrix spike RPD criteria as defined in the QAPP were used for evaluation purposes for results greater than 5 x RDL (other results were evaluated against criteria of $\pm$ 2 x RDL). This evaluation scheme is based on guidance presented for the evaluation of field duplicates in "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", EPA-540/R-94-013. Field duplicate results are summarized in Table 3.

No VOC target analytes were detected above the RDL in any of the samples. Trace levels were detected in several of the samples. Results for 1,2,4-trimethylbenzene have already been identified as suspected laboratory artifacts. No criteria in the QAPP exists for the evaluation of field duplicates. For results less than 5 x RDL, criteria of $\pm$ 2 x RDL is commonly used. All positive results met guidance of $\pm$ 2 x RDL, therefore acceptable field precision was demonstrated for VOCs.

No SVOC target analytes were detected above the RDL in any of the samples, therefore acceptable field precision was demonstrated for SVOCs. Trace levels (below the RDL) or concentrations just near the RDL were detected for numerous polynuclear aromatics (PNAs) in all samples. All positive results met guidance of $\pm$ 2 x RDL, therefore acceptable field precision was demonstrated for SVOCs.

Acceptable precision (RPD $\leq$ 20% or $\pm$ 2 x RDL) was demonstrated for all metals except aluminum, barium, calcium, iron, lead, manganese, potassium and vanadium in the samples collected from site B09, magnesium and manganese at site P05 and calcium from site S07. As the daily LCS met criteria, the poor precision is likely due to

sample heterogeneity. Metals associated with poor field precision are qualified "J" for use as estimates. The actual concentration is somewhere in the range bordered by the results from the 2 sample analyses.

3.0 COMPLETENESS

The AFCEE QAPP goal for completeness is 90% for soil matrixes. Percent completeness is defined as the number of valid results divided by the total number of individual target compound results. Valid results are those that have not been rejected (qualified "R"). The percent completeness for each method and matrix is as follows:

Method	Matrix	Percent Completeness
Volatiles (SW8260B)	Soil	96.8%
Semivolatiles (SW8270C)	Soil	89.2%
Metals	Soil	100%

The completeness goal of 90% was met for the soil samples except for semivolatiles. Approximately 3% of the SVOC results were qualified "R" for problems that have been confirmed by the laboratory as a matrix effect (non-compliant internal standard areas and low surrogate recoveries) and therefore outside of the control of the laboratory. Exclusive of these results %completeness for SVOCs rises to 92.1%. Overall percent completeness for all parameters was 94%.

ATTACHMENTS

VARIANCES

AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE
ENVIRONMENTAL RESTORATION SERVICES
BROOKS AFB, TX 78235

29 Nov 00

MEMORANDUM FOR HQ AFCEE/ERB
ATTENTION: Roy Willis/RTC/Plattsburg AFB

FROM: Burt Harrison
Environmental Chemistry Consultant
AFCEE/ERC
3207 North Road
Brooks AFB, Tx 78235

SUBJECT: Environmental Chemistry Review of the Kemron Laboratory QAPP Variances Prepared by Versar for the Plattsburg AFB Project.

References: (a) Handbook for the Installation Restoration Program (IRP) - Remedial Investigation/Feasability Studies (RI/FS), AFCEE, Sept. 1993. (b) U.S. EPA Test Methods for Evaluating Solid Wastes (SW 846), third edition, July 1992. (c) HQ AFCEE Quality Assurance Project Plan, March 1998.

A review of the Quality Assurance Project Plan variances for the Plattsburg AFB, NY project prepared by Versar are acceptable with the following exceptions. Recommend sample results be reported on a dry weight basis except for SW5035 samples where it is not possible. Concur with all Reporting Limit variances if approved by the New York State RPM and the USEPA RPM. Do not concur with calibration variances. Do not concur with recovery limits lower than 20% for any analyte for any analytical procedure. Concur with the MDL variance request after a survey of a number of AFCEE laboratories concerning this MDL issue requirement.

If you have any questions regarding this review or these comments, please contact me at (210) 536-5226.

Burt Harrison
Environmental Chemistry Consultant
Consultant Operations Division
AFCEE/ERC

QAPP Section 4.3.1- MDL Spike Levels

AFCEE REQUIREMENT:

Item (6) of Section 4.3.1 states "If the spike level in step 2 is more than five times the calculated MDL, repeat the process using a smaller spiking level."

VARIANCE REQUEST:

The laboratory requests a variance to change "five times" to read "ten times".

JUSTIFICATION:

The analytes that fail the "five times" criteria are on those instruments or methods that are very precise and have low relative standard deviations. Any procedure with a relative standard deviation less than 6.67% (at the spiked level) will produce MDLs that do not meet the 'fives times" criteria. Furthermore, this process tends to underestimate the MDL, so repeating the process at a lower spiking level may not produce meaningful data, particularly, if the spike level is below the quantitation limit (lowest calibration standard).

If so desired, the MDLs for those few analytes that fail the "five times" criteria MDL could be assigned a value equal to one-tenth the spike level, or one-half the project required RL, whichever is higher. This will assure that all project DQOs related to the MDLs and RLs will be met.

KEMRON meets the EPA criteria that the spike concentration should not exceed ten times the estimated MDL and AFCEE has accepted this interpretation on previous projects.

QAPP Section 8.2 – Wet Weight vs Dry Weight

AFCEE REQUIREMENT:

Section 8.2 of the AFCEE QAPP V3.0 requires that "A wet weight aliquot of sample equivalent to the method specified dry weight aliquot of sample shall be taken for analysis."

KEMRON VARIANCE REQUEST:

The laboratory requests a variance to allow the method prescribed sample weights to be determined on the "as-received" basis, as specified in SW846.

JUSTIFICATION:

1) Increasing the amount of wet weight changes the sample/solvent ratios, which may significantly reduce the recovery of analytes from the matrix, resulting in poor surrogate recovery and more R flagged data. Altering the sample/solvent reagent ratios is a direct violation of the SW-846 methods.2) Organic extraction methods such as 3540, 3545 and 3550 have a limit on the quantity of sample they can effectively process. 3) The QAPP procedure cannot be applied to samples collected by method 5035 for volatile organic analysis.

QAPP Section 7.2.9-1 SW8260 Reporting Limits

KEMRON VARIANCE REQUEST:

Reporting limit (RL) variances for the following analytes:

Analyte	AFCEE RL (ug/L)	Proposed RL (ug/L)
1,1,2,2 Tetrachloroethane	0.4	0.8
1,1-Dichloroethane	0.4	0.5
1,2,3-Trichlorobenzene	0.3	1
1,2,4-Trichlorobenzene	0.4	2
1,2-Dichlorobenzene	0.3	1
1,2-Dichloropropane	0.4	0.5
1,3-Dichloropropane	0.4	0.5
1-Chlorohexane	0.5	1
1,4-Dichlorobenzene	0.3	1

2-Chlorotoluene	0.4	1
Benzene	0.4	0.5
Bromobenzene	0.3	1
Bromochloromethane	0.4	0.5
Bromodichloromethane	0.8	1
Chlorobenzene	0.4	0.5
Chloroform	0.3	0.5
Ethylbenzene	0.6	1
Methylene Chloride	0.3	2
n-propylbenzene	0.4	1
Naphthalene	0.4	1
Styrene	0.4	1
Trichlorofluoromethane	0.8	1
Dibromochloromethane	0.5	0.6
1,2-Dichloroethane	0.6	0.7
m,p-Xylene		1

JUSTIFICATION:

The laboratory low calibration standard is not at the AFCEE RL. The proposed RL will meet the project requirements.

AFCEE REQUIREMENT:

Table 7.2.9-1 lists m-Xylene and p-Xylene as separate analytes.

KEMRON VARIANCE REQUEST:

KEMRON requests a variance to report m-Xylene and p-Xylene as one analyte, since the compounds co-elute.

QAPP Section 7.2.9 SW5035 Preservation

VARIANCE REQUEST:

KEMRON requests that method 5035 soil preservation be limited to freezing and that the holding time be accepted as 14 days.

JUSTIFICATION:

This variance is needed to prevent the degradation of performance of several (8260) target analytes and the failure of these analytes to meet the QAPP 3.0 quality control requirements for the second source verification and continuing calibration verification (CCV). The analytes most affected by affected by the sodium bisulfate are clorodifluoromethane, chloromethane, vinyl chloride, bromomethane, chloroethane, and trichlorofluromethane. These compounds have a high probability of failing ICV/CCV criteria, resulting in R flags on all samples. Using the freezing option will eliminate these problems. The freezing option and 14-day hold time is being accepted by some states and selected US-EPA regions.

QAPP Section 7.2.9 SW5035 Preservation

VARIANCE REQUEST:

KEMRON requests a variance to change the second source initial calibration verification (ICV) and continuing calibration verification (CCV) criteria from +/- 25 % to +/- 40% for clorodifluoromethane, chloromethane, vinyl chloride, bromomethane, chloroethane, and trichlorofluromethane.

JUSTIFICATION:

These compounds are very prone to ICV/CCV failure when sodium bisulfate is used as a preservative. Without the variance these compounds will probably have to be R-flagged.

QAPP Section 7.2.10 SW8270 Surrogate Control Limit

AFCEE REQUIREMENT:

Table 7.2.10-2 lists the acceptance limit for phenol-D5 as 25-125 % recovery in water.

KEMRON VARIANCE REQUEST:

KEMRON requests a variance to use 10 – 125 % recovery as the acceptance limit in water

JUSTIFICATION:

Phenol recovery above 10% is not achievable routinely due to poor extraction efficiency. Industry-wide statistics do not support the 25 – 125 % recovery limit.

QAPP Section 7.2.10 SW8270 LCS Control Limits

AFCEE REQUIREMENT: see table below

VARIANCE REQUEST:

LCS Control Limit variances for 8270 compounds in water:

Compound	AFCEE LCS LIMITS	PROPOSED LCS LIMITS
Phenol	25-125	20-125
2-Chloronaphthalene	60-125	49-120
Hexachlorocyclopentadiene	Delete as a target analyte	
Benzoic Acid	25-162	20-125
3,3'-Dichlorobenzidine	29-175	20-125
Phenol-d5 (surrogate)	25-125	20-125

JUSTIFICATION:

These compounds are industry-wide poor performers and consistently give recoveries below the AFCEE lower control limits. Hexachlorocyclopentadiene has been proposed for deletion as an analyte from the AFCEE 3.1 QAPP. The proposed limits are taken from the AFCEE 3.1 QAPP.

QAPP Section 7.2.15-1 SW6010B ICP

KEMRON VARIANCE REQUEST:

Reporting limit (RL) variances for the following analytes in water:

Analyte	AFCEE RL (mg/L)	Proposed RL (mg/L)
Zinc	0.01	0.02

JUSTIFICATION:

The proposed RL will meet the project requirements.

QAPP Section 7.2.17-27 SW7000 Method Variance - Water

AFCEE REQUIREMENT:

AFCEE projects often specify that arsenic, antimony, chromium, cadmium, lead, selenium, thallium and vanadium shall be performed by their respective 7000 – GFAA methods:

Metal	Method	AFCEE RL (mg/L)
Arsenic	7060A	0.005
Chromium	7191	0.005
Cadmium	7131A	0.001
Lead	7421	0.005
Vanadium	7911	0.004
Antimony	7041	0.005
Selenium	7740	0.005
Thallium	7841	0.001

KEMRON VARIANCE REQUEST:

Method Variance:
KEMRON requests a variance to use Method 6010B or 6020A in lieu of the GFAA methods. Analyzing these metals by ICP-AES or ICP-MS will not elevate the reporting limits, but will eliminate the inherent errors of GFAA methods:

Metal	Method	Proposed RL (mg/L)
Arsenic	6010B/6020A	0.005
Chromium	6010B	0.005
Cadmium	6010B	0.001
Lead	6010B/6020A	0.005
Vanadium	6010B	0.004
Antimony	6020A	0.005
Selenium	6020A	0.005
Thallium	6020A	0.001

JUSTIFICATION:

The proposed RLs are equal to the 7000 method RLs and meet the project DQOs.

QAPP Section 7.2.17-27 SW7000 Method Variance - Soil

AFCEE REQUIREMENT:

AFCEE DQOs often specifies that arsenic, antimony, selenium, thallium, chromium, cadmium, lead and vanadium be performed by their respective 7000 – GFAA methods:

KEMRON VARIANCE REQUEST:

Method Variance:
KEMRON requests a variance to use Method 6010B or 6020A in lieu of the GFAA methods. KEMRON will use a method that will meet the project action limits, either by ICP-AES or ICP-MS. The following RLs are proposed:

	AFCEE 7000 RL (mg/kg)	Proposed 6010 RL (mg/kg)	Proposed 6020A RL (mg/kg)
Antimony	0.5	1	0.2
Arsenic	0.5	1	0.5
Lead	0.5	1	0.5
Selenium	0.5	1	0.5
Vanadium	0.4	0.5	N/A
Chromium	0.5	0.5	N/A
Cadmium	0.1	0.1	N/A
Thallium	0.1	2	0.1

JUSTIFICATION:

Project DQOs will not be affected, and the inherent errors of GFAA methods will be eliminated.

QAPP Section 7.2.17-27 SW7000 Reporting Limits - Soil

KEMRON VARIANCE REQUEST:

Reporting limit variance for the following analyte:

Analyte	AFCEE RL (mg/kg)	Proposed RL (mg/kg)
Thallium	0.1	0.25

JUSTIFICATION:

The laboratory MDL does not support the AFCEE RL.This variance is needed if 7000 methods are required.

KEMRON VARIANCE REQUEST:

Reporting limit variance for the following analyte:

Analyte	AFCEE RL (mg/L)	Proposed RL (mg/L)
Thallium	0.001	0.005
Antimony	0.005	0.006

JUSTIFICATION:

The laboratory MDLs for the 7000 methods do not support the AFCEE RL.This variance is needed if 7000 methods are required.

CHAIN OF CUSTODIES

COC No. B J3151

109 Starlite Park
Marietta, OH 45750

KEMRON ENVIRONMENTAL SERVICES
CHAIN-OF-CUSTODY RECORD

Phone: 740-373-4071
Fax: 740-373-4835

Company Name: VERSAR

Project Contact: BRYAN FOLEY | Contact Phone #: (215) 913 1132

Turn Around Requirements: STANDARD | Location: PLATTSBURGH, NY

Project #: 45 21 . 441 | Project Name: C 3 B LANDFILL

Sampler (print): BRYAN FOLEY | Signature: [signature]

Program: ☐ NPDES ☐ AFCEE (circled) ☐ RCRA ☐ USACE ☐ Other

Mail Report To: RICK HABRUKOWICH
1900 FROST RD. SUITE 110
BRISTOL, PA 19007

ERPIMS REQUIRED FIELDS

Sample I.D. No	Location I.D.	SBD	SED	Date	Time	Comp*	Grab	Number of Containers	TAL METALS AF98	826-AF98	827-AF98	Comments	SACODE	COOLER ID	ABLOT	EBLOT	TBLOT
PAFB-P01				12/7/00	8:00	X	X	3	X	X	X						
PAFB-P02					8:10	X	X	3	X	X	X						
PAFB-P03					8:20	X	X	3	X	X	X						
PAFB-P04					8:30	X	X	3	X	X	X						
PAFB-P05A					8:40	X	X	3	X	X	X						
PAFB-P05B					8:40	X	X	3	X	X	X						
PAFB-P06					8:50	X	X	3	X	X	X						
PAFB-P07					9:00	X	X	3	X	X	X						
PAFB-P08					9:10	X	X	3	X	X	X						
PAFB-S01					9:15	X	X	3	X	X	X						
PAFB-S02					9:20	X	X	3	X	X	X						
PAFB-S03					9:25	X	X	3	X	X	X						
PAFB-S04					9:30	X	X	3	X	X	X						
PAFB-S05					9:35	X	X	3	X	X	X						
PAFB-S06					9:40	X	X	3	X	X	X						
PAFB-S07B					9:45	X	X	3	X	X	X						
PAFB-S07A					9:45	X	X	3	X	X	X						
PAFB-S08					9:50	X	X	3	X	X	X						
PAFB-S09					9:55	X	X	3	X	X	X						
PAFB-B01					10:00	X	X	3	X	X	X						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
[signature]							

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Cooler Temp in °C	Remarks:
			Brenda Gregory	12/11/00	1001	4	C/C Sealed & intact

* Homogenize all composite samples prior to analysis

250

COC No. B (J3150

109 Starlite Park
Marietta, OH 45750

KEYSTONE
ENVIRONMENTAL SERVICES
CHAIN-OF-CUSTODY RECORD

Phone: 740-373-4071
Fax: 740-373-4835

Company Name: VERSAR

Project Contact: BRYAN FOLEY
Contact Phone #: (715) 513 1132
Turn Around Requirements: STANDARD
Location: ALTOONA, NY
Project #: 45-21.441
Project Name: C3D LANDFILL
Sampler (print): BRYAN FOLEY
Signature:

Program: ☐ NPDES ☐ AFCEE ☐ RCRA ☐ USACE ☐ Other

Mail Report To: RICH HARBACHUK
1900 FROST RD SUITE 110
BRIDGEVILLE, PA 19007

ERPIMS REQUIRED FIELDS

Sample I.D. No	Location I.D.	SBD	SED	Date	Time	Comp*	Grab	NUMBER of CONTAINERS	TAL METAL - AF98	826 - AF98	827 - AF98	Comments	SACODE	COOLER ID	LOT CONTROL NUMBERS ABLOT	EBLOT	TBLOT
PAFB-B02				12/9/00	10:05	X	X	3	X	X	X						
PAFB-B03					10:10	X	X	3	X	X	X						
PAFB-B04					10:15	X	X	3	X	X	X						
PAFB-B05					10:20	X	X	3	X	X	X						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Cooler Temp in °C	Remarks
			Brenda Gregory	12/11/00	1001	2	C/C Dealed Sub intact

* Homogenize all composite samples prior to analysis

Page 2 of 2

COC No. B J3154

109 Starlite Park
Marietta, OH 45750

KEMRON ENVIRONMENTAL SERVICES
CHAIN-OF-CUSTODY RECORD

Phone: 740-373-4071
Fax: 740-373-4835

Company Name: VERSAR

Project Contact: BRYAN FOLEY | Contact Phone #: (215) 913 1132

Turn Around Requirements: STANDARD | Location: PLATTSBURGH, NY

Project #: 4521. 441 | Project Name: C, D LANDFILL

Sampler (print): BRYAN FOLEY | Signature: [signature]

Program: ☐ NPDES ☐ AFCEE (circled) ☐ RCRA ☐ USACE ☐ Other ____

Mail Report To: RICH HABRUKOWICH
1900 FROST RD. SUITE 110
BRISTOL, PA. 19007

ERPIMS REQUIRED FIELDS

Sample I.D. No / Location I.D.	SBD	SED	Date	Time	Comp*	Grab	NUMBER of CONTAINERS	METAL TAL - AF98	826 - AF98	827 - AF98	Comments	SACODE	COOLER ID	ABLOT	EBLOT	TBLOT
PAFB - B06			10/7/00	10:25	X	X	3	X	X	X						
PAFB - B07			↓	10:30	X	X	3	X	X	X						
PAFB - B08				10:35	X	X	3	X	X	X						
PAFB - B09 B				10:40	X	X	3	X	X	X						
PAFB - B09 A				10:45	X	X	3	X	X	X						
PAFB - B10				10:50	X	X	3	X	X	X						
PAFB - B11				10:55	X	X	3	X	X	X						
PAFB - B12				11:00	X	X	3	X	X	X						
PAFB - B13				11:05	X	X	3	X	X	X						
PAFB - S10				11:10	X	X	3	X	X	X						
PAFB - S11				11:15	X	X	3	X	X	X						
PAFB - S12				11:20	X	X	3	X	X	X						
PAFB - Sp01				11:25	X	X	2	X	[illegible]	X						
PAFB - Sp02				11:30	X	X	2	X		X						
PAFB - Sp03				11:35	X	X	2	X		X						
PAFB - Sp14				11:40	X	X	2	X		X						
PAFB - Sp05				11:45	X	X	2	X		X						
PAFB - Sp06				11:50	X	X	2	X		X						
PAFB - Sp07				11:55	X	X	2	X		X						
PAFB - Sp08			↓	12:00	X	X	2	X		X						

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
[signature]							

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Cooler Temp in °C	Remarks
			Brenda Gregory	10/11/00	1001	6	C/C sealed & intact

* Homogenize all composite samples prior to analysis

Page 1 of 2

COC No. B ( )3152

109 Starlite Park
Marietta, OH 45750

KEYSTONE ENVIRONMENTAL SERVICES

Phone: 740-373-4071
Fax: 740-373-4835

CHAIN-OF-CUSTODY RECORD

Company Name: VERSAR

Project Contact: BRYAN FOLEY
Contact Phone #: 215 913 1132

Turn Around Requirements: STANDARD
Location: PLATTSBURGH, NY

Project #: 4501.441
Project Name: C30 LAND FILL

Sampler (print): BRYAN FOLEY
Signature:

Program: ☐ NPDES ☑ AFCEE ☐ RCRA ☐ USACE ☐ Other

Mail Report To: RICH HABRUKOWICH
1900 FROST RD SUITE 110
BRISTOL, PA 19007

ERPIMS REQUIRED FIELDS

Sample I.D. No	Location I.D.	SBD	SED	Date	Time	Comp*	Grab	NUMBER of CONTAINERS	TAL METAL - AF98	827 - AF98	SACODE	COOLER ID	LOT CONTROL NUMBERS ABLOT	EBLOT	TBLOT	Comments
PAFB-SP09				12/11/00	12:05	X	X	2	X	X						
PAFB-SP10					12:10	X	X	2	X	X						
PAFB-SP11					12:15	X	X	2	X	X						
PAFB-SP12					10:20	X	X	2	X	X						
				VT												

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Cooler Temp in °C	Remarks:
			Blenda Gregory	12/11/00	1001	6	C/C dated Sp untact 1019

* Homogenize all composite samples prior to analysis

CASE NARRATIVES

TEST CERTIFICATE

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750
Phone: (740) 373-4071

Versar, Inc. Division 35
1900 Frost Road
Suite 110
Bristol, PA 19007
Attention: Rich Habrukowich

PO Number:
Account Number: VERSAR-PA-318

Login #: L0012228
Report Date: 12/28/00
Work ID: C&D LANDFILL
Date Received: 12/11/00

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
L0012228-01	PAFB-P01	L0012228-02	PAFB-P02
L0012228-03	PAFB-P03	L0012228-04	PAFB-P04
L0012228-05	PAFB-P05A	L0012228-06	PAFB-P05B
L0012228-07	PAFB-P06	L0012228-08	PAFB-P07
L0012228-09	PAFB-P08	L0012228-10	PAFB-S01
L0012228-11	PAFB-S02	L0012228-12	PAFB-S03
L0012228-13	PAFB-S04	L0012228-14	PAFB-S05
L0012228-15	PAFB-S06	L0012228-16	PAFB-S07B
L0012228-17	PAFB-S07A	L0012228-18	PAFB-S08
L0012228-19	PAFB-S09	L0012228-20	PAFB-B01
L0012228-21	PAFB-B02	L0012228-22	PAFB-B03
L0012228-23	PAFB-B04	L0012228-24	PAFB-B05
L0012228-25	PAFB-B06	L0012228-26	PAFB-B07
L0012228-27	PAFB-B08	L0012228-28	PAFB-B09B
L0012228-29	PAFB-B09A	L0012228-30	PAFB-B10
L0012228-31	PAFB-B11	L0012228-32	PAFB-B12
L0012228-33	PAFB-B13	L0012228-34	PAFB-S10
L0012228-35	PAFB-S11	L0012228-36	PAFB-S12
L0012228-37	PAFB-SP01	L0012228-38	PAFB-SP02
L0012228-39	PAFB-SP03	L0012228-40	PAFB-SP04
L0012228-41	PAFB-SP05	L0012228-42	PAFB-SP06
L0012228-43	PAFB-SP07	L0012228-44	PAFB-SP08
L0012228-45	PAFB-SP09	L0012228-46	PAFB-SP10
L0012228-47	PAFB-SP11	L0012228-48	PAFB-SP12

KEMRON ENVIRONMENTAL SERVICES

All results on solids/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the written approval of KEMRON.

NYSDOH ELAP ID: 10861

David L. Bumgarner

Certified By
David L. Bumgarner

RL = Reporting Limit

KEMRON ENVIRONMENTAL SERVICES

KEMRON ENVIRONMENTAL SERVICES
REPORT NARRATIVE

L0012228

CHAIN OF CUSTODY:

The chains of custody numbers were 103151, 103150, 103154, and 103152.

SHIPMENT CONDITIONS:

The chain of custodies were received sealed in coolers. The cooler temperatures were 4 and 6° C.

SAMPLE MANAGEMENT:

All samples were received intact.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

REVIEWED: Angela B. Wright DATE: 12-14-00

REPORT NARRATIVE
GC/MS VOLATILE ORGANICS

KEMRON Login No: L0012228

METHOD

Preparation: SW- 846 5030B
Analysis: SW-846 8260B

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

Alternate Source Standards: The alternate source analyzed on HPMS-11 yielded a %D for dichlorodifluoromethane that exceeded the criteria of less than +/- 25%. All other acceptance criteria were met.

Continuing Calibration and Tune: The CCV analzyed on 12/13/00 on HPMS-11 yielded %D's for dichlorodifluoromethane, chloromethane and bromomethane that exceeded the criteria of less than +/- 20%.

The CCV analyzed on 12/14/00 on HPMS-11 yielded %D's for dichlorodifluoromethane and bromomethane that exceeded the criteria of less than +/- 20%. All other acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Samples: The LCS analyzed on 12/14/00 yielded a % recovery for dichlorodifluoromethane that was above the upper advisory limit.

The LCS analyzed on 12/15/00 yielded % recoveries for dichlorodifluoromethane and 1,1,1,2,-tetrachloroethane that were above the upper advisory limits. These recoveries would favor a false positive, or bias high result; however, none of these LCS outliers were detected in any of the associated samples above the reporting limits. All other acceptance criteria were met.

Matrix Spikes: Sample fraction 12 was chosen internally for MS/MSD analyses and yielded % recoveries for multiple compounds which were outside of the advisory limits.

SAMPLES

Internal Standards: All acceptance criteria were met.
Surrogates: All acceptance criteria were met.
Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: RSS REVIEWED Stephanie J Lopez DATE: 2/21/03

Rev. 7/14/00

REPORT NARRATIVE
GC/MS SEMIVOLATILE ORGANICS

KEMRON Report No.: L0012228

METHOD

Preparation: SW- 846 3550B(Soils) 3510C(Waters)
Analysis: SW-846 8270C

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample fractions 03, 19, 37, 40, 41, 42, 43, 44, 45, 46 and 47 were analyzed at a 2x dilution and fractions 07, 10, 14, 38, 39 and 48 were analyzed at a 5x dilution due to appearance and viscosity.

CALIBRATION

Initial calibrations: For all compounds which yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

Alternate Source Standards: The alternate source standard analyzed on HPMS4 on 12/8/00 yielded a %D for 4-chloroaniline, 3-nitroaniline and 3,3'-dichlorobenzidine that exceeded the criteria of less than +/-25%.

The alternate source standard analyzed on HPMS5 on 12/16/00 yielded a %D for 2-nitrophenol, 4-chloroaniline and 3-nitroaniline that exceeded the criteria of less than +/-25%.

The alternate source standard analyzed on HPMS3 on 12/17/00 yielded a %D for benzoic acid, 4-chloroaniline and 3-nitroaniline that exceeded the criteria of less than +/-25%.

The alternate source standard analyzed on HPMS5 on 12/21/00 yielded a %D for benzoic acid, 2,4-dinitrophenol and di-n-octyl phthalate that exceeded the criteria of less than +/-25%. In each case flags, were applied accordingly. All other acceptance criteria were met.

Continuing Calibration and Tune: The CCV analyzed on 12/17/00 on HPMS3 yielded a %D for hexachlorocyclopentadiene and 3,3'-dichlorobenzidine that exceeded the criteria of less than +/- 20%.

The CCV analyzed on 12/17/00 on HPMS4 yielded a %D for benzyl alcohol and bis(2-chloroisopropyl)ether that exceeded the criteria of less than +/- 20%.

The CCV analyzed on 12/17/00 on HPMS5 yielded a %D for hexachlorocyclopentadiene that exceeded the criteria of less than +/- 20%.

The CCV analyzed on 12/19/00 on HPMS4 yielded a %D for hexachlorocyclopentadiene that exceeded the criteria of less than +/- 20%.

The CCV analyzed on 12/20/00 on HPMS5 yielded a %D for 4-nitroaniline and 3,3'-dichlorobenzidine that exceeded the criteria of less than +/- 20%.

The CCV analyzed on 12/22/00 on HPMS5 yielded a %D for 4-nitroaniline that exceeded the criteria of less than +/- 20%. In each case flags were applied accordingly. All other acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Samples: The LCS associated with extraction lab volume 152 page 123 extracted on 12/14/00 yielded % recoveries for hexachlorocyclopentadiene and 2-chloronaphthalene that were below the lower advisory limits .

The LCS associated with extraction lab volume 152 page 141 extracted on 12/14/00 yielded a % recovery for benzoic acid that was below the lower advisory limits . Samples were flagged accordingly. All other acceptance criteria were met.

Matrix Spikes: Sample fractions 18, 20 and 42 were chosen internally for MS/MSD analyses.

SAMPLES

Internal Standards: Sample matrix interference with the internal standard in fractions 04, 05, 06, 07, 10, 12, 14, 15, 16, 17, 19, 38, 39, 44, 45, 47 and 48 was confirmed by reanalysis. Samples were flagged accordingly. All other acceptance criteria were met.

Surrogates: Sample fraction 06 yielded a % recovery for 2,4,6-tribromophenol that was below the lower control limit; the sample was re-extracted within hold with similar results. Sample fractions 34, 36 yielded % recoveries for p-terphenyl-d14 above the upper control limit. All other acceptance criteria were met.

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: mdc REVIEWED: Stephanie C Type DATE: 1/3/01

Rev. 6/00

REPORT NARRATIVE
METALS

KEMRON Login No: L0012228

METHOD

Analysis: SW-846 6010/6020/7000

HOLDING TIMES

Sample Preparation: All holding times were met.
Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial calibrations: All acceptance criteria were met.
Alternate Source Standards: All acceptance criteria were met.
Continuing Calibration : All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.
Laboratory Control Sample: All acceptance criteria were met
Duplicate: WG89172 - Some sample nonhomogeneity was apparent in the duplicate analysis.

SAMPLES

All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and KEMRON Environmental Services, both technically and for completeness, except for the conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Analyst: SLP REVIEWED: Maureen Beery DATE: 12/27/00

Rev. 6/00

TABLES

Table 1 (VOC)
Analytical Results for Volatiles by
Method SW846 8260B

	PAFB-B01				PAFB-B02				PAFB-B03			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date	14-Dec-00				14-Dec-00				14-Dec-00			
% Solids	98	weight %	RL		94	weight %	RL		90	weight %	RL	
1,1,1,2-Tetrachloroethane		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0033	U
1,1,1-Trichloroethane		mg/kg	0.0041	U		mg/kg	0.0043	U		mg/kg	0.0044	U
1,1,2,2-Tetrachloroethane		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,1,2-Trichloroethane		mg/kg	0.0051	U		mg/kg	0.0053	U		mg/kg	0.0056	U
1,1-Dichloroethane		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,1-Dichloroethene		mg/kg	0.0061	U		mg/kg	0.0064	U		mg/kg	0.0067	U
1,1-Dichloropropene		mg/kg	0.0051	U		mg/kg	0.0053	U		mg/kg	0.0056	U
1,2,3-Trichlorobenzene		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,2,3-Trichloropropane		mg/kg	0.02	U		mg/kg	0.021	U		mg/kg	0.022	U
1,2,4-Trichlorobenzene		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,2,4-Trimethylbenzene	0.000306	mg/kg	0.0071	F	0.000287	mg/kg	0.0074	F	0.000333	mg/kg	0.0078	F
1,2-Dibromo-3-chloropropane		mg/kg	0.01	U		mg/kg	0.011	U		mg/kg	0.011	U
1,2-Dibromoethane		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0033	U
1,2-Dichlorobenzene		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,2-Dichloroethane		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0033	U
1,2-Dichloropropane		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,3,5-Trimethylbenzene		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0033	U
1,3-Dichlorobenzene		mg/kg	0.0061	U		mg/kg	0.0064	U		mg/kg	0.0067	U
1,3-Dichloropropane		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,4-Dichlorobenzene		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1-Chlorohexane		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0033	U
2,2-Dichloropropane		mg/kg	0.02	U		mg/kg	0.021	U		mg/kg	0.022	U
2-Chlorotoluene		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
4-Chlorotoluene		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0033	U
Benzene		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Bromobenzene		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Bromochloromethane		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Bromochloromethane		mg/kg	0.0041	U		mg/kg	0.0043	U		mg/kg	0.0044	U
[illegible]		mg/kg	0.0061	U		mg/kg	0.0064	U		mg/kg	0.0067	U
Bromomethane		mg/kg	0.0051	R		mg/kg	0.0053	R		mg/kg	0.0056	R
Carbon tetrachloride		mg/kg	0.01	U		mg/kg	0.011	U		mg/kg	0.011	U
Chlorobenzene		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Chloroethane		mg/kg	0.0051	U		mg/kg	0.0053	U		mg/kg	0.0056	U
Chloroform		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Chloromethane		mg/kg	0.0071	U		mg/kg	0.0074	U		mg/kg	0.0078	U
Dibromochloromethane		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0033	U
Dibromomethane		mg/kg	0.01	U		mg/kg	0.011	U		mg/kg	0.011	U
Dichlorodifluoromethane		mg/kg	0.0051	R		mg/kg	0.0053	R		mg/kg	0.0056	R
Ethylbenzene		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0033	U
Hexachlorobutadiene		mg/kg	0.0051	U		mg/kg	0.0053	U		mg/kg	0.0056	U
Isopropylbenzene		mg/kg	0.0082	U		mg/kg	0.0085	U		mg/kg	0.0089	U
Methylene chloride		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Naphthalene		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Styrene		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Tetrachloroethene		mg/kg	0.0071	U		mg/kg	0.0074	U		mg/kg	0.0078	U
Toluene		mg/kg	0.0051	U		mg/kg	0.0053	U		mg/kg	0.0056	U
Trichloroethene		mg/kg	0.01	U		mg/kg	0.011	U		mg/kg	0.011	U
Trichlorofluoromethane		mg/kg	0.0041	U		mg/kg	0.0043	U		mg/kg	0.0044	U
Vinyl chloride		mg/kg	0.0092	U		mg/kg	0.0096	U		mg/kg	0.01	U
cis-1,2-Dichloroethene		mg/kg	0.0061	U		mg/kg	0.0064	U		mg/kg	0.0067	U
cis-1,3-Dichloropropene		mg/kg	0.0051	U		mg/kg	0.0053	U		mg/kg	0.0056	U
m-,p-Xylene		mg/kg	0.0051	U		mg/kg	0.0053	U		mg/kg	0.0056	U
n-Butylbenzene		mg/kg	0.0051	U		mg/kg	0.0053	U		mg/kg	0.0056	U
n-Propylbenzene		mg/kg	0.002	U		mg/kg	0.0021	U		mg/kg	0.0022	U
o-Xylene		mg/kg	0.0051	U		mg/kg	0.0053	U		mg/kg	0.0056	U
p-Isopropyltoluene		mg/kg	0.0061	U		mg/kg	0.0064	U		mg/kg	0.0067	U
sec-Butylbenzene		mg/kg	0.0071	U		mg/kg	0.0074	U		mg/kg	0.0078	U
tert-Butylbenzene		mg/kg	0.0071	U		mg/kg	0.0074	U		mg/kg	0.0078	U
trans-[illegible]chloroethene		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0033	U
trans-[illegible]ichloropropene		mg/kg	0.0051	U		mg/kg	0.0053	U		mg/kg	0.0056	U
Acetone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U
2-Butanone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U

Table 1 (VOC)
Analytical Results for Volatiles by
Method SW846 8260B

	PAFB-B04				PAFB-B05				PAFB-B06			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date	14-Dec-00				14-Dec-00				14-Dec-00			
% Solids	95	weight %	RL		97	weight %	RL		96	weight %	RL	
1,1,1,2-Tetrachloroethane		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0031	U
1,1,1-Trichloroethane		mg/kg	0.0042	U		mg/kg	0.0041	U		mg/kg	0.0042	U
1,1,2,2-Tetrachloroethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,1,2-Trichloroethane		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0052	U
1,1-Dichloroethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,1-Dichloroethene		mg/kg	0.0063	U		mg/kg	0.0062	U		mg/kg	0.0063	U
1,1-Dichloropropene		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0052	U
1,2,3-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2,3-Trichloropropane		mg/kg	0.021	U		mg/kg	0.021	U		mg/kg	0.021	U
1,2,4-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2,4-Trimethylbenzene	0.000284	mg/kg	0.0074	F	0.00032	mg/kg	0.0072	F	0.000271	mg/kg	0.0073	F
1,2-Dibromo-3-chloropropane		mg/kg	0.011	U		mg/kg	0.01	U		mg/kg	0.01	U
1,2-Dibromoethane		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0031	U
1,2-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2-Dichloroethane		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0031	U
1,2-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,3,5-Trimethylbenzene		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0031	U
1,3-Dichlorobenzene		mg/kg	0.0063	U		mg/kg	0.0062	U		mg/kg	0.0063	U
1,3-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,4-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1-Chlorohexane		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0031	U
2,2-Dichloropropane		mg/kg	0.021	U		mg/kg	0.021	U		mg/kg	0.021	U
2-Chlorotoluene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
4-Chlorotoluene		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0031	U
Benzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Bromobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Bromochloromethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Bro[redacted]hloromethane		mg/kg	0.0042	U		mg/kg	0.0041	U		mg/kg	0.0042	U
Bro[redacted]n		mg/kg	0.0063	U		mg/kg	0.0062	U		mg/kg	0.0063	U
Bromomethane		mg/kg	0.0053	R		mg/kg	0.0052	R		mg/kg	0.0052	R
Carbon tetrachloride		mg/kg	0.011	U		mg/kg	0.01	U		mg/kg	0.01	U
Chlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Chloroethane		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0052	U
Chloroform		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Chloromethane		mg/kg	0.0074	U		mg/kg	0.0072	U		mg/kg	0.0073	U
Dibromochloromethane		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0031	U
Dibromomethane		mg/kg	0.011	U		mg/kg	0.01	U		mg/kg	0.01	U
Dichlorodifluoromethane		mg/kg	0.0053	R		mg/kg	0.0052	R		mg/kg	0.0052	R
Ethylbenzene		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0031	U
Hexachlorobutadiene		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0052	U
Isopropylbenzene		mg/kg	0.0084	U		mg/kg	0.0082	U		mg/kg	0.0083	U
Methylene chloride		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Naphthalene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Styrene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Tetrachloroethene		mg/kg	0.0074	U		mg/kg	0.0072	U		mg/kg	0.0073	U
Toluene		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0052	U
Trichloroethene		mg/kg	0.011	U		mg/kg	0.01	U		mg/kg	0.01	U
Trichlorofluoromethane		mg/kg	0.0042	U		mg/kg	0.0041	U		mg/kg	0.0042	U
Vinyl chloride		mg/kg	0.0095	U		mg/kg	0.0093	U		mg/kg	0.0094	U
cis-1,2-Dichloroethene		mg/kg	0.0063	U		mg/kg	0.0062	U		mg/kg	0.0063	U
cis-1,3-Dichloropropene		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0052	U
m-,p-Xylene		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0052	U
n-Butylbenzene		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0052	U
n-Propylbenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
o-Xylene		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0052	U
p-Isopropyltoluene		mg/kg	0.0063	U		mg/kg	0.0062	U		mg/kg	0.0063	U
sec-Butylbenzene		mg/kg	0.0074	U		mg/kg	0.0072	U		mg/kg	0.0073	U
tert-Butylbenzene		mg/kg	0.0074	U		mg/kg	0.0072	U		mg/kg	0.0073	U
trans[redacted]ichloroethene		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0031	U
trans[redacted]Dichloropropene		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0052	U
Acetone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U
2-Butanone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U

Table 1 (VOC)
Analytical Results for Volatiles by
Method SW846 8260B

	PAFB-B07				PAFB-B08				PAFB-B09A (FD1)[1]			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date	15-Dec-00				15-Dec-00				15-Dec-00			
% Solids	97	weight %	RL		95	weight %	RL		96	weight %	RL	
1,1,1,2-Tetrachloroethane		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0031	U
1,1,1-Trichloroethane		mg/kg	0.0041	U		mg/kg	0.0042	U		mg/kg	0.0042	U
1,1,2,2-Tetrachloroethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,1,2-Trichloroethane		mg/kg	0.0052	U		mg/kg	0.0053	U		mg/kg	0.0052	U
1,1-Dichloroethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,1-Dichloroethene		mg/kg	0.0062	U		mg/kg	0.0063	U		mg/kg	0.0063	U
1,1-Dichloropropene		mg/kg	0.0052	U		mg/kg	0.0053	U		mg/kg	0.0052	U
1,2,3-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2,3-Trichloropropane		mg/kg	0.021	U		mg/kg	0.021	U		mg/kg	0.021	U
1,2,4-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2,4-Trimethylbenzene	0.000299	mg/kg	0.0072	F	0.000316	mg/kg	0.0074	F	0.000302	mg/kg	0.0073	F
1,2-Dibromo-3-chloropropane		mg/kg	0.01	U		mg/kg	0.011	U		mg/kg	0.01	U
1,2-Dibromoethane		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0031	U
1,2-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2-Dichloroethane		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0031	U
1,2-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,3,5-Trimethylbenzene		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0031	U
1,3-Dichlorobenzene		mg/kg	0.0062	U		mg/kg	0.0063	U		mg/kg	0.0063	U
1,3-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,4-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1-Chlorohexane		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0031	U
2,2-Dichloropropane		mg/kg	0.021	U		mg/kg	0.021	U		mg/kg	0.021	U
2-Chlorotoluene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
4-Chlorotoluene		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0031	U
Benzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Bromobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Bromochloromethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Bromochloromethane		mg/kg	0.0041	U		mg/kg	0.0042	U		mg/kg	0.0042	U
Bromoform		mg/kg	0.0062	U		mg/kg	0.0063	U		mg/kg	0.0063	U
Bromomethane		mg/kg	0.0052	U		mg/kg	0.0053	U		mg/kg	0.0052	U
Carbon tetrachloride		mg/kg	0.01	U		mg/kg	0.011	U		mg/kg	0.01	U
Chlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Chloroethane		mg/kg	0.0052	U		mg/kg	0.0053	U		mg/kg	0.0052	U
Chloroform		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Chloromethane		mg/kg	0.0072	U		mg/kg	0.0074	U		mg/kg	0.0073	U
Dibromochloromethane		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0031	U
Dibromomethane		mg/kg	0.01	U		mg/kg	0.011	U		mg/kg	0.01	U
Dichlorodifluoromethane		mg/kg	0.0052	R		mg/kg	0.0053	R		mg/kg	0.0052	R
Ethylbenzene		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0031	U
Hexachlorobutadiene		mg/kg	0.0052	U		mg/kg	0.0053	U		mg/kg	0.0052	U
Isopropylbenzene		mg/kg	0.0082	U		mg/kg	0.0084	U		mg/kg	0.0083	U
Methylene chloride		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Naphthalene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Styrene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Tetrachloroethene		mg/kg	0.0072	U		mg/kg	0.0074	U		mg/kg	0.0073	U
Toluene		mg/kg	0.0052	U		mg/kg	0.0053	U		mg/kg	0.0052	U
Trichloroethene		mg/kg	0.01	U		mg/kg	0.011	U		mg/kg	0.01	U
Trichlorofluoromethane		mg/kg	0.0041	U		mg/kg	0.0042	U		mg/kg	0.0042	U
Vinyl chloride		mg/kg	0.0093	U		mg/kg	0.0095	U		mg/kg	0.0094	U
cis-1,2-Dichloroethene		mg/kg	0.0062	U		mg/kg	0.0063	U		mg/kg	0.0063	U
cis-1,3-Dichloropropene		mg/kg	0.0052	U		mg/kg	0.0053	U		mg/kg	0.0052	U
m-,p-Xylene		mg/kg	0.0052	U		mg/kg	0.0053	U		mg/kg	0.0052	U
n-Butylbenzene		mg/kg	0.0052	U		mg/kg	0.0053	U		mg/kg	0.0052	U
n-Propylbenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
o-Xylene		mg/kg	0.0052	U		mg/kg	0.0053	U		mg/kg	0.0052	U
p-Isopropyltoluene		mg/kg	0.0062	U		mg/kg	0.0063	U		mg/kg	0.0063	U
sec-Butylbenzene		mg/kg	0.0072	U		mg/kg	0.0074	U		mg/kg	0.0073	U
tert-Butylbenzene		mg/kg	0.0072	U		mg/kg	0.0074	U		mg/kg	0.0073	U
trans-1,2-Dichloroethene		mg/kg	0.0031	U		mg/kg	0.0032	U		mg/kg	0.0031	U
trans-1,3-Dichloropropene		mg/kg	0.0052	U		mg/kg	0.0053	U		mg/kg	0.0052	U
Acetone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U
2-Butanone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U

Table 1 (VOC)
Analytical Results for Volatiles by
Method SW846 8260B

	PAFB-B09B (FD1)[1]				PAFB-B10				PAFB-B11			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date	15-Dec-00				15-Dec-00				15-Dec-00			
% Solids	96	weight %	RL		97	weight %	RL		98	weight %	RL	
1,1,1,2-Tetrachloroethane		mg/kg	0.0031	U		mg/kg	0.0031	U		mg/kg	0.0031	U
1,1,1-Trichloroethane		mg/kg	0.0042	U		mg/kg	0.0041	U		mg/kg	0.0041	U
1,1,2,2-Tetrachloroethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
1,1,2-Trichloroethane		mg/kg	0.0052	U		mg/kg	0.0052	U		mg/kg	0.0051	U
1,1-Dichloroethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
1,1-Dichloroethene		mg/kg	0.0063	U		mg/kg	0.0062	U		mg/kg	0.0061	U
1,1-Dichloropropene		mg/kg	0.0052	U		mg/kg	0.0052	U		mg/kg	0.0051	U
1,2,3-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
1,2,3-Trichloropropane		mg/kg	0.021	U		mg/kg	0.021	U		mg/kg	0.02	U
1,2,4-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
1,2,4-Trimethylbenzene		mg/kg	0.0073	U	0.000278	mg/kg	0.0072	F	0.000286	mg/kg	0.0071	F
1,2-Dibromo-3-chloropropane		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U
1,2-Dibromoethane		mg/kg	0.0031	U		mg/kg	0.0031	U		mg/kg	0.0031	U
1,2-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
1,2-Dichloroethane		mg/kg	0.0031	U		mg/kg	0.0031	U		mg/kg	0.0031	U
1,2-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
1,3,5-Trimethylbenzene		mg/kg	0.0031	U		mg/kg	0.0031	U		mg/kg	0.0031	U
1,3-Dichlorobenzene		mg/kg	0.0063	U		mg/kg	0.0062	U		mg/kg	0.0061	U
1,3-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
1,4-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
1-Chlorohexane		mg/kg	0.0031	U		mg/kg	0.0031	U		mg/kg	0.0031	U
2,2-Dichloropropane		mg/kg	0.021	U		mg/kg	0.021	U		mg/kg	0.02	U
2-Chlorotoluene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
4-Chlorotoluene		mg/kg	0.0031	U		mg/kg	0.0031	U		mg/kg	0.0031	U
Benzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
Bromobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
Bromochloromethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
Bromodichloromethane		mg/kg	0.0042	U		mg/kg	0.0041	U		mg/kg	0.0041	U
Bromoform		mg/kg	0.0063	U		mg/kg	0.0062	U		mg/kg	0.0061	U
Bromomethane		mg/kg	0.0052	U		mg/kg	0.0052	U		mg/kg	0.0051	U
Carbon tetrachloride		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U
Chlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
Chloroethane		mg/kg	0.0052	U		mg/kg	0.0052	U		mg/kg	0.0051	U
Chloroform		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
Chloromethane		mg/kg	0.0073	U		mg/kg	0.0072	U		mg/kg	0.0071	U
Dibromochloromethane		mg/kg	0.0031	U		mg/kg	0.0031	U		mg/kg	0.0031	U
Dibromomethane		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U
Dichlorodifluoromethane		mg/kg	0.0052	R		mg/kg	0.0052	R		mg/kg	0.0051	R
Ethylbenzene		mg/kg	0.0031	U		mg/kg	0.0031	U		mg/kg	0.0031	U
Hexachlorobutadiene		mg/kg	0.0052	U		mg/kg	0.0052	U		mg/kg	0.0051	U
Isopropylbenzene		mg/kg	0.0083	U		mg/kg	0.0082	U		mg/kg	0.0082	U
Methylene chloride		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
Naphthalene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
Styrene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
Tetrachloroethene		mg/kg	0.0073	U		mg/kg	0.0072	U		mg/kg	0.0071	U
Toluene		mg/kg	0.0052	U		mg/kg	0.0052	U		mg/kg	0.0051	U
Trichloroethene		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U
Trichlorofluoromethane		mg/kg	0.0042	U		mg/kg	0.0041	U		mg/kg	0.0041	U
Vinyl chloride		mg/kg	0.0094	U		mg/kg	0.0093	U		mg/kg	0.0092	U
cis-1,2-Dichloroethene		mg/kg	0.0063	U		mg/kg	0.0062	U		mg/kg	0.0061	U
cis-1,3-Dichloropropene		mg/kg	0.0052	U		mg/kg	0.0052	U		mg/kg	0.0051	U
m-,p-Xylene		mg/kg	0.0052	U		mg/kg	0.0052	U		mg/kg	0.0051	U
n-Butylbenzene		mg/kg	0.0052	U		mg/kg	0.0052	U		mg/kg	0.0051	U
n-Propylbenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.002	U
o-Xylene		mg/kg	0.0052	U		mg/kg	0.0052	U		mg/kg	0.0051	U
p-Isopropyltoluene		mg/kg	0.0063	U		mg/kg	0.0062	U		mg/kg	0.0061	U
sec-Butylbenzene		mg/kg	0.0073	U		mg/kg	0.0072	U		mg/kg	0.0071	U
tert-Butylbenzene		mg/kg	0.0073	U		mg/kg	0.0072	U		mg/kg	0.0071	U
trans-1,2-Dichloroethene		mg/kg	0.0031	U		mg/kg	0.0031	U		mg/kg	0.0031	U
trans-1,3-Dichloropropene		mg/kg	0.0052	U		mg/kg	0.0052	U		mg/kg	0.0051	U
Acetone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U
2-Butanone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U

Table 1 (VOC)
Analytical Results for Volatiles by
Method SW846 8260B

	PAFB-B12				PAFB-B13			
Col' ı Date	7-Dec-00				7-Dec-00			
Ana[redacted]Date	15-Dec-00				15-Dec-00			
% Solids	96	weight %	RL		96	weight %	RL	
1,1,1,2-Tetrachloroethane		mg/kg	0.0031	U		mg/kg	0.0031	U
1,1,1-Trichloroethane		mg/kg	0.0042	U		mg/kg	0.0042	U
1,1,2,2-Tetrachloroethane		mg/kg	0.0021	U		mg/kg	0.0021	U
1,1,2-Trichloroethane		mg/kg	0.0052	U		mg/kg	0.0052	U
1,1-Dichloroethane		mg/kg	0.0021	U		mg/kg	0.0021	U
1,1-Dichloroethene		mg/kg	0.0063	U		mg/kg	0.0063	U
1,1-Dichloropropene		mg/kg	0.0052	U		mg/kg	0.0052	U
1,2,3-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2,3-Trichloropropane		mg/kg	0.021	U		mg/kg	0.021	U
1,2,4-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2,4-Trimethylbenzene	0.000292	mg/kg	0.0073	F	0.00025	mg/kg	0.0073	F
1,2-Dibromo-3-chloropropane		mg/kg	0.01	U		mg/kg	0.01	U
1,2-Dibromoethane		mg/kg	0.0031	U		mg/kg	0.0031	U
1,2-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2-Dichloroethane		mg/kg	0.0031	U		mg/kg	0.0031	U
1,2-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0021	U
1,3,5-Trimethylbenzene		mg/kg	0.0031	U		mg/kg	0.0031	U
1,3-Dichlorobenzene		mg/kg	0.0063	U		mg/kg	0.0063	U
1,3-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0021	U
1,4-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U
1-Chlorohexane		mg/kg	0.0031	U		mg/kg	0.0031	U
2,2-Dichloropropane		mg/kg	0.021	U		mg/kg	0.021	U
2-Chlorotoluene		mg/kg	0.0021	U		mg/kg	0.0021	U
4-Chlorotoluene		mg/kg	0.0031	U		mg/kg	0.0031	U
Benzene		mg/kg	0.0021	U		mg/kg	0.0021	U
Bromobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U
Bromochloromethane		mg/kg	0.0021	U		mg/kg	0.0021	U
Bro[redacted]hloromethane		mg/kg	0.0042	U		mg/kg	0.0042	U
Bro[redacted]n		mg/kg	0.0063	U		mg/kg	0.0063	U
Bromomethane		mg/kg	0.0052	U		mg/kg	0.0052	U
Carbon tetrachloride		mg/kg	0.01	U		mg/kg	0.01	U
Chlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U
Chloroethane		mg/kg	0.0052	U		mg/kg	0.0052	U
Chloroform		mg/kg	0.0021	U		mg/kg	0.0021	U
Chloromethane		mg/kg	0.0073	U		mg/kg	0.0073	U
Dibromochloromethane		mg/kg	0.0031	U		mg/kg	0.0031	U
Dibromomethane		mg/kg	0.01	U		mg/kg	0.01	U
Dichlorodifluoromethane		mg/kg	0.0052	R		mg/kg	0.0052	R
Ethylbenzene		mg/kg	0.0031	U		mg/kg	0.0031	U
Hexachlorobutadiene		mg/kg	0.0052	U		mg/kg	0.0052	U
Isopropylbenzene		mg/kg	0.0083	U		mg/kg	0.0083	U
Methylene chloride		mg/kg	0.0021	U		mg/kg	0.0021	U
Naphthalene		mg/kg	0.0021	U		mg/kg	0.0021	U
Styrene		mg/kg	0.0021	U		mg/kg	0.0021	U
Tetrachloroethene		mg/kg	0.0073	U		mg/kg	0.0073	U
Toluene		mg/kg	0.0052	U		mg/kg	0.0052	U
Trichloroethene		mg/kg	0.01	U		mg/kg	0.01	U
Trichlorofluoromethane		mg/kg	0.0042	U		mg/kg	0.0042	U
Vinyl chloride		mg/kg	0.0094	U		mg/kg	0.0094	U
cis-1,2-Dichloroethene		mg/kg	0.0063	U		mg/kg	0.0063	U
cis-1,3-Dichloropropene		mg/kg	0.0052	U		mg/kg	0.0052	U
m-,p-Xylene		mg/kg	0.0052	U		mg/kg	0.0052	U
n-Butylbenzene		mg/kg	0.0052	U		mg/kg	0.0052	U
n-Propylbenzene		mg/kg	0.0021	U		mg/kg	0.0021	U
o-Xylene		mg/kg	0.0052	U		mg/kg	0.0052	U
p-Isopropyltoluene		mg/kg	0.0063	U		mg/kg	0.0063	U
sec-Butylbenzene		mg/kg	0.0073	U		mg/kg	0.0073	U
tert-B[redacted]enzene		mg/kg	0.0073	U		mg/kg	0.0073	U
trans[redacted]ichloroethene		mg/kg	0.0031	U		mg/kg	0.0031	U
trans-1,3-Dichloropropene		mg/kg	0.0052	U		mg/kg	0.0052	U
Acetone		mg/kg	0.01	U		mg/kg	0.01	U
2-Butanone		mg/kg	0.01	U		mg/kg	0.01	U

Table 1 (VOC)
Analytical Results for Volatiles by Method SW846 8260B

	PAFB-P01				PAFB-P02				PAFB-P03			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date	13-Dec-00				13-Dec-00				13-Dec-00			
% Solids	86	weight %	RL		93	weight %	RL		95	weight %	RL	
1,1,1,2-Tetrachloroethane		mg/kg	0.0035	U		mg/kg	0.0032	U		mg/kg	0.0032	U
1,1,1-Trichloroethane		mg/kg	0.0047	U		mg/kg	0.0043	U		mg/kg	0.0042	U
1,1,2,2-Tetrachloroethane		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
1,1,2-Trichloroethane		mg/kg	0.0058	U		mg/kg	0.0054	U		mg/kg	0.0053	U
1,1-Dichloroethane		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
1,1-Dichloroethene		mg/kg	0.007	U		mg/kg	0.0065	U		mg/kg	0.0063	U
1,1-Dichloropropene		mg/kg	0.0058	U		mg/kg	0.0054	U		mg/kg	0.0053	U
1,2,3-Trichlorobenzene		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
1,2,3-Trichloropropane		mg/kg	0.023	U		mg/kg	0.022	U		mg/kg	0.021	U
1,2,4-Trichlorobenzene		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
1,2,4-Trimethylbenzene		mg/kg	0.0081	U		mg/kg	0.0075	U		mg/kg	0.0074	U
1,2-Dibromo-3-chloropropane		mg/kg	0.012	U		mg/kg	0.011	U		mg/kg	0.011	U
1,2-Dibromoethane		mg/kg	0.0035	U		mg/kg	0.0032	U		mg/kg	0.0032	U
1,2-Dichlorobenzene		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
1,2-Dichloroethane		mg/kg	0.0035	U		mg/kg	0.0032	U		mg/kg	0.0032	U
1,2-Dichloropropane		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
1,3,5-Trimethylbenzene		mg/kg	0.0035	U		mg/kg	0.0032	U		mg/kg	0.0032	U
1,3-Dichlorobenzene		mg/kg	0.007	U		mg/kg	0.0065	U		mg/kg	0.0063	U
1,3-Dichloropropane		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
1,4-Dichlorobenzene		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
1-Chlorohexane		mg/kg	0.0035	U		mg/kg	0.0032	U		mg/kg	0.0032	U
2,2-Dichloropropane		mg/kg	0.023	U		mg/kg	0.022	U		mg/kg	0.021	U
2-Chlorotoluene		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
4-Chlorotoluene		mg/kg	0.0035	U		mg/kg	0.0032	U		mg/kg	0.0032	U
Benzene		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
Bromobenzene		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
Bromochloromethane		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
Bromochloromethane		mg/kg	0.0047	U		mg/kg	0.0043	U		mg/kg	0.0042	U
Bromoform		mg/kg	0.007	U		mg/kg	0.0065	U		mg/kg	0.0063	U
Bromomethane		mg/kg	0.0058	R		mg/kg	0.0054	R		mg/kg	0.0053	R
Carbon tetrachloride		mg/kg	0.012	U		mg/kg	0.011	U		mg/kg	0.011	U
Chlorobenzene		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
Chloroethane		mg/kg	0.0058	U		mg/kg	0.0054	U		mg/kg	0.0053	U
Chloroform		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
Chloromethane		mg/kg	0.0081	R		mg/kg	0.0075	R		mg/kg	0.0074	R
Dibromochloromethane		mg/kg	0.0035	U		mg/kg	0.0032	U		mg/kg	0.0032	U
Dibromomethane		mg/kg	0.012	U		mg/kg	0.011	U		mg/kg	0.011	U
Dichlorodifluoromethane		mg/kg	0.0058	R		mg/kg	0.0054	R		mg/kg	0.0053	R
Ethylbenzene		mg/kg	0.0035	U		mg/kg	0.0032	U		mg/kg	0.0032	U
Hexachlorobutadiene		mg/kg	0.0058	U		mg/kg	0.0054	U		mg/kg	0.0053	U
Isopropylbenzene		mg/kg	0.0093	U		mg/kg	0.0086	U		mg/kg	0.0084	U
Methylene chloride		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
Naphthalene		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
Styrene		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
Tetrachloroethene	0.00193	mg/kg	0.0081	F	0.00374	mg/kg	0.0075	F	0.00289	mg/kg	0.0074	F
Toluene		mg/kg	0.0058	U		mg/kg	0.0054	U		mg/kg	0.0053	U
Trichloroethene		mg/kg	0.012	U		mg/kg	0.011	U		mg/kg	0.011	U
Trichlorofluoromethane		mg/kg	0.0047	U		mg/kg	0.0043	U		mg/kg	0.0042	U
Vinyl chloride		mg/kg	0.01	U		mg/kg	0.0097	U		mg/kg	0.0095	U
cis-1,2-Dichloroethene		mg/kg	0.007	U		mg/kg	0.0065	U		mg/kg	0.0063	U
cis-1,3-Dichloropropene		mg/kg	0.0058	U		mg/kg	0.0054	U		mg/kg	0.0053	U
m-,p-Xylene		mg/kg	0.0058	U		mg/kg	0.0054	U		mg/kg	0.0053	U
n-Butylbenzene		mg/kg	0.0058	U		mg/kg	0.0054	U		mg/kg	0.0053	U
n-Propylbenzene		mg/kg	0.0023	U		mg/kg	0.0022	U		mg/kg	0.0021	U
o-Xylene		mg/kg	0.0058	U		mg/kg	0.0054	U		mg/kg	0.0053	U
p-Isopropyltoluene		mg/kg	0.007	U		mg/kg	0.0065	U		mg/kg	0.0063	U
sec-Butylbenzene		mg/kg	0.0081	U		mg/kg	0.0075	U		mg/kg	0.0074	U
tert-Butylbenzene		mg/kg	0.0081	U		mg/kg	0.0075	U		mg/kg	0.0074	U
trans-1,2-Dichloroethene		mg/kg	0.0035	U		mg/kg	0.0032	U		mg/kg	0.0032	U
trans-1,3-Dichloropropene		mg/kg	0.0058	U		mg/kg	0.0054	U		mg/kg	0.0053	U
Acetone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U
2-Butanone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U

Table 1 (VOC)
Analytical Results for Volatiles by
Method SW846 8260B

	PAFB-P04				PAFB-P05A (FD2)[1]				PAFB-P05B (FD2)[1]			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date	13-Dec-00				13-Dec-00				13-Dec-00			
% Solids	95	weight %	RL		94	weight %	RL		94	weight %	RL	
1,1,1,2-Tetrachloroethane		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
1,1,1-Trichloroethane		mg/kg	0.0042	U		mg/kg	0.0043	U		mg/kg	0.0043	U
1,1,2,2-Tetrachloroethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,1,2-Trichloroethane		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0053	U
1,1-Dichloroethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,1-Dichloroethene		mg/kg	0.0063	U		mg/kg	0.0064	U		mg/kg	0.0064	U
1,1-Dichloropropene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0053	U
1,2,3-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2,3-Trichloropropane		mg/kg	0.021	U		mg/kg	0.021	U		mg/kg	0.021	U
1,2,4-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2,4-Trimethylbenzene		mg/kg	0.0074	U		mg/kg	0.0074	U		mg/kg	0.0074	U
1,2-Dibromo-3-chloropropane		mg/kg	0.011	U		mg/kg	0.011	U		mg/kg	0.011	U
1,2-Dibromoethane		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
1,2-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2-Dichloroethane		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
1,2-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,3,5-Trimethylbenzene		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
1,3-Dichlorobenzene		mg/kg	0.0063	U		mg/kg	0.0064	U		mg/kg	0.0064	U
1,3-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,4-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1-Chlorohexane		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
2,2-Dichloropropane		mg/kg	0.021	U		mg/kg	0.021	U		mg/kg	0.021	U
2-Chlorotoluene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
4-Chlorotoluene		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
Benzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Bromobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Bromochloromethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Bromochloromethane		mg/kg	0.0042	U		mg/kg	0.0043	U		mg/kg	0.0043	U
Bromodichloromethane		mg/kg	0.0063	U		mg/kg	0.0064	U		mg/kg	0.0064	U
Bromomethane		mg/kg	0.0053	R		mg/kg	0.0053	R		mg/kg	0.0053	R
Carbon tetrachloride		mg/kg	0.011	U		mg/kg	0.011	U		mg/kg	0.011	U
Chlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Chloroethane		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0053	U
Chloroform		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Chloromethane		mg/kg	0.0074	R		mg/kg	0.0074	R		mg/kg	0.0074	R
Dibromochloromethane		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
Dibromomethane		mg/kg	0.011	U		mg/kg	0.011	U		mg/kg	0.011	U
Dichlorodifluoromethane		mg/kg	0.0053	R		mg/kg	0.0053	R		mg/kg	0.0053	R
Ethylbenzene		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
Hexachlorobutadiene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0053	U
Isopropylbenzene		mg/kg	0.0084	U		mg/kg	0.0085	U		mg/kg	0.0085	U
Methylene chloride		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Naphthalene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Styrene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Tetrachloroethene		mg/kg	0.0074	U	0.00272	mg/kg	0.0074	F	0.00154	mg/kg	0.0074	F
Toluene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0053	U
Trichloroethene		mg/kg	0.011	U		mg/kg	0.011	U		mg/kg	0.011	U
Trichlorofluoromethane		mg/kg	0.0042	U		mg/kg	0.0043	U		mg/kg	0.0043	U
Vinyl chloride		mg/kg	0.0095	U		mg/kg	0.0096	U		mg/kg	0.0096	U
cis-1,2-Dichloroethene		mg/kg	0.0063	U		mg/kg	0.0064	U		mg/kg	0.0064	U
cis-1,3-Dichloropropene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0053	U
m-,p-Xylene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0053	U
n-Butylbenzene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0053	U
n-Propylbenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
o-Xylene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0053	U
p-Isopropyltoluene		mg/kg	0.0063	U		mg/kg	0.0064	U		mg/kg	0.0064	U
sec-Butylbenzene		mg/kg	0.0074	U		mg/kg	0.0074	U		mg/kg	0.0074	U
tert-Butylbenzene		mg/kg	0.0074	U		mg/kg	0.0074	U		mg/kg	0.0074	U
trans-1,2-Dichloroethene		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
trans-1,3-Dichloropropene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0053	U
Acetone		mg/kg	0.01	U		mg/kg	0.01	U	0.0074	mg/kg	0.01	F
2-Butanone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U

Table 1 (VOC)
Analytical Results for Volatiles by
Method SW846 8260B

8/10/01

	PAFB-P06				PAFB-P07				PAFB-P08			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date	12/13/00				12/13/00				12/13/00			
% Solids	91	weight %	RL		96	weight %	RL		96	weight %	RL	
1,1,1,2-Tetrachloroethane		mg/kg	0.0033	U		mg/kg	0.0031	U		mg/kg	0.0031	U
1,1,1-Trichloroethane		mg/kg	0.0044	U		mg/kg	0.0042	U		mg/kg	0.0042	U
1,1,2,2-Tetrachloroethane		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,1,2-Trichloroethane		mg/kg	0.0055	U		mg/kg	0.0052	U		mg/kg	0.0052	U
1,1-Dichloroethane		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,1-Dichloroethene		mg/kg	0.0066	U		mg/kg	0.0063	U		mg/kg	0.0063	U
1,1-Dichloropropene		mg/kg	0.0055	U		mg/kg	0.0052	U		mg/kg	0.0052	U
1,2,3-Trichlorobenzene		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2,3-Trichloropropane		mg/kg	0.022	U		mg/kg	0.021	U		mg/kg	0.021	U
1,2,4-Trichlorobenzene		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2,4-Trimethylbenzene		mg/kg	0.0077	U		mg/kg	0.0073	U		mg/kg	0.0073	U
1,2-Dibromo-3-chloropropane		mg/kg	0.011	U		mg/kg	0.01	U		mg/kg	0.01	U
1,2-Dibromoethane		mg/kg	0.0033	U		mg/kg	0.0031	U		mg/kg	0.0031	U
1,2-Dichlorobenzene		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2-Dichloroethane		mg/kg	0.0033	U		mg/kg	0.0031	U		mg/kg	0.0031	U
1,2-Dichloropropane		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,3,5-Trimethylbenzene		mg/kg	0.0033	U		mg/kg	0.0031	U		mg/kg	0.0031	U
1,3-Dichlorobenzene		mg/kg	0.0066	U		mg/kg	0.0063	U		mg/kg	0.0063	U
1,3-Dichloropropane		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,4-Dichlorobenzene		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1-Chlorohexane		mg/kg	0.0033	U		mg/kg	0.0031	U		mg/kg	0.0031	U
2,2-Dichloropropane		mg/kg	0.022	U		mg/kg	0.021	U		mg/kg	0.021	U
2-Chlorotoluene		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
4-Chlorotoluene		mg/kg	0.0033	U		mg/kg	0.0031	U		mg/kg	0.0031	U
Benzene		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Bromobenzene		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Bromochloromethane		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Bromochloromethane		mg/kg	0.0044	U		mg/kg	0.0042	U		mg/kg	0.0042	U
Bromobenzene		mg/kg	0.0066	U		mg/kg	0.0063	U		mg/kg	0.0063	U
Bromomethane		mg/kg	0.0055	R		mg/kg	0.0052	R		mg/kg	0.0052	R
Carbon tetrachloride		mg/kg	0.011	U		mg/kg	0.01	U		mg/kg	0.01	U
Chlorobenzene		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Chloroethane		mg/kg	0.0055	U		mg/kg	0.0052	U		mg/kg	0.0052	U
Chloroform		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Chloromethane		mg/kg	0.0077	R		mg/kg	0.0073	R		mg/kg	0.0073	R
Dibromochloromethane		mg/kg	0.0033	U		mg/kg	0.0031	U		mg/kg	0.0031	U
Dibromomethane		mg/kg	0.011	U		mg/kg	0.01	U		mg/kg	0.01	U
Dichlorodifluoromethane		mg/kg	0.0055	R		mg/kg	0.0052	R		mg/kg	0.0052	R
Ethylbenzene		mg/kg	0.0033	U		mg/kg	0.0031	U		mg/kg	0.0031	U
Hexachlorobutadiene		mg/kg	0.0055	U		mg/kg	0.0052	U		mg/kg	0.0052	U
Isopropylbenzene		mg/kg	0.0088	U		mg/kg	0.0083	U		mg/kg	0.0083	U
Methylene chloride		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Naphthalene		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Styrene		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Tetrachloroethene	0.00125	mg/kg	0.0077	F	0.00143	mg/kg	0.0073	F		mg/kg	0.0073	U
Toluene		mg/kg	0.0055	U		mg/kg	0.0052	U		mg/kg	0.0052	U
Trichloroethene		mg/kg	0.011	U		mg/kg	0.01	U		mg/kg	0.01	U
Trichlorofluoromethane		mg/kg	0.0044	U		mg/kg	0.0042	U		mg/kg	0.0042	U
Vinyl chloride		mg/kg	0.0099	U		mg/kg	0.0094	U		mg/kg	0.0094	U
cis-1,2-Dichloroethene		mg/kg	0.0066	U		mg/kg	0.0063	U		mg/kg	0.0063	U
cis-1,3-Dichloropropene		mg/kg	0.0055	U		mg/kg	0.0052	U		mg/kg	0.0052	U
m-,p-Xylene		mg/kg	0.0055	U		mg/kg	0.0052	U		mg/kg	0.0052	U
n-Butylbenzene		mg/kg	0.0055	U		mg/kg	0.0052	U		mg/kg	0.0052	U
n-Propylbenzene		mg/kg	0.0022	U		mg/kg	0.0021	U		mg/kg	0.0021	U
o-Xylene		mg/kg	0.0055	U		mg/kg	0.0052	U		mg/kg	0.0052	U
p-Isopropyltoluene		mg/kg	0.0066	U		mg/kg	0.0063	U		mg/kg	0.0063	U
sec-Butylbenzene		mg/kg	0.0077	U		mg/kg	0.0073	U		mg/kg	0.0073	U
tert-Butylbenzene		mg/kg	0.0077	U		mg/kg	0.0073	U		mg/kg	0.0073	U
trans-1,2-Dichloroethene		mg/kg	0.0033	U		mg/kg	0.0031	U		mg/kg	0.0031	U
trans-1,3-Dichloropropene		mg/kg	0.0055	U		mg/kg	0.0052	U		mg/kg	0.0052	U
Acetone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U
2-Butanone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U

Table 1 (VOC)
Analytical Results for Volatiles by Method SW846 8260B

	PAFB-S01				PAFB-S02				PAFB-S03			
Col[illegible]n Date	7-Dec-00				7-Dec-00				7-Dec-00			
An[illegible]Date	13-Dec-00				13-Dec-00				14-Dec-00			
% Solids	95	weight %	RL		96	weight %	RL		92	weight %	RL	
1,1,1,2-Tetrachloroethane		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0033	U
1,1,1-Trichloroethane		mg/kg	0.0042	U		mg/kg	0.0042	U		mg/kg	0.0043	U
1,1,2,2-Tetrachloroethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,1,2-Trichloroethane		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0054	U
1,1-Dichloroethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,1-Dichloroethene		mg/kg	0.0063	U		mg/kg	0.0063	U		mg/kg	0.0065	U
1,1-Dichloropropene		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0054	U
1,2,3-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	M
1,2,3-Trichloropropane		mg/kg	0.021	U		mg/kg	0.021	U		mg/kg	0.022	U
1,2,4-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	M
1,2,4-Trimethylbenzene		mg/kg	0.0074	U		mg/kg	0.0073	U	0.000293	mg/kg	0.0076	F
1,2-Dibromo-3-chloropropane		mg/kg	0.011	U		mg/kg	0.01	U		mg/kg	0.011	U
1,2-Dibromoethane		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0033	U
1,2-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	M
1,2-Dichloroethane		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0033	U
1,2-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,3,5-Trimethylbenzene		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0033	U
1,3-Dichlorobenzene		mg/kg	0.0063	U		mg/kg	0.0063	U		mg/kg	0.0065	M
1,3-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,4-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	M
1-Chlorohexane		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0033	M
2,2-Dichloropropane		mg/kg	0.021	U		mg/kg	0.021	U		mg/kg	0.022	U
2-Chlorotoluene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
4-Chlorotoluene		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0033	U
Benzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Bromobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Bromochloromethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Bror[illegible]hloromethane		mg/kg	0.0042	U		mg/kg	0.0042	U		mg/kg	0.0043	U
Bro[illegible]n		mg/kg	0.0063	U		mg/kg	0.0063	U		mg/kg	0.0065	U
Bromomethane		mg/kg	0.0053	R		mg/kg	0.0052	R		mg/kg	0.0054	R
Carbon tetrachloride		mg/kg	0.011	U		mg/kg	0.01	U		mg/kg	0.011	U
Chlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Chloroethane		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0054	U
Chloroform		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Chloromethane		mg/kg	0.0074	R		mg/kg	0.0073	R		mg/kg	0.0076	U
Dibromochloromethane		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0033	U
Dibromomethane		mg/kg	0.011	U		mg/kg	0.01	U		mg/kg	0.011	U
Dichlorodifluoromethane		mg/kg	0.0053	R		mg/kg	0.0052	R		mg/kg	0.0054	R
Ethylbenzene		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0033	U
Hexachlorobutadiene		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0054	M
Isopropylbenzene		mg/kg	0.0084	U		mg/kg	0.0083	U		mg/kg	0.0087	U
Methylene chloride		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Naphthalene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	M
Styrene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Tetrachloroethene	0.000874	mg/kg	0.0074	F		mg/kg	0.0073	U	0.00063	mg/kg	0.0076	F
Toluene		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0054	U
Trichloroethene		mg/kg	0.011	U		mg/kg	0.01	U		mg/kg	0.011	U
Trichlorofluoromethane		mg/kg	0.0042	U		mg/kg	0.0042	U		mg/kg	0.0043	U
Vinyl chloride		mg/kg	0.0095	U		mg/kg	0.0094	U		mg/kg	0.0098	U
cis-1,2-Dichloroethene		mg/kg	0.0063	U		mg/kg	0.0063	U		mg/kg	0.0065	U
cis-1,3-Dichloropropene		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0054	U
m-,p-Xylene		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0054	U
n-Butylbenzene		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0054	M
n-Propylbenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	M
o-Xylene		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0054	U
p-Isopropyltoluene		mg/kg	0.0063	U		mg/kg	0.0063	U		mg/kg	0.0065	M
sec-Butylbenzene		mg/kg	0.0074	U		mg/kg	0.0073	U		mg/kg	0.0076	M
tert-But[illegible]benzene		mg/kg	0.0074	U		mg/kg	0.0073	U		mg/kg	0.0076	M
trans-[illegible]chloroethene		mg/kg	0.0032	U		mg/kg	0.0031	U		mg/kg	0.0033	U
trans-1,[illegible]ichloropropene		mg/kg	0.0053	U		mg/kg	0.0052	U		mg/kg	0.0054	U
Acetone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U
2-Butanone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U

Table 1 (VOC)
Analytical Results for Volatiles by Method SW846 8260B

	PAFB-S04				PAFB-S05				PAFB-S06			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Ar[illegible] Date	14-Dec-00				14-Dec-00				14-Dec-00			
% [illegible]	95	weight %	RL		94	weight %	RL		96	weight %	RL	
1,1,1,2-Tetrachloroethane		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0031	U
1,1,1-Trichloroethane		mg/kg	0.0042	U		mg/kg	0.0043	U		mg/kg	0.0042	U
1,1,2,2-Tetrachloroethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,1,2-Trichloroethane		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0052	U
1,1-Dichloroethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,1-Dichloroethene		mg/kg	0.0063	U		mg/kg	0.0064	U		mg/kg	0.0063	U
1,1-Dichloropropene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0052	U
1,2,3-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2,3-Trichloropropane		mg/kg	0.021	U		mg/kg	0.021	U		mg/kg	0.021	U
1,2,4-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2,4-Trimethylbenzene	0.000379	mg/kg	0.0074	F	0.000362	mg/kg	0.0074	F	0.000302	mg/kg	0.0073	F
1,2-Dibromo-3-chloropropane		mg/kg	0.011	U		mg/kg	0.011	U		mg/kg	0.01	U
1,2-Dibromoethane		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0031	U
1,2-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,2-Dichloroethane		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0031	U
1,2-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,3,5-Trimethylbenzene		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0031	U
1,3-Dichlorobenzene		mg/kg	0.0063	U		mg/kg	0.0064	U		mg/kg	0.0063	U
1,3-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1,4-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
1-Chlorohexane		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0031	U
2,2-Dichloropropane		mg/kg	0.021	U		mg/kg	0.021	U		mg/kg	0.021	U
2-Chlorotoluene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
4-Chlorotoluene		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0031	U
Benzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Bromobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Bromochloromethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Brom[illegible]chloromethane		mg/kg	0.0042	U		mg/kg	0.0043	U		mg/kg	0.0042	U
Bro[illegible]a		mg/kg	0.0063	U		mg/kg	0.0064	U		mg/kg	0.0063	U
Brom[illegible]ethane		mg/kg	0.0053	R		mg/kg	0.0053	R		mg/kg	0.0052	R
Carbon tetrachloride		mg/kg	0.011	U		mg/kg	0.011	U		mg/kg	0.01	U
Chlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Chloroethane		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0052	U
Chloroform		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Chloromethane		mg/kg	0.0074	U		mg/kg	0.0074	U		mg/kg	0.0073	U
Dibromochloromethane		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0031	U
Dibromomethane		mg/kg	0.011	U		mg/kg	0.011	U		mg/kg	0.01	U
Dichlorodifluoromethane		mg/kg	0.0053	R		mg/kg	0.0053	R		mg/kg	0.0052	R
Ethylbenzene		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0031	U
Hexachlorobutadiene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0052	U
Isopropylbenzene		mg/kg	0.0084	U		mg/kg	0.0085	U		mg/kg	0.0083	U
Methylene chloride		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Naphthalene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Styrene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
Tetrachloroethene	0.000474	mg/kg	0.0074	F		mg/kg	0.0074	U		mg/kg	0.0073	U
Toluene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0052	U
Trichloroethene		mg/kg	0.011	U		mg/kg	0.011	U		mg/kg	0.01	U
Trichlorofluoromethane		mg/kg	0.0042	U		mg/kg	0.0043	U		mg/kg	0.0042	U
Vinyl chloride		mg/kg	0.0095	U		mg/kg	0.0096	U		mg/kg	0.0094	U
cis-1,2-Dichloroethene		mg/kg	0.0063	U		mg/kg	0.0064	U		mg/kg	0.0063	U
cis-1,3-Dichloropropene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0052	U
m-,p-Xylene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0052	U
n-Butylbenzene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0052	U
n-Propylbenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0021	U
o-Xylene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0052	U
p-Isopropyltoluene		mg/kg	0.0063	U		mg/kg	0.0064	U		mg/kg	0.0063	U
sec-Butylbenzene		mg/kg	0.0074	U		mg/kg	0.0074	U		mg/kg	0.0073	U
tert-Butylbenzene		mg/kg	0.0074	U		mg/kg	0.0074	U		mg/kg	0.0073	U
trans-[illegible]chloroethene		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0031	U
trans-[illegible]chloropropene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0052	U
Acetone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U
2-Butanone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U

Table 1 (VOC)
Analytical Results for Volatiles by
Method SW846 8260B

	PAFB-S07A (FD3)[1]				PAFB-S07B (FD3)[1]				PAFB-S08			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
An Date	14-Dec-00				14-Dec-00				14-Dec-00			
% S	94	weight %	RL		90	weight %	RL		96	weight %	RL	
1,1,1,2-Tetrachloroethane		mg/kg	0.0032	U		mg/kg	0.0033	U		mg/kg	0.0031	U
1,1,1-Trichloroethane		mg/kg	0.0043	U		mg/kg	0.0044	U		mg/kg	0.0042	U
1,1,2,2-Tetrachloroethane		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
1,1,2-Trichloroethane		mg/kg	0.0053	U		mg/kg	0.0056	U		mg/kg	0.0052	U
1,1-Dichloroethane		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
1,1-Dichloroethene		mg/kg	0.0064	U		mg/kg	0.0067	U		mg/kg	0.0063	U
1,1-Dichloropropene		mg/kg	0.0053	U		mg/kg	0.0056	U		mg/kg	0.0052	U
1,2,3-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
1,2,3-Trichloropropane		mg/kg	0.021	U		mg/kg	0.022	U		mg/kg	0.021	U
1,2,4-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
1,2,4-Trimethylbenzene	0.000309	mg/kg	0.0074	F	0.0003	mg/kg	0.0078	F	0.000323	mg/kg	0.0073	F
1,2-Dibromo-3-chloropropane		mg/kg	0.011	U		mg/kg	0.011	U		mg/kg	0.01	U
1,2-Dibromoethane		mg/kg	0.0032	U		mg/kg	0.0033	U		mg/kg	0.0031	U
1,2-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
1,2-Dichloroethane		mg/kg	0.0032	U		mg/kg	0.0033	U		mg/kg	0.0031	U
1,2-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
1,3,5-Trimethylbenzene		mg/kg	0.0032	U		mg/kg	0.0033	U		mg/kg	0.0031	U
1,3-Dichlorobenzene		mg/kg	0.0064	U		mg/kg	0.0067	U		mg/kg	0.0063	U
1,3-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
1,4-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
1-Chlorohexane		mg/kg	0.0032	U		mg/kg	0.0033	U		mg/kg	0.0031	U
2,2-Dichloropropane		mg/kg	0.021	U		mg/kg	0.022	U		mg/kg	0.021	U
2-Chlorotoluene		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
4-Chlorotoluene		mg/kg	0.0032	U		mg/kg	0.0033	U		mg/kg	0.0031	U
Benzene		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
Bromobenzene		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
Bromochloromethane		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
Bromodichloromethane		mg/kg	0.0043	U		mg/kg	0.0044	U		mg/kg	0.0042	U
Bro		mg/kg	0.0064	U		mg/kg	0.0067	U		mg/kg	0.0063	U
Brom thane		mg/kg	0.0053	R		mg/kg	0.0056	R		mg/kg	0.0052	R
Carbon tetrachloride		mg/kg	0.011	U		mg/kg	0.011	U		mg/kg	0.01	U
Chlorobenzene		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
Chloroethane		mg/kg	0.0053	U		mg/kg	0.0056	U		mg/kg	0.0052	U
Chloroform		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
Chloromethane		mg/kg	0.0074	U		mg/kg	0.0078	U		mg/kg	0.0073	U
Dibromochloromethane		mg/kg	0.0032	U		mg/kg	0.0033	U		mg/kg	0.0031	U
Dibromomethane		mg/kg	0.011	U		mg/kg	0.011	U		mg/kg	0.01	U
Dichlorodifluoromethane		mg/kg	0.0053	R		mg/kg	0.0056	R		mg/kg	0.0052	R
Ethylbenzene		mg/kg	0.0032	U		mg/kg	0.0033	U		mg/kg	0.0031	U
Hexachlorobutadiene		mg/kg	0.0053	U		mg/kg	0.0056	U		mg/kg	0.0052	U
Isopropylbenzene		mg/kg	0.0085	U		mg/kg	0.0089	U		mg/kg	0.0083	U
Methylene chloride		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
Naphthalene		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
Styrene		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
Tetrachloroethene	0.0012	mg/kg	0.0074	F	0.000711	mg/kg	0.0078	F		mg/kg	0.0073	U
Toluene		mg/kg	0.0053	U		mg/kg	0.0056	U		mg/kg	0.0052	U
Trichloroethene		mg/kg	0.011	U		mg/kg	0.011	U		mg/kg	0.01	U
Trichlorofluoromethane		mg/kg	0.0043	U		mg/kg	0.0044	U		mg/kg	0.0042	U
Vinyl chloride		mg/kg	0.0096	U		mg/kg	0.01	U		mg/kg	0.0094	U
cis-1,2-Dichloroethene		mg/kg	0.0064	U		mg/kg	0.0067	U		mg/kg	0.0063	U
cis-1,3-Dichloropropene		mg/kg	0.0053	U		mg/kg	0.0056	U		mg/kg	0.0052	U
m-,p-Xylene		mg/kg	0.0053	U		mg/kg	0.0056	U		mg/kg	0.0052	U
n-Butylbenzene		mg/kg	0.0053	U		mg/kg	0.0056	U		mg/kg	0.0052	U
n-Propylbenzene		mg/kg	0.0021	U		mg/kg	0.0022	U		mg/kg	0.0021	U
o-Xylene		mg/kg	0.0053	U		mg/kg	0.0056	U		mg/kg	0.0052	U
p-Isopropyltoluene		mg/kg	0.0064	U		mg/kg	0.0067	U		mg/kg	0.0063	U
sec-Butylbenzene		mg/kg	0.0074	U		mg/kg	0.0078	U		mg/kg	0.0073	U
tert-Butylbenzene		mg/kg	0.0074	U		mg/kg	0.0078	U		mg/kg	0.0073	U
trans-1 hloroethene		mg/kg	0.0032	U		mg/kg	0.0033	U		mg/kg	0.0031	U
trans- hloropropene		mg/kg	0.0053	U		mg/kg	0.0056	U		mg/kg	0.0052	U
Acetone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U
2-Butanone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U

Table 1 (VOC)
Analytical Results for Volatiles by
Method SW846 8260B

	PAFB-S09				PAFB-S10				PAFB-S11			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Ana[illegible] Date	14-Dec-00				15-Dec-00				15-Dec-00			
% S[illegible]	95	weight %	RL		95	weight %	RL		93	weight %	RL	
1,1,1,2-Tetrachloroethane		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
1,1,1-Trichloroethane		mg/kg	0.0042	U		mg/kg	0.0042	U		mg/kg	0.0043	U
1,1,2,2-Tetrachloroethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,1,2-Trichloroethane		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0054	U
1,1-Dichloroethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,1-Dichloroethene		mg/kg	0.0063	U		mg/kg	0.0063	U		mg/kg	0.0065	U
1,1-Dichloropropene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0054	U
1,2,3-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,2,3-Trichloropropane		mg/kg	0.021	U		mg/kg	0.021	U		mg/kg	0.022	U
1,2,4-Trichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,2,4-Trimethylbenzene	0.000305	mg/kg	0.0074	U	0.000274	mg/kg	0.0074	F	0.000258	mg/kg	0.0075	F
1,2-Dibromo-3-chloropropane		mg/kg	0.011	U		mg/kg	0.011	U		mg/kg	0.011	U
1,2-Dibromoethane		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
1,2-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,2-Dichloroethane		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
1,2-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,3,5-Trimethylbenzene		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
1,3-Dichlorobenzene		mg/kg	0.0063	U		mg/kg	0.0063	U		mg/kg	0.0065	U
1,3-Dichloropropane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1,4-Dichlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
1-Chlorohexane		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
2,2-Dichloropropane		mg/kg	0.021	U		mg/kg	0.021	U		mg/kg	0.022	U
2-Chlorotoluene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
4-Chlorotoluene		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
Benzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Bromobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Bromochloromethane		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Bromodichloromethane		mg/kg	0.0042	U		mg/kg	0.0042	U		mg/kg	0.0043	U
Brom[illegible]		mg/kg	0.0063	U		mg/kg	0.0063	U		mg/kg	0.0065	U
Brom[illegible]hane		mg/kg	0.0053	R		mg/kg	0.0053	U		mg/kg	0.0054	U
Carbon tetrachloride		mg/kg	0.011	U		mg/kg	0.011	U		mg/kg	0.011	U
Chlorobenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Chloroethane		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0054	U
Chloroform		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Chloromethane		mg/kg	0.0074	U		mg/kg	0.0074	U		mg/kg	0.0075	U
Dibromochloromethane		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
Dibromomethane		mg/kg	0.011	U		mg/kg	0.011	U		mg/kg	0.011	U
Dichlorodifluoromethane		mg/kg	0.0053	R		mg/kg	0.0053	R		mg/kg	0.0054	R
Ethylbenzene		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
Hexachlorobutadiene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0054	U
Isopropylbenzene		mg/kg	0.0084	U		mg/kg	0.0084	U		mg/kg	0.0086	U
Methylene chloride		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Naphthalene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Styrene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
Tetrachloroethene		mg/kg	0.0074	U		mg/kg	0.0074	U		mg/kg	0.0075	U
Toluene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0054	U
Trichloroethene		mg/kg	0.011	U		mg/kg	0.011	U		mg/kg	0.011	U
Trichlorofluoromethane		mg/kg	0.0042	U		mg/kg	0.0042	U		mg/kg	0.0043	U
Vinyl chloride		mg/kg	0.0095	U		mg/kg	0.0095	U		mg/kg	0.0097	U
cis-1,2-Dichloroethene		mg/kg	0.0063	U		mg/kg	0.0063	U		mg/kg	0.0065	U
cis-1,3-Dichloropropene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0054	U
m-,p-Xylene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0054	U
n-Butylbenzene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0054	U
n-Propylbenzene		mg/kg	0.0021	U		mg/kg	0.0021	U		mg/kg	0.0022	U
o-Xylene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0054	U
p-Isopropyltoluene		mg/kg	0.0063	U		mg/kg	0.0063	U		mg/kg	0.0065	U
sec-Butylbenzene		mg/kg	0.0074	U		mg/kg	0.0074	U		mg/kg	0.0075	U
tert-Butylbenzene		mg/kg	0.0074	U		mg/kg	0.0074	U		mg/kg	0.0075	U
trans-1,2-Dichloroethene		mg/kg	0.0032	U		mg/kg	0.0032	U		mg/kg	0.0032	U
trans-1,3-Dichloropropene		mg/kg	0.0053	U		mg/kg	0.0053	U		mg/kg	0.0054	U
Acetone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U
2-Butanone		mg/kg	0.01	U		mg/kg	0.01	U		mg/kg	0.01	U

Table 1 (VOC)
Analytical Results for Volatiles by
Method SW846 8260B

	PAFB-S12			
Collection Date	7-Dec-00			
Ar Date	15-Dec-00			
%	95	weight %	RL	
1,1,1,2-Tetrachloroethane		mg/kg	0.0032	U
1,1,1-Trichloroethane		mg/kg	0.0042	U
1,1,2,2-Tetrachloroethane		mg/kg	0.0021	U
1,1,2-Trichloroethane		mg/kg	0.0053	U
1,1-Dichloroethane		mg/kg	0.0021	U
1,1-Dichloroethene		mg/kg	0.0063	U
1,1-Dichloropropene		mg/kg	0.0053	U
1,2,3-Trichlorobenzene		mg/kg	0.0021	U
1,2,3-Trichloropropane		mg/kg	0.021	U
1,2,4-Trichlorobenzene		mg/kg	0.0021	U
1,2,4-Trimethylbenzene	0.000274	mg/kg	0.0074	F
1,2-Dibromo-3-chloropropane		mg/kg	0.011	U
1,2-Dibromoethane		mg/kg	0.0032	U
1,2-Dichlorobenzene		mg/kg	0.0021	U
1,2-Dichloroethane		mg/kg	0.0032	U
1,2-Dichloropropane		mg/kg	0.0021	U
1,3,5-Trimethylbenzene		mg/kg	0.0032	U
1,3-Dichlorobenzene		mg/kg	0.0063	U
1,3-Dichloropropane		mg/kg	0.0021	U
1,4-Dichlorobenzene		mg/kg	0.0021	U
1-Chlorohexane		mg/kg	0.0032	U
2,2-Dichloropropane		mg/kg	0.021	U
2-Chlorotoluene		mg/kg	0.0021	U
4-Chlorotoluene		mg/kg	0.0032	U
Benzene		mg/kg	0.0021	U
Bromobenzene		mg/kg	0.0021	U
Bromochloromethane		mg/kg	0.0021	U
Bromodichloromethane		mg/kg	0.0042	U
Bro n		mg/kg	0.0063	U
Bro thane		mg/kg	0.0053	U
Carbon tetrachloride		mg/kg	0.011	U
Chlorobenzene		mg/kg	0.0021	U
Chloroethane		mg/kg	0.0053	U
Chloroform		mg/kg	0.0021	U
Chloromethane		mg/kg	0.0074	U
Dibromochloromethane		mg/kg	0.0032	U
Dibromomethane		mg/kg	0.011	U
Dichlorodifluoromethane		mg/kg	0.0053	R
Ethylbenzene		mg/kg	0.0032	U
Hexachlorobutadiene		mg/kg	0.0053	U
Isopropylbenzene		mg/kg	0.0084	U
Methylene chloride		mg/kg	0.0021	U
Naphthalene		mg/kg	0.0021	U
Styrene		mg/kg	0.0021	U
Tetrachloroethene		mg/kg	0.0074	U
Toluene		mg/kg	0.0053	U
Trichloroethene		mg/kg	0.011	U
Trichlorofluoromethane		mg/kg	0.0042	U
Vinyl chloride		mg/kg	0.0095	U
cis-1,2-Dichloroethene		mg/kg	0.0063	U
cis-1,3-Dichloropropene		mg/kg	0.0053	U
m-,p-Xylene		mg/kg	0.0053	U
n-Butylbenzene		mg/kg	0.0053	U
n-Propylbenzene		mg/kg	0.0021	U
o-Xylene		mg/kg	0.0053	U
p-Isopropyltoluene		mg/kg	0.0063	U
sec-Butylbenzene		mg/kg	0.0074	U
tert-Butylbenzene		mg/kg	0.0074	U
trans- Dichloroethene		mg/kg	0.0032	U
trans- chloropropene		mg/kg	0.0053	U
Acetone		mg/kg	0.01	U
2-Butanone		mg/kg	0.01	U

Table 1(SVOC)
Analytical Results for Semivolatiles by
Method SW846 8270C

	PAFB-B01				PAFB-B02				PAFB-B03			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date (Instrument)	12/17/2000 (MS5)				12/18/2000 (MS5)				12/18/2000 (MS5)			
Percent Solids	98	weight %	RL		94	weight %	RL		90	weight %	RL	
1,2,4-Trichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,2-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,3-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,4-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2,4,5-Trichlorophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4,6-Trichlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dichlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dimethylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dinitrophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4-Dinitrotoluene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2,6-Dinitrotoluene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Chloronaphthalene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Chlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Methylnaphthalene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Methylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2-Nitrophenol		mg/kg	0.3	R		mg/kg	0.3	R		mg/kg	0.3	R
3,3'-Dichlorobenzidine		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	1.3	U
3-Nitroaniline		mg/kg	3.3	R		mg/kg	3.3	R		mg/kg	3.3	R
4,6-Dinitro-2-methylphenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
4-Bromophenyl-phenylether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Chloro-3-methylphenol		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	1.3	U
4-Chloroaniline		mg/kg	1.3	R		mg/kg	1.3	R		mg/kg	1.3	R
4-Chlorophenyl-phenyl ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Methylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
4-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
Acenaphthene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Acenaphthylene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Anthracene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Benzo(a)anthracene		mg/kg	0.7	U	0.113	mg/kg	0.7	F		mg/kg	0.7	U
Benzo(a)pyrene		mg/kg	0.7	U	0.112	mg/kg	0.7	F		mg/kg	0.7	U
Benzo(b)fluoranthene		mg/kg	0.7	U	0.129	mg/kg	0.7	F		mg/kg	0.7	U
Benzo(g,h,i)Perylene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Benzo(k)fluoranthene		mg/kg	0.7	U	0.107	mg/kg	0.7	F		mg/kg	0.7	U
Benzoic acid		mg/kg	1.6	R		mg/kg	1.6	R		mg/kg	1.6	R
Benzyl alcohol		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	1.3	U
Bis(2-Chloroethoxy)Methane		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Bis(2-Chloroethyl)ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Butylbenzylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Chrysene		mg/kg	0.7	U	0.114	mg/kg	0.7	F		mg/kg	0.7	U
Di-N-Butylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Di-n-octylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Dibenzo(a,h)Anthracene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Dibenzofuran		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Diethylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Dimethylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Fluoranthene		mg/kg	0.7	U	0.195	mg/kg	0.7	F		mg/kg	0.7	U
Fluorene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobutadiene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorocyclopentadiene		mg/kg	0.7	R		mg/kg	0.7	U		mg/kg	0.7	U
Hexachloroethane		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Indeno(1,2,3-cd)pyrene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Isophorone		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitroso-di-n-propylamine		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitrosodiphenylamine		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Naphthalene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Nitrobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Pentachlorophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
Phenanthrene		mg/kg	0.7	U	0.101	mg/kg	0.7	F		mg/kg	0.7	U
Phenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
vrene		mg/kg	0.7	U	0.164	mg/kg	0.7	F		mg/kg	0.7	U
s(2-Chloroisopropyl)ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
bis(2-Ethylhexyl)phthalate		mg/kg	0.7	U	0.0621	mg/kg	0.7	F		mg/kg	0.7	U
p-Nitrophenol		mg/kg	1.6	U		mg/kg	1.6	U		mg/kg	1.6	U

Table 1(SVOC)
Analytical Results for Semivolatiles by
Method SW846 8270C

	PAFB-B04				PAFB-B05				PAFB-B06			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date (Instrument)	12/22/2000 (MS5)				12/17/00 (MS5)				12/17/00 (MS5)			
Percent Solids	95	weight %	RL		97	weight %	RL		96	weight %	RL	
1,2,4-Trichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,2-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,3-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,4-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2,4,5-Trichlorophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4,6-Trichlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dichlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dimethylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dinitrophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4-Dinitrotoluene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2,6-Dinitrotoluene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Chloronaphthalene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Chlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Methylnaphthalene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Methylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2-Nitrophenol		mg/kg	0.3	U		mg/kg	0.3	R		mg/kg	0.3	R
3,3'-Dichlorobenzidine		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	1.3	U
3-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	R		mg/kg	3.3	R
4,6-Dinitro-2-methylphenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
4-Bromophenyl-phenylether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Chloro-3-methylphenol		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	1.3	U
4-Chloroaniline		mg/kg	1.3	U		mg/kg	1.3	R		mg/kg	1.3	R
4-Chlorophenyl-phenyl ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Methylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
4-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
Acenaphthene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Acenaphthylene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Anthracene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Benzo(a)anthracene	0.0376	mg/kg	0.7	F		mg/kg	0.7	U		mg/kg	0.7	U
Benzo(a)pyrene	0.0411	mg/kg	0.7	F		mg/kg	0.7	U		mg/kg	0.7	U
Benzo(b)fluoranthene	0.0478	mg/kg	0.7	F		mg/kg	0.7	U		mg/kg	0.7	U
Benzo(g,h,i)Perylene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Benzo(k)fluoranthene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Benzoic acid		mg/kg	1.6	R		mg/kg	1.6	R		mg/kg	1.6	R
Benzyl alcohol		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	1.3	U
Bis(2-Chloroethoxy)Methane		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Bis(2-Chloroethyl)ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Butylbenzylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Chrysene	0.0389	mg/kg	0.7	F		mg/kg	0.7	U		mg/kg	0.7	U
Di-N-Butylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Di-n-octylphthalate		mg/kg	0.7	R		mg/kg	0.7	U		mg/kg	0.7	U
Dibenzo(a,h)Anthracene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Dibenzofuran		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Diethylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Dimethylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Fluoranthene	0.0574	mg/kg	0.7	F		mg/kg	0.7	U		mg/kg	0.7	U
Fluorene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobutadiene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorocyclopentadiene		mg/kg	0.7	U		mg/kg	0.7	R		mg/kg	0.7	R
Hexachloroethane		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Indeno(1,2,3-cd)pyrene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Isophorone		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitroso-di-n-propylamine		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitrosodiphenylamine		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Naphthalene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Nitrobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Pentachlorophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
Phenanthrene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Phenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
Pyrene	0.0465	mg/kg	0.7	F		mg/kg	0.7	U		mg/kg	0.7	U
bis(2-Chloroisopropyl)ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
bis(2-Ethylhexyl)phthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
p-Nitrophenol		mg/kg	1.6	U		mg/kg	1.6	U		mg/kg	1.6	U

Table 1(SVOC)
Analytical Results for Semivolatiles by Method SW846 8270C

	PAFB-B07				PAFB-B08			
Collection Date	7-Dec-00				7-Dec-00			
Analysis Date (Instrument)	12/18/00 (MS5)				12/17/00 (MS5)			
Percent Solids	97	weight %	RL		96	weight %	RL	
1,2,4-Trichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U
1,2-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U
1,3-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U
1,4-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U
2,4,5-Trichlorophenol		mg/kg	3.3	U		mg/kg	3.3	U
2,4,6-Trichlorophenol		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dichlorophenol		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dimethylphenol		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dinitrophenol		mg/kg	3.3	U		mg/kg	3.3	U
2,4-Dinitrotoluene		mg/kg	0.7	U		mg/kg	0.7	U
2,6-Dinitrotoluene		mg/kg	0.7	U		mg/kg	0.7	U
2-Chloronaphthalene		mg/kg	0.7	U		mg/kg	0.7	U
2-Chlorophenol		mg/kg	0.3	U		mg/kg	0.3	U
2-Methylnaphthalene		mg/kg	0.7	U		mg/kg	0.7	U
2-Methylphenol		mg/kg	0.3	U		mg/kg	0.3	U
2-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	U
2-Nitrophenol		mg/kg	0.3	R		mg/kg	0.3	R
3,3'-Dichlorobenzidine		mg/kg	1.3	U		mg/kg	1.3	U
3-Nitroaniline		mg/kg	3.3	R		mg/kg	3.3	R
4,6-Dinitro-2-methylphenol		mg/kg	3.3	U		mg/kg	3.3	U
4-Bromophenyl-phenylether		mg/kg	0.7	U		mg/kg	0.7	U
4-Chloro-3-methylphenol		mg/kg	1.3	U		mg/kg	1.3	U
4-Chloroaniline		mg/kg	1.3	R		mg/kg	1.3	R
4-Chlorophenyl-phenyl ether		mg/kg	0.7	U		mg/kg	0.7	U
4-Methylphenol		mg/kg	0.3	U		mg/kg	0.3	U
4-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	U
Acenaphthene		mg/kg	0.7	U		mg/kg	0.7	U
Acenaphthylene		mg/kg	0.7	U		mg/kg	0.7	U
Anthracene		mg/kg	0.7	U		mg/kg	0.7	U
enzo(a)anthracene		mg/kg	0.7	U		mg/kg	0.7	U
Benzo(a)pyrene		mg/kg	0.7	U		mg/kg	0.7	U
Benzo(b)fluoranthene		mg/kg	0.7	U		mg/kg	0.7	U
Benzo(g,h,i)Perylene		mg/kg	0.7	U		mg/kg	0.7	U
Benzo(k)fluoranthene		mg/kg	0.7	U		mg/kg	0.7	U
Benzoic acid		mg/kg	1.6	R		mg/kg	1.6	R
Benzyl alcohol		mg/kg	1.3	U		mg/kg	1.3	U
Bis(2-Chloroethoxy)Methane		mg/kg	0.7	U		mg/kg	0.7	U
Bis(2-Chloroethyl)ether		mg/kg	0.7	U		mg/kg	0.7	U
Butylbenzylphthalate		mg/kg	0.7	U		mg/kg	0.7	U
Chrysene		mg/kg	0.7	U		mg/kg	0.7	U
Di-N-Butylphthalate		mg/kg	0.7	U		mg/kg	0.7	U
Di-n-octylphthalate		mg/kg	0.7	U		mg/kg	0.7	U
Dibenzo(a,h)Anthracene		mg/kg	0.7	U		mg/kg	0.7	U
Dibenzofuran		mg/kg	0.7	U		mg/kg	0.7	U
Diethylphthalate		mg/kg	0.7	U		mg/kg	0.7	U
Dimethylphthalate		mg/kg	0.7	U		mg/kg	0.7	U
Fluoranthene		mg/kg	0.7	U		mg/kg	0.7	U
Fluorene		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobutadiene		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorocyclopentadiene		mg/kg	0.7	U		mg/kg	0.7	R
Hexachloroethane		mg/kg	0.7	U		mg/kg	0.7	U
Indeno(1,2,3-cd)pyrene		mg/kg	0.7	U		mg/kg	0.7	U
Isophorone		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitroso-di-n-propylamine		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitrosodiphenylamine		mg/kg	0.7	U		mg/kg	0.7	U
Naphthalene		mg/kg	0.7	U		mg/kg	0.7	U
Nitrobenzene		mg/kg	0.7	U		mg/kg	0.7	U
Pentachlorophenol		mg/kg	3.3	U		mg/kg	3.3	U
Phenanthrene		mg/kg	0.7	U		mg/kg	0.7	U
Phenol		mg/kg	0.3	U		mg/kg	0.3	U
rene		mg/kg	0.7	U		mg/kg	0.7	U
s(2-Chloroisopropyl)ether		mg/kg	0.7	U		mg/kg	0.7	U
bis(2-Ethylhexyl)phthalate		mg/kg	0.7	U		mg/kg	0.7	U
p-Nitrophenol		mg/kg	1.6	U		mg/kg	1.6	U

Table 1(SVOC)
Analytical Results for Semivolatiles by
Method SW846 8270C

	PAFB-B09A (FD1)[1]				PAFB-B09B (FD1)[1]				PAFB-B10			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date (Instrument)	12/18/00 (MS5)				12/18/00 (MS5)				12/18/00 (MS5)			
Percent Solids	96	weight %	RL		96	weight %	RL		97	weight %	RL	
1,2,4-Trichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,2-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,3-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,4-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2,4,5-Trichlorophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4,6-Trichlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dichlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dimethylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dinitrophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4-Dinitrotoluene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2,6-Dinitrotoluene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Chloronaphthalene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Chlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Methylnaphthalene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Methylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2-Nitrophenol		mg/kg	0.3	R		mg/kg	0.3	R		mg/kg	0.3	R
3,3'-Dichlorobenzidine		mg/kg	1.3	U	**0.0553**	**mg/kg**	**1.3**	**F**		mg/kg	1.3	U
3-Nitroaniline		mg/kg	3.3	R		mg/kg	3.3	R		mg/kg	3.3	R
4,6-Dinitro-2-methylphenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
4-Bromophenyl-phenylether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Chloro-3-methylphenol		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	1.3	U
4-Chloroaniline		mg/kg	1.3	R		mg/kg	1.3	R		mg/kg	1.3	R
4-Chlorophenyl-phenyl ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Methylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
4-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
Acenaphthene		mg/kg	0.7	U	0.0571	mg/kg	0.7	F		mg/kg	0.7	U
Acenaphthylene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Anthracene		mg/kg	0.7	U	0.341	mg/kg	0.7	F		mg/kg	0.7	U
Benzo(a)anthracene	0.0569	mg/kg	0.7	F	0.803	mg/kg	0.7			mg/kg	0.7	U
Benzo(a)pyrene	0.0504	mg/kg	0.7	F	0.546	mg/kg	0.7	F		mg/kg	0.7	U
Benzo(b)fluoranthene	0.0584	mg/kg	0.7	F	0.549	mg/kg	0.7	F		mg/kg	0.7	U
Benzo(g,h,i)Perylene	0.0333	mg/kg	0.7	F	0.309	mg/kg	0.7	F		mg/kg	0.7	U
Benzo(k)fluoranthene	0.035	mg/kg	0.7	F	0.414	mg/kg	0.7	F		mg/kg	0.7	U
Benzoic acid		mg/kg	1.6	R		mg/kg	1.6	R		mg/kg	1.6	R
Benzyl alcohol		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	1.3	U
Bis(2-Chloroethoxy)Methane		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Bis(2-Chloroethyl)ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Butylbenzylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Chrysene	0.0587	mg/kg	0.7	F	0.802	mg/kg	0.7			mg/kg	0.7	U
Di-N-Butylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Di-n-octylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Dibenzo(a,h)Anthracene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Dibenzofuran		mg/kg	0.7	U	0.0723	mg/kg	0.7	F		mg/kg	0.7	U
Diethylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Dimethylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Fluoranthene	0.0727	mg/kg	0.7	F	1.98	mg/kg	0.7			mg/kg	0.7	U
Fluorene		mg/kg	0.7	U	0.224	mg/kg	0.7	F		mg/kg	0.7	U
Hexachlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobutadiene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorocyclopentadiene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachloroethane		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Indeno(1,2,3-cd)pyrene		mg/kg	0.7	U	0.267	mg/kg	0.7	F		mg/kg	0.7	U
Isophorone		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitroso-di-n-propylamine		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitrosodiphenylamine		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Naphthalene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Nitrobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Pentachlorophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
Phenanthrene		mg/kg	0.7	U	2.35	mg/kg	0.7			mg/kg	0.7	U
Phenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
Pyrene	0.0943	mg/kg	0.7	F	1.75	mg/kg	0.7			mg/kg	0.7	U
bis(2-Chloroisopropyl)ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
bis(2-Ethylhexyl)phthalate	0.0428	mg/kg	0.7	F		mg/kg	0.7	U	0.043	mg/kg	0.7	F
p-Nitrophenol		mg/kg	1.6	U		mg/kg	1.6	U		mg/kg	1.6	U

Table 1(SVOC)
Analytical Results for Semivolatiles by
Method SW846 8270C

	PAFB-B11				PAFB-B12				PAFB-B13			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date (Instrument)	12/17/00 (MS5)				12/18/00 (MS5)				12/22/00 (MS5)			
Percent Solids	98	weight %	RL		96	weight %	RL		96	weight %	RL	
1,2,4-Trichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,2-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,3-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,4-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2,4,5-Trichlorophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4,6-Trichlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dichlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dimethylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dinitrophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4-Dinitrotoluene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2,6-Dinitrotoluene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Chloronaphthalene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Chlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Methylnaphthalene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Methylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2-Nitrophenol		mg/kg	0.3	R		mg/kg	0.3	R		mg/kg	0.3	U
3,3'-Dichlorobenzidine		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	1.3	U
3-Nitroaniline		mg/kg	3.3	R		mg/kg	3.3	R		mg/kg	3.3	U
4,6-Dinitro-2-methylphenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
4-Bromophenyl-phenylether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Chloro-3-methylphenol		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	1.3	U
4-Chloroaniline		mg/kg	1.3	R		mg/kg	1.3	R		mg/kg	1.3	U
4-Chlorophenyl-phenyl ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Methylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
4-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
Acenaphthene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Acenaphthylene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Anthracene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
enzo(a)anthracene		mg/kg	0.7	U		mg/kg	0.7	U	0.0417	mg/kg	0.7	F
Benzo(a)pyrene		mg/kg	0.7	U	0.0302	mg/kg	0.7	F	0.0496	mg/kg	0.7	F
Benzo(b)fluoranthene		mg/kg	0.7	U	0.0353	mg/kg	0.7	F	0.062	mg/kg	0.7	F
Benzo(g,h,i)Perylene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Benzo(k)fluoranthene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Benzoic acid		mg/kg	1.6	R		mg/kg	1.6	R		mg/kg	1.6	R
Benzyl alcohol		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	1.3	U
Bis(2-Chloroethoxy)Methane		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Bis(2-Chloroethyl)ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Butylbenzylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Chrysene		mg/kg	0.7	U		mg/kg	0.7	U	0.0456	mg/kg	0.7	F
Di-N-Butylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Di-n-octylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	R
Dibenzo(a,h)Anthracene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Dibenzofuran		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Diethylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Dimethylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Fluoranthene		mg/kg	0.7	U	0.0412	mg/kg	0.7	F	0.0709	mg/kg	0.7	F
Fluorene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobutadiene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorocyclopentadiene		mg/kg	0.7	R		mg/kg	0.7	U		mg/kg	0.7	U
Hexachloroethane		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Indeno(1,2,3-cd)pyrene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Isophorone		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitroso-di-n-propylamine		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitrosodiphenylamine		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Naphthalene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Nitrobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Pentachlorophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
Phenanthrene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Phenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
ene		mg/kg	0.7	U	0.0393	mg/kg	0.7	F	0.0639	mg/kg	0.7	F
s(2-Chloroisopropyl)ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
bis(2-Ethylhexyl)phthalate		mg/kg	0.7	U		mg/kg	0.7	U	0.041	mg/kg	0.7	F
p-Nitrophenol		mg/kg	1.6	U		mg/kg	1.6	U		mg/kg	1.6	U

Table 1(SVOC)
Analytical Results for Semivolatiles by
Method SW846 8270C

	PAFB-P01				PAFB-P02				PAFB-P03			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date (Instrument)	12/17/00 (MS4)				12/18/00 (MS4)				12/18/00 (MS4)			
Percent Solids	86	weight %	RL		93	weight %	RL		95	weight %	RL	
1,2,4-Trichlorobenzene		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
1,2-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
1,3-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
1,4-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
2,4,5-Trichlorophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	6.6	U
2,4,6-Trichlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.6	U
2,4-Dichlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.6	U
2,4-Dimethylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.6	U
2,4-Dinitrophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	6.6	U
2,4-Dinitrotoluene		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
2,6-Dinitrotoluene		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
2-Chloronaphthalene		mg/kg	0.7	R		mg/kg	0.69	R		mg/kg	1.4	R
2-Chlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.6	U
2-Methylnaphthalene		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
2-Methylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.6	U
2-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	6.6	U
2-Nitrophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.6	U
3,3'-Dichlorobenzidine		mg/kg	1.3	R		mg/kg	1.3	R		mg/kg	2.6	R
3-Nitroaniline		mg/kg	3.3	R		mg/kg	3.3	R		mg/kg	6.6	R
4,6-Dinitro-2-methylphenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	6.6	U
4-Bromophenyl-phenylether		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
4-Chloro-3-methylphenol		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	2.6	U
4-Chloroaniline		mg/kg	1.3	R		mg/kg	1.3	R		mg/kg	2.6	R
4-Chlorophenyl-phenyl ether		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
4-Methylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.6	U
4-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	6.6	U
Acenaphthene		mg/kg	0.7	U		mg/kg	0.69	U	0.408	mg/kg	1.4	F
Acenaphthylene		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
Anthracene		mg/kg	0.7	U		mg/kg	0.69	U	0.666	mg/kg	1.4	F
Benzo(a)anthracene		mg/kg	0.7	U	0.1	mg/kg	0.69	F	2.11	mg/kg	1.4	
Benzo(a)pyrene		mg/kg	0.7	U	0.12	mg/kg	0.69	F	1.85	mg/kg	1.4	R
Benzo(b)fluoranthene		mg/kg	0.7	U	0.135	mg/kg	0.69	F	2.4	mg/kg	1.4	R
Benzo(g,h,i)Perylene		mg/kg	0.7	U	0.049	mg/kg	0.69	F	0.545	mg/kg	1.4	R
Benzo(k)fluoranthene		mg/kg	0.7	U	0.0979	mg/kg	0.69	F	1.71	mg/kg	1.4	R
Benzoic acid		mg/kg	1.6	U		mg/kg	1.6	U		mg/kg	3.2	U
Benzyl alcohol		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	2.6	U
Bis(2-Chloroethoxy)Methane		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
Bis(2-Chloroethyl)ether		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
Butylbenzylphthalate		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
Chrysene		mg/kg	0.7	U	0.111	mg/kg	0.69	F	1.89	mg/kg	1.4	U
Di-N-Butylphthalate		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
Di-n-octylphthalate		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
Dibenzo(a,h)Anthracene		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	R
Dibenzofuran		mg/kg	0.7	U		mg/kg	0.69	U	0.119	mg/kg	1.4	F
Diethylphthalate		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
Dimethylphthalate		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
Fluoranthene		mg/kg	0.7	U	0.194	mg/kg	0.69	F	4.41	mg/kg	1.4	
Fluorene		mg/kg	0.7	U		mg/kg	0.69	U	0.252	mg/kg	1.4	F
Hexachlorobenzene		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
Hexachlorobutadiene		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
Hexachlorocyclopentadiene		mg/kg	0.7	R		mg/kg	0.69	R		mg/kg	1.4	R
Hexachloroethane		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
Indeno(1,2,3-cd)pyrene		mg/kg	0.7	U	0.0486	mg/kg	0.69	F	0.559	mg/kg	1.4	R
Isophorone		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
N-Nitroso-di-n-propylamine		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
N-Nitrosodiphenylamine		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
Naphthalene		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
Nitrobenzene		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
Pentachlorophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	6.6	U
Phenanthrene		mg/kg	0.7	U	0.0979	mg/kg	0.69	F	2.76	mg/kg	1.4	
Phenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.6	U
Pyrene		mg/kg	0.7	U	0.165	mg/kg	0.69	F	4.75	mg/kg	1.4	
bis(2-Chloroisopropyl)ether		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
bis(2-Ethylhexyl)phthalate		mg/kg	0.7	U		mg/kg	0.69	U		mg/kg	1.4	U
p-Nitrophenol		mg/kg	1.6	U		mg/kg	1.6	U		mg/kg	3.2	U

Table 1(SVOC)
Analytical Results for Semivolatiles by
Method SW846 8270C

	PAFB-P04				PAFB-P05A (FD2)[1]				PAFB-P05B (FD2)[1]			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date (Instrument)	12/18/00 (MS4)				12/18/00 (MS4)				12/22/00 (MS5)			
Percent Solids	95	weight %	RL		94	weight %	RL		94	weight %	RL	
1,2,4-Trichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,2-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,3-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,4-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2,4,5-Trichlorophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	R
2,4,6-Trichlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	R
2,4-Dichlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dimethylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dinitrophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4-Dinitrotoluene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2,6-Dinitrotoluene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Chloronaphthalene		mg/kg	0.7	R		mg/kg	0.7	R		mg/kg	0.7	R
2-Chlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Methylnaphthalene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Methylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2-Nitrophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
3,3'-Dichlorobenzidine		mg/kg	1.3	R		mg/kg	1.3	R		mg/kg	1.3	U
3-Nitroaniline		mg/kg	3.3	R		mg/kg	3.3	R		mg/kg	3.3	U
4,6-Dinitro-2-methylphenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	R
4-Bromophenyl-phenylether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	R
4-Chloro-3-methylphenol		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	1.3	U
4-Chloroaniline		mg/kg	1.3	R		mg/kg	1.3	R		mg/kg	1.3	U
4-Chlorophenyl-phenyl ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Methylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
4-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	R
Acenaphthene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Acenaphthylene	0.097	mg/kg	0.7	F		mg/kg	0.7	U		mg/kg	0.7	U
Anthracene	0.129	mg/kg	0.7	F		mg/kg	0.7	U		mg/kg	0.7	R
Benzo(a)anthracene	0.542	mg/kg	0.7	F	0.0516	mg/kg	0.7		0.203	mg/kg	0.7	F
Benzo(a)pyrene	0.588	mg/kg	0.7	R		mg/kg	0.7	R	0.175	mg/kg	0.7	F
Benzo(b)fluoranthene	0.691	mg/kg	0.7	R	0.0818	mg/kg	0.7	R	0.268	mg/kg	0.7	F
Benzo(g,h,i)Perylene	0.167	mg/kg	0.7	R		mg/kg	0.7	R	0.0925	mg/kg	0.7	F
Benzo(k)fluoranthene	0.533	mg/kg	0.7	R	0.0727	mg/kg	0.7	R	0.175	mg/kg	0.7	F
Benzoic acid		mg/kg	1.6	U		mg/kg	1.6	U		mg/kg	1.6	R
Benzyl alcohol		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	1.3	U
Bis(2-Chloroethoxy)Methane		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Bis(2-Chloroethyl)ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Butylbenzylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Chrysene	0.559	mg/kg	0.7	F	0.0602	mg/kg	0.7		0.21	mg/kg	0.7	F
Di-N-Butylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	R
Di-n-octylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	R
Dibenzo(a,h)Anthracene		mg/kg	0.7	R		mg/kg	0.7	R		mg/kg	0.7	U
Dibenzofuran		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Diethylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Dimethylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Fluoranthene	1.23	mg/kg	0.7		0.0793	mg/kg	0.7	F	0.323	mg/kg	0.7	J
Fluorene	0.0546	mg/kg	0.7	F		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	R
Hexachlorobutadiene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorocyclopentadiene		mg/kg	0.7	R		mg/kg	0.7	R		mg/kg	0.7	U
Hexachloroethane		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Indeno(1,2,3-cd)pyrene	0.184	mg/kg	0.7	R		mg/kg	0.7	R	0.0864	mg/kg	0.7	F
Isophorone		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitroso-di-n-propylamine		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitrosodiphenylamine		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	R
Naphthalene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Nitrobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Pentachlorophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	R
Phenanthrene	0.552	mg/kg	0.7	F		mg/kg	0.7	U	0.164	mg/kg	0.7	J
Phenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
Pyrene	0.958	mg/kg	0.7		0.0938	mg/kg	0.7		0.354	mg/kg	0.7	F
bis(2-Chloroisopropyl)ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
bis(2-Ethylhexyl)phthalate		mg/kg	0.7	U	0.0516	mg/kg	0.7		0.0966	mg/kg	0.7	F
p-Nitrophenol		mg/kg	1.6	U		mg/kg	1.6	U		mg/kg	1.6	U

Table 1(SVOC)
Analytical Results for Semivolatiles by
Method SW846 8270C

	PAFB-P06				PAFB-P07				PAFB-P08			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date (Instrument)	12/18/00 (MS4)				12/18/00 (MS4)				12/18/00 (MS4)			
Percent Solids	91	weight %	RL		96	weight %	RL		96	weight %	RL	
1,2,4-Trichlorobenzene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
1,2-Dichlorobenzene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
1,3-Dichlorobenzene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
1,4-Dichlorobenzene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
2,4,5-Trichlorophenol		mg/kg	17	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4,6-Trichlorophenol		mg/kg	1.5	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dichlorophenol		mg/kg	1.5	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dimethylphenol		mg/kg	1.5	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dinitrophenol		mg/kg	17	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4-Dinitrotoluene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
2,6-Dinitrotoluene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Chloronaphthalene		mg/kg	3.5	R		mg/kg	0.7	R		mg/kg	0.7	R
2-Chlorophenol		mg/kg	1.5	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Methylnaphthalene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Methylphenol		mg/kg	1.5	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Nitroaniline		mg/kg	17	U		mg/kg	3.3	U		mg/kg	3.3	U
2-Nitrophenol		mg/kg	1.5	U		mg/kg	0.3	U		mg/kg	0.3	U
3,3'-Dichlorobenzidine		mg/kg	6.5	R		mg/kg	1.3	R		mg/kg	1.3	R
3-Nitroaniline		mg/kg	17	R		mg/kg	3.3	R		mg/kg	3.3	R
4,6-Dinitro-2-methylphenol		mg/kg	17	U		mg/kg	3.3	U		mg/kg	3.3	U
4-Bromophenyl-phenylether		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Chloro-3-methylphenol		mg/kg	6.5	U		mg/kg	1.3	U		mg/kg	1.3	U
4-Chloroaniline		mg/kg	6.5	R		mg/kg	1.3	R		mg/kg	1.3	R
4-Chlorophenyl-phenyl ether		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Methylphenol		mg/kg	1.5	U		mg/kg	0.3	U		mg/kg	0.3	U
4-Nitroaniline		mg/kg	17	U		mg/kg	3.3	U		mg/kg	3.3	U
Acenaphthene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Acenaphthylene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
nthracene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
enzo(a)anthracene	0.559	mg/kg	3.5	F		mg/kg	0.7	U	0.0372	mg/kg	0.7	F
Benzo(a)pyrene	0.692	mg/kg	3.5	R		mg/kg	0.7	U	0.0367	mg/kg	0.7	F
Benzo(b)fluoranthene	0.989	mg/kg	3.5	R		mg/kg	0.7	U	0.0437	mg/kg	0.7	F
Benzo(g,h,i)Perylene		mg/kg	3.5	R		mg/kg	0.7	U		mg/kg	0.7	U
Benzo(k)fluoranthene	0.651	mg/kg	3.5	R		mg/kg	0.7	U		mg/kg	0.7	U
Benzoic acid		mg/kg	8	U		mg/kg	1.6	U		mg/kg	1.6	U
Benzyl alcohol		mg/kg	6.5	U		mg/kg	1.3	U		mg/kg	1.3	U
Bis(2-Chloroethoxy)Methane		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Bis(2-Chloroethyl)ether		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Butylbenzylphthalate		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Chrysene	0.653	mg/kg	3.5	F		mg/kg	0.7	U		mg/kg	0.7	U
Di-N-Butylphthalate		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Di-n-octylphthalate		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Dibenzo(a,h)Anthracene		mg/kg	3.5	R		mg/kg	0.7	U		mg/kg	0.7	U
Dibenzofuran		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Diethylphthalate		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Dimethylphthalate		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Fluoranthene	1.04	mg/kg	3.5	F		mg/kg	0.7	U	0.0676	mg/kg	0.7	F
Fluorene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobenzene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobutadiene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorocyclopentadiene		mg/kg	3.5	R		mg/kg	0.7	R		mg/kg	0.7	R
Hexachloroethane		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Indeno(1,2,3-cd)pyrene		mg/kg	3.5	R		mg/kg	0.7	U		mg/kg	0.7	U
Isophorone		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitroso-di-n-propylamine		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitrosodiphenylamine		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Naphthalene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Nitrobenzene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Pentachlorophenol		mg/kg	17	U		mg/kg	3.3	U		mg/kg	3.3	U
Phenanthrene	0.377	mg/kg	3.5	F		mg/kg	0.7	U		mg/kg	0.7	U
enol		mg/kg	1.5	U		mg/kg	0.3	U		mg/kg	0.3	U
ene	1.36	mg/kg	3.5	F		mg/kg	0.7	U	0.0494	mg/kg	0.7	F
bis(2-Chloroisopropyl)ether		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
bis(2-Ethylhexyl)phthalate		mg/kg	3.5	U		mg/kg	0.7	U	0.0519	mg/kg	0.7	F
p-Nitrophenol		mg/kg	8	U		mg/kg	1.6	U		mg/kg	1.6	U

Table 1(SVOC)
Analytical Results for Semivolatiles by
Method SW846 8270C

	PAFB-S01				PAFB-S02				PAFB-S03			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date (Instrument)	12/18/00 (MS4)				12/18/00 (MS4)				12/18/00 (MS4)			
Percent Solids	95	weight %	RL		96	weight %	RL		92	weight %	RL	
1,2,4-Trichlorobenzene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
1,2-Dichlorobenzene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
1,3-Dichlorobenzene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
1,4-Dichlorobenzene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
2,4,5-Trichlorophenol		mg/kg	17	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4,6-Trichlorophenol		mg/kg	1.5	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dichlorophenol		mg/kg	1.5	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dimethylphenol		mg/kg	1.5	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dinitrophenol		mg/kg	17	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4-Dinitrotoluene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
2,6-Dinitrotoluene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Chloronaphthalene		mg/kg	3.5	R		mg/kg	0.7	R		mg/kg	0.7	R
2-Chlorophenol		mg/kg	1.5	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Methylnaphthalene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Methylphenol		mg/kg	1.5	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Nitroaniline		mg/kg	17	U		mg/kg	3.3	U		mg/kg	3.3	U
2-Nitrophenol		mg/kg	1.5	U		mg/kg	0.3	U		mg/kg	0.3	U
3,3'-Dichlorobenzidine		mg/kg	6.5	R		mg/kg	1.3	R		mg/kg	1.3	R
3-Nitroaniline		mg/kg	17	R		mg/kg	3.3	R		mg/kg	3.3	R
4,6-Dinitro-2-methylphenol		mg/kg	17	U		mg/kg	3.3	U		mg/kg	3.3	U
4-Bromophenyl-phenylether		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Chloro-3-methylphenol		mg/kg	6.5	U		mg/kg	1.3	U		mg/kg	1.3	U
4-Chloroaniline		mg/kg	6.5	R		mg/kg	1.3	R		mg/kg	1.3	R
4-Chlorophenyl-phenyl ether		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Methylphenol		mg/kg	1.5	U		mg/kg	0.3	U		mg/kg	0.3	U
4-Nitroaniline		mg/kg	17	U		mg/kg	3.3	U		mg/kg	3.3	U
Acenaphthene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Acenaphthylene		mg/kg	3.5	U	0.0376	mg/kg	0.7	F		mg/kg	0.7	U
Anthracene		mg/kg	3.5	U	0.0362	mg/kg	0.7	F		mg/kg	0.7	U
enzo(a)anthracene	0.241	mg/kg	3.5	F	0.164	mg/kg	0.7	F	0.144	mg/kg	0.7	F
Benzo(a)pyrene		mg/kg	3.5	R	0.234	mg/kg	0.7	F	0.168	mg/kg	0.7	R
Benzo(b)fluoranthene		mg/kg	3.5	R	0.211	mg/kg	0.7	F	0.214	mg/kg	0.7	R
Benzo(g,h,i)Perylene		mg/kg	3.5	R	0.093	mg/kg	0.7	F		mg/kg	0.7	R
Benzo(k)fluoranthene		mg/kg	3.5	R	0.153	mg/kg	0.7	F	0.168	mg/kg	0.7	R
Benzoic acid		mg/kg	8	U		mg/kg	1.6	U		mg/kg	1.6	U
Benzyl alcohol		mg/kg	6.5	U		mg/kg	1.3	U		mg/kg	1.3	U
Bis(2-Chloroethoxy)Methane		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Bis(2-Chloroethyl)ether		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Butylbenzylphthalate		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Chrysene	0.257	mg/kg	3.5	F	0.169	mg/kg	0.7	F	0.181	mg/kg	0.7	F
Di-N-Butylphthalate		mg/kg	3.5	U	0.299	mg/kg	0.7	F		mg/kg	0.7	U
Di-n-octylphthalate		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Dibenzo(a,h)Anthracene		mg/kg	3.5	R		mg/kg	0.7	U		mg/kg	0.7	R
Dibenzofuran		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Diethylphthalate		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Dimethylphthalate		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Fluoranthene	0.48	mg/kg	3.5	F	0.318	mg/kg	0.7	F	0.307	mg/kg	0.7	F
Fluorene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobenzene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobutadiene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorocyclopentadiene		mg/kg	3.5	R		mg/kg	0.7	R		mg/kg	0.7	R
Hexachloroethane		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Indeno(1,2,3-cd)pyrene		mg/kg	3.5	R	0.0977	mg/kg	0.7	F		mg/kg	0.7	R
Isophorone		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitroso-di-n-propylamine		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitrosodiphenylamine		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Naphthalene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Nitrobenzene		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
Pentachlorophenol		mg/kg	17	U		mg/kg	3.3	U		mg/kg	3.3	U
Phenanthrene	0.374	mg/kg	3.5	F	0.135	mg/kg	0.7	F	0.18	mg/kg	0.7	F
henol		mg/kg	1.5	U		mg/kg	0.3	U		mg/kg	0.3	U
ene	0.58	mg/kg	3.5	F	0.245	mg/kg	0.7	F	0.353	mg/kg	0.7	F
s(2-Chloroisopropyl)ether		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
bis(2-Ethylhexyl)phthalate		mg/kg	3.5	U		mg/kg	0.7	U		mg/kg	0.7	U
p-Nitrophenol		mg/kg	8	U		mg/kg	1.6	U		mg/kg	1.6	U

Table 1(SVOC)
Analytical Results for Semivolatiles by
Method SW846 8270C

	PAFB-S04				PAFB-S05				PAFB-S06			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date (Instrument)	12/18/00 (MS4)				12/19/00 & 012/20/00 (MS4)				12/18/00 (MS4)			
Percent Solids	95	weight %	RL		94	weight %	RL		96	weight %	RL	
1,2,4-Trichlorobenzene		mg/kg	0.7	U		mg/kg	3.5	U	0.000302	mg/kg	0.7	F
1,2-Dichlorobenzene		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
1,3-Dichlorobenzene		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
1,4-Dichlorobenzene		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
2,4,5-Trichlorophenol		mg/kg	3.3	U		mg/kg	17	U		mg/kg	3.3	U
2,4,6-Trichlorophenol		mg/kg	0.3	U		mg/kg	1.5	U		mg/kg	0.3	U
2,4-Dichlorophenol		mg/kg	0.3	U		mg/kg	1.5	U		mg/kg	0.3	U
2,4-Dimethylphenol		mg/kg	0.3	U		mg/kg	1.5	U		mg/kg	0.3	U
2,4-Dinitrophenol		mg/kg	3.3	U		mg/kg	17	U		mg/kg	3.3	U
2,4-Dinitrotoluene		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
2,6-Dinitrotoluene		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
2-Chloronaphthalene		mg/kg	0.7	R		mg/kg	3.5	R		mg/kg	0.7	R
2-Chlorophenol		mg/kg	0.3	U		mg/kg	1.5	U		mg/kg	0.3	U
2-Methylnaphthalene		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
2-Methylphenol		mg/kg	0.3	U		mg/kg	1.5	U		mg/kg	0.3	U
2-Nitroaniline		mg/kg	3.3	U		mg/kg	17	U		mg/kg	3.3	U
2-Nitrophenol		mg/kg	0.3	U		mg/kg	1.5	U		mg/kg	0.3	U
3,3'-Dichlorobenzidine		mg/kg	1.3	R		mg/kg	6.5	R		mg/kg	1.3	R
3-Nitroaniline		mg/kg	3.3	R		mg/kg	17	R		mg/kg	3.3	R
4,6-Dinitro-2-methylphenol		mg/kg	3.3	U		mg/kg	17	U		mg/kg	3.3	U
4-Bromophenyl-phenylether		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
4-Chloro-3-methylphenol		mg/kg	1.3	U		mg/kg	6.5	U		mg/kg	1.3	U
4-Chloroaniline		mg/kg	1.3	R		mg/kg	6.5	R		mg/kg	1.3	R
4-Chlorophenyl-phenyl ether		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
4-Methylphenol		mg/kg	0.3	U		mg/kg	1.5	U		mg/kg	0.3	U
4-Nitroaniline		mg/kg	3.3	U		mg/kg	17	U		mg/kg	3.3	U
Acenaphthene		mg/kg	0.7	U	0.745	mg/kg	3.5	F		mg/kg	0.7	U
Acenaphthylene		mg/kg	0.7	U	0.424	mg/kg	3.5	F		mg/kg	0.7	U
Anthracene		mg/kg	0.7	U	2.26	mg/kg	3.5	F		mg/kg	0.7	U
enzo(a)anthracene	0.0575	mg/kg	0.7	F	8.94	mg/kg	3.5		0.0494	mg/kg	0.7	F
Benzo(a)pyrene	0.0597	mg/kg	0.7	F		mg/kg	14	U	0.0581	mg/kg	0.7	F
Benzo(b)fluoranthene	0.0764	mg/kg	0.7	F		mg/kg	14	U	0.0765	mg/kg	0.7	F
Benzo(g,h,i)Perylene		mg/kg	0.7	U		mg/kg	14	U		mg/kg	0.7	U
Benzo(k)fluoranthene	0.0471	mg/kg	0.7	F		mg/kg	14	U	0.0477	mg/kg	0.7	F
Benzoic acid		mg/kg	1.6	U		mg/kg	8	U		mg/kg	1.6	U
Benzyl alcohol		mg/kg	1.3	U		mg/kg	6.5	U		mg/kg	1.3	U
Bis(2-Chloroethoxy)Methane		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
Bis(2-Chloroethyl)ether		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
Butylbenzylphthalate		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
Chrysene	0.0663	mg/kg	0.7	F	8.67	mg/kg	3.5		0.0563	mg/kg	0.7	F
Di-N-Butylphthalate		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
Di-n-octylphthalate		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
Dibenzo(a,h)Anthracene		mg/kg	0.7	U		mg/kg	14	U		mg/kg	0.7	U
Dibenzofuran		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
Diethylphthalate		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
Dimethylphthalate		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
Fluoranthene	0.15	mg/kg	0.7	F	20	mg/kg	14		0.0886	mg/kg	0.7	F
Fluorene		mg/kg	0.7	U	1.11	mg/kg	3.5	F		mg/kg	0.7	U
Hexachlorobenzene		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
Hexachlorobutadiene		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
Hexachlorocyclopentadiene		mg/kg	0.7	R		mg/kg	3.5	U		mg/kg	0.7	R
Hexachloroethane		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
Indeno(1,2,3-cd)pyrene		mg/kg	0.7	U		mg/kg	14	U		mg/kg	0.7	U
Isophorone		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
N-Nitroso-di-n-propylamine		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
N-Nitrosodiphenylamine		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
Naphthalene		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
Nitrobenzene		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
Pentachlorophenol		mg/kg	3.3	U		mg/kg	17	U		mg/kg	3.3	U
Phenanthrene	0.0986	mg/kg	0.7	F	8.39	mg/kg	3.5			mg/kg	0.7	U
Phenol		mg/kg	0.3	U		mg/kg	1.5	U		mg/kg	0.3	U
rene	0.109	mg/kg	0.7	F	27	mg/kg	3.5		0.0794	mg/kg	0.7	F
s(2-Chloroisopropyl)ether		mg/kg	0.7	U		mg/kg	3.5	U		mg/kg	0.7	U
bis(2-Ethylhexyl)phthalate		mg/kg	0.7	U		mg/kg	3.5	U	0.0845	mg/kg	0.7	F
p-Nitrophenol		mg/kg	1.6	U		mg/kg	8	U		mg/kg	1.6	U

Table 1(SVOC)
Analytical Results for Semivolatiles by
Method SW846 8270C

	PAFB-S07A (FD3)[1]				PAFB-S07B (FD3)[1]				PAFB-S08			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date (Instrument)	12/18/00 (MS4)				12/18/00 (MS4)				12/17/00 (MS4)			
Percent Solids	94	weight %	RL		90	weight %	RL		96	weight %	RL	
1,2,4-Trichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,2-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,3-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
1,4-Dichlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2,4,5-Trichlorophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4,6-Trichlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dichlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dimethylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dinitrophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4-Dinitrotoluene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2,6-Dinitrotoluene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Chloronaphthalene		mg/kg	0.7	R		mg/kg	0.7	R		mg/kg	0.7	R
2-Chlorophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Methylnaphthalene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Methylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
2-Nitrophenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
3,3'-Dichlorobenzidine		mg/kg	1.3	R		mg/kg	1.3	R		mg/kg	1.3	R
3-Nitroaniline		mg/kg	3.3	R		mg/kg	3.3	R		mg/kg	3.3	R
4,6-Dinitro-2-methylphenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
4-Bromophenyl-phenylether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Chloro-3-methylphenol		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	1.3	U
4-Chloroaniline		mg/kg	1.3	R		mg/kg	1.3	R		mg/kg	1.3	R
4-Chlorophenyl-phenyl ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Methylphenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
4-Nitroaniline		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
Acenaphthene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Acenaphthylene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Anthracene		mg/kg	0.7	U	0.0798	mg/kg	0.7	F		mg/kg	0.7	U
Benzo(a)anthracene	0.0546	mg/kg	0.7	F	0.398	mg/kg	0.7	F		mg/kg	0.7	U
Benzo(a)pyrene	0.0531	mg/kg	0.7	R	0.357	mg/kg	0.7	R		mg/kg	0.7	U
Benzo(b)fluoranthene	0.0719	mg/kg	0.7	R	0.394	mg/kg	0.7	R		mg/kg	0.7	U
Benzo(g,h,i)Perylene		mg/kg	0.7	R	0.107	mg/kg	0.7	R		mg/kg	0.7	U
Benzo(k)fluoranthene	0.052	mg/kg	0.7	R	0.373	mg/kg	0.7	R		mg/kg	0.7	U
Benzoic acid		mg/kg	1.6	U		mg/kg	1.6	U		mg/kg	1.6	U
Benzyl alcohol		mg/kg	1.3	U		mg/kg	1.3	U		mg/kg	1.3	U
Bis(2-Chloroethoxy)Methane		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Bis(2-Chloroethyl)ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Butylbenzylphthalate		mg/kg	0.7	U	0.117	mg/kg	0.7	F		mg/kg	0.7	U
Chrysene	0.0555	mg/kg	0.7	F	0.355	mg/kg	0.7	F		mg/kg	0.7	U
Di-N-Butylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Di-n-octylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Dibenzo(a,h)Anthracene		mg/kg	0.7	R		mg/kg	0.7	R		mg/kg	0.7	U
Dibenzofuran		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Diethylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Dimethylphthalate		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Fluoranthene	0.0993	mg/kg	0.7	F	0.711	mg/kg	0.7	F		mg/kg	0.7	U
Fluorene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobutadiene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorocyclopentadiene		mg/kg	0.7	R		mg/kg	0.7	R		mg/kg	0.7	R
Hexachloroethane		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Indeno(1,2,3-cd)pyrene		mg/kg	0.7	R	0.113	mg/kg	0.7	R		mg/kg	0.7	U
Isophorone		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitroso-di-n-propylamine		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitrosodiphenylamine		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Naphthalene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	M
Nitrobenzene		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
Pentachlorophenol		mg/kg	3.3	U		mg/kg	3.3	U		mg/kg	3.3	U
Phenanthrene		mg/kg	0.7	U	0.267	mg/kg	0.7	F		mg/kg	0.7	U
Phenol		mg/kg	0.3	U		mg/kg	0.3	U		mg/kg	0.3	U
Pyrene	0.0855	mg/kg	0.7	F	0.74	mg/kg	0.7	F		mg/kg	0.7	U
bis(2-Chloroisopropyl)ether		mg/kg	0.7	U		mg/kg	0.7	U		mg/kg	0.7	U
bis(2-Ethylhexyl)phthalate	0.0591	mg/kg	0.7	F	0.138	mg/kg	0.7	F		mg/kg	0.7	U
p-Nitrophenol		mg/kg	1.6	U		mg/kg	1.6	U		mg/kg	1.6	U

Table 1(SVOC)
Analytical Results for Semivolatiles by
Method SW846 8270C

	PAFB-S09				PAFB-S10				PAFB-S11			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Analysis Date (Instrument)	12/18/00(MS4) & 12/15/00(MS5)				12/17/00 (MS5)				12/22/00 (MS5)			
Percent Solids	95	weight %	RL		95	weight %	RL		93	weight %	RL	
1,2,4-Trichlorobenzene		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
1,2-Dichlorobenzene		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
1,3-Dichlorobenzene		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
1,4-Dichlorobenzene		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
2,4,5-Trichlorophenol		mg/kg	6.6	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4,6-Trichlorophenol		mg/kg	0.6	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dichlorophenol		mg/kg	0.6	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dimethylphenol		mg/kg	0.6	U		mg/kg	0.3	U		mg/kg	0.3	U
2,4-Dinitrophenol		mg/kg	6.6	U		mg/kg	3.3	U		mg/kg	3.3	U
2,4-Dinitrotoluene		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
2,6-Dinitrotoluene		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Chloronaphthalene		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Chlorophenol		mg/kg	0.6	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Methylnaphthalene		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
2-Methylphenol		mg/kg	0.6	U		mg/kg	0.3	U		mg/kg	0.3	U
2-Nitroaniline		mg/kg	6.6	U		mg/kg	3.3	U		mg/kg	3.3	U
2-Nitrophenol		mg/kg	0.6	R		mg/kg	0.3	R		mg/kg	0.3	U
3,3'-Dichlorobenzidine	0.041	mg/kg	2.6	F		mg/kg	1.3	U		mg/kg	1.3	U
3-Nitroaniline		mg/kg	6.6	R		mg/kg	3.3	R		mg/kg	3.3	U
4,6-Dinitro-2-methylphenol		mg/kg	6.6	U		mg/kg	3.3	U		mg/kg	3.3	U
4-Bromophenyl-phenylether		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Chloro-3-methylphenol		mg/kg	2.6	U		mg/kg	1.3	U		mg/kg	1.3	U
4-Chloroaniline		mg/kg	2.6	R		mg/kg	1.3	R		mg/kg	1.3	U
4-Chlorophenyl-phenyl ether		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
4-Methylphenol		mg/kg	0.6	U		mg/kg	0.3	U		mg/kg	0.3	U
4-Nitroaniline		mg/kg	6.6	U		mg/kg	3.3	U		mg/kg	3.3	U
Acenaphthene		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Acenaphthylene		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Anthracene	0.11	mg/kg	1.4	F		mg/kg	0.7	U		mg/kg	0.7	U
Benzo(a)anthracene	0.94	mg/kg	1.4	F	0.0413	mg/kg	0.7	F	0.137	mg/kg	0.7	F
Benzo(a)pyrene	1.04	mg/kg	1.4	R	0.0432	mg/kg	0.7	F	0.133	mg/kg	0.7	F
Benzo(b)fluoranthene	1.29	mg/kg	1.4	R	0.0578	mg/kg	0.7	F	0.171	mg/kg	0.7	F
Benzo(g,h,i)Perylene	0.251	mg/kg	1.4	R		mg/kg	0.7	U		mg/kg	0.7	U
Benzo(k)fluoranthene	0.83	mg/kg	1.4	R		mg/kg	0.7	F	0.148	mg/kg	0.7	F
Benzoic acid		mg/kg	3.2	U		mg/kg	1.6	U		mg/kg	1.6	R
Benzyl alcohol		mg/kg	2.6	U		mg/kg	1.3	U		mg/kg	1.3	U
Bis(2-Chloroethoxy)Methane		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Bis(2-Chloroethyl)ether		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Butylbenzylphthalate		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Chrysene	0.959	mg/kg	1.4	F	0.0447	mg/kg	0.7	F	0.15	mg/kg	0.7	F
Di-N-Butylphthalate		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Di-n-octylphthalate		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	R
Dibenzo(a,h)Anthracene		mg/kg	1.4	R		mg/kg	0.7	U		mg/kg	0.7	U
Dibenzofuran		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Diethylphthalate		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Dimethylphthalate		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Fluoranthene	1.55	mg/kg	1.4		0.0742	mg/kg	0.7	F	0.242	mg/kg	0.7	F
Fluorene		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobenzene		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorobutadiene		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachlorocyclopentadiene		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Hexachloroethane		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Indeno(1,2,3-cd)pyrene	0.224	mg/kg	1.4	R		mg/kg	0.7	U		mg/kg	0.7	U
Isophorone		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitroso-di-n-propylamine		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
N-Nitrosodiphenylamine		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Naphthalene		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Nitrobenzene		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
Pentachlorophenol		mg/kg	6.6	U		mg/kg	3.3	U		mg/kg	3.3	U
Phenanthrene	0.278	mg/kg	1.4	F		mg/kg	0.7	U	0.115	mg/kg	0.7	F
Phenol		mg/kg	0.6	U		mg/kg	0.3	U		mg/kg	0.3	U
Pyrene	1.82	mg/kg	1.4		0.0662	mg/kg	0.7	F	0.238	mg/kg	0.7	F
bis(2-Chloroisopropyl)ether		mg/kg	1.4	U		mg/kg	0.7	U		mg/kg	0.7	U
bis(2-Ethylhexyl)phthalate	1.07	mg/kg	1.4	F	0.0657	mg/kg	0.7	F	0.0914	mg/kg	0.7	F
p-Nitrophenol		mg/kg	3.2	U		mg/kg	1.6	U		mg/kg	1.6	U

Table 1(SVOC)
Analytical Results for Semivolatiles by
Method SW846 8270C

	PAFB-S12			
Collection Date	7-Dec-00			
Analysis Date (Instrument)	12/18/00 (MS5)			
Percent Solids	95	weight %	RL	
1,2,4-Trichlorobenzene		mg/kg	0.7	U
1,2-Dichlorobenzene		mg/kg	0.7	U
1,3-Dichlorobenzene		mg/kg	0.7	U
1,4-Dichlorobenzene		mg/kg	0.7	U
2,4,5-Trichlorophenol		mg/kg	3.3	U
2,4,6-Trichlorophenol		mg/kg	0.3	U
2,4-Dichlorophenol		mg/kg	0.3	U
2,4-Dimethylphenol		mg/kg	0.3	U
2,4-Dinitrophenol		mg/kg	3.3	U
2,4-Dinitrotoluene		mg/kg	0.7	U
2,6-Dinitrotoluene		mg/kg	0.7	U
2-Chloronaphthalene		mg/kg	0.7	U
2-Chlorophenol		mg/kg	0.3	U
2-Methylnaphthalene		mg/kg	0.7	U
2-Methylphenol		mg/kg	0.3	U
2-Nitroaniline		mg/kg	3.3	U
2-Nitrophenol		mg/kg	0.3	R
3,3'-Dichlorobenzidine		mg/kg	1.3	U
3-Nitroaniline		mg/kg	3.3	R
4,6-Dinitro-2-methylphenol		mg/kg	3.3	U
4-Bromophenyl-phenylether		mg/kg	0.7	U
4-Chloro-3-methylphenol		mg/kg	1.3	U
4-Chloroaniline		mg/kg	1.3	R
4-Chlorophenyl-phenyl ether		mg/kg	0.7	U
4-Methylphenol		mg/kg	0.3	U
4-Nitroaniline		mg/kg	3.3	U
Acenaphthene		mg/kg	0.7	U
Acenaphthylene		mg/kg	0.7	U
Anthracene		mg/kg	0.7	U
Benzo(a)anthracene	0.059	mg/kg	0.7	F
Benzo(a)pyrene	0.0634	mg/kg	0.7	F
Benzo(b)fluoranthene	0.0651	mg/kg	0.7	F
Benzo(g,h,i)Perylene	0.0307	mg/kg	0.7	F
Benzo(k)fluoranthene	0.0436	mg/kg	0.7	F
Benzoic acid		mg/kg	1.6	R
Benzyl alcohol		mg/kg	1.3	U
Bis(2-Chloroethoxy)Methane		mg/kg	0.7	U
Bis(2-Chloroethyl)ether		mg/kg	0.7	U
Butylbenzylphthalate		mg/kg	0.7	U
Chrysene	0.0578	mg/kg	0.7	F
Di-N-Butylphthalate		mg/kg	0.7	U
Di-n-octylphthalate		mg/kg	0.7	U
Dibenzo(a,h)Anthracene		mg/kg	0.7	U
Dibenzofuran		mg/kg	0.7	U
Diethylphthalate		mg/kg	0.7	U
Dimethylphthalate		mg/kg	0.7	U
Fluoranthene	0.0965	mg/kg	0.7	F
Fluorene		mg/kg	0.7	U
Hexachlorobenzene		mg/kg	0.7	U
Hexachlorobutadiene		mg/kg	0.7	U
Hexachlorocyclopentadiene		mg/kg	0.7	U
Hexachloroethane		mg/kg	0.7	U
Indeno(1,2,3-cd)pyrene		mg/kg	0.7	U
Isophorone		mg/kg	0.7	U
N-Nitroso-di-n-propylamine		mg/kg	0.7	U
N-Nitrosodiphenylamine		mg/kg	0.7	U
Naphthalene		mg/kg	0.7	U
Nitrobenzene		mg/kg	0.7	U
Pentachlorophenol		mg/kg	3.3	U
Phenanthrene	0.0371	mg/kg	0.7	F
Phenol		mg/kg	0.3	U
Pyrene	0.0889	mg/kg	0.7	F
bis(2-Chloroisopropyl)ether		mg/kg	0.7	U
bis(2-Ethylhexyl)phthalate	0.0763	mg/kg	0.7	F
p-Nitrophenol		mg/kg	1.6	U

Table 1(METALS)
Analytical Results for Metals by SW 846 Methods

	PAFB-B01				PAFB-B02				PAFB-B03			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Percent Solids	98	weight %	RL		94	weight %	RL		90	weight %	RL	
Aluminum, Total	3320	mg/kg	22		2940	mg/kg	23	M	1840	mg/kg	24	
Antimony, Total	0.499	mg/kg	1	F		mg/kg	1.1	M		mg/kg	1.1	U
Arsenic, Total	1.66	mg/kg	1		1.52	mg/kg	1.1		0.974	mg/kg	1.1	F
Barium, Total	98.4	mg/kg	1		12.7	mg/kg	1.1		8.53	mg/kg	1.1	
Beryllium, Total	0.139	mg/kg	0.31	F	0.179	mg/kg	0.32	F	0.114	mg/kg	0.33	F
Cadmium, Total	0.113	mg/kg	0.1			mg/kg	0.11	U		mg/kg	0.11	U
Calcium, Total	41000	mg/kg	100		15500	mg/kg	110	M	10200	mg/kg	110	
Chromium, Total	7.19	mg/kg	20	F	5.17	mg/kg	21		3	mg/kg	22	F
Cobalt, Total	2.43	mg/kg	10	F	2.5	mg/kg	11		1.67	mg/kg	11	F
Copper, Total	7.54	mg/kg	2		4.47	mg/kg	2.1		1.77	mg/kg	2.2	F
Iron, Total	6290	mg/kg	3.1		6350	mg/kg	3.2	M	4130	mg/kg	3.3	
Lead, Total	24.4	mg/kg	1		3.91	mg/kg	1.1		1.41	mg/kg	1.1	
Magnesium, Total	5060	mg/kg	100		5550	mg/kg	110	M	2530	mg/kg	110	
Manganese, Total	121	mg/kg	2		185	mg/kg	2.1	M	57.3	mg/kg	2.2	
Mercury, Total		mg/kg	0.1	U		mg/kg	0.11	U		mg/kg	0.11	U
Nickel, Total	5.96	mg/kg	2		4.47	mg/kg	2.1		2.34	mg/kg	2.2	
Potassium, Total	603	mg/kg	610	F	883	mg/kg	640		418	mg/kg	670	F
Selenium, Total	0.611	mg/kg	1	F	0.466	mg/kg	1.1	F		mg/kg	1.1	U
Silver, Total		mg/kg	1	U	0.163	mg/kg	1.1	F		mg/kg	1.1	U
Sodium, Total	50.5	mg/kg	10		50.5	mg/kg	11		45.6	mg/kg	11	
Thallium, Total		mg/kg	0.31	U		mg/kg	0.32	U		mg/kg	0.33	U
Vanadium, Total	9.39	mg/kg	1		6.91	mg/kg	1.1		5.44	mg/kg	1.1	
Zinc, Total	29.4	mg/kg	1		13.8	mg/kg	1.1		7.22	mg/kg	1.1	

Table 1(METALS)
Analytical Results for Metals by SW 846 Methods

	PAFB-B04				PAFB-B05				PAFB-B06			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Percent Solids	95	weight %	RL		97	weight %	RL		96	weight %	RL	
Aluminum, Total	3420	mg/kg	23		1690	mg/kg	23		2360	mg/kg	23	
Antimony, Total	0.939	mg/kg	1.1	F		mg/kg	1	U		mg/kg	1	U
Arsenic, Total	1.44	mg/kg	1.1		1.22	mg/kg	1		0.94	mg/kg	1	F
Barium, Total	18	mg/kg	1.1		12	mg/kg	1		10.7	mg/kg	1	
Beryllium, Total	0.193	mg/kg	0.32	F	0.103	mg/kg	0.31	F	0.128	mg/kg	0.31	F
Cadmium, Total		mg/kg	0.11	U		mg/kg	0.1	U		mg/kg	0.1	U
Calcium, Total	1960	mg/kg	110		4840	mg/kg	100		4890	mg/kg	100	
Chromium, Total	4.87	mg/kg	21	F	3.22	mg/kg	21	F	3.81	mg/kg	21	F
Cobalt, Total	2.4	mg/kg	11	F	1.78	mg/kg	10	F	2.09	mg/kg	10	F
Copper, Total	2.92	mg/kg	2.1		1.61	mg/kg	2.1	F	2.15	mg/kg	2.1	
Iron, Total	6790	mg/kg	3.2		5130	mg/kg	3.1		5420	mg/kg	3.1	
Lead, Total	1.84	mg/kg	1.1		0.604	mg/kg	1	F	0.781	mg/kg	1	F
Magnesium, Total	1060	mg/kg	110		2620	mg/kg	100		2900	mg/kg	100	
Manganese, Total	99.6	mg/kg	2.1		61.2	mg/kg	2.1		73.6	mg/kg	2.1	
Mercury, Total		mg/kg	0.11	U		mg/kg	0.1	U		mg/kg	0.1	U
Nickel, Total	3.72	mg/kg	2.1		2.02	mg/kg	2.1	F	2.77	mg/kg	2.1	
Potassium, Total	514	mg/kg	630	F	327	mg/kg	620	F	484	mg/kg	630	F
Selenium, Total	0.827	mg/kg	1.1	F	0.341	mg/kg	1	F		mg/kg	1	U
Silver, Total		mg/kg	1.1	U		mg/kg	1	U		mg/kg	1	U
Sodium, Total	56.4	mg/kg	11		53.3	mg/kg	10		56.7	mg/kg	10	
Thallium, Total	0.165	mg/kg	0.32	F		mg/kg	0.31	U	0.163	mg/kg	0.31	F
Vanadium, Total	8.91	mg/kg	1.1		6.93	mg/kg	1		6.92	mg/kg	1	
Zinc, Total	14.5	mg/kg	1.1		14.3	mg/kg	1		8.26	mg/kg	1	

Table 1(METALS)
Analytical Results for Metals by SW 846 Methods

	PAFB-B07				PAFB-B08				PAFB-B09A (FD1)[1]			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Percent Solids	97	weight %	RL		96	weight %	RL		96	weight %	RL	
Aluminum, Total	2390	mg/kg	23		1890	mg/kg	23		3490	mg/kg	23	J
Antimony, Total	0.529	mg/kg	1	F	0.559	mg/kg	1.1	F	0.478	mg/kg	1	F
Arsenic, Total	1.38	mg/kg	1		0.94	mg/kg	1.1	F	1.71	mg/kg	1	
Barium, Total	14.9	mg/kg	1		11.1	mg/kg	1.1		19.1	mg/kg	1	J
Beryllium, Total	0.123	mg/kg	0.31	F	0.102	mg/kg	0.32	F	0.186	mg/kg	0.31	F
Cadmium, Total	0.0438	mg/kg	0.1	F		mg/kg	0.11	U	0.0377	mg/kg	0.1	F
Calcium, Total	22600	mg/kg	100		4000	mg/kg	110		15900	mg/kg	100	J
Chromium, Total	3.67	mg/kg	21	F	3.29	mg/kg	21	F	4.6	mg/kg	21	F
Cobalt, Total	2.31	mg/kg	10	F	1.88	mg/kg	11	F	2.74	mg/kg	10	F
Copper, Total	3.18	mg/kg	2.1		1.82	mg/kg	2.1	F	3.56	mg/kg	2.1	
Iron, Total	6370	mg/kg	3.1		4940	mg/kg	3.2		7710	mg/kg	3.1	J
Lead, Total	2.4	mg/kg	1		0.819	mg/kg	1.1	F	7.13	mg/kg	1	J
Magnesium, Total	7280	mg/kg	100		2340	mg/kg	110		4860	mg/kg	100	
Manganese, Total	191	mg/kg	2.1		66.3	mg/kg	2.1		249	mg/kg	2.1	J
Mercury, Total		mg/kg	0.1	U		mg/kg	0.11	U		mg/kg	0.1	U
Nickel, Total	5.99	mg/kg	2.1		2.59	mg/kg	2.1		3.7	mg/kg	2.1	
Potassium, Total	544	mg/kg	620	F	371	mg/kg	630	F	641	mg/kg	630	
Selenium, Total	0.499	mg/kg	1	F	0.586	mg/kg	1.1	F	0.78	mg/kg	1	F
Silver, Total	0.124	mg/kg	1	F		mg/kg	1.1	U		mg/kg	1	U
Sodium, Total	49	mg/kg	10		44.8	mg/kg	11		40.4	mg/kg	10	
Thallium, Total	0.177	mg/kg	0.31	F		mg/kg	0.32	U	0.179	mg/kg	0.31	F
Vanadium, Total	5.63	mg/kg	1		6.29	mg/kg	1.1		9.77	mg/kg	1	J
Zinc, Total	16.4	mg/kg	1		14.9	mg/kg	1.1		14	mg/kg	1	

Table 1(METALS)
Analytical Results for Metals by SW 846 Methods

	PAFB-B09B (FD1)[1]				PAFB-B10				PAFB-B11			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Percent Solids	96	weight %	RL		97	weight %	RL		98	weight %	RL	
Aluminum, Total	2650	mg/kg	23	J	2290	mg/kg	23		2480	mg/kg	22	
Antimony, Total	0.651	mg/kg	1	F		mg/kg	1	U		mg/kg	1	U
Arsenic, Total	1.17	mg/kg	1		1.48	mg/kg	1		1.44	mg/kg	1	
Barium, Total	10.7	mg/kg	1	J	12.2	mg/kg	1		9.19	mg/kg	1	
Beryllium, Total	0.148	mg/kg	0.31	F	0.155	mg/kg	0.31	F	0.184	mg/kg	0.31	F
Cadmium, Total		mg/kg	0.1	U	0.0546	mg/kg	0.1	F		mg/kg	0.1	U
Calcium, Total	10200	mg/kg	100	J	19100	mg/kg	100		3520	mg/kg	100	
Chromium, Total	3.45	mg/kg	21	F	3.97	mg/kg	21	F	3.44	mg/kg	20	F
Cobalt, Total	2.03	mg/kg	10	F	2.06	mg/kg	10	F	2.29	mg/kg	10	F
Copper, Total	2.63	mg/kg	2.1		4.38	mg/kg	2.1		2.56	mg/kg	2	
Iron, Total	5360	mg/kg	3.1	J	5270	mg/kg	3.1		6640	mg/kg	3.1	
Lead, Total	2.64	mg/kg	1	J	4.53	mg/kg	1		0.791	mg/kg	1	F
Magnesium, Total	4990	mg/kg	100		8430	mg/kg	100		2880	mg/kg	100	
Manganese, Total	152	mg/kg	2.1	J	160	mg/kg	2.1		113	mg/kg	2	
Mercury, Total		mg/kg	0.1	U		mg/kg	0.1	U		mg/kg	0.1	U
Nickel, Total	3.26	mg/kg	2.1		2.96	mg/kg	2.1		3.92	mg/kg	2	
Potassium, Total	483	mg/kg	630	F	487	mg/kg	620	F	413	mg/kg	610	F
Selenium, Total	0.661	mg/kg	1	F	0.522	mg/kg	1	F	0.838	mg/kg	1	F
Silver, Total		mg/kg	1	U		mg/kg	1	U		mg/kg	1	U
Sodium, Total	47.6	mg/kg	10		82.2	mg/kg	10		51.4	mg/kg	10	
Thallium, Total	0.18	mg/kg	0.31	F		mg/kg	0.31	U		mg/kg	0.31	U
Vanadium, Total	5.57	mg/kg	1	J	6.31	mg/kg	1		5.76	mg/kg	1	
Zinc, Total	18.4	mg/kg	1		12.1	mg/kg	1		10.7	mg/kg	1	

Table 1(METALS)
Analytical Results for Metals by SW 846 Methods

	PAFB-B12				PAFB-B13			
Collection Date	7-Dec-00				7-Dec-00			
Percent Solids	96	weight %	RL		96	weight %	RL	
Aluminum, Total	3190	mg/kg	23		3850	mg/kg	23	
Antimony, Total	0.446	mg/kg	1	F		mg/kg	1	U
Arsenic, Total	1.49	mg/kg	1		1.68	mg/kg	1	
Barium, Total	15.8	mg/kg	1		294	mg/kg	1	
Beryllium, Total	0.199	mg/kg	0.31	F	0.203	mg/kg	0.31	F
Cadmium, Total	0.0459	mg/kg	0.1	F	0.151	mg/kg	0.1	
Calcium, Total	8170	mg/kg	100		9160	mg/kg	100	
Chromium, Total	4.31	mg/kg	21	F	6.54	mg/kg	21	F
Cobalt, Total	2.32	mg/kg	10	F	2.49	mg/kg	10	F
Copper, Total	3.53	mg/kg	2.1		5.52	mg/kg	2.1	
Iron, Total	6410	mg/kg	3.1		7400	mg/kg	3.1	
Lead, Total	7.33	mg/kg	1		14.3	mg/kg	1	
Magnesium, Total	2290	mg/kg	100		2550	mg/kg	100	
Manganese, Total	148	mg/kg	2.1		132	mg/kg	2.1	
Mercury, Total		mg/kg	0.1	U	0.02	mg/kg	0.1	F
Nickel, Total	3.84	mg/kg	2.1		4.79	mg/kg	2.1	
Potassium, Total	614	mg/kg	630	F	651	mg/kg	630	
Selenium, Total	0.759	mg/kg	1	F	2.71	mg/kg	1	
Silver, Total		mg/kg	1	U		mg/kg	1	U
Sodium, Total	31	mg/kg	10		43	mg/kg	10	
Thallium, Total		mg/kg	0.31	U		mg/kg	0.31	U
Vanadium, Total	9.3	mg/kg	1		9.91	mg/kg	1	
Zinc, Total	16.7	mg/kg	1		73.9	mg/kg	1	

Table 1(METALS)
Analytical Results for Metals by SW 846 Methods

	PAFB-P01				PAFB-P02				PAFB-P03			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Percent Solids	86	weight %	RL		93	weight %	RL		95	weight %	RL	
Aluminum, Total	2500	mg/kg	26		3590	mg/kg	24		2710	mg/kg	23	
Antimony, Total		mg/kg	1.2	M		mg/kg	1.1	U		mg/kg	1.1	U
Arsenic, Total	1.03	mg/kg	1.2	F	1.86	mg/kg	1.1		1.36	mg/kg	1.1	
Barium, Total	13.4	mg/kg	1.2		23.5	mg/kg	1.1		16	mg/kg	1.1	
Beryllium, Total	0.147	mg/kg	0.35	F	0.185	mg/kg	0.32	F	0.154	mg/kg	0.32	F
Cadmium, Total		mg/kg	0.12	U	0.0897	mg/kg	0.11	F	0.287	mg/kg	0.11	
Calcium, Total	3580	mg/kg	120		12200	mg/kg	110		3590	mg/kg	110	
Chromium, Total	3.53	mg/kg	23	F	5.81	mg/kg	22	F	4.87	mg/kg	21	F
Cobalt, Total	2.06	mg/kg	12	F	2.57	mg/kg	11	F	2.17	mg/kg	11	F
Copper, Total	3.19	mg/kg	2.3		6.71	mg/kg	2.2		4.86	mg/kg	2.1	
Iron, Total	4720	mg/kg	3.5		6600	mg/kg	3.2		8490	mg/kg	3.2	
Lead, Total	4.5	mg/kg	1.2	M	14.2	mg/kg	1.1		20.8	mg/kg	1.1	
Magnesium, Total	1370	mg/kg	120		2240	mg/kg	110		1060	mg/kg	110	
Manganese, Total	71.5	mg/kg	2.3		130	mg/kg	2.2		78.7	mg/kg	2.1	
Mercury, Total		mg/kg	0.12	U		mg/kg	0.11	U		mg/kg	0.11	U
Nickel, Total	2.91	mg/kg	2.3		4.61	mg/kg	2.2		3.59	mg/kg	2.1	
Potassium, Total	509	mg/kg	700	F	599	mg/kg	650	F	362	mg/kg	630	F
Selenium, Total	0.805	mg/kg	1.2	F	1.94	mg/kg	1.1		2.91	mg/kg	1.1	
Silver, Total		mg/kg	1.2	U		mg/kg	1.1	U		mg/kg	1.1	U
Sodium, Total	48	mg/kg	12		63	mg/kg	11		25.8	mg/kg	11	
Thallium, Total		mg/kg	0.35	U		mg/kg	0.32	U		mg/kg	0.32	U
Vanadium, Total	5.94	mg/kg	1.2		9.52	mg/kg	1.1		8.99	mg/kg	1.1	
Zinc, Total	10.6	mg/kg	1.2		31.1	mg/kg	1.1		87.8	mg/kg	1.1	

Table 1(METALS)
Analytical Results for Metals by SW 846 Methods

	PAFB-P04				PAFB-P05A (FD2)[1]				PAFB-P05B (FD2)[1]			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Percent Solids	95	weight %	RL		94	weight %	RL		94	weight %	RL	
Aluminum, Total	2920	mg/kg	23		2590	mg/kg	23		2900	mg/kg	23	
Antimony, Total		mg/kg	1.1	U		mg/kg	1.1	U		mg/kg	1.1	U
Arsenic, Total	1.77	mg/kg	1.1		1.07	mg/kg	1.1		1.17	mg/kg	1.1	
Barium, Total	14.5	mg/kg	1.1		49.4	mg/kg	1.1		57.7	mg/kg	1.1	
Beryllium, Total	0.168	mg/kg	0.32	F	0.13	mg/kg	0.32	F	0.124	mg/kg	0.32	F
Cadmium, Total		mg/kg	0.11	U	0.0996	mg/kg	0.11	F	0.105	mg/kg	0.11	F
Calcium, Total	5370	mg/kg	110		21000	mg/kg	110		18300	mg/kg	110	
Chromium, Total	4.29	mg/kg	21	F	4.37	mg/kg	21	F	5.43	mg/kg	21	F
Cobalt, Total	2.14	mg/kg	11	F	1.81	mg/kg	11	F	1.78	mg/kg	11	F
Copper, Total	3.95	mg/kg	2.1		2.98	mg/kg	2.1		2.95	mg/kg	2.1	
Iron, Total	5820	mg/kg	3.2		5000	mg/kg	3.2		4890	mg/kg	3.2	
Lead, Total	5.89	mg/kg	1.1		19.6	mg/kg	1.1		18.8	mg/kg	1.1	
Magnesium, Total	1670	mg/kg	110		3610	mg/kg	110	J	2660	mg/kg	110	J
Manganese, Total	84.5	mg/kg	2.1		136	mg/kg	2.1	J	106	mg/kg	2.1	J
Mercury, Total		mg/kg	0.11	U		mg/kg	0.11	U		mg/kg	0.11	U
Nickel, Total	3.56	mg/kg	2.1		5.17	mg/kg	2.1		3.35	mg/kg	2.1	
Potassium, Total	452	mg/kg	630	F	490	mg/kg	640	F	528	mg/kg	640	F
Selenium, Total	0.711	mg/kg	1.1	F		mg/kg	1.1	U	0.582	mg/kg	1.1	F
Silver, Total		mg/kg	1.1	U	0.11	mg/kg	1.1	F		mg/kg	1.1	U
Sodium, Total	34.5	mg/kg	11		49.3	mg/kg	11		49.7	mg/kg	11	
Thallium, Total		mg/kg	0.32	U		mg/kg	0.32	U		mg/kg	0.32	U
Vanadium, Total	7.22	mg/kg	1.1		6.82	mg/kg	1.1		7.07	mg/kg	1.1	
Zinc, Total	15.6	mg/kg	1.1		14.8	mg/kg	1.1		16.1	mg/kg	1.1	

Table 1(METALS)
Analytical Results for Metals by SW 846 Methods

	PAFB-P06				PAFB-P07				PAFB-P08			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Percent Solids	91	weight %	RL		96	weight %	RL		96	weight %	RL	
Aluminum, Total	3890	mg/kg	24		2020	mg/kg	23		1910	mg/kg	23	
Antimony, Total	0.636	mg/kg	1.1	F		mg/kg	1	U		mg/kg	1	U
Arsenic, Total	1.97	mg/kg	1.1		1.32	mg/kg	1		1.3	mg/kg	1	
Barium, Total	39.9	mg/kg	1.1		10.7	mg/kg	1		8.83	mg/kg	1	
Beryllium, Total	0.167	mg/kg	0.33	F	0.117	mg/kg	0.31	F	0.133	mg/kg	0.31	F
Cadmium, Total	0.13	mg/kg	0.11			mg/kg	0.1	U		mg/kg	0.1	U
Calcium, Total	28900	mg/kg	110		28900	mg/kg	100		15900	mg/kg	100	
Chromium, Total	6.84	mg/kg	22	F	2.88	mg/kg	21	F	2.82	mg/kg	21	F
Cobalt, Total	2.26	mg/kg	11	F	1.8	mg/kg	10	F	1.75	mg/kg	10	F
Copper, Total	6.47	mg/kg	2.2		2.96	mg/kg	2.1		2.68	mg/kg	2.1	
Iron, Total	6110	mg/kg	3.3		4220	mg/kg	3.1		4300	mg/kg	3.1	
Lead, Total	17.1	mg/kg	1.1		1.99	mg/kg	1		1.63	mg/kg	1	
Magnesium, Total	2900	mg/kg	110		4900	mg/kg	100		7470	mg/kg	100	
Manganese, Total	99.3	mg/kg	2.2		185	mg/kg	2.1		163	mg/kg	2.1	
Mercury, Total	0.03	mg/kg	0.11	F		mg/kg	0.1	U	0.023	mg/kg	0.1	F
Nickel, Total	4.47	mg/kg	2.2		2.83	mg/kg	2.1		2.58	mg/kg	2.1	
Potassium, Total	511	mg/kg	660	F	566	mg/kg	630	F	564	mg/kg	630	F
Selenium, Total	0.896	mg/kg	1.1	F		mg/kg	1	U		mg/kg	1	U
Silver, Total		mg/kg	1.1	U		mg/kg	1	U		mg/kg	1	U
Sodium, Total	50.7	mg/kg	11		47.8	mg/kg	10		39	mg/kg	10	
Thallium, Total		mg/kg	0.33	U		mg/kg	0.31	U		mg/kg	0.31	U
Vanadium, Total	11.9	mg/kg	1.1		4.34	mg/kg	1		4.5	mg/kg	1	
Zinc, Total	28.8	mg/kg	1.1		8.32	mg/kg	1		7.44	mg/kg	1	

Table 1(METALS)
Analytical Results for Metals by SW 846 Methods

	PAFB-S01				PAFB-S02				PAFB-S03			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Percent Solids	95	weight %	RL		96	weight %	RL		92	weight %	RL	
Aluminum, Total	2860	mg/kg	23		2840	mg/kg	23		3710	mg/kg	24	
Antimony, Total		mg/kg	1.1	U		mg/kg	1	U		mg/kg	1.1	U
Arsenic, Total	1.52	mg/kg	1.1		1.05	mg/kg	1		1.72	mg/kg	1.1	
Barium, Total	23.5	mg/kg	1.1		9.27	mg/kg	1		21.4	mg/kg	1.1	
Beryllium, Total	0.133	mg/kg	0.32	F	0.134	mg/kg	0.31	F	0.173	mg/kg	0.33	F
Cadmium, Total	0.0749	mg/kg	0.11	F		mg/kg	0.1	U	0.0865	mg/kg	0.11	F
Calcium, Total	29700	mg/kg	110		7220	mg/kg	100		17000	mg/kg	110	
Chromium, Total	3.93	mg/kg	21	F	3.49	mg/kg	21	F	5.1	mg/kg	22	F
Cobalt, Total	2.32	mg/kg	11	F	1.76	mg/kg	10	F	2.3	mg/kg	11	F
Copper, Total	5.54	mg/kg	2.1		3.92	mg/kg	2.1		4.8	mg/kg	2.2	
Iron, Total	5070	mg/kg	3.2		4310	mg/kg	3.1		5660	mg/kg	3.3	
Lead, Total	16	mg/kg	1.1		11.1	mg/kg	1		21.7	mg/kg	1.1	
Magnesium, Total	1820	mg/kg	110		1150	mg/kg	100		1530	mg/kg	110	
Manganese, Total	304	mg/kg	2.1		65.6	mg/kg	2.1		90.9	mg/kg	2.2	
Mercury, Total		mg/kg	0.11	U	0.02	mg/kg	0.1	F	0.036	mg/kg	0.11	F
Nickel, Total	4.19	mg/kg	2.1		2.7	mg/kg	2.1		3.7	mg/kg	2.2	
Potassium, Total	462	mg/kg	630	F	276	mg/kg	630	F	510	mg/kg	650	F
Selenium, Total	1.17	mg/kg	1.1		0.499	mg/kg	1	F	1.03	mg/kg	1.1	F
Silver, Total		mg/kg	1.1	U		mg/kg	1	U		mg/kg	1.1	U
Sodium, Total	36.8	mg/kg	11		35.4	mg/kg	10		35.7	mg/kg	11	
Thallium, Total		mg/kg	0.32	U		mg/kg	0.31	U		mg/kg	0.33	U
Vanadium, Total	17.1	mg/kg	1.1		5.49	mg/kg	1		9.04	mg/kg	1.1	
Zinc, Total	31.6	mg/kg	1.1		21.4	mg/kg	1		23.4	mg/kg	1.1	

Table 1(METALS)
Analytical Results for Metals by SW 846 Methods

	PAFB-S04				PAFB-S05				PAFB-S06			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Percent Solids	95	weight %	RL		94	weight %	RL		96	weight %	RL	
Aluminum, Total	3220	mg/kg	23		3300	mg/kg	23		3400	mg/kg	23	
Antimony, Total		mg/kg	1.1	U		mg/kg	1.1	U		mg/kg	1	U
Arsenic, Total	1.64	mg/kg	1.1		1.44	mg/kg	1.1		1.44	mg/kg	1	
Barium, Total	35.7	mg/kg	1.1		28.2	mg/kg	1.1		20.4	mg/kg	1	
Beryllium, Total	0.162	mg/kg	0.32	F	0.174	mg/kg	0.32	F	0.139	mg/kg	0.31	F
Cadmium, Total	0.306	mg/kg	0.11		0.468	mg/kg	0.11		0.0527	mg/kg	0.1	F
Calcium, Total	3180	mg/kg	110		16800	mg/kg	110		16100	mg/kg	100	
Chromium, Total	8.59	mg/kg	21	F	4.88	mg/kg	21	F	5.73	mg/kg	21	F
Cobalt, Total	1.84	mg/kg	11	F	2.57	mg/kg	11	F	2.3	mg/kg	10	F
Copper, Total	4.24	mg/kg	2.1		4.63	mg/kg	2.1		4.53	mg/kg	2.1	
Iron, Total	5740	mg/kg	3.2		5990	mg/kg	3.2		5710	mg/kg	3.1	
Lead, Total	35.9	mg/kg	1.1		10.6	mg/kg	1.1		7.49	mg/kg	1	
Magnesium, Total	1210	mg/kg	110		3850	mg/kg	110		2420	mg/kg	100	
Manganese, Total	71.8	mg/kg	2.1		172	mg/kg	2.1		96.9	mg/kg	2.1	
Mercury, Total	0.039	mg/kg	0.11	F		mg/kg	0.11	U		mg/kg	0.1	U
Nickel, Total	4.8	mg/kg	2.1		4.19	mg/kg	2.1		3.97	mg/kg	2.1	
Potassium, Total	246	mg/kg	630	F	600	mg/kg	640	F	645	mg/kg	630	
Selenium, Total	0.646	mg/kg	1.1	F	0.705	mg/kg	1.1	F	0.575	mg/kg	1	F
Silver, Total	0.409	mg/kg	1.1	F		mg/kg	1.1	U		mg/kg	1	U
Sodium, Total	26.1	mg/kg	11		48.4	mg/kg	11		70.5	mg/kg	10	
Thallium, Total		mg/kg	0.32	U		mg/kg	0.32	U		mg/kg	0.31	U
Vanadium, Total	10.2	mg/kg	1.1		8.39	mg/kg	1.1		8.23	mg/kg	1	
Zinc, Total	26.7	mg/kg	1.1		23.6	mg/kg	1.1		18.3	mg/kg	1	

Table 1(METALS)
Analytical Results for Metals by SW 846 Methods

	PAFB-S07A (FD3)[1]				PAFB-S07B (FD3)[1]				PAFB-S08			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Percent Solids	94	weight %	RL		90	weight %	RL		96	weight %	RL	
Aluminum, Total	2840	mg/kg	23		3020	mg/kg	24		1250	mg/kg	23	
Antimony, Total		mg/kg	1.1	U		mg/kg	1.1	U		mg/kg	1	U
Arsenic, Total	1.04	mg/kg	1.1	F	1.09	mg/kg	1.1	F	0.833	mg/kg	1	F
Barium, Total	13.3	mg/kg	1.1		14.3	mg/kg	1.1		5.61	mg/kg	1	
Beryllium, Total	0.138	mg/kg	0.32	F	0.162	mg/kg	0.33	F	0.0769	mg/kg	0.31	F
Cadmium, Total		mg/kg	0.11	U		mg/kg	0.11	U		mg/kg	0.1	U
Calcium, Total	2290	mg/kg	110	J	3340	mg/kg	110	J	3630	mg/kg	100	
Chromium, Total	4.04	mg/kg	21	F	3.88	mg/kg	22	F	1.68	mg/kg	21	F
Cobalt, Total	1.77	mg/kg	11	F	1.81	mg/kg	11	F	1.27	mg/kg	10	F
Copper, Total	2.98	mg/kg	2.1		3.08	mg/kg	2.2		1.42	mg/kg	2.1	F
Iron, Total	4860	mg/kg	3.2		4680	mg/kg	3.3		2970	mg/kg	3.1	
Lead, Total	13.3	mg/kg	1.1		15.8	mg/kg	1.1		0.444	mg/kg	1	F
Magnesium, Total	1020	mg/kg	110		966	mg/kg	110		2130	mg/kg	100	
Manganese, Total	61.5	mg/kg	2.1		63.1	mg/kg	2.2		71.4	mg/kg	2.1	
Mercury, Total		mg/kg	0.11	U		mg/kg	0.11	U		mg/kg	0.1	U
Nickel, Total	3.32	mg/kg	2.1		3.68	mg/kg	2.2		2.13	mg/kg	2.1	
Potassium, Total	362	mg/kg	640	F	382	mg/kg	670	F	247	mg/kg	630	F
Selenium, Total	0.574	mg/kg	1.1	F	0.683	mg/kg	1.1	F		mg/kg	1	U
Silver, Total		mg/kg	1.1	U	0.128	mg/kg	1.1	F		mg/kg	1	U
Sodium, Total	26.4	mg/kg	11		40.8	mg/kg	11		26.5	mg/kg	10	
Thallium, Total		mg/kg	0.32	U		mg/kg	0.33	U		mg/kg	0.31	U
Vanadium, Total	11.4	mg/kg	1.1		11.3	mg/kg	1.1		2.71	mg/kg	1	
Zinc, Total	25.3	mg/kg	1.1		24.1	mg/kg	1.1		6.14	mg/kg	1	

Table 1(METALS)
Analytical Results for Metals by SW 846 Methods

	PAFB-S09				PAFB-S10				PAFB-S11			
Collection Date	7-Dec-00				7-Dec-00				7-Dec-00			
Percent Solids	95	weight %	RL		95	weight %	RL		93	weight %	RL	
Aluminum, Total	3670	mg/kg	23		3050	mg/kg	23		2860	mg/kg	24	
Antimony, Total		mg/kg	1.1	U		mg/kg	1.1	U		mg/kg	1.1	U
Arsenic, Total	1.75	mg/kg	1.1		1.48	mg/kg	1.1		1.83	mg/kg	1.1	
Barium, Total	29.7	mg/kg	1.1		16.9	mg/kg	1.1		20.8	mg/kg	1.1	
Beryllium, Total	0.172	mg/kg	0.32	F	0.162	mg/kg	0.32	F	0.137	mg/kg	0.32	F
Cadmium, Total	0.0863	mg/kg	0.11	F	0.0591	mg/kg	0.11	F	0.104	mg/kg	0.11	F
Calcium, Total	13500	mg/kg	110		2450	mg/kg	110		15100	mg/kg	110	
Chromium, Total	5.56	mg/kg	21	F	4.53	mg/kg	21	F	7.3	mg/kg	22	F
Cobalt, Total	2.41	mg/kg	11	F	1.96	mg/kg	11	F	2.18	mg/kg	11	F
Copper, Total	8.79	mg/kg	2.1		3.27	mg/kg	2.1		4.26	mg/kg	2.2	
Iron, Total	6650	mg/kg	3.2		6040	mg/kg	3.2		6250	mg/kg	3.2	
Lead, Total	23.4	mg/kg	1.1		13.9	mg/kg	1.1		29.5	mg/kg	1.1	
Magnesium, Total	3040	mg/kg	110		922	mg/kg	110		2120	mg/kg	110	
Manganese, Total	138	mg/kg	2.1		65.8	mg/kg	2.1		87.6	mg/kg	2.2	
Mercury, Total	0.022	mg/kg	0.11	F		mg/kg	0.11	U	0.023	mg/kg	0.11	F
Nickel, Total	5.51	mg/kg	2.1		3.75	mg/kg	2.1		3.67	mg/kg	2.2	
Potassium, Total	513	mg/kg	630	F	356	mg/kg	630	F	557	mg/kg	650	F
Selenium, Total	1.68	mg/kg	1.1		0.681	mg/kg	1.1	F	0.758	mg/kg	1.1	F
Silver, Total		mg/kg	1.1	U		mg/kg	1.1	U		mg/kg	1.1	U
Sodium, Total	46.8	mg/kg	11		30.8	mg/kg	11		44.2	mg/kg	11	
Thallium, Total		mg/kg	0.32	U		mg/kg	0.32	U		mg/kg	0.32	U
Vanadium, Total	11.2	mg/kg	1.1		12.8	mg/kg	1.1		11.2	mg/kg	1.1	
Zinc, Total	41.1	mg/kg	1.1		24.6	mg/kg	1.1		26.7	mg/kg	1.1	

Table 1(METALS)
Analytical Results for Metals by SW 846 Methods

	PAFB-S12			
Collection Date	7-Dec-00			
Percent Solids	95	weight %	RL	
Aluminum, Total	3020	mg/kg	23	
Antimony, Total	0.613	mg/kg	1.1	F
Arsenic, Total	1.69	mg/kg	1.1	
Barium, Total	17.5	mg/kg	1.1	
Beryllium, Total	0.176	mg/kg	0.32	F
Cadmium, Total	0.227	mg/kg	0.11	
Calcium, Total	8520	mg/kg	110	
Chromium, Total	5.33	mg/kg	21	F
Cobalt, Total	2.38	mg/kg	11	F
Copper, Total	4.81	mg/kg	2.1	
Iron, Total	7310	mg/kg	3.2	
Lead, Total	7.31	mg/kg	1.1	
Magnesium, Total	3080	mg/kg	110	
Manganese, Total	149	mg/kg	2.1	
Mercury, Total		mg/kg	0.11	U
Nickel, Total	3.87	mg/kg	2.1	
Potassium, Total	558	mg/kg	630	F
Selenium, Total	0.956	mg/kg	1.1	F
Silver, Total		mg/kg	1.1	U
Sodium, Total	41.5	mg/kg	11	
Thallium, Total		mg/kg	0.32	U
Vanadium, Total	8.54	mg/kg	1.1	
Zinc, Total	17.4	mg/kg	1.1	

Table 1
FOOTNOTES

Footnotes:

1) The following are field duplicate pairs:

FD1:	PAFB-B09A &	PAFB-B09B
FD2:	PAFB-P05A &	PAFB-P05B
FD3:	PAFB-S07A &	PAFB-S07B

J - Results are estimated and the data are valid for limited purposes. The results are qualitatively acceptable but quantitatively unreliable.

UJ - The reported quantitation limit is estimated because associated quality control criteria were not met.

B - Results are estimated because the compound was detected in an associated blank.

R- Reported value or quantitation limit is rejected. Resampling or reanalysis may be necessary to verify the presence or absence of the compound.

M- A matrix interference was present. Reported value or quantitation limit may be an estimate.

F - Results are qualitatively acceptable but quantitatively unreliable due to uncertainity in precision near the limit of detection.

Table 2 (voa)
SUMMARY OF QUALIFIED VOLATILE RESULTS

Field Sample ID	Method	Target Analyte	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier[2]
PAFB-B01	8260B	Bromomethane	ND	CCC > CL	R
PAFB-B02	8260B	Bromomethane	ND	CCC > CL	R
PAFB-B03	8260B	Bromomethane	ND	CCC > CL	R
PAFB-B04	8260B	Bromomethane	ND	CCC > CL	R
PAFB-B05	8260B	Bromomethane	ND	CCC > CL	R
PAFB-B06	8260B	Bromomethane	ND	CCC > CL	R
PAFB-P01	8260B	Bromomethane	ND	CCC > CL	R
PAFB-P02	8260B	Bromomethane	ND	CCC > CL	R
PAFB-P03	8260B	Bromomethane	ND	CCC > CL	R
PAFB-P04	8260B	Bromomethane	ND	CCC > CL	R
PAFB-P05A	8260B	Bromomethane	ND	CCC > CL	R
PAFB-P05B	8260B	Bromomethane	ND	CCC > CL	R
PAFB-P06	8260B	Bromomethane	ND	CCC > CL	R
PAFB-P07	8260B	Bromomethane	ND	CCC > CL	R
PAFB-P08	8260B	Bromomethane	ND	CCC > CL	R
PAFB-S01	8260B	Bromomethane	ND	CCC > CL	R
PAFB-S02	8260B	Bromomethane	ND	CCC > CL	R
PAFB-S03	8260B	Bromomethane	ND	CCC > CL	R
PAFB-S04	8260B	Bromomethane	ND	CCC > CL	R
PAFB-S05	8260B	Bromomethane	ND	CCC > CL	R
PAFB-S06	8260B	Bromomethane	ND	CCC > CL	R
PAFB-S07A	8260B	Bromomethane	ND	CCC > CL	R
PAFB-S07B	8260B	Bromomethane	ND	CCC > CL	R
PAFB-S08	8260B	Bromomethane	ND	CCC > CL	R
PAFB-S09	8260B	Bromomethane	ND	CCC > CL	R
PAFB-P01	8260B	Chloromethane	ND	CCC > CL	R
PAFB-P02	8260B	Chloromethane	ND	CCC > CL	R
PAFB-P03	8260B	Chloromethane	ND	CCC > CL	R
PAFB-P04	8260B	Chloromethane	ND	CCC > CL	R
PAFB-P05A	8260B	Chloromethane	ND	CCC > CL	R
PAFB-P05B	8260B	Chloromethane	ND	CCC > CL	R
PAFB-P06	8260B	Chloromethane	ND	CCC > CL	R
PAFB-P07	8260B	Chloromethane	ND	CCC > CL	R
PAFB-P08	8260B	Chloromethane	ND	CCC > CL	R
PAFB-S01	8260B	Chloromethane	ND	CCC > CL	R
PAFB-S02	8260B	Chloromethane	ND	CCC > CL	R
PAFB-B01	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-B02	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-B03	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-B04	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-B05	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-B06	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-P01	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-P02	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-P03	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-P04	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-P05A	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-P05B	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-P06	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-P07	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-P08	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-S01	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-S02	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-S03	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-S04	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-S05	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-S06	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-S07A	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-S07B	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-S08	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-S09	8260B	Dichlorodifluoromethane	ND	CCC > CL	R
PAFB-S03	8260B	1- Chlorohexane	ND	MS < CL	M
PAFB-S03	8260B	1,2,3-Trichlorobenzene	ND	MS < CL	M
PAFB-S03	8260B	1,2,4-Trichlorobenzene	ND	MS < CL	M

Table 2 (voa)
SUMMARY OF QUALIFIED VOLATILE RESULTS

Field Sample ID	Method	Target Analyte	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier[2]
PAFB-S03	8260B	1,2-Dichlorobenzene	ND	MS < CL	M
PAFB-S03	8260B	1,3-Dichlorobenzene	ND	MS < CL	M
PAFB-S03	8260B	1,4-Dichlorobenzene	ND	MS < CL	M
PAFB-S03	8260B	Hexachlorobutadiene	ND	MS < CL	M
PAFB-S03	8260B	Naphthalene	ND	MS < CL	M
PAFB-S03	8260B	n-Butylbenzene	ND	MS < CL	M
PAFB-S03	8260B	p-Isopropyltoluene	ND	MS < CL	M
PAFB-S03	8260B	Propylbenzene	ND	MS < CL	M
PAFB-S03	8260B	sec-Butylbenzene	ND	MS < CL	M
PAFB-S03	8260B	tert-Butylbenzene	ND	MS < CL	M
PAFB-S03	8260B	Vinyl acetate	ND	MS < CL	M
PAFB-B01	8260B	1,2,4-Trimethylbenzene	0.000306	Result < RL	F
PAFB-B02	8260B	1,2,4-Trimethylbenzene	0.000287	Result < RL	F
PAFB-B03	8260B	1,2,4-Trimethylbenzene	0.000333	Result < RL	F
PAFB-B04	8260B	1,2,4-Trimethylbenzene	0.000284	Result < RL	F
PAFB-B05	8260B	1,2,4-Trimethylbenzene	0.00032	Result < RL	F
PAFB-B06	8260B	1,2,4-Trimethylbenzene	0.000271	Result < RL	F
PAFB-B07	8260B	1,2,4-Trimethylbenzene	0.000299	Result < RL	F
PAFB-B08	8260B	1,2,4-Trimethylbenzene	0.000316	Result < RL	F
PAFB-B09A	8260B	1,2,4-Trimethylbenzene	0.000302	Result < RL	F
PAFB-B10	8260B	1,2,4-Trimethylbenzene	0.000278	Result < RL	F
PAFB-B11	8260B	1,2,4-Trimethylbenzene	0.000286	Result < RL	F
PAFB-B12	8260B	1,2,4-Trimethylbenzene	0.000292	Result < RL	F
PAFB-B13	8260B	1,2,4-Trimethylbenzene	0.00025	Result < RL	F
PAFB-S03	8260B	1,2,4-Trimethylbenzene	0.000293	Result < RL	F
PAFB-S04	8260B	1,2,4-Trimethylbenzene	0.000379	Result < RL	F
PAFB-S05	8260B	1,2,4-Trimethylbenzene	0.000362	Result < RL	F
PAFB-S07A	8260B	1,2,4-Trimethylbenzene	0.000309	Result < RL	F
PAFB-S07B	8260B	1,2,4-Trimethylbenzene	0.0003	Result < RL	F
PAFB-S08	8260B	1,2,4-Trimethylbenzene	0.000323	Result < RL	F
PAFB-S09	8260B	1,2,4-Trimethylbenzene	0.000305	Result < RL	F
PAFB-S10	8260B	1,2,4-Trimethylbenzene	0.000274	Result < RL	F
PAFB-S11	8260B	1,2,4-Trimethylbenzene	0.000258	Result < RL	F
PAFB-S12	8260B	1,2,4-Trimethylbenzene	0.000274	Result < RL	F
PAFB-P05B	8260B	Acetone	0.00743	Result < RL	F
PAFB-P01	8260B	Tetrachloroethene	0.00193	Result < RL	F
PAFB-P02	8260B	Tetrachloroethene	0.00374	Result < RL	F
PAFB-P03	8260B	Tetrachloroethene	0.00289	Result < RL	F
PAFB-P05A	8260B	Tetrachloroethene	0.00272	Result < RL	F
PAFB-P05B	8260B	Tetrachloroethene	0.00154	Result < RL	F
PAFB-P06	8260B	Tetrachloroethene	0.00125	Result < RL	F
PAFB-P07	8260B	Tetrachloroethene	0.00143	Result < RL	F
PAFB-S01	8260B	Tetrachloroethene	0.000874	Result < RL	F
PAFB-S03	8260B	Tetrachloroethene	0.00063	Result < RL	F
PAFB-S04	8260B	Tetrachloroethene	0.000474	Result < RL	F
PAFB-S07A	8260B	Tetrachloroethene	0.0012	Result < RL	F
PAFB-S07B	8260B	Tetrachloroethene	0.000711	Result < RL	F
ALL	8260B	Dichlorodifluoromethane	ND	SSC > CL	R

Table 2 (svoa)
SUMMARY OF QUALIFIED SEMIVOLATILE RESULTS

Field Sample ID	Method	Target Analyte	Cleanup Objective Conc. (mg/kg)	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier[2]	Data Usabiltiy
PAFB-P05B-RE	8270C	4-Nitroaniline	N/A	ND	CCC > CL	R	NO IMPACT
PAFB-S05	8270C	Bis(2-Chloroisopropyl)ether	N/A	ND	CCC > CL	R	NO IMPACT
PAFB-B01	8270C	Hexachlorocyclopentadiene	N/A	ND	CCC > CL	R	NO IMPACT
PAFB-B05	8270C	Hexachlorocyclopentadiene	N/A	ND	CCC > CL	R	NO IMPACT
PAFB-B06	8270C	Hexachlorocyclopentadiene	N/A	ND	CCC > CL	R	NO IMPACT
PAFB-B08	8270C	Hexachlorocyclopentadiene	N/A	ND	CCC > CL	R	NO IMPACT
PAFB-B11	8270C	Hexachlorocyclopentadiene	N/A	ND	CCC > CL	R	NO IMPACT
PAFB-S11	8270C	4-Nitroaniline	N/A	ND	CCV > CL	R	NO IMPACT
PAFB-B04	8270C	Benzo (a) pyrene	0.061	ND	IS < CL	R	Accept
PAFB-P03	8270C	Benzo (a) pyrene	0.061	ND	IS < CL	R	Accept
PAFB-P04	8270C	Benzo (a) pyrene	0.061	0.588	IS < CL	R	Accept
PAFB-P05A	8270C	Benzo (a) pyrene	0.061	ND	IS < CL	R	Accept
PAFB-P06	8270C	Benzo (a) pyrene	0.061	ND	IS < CL	R	Accept
PAFB-S01	8270C	Benzo (a) pyrene	0.061	ND	IS < CL	R	Accept
PAFB-S03	8270C	Benzo (a) pyrene	0.061	0.168	IS < CL	R	Accept
PAFB-S05 (5x DIL)	8270C	Benzo (a) pyrene	0.061	0.0575	IS < CL	R	REJECT
PAFB-S07A	8270C	Benzo (a) pyrene	0.061	0.0531	IS < CL	R	Accept
PAFB-S07B	8270C	Benzo (a) pyrene	0.061	0.357	IS < CL	R	Accept
PAFB-S09	8270C	Benzo (a) pyrene	0.061	1.04	IS < CL	R	Accept
PAFB-B04	8270C	Benzo (b) fluoranthene	1.1	ND	IS < CL	R	Accept
PAFB-P03	8270C	Benzo (b) fluoranthene	1.1	ND	IS < CL	R	Accept
PAFB-P04	8270C	Benzo (b) fluoranthene	1.1	0.691	IS < CL	R	Accept
PAFB-P05A	8270C	Benzo (b) fluoranthene	1.1	0.0818	IS < CL	R	Accept
PAFB-P06	8270C	Benzo (b) fluoranthene	1.1	0.989	IS < CL	R	Accept
PAFB-S01	8270C	Benzo (b) fluoranthene	1.1	ND	IS < CL	R	Accept
PAFB-S03	8270C	Benzo (b) fluoranthene	1.1	0.214	IS < CL	R	Accept
PAFB-S05 (5x DIL)	8270C	Benzo (b) fluoranthene	1.1	0.0764	IS < CL	R	Accept
PAFB-S07A	8270C	Benzo (b) fluoranthene	1.1	0.0719	IS < CL	R	REJECT
PAFB-S07B	8270C	Benzo (b) fluoranthene	1.1	0.394	IS < CL	R	Accept
PAFB-S09	8270C	Benzo (b) fluoranthene	1.1	1.29	IS < CL	R	Accept
PAFB-B04	8270C	Benzo(ghi)perylene	50	ND	IS < CL	R	Accept
PAFB-P03	8270C	Benzo(ghi)perylene	50	ND	IS < CL	R	Accept
PAFB-P04	8270C	Benzo(ghi)perylene	50	0.167	IS < CL	R	Accept
PAFB-P05A	8270C	Benzo(ghi)perylene	50	ND	IS < CL	R	Accept
PAFB-P06	8270C	Benzo(ghi)perylene	50	ND	IS < CL	R	Accept
PAFB-S01	8270C	Benzo(ghi)perylene	50	ND	IS < CL	R	Accept
PAFB-S03	8270C	Benzo(ghi)perylene	50	ND	IS < CL	R	Accept
PAFB-S05 (5x DIL)	8270C	Benzo(ghi)perylene	50	ND	IS < CL	R	Accept
PAFB-S07A	8270C	Benzo(ghi)perylene	50	ND	IS < CL	R	Accept
PAFB-S07B	8270C	Benzo(ghi)perylene	50	0.107	IS < CL	R	Accept
PAFB-S09	8270C	Benzo(ghi)perylene	50	0.251	IS < CL	R	Accept
PAFB-B04	8270C	Benzo (k) fluoranthene	1.1	ND	IS < CL	R	Accept
PAFB-P03	8270C	Benzo (k) fluoranthene	1.1	ND	IS < CL	R	Accept
PAFB-P04	8270C	Benzo (k) fluoranthene	1.1	0.533	IS < CL	R	Accept
PAFB-P05A	8270C	Benzo (k) fluoranthene	1.1	0.727	IS < CL	R	Accept
PAFB-P06	8270C	Benzo (k) fluoranthene	1.1	0.651	IS < CL	R	Accept
PAFB-S01	8270C	Benzo (k) fluoranthene	1.1	ND	IS < CL	R	Accept
PAFB-S03	8270C	Benzo (k) fluoranthene	1.1	0.168	IS < CL	R	Accept
PAFB-S05 (5x DIL)	8270C	Benzo (k) fluoranthene	1.1	0.0471	IS < CL	R	REJECT
PAFB-S07A	8270C	Benzo (k) fluoranthene	1.1	0.052	IS < CL	R	Accept
PAFB-S07B	8270C	Benzo (k) fluoranthene	1.1	0.373	IS < CL	R	Accept
PAFB-S09	8270C	Benzo (k) fluoranthene	1.1	0.83	IS < CL	R	Accept
PAFB-B04	8270C	Dibenz (a,h) anthracene	14	ND	IS < CL	R	Accept
PAFB-P03	8270C	Dibenz (a,h) anthracene	14	ND	IS < CL	R	Accept
PAFB-P04	8270C	Dibenz (a,h) anthracene	14	ND	IS < CL	R	Accept
PAFB-P05A	8270C	Dibenz (a,h) anthracene	14	ND	IS < CL	R	Accept
PAFB-P06	8270C	Dibenz (a,h) anthracene	14	ND	IS < CL	R	Accept
PAFB-S01	8270C	Dibenz (a,h) anthracene	14	ND	IS < CL	R	Accept
PAFB-S03	8270C	Dibenz (a,h) anthracene	14	ND	IS < CL	R	Accept
PAFB-S05 (5x DIL)	8270C	Dibenz (a,h) anthracene	14	ND	IS < CL	R	Accept
PAFB-S07A	8270C	Dibenz (a,h) anthracene	14	ND	IS < CL	R	Accept
PAFB-S07B	8270C	Dibenz (a,h) anthracene	14	ND	IS < CL	R	Accept
PAFB-S09	8270C	Dibenz (a,h) anthracene	14	ND	IS < CL	R	Accept

Table 2 (svoa)
SUMMARY OF QUALIFIED SEMIVOLATILE RESULTS

Field Sample ID	Method	Target Analyte	Cleanup Objective Conc. (mg/kg)	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier[2]	Data Usabiltiy
PAFB-B04	8270C	Indeno(1,2,3-cd)pyrene	3.2	ND	IS < CL	R	Accept
PAFB-P03	8270C	Indeno(1,2,3-cd)pyrene	3.2	ND	IS < CL	R	Accept
PAFB-P04	8270C	Indeno(1,2,3-cd)pyrene	3.2	0.184	IS < CL	R	Accept
PAFB-P05A	8270C	Indeno(1,2,3-cd)pyrene	3.2	ND	IS < CL	R	Accept
PAFB-P06	8270C	Indeno(1,2,3-cd)pyrene	3.2	ND	IS < CL	R	Accept
PAFB-S01	8270C	Indeno(1,2,3-cd)pyrene	3.2	ND	IS < CL	R	Accept
PAFB-S03	8270C	Indeno(1,2,3-cd)pyrene	3.2	ND	IS < CL	R	Accept
PAFB-S05 (5x DIL)	8270C	Indeno(1,2,3-cd)pyrene	3.2	ND	IS < CL	R	REJECT
PAFB-S07A	8270C	Indeno(1,2,3-cd)pyrene	3.2	ND	IS < CL	R	Accept
PAFB-S07B	8270C	Indeno(1,2,3-cd)pyrene	3.2	0.113	IS < CL	R	Accept
PAFB-S09	8270C	Indeno(1,2,3-cd)pyrene	3.2	0.224	IS < CL	R	Accept
PAFB-P01	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-P02	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-P03	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-P04	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-P05A	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-P05B	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-P06	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-P07	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-P08	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S01	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S02	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S03	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S04	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S05	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S06	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S07A	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S07B	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S08	8270C	2-Chloronaphthalene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-B01	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-B02	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-B03	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-B04	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-B05	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-B06	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-B07	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-B08	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-B09A	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-B09B	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-B10	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-B11	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-B12	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-B13&	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-S09	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-S10	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-S11	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-S12	8270C	Benzoic acid	2.7	ND	LCS < CL	R	Accept
PAFB-P01	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	Accept
PAFB-P02	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	Accept
PAFB-P03	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-P04	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-P04	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-P05A	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-P05B	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-P06	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-P07	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-P08	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S01	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S02	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S03	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S04	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S05	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S06	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT

Table 2 (svoa)
SUMMARY OF QUALIFIED SEMIVOLATILE RESULTS

Field Sample ID	Method	Target Analyte	Cleanup Objective Conc. (mg/kg)	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier[2]	Data Usabiltiy
PAFB-S07A	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S07B	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S08	8270C	Hexachlorocyclopentadiene	N/A	ND	LCS < CL	R	NO IMPACT
PAFB-S08	8270C	2 Chloronaphthalene	N/A	ND	MS < CL	M	NO IMPACT
PAFB-B01	8270C	Benzoic acid	2.7	ND	MS < CL	M	Accept
PAFB-S08	8270C	Hexachlorocyclopentadiene	N/A	ND	MS < CL	M	NO IMPACT
PAFB-S08	8270C	Naphthalene	13	ND	MS < CL	M	Accept
PAFB-S06	8270C	1,2,4-Trichlorobenzene	N/A	0.000302	Result < RL	F	Accept
PAFB-B09B	8270C	3,3-Dichlorobenzidine	N/A	0.0553	Result < RL	F	NO IMPACT
PAFB-S09	8270C	3,3-Dichlorobenzidine	N/A	0.041	Result < RL	F	NO IMPACT
PAFB-B09B	8270C	Acenaphthene	50	0.0571	Result < RL	F	Accept
PAFB-P03	8270C	Acenaphthene		0.108	Result < RL	F	
PAFB-P04	8270C	Acenaphthylene		0.097	Result < RL	F	
PAFB-S02	8270C	Acenaphthylene		0.0376	Result < RL	F	
PAFB-B09B	8270C	Anthracene	50	0.341	Result < RL	F	Accept
PAFB-P03	8270C	Anthracene		0.666	Result < RL	F	
PAFB-P04	8270C	Anthracene		0.129	Result < RL	F	
PAFB-S02	8270C	Anthracene		0.0362	Result < RL	F	
PAFB-S07B	8270C	Anthracene		0.0798	Result < RL	F	
PAFB-S09	8270C	Anthracene		0.103	Result < RL	F	
PAFB-S09	8270C	Anthracene		0.11	Result < RL	F	
PAFB-B02	8270C	Benzo(a)anthracene	224	0.113	Result < RL	F	Accept
PAFB-B04	8270C	Benzo(a)anthracene		0.0376	Result < RL	F	
PAFB-B09A	8270C	Benzo(a)anthracene		0.0569	Result < RL	F	
PAFB-B13	8270C	Benzo(a)anthracene		0.0417	Result < RL	F	
PAFB-P02	8270C	Benzo(a)anthracene		0.101	Result < RL	F	
PAFB-P04	8270C	Benzo(a)anthracene		0.542	Result < RL	F	
PAFB-P05A	8270C	Benzo(a)anthracene		0.0516	Result < RL	F	
PAFB-P05B-RE	8270C	Benzo(a)anthracene		0.203	Result < RL	F	
PAFB-P05B	8270C	Benzo(a)anthracene		0.108	Result < RL	F	
PAFB-P06	8270C	Benzo(a)anthracene		0.559	Result < RL	F	
PAFB-P08	8270C	Benzo(a)anthracene		0.0372	Result < RL	F	
PAFB-S01	8270C	Benzo(a)anthracene		0.241	Result < RL	F	
PAFB-S02	8270C	Benzo(a)anthracene		0.164	Result < RL	F	
PAFB-S03	8270C	Benzo(a)anthracene		0.144	Result < RL	F	
PAFB-S04	8270C	Benzo(a)anthracene		0.0575	Result < RL	F	
PAFB-S06	8270C	Benzo(a)anthracene		0.0494	Result < RL	F	
PAFB-S07A	8270C	Benzo(a)anthracene		0.0546	Result < RL	F	
PAFB-S07B	8270C	Benzo(a)anthracene		0.398	Result < RL	F	
PAFB-S09	8270C	Benzo(a)anthracene		1	Result < RL	F	
PAFB-S09	8270C	Benzo(a)anthracene		0.94	Result < RL	F	
PAFB-S10	8270C	Benzo(a)anthracene		0.0413	Result < RL	F	
PAFB-S11	8270C	Benzo(a)anthracene		0.137	Result < RL	F	
PAFB-S12	8270C	Benzo(a)anthracene		0.059	Result < RL	F	
PAFB-B02	8270C	Benzo(a)pyrene	0.061	0.112	Result < RL	F	Accept
PAFB-B04	8270C	Benzo(a)pyrene		0.0411	Result < RL	F	
PAFB-B09A	8270C	Benzo(a)pyrene		0.0504	Result < RL	F	
PAFB-B09B	8270C	Benzo(a)pyrene		0.546	Result < RL	F	
PAFB-B12	8270C	Benzo(a)pyrene		0.0302	Result < RL	F	
PAFB-B13	8270C	Benzo(a)pyrene		0.0496	Result < RL	F	
PAFB-P02	8270C	Benzo(a)pyrene		0.121	Result < RL	F	
PAFB-P04	8270C	Benzo(a)pyrene		0.588	Result < RL	F	
PAFB-P05B-RE	8270C	Benzo(a)pyrene		0.175	Result < RL	F	
PAFB-P05B	8270C	Benzo(a)pyrene		0.137	Result < RL	F	
PAFB-P06	8270C	Benzo(a)pyrene		0.692	Result < RL	F	
PAFB-P08	8270C	Benzo(a)pyrene		0.0367	Result < RL	F	
PAFB-S02	8270C	Benzo(a)pyrene		0.234	Result < RL	F	
PAFB-S03	8270C	Benzo(a)pyrene		0.168	Result < RL	F	
PAFB-S04	8270C	Benzo(a)pyrene		0.0597	Result < RL	F	
PAFB-S06	8270C	Benzo(a)pyrene		0.0581	Result < RL	F	
PAFB-S07A	8270C	Benzo(a)pyrene		0.0531	Result < RL	F	
PAFB-S07B	8270C	Benzo(a)pyrene		0.357	Result < RL	F	
PAFB-S09	8270C	Benzo(a)pyrene		1.05	Result < RL	F	

Table 2 (svoa)
SUMMARY OF QUALIFIED SEMIVOLATILE RESULTS

Field Sample ID	Method	Target Analyte	Cleanup Objective Conc. (mg/kg)	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier[2]	Data Usabiltiy
PAFB-S09	8270C	Benzo(a)pyrene		1.04	Result < RL	F	
PAFB-S10	8270C	Benzo(a)pyrene		0.0432	Result < RL	F	
PAFB-S11	8270C	Benzo(a)pyrene		0.133	Result < RL	F	
PAFB-S12	8270C	Benzo(a)pyrene		0.0634	Result < RL	F	
PAFB-B02	8270C	Benzo(b)fluoranthene	1.1	0.129	Result < RL	F	Accept
PAFB-B04	8270C	Benzo(b)fluoranthene		0.0478	Result < RL	F	
PAFB-B09A	8270C	Benzo(b)fluoranthene		0.0584	Result < RL	F	
PAFB-B09B	8270C	Benzo(b)fluoranthene		0.549	Result < RL	F	
PAFB-B12	8270C	Benzo(b)fluoranthene		0.0353	Result < RL	F	
PAFB-B13	8270C	Benzo(b)fluoranthene		0.062	Result < RL	F	
PAFB-P02	8270C	Benzo(b)fluoranthene		0.139	Result < RL	F	
PAFB-P04	8270C	Benzo(b)fluoranthene		0.691	Result < RL	F	
PAFB-P05B-RE	8270C	Benzo(b)fluoranthene		0.268	Result < RL	F	
PAFB-P05B	8270C	Benzo(b)fluoranthene		0.189	Result < RL	F	
PAFB-P06	8270C	Benzo(b)fluoranthene		0.989	Result < RL	F	
PAFB-P08	8270C	Benzo(b)fluoranthene		0.0437	Result < RL	F	
PAFB-S02	8270C	Benzo(b)fluoranthene		0.211	Result < RL	F	
PAFB-S03	8270C	Benzo(b)fluoranthene		0.214	Result < RL	F	
PAFB-S04	8270C	Benzo(b)fluoranthene		0.0764	Result < RL	F	
PAFB-S06	8270C	Benzo(b)fluoranthene		0.0765	Result < RL	F	
PAFB-S07A	8270C	Benzo(b)fluoranthene		0.0719	Result < RL	F	
PAFB-S07B	8270C	Benzo(b)fluoranthene		0.394	Result < RL	F	
PAFB-S09	8270C	Benzo(b)fluoranthene		1.39	Result < RL	F	
PAFB-S09	8270C	Benzo(b)fluoranthene		1.29	Result < RL	F	
PAFB-S10	8270C	Benzo(b)fluoranthene		0.0578	Result < RL	F	
PAFB-S11	8270C	Benzo(b)fluoranthene		0.171	Result < RL	F	
PAFB-S12	8270C	Benzo(b)fluoranthene		0.0651	Result < RL	F	
PAFB-B09A	8270C	Benzo(g,h,I)perylene	50	0.0333	Result < RL	F	Accept
PAFB-P03	8270C	Benzo(g,h,I)perylene		0.545	Result < RL	F	
PAFB-S12	8270C	Benzo(g,h,I)perylene		0.0307	Result < RL	F	
PAFB-B09B	8270C	Benzo(ghi)perylene		0.309	Result < RL	F	
PAFB-P02	8270C	Benzo(ghi)perylene		0.0431	Result < RL	F	
PAFB-P04	8270C	Benzo(ghi)perylene		0.167	Result < RL	F	
PAFB-P05B-RE	8270C	Benzo(ghi)perylene		0.0925	Result < RL	F	
PAFB-S02	8270C	Benzo(ghi)perylene		0.093	Result < RL	F	
PAFB-S07B	8270C	Benzo(ghi)perylene		0.107	Result < RL	F	
PAFB-S09	8270C	Benzo(ghi)perylene		0.296	Result < RL	F	
PAFB-S09	8270C	Benzo(ghi)perylene		0.251	Result < RL	F	
PAFB-B02	8270C	Benzo(k)fluoranthene	1.1	0.107	Result < RL	F	Accept
PAFB-B09A	8270C	Benzo(k)fluoranthene		0.035	Result < RL	F	
PAFB-B09B	8270C	Benzo(k)fluoranthene		0.414	Result < RL	F	
PAFB-P02	8270C	Benzo(k)fluoranthene		0.1	Result < RL	F	
PAFB-P04	8270C	Benzo(k)fluoranthene		0.533	Result < RL	F	
PAFB-P04	8270C	Benzo(k)fluoranthene		0.533	Result < RL	F	
PAFB-P05A	8270C	Benzo(k)fluoranthene		0.0727	Result < RL	F	
PAFB-P05B-RE	8270C	Benzo(k)fluoranthene		0.175	Result < RL	F	
PAFB-P05B	8270C	Benzo(k)fluoranthene		0.109	Result < RL	F	
PAFB-P06	8270C	Benzo(k)fluoranthene		0.651	Result < RL	F	
PAFB-S02	8270C	Benzo(k)fluoranthene		0.153	Result < RL	F	
PAFB-S03	8270C	Benzo(k)fluoranthene		0.168	Result < RL	F	
PAFB-S04	8270C	Benzo(k)fluoranthene		0.0471	Result < RL	F	
PAFB-S06	8270C	Benzo(k)fluoranthene		0.0477	Result < RL	F	
PAFB-S07A	8270C	Benzo(k)fluoranthene		0.052	Result < RL	F	
PAFB-S07B	8270C	Benzo(k)fluoranthene		0.373	Result < RL	F	
PAFB-S09	8270C	Benzo(k)fluoranthene		0.964	Result < RL	F	
PAFB-S09	8270C	Benzo(k)fluoranthene		0.83	Result < RL	F	
PAFB-S11	8270C	Benzo(k)fluoranthene		0.148	Result < RL	F	
PAFB-S12	8270C	Benzo(k)fluoranthene		0.0436	Result < RL	F	
PAFB-B02	8270C	Bis(2-ethylhexyl)phthalate	50	0.0621	Result < RL	F	ACCEPT
PAFB-B09A	8270C	Bis(2-ethylhexyl)phthalate		0.0428	Result < RL	F	
PAFB-B10	8270C	Bis(2-ethylhexyl)phthalate		0.043	Result < RL	F	
PAFB-B13	8270C	Bis(2-ethylhexyl)phthalate		0.041	Result < RL	F	
PAFB-P05B-RE	8270C	Bis(2-ethylhexyl)phthalate		0.0966	Result < RL	F	

Table 2 (svoa)
SUMMARY OF QUALIFIED SEMIVOLATILE RESULTS

Field Sample ID	Method	Target Analyte	Cleanup Objective Conc. (mg/kg)	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier[2]	Data Usabiltiy
PAFB-P05B	8270C	Bis(2-ethylhexyl)phthalate		0.0495	Result < RL	F	
PAFB-P08	8270C	Bis(2-ethylhexyl)phthalate		0.0519	Result < RL	F	
PAFB-S06	8270C	Bis(2-ethylhexyl)phthalate		0.0845	Result < RL	F	
PAFB-S07A	8270C	Bis(2-ethylhexyl)phthalate		0.0591	Result < RL	F	
PAFB-S07B	8270C	Bis(2-ethylhexyl)phthalate		0.138	Result < RL	F	
PAFB-S09	8270C	Bis(2-ethylhexyl)phthalate		1.21	Result < RL	F	
PAFB-S09	8270C	Bis(2-ethylhexyl)phthalate		1.07	Result < RL	F	
PAFB-S10	8270C	Bis(2-ethylhexyl)phthalate		0.0657	Result < RL	F	
PAFB-S11	8270C	Bis(2-ethylhexyl)phthalate		0.0914	Result < RL	F	
PAFB-S12	8270C	Bis(2-ethylhexyl)phthalate		0.0763	Result < RL	F	
PAFB-S07B	8270C	Butylbenzylphthalate	N/A	0.117	Result < RL	F	
PAFB-B02	8270C	Chrysene	400	0.114	Result < RL	F	ACCEPT
PAFB-B04	8270C	Chrysene		0.0389	Result < RL	F	
PAFB-B09A	8270C	Chrysene		0.0587	Result < RL	F	
PAFB-B13	8270C	Chrysene		0.0456	Result < RL	F	
PAFB-P02	8270C	Chrysene		0.109	Result < RL	F	
PAFB-P04	8270C	Chrysene		0.559	Result < RL	F	
PAFB-P05A	8270C	Chrysene		0.0602	Result < RL	F	
PAFB-P05B-RE	8270C	Chrysene		0.21	Result < RL	F	
PAFB-P05B	8270C	Chrysene		0.145	Result < RL	F	
PAFB-P06	8270C	Chrysene		0.653	Result < RL	F	
PAFB-S01	8270C	Chrysene		0.257	Result < RL	F	
PAFB-S02	8270C	Chrysene		0.169	Result < RL	F	
PAFB-S03	8270C	Chrysene		0.181	Result < RL	F	
PAFB-S04	8270C	Chrysene		0.0663	Result < RL	F	
PAFB-S06	8270C	Chrysene		0.0563	Result < RL	F	
PAFB-S07A	8270C	Chrysene		0.0555	Result < RL	F	
PAFB-S07B	8270C	Chrysene		0.355	Result < RL	F	
PAFB-S09	8270C	Chrysene		1.05	Result < RL	F	
PAFB-S09	8270C	Chrysene		0.959	Result < RL	F	
PAFB-S10	8270C	Chrysene		0.0447	Result < RL	F	
PAFB-S11	8270C	Chrysene		0.15	Result < RL	F	
PAFB-S12	8270C	Chrysene		0.0578	Result < RL	F	
PAFB-B09B	8270C	Dibenzofuran	6.2	0.0723	Result < RL	F	ACCEPT
PAFB-P03	8270C	Dibenzofuran	6.2	0.119	Result < RL	F	
PAFB-S02	8270C	Di-n-butylphthalate	N/A	0.299	Result < RL	F	
PAFB-B02	8270C	Fluoranthene	50	0.195	Result < RL	F	ACCEPT
PAFB-B04	8270C	Fluoranthene		0.0574	Result < RL	F	
PAFB-B09A	8270C	Fluoranthene		0.0727	Result < RL	F	
PAFB-B12	8270C	Fluoranthene		0.0412	Result < RL	F	
PAFB-B13	8270C	Fluoranthene		0.0709	Result < RL	F	
PAFB-P02	8270C	Fluoranthene		0.199	Result < RL	F	
PAFB-P05B-RE	8270C	Fluoranthene		0.323	Result < RL	F	
PAFB-P05B	8270C	Fluoranthene		0.217	Result < RL	F	
PAFB-P06	8270C	Fluoranthene		1.04	Result < RL	F	
PAFB-P08	8270C	Fluoranthene		0.0676	Result < RL	F	
PAFB-S01	8270C	Fluoranthene		0.48	Result < RL	F	
PAFB-S02	8270C	Fluoranthene		0.318	Result < RL	F	
PAFB-S03	8270C	Fluoranthene		0.307	Result < RL	F	
PAFB-S04	8270C	Fluoranthene		0.15	Result < RL	F	
PAFB-S06	8270C	Fluoranthene		0.0886	Result < RL	F	
PAFB-S07A	8270C	Fluoranthene		0.0993	Result < RL	F	
PAFB-S07B	8270C	Fluoranthene		0.711	Result < RL	F	
PAFB-S10	8270C	Fluoranthene		0.0742	Result < RL	F	
PAFB-S11	8270C	Fluoranthene		0.242	Result < RL	F	
PAFB-S12	8270C	Fluoranthene		0.0965	Result < RL	F	
PAFB-B09B	8270C	Fluorene	50	0.224	Result < RL	F	ACCEPT
PAFB-P03	8270C	Fluorene		0.252	Result < RL	F	
PAFB-P04	8270C	Fluorene		0.0546	Result < RL	F	
PAFB-P05A	8270C	Fluorene		0.0793	Result < RL	F	
PAFB-B09B	8270C	Indeno(1,2,3-cd)pyrene	3.2	0.267	Result < RL	F	ACCEPT
PAFB-P02	8270C	Indeno(1,2,3-cd)pyrene		0.0436	Result < RL	F	
PAFB-P03	8270C	Indeno(1,2,3-cd)pyrene		0.559	Result < RL	F	

Table 2 (svoa)
SUMMARY OF QUALIFIED SEMIVOLATILE RESULTS

Field Sample ID	Method	Target Analyte	Cleanup Objective Conc. (mg/kg)	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier[2]	Data Usabiltiy
PAFB-P04	8270C	Indeno(1,2,3-cd)pyrene		0.184	Result < RL	F	
PAFB-P05B-RE	8270C	Indeno(1,2,3-cd)pyrene		0.0864	Result < RL	F	
PAFB-S02	8270C	Indeno(1,2,3-cd)pyrene		0.0977	Result < RL	F	
PAFB-S07B	8270C	Indeno(1,2,3-cd)pyrene		0.113	Result < RL	F	
PAFB-S09	8270C	Indeno(1,2,3-cd)pyrene		0.273	Result < RL	F	
PAFB-S09	8270C	Indeno(1,2,3-cd)pyrene		0.224	Result < RL	F	
PAFB-B02	8270C	Phenanthrene	50	0.101	Result < RL	F	ACCEPT
PAFB-P02	8270C	Phenanthrene		0.0965	Result < RL	F	
PAFB-P04	8270C	Phenanthrene		0.552	Result < RL	F	
PAFB-P05B-RE	8270C	Phenanthrene		0.164	Result < RL	F	
PAFB-P05B	8270C	Phenanthrene		0.105	Result < RL	F	
PAFB-P06	8270C	Phenanthrene		0.377	Result < RL	F	
PAFB-S01	8270C	Phenanthrene		0.374	Result < RL	F	
PAFB-S02	8270C	Phenanthrene		0.135	Result < RL	F	
PAFB-S03	8270C	Phenanthrene		0.18	Result < RL	F	
PAFB-S04	8270C	Phenanthrene		0.0986	Result < RL	F	
PAFB-S07B	8270C	Phenanthrene		0.267	Result < RL	F	
PAFB-S09	8270C	Phenanthrene		0.293	Result < RL	F	
PAFB-S09	8270C	Phenanthrene		0.278	Result < RL	F	
PAFB-S11	8270C	Phenanthrene		0.115	Result < RL	F	
PAFB-S12	8270C	Phenanthrene		0.0371	Result < RL	F	
PAFB-B02	8270C	Pyrene	50	0.164	Result < RL	F	ACCEPT
PAFB-B04	8270C	Pyrene		0.0465	Result < RL	F	
PAFB-B09A	8270C	Pyrene		0.0943	Result < RL	F	
PAFB-B12	8270C	Pyrene		0.0393	Result < RL	F	
PAFB-B13	8270C	Pyrene		0.0639	Result < RL	F	
PAFB-P02	8270C	Pyrene		0.159	Result < RL	F	
PAFB-P04	8270C	Pyrene		0.958	Result < RL	F	
PAFB-P05A	8270C	Pyrene		0.0938	Result < RL	F	
PAFB-P05B-RE	8270C	Pyrene		0.354	Result < RL	F	
PAFB-P05B	8270C	Pyrene		0.275	Result < RL	F	
PAFB-P06	8270C	Pyrene		1.36	Result < RL	F	
PAFB-P08	8270C	Pyrene		0.0494	Result < RL	F	
PAFB-S01	8270C	Pyrene		0.58	Result < RL	F	
PAFB-S02	8270C	Pyrene		0.245	Result < RL	F	
PAFB-S03	8270C	Pyrene		0.353	Result < RL	F	
PAFB-S04	8270C	Pyrene		0.109	Result < RL	F	
PAFB-S06	8270C	Pyrene		0.0794	Result < RL	F	
PAFB-S07A	8270C	Pyrene		0.0855	Result < RL	F	
PAFB-S07B	8270C	Pyrene		0.74	Result < RL	F	
PAFB-S10	8270C	Pyrene		0.0662	Result < RL	F	
PAFB-S11	8270C	Pyrene		0.238	Result < RL	F	
PAFB-S12	8270C	Pyrene		0.0889	Result < RL	F	
PAFB-B01	8270C	2-Nitrophenol	N/A	ND	SSC > CL	R	NO IMPACT
PAFB-B02	8270C	2-Nitrophenol		ND	SSC > CL	R	
PAFB-B03	8270C	2-Nitrophenol		ND	SSC > CL	R	
PAFB-B04	8270C	2-Nitrophenol		ND	SSC > CL	R	
PAFB-B05	8270C	2-Nitrophenol		ND	SSC > CL	R	
PAFB-B06	8270C	2-Nitrophenol		ND	SSC > CL	R	
PAFB-B07	8270C	2-Nitrophenol		ND	SSC > CL	R	
PAFB-B08	8270C	2-Nitrophenol		ND	SSC > CL	R	
PAFB-B09A	8270C	2-Nitrophenol		ND	SSC > CL	R	
PAFB-B09B	8270C	2-Nitrophenol		ND	SSC > CL	R	
PAFB-B10	8270C	2-Nitrophenol		ND	SSC > CL	R	
PAFB-B11	8270C	2-Nitrophenol		ND	SSC > CL	R	
PAFB-B12	8270C	2-Nitrophenol		ND	SSC > CL	R	
PAFB-B13	8270C	2-Nitrophenol		ND	SSC > CL	R	
PAFB-S09	8270C	2-Nitrophenol		ND	SSC > CL	R	
PAFB-S10	8270C	2-Nitrophenol		ND	SSC > CL	R	
PAFB-S12	8270C	2-Nitrophenol		ND	SSC > CL	R	
PAFB-P01	8270C	3,3-Dichlorobenzidine	N/.A	ND	SSC > CL	R	NO IMPACT
PAFB-P02	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	
PAFB-P03	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	

Table 2 (svoa)
SUMMARY OF QUALIFIED SEMIVOLATILE RESULTS

Field Sample ID	Method	Target Analyte	Cleanup Objective Conc. (mg/kg)	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier[2]	Data Usabiltiy
PAFB-P04	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	
PAFB-P05A	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	
PAFB-P05B	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	
PAFB-P06	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	
PAFB-P07	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	
PAFB-P08	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	
PAFB-S01	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	
PAFB-S02	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	
PAFB-S03	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	
PAFB-S04	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	
PAFB-S05	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	
PAFB-S06	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	
PAFB-S07A	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	
PAFB-S07B	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	
PAFB-S08	8270C	3,3-Dichlorobenzidine		ND	SSC > CL	R	
PAFB-B01	8270C	3-Nitroaniline	N/A	ND	SSC > CL	R	NO IMPACT
PAFB-B02	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-B03	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-B04	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-B05	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-B06	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-B07	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-B08	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-B09A	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-B09B	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-B10	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-B11	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-B12	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-B13	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-P01	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-P02	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-P03	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-P04	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-P05A	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-P05B	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-P06	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-P07	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-P08	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-S01	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-S02	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-S03	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-S04	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-S05	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-S06	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-S07A	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-S07B	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-S08	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-S09	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-S10	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-S12	8270C	3-Nitroaniline		ND	SSC > CL	R	
PAFB-B01	8270C	4-Chloroaniline	N/A	ND	SSC > CL	R	NO IMPACT
PAFB-B02	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-B03	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-B04	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-B05	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-B06	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-B07	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-B08	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-B09A	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-B09B	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-B10	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-B11	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-B12	8270C	4-Chloroaniline		ND	SSC > CL	R	

Table 2 (svoa)
SUMMARY OF QUALIFIED SEMIVOLATILE RESULTS

Field Sample ID	Method	Target Analyte	Cleanup Objective Conc. (mg/kg)	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier[2]	Data Usabiltiy
PAFB-B13	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-P01	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-P02	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-P03	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-P04	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-P05A	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-P05B	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-P06	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-P07	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-P08	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-S01	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-S02	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-S03	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-S04	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-S05	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-S06	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-S07A	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-S07B	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-S08	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-S09	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-S10	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-S12	8270C	4-Chloroaniline		ND	SSC > CL	R	
PAFB-B04	8270C	Benzoic acid	2.7	ND	SSC > CL	R	ACCEPT
PAFB-B13	8270C	Benzoic acid		ND	SSC > CL	R	
PAFB-P05B-RE	8270C	Benzoic acid		ND	SSC > CL	R	
PAFB-S09	8270C	Benzoic acid		ND	SSC > CL	R	
PAFB-S11	8270C	Benzoic Acid		ND	SSC > CL	R	
PAFB-B04	8270C	Di-n-octyl phthalate	N/A	ND	SSC > CL	R	NO IMPACT
PAFB-B13	8270C	Di-n-octyl phthalate		ND	SSC > CL	R	
PAFB-P05B-RE	8270C	Di-n-octyl phthalate		ND	SSC > CL	R	
PAFB-S09	8270C	Di-n-octyl phthalate		ND	SSC > CL	R	
PAFB-S11	8270C	Di-n-octylphthalate		ND	SSC > CL	R	
PAFB-P05B-RE	8270C	2,4,5-Trichlorophenol	N/A	ND	SURR < CL	R	NO IMPACT
PAFB-P05B-RE	8270C	2,4,6-Trichlorophenol		ND	SURR < CL	R	
PAFB-P05B-RE	8270C	4,6-Dinitro-2-Methyl Phenol	N/A	ND	SURR < CL	R	NO IMPACT
PAFB-P05B-RE	8270C	4-Bromophenyl phenyl ether	N/A	ND	SURR < CL	R	NO IMPACT
PAFB-P05B-RE	8270C	Anthracene	50	ND	SURR < CL	R	ACCEPT
PAFB-P05B-RE	8270C	Di-n-butyl phthalate	N/A	ND	SURR < CL	R	NO IMPACT
PAFB-P05B-RE	8270C	Fluoranthene	50	0.323	SURR < CL	J	ACCEPT
PAFB-P05B-RE	8270C	Hexachlorobenzene	N/A	ND	SURR < CL	R	NO IMPACT
PAFB-P05B-RE	8270C	n-Nitrosodiphenylamine	N/A	ND	SURR < CL	R	NO IMPACT
PAFB-P05B-RE	8270C	Pentachlorophenol	N/A	ND	SURR < CL	R	NO IMPACT
PAFB-P05B-RE	8270C	Phenanthrene	50	0.164	SURR < CL	J	ACCEPT

Table 2 (Metals)
SUMMARY OF QUALIFIED METALS RESULTS

Field Sample ID	Method	Target Analyte	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier[2]
PAFB-B09A	6010B	Aluminum	3490	DUP RPD > CL	J
PAFB-B09B	6010B	Aluminum	2650	DUP RPD > CL	J
PAFB-B09A	6010B	Barium	19.1	DUP RPD > CL	J
PAFB-B09B	6010B	Barium	10.7	DUP RPD > CL	J
PAFB-B09A	6010B	Calcium	15900	DUP RPD > CL	J
PAFB-B09B	6010B	Calcium	10200	DUP RPD > CL	J
PAFB-S07A	6010B	Calcium	2290	DUP RPD > CL	J
PAFB-S07B	6010B	Calcium	3340	DUP RPD > CL	J
PAFB-B09A	6010B	Iron	7710	DUP RPD > CL	J
PAFB-B09B	6010B	Iron	5360	DUP RPD > CL	J
PAFB-B09A	6010B	Lead	7.13	DUP RPD > CL	J
PAFB-B09B	6010B	Lead	3610	DUP RPD > CL	J
PAFB-P05A	6010B	Magnesium	2660	DUP RPD > CL	J
PAFB-P05B	6010B	Magnesium	2660	DUP RPD > CL	J
PAFB-B09A	6010B	Manganese	249	DUP RPD > CL	J
PAFB-B09B	6010B	Manganese	152	DUP RPD > CL	J
PAFB-P05A	6010B	Manganese	136	DUP RPD > CL	J
PAFB-P05B	6010B	Manganese	106	DUP RPD > CL	J
PAFB-P05A	6010B	Nickel	5.17	DUP RPD > CL	J
PAFB-P05B	6010B	Nickel	3.35	DUP RPD > CL	J
PAFB-S07A	6010B	Sodium	26.4	DUP RPD > CL	J
PAFB-S07B	6010B	Sodium	40.8	DUP RPD > CL	J
PAFB-B09A	6010B	Vanadium	9.77	DUP RPD > CL	J
PAFB-B09B	6010B	Vanadium	5.57	DUP RPD > CL	J
PAFB-B02	6010B	Antimony	ND	MS < CL	M
PAFB-P01	6010B	Antimony	ND	MS < CL	M
PAFB-P01	6010B	Lead	4.5	MS < CL	M
PAFB-B02	6010B	Aluminum	2940	MS RPD > CL	M
PAFB-B02	6010B	Calcium	15500	MS RPD > CL	M
PAFB-B02	6010B	Iron	6350	MS RPD > CL	M
PAFB-B02	6010B	Magnesium	5550	MS RPD > CL	M
PAFB-B02	6010B	Manganese	185	MS RPD > CL	M
PAFB-B01	6010B	Antimony	0.499	Result < PQL	F
PAFB-B04	6010B	Antimony	0.939	Result < PQL	F
PAFB-B07	6010B	Antimony	0.529	Result < PQL	F
PAFB-B08	6010B	Antimony	0.559	Result < PQL	F
PAFB-B09A	6010B	Antimony	0.478	Result < PQL	F
PAFB-B09B	6010B	Antimony	0.651	Result < PQL	F
PAFB-B12	6010B	Antimony	0.446	Result < PQL	F
PAFB-P06	6010B	Antimony	0.636	Result < PQL	F
PAFB-S12	6010B	Antimony	0.613	Result < PQL	F
PAFB-B03	6010B	Arsenic	0.974	Result < PQL	F
PAFB-B06	6010B	Arsenic	0.94	Result < PQL	F
PAFB-B08	6010B	Arsenic	0.94	Result < PQL	F
PAFB-P01	6010B	Arsenic	1.03	Result < PQL	F
PAFB-S07A	6010B	Arsenic	1.04	Result < PQL	F
PAFB-S07B	6010B	Arsenic	1.09	Result < PQL	F
PAFB-S08	6010B	Arsenic	0.833	Result < PQL	F
PAFB-B01	6010B	Beryllium	0.139	Result < PQL	F
PAFB-B02	6010B	Beryllium	0.179	Result < PQL	F
PAFB-B03	6010B	Beryllium	0.114	Result < PQL	F
PAFB-B04	6010B	Beryllium	0.193	Result < PQL	F
PAFB-B05	6010B	Beryllium	0.103	Result < PQL	F
PAFB-B06	6010B	Beryllium	0.128	Result < PQL	F
PAFB-B07	6010B	Beryllium	0.123	Result < PQL	F
PAFB-B08	6010B	Beryllium	0.102	Result < PQL	F
PAFB-B09A	6010B	Beryllium	0.186	Result < PQL	F
PAFB-B09B	6010B	Beryllium	0.148	Result < PQL	F
PAFB-B10	6010B	Beryllium	0.155	Result < PQL	F
PAFB-B11	6010B	Beryllium	0.184	Result < PQL	F
PAFB-B12	6010B	Beryllium	0.199	Result < PQL	F
PAFB-B13	6010B	Beryllium	0.203	Result < PQL	F
PAFB-P01	6010B	Beryllium	0.147	Result < PQL	F
PAFB-P02	6010B	Beryllium	0.185	Result < PQL	F
PAFB-P03	6010B	Beryllium	0.154	Result < PQL	F
PAFB-P04	6010B	Beryllium	0.172	Result < PQL	F

Table 2 (Metals)
SUMMARY OF QUALIFIED METALS RESULTS

Field Sample ID	Method	Target Analyte	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier[2]
PAFB-P05A	6010B	Beryllium	0.13	Result < PQL	F
PAFB-P05B	6010B	Beryllium	0.124	Result < PQL	F
PAFB-P06	6010B	Beryllium	0.167	Result < PQL	F
PAFB-P07	6010B	Beryllium	0.117	Result < PQL	F
PAFB-P08	6010B	Beryllium	0.133	Result < PQL	F
PAFB-S01	6010B	Beryllium	0.133	Result < PQL	F
PAFB-S02	6010B	Beryllium	0.134	Result < PQL	F
PAFB-S03	6010B	Beryllium	0.173	Result < PQL	F
PAFB-S04	6010B	Beryllium	0.162	Result < PQL	F
PAFB-S05	6010B	Beryllium	0.174	Result < PQL	F
PAFB-S06	6010B	Beryllium	0.139	Result < PQL	F
PAFB-S07A	6010B	Beryllium	0.138	Result < PQL	F
PAFB-S07B	6010B	Beryllium	0.162	Result < PQL	F
PAFB-S08	6010B	Beryllium	0.0769	Result < PQL	F
PAFB-S09	6010B	Beryllium	0.172	Result < PQL	F
PAFB-S10	6010B	Beryllium	0.162	Result < PQL	F
PAFB-S11	6010B	Beryllium	0.137	Result < PQL	F
PAFB-S12	6010B	Beryllium	0.176	Result < PQL	F
PAFB-B07	6010B	Cadmium	0.0438	Result < PQL	F
PAFB-B09A	6010B	Cadmium	0.0377	Result < PQL	F
PAFB-B10	6010B	Cadmium	0.0546	Result < PQL	F
PAFB-B12	6010B	Cadmium	0.0459	Result < PQL	F
PAFB-P02	6010B	Cadmium	0.0897	Result < PQL	F
PAFB-P05A	6010B	Cadmium	0.0996	Result < PQL	F
PAFB-P05B	6010B	Cadmium	0.105	Result < PQL	F
PAFB-S01	6010B	Cadmium	0.0749	Result < PQL	F
PAFB-S03	6010B	Cadmium	0.0865	Result < PQL	F
PAFB-S06	6010B	Cadmium	0.0527	Result < PQL	F
PAFB-S09	6010B	Cadmium	0.0863	Result < PQL	F
PAFB-S10	6010B	Cadmium	0.0591	Result < PQL	F
PAFB-S11	6010B	Cadmium	0.104	Result < PQL	F
PAFB-B01	6010B	Chromium	7.19	Result < PQL	F
PAFB-B03	6010B	Chromium	3	Result < PQL	F
PAFB-B04	6010B	Chromium	4.87	Result < PQL	F
PAFB-B05	6010B	Chromium	3.22	Result < PQL	F
PAFB-B06	6010B	Chromium	3.81	Result < PQL	F
PAFB-B07	6010B	Chromium	3.67	Result < PQL	F
PAFB-B08	6010B	Chromium	3.29	Result < PQL	F
PAFB-B09A	6010B	Chromium	4.6	Result < PQL	F
PAFB-B09B	6010B	Chromium	3.45	Result < PQL	F
PAFB-B10	6010B	Chromium	3.97	Result < PQL	F
PAFB-B11	6010B	Chromium	3.44	Result < PQL	F
PAFB-B12	6010B	Chromium	4.31	Result < PQL	F
PAFB-B13	6010B	Chromium	6.54	Result < PQL	F
PAFB-P01	6010B	Chromium	3.53	Result < PQL	F
PAFB-P02	6010B	Chromium	5.81	Result < PQL	F
PAFB-P03	6010B	Chromium	4.87	Result < PQL	F
PAFB-P04	6010B	Chromium	4.39	Result < PQL	F
PAFB-P05A	6010B	Chromium	4.37	Result < PQL	F
PAFB-P05B	6010B	Chromium	5.43	Result < PQL	F
PAFB-P06	6010B	Chromium	6.84	Result < PQL	F
PAFB-P07	6010B	Chromium	2.88	Result < PQL	F
PAFB-P08	6010B	Chromium	2.82	Result < PQL	F
PAFB-S01	6010B	Chromium	3.93	Result < PQL	F
PAFB-S02	6010B	Chromium	3.49	Result < PQL	F
PAFB-S03	6010B	Chromium	5.1	Result < PQL	F
PAFB-S04	6010B	Chromium	8.59	Result < PQL	F
PAFB-S05	6010B	Chromium	4.88	Result < PQL	F
PAFB-S06	6010B	Chromium	5.73	Result < PQL	F
PAFB-S07A	6010B	Chromium	4.04	Result < PQL	F
PAFB-S07B	6010B	Chromium	3.88	Result < PQL	F
PAFB-S08	6010B	Chromium	1.68	Result < PQL	F
PAFB-S09	6010B	Chromium	5.56	Result < PQL	F
PAFB-S10	6010B	Chromium	4.53	Result < PQL	F
PAFB-S11	6010B	Chromium	7.3	Result < PQL	F
PAFB-S12	6010B	Chromium	5.33	Result < PQL	F

Table 2 (Metals)
SUMMARY OF QUALIFIED METALS RESULTS

Field Sample ID	Method	Target Analyte	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier[2]
PAFB-B01	6010B	Cobalt	2.43	Result < PQL	F
PAFB-B03	6010B	Cobalt	1.67	Result < PQL	F
PAFB-B04	6010B	Cobalt	2.4	Result < PQL	F
PAFB-B05	6010B	Cobalt	1.78	Result < PQL	F
PAFB-B06	6010B	Cobalt	2.09	Result < PQL	F
PAFB-B07	6010B	Cobalt	2.31	Result < PQL	F
PAFB-B08	6010B	Cobalt	1.88	Result < PQL	F
PAFB-B09A	6010B	Cobalt	2.74	Result < PQL	F
PAFB-B09B	6010B	Cobalt	2.03	Result < PQL	F
PAFB-B10	6010B	Cobalt	2.06	Result < PQL	F
PAFB-B11	6010B	Cobalt	2.29	Result < PQL	F
PAFB-B12	6010B	Cobalt	2.32	Result < PQL	F
PAFB-B13	6010B	Cobalt	2.49	Result < PQL	F
PAFB-P01	6010B	Cobalt	2.06	Result < PQL	F
PAFB-P02	6010B	Cobalt	2.57	Result < PQL	F
PAFB-P03	6010B	Cobalt	2.17	Result < PQL	F
PAFB-P04	6010B	Cobalt	2.18	Result < PQL	F
PAFB-P05A	6010B	Cobalt	1.81	Result < PQL	F
PAFB-P05B	6010B	Cobalt	1.78	Result < PQL	F
PAFB-P06	6010B	Cobalt	2.26	Result < PQL	F
PAFB-P07	6010B	Cobalt	1.8	Result < PQL	F
PAFB-P08	6010B	Cobalt	1.75	Result < PQL	F
PAFB-S01	6010B	Cobalt	2.32	Result < PQL	F
PAFB-S02	6010B	Cobalt	1.76	Result < PQL	F
PAFB-S03	6010B	Cobalt	2.3	Result < PQL	F
PAFB-S04	6010B	Cobalt	1.84	Result < PQL	F
PAFB-S05	6010B	Cobalt	2.57	Result < PQL	F
PAFB-S06	6010B	Cobalt	2.3	Result < PQL	F
PAFB-S07A	6010B	Cobalt	1.77	Result < PQL	F
PAFB-S07B	6010B	Cobalt	1.81	Result < PQL	F
PAFB-S08	6010B	Cobalt	1.27	Result < PQL	F
PAFB-S09	6010B	Cobalt	2.41	Result < PQL	F
PAFB-S10	6010B	Cobalt	1.96	Result < PQL	F
PAFB-S11	6010B	Cobalt	2.18	Result < PQL	F
PAFB-S12	6010B	Cobalt	2.38	Result < PQL	F
PAFB-B03	6010B	Copper	1.77	Result < PQL	F
PAFB-B05	6010B	Copper	1.61	Result < PQL	F
PAFB-B08	6010B	Copper	1.82	Result < PQL	F
PAFB-S08	6010B	Copper	1.42	Result < PQL	F
PAFB-B05	6010B	Lead	0.604	Result < PQL	F
PAFB-B06	6010B	Lead	0.781	Result < PQL	F
PAFB-B08	6010B	Lead	0.819	Result < PQL	F
PAFB-B11	6010B	Lead	0.791	Result < PQL	F
PAFB-S08	6010B	Lead	0.444	Result < PQL	F
PAFB-B13	7471A	Mercury	0.02	Result < PQL	F
PAFB-P06	7471A	Mercury	0.03	Result < PQL	F
PAFB-P08	7471A	Mercury	0.023	Result < PQL	F
PAFB-S02	7471A	Mercury	0.02	Result < PQL	F
PAFB-S03	7471A	Mercury	0.036	Result < PQL	F
PAFB-S04	7471A	Mercury	0.039	Result < PQL	F
PAFB-S09	7471A	Mercury	0.022	Result < PQL	F
PAFB-S11	7471A	Mercury	0.023	Result < PQL	F
PAFB-B05	6010B	Nickel	2.02	Result < PQL	F
PAFB-B01	6010B	Potassium	603	Result < PQL	F
PAFB-B03	6010B	Potassium	418	Result < PQL	F
PAFB-B04	6010B	Potassium	514	Result < PQL	F
PAFB-B05	6010B	Potassium	327	Result < PQL	F
PAFB-B06	6010B	Potassium	484	Result < PQL	F
PAFB-B07	6010B	Potassium	544	Result < PQL	F
PAFB-B08	6010B	Potassium	371	Result < PQL	F
PAFB-B09B	6010B	Potassium	483	Result < PQL	F
PAFB-B10	6010B	Potassium	487	Result < PQL	F
PAFB-B11	6010B	Potassium	413	Result < PQL	F
PAFB-B12	6010B	Potassium	614	Result < PQL	F
PAFB-P01	6010B	Potassium	509	Result < PQL	F
PAFB-P02	6010B	Potassium	599	Result < PQL	F

Table 2 (Metals)
SUMMARY OF QUALIFIED METALS RESULTS

Field Sample ID	Method	Target Analyte	Reported Conc. (mg/kg)	Reason for Qualification[1]	Qualifier[2]
PAFB-P03	6010B	Potassium	362	Result < PQL	F
PAFB-P04	6010B	Potassium	461	Result < PQL	F
PAFB-P05A	6010B	Potassium	490	Result < PQL	F
PAFB-P05B	6010B	Potassium	528	Result < PQL	F
PAFB-P06	6010B	Potassium	511	Result < PQL	F
PAFB-P07	6010B	Potassium	566	Result < PQL	F
PAFB-P08	6010B	Potassium	564	Result < PQL	F
PAFB-S01	6010B	Potassium	462	Result < PQL	F
PAFB-S02	6010B	Potassium	276	Result < PQL	F
PAFB-S03	6010B	Potassium	510	Result < PQL	F
PAFB-S04	6010B	Potassium	246	Result < PQL	F
PAFB-S05	6010B	Potassium	600	Result < PQL	F
PAFB-S07A	6010B	Potassium	362	Result < PQL	F
PAFB-S07B	6010B	Potassium	382	Result < PQL	F
PAFB-S08	6010B	Potassium	247	Result < PQL	F
PAFB-S09	6010B	Potassium	513	Result < PQL	F
PAFB-S10	6010B	Potassium	356	Result < PQL	F
PAFB-S11	6010B	Potassium	557	Result < PQL	F
PAFB-S12	6010B	Potassium	558	Result < PQL	F
PAFB-B01	6010B	Selenium	0.611	Result < PQL	F
PAFB-B02	6010B	Selenium	0.466	Result < PQL	F
PAFB-B04	6010B	Selenium	0.827	Result < PQL	F
PAFB-B05	6010B	Selenium	0.341	Result < PQL	F
PAFB-B07	6010B	Selenium	0.499	Result < PQL	F
PAFB-B08	6010B	Selenium	0.586	Result < PQL	F
PAFB-B09A	6010B	Selenium	0.78	Result < PQL	F
PAFB-B09B	6010B	Selenium	0.661	Result < PQL	F
PAFB-B10	6010B	Selenium	0.522	Result < PQL	F
PAFB-B11	6010B	Selenium	0.838	Result < PQL	F
PAFB-B12	6010B	Selenium	0.759	Result < PQL	F
PAFB-P01	6010B	Selenium	0.805	Result < PQL	F
PAFB-P04	6010B	Selenium	0.726	Result < PQL	F
PAFB-P05B	6010B	Selenium	0.582	Result < PQL	F
PAFB-P06	6010B	Selenium	0.896	Result < PQL	F
PAFB-S02	6010B	Selenium	0.499	Result < PQL	F
PAFB-S03	6010B	Selenium	1.03	Result < PQL	F
PAFB-S04	6010B	Selenium	0.646	Result < PQL	F
PAFB-S05	6010B	Selenium	0.705	Result < PQL	F
PAFB-S06	6010B	Selenium	0.575	Result < PQL	F
PAFB-S07A	6010B	Selenium	0.574	Result < PQL	F
PAFB-S07B	6010B	Selenium	0.683	Result < PQL	F
PAFB-S10	6010B	Selenium	0.681	Result < PQL	F
PAFB-S11	6010B	Selenium	0.758	Result < PQL	F
PAFB-S12	6010B	Selenium	0.956	Result < PQL	F
PAFB-B02	6010B	Silver	0.163	Result < PQL	F
PAFB-B07	6010B	Silver	0.124	Result < PQL	F
PAFB-P05A	6010B	Silver	0.11	Result < PQL	F
PAFB-S04	6010B	Silver	0.409	Result < PQL	F
PAFB-S07B	6010B	Silver	0.128	Result < PQL	F
PAFB-B04	7841	Thallium	0.165	Result < PQL	F
PAFB-B06	7841	Thallium	0.163	Result < PQL	F
PAFB-B07	7841	Thallium	0.177	Result < PQL	F
PAFB-B09A	7841	Thallium	0.179	Result < PQL	F
PAFB-B09B	7841	Thallium	0.18	Result < PQL	F

Table 2
FOOTNOTES

(1) Reason for Qualification:	Data Impact	
CCV > CL	Precision	continuing calibration verification %difference greater than the control limit
CCC>CL	Precision	continuing calibration check daily standard grater than control limit
IS < CL	Low Bias	Internal Standard Area less than lower control limit
MS > CL	High Bias	Matrix spike %Recovery above upper control limit
MS < CL	Low Bias	Matrix spike %Recovery below lower control limit
MS RPD > CL	Precision	Matrix spike/matrix spike duplicate RPD greater than control limit
LCS < CL	Low Bias	Laboratory control recovery below lower control limit
SSC > CL	Precision	Second source calibration standard %difference above control limit
Result < PQL	Precision	Result is above the MDL but below the RL and subject to poor precision
SURR < CL	Low Bias	Surrogate %Recovery below lower control limit.

**Data Impact:	High Bias:	The associated reported result may overestimate the true value.
	Low Bias:	The associated reported result may underestimate the true value.
	Precision:	The associated reported result is subject to relatively high variability.

N/A	Not a COC analyte; result will not affect project decisions.
Accept	Data deemed acceptable based on reported concentrations and application of USEPA *Guidance for the Data Quality Objectives Process;* EPA/600/R-96/055; 8/2000

(2) Qualifier

J -	Results are estimated and the data are valid for limited purposes. The results are qualitatively acceptable but quantitatively unreliable.
UJ -	The reported quantitation limit is estimated because associated quality control criteria were not met.
B -	Results are estimated because the compound was detected in an associated blank.
R-	Reported value or quantitation limit is rejected. Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
M-	A matrix interference was present. Reported value or quantitation limit may be an estimate.
F -	Results are qualitatively acceptable but quantitatively unreliable due to uncertainity in precision near the limit of detection.

Table 3
Summary of Field Duplicate Results

Target Analytes	Sample Result (mg/kg)	Duplicate Result (mg/kg)	RDL (mg/kg)	RPD or Difference	Criteria (% or mg/kg)[1]	Qualifier
PAFB-B09A/ -B09B (site B09)						
VOCs						
1,2,4-Trimethylbenzene	0.000302	<0.0073	0.0073	0.006998	± 0.0146	
SVOCs						
Acenaphthene		0.0571	0.7	0.6429	± 1.4	
Anthracene		0.341	0.7	0.359	± 1.4	
Benzo(a)anthracene	0.0569	0.803	0.7	0.7461	± 1.4	
Benzo(a)pyrene	0.0504	0.546	0.7	0.4956	± 1.4	
Benzo(b)fluoranthene	0.0584	0.549	0.7	0.4906	± 1.4	
Benzo(g,h,i)Perylene	0.0333	0.309	0.7	0.2757	± 1.4	
Benzo(k)fluoranthene	0.035	0.414	0.7	0.379	± 1.4	
Chrysene	0.0587	0.802	0.7	0.7433	± 1.4	
Dibenzofuran		0.0723	0.7	0.6277	± 1.4	
Fluoranthene	0.0727	1.98	0.7	1.9073	± 1.4	
Fluorene		0.224	0.7	0.476	± 1.4	
Indeno(1,2,3-cd)pyrene		0.267	0.7	0.433	± 1.4	
Phenanthrene		2.35	0.7	-1.65	± 1.4	
Pyrene	0.0943	1.75	0.7	1.6557	± 1.4	
bis(2-Ethylhexyl)phthalate	0.0428		0.7	0.6572	± 1.4	
METALs						
Aluminum, Total	3490	2650	23	-27.36%	≤ 20%	J
Antimony, Total	0.478	0.651	1.1	0.173	± 2.2	
Arsenic, Total	1.71	1.17	1.1	-0.540	± 2.2	
Barium, Total	19.1	10.7	1.1	-56.38%	≤ 20%	J
Beryllium, Total	0.186	0.148	0.32	-0.038	± 0.64	
Cadmium, Total	0.0377		0.11	-0.038	± 0.22	
Calcium, Total	15900	10200	110	-43.68%	≤ 20%	J
Chromium, Total	4.6	3.45	21	-1.150	± 42	
Cobalt, Total	2.74	2.03	11	-0.710	± 22	
Copper, Total	3.56	2.63	2.1	-0.930	± 4.2	
Iron, Total	7710	5360	3.2	-35.96%	≤ 20%	J
Lead, Total	7.13	2.64	1.1	-4.490	± 2.2	J
Magnesium, Total	4860	4990	110	2.64%	≤ 20%	
Manganese, Total	249	152	2.1	-48.38%	≤ 20%	J
Nickel, Total	3.7	3.26	2.1	-0.440	± 4.2	
Potassium, Total	641	483	630	-158	± 1220	J
Selenium, Total	0.78	0.661	1.1	-0.119	± 2.2	
Sodium, Total	40.4	47.6	11	7.200	± 22	
Thallium, Total	0.179	0.18	0.32	0.001	± 0.64	
Vanadium, Total	9.77	5.57	1.1	-4.2	± 2.2	J
Zinc, Total	14	18.4	1.1	27.16%	≤ 20%	J

Table 3
Summary of Field Duplicate Results

Target Analytes	Sample Result (mg/kg)	Duplicate Result (mg/kg)	RDL (mg/kg)	RPD or Difference	Criteria (% or mg/kg)[1]	Qualifier
PAFB-P05A/ -P05B (site P05)						
VOCs						
Tetrachloroethene	0.00272	0.00154	0.0074	-0.00118	± 0.0148	
SVOCs						
Benzo(a)anthracene	0.0516	0.203	0.7	0.1514	± 1.4	
Benzo(a)pyrene		0.175	0.7	0.525	± 1.4	
Benzo(b)fluoranthene	0.0818	0.268	0.7	0.1862	± 1.4	
Benzo(g,h,i)Perylene		0.0925	0.7	0.6075	± 1.4	
Benzo(k)fluoranthene	0.0727	0.175	0.7	0.1023	± 1.4	
Chrysene	0.0602	0.21	0.7	0.1498	± 1.4	
Fluoranthene	0.0793	0.323	0.7	0.2437	± 1.4	
Indeno(1,2,3-cd)pyrene		0.0864	0.7	0.6136	± 1.4	
Phenanthrene		0.164	0.7	0.536	± 1.4	
Pyrene	0.0938	0.354	0.7	0.2602	± 1.4	
bis(2-Ethylhexyl)phthalate	0.0516	0.0966	0.7	0.045	± 1.4	
METALs						
Aluminum, Total	2590	2900	23	11.29%	≤ 20%	
Arsenic, Total	1.07	1.17	1.1	0.1	± 2.2	
Barium, Total	49.4	57.7	1.1	15.50%	≤ 20%	
Beryllium, Total	0.13	0.124	0.32	-0.006	± 2.2	
Cadmium, Total	0.0996	0.105	0.11	0.0054	± 2.2	
Calcium, Total	21000	18300	110	-13.74%	≤ 20%	
Chromium, Total	4.37	5.43	21	1.06	± 42	
Cobalt, Total	1.81	1.78	11	-1.67%	≤ 20%	
Copper, Total	2.98	2.95	2.1	-0.03	± 4.2	
Iron, Total	5000	4890	3.2	-2.22%	≤ 20%	
Lead, Total	19.6	18.8	1.1	-4.17%	≤ 20%	
Magnesium, Total	3610	2660	110	-30.30%	≤ 20%	J
Manganese, Total	136	106	2.1	-24.79%	≤ 20%	J
Nickel, Total	5.17	3.35	2.1	-1.82	± 4.2	
Potassium, Total	490	528	640	7.47%	≤ 20%	
Selenium, Total		0.582	1.1	0.52	± 2.2	
Silver, Total	0.11	< 1.1	1.1	0.99	± 2.2	
Sodium, Total	49.3	49.7	11	0.40	± 22	
Vanadium, Total	6.82	7.07	1.1	3.60%	≤ 20%	
Zinc, Total	14.8	16.1	1.1	8.41%	≤ 20%	

Table 3
Summary of Field Duplicate Results

Target Analytes	Sample Result (mg/kg)	Duplicate Result (mg/kg)	RDL (mg/kg)	RPD or Difference	Criteria (% or mg/kg)[1]	Qualifier
PAFB-S07A/ -S07B (site S07)						
VOCs						
Tetrachloroethene	0.0012	0.000711	0.0074	0.0067	± 0.0148	
1,2,4-Trimethylbenzene	0.000309	0.0003	0.0074	0.0071	± 0.0148	
SVOCs						
Anthracene	< 0.7	0.0798	0.7	0.6202	± 1.4	
Benzo(a)anthracene	0.0546	0.398	0.7	0.3434	± 1.4	
Benzo(a)pyrene	0.0531	0.357	0.7	0.3039	± 1.4	
Benzo(b)fluoranthene	0.0719	0.394	0.7	0.3221	± 1.4	
Benzo(g,h,i)Perylene	<0.7	0.107	0.7	0.593	± 1.4	
Benzo(k)fluoranthene	0.052	0.373	0.7	0.321	± 1.4	
Butylbenzylphthalate	<0.7	0.117	0.7	0.583	± 1.4	
Chrysene	0.0555	0.355	0.7	0.2995	± 1.4	
Fluoranthene	0.0993	0.711	0.7	0.6117	± 1.4	
Indeno(1,2,3-cd)pyrene	<0.7	0.113	0.7	0.587	± 1.4	
Phenanthrene	<0.7	0.267	0.7	0.433	± 1.4	
Pyrene	0.0855	0.74	0.7	0.6545	± 1.4	
bis(2-Ethylhexyl)phthalate	0.0591	0.138	0.7	0.0789	± 1.4	
METALs						
Aluminum, Total	2840	3020	23	6.14%	≤ 20%	
Arsenic, Total	1.04	1.09	1.1	0.05	± 2.2	
Barium, Total	13.3	14.3	1.1	7.25%	≤ 20%	
Beryllium, Total	0.138	0.162	0.32	0.02	± 2.2	
Calcium, Total	2290	3340	110	37.30%	≤ 20%	J
Chromium, Total	4.04	3.88	21	-0.16	± 42	
Cobalt, Total	1.77	1.81	11	2.23%	≤ 20%	
Copper, Total	2.98	3.08	2.1	0.10	± 4.2	
Iron, Total	4860	4680	3.2	-3.77%	≤ 20%	
Lead, Total	13.3	15.8	1.1	17.18%	≤ 20%	
Magnesium, Total	1020	966	110	-5.44%	≤ 20%	
Manganese, Total	61.5	63.1	2.1	2.57%	≤ 20%	
Nickel, Total	3.32	3.68	2.1	0.36	± 4.2	
Potassium, Total	362	382	640	5.38%	≤ 20%	
Selenium, Total	0.574	0.683	1.1	0.11	± 2.2	
Silver, Total	<1.1	0.128	1.1	0.972	± 2.2	
Sodium, Total	26.4	40.8	11	14.40	± 22	
Vanadium, Total	11.4	11.3	1.1	-0.88%	≤ 20%	
Zinc, Total	25.3	24.1	1.1	-4.86%	≤ 20%	

Footnotes:

(1) Results greater than 5 x RDL are evaluated against matrix spike RPD criteria, otherwise criteria of ± 2 x RDL were applied.

APPENDIX D

DATA ANALYSIS

Confirmation Samples for Metal Analysis -- Statistical Variability

Although the selenium value of 2.0 mg/kg is listed in NYSDEC TAGM 4046 Appendix A, Table 4, (column 5) as the recommended cleanup objective (RCO), Appendix A, Table 4 (column 2) also reports a native soil range 0 to 3.9 mg/kg. Native background metal constituent concentrations can vary significantly depending upon the soil type and it's heterogeneity. The silt and clay content of the soil affect the soil cation exchange capacity and resultant metal concentration. In addition, soil organic content also impacts the concentration of metals in soils.

There are numerous components that contribute to variability in metals results in soil samples. The heterogeneity of the soil matrix itself, variability in field sampling procedures, variability in laboratory subsampling procedures and analytical variability all contribute to the reproducibility of the results. Data provided in the analytical method used (SW846 6010B) indicates variability of over 20% for the analysis of Selenium in soil performance evaluation (PE) samples that by design are extremely homogeneous. The precision for the analysis of PE samples therefore can be attributed to analytical variability. Technical guidance provided in the National Functional Guidelines for Inorganic Review (EPA-540/R-93-013) indicate that laboratory duplicates/splits can be expected to have an RPD (relative percent difference) of up to 35%. This greater variability can be attributed to error introduced as a result of subsampling techniques, sample matrix heterogeneity and analytical variability. Variability in laboratory results from samples that are not homogeneous can be expected to be greater than that associated with PE samples, with additional error introduced as a result of the heterogeneous distributions of metals in the area where the samples were collected in the field. As only a few grams of material are required for analysis, the introduction of error/variability due to subsampling of the sample jar is not unexpected.

In summary, the aforementioned analytical variability suggests that the elevated levels of selenium present in this report for the confirmation samples and soil stockpiles can be considered equivalent to native background levels are within acceptable tolerance limits of the 2 mg/kg RCO. A similar argument can be made for zinc.

Calcium (Ca) and Magnesium (Mg) Exceedences

Ca and Mg are classified as secondary nutrients in soil, which act as beneficial soil stabilizers and enhance pH buffer capacity (i.e., protection from acid rain). They are common to the soils surrounding Plattsburgh, NY. The elements are not part of EPA's RCRA list of toxic or priority pollutants metals nor do the analytes have any TCLP criteria.

Ca and Mg do not have any primary drinking water standards, but for aesthetic/nuisance purposes (water hardness and scaling) have a secondary standard not related to human health.

Water quality data from a downgradient C&D Landfill monitoring well (MW-033-002; goundwater at 10 feet below the ground surface) had total Ca and total Mg concentrations of 51 mg/l and 17.5 mg/l, respectively, in the most recent sampling event. Background Ca and Mg concentrations reported for the area in the URS, *January 1996 Background Surface Soil and Groundwater Survey,* showed an average Ca and Mg value of 99.9 mg/l and 39.9 mg/l, respectively, with a 95% upper tolerance limit of 175 mg/l and 80.6 mg/l, respectively. The above-referenced downgradient concentrations are about half the background average. Therefore, the elevated levels of Ca and Mg found in the C&D Landfill bottom soils and soil stockpiles did not appear to impact water quality immediately downgradient of the landfill.

Characterization Samples for Metal analysis -- Statistical Variability

A soil stockpile (SP-14) at the Stump Dump Landfill was sampled in May and again in June to assess the variability in constituent concentrations, specifically for selenium and zinc. The composite sample collected on May 7, 2001 was rerun for selenium and zinc in June. Three additional samples were collected on June 23, 2001, a grab sample (14B) and a composite sample that was thoroughly mixed in a stainless steel bowl and split into two samples (14A and 14C). The stockpiles themselves were produced from localized fill areas and are thoroughly mixed as a result of the soil screening process. After the 3 samples collected on June 23rd were analyzed, the laboratory was requested to re-analyze the sample with the highest selenium value (14C) and prepare and analyze the sample 7 times to establish the heterogeneity of the sample material itself. The laboratory thoroughly homogenized the contents of the sample jar for sample 14C prior to removing 7 aliquots for sample analysis. The results are as follows:

Sample	Sampling Date	Type	Selenium * mg/kg	Zinc* mg/kg
SP-14	5/7	4-pt composite	12.3	319
SP-14 (rerun)	5/7	4-pt composite	2.82	59
SP-14A	6/23	4-pt composite (split)	2.38	33.6
SP-14B	6/23	Grab	2.86	42.0
SP-14C	6/23	4-pt composite (split)	8.53	215
SP-14C (rerun)	6/23	4-pt composite (split)	2.45	NA
SP-14C (rerun)	6/23	4-pt composite (split)	1.36	NA
SP-14C (rerun)	6/23	4-pt composite (split)	1.13	NA
SP-14C (rerun)	6/23	4-pt composite (split)	1.12	NA
SP-14C (rerun)	6/23	4-pt composite (split)	0.814	NA
SP-14C (rerun)	6/23	4-pt composite (split)	2.48	NA
SP-14C (rerun)	6/23	4-pt composite (split)	0.964	NA

* NYSDEC TAGM RCO or Soil Background level: Selenium -- 2.0 mg/kg; Zinc -- 63.4 mg/kg
NA: Not Analyzed

The analysis demonstrates a wide variation in sample results for soil stockpile samples; whereby a single analysis of a sample may exceed the RCO, but the same sample when rerun can statistically be expected to also be below the RCO value. Additionally, the grab sample results did not differ significantly from the composite samples. For example, sample SP-14C showed a selenium variation of 0.814 to 8.53 mg/kg and a combined average from the eight analytical tests of 2.36 mg/kg. Excluding the largest and lowest value as an anomaly, the average is lowered to 1.58 mg/kg. The %RSD for the six replicates is 49%, which corresponds to a 95% confidence interval of ND – 3.2 mg/kg.

In summary, the analytical variability of the data shown above indicates that the elevated levels of selenium present in this report for the confirmation samples and soil stockpiles can be considered equivalent to native background levels and are statistically below the suggested RCO of 2 mg/kg.

Versar 6 Tires
1 Pick Service

COUNTY OF FRANKLIN
SOLID WASTE MANAGEMENT AUTHORITY
REGIONAL LANDFILL

Customer Name: Valley Sanitation
P.O. Box 946
Peru, New York
12972
Truck No. : 850

Transaction No. 068450
Time In 13:17
Time Out 14:26
Date 12-29-00
Weigh Master :

WEIGHED WASTE
Material ID# 14
Description : SPOT MARKET C&D
Cost / Ton $ 42.50

Gross: 052260 lb INB
Tare : 038340 lb
Net : 13920 lb

Net Tons: 6.96

Weighed Waste Sub Total:$ 382.80

ITEM WASTE
Item 1 Pick Service
Cost/Item 35.00
Quantity: 1

Item 2 TIRES-16" OR LE
Cost/Item $ 2.00
Quantity: 6

Item 3 None
Cost/Item $ 0.00
Quantity: 0

Item Sub Total$ 47.00

LOAD VALUE $ $29.80

Driver : D. Green

STRAIGHT BILL OF LADING

ORIGINAL - NOT NEGOTIABLE

Shipper No. SA-175

Carrier No. _____

Date 11/28/01

ge 1 of 1

MC Environmental Services, Inc.
(Name of carrier) (SCAC)

ect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec. 1.

ignee CWM Chemical Services

1550 Balmer Rd

Model City State N.Y. Zip Code 14107

FROM: Shipper AFBCA/DA Plattsburgh

Street 22 US Suite 2200

City Plattsburgh State N.Y. Zip Code 12903

24 hr. Emergency Contact Tel. No. (518) 563-2871 x14 Steve Esquired

Best

Vehicle Number

lo. of Units ontainer Type	HM	BASIC DESCRIPTON Proper Shipping Name, Hazard Class, Identification Number (UN or NA), Packing Group, per 172.101, 172.202, 172.203	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARGES (For Carrier Use Only)
dr	X	RQ Asbestos	200 #			
		9 NA 2212 PG III				

PLACARDS TENDERED: YES ☐ NO ☒

I) Where the rate is dependent on value, shippeers are required to state in writing the agreed or declared value of the property, as follows: "The declared value of the property is hereby specifically stated by the shipper to eeding _____ per _____"
the applicable tariff provisions specify a limitation of the carrier's liability lease or a value declaration by the shipper and the shipper does not release liability or declare a value, the carrier's liability shall be limited to the extent such provisions. See NMFC Item 172.
ities requiring special or additional care or attention in handling or stowing marked and packaged as to ensure safe transportation. See section 2(e) Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) act Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packed, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

_____ Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

(Signature of Consignor)

TOTAL CHARGES: $

FREIGHT CHARGES

FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

RECEIVED, subject to classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described 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 contract) agrees to carry to its usual place of delivery at said destination, if on its route, 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.

Mr. Cat As Agent of

CARRIER MC Environmental Services, Inc.

PER Mr. Cat

DATE 11/28/01

1

post-office address of shipper

STRAIGHT BILL OF LADING

ORIGINAL NOT NEGOTIABLE

Shipper No. 54-17

Page 1 of 1

MC Environmental Services, Inc.
(Name of carrier) (SCAC)

Carrier No. _____

Date 11/28/01

On Collect on Delivery shipments, the letters "COD" must appear before consignee's name or as otherwise provided in Item 430, Sec. 1.

TO:
Consignee CWM Chemical Services
Street 1550 Balmer Rd
City Model City State N.Y. Zip Code 14107

FROM:
Shipper AFBCA/DA Plattsburgh
Street 22 US Suite 2200
City Plattsburgh State N.Y. Zip Code 1290
24 hr. Emergency Contact Tel. No. (518) 563-2871 x14 Steve Eagan

Route Best

Vehicle Number

No. of Units & Container Type	HM	BASIC DESCRIPTION Proper Shipping Name, Hazard Class, Identification Number (UN or NA), Packing Group, per 172.101, 172.202, 172.203	TOTAL QUANTITY (Weight, Volume, Gallons, etc.)	WEIGHT (Subject to Correction)	RATE	CHARG (For Can Use Onl
1 dr	X	RQ Asbestos	200 #			
		9 NA 2212 PG III				

PLACARDS TENDERED: YES ☐ NO ☒

te – (1) Where the rate is dependent on value, shippeers are required to state ifically in writing the agreed or declared value of the property, as follows: "The ed or declared value of the property is hereby specifically stated by the shipper to ot exceeding _____ per _____."
Where the applicable tariff provisions specify a limitation of the carrier's liability nt a release or a value declaration by the shipper and the shipper does not release arrier's liability or declare a value, the carrier's liability shall be limited to the extent ded by such provisions. See NMFC Item 172.
mmodities requiring special or additional care or attention in handling or stowing be so marked and packaged as to ensure safe transportation. See section 2(e) n 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packed, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

_____ Signature

REMIT C.O.D. TO: ADDRESS

COD Amt: $

C.O.D. FEE: PREPAID ☐ COLLECT ☐ $

TOTAL CHARGES: $

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

_____ (Signature of Consignor)

RECEIVED, subject to classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described 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 contract) agrees to carry to its usual place of delivery at said destination, if on its route, 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.

PER Mr. Cat As Agent of

CARRIER MC Environmental Services, I

PER Mr. Cat

DATE 11/28/01

nent post-office address of shipper