3F00011

FINAL
ENGINEERING EVALUATION AND COST ANALYSIS REPORT

EPA Region 5 Records Ctr.
210686

FOR THE

FORMER CELOTEX SITE
2800 South Sacramento Avenue
Chicago, IL 60623

PREPARED FOR:

HONEYWELL INTERNATIONAL INC.
101 Columbia Road
Morristown, New Jersey 07962

MARCH 2004

PREPARED BY:

PARSONS
999 OAKMONT PLAZA DRIVE, SUITE 420
WESTMONT, ILLINOIS 60559

PARSONS JOB NO. 742040

FINAL
ENGINEERING EVALUATION AND COST ANALYSIS REPORT

for the

FORMER CELOTEX SITE
2800 South Sacramento Avenue
Chicago, IL 60623

Prepared for:

HONEYWELL INTERNATIONAL INC.
101 COLUMBIA ROAD
MORRISTOWN, NEW JERSEY 07962

MARCH 2004

Prepared by:

PARSONS
999 OAKMONT PLAZA DRIVE
WESTMONT, ILLINOIS 60559

Parsons Project No. 742040

TABLE OF CONTENTS

SECTION 1 INTRODUCTION 1-1

1.1 PURPOSE 1-1
1.2 REPORT ORGANIZATION 1-2
1.3 PROJECT NOMENCLATURE 1-3

SECTION 2 SITE CHARACTERIZATION 2-1

2.1 SITE LOCATION AND PHYSICAL SETTING 2-1
2.2 SURROUNDING LAND USE 2-1
2.3 SITE CONDITION 2-1
2.4 THE EE/CA FIELD INVESTIGATION PROGRAM 2-2
2.5 IDENTIFICATION OF REMEDIAL ACTION GOALS, OBJECTIVES, AND SCOPE 2-4
2.5.1 Remedial Action Goals and Objectives 2-4
2.5.2 Scope of Remedial Actions 2-5

SECTION 3 IDENTIFICATION AND EVALUATION OF ALTERNATIVES 3-1

3.1 OVERVIEW 3-1
3.2 DESCRIPTION OF TECHNOLOGIES APPLICABLE TO THE SITE 3-1
3.2.1 Approach to Selecting Remedial Technologies for the Main Site 3-1
3.2.2 Approach to Selecting Remedial Technologies for the Residential Area 3-2
3.3 IDENTIFICATION AND ANALYSIS OF ALTERNATIVES 3-3
3.3.1 Main Site Alternatives 3-4
3.3.2 Residential Area Remedial Alternatives 3-8
3.4 POTENTIAL APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS 3-13
3.4.1 Introduction 3-13
3.4.2 Chemical-Specific ARARs 3-13
3.4.3 Location-Specific ARARs 3-13
3.4.4 Action-Specific ARARs 3-14
3.5 DETAILED ANALYSIS OF ALTERNATIVES 3-14

SECTION 4 COMPARATIVE ANALYSIS OF ALTERNATIVES 4-1

4.1 INTRODUCTION 4-1
4.2 MAIN SITE ALTERNATIVES 4-1
4.3 RESIDENTIAL AREA ALTERNATIVES 4-2

SECTION 5 RECOMMENDED REMEDIAL APPROACH 5-1

5.1 MAIN SITE RECOMMENDED REMEDIAL ALTERNATIVE 5-1
5.2 RESIDENTIAL AREA RECOMMENDED REMEDIAL ALTERNATIVE 5-2

SECTION 6 REFERENCES 6-1

TABLE OF CONTENTS

LIST OF FIGURES

FIGURE 2.1 SITE LOCATION MAP 2-9

FIGURE 2.2 TOPOGRAPHIC SITE MAP 2-10

FIGURE 2.3 SOIL BORING LOCATION MAP 2-11

FIGURE 3.1 ALTERNATIVE M1-NO ACTION CROSS-SECTION 3-17

FIGURE 3.2 ALTERNATIVE M2-PERMEABLE CLAY/SOIL COVER CROSS-SECTION 3-18

FIGURE 3.3 SITE PLAN SHOWING GENERAL REMOVAL AND RELOCATION AREAS 3-19

FIGURE 3.4 ALTERNATIVE M3-IMPERMEABLE ASPHALT COVER CROSS-SECTION 3-20

FIGURE 3.5 ALTERNATIVE M4-THREE FOOT SOIL REMOVAL AND PERMEABLE CLAY COVER CROSS-SECTION 3-21

LIST OF TABLES

TABLE 2.1 SUMMARY OF REMEDIAL OBJECTIVES BY RECEPTOR AND TARGET RISK LEVEL 2-12

TABLE 3.1 POTENTIAL FEDERAL STATUTES 3-22

TABLE 3.2 POTENTIAL FEDERAL, STATE AND COUNTY CHEMICAL-SPECIFIC ARARS 3-24

TABLE 3.3 POTENTIAL FEDERAL, STATE AND COUNTY LOCATION-SPECIFIC ARARS 3-26

TABLE 3.4 POTENTIAL FEDERAL, STATE AND COUNTY ACTION-SPECIFIC ARARS 3-27

TABLE 3.5 DETAILED ANALYSIS OF ALTERNATIVES BASED ON THE EFFECTIVENESS CRITERIA 3-29

TABLE 3.6 DETAILED ANALYSIS OF ALTERNATIVES BASED ON THE IMPLEMENTABILITY CRITERIA 3-36

TABLE 3.7 DETAILED ANALYSIS OF ALTERNATIVES BASED ON THE COST CRITERIA 3-50

TABLE 3.8 BREAKDOWN OF COSTS BY ALTERNATIVES 3-53

TABLE OF CONTENTS

LIST OF APPENDICES

APPENDIX A EXCERPTS FROM VARIOUS PROJECT REPORTS

A-1 EXCERPTS FROM ERM'S DATA REPORT FOR RESIDENTIAL SOIL SAMPLING
A-2 EXCERPTS FROM PARSONS' DATA REPORT FOR THE EE/CA
A-3 EXCERPTS FROM PARSONS' PHASE II RESIDENTIAL AREA SAMPLING REPORT
A-4 EXCERPTS FROM PARSONS' PHASE III RESIDENTIAL AREA SAMPLING REPORT

SECTION 1
INTRODUCTION

1.1 PURPOSE

On 1 November 1996, the United States Environmental Protection Agency (USEPA) entered into an Administrative Order by Consent (AOC) with AlliedSignal, Inc. and The Celotex Corporation (Respondents) for the property located at 2800 South Sacramento Avenue, Chicago, Illinois (the Site). This Engineering Evaluation and Cost Analysis (EE/CA) report has been prepared to fulfill provisions in the AOC that require the Respondents to conduct an EE/CA to evaluate alternative response actions pursuant to 40 CFR 300.415 (b)(4)(I) and the Superfund Accelerated Cleanup Model (SACM) guidance.

The EE/CA is the USEPA-specified remedial alternatives analysis mechanism for evaluating non-time-critical removal actions under SACM. The EE/CA report is tailored to the scope, goals, and objectives of the project, and should only contain those data necessary to support the selection of a response alternative. Non-time-critical removal actions may be interim or final actions, or they may be the first and only action at a site. Alternatively, non-time-critical removal actions can be one of a series of planned response actions, where the nature and extent of contamination and risk presented by the site have been or will be determined. Under this scenario, the EE/CA document would be similar to a focused Feasibility Study, with concentration on a limited number of appropriate alternatives and reference to existing information on the nature and extent of contamination and risks.

This EE/CA report was prepared by Parsons. Parsons was retained by the Respondents, through a contract with AlliedSignal, Inc (currently named Honeywell International Inc. [and hereinafter referred to as Honeywell]), to provide engineering services and execute the EE/CA for the Site. Cox Associates (Cox) and Ogden Environmental and Energy Services (Ogden), consultants retained by Honeywell, have

also provided key technical services to this EE/CA. The EE/CA is being coordinated by the USEPA, Region V Headquarters SACM office, in Chicago, Illinois.

It is to be noted that the Draft EE/CA report was submitted in June 1999 to the USEPA Region V for review. Honeywell received written comments from the USEPA Region V on the Draft EE/CA in February 2003 and additional comments during discussions in July and August 2003. During the period between June 1999 and 2002, Sacramento Corporation entered into discussion with The Celotex Corporation and the USEPA Region V to purchase the Main Site for industrial/commercial use. The USEPA Region V had discussions directly with Sacramento Corporation regarding their use of the property and their placement of two feet of gravel on a portion of the Main Site. USEPA did advise Sacramento Corporation that as of April 2002, it did not intend to require additional remedial action on that portion of the Main Site. Honeywell was not involved in the aforementioned discussions that occurred between the USEPA Region V and Sacramento Corporation.

1.2 REPORT ORGANIZATION

This report is organized into five sections and one appendix that address the requirements of the EE/CA, as described in (1) the EE/CA guidance document, "*Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA*," August 1993, USEPA, Washington, D.C., and (2) Item V of the AOC EE/CA scope of work.

In addition to the introductory discussion presented in Section 1, discussions on site characterization and remedial action goals, objectives, and scope are presented in Section 2. Section 3 presents discussion on the identification and evaluation of alternatives, including descriptions of technologies deemed applicable to this EE/CA; presentation of potential applicable or relevant and appropriate requirements (ARARs); and the assessment of the alternatives based on the three evaluation criteria: effectiveness, implementability, and cost. Section 4 presents a comparative analysis of alternatives that evaluates the relative performance of each alternative to identify the advantages and disadvantages of each alternative relative to one another. Section 5 presents a summary discussion of the alternative(s) recommended as a result of the

EE/CA. To facilitate continuous and easy reading of the text, all figures and tables cited in this report are provided at the end of the section in which they are referenced. Appendix A presents excerpts from the following reports: Data Report (ERM, October 1995); Data Report (Parsons, October 1997); Draft Phase II Residential Sampling Report (Parsons, August 1998); and Draft Phase III Residential Sampling Report (Parsons, June 1999). (It is noted that the USEPA Region V approved both draft reports without revision.)

1.3 PROJECT NOMENCLATURE

The EE/CA for the Site encompasses the evaluation of both the 24-acre property on which the Respondents' facility operations occurred and the residential area surrounding the 24-acre property that could have been impacted by former operations that occurred at 2800 South Sacramento Avenue. Various terminologies have been developed for this EE/CA as the evaluation of onsite and off-site risks have been assessed. The term "Main Site or Site" as used in this report only addresses the 24-acre parcel. The term "residential area" refers to the residential properties in the vicinity of the Site. Within the residential area, "background" is defined to be those areas beyond approximately 1,000 to 1,200 feet from the center of the Site at which there is no evidence that soil concentrations have been affected by past Site activities. The "foreground" area is defined to be the area within 1,200 feet from the center of the Site. The "residential area of greatest concern" is defined as the "foreground" area within the north-north-east octant, as measured from the center of the Site.

SECTION 2
SITE CHARACTERIZATION

2.1 SITE LOCATION AND PHYSICAL SETTING

The Site is located on the west side of Sacramento Avenue between 31st and 27th streets (Figure 2.1). The United States Geological Survey (USGS) reference for the Site location indicates that it is situated in the West 1/2 of the Southwest 1/4 of Section 25, Township 39 North, Range 13 East of the Third Prime Meridian on the Englewood 7.5 Minute Quadrangle. The Site encompasses 24 acres; 18 acres of the property was formerly owned by The Celotex Corporation and is currently owned by Sacramento Corporation, and a 6-acre parcel to the south is owned by the Palumbo Corporation et al.

2.2 SURROUNDING LAND USE

The Site is situated amidst a multi-use area that includes residential, commercial, manufacturing, governmental, and industrial establishments. A topographic site layout map is presented on Figure 2.2. The Cook County Correctional Facility is located across from the Site, on the east side of Sacramento Avenue. Residential property/buildings and the Atkinson, Topeka & Santa Fe railroad line adjoin the Site along the north and west property boundaries. Residential homes are also located across from the north portion of the eastern property boundary (on the east side of Whipple Avenue). The south side of the Site is bounded by the No. 3050 Chicago Fire Department, the Bureau of Support Services, and by vacant land owned by the Palumbo Corporation et al. Residential homes are present on the west side of South Albany Avenue along the southwest quadrant of the Site. The Chicago Sanitary and Ship Canal is located approximately 1,500 feet south of the Site.

2.3 SITE CONDITION

The Site formerly housed several manufacturing-related buildings including a large warehouse, smaller storage sheds, an enclosed tank area, and an office building. All buildings have been demolished and removed from the Site. The only remnants of the manufacturing operation currently visible on site are the concrete slabs. Areas not overlain by concrete are covered with vegetation (a soil cover was placed over the Site subsequent to the completion

of demolition activities). The Site is currently surrounded by a chain-link fence, and has 24-hour security service present in a trailer located at the main gate entrance off of Sacramento Avenue.

In 1997, resurfacing/recontouring work was completed at the Site to address surface water run-off issues, resulting in a complete alteration of site/soil conditions in approximately the upper six feet of the Site (and deeper in a few areas). Given that the Main Site field sampling program was performed prior to the resurfacing/recontouring of the Site, the depth and location of some of the soil samples collected during the field sampling program do not correlate with current Site elevations and features. Figure 2.1 shows the Site contours that existed when the Main Site field sampling program was executed. Based on direction from the USEPA Region V Remedial Project Manager (RPM), the EE/CA for the Site has been performed and presented herein based on Site conditions, as they originally existed prior to the resurfacing/recontouring actions. It is to be noted that Honeywell has been verbally informed that Sacramento Corporation, the current owner of the 18-acre portion of the Main Site, has placed a gravel cover over this portion of the Main Site. The gravel cover is reported to be 2 feet or greater in depth.

2.4 THE EE/CA FIELD INVESTIGATION PROGRAM

Prior to the AOC in November 1996, ERM-North Central, Inc. (ERM) executed a residential area sampling program (hereinafter referred to as the Phase I Residential Area Sampling and Analysis Program [RASAP]) on behalf of the Respondents. The Phase I RASAP encompassed over 100 soil samples collected from 57 residential properties located at varying distances from the Site. Composited surface soil samples were collected from each sampled property. A risk assessment was performed using the information generated from the Phase I RASAP, resulting in the report entitled "*Deterministic and Probabilistic Calculations to Estimate Risk-Based Cleanup Goals for Soils at Residences near the 2800 South Sacramento Avenue Site, Chicago, Illinois.*" Alceon Corporation, October 25, 1996 (also referred to as the Residential Area Risk Assessment). This Residential Area Risk Assessment has since been updated/amended via the incorporation of the findings and data from various technical studies performed by Cox and Ogden, on behalf of the Respondents. It is noted that

the Residential Area Risk Assessment referenced previously was not approved by the USEPA Region V.

After the AOC was executed in November 1996, the first investigation program that was performed was the Main Site field investigation. Figure 2.3 shows the locations of the soil borings from which soil samples were collected during the Main Site field sampling program. In October 1997, a report entitled *"Data Report for the Engineering Evaluation and Cost Analysis of the 2800 South Sacramento Avenue Site"* was submitted to the USEPA Region V. This report presented the findings and analytical data generated from the Main Site investigation, and contained information on surrounding land use, Site background, Site chronological history, local and site-specific geology and hydrology, and meteorological information pertinent to the Site. The data from the Main Site investigation also resulted in the generation of the report entitled *"Main Site Risk Assessment for the 2800 South Sacramento Avenue Site,"* Parsons ES, October 1998. This Main Site Risk Assessment was subsequently approved by the USEPA. No additional investigatory activities have been performed at the Main Site.

Two phases of residential area investigation were performed after the execution of the Main Site field investigation program based on the *"Residential Area Conceptual Work Plan,"* Parsons ES, May 1997. The findings and analytical data from these investigations are presented in the *"Draft Phase II Residential Area Sampling Report,"* Parsons ES, August 1998, and the *"Draft Phase III Residential Area Sampling Report,"* Parsons ES, June 1999.

All reports related to the EE/CA study were submitted to the USEPA Region V. The information and data presented in these reports is extensive and has not been repeated in this EE/CA report. However, the findings and data presented in these reports form the basis for the evaluation of remedial alternatives presented in this EE/CA report.

2.5 IDENTIFICATION OF REMEDIAL ACTION GOALS, OBJECTIVES, AND SCOPE

2.5.1 Remedial Action Goals and Objectives

For the Main Site, remedial goal contaminant-specific concentrations for a variety of Site scenarios and risk levels were developed as part of the Main Site Risk Assessment (MSRA) and presented in the MSRA report. The evaluation of risk associated with residential area impacts was discussed in the Residential Area Risk Assessment report (as amended) and in the Draft Phase II and III Residential Area Sampling Reports (RASRs). In March 1999, the USEPA Region V provided the Respondents with risk-based goals on which to base the development of the EE CA remedial alternatives evaluation process. Separate risk-based goals were identified for the Main Site and the Residential Area, as follows:

For the Main Site:

- Cleanup objectives were to be evaluated based on the Main Site Risk Assessment determinations for (a) a future industrial worker scenario at a 1×10^{-5} risk level, and (b) a residential scenario at a 1×10^{-6} risk level.

  The USEPA Region V also designated the future industrial worker scenario contaminant concentrations identified in the Main Site Risk Assessment (MSRA) as the action level for the Main Site. Table 2.1 presents the contaminants of concern for each Main Site scenario along with the target concentrations for each contaminant, which were developed as part of the MSRA.

For the Residential Area:

- Cleanup objectives were to be evaluated based on the Residential Area Risk Assessment report (as amended) remedial scenarios for the (a) 3×10^{-5} risk level (b) 2×10^{-5} risk level (c) 1×10^{-5} risk level, and (d) background. However, because the USEPA did not ultimately concur with and approve the Residential Area Risk Assessment report (prepared by Alceon Corporation et al.), the evaluation of cleanup objectives and risk levels for the Residential Area were instead assessed based on the USEPA-approved Main Site Risk Assessment, residential child scenario exposure pathways and risk assumptions. This risk level evaluation was performed for four target cleanup objectives: 30 ppm, 20 ppm, 10 ppm, and 5 ppm (defined as background, refer to Section 2.5.2.2).

The risks assessed for the Main Site and discussed in the MSRA are related to impacted Site soils. Based on early discussions and agreements between the Respondents and the USEPA Region V, groundwater is not considered a medium of potential concern for the Site.

As stated in the Data Report, the findings of the subsurface investigation at the Main Site indicate that within a 20-to-25-foot depth, subsurface water exists only in isolated pockets and not within a continuous flow zone. Drinking water in the area of the Site is supplied by the City of Chicago and is obtained from Lake Michigan. The City of Chicago has an ordinance in place prohibiting the use of groundwater as a potable source of drinking water.

2.5.2 Scope of Remedial Actions

The goals and objectives specified previously have been used to develop a focused scope and remedial actions for this EE/CA. The basis for this scope is discussed below.

2.5.2.1 Main Site

As shown on Table 2.1, the contaminants of concern for the *"industrial worker scenario at a 1 x 10^{-5} risk level"* are six polynuclear aromatic hydrocarbons (PAH) compounds and arsenic, for soils at a depth of 0 to 10 feet. The contaminants of concern for the *"residential scenario at a 1 x 10^{-6} risk level"* are five PAH compounds and arsenic, for soils at a depth of 0 to 0.5 feet, and six PAH compounds, arsenic, benzene, and Aroclor-1254, for soils at a depth of 0 to 10 feet.

The risk posed by the PAHs is associated with dermal contact and ingestion routes of exposure. The risk posed by arsenic and Aroclor-1254 is associated with the ingestion route of exposure, and the risk posed by benzene is via the inhalation route of exposure. In keeping with the focused nature of an EE/CA, the remedial alternatives and the scope of the remedial action that will be assessed for the Site relative to these two scenarios, will only focus on those measures that are appropriate and necessary to addressing/mitigating these risks.

As such, for the industrial worker scenario, the remedial alternatives developed for the Main Site and evaluated in this EE/CA are geared toward preventing industrial workers from contacting and ingesting the impacted Main Site soils. It is noted that the industrial worker scenario is geared toward the Main Site having an industrial/commercial end use.

For the residential scenario, the remedial alternatives developed for the Main Site and evaluated in this EE/CA are geared toward (1) eliminating the inhalation risk posed by soils

in certain areas of the Site and (2) preventing a future child/adult resident from contacting and ingesting the impacted Main Site soils. It is noted that the residential scenario is geared toward the Main Site having a residential end use.

2.5.2.2 Residential Area

Carcinogenic PAHs are the contaminants of concern in the residential area surface soils, and the risks posed by the carcinogenic PAHs have been assessed as benzo(a)pyrene [B(a)P] equivalents. As stated previously, the risk posed by PAHs is associated with dermal contact and ingestion routes of exposure. Remedial actions evaluated in this EE/CA for the residential properties will be designed to address/mitigate these risks.

The evaluation of the data from the various phases of the residential area investigation indicated that there is (1) high variability of PAH concentrations in residential area surface soils, (2) the possibility of spikes in the data (even among background locations), (3) overlap of the background and foreground PAH concentration distributions, with some sampled values in background locations exceeding some sampled values in foreground locations, and (4) a relatively narrow range (about 1 order of magnitude) for mean and median concentrations. These findings imply that a relatively small shift in the target concentration (or risk levels) used to determine further investigative actions or to scope future remedial actions (as small as one order of magnitude) may make the difference between viewing with concern almost all residential properties within the foreground locations (and possibly into the background locations) versus a smaller number of properties within the foreground.

Furthermore, the following was determined and stated in the Draft Phase III Residential Area Sampling Report, dated June 1999, (prepared by Parsons and Cox, and approved by the USEPA Region V), "*...While a mean value of about 3 ppm, plus or minus 1 ppm is realistic for the background soil concentrations, ... "spike" values in excess of 10 ppm are observed.*" Based on these findings, a concentration of 4 to 5 ppm B(a)P equivalents was assessed as the residential area background level for this EE/CA.

As stated previously, the evaluation of risk levels for this EE/CA is based on assessing four target cleanup objectives (30, 20 10, and 5 ppm, respectively) based on the MSRA

residential-child exposure scenario. For this assessment, Parsons performed risk calculations to determine the total cancer risks to a potential future child resident, as a result of exposure to these four B(a)P equivalent concentrations. The exposure pathways (ingestion of soil, dermal exposure to soil, and inhalation of resuspended soil particulate contaminants) and the exposure assumptions used in the MSRA risk calculations for a child resident, are the same as those listed in Tables C.1.25, C.1.26, and C.1.27 of the USEPA-approved MSRA report.

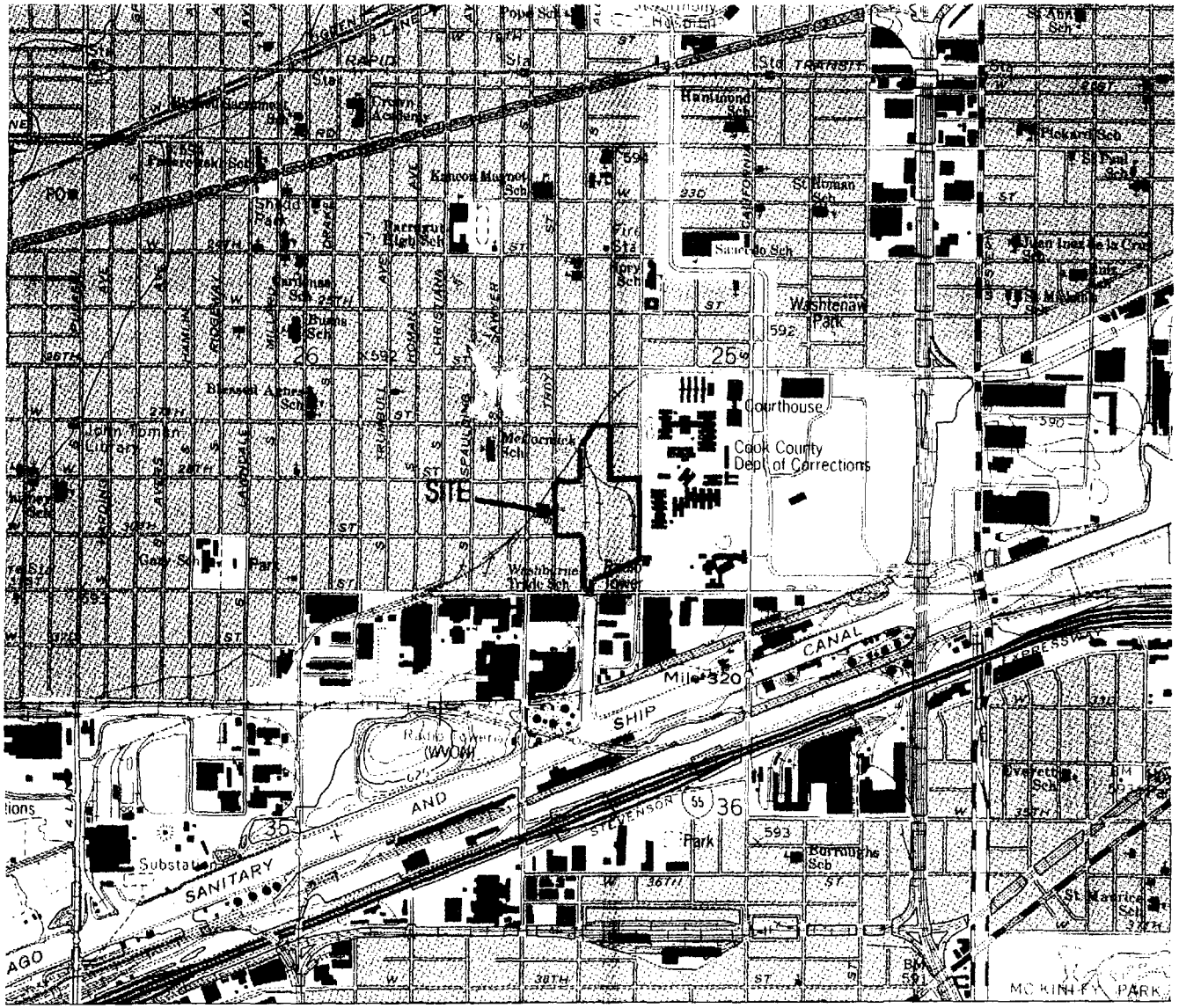
The table shown below presents the potential scope of the remedial process associated with the four target cleanup objectives and associated risk levels.

Target B(a)P Equivalent Cleanup Objective (ppm)	Risk Level Calculated Based on the Residential-Child Scenario in the MSRA	Estimated Maximum Number of Residential Properties That Could Be Remediated
30	1.8×10^{-4}	2
20	1.2×10^{-4}	15
10	5.8×10^{-5}	32
5 (Background)	2.9×10^{-5}	48

Each cleanup objective/risk level will be individually assessed as part of this EE/CA based on the estimated maximum number of residential properties that are identified for remediation. For example, the above-referenced table indicates that a risk level of 1.2×10^{-4} is equivalent to an estimated cleanup objective of 20 ppm B(a)P equivalents, and soils on a maximum of 15 residential properties within the "residential area of greatest concern" could exhibit concentrations that exceed these levels and have to be remediated. The table also indicates that remediating to background (5 ppm or below) could result in the entire "residential area of greatest concern" (quantified herein as 48 residential properties) being remediated. It is to be noted that because it was determined that background is around 5 ppm, which is a risk level of 2.9×10^{-5}, and background is considered the most conservative remedial action objective for residential remediation, the evaluation of the 1.0×10^{-6} risk level was not pertinent to this EE/CA.

The strategies and statistical methodologies designed for the residential area were used to evaluate the implications of the four cleanup objectives/risk levels and to develop the information presented in the aforementioned table. In keeping with the various determinations presented in the Residential Area Conceptual Work Plan, and the Phase II and III RASRs, the "residential area of greatest concern" (as defined in Section 1.4) was used in this EE/CA as the community to target for remedial measures. The residential area of greatest concern has 48 residential properties. Given the previously discussed overlap between foreground and background surface soil PAH concentration distributions, the number of residential properties remediated under this scenario could be larger than 48, since properties in the "background area" could also be assigned for remediation under this scenario. In this EE/CA report, the background risk level evaluation will be based on a maximum of 48 residential properties requiring remediation.

The Phase II and III RASAPs were designed to evaluate the extent of impact and remedial requirements relative to the 30 ppm B(a)P equivalents cleanup objective. For the other three cleanup objectives shown on the table, additional sampling will be needed to confirm how many homes would actually have to be remediated and to identify the addresses of the homes. As such, the actual addresses and characteristics of the residential properties to be remediated under the various risk scenarios are not specified in this EE/CA report.



VICINITY MAP

SOURCE: 7.5 MINUTE QUADRANGLE MAP OF ENGLEWOOD, IL. DATED 1963, PHOTOREVISED 1972 & 1980.

SITE PLAN

2000 0 2000

SCALE IN FEET

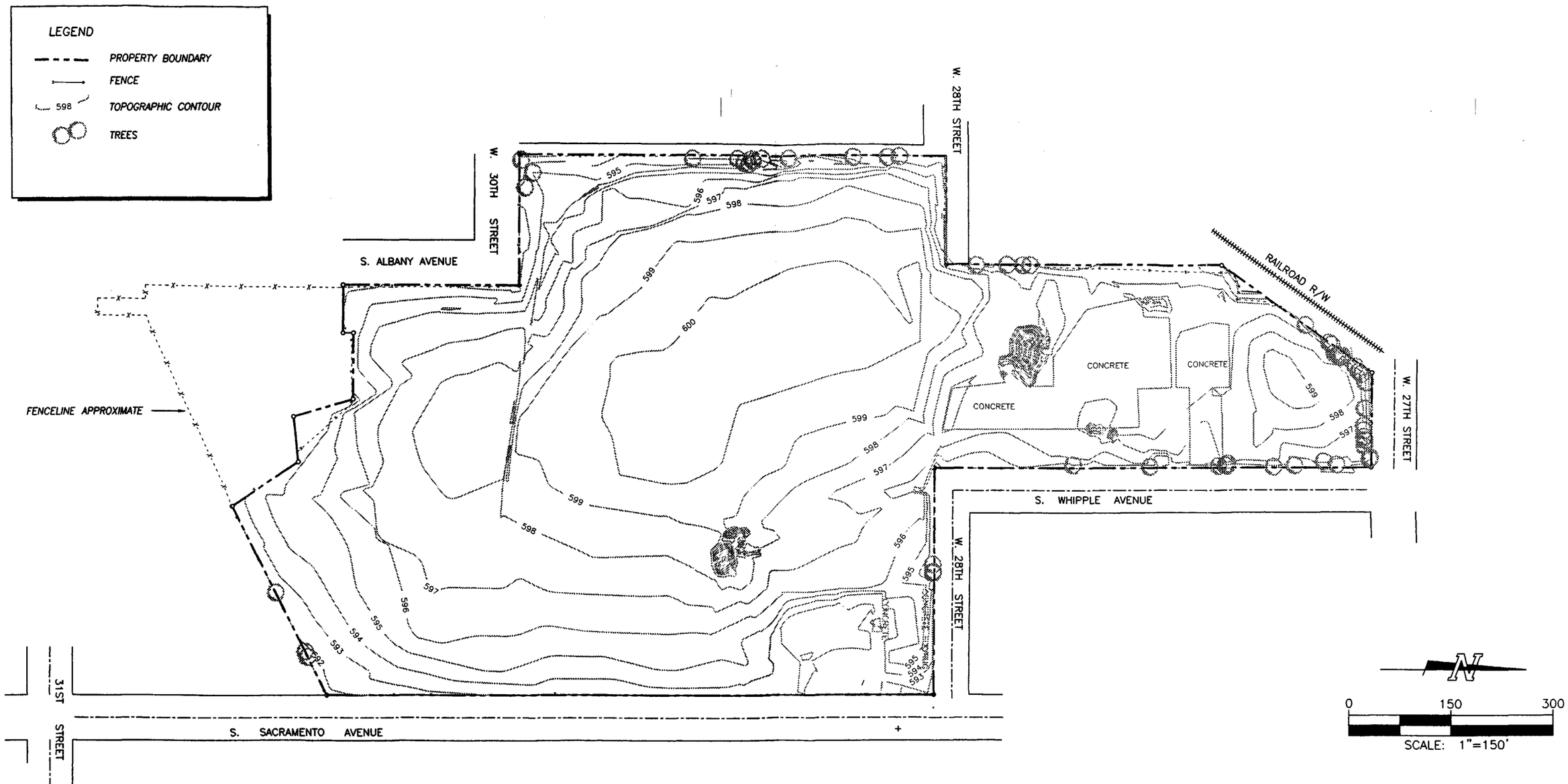
PARSONS ENGINEERING SCIENCE, INC.

SITE LOCATION MAP

AlliedSignal, Inc./The Celotex Corporation

FIGURE 2.1

p:\drawings\alliedsi\site.cdr



SOURCE: SITE MAP BASED ON FILE No. WAS BASED ON SITE DRAWING PROVIDED BY WESTSHORE ENGINEERING AND SURVEYING, INC. (FILE No. WS-440-11, 5-16-96)

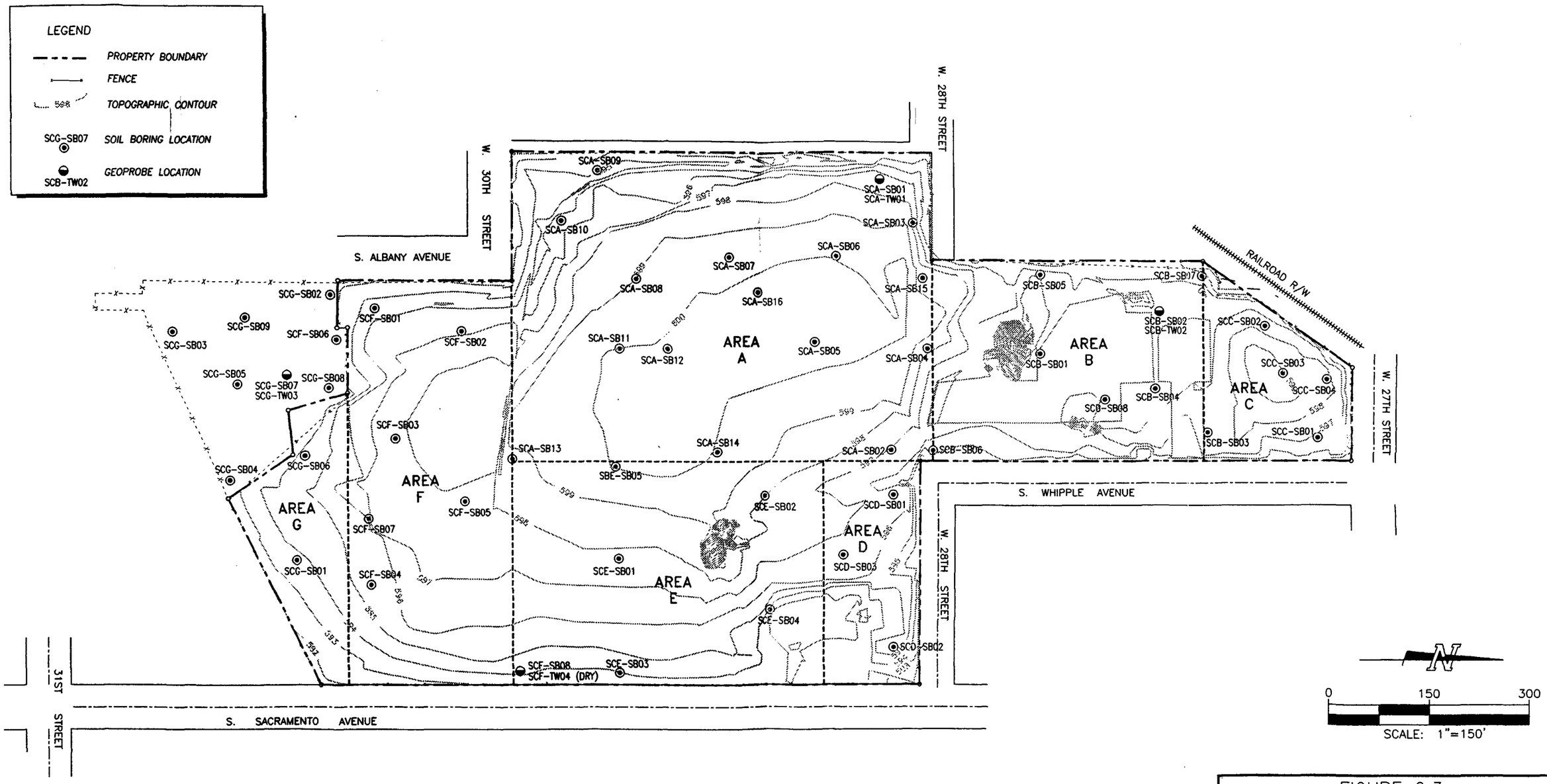
FIGURE 2.2

AlliedSignal, Inc./The Celotex Corporation

TOPOGRAPHIC SITE MAP

PARSONS ENGINEERING SCIENCE, INC.
DESIGN * RESEARCH * PLANNING
1000 JORIE BLVD. * OAKBROOK, IL. 60523 * (630) 990-7200

DATE: 9/26/97
R:\DRAWINGS\ALLIEDSI\DATARPRT\30577001.DWG



SOURCE: SITE MAP BASED ON FILE No. WAS BASED ON SITE DRAWING PROVIDED BY WESTSHORE ENGINEERING AND SURVEYING, INC. (FILE No. WS-440-11, 5-16-96)

FIGURE 2.3

AlliedSignal, Inc./The Celotex Corporation

SOIL BORING LOCATION MAP

PARSONS ENGINEERING SCIENCE, INC.
DESIGN * RESEARCH * PLANNING
1000 JORIE BLVD. * OAKBROOK, IL. 60523 * (630) 990-7200

DATE: 10/16/97
R:\DRAWINGS\ALLIEDSI\DATARPRT\30577012.DWG

TABLE 2.1
SUMMARY OF REMEDIAL OBJECTIVES
BY RECEPTOR AND TARGET RISK LEVEL

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Receptor	Depth of Soil	Constituent of Concern	Cleanup Objective at Target Risk Level (parts per million)	
			1.00 E-05	1.00 E-06
Future Commercial/ Industrial Worker	0-10 feet	Benzo(a)anthracene	2.36E+01	NA
		Benzo(a)pyrene	2.36E+00	NA
		Benzo(b)fluoranthene	2.36E+01	NA
		Benzo(k)fluoranthene	2.36E+02	NA
		Dibenz(a,h)anthracene	2.36E+00	NA
		Indeno(1,2,3-c,d)pyrene	2.36E+01	NA
		Arsenic	3.32E+01	NA
Future Resident/ Adult	0-0.5 feet	Benzo(a)anthracene	NA	1.76E+00
		Benzo(a)pyrene	NA	1.76E-01
		Benzo(b)fluoranthene	NA	1.76E+00
		Dibenz(a,h)anthracene	NA	1.76E-01
		Indeno(1,2,3-c,d)pyrene	NA	1.76E+00
		Arsenic	NA	2.47E+00
Future Resident/ Child	0-0.5 feet	Benzo(a)anthracene	NA	1.71E+00
		Benzo(a)pyrene	NA	1.71E-01
		Benzo(b)fluoranthene	NA	1.71E+00
		Dibenz(a,h)anthracene	NA	1.71E-01
		Indeno(1,2,3-c,d)pyrene	NA	1.71E+00
		Arsenic	NA	1.18E+00
Future Resident/ Adult	0-10 feet	Benzo(a)anthracene	NA	1.76E+00
		Benzo(a)pyrene	NA	1.76E-01
		Benzo(b)fluoranthene	NA	1.76E+00
		Benzo(k)fluoranthene	NA	1.76E+01
		Dibenz(a,h)anthracene	NA	1.76E-01
		Indeno(1,2,3-c,d)pyrene	NA	1.76E+00

TABLE 2.1
SUMMARY OF REMEDIAL OBJECTIVES
BY RECEPTOR AND TARGET RISK LEVEL

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Receptor	Depth of Soil	Constituent of Concern	Cleanup Objective at Target Risk Level (parts per million)	
			1.00 E-05	1.00 E-06
Future Resident/ Adult	0-10 feet	Arsenic	NA	2.47E+00
		Benzene	NA	8.88E-01
Future Resident/ Child	0-10 feet	Benzo(a)anthracene	NA	1.71E+00
		Benzo(a)pyrene	NA	1.71E-01
		Benzo(b)fluoranthene	NA	1.71E+00
		Benzo(k)fluoranthene	NA	1.71E+01
		Dibenz(a,h)anthracene	NA	1.71E-01
		Indeno(1,2,3-c,d)pyrene	NA	1.71E+00
		Aroclor-1254	NA	7.27E-01
		Arsenic	NA	1.18E+00
		Benzene	NA	1.00E+00

NA - Not Applicable.

SECTION 3
IDENTIFICATION AND EVALUATION OF ALTERNATIVES

3.1 OVERVIEW

This EE/CA report was developed as a focused study that addresses only those alternatives that could realistically and practically address the risks posed by the contamination associated with the Site. A limited number of alternatives have been developed using technologies that have been proven acceptable and have been implemented repeatedly under similar contaminant scenarios to meet the cleanup objectives and action levels identified for the Main Site and residential areas.

This section presents discussion of the technologies and alternatives developed for the Main Site and the residential area, and presents an evaluation of the alternatives against the short and long-term aspects of three broad criteria: effectiveness, implementability, and cost.

3.2 DESCRIPTION OF TECHNOLOGIES APPLICABLE TO THE SITE

3.2.1 Approach to Selecting Remedial Technologies for the Main Site

For the Main Site, technologies were considered which would prevent direct contact with and ingestion of contaminated soils, and would mitigate the inhalation risk posed by soils in certain areas of the Site. The selected technologies incorporated two general approaches: the use of a physical barrier to prevent direct contact with and ingestion of the impacted soils and, where applicable, the removal of impacted soils that pose an inhalation risk. Onsite/off-site treatment approaches to the impacted soils were eliminated from consideration for several reasons, including the following:

- The use of treatment technologies such as onsite thermal treatment were considered inappropriate for the Site given the proximity of the surrounding residential population to the Site, and the potential impact that such treatment operations could have on the quality of life in the community on a day-to-day basis.
- The treatment of PAH-impacted soils was deemed unnecessary since the risks posed by these materials can be more appropriately addressed (and with less impact on the surrounding residential community) via the use of technologies that involve the placement of physical barriers.

- None of the impacted soils at the Site are considered to be a hazardous waste (based on analytical data generated from the Main Site field investigation); therefore, it is not anticipated that offsite disposal of the impacted soils will require treatment to address land ban restrictions related to hazardous wastes.

Given the size of the Main Site (24 acres), technologies that facilitated the placement of a cover over the Site soils, in such a manner as to prevent short- and long-term direct contact (and thereby ingestion) with the impacted soils, will eliminate the risk posed by the impacted soils under the industrial worker scenario. In addition, the placement of a cover over the Site would eliminate the potential for future airborne dispersal of impacted dust particulates from the Site. To address the inhalation risk associated with the residential scenario, it was deemed most feasible to excavate and dispose of the benzene-impacted soils offsite, in lieu of performing any onsite treatment.

Since groundwater is not considered to be a media of potential concern, and the Site does not generate gaseous emissions or contain hazardous waste, there is no reason for a multi-layer cap design, nor is there a reason to require the incorporation of long-term monitoring wells into the capping alternative for the Site. Surface water runoff will be contacting the cover material that will be placed on the Site, so special management/treatment of surface water runoff was not considered as part of this EE/CA.

3.2.2 Approach to Selecting Remedial Technologies for the Residential Area

The average size of a residential property within the "residential area of concern" is less than one-eighth of an acre. As such, excavation and off-property disposal of the impacted surface soil are considered the most applicable technologies for this residential area. These technologies were selected to facilitate the removal of the impacted surface soil from the designated residential properties, and to ensure the protection of the health and well being of the property residents during the removal/remedial actions.

In-situ technologies to treat the contaminants of concern are not considered appropriate for the residential areas given (1) the size of the properties, (2) the timeframe associated with the implementation and monitoring of these technologies, and (3) the resulting burden that would be placed on the families living on the impacted properties. Excavating and removing

the impacted surface soil at the designated residential areas will minimize the impacts to human health under current and future uses of the residential properties by eliminating exposure to the contaminants of concern in the soil through ingestion and dermal contact pathways. Based on discussions with the USEPA Region V, a depth of one foot has been used to quantify soil removal actions related to residential remedial measures.

As previously stated, soil analytical data from impacted Site soils indicated that these soils were not characteristically hazardous waste. Given that the source of the PAH contamination in the impacted residential area surface soils is considered to be fugitive dust emissions from the Site, the excavated soils from the residential area are not anticipated to be a hazardous waste. Thus, treatment of the removed residential area surface soils will not be required for disposal.

Management of the excavated surface soils from the residential areas will entail off-site disposal at a landfill. Management of these excavated surface soils on the Main Site was initially considered in this EE/CA as being potentially applicable to this site/project. However, the USEPA Region V has stated that the City of Chicago considers the soils generated from this residential cleanup to be a waste that is covered under Section 11-4-1500 of the Chicago Municipal Code, and is therefore prohibited from being disposed in any manner other than at a permitted facility. Furthermore, the reuse of the Main Site by Sacramento Corporation also makes the onsite management approach infeasible.

3.3 IDENTIFICATION AND ANALYSIS OF ALTERNATIVES

Based on the nature and extent of contamination defined for the Main Site and for the residential area, appropriate alternatives have been developed to meet the cleanup objectives and action levels specified by USEPA Region V. Separate alternatives are presented herein for the Main Site and the residential area. The final remedial recommendations in this EE/CA will be the combination of alternatives that best meet the specified criteria for the Main Site and the residential areas, respectively.

3.3.1 Main Site Alternatives

Three categories of alternatives have been developed to meet the cleanup objectives and action levels at the Main Site:

1. No Action.
2. Alternatives to meet the cleanup objectives for a future industrial scenario at a 1×10^{-5} risk level.
3. Alternatives to meet the cleanup objectives for a future residential scenario at a 1×10^{-6} risk level.

These alternatives utilize the applicable technologies discussed in Section 3.2, and are described in the following subsections.

3.3.1.1 Alternative M1: No Action

The no action alternative for the Main Site consists of implementing no remedial or removal activities at the Site. Under this scenario, the Site would remain in its current state. No measures would be taken to prevent direct contact with Site soils. Since the USEPA Region V has stipulated that the action level for the Site is the industrial worker scenario, the potential applicability of this alternative will be based on whether the Site meets the cleanup objectives specified in Table 2.1 in its current state. Figure 3.1 presents a cross-section of the existing Site for the No Action alternative.

3.3.1.2 Alternative M2: Installation of a Permeable Clay/Soil Cover

This alternative proposes the installation of a two-foot permeable cover at the Main Site to meet the cleanup objectives for a future industrial scenario at a 1×10^{-5} risk level. Figure 3.2 presents a cross-section of one type of proposed permeable cover. As shown in Figure 3.2, the permeable cover would consist of one and one-half feet of clay at 10^{-5} permeability and six inches of topsoil. Under this alternative, the runoff from the Site would be diverted into a gunite ditch and conveyed to the nearest inlet of the local storm sewer system.

To install two feet of clean cover material with acceptable side slopes and the necessary storm water management system, soils along the fence line/property line would have to be excavated and relocated to other areas within the Site. For purposes of this EE/CA report, it has been assumed as part of the preliminary design for this alternative that the excavated soils would be relocated within the shaded area shown on Figure 3.3. The amount of soil that would require relocation is relatively small and would not significantly increase the slopes or finished grade of the Site. The placement of the permeable cover over the Main Site would occur after all soil relocation has been completed.

The preliminary design presented in this EE/CA Report for Alternative M2 is not considered to be the only manner in which a permeable clean cover can be designed for/placed on the Site to prevent human direct contact with and ingestion of the impacted soils beneath the cover. Alternative M2 proposes the installation of a two-foot permeable cover over the Main Site to meet the cleanup objectives for a future industrial scenario at a 1×10^{-5} risk level. The two-foot cover thickness is a guidance cover thickness, not a minimum regulatory requirement. As long as sufficient cover is placed and appropriately and routinely maintained to prevent human direct contact with and ingestion of the impacted soils beneath the cover, the permeable cover thickness may be less than two feet in thickness but shall not be considered (by Honeywell) to be acceptable, if less than one foot in thickness.

The practical application of this alternative is that the Site could be used as a commercial/industrial establishment and, providing that sufficient cover is maintained across the surface of the Site, the risk to the industrial workers employed and working at the establishment, associated with the ingestion of and direct contact with impacted soils, would be below the 1×10^{-5} risk level.

It is noted that the action, by Sacramento Corporation, of placing 2 feet (or more) of clean gravel cover over portions of the Site (with the intent of a commercial/industrial Site end use) would fulfill the intent of this alternative in the areas that were covered. However, it will need to be confirmed (a) where the clean gravel cover was placed, and (b) that the depth of the clean gravel cover was in accordance with this alternative. Areas that do not exhibit at least one foot of permeable cover would have to receive the necessary permeable cover to

fulfill the minimum cover thickness requirements stated for this alternative. It is also to be noted that while the example permeable cover for this EE/CA included a vegetated layer, this vegetated layer is not mandatory to the alternative, (relative to addressing the risks associated with the ingestion of and/or direct contact with impacted soils). Hence, a gravel cover surface would be acceptable and would meet the intent of the ARARs (refer to Section 3.4) provided that the integrity of the gravel cover (surface and minimum thickness) is properly maintained.

3.3.1.3 Alternative M3: The Installation of an Impermeable Asphalt Cover

This alternative proposes the installation of an impermeable asphalt cover at the Main Site to meet the cleanup objectives for a future industrial scenario at a 1×10^{-5} risk level. Figure 3.4 presents a cross-section of the proposed impermeable asphalt cover. As shown in Figure 3.4, this asphalt cover will consist of six inches of road base overlain by six inches of asphalt pavement. A six-inch asphalt curb will surround the Site. The storm water runoff generated across this cover will be conveyed to the nearest inlet of the local storm sewer system.

As in Alternative M2, the existing soils along the fence and property lines will have to be excavated and relocated to other areas within the Site. The placement of the impermeable asphalt cover over the Main Site will occur after all soil relocation has been completed. If excavated soils from the residential areas are brought onto the Site for management (Refer to Section 3.3.2.5), these soils will be placed during soil relocation activities, prior to the impermeable asphalt cover being installed on the Site. Given the size of the Site, the incorporation of the residential area soils within the Site subsurface for any of the four risk levels (1×10^{-5}, 2×10^{-5}, 3×10^{-5}, and background) should not impact the placement or design of the impermeable asphalt cover.

The practical application of this alternative would be the end use of the Site as a parking lot in an industrial/commercial setting. By maintaining the asphalt cover across the surface of the Site, the exposure risk for the industrial worker related to the ingestion of and/or direct contact with the impacted soils, would be below the 1×10^{-5} risk level.

3.3.1.4 Alternative M4: Installation of a Permeable, 3-Foot Clay Cover Along with Hot-Spot Excavation of Impacted Soil

This alternative is designed to meet the cleanup objectives for a residential scenario at a 1 x 10^{-6} risk level. For this alternative, it is proposed that (1) Site soils that exceed the cleanup objectives for benzene by presenting an unacceptable inhalation risk be excavated and disposed offsite, and (2) three feet of clean permeable cover material be placed over the Site. The practical application of this alternative is that the Main Site would have a residential end use wherein the Site would be subdivided into residential properties on which homes would be built and adult/child residents would live and play.

Based on the data collected during the Main Site field investigation, soils from five boring locations exceeded the cleanup objectives for benzene (Refer to Figure 2.3): SCA-SB01, SCB-SB03, SCC-SB02, SCG-SB02, and SCF-SB06. For purposes of this EE/CA and the residential scenario, it has been assumed that to eliminate the inhalation pathway of exposure associated with soils in these five areas, the areas will be excavated down to a depth of 10 feet, and the excavated soils disposed off-site. The total volume of benzene-impacted soils estimated for removal from these areas is 20,000 cubic yards. Furthermore, to eliminate the exposure pathways associated with the direct contact and ingestion of PAH-impacted Site soils under this residential scenario, it is assumed that three feet of clean cover material will be placed across the Site. These assumptions are based on the Illinois Tiered Approach to Cleanup Objectives (TACO) voluntary guidance requirements for excluding exposure pathways associated with risks related to inhalation and ingestion.

Figure 3.5 presents a cross-section of the proposed permeable cover for the residential scenario. The needs and requirements of a specific architectural design for a residential construction project cannot be predicted and incorporated into this alternative. However, for practical purposes it has been assumed that the general topography of the Site, if used for residential purposes, would be designed to be similar to the surrounding residential area topography. As such, even after Site soils exceeding the benzene cleanup objective are excavated and removed offsite, and other Site soils are relocated and backfilled into these excavation areas, it is anticipated that upwards of 230,000 cubic yards of soil will have to be

removed and disposed offsite as Illinois Special Waste. The excavation of these soils will enable the necessary topography to be maintained after three feet of clean cover material have been placed over the Site. For this alternative, the anticipated total volume of soil that will have to be excavated and disposed offsite as an Illinois Special Waste, is estimated at 250,000 cubic yards. It is assumed that these soils will be disposed at a landfill certified to accept special waste.

3.3.2 Residential Area Remedial Alternatives

The following alternatives have been developed to meet the cleanup objectives and action levels for the residential area for the four target cleanup objectives: 30, 20, 10, and 5 ppm (background). The development of these alternatives was based on the approach explained in Section 3.2.2, and on the scope of remedial actions described in Section 2.5.

3.3.2.1 Alternative R1: Excavation of Soil at Two Residential Properties

As discussed in Section 2.5.2, a risk level of 1.8×10^{-4} is equivalent to an estimated cleanup objective of 30 ppm B(a)P equivalents. Based on the various RASAPs executed for this EE CA, it has been shown that soils on two residential properties within the "residential area of greatest concern" could exhibit concentrations that exceed these levels and have to be remediated. As such, this alternative involves the excavation of impacted soils at two residential properties (approximately 500 cubic yards in total) to meet the cleanup objectives for a future residential scenario of 30 ppm. It is noted that additional confirmation sampling is not deemed necessary to determine the location of the two properties. The design of the Phase II and III RASAPs was geared toward evaluating the extent of remedial measures for the 30 ppm cleanup objective, and the two residential properties have been identified as a result.

The contaminants of concern in residential area surface soils are PAHs; therefore, the exposure pathway is through direct contact and ingestion. It has been stated that the elevated PAH concentrations in the surface soil of impacted residential properties are the result of PAH-impacted fugitive dust from Site depositing on the surface soil in the residential areas. The average residential property in the area is less than one-eighth acre in size, and a large

portion of these properties is overlain by the house structure. In addition, the configuration of the properties is long and narrow, and the soil removal areas can only be accessed via the alleyway in the rear of the property. For purposes of this EE/CA report, it has been assumed that residential area remedial activities will entail the excavation of surface soils from designated impacted properties, down to a depth of one foot below ground surface, and all soils not covered by the house structure will be removed down to the 1-foot depth and replaced with clean backfill (Refer to Section 3.2.2).

Furthermore, this alternative assumes that to facilitate construction equipment access to the properties and removal of the impacted soils, all concrete, asphalt, grass, trees, fences and other landscaping present on the properties being remediated would be removed prior to excavation activities, and replaced following the placement of clean backfill in the excavated areas. No residential family or person relocation has been assumed or is deemed necessary for this removal action.

The actual project performance period is estimated to be 7 days. It is assumed that dust generation will be minimal. If necessary, it is assumed that dust suppressant measures could be undertaken that would preclude the need to seal off houses from dust during soil excavation activities. Residents would be required to keep windows and doors closed during the execution of remedial activities. It is assumed that excavated soils will be loaded directly into trucks and transported to an appropriately permitted landfill for disposal, in accordance Alternative D2 (Refer to Section 3.3.2.6).

3.3.2.2 Alternative R2: Excavation of Soil at 15 Residential Properties

To achieve a cleanup objective of 20 ppm, which is calculated to be equivalent to a risk level of 1.2×10^{-4}, it is estimated that soils on 15 residential properties within the "residential area of greatest concern" could exhibit concentrations that exceed these levels and have to be remediated. Therefore, this alternative involves the excavation of impacted soils from 15 residential properties (approximately 3,750 cubic yards of soil in total), to meet the 20 ppm cleanup objective. It is currently estimated that the total remedial action for the 15 properties

(project performance period) will take approximately 17 days. Excavation and disposal procedures will be the same as described in Alternative R1.

It is noted that the actual number of residential properties and the specific locations of the properties that would have to be remediated for this 20 ppm cleanup objective would have to be confirmed via additional sampling. This additional sampling would require that Honeywell execute the following: (1) acquire property owners' permission to access the properties to be sampled, (2) collect and analyze the additional surface soil samples, (3) validate, evaluate, and report the data findings, and (4) reach a consensus agreement with the USEPA Region V on which properties need to be remediated.

3.3.2.3 Alternative R3: Excavation of Soil at 32 Residential Properties

To achieve a cleanup objective of 10 ppm, which is calculated to be equivalent to a risk level of 5.8×10^{-5}, it is estimated that soils on 32 residential properties within the "residential area of greatest concern" could exhibit concentrations that exceed these levels and have to be remediated. Therefore, this alternative involves the excavation of impacted soils at an estimated 32 residential properties (approximately 7,400 cubic yards in total) to meet the 10 ppm cleanup objective. It is also currently estimated that the total remedial action for the 32 properties (project performance period) will take approximately 35 days. Excavation and disposal procedures will be the same as described in Alternative R1.

It is noted that the actual number of residential properties and the specific locations of the properties that would have to be remediated for this 10 ppm cleanup objective would have to be confirmed via additional sampling. As with Alternative R2, this additional sampling would require that Honeywell execute the following: (1) acquire property owners' permission to access the properties to be sampled, (2) collect and analyze the additional surface soil samples, (3) validate, evaluate, and report the data findings, and (4) reach a consensus agreement with the USEPA Region V on which properties need to be remediated.

3.3.2.4 Alternative R4: Excavation of Soil at 48 Residential Properties

Background is estimated to be equivalent to a cleanup objective of approximately 5 ppm B(a)P equivalents, which is calculated to be equivalent to a risk level of 2.9×10^{-5}. If the cleanup objective is set at (or below) the 5 ppm background concentration, it is estimated that soils on all residential properties within the "residential area of greatest concern" could exhibit concentrations that exceed the cleanup objective, and some residential properties in the background area would also have to be remediated. For purposes of this EE/CA, the number of residential properties that could be remediated under this scenario has been capped at 48. As a result, this alternative involves the excavation of impacted soils at 48 residential properties (approximately 11,100 cubic yards in total) to meet the cleanup objectives for a background risk level. It is also currently estimated that the total remedial action for the 48 properties (project performance period) will take 40 days Excavation and disposal procedures will be the same as described in Alternative R1.

As with Alternatives R2 and R3, it is noted that the actual number of residential properties and the specific locations of the properties that would have to be remediated if the cleanup objective was set at background, would have to be confirmed via additional sampling. This additional sampling would require that Honeywell execute the following: (1) acquire property owners' permission to access the properties to be sampled, (2) collect and analyze the additional surface soil samples, (3) validate, evaluate, and report the data findings, and (4) reach a consensus agreement with the USEPA Region V on which properties need to be remediated.

3.3.2.5 Alternative D1: Onsite Disposal of Excavated Residential Area Soil

This alternative involves the disposal of excavated soils from the residential area removal actions (Alternatives R1 through R4) onto the Main Site, for incorporation into the subgrade of the Site, prior to the installation of the clay or asphalt cover (Alternatives M2 and M3). The contaminants of concern in the residential area soils are PAHs, as are the primary Main Site contaminants of concern. Furthermore, the impacted residential area surface soils

are not a hazardous waste and the PAHs reportedly originated from the Site; therefore, it is considered feasible to consider this option for management of the excavated soils.

Under this alternative, the residential area soils would be excavated and transported directly to the Site. The trip to the Site from the residential area of concern would not take longer than 5 to 10 minutes, given close proximity of the Site to the residential area of concern. However, as stated in Section 3.2.2, the USEPA Region V has indicated that the City of Chicago considers the soils generated from this residential cleanup to be a waste that is covered under Section 11-4-1500 of the Chicago Municipal Code, and is therefore prohibited from being disposed in any manner other than at a permitted facility. Furthermore, the reuse of the Main Site by Sacramento Corporation also makes the onsite disposal alternative infeasible.

3.3.2.6 Alternative D2: Off-site Disposal of Excavated Residential Area Soils

This alternative involves the transport of the impacted excavated residential area surface soils from the residential area of concern to a permitted facility such as a landfill. The contaminants of concern in the soil are PAHs, and it is assumed in this EE/CA that these soils will be disposed as a special waste. However, under current Illinois law (Illinois Pollution Control Act, Section 3.45 and Section 22.48) a generator can certify that a waste is not a special waste as long as the waste is not (1) a liquid waste, (2) a regulated asbestos waste, (3) a regulated PCB waste, (4) a delisted hazardous waste, (5) a decharacterized hazardous waste, or (6) an auto fluff waste. The certification of the residential area excavated soils as a non-hazardous non-special waste should be possible, and would result in the excavated soils being disposed of as a non-special waste. This would eliminate the need for a special waste transporter for the excavated soils and would eliminate the need to manifest the waste. Disposal requirements would be stipulated by the receiving landfill. Further sampling of the excavated residential soil may be required prior to disposal of the excavated material, to fulfill the requirements of the selected landfill. The volume of soil that will require disposal will depend on which residential area remedial alternative (Alternative R1 through R4) is selected.

3.4 POTENTIAL APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

3.4.1 Introduction

This section presents the standards, requirements, criteria, and limitations under federal and state environmental laws and regulations that may be ARARs under CERCLA for remedial action at the Site. The ARARs are used in conjunction with risk-based goals to govern CERCLA response activities and to establish cleanup goals. The federal statutes that potentially apply to the Site are presented in Table 3.1.

3.4.2 Chemical-Specific ARARs

Chemical-specific ARARs set forth health- or risk-based concentration limits or ranges for various environmental media. The primary contaminants of concern at the Site are PAHs. The risk-based cleanup objectives and action levels for this Site were discussed in Section 2.5 and presented in Table 2.1. Because soil is the medium of concern at the Site, the laws and regulations governing solid wastes are applicable. Analytical results contained in *Data Report* (Parsons ES, 1997) indicate that soils at the Site do not have the toxicity characteristics that meet the regulatory definition of a RCRA hazardous waste, as contained in 40 CFR, Part 261. Thus, it is not considered likely that the impacted soils at the Site (or from the residential areas) will be classified as a hazardous waste. However, in the unlikely event that future analysis/evaluation of Site soil results in their classification as a hazardous waste, the federal and state laws and regulations governing these types of wastes will be applicable. There are also state regulations that govern wastes classified as special waste.

Ambient air could also be a potential medium of concern at this site if chemical constituents such as volatile organic compounds (e.g. benzene) are emitted into the air during waste excavation, handling, or disposal activities. The potential federal and state chemical-specific ARARs are presented in Table 3.2.

3.4.3 Location-Specific ARARs

Location-specific ARARs are restrictions placed on the concentration of hazardous substances or the conduct of activities based on the characteristics of a site. Potential

location-specific ARARs include laws and regulations that pertain to endangered and threatened species habitats, wetlands, floodplains, and properties of historical significance.

The Site has long history of industrial land use and development as described in the *Data Report* (Parsons ES, 1997). Based on the Site's history and industrial location, it is reasonable to assume that the Site is not a critical habitat for endangered species or a property of historic or archeological significance. Wetlands are defined in federal laws and regulations as "*...those areas that are inundated or saturated by surface or groundwater for a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.*" Given the Site's hydrogeologic characteristics, no part of the Site is considered to be a wetland. The potential federal and state location-specific ARARs are presented in Table 3.3.

3.4.4 Action-Specific ARARs

Action-specific ARARs are technology or activity based requirements or limitations on actions related to the management of wastes. Action-specific ARARs are triggered by the specific remedial responses selected for a site. RCRA provides the largest number of action-specific ARARs because it is the statute directed toward the management of hazardous waste. Management of wastes that do not meet the definition of RCRA hazardous wastes may trigger relevant and appropriate RCRA requirements, if the wastes are sufficiently similar to hazardous waste to warrant such standards. Table 3.4 provides the potential federal and state action-specific ARARs for the Site.

3.5 DETAILED ANALYSIS OF ALTERNATIVES

The alternatives described previously in Section 3.3 for the Main Site and the residential area have been evaluated against three criteria: effectiveness, implementability and cost. The various elements of these three criteria and the results of this analysis are presented in Tables 3.5 through 3.8, as follows:

- Table 3.5 shows an assessment of the alternatives against the criteria of effectiveness. This analysis focuses on how well each alternative achieves adequate protection of public health and the environment, protection of workers during implementation and compliance with ARARs. This analysis also considers each alternative's ability to achieve specified removal action objectives.

- Table 3.6 assesses the implementability of the alternatives. This broad criterion addresses the technical and administrative feasibility of implementing each alternative and the availability of various services required during its implementation.

- Table 3.7 presents the overall cost associated with each alternative, including capital costs, annual operation and maintenance costs, and present worth. Cost estimates were prepared to aid in the final evaluation of alternatives using the information currently available. Final project costs will depend on actual labor and material costs, site conditions, productivity, competitive market conditions, final project scope, final project schedule and other variable factors. As a result, final project costs will vary from the estimates provided herein.

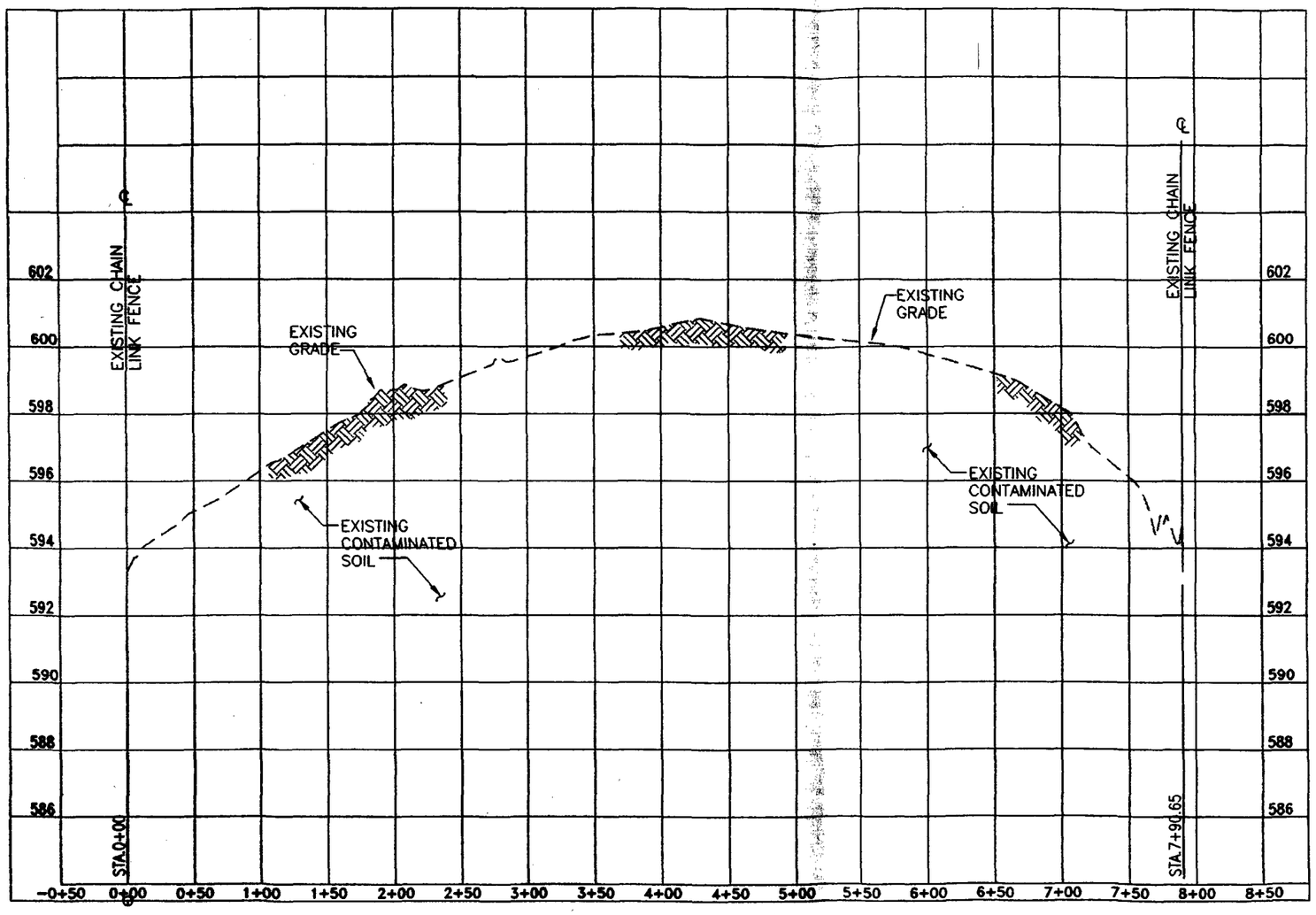
- Table 3.8 is a detailed cost estimate showing the specific cost for each alternative. The cost estimates are order-of-magnitude range with an intended accuracy range of +50 to –30 percent. The cost estimate includes the capital cost required to design and implement each alternative, and the operations and maintenance costs incurred each year following implementation of the remedial action. Both direct and indirect capital costs are included in the cost estimates.

  Direct costs include costs for construction equipment mobilization and demobilization costs; labor costs; and costs for materials required to implement each alternative. Indirect costs include engineering expenses; sampling and data evaluation costs; relocation expenses for residents of impacted properties; and contingency allowances. Operation and maintenance costs include the long-term maintenance of the Main Site cover (Alternatives M2 through M4). No long-term operation and maintenance expenses are anticipated for the residential and disposal alternatives. Present worth costs are presented to allow comparison of costs that occur over different time periods by discounting future expenditures to the present year. Present worth calculations were based on a 30-year period using a 6% discount rate. The following assumptions were made in the preparation of the cost estimate:

  1. The line item quantities for direct construction costs for the residential area alternatives (Alternatives R1 through R4) were based on assumed characteristics of an average property. These characteristics include the assumptions that the average residential area property is 3,600 square feet (120 feet x 30 feet) and the house structure encompasses approximately 850 square feet, leaving 2,800 square feet for remediation. Depth of soil removal was estimated at 1 foot. Other incidental costs such as fence and tree removals were also assumed.

  2. For the residential alternatives (Alternatives R2 through R4), pre-design field investigation costs were also built into the estimate for these alternatives. It was assumed that multiple non-composited surface soil samples would have to be collected from residential properties to define the extent of remedial measures for each risk level. The analytical cost for these samples was based on sampling criteria that assumed the collection of eight surface soil samples per home, and quality control samples (one matrix spike/matrix spike duplicate [MS/MSD] for every 20 samples and

one field duplicate for every 10 samples). Related expenses include sample collection, data validation, and report preparation costs.



SECTION A–A
NO ACTION

SCALE: 1"=100'–0" (HORIZONTAL)
1"=4'–0" (VERTICAL)

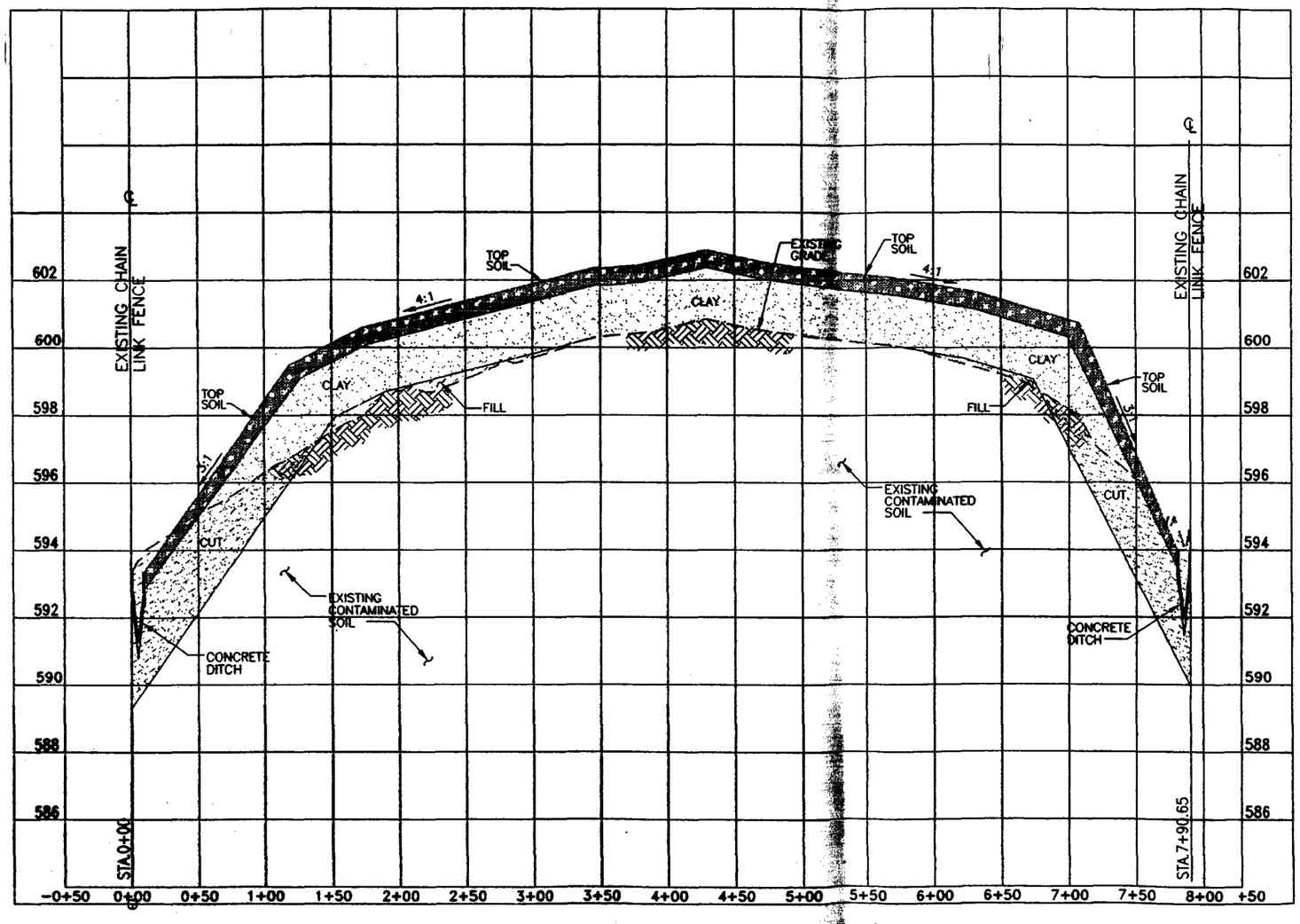
FIGURE 3.1

AlliedSignal, Inc./The Celotex Corporation

ALTERNATIVE M1
NO ACTION
CROSS–SECTION

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1000 JORIE BLVD. • OAKBROOK, ILLINOIS 60523 • 630) 990–7200

DATE: 5/14/99 [np]
K:\Project\Celotex\Drawings\cx002.dwg



SECTION A–A
PERMEABLE CLAY/SOIL COVER

SCALE: 1"=100'–0" (HORIZONTAL)
1"=4'–0" (VERTICAL)

FIGURE 3.2

AlliedSignal, Inc./The Celotex Corporation

ALTERNATIVE M2
PERMEABLE CLAY/SOIL COVER
CROSS–SECTION

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1000 JORIE BLVD. • OAKBROOK, ILLINOIS 60523 • 630) 990–7200

DATE: 5/14/99 [np]
K:\Project\Celotex\Drawings\cx003.dwg

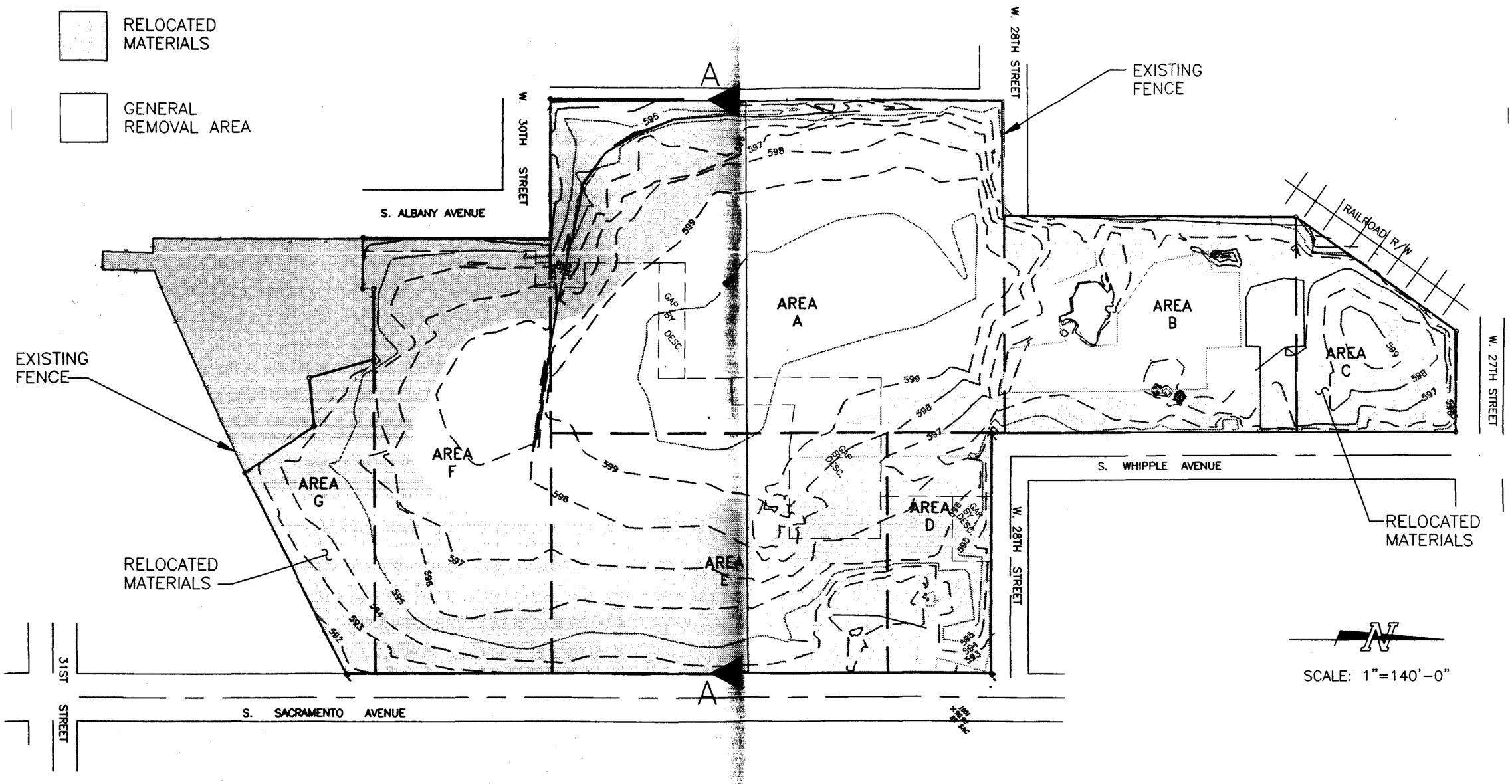


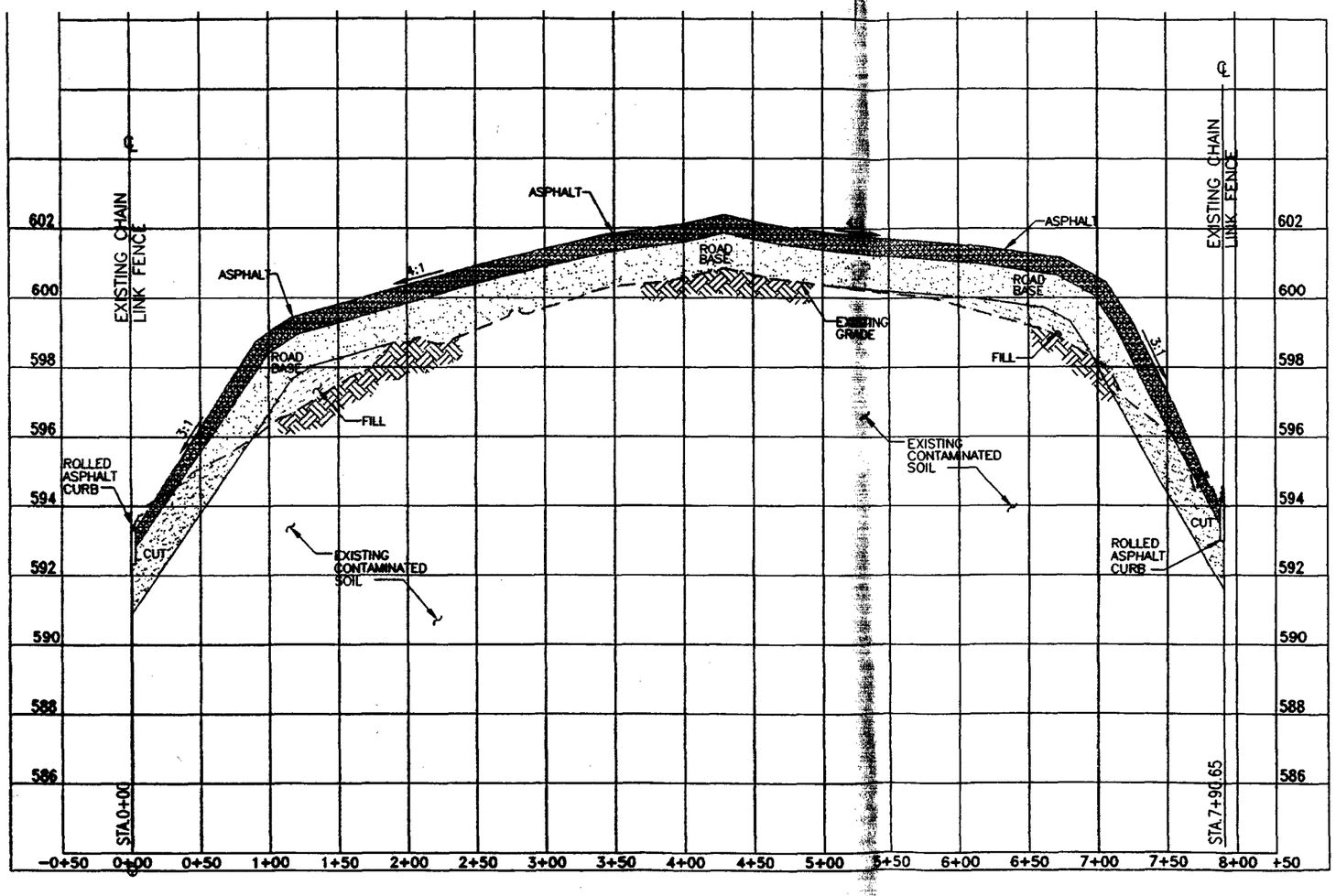
FIGURE 3.3

AlliedSignal, Inc./The Celotex Corporation

SITE PLAN
SHOWING GENERAL REMOVAL
AND RELOCATION AREAS

PARSONS ENGINEERING SCIENCE, INC.
DESIGN * RESEARCH * PLANNING
1000 JORIE BLVD. * OAKBROOK, ILLINOIS 60523 * 630) 990-7200

DATE: 5/26/99 [NP]
\PROJECT\CELOTEX\CX006.DWG



SECTION A-A
IMPERMEABLE ASPHALT COVER

SCALE: 1"=100'-0" (HORIZONTAL)
1"=4'-0" (VERTICAL)

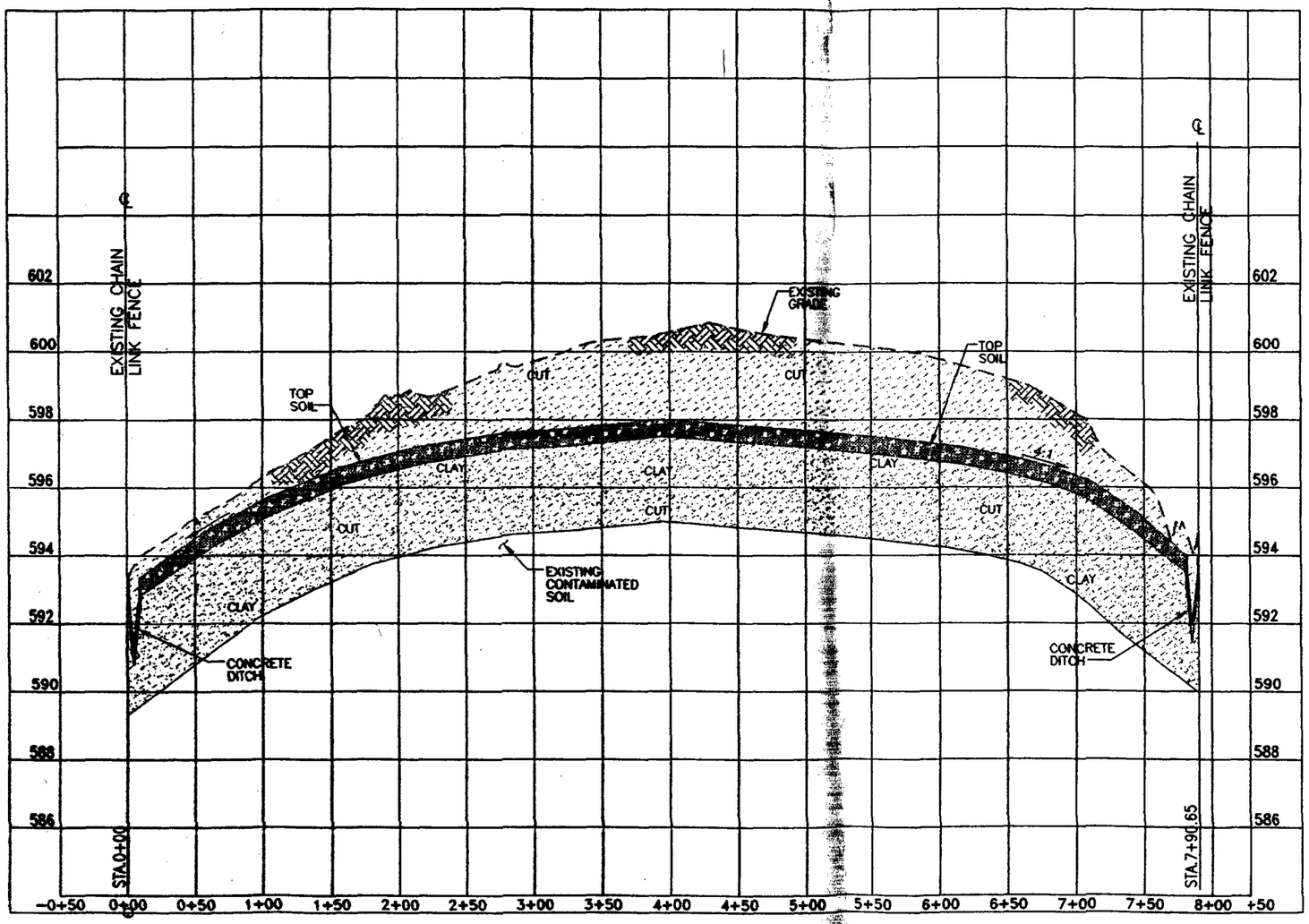
FIGURE 3.4

AlliedSignal, Inc./The Celotex Corporation

ALTERNATIVE M3
IMPERMEABLE ASPHALT COVER
CROSS-SECTION

PARSONS ENGINEERING SCIENCE, INC.
DESIGN * RESEARCH * PLANNING
1000 JORIE BLVD. * OAKBROOK, ILLINOIS 60523 * 630) 990-7200

DATE: 5/14/99 [np]
K:\Project\Celotex\Drawings\cx004.dwg



SECTION A–A
REMOVAL OF SOIL/3 FT. CLAY CAP

SCALE: 1"=100'-0" (HORIZONTAL)
1"=4'-0" (VERTICAL)

FIGURE 3.5

AlliedSignal, Inc./The Celotex Corporation

ALTERNATIVE M4
THREE FOOT SOIL AND
PERMEABLE CLAY COVER
CROSS-SECTION

PARSONS ENGINEERING SCIENCE, INC.
DESIGN * RESEARCH * PLANNING
1000 JORIE BLVD. * OAKBROOK, ILLINOIS 60523 * 630) 990-7200

DATE: 5/14/99 [np]
K:\Project\Celotex\Drawings\cx007.dwg

TABLE 3.1
POTENTIAL FEDERAL STATUTES

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Regulation Title or Subject/Revised Code Section and Pertinent Paragraph	Regulation Description	Regulation Application	ARAR
Clean Air Act (CAA) 42 U.S.C. 7400	Statute to protect and enhance the quality of air resources so as to promote public health, welfare, and the productive capacity of the population. Provides guidance for air pollution prevention and control, emission standards, noise pollution and acid deposition control, permits, and ozone layer protection.	Applies to the ambient atmosphere.	Yes
Clean Water Act (CWA) 33 U.S.C. 120	The Clean Water Act is a 1977 amendment to the Federal Water Pollution Control Act of 1972, which set the basic structure for regulating discharges of pollutants to waters of the United States. Primary goal is to restore and maintain the chemical, physical, and biological integrity of U.S. waters.	Applies to waters of the United States.	Yes
Comprehensive Environmental Response, Compensation and Liability (CERCLA) 42 U.S.C. 9600	Statute establishes prohibitions and requirements concerning closed and abandoned hazardous waste sites, provides for liability of persons responsible for releases of hazardous waste at these sites, and establishes a trust fund to provide for cleanup when no responsible party can be identified. Also establishes guidelines and procedures needed to respond to releases and threatened releases of hazardous substances, pollutants, or contaminants	Applies to releases or threatened releases of hazardous substances that may endanger public health or the environment.	Yes
Occupational Safety and Health Act (OSHA) 29 U.S.C. 650	Congress passed the Occupational and Safety Health Act to ensure worker and workplace safety. Its goal is to ensure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions.	Applies to employers.	Yes

TABLE 3.1 (Continued)
POTENTIAL FEDERAL STATUTES

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Regulation Title or Subject/Revised Code Section and Pertinent Paragraph	Regulation Description	Regulation Application	ARAR
Noise Control Act (NCA) 42 U.S.C. 4900	Purpose is to promote environment free from noise that jeopardizes human health or welfare. Establishes means for effective coordination of federal research and activities in noise control, authorizes establishment of federal noise emission standards for products and provides public with information about noise emission/reduction of products.	Applies to sources of noise pollution.	No
Resource Conservation and Recovery Act (RCRA) 42 U.S.C. 6900	Enacted to protect the quality of groundwater, surface water, air, and land from contamination by hazardous waste. Law gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous wastes.	Applies to hazardous waste.	No
Safe Drinking Water Act (SDWA) 43 U.S.C. 300	Established to protect the quality of drinking water in the U.S. This law focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources. Sets minimum national drinking water standards.	Applies for drinking waters of the United States.	No

TABLE 3.2
POTENTIAL FEDERAL, STATE, AND COUNTY CHEMICAL-SPECIFIC ARARs

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Regulation Title or Subject/Revised Code Section and Pertinent Paragraph	Regulation Description	Regulation Application	ARAR	Comments
40 CFR 50	Establishes ambient air quality standards.	Applies to the ambient atmosphere	Possible	Applicable to discharges of toxic substances to the atmosphere during waste handling or disposal.
40 CFR 261	Part 261 identifies and lists those solid wastes that are subject to regulation as hazardous wastes.	Applies to solid wastes	No	Soils removed from the Site are not hazardous waste. Soils removed from the residential areas will be non-special non-hazardous waste.
40 CFR 262	Parts 262 establishes procedures for obtaining an EPA identification number and identifies record keeping, packaging, labeling, and reporting requirements for hazardous waste generators.	Applies to generators of hazardous waste	Possible	Applicable if soil removed from the site is identified as a special waste.
40 CFR 122-124	Parts 122-124 establish rules for obtaining a National Pollutant Discharge Elimination System (NPDES) permit for wastewater discharges.	Applies to CERCLA wastewater discharges	Possible	Applicable if remedial action involves significant excavation, regrading or resurfacing of the site that could result in the discharge of pollutants through storm water runoff.
Title 35 IAC Part 212	Sets standards and limitations for visible and particulate matter emissions from stationary emission units. Permits for source subject to this part may be required pursuant to 35 Ill. Adm. Code 201.	Applies to the ambient atmosphere	Possible	Applicable to discharges of toxic substances to the atmosphere during waste handling or disposal.
Title 35 IAC Part 218	Sets standards and limitations for emission of organic material and volatile organic material from stationary sources located in the Chicago area.	Applies to the ambient atmosphere	Possible	Applicable to discharges of toxic substances to the atmosphere during waste handling or disposal.
Title 35 IAC Part 720	Establishes the all management policies, procedures and regulations for hazardous waste that are subject to the notification requirements of Section 3010 RCRA.	Applies to hazardous waste management	No	Soils removed from the Site are not hazardous waste. Soils removed from the residential areas will be non-special non-hazardous waste.

TABLE 3.2 (Continued)
POTENTIAL FEDERAL, STATE, AND COUNTY CHEMICAL-SPECIFIC ARARs

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Regulation Title or Subject/Revised Code Section and Pertinent Paragraph	Regulation Description	Regulation Application	ARAR	Comments
Title 35 IAC Part 721	Identifies those solid waste which are subject to regulations as hazardous waste under 35 Ill. Adm. Code 702,703, 705 and 722 through 725 and 728, and which are subject to the notification requirements of Section 3010 of the RCRA.	Applies to solid wastes	No	Soils removed from the Site are not hazardous waste but could be special waste. Soils removed from the residential areas will be non-special non-hazardous waste.
Title 35 IAC Part 722	Establishes regulations and standards for generators of hazardous waste under 35 Ill. Adm. Code 721.105(c) and (d).	Applies to generators of hazardous waste	No	Soils removed from the Site are not hazardous waste. Soils removed from the residential areas will be non-special non-hazardous waste.
Title 35 IAC Part 740	Site Remediation Program - Establishes the procedures for the investigative and remedial activities at a site where there is a release, threatened release, or suspected release of hazardous substance, pesticides, or petroleum and for the review and approval of those activities.	Applies to CERCLA sites	Yes	Applicable to this site due to the presence of hazardous substances in the soil.
Title 35 IAC Part 742	Tiered Approach to Corrective Action Objectives - Sets forth procedures for evaluating the risk to human health posed by environmental conditions and developing remediation objectives that achieve acceptable risk levels. The purpose of these procedures is to provide for the adequate protection of human health and the environment based on the risk to human health pose by environmental conditions while incorporating site related information.	Applies to CERCLA sites	Yes	Applicable to this site due to the presence of hazardous substances in the soil.
430 ILCS 55	Hazardous Material Emergency Reimbursement Act - provides for financial resources to any community that responds to an emergency incidents involving hazardous material	Applies to CERCLA sites	Yes	Applicable to this site due to the presence of hazardous substances in the soil.

TABLE 3.3
POTENTIAL FEDERAL, STATE AND COUNTY LOCATION-SPECIFIC ARARs

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Regulation Title or Subject/Revised Code Section and Pertinent Paragraph	Regulation Description	Regulation Application	ARAR	Comments
33 CFR 320-330	Parts 320-330 identify requirements to minimize potential harm and preserve and enhance wetlands.	Applies to management of property in wetlands.	No	The Site is not believed to contain any wetlands.
36 CFR 65	Sets forth requirements that encourage the long range preservation of nationally significant properties that illustrate or commemorate the history and prehistory of the United States.	Applies to the alteration of a site that threatens objects of historical or archeological significance.	No	Applicable if significant artifacts are found at the site. No indications of artifacts have been associated with the Site to date.
40 CFR 264.18	Identifies design, operation, and maintenance standards for owners and operators of hazardous waste treatment, storage and disposal (TSD) facilities located within a 100 year floodplain.	Applies to owners and operators of hazardous waste treatment, storage, and disposal facilities.	No	The Site is not a TSD.
50 CFR Parts 200 and 402	Parts 200 and 402 contain requirements regarding endangered or threatened species of fish, wildlife, or plants and habitat of such species that has been designated as critical.	Applies to areas designated as critical habitats	No	No endangered or threatened species are known to be associated with the Site.
55 ILCS 5	Provides for the identification, protection, preservation, restoration, and rehabilitation of buildings, structures, objects, areas, sites, and landscape that are of historical, archaeological, architectural or scenic significance. Promotes economic development through the protection and enhancement of resources important to tourism and business so as to promote the general welfare of the State.	Applies to areas designated as historical landmarks	No	The Site is not a historical landmark.

TABLE 3.4
POTENTIAL FEDERAL, STATE AND COUNTY ACTION-SPECIFIC ARARs

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Regulation Title or Subject/Revised Code Section and Pertinent Paragraph	Regulation Description	Action	ARAR	Comments
40 CFR 262 and 263 49 CFR 100-199	Establishes responsibilities for transporters of hazardous waste in regards to handling, transportation and management of the waste. Sets requirements for manifesting, record keeping and emergency response actions in case of a spill.	Off-site transport	No	Applies if soil identified as hazardous waste is transported off- site. Soils removed from the Site will not be hazardous waste and soils removed from the residential areas will be non-special non-hazardous waste.
40 CFR 264	Establishes standards for owners and operators of hazardous waste treatment, storage, and disposal facilities. Also establishes closure and post-closure requirements for RCRA sites.	Storage, Treatment, Incineration, Stabilization, Capping, Land Disposal	No	Applies to the treatment, storage, and disposal of soil identified as a hazardous waste. Soils from the Site are not hazardous waste and soils removed from the residential areas will be non-special non-hazardous waste.
40 CFR 268	Regulates land disposal of solid waste and establishes land disposal restrictions (LDR) treatment standards.	Excavation and land disposal	Possible	Movement of excavated soils to a new location and placement in or on land will trigger LDR for the excavated waste. Applies to soil identified as a restricted hazardous waste (not all hazardous wastes are subject to LDR treatment standards). Soils removed from the Site are not hazardous waste but could be special waste. Soils removed from the residential areas will be non-special non-hazardous waste.

TABLE 3.4 (Continued)
POTENTIAL FEDERAL, STATE AND COUNTY ACTION-SPECIFIC ARARs

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Regulation Title or Subject/Revised Code Section and Pertinent Paragraph	Regulation Description	Action	ARAR	Comments
430 ILCS 50/	This Act requires that the Illinois Department of Transportation adopt the federal hazardous material placarding regulations promulgated under the Hazardous Material Transportation Act (PL 93-633) for the interstate and intrastate transportation of hazardous material.	Off-site transport	Possible	Applies if soil identified as hazardous or special waste is transported off- site. Soils removed from the Site are not hazardous waste but could be special waste. Soils removed from the residential areas will be non-special non-hazardous waste.
Section 11-4-1500	Chicago Municipal Code that addresses waste management actions within the City of Chicago.	Excavation and Land Disposal	Yes	Prohibits the disposal of any waste other than at a permitted facility. Would apply to excavated residential soils and would prevent these soils from being placed on the Main Site.
Title 35 IAC Part 728	Identifies hazardous wastes that are restricted from land disposal and defines those circumstances under which an otherwise prohibited waste may continue to be land disposed.	Excavation and land disposal	No	Applies to land disposal of hazardous waste. Soils removed from the Site will not be hazardous waste and soils removed from the residential areas will be non-special non-hazardous waste.

TABLE 3.5
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE EFFECTIVENESS CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives			
Overall Protection of Public Health and the Environment :	**M1** **No Action**	**M2** **Permeable Clay/Soil Cover**	**M3** **Impermeable Asphalt Cover**	**M4** **Permeable Clay/Soil Cover with Hot Spot Excavation**
Long-term effectiveness and permanence	No risk reduction for exposure pathways. Hence industrial workers (or equivalent) accessing the site could be exposed to risks in excess of 1 x 10^{-5} if contact or ingestion of site soils occurs. The existing site security would limit access to site within the limitations of their job description. Over time, soil erosion could increase risks associated with exposure to site soil and the dispersal of dust particulates from the Site.	Allows for safe disposal of excavated soil from residential areas. Contact with site soils would be eliminated. The revegetated site will require maintenance to prevent under or over growth conditions or soil erosion. Eliminates the potential for the airborne dispersal of dust particulates from the Site.	Allows for safe disposal of excavated soil from residential areas. Contact with site soils would be eliminated. The asphalt cover will require maintenance to prevent site soils from becoming exposed as a result of potholes, etc. Eliminates the potential for the airborne dispersal of dust particulates from the Site. Maintenance would be minimized if the asphalt cover is designed and built to support the end use (e.g., reinforced cover if the lot will be used by trucks and other heavy vehicles).	Allows for safe disposal of excavated soil from residential areas. Contact with site soils would be eliminated. The revegetated site will require maintenance to prevent under or over growth conditions or soil erosion. Eliminates the potential for the airborne dispersal of dust particulates from the Site. Does not allow for on-site disposal of excavated soils from residential areas.
Compliance with ARARs and Other Criteria	Refer to Section 3.4 for potential ARARs. Does not meet cleanup objectives associated with the industrial worker at the 1x10^{-5} risk level.	Refer to Section 3.4 for potential ARARs. Meets cleanup objectives for a future industrial scenario at the 1x10^{-5} risk level.	Refer to Section 3.4 for potential ARARs. Meets cleanup objectives for a future industrial scenario at the 1x10^{-5} risk level.	Refer to Section 3.4 for potential ARARs. Meets cleanup objectives for a future residential scenario at the 1x10^{-6} risk level.

TABLE 3.5 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE EFFECTIVENESS CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives			
Overall Protection of Public Health and the Environment :	**M1** **No Action**	**M2** **Permeable Clay/Soil Cover**	**M3** **Impermeable Asphalt Cover**	**M4** **Permeable Clay/Soil Cover with Hot Spot Excavation**
Short-term effectiveness –impacts during implementation	No action would be taken under this alternative.	Soil relocation and grading activities during implementation will disturb contaminated soil and may generate fugitive dust that could impact surrounding community and onsite construction workers. Dust control measures and reliable personal protective measures for workers can be easily implemented.	Soil relocation and grading activities during implementation will disturb contaminated soil and may generate fugitive dust that could impact surrounding community and onsite construction workers. Dust control measures and reliable personal protective measures for workers can be easily implemented. There will be emissions from the asphalt trucks and the paving machine during placement of the asphalt cover over the site. Resulting exposure for the community and the construction workers will be equivalent to that associated with roadway resurfacing activities.	Soil relocation and grading activities during implementation will disturb contaminated soil and may generate fugitive dust that could impact surrounding community and onsite construction workers. Dust control measures and reliable personal protective measures for workers can be easily implemented. The excavation of benzene contaminated soils may present hazards to workers during implementation. Reliable personal protective measures for workers can also address these hazards.

TABLE 3.5 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE EFFECTIVENESS CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives			
Overall Protection of Public Health and the Environment :	**R1 Excavation of Soil at 2 Residential Properties**	**R2 Excavation of Soil at 15 Residential Properties**	**R3 Excavation of Soil at 32 Residential Properties**	**R4 Excavation of Soil at 48 Residential Properties**
Long-term effectiveness and permanence	Exposure to impacted soils will be eliminated. No required maintenance or restrictions on future use of the remediated properties will be needed.	Same as Alternative R1.	Same as Alternative R1.	Same as Alternative R1.
Compliance with ARARs and Other Criteria	Refer to Section 3.4 for potential ARARs. Meets objectives for a residential area $3x10^{-5}$ risk level.	Refer to Section 3.4 for potential ARARs. Meets objectives for a residential area $2 x10^{-5}$ risk level.	Refer to Section 3.4 for potential ARARs. Meets objectives for a residential area $1 x10^{-5}$ risk level.	Refer to Section 3.4 for potential ARARs. Meets objectives for a residential area cleanup to background risk level requirements.
Short-term effectiveness –impacts during implementation	Fugitive dust emissions during excavation could disperse particulates off the impacted property being remediated, and could impact construction personnel performing the work. Dust control measures and reliable personal protective measures for workers can be easily implemented.	Same as Alternative R1.	Same as Alternative R1.	Same as Alternative R1.

TABLE 3.5 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE EFFECTIVENESS CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives	
Overall Protection of Public Health and the Environment :	**D1** **Disposal of Excavated Residential Soil at Main Site**	**D2** **Disposal of Excavated Residential Soil at Offsite Landfill**
Long-term effectiveness and permanence	Provides containment of contaminated soil under the Site cover, which reduces the potential for the airborne spread of contaminated dust and vapors as well as exposure via dermal contact and ingestion. Maintenance requirements and restrictions on future use depend on the type of cover (clay/soil or asphalt) used at the Main Site.	Contaminated soil will be contained at an offsite facility and will present no risk to the local community. Landfills are required to have maintenance and control measures in-place that address/control the risks posed by the materials they accept.
Compliance with ARARs and Other Criteria	Refer to Section 3.4 for potential ARARs. Does not comply with Chicago Municipal Code regarding waste disposal.	Refer to Section 3.4 for potential ARARs. Meets State and Federal requirements for transport and disposal of non-hazardous non-special waste.
Short-term effectiveness –impacts during implementation	The transport and disposal of contaminated soil could result in impacted dust particulate emission during the period the soil is being transported to and when. it is being placed at the Main Site. These issues can be addressed via the use of dust suppressant measures, keeping the truck beds covered during transport, and the use of reliable personal protective measures by construction workers. A traffic accident could result in spillage of soils onto roadway. However, the distance between the Main Site and the residential area is negligible, so the potential for a traffic accident is considered minimal. Loading and disposing of contaminated soil presents minimal hazards to workers during implementation.	Same as Alternative D1, except that the distance between the residential area and the disposal facility is much greater in this alternative, so greater care will have to taken during driving to prevent accidents.

TABLE 3.5 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE EFFECTIVENESS CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives			
Reduction of Toxicity, Mobility or Volume Through Treatment	**M1** **No Action**	**M2** **Permeable Clay/Soil Cover**	**M3** **Impermeable Asphalt Cover**	**M4** **Permeable Clay/Soil Cover with Hot Spot Excavation**
Expected degree of reduction in toxicity, mobility or volume of hazardous materials	No reduction in toxicity, mobility, or volume of the contaminants of concern will occur.	Mobility of contaminants through dust and vapors will be eliminated. All contaminated soil will be contained under the Site cover and vegetation preventing contact/ingestion. No reduction in toxicity or volume of the contaminants of concern will occur.	Mobility of contaminants through dust and vapors will be eliminated. All contaminated soil will be contained under the Site cover preventing contact/ingestion. No reduction in toxicity or volume of the contaminants of concern will occur	Mobility of contaminants through dust and vapors will be eliminated. All contaminated soil will be contained under cover and vegetation. The volume of impacted soils will be reduced via the excavation and off-site disposal of benzene-impacted soil and some PAH-impacted soil prior to installation of the cover. The toxicity of the remaining impacted materials will not be decreased.
Degree to which treatment or containment will be irreversible	Not applicable to the no action alternative.	Containment of the Site soils could be compromised through severe disturbance of the clay/soil cover during maintenance activities, by acts of God, or general vandalism. These damages can be repaired relatively easily.	Containment of the Site soils could be compromised through severe disturbance of the asphalt cover by vehicular traffic, acts of God, or general vandalism. These damages can be repaired relatively easily.	Containment of the Site soils could be compromised through severe disturbance of the clay/soil cover during maintenance activities, by acts of God, or general vandalism. These damages can be repaired relatively easily.
Residual effects concerns	Site conditions will remain unchanged for the no action alternative.	Residual effects will be minimal due to the fact that the risks posed by the soils will be eliminated by the placement of the cover.	Same as Alternative M2	Residual effects will be minimal due to the fact that the risks posed by the soils will be eliminated by the placement of the cover.

TABLE 3.5 (Continued)
ENGINEERING EVALUATION AND COST ANALYSIS REPORT
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE EFFECTIVENESS CRITERIA

Criteria	Alternatives			
Reduction of Toxicity, Mobility or Volume Through Treatment	**R1 Excavation of Soil at 2 Residential Properties**	**R2 Excavation of Soil at 15 Residential Properties**	**R3 Excavation of Soil at 32 Residential Properties**	**R4 Excavation of Soil at 48 Residential Properties**
Expected degree of reduction in toxicity, mobility or volume of hazardous materials	Contamination of the impacted residential areas likely resulted from fugitive dust emissions from the Main Site depositing on the surface soil. Thus excavation of the impacted surface soil from the designated impacted properties will reduce the volume of the constituents of concern and eliminate its toxicity and mobility at the property being remediated.	Same as Alternative R1.	Same as Alternative R1.	Same as Alternative R1.
Degree to which treatment or containment will be irreversible	Excavation of the contaminated soil from impacted properties is an irreversible process and the source of this impact is no longer active/present; hence, the properties cannot become recontaminated from the Site.	Same as Alternative R1.	Same as Alternative R1.	Same as Alternative R1.
Residual effects concerns	There will be no residual effects because the impacted soils will have been removed from the impacted properties.	Same as Alternative R1.	Same as Alternative R1.	Same as Alternative R1.

TABLE 3.5 (Continued)
ENGINEERING EVALUATION AND COST ANALYSIS REPORT
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE EFFECTIVENESS CRITERIA

Criteria	Alternatives	
Reduction of Toxicity, Mobility or Volume Through Treatment	**D1** **Disposal of Excavated Residential Soil at Main Site**	**D2** **Disposal of Excavated Residential Soil at Offsite Landfill**
Expected degree of reduction in toxicity, mobility or volume of hazardous materials	Mobility of contaminants through dust emissions will be eliminated following the placement of the Site cover. The overall toxicity and volume of the impacted materials will not be reduced.	Mobility of contaminants through dust emissions will be eliminated following the disposal of impacted soils at the land disposal facility. The overall toxicity and volume of the impacted materials will not be reduced; just relocated off the Site.
Degree to which treatment or containment will be irreversible	The Site cover could be compromised through severe disturbance of clay/soil or asphalt during maintenance activities, from vehicular traffic, acts of God, or vandalism. These damages can be easily repaired.	Once taken off site, the impacted soils will not be brought back to the Site/residential area. Hence, this alternative is considered an irreversible process with respect to the Main Site and the residential areas.
Residual effects concerns	Residual effects will be based on the final cover placed on the Site. They are considered to be minimal because the risks posed by the soils will be eliminated by the placement of the cover.	No residual effects at the Main Site or residential areas are expected due to offsite disposal.

TABLE 3.6
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE IMPLEMENTABILITY CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives			
Technical Feasibility:	**M1 No Action**	**M2 Permeable Clay/Soil Cover**	**M3 Impermeable Asphalt Cover**	**M4 Permeable Clay/Soil Cover with Hot Spot Excavation**
Construction and operational considerations	No action would be taken under this alternative.	Truck and heavy equipment traffic during implementation may adversely effect local community. Cover can be constructed and maintained in typical climatic conditions at Site location. Severe weather in the winter months may limit construction activities. Operation and maintenance of cover will be minimal. Stormwater drainage system will reduce damage to cover from erosion.	Truck and heavy equipment traffic during implementation may adversely effect local community. Climatic conditions can potentially affect, but likely not prohibit, the installation of the asphalt cover. Cover can be maintained in typical climatic conditions at Site location. Operation and maintenance of cover will be minimal. Stormwater drainage system will reduce damage to cover from erosion. Asphalt may be adversely affected by future industrial uses of Site such as parking lots.	Truck and heavy equipment traffic during implementation may adversely effect local community. Excavation of benzene contaminated soil requires more time, material and equipment than alternatives M2 and M3. Cover can be constructed and maintained in typical climatic conditions at Site location. Severe weather in the winter months may limit construction activities. Operation and maintenance of cover will be minimal. Stormwater drainage system will reduce damage to cover from erosion.
Reliability of technology	Not applicable to no action alternative.	Clay/soil covers are commonly used at CERCLA Sites to prevent contact with impacted soils and reduce mobility of contaminants. This technology is highly reliable provided the cover integrity remains intact.	Asphalt covers are commonly used to prevent contact with the environment and reduce mobility of contaminants. This technology is highly reliable provided the cover integrity remains intact.	Same as Alternative M2.

TABLE 3.6 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE IMPLEMENTABILITY CRITERIA

ENGINEERING EVALUATION AND COST ANALSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives			
Technical Feasibility:	**M1 No Action**	**M2 Permeable Clay/Soil Cover**	**M3 Impermeable Asphalt Cover**	**M4 Permeable Clay/Soil Cover with Hot Spot Excavation**
Need for maintenance and other further actions	Existing security should be continued at the Site to prevent access of unauthorized vehicles, equipment, or personnel.	Revegetated Site may require maintenance to prevent under/over growth and erosion. Future industrial uses should be limited to activities that do not disturb the integrity of the cover or should require the integrity of the cover to be restored following construction. Deed restrictions should be used to limit future uses of the Site, to identify the presence of impacted soils beneath the cover, and to specify that any subsurface disturbances will require special health and safety protective measures during construction activities.	Asphalt may require periodic maintenance to repair damage from weather and vehicle parking. Future industrial uses should be limited to activities that do not disturb the integrity of the cover or should require the integrity of the cover to be restored following construction. Deed restrictions should be used to limit future uses of the Site, to identify the presence of impacted soils beneath the cover, and to specify that any subsurface disturbances will require special health and safety protective measures during construction activities.	Revegetated Site may require maintenance to prevent under/over growth and erosion. Future residential construction activities should require the integrity of the cover to be restored following construction. Deed restrictions should be used to prevent the construction of homes with basements, to identify the presence of impacted soils beneath the cover, and to specify that any subsurface disturbances will require special health and safety protective measures during construction activities.

TABLE 3.6 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE IMPLEMENTABILITY CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives			
Technical Feasibility:	**R1** **Excavation of Soil at 2 Residential Properties**	**R2** **Excavation of Soil at 15 Residential Properties**	**R3** **Excavation of Soil at 32 Residential Properties**	**R4** **Excavation of Soil at 48 Residential Properties**
Construction and operational considerations	Special equipment may be required to remove concrete and soil in narrow spaces between houses. Truck and heavy equipment traffic during excavation may adversely affect the neighboring residences. Excavation and property restoration actions can take place in typical climatic conditions. Severe weather in the winter months may limit construction activities. No operational actions will be required following the soil excavation and property restoration activities of the impacted properties.	Same as Alternative R1	Same as Alternative R1	Same as Alternative R1
Reliability of technology	Removal of contaminated soil is commonly used at CERCLA Sites to eliminate exposure to chemical constituents. This technology is highly reliable.	Same as Alternative R1	Same as Alternative R1	Same as Alternative R1

TABLE 3.6 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE IMPLEMENTABILITY CRITERIA

ENGINEERING EVALUATIONS AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives			
Technical Feasibility:	**R1** **Excavation of Soil at 2 Residential Properties**	**R2** **Excavation of Soil at 15 Residential Properties**	**R3** **Excavation of Soil at 32 Residential Properties**	**R4** **Excavation of Soil at 48 Residential Properties**
Need for maintenance and other further actions	No required maintenance or restrictions on future use of impacted properties will result following implementation of this alternative.	Same as Alternative R1	Same as Alternative R1	Same as Alternative R1

TABLE 3.6 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE IMPLEMENTABILITY CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives	
Technical Feasibility:	**D1** **Disposal of Excavated Residential Soil at Main Site**	**D2** **Disposal of Excavated Residential Soil at Offsite Landfill**
Construction and operational considerations	Truck traffic between the residential areas and the Main Site may adversely effect local community. Excavated soil cannot easily be transported to the Main Site and incorporated under the cover now that Site has been put back into use by Sacramento Corp.	Transport of excavated soil offsite will have farther-reaching adverse effects on local community traffic because the trucks will have to travel further through the community on the way to the landfill. Severe weather in the winter months may limit transport and offsite disposal activities. Stockpiling onsite may be required prior to disposal to allow complete truckloads to be processed each time truck loading occurs.
Reliability of technology	Incorporation of the excavated soil will not affect the reliability of the cover.	Offsite disposal of excavated soil at a land disposal facility is frequently used and is considered reliable providing the soils are disposed at the appropriate facility
Need for maintenance and other further actions	No additional operational or maintenance activities related to the cover would be required as a result of this alternative.	No onsite operational or maintenance activities would be required as a result of this alternative.

TABLE 3.6 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE IMPLEMENTABILITY CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives			
Technical Feasibility:	**M1 No Action**	**M2 Permeable Clay/Soil Cover**	**M3 Impermeable Asphalt Cover**	**M4 Permeable Clay/Soil Cover with Hot Spot Excavation**
Availability of Equipment	No equipment is needed for the no action alternative.	Construction equipment and materials required for the implementation of this alternative are readily available in the Chicagoland area.	Same as Alternative M2.	Same as Alternative M2.
Availability of Personnel and Services	No additional personnel and services are needed for the no action alternative.	Implementation of this alternative does not require a large number skilled laborers or technical specialists. Qualified and experienced construction personnel are readily available in the local area. Requirements for laboratory testing services are not anticipated as part of this alternative, but are readily available in the Chicagoland area, if needed.	Same as Alternative M2. Some geotechnical services may be required to assess the necessary support strength for the asphalt cover if it is to be used by heavy equipment. These services are readily available in the Chicagoland area, if needed.	Same as Alternative M2. Excavated soil containing benzene may require additional analysis prior to offsite disposal. Laboratory testing services are readily available, if needed.
Offsite treatment and disposal capacity	Not applicable to no action alternative.	Not applicable to this alternative.	Same as Alternative M2.	Concentrations of benzene and PAHs in contaminated Site soils are not likely to require the soil be disposed of as hazardous waste. Soil should be able to be disposed of at a non-hazardous special waste landfill. There are several Special Waste landfills within a day or less drive from the Site.

TABLE 3.6 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE IMPLEMENTABILITY CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives			
Technical Feasibility:	**R1** **Excavation of Soil at 2 Residential Properties**	**R2** **Excavation of Soil at 15 Residential Properties**	**R3** **Excavation of Soil at 32 Residential Properties**	**R4** **Excavation of Soil at 48 Residential Properties**
Availability of Equipment	Construction equipment and materials required for implementation of this alternative are readily available in the Chicagoland area.	Same as Alternative R1.	Same as Alternative R1.	Same as Alternative R1.
Availability of Personnel and Services	Implementation of this alternative does not require a large number skilled laborers or technical specialists. Qualified and experienced construction personnel are readily available in the local area. Requirements for laboratory testing services are not anticipated as part of this alternative, but are readily available, if needed.	Same as Alternative R1.	Same as Alternative R1.	Same as Alternative R1.
Off-Site treatment and disposal capacity	Refer to Alternative D2.	Refer to Alternative D2.	Refer to Alternative D2.	Refer to Alternative D2.

TABLE 3.6 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE IMPLEMENTABILITY CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria:	Alternatives	
Technical Feasibility:	**D1** **Disposal of Excavated Residential Soil at Main Site**	**D2** **Disposal of Excavated Residential Soil at Offsite Landfill**
Availability of Equipment	Construction equipment, trucks, and materials that are used for the implementation of the cover at the Main Site can also be used to haul the excavated soil from the residential areas to the Site, and to manage this material on Site.	Several companies that specialize in the transport of contaminated waste are available in the local area. Furthermore, if the soils are certified to be non-hazardous non-special waste, special transportation requirements will not be necessary. Hence, transportation of residential area soils from the Site to the landfill is expected to be routine.
Availability of Personnel and Services	Implementation of this alternative does not require a large number skilled laborers or technical specialists. Qualified and experienced construction personnel are readily available in the Chicagoland area. Requirements for laboratory testing services are not anticipated as part of this alternative, but are readily available, if needed.	Same as above.
Offsite treatment and disposal capacity	Not applicable to this alternative.	Several landfills in the local area will accept non-hazardous special waste or non-special waste for disposal.

TABLE 3.6 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE IMPLEMENTABILITY CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives			
Administrative Feasibility:	**M1 No Action**	**M2 Permeable Clay/Soil Cover**	**M3 Impermeable Asphalt Cover**	**M4 Permeable Clay/Soil Cover with Hot Spot Excavation**
Impact on adjoining property	Impacts of no action would be the same as the current situation. Constituents of concern could move off-Site through dust emissions.	No significant impact on adjoining property during implementation. Revegetated cover will improve appearance of Site. Future industrial use may require zoning variances.	No significant impact on adjoining property during implementation. Future industrial use, such as parking lots, may require zoning variances.	Same as Alternative M2.
Offsite permits required	Not applicable to the no action alternative.	Directed discharge to existing stormwater management system may require actions to comply with NPDES permit.	Same as Alternative M2. This alternative will probably increase the volume of surface water that discharges off the Site due to the relatively impermeable nature of an asphalt cover.	Same as Alternative M2.
Ability to impose institutional controls	Security fencing and guard are already onsite. Fencing and no trespassing signs are also present; however, without maintenance and upkeep these will deteriorate.	Constant security measures may be required (security fencing, no trespassing signs, etc) to prevent damage to the cover by unauthorized vehicles or personnel, if the Site remains vacant after the cover is put in place. If the Site is put to an industrial end use, the maintenance department of the facility will have to maintain the integrity of the cover.	No institutional controls should be necessary. .	Constant security measures may be required (security fencing, no trespassing signs, etc) to prevent damage to the cover by unauthorized vehicles or personnel, if the Site remains vacant after the cover is put in place. If the Site is put to a residential end use, providing at the end of construction activities the integrity of the cover is returned (in green areas) to its intended design, the deed restrictions would instruct the residents on the necessary maintenance of their property (such as preventing the three foot cover from eroding).

TABLE 3.6 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE IMPLEMENTABILITY CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives			
Administrative Feasibility:	**R1 Excavation of Soil at 2 Residential Properties**	**R2 Excavation of Soil at 15 Residential Properties**	**R3 Excavation of Soil at 32 Residential Properties**	**R4 Excavation of Soil at 48 Residential Properties**
Impact on adjoining property	Traffic and construction noise may have negative impact on adjoining property during implementation. Dust control measures will need to be used to prevent airborne spread of soil during excavation activities. No impact on adjoining property is assumed following implementation, due to the removal of the impacted surface soil.	Same as Alternative R1.	Same as Alternative R1.	Same as Alternative R1.
Offsite permits required	The requirement of offsite permits is not anticipated for this alternative.	Same as Alternative R1.	Same as Alternative R1.	Same as Alternative R1.
Ability to impose institutional controls	No institutional controls should be necessary since the impacted surface soil material would have been removed from the impacted properties.	Same as Alternative R1.	Same as Alternative R1	Same as Alternative R1

TABLE 3.6 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE IMPLEMENTABILITY CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives	
Administrative Feasibility:	**D1** **Disposal of Excavated Residential Soil at Main Site**	**D2** **Disposal of Excavated Residential Soil at Offsite Landfill**
Impact on adjoining property	There should not be any impact on adjoining properties during onsite soil disposal that would be an issue from an administrative perspective.	Contaminated soil will be contained at an offsite facility and will have no impact on the adjoining property.
Offsite permits required	It is anticipated that the residential area soils can be certified as non-hazardous non-special waste. However, since this disposal alternative is prohibited under Chicago Municipal Code Section 11-4-1500, permits/permission to execute this disposal alternative would probably not be given by the City of Chicago.	No offsite permits should be required; however, the landfill will have documentation requirements that will apply.
Ability to impose institutional controls	See discussion for Alternatives M2 and M3.	No institutional controls should be necessary.

TABLE 3.6 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE IMPLEMENTABILITY CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives			
Acceptance:	**M1** **No Action**	**M2** **Permeable Clay/Soil Cover**	**M3** **Impermeable Asphalt Cover**	**M4** **Permeable Clay/Soil Cover with Hot Spot Excavation**
State and Community Acceptance:	Acceptance of the no action alternative is unlikely because of the continued risk presented by the contaminated soil at the Main Site.	This alternative should be acceptable to both state and community because the revegetated cover offers effective risk protection from the contaminated soil and improves the appearance/usefulness of the local area.	This alternative should be acceptable to both state and community because the asphalt cover offers effective risk protection from the contaminated soil and provides usefulness to the Site.	This alternative should be acceptable to both state and community because the revegetated cover offers effective risk protection from the contaminated soil and improves the appearance/usefulness of the local area. In addition, the community will be given more options for the future use of the Site due to the removal actions that would be performed to achieve the 1×10^{-6} risk level.

TABLE 3.6 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE IMPLEMENTABILITY CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives			
Acceptance:	**R1** **Excavation of Soil at 2 Residential Properties**	**R2** **Excavation of Soil at 15 Residential Properties**	**R3** **Excavation of Soil at 32 Residential Properties**	**R4** **Excavation of Soil at 48 Residential Properties**
State and Community Acceptance:	Alternative should gain acceptance from the state and community because it facilitates removal of contaminated surface soils from the impacted properties. The selection criteria for impacted properties may concern residents whose properties were not selected.	Same as Alternative R1.	Same as Alternative R1.	Same as Alternative R1.

TABLE 3.6 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE IMPLEMENTABILITY CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives	
	D1	D2
Acceptance:	Disposal of Excavated Residential Soil at Main Site	Disposal of Excavated Residential Soil at Offsite Landfill
State and Community Acceptance:	This disposal alternative is prohibited under the Chicago Municipal Code Section 11-4-1500, therefore this disposal alternative would probably not be accepted by the City of Chicago.	Alternative should gain acceptance from the state and community, with the community possibly preferring offsite disposal of contaminated soil.

TABLE 3.7
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE COST CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	**Alternatives**			
Costs	**M1** **No Action**	**M2** **Permeable Clay/Soil Cover**	**M3** **Impermeable Asphalt Cover**	**M4** **Permeable Clay/Soil Cover with Hot Spot Excavation**
Capital costs:	$0	$3,773,700	$5,369,000	$48,451,238
Annual operations and maintenance costs:	$0	$12,000	$20,000	$12,000
Present Worth Costs for the Main Site Alternatives	**$0**	**$3,938,880**	**$5,644,300**	**$48,616,418**

Present worth costs calculated using 6% interest factor over 30 years.

TABLE 3.7 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE COST CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	Alternatives			
Costs	**R1** **Excavation of Soil at 2 Residential Properties**	**R2** **Excavation of Soil at 15 Residential Properties**	**R3** **Excavation of Soil at 32 Residential Properties**	**R4** **Excavation of Soil at 48 Residential Properties**
Capital costs:	$58,300	$499,000	$878,900	$1,275,900
Annual operations and maintenance costs:	$0	$0	$0	$0
Present worth costs for Residential Soil Removal Alternatives	**$58,300**	**$499,000**	**$878,900**	**$1,275,900**

Present worth costs calculated using 6% interest factor over 30 years (rounded to nearest hundred).

TABLE 3.7 (Continued)
DETAILED ANALYSIS OF ALTERNATIVES
BASED ON THE COST CRITERIA

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

Criteria	**Alternatives**			
Costs	**R1** **Excavation of Soil at 2 Residential Properties**	**R2** **Excavation of Soil at 15 Residential Properties**	**R3** **Excavation of Soil at 32 Residential Properties**	**R4** **Excavation of Soil at 48 Residential Properties**
Capital costs for Disposal Alternative D2:	$20,000	$296,000	$140,000	$444,000
Annual operations and maintenance costs:	$0	$0	$0	$0
Present worth costs for Residential Soil Disposal Alternative D2 :	**$20,000**	**$296,000**	**$140,000**	**$444,000**

Present worth costs calculated using 6% interest factor over 30 years.

TABLE 3.8
BREAKDOWN OF COSTS BY ALTERNATIVES

ENGINEERING EVALUATION AND COST ANALSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE, CHICAGO, IL

Alternative M2 - Permeable Clay/Soil Cover

Direct Construction Costs	Quantity	Units	Unit Price	Total Cost
Site preparation/contractor mobilization-demobilization	1	LS	$65,000	$65,000
Clay	62,500	CY	$12	$750,000
Top soil	21,250	CY	$18	$382,500
Construct side slopes and drainage system	4700	LF	$300	$1,410,000
Site revegetation and restoration	24	AC	$2,000	$48,000
Contractor demobilization	1	LS	$40,000	$40,000
		Direct Costs Subtotal		$2,695,500
Indirect Construction Costs				
Contractor overhead (20%)		LS	20%	$539,100
Contingency allowances (5%)		LS	50%	$134,775
		Indirect Cost Subtotal		$673,875
		Total Construction Cost		$3,369,375
Indirect Engineering Costs				
Design plans and specifications (10% Direct Construction Costs)	1	LS	10%	$269,550
		Engineering Cost Subtotal		$404,325
		Total Capital Cost		$3,773,700

TABLE 3.8 (Continued)
BREAKDOWN OF COSTS BY ALTERNATIVES

ENGINEERING EVALUATION AND COST ANALSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE, CHICAGO, IL

Alternative M3 - Impermeable Asphalt Cover

Direct Construction Costs	Quantity	Units	Unit Price	Total Cost
Site preparation/contractor mobilization	1	LS	$65,000	$65,000
6-12 inches subbase	40,000	CY	$36	$1,440,000
Asphalt paving	120,000	SY	$15	$1,800,000
Construct drainage system	4700	LF	$100	$470,000
Fencing restoration	1	LS	$20,000	$20,000
Contractor demobilization	1	LS	$40,000	$40,000
		Direct Costs Subtotal		$3,835,000
Indirect Construction Costs				
Contractor overhead (20%)		LS	20%	$767,000
Contingency allowances (5%)		LS	50%	$191,750
		Indirect Cost Subtotal		$958,750
		Total Construction Cost		$4,793,750
Indirect Engineering Costs				
Design plans and specifications (10% Direct Construction Costs)	1	LS	10%	$383,500
		Total Capital Cost		$5,369,000

TABLE 3.8 (Continued)
BREAKDOWN OF COSTS BY ALTERNATIVES

ENGINEERING EVALUATION AND COST ANALSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE, CHICAGO, IL

Alternative M4 - Permeable Clay/Soil Cover with Hot Spot Excavation

Direct Construction Costs	Quantity	Units	Unit Price	Total Cost
Site preparation/contractor mobilization	1	LS	$65,000	$65,000
Excavte contaminated soils	250,000	CY	$50	$12,500,000
Transport and Dispose of contaminated soils	250,000	CY	$40	$10,000,000
Clay	106,250	CY	$15	$1,593,750
Contractor demobilization	1	LS	$40,000	$40,000
		Direct Costs Subtotal		$26,081,750
Indirect Construction Costs				
Contractor overhead (20%)		LS	20%	$5,216,350
Contingency allowances (50%)		LS	50%	$13,040,875
		Indirect Cost Subtotal		$18,257,225
		Total Construction Cost		$44,338,975
Indirect Engineering Costs				
Predesign Investigation	1	LS	$100,000	$100,000
Design plans and specifications (10% Direct Construction Costs)	1	LS	10%	$2,608,175
Engineering Oversight (5% Direct Construction Costs)	1	LS	5%	$1,304,088
		Engineering Cost Subtotal		$4,012,263
		Total Capital Cost		$48,351,238
		Total Construction Cost		$48,451,238

TABLE 3.8 (Continued)
BREAKDOWN OF COSTS BY ALTERNATIVES

ENGINEERING EVALUATION AND COST ANALSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE, CHICAGO, IL

Alternative R1: Excavation of Soil at 2 Residential Properties

Direct Construction Costs	Quantity	Units	Unit Price	Total Cost
Contractor mobilization	24	HR	$75	$1,800
Video tape of existing property conditions	2	EA	$120	$240
Asphalt pavement removal	800	SF	$2	$1,200
Excavation of contaminated soil	450	CY	$10	$4,500
Hand excavation of contaminated soil	50	CY	$40	$2,000
Top soil replacement	200	CY	$15	$3,000
Sod placement	400	SY	$3.5	$1,400
Tree planting (3" diameter trees)	6	EA	$475	$2,850
Replace concrete pavement (5" thick)	800	SF	$5.5	$4,400
Replace asphalt pavement (8" stone base\3" asphalt)	800	SF	$3.0	$2,360
		Direct Costs Subtotal		$23,750
Indirect Construction Costs				
Contractor overhead (20%)		LS	20%	$4,750
Contingency allowances (5%)		LS	5%	$1,188
		Indirect Cost Subtotal		$5,938
		Total Construction Cost		$29,688

TABLE 3.8 (Continued)
BREAKDOWN OF COSTS BY ALTERNATIVES

ENGINEERING EVALUATION AND COST ANALSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE, CHICAGO, IL

Alternative R1: Excavation of Soil at 2 Residential Properties

Indirect Engineering Costs	Quantity	Units	Unit Price	Total Cost
Preliminary Sampling and Data Evaluation:				
Sample collection	2	PROP	$2,250	$4,500
Soil sampling and analysis (PAHs)	0	EA	$140	$0
Soil sampling and analysis (Disposal Parameters)	1	EA	$235	$235
Data validation	1	SAMP	$131	$131
Data evaluation and report preparation	1	PROP	$1,750	$1,750
Predesign Investigation	1	LS	$10,000	$10,000
Design plans and specifications	1	LS	$5,000	$5,000
Engineering Oversight*	7	DY	$1,000	$7,000
			Engineering Cost Subtotal	$28,616
	Total Capital Cost			$58,304

*Assumes engineer onsite for duration of construction period

TABLE 3.8 (Continued)
BREAKDOWN OF COSTS BY ALTERNATIVES

ENGINEERING EVALUATION AND COST ANALSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE, CHICAGO, IL

Alternative R2: Excavation of Soil at 15 Residential Properties

Direct Construction Costs	Quantity	Units	Unit Price	Total Cost
Contractor mobilization	150	HR	$75	$11,250
Video tape of existing property conditions	15	EA	$120	$1,800
Asphalt pavement removal	6000	SF	$2	$12,000
Excavation of contaminated soil	3150	CY	$10	$31,500
Hand excavation of contaminated soil	350	CY	$40	$14,000
Top soil replacement	1400	CY	$15	$21,000
Sod placement	3000	SY	$3.5	$10,500
Tree planting (3" diameter trees)	45	EA	$475	$21,375
Replace concrete pavement (5" thick)	6000	SF	$5.5	$33,000
Replace asphalt pavement (8" stone base\3" asphalt)	6000	SF	$3.0	$17,700
		Direct Costs Subtotal		$174,125
Indirect Construction Costs				
Contractor overhead (20%)		LS	20%	$34,825
Contingency allowances (5%)		LS	5%	$8,706
		Indirect Cost Subtotal		$43,531
		Total Construction Cost		$217,656

TABLE 3.8 (Continued)
BREAKDOWN OF COSTS BY ALTERNATIVES

ENGINEERING EVALUATION AND COST ANALSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE, CHICAGO, IL

Alternative R2: Excavation of Soil at 15 Residential Properties

Indirect Engineering Costs	Quantity	Units	Unit Price	Total Cost
Preliminary Sampling and Data Evaluation:				
Sample collection (assuming 33 properties sampled)	33	PROP	$2,250	$74,250
Soil sampling and analysis (PAHs)(assuming 33 properties sampled)	319	EA	$140	$44,660
Soil sampling and analysis (Disposal Parameters)	4	EA	$235	$940
Data validation	319	SAMP	$131	$41,789
Data evaluation and report preparation	33	PROP	$1,750	$57,750
Predesign Investigation	1	LS	$25,000	$25,000
Design plans and specifications	1	LS	$20,000	$20,000
Engineering Oversight*	17	DY	$1,000	$17,000
			Engineering Cost Subtotal	$281,389
	Total Capital Cost			$499,045

*Assumes engineer onsite for duration of construction period

TABLE 3.8 (Continued)
BREAKDOWN OF COSTS BY ALTERNATIVES

ENGINEERING EVALUATION AND COST ANALSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE, CHICAGO, IL

Alternative R3: Excavation of Soil at 32 Residential Properties

Direct Construction Costs	Quantity	Units	Unit Price	Total Cost
Contractor mobilization	325	HR	$75	$24,375
Video tape of existing property conditions	32	EA	$120	$3,840
Asphalt pavement removal	12800	SF	$2	$19,200
Excavation of contaminated soil	6660	CY	$10	$66,600
Hand excavation of contaminated soil	740	CY	$40	$29,600
Top soil replacement	2960	CY	$15	$44,400
Sod placement	6400	SY	$3.5	$22,400
Tree planting (3" diameter trees)	96	EA	$475	$45,600
Replace concrete pavement (5" thick)	12800	SF	$5.5	$70,400
Replace asphalt pavement (8" stone base\3" asphalt)	12800	SF	$3.0	$37,760
		Direct Costs Subtotal		$364,175
Indirect Construction Costs				
Contractor overhead (20%)		LS	20%	$72,835
Contingency allowances (5%)		LS	5%	$18,209
		Indirect Cost Subtotal		$91,044
		Total Construction Cost		$455,219

TABLE 3.8 (Continued)
BREAKDOWN OF COSTS BY ALTERNATIVES

ENGINEERING EVALUATION AND COST ANALSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE, CHICAGO, IL

Alternative R3: Excavation of Soil at 32 Residential Properties

Indirect Engineering Costs	Quantity	Units	Unit Price	Total Cost
Preliminary Sampling and Data Evaluation:				
Sample collection (assumes 48 properties sampled)	48	PROP	$2,250	$108,000
Soil sampling and analysis (PAHs)(assumes 48 properties sampled)	463	EA	$140	$64,820
Soil sampling and analysis (Disposal Parameters)	5	EA	$235	$1,175
Data validation	463	SAMP	$131	$60,653
Data evaluation and report preparation	48	PROP	$1,750	$84,000
Predesign Investigation	1	LS	$40,000	$40,000
Design plans and specifications	1	LS	$30,000	$30,000
Engineering Oversight*	35	DY	$1,000	$35,000
			Engineering Cost Subtotal	$423,648
	Total Capital Cost			$878,867

*Assumes engineer onsite for duration of construction period

TABLE 3.8 (Continued)
BREAKDOWN OF COSTS BY ALTERNATIVES

ENGINEERING EVALUATION AND COST ANALSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE, CHICAGO, IL

Alternative R4: Excavation of Soil at 48 Residential Properties

Direct Construction Costs	Quantity	Units	Unit Price	Total Cost
Contractor mobilization	500	HR	$75	$37,500
Video tape of existing property conditions	48	EA	$120	$5,760
Asphalt pavement removal	19200	SF	$2	$28,800
Excavation of contaminated soil	9990	CY	$10	$99,900
Hand excavation of contaminated soil	1110	CY	$40	$44,400
Top soil replacement	4440	CY	$15	$66,600
Sod placement	9600	SY	$3.5	$33,600
Tree planting (3" diameter trees)	144	EA	$475	$68,400
Replace concrete pavement (5" thick)	19200	SF	$5.5	$105,600
Replace asphalt pavement (8" stone base\3" asphalt)	19200	SF	$3.0	$56,640
		Direct Costs Subtotal		$547,200

Indirect Construction Costs			
Contractor overhead (20%)	LS	20%	$109,440
Contingency allowances (5%)	LS	5%	$27,360
	Indirect Cost Subtotal		$136,800
	Total Construction Cost		$684,000

TABLE 3.8 (Continued)
BREAKDOWN OF COSTS BY ALTERNATIVES

ENGINEERING EVALUATION AND COST ANALSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE, CHICAGO, IL

Alternative R4: Excavation of Soil at 48 Residential Properties

Indirect Engineering Costs	Quantity	Units	Unit Price	Total Cost
Preliminary Sampling and Data Evaluation:				
Sample collection (assumes 68 properties are sampled)	68	PROP	$2,250	$153,000
Soil sampling and analysis (PAHs)(assumes 68 properties are sampled)	655	EA	$140	$91,700
Soil sampling and analysis (Disposal Parameters)	10	EA	$235	$2,350
Data validation	655	SAMP	$131	$85,805
Data evaluation and report preparation	68	PROP	$1,750	$119,000
Predesign Investigation	1	LS	$60,000	$60,000
Design plans and specifications	1	LS	$40,000	$40,000
Engineering Oversight*	40	DY	$1,000	$40,000
			Engineering Cost Subtotal	$591,855
	Total Capital Cost			$1,275,855

*Assumes engineer onsite for duration of construction period

TABLE 3.8 (Continued)
BREAKDOWN OF COSTS BY ALTERNATIVES

ENGINEERING EVALUATION AND COST ANALSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE, CHICAGO, IL

*Cost are incorporated into the excavation costs for alternatives R1-R4. Alternative D1 was eliminated because it did not meet ARARs.

Alternative D2: Offsite Disposal of Residential Area Soil

Direct Costs		Quantity	Units	Unit Price	Total Cost
Loading, transporting and disposing of soil at permitted landfill					
	Alternative R1	500	CY	$40	$20,000
	Alternative R2	3500	CY	$40	$140,000
	Alternative R3	7400	CY	$40	$296,000
	Alternative R4	11100	CY	$40	$444,000

TABLE 3.8 (Continued)
BREAKDOWN OF COSTS BY ALTERNATIVE

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE, CHICAGO, IL

Alternative M2 - Permeable clay/soil cover

	Frequency/Year	Units	Unit Price	Total Cost/Yr
Fence Maintenance and Replacement	4	LS	$1,000	$4,000
Maintenance of Revegetated Site	4	LS	$2,000	$8,000
			Total O and M Cost	**$12,000**

Alternative M3 - Impermeable asphalt cover

	Frequency/Year	Units	Unit Price	Total Cost/Yr
Fence Maintenance and Replacement	4	LS	$1,000	$4,000
Maintenance of Paved Site	4	LS	$4,000	$16,000
			Total O and M Cost	**$20,000**

Alternative M4 - Permeable clay/soil cover with hot spot excavation

	Frequency/Year	Units	Unit Price	Total Cost/Yr
Fence Maintenance and Replacement	4	LS	$1,000	$4,000
Maintenance of Revegetated Site	4	LS	$2,000	$8,000
			Total O and M Cost	**$12,000**

TABLE 3.8 (Continued)
BREAKDOWN OF COSTS BY ALTERNATIVE

ENGINEERING EVALUATION AND COST ANALYSIS REPORT
2800 SOUTH SACRAMENTO AVENUE SITE, CHICAGO, IL

Alternative	Total Capital Cost	Annual O& M Cost	Present Worth Cost
M1	$0	$0	$0
M2	$3,773,700	$12,000	$3,938,880
M3	$5,369,000	$20,000	$5,644,300
M4	$48,451,238	$12,000	$48,616,418

Present worth calculated using interest factor of 6% over 30 years

SECTION 4
COMPARATIVE ANALYSIS OF ALTERNATIVES

4.1 INTRODUCTION

The purpose of this comparative analysis is to identify the advantages and disadvantages of each alternative relative to one another and to identify the combination of actions that best meet the evaluation criteria.

4.2 MAIN SITE ALTERNATIVES

Alternative M1, the no action alternative, is not considered a feasible alternative when assessed against the other three proposed Main Site alternatives, because the exposed Site soils will continue to exceed the industrial worker action level for a 1×10^{-5} risk level. When compared to Alternatives M2 and M3, Alternative M4 is less feasible in terms of implementability and cost.

Alternative M4 will require greater disturbance of Site soils than M2 and M3, potentially necessitating extensive construction worker personal protective requirements during construction work and extensive ambient air monitoring requirements related to air emissions impact on the surrounding residential community. Alternative M4 will also cost more to implement due to the (1) greater volume of soil requiring excavation and off-site disposal, (2) greater amount of clay required to construct the cover, and (3) increased safety requirements pertaining to construction workers safety and ambient air monitoring. The primary advantage to Alternative M4 is that it allows for the future residential use of the Main Site.

Alternatives M2 and M3 both present less health risks to construction workers and the local community during implementation than Alternative M4 because they will entail less subsurface soil disturbance during implementation. Alternative M4 will have a greater and farther reaching disruptive influence on local traffic patterns and traffic congestion because the large volume of soil that would have to be transported off site would result in increased truck traffic. The trucks would have to travel from the Site and through parts of the

surrounding community to get to the landfill. The potential for traffic accidents is greater for Alternative M4 than for Alternatives M2 or M3.

If a vegetated layer is installed as part of Alternative M2, this alternative could result in a revegetated site that will increase the green space in this highly urbanized area, but will require maintenance to prevent over under growth and erosion of the top soil cover material. Alternative M3 will result in a paved site that could be used for vehicle parking, an end use that may have some appeal given the presence of the correctional facility across from the Site. The asphalt cover would require periodic maintenance to repair normal wear and tear but erosion would not be an issue. Alternatives M2 or M3 could also be coupled with the future development of the Site for industrial commercial uses providing the cover materials (clay soil or asphalt) remain intact (or are reconstructed and maintained) after construction of the industrial facility building(s).

All three cover alternatives will provide effective storm water management systems. Alternative M2 would cost less to implement than Alternative M3, with Alternative M4 having a significantly higher cost to implement than either Alternative M2 or M3. Furthermore, the cost of implementing Alternative M2 may have been further reduced by the actions of Sacramento Corporation, if it can be confirmed that Sacramento Corporation has put in-placed 1 foot or more of clean gravel cover over their portion of the Main Site (as mentioned previously, the clean gravel cover would fulfill the broader "permeable cover" interpretation of Alternative M2). Only the areas of the Main Site that exhibit less than 1 foot of clean gravel cover thickness would have to be further covered with additional equivalent "permeable cover" material. It is noted that a permeable gravel cover version of Alternative M2 could also be used for vehicle parking, if the gravel cover surface is built and compacted appropriately. As with any cover, a permeable gravel cover would require proper periodic maintenance to repair normal wear and tear, and to address erosion (if any).

4.3 RESIDENTIAL AREA ALTERNATIVES

All four residential area alternatives, Alternatives R1 through R4, allow for continued residential use of the properties following removal actions. The cost for each alternative increases because factors associated with (1) the number of properties requiring remediation,

(2) the volume of soil requiring excavation, and (3) the sampling/investigation costs required to delineate the extent of residential area removal actions, all increase as the cleanup objectives becomes more stringent. Additionally, the more stringent the cleanup objective, the greater the probability that background residential properties will be erroneously included in the remedial action. As a result, residential homes that have not been impacted by the Site will be unnecessarily disrupted and the soils on their properties unnecessarily excavated. Furthermore, general services and overall transportation activities within the surrounding community as a whole (related to residential, commercial, and governmental establishments) will be significantly impacted by extensive residential remedial measures.

The alternative for disposing of the excavated residential soil on the Main Site, Alternative D1, is no longer feasible for this project (refer to Section 3.3.2.5). Alternative D2 would present some minimal risks to workers and the public during and following implementation, but these risks can be effectively and easily managed. Alternative D2 will increase traffic in the area and in the surrounding community because of the need to transport and dispose of the excavated soils off site; however, this increased traffic would be a temporary condition that could be controlled with the implementation of appropriate traffic control measures.

This disposal alternative (Alternative D2) can be efficiently and effectively implemented once access to a permitted disposal facility is coordinated. Alternative D2 would effectively address the potential risks posed by the PAH constituents present in the soils that are located on impacted residential properties .

SECTION 5

RECOMMENDED REMEDIAL APPROACH

5.1 MAIN SITE RECOMMENDED REMEDIAL ALTERNATIVE

For the Main Site, the recommended alternative can either be Alternative M2 (Installation of a Permeable Clay or Soil Cover) or Alternative M3 (Installation of an Impermeable Asphalt Cover). It is noted that the implementation of Alternatives M2 or M3 would not be impacted by Site conditions that existed at the time of Site purchase, as a result of the 1997 resurfacing/recontouring activities (refer to discussions in Section 2.3). Under the industrial worker scenario for a 1×10^{-5} risk level, the top 10 feet of material across the Site can be redistributed within the Site without attention to placement and location, providing that after final placement and grading the clean cover overlays these Site soils. Hence, the re-characterization of the existing 10 feet of soils on the Main Site would not be needed to facilitate the implementation of an industrial worker action level for the Site.

If Sacramento Corporation has installed a two-foot (or greater) clean gravel cover over portions of the Main Site, this action would have fulfilled the intent of Alternative M2, in the covered areas. As noted in Section 3.3.1.2, Alternative M2 proposes the installation of a two-foot permeable cover over the Main Site to meet the cleanup objectives for a future industrial scenario at a 1×10^{-5} risk level; however, the two-foot cover thickness is a guidance cover thickness, not a minimum regulatory requirement. As long as sufficient cover is placed, and appropriately and routinely maintained to prevent human direct contact with and ingestion of the impacted soils beneath the cover, the permeable cover thickness may be less than two feet in thickness but shall not be considered (by Honeywell) to be acceptable, if less than one foot in thickness. As such, to fulfill the requirements of this EE/CA, areas of the Main Site that are not covered with at least one foot of clean gravel cover would have to receive equivalent "permeable cover" material to a thickness that meets or exceeds the minimum cover thickness of one foot.

It is noted that although the implementation of Alternative M2 would address the risks posed by the impacted Main Site soils, relative to the industrial worker action level, impacted materials will remain within the subsurface of the Site. Also, if the owners of the Main Site Property alter the use of the Property in the future, it will be necessary to ensure that the implemented remedial measures remain intact and are in keeping with the proposed future property use and future exposure scenarios pathways. As such, Alternative M2 (or M3) also require deed restrictions for the Property that (1) restrict the use/zoning of the Site to industrial commercial, (2) specify that any subsurface construction work performed on the Site will require special health and safety training, personal protective measures, and monitoring requirements for construction personnel, (3) require that special soils management be evaluated and arranged for if Site soils are to be excavated and transported disposed off Site, (4) require that the property owner(s) maintain the integrity of the remedial measures (i.e., maintain the integrity and minimum thickness of the cover), and (5) prohibit the construction of any buildings with basements at the Site.

5.2 RESIDENTIAL AREA RECOMMENDED REMEDIAL ALTERNATIVE

The recommended residential area remedial alternative is dependent on the selected preferred cleanup objective risk level and the residential area assessed to potentially be impacted by activities from the Site.

The USEPA's intent is to remediate the area of concern to a risk level equivalent to background. For the residential area of greatest concern in the vicinity of the Former Celotex Site, the background cleanup objective (5 ppm B[a]P) is equivalent to a risk level of 2.9×10^{-5}. For this EE/CA, it has been shown that a cleanup objective of background will result in the remediation of properties not impacted by the Site (due to the overlap of the background and foreground areas), and would potentially be cost prohibitive.

The 10 ppm B(a)P equivalents cleanup objective is equivalent to a risk level of 5.8×10^{-5}. The difference in expected human health impacts between the 5-ppm background risk level of 2.9×10^{-5} and the 10-ppm risk level of 5.8×10^{-5} is negligible (i.e., the difference represents an estimated upper-bound of approximately 3 excess cancer deaths in 100,000, a lower-bound of zero excess cancer deaths, with the lower-bound most likely to occur in this

residential community, given that confidence bands overlap with each other). It is also noted that the overlap of confidence bands also indicates that the upper-bound represents total (i.e., both Site and non-Site related) soil contamination-related risks, not just Site-related risks, which would be even less. Therefore, utilizing 10 ppm B(a)P equivalents as the target cleanup objective for the residential area of greatest concern would not result in a risk level that is statistically detectably greater than background. However, as demonstrated by the EE/CA assessment, the cost differential to remediate residential properties within the area of greatest concern to a 5-ppm B(a)P equivalents cleanup objective versus to a 10-ppm B(a)P equivalents cleanup objective, is not insignificant.

Based on the results of the EE/CA data collection and assessment, and on the abovementioned evaluation, the following has been stated by the USEPA Region V and agreed to by Honeywell:

(a) Existing data shows there is a connection to the Site in the north-north-east octant (NNE) foreground residential area.

(b) 10 ppm is the preferred cleanup objective for the NNE foreground area residential properties, based on B(a)P equivalent concentrations.

(c) The assessment of which residential properties in the NNE blocks require remediation would be determined by sampling the residential properties located within the area bounded by Whipple Avenue, Sacramento Avenue, 28th Street, and 26th Street.

The abovementioned determination is in keeping with Alternative R3 (from a cleanup level perspective) and is considered to be effective because it provides for a very high level of protection of public health and the environment.

In summary, this EE/CA Report recommends that residential Alternative R3 be applied to those impacted NNE residential properties within the area bounded by Whipple Avenue, Sacramento Avenue, 28th Street, and 26th Street that exceed the 10 ppm B(a)P equivalents concentration.

This EE/CA Report also recommends that Honeywell perform additional investigative sampling and assessment within the area bounded by 28th Street, Troy Street, 31 Street, and the western Site boundary, to determine if there is any connection between residential PAH

concentrations in this area and the PAH contaminants generated from historical Site-related activities.

SECTION 6
REFERENCES

Guidance on Conducting Non-Time-Critical Removal Actions under CERCLA, August 1993, USEPA, Washington, D.C.

Deterministic and Probabilistic Calculations to Estimate Risk-Based Cleanup Goals for Soils at Residences near the 2800 South Sacramento Avenue Site, Chicago, Illinois, Alceon Corporation, October 25, 1996, as Amended.

Residential Area Conceptual Work Plan for the Engineering Evaluation and Cost Analysis of the 2800 South Sacramento Avenue Site, Parsons Engineering Science, Inc., May 1997.

Data Report for the Engineering Evaluation and Cost Analysis of the 2800 South Sacramento Avenue Site, Parsons Engineering Science, Inc., October 1997.

Draft Phase II Residential Area Sampling Report for the Engineering Evaluation and Cost Analysis of the 2800 South Sacramento Avenue Site, Parsons Engineering Science, Inc., August 1998.

Final Main Site Risk Assessment for the Engineering Evaluation and Cost Analysis of the 2800 South Sacramento Avenue Site, Parsons Engineering Science, Inc., October 1998.

Draft Phase III Residential Area Sampling Report for the Engineering Evaluation and Cost Analysis of the 2800 South Sacramento Avenue Site, Parsons Engineering Science, Inc., June 1999.

APPENDIX A
FINAL
ENGINEERING EVALUATION AND COST ANALYSIS REPORT

FOR THE

FORMER CELOTEX SITE
2800 South Sacramento Avenue
Chicago, IL 60623

PREPARED FOR:

HONEYWELL INTERNATIONAL INC.
101 Columbia Road
Morristown, New Jersey 07962

MARCH 2004

PREPARED BY:

PARSONS
999 OAKMONT PLAZA DRIVE, SUITE 420
WESTMONT, ILLINOIS 60559

PARSONS JOB NO. 742040

APPENDIX A

FINAL
ENGINEERING EVALUATION AND COST ANALYSIS REPORT

for the

FORMER CELOTEX SITE
2800 South Sacramento Avenue
Chicago, IL 60623

Prepared for:

HONEYWELL INTERNATIONAL INC.
101 COLUMBIA ROAD
MORRISTOWN, NEW JERSEY 07962

MARCH 2004

Prepared by:

PARSONS
999 OAKMONT PLAZA DRIVE
WESTMONT, ILLINOIS 60559

Parsons Project No. 742040

APPENDIX A-1

EXCERPTS FROM ERM'S DATA REPORT FOR RESIDENTIAL SOIL SAMPLING

DATA REPORT

ENVIRONMENTAL RESOURCES MANAGEMENT GROUP

AlliedSignal, Inc.

Data Report
Residential Soil Sampling
Celotex Site
Chicago, Illinois

October 1995

Project No. 95010

Environmental Resources Management-North Central, Inc.
540 Lake Cook Road, Suite 300
Deerfield, Illinois 60015

ERM®

DATA REPORT

AlliedSignal, Inc.

Data Report
Residential Soil Sampling
Celotex Site
Chicago, Illinois

October 1995

Project No. 95010

Environmental Resources Management-North Central, Inc.
540 Lake Cook Road, Suite 300
Deerfield, Illinois 60015

ERM-North Central, Inc.

540 Lake Cook Road
Suite 300
Deerfield, IL 60015
(708) 940-7200
(708) 940-9280 (fax)

October 9, 1995

ERM.

Mr. Richard Boice
U.S. Environmental Protection Agency
Region V, HSRL-6J
77 West Jackson
Chicago, IL 60604

RE: Celotex Site - Data Report

Dear Mr. Boice:

Environmental Resources Management-North Central, Inc. (ERM-North Central), at the direction of the Celotex Site Respondents is submitting three copies of this Data Report as required in Section 5.0 of the approved July 28, 1995 "Support Sampling Plan, Celotex Site, Chicago, Illinois" (SSP). This Data Report fully incorporates the qualified results presented in the Data Validation Report (Attachment 1) prepared by ERM-Northeast, Inc. In addition, the certificate of analysis forms provided by the bottle manufacturer for the bottles used during this investigation are included as Attachment 2 and the geotechnical sample results in Attachment 3.

The following tables, as specified in Section 5.0 of the SSP, accompany this letter:

- Table 1 - Details the sample name, address from which the sample was collected, and depth interval from which the sample was collected;

- Table 2 - Provides the semivolatile organic compound (SVOC) results for each sample collected as part of this investigation. The tabular results have been data validated and only those compounds with reported concentrations above the detection unit are presented;

- Table 3 - Summarizes the individual and total polynuclear aromatic hydrocarbon (PAH) concentrations detected in each sample; and

- Table 4 - Provides the benzo(a)pyrene equivalence concentrations for benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, and dibenzo(a,h)anthracene. Relative potency factor values were obtained from the April, 1988, "Comparative Potency Approach for Estimating the Cancer Risk Associated with Exposure to Mixtures of Polycyclic Aromatic Hydrocarbons", Interim Final Report, Contract No. 88-02-4403.

The following figures are presented under this cover letter:

- Figure 1 - Details the spacial distribution and locations of the samples collected as part of this investigation;

- Figures 2-4 - Show only the detected concentrations of the SVOC results by quadrant (northeastern, northwestern, and southwestern quadrants, respectively); and

- Figures 5-7 - Show the total PAH concentrations at each sample location (northeastern, northwestern, and southwestern quadrants, respectively).

- Figures 8-10 - Show the total benzo(a)pyrene equivalence results at each sample location (northeastern, northwestern, and southwestern quadrants, respectively).

As indicated in the SSP, a technical memorandum summarizing the sampling procedures and interpretation of the site data will be prepared and submitted in conjunction with the Engineering Evaluation/Cost Assessment Report.

If you have any questions regarding this submittal, please contact David Paley at Allied Signal, Inc., at 201-455-3302 or myself.

Very truly yours,

ERM-NORTH CENTRAL, INC.

John P. Imse, P.G.
Principal

kdh

attachments
cc: Tom Crause, IEPA
David Paley, Allied Signal
Lecil Colburn, Jim Walter Corporation
David Burmaster, Alceon Corporation

TABLES

TABLE 1

RESIDENTIAL AND ONSITE SOIL SAMPLE LOCATIONS
CHICAGO, ILLINOIS
Page 1 of 2

ID	Sample ID	Sample Depth	Sample Type	Address	State Plane Coordinates (East)	State Plane Coordinates (North)
1	CSESIEPA4C	6-12 inches	Investigative	2731 Whipple	1171899	1894427
2	CSESIEPA5C	6-12 inches	Investigative	2738 Sacramento	1172120	1894340
3	CSES1C1A	0-3 inch	Investigative	2704 Sacramento	1172120	1894695
4	CSES1C2A	0-3 inch	Investigative	2703 Whipple	1171855	1894735
5-6	CSES1C3A	0-3 inch	Investigative	2702 Sacramento	1172120	1894760
	CSES1C3C	6-12 inches	Investigative	2702 Sacramento	1172120	1894760
7-8	CSES1C4A	0-3 inch	Investigative	2708 Sacramento	1172120	1894660
	CSES1C4AD	0-3 inch	Duplicate	2708 Sacramento	1172120	1894660
9	CSES1D1A	0-3 inch	Investigative	2632 Sacramento	1172085	1895160
10-13	CSES1D2A	0-3 inch	Investigative	2642 Sacramento	1172095	1895055
	CSES1D2AB	0-3 inch	Back Yard	2642 Sacramento	1172095	1895055
	CSES1D2ABD	0-3 inch	Back Yard Duplicate	2642 Sacramento	1172095	1895055
	CSES1D2AF	0-3 inch	Front Yard	2642 Sacramento	1172095	1895055
14	CSES1FAA	0-3 inch	Investigative	2438 Sacramento	1171960	1896335
15-17	CSES1FCA	0-3 inch	Investigative	2930 W. 25th Pl.	1172464	1896218
	CSES1FCAB	0-3 inch	Back Yard	2930 W. 25th Pl.	1172464	1896218
	CSES1FCAF	0-3 inch	Front Yard	2930 W. 25th Pl.	1172464	1896218
18-19	CSES1FEA	0-3 inch	Investigative	2524 Sacramento	1171986	1895842
	CSES1FEC	6-12 inches	Investigative	2524 Sacramento	1171986	1895842
20-22	CSES1FFA	0-3 inch	Investigative	2950 W. 25th Pl.	1172227	1895878
	CSES1FFAB	0-3 inch	Back Yard	2950 W. 25th Pl.	1172227	1895878
	CSES1FFAF	0-3 inch	Front Yard	2950 W. 25th Pl.	1172227	1895878
23	CSES1FGA	0-3 inch	Investigative	2923 W. 25th Pl.	1172535	1896105
24	CSES1FHA	0-3 inch	Investigative	2845 W. 25th Pl.	1172898	1896129
25-26	CSES1FIA	0-3 inch	Investigative	2834 W. 25th Pl.	1173091	1895915
	CSES1FIC	6-12 inches	Investigative	2834 W. 25th Pl.	1173091	1895915
27	CSES1FJA	0-3 inch	Investigative	2543 Whipple	1171816	1895672
28-29	CSES1FKA	0-3 inch	Investigative	2528 Sacramento	1171997	1895784
	CSES1FKAD	0-3 inch	Duplicate	2528 Sacramento	1171997	1895784
30-31	CSES1FLA	0-3 inch	Investigative	2927 W. 25th Pl.	1172493	1895742
	CSES1FLAD	0-3 inch	Duplicate	2927 W. 25th Pl.	1172493	1895742
32	CSES1FNA	0-3 inch	Investigative	2833 W. 25th Pl.	1173091	1895797
33	CSES5C1A	0-3 inch	Investigative	3037 Troy	1171320	1893115
34-36	CSES5C2A	0-3 inch	Investigative	3019 Troy	1171320	1893200
	CSES5C2AB	0-3 inch	Back Yard	3019 Troy	1171320	1893200
	CSES5C2AF	0-3 inch	Front Yard	3019 Troy	1171320	1893200
37	CSES5C3A	0-3 inch	Investigative	3021 Troy	1171320	1893160
38	CSES5D1A	0-3 inch	Investigative	3047 Troy	1171320	1892920
39-41	CSES5D2A	0-3 inch	Investigative	3051 Troy	1171320	1892860
	CSES5D2C	6-12 inches	Investigative	3051 Troy	1171320	1892860
	CSES5D2CD	6-12 inches	Duplicate	3051 Troy	1171320	1892860
42-43	CSES5D3A	0-3 inch	Investigative	3041 Troy	1171320	1893005
	CSES5D3AD	0-3 inch	Duplicate	3041 Troy	1171320	1893005
44	CSES6D1A	0-3 inch	Investigative	2817 Sawyer	1170600	1893875
45	CSES6D2A	0-3 inch	Investigative	2829 Sawyer	1170605	1893780
46	CSES6E1A	0-3 inch	Investigative	2822 Sawyer	1170505	1893830
47	CSES6E2A	0-3 inch	Investigative	2833 Spaulding	1170360	1893630
48	CSES7C1A	0-3 inch	Investigative	2736 Troy	1171125	1894425
49	CSES7D1A	0-3 inch	Investigative	2801 Sawyer	1170595	1894015
50-52	CSES7D2A	0-3 inch	Investigative	2809 Sawyer	1170595	1893975
	CSES7D2AB	0-3 inch	Back Yard	2809 Sawyer	1170595	1893975
	CSES7D2AF	0-3 inch	Front Yard	2809 Sawyer	1170595	1893975

TABLE 1

RESIDENTIAL AND ONSITE SOIL SAMPLE LOCATIONS
CHICAGO, ILLINOIS
Page 2 of 2

ID	Sample ID	Sample Depth	Sample Type	Address	State Plane Coordinates (East)	State Plane Coordinates (North)
53	CSES7E1A	0-3 inch	Investigative	2719 Sawyer	1170580	1894570
54-57	CSES7E2A	0-3 inch	Investigative	2741 Spaulding	1170335	1894260
	CSES7E2AB	0-3 inch	Back Yard	2741 Spaulding	1170335	1894260
	CSES7E2AD	0-3 inch	Duplicate	2741 Spaulding	1170335	1894260
	CSES7E2AF	0-3 inch	Front Yard	2741 Spaulding	1170335	1894260
58	CSES8C1A	0-3 inch	Investigative	2709 Troy	1171215	1894660
59	CSES8C2A	0-3 inch	Investigative	2705 Troy	1171215	1894705
60	CSES8C3A	0-3 inch	Investigative	2708 Troy	1171110	1894660
61	CSES8D1A	0-3 inch	Investigative	2637 Troy	1171215	1895040
62	CSES8D2A	0-3 inch	Investigative	2653 Troy	1171215	1894920
63-67	CSES8E1A	0-3 inch	Investigative	2622 Troy	1171075	1895220
	CSES8E1AB	0-3 inch	Back Yard	2622 Troy	1171075	1895220
	CSES8E1AF	0-3 inch	Front Yard	2622 Troy	1171075	1895220
	CSES8E1AFD	0-3 inch	Front Yard Duplicate	2622 Troy	1171075	1895220
	CSES8E1C	6-12 inches	Investigative	2622 Troy	1171075	1895220
68	CSES8E2A	0-3 inch	Investigative	2624 Troy	1171075	1895180
69-70	CSES8E3A	0-3 inch	Investigative	2621 Troy	1171195	1895260
	CSES8E3C	6-12 inches	Investigative	2621 Troy	1171195	1895260
71-72	CSES8FAA	0-3 inch	Investigative	2534 Spaulding	1170075	1895641
	CSES8FAC	6-12 inches	Investigative	2534 Spaulding	1170075	1895641
73	CSES8FBA	0-3 inch	Investigative	2520 Sawyer	1170366	1895837
74-76	CSES8FCA	0-3 inch	Investigative	2440 Troy	1171019	1896300
	CSES8FCAB	0-3 inch	Back Yard	2440 Troy	1171019	1896300
	CSES8FCAF	0-3 inch	Front Yard	2440 Troy	1171019	1896300
77	CSES8FDA	0-3 inch	Investigative	2437 Albany	1171456	1896372
78	CSES8FEA	0-3 inch	Investigative	2534 Sawyer	1170401	1895599
79	CSES8FFA	0-3 inch	Investigative	2443 Kedzie	1170820	1895561
80-82	CSES8FGA	0-3 inch	Investigative	3111 W. 25th PL	1171260	1896033
	CSES8FGAB	0-3 inch	Back Yard	3111 W. 25th PL	1171260	1896033
	CSES8FGAF	0-3 inch	Front Yard	3111 W. 25th PL	1171260	1896033
83-85	CSES8FHA	0-3 inch	Investigative	2525 Albany	1171490	1895801
	CSES8FHAB	0-3 inch	Back Yard	2525 Albany	1171490	1895801
	CSES8FHAF	0-3 inch	Front Yard	2525 Albany	1171490	1895801
86-88	CSES8FIA	0-3 inch	Investigative	2625 Sawyer	1170525	1895172
	CSES8FIAB	0-3 inch	Back Yard	2625 Sawyer	1170525	1895172
	CSES8FIAF	0-3 inch	Front Yard	2625 Sawyer	1170525	1895172
89-90	CSES8FJ1A	0-3 inch	Investigative	2547 Troy	1171170	1895588
	CSES8FJ1AD	0-3 inch	Duplicate	2547 Troy	1171170	1895588
91	CSES8FKA	0-3 inch	Investigative	2532 Whipple	1171665	1895774
92-93	CSESIEPA1C	6-12 inches	Investigative	2813 Troy	1171255	1894010
	CSESIEPA1CD	6-12 inches	Duplicate	2813 Troy	1171255	1894010
94	CSESIEPA2C	6-12 inches	Investigative	2815 Troy	1171255	1893960
95	CSESIEPA3C	6-12 inches	Investigative	2843 Troy	1171270	1893660
96-97	CSESS1A	0-3 inch	Investigative	On Site Surface	1171645	1893510
	CSESS1B	3-6 inch	Investigative	On Site Surface	1171645	1893510
98-99	CSESS2A	0-3 inch	Investigative	On Site Surface	1171835	1894030
	CSESS2B	3-6 inch	Investigative	On Site Surface	1171835	1894030
100-101	CSEST1A	0-3 inch	Investigative	On Site Trench	1171610	1893540
	CSEST1B	3-6 inch	Investigative	On Site Trench	1171610	1893540
102-103	CSESTF1A	0-3 inch	Investigative	On Site Tank Farm	1171365	1893660
	CSESTF1B	3-6 inch	Investigative	On Site Tank Farm	1171365	1893660
104-106	CSESTF2A	0-3 inch	Investigative	On Site Tank Farm	1171495	1893890
	CSESTF2AD	0-3 inch	Duplicate	On Site Tank Farm	1171495	1893890
	CSESTF2B	3-6 inch	Investigative	On Site Tank Farm	1171495	1893890

TABLE 2

SEMIVOLATILE ORGANIC COMPOUND RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID1	ID2	ID3	ID4	ID5	ID6	ID7	ID8	ID9	ID10
Laboratory Sample ID:	1EPDAC	IEPA5C	1C1A	1C2A	C3A	C3C	1C4A	1C4AD	D1A	D2A
ERM ID:	CSESIEPA4C	CSESIEPA5C	CSES1C1A	CSES1C2A	CSES1C3A	CSES1C3C	CSES1C4A	CSES1C4AD	CSES1D1A	CSES1D2A
4-Methylphenol	8500 U	2100 U	2000 U	4500 U	1300 U	2100 U	1500 U	1900 U	820 U	2000 U
Isophorone	8500 U	2100 U	2000 U	4500 U	1300 U	2100 U	1500 U	1900 U	820 U	2000 U
2,4-Dichlorophenol	8500 U	2100 U	2000 U	4500 U	1300 U	2100 U	1500 U	1900 U	820 U	2000 U
Naphthalene	1400 J	580 J	290 J	600 J	460 J	530 J	350 J	330 J	330 J	540 J
2-Methylnaphthalene	8500 U	320 J	2000 U	4500 U	270 J	330 J	180 J	1900 U	280 J	380 J
Dimethylphthalate	8500 U	2100 U	2000 U	4500 U	1300 U	2100 U	1500 U	1900 U	820 U	2000 U
Acenaphthylene	8500 U	190 J	2000 U	4500 U	170 J	2100 U	1500 U	1900 U	360 J	320 J
2,6-Dinitrotoluene	8500 U	1400 J	2000 U	4500 U	830 J	1400 J	1000 J	1900 U	820 U	2000 U
Acenaphthene	3400 J	1600 J	1000 J	2700 J	840 J	1300 J	990 J	1000 J	450 J	1400 J
Dibenzofuran	900 J	2100 U	200 J	500 J	270 J	380 J	1500 U	230 J	200 J	2000 U
2,4-Dinitrotoluene	8500 U	2100 U	2000 U	4500 U	1300 U	2100 U	1500 U	1900 U	820 U	2000 U
Fluorene	1700 J	850 J	430 J	1200 J	600 J	810 J	550 J	470 J	430 J	1000 J
4-Nitroaniline	20000 U	5100 U	4900 U	11000 U	3100 U	5200 U	3700 U	4700 U	2000 U	4800 U
N-Nitrosodiphenylamine (1)	8500 U	2100 U	2000 U	4500 U	1300 U	2100 U	1500 U	1900 U	820 U	2000 U
Phenanthrene	21000	8400	4800	11000	4800	7200	5000	4800	3600	8700
Anthracene	4900 J	2500	1200 J	2900 J	1500	2100 J	1500 J	1200 J	1000	2600
Carbazole	8500 U	1500 J	2000 U	1700 J	750 J	1100 J	1500 U	1900 U	510 J	1300 J
Di-n-butylphthalate	8500 U	2100 U	2000 U	4500 U	1300 U	2900 U	1500 U	1900 U	3000 U	2000 U
Fluoranthene	41000	12000	9300	18000	7500	11000	8100	8900	4900	13000
Pyrene	46000	12000	7700	14000	6300	11000	8000	7300	5100	13000
Butylbenzylphthalate	8500 U	2100 U	2000 U	4500 U	1300 U	2100 U	1500 U	1900 U	370 J	2000 U
Benzo(a)anthracene	27000	12000	5900	12000	5900	9100	7300	5500	4400	11000
Chrysene	30000	10000	6700	13000	5400	8500	6700	6300	4000	9900
bis(2-Ethylhexyl)phthalate	2400 J	1400 J	1200 J	2600 J	1900	1500 J	2100	1400 J	2000	4200
Di-n-octylphthalate	8500 U	2100 U	2000 U	4500 U	1300 U	2100 U	1500 J	1900 U	820 U	2000 U
Benzo(b)fluoranthene	34000	16000	8600	14000	7900	10000	8600	8900	5900 J	14000
Benzo(k)fluoranthene	16000	8000	4600	12000	2700	7000	6500	3700	2900 J	5300
Benzo(a)pyrene	29000	12000	7200	13000	5600	8800	7200	6800	4000 J	10000
Indeno(1,2,3-cd)pyrene	16000	4300	4600	9500	3500	4000	2600	4600	1500 J	5000
Dibenzo(a,h)anthracene	8400 J	2600	3000	6800	2300	2600	1800	3000	1100 J	3400
Benzo(g,h,i)perylene	12000	2800	3500	8100	2500	2900	1600	3500	990 J	3400

TABLE 2

SEMIVOLATILE ORGANIC COMPOUND RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID11	ID12	ID13	ID14	ID15	ID16	ID17	ID18	ID19	ID20
Laboratory Sample ID:	D2AB	D2ABD	D2AF	FAA	1FcA	1FcAB	1FcAF	FEA	FEC	1FfA
ERM ID:	CSES1D2AB	CSES1D2ABD	CSES1D2AF	CSES1FaA	CSES1FcA	CSES1FcAB	CSES1FcAF	CSES1FeA	CSES1FeC	CSES1FfA
4-Methylphenol	3900 U	3900 U	2000 U	460 U	410 U	800 U	53 J	820 U	830 U	390 U
Isophorone	3900 U	3900 U	2000 U	460 U	550	850	450 U	820 U	830 U	390 U
2,4-Dichlorophenol	3900 U	3900 U	2000 U	460 U	410 U	800 U	450 U	820 U	830 U	390 U
Naphthalene	740 J	530 J	2600	250 J	230 J	110 J	380 J	390 J	260 J	78 J
2-Methylnaphthalene	500 J	3900 U	880 J	110 J	99 J	93 J	160 J	250 J	200 J	62 J
Dimethylphthalate	3900 U	3900 U	2000 U	460 U	410 U	800 U	450 U	820 U	830 U	390 U
Acenaphthylene	400 J	380 J	180 J	98 J	120 J	220 J	82 J	95 J	87 J	57 J
2,6-Dinitrotoluene	3900 U	3900 U	2000 U	460 U	410 U	800 U	450 U	820 U	830 U	390 U
Acenaphthene	1700 J	1500 J	1600 J	310 J	340 J	330 J	480	410 J	370 J	200 J
Dibenzofuran	3900 U	450 J	1200 J	460 U	130 J	120 J	450 U	160 J	140 J	87 J
2,4-Dinitrotoluene	3900 U	3900 U	2000 U	460 U	410 U	800 U	450 U	820 U	830 U	390 U
Fluorene	1100 J	1000 J	2000	280 J	250 J	280 J	470	300 J	280 J	170 J
4-Nitroaniline	9500 U	9500 U	250 J	1100 U	1000 U	260 J	1100 U	2000 U	2000 U	950 U
N-Nitrosodiphenylamine (1)	3900 U	3900 U	2000 U	460 U	410 U	800 U	450 U	820 U	830 U	390 U
Phenanthrene	11000	10000	9700	2000	2100	3000	2700	2800	2900	1600
Anthracene	3300 J	2900 J	3500	630	570	740 J	950	650 J	690 J	430
Carbazole	1500 J	1300 J	1800 J	290 J	340 J	430 J	520	360 J	320 J	390 U
Di-n-butylphthalate	3900 U	3900 U	2800 U	1800 U	280 J	530 J	250 J	1400 U	2500 U	540
Fluoranthene	18000	17000	11000	2300	3000	4400	3000	3500	3500	2200
Pyrene	16000	14000	10000	3400	2600	4500	3300	4100	3900	2300
Butylbenzylphthalate	3900 U	3900 U	2000 U	1600	410 U	800 U	450 U	820 U	830 U	300 J
Benzo(a)anthracene	14000	13000	8700	2200	1800	3500	2500	3000	2800	1700
Chrysene	13000	12000	7800	2000	2000	3300	2200	3000	2800	1600
bis(2-Ethylhexyl)phthalate	4800	3300 J	4100	2600	940	1500	1400	2100	1800	1100
Di-n-octylphthalate	3900 U	3900 U	2000 U	460 U	410 U	800 U	63 J	820 U	830 U	390 U
Benzo(b)fluoranthene	15000	16000	9200	2000 J	2800 J	3600 J	2500	4400 J	3800	1900
Benzo(k)fluoranthene	11000	7200	4800	1800 J	1500 J	2800 J	1300	2300 J	1700	1100
Benzo(a)pyrene	13000	12000	7600	1800 J	1900 J	3100 J	2000	3300 J	2800	1500
Indeno(1,2,3-cd)pyrene	4400	5700	4200	940 J	640 J	1100 J	880	1100 J	1000	720
Dibenzo(a,h)anthracene	3200 J	3900	2700	610 J	460 J	790 J	620	830 J	710 J	470
Benzo(g,h,i)perylene	2900 J	3700 J	3000	660 J	430 J	750 J	650	810 J	740 J	480

TABLE 2

SEMIVOLATILE ORGANIC COMPOUND RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID21	ID22	ID23	ID24	ID25	ID26	ID27	ID28	ID29	ID30
Laboratory Sample ID:	1FfAB	1FfAFM	1FgA	1FhA	1FjA	1FgC	FJA	FKA	FKAD	1FLA
ERM ID:	CSES1FfAB	CSES1FfAFM	CSES1FgA	CSES1FhA	CSES1FiA	CSES1FiC	CSESFjA	CSESFkA	CSESFkAD	CSES1FLA
4-Methylphenol	400 U	770 U	440 U	420 U	890 U	810 U	520 U	850 U	860 U	780 J
Isophorone	400 U	770 U	440 U	420 U	890 U	810 U	520 U	850 U	860 U	4200 U
2,4-Dichlorophenol	400 U	770 U	440 U	420 U	890 U	810 U	520 U	110 J	860 U	4200 U
Naphthalene	95 J	110 J	59 J	65 J	98 J	100 J	83 J	370 J	380 J	12000 J
2-Methylnaphthalene	54 J	86 J	440 U	46 J	890 U	810 U	88 J	160 J	160 J	4300 J
Dimethylphthalate	400 U	770 U	440 U	420 U	890 U	810 U	520 U	850 U	860 U	4200 U
Acenaphthylene	110 J	90 J	69 J	73 J	220 J	260 J	62 J	98 J	130 J	430 J
2,6-Dinitrotoluene	400 U	770 U	440 U	420 U	890 U	810 U	520 U	850 U	860 U	3000 J
Acenaphthene	200 J	280 J	220 J	200 J	280 J	280 J	150 J	690 J	660 J	6100 J
Dibenzofuran	93 J	100 J	66 J	62 J	100 J	130 J	520 U	240 J	860 U	4400 J
2,4-Dinitrotoluene	400 U	770 U	440 U	420 U	890 U	810 U	520 U	850 U	860 U	4200 U
Fluorene	180 J	220 J	140 J	120 J	200 J	280 J	140 J	470 J	460 J	6000 J
4-Nitroaniline	970 U	1900 U	1100 U	1000 U	210 J	100 J	1300 U	2100 U	2100 U	10000 U
N-Nitrosodiphenylamine (1)	400 U	770 U	440 U	420 U	890 U	810 U	520 U	850 U	860 U	4200 U
Phenanthrene	1800	2400	1500	1500	2600	3100	1400	3600	3500	32000 J
Anthracene	440	610 J	380 J	370 J	630 J	790 J	380 J	910	800 J	12000 J
Carbazole	400 U	770 U	440 U	180 J	890 U	810 U	190 J	590 J	550 J	5900 J
Di-n-butylphthalate	350 J	770 U	220 J	260 J	890 U	810 U	1600 U	1600 U	2100 U	4200 U
Fluoranthene	3000	3400	2500	2200	4600	4500	2100	4800	4500	32000 J
Pyrene	2600	3400	2300	2000	4000	4700	2100	4600	4400	27000 J
Butylbenzylphthalate	400 U	770 U	440 U	220 J	890 U	810 U	370 J	740 J	860 U	4200 U
Benzo(a)anthracene	1700	2700	1500	1200	2600	3600	1600	3800	3500	21000 J
Chrysene	2000	2500	1700	1400	3000	3400	1500	3400	3300	18000 J
bis(2-Ethylhexyl)phthalate	1200	2300	1400	2600	3200	1800	2100	4400	3900	3900 J
Di-n-octylphthalate	400 U	430 J	440 U	57 J	890 U	810 U	520 U	850 U	860 U	4200 U
Benzo(b)fluoranthene	2700	2600	2100	2100	3600	3800	1700	4300	3800	19000 J
Benzo(k)fluoranthene	1100	2700	1100	980	2200	3000	1300	2100	2300	9100
Benzo(a)pyrene	1800	2400	1700	1400	2800	3300	1400	3300	3000	15000 J
Indeno(1,2,3-cd)pyrene	760	830	790	570	1400	1200	500 J	1800	1500	9100 J
Dibenzo(a,h)anthracene	520	580 J	520	370 J	960	780 J	360 J	1200	1000	6000 J
Benzo(g,h,i)perylene	500	540 J	560	380 J	1100	760 J	340 J	1200	1000	7100 J

TABLE 2

SEMIVOLATILE ORGANIC COMPOUND RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID31	ID32	ID33	ID34	ID35	ID36	ID37	ID38	ID39	ID40
Laboratory Sample ID:	1F1AD	1FnA	5C1A	5C2A	5C2AB	5C2AF	5C3A	5D1A	5D2A	5D2C
ERM ID:	CSES1F1AD	CSES1FnA	CSES5C1A	CSES5C2A	CSES5C2AB	CSES5C2AF	CSES5C3A	CSES5D1A	CSES5D2A	CSES5D2C
4-Methylphenol	1700 U	780 U	2300 U	1200 U	2300 U	860 U	1700 U	900 U	810 U	2000 U
Isophorone	1700 U	780 U	2300 U	1200 U	2300 U	860 U	1700 U	900 U	810 U	2000 U
2,4-Dichlorophenol	1700 U	780 U	2300 U	1200 U	2300 U	860 U	1700 U	900 U	810 U	2000 U
Naphthalene	430 J	97 J	2300 U	210 J	340 J	860 U	230 J	140 J	110 J	320 J
2-Methylnaphthalene	260 J	780 U	2300 U	120 J	2300 U	860 U	1700 U	99 J	98 J	180 J
Dimethylphthalate	1700 U	780 U	2300 U	1200 U	2300 U	860 U	1700 U	900 U	810 U	340 J
Acenaphthylene	240 J	120 J	2300 U	150 J	2300 U	860 U	150 J	900 U	73 J	2000 U
2,6-Dinitrotoluene	1700 U	780 U	2300 U	1200 U	2300 U	860 U	1700 U	900 U	810 U	2000 J
Acenaphthene	860 J	320 J	640 J	510 J	930 J	140 J	480 J	350 J	350 J	550 J
Dibenzofuran	370 J	100 J	2300 U	120 J	2300 U	860 U	1700 U	96 J	110 J	2000 U
2,4-Dinitrotoluene	1700 U	780 U	2300 U	1200 U	2300 U	860 U	1700 U	900 U	810 U	2000 U
Fluorene	790 J	210 J	260 J	240 J	390 J	860 U	230 J	180 J	190 J	300 J
4-Nitroaniline	4200 U	1900 U	5500 U	3000 U	5600 U	2100 U	4000 U	2200 U	2000 U	5000 U
N-Nitrosodiphenylamine (1)	1700 U	780 U	2300 U	1200 U	2300 U	860 U	1700 U	900 U	810 U	2000 U
Phenanthrene	6800 J	2200	3300	3400	5500	1100	3100	2500	2700	4500
Anthracene	2000 J	550 J	810 J	670 J	1100 J	210 J	680 J	570 J	600 J	1000 J
Carbazole	1700 U	780 U	2300 U	410 J	2300 U	860 U	1700 U	900 U	810 U	540 J
Di-n-butylphthalate	1700 U	780 U	2300 U	200 J	2300 U	860 U	1800	860 J	2600	2000 U
Fluoranthene	8700 J	3700	7200	7400	11000	2300	7800	5500	6500	7800
Pyrene	8600 J	3200	8500	8700	13000	2200	8200	5200	6500	9500
Butylbenzylphthalate	1700 U	780 U	2300 U	1200 U	2300 U	860 U	1700 U	900 U	410 J	2000 U
Benzo(a)anthracene	6500 J	2000	5100	4500	7600	1300	4800	3000	3600	5200
Chrysene	5900 J	2400	6000	5600	9700	1600	6200	3600	4200	6000
bis(2-Ethylhexyl)phthalate	2900	2400	6400	3000	3300	1900	7000	5000	810 U	7900 J
Di-n-octylphthalate	1700 U	780 U	2300 U	1200 U	2300 U	860 U	240 J	900 U	140 J	2000 U
Benzo(b)fluoranthene	5900 J	3400	6800	6700	11000	1800	7000	5200	5000	5200
Benzo(k)fluoranthene	3900	1400	4200	3800	5700	950	4600	2600	3000	4300
Benzo(a)pyrene	4900 J	2400	5900	3600	9800	1500	3900	3800	4000	5500
Indeno(1,2,3-cd)pyrene	2400 J	1300	2000 J	2200	5400	530 J	2100	1000	950	2000 J
Dibenzo(a,h)anthracene	1700 J	870	1100 J	980 J	2900	220 J	1200 J	600 J	460 J	1100 J
Benzo(g,h,i)perylene	1700 J	940	1400 J	1200 J	3700	380 J	1200 J	700 J	590 J	1100 J

TABLE 2

SEMIVOLATILE ORGANIC COMPOUND RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID41	ID42	ID43	ID44	ID45	ID46	ID47	ID48	ID49	ID50
Laboratory Sample ID:	5D2CD	5D3A	5D3AD	6D1A	6D2A	6E1A	6E2A	7C1A	7D1A	7D2A
ERM ID:	CSES5D2CD	CSES5D3A	CSES5D3AD	CSES6D1A	CSES6D2A	CSES6E1A	CSES6E2A	CSES7C1A	CSES7D1A	CSES7D2A
4-Methylphenol	6100 U	1800 U	2300 U	1400 U	2200 U	1300 U	1900 U	840 U	890 U	1400 U
Isophorone	6100 U	1800 U	2300 U	1400 U	2200 U	1300 U	1900 U	840 U	890 U	1400 U
2,4-Dichlorophenol	6100 U	1800 U	2300 U	1400 U	2200 U	1300 U	1900 U	840 U	890 U	1400 U
Naphthalene	6100 U	180 J	2300 U	1400 U	2200 U	1300 U	1900 U	120 J	890 U	1400 U
2-Methylnaphthalene	6100 U	1800 U	2300 U	1400 U	2200 U	1300 U	1900 U	180 J	890 U	1400 U
Dimethylphthalate	6100 U	1800 U	2300 U	1400 U	2200 U	1300 U	1900 U	840 U	890 U	1400 U
Acenaphthylene	6100 U	1800 U	2300 U	1400 U	2200 U	1300 U	1900 U	520 J	890 U	1400 U
2,6-Dinitrotoluene	6100 U	1800 U	2300 U	1400 U	2200 U	1300 U	1900 U	840 U	890 U	1400 U
Acenaphthene	6100 U	430 J	460 J	230 J	2200 U	110 J	330 J	270 J	890 U	210 J
Dibenzofuran	6100 U	1800 U	2300 U	1400 U	2200 U	1300 U	1900 U	100 J	890 U	1400 U
2,4-Dinitrotoluene	6100 U	1800 U	2300 U	1400 U	2200 U	1300 U	1900 U	840 U	890 U	1400 U
Fluorene	6100 U	220 J	270 J	1400 U	2200 U	1300 U	210 J	370 J	890 U	1400 U
4-Nitroaniline	15000 U	4400 U	5700 U	3400 U	5400 U	3100 U	4600 U	2000 U	2200 U	3300 U
N-Nitrosodiphenylamine (1)	6100 U	1800 U	2300 U	1400 U	2200 U	1300 U	1900 U	840 U	890 U	1400 U
Phenanthrene	3000 J	3500	4400	1800	1500 J	1000 J	2700	3100	920	1600
Anthracene	650 J	760 J	960 J	340 J	330 J	210 J	580 J	840 J	180 J	380 J
Carbazole	6100 U	600 J	2300 U	1400 U	2200 U	1300 U	300 J	840 U	890 U	1400 U
Di-n-butylphthalate	6100 U	3400 J	2300 UJ	1400 U	2200 U	1100 J	1900 U	840 U	890 U	1400 U
Fluoranthene	5900 J	9300	12000	3700	3100	1800	5200	4000	1600	3100
Pyrene	6800	9800	12000	4400	3600	2200	5500	4200	1600	3600
Butylbenzylphthalate	6100 U	1800 U	2300 U	1400 U	2200 U	1300 U	1900 U	840 U	890 U	1400 U
Benzo(a)anthracene	4200 J	5700	7200	2400	2300	1200 J	2900	3200	960	2100
Chrysene	4600 J	7200	8800	2900	2600	1300	3200	3000	1100	2400
bis(2-Ethylhexyl)phthalate	31000 J	9100	8100	9400	16000	6800	8300	3000	5000	8700
Di-n-octylphthalate	6100 U	250 J	2300 U	670 J	1100 J	440 J	400 J	840 J	180 J	380 J
Benzo(b)fluoranthene	4200 J	7100	8700	2700	2700	1100 J	2600	3000	920	2100
Benzo(k)fluoranthene	3300 J	4000	3900	1700	1600 J	840 J	1800 J	2100	660 J	1400
Benzo(a)pyrene	4200 J	5600	6600	2400	2200 J	980 J	2500	2500	810 J	1900
Indeno(1,2,3-cd)pyrene	1700 J	2800	3500	770 J	900 J	370 J	1500 J	1400	500 J	1100 J
Dibenzo(a,h)anthracene	870 J	1500 J	1900 J	410 J	480 J	190 J	610 J	940	270 J	570 J
Benzo(g,h,i)perylene	1100 J	1800 J	2200 J	500 J	520 J	250 J	1000 J	970	280 J	670 J

TABLE 2

SEMIVOLATILE ORGANIC COMPOUND RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID51	ID52	ID53	ID54	ID55	ID56	ID57	ID58	ID59	ID60
Laboratory Sample ID:	7D2AB	7D2AF	7E1A	7E2A	7E2AB	7E2AD	7E2AF	8C1A	8C2A	8C3A
ERM ID:	CSES7D2AB	CSES7D2AF	CSES7E1A	CSES7E2A	CSES7E2AB	CSES7E2AD	CSES7E2AF	CSES8C1A	CSES8C2A	CSES8C3A
4-Methylphenol	890 U	1300 U	440 U	870 U	1200 U	430 U	420 U	2400 U	1400 U	1200 U
Isophorone	890 U	1300 U	440 U	870 U	1200 U	430 U	420 U	2400 U	1400 U	1200 U
2,4-Dichlorophenol	890 U	1300 U	440 U	870 U	1200 U	430 U	420 U	2400 U	1400 U	1200 U
Naphthalene	170 J	1300 U	440 U	120 J	350 J	110 J	71 J	2400 U	210 J	220 J
2-Methylnaphthalene	120 J	1300 U	440 U	130 J	310 J	120 J	50 J	2400 U	1400 U	150 J
Dimethylphthalate	890 U	1300 U	440 U	870 U	1200 U	430 U	420 U	2400 U	1400 U	1200 U
Acenaphthylene	85 J	1300 U	440 U	870 U	1200 U	54 J	420 U	220 J	140 J	130 J
2,6-Dinitrotoluene	890 U	1300 U	440 U	870 U	1200 U	430 U	420 U	2400 U	1400 U	1200 U
Acenaphthene	340 J	200 J	440 U	270 J	440 J	120 J	210 J	460 J	390 J	330 J
Dibenzofuran	130 J	1300 U	440 U	140 J	320 J	76 J	420 U	2400 U	1400 U	150 J
2,4-Dinitrotoluene	890 U	1300 U	440 U	870 U	1200 U	430 U	420 U	2400 U	1400 U	1200 U
Fluorene	200 J	150 J	440 U	220 J	490 J	100 J	190 J	370 J	220 J	270 J
4-Nitroaniline	2200 U	3200 U	1100 U	2100 U	3000 U	1000 U	1000 U	5800 U	3500 U	3000 U
N-Nitrosodiphenylamine (1)	890 U	1300 U	440 U	870 U	1200 U	430 U	420 U	2400 U	1400 U	1200 U
Phenanthrene	3000	2300	280 J	3000	5800	1500	2000	5600	3300	3500
Anthracene	670 J	490 J	57 J	660 J	1200 J	330 J	450	1200 J	690 J	660 J
Carbazole	370 J	1300 U	440 U	870 U	1200 U	430 U	420 U	740 J	420 J	360 J
Di-n-butylphthalate	410 J	1400	440 U	870 U	1200 U	430 U	420 U	2400 U	1400 U	1200 U
Fluoranthene	6600	3300	570	5200	7500	2900	2900	11000	7500	6600
Pyrene	7200	4000	610	5100	7600	3000	2800	10000	7800	6100
Butylbenzylphthalate	220 J	1300 U	440 U	870 U	1200 U	430 U	420 U	2400 U	1400 U	1200 U
Benzo(a)anthracene	3500	1700	300 J	2600	3700	1600	1300	5900	4300	3400
Chrysene	4400	1900	370 J	3000	4100	1900	1500	6600	4800	4000
bis(2-Ethylhexyl)phthalate	890 U	6200	750	1700	1800	1600	1200	3900	7500	3500
Di-n-octylphthalate	890 U	1300 U	440 U	870 U	1200 U	430 U	420 U	2400 U	1400 U	1200 U
Benzo(b)fluoranthene	4500	1400	480	2700	3600	2600	1900	5100	5700	3700
Benzo(k)fluoranthene	3000	880 J	320 J	1800	2300	1500	1100	4200	3200	1900
Benzo(a)pyrene	3800	1300 J	340 J	2400	3000	1700	1200	4300	4000	2700
Indeno(1,2,3-cd)pyrene	1100	680 J	90 J	1200 J	1100 J	340 J	250 J	1300 J	1200 J	1200 J
Dibenzo(a,h)anthracene	590 J	250 J	440 U	680 J	670 J	220 J	160 J	760 J	460 J	510 J
Benzo(g,h,i)perylene	630 J	520 J	440 U	670 J	500 J	160 J	110 J	960 J	760 J	950 J

TABLE 2

SEMIVOLATILE ORGANIC COMPOUND RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID61	ID62	ID63	ID64	ID65	ID66	ID67	ID68	ID69	ID70
Laboratory Sample ID:	8D1A	8D2A	8E1A	8E1AB	8EA1F	8E1AFD	8E1C	8E2A	8E3A	8E3C
ERM ID:	CSES8D1A	CSES8D2A	CSES8E1A	CSES8E1AB	CSES8E1AF	CSES8E1AFD	CSES8E1C	CSES8E2A	CSES8E3A	CSES8E3C
4-Methylphenol	800 U	1800 U	430 U	860 U	890 U	460 U	810 U	1700 U	840 U	1200 U
Isophorone	800 U	1800 U	430 U	860 U	890 U	460 U	810 U	1700 U	840 U	1200 U
2,4-Dichlorophenol	800 U	1800 U	430 U	860 U	890 U	460 U	810 U	1700 U	840 UJ	1200 U
Naphthalene	800 U	1800 U	49 J	860 U	890 U	460 U	96 J	240 J	840 U	130 J
2-Methylnaphthalene	800 U	1800 U	47 J	860 U	890 U	460 U	87 J	220 J	840 U	1200 U
Dimethylphthalate	800 U	1800 U	430 U	860 U	890 U	460 U	810 U	1700 U	840 U	1200 U
Acenaphthylene	800 U	1800 U	55 J	860 U	93 J	44 J	88 J	190 J	110 J	110 J
2,6-Dinitrotoluene	800 U	1800 U	430 U	860 U	890 U	460 U	810 U	1700 U	840 U	1200 U
Acenaphthene	110 J	1800 U	100 J	260 J	140 J	64 J	160 J	590 J	120 J	240 J
Dibenzofuran	800 U	1800 U	430 U	130 J	890 U	460 U	810 U	290 J	840 U	1200 U
2,4-Dinitrotoluene	800 U	1800 U	430 U	860 U	890 U	460 U	810 U	1700 U	840 U	1200 U
Fluorene	800 U	1800 U	100 J	270 J	130 J	58 J	150 J	600 J	94 J	190 J
4-Nitroaniline	2000 U	4300 U	1000 U	2100 U	2200 U	1100 U	2000 U	4200 U	220 J	2900 U
N-Nitrosodiphenylamine (1)	800 U	1800 U	430 U	860 U	890 U	460 U	810 U	1700 U	840 U	1200 U
Phenanthrene	1000	1600 J	1600	3200	2000	940	2500	6700	1400	2200
Anthracene	210 J	300 J	340 J	600 J	440 J	200 J	520 J	1500 J	280 J	480 J
Carbazole	800 U	1800 U	430 U	860 U	890 U	460 U	810 U	1700 U	840 U	1200 U
Di-n-butylphthalate	800 U	1800 U	430 U	860 U	890 U	460 U	810 U	1700 U	840 U	1200 U
Fluoranthene	2100	2700	2800	4600	3800	1900	4300	8500	2800	4100
Pyrene	2200	2500	3200	4500	5200	2600	6000	9200	3200	4600
Butylbenzylphthalate	800 U	1800 U	430 U	860 U	890 U	460 U	810 U	1700 U	850	1200 U
Benzo(a)anthracene	1200	1400 J	1500	2200	2000	1000	2500	4200	1600	2300
Chrysene	1400	1800	1800	2600	2400	1300	2900	4900	2100	2800
bis(2-Ethylhexyl)phthalate	1100	8200	1100	1400	1900	730	780 J	3600	1900	1100 J
Di-n-octylphthalate	800 U	1800 U	430 U	860 U	890 U	460 U	810 U	1700 U	840 U	1200 U
Benzo(b)fluoranthene	1300	2000	1900	2500	2300	1200	2900	4600	2200	2600
Benzo(k)fluoranthene	960	1300 J	1000	1700	1700	800	1600	3300	1500	2200
Benzo(a)pyrene	1200	1600 J	1500	2200	2300	1100	2500	4000	1800	2400
Indeno(1,2,3-cd)pyrene	510 J	1100 J	580	1200	650 J	440 J	760 J	1500 J	690 J	870 J
Dibenzo(a,h)anthracene	220 J	530 J	330 J	600 J	380 J	250 J	440 J	850 J	400 J	530 J
Benzo(g,h,i)perylene	380 J	340 J	360 J	790 J	510 J	270 J	380 J	550 J	280 J	440 J

TABLE 2

SEMIVOLATILE ORGANIC COMPOUND RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID71	ID72	ID73	ID74	ID75	ID76	ID77	ID78	ID79	ID80
Laboratory Sample ID:	8FAA	8FAC	8F1bA	8FCA	8FCAB	8FCAF	8FDA	8FeAM	8FFA	8FgA
ERM ID:	CSES8FaA	CSES8FaC	CSES8FbA	CSES8FcA	CSES8FcAB	CSES8FcAF	CSES8FdA	CSES8FeA	CSES8FfA	CSES8FgA
4-Methylphenol	430 U	430 U	1300 U	440 U	4300 U	420 U	410 U	440 U	420 U	440 U
Isophorone	430 U	430 U	1300 U	440 U	4300 U	420 U	410 U	440 U	420 U	440 U
2,4-Dichlorophenol	430 U	430 U	1300 U	440 U	4300 U	420 U	410 U	440 U	420 U	440 U
Naphthalene	76 J	58 J	560 J	440 U	4300 U	420 U	78 J	440 U	58 J	53 J
2-Methylnaphthalene	61 J	430 U	470 J	440 U	4300 U	420 U	61 J	440 U	61 J	440 U
Dimethylphthalate	430 U	430 U	1300 U	440 U	4300 U	420 U	410 U	440 U	420 U	440 U
Acenaphthylene	110 J	110 J	1300 U	130 J	4300 U	68 J	70 J	52 J	56 J	46 J
2,6-Dinitrotoluene	430 U	430 U	1300 U	440 U	4300 U	420 U	410 U	440 U	420 U	440 U
Acenaphthene	430 U	120 J	480 J	72 J	4300 U	84 J	170 J	89 J	300 J	120 J
Dibenzofuran	140 J	78 J	310 J	440 U	4300 U	420 U	70 J	440 U	160 J	440 U
2,4-Dinitrotoluene	430 U	430 U	1300 U	440 U	4300 U	420 U	410 U	440 U	420 U	440 U
Fluorene	220 J	120 J	570 J	88 J	4300 U	96 J	120 J	73 J	280 J	92 J
4-Nitroaniline	1000 U	1000 U	480 J	1100 U	10000 U	420 U	990 U	1100 U	1000 U	1100 U
N-Nitrosodiphenylamine (1)	430 U	430 U	1300 U	440 U	4300 U	420 U	410 U	440 U	420 U	440 U
Phenanthrene	1900	1300	6800	1100	1700 J	1000	1100	1000	2200	1100
Anthracene	520	330 J	1500	250 J	1700 J	300 J	300 J	190 J	660	240 J
Carbazole	280 J	190 J	1300 U	170 J	4300 U	100 J	170 J	100 J	390 J	130 J
Di-n-butylphthalate	430 U	430 U	1300 U	440 U	4300 U	420 U	150 J	1800	420 U	300 J
Fluoranthene	2500	2000	6500	1800	2900 J	1600	1700	2000	2600	1800
Pyrene	2600	1900	7100	1800	3900 J	1700	1800	2100	2800	2000
Butylbenzylphthalate	430 U	430 U	1300 U	350 J	20000	420 U	410 U	250 J	420 U	440 U
Benzo(a)anthracene	1500	1100	3000	1100	1800 J	930	1100	1000	1700	1400
Chrysene	1700	1300	3300	1300	2000 J	1100	1300	1300	1900	1400
bis(2-Ethylhexyl)phthalate	1300	540	1500	1600	2700 J	1500	1400	1400	1100	1200
Di-n-octylphthalate	430 U	430 U	1300 U	440 U	4300 U	74 J	410 U	440 U	59 J	440 U
Benzo(b)fluoranthene	2200	1400	2400	1200	1500 J	1400	1900	1300	2200	1300
Benzo(k)fluoranthene	1100	1200	2000	1000	1100 J	900	1100	750	1300	1100
Benzo(a)pyrene	1500	1200	2300	1000	1300 J	970	1300	1000	1600	1300
Indeno(1,2,3-cd)pyrene	530	370 J	750 J	530	470 J	320 J	440	420 J	500	720
Dibenzo(a,h)anthracene	350 J	240 J	450 J	350 J	4300 U	240 J	310 J	250 J	360 J	460
Benzo(g,h,i)perylene	350 J	240 J	340 J	430 J	4300 U	290 J	290 J	260 J	330 J	540

TABLE 2

SEMIVOLATILE ORGANIC COMPOUND RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID81	ID82	ID83	ID84	ID85	ID86	ID87	ID88	ID89	ID90
Laboratory Sample ID:	8FgAB	8FgAF	8FHA	8FBAB	8FHAF	8FiAM	8FiAB	8FiAF	8FJA	8FJAD
ERM ID:	CSES8FgAB	CSES8FgAF	CSES8FhA	CSES8FhAB	CSES8FhAF	CSES8FiA	CSES8FiAB	CSES8FiAF	CSES8FjA	CSES8FjAD
4-Methylphenol	460 U	400 U	430 U	440 U	420 U	410 U	400 U	440 U	1300 U	840 U
Isophorone	460 U	400 U	430 U	440 U	420 U	410 U	400 U	440 U	1300 U	840 U
2,4-Dichlorophenol	460 U	400 U	430 U	440 U	420 U	410 U	400 U	440 U	1300 U	840 U
Naphthalene	82 J	71 J	56 J	150 J	51 J	43 J	73 J	77 J	130 J	130 J
2-Methylnaphthalene	53 J	50 J	55 J	92 J	420 U	46 J	80 J	50 J	1300 U	120 J
Dimethylphthalate	460 U	400 U	74 J	440 U	420 U	410 U	400 U	440 U	1300 U	840 U
Acenaphthylene	63 J	74 J	49 J	62 J	43 J	46 J	63 J	38 J	120 J	140 J
2,6-Dinitrotoluene	460 U	400 U	430 U	440 U	420 U	410 U	400 U	440 U	1300 U	840 U
Acenaphthene	160 J	190 J	140 J	160 J	100 J	110 J	140 J	100 J	300 J	300 J
Dibenzofuran	460 U	64 J	77 J	82 J	420 U	58 J	93 J	57 J	130 J	840 U
2,4-Dinitrotoluene	460 U	400 U	430 U	440 U	420 U	410 U	400 U	440 U	1300 U	190 J
Fluorene	120 J	120 J	140 J	130 J	57 J	110 J	130 J	80 J	260 J	270 J
4-Nitroaniline	1100 U	980 U	1000 U	1100 U	1000 U	1000 U	980 U	1100 U	3200 U	2000 U
N-Nitrosodiphenylamine (1)	460 U	400 U	430 U	440 U	420 U	410 U	400 U	440 U	1300 U	840 U
Phenanthrene	1200	1400	1300	1200	670	1500	2100	1200	3500	3100
Anthracene	330 J	360 J	390 J	310 J	160 J	290 J	400 J	240 J	850 J	910
Carbazole	460 U	180 J	170 J	190 J	98 J	410 U	400 U	440 U	220 J	330 J
Di-n-butylphthalate	310 J	300 J	430 U	440 U	420 U	410 U	400 U	440 U	1300 U	840 U
Fluoranthene	2000	2500	1700	1900	1100	2300	3000	2200	6300	4700
Pyrene	2400	2600	1700	1900	1200	2300 J	3100	2400	6400	5000
Butylbenzylphthalate	460 U	200 J	430 U	440 U	420 U	750	730	440 U	130 J	840 U
Benzo(a)anthracene	1700	1500	1000	1300	710	1200	1400	1200	3000	3500
Chrysene	1600	1800	1200	1400	890	1500	1700	1600	3100	3400
bis(2-Ethylhexyl)phthalate	1200	2800	1700	1300	1600	2300	2200	2500	1200 J	1700
Di-n-octylphthalate	460 U	110 J	69 J	440 U	68 J	410 U	400 U	440 U	1300 U	840 U
Benzo(b)fluoranthene	1800	2600 J	1300	1600	1000	1400	2200	1700	2400	4200
Benzo(k)fluoranthene	1600	1800 J	1200	1200	920	1100	1100	960	1800	2300
Benzo(a)pyrene	1600	1800 J	1100	1400	780	1300	1400	1300	2100	3300
Indeno(1,2,3-cd)pyrene	570	530 J	360 J	690	230 J	700	340 J	440 J	700 J	1400
Dibenzo(a,h)anthracene	400 J	350 J	240 J	450	160 J	340 J	220 J	260 J	280 J	910 J
Benzo(g,h,i)perylene	380 J	350 J	220 J	550	150 J	350 J	170 J	220 J	500 J	970

TABLE 2

SEMIVOLATILE ORGANIC COMPOUND RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID91	ID92	ID93	ID94	ID95	ID96	ID97	ID98	ID99	ID100
Laboratory Sample ID:	8FKA	1EPA1C	EPA1CD	1EPA2C	IEPA3C	S1A	S1B	S2A	S2B	T1A
ERM ID:	CSES8FkA	CSESIEPA1C	CSESIEPA1CD	CSESIEPA2C	CSESIEPA3C	CSESS1A	CSESS1B	CSESS2A	CSESS2B	CSESTIA
4-Methylphenol	800 U	4300 U	4400 U	4300 U	4100 U	350 U	350 U	380 U	750 U	360 U
Isophorone	800 U	4300 U	4400 U	4300 U	4100 U	350 U	350 U	380 U	750 U	360 U
2,4-Dichlorophenol	800 U	4300 U	4400 U	4300 U	4100 U	350 U	350 U	380 U	750 U	360 U
Naphthalene	180 J	600 J	700 J	710 J	1500 J	350 U	44 J	380 U	660 J	72 J
2-Methylnaphthalene	140 J	4300 U	4400 U	4300 UJ	660 J	350 U	56 J	380 U	440 J	110 J
Dimethylphthalate	800 U	4300 U	4400 U	4300 U	4100 U	350 U	350 U	380 U	750 U	360 U
Acenaphthylene	110 J	4300 U	4400 U	420 J	570 J	350 U	39 J	380 U	120 J	32 J
2,6-Dinitrotoluene	800 U	4300 U	4400 U	4300 U	4100 U	350 U	350 U	380 U	750 U	360 U
Acenaphthene	360 J	1300 J	1500 J	2000 J	3100 J	350 U	110 J	380 U	570 J	79 J
Dibenzofuran	800 U	4300 U	4400 U	470 J	4100 U	350 U	52 J	380 U	570 J	95 J
2,4-Dinitrotoluene	370 J	4300 U	4400 U	4300 U	4100 U	350 U	350 U	380 U	750 U	360 U
Fluorene	240 J	600 J	640 J	950 J	2000 J	350 U	86 J	380 U	720 J	120 J
4-Nitroaniline	2000 U	10000 U	11000 U	10000 U	1200 J	850 U	860 U	920 U	1800 U	870 U
N-Nitrosodiphenylamine (1)	120 J	4300 U	4400 U	4300 U	4100 U	350 U	350 U	380 U	750 U	360 U
Phenanthrene	2600	8100	8400	9300	15000	160 J	670	70 J	2900	850
Anthracene	640 J	1700 J	1800 J	2500 J	4200	47 J	220 J	380 U	950	240 J
Carbazole	390 J	1100 J	1200 J	1500 J	2600 J	350 U	56 J	380 U	320 J	82 J
Di-n-butylphthalate	800 U	4300 U	3300 J	4300 U	4100 U	440 U	1500 U	380 U	750 U	1900 U
Fluoranthene	3900	16000	18000	16000	22000	290 J	850	84 J	2500	970
Pyrene	3600	16000	19000	14000	18000	240 J	840 J	80 J	2200	920
Butylbenzylphthalate	800 U	4300 U	4400 U	4300 U	4100 U	350 U	350 U	380 U	750 U	360 U
Benzo(a)anthracene	2700	11000	12000	11000	18000	160 J	630	380 U	1200	550
Chrysene	2800	12000	14000	13000	16000	170 J	560	50 J	1100	520
bis(2-Ethylhexyl)phthalate	2000	4900	5200	3900 J	3800 J	60 J	110 J	380 U	750 U	66 J
Di-n-octylphthalate	800 U	4300 U	4400 U	4300 U	4100 U	350 U	350 U	380 U	750 U	360 U
Benzo(b)fluoranthene	3500	13000	17000	14000	19000	180 J	570	380 U	880	470
Benzo(k)fluoranthene	2100	8600	9400	10000	11000	150 J	600	380 U	890	420
Benzo(a)pyrene	3000	10000	13000	13000	17000	170 J	620	380 U	920	420
Indeno(1,2,3-cd)pyrene	1900	3500 J	4200 J	9800	12000	77 J	300 J	380 U	300 J	150 J
Dibenzo(a,h)anthracene	1200	2000 J	2000 J	6300	7500	57 J	220 J	380 U	180 J	100 J
Benzo(g,h,i)perylene	1400	2400 J	3000 J	8400	9000	60 J	210 J	380 U	280 J	110 J

TABLE 2

SEMIVOLATILE ORGANIC COMPOUND RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID101	ID102	ID103	ID104	ID105	ID106
Laboratory Sample ID:	T1B	1AM	TF1B	F2A	2AD	F2B
ERM ID:	CSEST1B	CSESTF1A	CSESTF1B	CSESTF2A	CSESTF2AD	CSESTF2B
4-Methylphenol	380 U	15000 U	74000 U	380 U	370 U	380 U
Isophorone	380 U	15000 U	74000 U	380 U	370 U	380 U
2,4-Dichlorophenol	380 U	15000 U	74000 U	380 U	370 U	380 U
Naphthalene	65 J	3900 J	32000 J	79 J	39 J	380 U
2-Methylnaphthalene	64 J	3200 J	27000 J	60 J	44 J	41 J
Dimethylphthalate	380 U	15000 U	74000 U	380 U	370 U	380 U
Acenaphthylene	46 J	2300 J	11000 J	36 J	370 U	380 U
2,6-Dinitrotoluene	380 U	15000 U	74000 U	380 U	370 U	380 U
Acenaphthene	91 J	5000 J	40000 J	140 J	370 U	380 U
Dibenzofuran	100 J	6900 J	54000 J	120 J	38 J	380 U
2,4-Dinitrotoluene	380 U	15000 U	74000 U	380 U	370 U	380 U
Fluorene	140 J	7900 J	69000 J	220 J	40 J	39 J
4-Nitroaniline	930 U	36000 U	180000 U	920 U	900 U	910 U
N-Nitrosodiphenylamine (1)	380 U	15000 U	74000 U	380 U	370 U	380 U
Phenanthrene	1200	65000	410000	2300 J	350 J	270 J
Anthracene	360 J	17000	140000	550 J	110 J	74 J
Carbazole	99 J	5700 J	51000 J	230 J	370 U	380 U
Di-n-butylphthalate	1100 U	15000 U	74000 U	380 U	370 U	380 U
Fluoranthene	1400	69000	360000	2600 J	450	280 J
Pyrene	1300	57000	300000	1900 J	450	280 J
Butylbenzylphthalate	380 U	15000 U	74000 U	380 U	370 U	380 U
Benzo(a)anthracene	880	34000	200000	840 J	220 J	140 J
Chrysene	790	30000	170000	900 J	260 J	170 J
bis(2-Ethylhexyl)phthalate	94 J	15000 U	74000 U	180 J	310 J	64 J
Di-n-octylphthalate	380 U	15000 U	74000 U	380 U	370 U	380 U
Benzo(b)fluoranthene	750	22000	160000	850 J	260 J	170 J
Benzo(k)fluoranthene	600	20000	140000	620 J	180 J	120 J
Benzo(a)pyrene	650	22000	130000	740 J	250 J	140 J
Indeno(1,2,3-cd)pyrene	290 J	11000 J	33000 J	230 J	100 J	72 J
Dibenzo(a,h)anthracene	200 J	5900 J	22000 J	120 J	370 U	380 U
Benzo(g,h,i)perylene	200 J	10000 J	20000 J	150 J	110 J	63 J

Note: (1) All concentrations in ug/kg.

Key:

U = The compound was not detected at the specified limit.

UJ = The compound was not detected, but the limit is estimated.

J = Quantitation is approximate as a result fo the limitations identified during the quality assurance review.

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID1	ID2	ID3	ID4	ID5	ID6	ID7	ID8	ID9	ID10
Laboratory Sample ID:	1EPDAC	IEPA5C	1C1A	1C2A	C3A	C3C	1C4A	1C4AD	D1A	D2A
ERM ID:	CSESIEPA4C	CSESIEPA5C	CSES1C1A	CSES1C2A	CSES1C3A	CSES1C3C	CSES1C4A	CSES1C4AD	CSES1D1A	CSES1D2A
Naphthalene	1400 J	580 J	290 J	600 J	460 J	530 J	350 J	330 J	330 J	540 J
Acenaphthylene	ND	190 J	ND	ND	170 J	ND	ND	ND	360 J	320 J
Acenaphthene	3400 J	1600 J	1000 J	2700 J	840 J	1300 J	990 J	1000 J	450 J	1400 J
Fluorene	1700 J	850 J	430 J	1200 J	600 J	810 J	550 J	470 J	430 J	1000 J
Phenanthrene	21000	8400	4800	11000	4800	7200	5000	4800	3600	8700
Anthracene	4900 J	2500	1200 J	2900 J	1500	2100 J	1500 J	1200 J	1000	2600
Fluoranthene	41000	12000	9300	18000	7500	11000	8100	8900	4900	13000
Pyrene	46000	12000	7700	14000	6300	11000	8000	7300	5100	13000
Benzo(a)anthracene	27000	12000	5900	12000	5900	9100	7300	5500	4400	11000
Chrysene	30000	10000	6700	13000	5400	8500	6700	6300	4000	9900
Benzo(b)fluoranthene	34000	16000	8600	14000	7900	10000	8600	8900	5900 J	14000
Benzo(k)fluoranthene	16000	8000	4600	12000	2700	7000	6500	3700	2900 J	5300
Benzo(a)pyrene	29000	12000	7200	13000	5600	8800	7200	6800	4000 J	10000
Indeno(1,2,3-cd)pyrene	16000	4300	4600	9500	3500	4000	2600	4600	1500 J	5000
Dibenzo(a,h)anthracene	8400 J	2600	3000	6800	2300	2600	1800	3000	1100 J	3400
Benzo(g,h,i)perylene	12000	2800	3500	8100	2500	2900	1600	3500	990 J	3400
Total PAH Concentration:	291800	105820	68820	138800	57970	86840	66790	66300	40960	102560

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID11	ID12	ID13	ID14	ID15	ID16	ID17	ID18	ID19	ID20
Laboratory Sample ID:	D2AB	D2ABD	D2AF	FAA	1FcA	1FcAB	1FcAF	FEA	FEC	1FfA
ERM ID:	CSES1D2AB	CSES1D2ABD	CSES1D2AF	CSES1FaA	CSES1FcA	CSES1FcAB	CSES1FcAF	CSES1FeA	CSES1FeC	CSES1FfA
Naphthalene	740 J	530 J	2600	250 J	230 J	110 J	380 J	390 J	260 J	78 J
Acenaphthylene	400 J	380 J	180 J	98 J	120 J	220 J	82 J	95 J	87 J	57 J
Acenaphthene	1700 J	1500 J	1600 J	310 J	340 J	330 J	480	410 J	370 J	200 J
Fluorene	1100 J	1000 J	2000	280 J	250 J	280 J	470	300 J	280 J	170 J
Phenanthrene	11000	10000	9700	2000	2100	3000	2700	2800	2900	1600
Anthracene	3300 J	2900 J	3500	630	570	740 J	950	650 J	690 J	430
Fluoranthene	18000	17000	11000	2300	3000	4400	3000	3500	3500	2200
Pyrene	16000	14000	10000	3400	2600	4500	3300	4100	3900	2300
Benzo(a)anthracene	14000	13000	8700	2200	1800	3500	2500	3000	2800	1700
Chrysene	13000	12000	7800	2000	2000	3300	2200	3000	2800	1600
Benzo(b)fluoranthene	15000	16000	9200	2000 J	2800 J	3600 J	2500	4400 J	3800	1900
Benzo(k)fluoranthene	11000	7200	4800	1800 J	1500 J	2800 J	1300	2300 J	1700	1100
Benzo(a)pyrene	13000	12000	7600	1800 J	1900 J	3100 J	2000	3300 J	2800	1500
Indeno(1,2,3-cd)pyrene	4400	5700	4200	940 J	640 J	1100 J	880	1100 J	1000	720
Dibenzo(a,h)anthracene	3200 J	3900	2700	610 J	460 J	790 J	620	830 J	710 J	470
Benzo(g,h,i)perylene	2900 J	3700 J	3000	660 J	430 J	750 J	650	810 J	740 J	480
Total PAH Concentration:	128740	120810	88580	21278	20740	32520	24012	30985	28337	16505

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID21	ID22	ID23	ID24	ID25	ID26	ID27	ID28	ID29	ID30
Laboratory Sample ID:	1FfAB	1FfAFM	1FgA	1FhA	1FjA	1FgC	FJA	FKA	FKAD	1FLA
ERM ID:	CSES1FfAB	CSES1FfAFM	CSES1FgA	CSES1FhA	CSES1FiA	CSES1FiC	CSESFjA	CSESFkA	CSESFkAD	CSES1FLA
Naphthalene	95 J	110 J	59 J	65 J	98 J	100 J	83 J	370 J	380 J	12000 J
Acenaphthylene	110 J	90 J	69 J	73 J	220 J	260 J	62 J	98 J	130 J	430 J
Acenaphthene	200 J	280 J	220 J	200 J	280 J	280 J	150 J	690 J	660 J	6100 J
Fluorene	180 J	220 J	140 J	120 J	200 J	280 J	140 J	470 J	460 J	6000 J
Phenanthrene	1800	2400	1500	1500	2600	3100	1400	3600	3500	32000 J
Anthracene	440	610 J	380 J	370 J	630 J	790 J	380 J	910	800 J	12000 J
Fluoranthene	3000	3400	2500	2200	4600	4500	2100	4800	4500	32000 J
Pyrene	2600	3400	2300	2000	4000	4700	2100	4600	4400	27000 J
Benzo(a)anthracene	1700	2700	1500	1200	2600	3600	1600	3800	3500	21000 J
Chrysene	2000	2500	1700	1400	3000	3400	1500	3400	3300	18000 J
Benzo(b)fluoranthene	2700	2600	2100	2100	3600	3800	1700	4300	3800	19000 J
Benzo(k)fluoranthene	1100	2700	1100	980	2200	3000	1300	2100	2300	9100
Benzo(a)pyrene	1800	2400	1700	1400	2800	3200	1400	3300	3000	15000 J
Indeno(1,2,3-cd)pyrene	760	830	790	570	1400	1200	500 J	1800	1500	9100 J
Dibenzo(a,h)anthracene	520	580 J	520	370 J	960	780 J	360 J	1200	1000	6000 J
Benzo(g,h,i)perylene	500	540 J	560	380 J	1100	760 J	340 J	1200	1000	7100 J
Total PAH Concentration:	19505	25360	17138	14928	30288	33750	15115	36638	34230	231830

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID31	ID32	ID33	ID34	ID35	ID36	ID37	ID38	ID39	ID40
Laboratory Sample ID:	1F1AD	1FnA	5C1A	5C2A	5C2AB	5C2AF	5C3A	5D1A	5D2A	5D2C
ERM ID:	CSES1F1AD	CSES1FnA	CSES5C1A	CSES5C2A	CSES5C2AB	CSES5C2AF	CSES5C3A	CSES5D1A	CSES5D2A	CSES5D2C
Naphthalene	430 J	97 J	ND	210 J	340 J	ND	230 J	140 J	110 J	320 J
Acenaphthylene	240 J	120 J	ND	150 J	ND	ND	150 J	ND	73 J	ND
Acenaphthene	860 J	320 J	640 J	510 J	930 J	140 J	480 J	350 J	350 J	550 J
Fluorene	790 J	210 J	260 J	240 J	390 J	ND	230 J	180 J	190 J	300 J
Phenanthrene	6800 J	2200	3300	3400	5500	1100	3100	2500	2700	4500
Anthracene	2000 J	550 J	810 J	670 J	1100 J	210 J	680 J	570 J	600 J	1000 J
Fluoranthene	8700 J	3700	7200	7400	11000	2300	7800	5500	6500	7800
Pyrene	8600 J	3200	8500	8700	13000	2200	8200	5200	6500	9500
Benzo(a)anthracene	6500 J	2000	5100	4500	7600	1300	4800	3000	3600	5200
Chrysene	5900 J	2400	6000	5600	9700	1600	6200	3600	4200	6000
Benzo(b)fluoranthene	5900 J	3400	6800	6700	11000	1800	7000	5200	5000	5200
Benzo(k)fluoranthene	3900	1400	4200	3800	5700	950	4600	2600	3000	4300
Benzo(a)pyrene	4900 J	2400	5900	3600	9800	1500	3900	3800	4000	5500
Indeno(1,2,3-cd)pyrene	2400 J	1300	2000 J	2200	5400	530 J	2100	1000	950	2000 J
Dibenzo(a,h)anthracene	1700 J	870	1100 J	980 J	2900	220 J	1200 J	600 J	460 J	1100 J
Benzo(g,h,i)perylene	1700 J	940	1400 J	1200 J	3700	380 J	1200 J	700 J	590 J	1100 J
Total PAH Concentration:	61320	25107	53210	49860	88060	14230	51870	34940	38823	54370

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID41	ID42	ID43	ID44	ID45	ID46	ID47	ID48	ID49	ID50
Laboratory Sample ID:	5D2CD	5D3A	5D3AD	6D1A	6D2A	6E1A	6E2A	7C1A	7D1A	7D2A
ERM ID:	CSES5D2CD	CSES5D3A	CSES5D3AD	CSES6D1A	CSES6D2A	CSES6E1A	CSES6E2A	CSES7C1A	CSES7D1A	CSES7D2A
Naphthalene	ND	180 J	ND	ND	ND	ND	ND	120 J	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	520 J	ND	ND
Acenaphthene	ND	430 J	460 J	230 J	ND	110 J	330 J	270 J	ND	210 J
Fluorene	ND	220 J	270 J	ND	ND	ND	210 J	370 J	ND	ND
Phenanthrene	3000 J	3500	4400	1800	1500 J	1000 J	2700	3100	920	1600
Anthracene	650 J	760 J	960 J	340 J	330 J	210 J	580 J	840 J	180 J	380 J
Fluoranthene	5900 J	9300	12000	3700	3100	1800	5200	4000	1600	3100
Pyrene	6800	9800	12000	4400	3600	2200	5500	4200	1600	3600
Benzo(a)anthracene	4200 J	5700	7200	2400	2300	1200 J	2900	3200	960	2100
Chrysene	4600 J	7200	8800	2900	2600	1300	3200	3000	1100	2400
Benzo(b)fluoranthene	4200 J	7100	8700	2700	2700	1100 J	2600	3000	920	2100
Benzo(k)fluoranthene	3300 J	4000	3900	1700	1600 J	840 J	1800 J	2100	660 J	1400
Benzo(a)pyrene	4200 J	5600	6600	2400	2200 J	980 J	2500	2500	810 J	1900
Indeno(1,2,3-cd)pyrene	1700 J	2800	3500	770 J	900 J	370 J	1500 J	1400	500 J	1100 J
Dibenzo(a,h)anthracene	870 J	1500 J	1900 J	410 J	480 J	190 J	610 J	940	270 J	570 J
Benzo(g,h,i)perylene	1100 J	1800 J	2200 J	500 J	520 J	250 J	1000 J	970	280 J	670 J
Total PAH Concentration:	40520	59890	72890	24250	21830	11550	30630	30530	9800	21130

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID51	ID52	ID53	ID54	ID55	ID56	ID57	ID58	ID59	ID60
Laboratory Sample ID:	7D2AB	7D2AF	7E1A	7E2A	7E2AB	7E2AD	7E2AF	8C1A	8C2A	8C3A
ERM ID:	CSES7D2AB	CSES7D2AF	CSES7E1A	CSES7E2A	CSES7E2AB	CSES7E2AD	CSES7E2AF	CSES8C1A	CSES8C2A	CSES8C3A
Naphthalene	170 J	ND	ND	120 J	350 J	110 J	71 J	ND	210 J	220 J
Acenaphthylene	85 J	ND	ND	ND	ND	54 J	ND	220 J	140 J	130 J
Acenaphthene	340 J	200 J	ND	270 J	440 J	120 J	210 J	460 J	390 J	330 J
Fluorene	200 J	150 J	ND	220 J	490 J	100 J	190 J	370 J	220 J	270 J
Phenanthrene	3000	2300	280 J	3000	5800	1500	2000	5600	3300	3500
Anthracene	670 J	490 J	57 J	660 J	1200 J	330 J	450	1200 J	690 J	660 J
Fluoranthene	6600	3300	570	5200	7500	2900	2900	11000	7500	6600
Pyrene	7200	4000	610	5100	7600	3000	2800	10000	7800	6100
Benzo(a)anthracene	3500	1700	300 J	2600	3700	1600	1300	5900	4300	3400
Chrysene	4400	1900	370 J	3000	4100	1900	1500	6600	4800	4000
Benzo(b)fluoranthene	4500	1400	480	2700	3600	2600	1900	5100	5700	3700
Benzo(k)fluoranthene	3000	880 J	320 J	1800	2300	1500	1100	4200	3200	1900
Benzo(a)pyrene	3800	1300 J	340 J	2400	3000	1700	1200	4300	4000	2700
Indeno(1,2,3-cd)pyrene	1100	680 J	90 J	1200 J	1100 J	340 J	250 J	1300 J	1200 J	1200 J
Dibenzo(a,h)anthracene	590 J	250 J	ND	680 J	670 J	220 J	160 J	760 J	460 J	510 J
Benzo(g,h,i)perylene	630 J	520 J	ND	670 J	500 J	160 J	110 J	960 J	760 J	950 J
Total PAH Concentration:	39785	19070	3417	29620	42350	18134	16141	57970	44670	36170

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID61	ID62	ID63	ID64	ID65	ID66	ID67	ID68	ID69	ID70
Laboratory Sample ID:	8D1A	8D2A	8E1A	8E1AB	8EA1F	8E1AFD	8E1C	8E2A	8E3A	8E3C
ERM ID:	CSES8D1A	CSES8D2A	CSES8E1A	CSES8E1AB	CSES8E1AF	CSES8E1AFD	CSES8E1C	CSES8E2A	CSES8E3A	CSES8E3C
Naphthalene	ND	ND	49 J	ND	ND	ND	96 J	240 J	ND	130 J
Acenaphthylene	ND	ND	55 J	ND	93 J	44 J	88 J	190 J	110 J	110 J
Acenaphthene	110 J	ND	100 J	260 J	140 J	64 J	160 J	590 J	120 J	240 J
Fluorene	ND	ND	100 J	270 J	130 J	58 J	150 J	600 J	94 J	190 J
Phenanthrene	1000	1600 J	1600	3200	2000	940	2500	6700	1400	2200
Anthracene	210 J	300 J	340 J	600 J	440 J	200 J	520 J	1500 J	280 J	480 J
Fluoranthene	2100	2700	2800	4600	3800	1900	4300	8500	2800	4100
Pyrene	2200	2500	3200	4500	5200	2600	6000	9200	3200	4600
Benzo(a)anthracene	1200	1400 J	1500	2200	2000	1000	2500	4200	1600	2300
Chrysene	1400	1800	1800	2600	2400	1300	2900	4900	2100	2800
Benzo(b)fluoranthene	1300	2000	1900	2500	2300	1200	2900	4600	2200	2600
Benzo(k)fluoranthene	960	1300 J	1000	1700	1700	800	1600	3300	1500	2200
Benzo(a)pyrene	1200	1600 J	1500	2200	2300	1100	2500	4000	1800	2400
Indeno(1,2,3-cd)pyrene	510 J	1100 J	580	1200	650 J	440 J	760 J	1500 J	690 J	870 J
Dibenzo(a,h)anthracene	220 J	530 J	330 J	600 J	380 J	250 J	440 J	850 J	400 J	530 J
Benzo(g,h,i)perylene	380 J	340 J	360 J	790 J	510 J	270 J	380 J	550 J	280 J	440 J
Total PAH Concentration:	12790	17170	17214	27220	24043	12166	27794	51420	18574	26190

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID71	ID72	ID73	ID74	ID75	ID76	ID77	ID78	ID79	ID80
Laboratory Sample ID:	8FAA	8FAC	8F1bA	8FCA	8FCAB	8FCAF	8FDA	8FeAM	8FFA	8FgA
ERM ID:	CSES8FaA	CSES8FaC	CSES8FbA	CSES8FcA	CSES8FcAB	CSES8FcAF	CSES8FdA	CSES8FeA	CSES8FfA	CSES8FgA
Naphthalene	76 J	58 J	560 J	ND	ND	ND	78 J	ND	58 J	53 J
Acenaphthylene	110 J	110 J	ND	130 J	ND	68 J	70 J	52 J	56 J	46 J
Acenaphthene	ND	120 J	480 J	72 J	ND	84 J	170 J	89 J	300 J	120 J
Fluorene	220 J	120 J	570 J	88 J	ND	96 J	120 J	73 J	280 J	92 J
Phenanthrene	1900	1300	6800	1100	1700 J	1000	1100	1000	2200	1100
Anthracene	520	330 J	1500	250 J	1700 J	300 J	300 J	190 J	660	240 J
Fluoranthene	2500	2000	6500	1800	2900 J	1600	1700	2000	2600	1800
Pyrene	2600	1900	7100	1800	3900 J	1700	1800	2100	2800	2000
Benzo(a)anthracene	1500	1100	3000	1100	1800 J	930	1100	1000	1700	1400
Chrysene	1700	1300	3300	1300	2000 J	1100	1300	1300	1900	1400
Benzo(b)fluoranthene	2200	1400	2400	1200	1500 J	1400	1900	1300	2200	1300
Benzo(k)fluoranthene	1100	1200	2000	1000	1100 J	900	1100	750	1300	1100
Benzo(a)pyrene	1500	1200	2300	1000	1300 J	970	1300	1000	1600	1300
Indeno(1,2,3-cd)pyrene	530	370 J	750 J	530	470 J	320 J	440	420 J	500	720
Dibenzo(a,h)anthracene	350 J	240 J	450 J	350 J	ND	240 J	310 J	250 J	360 J	460
Benzo(g,h,i)perylene	350 J	240 J	340 J	430 J	ND	290 J	290 J	260 J	330 J	540
Total PAH Concentration:	17156	12988	38050	12150	18370	10998	13078	11784	18844	13671

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID81	ID82	ID83	ID84	ID85	ID86	ID87	ID88	ID89	ID90
Laboratory Sample ID:	8FgAB	8FgAF	8FHA	8FBAB	8FHAF	8FiAM	8FiAB	8FiAF	8FJA	8FJAD
ERM ID:	CSES8FgAB	CSES8FgAF	CSES8FhA	CSES8FhAB	CSES8FhAF	CSES8FiA	CSES8FiAB	CSES8FiAF	CSES8FjA	CSES8FjAD
Naphthalene	82 J	71 J	56 J	150 J	51 J	43 J	73 J	77 J	130 J	130 J
Acenaphthylene	63 J	74 J	49 J	62 J	43 J	46 J	63 J	38 J	120 J	140 J
Acenaphthene	160 J	190 J	140 J	160 J	100 J	110 J	140 J	100 J	300 J	300 J
Fluorene	120 J	120 J	140 J	130 J	57 J	110 J	130 J	80 J	260 J	270 J
Phenanthrene	1200	1400	1300	1200	670	1500	2100	1200	3500	3100
Anthracene	330 J	360 J	390 J	310 J	160 J	290 J	400 J	240 J	850 J	910
Fluoranthene	2000	2500	1700	1900	1100	2300	3000	2200	6300	4700
Pyrene	2400	2600	1700	1900	1200	2300 J	3100	2400	6400	5000
Benzo(a)anthracene	1700	1500	1000	1300	710	1200	1400	1200	3000	3500
Chrysene	1600	1800	1200	1400	890	1500	1700	1600	3100	3400
Benzo(b)fluoranthene	1800	2600 J	1300	1600	1000	1400	2200	1700	2400	4200
Benzo(k)fluoranthene	1600	1800 J	1200	1200	920	1100	1100	960	1800	2300
Benzo(a)pyrene	1600	1800 J	1100	1400	780	1300	1400	1300	2100	3300
Indeno(1,2,3-cd)pyrene	570	530 J	360 J	690	230 J	700	340 J	440 J	700 J	1400
Dibenzo(a,h)anthracene	400 J	350 J	240 J	450	160 J	340 J	220 J	260 J	280 J	910 J
Benzo(g,h,i)perylene	380 J	350 J	220 J	550	150 J	350 J	170 J	220 J	500 J	970
Total PAH Concentration:	16005	18045	12095	14402	8221	14589	17536	14015	31740	34530

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID91	ID92	ID93	ID94	ID95	ID96	ID97	ID98	ID99	ID100
Laboratory Sample ID:	8FKA	1EPA1C	EPA1CD	1EPA2C	IEPA3C	S1A	S1B	CSESS2A	CSESS2B	T1A
ERM ID:	CSES8FkA	CSESIEPA1C	CSESIEPA1CD	CSESIEPA2C	CSESIEPA3C	CSESS1A	CSESS1B	CSESS2A	CSESS2B	CSEST1A
Naphthalene	180 J	600 J	700 J	710 J	1500 J	ND	44 J	ND	660 J	72 J
Acenaphthylene	110 J	ND	ND	420 J	570 J	ND	39 J	ND	120 J	32 J
Acenaphthene	360 J	1300 J	1500 J	2000 J	3100 J	ND	110 J	ND	570 J	79 J
Fluorene	240 J	600 J	640 J	950 J	2000 J	ND	86 J	ND	720 J	120 J
Phenanthrene	2600	8100	8400	9300	15000	160 J	670	70 J	2900	850
Anthracene	640 J	1700 J	1800 J	2500 J	4200	47 J	220 J	ND	950	240 J
Fluoranthene	3900	16000	18000	16000	22000	290 J	850	84 J	2500	970
Pyrene	3600	16000	19000	14000	18000	240 J	840 J	80 J	2200	920
Benzo(a)anthracene	2700	11000	12000	11000	18000	160 J	630	ND	1200	550
Chrysene	2800	12000	14000	13000	16000	170 J	560	50 J	1100	520
Benzo(b)fluoranthene	3500	13000	17000	14000	19000	180 J	570	ND	880	470
Benzo(k)fluoranthene	2100	8600	9400	10000	11000	150 J	600	ND	890	420
Benzo(a)pyrene	3000	10000	13000	13000	17000	170 J	620	ND	920	420
Indeno(1,2,3-cd)pyrene	1900	3500 J	4200 J	9800	12000	77 J	300 J	ND	300 J	150 J
Dibenzo(a,h)anthracene	1200	2000 J	2000 J	6300	7500	57 J	220 J	ND	180 J	100 J
Benzo(g,h,i)perylene	1400	2400 J	3000 J	8400	9000	60 J	210 J	ND	280 J	110 J
Total PAH Concentration:	30230	106800	124640	131380	175870	1761	6569	284	16370	6023

TABLE 3

POLYNUCLEAR AROMATIC HYDROCARBON RESULTS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:	ID101	ID102	ID103	ID104	ID105	ID106
Laboratory Sample ID:	T1B	CSESTF1AM	TF1B	CSESTF2A	CSESTF2AD	CSESTF2B
ERM ID:	CSEST1B	CSESTF1A	CSESTF1B	CSESTF2A	CSESTF2AD	CSESTF2B
Naphthalene	65 J	3900 J	32000 J	79 J	39 J	ND
Acenaphthylene	46 J	2300 J	11000 J	36 J	ND	ND
Acenaphthene	91 J	5000 J	40000 J	140 J	ND	ND
Fluorene	140 J	7900 J	69000 J	220 J	40 J	39 J
Phenanthrene	1200	65000	410000	2300 J	350 J	270 J
Anthracene	360 J	17000	140000	550 J	110 J	74 J
Fluoranthene	1400	69000	360000	2600 J	450	280 J
Pyrene	1300	57000	300000	1900 J	450	280 J
Benzo(a)anthracene	880	34000	200000	840 J	220 J	140 J
Chrysene	790	30000	170000	900 J	260 J	170 J
Benzo(b)fluoranthene	750	22000	160000	850 J	260 J	170 J
Benzo(k)fluoranthene	600	20000	140000	620 J	180 J	120 J
Benzo(a)pyrene	650	22000	130000	740 J	250 J	140 J
Indeno(1,2,3-cd)pyrene	290 J	11000 J	33000 J	230 J	100 J	72 J
Dibenzo(a,h)anthracene	200 J	5900 J	22000 J	120 J	ND	ND
Benzo(g,h,i)perylene	200 J	10000 J	20000 J	150 J	110 J	63 J
Total PAH Concentration:	8962	382000	2237000	12275	2819	1818

Note: (1) All concentrations are in ug/kg.

Key:

U = The compound was not detected at the specified limit.

UJ = The compound was not detected, but the limit is estimated.

J = Quantitation is approximate as a result of the limitations identified during the quality assurance review.

ND = Not detected.

TABLE 4

BENZO(a)PYRENE EQUIVALENCE CALCULATIONS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:		ID1		ID2		ID3		ID4		ID5	
Laboratory Sample ID:	Relative	1EPDAC	Benzo(a)pyrene	IEPA5C	Benzo(a)pyrene	1C1A	Benzo(a)pyrene	1C2A	Benzo(a)pyrene	C3A	Benzo(a)pyrene
ERM ID:	Potency (2)	CSESIEPA4C	Equivalent	CSESIEPA5C	Equivalent	CSES1C1A	Equivalent	CSES1C2A	Equivalent	CSES1C3A	Equivalent
Benzo(a)anthracene	0.145	27000	3915	12000	1740	5900	855.5	12000	1740	5900	855.5
Chrysene	0.0044	30000	132	10000	44	6700	29.48	13000	57.2	5400	23.76
Benzo(b)fluoranthene	0.14	34000	4760	16000	2240	8600	1204	14000	1960	7900	1106
Benzo(k)fluoranthene	0.066	16000	1056	8000	528	4600	303.6	12000	792	2700	178.2
Benzo(a)pyrene	1	29000	29000	12000	12000	7200	7200	13000	13000	5600	5600
Indeno(1,2,3-cd)pyrene	0.232	16000	3712	4300	997.6	4600	1067.2	9500	2204	3500	812
Dibenzo(a,h)anthracene	1.11	8400 J	9324	2600	2886	3000	3330	6800	7548	2300	2553
Total Benzo(a)pyrene equivalence:			51899		20435.6		13989.78		27301.2		11128.46

Map ID:		ID6		ID7		ID8		ID9		ID10	
Laboratory Sample ID:	Relative	C3C	Benzo(a)pyrene	1C4A	Benzo(a)pyrene	1C4AD	Benzo(a)pyrene	D1A	Benzo(a)pyrene	D2A	Benzo(a)pyrene
ERM ID:	Potency (2)	CSES1C3C	Equivalent	CSES1C4A	Equivalent	CSES1C4AD	Equivalent	CSES1D1A	Equivalent	CSES1D2A	Equivalent
Benzo(a)anthracene	0.145	9100	1319.5	7300	1058.5	5500	797.5	4400	638	11000	1595
Chrysene	0.0044	8500	37.4	6700	29.48	6300	27.72	4000	17.6	9900	43.56
Benzo(b)fluoranthene	0.14	10000	1400	8600	1204	8900	1246	5900 J	826	14000	1960
Benzo(k)fluoranthene	0.066	7000	462	6500	429	3700	244.2	2900 J	191.4	5300	349.8
Benzo(a)pyrene	1	8800	8800	7200	7200	6800	6800	4000 J	4000	10000	10000
Indeno(1,2,3-cd)pyrene	0.232	4000	928	2600	603.2	4600	1067.2	1500 J	348	5000	1160
Dibenzo(a,h)anthracene	1.11	2600	2886	1800	1998	3000	3330	1100 J	1221	3400	3774
Total Benzo(a)pyrene equivalence:			15832.9		12522.18		13512.62		7242		18882.36

TABLE 4

BENZO(a)PYRENE EQUIVALENCE CALCULATIONS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:		ID11		ID12		ID13		ID14		ID15	
Laboratory Sample ID:	Relative	D2AB	Benzo(a)pyrene	D2ABD	Benzo(a)pyrene	D2AF	Benzo(a)pyrene	FAA	Benzo(a)pyrene	1FcA	Benzo(a)pyrene
ERM ID:	Potency (2)	CSES1D2AB	Equivalent	CSES1D2ABD	Equivalent	CSES1D2AF	Equivalent	CSES1FaA	Equivalent	CSES1FcA	Equivalent
Benzo(a)anthracene	0.145	14000	2030	13000	1885	8700	1261.5	2200	319	1800	261
Chrysene	0.0044	13000	57.2	12000	52.8	7800	34.32	2000	8.8	2000	8.8
Benzo(b)fluoranthene	0.14	15000	2100	16000	2240	9200	1288	2000 J	280	2800 J	392
Benzo(k)fluoranthene	0.066	11000	726	7200	475.2	4800	316.8	1800 J	118.8	1500 J	99
Benzo(a)pyrene	1	13000	13000	12000	12000	7600	7600	1800 J	1800	1900 J	1900
Indeno(1,2,3-cd)pyrene	0.232	4400	1020.8	5700	1322.4	4200	974.4	940 J	218.08	640 J	148.48
Dibenzo(a,h)anthracene	1.11	3200 J	3552	3900	4329	2700	2997	610 J	677.1	460 J	510.6
Total Benzo(a)pyrene equivalence:			22486		22304.4		14472.02		3421.78		3319.88

Map ID:		ID16		ID17		ID18		ID19		ID20	
Laboratory Sample ID:	Relative	1FcAB	Benzo(a)pyrene	1FcAF	Benzo(a)pyrene	FEA	Benzo(a)pyrene	FEC	Benzo(a)pyrene	1FfA	Benzo(a)pyrene
ERM ID:	Potency (2)	CSES1FcAB	Equivalent	CSES1FcAF	Equivalent	CSES1FeA	Equivalent	CSES1FeC	Equivalent	CSES1FfA	Equivalent
Benzo(a)anthracene	0.145	3500	507.5	2500	362.5	3000	435	2800	406	1700	246.5
Chrysene	0.0044	3300	14.52	2200	9.68	3000	13.2	2800	12.32	1600	7.04
Benzo(b)fluoranthene	0.14	3600 J	504	2500	350	4400 J	616	3800	532	1900	266
Benzo(k)fluoranthene	0.066	2800 J	184.8	1300	85.8	2300 J	151.8	1700	112.2	1100	72.6
Benzo(a)pyrene	1	3100 J	3100	2000	2000	3300 J	3300	2800	2800	1500	1500
Indeno(1,2,3-cd)pyrene	0.232	1100 J	255.2	880	204.16	1100 J	255.2	1000	232	720	167.04
Dibenzo(a,h)anthracene	1.11	790 J	876.9	620	688.2	830 J	921.3	710 J	788.1	470	521.7
Total Benzo(a)pyrene equivalence:			5442.92		3700.34		5692.5		4882.62		2780.88

TABLE 4

BENZO(a)PYRENE EQUIVALENCE CALCULATIONS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID: Laboratory Sample ID: ERM ID:	Relative Potency (2)	ID21 1FfAB CSES1FfAB	Benzo(a)pyrene Equivalent	ID22 1FfAFM CSES1FfAFM	Benzo(a)pyrene Equivalent	ID23 1FgA CSES1FgA	Benzo(a)pyrene Equivalent	ID24 1FhA CSES1FhA	Benzo(a)pyrene Equivalent	ID25 1FjA CSES1FIA	Benzo(a)pyrene Equivalent
Benzo(a)anthracene	0.145	1700	246.5	2700	391.5	1500	217.5	1200	174	2600	377
Chrysene	0.0044	2000	8.8	2500	11	1700	7.48	1400	6.16	3000	13.2
Benzo(b)fluoranthene	0.14	2700	378	2600	364	2100	294	2100	294	3600	504
Benzo(k)fluoranthene	0.066	1100	72.6	2700	178.2	1100	72.6	980	64.68	2200	145.2
Benzo(a)pyrene	1	1800	1800	2400	2400	1700	1700	1400	1400	2800	2800
Indeno(1,2,3-cd)pyrene	0.232	760	176.32	830	192.56	790	183.28	570	132.24	1400	324.8
Dibenzo(a,h)anthracene	1.11	520	577.2	580 J	643.8	520	577.2	370 J	410.7	960	1065.6
Total Benzo(a)pyrene equivalence:			3259.42		4181.06		3052.06		2481.78		5229.8

Map ID: Laboratory Sample ID: ERM ID:	Relative Potency (2)	ID26 1FgC CSES1FiC	Benzo(a)pyrene Equivalent	ID27 FJA CSESFjA	Benzo(a)pyrene Equivalent	ID28 FKA CSESFkA	Benzo(a)pyrene Equivalent	ID29 FKAD CSESFkAD	Benzo(a)pyrene Equivalent	ID30 1FLA CSES1FLA	Benzo(a)pyrene Equivalent
Benzo(a)anthracene	0.145	3600	522	1600	232	3800	551	3500	507.5	21000	3045
Chrysene	0.0044	3400	14.96	1500	6.6	3400	14.96	3300	14.52	18000	79.2
Benzo(b)fluoranthene	0.14	3800	532	1700	238	4300	602	3800	532	19000	2660
Benzo(k)fluoranthene	0.066	3000	198	1300	85.8	2100	138.6	2300	151.8	9100	600.6
Benzo(a)pyrene	1	3200	3200	1400	1400	3300	3300	3000	3000	15000	15000
Indeno(1,2,3-cd)pyrene	0.232	1200	278.4	500 J	116	1800	417.6	1500	348	9100	2111.2
Dibenzo(a,h)anthracene	1.11	780 J	865.8	360 J	399.6	1200	1332	1000	1110	6000	6660
Total Benzo(a)pyrene equivalence:			5611.16		2478		6356.16		5663.82		30156

TABLE 4

BENZO(a)PYRENE EQUIVALENCE CALCULATIONS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:		ID31		ID32		ID33		ID34		ID35	
Laboratory Sample ID:	Relative	1F1AD	Benzo(a)pyrene	1FnA	Benzo(a)pyrene	5C1A	Benzo(a)pyrene	5C2A	Benzo(a)pyrene	5C2AB	Benzo(a)pyrene
ERM ID:	Potency (2)	CSES1F1AD	Equivalent	CSES1FnA	Equivalent	CSES5C1A	Equivalent	CSES5C2A	Equivalent	CSES5C2AB	Equivalent
Benzo(a)anthracene	0.145	6500 J	942.5	2000	290	5100	739.5	4500	652.5	7600	1102
Chrysene	0.0044	5900 J	25.96	2400	10.56	6000	26.4	5600	24.64	9700	42.68
Benzo(b)fluoranthene	0.14	5900 J	826	3400	476	6800	952	6700	938	11000	1540
Benzo(k)fluoranthene	0.066	3900	257.4	1400	92.4	4200	277.2	3800	250.8	5700	376.2
Benzo(a)pyrene	1	4900 J	4900	2400	2400	5900	5900	3600	3600	9800	9800
Indeno(1,2,3-cd)pyrene	0.232	2400 J	556.8	1300	301.6	2000 J	464	2200	510.4	5400	1252.8
Dibenzo(a,h)anthracene	1.11	1700 J	1887	870	965.7	1100 J	1221	980 J	1087.8	2900	3219
Total Benzo(a)pyrene equivalence:			9395.66		4536.26		9580.1		7064.14		17332.68

Map ID:		ID36		ID37		ID38		ID39		ID40	
Laboratory Sample ID:	Relative	5C2AF	Benzo(a)pyrene	5C3A	Benzo(a)pyrene	5D1A	Benzo(a)pyrene	5D2A	Benzo(a)pyrene	5D2C	Benzo(a)pyrene
ERM ID:	Potency (2)	CSES5C2AF	Equivalent	CSES5C3A	Equivalent	CSES5D1A	Equivalent	CSES5D2A	Equivalent	CSES5D2C	Equivalent
Benzo(a)anthracene	0.145	1300	188.5	4800	696	3000	435	3600	522	5200	754
Chrysene	0.0044	1600	7.04	6200	27.28	3600	15.84	4200	18.48	6000	26.4
Benzo(b)fluoranthene	0.14	1800	252	7000	980	5200	728	5000	700	5200	728
Benzo(k)fluoranthene	0.066	950	62.7	4600	303.6	2600	171.6	3000	198	4300	283.8
Benzo(a)pyrene	1	1500	1500	3900	3900	3800	3800	4000	4000	5500	5500
Indeno(1,2,3-cd)pyrene	0.232	530 J	122.96	2100	487.2	1000	232	950	220.4	2000	464
Dibenzo(a,h)anthracene	1.11	220 J	244.2	1200 J	1332	600 J	666	460 J	510.6	1100	1221
Total Benzo(a)pyrene equivalence:			2377.4		7726.08		6048.44		6169.48		8977.2

TABLE 4

BENZO(a)PYRENE EQUIVALENCE CALCULATIONS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID: Laboratory Sample ID: ERM ID:	Relative Potency (2)	ID41 5D2CD CSES5D2CD	Benzo(a)pyrene Equivalent	ID42 5D3A CSES5D3A	Benzo(a)pyrene Equivalent	ID43 5D3AD CSES5D3AD	Benzo(a)pyrene Equivalent	ID44 6D1A CSES6D1A	Benzo(a)pyrene Equivalent	ID45 6D2A CSES6D2A	Benzo(a)pyrene Equivalent
Benzo(a)anthracene	0.145	4200 J	609	5700	826.5	7200	1044	2400	348	2300	333.5
Chrysene	0.0044	4600 J	20.24	7200	31.68	8800	38.72	2900	12.76	2600	11.44
Benzo(b)fluoranthene	0.14	4200 J	588	7100	994	8700	1218	2700	378	2700	378
Benzo(k)fluoranthene	0.066	3300 J	217.8	4000	264	3900	257.4	1700	112.2	1600 J	105.6
Benzo(a)pyrene	1	4200 J	4200	5600	5600	6600	6600	2400	2400	2200 J	2200
Indeno(1,2,3-cd)pyrene	0.232	1700 J	394.4	2800	649.6	3500	812	770 J	178.64	900 J	208.8
Dibenzo(a,h)anthracene	1.11	870 J	965.7	1500 J	1665	1900 J	2109	410 J	455.1	480 J	532.8
Total Benzo(a)pyrene equivalence:			6995.14		10030.78		12079.12		3884.7		3770.14

Map ID: Laboratory Sample ID: ERM ID:	Relative Potency (2)	ID46 6E1A CSES6E1A	Benzo(a)pyrene Equivalent	ID47 6E2A CSES6E2A	Benzo(a)pyrene Equivalent	ID48 7C1A CSES7C1A	Benzo(a)pyrene Equivalent	ID49 7D1A CSES7D1A	Benzo(a)pyrene Equivalent	ID50 7D2A CSES7D2A	Benzo(a)pyrene Equivalent
Benzo(a)anthracene	0.145	1200 J	174	2900	420.5	3200	464	960	139.2	2100	304.5
Chrysene	0.0044	1300	5.72	3200	14.08	3000	13.2	1100	4.84	2400	10.56
Benzo(b)fluoranthene	0.14	1100 J	154	2600	364	3000	420	920	128.8	2100	294
Benzo(k)fluoranthene	0.066	840 J	55.44	1800 J	118.8	2100	138.6	660 J	43.56	1400	92.4
Benzo(a)pyrene	1	980 J	980	2500	2500	2500	2500	810 J	810	1900	1900
Indeno(1,2,3-cd)pyrene	0.232	370 J	85.84	1500 J	348	1400	324.8	500 J	116	1100	255.2
Dibenzo(a,h)anthracene	1.11	190 J	210.9	610 J	677.1	940	1043.4	270 J	299.7	570	632.7
Total Benzo(a)pyrene equivalence:			1665.9		4442.48		4904		1542.1		3489.36

TABLE 4

BENZO(a)PYRENE EQUIVALENCE CALCULATIONS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:		ID51		ID52		ID53		ID54		ID55	
Laboratory Sample ID:	Relative	7D2AB	Benzo(a)pyrene	7D2AF	Benzo(a)pyrene	7E1A	Benzo(a)pyrene	7E2A	Benzo(a)pyrene	7E2AB	Benzo(a)pyrene
ERM ID:	Potency (2)	CSES7D2AB	Equivalent	CSES7D2AF	Equivalent	CSES7E1A	Equivalent	CSES7E2A	Equivalent	CSES7E2AB	Equivalent
Benzo(a)anthracene	0.145	3500	507.5	1700	246.5	300 J	43.5	2600	377	3700	536.5
Chrysene	0.0044	4400	19.36	1900	8.36	370 J	1.628	3000	13.2	4100	18.04
Benzo(b)fluoranthene	0.14	4500	630	1400	196	480	67.2	2700	378	3600	504
Benzo(k)fluoranthene	0.066	3000	198	880 J	58.08	320 J	21.12	1800	118.8	2300	151.8
Benzo(a)pyrene	1	3800	3800	1300 J	1300	340 J	340	2400	2400	3000	3000
Indeno(1,2,3-cd)pyrene	0.232	1100	255.2	680 J	157.76	90 J	20.88	1200 J	278.4	1100 J	255.2
Dibenzo(a,h)anthracene	1.11	590 J	654.9	250 J	277.5	ND	0	680 J	754.8	670 J	743.7
Total Benzo(a)pyrene equivalence:			6064.96		2244.2		494.328		4320.2		5209.24

Map ID:		ID56		ID57		ID58		ID59		ID60	
Laboratory Sample ID:	Relative	7E2AD	Benzo(a)pyrene	7E2AF	Benzo(a)pyrene	8C1A	Benzo(a)pyrene	8C2A	Benzo(a)pyrene	8C3A	Benzo(a)pyrene
ERM ID:	Potency (2)	CSES7E2AD	Equivalent	CSES7E2AF	Equivalent	CSES8C1A	Equivalent	CSES8C2A	Equivalent	CSES8C3A	Equivalent
Benzo(a)anthracene	0.145	1600	232	1300	188.5	5900	855.5	4300	623.5	3400	493
Chrysene	0.0044	1900	8.36	1500	6.6	6600	29.04	4800	21.12	4000	17.6
Benzo(b)fluoranthene	0.14	2600	364	1900	266	5100	714	5700	798	3700	518
Benzo(k)fluoranthene	0.066	1500	99	1100	72.6	4200	277.2	3200	211.2	1900	125.4
Benzo(a)pyrene	1	1700	1700	1200	1200	4300	4300	4000	4000	2700	2700
Indeno(1,2,3-cd)pyrene	0.232	340 J	78.88	250 J	58	1300 J	301.6	1200 J	278.4	1200	278.4
Dibenzo(a,h)anthracene	1.11	220 J	244.2	160 J	177.6	760 J	843.6	460 J	510.6	510	566.1
Total Benzo(a)pyrene equivalence:			2726.44		1969.3		7320.94		6442.82		4698.5

TABLE 4

BENZO(a)PYRENE EQUIVALENCE CALCULATIONS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID: Laboratory Sample ID: ERM ID:	Relative Potency (2)	ID61 8D1A CSES8D1A	Benzo(a)pyrene Equivalent	ID62 8D2A CSES8D2A	Benzo(a)pyrene Equivalent	ID63 8E1A CSES8E1A	Benzo(a)pyrene Equivalent	ID64 8E1AB CSES8E1AB	Benzo(a)pyrene Equivalent	ID65 8EA1F CSES8E1AF	Benzo(a)pyrene Equivalent
Benzo(a)anthracene	0.145	1200	174	1400 J	203	1500	217.5	2200	319	2000	290
Chrysene	0.0044	1400	6.16	1800	7.92	1800	7.92	2600	11.44	2400	10.56
Benzo(b)fluoranthene	0.14	1300	182	2000	280	1900	266	2500	350	2300	322
Benzo(k)fluoranthene	0.066	960	63.36	1300 J	85.8	1000	66	1700	112.2	1700	112.2
Benzo(a)pyrene	1	1200	1200	1600 J	1600	1500	1500	2200	2200	2300	2300
Indeno(1,2,3-cd)pyrene	0.232	510 J	118.32	1100 J	255.2	580	134.56	1200	278.4	650 J	150.8
Dibenzo(a,h)anthracene	1.11	220 J	244.2	530 J	588.3	330 J	366.3	600 J	666	380 J	421.8
Total Benzo(a)pyrene equivalence:			1988.04		3020.22		2558.28		3937.04		3607.36

Map ID: Laboratory Sample ID: ERM ID:	Relative Potency (2)	ID66 8E1AFD CSES8E1AFD	Benzo(a)pyrene Equivalent	ID67 8E1C CSES8E1C	Benzo(a)pyrene Equivalent	ID68 8E2A CSES8E2A	Benzo(a)pyrene Equivalent	ID69 8E3A CSES8E3A	Benzo(a)pyrene Equivalent	ID70 8E3C CSES8E3C	Benzo(a)pyrene Equivalent
Benzo(a)anthracene	0.145	1000	145	2500	362.5	4200	609	1600	232	2300	333.5
Chrysene	0.0044	1300	5.72	2900	12.76	4900	21.56	2100	9.24	2800	12.32
Benzo(b)fluoranthene	0.14	1200	168	2900	406	4600	644	2200	308	2600	364
Benzo(k)fluoranthene	0.066	800	52.8	1600	105.6	3300	217.8	1500	99	2200	145.2
Benzo(a)pyrene	1	1100	1100	2500	2500	4000	4000	1800	1800	2400	2400
Indeno(1,2,3-cd)pyrene	0.232	440 J	102.08	760 J	176.32	1500 J	348	690 J	160.08	870	201.84
Dibenzo(a,h)anthracene	1.11	250 J	277.5	440 J	488.4	850 J	943.5	400 J	444	530	588.3
Total Benzo(a)pyrene equivalence:			1851.1		4051.58		6783.86		3052.32		4045.16

TABLE 4

BENZO(a)PYRENE EQUIVALENCE CALCULATIONS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:		ID71		ID72		ID73		ID74		ID75	
Laboratory Sample ID:	Relative	8FAA	Benzo(a)pyrene	8FAC	Benzo(a)pyrene	8F1bA	Benzo(a)pyrene	8FCA	Benzo(a)pyrene	8FCAB	Benzo(a)pyrene
ERM ID:	Potency (2)	CSES8FaA	Equivalent	CSES8FaC	Equivalent	CSES8FbA	Equivalent	CSES8FcA	Equivalent	CSES8FcAB	Equivalent
Benzo(a)anthracene	0.145	1500	217.5	1100	159.5	3000	435	1100	159.5	1800 J	261
Chrysene	0.0044	1700	7.48	1300	5.72	3300	14.52	1300	5.72	2000 J	8.8
Benzo(b)fluoranthene	0.14	2200	308	1400	196	2400	336	1200	168	1500 J	210
Benzo(k)fluoranthene	0.066	1100	72.6	1200	79.2	2000	132	1000	66	1100 J	72.6
Benzo(a)pyrene	1	1500	1500	1200	1200	2300	2300	1000	1000	1300 J	1300
Indeno(1,2,3-cd)pyrene	0.232	530	122.96	370 J	85.84	750 J	174	530	122.96	470 J	109.04
Dibenzo(a,h)anthracene	1.11	350 J	388.5	240 J	266.4	450 J	499.5	350 J	388.5	ND	0
Total Benzo(a)pyrene equivalence:			2617.04		1992.66		3891.02		1910.68		1961.44

Map ID:		ID76		ID77		ID78		ID79		ID80	
Laboratory Sample ID:	Relative	8FCAF	Benzo(a)pyrene	8FDA	Benzo(a)pyrene	8FeAM	Benzo(a)pyrene	8FFA	Benzo(a)pyrene	8FgA	Benzo(a)pyrene
ERM ID:	Potency (2)	CSES8FcAF	Equivalent	CSES8FdA	Equivalent	CSES8FeA	Equivalent	CSES8FfA	Equivalent	CSES8FgA	Equivalent
Benzo(a)anthracene	0.145	930	134.85	1100	159.5	1000	145	1700	246.5	1400	203
Chrysene	0.0044	1100	4.84	1300	5.72	1300	5.72	1900	8.36	1400	6.16
Benzo(b)fluoranthene	0.14	1400	196	1900	266	1300	182	2200	308	1300	182
Benzo(k)fluoranthene	0.066	900	59.4	1100	72.6	750	49.5	1300	85.8	1100	72.6
Benzo(a)pyrene	1	970	970	1300	1300	1000	1000	1600	1600	1300	1300
Indeno(1,2,3-cd)pyrene	0.232	320 J	74.24	440	102.08	420 J	97.44	500	116	720	167.04
Dibenzo(a,h)anthracene	1.11	240 J	266.4	310 J	344.1	250 J	277.5	360 J	399.6	460	510.6
Total Benzo(a)pyrene equivalence:			1705.73		2250		1757.16		2764.26		2441.4

TABLE 4

BENZO(a)PYRENE EQUIVALENCE CALCULATIONS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:		ID81		ID82		ID83		ID84		ID85	
Laboratory Sample ID:	Relative	8FgAB	Benzo(a)pyrene	8FgAF	Benzo(a)pyrene	8FHA	Benzo(a)pyrene	8FBAB	Benzo(a)pyrene	8FHAF	Benzo(a)pyrene
ERM ID:	Potency (2)	CSES8FgAB	Equivalent	CSES8FgAF	Equivalent	CSES8FhA	Equivalent	CSES8FhAB	Equivalent	CSES8FhAF	Equivalent
Benzo(a)anthracene	0.145	1700	246.5	1500	217.5	1000	145	1300	188.5	710	102.95
Chrysene	0.0044	1600	7.04	1800	7.92	1200	5.28	1400	6.16	890	3.916
Benzo(b)fluoranthene	0.14	1800	252	2600 J	364	1300	182	1600	224	1000	140
Benzo(k)fluoranthene	0.066	1600	105.6	1800 J	118.8	1200	79.2	1200	79.2	920	60.72
Benzo(a)pyrene	1	1600	1600	1800 J	1800	1100	1100	1400	1400	780	780
Indeno(1,2,3-cd)pyrene	0.232	570	132.24	530 J	122.96	360 J	83.52	690	160.08	230 J	53.36
Dibenzo(a,h)anthracene	1.11	400 J	444	350 J	388.5	240 J	266.4	450	499.5	160 J	177.6
Total Benzo(a)pyrene equivalence:			2787.38		3019.68		1861.4		2557.44		1318.546

Map ID:		ID86		ID87		ID88		ID89		ID90	
Laboratory Sample ID:	Relative	8FiAM	Benzo(a)pyrene	8FiAB	Benzo(a)pyrene	8FiAF	Benzo(a)pyrene	8FJA	Benzo(a)pyrene	8FJAD	Benzo(a)pyrene
ERM ID:	Potency (2)	CSES8FiA	Equivalent	CSES8FiAB	Equivalent	CSES8FiAF	Equivalent	CSES8FjA	Equivalent	CSES8FJAD	Equivalent
Benzo(a)anthracene	0.145	1200	174	1400	203	1200	174	3000	435	3500	507.5
Chrysene	0.0044	1500	6.6	1700	7.48	1600	7.04	3100	13.64	3400	14.96
Benzo(b)fluoranthene	0.14	1400	196	2200	308	1700	238	2400	336	4200	588
Benzo(k)fluoranthene	0.066	1100	72.6	1100	72.6	960	63.36	1800	118.8	2300	151.8
Benzo(a)pyrene	1	1300	1300	1400	1400	1300	1300	2100	2100	3300	3300
Indeno(1,2,3-cd)pyrene	0.232	700	162.4	340 J	78.88	440 J	102.08	700 J	162.4	1400	324.8
Dibenzo(a,h)anthracene	1.11	340 J	377.4	220 J	244.2	260 J	288.6	280 J	310.8	910	1010.1
Total Benzo(a)pyrene equivalence:			2289		2314.16		2173.08		3476.64		5897.16

TABLE 4

BENZO(a)PYRENE EQUIVALENCE CALCULATIONS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

Map ID:		ID91		ID92		ID93		ID94		ID95	
Laboratory Sample ID:	Relative	8FKA	Benzo(a)pyrene	1EPA1C	Benzo(a)pyrene	EPA1CD	Benzo(a)pyrene	1EPA2C	Benzo(a)pyrene	IEPA3C	Benzo(a)pyrene
ERM ID:	Potency (2)	CSES8FkA	Equivalent	CSESIEPA1C	Equivalent	CSESIEPA1CD	Equivalent	CSESIEPA2C	Equivalent	CSESIEPA3C	Equivalent
Benzo(a)anthracene	0.145	2700	391.5	11000	1595	12000	1740	11000	1595	18000	2610
Chrysene	0.0044	2800	12.32	12000	52.8	14000	61.6	13000	57.2	16000	70.4
Benzo(b)fluoranthene	0.14	3500	490	13000	1820	17000	2380	14000	1960	19000	2660
Benzo(k)fluoranthene	0.066	2100	138.6	8600	567.6	9400	620.4	10000	660	11000	726
Benzo(a)pyrene	1	3000	3000	10000	10000	13000	13000	13000	13000	17000	17000
Indeno(1,2,3-cd)pyrene	0.232	1900	440.8	3500 J	812	4200 J	974.4	9800	2273.6	12000	2784
Dibenzo(a,h)anthracene	1.11	1200	1332	2000 J	2220	2000 J	2220	6300	6993	7500	8325
Total Benzo(a)pyrene equivalence:			5805.22		17067.4		20996.4		26538.8		34175.4

Map ID:		ID96		ID97		ID98		ID99		ID100	
Laboratory Sample ID:	Relative	S1A	Benzo(a)pyrene	S1B	Benzo(a)pyrene	CSESS2A	Benzo(a)pyrene	CSESS2B	Benzo(a)pyrene	T1A	Benzo(a)pyrene
ERM ID:	Potency (2)	CSESS1A	Equivalent	CSESS1B	Equivalent	CSESS2A	Equivalent	CSESS2B	Equivalent	CSEST1A	Equivalent
Benzo(a)anthracene	0.145	160 J	23.2	630	91.35	ND	0	1200	174	550	79.75
Chrysene	0.0044	170 J	0.748	560	2.464	50 J	0.22	1100	4.84	520	2.288
Benzo(b)fluoranthene	0.14	180 J	25.2	570	79.8	ND	0	880	123.2	470	65.8
Benzo(k)fluoranthene	0.066	150 J	9.9	600	39.6	ND	0	890	58.74	420	27.72
Benzo(a)pyrene	1	170 J	170	620	620	ND	0	920	920	420	420
Indeno(1,2,3-cd)pyrene	0.232	77 J	17.864	300 J	69.6	ND	0	300 J	69.6	150	34.8
Dibenzo(a,h)anthracene	1.11	57 J	63.27	220 J	244.2	ND	0	180 J	199.8	100	111
Total Benzo(a)pyrene equivalence:			310.182		1147.014		0.22		1550.18		741.358

TABLE 4

BENZO(a)PYRENE EQUIVALENCE CALCULATIONS (1)
CELOTEX SITE
CHICAGO, ILLINOIS

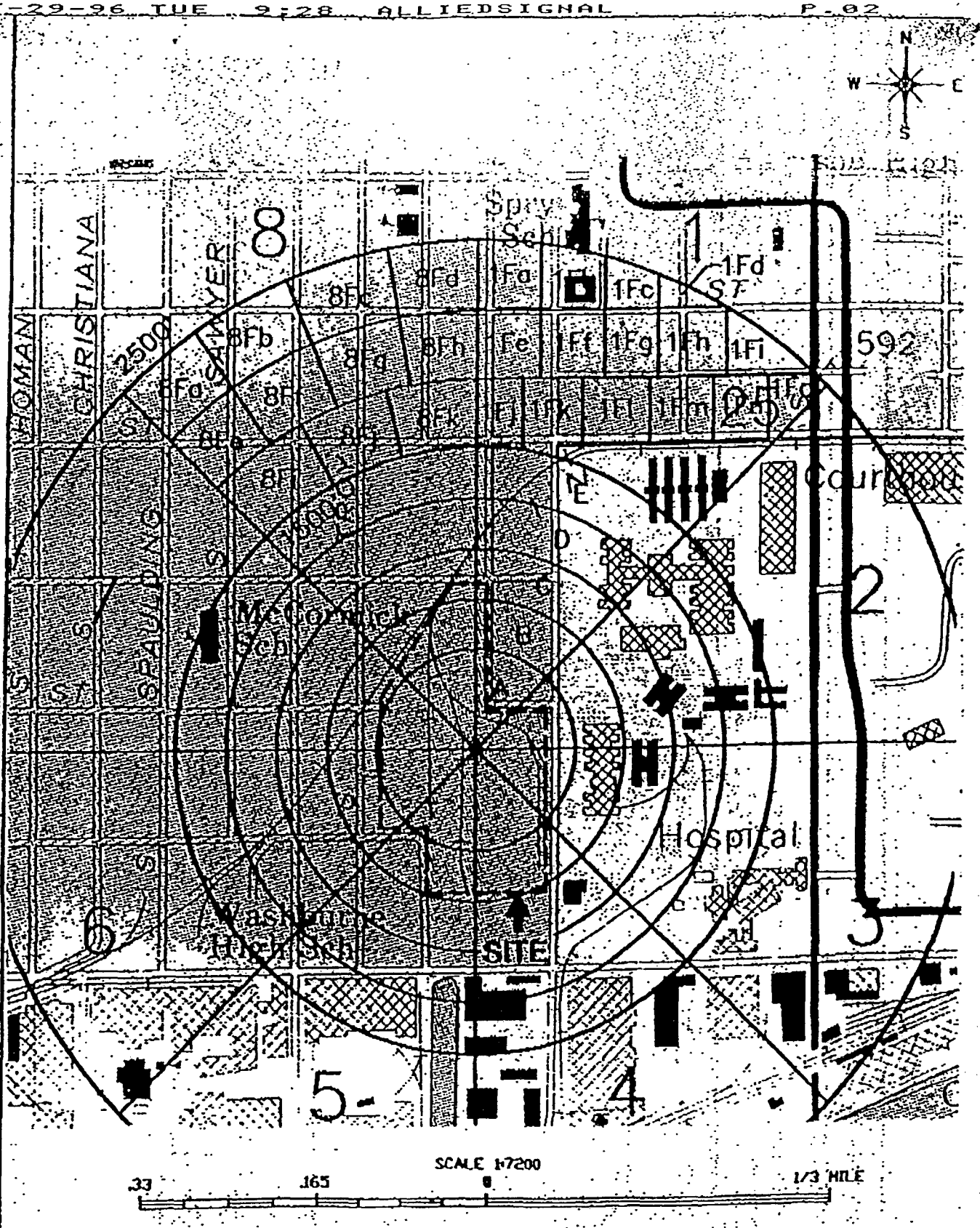
Map ID: Laboratory Sample ID: ERM ID:	Relative Potency (2)	ID101 T1B CSEST1B	Benzo(a)pyrene Equivalent	ID102 CSESTF1AM CSESTF1A	Benzo(a)pyrene Equivalent	ID103 TF1B CSESTF1B	Benzo(a)pyrene Equivalent	ID104 CSESTF2A CSESTF2A	Benzo(a)pyrene Equivalent	ID105 CSESTF2AD CSESTF2AD	Benzo(a)pyrene Equivalent
Benzo(a)anthracene	0.145	880	127.6	34000	4930	200000	29000	840 J	121.8	220 J	31.9
Chrysene	0.0044	790	3.476	30000	132	170000	748	900 J	3.96	260 J	1.144
Benzo(b)fluoranthene	0.14	750	105	22000	3080	160000	22400	850 J	119	260 J	36.4
Benzo(k)fluoranthene	0.066	600	39.6	20000	1320	140000	9240	620 J	40.92	180 J	11.88
Benzo(a)pyrene	1	650	650	22000	22000	130000	130000	740 J	740	250 J	250
Indeno(1,2,3-cd)pyrene	0.232	290 J	67.28	11000 J	2552	33000 J	7656	230 J	53.36	100 J	23.2
Dibenzo(a,h)anthracene	1.11	200 J	222	5900 J	6549	22000 J	24420	120 J	133.2	ND	0
Total Benzo(a)pyrene equivalence:			1214.956		40563		223464		1212.24		354.524

Map ID: Laboratory Sample ID: ERM ID:	Relative Potency (2)	ID106 CSESTF2B CSESTF2B	Benzo(a)pyrene Equivalent
Benzo(a)anthracene	0.145	140 J	20.3
Chrysene	0.0044	170 J	0.748
Benzo(b)fluoranthene	0.14	170 J	23.8
Benzo(k)fluoranthene	0.066	120 J	7.92
Benzo(a)pyrene	1	140 J	140
Indeno(1,2,3-cd)pyrene	0.232	72 J	16.704
Dibenzo(a,h)anthracene	1.11	ND	0
Total Benzo(a)pyrene equivalence:			209.472

Note:
(1) All concentrations in ug/kg.
(2) ICF-Clement Associates, April 1988, "Comparative Potency Approach for Estimateing th Cancer Risk Associated with Exposure to Mixtures of Polycyclic Aromatic Hydrocarbon Interm Final Report, Contract No. 88-02-4403.

Key:
U = The compound was not detected at the specified limit.
UJ = The compound was not detected, but the limit is estimated.
J = Quantitation is approximate as a result fo the limitations identified during the quality assurance review.
ND = Not Detected

FIGURES



8Fa SUBSECTION DESIGNATION
(4) NUMBER OF SAMPLES

CELOTEX SITE
CHICAGO, ILLINOIS

ERM

K:\CPFILES\ERM\AL\85010\ACAD\SSP\7104-38.DWG JUL 18, 1996 10:51 AM
7/18/95 FX-

INDENO(1,2,3-cd)PYRENE	1300
DIBENZO(a,h)ANTHRACENE	870
BENZO(g,h,i)PERYLENE	940

ID31	SAMPLE ID:CSES1FLAD
NAPHTHALENE	430 J
2-METHYLNAPHTHALENE	260 J
ACENAPHTHYLENE	240 J
ACENAPHTHENE	860 J
DIBENZOFURAN	370 J
FLUORENE	790 J
PHENANTHRENE	6800 J
ANTHRACENE	2000 J
FLUORANTHENE	8700 J
PYRENE	8600 J
BENZO(a)ANTHRACENE	6500 J
CHRYSENE	5900 J
bis(2-ETHYLHEXYL)PHTHALATE	2900
BENZO(b)FLUORANTHENE	5900 J
BENZO(k)FLUORANTHENE	3900
BENZO(a)PYRENE	4900 J
INDENO(1,2,3-cd)PYRENE	2400 J
DIBENZO(a,h)ANTHRACENE	1700 J
BENZO(g,h,i)PERYLENE	1700 J

ID30	SAMPLE ID:CSES1FLA
4-METHYLPHENOL	780 J
NAPHTHALENE	12000 J
2-METHYLNAPHTHALENE	4300 J
ACENAPHTHYLENE	430 J
2,6-DINITROTOLUENE	3000 J
ACENAPHTHENE	6100 J
DIBENZOFURAN	4400 J
FLUORENE	6000 J
PHENANTHRENE	32000 J
ANTHRACENE	12000 J
CARBAZOLE	5900 J
FLUORANTHENE	32000 J
PYRENE	27000 J
BENZO(a)ANTHRACENE	21000 J
CHRYSENE	18000 J
bis(2-ETHYLHEXYL)PHTHALATE	3900 J
BENZO(b)FLUORANTHENE	19000 J
BENZO(k)FLUORANTHENE	9100
BENZO(a)PYRENE	15000 J
INDENO(1,2,3-cd)PYRENE	9100 J
DIBENZO(a,h)ANTHRACENE	6000 J
BENZO(g,h,i)PERYLENE	7100 J

	SAMPLE ID:CSESFKA
CHLOROPHENOL	110 J
ALENE	370 J
YLNAPHTHALENE	160 J
HTHYLENE	98 J
HTHENE	690 J
OFURAN	240 J
NE	470 J
ITHRENE	3800
CENE	910
OLE	590 J
NTHENE	4800
	4800
ENZYLPHTHALATE	740 J
a)ANTHRACENE	3800
NE	3400
THYLHEXYL)PHTHALATE	4400
b)FLUORANTHENE	4300
k)FLUORANTHENE	2100
a)PYRENE	3300
(1,2,3-cd)PYRENE	1800
O(a,h)ANTHRACENE	1200
g,h,i)PERYLENE	1200

FIGURE 2

SEMIVOLATILE ORGANIC COMPOUNDS
SAMPLE RESULTS
NORTHEAST QUADRANT
CELOTEX SITE
CHICAGO, ILLINOIS

ERM

SAMPLE ID:CSESIEPA1CD	
ALENE	700 J
HTHENE	1500 J
NE	640 J
THRENE	8400
CENE	1800 J
OLE	1200 J
UTYLPHTHALATE	3300 J
NTHENE	18000
	19000
a)ANTHRACENE	12000
NE	14000
THYLHEXYL)PHTHALATE	5200
b)FLUORANTHENE	17000
k)FLUORANTHENE	9400
a)PYRENE	13000
(1,2,3-cd)PYRENE	4200 J
O(a,h)ANTHRACENE	2000 J
(g,h,i)PERYLENE	3000 J

ID48 SAMPLE ID:CSES7C1A	
NAPHTHALENE	120 J
2-METHYLNAPHTHALENE	180 J
ACENAPHTHYLENE	520 J
ACENAPHTHENE	270 J
DIBENZOFURAN	100 J
FLUORENE	370 J
PHENANTHRENE	3100
ANTHRACENE	840 J
FLUORANTHENE	4000
PYRENE	4200
BENZO(a)ANTHRACENE	3200
CHRYSENE	3000
bis(2-ETHYLHEXYL)PHTHALATE	3000
BENZO(b)FLUORANTHENE	3000
BENZO(k)FLUORANTHENE	2100
BENZO(a)PYRENE	2500
INDENO(1,2,3-cd)PYRENE	1400
DIBENZO(a,h)ANTHRACENE	940
BENZO(g,h,i)PERYLENE	970

ID60 SAMPLE ID:CSESBC3A	
NAPHTHALENE	220 J
2-METHYLNAPHTHALENE	150 J
ACENAPHTHYLENE	130 J
ACENAPHTHENE	330 J
DIBENZOFURAN	150 J
FLUORENE	270 J
PHENANTHRENE	3500
ANTHRACENE	660 J
CARBAZOLE	360 J
FLUORANTHENE	6600
PYRENE	6100
BENZO(a)ANTHRACENE	3400
CHRYSENE	4000
bis(2-ETHYLHEXYL)PHTHALATE	3500
BENZO(b)FLUORANTHENE	3700
BENZO(k)FLUORANTHENE	1900
BENZO(a)PYRENE	2700
INDENO(1,2,3-cd)PYRENE	1200 J
DIBENZO(a,h)ANTHRACENE	510 J
BENZO(g,h,i)PERYLENE	950 J

BENZO(a)PYRENE	4300
INDENO(1,2,3-cd)PYRENE	1300 J
DIBENZO(a,h)ANTHRACENE	760 J
BENZO(g,h,i)PERYLENE	960 J

BENZO(g,h,i)PERYLENE	760 J

FIGURE 3

SEMIVOLATILE ORGANIC COMPOUNDS
SAMPLE RESULTS
NORTHWEST QUADRANT
CELOTEX SITE
CHICAGO,ILLINOIS

ERM

DIBENZO(a,h)ANTHRACENE	220 J	DIBENZO(a,h)ANTHRACENE	200 J
BENZO(g,h,i)PERYLENE	210 J	BENZO(g,h,i)PERYLENE	200 J

FIGURE 4

SEMIVOLATILE ORGANIC COMPOUNDS
SAMPLE RESULTS
SOUTHWEST QUADRANT
CELOTEX SITE
CHICAGO, ILLINOIS

ERM

TOTAL PAHs	231,830
ID31	SAMPLE ID:CSES1FLAD
TOTAL PAHs	61,320

KA

AD

FIGURE 5

TOTAL POLYNUCLEAR AROMATIC HYDROCARBONS
SAMPLE RESULTS
NORTHWEST QUADRANT
CELOTEX SITE
CHICAGO, ILLINOIS

ERM

ID61	SAMPLE ID:CSES8D1A
TOTAL PAHs	12,790

ID62	SAMPLE ID:CSES8D2A
TOTAL PAHs	17,170

ID59	SAMPLE ID:CSES8C2A
TOTAL PAHs	44,670

ID58	SAMPLE ID:CSES8C1A
TOTAL PAHs	57,970

SITE

SAMPLE ID:CSESIEPA1C	
	106,800
SAMPLE ID:CSESIEPA1CD	
	124,640

FIGURE 6

TOTAL POLYNUCLEAR AROMATIC HYDROCARBONS
SAMPLE RESULTS
NORTHWEST QUADRANT
CELOTEX SITE
CHICAGO, ILLINOIS

ERM

FIGURE 7

TOTAL POLYNUCLEAR AROMATIC HYDROCARBONS
SAMPLE RESULTS
SOUTHWEST QUADRANT
CELOTEX SITE
CHICAGO, ILLINOIS

ERM

ID31	SAMPLE ID:CSES1FLAD	
BENZO(a)PYRENE EQUIVALENCE		9395.66

FIGURE 8

TOTAL BENZO(a)PYRENE EQUIVALENCE CONCENTRATIONS
SAMPLE RESULTS
NORTHEAST QUADRANT
CELOTEX SITE
CHICAGO, ILLINOIS

ERM

ID61	SAMPLE ID:CSES8D1A
BENZO(a)PYRENE EQUIVALENCE	1988.04

ID62	SAMPLE ID:CSES8D2A
BENZO(a)PYRENE EQUIVALENCE	3020.22

ID59	SAMPLE ID:CSES8C2A
BENZO(a)PYRENE EQUIVALENCE	6442.82

ID58	SAMPLE ID:CSES8C1A
BENZO(a)PYRENE EQUIVALENCE	7320.94

SITE

SAMPLE ID:CSESIEPA1C	
(a)PYRENE EQUIVALENCE	17,067.4
SAMPLE ID:CSESIEPA1CD	
(a)PYRENE EQUIVALENCE	20,996.4

FIGURE 9

TOTAL BENZO(a)PYRENE EQUIVALENCE CONCENTRATIONS
SAMPLE RESULTS
NORTHWEST QUADRANT
CELOTEX SITE
CHICAGO, ILLINOIS

ERM

FIGURE 10

TOTAL BENZO(a)PYRENE EQUIVALENCE CONCENTRATIONS
SAMPLE RESULTS
SOUTHWEST QUADRANT
CELOTEX SITE
CHICAGO, ILLINOIS

ERM

APPENDIX A-2

EXCERPTS FROM PARSONS' DATA REPORT FOR THE EE/CA

FILE COPY

DATA REPORT

for the

ENGINEERING EVALUATION AND COST ANALYSIS
OF THE FORMER CELOTEX SITE
2800 South Sacramento Avenue
Chicago, IL 60623

Prepared for:

ALLIEDSIGNAL, INC.
MORRISTOWN, NEW JERSEY
and
THE CELOTEX CORPORATION
TAMPA, FLORIDA

OCTOBER 1997

Prepared by:

PARSONS ENGINEERING SCIENCE, INC.
1000 JORIE BOULEVARD, SUITE 250
OAKBROOK, IL 60523

Parsons ES Project No. 730577

SECTION 3
DISCUSSION OF DATA COLLECTION ACTIVITIES

3.1 OVERVIEW

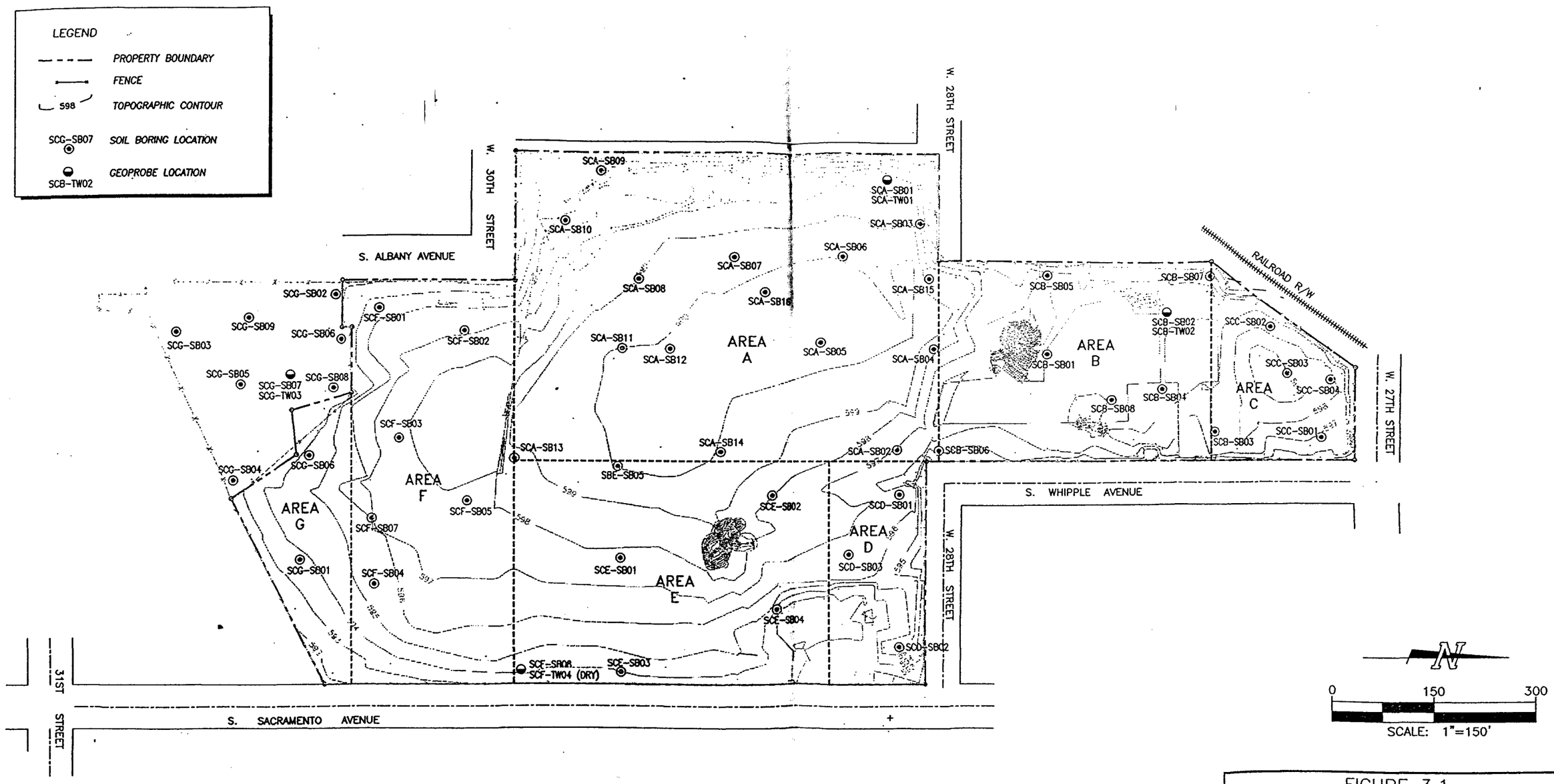
The EE/CA main site sampling program was performed during the period of 29 April through 6 June 1997 based on the requirements of the SSP. The following subsections describe the field program with specific reference to the field changes that were made in response to conditions noted or encountered during the field activities. In instances where field activities were performed in accordance with the Final Support Sampling Plan (SSP) this fact is simply noted.

3.2 SOIL INVESTIGATION

3.2.1 Additional Soil Borings

A total of 54 borings were drilled as part of the EE/CA main site sampling program, and each soil sample collected from every interval along the boring was field screened and the VOC headspace results documented. Originally, a total of 51 soil borings were identified in the SSP for this field program, with ten of the 51 borings classified as unassigned miscellaneous locations to be located in the field (Table 3.1). During the execution of the field program, the 10 unassigned borings were installed in areas within Sectors A through F that required supplemental investigation. Subsequently, it was determined that additional borings were needed on the Palumbo property to provide better coverage of this area, and to facilitate a better evaluation of subsurface conditions in the area (it was the stated intent of the investigation to attempt to collect all required information in one sampling event). Following concurrence from the Respondents, three additional borings were installed and sampled in Sector G to supplement the investigation of this area.

Table 3.2 summarizes the samples collected during the EE/CA field program and specifies the analytical parameters for which each sample was analyzed. Figure 3.1



SOURCE: SITE MAP BASED ON FILE No. WAS BASED ON SITE DRAWING PROVIDED BY WESTSHORE ENGINEERING AND SURVEYING, INC. (FILE No. WS-440-11, 5-16-96)

FIGURE 3.1

AlliedSignal, Inc./The Celotex Corporation

SOIL BORING LOCATION MAP

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1000 JORIE BLVD. • OAKBROOK, IL 60523 • (630) 990-7200
OFFICES IN PRINCIPAL CITIES

DATE: 10/16/97
R:\DRAWINGS\ALLIEDSI\DATARPRT\30577012.DWG

presents the surveyed locations of the soil borings relative to the site elevations that existed during the field sampling program. Figures 3.2 through 3.12 depict the variations in soil VOC headspace results detected during field screening activities. Figure 3.13 shows the locations, depth range, and thickness of asphalt/tar materials across the Site as visually noted during the field program.

3.2.2 Depth of Borings

Originally, as specified in the SSP, at each designated soil sample location, a soil boring was to be advanced until either the groundwater table was encountered or a 20-foot depth below ground surface was reached, whichever occurred first. During the second week of field activities, on-site discussions between the USEPA Region V remedial project manager (RPM), the AlliedSignal project manager, and the Parsons ES project manager, resulted in a few amendments to the rationale for the maximum target depth of the soil borings. It was agreed that a boring could be extended until clean, native materials were encountered below wet, impacted soils and an effort should be made to locate the groundwater table.

3.2.3 Surface Elevation/Higher Elevations

As specified in the SSP, all soil boring locations were surveyed by a licensed Illinois surveyor at the culmination of the field program. The depths of the soil borings and the associated surveyed elevations of the soil boring locations were measured from the ground surface elevations as they existed during the field program. However, the resurfacing/recontouring work and the drainage installation activities that were performed at the Site in June-July 1997 to address surface water run-off issues, completely altered site/soil conditions in approximately the upper 6 feet of the Site (and deeper in a few areas). Some of this resurfacing work required the shifting of site materials from one area of the Site to another to facilitate site recontouring. In other instances, excavation activities associated with drainage trenches altered the order of deposition of material upon replacement. These activities were performed by heavy earth-moving equipment such as

back-hoes, and the monuments that marked the location of the soil borings were destroyed in the process of the Site work. There have been elevation changes to various areas of the Site; therefore, the depths of the some of the samples collected during the EE/CA field sampling program do not correlate with current site elevations. Based on direction from the USEPA Region V RPM, the topographic maps, discussions, and reports generated from the EE/CA field investigation program will be based on site conditions as they originally existed before the Site was reworked.

3.2.4 Shelby Tubes

Originally, as specified in the SSP, Shelby Tubes were to be collected over the course of the field program and selected from predesignated sectors and depths as outline in the SSP (Refer herein to Table 3.1). However, after the subsurface conditions were assessed by the Parsons ES lead field geologist during the field program, it was determined that obtaining geotechnical information on the various substrata encountered during the field program would be more beneficial to the EE/CA study than basing the decision on the predetermined depths, since the locations of the various strata sometimes varied in depth.

3.3 GROUNDWATER INVESTIGATION

3.3.1 Location Change

As stated in the SSP, four specific locations were identified for temporary well point (TWP) installation. However, after the drilling of the soil borings had been completed, several of preselected locations for the TWPs had little to no observable groundwater available for sample collection purposes. Most of the locations had no observable groundwater throughout the entire depth of the borings. In an effort to locate groundwater several TWPs were relocated to areas were saturated soils were encountered during soil boring activities (saturated soils suggested the presence of groundwater).

Temporary well point SCF-TWP4 was installed at soil boring location SCF-SB08 due to the potential for better groundwater recovery; however, no measurable water was recovered during groundwater sampling.

Temporary well point SCG-TWP3 was installed at soil boring location SCG-SB07 location, also due to the potential for better groundwater recovery. During groundwater sampling, enough water was recovered to fill sample containers for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs) and cyanide.

Temporary well point SCA-TWP1 was water-bearing to a limited degree but slow to recover. At the end of the sampling day, an MS/MSD sample was collected from SCA-TWP1 for VOCs, SVOCs, cyanide, metals, and mercury.

Temporary well point SCB-TWP2 was slow to recover, and only the VOC sample aliquot was collected.

3.3.2 Groundwater Recovery

As stated above, the rate of the groundwater recovery for all but one of the TWPs was extremely slow. One of the TWPs had no groundwater recovery at all. Each of the TWPs had a 10-foot section of PVC screen placed inside the probed point, allowing water to enter the screen. If enough water was present a sample aliquot was collected based on the order of importance discussed in Subsection 3.3.3. Once the groundwater in the well point had been sampled dry, it was left open so that the groundwater level could recover and additional volumes of water be collected for other analytical parameters.

Figure 3.14 shows where saturated soils were encountered during drilling activities and the approximate thickness of the saturated column. Throughout the Site, the presence of these saturated materials appears to reflect water that is entrapped within various pockets of subsurface material and not the presence of any type of water table.

3.3.3 Samples Sent in for Analysis, Degree of Importance

Due to the slow and sometimes non-recovery of the groundwater in the TWPs, the sequence of the samples collected, if any, was based upon the relative degree of importance of the analyte(s) or on which sample aliquot required the collection of the least volume. The first sample aliquots to be collected were VOCs (due to the small volume requirement) followed by SVOCs, and metals/cyanide.

3.4 SEDIMENT INVESTIGATION

The sediment sampling event was performed on Saturday, 31 May 1997. All sample collection activities and laboratory analyses were performed in accordance with the SSP. Figure 3.15 shows the locations from where the sediment samples were collected.

TABLE 5.1
SUMMARY OF DETECTIONS - AREA A SOILS
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB01-SS01-6/8	SCA-SB01-SS01-6/8	SCA-SB02-SS01-8/10	SCA-SB03-SS01-0/6	SCA-SB03-SS01-14/16	SCA-SB04-SS01-14/16	SCA-SB05-SS01-16/18
LOCATION:		SCA-SB01	SCA-SB01	SCA-SB02	SCA-SB03	SCA-SB03	SCA-SB04	SCA-SB05
DEPTH RANGE:		6 to 8 feet	6 to 8 feet	8 to 10 feet	0 to 0.5 feet	14 to 16 feet	14 to 16 feet	16 to 18 feet
SAMPLE DATE:		05/02/97	05/02/97	05/02/97	05/02/97	05/05/97	05/05/97	05/05/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E070177003	A7E070177004	A7E030118008	A7E070177005	A7E070177007	A7E070180001	A7E070180004
EPA SAMPLE ID:		E077703	E077704	E031808	E077705	E077707	E078001	E078004
SAMPLE TYPE:		N1	FR1	N1	N1	N1	N1	N1
SDG NO:		AS02	AS02	AS02	AS02	AS02	AS03	AS03
Volatile Organic Compounds								
Methylene Chloride	ug/kg	--	--	--	--	--	--	--
Acetone	ug/kg	1900 J9	--	1400 J9	5700 J9	1100 J10	--	--
1,1-Dichloroethene	ug/kg	--	--	--	--	--	--	--
Chloroform	ug/kg	--	--	--	--	--	--	--
2-Butanone	ug/kg	--	--	--	--	--	--	--
Carbon Tetrachloride	ug/kg	--	--	--	--	--	--	--
Trichloroethene	ug/kg	--	--	--	--	--	--	--
Benzene	ug/kg	8100 J7	32000 J10	--	--	16000	11000 J1	6200 J1
4-Methyl-2-pentanone	ug/kg	--	--	--	--	--	--	--
Tetrachloroethene	ug/kg	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	ug/kg	--	--	--	--	--	--	--
Toluene	ug/kg	24000 J7	110000 J7	--	--	16000	32000	22000
Chlorobenzene	ug/kg	--	--	--	--	--	--	--
Ethylbenzene	ug/kg	18000 J7	120000 J7	--	--	22000	18000	12000
Styrene	ug/kg	6400	--	--	--	1400 J1	--	--
Xylenes (total)	ug/kg	73000 J7	430000 J7	--	--	57000	76000	46000

TABLE 5.1
SUMMARY OF DETECTIONS - AREA A SOILS
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB07-SS01-8/10	SCA-SB08-SS01-12/14	SCA-SB09-SS01-4/6	SCA-SB10-SS01-10/12	SCA-SB11-SS01-0/6	SCA-SB11-SS01-1/2	SCA-SB11-SS01-14/16
LOCATION:		SCA-SB07	SCA-SB08	SCA-SB09	SCA-SB10	SCA-SB11	SCA-SB11	SCA-SB11
DEPTH RANGE:		8 to 10 feet	12 to 14 feet	4 to 6 feet	10 to 12 feet	0 to 0.5 feet	1 to 2 feet	14 to 16 feet
SAMPLE DATE:		06/16/97	05/05/97	05/05/97	05/07/97	05/07/97	05/07/97	05/07/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Re-Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F180147004	A7E070180014	A7E090172004	A7E090176001	A7E090176002	A7E090176003	A7E090176004
EPA SAMPLE ID:		F184704	E078014	E097204	E097601	E097602	E097603	E097604
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS11	AS03	AS03	AS04	AS04	AS04	AS04
Volatile Organic Compounds								
Methylene Chloride	ug/kg	--	--	--	--	--	--	--
Acetone	ug/kg	--	--	42	1200	9 J1	360	--
1,1-Dichloroethene	ug/kg	--	--	--	--	--	--	--
Chloroform	ug/kg	--	--	--	--	--	--	--
2-Butanone	ug/kg	--	--	12 J1	--	--	--	--
Carbon Tetrachloride	ug/kg	--	--	--	--	--	--	--
Trichloroethene	ug/kg	--	--	--	--	--	--	--
Benzene	ug/kg	400 J1	34000	--	--	--	--	--
4-Methyl-2-pentanone	ug/kg	--	--	--	--	--	--	--
Tetrachloroethene	ug/kg	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	ug/kg	--	--	--	--	--	--	--
Toluene	ug/kg	--	--	--	--	--	--	--
Chlorobenzene	ug/kg	--	--	--	--	--	--	--
Ethylbenzene	ug/kg	3500	80000	--	--	--	--	16000
Styrene	ug/kg	--	--	--	--	--	--	--
Xylenes (total)	ug/kg	750 J1	88000	--	--	--	--	18000

TABLE 5.1
SUMMARY OF DETECTIONS - AREA A SOILS
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB12-SS01-4/6	SCA-SB13-SS01-1/2	SCA-SB13-SS01-1/2	SCA-SB14-SS01-1/2	SCA-SB15-SS01-12/14	SCA-SB16-SS01-12/14
LOCATION:		SCA-SB12	SCA-SB13	SCA-SB13	SCA-SB14	SCA-SB15	SCA-SB16
DEPTH RANGE:		4 to 6 feet	1 to 2 feet	1 to 2 feet	1 to 2 feet	12 to 14 feet	12 to 14 feet
SAMPLE DATE:		05/07/97	05/07/97	05/07/97	05/16/97	05/16/97	05/14/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Duplicate	Field Re-Sample	Field Re-Sample	Field Sample
LAB SAMPLE ID:		A7E090176007	A7E090176009	A7E090176010	A7F180147005	A7F180147012	A7E190102004
EPA SAMPLE ID:		E097607	E097609	E097610	F184705	F184712	E190204
SAMPLE TYPE:		N1	N1	FR1	N1	N1	N1
SDG NO:		AS04	AS04	AS04	AS11	AS11	AS08
Volatile Organic Compounds							
Methylene Chloride	ug/kg	–	–	–	–	–	–
Acetone	ug/kg	2000	1200	780	–	530 J1	1500
1,1-Dichloroethene	ug/kg	–	–	–	–	–	–
Chloroform	ug/kg	–	–	–	3 J1	–	–
2-Butanone	ug/kg	–	–	–	–	–	–
Carbon Tetrachloride	ug/kg	–	–	–	–	–	–
Trichloroethene	ug/kg	–	–	–	–	–	–
Benzene	ug/kg	–	–	–	–	16000	8700
4-Methyl-2-pentanone	ug/kg	–	–	–	–	–	–
Tetrachloroethene	ug/kg	–	–	–	–	–	–
1,1,2,2-Tetrachloroethane	ug/kg	–	–	–	–	–	–
Toluene	ug/kg	–	–	–	–	20000	1400 J1
Chlorobenzene	ug/kg	–	–	–	–	–	–
Ethylbenzene	ug/kg	–	–	–	–	16000	20000
Styrene	ug/kg	–	–	–	–	7700	–
Xylenes (total)	ug/kg	–	–	–	–	72000	32000 J3

TABLE 5.1
SUMMARY OF DETECTIONS - AREA B SOILS
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCB-SB01-SS01-1/2	SCB-SB01-SS01-4/6	SCB-SB91-SS01-4/6	SCB-SB02-SS01-1/2	SCB-SB02-SS01-4/6	SCB-SB03-SS01-1/2	SCB-SB03-SS01-6/8
LOCATION:		SCB-SB01	SCB-SB01	SCB-SB01	SCB-SB02	SCB-SB02	SCB-SB03	SCB-SB03
DEPTH RANGE:		1 to 2 feet	4 to 6 feet	4 to 6 feet	1 to 2 feet	4 to 6 feet	1 to 2 feet	6 to 8 feet
SAMPLE DATE:		04/29/97	04/29/97	04/29/97	06/16/97	06/16/97	05/01/97	05/01/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Duplicate	Field Re-Sample	Field Re-Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E010140010	A7E010140011	A7E010140012	A7F170129008	A7F170129009	A7E030105008	A7E030112001
EPA SAMPLE ID:		E014010	E014011	E014012	F172908	F172909	E030508	E031201
SAMPLE TYPE:		N1	N1	FR1	N1	N1	N1	N1
SDG NO:		AS01	AS01	AS01	AS11	AS11	AS01	AS02
Volatile Organic Compounds								
Methylene Chloride	ug/kg	--	--	--	--	--	16	--
Acetone	ug/kg	130 J9	490 J9	1100 J9	--	800 J1	--	2600
1,1-Dichloroethene	ug/kg	--	--	--	--	--	--	--
Chloroform	ug/kg	--	--	--	4 J1	--	--	--
2-Butanone	ug/kg	--	--	--	--	--	--	--
Carbon Tetrachloride	ug/kg	--	--	--	--	--	--	--
Trichloroethene	ug/kg	--	--	--	--	--	--	--
Benzene	ug/kg	--	--	--	--	700 J1	--	--
4-Methyl-2-pentanone	ug/kg	--	--	--	--	--	--	--
Tetrachloroethene	ug/kg	--	--	--	--	--	2 J1	--
1,1,2,2-Tetrachloroethane	ug/kg	--	--	--	--	--	3 J1	--
Toluene	ug/kg	--	--	--	--	--	--	--
Chlorobenzene	ug/kg	--	--	--	--	--	--	--
Ethylbenzene	ug/kg	--	--	80 J1	3 J1	14000	--	3200
Styrene	ug/kg	--	--	--	--	--	--	--
Xylenes (total)	ug/kg	--	--	140	3 J1	13000	--	2700

TABLE 5.1
SUMMARY OF DETECTIONS - AREA B SOILS
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCB-SB04-SS01-1/2	SCB-SB04-SS01-4/6	SCB-SB05-SS01-0/5	SCB-SB05-SS01-6/8	SCB-SB06-SS01-14/15	SCB-SB07-SS01-10/12
LOCATION:		SCB-SB04	SCB-SB04	SCB-SB05	SCB-SB05	SCB-SB06	SCB-SB07
DEPTH RANGE:		1 to 2 feet	4 to 6 feet	0 to 0.5 feet	6 to 8 feet	14 to 16 feet	10 to 12 feet
SAMPLE DATE:		05/01/97	05/01/97	05/01/97	05/01/97	05/02/97	05/13/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E030112003	A7E030112004	A7E030105004	A7E030105006	A7E030115003	A7E150154004
EPA SAMPLE ID:		E031203	E031204	E030504	E030506	E031503	E155404
SAMPLE TYPE:		N1	N1	FR1	N1	N1	N1
SDG NO:		AS02	AS02	AS01	AS01	AS02	AS07
Volatile Organic Compounds							
Methylene Chloride	ug/kg	8 J10	–	4 J10	–	–	–
Acetone	ug/kg	–	42 J9	–	51 J9	3000 J9	1400
1,1-Dichloroethene	ug/kg	–	–	–	–	–	–
Chloroform	ug/kg	–	–	–	–	–	–
2-Butanone	ug/kg	–	–	–	–	350 J10	–
Carbon Tetrachloride	ug/kg	–	–	–	–	–	–
Trichloroethene	ug/kg	–	–	–	–	–	–
Benzene	ug/kg	–	3 J1	–	–	–	–
4-Methyl-2-pentanone	ug/kg	–	–	–	–	–	–
Tetrachloroethene	ug/kg	2 J10	–	–	–	–	–
1,1,2,2-Tetrachloroethane	ug/kg	–	–	–	–	–	–
Toluene	ug/kg	–	16	–	–	–	–
Chlorobenzene	ug/kg	–	–	–	–	–	–
Ethylbenzene	ug/kg	–	17	–	–	–	–
Styrene	ug/kg	–	2 J1	–	–	–	–
Xylenes (total)	ug/kg	–	50	–	–	–	–

TABLE 5.1
SUMMARY OF DETECTIONS - AREA C SOILS
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCC-SB01-SS01-12/14	SCC-SB02-SS01-6/8	SCC-SB03-SS01-8/10	
LOCATION:		SCC-SB01	SCC-SB02	SCC-SB03	
DEPTH RANGE:		12 to 14 feet	6 to 8 feet	8 to 10 feet	
SAMPLE DATE:		04/29/97	04/29/97	06/16/97	
MATRIX:		Soil	Soil	Soil	
SAMPLE TYPE:		Field Sample	Field Sample	Field Re-Sample	
LAB SAMPLE ID:		A7E010140003	A7E010140006	A7F180147001	
EPA SAMPLE ID:		E014003	E014006	F184701	
SAMPLE TYPE:		N1	N1	N1	
SDG NO:		AS01	AS01	AS11	
Volatile Organic Compounds					
Methylene Chloride	ug/kg	--	--	--	
Acetone	ug/kg	3000	11000	1100	J1
1,1-Dichloroethene	ug/kg	--	--	--	
Chloroform	ug/kg	--	--	--	
2-Butanone	ug/kg	--	--	--	
Carbon Tetrachloride	ug/kg	--	--	--	
Trichloroethene	ug/kg	--	--	--	
Benzene	ug/kg	1400 J1	3000	4300	
4-Methyl-2-pentanone	ug/kg	--	--	--	
Tetrachloroethene	ug/kg	--	--	--	
1,1,2,2-Tetrachloroethane	ug/kg	--	--	--	
Toluene	ug/kg	700 J1	1900	1900	
Chlorobenzene	ug/kg	--	--	--	
Ethylbenzene	ug/kg	6400	29000	20000	
Styrene	ug/kg	--	--	470	J1
Xylenes (total)	ug/kg	11000	25000	21000	

TABLE 5.1
SUMMARY OF DETECTIONS - AREA D SOILS
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCD-SB01-SS01-12/14	SCD-SB02-SS01-8/10	SCD-SB03-SS01-4/6
LOCATION:		SCD-SB01	SCD-SB02	SCD-SB03
DEPTH RANGE:		12 to 14 feet	8 to 10 feet	4 to 6 feet
SAMPLE DATE:		06/16/97	05/08/97	05/12/97
MATRIX:		Soil	Soil	Soil
SAMPLE TYPE:		Field Re-Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F180147009	A7E120138004	A7E140183017
EPA SAMPLE ID:		F184709	E123804	E146317
SAMPLE TYPE:		N1	N1	N1
SDG NO:		AS11	AS05	AS06
Volatile Organic Compounds				
Methylene Chloride	ug/kg	–	–	–
Acetone	ug/kg	–	6500 DJ2	5100
1,1-Dichloroethene	ug/kg	–	–	–
Chloroform	ug/kg	–	–	–
2-Butanone	ug/kg	–	–	–
Carbon Tetrachloride	ug/kg	–	–	–
Trichloroethene	ug/kg	–	–	–
Benzene	ug/kg	–	–	–
4-Methyl-2-pentanone	ug/kg	–	–	–
Tetrachloroethene	ug/kg	–	–	–
1,1,2,2-Tetrachloroethane	ug/kg	–	–	–
Toluene	ug/kg	29 J1	–	–
Chlorobenzene	ug/kg	–	–	–
Ethylbenzene	ug/kg	230	–	82 J1
Styrene	ug/kg	–	–	–
Xylenes (total)	ug/kg	280	–	240

TABLE 5.1
SUMMARY OF DETECTIONS - AREA E SOILS
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCE-SB01-SS01-1/2	SCE-SB01-SS01-8/10	SCE-SB02-SS01-0/6	SCE-SB02-SS01-4/6	SCE-SB03-SS01-8/10	SCE-SB04-SS01-0/6	SCE-SB04-SS01-1/2
LOCATION:		SCE-SB01	SCE-SB01	SCE-SB02	SCE-SB02	SCE-SB03	SCE-SB04	SCE-SB04
DEPTH RANGE:		1 to 2 feet	8 to 10 feet	0 to 0.5 feet	4 to 6 feet	8 to 10 feet	0 to 0.5 feet	1 to 2 feet
SAMPLE DATE:		05/08/97	05/08/97	05/12/97	05/12/97	05/12/97	05/12/97	05/12/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E090176013	A7E090176014	A7E140163007	A7E140163006	A7E140163011	A7E140163012	A7E140163013
EPA SAMPLE ID:		E097613	E097614	E146307	E146306	E146311	E146312	E146313
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS04	AS04	AS06	AS06	AS06	AS06	AS06
Volatile Organic Compounds								
Methylene Chloride	ug/kg	--	--	--	--	--	--	--
Acetone	ug/kg	14	5000	5200	6400	1000	9800	400
1,1-Dichloroethene	ug/kg	--	--	--	--	--	--	--
Chloroform	ug/kg	--	--	--	--	--	--	--
2-Butanone	ug/kg	--	--	--	--	--	--	--
Carbon Tetrachloride	ug/kg	--	--	--	--	--	--	--
Trichloroethene	ug/kg	--	--	--	--	--	--	--
Benzene	ug/kg	--	--	--	--	--	--	--
4-Methyl-2-pentanone	ug/kg	--	--	--	--	--	--	--
Tetrachloroethene	ug/kg	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	ug/kg	--	--	--	--	--	--	--
Toluene	ug/kg	--	--	--	300 J1	--	--	--
Chlorobenzene	ug/kg	--	--	--	--	--	--	--
Ethylbenzene	ug/kg	--	--	--	--	--	--	--
Styrene	ug/kg	--	--	--	--	--	--	--
Xylenes (total)	ug/kg	--	--	--	440 J1	--	--	--

TABLE 5.1
SUMMARY OF DETECTIONS - AREA E SOILS
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	SCE-SB04-SS01-8/10
	LOCATION:	SCE-SB04
	DEPTH RANGE:	8 to 10 feet
	SAMPLE DATE:	05/12/97
	MATRIX:	Soil
	SAMPLE TYPE:	Field Sample
	LAB SAMPLE ID:	A7E140183014
	EPA SAMPLE ID:	E145314
	SAMPLE TYPE:	N1
	SDG NO:	AS06
Volatile Organic Compounds		
Methylene Chloride	ug/kg	–
Acetone	ug/kg	2500
1,1-Dichloroethene	ug/kg	–
Chloroform	ug/kg	–
2-Butanone	ug/kg	–
Carbon Tetrachloride	ug/kg	–
Trichloroethene	ug/kg	–
Benzene	ug/kg	–
4-Methyl-2-pentanone	ug/kg	–
Tetrachloroethene	ug/kg	–
1,1,2,2-Tetrachloroethane	ug/kg	–
Toluene	ug/kg	–
Chlorobenzene	ug/kg	–
Ethylbenzene	ug/kg	–
Styrene	ug/kg	–
Xylenes (total)	ug/kg	–

TABLE 5.1
SUMMARY OF DETECTIONS - AREA F SOILS
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCF-SB01-SS01-16/18	SCF-SB92-SS01-0/6	SCF-SB02-SS01-1/2	SCF-SB02-SS01-14/16	SCF-SB03-SS01-1/2	SCF-SB04-SS01-8/10	SCF-SB05-SS01-14/16
LOCATION:		SCF-SB01	SCF-SB02	SCF-SB02	SCF-SB02	SCF-SB03	SCF-SB04	SCF-SB05
DEPTH RANGE:		16 to 18 feet	0 to 0.5 feet	1 to 2 feet	14 to 16 feet	1 to 2 feet	8 to 10 feet	14 to 16 feet
SAMPLE DATE:		05/08/97	05/08/97	05/08/97	05/08/97	05/08/97	06/16/97	05/08/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Re-Sample	Field Sample
LAB SAMPLE ID:		A7E120138007	A7E120138010	A7E120138009	A7E120138011	A7E120138013	A7F180147011	A7E120138017
EPA SAMPLE ID:		E123807	E123810	E123809	E123811	E123813	F184711	E123817
SAMPLE TYPE:		N1	FR1	N1	N1	N1	N1	N1
SDG NO:		AS05	AS05	AS05	AS05	AS05	AS11	AS05
Volatile Organic Compounds								
Methylene Chloride	ug/kg	28 J1	140 J10	68 J1	100 J1	11 J1	--	--
Acetone	ug/kg	1700	18000 DJ2	10000 DJ2	4700 DJ2	--	760	2000 J9
1,1-Dichloroethene	ug/kg	--	--	--	--	--	--	--
Chloroform	ug/kg	--	--	--	--	--	--	--
2-Butanone	ug/kg	--	--	--	--	--	--	--
Carbon Tetrachloride	ug/kg	--	--	--	--	--	--	--
Trichloroethene	ug/kg	--	--	--	--	--	--	--
Benzene	ug/kg	--	--	--	--	--	--	--
4-Methyl-2-pentanone	ug/kg	--	--	--	--	--	--	--
Tetrachloroethene	ug/kg	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	ug/kg	--	--	--	--	--	--	--
Toluene	ug/kg	--	--	--	--	--	--	--
Chlorobenzene	ug/kg	--	--	--	--	--	--	--
Ethylbenzene	ug/kg	--	--	--	--	--	--	--
Styrene	ug/kg	--	--	--	--	--	--	--
Xylenes (total)	ug/kg	--	--	--	--	--	--	--

TABLE 5.1
SUMMARY OF DETECTIONS - AREA F SOILS
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCF-SB06-SS01-0.5	SCF-SB06-SS01-1/2	SCF-SB06-SS01-14/18
LOCATION:		SCF-SB06	SCF-SB06	SCF-SB06
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	14 to 18 feet
SAMPLE DATE:		05/31/97	05/31/97	05/31/97
MATRIX:		Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F040135006	A7F040135004	A7F040135005
EPA SAMPLE ID:		F043506	F043504	F043505
SAMPLE TYPE:		N1	N1	N1
SDG NO:		AS09	AS09	AS09
Volatile Organic Compounds				
Methylene Chloride	ug/kg	–	–	–
Acetone	ug/kg	9100	9 J1	1400
1,1-Dichloroethene	ug/kg	–	–	–
Chloroform	ug/kg	–	–	–
2-Butanone	ug/kg	–	–	–
Carbon Tetrachloride	ug/kg	–	–	–
Trichloroethene	ug/kg	–	–	–
Benzene	ug/kg	–	–	–
4-Methyl-2-pentanone	ug/kg	–	–	–
Tetrachloroethene	ug/kg	–	–	–
1,1,2,2-Tetrachloroethane	ug/kg	–	–	–
Toluene	ug/kg	–	–	–
Chlorobenzene	ug/kg	–	–	–
Ethylbenzene	ug/kg	–	–	–
Styrene	ug/kg	–	–	–
Xylenes (total)	ug/kg	–	–	–

TABLE 1
SUMMARY OF DETECTIONS - AREA G SOILS
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCG-SB91-SS01-16/18	SCG-SB02-SS01-0/6	SCG-SB02-SS01-1/2	SCG-SB02-SS01-8/10	SCG-SB03-SS01-1/2	SCG-SB93-SS01-1/2	SCG-SB03-SS01-4/6
LOCATION:		SCG-SB01	SCG-SB02	SCG-SB02	SCG-SB02	SCG-SB03	SCG-SB03	SCG-SB03
DEPTH RANGE:		16 to 18 feet	0 to 0.5 feet	1 to 2 feet	8 to 10 feet	1 to 2 feet	1 to 2 feet	4 to 6 feet
SAMPLE DATE:		05/12/97	05/31/97	05/31/97	05/31/97	06/04/97	06/04/97	06/04/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample
LAB SAMPLE ID:		A7E140163001	A7F040135008	A7F040135007	A7F040135009	A7F050158003	A7F050158004	A7F050158001
EPA SAMPLE ID:		E146301	F043508	F043507	F043509	F055803	F055804	F055801
SAMPLE TYPE:		FR1	N1	N1	N1	N1	FR1	N1
SDG NO:		AS06	AS09	AS09	AS09	AS09	AS09	AS09
Volatile Organic Compounds								
Methylene Chloride	ug/kg	7 J10	--	--	--	--	--	--
Acetone	ug/kg	440 J7	--	6700 J1	5900	670	740	800
1,1-Dichloroethene	ug/kg	--	--	--	--	--	--	--
Chloroform	ug/kg	--	--	--	--	--	--	--
2-Butanone	ug/kg	34 J1	--	--	--	--	--	--
Carbon Tetrachloride	ug/kg	--	--	--	--	--	--	--
Trichloroethene	ug/kg	--	--	--	--	--	--	--
Benzene	ug/kg	--	--	--	1800	--	--	--
4-Methyl-2-pentanone	ug/kg	25 J1	--	--	--	--	--	--
Tetrachloroethene	ug/kg	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	ug/kg	--	--	--	--	--	--	--
Toluene	ug/kg	--	--	--	--	--	--	--
Chlorobenzene	ug/kg	--	--	--	--	--	--	--
Ethylbenzene	ug/kg	--	27000	8400 J1	16000	--	--	--
Styrene	ug/kg	--	--	--	--	--	--	--
Xylenes (total)	ug/kg	--	56000	17000	13000	--	--	--

TABLE 5.1
SUMMARY OF DETECTIONS - AREA G SOILS
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCG-SB03-SS01-12/14	SCG-SB04-SS01-1/2	SCG-SB04-SS01-8/10	SCG-SB04-SS01-8/10	SCG-SB05-SS01-1/2	SCG-SB05-SS01-6/8	SCG-SB05-SS01-10/12
LOCATION:		SCG-SB03	SCG-SB04	SCG-SB04	SCG-SB04	SCG-SB05	SCG-SB05	SCG-SB05
DEPTH RANGE:		12 to 14 feet	1 to 2 feet	8 to 10 feet	8 to 10 feet	1 to 2 feet	6 to 8 feet	10 to 12 feet
SAMPLE DATE:		08/04/97	05/31/97	05/31/97	05/31/97	05/31/97	05/31/97	05/31/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F050158002	A7F040135010	A7F040135011	A7F040135013	A7F040135016	A7F040135015	A7F040135014
EPA SAMPLE ID:		F055802	F043510	F043511	F043513	F043516	F043515	F043514
SAMPLE TYPE:		N1	N1	N1	FR1	N1	N1	N1
SDG NO:		AS09	AS09	AS09	AS09	AS09	AS09	AS09
Volatile Organic Compounds								
Methylene Chloride	ug/kg	–	–	–	–	–	–	–
Acetone	ug/kg	1600	–	800 J7	130 J7	10 J1	730	200
1,1-Dichloroethene	ug/kg	–	–	–	–	–	–	–
Chloroform	ug/kg	41 J1	–	–	–	3 J1	–	–
2-Butanone	ug/kg	–	–	–	–	–	–	–
Carbon Tetrachloride	ug/kg	–	–	–	–	–	–	–
Trichloroethene	ug/kg	–	–	–	–	–	–	–
Benzene	ug/kg	–	–	–	–	–	–	–
4-Methyl-2-pentanone	ug/kg	–	–	–	–	–	–	–
Tetrachloroethene	ug/kg	–	–	–	–	–	–	–
1,1,2,2-Tetrachloroethane	ug/kg	–	–	–	–	–	–	–
Toluene	ug/kg	–	–	9 J1	–	–	–	–
Chlorobenzene	ug/kg	–	–	–	–	–	–	–
Ethylbenzene	ug/kg	–	–	41 J7	8 J10	–	–	–
Styrene	ug/kg	–	–	–	–	–	–	–
Xylenes (total)	ug/kg	–	7 J1	36 J10	7 J10	–	–	–

TABLE 5.1
SUMMARY OF DETECTIONS - AREA G SOILS
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCG-SB06-SS01-4/6	SCG-SB07-SS01-0/6	SCG-SB07-SS01-2/4	SCG-SB07-SS01-8/10	SCG-SB08-SS01-1/2	SCG-SB08-SS01-8/10	SCG-SB08-SS01-12/14
LOCATION:		SCG-SB06	SCG-SB07	SCG-SB07	SCG-SB07	SCG-SB08	SCG-SB08	SCG-SB08
DEPTH RANGE:		4 to 6 feet	0 to 0.5 feet	2 to 4 feet	8 to 10 feet	1 to 2 feet	8 to 10 feet	12 to 14 feet
SAMPLE DATE:		05/13/97	06/04/97	06/03/97	06/04/97	06/16/97	06/16/97	06/16/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E150154014	A7F050163001	A7F050163002	A7F050163003	A7F170129001	A7F170129002	A7F170129003
EPA SAMPLE ID:		E155414	F056301	F056302	F056303	F172901	F172902	F172903
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS07	AS10	AS10	AS10	AS11	AS11	AS11
Volatile Organic Compounds								
Methylene Chloride	ug/kg	--	--	--	--	--	--	--
Acetone	ug/kg	--	25000	--	1400 J1	1600	1700	200 J4
1,1-Dichloroethene	ug/kg	8500	--	--	--	--	--	--
Chloroform	ug/kg	--	--	8 J1	--	--	--	--
2-Butanone	ug/kg	--	--	--	--	--	--	--
Carbon Tetrachloride	ug/kg	--	--	--	--	--	--	--
Trichloroethene	ug/kg	7900	--	--	--	--	--	--
Benzene	ug/kg	57000	--	--	--	500 J1	--	--
4-Methyl-2-pentanone	ug/kg	--	--	--	--	--	--	4 J10
Tetrachloroethene	ug/kg	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane	ug/kg	--	--	--	--	--	--	--
Toluene	ug/kg	68000	--	4 J1	--	730 J1	--	--
Chlorobenzene	ug/kg	8000	--	--	--	--	--	--
Ethylbenzene	ug/kg	17000	--	8 J1	--	740 J1	--	--
Styrene	ug/kg	26000	--	--	--	--	--	--
Xylenes (total)	ug/kg	80000	--	38	--	3100	--	--

TABLE 5.1
SUMMARY OF DETECTIONS - AREA G SOILS
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCG-SB09-SS01-1/2	SCG-SB09-SS01-6/8	SCG-SB09-SS01-8/10
LOCATION:		SCG-SB09	SCG-SB09	SCG-SB09
DEPTH RANGE:		1 to 2 feet	6 to 8 feet	8 to 10 feet
SAMPLE DATE:		06/16/97	06/16/97	06/16/97
MATRIX:		Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F170129004	A7F170129005	A7F170129006
EPA SAMPLE ID:		F172904	F172905	F172906
SAMPLE TYPE:		N1	N1	N1
SDG NO:		AS11	AS11	AS11
Volatile Organic Compounds				
Methylene Chloride	ug/kg	–	–	–
Acetone	ug/kg	180	90	190
1,1-Dichloroethene	ug/kg	–	–	–
Chloroform	ug/kg	–	3 J1	3 J1
2-Butanone	ug/kg	–	–	12 J1
Carbon Tetrachloride	ug/kg	–	–	–
Trichloroethene	ug/kg	–	–	–
Benzene	ug/kg	7 J1	–	–
4-Methyl-2-pentanone	ug/kg	–	–	–
Tetrachloroethene	ug/kg	–	–	–
1,1,2,2-Tetrachloroethane	ug/kg	–	–	–
Toluene	ug/kg	5 J1	–	–
Chlorobenzene	ug/kg	–	–	–
Ethylbenzene	ug/kg	–	–	–
Styrene	ug/kg	–	–	–
Xylenes (total)	ug/kg	3 J1	–	–

TABLE 5.1
SUMMARY OF DETECTIONS - BACKGROUND SOILS
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	BG1-SB01-SS01-0/2	BG1-SB01-SS01-6/8	BG1-SB01-SS01-12/14
	LOCATION:	Background	Background	Background
	DEPTH RANGE:	0 to 2 feet	6 to 8 feet	12 to 14 feet
	SAMPLE DATE:	06/04/97	06/04/97	06/04/97
	MATRIX:	Soil	Soil	Soil
	SAMPLE TYPE:	Field Sample	Field Sample	Field Sample
	LAB SAMPLE ID:	A7F050163004	A7F050163005	A7F050163006
	EPA SAMPLE ID:	F056304	F056305	F056306
	SAMPLE TYPE:	N1	N1	N1
	SDG NO:	AS10	AS10	AS10
Volatile Organic Compounds				
Methylene Chloride	ug/kg	8 J1	8 J1	--
Acetone	ug/kg	--	44	960
1,1-Dichloroethene	ug/kg	--	--	--
Chloroform	ug/kg	33	10 J1	--
2-Butanone	ug/kg	--	--	--
Carbon Tetrachloride	ug/kg	5 J1	--	--
Trichloroethene	ug/kg	--	--	--
Benzene	ug/kg	--	--	--
4-Methyl-2-pentanone	ug/kg	--	--	--
Tetrachloroethene	ug/kg	--	--	--
1,1,2,2-Tetrachloroethane	ug/kg	--	--	--
Toluene	ug/kg	--	--	--
Chlorobenzene	ug/kg	--	--	--
Ethylbenzene	ug/kg	--	--	--
Styrene	ug/kg	--	--	--
Xylenes (total)	ug/kg	--	--	--

TABLE 5.1
SUMMARY OF DETECTIONS - GROUNDWATER
VOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-TW01-GW01	SCB-TW02-GW01	SCG-TW03-GW01	SWRB1-6/5/97
LOCATION:		SCA-SB01	SCB-SB02	SCG-SB03	
DEPTH RANGE:					
SAMPLE DATE:		06/06/97	06/06/97	06/06/97	06/06/97
MATRIX:		Groundwater	Groundwater	Groundwater	
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Rinsate Blank
LAB SAMPLE ID:		A7F110101001	A7F110101004	A7F110101005	A7F110101002
EPA ID:		F110101	F110104	F110105	F110102
SAMPLE TYPE:		N1	N1	N1	EB1
SDG NO:		AS10	AS10	AS10	AS10
Volatile Organic Compounds					
Methylene Chloride	ug/L	--	--	--	3 J1
Acetone	ug/L	--	10	6 J1	--
1,1-Dichloroethene	ug/L	--	--	--	--
Chloroform	ug/L	--	--	--	17
2-Butanone	ug/L	--	--	--	--
Carbon Tetrachloride	ug/L	--	--	--	--
Trichloroethene	ug/L	--	--	--	--
Benzene	ug/L	1300	3 J1	2 J1	--
4-Methyl-2-pentanone	ug/L	--	--	--	--
Tetrachloroethene	ug/L	--	--	--	--
1,1,2,2-Tetrachloroethane	ug/L	--	--	--	--
Toluene	ug/L	730	3 J1	3 J1	--
Chlorobenzene	ug/L	--	--	--	--
Ethylbenzene	ug/L	800	8 J1	11	--
Styrene	ug/L	--	--	--	--
Xylenes (total)	ug/L	2500	14	19	--

NOTES:

All Field Sample IDs begin with "SSAS1-". They have been shortened here to conserve space.

--	Analyte was not detected.
NA	Analyte was not analyzed for in given sample.
R	Unusable data due to gross violations of one or more quality control criteria.
D	Reported from diluted sample run due to calibration exceedance in the original analysis. See "J3" below.
U	The analyte was analyzed for and is not present above the level of the associated value.
UJ	The analyte was analyzed for but was not detected. The reported detection limit has been qualified due to a QC anomaly. Refer to the numerical suffixes.
UB	Analyte detected in the field or laboratory blank associated with this sample. Reported result should be considered estimated and biased high.
J	The analyte was positively identified, but the associated numerical value may be imprecise due to a quality control (QC) anomaly.
J^1	Estimated value, greater than the method detection limit (MDL) or the instrument detection limit (IDL) but less than the project reporting limit (PRL).
J^2	Sample was prepared or analyzed outside the specified holding time. The qualified result should be considered estimated and biased low.
J^3	Result exceeded the calibration range for the instrument and method and should be considered estimated.
J^4	Surrogate outliers were reported for the sample. The reported result should be considered estimated.
J^5	Accuracy and/or precision outlier reported for MS/MSD or field duplicate samples associated with the reported result. Result should be considered estimated.
J^6	Accuracy outlier reported for the Laboratory Control Sample (LCS) associated with the reported result. The reported result should be considered an estimate.
J^7	Field precision outlier reported for the field duplicate/replicate sample associated with this result. Result should be considered an estimate.
J^8	Precision outlier reported for the laboratory duplicate samples associated with this analysis. Result should be considered an estimate.
J^9	Calibration or internal standard outliers reported for this sample. Results should be considered estimated.
J^{10}	Multiple QC anomalies associated with the reported result.
J^{11}	ICP serial dilution outlier reported. Result should be considered an estimate.
J^{12}	The percent difference between the values from the confirmation and quantitation columns exceeded 25%. Result should be considered an estimate.
J^{13}	The reported result has been qualified as estimated or unusable due to matrix interferences or laboratory error.

TABLE 5.4
SUMMARY OF DETECTIONS - AREA A SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB01-SS01-0/6	SCA-SB01-SS01-1/2	SCA-SB01-SS01-6/8	SCA-SB01-SS01-6/8	SCA-SB02-SS01-0/5	SCA-SB02-SS01-1/2	SCA-SB02-SS01-8/10
LOCATION:		SCA-SB01	SCA-SB01	SCA-SB01	SCA-SB01	SCA-SB02	SCA-SB02	SCA-SB02
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	6 to 8 feet	6 to 8 feet	0 to 0.5 feet	1 to 2 feet	8 to 10 feet
SAMPLE DATE:		05/02/97	05/02/97	05/02/97	05/02/97	05/02/97	05/02/97	05/02/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E070177001	A7E070177002	A7E070177003	A7E070177004	A7E030115005	A7E030115004	A7E030115006
EPA SAMPLE ID:		E077701	E077702	E077703	E077704	E031505	E031504	E031506
SAMPLE TYPE:		N1	N1	N1	FR1	N1	N1	N1
SDG NO:		AS02	AS02	AS02	AS02	AS02	AS02	AS02
Semivolatile Organc Compounds								
Phenol	ug/kg	–				–		
2-Methylphenol	ug/kg	–				–		
4-Methylphenol	ug/kg	–				–		
2,4-Dimethylphenol	ug/kg	–				–		
Naphthalene	ug/kg	–	–	2500000	2900000	–	–	62000
2-Methylnaphthalene	ug/kg	–	–	660000	800000	–	130 J1	15000 J1
Acenaphthylene	ug/kg	–	–	–	–	53 J1	–	–
Acenaphthene	ug/kg	120 J1	72 J1	240000 J1	300000 J1	180 J1	320 J1	49000
Dibenzofuran	ug/kg	–				120 J1		
Fluorene	ug/kg	98 J1	58 J1	300000 J1	360000 J1	180 J1	460 J1	52000
Phenanthrene	ug/kg	1200	760	860000	970000	2200	4400	320000
Anthracene	ug/kg	280 J1	160 J1	200000 J1	240000 J1	420 J1	1000	29000 J1
Carbazole	ug/kg	100 J1				150 J1		
Di-n-Butylphthalate	ug/kg	–				–		
Fluoranthene	ug/kg	2600	1200	540000	650000	3100	5500	280000
Pyrene	ug/kg	2200	1100	530000	580000	2400	4600	220000
Butylbenzylphthalate	ug/kg	–				–		
Benzo(a)Anthracene	ug/kg	1200	650	200000 J1	250000 J1	1300	2500	66000
Chrysene	ug/kg	1100	590	230000 J1	270000 J1	1300	2400	33000 J1
bis(2-ethylhexyl)Phthalate	ug/kg	210 J1				83 J1		
Benzo(b)fluoranthene	ug/kg	1600	800	240000 J1	300000 J1	1500	2700	49000
Benzo(k)fluoranthene	ug/kg	540	270 J1	69000 J1	120000 J1	650	970	18000 J1
Benzo(a)pyrene	ug/kg	1100	590	150000 J1	190000 J1	1200	2000	33000 J1
Indeno(1,2,3-cd)pyrene	ug/kg	590	270 J1	82000 J1	100000 J1	650	1100	12000 J1
Dibenz(a,h)anthracene	ug/kg	140 J1	81 J1	–	–	190 J1	290 J1	–
Benzo(g,h,i)perylene	ug/kg	380 J1	190 J1	78000 J1	100000 J1	430 J1	760 J1	9700 J1

TABLE o.2
SUMMARY OF DETECTIONS - AREA A SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB03-SS01-0/6	SCA-SB03-SS01-1/2	SCA-SB03-SS01-14/16	SCA-SB04-SS01-0/6	SCA-SB04-SS01-1/2	SCA-SB04-SS01-14/16	SCA-SB05-SS01-0/6
LOCATION:		SCA-SB03	SCA-SB03	SCA-SB03	SCA-SB04	SCA-SB04	SCA-SB04	SCA-SB05
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	14 to 16 feet	0 to 0.5 feet	1 to 2 feet	14 to 16 feet	0 to 0.5 feet
SAMPLE DATE:		05/02/97	05/02/97	05/05/97	05/02/97	05/02/97	05/05/97	05/05/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E070177005	A7E070177006	A7E070177007	A7E070177008	A7E070177009	A7E070180001	A7E070180002
EPA SAMPLE ID:		E077705	E077706	E077707	E077708	E077709	E078001	E078002
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS02	AS02	AS02	AS02	AS02	AS03	AS03
Semivolatile Organic Compounds								
Phenol	ug/kg	--			--			--
2-Methylphenol	ug/kg	--			--			--
4-Methylphenol	ug/kg	--			--			--
2,4-Dimethylphenol	ug/kg	--			--			--
Naphthalene	ug/kg	270 J1	250 J10	1000000	320 J1	430 J1	1200000	--
2-Methylnaphthalene	ug/kg	76 J1	77 J10	340000	100 J1	140 J1	350000	76 J1
Acenaphthylene	ug/kg	--	--	--	--	--	18000 J1	--
Acenaphthene	ug/kg	72 J1	110 J10	150000 J1	120 J1	210 J1	120000 J1	--
Dibenzofuran	ug/kg	--			84 J1			--
Fluorene	ug/kg	--	100 J10	160000 J1	120 J1	290 J1	140000 J1	--
Phenanthrene	ug/kg	620	1000 J9	370000	910	2600	250000	440
Anthracene	ug/kg	150 J1	210 J10	57000 J1	170 J1	570	85000 J1	120 J1
Carbazole	ug/kg	55 J1			81 J1			--
Di-n-Butylphthalate	ug/kg	--			--			--
Fluoranthene	ug/kg	1100	1300 J9	180000	1500	3200	100000 J1	370 J1
Pyrene	ug/kg	1000	1500 J9	200000 J9	1200	2700	87000 J1	300 J1
Butylbenzylphthalate	ug/kg	--			--			--
Benzo(a)Anthracene	ug/kg	620	860 J9	53000 J1	840	1400	25000 J1	--
Chrysene	ug/kg	570	680 J9	46000 J1	750	1300	26000 J1	--
bis(2-ethylhexyl)Phthalate	ug/kg	140 J1			150 J1			93 J1
Benzo(b)fluoranthene	ug/kg	930	960 J9	38000 J1	1100	1600	22000 J1	210 J1
Benzo(k)fluoranthene	ug/kg	260 J1	400 J9	18000 J1	310 J1	550	--	84 J1
Benzo(a)pyrene	ug/kg	670	750 J9	32000 J1	730	1200	18000 J1	160 J1
Indeno(1,2,3-cd)pyrene	ug/kg	340 J1	380 J10	--	380 J1	510 J1	--	98 J1
Dibenz(a,h)anthracene	ug/kg	59 J1	54 J10	--	150 J1	140 J1	--	--
Benzo(g,h,i)perylene	ug/kg	290 J1	330 J10	--	280 J1	470 J1	--	92 J1

TABLE 6.2
SUMMARY OF DETECTIONS - AREA A SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB05-SS01-1/2	SCA-SB05-SS01-16/18	SCA-SB06-SS01-0/6	SCA-SB96-SS01-0/6	SCA-SB06-SS01-1/2	SCA-SB06-SS01-4/6	SCA-SB07-SS01-0/6
LOCATION:		SCA-SB05	SCA-SB05	SCA-SB06	SCA-SB06	SCA-SB06	SCA-SB06	SCA-SB07
DEPTH RANGE:		1 to 2 feet	16 to 18 feet	0 to 0.5 feet	0 to 0.5 feet	1 to 2 feet	4 to 6 feet	0 to 0.5 feet
SAMPLE DATE:		05/05/97	05/05/97	05/05/97	05/05/97	05/05/97	05/05/97	05/05/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E070180003	A7E070180004	A7E070180005	A7E070180006	A7E070180007	A7E070180008	A7E070180009
EPA SAMPLE ID:		E078003	E078004	E078005	E078006	E078007	E078008	E078009
SAMPLE TYPE:		N1	N1	N1	FR1	N1	N1	N1
SDG NO:		AS03	AS03	AS03	AS03	AS03	AS03	AS03
Semivolatile Organic Compounds								
Phenol	ug/kg			–	–			–
2-Methylphenol	ug/kg			–	–			–
4-Methylphenol	ug/kg			–	–			–
2,4-Dimethylphenol	ug/kg			–	–			–
Naphthalene	ug/kg	90 J1	160000	39 J1	–	800 J1	250 J1	–
2-Methylnaphthalene	ug/kg	49 J1	30000	–	–	330 J1	120 J1	–
Acenaphthylene	ug/kg	–	–	–	–	100 J1	–	–
Acenaphthene	ug/kg	–	14000 J1	–	420 J1	440 J1	310 J1	–
Dibenzofuran	ug/kg			–	310 J1			–
Fluorene	ug/kg	47 J1	13000 J1	–	830 J10	580 J1	340 J1	–
Phenanthrene	ug/kg	270 J1	25000	340 J10	6100 J7	3600	2700	1200
Anthracene	ug/kg	66 J1	3900 J1	68 J10	2000 J7	830	660	290 J1
Carbazole	ug/kg			–	240 J1			84 J1
Di-n-Butylphthalate	ug/kg			–	–			–
Fluoranthene	ug/kg	260 J1	9400 J1	620 J7	8200 J7	5200	3300 D	2000
Pyrene	ug/kg	210 J1	9000 J1	570	7000	5100	2900	2000
Butylbenzylphthalate	ug/kg			–	–			–
Benzo(a)Anthracene	ug/kg	110 J1	2500 J1	350 J1	3000	2600	1900	900
Chrysene	ug/kg	130 J1	3100 J1	380	3200	2600	1600	860
bis(2-ethylhexyl)Phthalate	ug/kg			77 J1	–			310 J1
Benzo(b)fluoranthene	ug/kg	140 J1	–	470	3100	4100	2800	1200
Benzo(k)fluoranthene	ug/kg	46 J1	–	160 J1	1300 J1	1300	740	350 J1
Benzo(a)pyrene	ug/kg	110 J1	–	360 J1	2400	3100	2000	850
Indeno(1,2,3-cd)pyrene	ug/kg	64 J1	–	210 J1	1100 J1	1700	1100	420
Dibenz(a,h)anthracene	ug/kg	–	–	81 J10	300 J10	530 J1	320 J1	200 J1
Benzo(g,h,i)perylene	ug/kg	58 J1	–	190 J1	920 J1	1600	890	380 J1

TABLE 5.2
SUMMARY OF DETECTIONS - AREA A SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB07-SS01-1/2	SCA-SB07-SS01-8/10	SCA-SB08-SS01-0/6	SCA-SB08-SS01-1/2	SCA-SB08-SS01-12/14	SCA-SB09-SS01-0/6	SCA-SB09-SS01-1/2
LOCATION:		SCA-SB07	SCA-SB07	SCA-SB08	SCA-SB08	SCA-SB08	SCA-SB09	SCA-SB09
DEPTH RANGE:		1 to 2 feet	8 to 10 feet	0 to 0.5 feet	1 to 2 feet	12 to 14 feet	0 to 0.5 feet	1 to 2 feet
SAMPLE DATE:		05/05/97	05/05/97	05/05/97	05/05/97	05/05/97	05/05/97	05/05/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E070180010	A7E070180011	A7E070180012	A7E070180013	A7E070180014	A7E090172001	A7E090172002
EPA SAMPLE ID:		E078010	E078011	E078012	E078013	E078014	E097201	E097202
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS03	AS03	AS03	AS03	AS03	AS03	AS03
Semivolatile Organic Compounds								
Phenol	ug/kg			--			--	
2-Methylphenol	ug/kg			--			--	
4-Methylphenol	ug/kg			--			--	
2,4-Dimethylphenol	ug/kg			--			--	
Naphthalene	ug/kg	73 J1	420000	180 J1	200 J1	1100000	390	2000 J1
2-Methylnaphthalene	ug/kg	39 J1	230000	150 J1	120 J1	410000	440	--
Acenaphthylene	ug/kg	--	--	--	--	--	93 J1	--
Acenaphthene	ug/kg	67 J1	98000 J1	98 J1	64 J1	230000	230 J1	9400 J1
Dibenzofuran	ug/kg			66 J1			200 J1	
Fluorene	ug/kg	130 J1	130000	150 J1	76 J1	190000	210 J1	16000 J1
Phenanthrene	ug/kg	1600	520000	1100	650	590000	1400	80000
Anthracene	ug/kg	390	120000	220 J1	160 J1	130000 J1	260 J1	49000
Carbazole	ug/kg			75 J1			100 J1	
Di-n-Butylphthalate	ug/kg			--			--	
Fluoranthene	ug/kg	2100	320000	1200	1200	290000	1800	130000
Pyrene	ug/kg	2200	350000	1300	1000	330000	1800	100000
Butylbenzylphthalate	ug/kg			--			--	
Benzo(a)Anthracene	ug/kg	910	130000	570	540	110000 J1	840	57000
Chrysene	ug/kg	880	130000	620	500	110000 J1	790	56000
bis(2-ethylhexyl)Phthalate	ug/kg			210 J1			630	
Benzo(b)fluoranthene	ug/kg	1000	120000	740	750	84000 J1	950	58000
Benzo(k)fluoranthene	ug/kg	270 J1	50000 J1	220 J1	210 J1	30000 J1	350 J1	24000
Benzo(a)pyrene	ug/kg	730	110000 J1	550	510	68000 J1	680	46000
Indeno(1,2,3-cd)pyrene	ug/kg	370 J1	41000 J1	300 J1	380 J1	23000 J1	480	21000
Dibenz(a,h)anthracene	ug/kg	81 J1	15000 J1	76 J1	110 J1	--	--	5700 J1
Benzo(g,h,i)perylene	ug/kg	310 J1	37000 J1	240 J1	360 J1	26000 J1	530	21000

TABLE 5.2
SUMMARY OF DETECTIONS - AREA A SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB09-SS01-1/2	SCA-SB09-SS01-4/6	SCA-SB10-SS01-0/6	SCA-SB10-SS01-1/2	SCA-SB10-SS01-10/12	SCA-SB11-SS01-0/6	SCA-SB11-SS01-1/2
LOCATION:		SCA-SB09	SCA-SB09	SCA-SB10	SCA-SB10	SCA-SB10	SCA-SB11	SCA-SB11
DEPTH RANGE:		1 to 2 feet	4 to 6 feet	0 to 0.5 feet	1 to 2 feet	10 to 12 feet	0 to 0.5 feet	1 to 2 feet
SAMPLE DATE:		05/05/97	05/05/97	05/05/97	05/05/97	05/07/97	05/07/97	05/07/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E090172003	A7E090172004	A7E090172005	A7E090172006	A7E090178001	A7E090178002	A7E090178003
EPA SAMPLE ID:		E097203	E097204	E097205	E097206	E097601	E097602	E097603
SAMPLE TYPE:		FR1	N1	N1	N1	N1	N1	N1
SDG NO:		AS03	AS03	AS03	AS03	AS04	AS04	AS04
Semivolatile Organic Compounds								
Phenol	ug/kg			–			–	
2-Methylphenol	ug/kg			–			–	
4-Methylphenol	ug/kg			–			–	
2,4-Dimethylphenol	ug/kg			–			–	
Naphthalene	ug/kg	5800 J1	200 J1	100 J1	22000 J1	–	–	370 J1
2-Methylnaphthalene	ug/kg	–	110 J1	94 J1	20000 J1	–	–	200 J1
Acenaphthylene	ug/kg	–	–	69 J1	15000 J1	–	–	–
Acenaphthene	ug/kg	10000 J1	140 J1	44 J1	23000 J1	–	48 J1	240 J1
Dibenzofuran	ug/kg			61 J1			–	
Fluorene	ug/kg	19000 J1	250 J1	57 J1	51000 J1	–	–	350 J1
Phenanthrene	ug/kg	120000	2000	620	400000	160 J1	440	2600
Anthracene	ug/kg	53000	1000	130 J1	85000 J1	–	140 J1	700
Carbazole	ug/kg			59 J1			46 J1	
Di-n-Butylphthalate	ug/kg			–			–	
Fluoranthene	ug/kg	170000	4000	1100	340000	120 J1	920	3200
Pyrene	ug/kg	130000	1700	990	300000	100 J1	910	2400
Butylbenzylphthalate	ug/kg			–			92 J1	
Benzo(a)Anthracene	ug/kg	75000	1700	510	140000	47 J1	540	1300
Chrysene	ug/kg	77000	1900	570	130000	53 J1	510	1200
bis(2-ethylhexyl)Phthalate	ug/kg			410			130 J1	
Benzo(b)fluoranthene	ug/kg	83000	1900	740	120000	–	700	1200
Benzo(k)fluoranthene	ug/kg	30000 J1	650 J1	260 J1	53000 J1	–	210 J1	490 J1
Benzo(a)pyrene	ug/kg	62000	1200	480	96000	–	480	850
Indeno(1,2,3-cd)pyrene	ug/kg	27000 J1	580 J1	390	52000 J1	–	250 J1	420 J1
Dibenz(a,h)anthracene	ug/kg	8600 J1	220 J1	–	15000 J1	–	67 J1	110 J1
Benzo(g,h,i)perylene	ug/kg	25000 J1	510 J1	360 J1	49000 J1	–	230 J1	440 J1

TABLE 5.2
SUMMARY OF DETECTIONS - AREA A SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB11-SS01-14/16	SCA-SB12-SS01-0/6	SCA-SB12-SS01-1/2	SCA-SB12-SS01-4/6	SCA-SB13-SS01-0/6	SCA-SB13-SS01-1/2	SCA-SB103-SS01-1/2
LOCATION:		SCA-SB11	SCA-SB12	SCA-SB12	SCA-SB12	SCA-SB13	SCA-SB13	SCA-SB13
DEPTH RANGE:		14 to 16 feet	0 to 0.5 feet	1 to 2 feet	4 to 6 feet	0 to 0.5 feet	1 to 2 feet	1 to 2 feet
SAMPLE DATE:		05/07/97	05/07/97	05/07/97	05/07/97	05/07/97	05/07/97	05/07/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
LAB SAMPLE ID:		A7E090176004	A7E090176005	A7E090176006	A7E090176007	A7E090176008	A7E090176009	A7E090176010
EPA SAMPLE ID:		E097604	E097605	E097606	E097607	E097608	E097609	E097610
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	FR1
SDG NO:		AS04	AS04	AS04	AS04	AS04	AS04	AS04
Semivolatile Organic Compounds								
Phenol	ug/kg		--			--		
2-Methylphenol	ug/kg		--			--		
4-Methylphenol	ug/kg		--			--		
2,4-Dimethylphenol	ug/kg		--			--		
Naphthalene	ug/kg	1400000	--	1800	27000	50 J1	440	720
2-Methylnaphthalene	ug/kg	290000	--	550	12000 J1	--	190 J1	240 J1
Acenaphthylene	ug/kg	--	--	64 J1	1300 J1	--	--	--
Acenaphthene	ug/kg	290000	450 J1	780	18000	--	410	320 J1
Dibenzofuran	ug/kg		560 J1			--		
Fluorene	ug/kg	390000	1200 J1	840	19000	--	490	330 J1
Phenanthrene	ug/kg	1300000	13000	3900	66000	210 J1	2100	1100
Anthracene	ug/kg	250000	3300	380 J1	6800 J1	--	360 J1	190 J1
Carbazole	ug/kg		310 J1			--		
Di-n-Butylphthalate	ug/kg		--			--		
Fluoranthene	ug/kg	710000	14000	2800	38000	210 J1	1600	810
Pyrene	ug/kg	610000	13000	2500	32000	150 J1	1300	740
Butylbenzylphthalate	ug/kg		--			--		
Benzo(a)Anthracene	ug/kg	220000	7300	900	8800 J1	77 J1	550	240 J1
Chrysene	ug/kg	210000 J1	6700	710	6000 J1	85 J1	490	220 J1
bis(2-ethylhexyl)Phthalate	ug/kg		--			--		
Benzo(b)fluoranthene	ug/kg	170000 J1	5800	820	6400 J1	110 J1	570	240 J1
Benzo(k)fluoranthene	ug/kg	82000 J1	2300 J1	330 J1	2600 J1	--	180 J1	95 J1
Benzo(a)pyrene	ug/kg	140000 J1	4700	650	4900 J1	78 J1	410	190 J1
Indeno(1,2,3-cd)pyrene	ug/kg	43000 J1	1500 J1	230 J1	--	--	160 J1	72 J1
Dibenz(a,h)anthracene	ug/kg	--	640 J1	53 J1	--	--	--	--
Benzo(g,h,i)perylene	ug/kg	45000 J1	1500 J1	280 J1	1300 J1	--	160 J1	70 J1

TABLE 5.2
SUMMARY OF DETECTIONS - AREA A SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB13-SS01-4/6	SCA-SB14-SS01-0/6	SCA-SB14-SS01-1/2	SCA-SB104-SS01-1/2	SCA-SB14-SS01-4/6	SCA-SB15-SS01-0/6	SCA-SB15-SS01-1/2
LOCATION:		SCA-SB13	SCA-SB14	SCA-SB14	SCA-SB14	SCA-SB14	SCA-SB15	SCA-SB15
DEPTH RANGE:		4 to 6 feet	0 to 0.5 feet	1 to 2 feet	1 to 2 feet	4 to 6 feet	0 to 0.5 feet	1 to 2 feet
SAMPLE DATE:		05/07/97	05/08/97	05/08/97	05/08/97	05/08/97	05/13/97	05/13/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E090176011	A7E090176015	A7E090176016	A7E090176019	A7E090176017	A7E150154008	A7E150154009
EPA SAMPLE ID:		E097611	E097615	E097616	E097618	E097617	E155408	E155409
SAMPLE TYPE:		N1	N1	N1	FR1	N1	N1	N1
SDG NO:		AS04	AS04	AS04	AS04	AS04	AS07	AS07
Semivolatile Organic Compounds								
Phenol	ug/kg		–	–	–	–		–
2-Methylphenol	ug/kg		–	–	–	–		–
4-Methylphenol	ug/kg		–	–	–	–		–
2,4-Dimethylphenol	ug/kg		–	–	–	–		–
Naphthalene	ug/kg	1800 J1	–	–	–	380 J1	85 J1	5300
2-Methylnaphthalene	ug/kg	–	–	–	–	180 J1	60 J1	2300
Acenaphthylene	ug/kg	–	–	–	–	–	–	–
Acenaphthene	ug/kg	1500 J1	–	–	–	460 J1	130 J1	1200
Dibenzofuran	ug/kg		–	–	–	200 J1		850 J1
Fluorene	ug/kg	1500 J1	–	–	–	380 J1	110 J1	1300
Phenanthrene	ug/kg	37000	–	83 J1	47 J1	3700	1200	6300 J7
Anthracene	ug/kg	7000 J1	–	–	–	790 J1	260 J1	1700 J7
Carbazole	ug/kg		–	–	–	680 J1		770 J1
Di-n-Butylphthalate	ug/kg		–	–	–	–		–
Fluoranthene	ug/kg	55000	55 J1	84 J1	87 J1	6700	2000	4700 J7
Pyrene	ug/kg	47000	–	89 J1	100 J1	5700	2100	–
Butylbenzylphthalate	ug/kg		–	–	–	–		–
Benzo(a)Anthracene	ug/kg	27000	–	–	150 J1	4200	1200	2300 J7
Chrysene	ug/kg	26000	–	46 J10	180 J10	4400	1100	2300 J7
bis(2-ethylhexyl)Phthalate	ug/kg		86 J1	–	–	–		–
Benzo(b)fluoranthene	ug/kg	27000	–	43 J10	330 J10	5500	1300	2300 J7
Benzo(k)fluoranthene	ug/kg	8200 J1	–	–	120 J1	1800	440 J1	820 J10
Benzo(a)pyrene	ug/kg	19000	–	–	300 J1	4000	1100	1900 J7
Indeno(1,2,3-cd)pyrene	ug/kg	7600 J1	–	–	130 J1	1900	630	930 J10
Dibenz(a,h)anthracene	ug/kg	2900 J1	–	–	–	700 J1	110 J1	180 J1
Benzo(g,h,i)perylene	ug/kg	7800 J1	–	–	160 J1	2100	660	830 J10

TABLE 6.2
SUMMARY OF DETECTIONS - AREA A SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB105-SS01-1/2	SCA-SB15-SS01-12/14	SCA-SB16-SS01-0/6	SCA-SB16-SS01-1/2	SCA-SB16-SS01-12/14
LOCATION:		SCA-SB15	SCA-SB15	SCA-SB16	SCA-SB16	SCA-SB16
DEPTH RANGE:		1 to 2 feet	12 to 14 feet	0 to 0.5 feet	1 to 2 feet	12 to 14 feet
SAMPLE DATE:		05/13/97	05/13/97	05/14/97	05/14/97	05/14/97
MATRIX:		Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E150154010	A7E150154011	A7E190102002	A7E190102003	A7E190102004
EPA SAMPLE ID:		E155410	E155411	E190202	E190203	E190204
SAMPLE TYPE:		FR1	N1	N1	N1	N1
SDG NO:		AS07	AS07	AS08	AS08	AS08
Semivolatile Organic Compounds						
Phenol	ug/kg		23000 J1			
2-Methylphenol	ug/kg		--			
4-Methylphenol	ug/kg		42000 J1			
2,4-Dimethylphenol	ug/kg		--			
Naphthalene	ug/kg	--	920000	--	--	58000 D
2-Methylnaphthalene	ug/kg	--	240000	--	--	20000
Acenaphthylene	ug/kg	--	--	--	--	1500 J1
Acenaphthene	ug/kg	--	150000 J1	--	120 J1	29000
Dibenzofuran	ug/kg		140000 J1			
Fluorene	ug/kg	--	140000 J1	--	140 J1	40000 D
Phenanthrene	ug/kg	240 J10	350000	380	1500	150000 D
Anthracene	ug/kg	46 J10	38000 J1	85 J1	340 J1	140000 D
Carbazole	ug/kg		40000 J1			
Di-n-Butylphthalate	ug/kg		--			
Fluoranthene	ug/kg	440 J7	170000	730	2800	82000 D
Pyrene	ug/kg	520 J7	130000 J1	740	2600	78000 D
Butylbenzylphthalate	ug/kg		--			
Benzo(a)Anthracene	ug/kg	220 J10	32000 J1	300 J1	1100	25000
Chrysene	ug/kg	280 J10	--	360 J1	1200	25000
bis(2-ethylhexyl)Phthalate	ug/kg		--			
Benzo(b)fluoranthene	ug/kg	340 J10	--	430	1500	20000
Benzo(k)fluoranthene	ug/kg	120 J10	--	160 J1	570	9500
Benzo(a)pyrene	ug/kg	240 J10	--	310 J1	1100	14000
Indeno(1,2,3-cd)pyrene	ug/kg	160 J10	--	160 J1	540	5900
Dibenz(a,h)anthracene	ug/kg	--	--	--	--	1600 J1
Benzo(g,h,i)perylene	ug/kg	150 J10	--	160 J1	570	4600

TABLE 5.2
SUMMARY OF DETECTIONS - AREA B SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCB-SB01-SS01-1/2	SCB-SB01-SS01-4/6	SCB-SB01-SS01-4/6	SCB-SB02-SS01-0/6	SCB-SB02-SS01-1/2	SCB-SB02-SS01-4/6	SCB-SB03-SS01-0/6
LOCATION:		SCB-SB01	SCB-SB01	SCB-SB01	SCB-SB02	SCB-SB02	SCB-SB02	SCB-SB03
DEPTH RANGE:		1 to 2 feet	4 to 6 feet	4 to 6 feet	0 to 0.5 feet	1 to 2 feet	4 to 6 feet	0 to 0.5 feet
SAMPLE DATE:		04/29/97	04/29/97	04/29/97	05/01/97	05/01/97	05/01/97	05/01/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E010140010	A7E010140011	A7E010140012	A7E030112005	A7E030105002	A7E030105001	A7E030105007
EPA SAMPLE ID:		E014010	E014011	E014012	E031205	E030502	E030501	E030507
SAMPLE TYPE:		N1	N1	FR1	N1	N1	N1	N1
SDG NO:		AS01	AS01	AS01	AS02	AS01	AS01	AS01
Semivolatile Organic Compounds								
Phenol	ug/kg				–	–	–	–
2-Methylphenol	ug/kg				–	–	–	–
4-Methylphenol	ug/kg				–	–	–	–
2,4-Dimethylphenol	ug/kg				–	–	–	–
Naphthalene	ug/kg	1100 J1	79000	71000	8300 J1	5700 J1	57000 J1	290 J1
2-Methylnaphthalene	ug/kg	520 J1	41000 J1	28000	2100 J1	1800 J1	–	–
Acenaphthylene	ug/kg	–	–	–	810 J1	–	–	–
Acenaphthene	ug/kg	1000 J1	110000	72000	3700 J1	6200 J1	120000 J1	680 J1
Dibenzofuran	ug/kg				2200 J1	3500 J1	80000 J1	–
Fluorene	ug/kg	770 J1	95000	58000	3600 J1	6400 J1	120000 J1	750 J1
Phenanthrene	ug/kg	8100	230000	120000	30000	49000	730000	7600
Anthracene	ug/kg	1800 J1	40000 J1	15000 J1	7900 J1	13000	50000 J1	2100 J1
Carbazole	ug/kg				3700 J1	4900 J1	25000 J1	670 J1
Di-n-Butylphthalate	ug/kg				–	–	–	–
Fluoranthene	ug/kg	23000	160000	72000	50000	71000	700000	15000
Pyrene	ug/kg	18000	110000	51000	43000	58000	590000	10000
Butylbenzylphthalate	ug/kg				–	–	–	–
Benzo(a)Anthracene	ug/kg	10000	41000 J1	15000 J1	23000	32000	150000 J1	6200
Chrysene	ug/kg	12000	46000	18000 J1	23000	35000	110000 J1	7500
bis(2-ethylhexyl)Phthalate	ug/kg				–	–	–	390 J1
Benzo(b)fluoranthene	ug/kg	17000	42000 J1	15000 J1	31000	45000	120000 J1	9200
Benzo(k)fluoranthene	ug/kg	6200	18000 J10	5900 J10	10000 J1	14000	49000 J1	3500
Benzo(a)pyrene	ug/kg	13000	34000 J1	12000 J1	21000	34000	89000 J1	7100
Indeno(1,2,3-cd)pyrene	ug/kg	6500	13000 J1	4500 J1	9800 J1	15000	30000 J1	3400
Dibenz(a,h)anthracene	ug/kg	1700 J1	–	–	2800 J1	4400 J1	–	840 J1
Benzo(g,h,i)perylene	ug/kg	8400	12000 J1	4100 J1	8800 J1	14000	25000 J1	3000

TABLE 6.2
SUMMARY OF DETECTIONS - AREA B SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCB-SB03-SS01-1/2	SCB-SB03-SS01-6/8	SCB-SB04-SS01-0/6	SCB-SB04-SS01-1/2	SCB-SB04-SS01-4/6	SCB-SB05-SS01-0/6	SCB-SB95-SS01-0/6
LOCATION:		SCB-SB03	SCB-SB03	SCB-SB04	SCB-SB04	SCB-SB04	SCB-SB05	SCB-SB05
DEPTH RANGE:		1 to 2 feet	6 to 8 feet	0 to 0.5 feet	1 to 2 feet	4 to 6 feet	0 to 0.5 feet	0 to 0.5 feet
SAMPLE DATE:		05/01/97	05/01/97	05/01/97	05/01/97	05/01/97	05/01/97	05/01/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
LAB SAMPLE ID:		A7E030105008	A7E030112001	A7E030112002	A7E030112003	A7E030112004	A7E030105003	A7E030105004
EPA SAMPLE ID:		E030508	E031201	E031202	E031203	E031204	E030503	E030504
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	FR1
SDG NO:		AS01	AS02	AS02	AS02	AS02	AS01	AS01
Semivolatile Organic Compounds								
Phenol	ug/kg			--			--	--
2-Methylphenol	ug/kg			--			--	--
4-Methylphenol	ug/kg			--			--	--
2,4-Dimethylphenol	ug/kg			--			--	--
Naphthalene	ug/kg	17000 J1	580000	--	--	380000	--	--
2-Methylnaphthalene	ug/kg	--	290000	200 J1	1500 J1	94000 J1	--	--
Acenaphthylene	ug/kg	--	15000 J1	--	1700 J1	--	--	--
Acenaphthene	ug/kg	26000 J1	260000	640 J1	3000 J1	180000	--	--
Dibenzofuran	ug/kg			320 J1			--	--
Fluorene	ug/kg	28000 J1	210000	820 J1	4400 J1	180000	--	--
Phenanthrene	ug/kg	470000	780000	5400	34000	890000	370 J1	560
Anthracene	ug/kg	120000 J1	230000	1200 J1	9000	260000	64 J1	86 J1
Carbazole	ug/kg			690 J1			--	--
Di-n-Butylphthalate	ug/kg			--			--	--
Fluoranthene	ug/kg	750000	480000	10000	57000	730000	790	910
Pyrene	ug/kg	710000	410000	8700	50000	630000	640	660
Butylbenzylphthalate	ug/kg			--			--	--
Benzo(a)Anthracene	ug/kg	340000	200000	4400	30000	310000	370 J1	390
Chrysene	ug/kg	380000	180000	4600	28000	280000	440	480
bis(2-ethylhexyl)Phthalate	ug/kg			260 J1			--	--
Benzo(b)fluoranthene	ug/kg	450000	170000	6300	44000	350000	500	480
Benzo(k)fluoranthene	ug/kg	170000	64000 J1	2100	14000	120000 J1	210 J1	210 J1
Benzo(a)pyrene	ug/kg	290000	150000	4000	30000	310000	370 J1	400
Indeno(1,2,3-cd)pyrene	ug/kg	130000 J1	74000 J1	1800	16000	160000	160 J1	200 J1
Dibenz(a,h)anthracene	ug/kg	37000 J1	22000 J1	560 J1	3800 J1	37000 J1	57 J1	52 J1
Benzo(g,h,i)perylene	ug/kg	110000 J1	64000 J1	1600	15000	150000	170 J1	160 J1

TABLE 6.2
SUMMARY OF DETECTIONS - AREA B SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCB-SB05-SS01-1/2	SCB-SB05-SS01-6/8	SCB-SB06-SS01-0.5	SCB-SB06-SS01-1/2	SCB-SB06-SS01-14/16	SCB-SB07-SS01-0/6	SCB-SB07-SS01-1/2
LOCATION:		SCB-SB05	SCB-SB05	SCB-SB06	SCB-SB06	SCB-SB06	SCB-SB07	SCB-SB07
DEPTH RANGE:		1 to 2 feet	6 to 8 feet	0 to 0.5 feet	1 to 2 feet	14 to 16 feet	0 to 0.5 feet	1 to 2 feet
SAMPLE DATE:		05/01/97	05/01/97	05/02/97	05/02/97	05/02/97	05/13/97	05/13/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E030105005	A7E030105006	A7E030115001	A7E030115002	A7E030115003	A7E150154002	A7E150154003
EPA SAMPLE ID:		E030505	E030506	E031501	E031502	E031503	E155402	E155403
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS01	AS01	AS02	AS02	AS02	AS07	AS07
Semivolatile Organic Compounds								
Phenol	ug/kg			–				
2-Methylphenol	ug/kg			–				
4-Methylphenol	ug/kg			–				
2,4-Dimethylphenol	ug/kg			–				
Naphthalene	ug/kg	–	790	–	–	–	250 J1	820 J1
2-Methylnaphthalene	ug/kg	–	280 J1	–	–	–	–	480 J1
Acenaphthylene	ug/kg	–	63 J1	–	–	–	–	–
Acenaphthene	ug/kg	–	460 J1	–	–	–	430 J1	740 J1
Dibenzofuran	ug/kg			–				
Fluorene	ug/kg	43 J1	520 J1	–	–	–	520 J1	830 J1
Phenanthrene	ug/kg	390	2000	220 J1	120 J1D	59 J1	5200	7300
Anthracene	ug/kg	59 J1	610	–	–	–	1500 J1	1800
Carbazole	ug/kg			–				
Di-n-Butylphthalate	ug/kg			–				
Fluoranthene	ug/kg	780	2200	400	180 J1D	–	7500	6500
Pyrene	ug/kg	550	1500	340 J1	230 J1D	–	8200	6600
Butylbenzylphthalate	ug/kg			–				
Benzo(a)Anthracene	ug/kg	290 J1	780	160 J1	100 J1D	–	3800	2700
Chrysene	ug/kg	390	1000	190 J1	110 J1D	–	4100	3100
bis(2-ethylhexyl)Phthalate	ug/kg			66 J1				
Benzo(b)fluoranthene	ug/kg	430	1100	230 J1	110 J1D	–	4000	2700
Benzo(k)fluoranthene	ug/kg	200 J1	390 J1	88 J1	49 J1D	–	1500 J1	960 J1
Benzo(a)pyrene	ug/kg	320 J1	760	150 J1	100 J1D	–	3200	2100
Indeno(1,2,3-cd)pyrene	ug/kg	190 J1	420 J1	81 J1	68 J1D	–	2000	1300 J1
Dibenz(a,h)anthracene	ug/kg	55 J1	110 J1	–	–	–	580 J1	330 J1
Benzo(g,h,i)perylene	ug/kg	170 J1	320 J1	71 J1	57 J1D	–	2100	1100 J1

TABLE 5.2
SUMMARY OF DETECTIONS - AREA B SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCB-SB08-SS01-0/6	SCB-SB08-SS01-1/2	SCB-SB08-SS01-12/14
LOCATION:		SCB-SB08	SCB-SB08	SCB-SB08
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	12 to 14 feet
SAMPLE DATE:		05/13/97	05/13/97	05/13/97
MATRIX:		Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E150154005	A7E150154006	A7E150154007
EPA SAMPLE ID:		E155405	E155406	E155407
SAMPLE TYPE:		N1	N1	N1
SDG NO:		AS07	AS07	AS07
Semivolatile Organic Compounds				
Phenol	ug/kg			
2-Methylphenol	ug/kg			
4-Methylphenol	ug/kg			
2,4-Dimethylphenol	ug/kg			
Naphthalene	ug/kg	--	260 J1	8000 J1
2-Methylnaphthalene	ug/kg	--	--	8100 J1
Acenaphthylene	ug/kg	--	--	--
Acenaphthene	ug/kg	5600 J1	290 J1	12000
Dibenzofuran	ug/kg			
Fluorene	ug/kg	5300 J1	310 J1	13000
Phenanthrene	ug/kg	57000	4800	53000
Anthracene	ug/kg	13000 J1	1300 J1	8300 J1
Carbazole	ug/kg			
Di-n-Butylphthalate	ug/kg			
Fluoranthene	ug/kg	84000	8900	32000
Pyrene	ug/kg	88000	8500	30000
Butylbenzylphthalate	ug/kg			
Benzo(a)Anthracene	ug/kg	46000	4400	9300 J1
Chrysene	ug/kg	50000	4400	7900 J1
bis(2-ethylhexyl)Phthalate	ug/kg			
Benzo(b)fluoranthene	ug/kg	53000	5500	6300 J1
Benzo(k)fluoranthene	ug/kg	19000 J1	2400	2600 J1
Benzo(a)pyrene	ug/kg	44000	3900	5100 J1
Indeno(1,2,3-cd)pyrene	ug/kg	29000	3000	2400 J1
Dibenz(a,h)anthracene	ug/kg	6800 J1	1000 J1	--
Benzo(g,h,i)perylene	ug/kg	26000	2900	2400 J1

TABLE ...
SUMMARY OF DETECTIONS - AREA C SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FELD SAMPLE ID:		SCC-SB01-SS01-0/6	SCC-SB01-SS01-1/2	SCC-SB01-SS01-12/14	SCC-SB02-SS01-0/6	SCC-SB02-SS01-1/2	SCC-SB02-SS01-6/8	SCC-SB03-SS01-0/6
LOCATION:		SCC-SB01	SCC-SB01	SCC-SB01	SCC-SB02	SCC-SB02	SCC-SB02	SCC-SB03
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	12 to 14 feet	0 to 0.5 feet	1 to 2 feet	6 to 8 feet	0 to 0.5 feet
SAMPLE DATE:		04/29/97	04/29/97	04/29/97	04/29/97	04/29/97	04/29/97	04/29/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E010140001	A7E010140002	A7E010140003	A7E010140004	A7E010140005	A7E010140006	A7E010140007
EPA SAMPLE ID:		E014001	E014002	E014003	E014004	E014005	E014006	E014007
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS01	AS01	AS01	AS01	AS01	AS01	AS01
Semivolatile Organic Compounds								
Phenol	ug/kg	–			–			–
2-Methylphenol	ug/kg	–			–			–
4-Methylphenol	ug/kg	–			–			–
2,4-Dimethylphenol	ug/kg	–			–			–
Naphthalene	ug/kg	56 J1	4400 J1	130000	–	6400 J1	1200000	360 J1
2-Methylnaphthalene	ug/kg	–	1700 J1	91000	–	3100 J1	790000	–
Acenaphthylene	ug/kg	–	–	21000 J1	–	–	30000 J1	–
Acenaphthene	ug/kg	–	6200 J1	27000	–	9200 J1	420000	600 J1
Dibenzofuran	ug/kg	–			–			–
Fluorene	ug/kg	–	5100 J1	27000	–	8800 J1	250000	–
Phenanthrene	ug/kg	1000	47000	70000	8900	85000	800000	5900
Anthracene	ug/kg	180 J1	11000 J1	26000	1800 J1	23000	200000	1300 J1
Carbazole	ug/kg	91 J1			690 J1			520 J1
Di-n-Butylphthalate	ug/kg	–			–			–
Fluoranthene	ug/kg	2000	78000	30000	23000	140000	340000	12000
Pyrene	ug/kg	1600	58000	38000	17000	100000	440000	9100
Butylbenzylphthalate	ug/kg	–			–			–
Benzo(a)Anthracene	ug/kg	1000	35000	15000 J1	8200	60000	160000 J1	5900
Chrysene	ug/kg	1200	41000	18000 J1	9800	70000	170000 J1	6800
bis(2-ethylhexyl)Phthalate	ug/kg	180 J1			670 J1			510 J1
Benzo(b)fluoranthene	ug/kg	1500	60000	10000 J1	9400	93000	120000 J1	10000
Benzo(k)fluoranthene	ug/kg	540	18000	4000 J1	3500 J1	28000	43000 J1	2900
Benzo(a)pyrene	ug/kg	1100	44000	12000 J1	6500	66000	130000 J1	7100
Indeno(1,2,3-cd)pyrene	ug/kg	620	23000	3300 J1	3000 J1	33000	43000 J1	3500
Dibenz(a,h)anthracene	ug/kg	190 J1	5600 J1	–	800 J1	8400 J1	–	980 J1
Benzo(g,h,i)perylene	ug/kg	640	22000	3100 J1	2900 J1	30000	41000 J1	3200

TABLE
SUMMARY OF DETECTIONS - AREA C SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCC-SB03-SS01-1/2	SCC-SB03-SS01-8/10	SCC-SB04-SS01-0/6	SCC-SB94-SS01-0/6	SCC-SB04-SS01-1/2	SCC-SB04-SS01-14/16
LOCATION:		SCC-SB03	SCC-SB03	SCC-SB04	SCC-SB04	SCC-SB04	SCC-SB04
DEPTH RANGE:		1 to 2 feet	8 to 10 feet	0 to 0.5 feet	0 to 0.5 feet	1 to 2 feet	14 to 16 feet
SAMPLE DATE:		04/29/97	04/29/97	05/12/97	05/13/97	05/12/97	05/12/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample
LAB SAMPLE ID:		A7E010140008	A7E010140009	A7E140163018	A7E150154001	A7E140163019	A7E140163020
EPA SAMPLE ID:		E014008	E014009	E146318	E155401	E146319	E146320
SAMPLE TYPE:		N1	N1	N1	FR1	N1	N1
SDG NO:		AS01	AS01	AS06	AS07	AS06	AS06
Semivolatile Organic Compounds							
Phenol	ug/kg	--	--				
2-Methylphenol	ug/kg	--	--				
4-Methylphenol	ug/kg	--	--				
2,4-Dimethylphenol	ug/kg	--	--				
Naphthalene	ug/kg	56 J1	1100000 J2	450 J1	1300	5200 J1	120000
2-Methylnaphthalene	ug/kg	--	560000 J2	170 J1	470 J1	1400 J1	100000
Acenaphthylene	ug/kg	--	22000 J2	--	--	--	42000
Acenaphthene	ug/kg	--	280000 J2	210 J1	410 J1	5000 J1	6700 J1
Dibenzofuran	ug/kg	--	50000 J2				
Fluorene	ug/kg	--	160000 J2	200 J1	360 J1	4900 J1	39000
Phenanthrene	ug/kg	820	530000 J2	1700	2300	41000	160000
Anthracene	ug/kg	100 J1	130000 J2	590 J1	490 J1	9000 J1	50000
Carbazole	ug/kg	67 J1	--				
Di-n-Butylphthalate	ug/kg	--	--				
Fluoranthene	ug/kg	1300	250000 J2	2800	2800	50000	57000
Pyrene	ug/kg	900	330000 J2	2400	3200	54000	96000
Butylbenzylphthalate	ug/kg	--	--				
Benzo(a)Anthracene	ug/kg	510	120000 J2	1300	1500	23000	31000
Chrysene	ug/kg	690	120000 J2	1400	1800	23000	29000
bis(2-ethylhexyl)Phthalate	ug/kg	130 J1	--				
Benzo(b)fluoranthene	ug/kg	890	100000 J2	1800	1800	25000	16000 J1
Benzo(k)fluoranthene	ug/kg	260 J1	43000 J2	530 J1	630 J1	17000	8400 J1
Benzo(a)pyrene	ug/kg	600	97000 J2	1300	1400	24000	27000
Indeno(1,2,3-cd)pyrene	ug/kg	370 J1	32000 J2	520 J1	1000	10000 J1	8300 J1
Dibenz(a,h)anthracene	ug/kg	100 J1	--	100 J1	220 J1	--	--
Benzo(g,h,i)perylene	ug/kg	380	31000 J2	530 J1	1000	11000 J1	9200 J1

TABLE 5.4
SUMMARY OF DETECTIONS - AREA D SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCD-SB01-SS01-0/6	SCD-SB01-SS01-1/2	SCD-SB01-SS01-12/14	SCD-SB02-SS01-0/6	SCD-SB02-SS01-1/2	SCD-SB02-SS01-8/10	SCD-SB03-SS01-0/6
LOCATION:		SCD-SB01	SCD-SB01	SCD-SB01	SCD-SB02	SCD-SB02	SCD-SB02	SCD-SB03
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	12 to 14 feet	0 to 0.5 feet	1 to 2 feet	8 to 10 feet	0 to 0.5 feet
SAMPLE DATE:		05/08/97	05/08/97	05/08/97	05/08/97	05/08/97	05/08/97	05/12/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E090176019	A7E090176020	A7E120138001	A7E120138002	A7E120138003	A7E120138004	A7E140163015
EPA SAMPLE ID:		E097619	E097620	E123801	E123802	E123803	E123804	E146315
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS04	AS04	AS05	AS05	AS05	AS05	AS06
Semivolatile Organic Compounds								
Phenol	ug/kg	–	–	–	–			–
2-Methylphenol	ug/kg	–	–	–	–			–
4-Methylphenol	ug/kg	–	–	–	–			–
2,4-Dimethylphenol	ug/kg	–	–	–	–			–
Naphthalene	ug/kg	–	–	4700	100 J1	120 J1	170 J1	60 J1
2-Methylnaphthalene	ug/kg	–	–	1700	55 J1	71 J1	670	59 J1
Acenaphthylene	ug/kg	–	–	–	–	–	50 J1	–
Acenaphthene	ug/kg	59 J1	–	3300	100 J1	140 J1	780	100 J1
Dibenzofuran	ug/kg	–	–	1600	71 J1			78 J1
Fluorene	ug/kg	71 J1	–	2100	88 J1	120 J1	820	130 J1
Phenanthrene	ug/kg	750	400	4500	330 J1	390	1500	1100
Anthracene	ug/kg	160 J1	98 J1	450 J1	68 J1	88 J1	340 J1	290 J1
Carbazole	ug/kg	74 J1	43 J1	92 J1	–			130 J1
Di-n-Butylphthalate	ug/kg	–	–	–	–			–
Fluoranthene	ug/kg	1200	710	2600	440	270 J1	720	1600
Pyrene	ug/kg	1100	750	1600	320 J1	210 J1	460	1700
Butylbenzylphthalate	ug/kg	–	–	–	–			–
Benzo(a)Anthracene	ug/kg	530	350 J1	640 J1	200 J1	99 J1	190 J1	870
Chrysene	ug/kg	580	350 J1	540 J1	210 J1	100 J1	160 J1	840
bis(2-ethylhexyl)Phthalate	ug/kg	67 J1	83 J1	–	74 J1			140 J1
Benzo(b)fluoranthene	ug/kg	800	430	540 J1	250 J1	120 J1	210 J1	860
Benzo(k)fluoranthene	ug/kg	240 J1	200 J1	170 J1	100 J1	58 J1	71 J1	410
Benzo(a)pyrene	ug/kg	490	310 J1	390 J1	200 J1	98 J1	160 J1	840
Indeno(1,2,3-cd)pyrene	ug/kg	210 J1	140 J1	190 J1	100 J1	42 J1	92 J1	320 J1
Dibenz(a,h)anthracene	ug/kg	–	–	–	–	–	–	–
Benzo(g,h,i)perylene	ug/kg	220 J1	140 J1	220 J1	110 J1	45 J1	85 J1	390

TABLE 5.2
SUMMARY OF DETECTIONS - AREA D SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCD-SB03-SS01-1/2	SCD-SB03-SS01-4/6
LOCATION:		SCD-SB03	SCD-SB03
DEPTH RANGE:		1 to 2 feet	4 to 6 feet
SAMPLE DATE:		05/12/97	05/12/97
MATRIX:		Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample
LAB SAMPLE ID:		A7E140163016	A7E140163017
EPA SAMPLE ID:		E146316	E146317
SAMPLE TYPE:		N1	N1
SDG NO:		AS06	AS06
Semivolatile Organic Compounds			
Phenol	ug/kg		
2-Methylphenol	ug/kg		
4-Methylphenol	ug/kg		
2,4-Dimethylphenol	ug/kg		
Naphthalene	ug/kg	67 J1	410000 J1
2-Methylnaphthalene	ug/kg	48 J1	3500000
Acenaphthylene	ug/kg	--	--
Acenaphthene	ug/kg	--	1800000
Dibenzofuran	ug/kg		
Fluorene	ug/kg	--	500000 J1
Phenanthrene	ug/kg	270 J1	160000 J1
Anthracene	ug/kg	61 J1	--
Carbazole	ug/kg		
Di-n-Butylphthalate	ug/kg		
Fluoranthene	ug/kg	330 J1	140000 J1
Pyrene	ug/kg	310 J1	170000 J1
Butylbenzylphthalate	ug/kg		
Benzo(a)Anthracene	ug/kg	180 J1	67000 J1
Chrysene	ug/kg	190 J1	86000 J1
bis(2-ethylhexyl)Phthalate	ug/kg		
Benzo(b)fluoranthene	ug/kg	150 J1	--
Benzo(k)fluoranthene	ug/kg	83 J1	--
Benzo(a)pyrene	ug/kg	190 J1	--
Indeno(1,2,3-cd)pyrene	ug/kg	120 J1	--
Dibenz(a,h)anthracene	ug/kg	--	--
Benzo(g,h,i)perylene	ug/kg	150 J1	--

TABLE 5.2
SUMMARY OF DETECTIONS - AREA E SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCE-SB01-SS01-0/6	SCE-SB01-SS01-1/2	SCE-SB01-SS01-8/10	SCE-SB02-SS01-0/6	SCE-SB02-SS01-1/2	SCE-SB02-SS01-4/6	SCE-SB03-SS01-0/6
LOCATION:		SCE-SB01	SCE-SB01	SCE-SB01	SCE-SB02	SCE-SB02	SCE-SB02	SCE-SB03
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	8 to 10 feet	0 to 0.5 feet	1 to 2 feet	4 to 6 feet	0 to 0.5 feet
SAMPLE DATE:		05/08/97	05/08/97	05/08/97	05/12/97	05/12/97	05/12/97	05/12/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E090176012	A7E090176013	A7E090176014	A7E140163007	A7E140163005	A7E140163006	A7E140163008
EPA SAMPLE ID:		E097612	E097613	E097614	E146307	E146305	E146306	E146308
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS04	AS04	AS04	AS06	AS06	AS06	AS06
Semivolatile Organic Compounds								
Phenol	ug/kg	–			–			–
2-Methylphenol	ug/kg	–			–			–
4-Methylphenol	ug/kg	–			–			–
2,4-Dimethylphenol	ug/kg	–			–			–
Naphthalene	ug/kg	–	–	68 J1	99 J1	42 J1	8600 J1	250 J1
2-Methylnaphthalene	ug/kg	–	–	–	98 J1	41 J1	14000 J1	210 J1
Acenaphthylene	ug/kg	–	–	–	–	–	–	–
Acenaphthene	ug/kg	–	–	–	160 J1	59 J1	28000 J1	320 J1
Dibenzofuran	ug/kg	–			120 J1			220 J1
Fluorene	ug/kg	–	–	–	170 J1	68 J1	26000 J1	330 J1
Phenanthrene	ug/kg	76 J1	240 J1	300 J1	820	710	190000	1100
Anthracene	ug/kg	–	56 J1	–	140 J1	170 J1	49000 J1	130 J1
Carbazole	ug/kg	–			–			–
Di-n-Butylphthalate	ug/kg	–			–			–
Fluoranthene	ug/kg	120 J1	370 J1	460	920	1400	250000	550
Pyrene	ug/kg	120 J1	370 J1	500	630	1000	270000	580
Butylbenzylphthalate	ug/kg	–			–			–
Benzo(a)Anthracene	ug/kg	61 J1	150 J1	240 J1	400	500	110000	280 J1
Chrysene	ug/kg	72 J1	160 J1	240 J1	370 J1	510	120000	230 J1
bis(2-ethylhexyl)Phthalate	ug/kg	160 J1			160 J1			270 J1
Benzo(b)fluoranthene	ug/kg	85 J1	200 J1	280 J1	400	640	110000	290 J1
Benzo(k)fluoranthene	ug/kg	–	74 J1	140 J1	140 J1	190 J1	57000	97 J1
Benzo(a)pyrene	ug/kg	68 J1	120 J1	180 J1	330 J1	520	110000	230 J1
Indeno(1,2,3-cd)pyrene	ug/kg	–	72 J1	93 J1	150 J1	200 J1	47000 J1	140 J1
Dibenz(a,h)anthracene	ug/kg	–	–	–	–	45 J1	–	–
Benzo(g,h,i)perylene	ug/kg	–	67 J1	100 J1	160 J1	250 J1	47000 J1	160 J1

TABLE 5.2
SUMMARY OF DETECTIONS - AREA E SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCE-SB03-SS01-1/2	SCE-SB93-SS01-1/2	SCE-SB04-SS01-0/6	SCE-SB04-SS01-1/2	SCE-SB04-SS01-8/10	SCE-SB06-SS01-0/6	SCE-SB06-SS01-1/2
LOCATION:		SCE-SB03	SCE-SB03	SCE-SB04	SCE-SB04	SCE-SB04	SCE-SB05	SCE-SB05
DEPTH RANGE:		1 to 2 feet	1 to 2 feet	0 to 0.5 feet	1 to 2 feet	8 to 10 feet	0 to 0.5 feet	1 to 2 feet
SAMPLE DATE:		05/12/97	05/12/97	05/12/97	05/12/97	05/12/97	05/14/97	05/14/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E140163009	A7E140163010	A7E140163012	A7E140163013	A7E140163014	A7E190102005	A7E190102006
EPA SAMPLE ID:		E146309	E146310	E146312	E146313	E146314	E190205	E190206
SAMPLE TYPE:		N1	FR1	N1	N1	N1	N1	N1
SDG NO:		AS08	AS08	AS08	AS08	AS08	AS08	AS08
Semivolatile Organic Compounds								
Phenol	ug/kg	--		--				
2-Methylphenol	ug/kg	--		--				
4-Methylphenol	ug/kg	--		--				
2,4-Dimethylphenol	ug/kg	--		--				
Naphthalene	ug/kg	--	170 J1	140 J1	--	--	--	--
2-Methylnaphthalene	ug/kg	37 J1	--	--	6700 J1	--	--	--
Acenaphthylene	ug/kg	--	--	--	--	--	--	--
Acenaphthene	ug/kg	150 J10	640 J10	210 J1	7500 J1	--	--	--
Dibenzofuran	ug/kg	46 J1		90 J1				
Fluorene	ug/kg	86 J10	420 J10	140 J1	6500 J1	--	--	--
Phenanthrene	ug/kg	760 J7	4100 J7	1400	89000	220 J1	62 J1	60 J1
Anthracene	ug/kg	190 J10	1200 J10	320 J1	20000 J1	91 J1	--	--
Carbazole	ug/kg	91 J1		180 J1				
Di-n-Butylphthalate	ug/kg	--		--				
Fluoranthene	ug/kg	1400 J7	8000 J7	2000	220000	330 J1	49 J1	170 J1
Pyrene	ug/kg	1400 J7	6800 J7	2200	240000	260 J1	--	170 J1
Butylbenzylphthalate	ug/kg	--		--				
Benzo(a)Anthracene	ug/kg	930 J7	3800 J7	1100	130000	96 J1	--	90 J1
Chrysene	ug/kg	800 J7	3500 J7	1200	160000	120 J1	--	120 J1
bis(2-ethylhexyl)Phthalate	ug/kg	610		--				
Benzo(b)fluoranthene	ug/kg	1200 J7	6400 J7	1200	140000	150 J1	--	140 J1
Benzo(k)fluoranthene	ug/kg	460 J7	2400 J7	470 J1	62000	47 J1	--	60 J1
Benzo(a)pyrene	ug/kg	1200 J7	5200 J7	1100	130000	88 J1	--	88 J1
Indeno(1,2,3-cd)pyrene	ug/kg	640 J7	2500 J7	500	55000	--	--	--
Dibenz(a,h)anthracene	ug/kg	120 J10	530 J10	--	16000 J1	--	--	--
Benzo(g,h,i)perylene	ug/kg	700 J7	2900 J7	530	53000	--	--	48 J1

TABLE 5.2
SUMMARY OF DETECTIONS - AREA E SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	SCE-SB06-SS01-6/8
	LOCATION:	SCE-SB05
	DEPTH RANGE:	6 to 8 feet
	SAMPLE DATE:	05/14/97
	MATRIX:	Soil
	SAMPLE TYPE:	Field Sample
	LAB SAMPLE ID:	A7E190102007
	EPA SAMPLE ID:	E190207
	SAMPLE TYPE:	N1
	SDG NO:	AS08
Semivolatile Organic Compounds		
Phenol	ug/kg	–
2-Methylphenol	ug/kg	–
4-Methylphenol	ug/kg	–
2,4-Dimethylphenol	ug/kg	–
Naphthalene	ug/kg	1500 J1
2-Methylnaphthalene	ug/kg	970 J1
Acenaphthylene	ug/kg	–
Acenaphthene	ug/kg	3100 J1
Dibenzofuran	ug/kg	2700 J1
Fluorene	ug/kg	5900 J1
Phenanthrene	ug/kg	44000
Anthracene	ug/kg	18000
Carbazole	ug/kg	5400 J1
Di-n-Butylphthalate	ug/kg	–
Fluoranthene	ug/kg	59000
Pyrene	ug/kg	49000
Butylbenzylphthalate	ug/kg	–
Benzo(a)Anthracene	ug/kg	27000
Chrysene	ug/kg	27000
bis(2-ethylhexyl)Phthalate	ug/kg	–
Benzo(b)fluoranthene	ug/kg	32000
Benzo(k)fluoranthene	ug/kg	13000
Benzo(a)pyrene	ug/kg	27000
Indeno(1,2,3-cd)pyrene	ug/kg	13000
Dibenz(a,h)anthracene	ug/kg	3800
Benzo(g,h,i)perylene	ug/kg	15000

TABLE 5.2
SUMMARY OF DETECTIONS - AREA F SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCF-SB01-SS01-0/6	SCF-SB01-SS01-1/2	SCF-SB01-SS01-16/18	SCF-SB02-SS01-0/6	SCF-SB92-SS01-0/6	SCF-SB02-SS01-1/2	SCF-SB02-SS01-14/16
LOCATION:		SCF-SB01	SCF-SB01	SCF-SB01	SCF-SB02	SCF-SB02	SCF-SB02	SCF-SB02
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	16 to 18 feet	0 to 0.5 feet	0 to 0.5 feet	1 to 2 feet	14 to 16 feet
SAMPLE DATE:		05/08/97	05/08/97	05/08/97	05/08/97	05/08/97	05/08/97	05/08/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample
LAB SAMPLE ID:		A7E120138005	A7E120138006	A7E120138007	A7E120138008	A7E120138010	A7E120138009	A7E120138011
EPA SAMPLE ID:		E123805	E123806	E123807	E123808	E123810	E123809	E123811
SAMPLE TYPE:		N1	N1	N1	N1	FR1	N1	N1
SDG NO:		AS05	AS05	AS05	AS05	AS05	AS05	AS05
Semivolatile Organic Conpounds								
Phenol	ug/kg	--			--	--		
2-Methylphenol	ug/kg	--			--	--		
4-Methylphenol	ug/kg	--			--	--		
2,4-Dimethylphenol	ug/kg	--			--	--		
Naphthalene	ug/kg	86 J1	50 J1	--	--	--	--	--
2-Methylnaphthalene	ug/kg	100 J1	44 J1	--	--	--	--	--
Acenaphthylene	ug/kg	--	--	--	--	--	--	--
Acenaphthene	ug/kg	320 J1	57 J1	--	--	--	--	--
Dibenzofuran	ug/kg	200 J1			--	--		
Fluorene	ug/kg	400 J1	--	--	--	--	--	--
Phenanthrene	ug/kg	3500	600	78 J1	93 J1	67 J1	54 J1	67 J1
Anthracene	ug/kg	1000	140 J1	--	--	--	--	--
Carbazole	ug/kg	240 J1			--	--		
Di-n-Butylphthalate	ug/kg	--			--	--		
Fluoranthene	ug/kg	5400	960	55 J1	100 J1	--	77 J1	--
Pyrene	ug/kg	4000	890	43 J1	78 J1	--	50 J1	--
Butylbenzylphthalate	ug/kg	87 J1			--	--		
Benzo(a)Anthracene	ug/kg	2700	470	--	47 J1	--	--	--
Chrysene	ug/kg	2400	360 J1	--	45 J1	51 J1	--	--
bis(2-ethylhexyl)Phthalate	ug/kg	240 J1			140 J1	140 J1		
Benzo(b)fluoranthene	ug/kg	2900	660	--	62 J1	60 J1	--	--
Benzo(k)fluoranthene	ug/kg	1100	170 J1	--	--	--	--	--
Benzo(a)pyrene	ug/kg	2500	420	--	55 J1	--	--	--
Indeno(1,2,3-cd)pyrene	ug/kg	890	250 J1	--	--	--	--	--
Dibenz(a,h)anthracene	ug/kg	380 J1	--	--	--	--	--	--
Benzo(g,h,i)perylene	ug/kg	960	260 J1	--	--	--	--	--

TABLE ...
SUMMARY OF DETECTIONS - AREA F SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCF-SB03-SS01-0/6	SCF-SB03-SS01-1/2	SCF-SB04-SS01-0/6	SCF-SB04-SS01-1/2	SCF-SB04-SS01-8/10	SCF-SB05-SS01-0/6	SCF-SB05-SS01-1/2
LOCATION:		SCF-SB03	SCF-SB03	SCF-SB04	SCF-SB04	SCF-SB04	SCF-SB05	SCF-SB05
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	0 to 0.5 feet	1 to 2 feet	8 to 10 feet	0 to 0.5 feet	1 to 2 feet
SAMPLE DATE:		05/08/97	05/08/97	05/12/97	05/12/97	05/12/97	05/08/97	05/08/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E120138012	A7E120138013	A7E140163002	A7E140163003	A7E140163004	A7E120138015	A7E120138016
EPA SAMPLE ID:		E123812	E123813	E146302	E146303	E146304	E123815	E123816
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS05	AS05	AS06	AS06	AS06	AS05	AS05
Semivolatile Organic Compounds								
Phenol	ug/kg	–		–	–	–	–	
2-Methylphenol	ug/kg	–		–	–	–	–	
4-Methylphenol	ug/kg	–		–	–	–	–	
2,4-Dimethylphenol	ug/kg	–		–	–	–	–	
Naphthalene	ug/kg	–	–	–	–	38000 J1	–	–
2-Methylnaphthalene	ug/kg	–	–	–	–	20000 J1	–	–
Acenaphthylene	ug/kg	–	–	–	–	–	–	–
Acenaphthene	ug/kg	–	–	–	–	77000 J1	–	–
Dibenzofuran	ug/kg	–		–	–	37000 J1	–	
Fluorene	ug/kg	–	–	–	–	70000 J1	–	–
Phenanthrene	ug/kg	–	82 J1	310 J1	89 J1	440000	80 J1	–
Anthracene	ug/kg	–	–	–	–	110000	–	–
Carbazole	ug/kg	–		–	–	69000 J1	–	
Di-n-Butylphthalate	ug/kg	–		–	–	–	–	
Fluoranthene	ug/kg	62 J1	180 J1	430	140 J1	440000	110 J1	78 J1
Pyrene	ug/kg	52 J1	160 J1	400	120 J1	350000	78 J1	76 J1
Butylbenzylphthalate	ug/kg	–		–	–	–	–	
Benzo(a)Anthracene	ug/kg	–	78 J1	260 J1	83 J1	240000	43 J1	–
Chrysene	ug/kg	–	77 J1	250 J1	79 J1	240000	52 J1	42 J1
bis(2-ethylhexyl)Phthalate	ug/kg	–		–	61 J1	–	–	
Benzo(b)fluoranthene	ug/kg	49 J1	110 J1	290 J1	95 J1	240000	70 J1	52 J1
Benzo(k)fluoranthene	ug/kg	–	45 J1	90 J1	47 J1	110000	–	–
Benzo(a)pyrene	ug/kg	–	78 J1	260 J1	110 J1	230000	–	–
Indeno(1,2,3-cd)pyrene	ug/kg	–	45 J1	140 J1	62 J1	98000 J1	–	–
Dibenz(a,h)anthracene	ug/kg	–	–	–	–	34000 J1	–	–
Benzo(g,h,i)perylene	ug/kg	–	43 J1	140 J1	70 J1	100000	–	–

TABLE 5.2
SUMMARY OF DETECTIONS - AREA F SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCF-SB05-SS01-14/16	SCF-SB06-SS01-0/6	SCF-SB06-SS01-1/2	SCF-SB06-SS01-14/16	SCF-SB07-SS01-0/6	SCF-SB07-SS01-1/2	SCF-SB07-SS01-12/14
LOCATION:		SCF-SB05	SCF-SB06	SCF-SB06	SCF-SB06	SCF-SB07	SCF-SB07	SCF-SB07
DEPTH RANGE:		14 to 16 feet	0 to 0.5 feet	1 to 2 feet	14 to 16 feet	0 to 0.5 feet	1 to 2 feet	12 to 14 feet
SAMPLE DATE:		05/08/97	05/31/97	05/31/97	05/31/97	05/13/97	05/13/97	05/13/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E120138017	A7F040135006	A7F040135004	A7F040135005	A7E150154015	A7E150154016	A7E150154017
EPA SAMPLE ID:		E123817	F043506	F043504	F043505	E155415	E155416	E155417
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS05	AS09	AS09	AS09	AS07	AS07	AS07
Semivolatile Organic Compounds								
Phenol	ug/kg		--					
2-Methylphenol	ug/kg		--					
4-Methylphenol	ug/kg		--					
2,4-Dimethylphenol	ug/kg		--					
Naphthalene	ug/kg	1700 J1	430 J1	1600 J1	--	43 J1	75 J1	700
2-Methylnaphthalene	ug/kg	910 J1	--	--	--	--	--	300 J1
Acenaphthylene	ug/kg	--	500 J1	--	--	--	--	--
Acenaphthene	ug/kg	1300 J1	1000 J1	7000 J1	--	--	48 J1	430 J1
Dibenzofuran	ug/kg		460 J1					
Fluorene	ug/kg	1500 J1	860 J1	8000 J1	--	--	66 J1	570 J1
Phenanthrene	ug/kg	13000 D	7700	33000	56 J1	250 J1	380	3600
Anthracene	ug/kg	3300	2700 J1	13000	--	48 J1	50 J1	1000
Carbazole	ug/kg		1500 J1					
Di-n-Butylphthalate	ug/kg		--					
Fluoranthene	ug/kg	13000	19000	78000	50 J1	500	440	2800
Pyrene	ug/kg	11000	20000	70000	46 J1	510	430	2400
Butylbenzylphthalate	ug/kg		--					
Benzo(a)Anthracene	ug/kg	4500	7900	33000	--	330 J1	210 J1	1200
Chrysene	ug/kg	3800	8200	39000	--	330 J1	220 J1	1200
bis(2-ethylhexyl)Phthalate	ug/kg		680 J10					
Benzo(b)fluoranthene	ug/kg	4600	16000	59000	--	420	280 J1	1200
Benzo(k)fluoranthene	ug/kg	970 J1	5000	16000	--	120 J1	110 J1	380 J1
Benzo(a)pyrene	ug/kg	3400	11000	40000	--	300 J1	190 J1	940
Indeno(1,2,3-cd)pyrene	ug/kg	1500 J1	6900	18000	--	170 J1	100 J1	430 J1
Dibenz(a,h)anthracene	ug/kg	430 J1	1400 J1	6100 J1	--	--	--	120 J1
Benzo(g,h,i)perylene	ug/kg	1500 J1	6000	18000	--	150 J1	98 J1	390 J1

TABLE 5.2
SUMMARY OF DETECTIONS - AREA F SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCF-SB08-SS01-0/6	SCF-SB08-SS01-1/2	SCF-SB78-SS01-1/2	SCF-SB08-SS01-14/16
LOCATION:		SCF-SB08	SCF-SB08	SCF-SB08	SCF-SB08
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	1 to 2 feet	14 to 16 feet
SAMPLE DATE:		05/13/97	05/13/97	05/13/97	05/14/97
MATRIX:		Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Duplicate	Field Sample
LAB SAMPLE ID:		ATE150154018	ATE150154019	ATE150154020	ATE190102001
EPA SAMPLE ID:		E155418	E155419	E155420	E190201
SAMPLE TYPE:		N1	N1	FR1	N1
SDG NO:		AS07	AS07	AS07	AS08
Semivolatile Organic Compounds					
Phenol	ug/kg				
2-Methylphenol	ug/kg				
4-Methylphenol	ug/kg				
2,4-Dimethylphenol	ug/kg				
Naphthalene	ug/kg	42 J1	720 J1	330 J1	–
2-Methylnaphthalene	ug/kg	–	–	–	–
Acenaphthylene	ug/kg	–	–	–	–
Acenaphthene	ug/kg	–	2200 J1	1000 J1	–
Dibenzofuran	ug/kg				
Fluorene	ug/kg	–	1500 J1	700 J1	–
Phenanthrene	ug/kg	280 J1	12000	6000	85 J1
Anthracene	ug/kg	77 J1	3600 J1	1700 J1	–
Carbazole	ug/kg				
Di-n-Butylphthalate	ug/kg				
Fluoranthene	ug/kg	480	21000	11000	–
Pyrene	ug/kg	650	19000	10000	–
Butylbenzylphthalate	ug/kg				
Benzo(a)Anthracene	ug/kg	240 J1	10000	6300	–
Chrysene	ug/kg	270 J1	11000	6500	–
bis(2-ethylhexyl)Phthalate	ug/kg				
Benzo(b)fluoranthene	ug/kg	310 J1	18000	9100	–
Benzo(k)fluoranthene	ug/kg	130 J1	6400	3700	–
Benzo(a)pyrene	ug/kg	260 J1	14000	7000	–
Indeno(1,2,3-cd)pyrene	ug/kg	200 J1	8600	4400	–
Dibenz(a,h)anthracene	ug/kg	–	2000 J1	830 J1	–
Benzo(g,h,i)perylene	ug/kg	190 J1	9000	4800	–

TABLE 2
SUMMARY OF DETECTIONS - AREA G SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCG-SB01-SS01-0/6	SCG-SB01-SS01-1/2	SCG-SB01-SS01-16/18	SCG-SB91-SS01-16/18	SCG-SB02-SS01-0/6	SCG-SB02-SS01-1/2	SCG-SB02-SS01-8/10
LOCATION:		SCG-SB01	SCG-SB01	SCG-SB01	SCG-SB01	SCG-SB02	SCG-SB02	SCG-SB02
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	16 to 18 feet	16 to 18 feet	0 to 0.5 feet	1 to 2 feet	8 to 10 feet
SAMPLE DATE:		05/08/97	05/08/97	05/08/97	05/12/97	05/31/97	05/31/97	05/31/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E120138018	A7E120138019	A7E120138020	A7E140163001	A7F040135008	A7F040135007	A7F040135009
EPA SAMPLE ID:		E123818	E123819	E123820	E146301	F043508	F043507	F043509
SAMPLE TYPE:		N1	N1	N1	FR1	N1	N1	N1
SDG NO:		AS05	AS05	AS05	AS06	AS09	AS09	AS09
Semivolatile Organic Compounds								
Phenol	ug/kg	--				--		
2-Methylphenol	ug/kg	--				--		
4-Methylphenol	ug/kg	--				--		
2,4-Dimethylphenol	ug/kg	--				--		
Naphthalene	ug/kg	--	42 J1	58 J1	71 J1	150000	1900000	10000
2-Methylnaphthalene	ug/kg	--	--	--	--	87000	890000	5600
Acenaphthylene	ug/kg	--	--	--	--	--	--	2200
Acenaphthene	ug/kg	--	--	--	57 J1	100000	840000	1900
Dibenzofuran	ug/kg	--				82000		
Fluorene	ug/kg	--	--	80 J1	82 J1	110000	900000	3000
Phenanthrene	ug/kg	95 J1	120 J1	460 J1	520	350000	2200000	6400
Anthracene	ug/kg	--	--	140 J1	160 J1	190000	340000	1400
Carbazole	ug/kg	--				54000 J1		
Di-n-Butylphthalate	ug/kg	--				--		
Fluoranthene	ug/kg	200 J1	150 J1	760	1200	260000	1100000	1200 J1
Pyrene	ug/kg	160 J1	120 J1	790	940	180000	800000	1700
Butylbenzylphthalate	ug/kg	--				--		
Benzo(a)Anthracene	ug/kg	80 J1	54 J1	390 J1	590	96000	250000	600 J1
Chrysene	ug/kg	110 J1	67 J1	430 J1	630	98000	250000	620 J1
bis(2-ethylhexyl)Phthalate	ug/kg	110 J1				--		
Benzo(b)fluoranthene	ug/kg	150 J1	79 J1	500	890	130000	210000	390 J1
Benzo(k)fluoranthene	ug/kg	--	--	160 J1	270 J1	59000 J1	85000 J1	--
Benzo(a)pyrene	ug/kg	88 J1	60 J1	370 J1	610	100000	160000	410 J1
Indeno(1,2,3-cd)pyrene	ug/kg	--	--	160 J1	260 J1	43000 J1	54000 J1	--
Dibenz(a,h)anthracene	ug/kg	--	--	83 J1	89 J1	12000 J1	--	--
Benzo(g,h,i)perylene	ug/kg	65 J1	--	--	290 J1	41000 J1	55000 J1	--

TABLE 5.2
SUMMARY OF DETECTIONS - AREA G SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCG-SB03-SS01-1/2	SCG-SB03-SS01-1/2	SCG-SB03-SS01-4/6	SCG-SB03-SS01-12/14	SCG-SB04-SS01-0/5	SCG-SB04-SS01-1/2	SCG-SB04-SS01-8/10
LOCATION:		SCG-SB03	SCG-SB03	SCG-SB03	SCG-SB03	SCG-SB04	SCG-SB04	SCG-SB04
DEPTH RANGE:		1 to 2 feet	1 to 2 feet	4 to 6 feet	12 to 14 feet	0 to 0.5 feet	1 to 2 feet	8 to 10 feet
SAMPLE DATE:		08/04/97	08/04/97	08/04/97	08/04/97	05/31/97	05/31/97	05/31/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F050158003	A7F050158004	A7F050158001	A7F050158002	A7F040135012	A7F040135013	A7F040135011
EPA SAMPLE ID:		F055803	F055804	F055801	F055802	F043512	F043513	F043511
SAMPLE TYPE:		N1	FR1	N1	N1	N1	N1	N1
SDG NO:		AS09	AS09	AS09	AS09	AS09	AS09	AS09
Semivolatile Organic Compounds								
Phenol	ug/kg	–	–	–	–	–		
2-Methylphenol	ug/kg	–	–	–	–	–		
4-Methylphenol	ug/kg	–	–	–	–	–		
2,4-Dimethylphenol	ug/kg	–	–	–	–	–		
Naphthalene	ug/kg	4300 J1	3500 J1	1600 J1	–	430 J1	40000	660000
2-Methylnaphthalene	ug/kg	3200 J1	3100 J1	1900 J1	–	–	14000 J1	230000 J1
Acenaphthylene	ug/kg	–	–	–	–	–	–	–
Acenaphthene	ug/kg	6500 J1	9600 J1	5200 J1	6000 J1	550 J1	37000	930000
Dibenzofuran	ug/kg	3200 J1	4100 J1	5100 J1	740 J1	300 J1		
Fluorene	ug/kg	5000 J1	7700 J1	9200 J1	3300 J1	580 J1	32000	1000000
Phenanthrene	ug/kg	29000	41000	48000	920 J1	4100	150000	7600000
Anthracene	ug/kg	12000	19000	16000	1800 J1	1200 J1	45000	2300000
Carbazole	ug/kg	3200 J1	5300 J1	3600 J1	460 J1	630 J1		
Di-n-Butylphthalate	ug/kg	–	–	–	–	–		
Fluoranthene	ug/kg	37000	58000	57000	18000	8500	240000	6500000
Pyrene	ug/kg	28000	55000	45000	14000	6900	240000	5200000
Butylbenzylphthalate	ug/kg	–	–	–	–	–		
Benzo(a)Anthracene	ug/kg	25000	32000	22000	4300	4200	140000	2700000
Chrysene	ug/kg	24000	34000	21000	4200	4600	130000	2700000
bis(2-ethylhexyl)Phthalate	ug/kg	–	–	–	–	1000 J1		
Benzo(b)fluoranthene	ug/kg	41000	65000	26000	4300	7900	270000	2600000
Benzo(k)fluoranthene	ug/kg	15000	22000	8600 J1	1800 J1	2400	94000	1400000
Benzo(a)pyrene	ug/kg	36000	57000	18000	3100 J1	5500	220000	2400000
Indeno(1,2,3-cd)pyrene	ug/kg	17000	28000	6600 J1	1100 J1	3200	110000	900000
Dibenz(a,h)anthracene	ug/kg	5200 J1	9100 J1	–	–	1000 J1	35000	200000 J1
Benzo(g,h,i)perylene	ug/kg	18000	30000	6500 J1	1200 J1	3600	87000	960000

TABLE 5.2
SUMMARY OF DETECTIONS - AREA G SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCG-SB94-SS01-8/10	SCG-SB05-SS01-1/2	SCG-SB05-SS01-6/8	SCG-SB05-SS01-10/12	SCG-SB06-SS01-0/6	SCG-SB06-SS01-1/2	SCG-SB06-SS01-4/6
LOCATION:		SCG-SB04	SCG-SB05	SCG-SB05	SCG-SB05	SCG-SB06	SCG-SB06	SCG-SB06
DEPTH RANGE:		8 to 10 feet	1 to 2 feet	6 to 8 feet	10 to 12 feet	0 to 0.5 feet	1 to 2 feet	4 to 6 feet
SAMPLE DATE:		05/31/97	05/31/97	05/31/97	05/31/97	05/13/97	05/13/97	05/13/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F040135013	A7F040135016	A7F040135015	A7F040135014	A7E150154012	A7E150154013	A7E150154014
EPA SAMPLE ID:		F043513	F043516	F043515	F043514	E155412	E155413	E155414
SAMPLE TYPE:		FR1	N1	N1	N1	N1	N1	N1
SDG NO:		AS09	AS09	AS09	AS09	AS07	AS07	AS07
Semivolatile Organic Compounds								
Phenol	ug/kg		--					
2-Methylphenol	ug/kg		--					
4-Methylphenol	ug/kg		--					
2,4-Dimethylphenol	ug/kg		--					
Naphthalene	ug/kg	660000	4300 J1	4200 J1	87 J1	3800	780	1000000
2-Methylnaphthalene	ug/kg	240000	1800 J1	2000 J1	53 J1	1000 J1	240 J1	250000
Acenaphthylene	ug/kg	--	--	--	--	--	--	81000 J1
Acenaphthene	ug/kg	940000	6400 J1	4300 J1	140 J1	890 J1	280 J1	160000 J1
Dibenzofuran	ug/kg		2300 J1					
Fluorene	ug/kg	980000	4900 J1	3200 J1	320 J1	830 J1	270 J1	210000 J1
Phenanthrene	ug/kg	8100000	54000	53000	2000	5600	1600	1200000
Anthracene	ug/kg	2400000	14000	12000 J1	870	1300 J1	380 J1	280000
Carbazole	ug/kg		9000 J1					
Di-n-Butylphthalate	ug/kg		--					
Fluoranthene	ug/kg	6700000	91000	89000	2500	10000	2900	1700000
Pyrene	ug/kg	5100000	79000	69000	2000	13000	3600	1800000
Butylbenzylphthalate	ug/kg		--					
Benzo(a)Anthracene	ug/kg	2800000	46000	47000	1300	6000	1800	1100000
Chrysene	ug/kg	3900000	51000	51000	1300	8100	2100	1500000
bis(2-ethylhexyl)Phthalate	ug/kg		--					
Benzo(b)fluoranthene	ug/kg	2400000	69000	71000	1900	9400	2500	1400000
Benzo(k)fluoranthene	ug/kg	1300000	22000	26000	580	2700	840	480000
Benzo(a)pyrene	ug/kg	2300000	53000	57000	1300	6600	1800	1100000
Indeno(1,2,3-cd)pyrene	ug/kg	890000	22000	27000	570	3800	1100	620000
Dibenz(a,h)anthracene	ug/kg	180000 J1	7700 J1	9300 J1	170 J1	760 J1	290 J1	210000 J1
Benzo(g,h,i)perylene	ug/kg	920000	22000	31000	490	3600	1000	600000

TABLE 5.2
SUMMARY OF DETECTIONS - AREA G SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCG-SB07-SS01-0/6	SCG-SB07-SS01-2/4	SCG-SB07-SS01-8/10	SCG-SB08-SS01-1/2	SCG-SB08-SS01-8/10	SCG-SB08-SS01-12/14	SCG-SB09-SS01-1/2
LOCATION:		SCG-SB07	SCG-SB07	SCG-SB07	SCG-SB08	SCG-SB08	SCG-SB08	SCG-SB09
DEPTH RANGE:		0 to 0.5 feet	2 to 4 feet	8 to 10 feet	1 to 2 feet	8 to 10 feet	12 to 14 feet	1 to 2 feet
SAMPLE DATE:		06/04/97	06/03/97	06/04/97	06/16/97	06/16/97	06/16/97	06/16/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F050163001	A7F050163002	A7F050163003	A7F170129001	A7F170129002	A7F170129003	A7F170129004
EPA SAMPLE ID:		F056301	F056302	F056303	F172901	F172902	F172903	F172904
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS10	AS10	AS10	AS11	AS11	AS11	AS11
Semivolatile Organic Compounds								
Phenol	ug/kg	–	–	–	–			–
2-Methylphenol	ug/kg	–	–	–	–			–
4-Methylphenol	ug/kg	–	–	–	–			–
2,4-Dimethylphenol	ug/kg	–	–	–	–			–
Naphthalene	ug/kg	3300 J1	79000 J1	–	500000	–	–	54000 J1
2-Methylnaphthalene	ug/kg	1400 J1	31000 J1	14000	120000	–	–	17000 J1
Acenaphthylene	ug/kg	–	–	–	–	–	–	–
Acenaphthene	ug/kg	4100 J1	89000 J1	12000	140000	–	–	47000 J1
Dibenzofuran	ug/kg	1800 J1	38000 J1	7200 J1	150000			44000 J1
Fluorene	ug/kg	3000 J1	59000 J1	12000	220000	–	–	71000 J1
Phenanthrene	ug/kg	27000	470000	37000	1000000	42 J1	71 J1	190000
Anthracene	ug/kg	6100 J1	130000	8000 J1	470000	–	–	94000
Carbazole	ug/kg	3600 J1	70000 J1	4600 J1	220000			74000 J1
Di-n-Butylphthalate	ug/kg	–	–	–	–			–
Fluoranthene	ug/kg	41000	640000	22000	1100000	–	58 J1	370000
Pyrene	ug/kg	33000	530000	16000	760000	43 J1	47 J1	290000
Butylbenzylphthalate	ug/kg	–	–	–	–			–
Benzo(a)Anthracene	ug/kg	23000	360000	7300 J1	420000	–	–	160000
Chrysene	ug/kg	24000	390000	7600 J1	410000	–	50 J1	190000
bis(2-ethylhexyl)Phthalate	ug/kg	–	–	–	–			–
Benzo(b)fluoranthene	ug/kg	31000	420000	9000	400000	–	46 J1	230000
Benzo(k)fluoranthene	ug/kg	10000	180000	4000 J1	160000	–	–	67000 J1
Benzo(a)pyrene	ug/kg	24000	390000	6900 J1	350000	–	–	160000
Indeno(1,2,3-cd)pyrene	ug/kg	12000	180000	2700 J1	130000	–	–	68000 J1
Dibenz(a,h)anthracene	ug/kg	4100 J1	49000 J1	–	37000 J1	–	–	22000 J1
Benzo(g,h,i)perylene	ug/kg	12000	180000	2700 J1	130000	–	–	59000 J1

TABLE 5.2
SUMMARY OF DETECTIONS - AREA G SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCG-SB09-SS01-6/8	SCG-SB09-SS01-8/10
LOCATION:		SCG-SB09	SCG-SB09
DEPTH RANGE:		6 to 8 feet	8 to 10 feet
SAMPLE DATE:		06/16/97	06/16/97
MATRIX:		Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample
LAB SAMPLE ID:		A7F170129005	A7F170129006
EPA SAMPLE ID:		F172905	F172906
SAMPLE TYPE:		N1	N1
SDG NO:		AS11	AS11
Semivolatile Organic Compounds			
Phenol	ug/kg		
2-Methylphenol	ug/kg		
4-Methylphenol	ug/kg		
2,4-Dimethylphenol	ug/kg		
Naphthalene	ug/kg	--	--
2-Methylnaphthalene	ug/kg	--	--
Acenaphthylene	ug/kg	--	--
Acenaphthene	ug/kg	--	--
Dibenzofuran	ug/kg		
Fluorene	ug/kg	--	--
Phenanthrene	ug/kg	190 J1	--
Anthracene	ug/kg	68 J1	--
Carbazole	ug/kg		
Di-n-Butylphthalate	ug/kg		
Fluoranthene	ug/kg	240 J1	73 J1
Pyrene	ug/kg	190 J1	63 J1
Butylbenzylphthalate	ug/kg		
Benzo(a)Anthracene	ug/kg	110 J1	--
Chrysene	ug/kg	130 J1	56 J1
bis(2-ethylhexyl)Phthalate	ug/kg		
Benzo(b)fluoranthene	ug/kg	170 J1	71 J1
Benzo(k)fluoranthene	ug/kg	58 J1	--
Benzo(a)pyrene	ug/kg	120 J1	60 J1
Indeno(1,2,3-cd)pyrene	ug/kg	65 J1	--
Dibenz(a,h)anthracene	ug/kg	--	--
Benzo(g,h,i)perylene	ug/kg	56 J1	--

TABLE 5.2
SUMMARY OF DETECTIONS - BACKGROUND SOILS
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	BG1-SB01-SS01-0/2	BG1-SB01-SS01-6/8
	LOCATION:	Background	Background
	DEPTH RANGE:	0 to 2 feet	6 to 8 feet
	SAMPLE DATE:	08/04/97	08/04/97
	MATRIX:	Soil	Soil
	SAMPLE TYPE:	Field Sample	Field Sample
	LAB SAMPLE ID:	A7F050183004	A7F050183005
	EPA SAMPLE ID:	F056304	F056305
	SAMPLE TYPE:	N1	N1
	SDG NO:	AS10	AS10
Semivolatile Organic Compounds			
Phenol	ug/kg	–	–
2-Methylphenol	ug/kg	–	–
4-Methylphenol	ug/kg	–	–
2,4-Dimethylphenol	ug/kg	–	–
Naphthalene	ug/kg	–	–
2-Methylnaphthalene	ug/kg	–	–
Acenaphthylene	ug/kg	–	–
Acenaphthene	ug/kg	59 J1	–
Dibenzofuran	ug/kg	54 J1	–
Fluorene	ug/kg	84 J1	–
Phenanthrene	ug/kg	560	56 J1
Anthracene	ug/kg	97 J1	–
Carbazole	ug/kg	43 J1	–
Di-n-Butylphthalate	ug/kg	46 J1	–
Fluoranthene	ug/kg	750	58 J1
Pyrene	ug/kg	630	44 J1
Butylbenzylphthalate	ug/kg	–	–
Benzo(a)Anthracene	ug/kg	380 J1	–
Chrysene	ug/kg	400 J1	–
bis(2-ethylhexyl)Phthalate	ug/kg	180 J1	–
Benzo(b)fluoranthene	ug/kg	550	54 J1
Benzo(k)fluoranthene	ug/kg	180 J1	–
Benzo(a)pyrene	ug/kg	370 J1	45 J1
Indeno(1,2,3-cd)pyrene	ug/kg	160 J1	–
Dibenz(a,h)anthracene	ug/kg	58 J1	–
Benzo(g,h,i)perylene	ug/kg	180 J1	–

TABLE .2
SUMMARY OF DETECTIONS - SEDIMENT
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		C1-SD01MMSD	CU-SD02	CD-SD03
LOCATION:		Inlet Location	Upstream Location	Downstream Location
DEPTH RANGE:				
SAMPLE DATE:		05/31/97	05/31/97	05/31/97
MATRIX:		Sediment	Sediment	Sediment
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F040135002	A7F040135003	A7F040135001
EPA SAMPLE ID:		F043502	F043503	F043501
SAMPLE TYPE:		N1	N1	N1
SDG NO:		AS09	AS09	AS09
Semivolatile Organic Compounds				
Phenol	ug/kg	--		
2-Methylphenol	ug/kg	--		
4-Methylphenol	ug/kg	--		
2,4-Dimethylphenol	ug/kg	--		
Naphthalene	ug/kg	6200	100 J1	--
2-Methylnaphthalene	ug/kg	5900	140 J1	280 J1
Acenaphthylene	ug/kg	--	140 J1	--
Acenaphthene	ug/kg	4300 J1	400	2800
Dibenzofuran	ug/kg	2700 J1		
Fluorene	ug/kg	4400 J1	380 J1	2700
Phenanthrene	ug/kg	29000	1500	12000
Anthracene	ug/kg	4200 J1	600	1900
Carbazole	ug/kg	1500 J1		
Di-n-Butylphthalate	ug/kg	--		
Fluoranthene	ug/kg	31000	2800	8500
Pyrene	ug/kg	18000 J9	2600	5200
Butylbenzylphthalate	ug/kg	--		
Benzo(a)Anthracene	ug/kg	8900	1400	2300
Chrysene	ug/kg	8900	1300	2400
bis(2-ethylhexyl)Phthalate	ug/kg	33000		
Benzo(b)fluoranthene	ug/kg	11000	1700	2000
Benzo(k)fluoranthene	ug/kg	3100 J1	610	560 J1
Benzo(a)pyrene	ug/kg	7000	1200	1500 J1
Indeno(1,2,3-cd)pyrene	ug/kg	3700 J1	500	680 J1
Dibenz(a,h)anthracene	ug/kg	1000 J1	140 J1	150 J1
Benzo(g,h,i)perylene	ug/kg	3800 J1	420	610 J1

TABLE 6.2
SUMMARY OF DETECTIONS - GROUNDWATER
SEMIVOLATILE ORGANIC COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-TW01-GW01	SCG-TW03-GW01	GWRB1-6/5/97
LOCATION:		SCA-SB01	SCG-SB03	
DEPTH RANGE:				
SAMPLE DATE:		06/06/97	06/06/97	06/06/97
MATRIX:		Groundwater	Groundwater	
SAMPLE TYPE:		Field Sample	Field Sample	Rinsate Blank
LAB SAMPLE ID:		A7F110101001	A7F110101005	A7F110101002
EPA ID:		F110101	F110105	F110102
SAMPLE TYPE:		N1	N1	EB1
SDG NO:		AS10	AS10	AS10
Semivolatile Organic Compounds				
Phenol	ug/L	1600	–	1 J1
2-Methylphenol	ug/L	4700	–	–
4-Methylphenol	ug/L	9800	–	–
2,4-Dimethylphenol	ug/L	9900	7 J1D	–
Naphthalene	ug/L	8600	240 J4	–
2-Methylnaphthalene	ug/L	810 J1	110 J4	–
Acenaphthylene	ug/L	–	4 J1D	–
Acenaphthene	ug/L	240 J1	120 J4	–
Dibenzofuran	ug/L	170 J1	63 J4	–
Fluorene	ug/L	–	75 J4	–
Phenanthrene	ug/L	300 J1	150 J4	–
Anthracene	ug/L	–	34 J4	–
Carbazole	ug/L	310 J1	130 J4	–
Di-n-Butylphthalate	ug/L	–	–	–
Fluoranthene	ug/L	–	78 J4	–
Pyrene	ug/L	–	38 J4	–
Butylbenzylphthalate	ug/L	–	–	–
Benzo(a)Anthracene	ug/L	–	20 J1D	–
Chrysene	ug/L	–	20 J1D	–
bis(2-ethylhexyl)Phthalate	ug/L	–	–	–
Benzo(b)fluoranthene	ug/L	–	22 J1D	–
Benzo(k)fluoranthene	ug/L	–	9 J1D	–
Benzo(a)pyrene	ug/L	–	18 J1D	–
Indeno(1,2,3-cd)pyrene	ug/L	–	5 J1D	–
Dibenz(a,h)anthracene	ug/L	–	–	–
Benzo(g,h,i)perylene	ug/L	–	7 J1D	–

NOTES:

All Field Sample IDs begin with "SSAS1-". They have been shortened here to conserve space.

--	Analyte was not detected.
NA	Analyte was not analyzed for in given sample.
R	Unusable data due to gross violations of one or more quality control criteria.
D	Reported from diluted sample run due to calibration exceedance in the original analysis. See "J3" below.
U	The analyte was analyzed for and is not present above the level of the associated value.
UJ	The analyte was analyzed for but was not detected. The reported detection limit has been qualified due to a QC anomaly. Refer to the numerical suffixes.
UB	Analyte detected in the field or laboratory blank associated with this sample. Reported result should be considered estimated and biased high.
J	The analyte was positively identified, but the associated numerical value may be imprecise due to a quality control (QC) anomaly.
J^1	Estimated value, greater than the method detection limit (MDL) or the instrument detection limit (IDL) but less than the project reporting limit (PRL).
J^2	Sample was prepared or analyzed outside the specified holding time. The qualified result should be considered estimated and biased low.
J^3	Result exceeded the calibration range for the instrument and method and should be considered estimated.
J^4	Surrogate outliers were reported for the sample. The reported result should be considered estimated.
J^5	Accuracy and/or precision outlier reported for MS/MSD or field duplicate samples associated with the reported result. Result should be considered estimated.
J^6	Accuracy outlier reported for the Laboratory Control Sample (LCS) associated with the reported result. The reported result should be considered an estimate.
J^7.	Field precision outlier reported for the field duplicate/replicate sample associated with this result. Result should be considered an estimate.
J^8	Precision outlier reported for the laboratory duplicate samples associated with this analysis. Result should be considered an estimate.
J^9	Calibration or internal standard outliers reported for this sample. Results should be considered estimated.
J^{10}	Multiple QC anomalies associated with the reported result.
J^{11}	ICP serial dilution outlier reported. Result should be considered an estimate.
J^{12}	The percent difference between the values from the confirmation and quantitation columns exceeded 25%. Result should be considered an estimate.
J^{13}	The reported result has been qualified as estimated or unusable due to matrix interferences or laboratory error.

TAb__ 5.3
SUMMARY OF DETECTIONS - AREA A SOILS
PESTICIDES/PCB COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB01-SS01-0/5	SCA-SB02-SS01-0/5	SCA-SB03-SS01-0/5	SCA-SB04-SS01-0/5	SCA-SB05-SS01-0/5	SCA-SB06-SS01-0/5	SCA-SB06-SS01-0/5
LOCATION:		SCA-SB01	SCA-SB02	SCA-SB03	SCA-SB04	SCA-SB05	SCA-SB06	SCA-SB06
DEPTH RANGE:		0 to 0.5 feet	0 to 0.5 feet	0 to 0.5 feet	0 to 0.5 feet	0 to 0.5 feet	0 to 0.5 feet	0 to 0.5 feet
SAMPLE DATE:		05/02/97	05/02/97	05/02/97	05/02/97	05/05/97	05/05/97	05/05/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
LAB SAMPLE ID:		A7E070177001	A7E030115005	A7E070177005	A7E070177008	A7E070180002	A7E070180005	A7E070180006
EPA SAMPLE ID:		E077701	E031505	E077705	E077708	E078002	E078005	E078006
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	FR1
SDG NO:		AS02	AS02	AS02	AS02	AS03	AS03	AS03
Pesticide/PCB Compounds								
alpha-BHC	ug/kg	–	–	–	–	–	–	–
Heptachlor	ug/kg	–	–	–	–	–	–	–
Endosulfan I	ug/kg	–	–	–	–	–	0.067 J10	–
Dieldrin	ug/kg	0.93 J10	3.4 J10	–	0.5 J10	0.26 J10	3.6 J10	2.6 J10
4,4-DDE'	ug/kg	0.73 J10	2.8 J10	–	0.58 J10	0.79 J10	1.1 J10	0.88 J10
Endrin	ug/kg	–	–	–	–	–	–	–
Endosulfan II	ug/kg	1.4 J10	3.2 J10	–	0.22 J10	–	1.7 J10	1.2 J10
4,4-DDD'	ug/kg	–	–	1.3 J10	–	0.17 J10	–	–
4,4-DDT'	ug/kg	–	3 J10	–	–	–	1 J10	0.88 J10
Methoxychlor	ug/kg	19 J10	32 J10	23 J10	10 J10	5 J10	9.7 J10	8.4 J10
alpha-Chlordane	ug/kg	–	3.5 J10	–	0.28 J10	–	1.7 J10	1.2 J10
gamma-Chlordane	ug/kg	–	–	–	–	–	0.29 J10	0.2 J10
Aroclor-1254	ug/kg	–	93 J10	–	–	–	63 J12	48 J12

TABLE 5.3
SUMMARY OF DETECTIONS - AREA A SOILS
PESTICIDES/PCB COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB07-SS01-0/6	SCA-SB07-SS01-1/2	SCA-SB07-SS01-8/10	SCA-SB08-SS01-0/6	SCA-SB09-SS01-0/6	SCA-SB10-SS01-0/6	SCA-SB11-SS01-0/6
LOCATION:		SCA-SB07	SCA-SB07	SCA-SB07	SCA-SB08	SCA-SB09	SCA-SB10	SCA-SB11
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	8 to 10 feet	0 to 0.5 feet	0 to 0.5 feet	0 to 0.5 feet	0 to 0.5 feet
SAMPLE DATE:		05/05/97	06/16/97	06/16/97	05/05/97	05/05/97	05/05/97	05/07/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Re-Sample	Field Re-Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E070180009	A7F180147003	A7F180147004	A7E070180012	A7E090172001	A7E090172005	A7E090176002
EPA SAMPLE ID:		E078009	F184703	F184704	E078012	E097201	E097205	E097602
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS03	AS11	AS11	AS03	AS03	AS03	AS04
Pesticide/PCB Compounds								
alpha-BHC	ug/kg	--	--	--	--	--	--	--
Heptachlor	ug/kg	--	--	--	--	--	--	--
Endosulfan I	ug/kg	--	1.8 J10	--	--	6 J10	11	--
Dieldrin	ug/kg	0.89 J10	5.4 J10	--	1.6 J10	12 J10	9.8 J10	0.39 J10
4,4-DDE'	ug/kg	0.82 J10	3.4 J10	--	0.78 J10	6.7 J10	5.1 J1	0.63 J1
Endrin	ug/kg	--	--	--	--	--	--	--
Endosulfan II	ug/kg	0.88 J10	--	--	0.49 J10	--	--	--
4,4-DDD'	ug/kg	--	--	--	--	53 J12	62 J12	0.19 J10
4,4-DDT'	ug/kg	1.4 J10	--	--	--	0.7 J10	--	3.9 J1
Methoxychlor	ug/kg	7 J10	11 J10	27 J10	11 J10	10 J10	12 J10	3.5 J10
alpha-Chlordane	ug/kg	0.7 J10	6.8 J1	--	0.93 J10	14	8.4 J10	--
gamma-Chlordane	ug/kg	0.57 J10	3.8 J10	--	0.96 J10	8.2 J10	2.6 J10	--
Aroclor-1254	ug/kg	25 J10	200	--	32 J10	--	--	--

TABLE 5.3
SUMMARY OF DETECTIONS - AREA A SOILS
PESTICIDES/PCB COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB12-SS01-0/6	SCA-SB13-SS01-0/6	SCA-SB14-SS01-0/6	SCA-SB104-SS01-1/2	SCA-SB14-SS01-4/6	SCA-SB15-SS01-12/14
LOCATION:		SCA-SB12	SCA-SB13	SCA-SB14	SCA-SB14	SCA-SB14	SCA-SB15
DEPTH RANGE:		0 to 0.5 feet	0 to 0.5 feet	0 to 0.5 feet	1 to 2 feet	4 to 6 feet	12 to 14 feet
SAMPLE DATE:		05/07/97	05/07/97	05/08/97	05/08/97	05/08/97	05/13/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample
LAB SAMPLE ID:		A7E090176005	A7E090176008	A7E090176015	A7E090176018	A7E090176017	A7E150154011
EPA SAMPLE ID:		E097605	E097608	E097615	E097618	E097617	E155411
SAMPLE TYPE:		N1	N1	N1	FR1	N1	N1
SDG NO:		AS04	AS04	AS04	AS04	AS04	AS07
Pesticide/PCB Compounds							
alpha-BHC	ug/kg	–	–	–	–	–	–
Heptachlor	ug/kg	–	–	–	–	–	–
Endosulfan I	ug/kg	–	–	–	–	–	–
Dieldrin	ug/kg	0.44 J10	–	–	–	1.3 J10	–
4,4-DDE'	ug/kg	0.33 J10	0.68 J10	–	–	11 J12	–
Endrin	ug/kg	–	–	–	–	–	–
Endosulfan II	ug/kg	–	–	–	–	–	2.2 J10
4,4-DDD'	ug/kg	0.21 J10	1.8 J1	–	–	50	4.5 J10
4,4-DDT'	ug/kg	–	0.55 J10	3.2 J10	–	15 J12	–
Methoxychlor	ug/kg	3.6 J10	–	2.1 J1	1.7 J1	–	–
alpha-Chlordane	ug/kg	–	0.22 J10	–	–	1.4 J10	1.8 J10
gamma-Chlordane	ug/kg	–	0.42 J10	–	–	2.5 J10	–
Aroclor-1254	ug/kg	–	–	–	–	–	–

TABLE 5.3
SUMMARY OF DETECTIONS - AREA B SOILS
PESTICIDES/PCB COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCB-SB02-SS01-0/6	SCB-SB02-SS01-1/2	SCB-SB03-SS01-0/6	SCB-SB04-SS01-0/6	SCB-SB05-SS01-0/6	SCB-SB95-SS01-0/6	SCB-SB06-SS01-0/6
LOCATION:		SCB-SB02	SCB-SB02	SCB-SB03	SCB-SB04	SCB-SB05	SCB-SB05	SCB-SB06
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	0 to 0.5 feet	0 to 0.5 feet	0 to 0.5 feet	0 to 0.5 feet	0 to 0.5 feet
SAMPLE DATE:		05/01/97	05/01/97	05/01/97	05/01/97	05/01/97	05/01/97	05/02/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample
LAB SAMPLE ID:		A7E030112005	A7E030105002	A7E030105007	A7E030112002	A7E030105003	A7E030105004	A7E030115001
EPA SAMPLE ID:		E031205	E030502	E030507	E031202	E030503	E030504	E031501
SAMPLE TYPE:		N1	N1	N1	N1	N1	FR1	N1
SDG NO:		AS02	AS01	AS01	AS02	AS01	AS01	AS02
Pesticide/PCB Compounds								
alpha-BHC	ug/kg	--	--	--	--	--	--	--
Heptachlor	ug/kg	--	--	--	--	--	--	--
Endosulfan I	ug/kg	48 J10	--	--	1.2 J10	--	--	--
Dieldrin	ug/kg	140 J10	36 J10	9 J10	18 J10	0.71 J10	0.11 J10	--
4,4-DDE'	ug/kg	--	--	28 J10	6.6 J4	0.5 J10	0.53 J10	--
Endrin	ug/kg	--	--	--	--	--	--	--
Endosulfan II	ug/kg	--	30 J10	10 J10	9.5 J10	1.5 J10	0.65 J10	--
4,4-DDD'	ug/kg	--	--	--	--	--	--	2.1 J10
4,4-DDT'	ug/kg	--	--	15 J10	4.2 J10	1 J10	0.89 J10	--
Methoxychlor	ug/kg	140 J10	--	75 J12	57 J10	7.4 J10	5.4 J10	1.5 J10
alpha-Chlordane	ug/kg	77 J10	28 J10	8.8 J10	12 J4	0.54 J10	0.37 J10	--
gamma-Chlordane	ug/kg	--	--	--	--	--	--	--
Aroclor-1254	ug/kg	4400 J1	600 J10	240 J10	420 J10	18 J10	--	--

TABLE 5.3
SUMMARY OF DETECTIONS - AREA C SOILS
PESTICIDES/PCB COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCC-SB01-SS01-0/6	SCC-SB02-SS01-0/6	SCC-SB03-SS01-0/6	SCC-SB03-SS01-1/2	SCC-SB03-SS01-8/10
LOCATION:		SCC-SB01	SCC-SB02	SCC-SB03	SCC-SB03	SCC-SB03
DEPTH RANGE:		0 to 0.5 feet	0 to 0.5 feet	0 to 0.5 feet	1 to 2 feet	8 to 10 feet
SAMPLE DATE:		04/29/97	04/29/97	04/29/97	04/29/97	04/29/97
MATRIX:		Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E010140001	A7E010140004	A7E010140007	A7E010140008	A7E010140009
EPA SAMPLE ID:		E014001	E014004	E014007	E014008	E014009
SAMPLE TYPE:		N1	N1	N1	N1	N1
SDG NO:		AS01	AS01	AS01	AS01	AS01
Pesticide/PCB Compounds						
alpha-BHC	ug/kg	–	–	–	–	–
Heptachlor	ug/kg	–	–	–	–	–
Endosulfan I	ug/kg	2.4 J10	–	–	1.2 J10	–
Dieldrin	ug/kg	1.2 J10	5.4 J10	5.8 J10	3 J10	–
4,4-DDE'	ug/kg	18 J10	10 J10	9.1 J10	1.4 J1	–
Endrin	ug/kg	–	–	–	–	0.52 J10
Endosulfan II	ug/kg	0.94 J10	4.9 J10	6.4 J10	–	0.57 J10
4,4-DDD'	ug/kg	–	–	–	–	–
4,4-DDT'	ug/kg	19 J10	–	8.2 J10	0.87 J10	3.2 J10
Methoxychlor	ug/kg	22 J10	61 J10	65 J10	7.6 J10	21 J10
alpha-Chlordane	ug/kg	1.9 J10	6.4 J1	6.9 J10	2.2	–
gamma-Chlordane	ug/kg	–	–	–	–	–
Aroclor-1254	ug/kg	54 J10	280 J1	–	73	–

TABLE 5.3
SUMMARY OF DETECTIONS - AREA D SOILS
PESTICIDES/PCB COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCD-SB01-SS01-0/6	SCD-SB01-SS01-1/2	SCD-SB02-SS01-0/6	SCD-SB03-SS01-0/6
LOCATION:		SCD-SB01	SCD-SB01	SCD-SB02	SCD-SB03
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	0 to 0.5 feet	0 to 0.5 feet
SAMPLE DATE:		05/08/97	05/08/97	05/08/97	05/12/97
MATRIX:		Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E090176019	A7E090176020	A7E120138002	A7E140163015
EPA SAMPLE ID:		E097619	E097620	E123802	E146315
SAMPLE TYPE:		N1	N1	N1	N1
SDG NO:		AS04	AS04	AS05	AS06
Pesticide/PCB Compounds					
alpha-BHC	ug/kg	--	--	0.32 J10	--
Heptachlor	ug/kg	--	--	--	--
Endosulfan I	ug/kg	--	--	--	--
Dieldrin	ug/kg	0.76 J10	0.35 J10	--	1.1 J10
4,4-DDE'	ug/kg	1.3 J10	11	7.5 J4	1.5 J10
Endrin	ug/kg	--	--	--	--
Endosulfan II	ug/kg	--	--	--	--
4,4-DDD'	ug/kg	3.2 J10	9.6 J12	0.4 J10	--
4,4-DDT'	ug/kg	2.8 J10	7.4 J12	4.9 J4	2.9 J10
Methoxychlor	ug/kg	8.6 J10	4.5 J10	--	9.8 J10
alpha-Chlordane	ug/kg	0.69 J10	0.7 J10	--	1 J10
gamma-Chlordane	ug/kg	0.2 J10	0.37 J10	--	0.33 J10
Aroclor-1254	ug/kg	--	--	--	--

TABLE 5.3
SUMMARY OF DETECTIONS - AREA E SOILS
PESTICIDES/PCB COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	SCE-SB01-SS01-0/6	SCE-SB03-SS01-0/6	SCE-SB04-SS01-0/6
	LOCATION:	SCE-SB01	SCE-SB03	SCE-SB04
	DEPTH RANGE:	0 to 0.5 feet	0 to 0.5 feet	0 to 0.5 feet
	SAMPLE DATE:	05/08/97	05/12/97	05/12/97
	MATRIX:	Soil	Soil	Soil
	SAMPLE TYPE:	Field Sample	Field Sample	Field Sample
	LAB SAMPLE ID:	A7E090176012	A7E140163008	A7E140163012
	EPA SAMPLE ID:	E097612	E145308	E145312
	SAMPLE TYPE:	N1	N1	N1
	SDG NO:	AS04	AS08	AS08
Pesticide/PCB Compounds				
alpha-BHC	ug/kg	–	–	–
Heptachlor	ug/kg	–	–	–
Endosulfan I	ug/kg	0.83 J10	[illegible] J10	–
Dieldrin	ug/kg	0.77 J10	[illegible] J10	2.7 J10
4,4-DDE	ug/kg	15	[illegible] J10	2.2 J10
Endrin	ug/kg	–	–	–
Endosulfan II	ug/kg	–	–	4 J10
4,4-DDD	ug/kg	10 J12	[illegible] J10	–
4,4-DDT	ug/kg	14	0.48 J10	–
Methoxychlor	ug/kg	–	3.4 J10	16 J10
alpha-Chlordane	ug/kg	1.2 J1	[illegible] J10	3.1 J1
gamma-Chlordane	ug/kg	0.85 J1	[illegible] J4	–
Aroclor-1254	ug/kg	–	–	82 J1

TABLE 5.3
SUMMARY OF DETECTIONS - AREA F SOILS
PESTICIDES/PCB COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCF-SB01-SS01-0/6	SCF-SB02-SS01-0/6	SCF-SB92-SS01-0/6	SCF-SB03-SS01-0/6	SCF-SB04-SS01-0/6	SCF-SB04-SS01-8/10	SCF-SB05-SS01-0/6
LOCATION:		SCF-SB01	SCF-SB02	SCF-SB02	SCF-SB03	SCF-SB04	SCF-SB04	SCF-SB05
DEPTH RANGE:		0 to 0.5 feet	0 to 0.5 feet	0 to 0.5 feet	0 to 0.5 feet	0 to 0.5 feet	8 to 10 feet	0 to 0.5 feet
SAMPLE DATE:		05/08/97	05/08/97	05/08/97	05/08/97	05/12/97	05/12/97	05/08/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E120138005	A7E120138008	A7E120138010	A7E120138012	A7E140163002	A7E140163004	A7E120138015
EPA SAMPLE ID:		E123805	E123808	E123810	E123812	E146302	E146304	E123815
SAMPLE TYPE:		N1	N1	FR1	N1	N1	N1	N1
SDG NO:		AS05	AS05	AS05	AS05	AS06	AS06	AS05
Pesticide/PCB Compounds								
alpha-BHC	ug/kg	--	--	--	--	--	--	--
Heptachlor	ug/kg	--	--	--	--	--	--	0.23 J10
Endosulfan I	ug/kg	--	--	--	--	--	--	--
Dieldrin	ug/kg	0.28 J10	0.91 J10	1.2 J10	0.39 J10	0.32 J10	--	--
4,4-DDE'	ug/kg	--	--	--	--	1.6 J10	--	0.66 J10
Endrin	ug/kg	--	0.66 J10	0.86 J10	--	--	--	--
Endosulfan II	ug/kg	--	--	--	--	--	2.7 J10	--
4,4-DDD'	ug/kg	--	--	--	--	1.4 J10	--	1.2 J10
4,4-DDT'	ug/kg	--	--	--	--	1.3 J10	42 J12	--
Methoxychlor	ug/kg	--	--	--	--	4.6 J10	53 J10	--
alpha-Chlordane	ug/kg	--	0.27 J10	0.41 J1	0.27 J10	0.77 J1	2.6 J10	0.77 J10
gamma-Chlordane	ug/kg	--	0.22 J10	0.16 J10	0.55 J10	0.88 J10	--	1.3 J10
Aroclor-1254	ug/kg	--	--	--	--	--	--	--

TABLE 5.3
SUMMARY OF DETECTIONS - AREA F SOILS
PESTICIDES/PCB COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCF-SB06-SS01-0.5
LOCATION:		SCF-SB06
DEPTH RANGE:		0 to 0.5 feet
SAMPLE DATE:		05/31/97
MATRIX:		Soil
SAMPLE TYPE:		Field Sample
LAB SAMPLE ID:		A7F040135006
EPA SAMPLE ID:		F043506
SAMPLE TYPE:		N
SDG NO:		AS09
Pesticide/PCB Compounds		
alpha-BHC	ug/kg	--
Heptachlor	ug/kg	--
Endosulfan I	ug/kg	--
Dieldrin	ug/kg	15 J
4,4-DDE	ug/kg	--
Endrin	ug/kg	--
Endosulfan II	ug/kg	8.6 J
4,4-DDD	ug/kg	--
4,4-DDT	ug/kg	32 J
Methoxychlor	ug/kg	--
alpha-Chlordane	ug/kg	9.5 J
gamma-Chlordane	ug/kg	--
Aroclor-1254	ug/kg	--

TABLE 5.3
SUMMARY OF DETECTIONS - AREA G SOILS
PESTICIDES/PCB COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCG-SB01-SS01-0/6	SCG-SB02-SS01-0/6	SCG-SB03-SS01-1/2	SCG-SB93-SS01-1/2	SCG-SB03-SS01-4/6	SCG-SB04-SS01-0/6	SCG-SB07-SS01-0/6
LOCATION:		SCG-SB01	SCG-SB02	SCG-SB03	SCG-SB03	SCG-SB03	SCG-SB04	SCG-SB07
DEPTH RANGE:		0 to 0.5 feet	0 to 0.5 feet	1 to 2 feet	1 to 2 feet	4 to 6 feet	0 to 0.5 feet	0 to 0.5 feet
SAMPLE DATE:		05/08/97	05/31/97	06/04/97	06/04/97	06/04/97	05/31/97	06/04/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E120138018	A7F040135008	A7F050158003	A7F050158004	A7F050158001	A7F040135012	A7F050163001
EPA SAMPLE ID:		E123818	F043508	F055803	F055804	F055801	F043512	F056301
SAMPLE TYPE:		N1	N1	N1	FR1	N1	N1	N1
SDG NO:		AS05	AS09	AS09	AS09	AS09	AS09	AS10
Pesticide/PCB Compounds								
alpha-BHC	ug/kg	--	--	--	--	--	--	--
Heptachlor	ug/kg	--	--	--	--	--	--	--
Endosulfan I	ug/kg	--	--	--	--	--	--	--
Dieldrin	ug/kg	0.46 J10	22 J10	--	2 J10	--	3.3 J10	--
4,4-DDE'	ug/kg	0.47 J1	--	--	4.2 J10	--	9.5 J10	--
Endrin	ug/kg	--	--	--	--	--	--	--
Endosulfan II	ug/kg	--	4.3 J10	--	--	--	1.6 J10	--
4,4-DDD'	ug/kg	--	--	44 J1	47	--	--	--
4,4-DDT'	ug/kg	--	--	--	24 J10	--	79	120
Methoxychlor	ug/kg	--	--	52 J10	47 J10	100 J10	--	150 J10
alpha-Chlordane	ug/kg	0.53 J10	--	--	--	--	3.3 J10	5.9 J10
gamma-Chlordane	ug/kg	1.8 J10	--	--	--	--	--	--
Aroclor-1254	ug/kg	13 J10	--	--	--	--	--	--

TABLE 5.3
SUMMARY OF DETECTIONS - AREA G SOILS
PESTICIDES/PCB COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCG-SB08-SS01-1/2	SCG-SB09-SS01-1/2
LOCATION:		SCG-SB08	SCG-SB09
DEPTH RANGE:		1 to 2 feet	1 to 2 feet
SAMPLE DATE:		06/16/97	06/16/97
MATRIX:		Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample
LAB SAMPLE ID:		A7F170129001	A7F170129004
EPA SAMPLE ID:		F172901	F172904
SAMPLE TYPE:		N1	N1
SDG NO:		AS11	AS11
Pesticide/PCB Compounds			
alpha-BHC	ug/kg	–	–
Heptachlor	ug/kg	–	–
Endosulfan I	ug/kg	–	–
Dieldrin	ug/kg	–	–
4,4-DDE	ug/kg	–	–
Endrin	ug/kg	–	–
Endosulfan II	ug/kg	–	–
4,4-DDD	ug/kg	–	–
4,4-DDT	ug/kg	57 J10	–
Methoxychlor	ug/kg	–	39 J10
alpha-Chlordane	ug/kg	–	–
gamma-Chlordane	ug/kg	–	–
Aroclor-1254	ug/kg	–	–

TABLE 5.3
SUMMARY OF DETECTIONS - BACKGROUND SOILS
PESTICIDES/PCB COMPOUNDS
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		BG1-SB01-SS01-0/2	BG1-SB01-SS01-6/8	BG1-SB01-SS01-12/14
LOCATION:		Background	Background	Background
DEPTH RANGE:		0 to 2 feet	6 to 8 feet	12 to 14 feet
SAMPLE DATE:		06/04/97	06/04/97	06/04/97
MATRIX:		Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F050163004	A7F050163005	A7F050163006
EPA SAMPLE ID:		F056304	F056305	F056306
SAMPLE TYPE:		N1	N1	N1
SDG NO:		AS10	AS10	AS10
Pesticide/PCB Compounds				
alpha-BHC	ug/kg	--	--	--
Heptachlor	ug/kg	--	--	--
Endosulfan I	ug/kg	--	--	--
Dieldrin	ug/kg	--	--	--
4,4-DDE'	ug/kg	720 D	6.6	0.35 J1
Endrin	ug/kg	--	--	--
Endosulfan II	ug/kg	--	--	--
4,4-DDD'	ug/kg	1.5 J10	--	--
4,4-DDT'	ug/kg	410 D	4.7	--
Methoxychlor	ug/kg	19 J1	--	--
alpha-Chlordane	ug/kg	1.4 J10	--	--
gamma-Chlordane	ug/kg	--	--	--
Aroclor-1254	ug/kg	--	--	--

NOTES:

All Field Sample IDs begin with "SSAS1-". They have been shortened here to conserve space.

--	Analyte was not detected.
NA	Analyte was not analyzed for in given sample.
R	Unusable data due to gross violations of one or more quality control criteria.
D	Reported from diluted sample run due to calibration exceedance in the original analysis. See "J3" below.
U	The analyte was analyzed for and is not present above the level of the associated value
UJ	The analyte was analyzed for but was not detected. The reported detection limit has been qualified due to a QC anomaly. Refer to the numerical suffixes.
UB	Analyte detected in the field or laboratory blank associated with this sample. Reported result should be considered estimated and biased high.
J	The analyte was positively identified, but the associated numerical value may be imprecise due to a quality control (QC) anomaly.
J^1	Estimated value, greater than the method detection limit (MDL) or the instrument detection limit (IDL) but less than the project reporting limit (PRL).
J^2	Sample was prepared or analyzed outside the specified holding time. The qualified result should be considered estimated and biased low
J^3	Result exceeded the calibration range for the instrument and method and should be considered estimated.
J^4	Surrogate outliers were reported for the sample. The reported result should be considered estimated.
J^5	Accuracy and/or precision outlier reported for MS/MSD or field duplicate samples associated with the reported result. Result should be considered estimated.
J^6	Accuracy outlier reported for the Laboratory Control Sample (LCS) associated with the reported result. The reported result should be considered an estimate.
J^7	Field precision outlier reported for the field duplicate/replicate sample associated with this result. Result should be considered an estimate.
J^8	Precision outlier reported for the laboratory duplicate samples associated with this analysis. Result should be considered an estimate.
J^9	Calibration or internal standard outliers reported for this sample. Results should be considered estimated.
J^{10}	Multiple QC anomalies associated with the reported result.
J^{11}	ICP serial dilution outlier reported. Result should be considered an estimate.
J^{12}	The percent difference between the values from the confirmation and quantitation columns exceeded 25%. Result should be considered an estimate.
J^{13}	The reported result has been qualified as estimated or unusable due to matrix interferences or laboratory error.

TABLE 5.4
SUMMARY OF DETECTIONS - AREA A SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB05-SS01-1/2	SCA-SB05-SS01-16/18	SCA-SB06-SS01-0/6	SCA-SB96-SS01-0/6	SCA-SB06-SS01-1/2	SCA-SB06-SS01-4/6	SCA-SB07-SS01-0/6
LOCATION:		SCA-SB05	SCA-SB05	SCA-SB06	SCA-SB06	SCA-SB06	SCA-SB06	SCA-SB07
DEPTH RANGE:		1 to 2 feet	16 to 18 feet	0 to 0.5 feet	0 to 0.5 feet	1 to 2 feet	4 to 6 feet	0 to 0.5 feet
SAMPLE DATE:		05/05/97	05/05/97	05/05/97	05/05/97	05/05/97	05/05/97	05/05/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E070180003	A7E070180004	A7E070180005	A7E070180006	A7E070180007	A7E070180008	A7E070180009
EPA SAMPLE ID:		E078003	E078004	E078005	E078006	E078007	E078008	E078009
SAMPLE TYPE:		N1	N1	N1	FR1	N1	N1	N1
SDG NO:		AS03	AS03	AS03	AS03	AS03	AS03	AS03
Total CLP Metals								
Arsenic	mg/kg	10.9	9.3	6.2	7.2	7.7	18.9	7.3
Barium	mg/kg	99.5	39.7 J1	52.7	64.6	90.2	334	61.3
Cadmium	mg/kg	0.24 J1	--	0.3 J1	0.33 J1	1.8	4.1	0.51 J1
Chromium	mg/kg	19.2	18.2	11.4	13.6	33.4	25.1	15.1
Lead	mg/kg	244	18.8	57.4	68.3	103	382	63.2
Mercury	mg/kg	0.09 J1	0.06 J1	0.22	0.22	0.21	0.47	0.16
Selenium	mg/kg	--	--	--	--	--	1 J1	--
Silver	mg/kg	--	--	--	--	0.3 J1	1 J1	--
Total Cyanide	mg/kg	--	--	--	--	0.09 J1	0.6	--
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg							
Sulfur (D2015/300.0)	ug/g							
pH (solid)		7.6 J2	7.9 J2	7.7 J2	7.8 J2	7.8 J2	6.9 J2	8 J2
BTU per pound	Btu/lb							

TABLE 5.4
SUMMARY OF DETECTIONS - AREA A SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB07-SS01-1/2	SCA-SB07-SS01-1/2	SCA-SB07-SS01-8/10	SCA-SB07-SS01-8/10	SCA-SB08-SS01-0/6	SCA-SB08-SS01-1/2	SCA-SB08-SS01-12/14
LOCATION:		SCA-SB07	SCA-SB07	SCA-SB07	SCA-SB07	SCA-SB08	SCA-SB08	SCA-SB08
DEPTH RANGE:		1 to 2 feet	1 to 2 feet	8 to 10 feet	8 to 10 feet	0 to 0.5 feet	1 to 2 feet	12 to 14 feet
SAMPLE DATE:		05/05/97	06/16/97	05/05/97	06/16/97	05/05/97	05/05/97	05/05/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Re-Sample	Field Sample	Field Re-Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E070180010	A7F180147003	A7E070180011	A7F180147004	A7E070180012	A7E070180013	A7E070180014
EPA SAMPLE ID:		E078010	F184703	E078011	F184704	E078012	E078013	E078014
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS03	AS11	AS03	AS11	AS03	AS03	AS03
Total CLP Metals								
Arsenic	mg/kg		0.22		–	8	8.6	8.1
Barium	mg/kg		8.9 J8		13.2 J8	75.2	104	86.6
Cadmium	mg/kg		53.9		184	0.37 J1	10.8	–
Chromium	mg/kg		4.2		1.4	13.6	127	22.9
Lead	mg/kg		53.8 J8		27.7 J8	80.7	114	22
Mercury	mg/kg		46.2 J8		171 J8	0.3	0.94	0.08 J1
Selenium	mg/kg		1.2 J5		2.7 J5	–	–	1 J1
Silver	mg/kg		0.79 J1		–	–	2.9	–
Total Cyanide	mg/kg		–		–	–	0.61	0.57 J1
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg	14000		12000				
Sulfur (D2015/300.0)	ug/g	547		913				
pH (solid)		7.2 J2		7.5 J2		7.6 J2	7.5 J2	7.8 J2
BTU per pound	Btu/lb	–		1100				

TABLE 5.4
SUMMARY OF DETECTIONS - AREA A SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB09-SS01-0/6	SCA-SB09-SS01-1/2	SCA-SB99-SS01-1/2	SCA-SB09-SS01-4/6	SCA-SB10-SS01-0/6	SCA-SB10-SS01-1/2	SCA-SB10-SS01-10/12
LOCATION:		SCA-SB09	SCA-SB09	SCA-SB09	SCA-SB09	SCA-SB10	SCA-SB10	SCA-SB10
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	1 to 2 feet	4 to 6 feet	0 to 0.5 feet	1 to 2 feet	10 to 12 feet
SAMPLE DATE:		05/05/97	05/05/97	05/05/97	05/05/97	05/05/97	05/05/97	05/07/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E090172001	A7E090172002	A7E090172003	A7E090172004	A7E090172005	A7E090172006	A7E090176001
EPA SAMPLE ID:		E097201	E097202	E097203	E097204	E097205	E097206	E097601
SAMPLE TYPE:		N1	N1	FR1	N1	N1	N1	N1
SDG NO:		AS03	AS03	AS03	AS03	AS03	AS03	AS04
Total CLP Metals								
Arsenic	mg/kg	9.4	5.3	6.2	9.3	11.2	11.1	--
Barium	mg/kg	102	118	123	53.7	126	148	7.9
Cadmium	mg/kg	13	1.5	4	--	15.6	10	43.9 J1
Chromium	mg/kg	145	23.1	41.4	16	181	145	--
Lead	mg/kg	93.3	73.4	111	77.4	126	123	20
Mercury	mg/kg	0.91	0.28	0.82	0.15	1.1	1.1	19 J5
Selenium	mg/kg	--	--	--	--	--	--	--
Silver	mg/kg	3.4	--	0.35 J1	--	4.6	3.1	--
Total Cyanide	mg/kg	0.84	0.42 J1	0.62	0.09 J1	0.39 J1	0.25 J1	--
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg							
Sulfur (D2015/300.0)	ug/g							
pH (solid)		8.2 J2	8.3 J2	8.9 J2	7.6 J2	7.6 J2	8.5 J2	8 J2
BTU per pound	Btu/lb							

TABLE 5.4
SUMMARY OF DETECTIONS - AREA A SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB11-SS01-0.5	SCA-SB11-SS01-1/2	SCA-SB11-SS01-14/16	SCA-SB12-SS01-0.5	SCA-SB12-SS01-1/2	SCA-SB12-SS01-4/6	SCA-SB13-SS01-0.5
LOCATION:		SCA-SB11	SCA-SB11	SCA-SB11	SCA-SB12	SCA-SB12	SCA-SB12	SCA-SB13
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	14 to 16 feet	0 to 0.5 feet	1 to 2 feet	4 to 6 feet	0 to 0.5 feet
SAMPLE DATE:		05/07/97	05/07/97	05/07/97	05/07/97	05/07/97	05/07/97	05/07/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E090176002	A7E090176003	A7E090176004	A7E090176005	A7E090176006	A7E090176007	A7E090176008
EPA SAMPLE ID:		E097602	E097603	E097604	E097605	E097606	E097607	E097608
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS04	AS04	AS04	AS04	AS04	AS04	AS04
Total CLP Metals								
Arsenic	mg/kg	0.26	0.14	0.1 J1	0.11 J1	0.11 J1	0.07 J1	–
Barium	mg/kg	11.1	10.3	9.7	13.3	9.3	6.3	8.6
Cadmium	mg/kg	118	95.8	84.9	88.6	64.4	51.2	31.3 J1
Chromium	mg/kg	0.56 J1	0.53 J1	2.6	0.28 J1	0.78 J1	0.58 J1	–
Lead	mg/kg	16.4	18.4	16.9	20.1	22.2	24	14.5
Mercury	mg/kg	149 J5	135 J5	294 J5	80.8 J5	53.7 J5	31.5 J5	14.8 J5
Selenium	mg/kg	–	–	–	–	–	–	–
Silver	mg/kg	–	0.32 J1	–	–	–	–	–
Total Cyanide	mg/kg	0.09 J10	–	–	–	–	0.12 J10	0.1 J10
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg							
Sulfur (D2015/300.0)	ug/g							
pH (solid)		7.7 J2	7.8 J2	8.2 J2	8.1 J2	7.7 J2	7.6 J2	7.4 J2
BTU per pound	Btu/lb							

TABLE 4
SUMMARY OF DETECTIONS - AREA A SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB13-SS01-1/2	SCA-SB103-SS01-1/2	SCA-SB13-SS01-4/6	SCA-SB14-SS01-0/6	SCA-SB14-SS01-1/2	SCA-SB14-SS01-1/2	SCA-SB104-SS01-1/2
LOCATION:		SCA-SB13	SCA-SB13	SCA-SB13	SCA-SB14	SCA-SB14	SCA-SB14	SCA-SB14
DEPTH RANGE:		1 to 2 feet	1 to 2 feet	4 to 6 feet	0 to 0.5 feet	1 to 2 feet	1 to 2 feet	1 to 2 feet
SAMPLE DATE:		05/07/97	05/07/97	05/07/97	05/08/97	05/08/97	06/16/97	05/08/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Re-Sample	Field Duplicate
LAB SAMPLE ID:		A7E090176009	A7E090176010	A7E090176011	A7E090176015	A7E090176016	A7F180147005	A7E090176018
EPA SAMPLE ID:		E097609	E097610	E097611	E097615	E097616	F184705	E097618
SAMPLE TYPE:		N1	FR1	N1	N1	N1	N1	FR1
SDG NO:		AS04	AS04	AS04	AS04	AS04	AS11	AS04
Total CLP Metals								
Arsenic	mg/kg	--	--	0.14	--		--	
Barium	mg/kg	8.5	6.7	15.9	9		8 J8	
Cadmium	mg/kg	36.4 J1	27.3 J1	36.2 J1	31.2 J1		50.9	
Chromium	mg/kg	0.46 J1	0.34 J1	--	--		0.35 J1	
Lead	mg/kg	14.2	11	25.6	11.5		18.5 J8	
Mercury	mg/kg	14.2 J5	11.1 J5	20.3 J5	13.1 J5		15 J8	
Selenium	mg/kg	--	--	--	--		--	
Silver	mg/kg	--	--	--	--		--	
Total Cyanide	mg/kg	--	--	--	--		--	
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg					9000		12000
Sulfur (D2015/300.0)	ug/g					542		752
pH (solid)		7.5 J2	7.5 J2	7.6 J2	7.9 J2	7.8 J2		7.7 J2
BTU per pound	Btu/lb					190		200

TABLE 5.4
SUMMARY OF DETECTIONS - AREA A SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB104-SS01-1/2	SCA-SB14-SS01-4/6	SCA-SB14-SS01-4/6	SCA-SB15-SS01-0/6	SCA-SB15-SS01-1/2	SCA-SB105-SS01-1/2	SCA-SB15-SS01-12/14
LOCATION:		SCA-SB14	SCA-SB14	SCA-SB14	SCA-SB15	SCA-SB15	SCA-SB15	SCA-SB15
DEPTH RANGE:		1 to 2 feet	4 to 6 feet	4 to 6 feet	0 to 0.5 feet	1 to 2 feet	1 to 2 feet	12 to 14 feet
SAMPLE DATE:		06/16/97	05/08/97	06/16/97	05/13/97	05/13/97	05/13/97	05/13/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Duplicate Re-Sample	Field Sample	Field Re-Sample	Field Sample	Field Sample	Field Duplicate	Field Sample
LAB SAMPLE ID:		A7F180147007	A7E090176017	A7F180147006	A7E150154008	A7E150154009	A7E150154010	A7E150154011
EPA SAMPLE ID:		F184707	E097617	F184706	E155408	E155409	E155410	E155411
SAMPLE TYPE:		FR1	N1	N1	N1	N1	FR1	N1
SDG NO:		AS11	AS04	AS11	AS07	AS07	AS07	AS07
Total CLP Metals								
Arsenic	mg/kg	–		–	0.11	0.09 J1	0.08 J1	
Barium	mg/kg	8.9 J8		12.1 J8	8.8 J5	0.15	12.7 J5	
Cadmium	mg/kg	37.5 J1		19.5 J1	63	62.2	63.8	
Chromium	mg/kg	0.35 J1		0.32 J1	0.37 J1	–	–	
Lead	mg/kg	17.3 J8		11.5 J8	15.3	15.5	18.8	
Mercury	mg/kg	16.1 J8		19.6 J8	89.2 J8	75.7 J8	42.4 J8	
Selenium	mg/kg	–		–	–	–	–	
Silver	mg/kg	–		–	–	–	–	
Total Cyanide	mg/kg	–		–	0.11 J1	0.18 J1	0.1 J1	
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg		7600					18000
Sulfur (D2015/300.0)	ug/g		669					573
pH (solid)			7.6 J2		8.2 J2	8 J2	7.7 J2	8 J2
BTU per pound	Btu/lb		–					160

TABLE 5.4
SUMMARY OF DETECTIONS - AREA A SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCA-SB15-SS01-12/14	SCA-SB16-SS01-0/6	SCA-SB16-SS01-1/2	SCA-SB16-SS01-12/14
LOCATION:		SCA-SB15	SCA-SB16	SCA-SB16	SCA-SB16
DEPTH RANGE:		12 to 14 feet	0 to 0.5 feet	1 to 2 feet	12 to 14 feet
SAMPLE DATE:		06/16/97	05/14/97	05/14/97	05/14/97
MATRIX:		Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Re-Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F180147012	A7E190102002	A7E190102003	A7E190102004
EPA SAMPLE ID:		F184712	E190202	E190203	E190204
SAMPLE TYPE:		N1	N1	N1	N1
SDG NO:		AS11	AS08	AS08	AS08
Total CLP Metals					
Arsenic	mg/kg	--	--	0.15	0.18
Barium	mg/kg	5.8 J8	8.6	9.9	8.4
Cadmium	mg/kg	44.5 J1	49.2	70.5	50.5
Chromium	mg/kg	0.26 J1	--	0.31 J1	0.35 J1
Lead	mg/kg	18.1 J8	16	12.7	17.5
Mercury	mg/kg	18 J8	26.2 J8	76.5 J8	24.3 J8
Selenium	mg/kg	--	--	--	--
Silver	mg/kg	--	--	--	1.1 J1
Total Cyanide	mg/kg	--	--	0.2 J1	0.94
Wet Chemistry Parameters					
Total Organic Carbon	mg/kg				
Sulfur (D2015/300.0)	ug/g				
pH (solid)			8.4 J2	8 J2	8.3 J2
BTU per pound	Btu/lb				

TABLE 5.4
SUMMARY OF DETECTIONS - AREA B SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCB-SB01-SS01-1/2	SCB-SB01-SS01-4/6	SCB-SB01-SS01-4/6	SCB-SB02-SS01-0/5	SCB-SB02-SS01-1/2	SCB-SB02-SS01-1/2	SCB-SB02-SS01-4/6
LOCATION:		SCB-SB01	SCB-SB01	SCB-SB01	SCB-SB02	SCB-SB02	SCB-SB02	SCB-SB02
DEPTH RANGE:		1 to 2 feet	4 to 6 feet	4 to 6 feet	0 to 0.5 feet	1 to 2 feet	1 to 2 feet	4 to 6 feet
SAMPLE DATE:		04/29/97	04/29/97	04/29/97	05/01/97	05/01/97	06/16/97	05/01/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Re-Sample	Field Sample
LAB SAMPLE ID:		A7E010140010	A7E010140011	A7E010140012	A7E030112005	A7E030105002	A7F170129008	A7E030105001
EPA SAMPLE ID:		E014010	E014011	E014012	E031205	E030502	F172908	E030501
SAMPLE TYPE:		N1	N1	FR1	N1	N1	N1	N1
SDG NO:		AS01	AS01	AS01	AS02	AS01	AS11	AS01
Total CLP Metals								
Arsenic	mg/kg	10.6	8.2	8.2	7.6 J5		0.25	
Barium	mg/kg	105	99	152	73.2		5.7 J8	
Cadmium	mg/kg	0.66 J1	–	–	1.9		97.2	
Chromium	mg/kg	24.6 J11	28.3 J11	23.4 J11	29.8 J5		1.1 J1	
Lead	mg/kg	74.5	63	35.2	78.1 J8		25.7 J8	
Mercury	mg/kg	0.3	0.18	0.08 J1	0.51		78 J8	
Selenium	mg/kg	–	–	–	–		–	
Silver	mg/kg	3.5	–	–	–		–	
Total Cyanide	mg/kg	–	–	–	–		–	
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg					8900		19000
Sulfur (D2015/300.0)	ug/g					395		699
pH (solid)		10 J2	7.5 J2	7.3 J2	7.4 J2	7.5 J2		7.7 J2
BTU per pound	Btu/lb					1200		–

TABLE 5.4
SUMMARY OF DETECTIONS - AREA B SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCB-SB02-SS01-4/6	SCB-SB03-SS01-0/6	SCB-SB03-SS01-1/2	SCB-SB03-SS01-6/8	SCB-SB04-SS01-0/6	SCB-SB04-SS01-1/2	SCB-SB04-SS01-4/6
LOCATION:		SCB-SB02	SCB-SB03	SCB-SB03	SCB-SB03	SCB-SB04	SCB-SB04	SCB-SB04
DEPTH RANGE:		4 to 6 feet	0 to 0.5 feet	1 to 2 feet	6 to 8 feet	0 to 0.5 feet	1 to 2 feet	4 to 6 feet
SAMPLE DATE:		06/16/97	05/01/97	05/01/97	05/01/97	05/01/97	05/01/97	05/01/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Re-Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F170129009	A7E030105007	A7E030105008	A7E030112001	A7E030112002	A7E030112003	A7E030112004
EPA SAMPLE ID:		F172909	E030507	E030508	E031201	E031202	E031203	E031204
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS11	AS01	AS01	AS02	AS02	AS02	AS02
Total CLP Metals								
Arsenic	mg/kg	0.17	10.3	9.6	7.9 J5	9.7 J5	9.2 J5	6.8 J5
Barium	mg/kg	7.7 J8	39.1 J1	169	210	38.4 J1	54.2	441
Cadmium	mg/kg	75	0.69 J1	1.4	0.64 J1	1 J1	0.52 J1	--
Chromium	mg/kg	1.2	14.2 J11	23 J11	22.9 J5	18.7 J5	17.2 J5	64.4 J5
Lead	mg/kg	24.7 J8	38	139	85.5 J8	284 J8	41.5 J8	340 J8
Mercury	mg/kg	57.4 J8	0.25	0.22	0.52	0.24	0.3	0.07 J1
Selenium	mg/kg	--	--	0.98 J1	--	--	--	--
Silver	mg/kg	--	--	--	--	--	--	--
Total Cyanide	mg/kg	--	--	1.3	0.48 J10	0.11 J10	0.12 J10	--
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg							
Sulfur (D2015/300.0)	ug/g							
pH (solid)			7.4 J2	7.5 J2	7.5 J2	7.6 J2	7.6 J2	7.5 J2
BTU per pound	Btu/lb							

TABLE 5.4
SUMMARY OF DETECTIONS - AREA B SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCB-SB05-SS01-0/6	SCB-SB95-SS01-0/6	SCB-SB05-SS01-1/2	SCB-SB05-SS01-6/8	SCB-SB06-SS01-0/6	SCB-SB06-SS01-1/2	SCB-SB06-SS01-14/16
LOCATION:		SCB-SB05	SCB-SB05	SCB-SB05	SCB-SB05	SCB-SB06	SCB-SB06	SCB-SB06
DEPTH RANGE:		0 to 0.5 feet	0 to 0.5 feet	1 to 2 feet	6 to 8 feet	0 to 0.5 feet	1 to 2 feet	14 to 16 feet
SAMPLE DATE:		05/01/97	05/01/97	05/01/97	05/01/97	05/02/97	05/02/97	05/02/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E030105003	A7E030105004	A7E030105005	A7E030105006	A7E030115001	A7E030115002	A7E030115003
EPA SAMPLE ID:		E030503	E030504	E030505	E030506	E031501	E031502	E031503
SAMPLE TYPE:		N1	FR1	N1	N1	N1	N1	N1
SDG NO:		AS01	AS01	AS01	AS01	AS02	AS02	AS02
Total CLP Metals								
Arsenic	mg/kg	7.7	10.1	8	9.7	10.2 J5	12.7 J5	11 J5
Barium	mg/kg	62.5	55.1	29.4 J1	105	47.2	24.9 J1	59.8
Cadmium	mg/kg	1 J1	–	0.81 J1	–	1 J1	0.54 J1	0.29 J1
Chromium	mg/kg	13.9 J11	14 J11	18.6 J11	25.3 J11	20.3 J5	16.8 J5	18.5 J5
Lead	mg/kg	59.8	48.6	28.7	118	181 J8	17.4 J8	36.2 J8
Mercury	mg/kg	0.28	0.21	0.09 J1	0.17 J1	0.08 J1	0.08 J1	0.1 J1
Selenium	mg/kg	–	–	–	–	–	–	–
Silver	mg/kg	–	–	–	–	–	–	–
Total Cyanide	mg/kg	–	–	–	0.2 J1	–	–	–
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg							
Sulfur (D2015/300.0)	ug/g							
pH (solid)		7.6 J2	7.7 J2	7.5 J2	7.6 J2	8 J2	7.7 J2	7.5 J2
BTU per pound	Btu/lb							

TABLE 4
SUMMARY OF DETECTIONS - AREA B SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCB-SB07-SS01-0/6	SCB-SB07-SS01-1/2	SCB-SB07-SS01-10/12	SCB-SB08-SS01-0/6	SCB-SB08-SS01-1/2	SCB-SB08-SS01-12/14
LOCATION:		SCB-SB07	SCB-SB07	SCB-SB07	SCB-SB08	SCB-SB08	SCB-SB08
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	10 to 12 feet	0 to 0.5 feet	1 to 2 feet	12 to 14 feet
SAMPLE DATE:		05/13/97	05/13/97	05/13/97	05/13/97	05/13/97	05/13/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E150154002	A7E150154003	A7E150154004	A7E150154005	A7E150154006	A7E150154007
EPA SAMPLE ID:		E155402	E155403	E155404	E155405	E155406	E155407
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1
SDG NO:		AS07	AS07	AS07	AS07	AS07	AS07
Total CLP Metals							
Arsenic	mg/kg	--	0.09 J1	--	2	0.09 J1	--
Barium	mg/kg	10.1 J5	8 J5	9.8 J5	40.7 J5	9.2 J5	7 J5
Cadmium	mg/kg	32.1 J1	28 J1	38.9 J1	2220	18.5 J1	56.6
Chromium	mg/kg	1 J1	1.3	--	3.3	--	--
Lead	mg/kg	21.2	24.4	14.6	319	52.1	20.3
Mercury	mg/kg	25.8 J8	22.6 J8	15 J8	1610 J8	23.7 J8	11.5 J8
Selenium	mg/kg	--	--	--	1.6	--	--
Silver	mg/kg	--	0.25 J1	--	--	--	--
Total Cyanide	mg/kg	0.17 J1	--	--	4.6	0.11 J1	--
Wet Chemistry Parameters							
Total Organic Carbon	mg/kg						
Sulfur (D2015/300.0)	ug/g						
pH (solid)		8 J2	7.6 J2	8 J2	8 J2	7.8 J2	7.8 J2
BTU per pound	Btu/lb						

TABLE 5.4
SUMMARY OF DETECTIONS - AREA C SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCC-SB01-SS01-0/5	SCC-SB01-SS01-1/2	SCC-SB01-SS01-12/14	SCC-SB02-SS01-0/5	SCC-SB02-SS01-1/2	SCC-SB02-SS01-6/8	SCC-SB03-SS01-0/5
LOCATION:		SCC-SB01	SCC-SB01	SCC-SB01	SCC-SB02	SCC-SB02	SCC-SB02	SCC-SB03
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	12 to 14 feet	0 to 0.5 feet	1 to 2 feet	6 to 8 feet	0 to 0.5 feet
SAMPLE DATE:		04/29/97	04/29/97	04/29/97	04/29/97	04/29/97	04/29/97	04/29/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E010140001	A7E010140002	A7E010140003	A7E010140004	A7E010140005	A7E010140006	A7E010140007
EPA SAMPLE ID:		E014001	E014002	E014003	E014004	E014005	E014006	E014007
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS01	AS01	AS01	AS01	AS01	AS01	AS01
Total CLP Metals								
Arsenic	mg/kg	12.3	9.8	13.2	9.7	9.1	4.6	9.9
Barium	mg/kg	30.3 J1	49.4	57.1	27.6 J1	59.7	53.6	34.2 J1
Cadmium	mg/kg	0.3 J1	0.48 J1	–	0.34 J1	1.5	–	0.34 J1
Chromium	mg/kg	15.5 J11	18.2 J11	20.5 J11	12.3 J11	22.2 J11	6.3 J11	12.1 J11
Lead	mg/kg	22.7	35.8	13.1	28.3	62.5	27.6	24.4
Mercury	mg/kg	0.09 J1	0.08 J1	–	0.07 J1	0.25	0.1 J1	0.09 J1
Selenium	mg/kg	–	–	–	–	–	–	–
Silver	mg/kg	–	–	–	–	–	–	–
Total Cyanide	mg/kg	0.2 J1	0.37 J1	–	0.15 J1	0.3 J1	0.18 J1	–
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg							
Sulfur (D2015/300.0)	ug/g							
pH (solid)		7.8 J2	7.4 J2	7.8 J2	7.7 J2	7.4 J2	7.8 J2	7.8 J2
BTU per pound	Btu/lb							

TABLE 5.4
SUMMARY OF DETECTIONS - AREA C SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCC-SB03-SS01-1/2	SCC-SB03-SS01-1/2	SCC-SB03-SS01-8/10	SCC-SB03-SS01-8/10	SCC-SB04-SS01-0/6	SCC-SB94-SS01-0/6	SCC-SB04-SS01-1/2
LOCATION:		SCC-SB03	SCC-SB03	SCC-SB03	SCC-SB03	SCC-SB04	SCC-SB04	SCC-SB04
DEPTH RANGE:		1 to 2 feet	1 to 2 feet	8 to 10 feet	8 to 10 feet	0 to 0.5 feet	0 to 0.5 feet	1 to 2 feet
SAMPLE DATE:		04/29/97	06/16/97	04/29/97	06/16/97	05/12/97	05/13/97	05/12/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Re-Sample	Field Sample	Field Re-Sample	Field Sample	Field Duplicate	Field Sample
LAB SAMPLE ID:		A7E010140008	A7F180147002	A7E010140009	A7F180147001	A7E140163018	A7E150154001	A7E140163019
EPA SAMPLE ID:		E014008	F184702	E014009	F184701	E146318	E155401	E146319
SAMPLE TYPE:		N1	N1	N1	N1	N1	FR1	N1
SDG NO:		AS01	AS11	AS01	AS11	AS06	AS07	AS06
Total CLP Metals								
Arsenic	mg/kg		0.14		0.13 J1		0.07 J1	
Barium	mg/kg		9 J8		12.7 J8		10.1 J5	
Cadmium	mg/kg		60.4		141		27.7 J1	
Chromium	mg/kg		0.77 J1		1.8		0.89 J1	
Lead	mg/kg		12.9 J8		19 J8		19.8	
Mercury	mg/kg		91.7 J8		74.6 J8		21.3 J8	
Selenium	mg/kg		--		1.7 J5		--	
Silver	mg/kg		--		--		--	
Total Cyanide	mg/kg		--		--		0.21 J1	
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg	9200		21000				
Sulfur (D2015/300.0)	ug/g	413		2330				
pH (solid)		7.3 J2		7.6 J2		8.4 J2	8.1 J2	10.5 J2
BTU per pound	Btu/lb	--		700				

TABLE 5.4
SUMMARY OF DETECTIONS - AREA C SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	SCC-SB04-SS[illegible]
	LOCATION:	SCC-SB04
	DEPTH RANGE:	14 to 16 feet
	SAMPLE DATE:	05/12/97
	MATRIX:	Soil
	SAMPLE TYPE:	Field Sample
	LAB SAMPLE ID:	ATE140163020
	EPA SAMPLE ID:	E148320
	SAMPLE TYPE:	N1
	SDG NO:	AS08
Total CLP Metals		
Arsenic	mg/kg	
Barium	mg/kg	
Cadmium	mg/kg	
Chromium	mg/kg	
Lead	mg/kg	
Mercury	mg/kg	
Selenium	mg/kg	
Silver	mg/kg	
Total Cyanide	mg/kg	
Wet Chemistry Parameters		
Total Organic Carbon	mg/kg	
Sulfur (D2015/300.0)	ug/g	
pH (solid)		8.1 [illegible]
BTU per pound	Btu/lb	

TABLE 4
SUMMARY OF DETECTIONS - AREA D SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCD-SB01-SS01-0/6	SCD-SB01-SS01-1/2	SCD-SB01-SS01-1/2	SCD-SB01-SS01-12/14	SCD-SB01-SS01-12/14	SCD-SB02-SS01-0/6	SCD-SB02-SS01-1/2
LOCATION:		SCD-SB01	SCD-SB01	SCD-SB01	SCD-SB01	SCD-SB01	SCD-SB02	SCD-SB02
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	1 to 2 feet	12 to 14 feet	12 to 14 feet	0 to 0.5 feet	1 to 2 feet
SAMPLE DATE:		05/08/97	05/08/97	06/16/97	05/08/97	06/16/97	05/08/97	05/08/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Re-Sample	Field Sample	Field Re-Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E090176019	A7E090176020	A7F180147008	A7E120138001	A7F180147009	A7E120138002	A7E120138003
EPA SAMPLE ID:		E097619	E097620	F184708	E123801	F184709	E123802	E123803
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS04	AS04	AS11	AS05	AS11	AS05	AS05
Total CLP Metals								
Mercury	mg/kg	0.17		0.07 J1		0.06 J1	--	--
Arsenic	mg/kg	9.6		7.8 J8		8 J8	8.9	9.4
Barium	mg/kg	48.2		36.5 J1		43.9 J1	25.7 J1	38.9 J1
Cadmium	mg/kg	1.1 J1		0.95 J1		0.21 J1	0.34 J1	0.51 J1
Chromium	mg/kg	25.9		17.1 J8		21.5 J8	14.2 J8	21.9 J8
Lead	mg/kg	59.3 J5		16.5 J8		14.5 J8	14.6	19.8
Selenium	mg/kg	--		--		--	--	--
Silver	mg/kg	--		--		--	--	--
Total Cyanide	mg/kg	--		--		--	0.09 J10	--
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg		9800		10000			
Sulfur (D2015/300.0)	ug/g		1260		2070			
pH (solid)		7.7 J2	7.6 J2		7.8 J2		8.1 J2	7.6 J2
BTU per pound	BTU/lb		--		250			

TABLE 5.4
SUMMARY OF DETECTIONS - AREA D SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCD-SB02-SS01-8/10	SCD-SB03-SS01-0/6	SCD-SB03-SS01-1/2	SCD-SB03-SS01-4/6
LOCATION:		SCD-SB02	SCD-SB03	SCD-SB03	SCD-SB03
DEPTH RANGE:		8 to 10 feet	0 to 0.5 feet	1 to 2 feet	4 to 6 feet
SAMPLE DATE:		05/08/97	05/12/97	05/12/97	05/12/97
MATRIX:		Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E120138004	A7E140183015	A7E140183016	A7E140183017
EPA SAMPLE ID:		E123804	E146315	E146316	E146317
SAMPLE TYPE:		N1	N1	N1	N1
SDG NO:		AS05	AS06	AS06	AS06
Total CLP Metals					
Mercury	mg/kg	–			
Arsenic	mg/kg	9.8			
Barium	mg/kg	45.3 J1			
Cadmium	mg/kg	–			
Chromium	mg/kg	17.2 J8			
Lead	mg/kg	14.6			
Selenium	mg/kg	–			
Silver	mg/kg	–			
Total Cyanide	mg/kg	–			
Wet Chemistry Parameters					
Total Organic Carbon	mg/kg				
Sulfur (D2015/300.0)	ug/g				
pH (solid)		7.9 J2	8 J2	7.4 J2	7.5 J2
BTU per pound	BTU/lb				

TABLE 5.4
SUMMARY OF DETECTIONS - AREA E SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCE-SB01-SS01-0/6	SCE-SB01-SS01-1/2	SCE-SB01-SS01-8/10	SCE-SB02-SS01-0/6	SCE-SB02-SS01-1/2	SCE-SB02-SS01-4/6	SCE-SB03-SS01-0/6
LOCATION:		SCE-SB01	SCE-SB01	SCE-SB01	SCE-SB02	SCE-SB02	SCE-SB02	SCE-SB03
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	8 to 10 feet	0 to 0.5 feet	1 to 2 feet	4 to 6 feet	0 to 0.5 feet
SAMPLE DATE:		05/08/97	05/08/97	05/08/97	05/12/97	05/12/97	05/12/97	05/12/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E090176012	A7E090176013	A7E090176014	A7E140163007	A7E140163005	A7E140163006	A7E140163008
EPA SAMPLE ID:		E097612	E097613	E097614	E146307	E146305	E146306	E146308
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS04	AS04	AS04	AS06	AS06	AS06	AS06
Total CLP Metals								
Mercury	mg/kg	--	0.06 J1	0.71				
Arsenic	mg/kg	9.8	7.5	7.1				
Barium	mg/kg	26.6 J1	49.8	57.9				
Cadmium	mg/kg	0.97 J1	--	--				
Chromium	mg/kg	19.2	23	24.7				
Lead	mg/kg	17.9 J5	12.5 J5	141 J5				
Selenium	mg/kg	--	--	--				
Silver	mg/kg	--	--	--				
Total Cyanide	mg/kg	--	--	1.6 J5				
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg							
Sulfur (D2015/300.0)	ug/g							
pH (solid)		7.6 J2	7.9 J2	7.6 J2	8 J2	7.4 J2	8 J2	8 J2
BTU per pound	BTU/lb							

TABLE 5.4
SUMMARY OF DETECTIONS - AREA E SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCE-SB03-SS01-1/2	SCE-SB03-SS01-1/2	SCE-SB03-SS01-8/10	SCE-SB04-SS01-0/5	SCE-SB04-SS01-1/2	SCE-SB04-SS01-8/10	SCE-SB05-SS01-0/5
LOCATION:		SCE-SB03	SCE-SB03	SCE-SB03	SCE-SB04	SCE-SB04	SCE-SB04	SCE-SB05
DEPTH RANGE:		1 to 2 feet	1 to 2 feet	8 to 10 feet	0 to 0.5 feet	1 to 2 feet	8 to 10 feet	0 to 0.5 feet
SAMPLE DATE:		05/12/97	05/12/97	05/12/97	05/12/97	05/12/97	05/12/97	05/14/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E140163009	A7E140163010	A7E140163011	A7E140163012	A7E140163013	A7E140163014	A7E190102005
EPA SAMPLE ID:		E146309	E146310	E146311	E146312	E146313	E146314	E190205
SAMPLE TYPE:		N1	FR1	N1	N1	N1	N1	N1
SDG NO:		AS08	AS08	AS08	AS08	AS08	AS08	AS08
Total CLP Metals								
Mercury	mg/kg							-
Arsenic	mg/kg							10.4
Barium	mg/kg							75.5
Cadmium	mg/kg							-
Chromium	mg/kg							15.3
Lead	mg/kg							24.J8
Selenium	mg/kg							-
Silver	mg/kg							-
Total Cyanide	mg/kg							-
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg							
Sulfur (D2015/300.0)	ug/g							
pH (solid)		7.6 J2	7.7 J2	8.2 J2	7.9 J2	8.3 J2	7.8 J2	8 J2
BTU per pound	BTU/lb							

TABLE 5.4
SUMMARY OF DETECTIONS - AREA E SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	SCE-SB06-SS01-1/2	SCE-SB06-SS01-6/8
	LOCATION:	SCE-SB05	SCE-SB05
	DEPTH RANGE:	1 to 2 feet	6 to 8 feet
	SAMPLE DATE:	05/14/97	05/14/97
	MATRIX:	Soil	Soil
	SAMPLE TYPE:	Field Sample	Field Sample
	LAB SAMPLE ID:	A7E190102006	A7E190102007
	EPA SAMPLE ID:	E190206	E190207
	SAMPLE TYPE:	N1	N1
	SDG NO:	AS08	AS08
Total CLP Metals			
Mercury	mg/kg	0.1 J1	0.24
Arsenic	mg/kg	7.4	6.9
Barium	mg/kg	38.2 J1	72.5
Cadmium	mg/kg	2.8	1.1 J1
Chromium	mg/kg	49.4	10.5
Lead	mg/kg	30.2 J8	143 J8
Selenium	mg/kg	--	--
Silver	mg/kg	0.52 J1	--
Total Cyanide	mg/kg	0.61	0.11 J1
Wet Chemistry Parameters			
Total Organic Carbon	mg/kg		
Sulfur (D2015/300.0)	ug/g		
pH (solid)		8.2 J2	9.2 J2
BTU per pound	BTU/lb		

TABLE 5.4
SUMMARY OF DETECTIONS - AREA F SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCF-SB01-SS01-0/5	SCF-SB01-SS01-1/2	SCF-SB01-SS01-16/18	SCF-SB02-SS01-0/5	SCF-SB02-SS01-0/5	SCF-SB02-SS01-1/2	SCF-SB02-SS01-14/16
LOCATION:		SCF-SB01	SCF-SB01	SCF-SB01	SCF-SB02	SCF-SB02	SCF-SB02	SCF-SB02
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	16 to 18 feet	0 to 0.5 feet	0 to 0.5 feet	1 to 2 feet	14 to 16 feet
SAMPLE DATE:		05/08/97	05/08/97	05/08/97	05/08/97	05/08/97	05/08/97	05/08/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample
LAB SAMPLE ID:		A7E120138005	A7E120138006	A7E120138007	A7E120138008	A7E120138010	A7E120138009	A7E120138011
EPA SAMPLE ID:		E123805	E123806	E123807	E123808	E123810	E123809	E123811
SAMPLE TYPE:		N1	N1	N1	N1	FR1	N1	N1
SDG NO:		AS05	AS05	AS05	AS05	AS05	AS05	AS05
Total CLP Metals								
Mercury	mg/kg	0.12	1.9	–	–	–	–	–
Arsenic	mg/kg	7	9.9	17.4	8.2	11.8	8	13.7
Barium	mg/kg	29.4 J1	156	56.6	28.1 J1	35.4 J1	35.6 J1	42.2 J1
Cadmium	mg/kg	0.35 J1	28.7	–	0.55 J1	0.9 J1	–	–
Chromium	mg/kg	9.3 J8	315 J8	20.7 J8	14.5 J8	23.5 J8	17.1 J8	19.4 J8
Lead	mg/kg	47.1	188	27.2	12.4	20.2	11.7	23.1
Selenium	mg/kg	–	–	–	–	–	–	–
Silver	mg/kg	–	9.6	–	–	–	–	–
Total Cyanide	mg/kg	–	3.1 J6	–	–	0.29 J10	–	–
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg							
Sulfur (D2015/300.0)	ug/g							
pH (solid)		8.1 J2	7.3 J2	7.9 J2	7.4 J2	7.5 J2	7.8 J2	7.7 J2
BTU per pound	BTU/lb							

TABLE 5.4
SUMMARY OF DETECTIONS - AREA F SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCF-SB03-SS01-0/6	SCF-SB03-SS01-1/2	SCF-SB03-SS01-18/20	SCF-SB04-SS01-0/6	SCF-SB04-SS01-1/2	SCF-SB04-SS01-1/2	SCF-SB04-SS01-8/10
LOCATION:		SCF-SB03	SCF-SB03	SCF-SB03	SCF-SB04	SCF-SB04	SCF-SB04	SCF-SB04
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	18 to 20 feet	0 to 0.5 feet	1 to 2 feet	1 to 2 feet	8 to 10 feet
SAMPLE DATE:		05/08/97	05/08/97	05/08/97	05/12/97	05/12/97	06/16/97	05/12/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Re-Sample	Field Sample
LAB SAMPLE ID:		A7E120138012	A7E120138013	A7E120138014	A7E140163002	A7E140163003	A7F180147010	A7E140163004
EPA SAMPLE ID:		E123812	E123813	E123814	E146302	E146303	F184710	E146304
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS05	AS05	AS05	AS06	AS06	AS11	AS06
Total CLP Metals								
Mercury	mg/kg	--	--	--			--	
Arsenic	mg/kg	8.3	10.4	7.2			10.9 J8	
Barium	mg/kg	45.4 J1	32.3 J1	50.4			28.2 J1	
Cadmium	mg/kg	--	0.81 J1	--			0.24 J1	
Chromium	mg/kg	20.4 J8	19.1 J8	23.6 J8			12.3 J8	
Lead	mg/kg	13.2	21.9	12			9.8 J8	
Selenium	mg/kg	--	--	--			--	
Silver	mg/kg	--	--	--			--	
Total Cyanide	mg/kg	--	0.09 J10	--			--	
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg							
Sulfur (D2015/300.0)	ug/g							
pH (solid)		7.6 J2	7.9 J2	8.1 J2	8.4 J2	7.5 J2		8 J2
BTU per pound	BTU/lb							

TABLE 5.4
SUMMARY OF DETECTIONS - AREA F SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCF-SB04-SS01-8/10	SCF-SB05-SS01-0/6	SCF-SB05-SS01-1/2	SCF-SB05-SS01-14/16	SCF-SB06-SS01-0/6	SCF-SB06-SS01-1/2	SCF-SB06-SS01-14/16
LOCATION:		SCF-SB04	SCF-SB05	SCF-SB05	SCF-SB05	SCF-SB06	SCF-SB06	SCF-SB06
DEPTH RANGE:		8 to 10 feet	0 to 0.5 feet	1 to 2 feet	14 to 16 feet	0 to 0.5 feet	1 to 2 feet	14 to 16 feet
SAMPLE DATE:		06/16/97	05/08/97	05/08/97	05/08/97	05/31/97	05/31/97	05/31/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Re-Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F180147011	A7E120138015	A7E120138016	A7E120138017	A7F040135006	A7F040135004	A7F040135005
EPA SAMPLE ID:		F184711	E123815	E123816	E123817	F043506	F043504	F043505
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS11	AS05	AS05	AS05	AS09	AS09	AS09
Total CLP Metals								
Mercury	mg/kg	–	–	–	27.1	0.39 J5	0.38 J5	–
Arsenic	mg/kg	5.9 J8	8.2	13.7	104	8.1	8.4	6.7
Barium	mg/kg	71.5	32.2 J1	28.7 J1	389	135	128	56.3
Cadmium	mg/kg	0.28 J1	0.35 J1	–	5	2.1	1.5	0.35 J1
Chromium	mg/kg	20.9 J8	14.2 J8	13.7 J8	26.9 J8	38.1	32.3	22.7
Lead	mg/kg	16.4 J8	12.9	13.9	2880	293 J5	181 J5	11.2 J5
Selenium	mg/kg	1.2 J10	–	–	25.3	–	1.4 J5	–
Silver	mg/kg	–	–	–	0.61 J1	–	–	–
Total Cyanide	mg/kg	–	–	–	1.2 J8	–	–	–
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg							
Sulfur (D2015/300.0)	ug/g							
pH (solid)			7.2 J2	7.5 J2	7 J2	8 J2	7.3 J2	7.8 J2
BTU per pound	BTU/lb							

TABLE 5.4
SUMMARY OF DETECTIONS - AREA F SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

PELD SAMPLE ID:		SCF-SB07-SS01-0/6	SCF-SB07-SS01-1/2	SCF-SB07-SS01-12/14	SCF-SB08-SS01-0/6	SCF-SB08-SS01-1/2	SCF-SB78-SS01-1/2	SCF-SB08-SS01-14/16
LOCATION:		SCF-SB07	SCF-SB07	SCF-SB07	SCF-SB08	SCF-SB08	SCF-SB08	SCF-SB08
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	12 to 14 feet	0 to 0.5 feet	1 to 2 feet	1 to 2 feet	14 to 16 feet
SAMPLE DATE:		05/13/97	05/13/97	05/13/97	05/13/97	05/13/97	05/13/97	05/14/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample
LAB SAMPLE ID:		A7E150154015	A7E150154016	A7E150154017	A7E150154018	A7E150154019	A7E150154020	A7E190102001
EPA SAMPLE ID:		E155415	E155416	E155417	E155418	E155419	E155420	E190201
SAMPLE TYPE:		N1	N1	N1	N1	N1	FR1	N1
SDG NO:		AS07	AS07	AS07	AS07	AS07	AS07	AS08
Total CLP Metals								
Mercury	mg/kg	--	--	--	0.23	0.15	0.3	--
Arsenic	mg/kg	7.8 J5	9.3 J5	5.1 J5	10.9 J5	14.9 J5	14.3 J5	13.7
Barium	mg/kg	23.5 J1	26.4 J1	68.3	37.4 J1	74.2	81.4	27.2 J1
Cadmium	mg/kg	0.22 J1	--	--	2.4	1.9	1.8	0.44 J1
Chromium	mg/kg	11.5	12.2	25.2	33.6	29.8	35.2	12.8
Lead	mg/kg	17.8 J8	12.9 J8	22.8 J8	26.9 J8	116 J8	136 J8	19.9 J8
Selenium	mg/kg	--	--	--	--	--	--	--
Silver	mg/kg	--	--	--	0.42 J1	--	--	--
Total Cyanide	mg/kg	--	0.13 J1	--	0.08 J1	--	0.11 J1	--
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg							
Sulfur (D2015/300.0)	ug/g							
pH (solid)		7.7 J2	7.7 J2	7.8 J2	7.6 J2	7.6 J2	7.9 J2	7.6 J2
BTU per pound	BTU/lb							

TABLE 5.4
SUMMARY OF DETECTIONS - AREA G SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCG-SB01-SS01-0/5	SCG-SB01-SS01-1/2	SCG-SB01-SS01-16/18	SCG-SB01-SS01-16/18	SCG-SB02-SS01-0/5	SCG-SB02-SS01-1/2	SCG-SB02-SS01-8/10
LOCATION:		SCG-SB01	SCG-SB01	SCG-SB01	SCG-SB01	SCG-SB02	SCG-SB02	SCG-SB02
DEPTH RANGE:		0 to 0.5 feet	1 to 2 feet	16 to 18 feet	16 to 18 feet	0 to 0.5 feet	1 to 2 feet	8 to 10 feet
SAMPLE DATE:		05/08/97	05/08/97	05/08/97	05/12/97	05/31/97	05/31/97	05/31/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7E120138018	A7E120138019	A7E120138020	A7E140158001	A7F040135006	A7F040135007	A7F040135009
EPA SAMPLE ID:		E123818	E123819	E123820	E145301	F043506	F043507	F043509
SAMPLE TYPE:		N1	N1	N1	FR1	N1	N1	N1
SDG NO:		AS05	AS05	AS05	AS06	AS09	AS09	AS09
Total CLP Metals								
Mercury	mg/kg	–	–	–		0.67 J5	0.22 J5	–
Arsenic	mg/kg	7.9	9.1	11.8		14	14.3	10
Barium	mg/kg	23.6 J1	33.9 J1	42.3 J1		68.4	114	45 J1
Cadmium	mg/kg	0.63 J1	0.42 J1	–		2.5	2.5	0.36 J1
Chromium	mg/kg	13.5 J8	14.9 J8	14.7 J8		22	18.2	22
Lead	mg/kg	17	14.9	13		335 J5	559 J5	18.8 J5
Selenium	mg/kg	–	–	–		–	1 J10	–
Silver	mg/kg	–	0.98 J1	–		–	–	–
Total Cyanide	mg/kg	0.1 J10	–	–		–	–	–
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg							
Sulfur (D2015/300.0)	ug/g							
pH (solid)		7.8 J2	7.6 J2	7.7 J2	7.5 J2	7.5 J2	7 J2	7.6 J2
BTU per pound	BTU/lb							

TABLE 5.4
SUMMARY OF DETECTIONS - AREA G SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCG-SB03-SS01-1/2	SCG-SB93-SS01-1/2	SCG-SB03-SS01-4/6	SCG-SB03-SS01-12/14	SCG-SB04-SS01-0/6	SCG-SB04-SS01-1/2	SCG-SB04-SS01-8/10
LOCATION:		SCG-SB03	SCG-SB03	SCG-SB03	SCG-SB03	SCG-SB04	SCG-SB04	SCG-SB04
DEPTH RANGE:		1 to 2 feet	1 to 2 feet	4 to 6 feet	12 to 14 feet	0 to 0.5 feet	1 to 2 feet	8 to 10 feet
SAMPLE DATE:		06/04/97	06/04/97	06/04/97	06/04/97	05/31/97	05/31/97	05/31/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F050158003	A7F050158004	A7F050158001	A7F050158002	A7F040135012	A7F040135010	A7F040135011
EPA SAMPLE ID:		F055803	F055804	F055801	F055802	F043512	F043510	F043511
SAMPLE TYPE:		N1	FR1	N1	N1	N1	N1	N1
SDG NO:		AS09	AS09	AS09	AS09	AS09	AS09	AS09
Total CLP Metals								
Mercury	mg/kg	0.07 J5	0.14 J5	--	--	--	--	0.78 J5
Arsenic	mg/kg	3.7	3	6	10.4	5.4	6.4	86.4
Barium	mg/kg	29.6 J1	25.4 J1	60.9	19.3 J1	38.1 J1	32.3 J1	137
Cadmium	mg/kg	0.69 J1	0.64 J1	0.87 J1	0.3 J1	0.77 J1	0.98 J1	2
Chromium	mg/kg	8.1	8.8	16.1	9.5	9.9	9.8	24.8
Lead	mg/kg	34.6 J5	44.4 J5	55 J5	10.3 J5	33.5 J5	77.6 J5	157 J5
Selenium	mg/kg	--	--	1.1 J10	--	--	1.2 J5	2.3 J5
Silver	mg/kg	--	--	--	--	--	--	--
Total Cyanide	mg/kg	--	--	--	--	--	--	--
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg							
Sulfur (D2015/300.0)	ug/g							
pH (solid)		8 J2	8.1 J2	7.2 J2	7.2 J2	7.7 J2	8.2 J2	8.3 J2
BTU per pound	BTU/lb							

TABLE 5.4
SUMMARY OF DETECTIONS - AREA G SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCG-SB04-SS01-8/10	SCG-SB05-SS01-1/2	SCG-SB05-SS01-6/8	SCG-SB05-SS01-10/12	SCG-SB06-SS01-0/0.5	SCG-SB06-SS01-1/2	SCG-SB06-SS01-4/6
LOCATION:		SCG-SB04	SCG-SB05	SCG-SB05	SCG-SB05	SCG-SB06	SCG-SB06	SCG-SB06
DEPTH RANGE:		8 to 10 feet	1 to 2 feet	6 to 8 feet	10 to 12 feet	0 to 0.5 feet	1 to 2 feet	4 to 6 feet
SAMPLE DATE:		05/31/97	05/31/97	05/31/97	05/31/97	05/13/97	05/13/97	05/13/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Duplicate	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F040135013	A7F040135016	A7F040135015	A7F040135014	A7E150154012	A7E150154013	A7E150154014
EPA SAMPLE ID:		F043513	F043516	F043515	F043514	E155412	E155413	E155414
SAMPLE TYPE:		FR1	N1	N1	N1	N1	N1	N1
SDG NO:		AS09	AS09	AS09	AS09	AS07	AS07	AS07
Total CLP Metals								
Mercury	mg/kg	0.31 J5	0.11 J5	0.13 J5	–	–	–	–
Arsenic	mg/kg	45.6	5.4	8.9	8.8	10.8 J5	12.4 J5	11.3 J5
Barium	mg/kg	92.6	62.7	47.2	9 J1	45.3 J1	55.2	9.7 J1
Cadmium	mg/kg	2.1	0.59 J1	1.1 J1	–	0.8 J1	0.55 J1	2
Chromium	mg/kg	24.5	12.4	12.8	4.8	17.5	14	2.1 J1
Lead	mg/kg	140 J5	36.4 J5	225 J5	4.9 J5	22.3 J8	16 J8	36.8 J8
Selenium	mg/kg	2.7 J5	–	–	–	–	–	–
Silver	mg/kg	0.24 J1	–	–	–	–	–	–
Total Cyanide	mg/kg	–	–	–	–	0.11 J1	–	0.21 J1
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg							
Sulfur (D2015/300.0)	ug/g							
pH (solid)		8 J2	7.8 J2	7.2 J2	7.4 J2	7.5 J2	7.7 J2	8 J2
BTU per pound	BTU/lb							

TABLE 5.4
SUMMARY OF DETECTIONS - AREA G SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCG-SB07-SS01-0/6	SCG-SB07-SS01-2/4	SCG-SB07-SS01-2/4	SCG-SB07-SS01-8/10	SCG-SB08-SS01-1/2	SCG-SB08-SS01-8/10	SCG-SB08-SS01-12/14
LOCATION:		SCG-SB07	SCG-SB07	SCG-SB07	SCG-SB07	SCG-SB08	SCG-SB08	SCG-SB08
DEPTH RANGE:		0 to 0.5 feet	2 to 4 feet	2 to 4 feet	8 to 10 feet	1 to 2 feet	8 to 10 feet	12 to 14 feet
SAMPLE DATE:		06/04/97	06/03/97	06/16/97	06/04/97	06/16/97	06/16/97	06/16/97
MATRIX:		Soil	Soil	Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Re-Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F050163001	A7F050163002	A7F170129007	A7F050163003	A7F170129001	A7F170129002	A7F170129003
EPA SAMPLE ID:		F056301	F056302	F172907	F056303	F172901	F172902	F172903
SAMPLE TYPE:		N1	N1	N1	N1	N1	N1	N1
SDG NO:		AS10	AS10	AS11	AS10	AS11	AS11	AS11
Total CLP Metals								
Mercury	mg/kg	--	0.09 J5		--	0.15	--	--
Arsenic	mg/kg	3	5.5		3.7	21.8 J8	17 J8	11.6 J8
Barium	mg/kg	22.2 J1	45.5 J1		45.7 J1	153	29.1 J1	21.4 J1
Cadmium	mg/kg	0.32 J1	1.3		0.15 J1	0.69 J1	0.35 J1	0.4 J1
Chromium	mg/kg	6.3	11.7		15.4	213 J8	14.3 J8	12.2 J8
Lead	mg/kg	12.8 J5	41.4 J5		13.7 J5	39.7 J8	17.4 J8	19.5 J8
Selenium	mg/kg	--	1.4 J5		--	--	1.1 J10	1 J10
Silver	mg/kg	--	--		--	--	--	--
Total Cyanide	mg/kg	--	--		--	--	--	--
Wet Chemistry Parameters								
Total Organic Carbon	mg/kg			16000	4000			
Sulfur (D2015/300.0)	ug/g			2070	222			
pH (solid)		7.7 J2	9.1 J2		7.3 J2	8.7 J2	7.7 J2	7.5 J2
BTU per pound	BTU/lb			1000	100			

TABLE 5.4
SUMMARY OF DETECTIONS - AREA G SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SCG-SB09-SS01-1/2	SCG-SB09-SS01-6/8	SCG-SB09-SS01-8/10
LOCATION:		SCG-SB09	SCG-SB09	SCG-SB09
DEPTH RANGE:		1 to 2 feet	6 to 8 feet	8 to 10 feet
SAMPLE DATE:		06/16/97	06/16/97	06/16/97
MATRIX:		Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F170129004	A7F170129005	A7F170129006
EPA SAMPLE ID:		F172904	F172905	F172906
SAMPLE TYPE:		N1	N1	N1
SDG NO:		AS11	AS11	AS11
Total CLP Metals				
Mercury	mg/kg	0.14	–	–
Arsenic	mg/kg	8.8 J8	6.7 J8	25.9 J8
Barium	mg/kg	49.1	61.6	58.2
Cadmium	mg/kg	0.74 J1	0.26 J1	0.6 J1
Chromium	mg/kg	8.8 J8	19.3 J8	20.8 J8
Lead	mg/kg	54.2 J8	15.7 J8	21.3 J8
Selenium	mg/kg	0.93 J10	1.3 J10	2.2 J5
Silver	mg/kg	–	–	–
Total Cyanide	mg/kg	–	–	–
Wet Chemistry Parameters				
Total Organic Carbon	mg/kg			
Sulfur (D2015/3000.0)	ug/g			
pH (solid)		7.8 J2	7.2 J2	7.2 J2
BTU per pound	BTU/lb			

TABLE 5.4
SUMMARY OF DETECTIONS - BACKGROUND SOILS
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		BG1-SB01-SS01-0/2	BG1-SB01-SS01-6/8	BG1-SB01-SS01-12/14
LOCATION:		Background	Background	Background
DEPTH RANGE:		0 to 2 feet	6 to 8 feet	12 to 14 feet
SAMPLE DATE:		06/04/97	06/04/97	06/04/97
MATRIX:		Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F050163004	A7F050163005	A7F050163006
EPA SAMPLE ID:		F056304	F056305	F056306
SAMPLE TYPE:		N1	N1	N1
SDG NO:		AS10	AS10	AS10
Total CLP Metals				
Mercury	mg/kg	0.23 J5	--	--
Arsenic	mg/kg	10.3	3.7	10.3
Barium	mg/kg	70.8	41.2 J1	47.8 J1
Cadmium	mg/kg	0.81 J1	0.18 J1	0.34 J1
Chromium	mg/kg	20.9	18.8	20.4
Lead	mg/kg	95.2 J5	11.2 J5	16.3 J5
Selenium	mg/kg	--	--	--
Silver	mg/kg	--	--	--
Total Cyanide	mg/kg	--	--	--
Wet Chemistry Parameters				
Total Organic Carbon	mg/kg			
Sulfur (D2015/300.0)	ug/g			
pH (solid)		7.4 J2	7.9 J2	7.6 J2
BTU per pound	BTU/lb			

TABLE 5.4
SUMMARY OF DETECTIONS - SEDIMENT
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		C1-SD01MMSD	CU-SD02	CD-SD03
LOCATION:		Inlet Location	Upstream Location	Downstream Location
DEPTH RANGE:				
SAMPLE DATE:		05/31/97	05/31/97	05/31/97
MATRIX:		Sediment	Sediment	Sediment
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A7F040135002	A7F040135003	A7F040135001
EPA SAMPLE ID:		F043502	F043503	F043501
SAMPLE TYPE:		N1	N1	N1
SDG NO:		AS09	AS09	AS09
Total CLP Metals				
Mercury	mg/kg	2.3 J5	0.07 J10	0.2 J5
Arsenic	mg/kg	13.9	10.4	9.9
Barium	mg/kg	254	25.7 J1	45.8 J1
Cadmium	mg/kg	16.7	0.64 J1	4.6
Chromium	mg/kg	112	17.6	46.5
Lead	mg/kg	697 J5	32.9 J5	78.3 J5
Selenium	mg/kg	5.1 J5	–	–
Silver	mg/kg	2.3 J1	–	0.9 J1
Total Cyanide	mg/kg	1.9 J10	–	–
Wet Chemistry Parameters				
Total Organic Carbon	mg/kg			
Sulfur (D2015/300.0)	ug/g			
pH (solid)		7.4 J2	7.8 J2	7.4 J2
BTU per pound	BTU/lb			

TABLE 5.4
SUMMARY OF DETECTIONS - GROUNDWATER
CLP METALS/WET CHEMISTRY
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	SCA-TW01-GW01	SCG-TW03-GW01	GWRB1-6/6/97
	LOCATION:	SCA-SB01	SCG-SB03	
	DEPTH RANGE:			
	SAMPLE DATE:	06/06/97	06/06/97	06/06/97
	MATRIX:	Groundwater	Groundwater	
	SAMPLE TYPE:	Field Sample	Field Sample	Rinseate Blank
	LAB SAMPLE ID:	A7F110101001	A7F110101005	A7F110101002
	EPA ID:	F110101	F110105	F110102
	SAMPLE TYPE:	N1	N1	EB1
	SDG NO:	AS10	AS10	AS10
Total CLP Metals				
Arsenic	ug/L	139		--
Barium	ug/L	2200		7.2 J1
Cadmium	ug/L	28.7		--
Chromium	ug/L	378		--
Lead	ug/L	1510 J5		--
Selenium	ug/L	18.3 J5		--
Total Cyanide	ug/L	75.9	7.8 J1	--
Dissolved CLP Metals				
Arsenic	ug/L	7.6 J1		--
Barium	ug/L	780		--
Chromium	ug/L	2 J1		--
Lead	ug/L	--		--
Selenium	ug/L	4.3 J10		--
Silver	ug/L	--		--

NOTES:

All Field Sample IDs begin with "SSAS1-". They have been shortened here to conserve space.

--	Analyte was not detected.
NA	Analyte was not analyzed for in given sample.
R	Unusable data due to gross violations of one or more quality control criteria.
D	Reported from diluted sample run due to calibration exceedance in the original analysis. See "J3" below.
U	The analyte was analyzed for and is not present above the level of the associated value.
UJ	The analyte was analyzed for but was not detected. The reported detection limit has been qualified due to a QC anomaly. Refer to the numerical suffixes
UB	Analyte detected in the field or laboratory blank associated with this sample. Reported result should be considered estimated and biased high
J	The analyte was positively identified, but the associated numerical value may be imprecise due to a quality control (QC) anomaly.
J^1	Estimated value, greater than the method detection limit (MDL) or the instrument detection limit (IDL) but less than the project reporting limit (PRL)
J^2	Sample was prepared or analyzed outside the specified holding time. The qualified result should be considered estimated and biased low
J^3	Result exceeded the calibration range for the instrument and method and should be considered estimated.
J^4	Surrogate outliers were reported for the sample. The reported result should be considered estimated.
J^5	Accuracy and/or precision outlier reported for MS/MSD or field duplicate samples associated with the reported result. Result should be considered estimated.
J^6	Accuracy outlier reported for the Laboratory Control Sample (LCS) associated with the reported result. The reported result should be considered an estimate.
J^7	Field precision outlier reported for the field duplicate/replicate sample associated with this result. Result should be considered an estimate
J^8	Precision outlier reported for the laboratory duplicate samples associated with this analysis. Result should be considered an estimate.
J^9	Calibration or internal standard outliers reported for this sample. Results should be considered estimated
J^{10}	Multiple QC anomalies associated with the reported result.
J^{11}	ICP serial dilution outlier reported. Result should be considered an estimate.
J^{12}	The percent difference between the values from the confirmation and quantitation columns exceeded 25%. Result should be considered an estimate.
J^{13}	The reported result has been qualified as estimated or unusable due to matrix interferences or laboratory error.

TAL... 5.5
SUMMARY OF DETECTIONS - TCLP SAMPLES
DATA REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	SCC-SB03-SS01-8/10	SCA-SB07-SS01-8/10	SCA-SB15-SS01-12/14
	LOCATION:	SCC-SB03	SCA-SB07	SCA-SB15
	DEPTH RANGE:	8 to 10 feet	8 to 10 feet	12 to 14 feet
	SAMPLE DATE:	04/30/97	05/06/97	05/13/97
	MATRIX:	Soil	Soil	Soil
	SAMPLE TYPE:	Field Sample	Field Sample	Field Sample
	LAB SAMPLE ID:	A7E030103002	A7E080152002	A7E160105001
	EPA ID:	E014009	E078011	E155411
	SAMPLE TYPE:	N1	N1	N1
	SDG NO:	AS01	AS03	AS07
TCLP Volatiles				
Benzene-TCLP	mg/L	0.057 J2	--	0.044
TCLP Metals				
Lead-TCLP	mg/L	--	0.52	--

NOTES:

All Field Sample IDs begin with "SSAS1-". They have been shortened here to conserve space.

--	Analyte was not detected.
NA	Analyte was not analyzed for in given sample.
R	Unusable data due to gross violations of one or more quality control criteria.
D	Reported from diluted sample run due to calibration exceedance in the original analysis. See "J3" below.
U	The analyte was analyzed for and is not present above the level of the associated value.
UJ	The analyte was analyzed for but was not detected. The reported detection limit has been qualified due to a QC anomaly. Refer to the numerical suffixes.
UB	Analyte detected in the field or laboratory blank associated with this sample. Reported result should be considered estimated and biased high.
J	The analyte was positively identified, but the associated numerical value may be imprecise due to a quality control (QC) anomaly.
J^1	Estimated value, greater than the method detection limit (MDL) or the instrument detection limit (IDL) but less than the project reporting limit (PRL).
J^2	Sample was prepared or analyzed outside the specified holding time. The qualified result should be considered estimated and biased low.
J^3	Result exceeded the calibration range for the instrument and method and should be considered estimated.
J^4	Surrogate outliers were reported for the sample. The reported result should be considered estimated.
J^5	Accuracy and/or precision outlier reported for MS/MSD or field duplicate samples associated with the reported result. Result should be considered estimated.
J^6	Accuracy outlier reported for the Laboratory Control Sample (LCS) associated with the reported result. The reported result should be considered an estimate.
J^7	Field precision outlier reported for the field duplicate/replicate sample associated with this result. Result should be considered an estimate.
J^8	Precision outlier reported for the laboratory duplicate samples associated with this analysis. Result should be considered an estimate.
J^9	Calibration or internal standard outliers reported for this sample. Results should be considered estimated
J^{10}	Multiple QC anomalies associated with the reported result.
J^{11}	ICP serial dilution outlier reported. Result should be considered an estimate.
J^{12}	The percent difference between the values from the confirmation and quantitation columns exceeded 25%. Result should be considered an estimate.
J^{13}	The reported result has been qualified as estimated or unusable due to matrix interferences or laboratory error.

APPENDIX A-3

EXCERPTS FROM PARSONS' PHASE II RESIDENTIAL AREA SAMPLING REPORT

FILE COPY

DRAFT PHASE II RESIDENTIAL AREA SAMPLING REPORT

for the

ENGINEERING EVALUATION AND COST ANALYSIS
OF THE FORMER CELOTEX SITE
2800 South Sacramento Avenue
Chicago, Illinois 60623

Prepared for:

ALLIEDSIGNAL, INC.
MORRISTOWN, NEW JERSEY
and
THE CELOTEX CORPORATION
TAMPA, FLORIDA

AUGUST 1998

Prepared by:

PARSONS ENGINEERING SCIENCE, INC.
1000 JORIE BOULEVARD, SUITE 250
OAK BROOK, ILLINOIS 60523

Parsons ES Project No. 730577

SECTION 2
FIELD INVESTIGATION ACTIVITIES

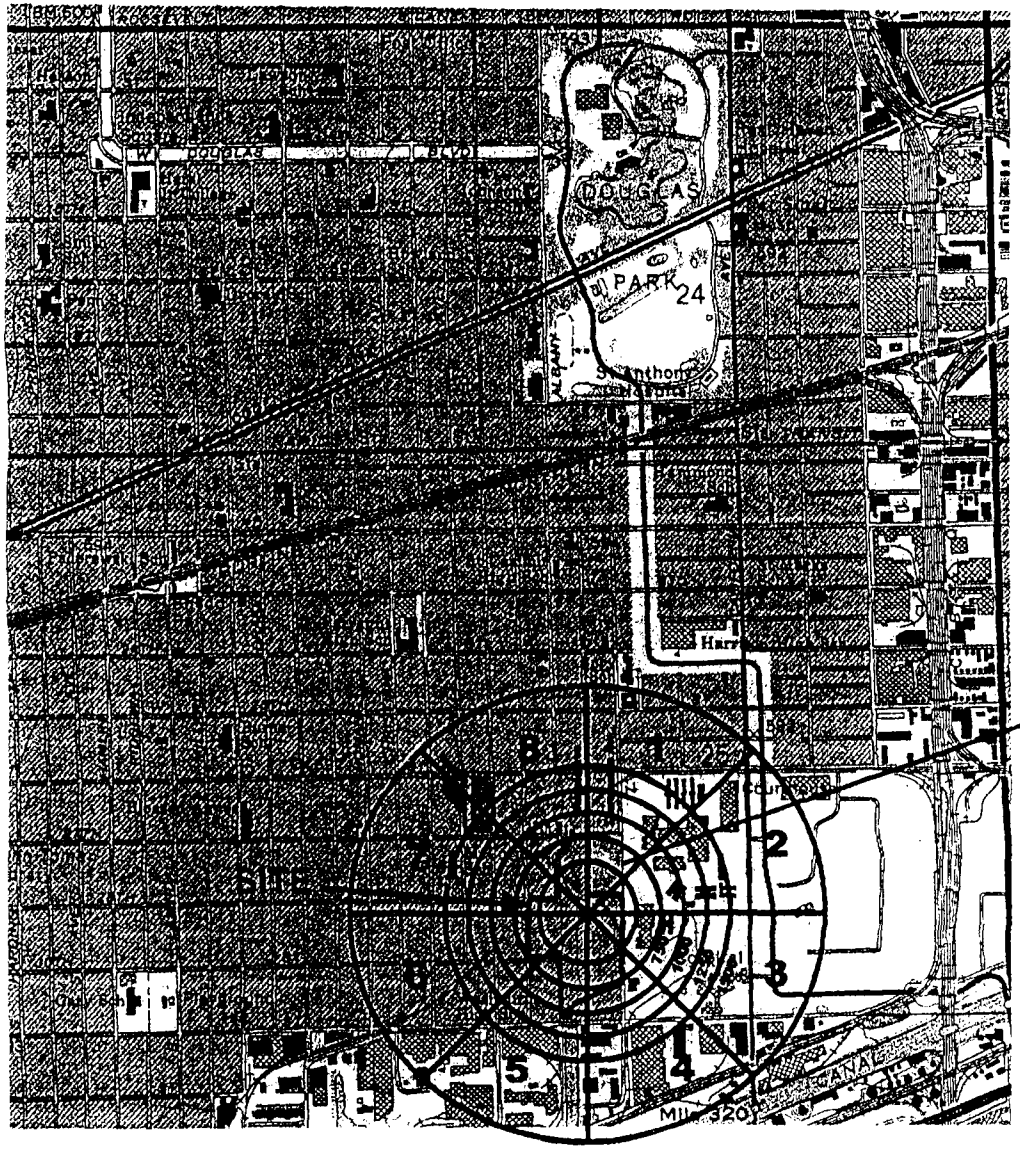
2.1 OVERVIEW

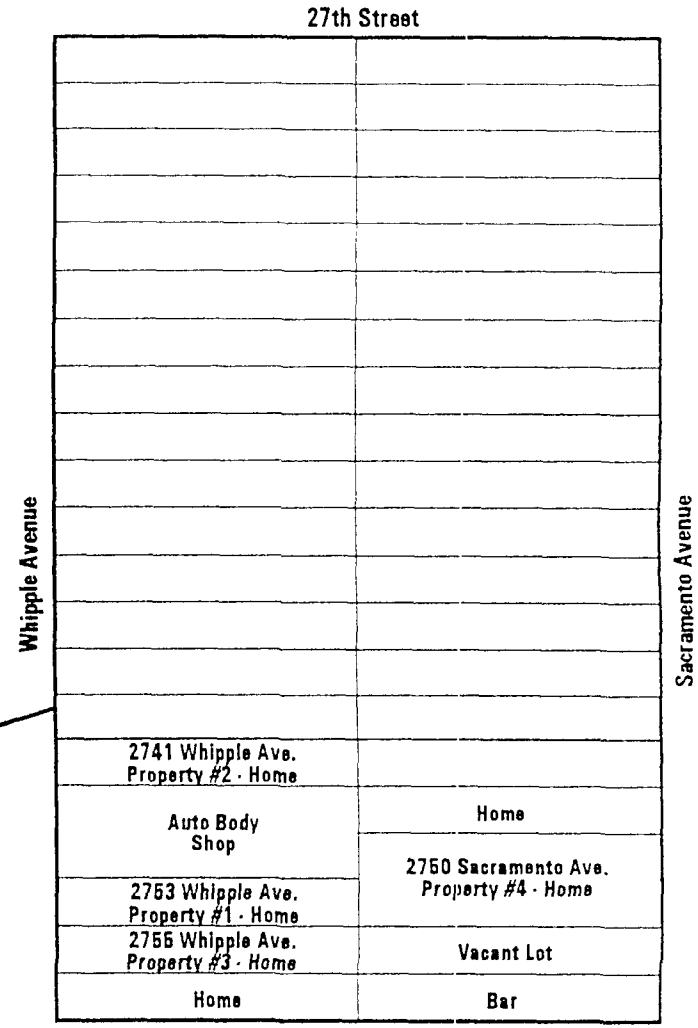
The approach for the Phase II residential sampling program was based on the adaptive sampling approach, and was implemented in accordance with the Phase II RASAP which was approved by the USEPA Region V in December 1997. Four residential properties from within the north north-east quadrant from the Site were identified to be sampled during this phase of the residential evaluation. (Refer to Figure 2.1 for a site location map.) These properties are located at the addresses shown below:

ASSIGNED PROPERTY NO.	PROPERTY ADDRESS	ASSIGNED PROPERTY ID
Property No. 1:	2753 Whipple Avenue	RAP1
Property No. 2:	2941 Whipple Avenue	RAP2
Property No. 3:	2755 Whipple Avenue	RAP3
Property No. 4:	2750 S. Sacramento Avenue	RAP4

Parsons ES (on behalf of the Respondents), with significant assistance from the USEPA Region V, searched for the owners of the abovementioned properties to acquire written permission to access their properties and collect soil samples. Permission to sample all four properties was obtained from the respective owners.

The field sampling effort was performed over a 2-day period, with property Nos. 1 and 2 sampled on 4 February and property Nos. 3 and 4 sampled on 5 February. A summary of the field conditions and activities performed during the Phase II field program, on a property-by-property basis, is presented in the next subsection.





LEGEND

1 Sector Number

1500 Distance from Center (feet)

PARSONS ENGINEERING SCIENCE, INC.

SOIL SAMPLING PROPERTY LOCATIONS

AlliedSignal, Inc./The Celotex Corporation

FIGURE 2.1

8-12-98 /soilsamp.cdr

2.2 SAMPLING ACTIVITIES

In accordance with the approach specified in the Phase II RASAP, Parsons ES collected eight surface soil samples from each property, for a total of 32 investigative samples. All soil samples were collected as grab samples (i.e., samples from multiple locations were not composited). The soil samples were collected from a depth of 0 to 3 inches below grade. The sample collection protocol entailed the use of a decontaminated stainless-steel spoon to remove the soil material down to the 3-inch depth and the placement of the removed material into a decontaminated stainless-steel bowl. Once sufficient material had been removed to fill the necessary sample containers, the soils in the bowl were homogenized using the stainless-steel spoon and then placed into the appropriate sample container(s). Field duplicate and matrix spike/matrix spike duplicate (MS/MSD) samples were collected in accordance with the requirements specified in the Phase II RASAP. A total of four field duplicate soil samples (one from each property) and two MS/MSD soil samples were collected and sent to the laboratory for analysis. All sample analyses were performed by the Quanterra, Inc. laboratory located in North Canton, Ohio.

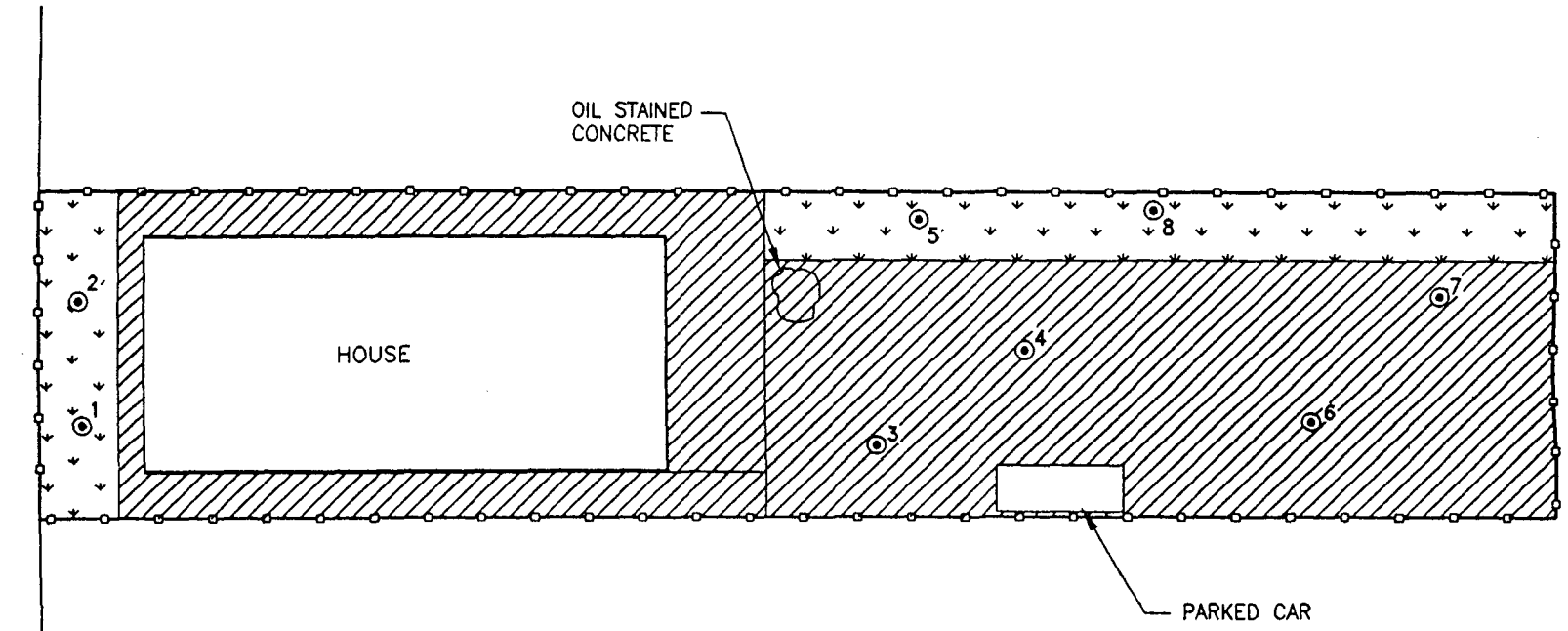
At the first property Parsons ES sampled (2753 Whipple Avenue), the majority of the property that was not occupied by the house structure was overlain with concrete. To access the soils beneath the concrete, Parsons ES used a hand-held concrete coring machine to drill through the concrete. The first two soil samples collected as part of the Phase II RASAP were taken from the grassy front yard area located on the west side of the property. Four of the remaining six soil samples were taken from soils located beneath the concrete surface. An additional two soils samples were collected from the exposed soil strip located along the north side of the concrete yard area. Care was taken to avoid collecting samples in areas that visually appeared to be impacted from non-site-related wastes, such as in the vicinity of oil staining. (Refer to Figure 2.2 for a schematic showing the approximate sample locations on this property.)

Concrete cored areas were repaired by Parsons ES after sampling activities were completed at the property, using cement troweled by hand.

The second property that was sampled is located at 2941 Whipple Avenue. This property does not have a front yard, but it has a large grass-covered area in the backyard; therefore, no concrete coring was performed to access subsurface materials. Eight soil samples were collected from this property at the locations shown on Figure 2.3.

The third property that was sampled is located at 2755 Whipple Avenue. This property does not have a front yard area, and a portion of the backyard is overlain with very thick concrete. Because of the thickness of the concrete, no attempt was made to core through this area with the hand coring machine. Instead, samples were collected from grassy areas. Eight soil samples were collected from this property at the locations shown on Figure 2.4.

The fourth property that was sampled is located at 2750 South Sacramento Avenue. This property is a double lot. Portions of the property are covered in concrete, but there are large grassy areas. No concrete coring was performed during the sampling event at this property. The eight soil samples were collected from the locations shown on Figure 2.5.



LEGEND

- SOIL SAMPLE LOCATION
- CONCRETE
- GRASS
- FENCE BOUNDARY

N

0 15 30

SCALE: 1"=15'

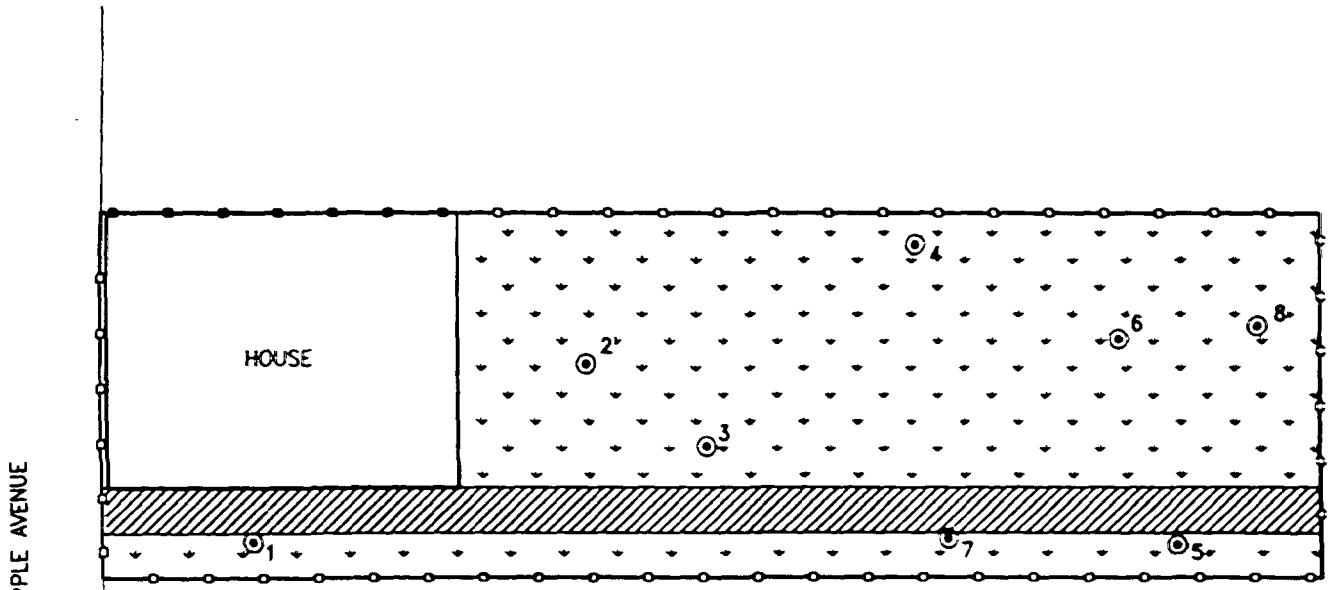
FIGURE 2.2

AlliedSignal, Inc./The Celotex Corporation

SOIL SAMPLE LOCATION MAP
PROPERTY No. 1
2753 WHIPPLE AVENUE

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1000 JORIE BLVD. • OAKBROOK, ILLINOIS 60523 • (630) 990-7200
OFFICES IN PRINCIPAL CITIES

DATE: 7/31/98
R:\DRAWINGS\ALLIEDSI\2753WHIP.DWG



LEGEND

- SOIL SAMPLE LOCATION
- CONCRETE
- GRASS
- FENCE BOUNDARY

N

0 15 30

SCALE: 1"=15'

FIGURE 2.3

AlliedSignal, Inc./The Celotex Corporation

SOIL SAMPLE LOCATION MAF
PROPERTY No. 2
2941 WHIPPLE AVENUE

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1000 JORIE BLVD. • OAKBROOK, ILLINOIS 60523 • (630) 990-7200
OFFICES IN PRINCIPAL CITIES

DATE: 7/31/98
R:\DRAWINGS\ALLIEDSI\2941WHIP.DWG

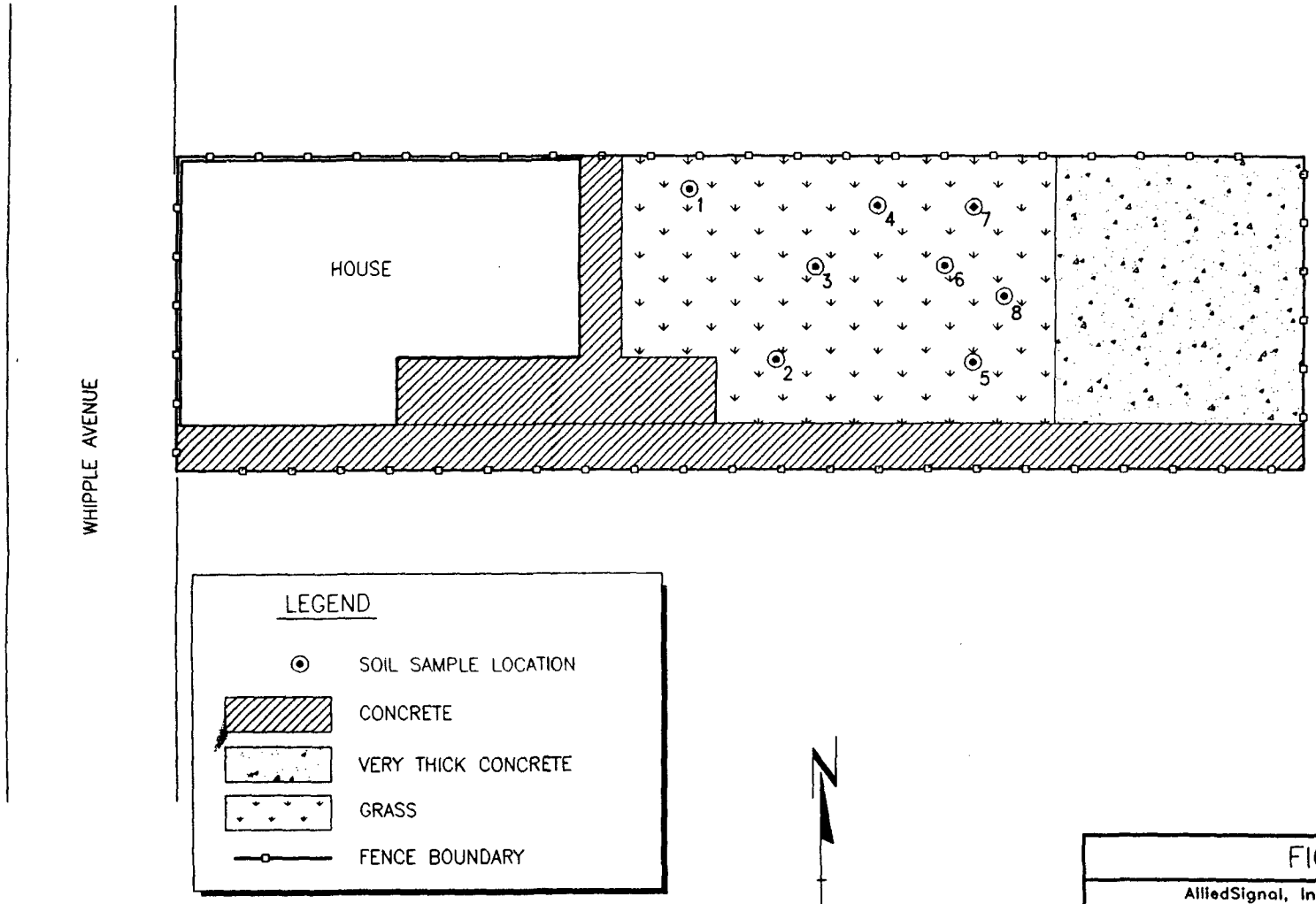


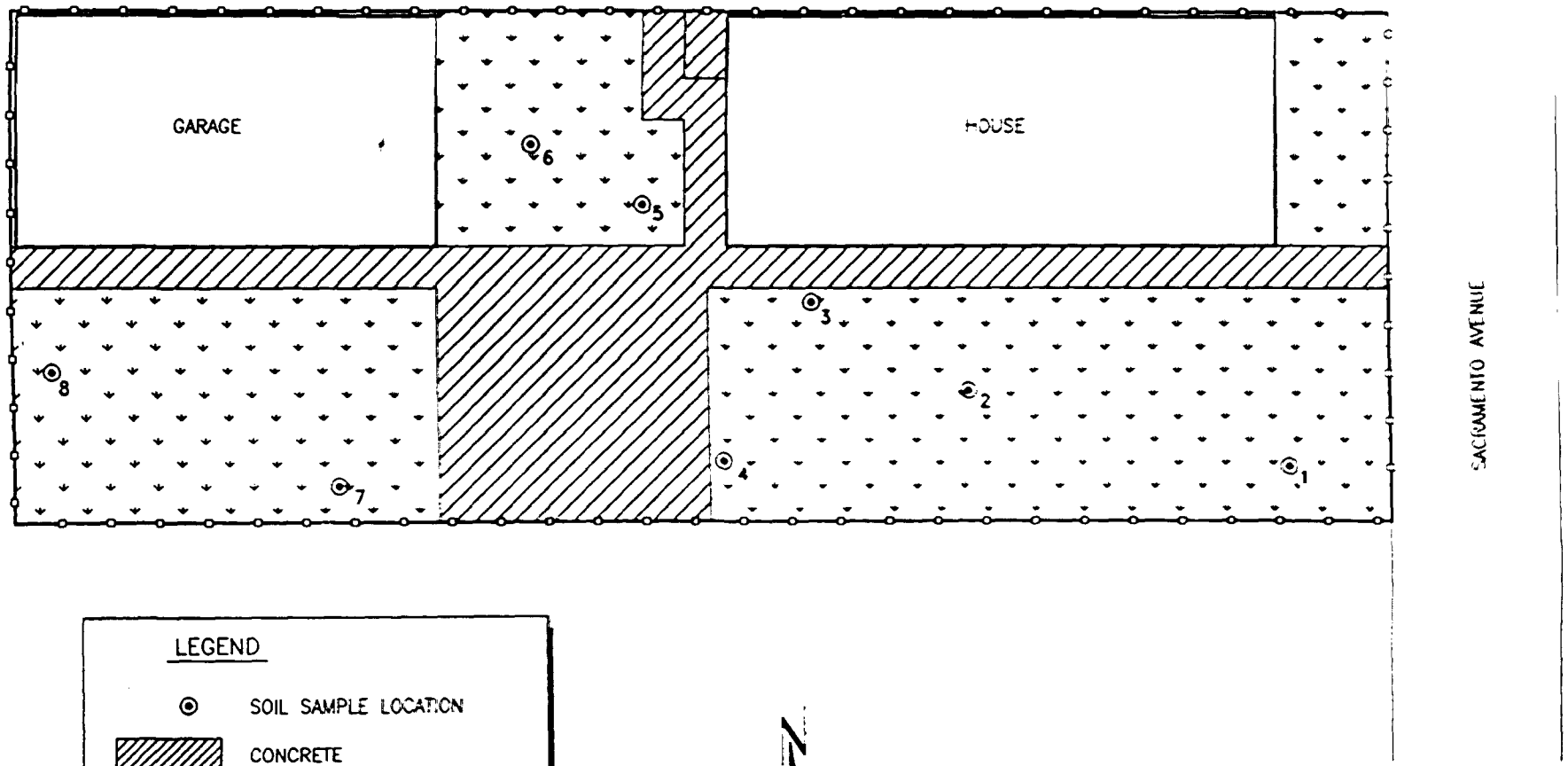
FIGURE 2.4

AlliedSignal, Inc./The Celotex Corporation

SOIL SAMPLE LOCATION MAP
PROPERTY No. 3
2755 WHIPPLE AVENUE

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1000 JORIE BLVD. • OAKBROOK, ILLINOIS 60523 • (630) 990-7200
OFFICES IN PRINCIPAL CITIES

DATE: 7/31/98
R:\DRAWINGS\ALLIEDSI\2755WHIP.DWG



LEGEND

- SOIL SAMPLE LOCATION
- CONCRETE
- GRASS
- FENCE BOUNDARY

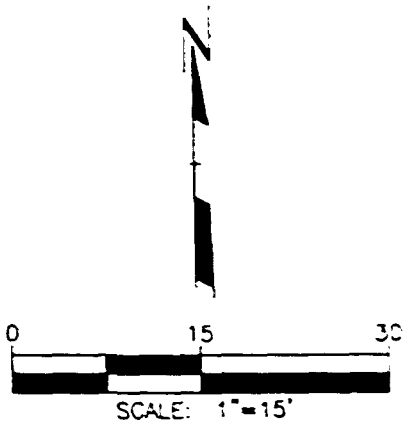


FIGURE 2.5

AlliedSignal, Inc./The Celotex Corporation

SOIL SAMPLE LOCATION MAP
PROPERTY No. 4
2750 S. SACRAMENTO AVENUE

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1000 JORIE BLVD. • OAKBROOK, ILLINOIS 60523 • (630) 990-7200
OFFICES IN PRINCIPAL CITIES

DATE: 7/31/98
R:\DRAWINGS\ALLIEDSI\2750SAC.DWG

TABLE 3.1
SUMMARY OF DETECTED COMPOUNDS
PHASE II RESIDENTIAL AREA SAMPLING REPORT

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SSAS2-RAP1-SS01-0/3	SSAS2-RAP1-SS02-0/3	SSAS2-RAP1-SS92-0/3	SSAS2-RAP1-SS03-0/3	SSAS2-RAP1-SS04-0/3
LOCATION:		SSAS2-RAP1	SSAS2-RAP1	SSAS2-RAP1	SSAS2-RAP1	SSAS2-RAP1
DEPTH RANGE:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
SAMPLE DATE:		2/4/98	2/4/98	2/4/98	2/4/98	2/4/98
MATRIX:		Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample
LAB SAMPLE ID:		A8B050150001	A8B050150002	A8B050150003	A8B050150004	A8B050150005
EPA SAMPLE ID:		RAP101	RAP102	RAP192	RAP103	RAP104
SAMPLE TYPE:		N1	N1	FR1	N1	N1
SDG NO:		CELOTEX1	CELOTEX1	CELOTEX1	CELOTEX1	CELOTEX1
Semivolatile Organic Compounds						
2-Methylnaphthalene	ug/kg	1700 J1	600 J1	430 J1	14000 J1	4900 U
Acenaphthene	ug/kg	7000 J1	2400 J1	2100 J1	20000 J1	3400 J1
Acenaphthylene	ug/kg	8600 U	4200 U	3900 U	21000 U	4900 U
Anthracene	ug/kg	8100 J1	3600 J1	3000 J1	28000	3400 J1
Benzo(a)Anthracene	ug/kg	32000	15000	14000	45000	18000
Benzo(a)pyrene	ug/kg	38000	17000	16000	48000	25000
Benzo(b)fluoranthene	ug/kg	50000	22000	21000	53000	31000
Benzo(g,h,i)perylene	ug/kg	17000	8300	7300	20000 J1	12000
Benzo(k)fluoranthene	ug/kg	18000	8800	9100	23000	14000
Chrysene	ug/kg	31000	17000	14000	44000	19000
Dibenz(a,h)anthracene	ug/kg	5100 J1	2400 J1	2100 J1	5400 J1	3400 J1
Fluoranthene	ug/kg	51000	25000	22000	95000	29000
Fluorene	ug/kg	3500 J1	1200 J1	1200 J1	17000 J1	1300 J1
Indeno(1,2,3-cd)pyrene	ug/kg	18000	8700	7800	20000 J1	12000
Naphthalene	ug/kg	3900 J1	1300 J1	1200 J1	34000	1200 J1
Phenanthrene	ug/kg	34000	16000	13000	95000	15000
Pyrene	ug/kg	38000	19000	16000	76000	20000

TABLE 3.1
SUMMARY OF DETECTED COMPOUNDS
PHASE II RESIDENTIAL AREA SAMPLING REPORT

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SSAS2-RAP1-SS05-0/3	SSAS2-RAP1-SS06-0/3	SSAS2-RAP1-SS07-0/3	SSAS2-RAP1-SS08-0/3	SSAS2-RAP2-SS01-0/3
LOCATION:		SSAS2-RAP1	SSAS2-RAP1	SSAS2-RAP1	SSAS2-RAP1	SSAS2-RAP2
DEPTH RANGE:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
SAMPLE DATE:		2/4/98	2/4/98	2/4/98	2/4/98	2/4/98
MATRIX:		Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A8B050150006	A8B050150007	A8B050150008	A8B050150009	A8B050150010
EPA SAMPLE ID:		RAP105	RAP106	RAP107	RAP108	RAP201
SAMPLE TYPE:		N1	N1	N1	N1	N1
SDG NO:		CELOTEX1	CELOTEX1	CELOTEX1	CELOTEX1	CELOTEX1
Semivolatile Organic Compounds						
2-Methylnaphthalene	ug/kg	1700 J1	3800 J1	52000 J1	700 J1	4300 U
Acenaphthene	ug/kg	1000 J1	8400 J1	110000 J1	2000 J1	540 J1
Acenaphthylene	ug/kg	4700 U	10000 U	120000 U	6000 U	4300 U
Anthracene	ug/kg	1400 J1	11000	190000	3500 J1	1300 J1
Benzo(a)Anthracene	ug/kg	9800	31000	320000	13000	6100
Benzo(a)pyrene	ug/kg	15000	35000	340000	15000	6700
Benzo(b)fluoranthene	ug/kg	19000	41000	360000	19000	8700
Benzo(g,h,i)perylene	ug/kg	8100	15000	140000	7100	4200 J1
Benzo(k)fluoranthene	ug/kg	5900	18000	150000	7000	3400 J1
Chrysene	ug/kg	10000	30000	310000	13000	7100
Dibenz(a,h)anthracene	ug/kg	2300 J1	4200 J1	47000 J1	2400 J1	1000 J1
Fluoranthene	ug/kg	15000	54000	660000	25000	12000
Fluorene	ug/kg	4700 U	5500 J1	110000 J1	1100 J1	4300 U
Indeno(1,2,3-cd)pyrene	ug/kg	8200	16000	170000	7200	3600 J1
Naphthalene	ug/kg	1200 J1	10000 J1	120000 J1	980 J1	4300 U
Phenanthrene	ug/kg	5400	41000	650000	12000	5800
Pyrene	ug/kg	10000	40000	530000	18000 J5	9500

TABLE 3.1
SUMMARY OF DETECTED COMPOUNDS
PHASE II RESIDENTIAL AREA SAMPLING REPORT

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SSAS2-RAP2-SS02-0/3	SSAS2-RAP2-SS03-0/3	SSAS2-RAP2-SS04-0/3	SSAS2-RAP2-SS05-0/3	SSAS2-RAP2-SS95-0/3
LOCATION:		SSAS2-RAP2	SSAS2-RAP2	SSAS2-RAP2	SSAS2-RAP2	SSAS2-RAP2
DEPTH RANGE:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
SAMPLE DATE:		2/4/98	2/4/98	2/4/98	2/4/98	2/4/98
MATRIX:		Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
LAB SAMPLE ID:		A8B050150011	A8B050150012	A8B050150013	A8B050150014	A8B050150015
EPA SAMPLE ID:		RAP202	RAP203	RAP204	RAP205	RAP295
SAMPLE TYPE:		N1	N1	N1	N1	FR1
SDG NO:		CELOTEX1	CELOTEX1	CELOTEX1	CELOTEX1	CELOTEX1
Semivolatile Organic Compounds						
2-Methylnaphthalene	ug/kg	4400 U	4900 U	690 J1	480 J1	490 J1
Acenaphthene	ug/kg	2000 J1	2200 J1	3300 J1	1900 J1	1600 J1
Acenaphthylene	ug/kg	4400 U	4900 U	6500 U	4500 U	4400 U
Anthracene	ug/kg	2600 J1	2700 J1	3900 J1	3200 J1	2500 J1
Benzo(a)Anthracene	ug/kg	16000	16000	22000	13000	11000
Benzo(a)pyrene	ug/kg	19000	20000	29000	18000	14000
Benzo(b)fluoranthene	ug/kg	25000	25000	36000	23000	18000
Benzo(g,h,i)perylene	ug/kg	8700	8700	13000	7900	6800
Benzo(k)fluoranthene	ug/kg	9500	10000	12000	9200	7000
Chrysene	ug/kg	16000	16000	23000	14000	11000
Dibenz(a,h)anthracene	ug/kg	2800 J1	2600 J1	3600 J1	2200 J1	1900 J1
Fluoranthene	ug/kg	26000	26000	35000	22000	20000
Fluorene	ug/kg	860 J1	940 J1	1300 J1	1100 J1	980 J1
Indeno(1,2,3-cd)pyrene	ug/kg	9200	9100	13000	8400	6700
Naphthalene	ug/kg	1000 J1	920 J1	1500 J1	920 J1	890 J1
Phenanthrene	ug/kg	11000	12000	17000	12000	10000
Pyrene	ug/kg	22000	23000	30000	20000	16000

TABLE 3.1
SUMMARY OF DETECTED COMPOUNDS
PHASE II RESIDENTIAL AREA SAMPLING REPORT

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SSAS2-RAP2-SS06-0/3	SSAS2-RAP2-SS07-0/3	SSAS2-RAP2-SS08-0/3	SSAS2-RAP3-SS01-0/3	SSAS2-RAP3-SS02-0/3
LOCATION:		SSAS2-RAP2	SSAS2-RAP2	SSAS2-RAP2	SSAS2-RAP3	SSAS2-RAP3
DEPTH RANGE:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
SAMPLE DATE:		2/4/98	2/4/98	2/4/98	2/5/98	2/5/98
MATRIX:		Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A8B050150016	A8B050150017	A8B050150018	A8B060127001	A8B060127002
EPA SAMPLE ID:		RAP206	RAP207	RAP208	RAP301	RAP302
SAMPLE TYPE:		N1	N1	N1	N1	N1
SDG NO:		CELOTEX1	CELOTEX1	CELOTEX1	CELOTEX2	CELOTEX2
Semivolatile Organic Compounds						
2-Methylnaphthalene	ug/kg	5400 U	320 J1	9200 U	730 J1	6300 U
Acenaphthene	ug/kg	1200 J1	1700 J1	1400 J1	3400 J1	3000 J1
Acenaphthylene	ug/kg	5400 U	2800 U	9200 U	5800 U	6300 U
Anthracene	ug/kg	5000 J1	1800 J1	1900 J1	3700 J1	3800 J1
Benzo(a)Anthracene	ug/kg	17000	9900	10000	16000	21000
Benzo(a)pyrene	ug/kg	19000	12000	13000	25000	27000
Benzo(b)fluoranthene	ug/kg	25000	16000	15000	30000	36000
Benzo(g,h,i)perylene	ug/kg	7200	5800	7300 J1	12000	13000
Benzo(k)fluoranthene	ug/kg	8300	4800	6200 J1	12000	12000
Chrysene	ug/kg	19000	10000	9800	19000	21000
Dibenz(a,h)anthracene	ug/kg	2300 J1	2300 J1	2000 J1	3300 J1	3600 J1
Fluoranthene	ug/kg	33000	16000	16000	28000	32000
Fluorene	ug/kg	1200 J1	690 J1	970 J1	1700 J1	1400 J1
Indeno(1,2,3-cd)pyrene	ug/kg	8300	5900	6800 J1	12000	13000
Naphthalene	ug/kg	5400 U	790 J1	9200 U	3100 J1	1300 J1
Phenanthrene	ug/kg	17000	8200	7900 J1	15000	17000
Pyrene	ug/kg	29000	17000	11000	22000	26000

TABLE 3.1
SUMMARY OF DETECTED COMPOUNDS
PHASE II RESIDENTIAL AREA SAMPLING REPORT

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SSAS2-RAP3-SS03-0/3	SSAS2-RAP3-SS04-0/3	SSAS2-RAP3-SS05-0/3	SSAS2-RAP3-SS95-0/3	SSAS2-RAP3-SS06-0/3
LOCATION:		SSAS2-RAP3	SSAS2-RAP3	SSAS2-RAP3	SSAS2-RAP3	SSAS2-RAP3
DEPTH RANGE:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
SAMPLE DATE:		2/5/98	2/5/98	2/5/98	2/5/98	2/5/98
MATRIX:		Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample
LAB SAMPLE ID:		A8B060127003	A8B060127004	A8B060127005	A8B060127006	A8B060127007
EPA SAMPLE ID:		RAP303	RAP304	RAP305	RAP395	RAP306
SAMPLE TYPE:		N1	N1	N1	FR1	N1
SDG NO:		CELOTEX2	CELOTEX2	CELOTEX2	CELOTEX2	CELOTEX2
Semivolatile Organic Compounds						
2-Methylnaphthalene	ug/kg	5600 U	9200 U	1900 J1	2500 J1	1000 J1
Acenaphthene	ug/kg	2800 J1	4200 J1	4300 J1	4800	4700 J1
Acenaphthylene	ug/kg	5600 U	9200 U	6200 U	4700 U	8600 U
Anthracene	ug/kg	3500 J1	4800 J1	4700 J1	5400	5800 J1
Benzo(a)Anthracene	ug/kg	19000	23000	20000	19000	24000
Benzo(a)pyrene	ug/kg	26000	34000	24000	24000	32000
Benzo(b)fluoranthene	ug/kg	38000	42000	31000	32000	42000
Benzo(g,h,i)perylene	ug/kg	13000	15000	11000	11000	15000
Benzo(k)fluoranthene	ug/kg	11000	18000	11000	10000	15000
Chrysene	ug/kg	21000	26000	18000	18000	25000
Dibenz(a,h)anthracene	ug/kg	3700 J1	4900 J1	3600 J1	2700 J1	4600 J1
Fluoranthene	ug/kg	31000	39000	34000	33000	43000
Fluorene	ug/kg	1100 J1	2000 J1	2700 J1	3000 J1	2000 J1
Indeno(1,2,3-cd)pyrene	ug/kg	14000	16000	12000	11000	16000
Naphthalene	ug/kg	1100 J1	2400 J1	4600 J1	7300	2800 J1
Phenanthrene	ug/kg	14000	20000	19000	23000	23000
Pyrene	ug/kg	23000	31000	23000	23000	32000

TABLE 3.1
SUMMARY OF DETECTED COMPOUNDS
PHASE II RESIDENTIAL AREA SAMPLING REPORT

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SSAS2-RAP3-SS07-0/3	SSAS2-RAP3-SS08-0/3	SSAS2-RAP4-SS01-0/3	SSAS2-RAP4-SS02-0/3	SSAS2-RAP4-SS03-0/3
LOCATION:		SSAS2-RAP3	SSAS2-RAP3	SSAS2-RAP4	SSAS2-RAP4	SSAS2-RAP4
DEPTH RANGE:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
SAMPLE DATE:		2/5/98	2/5/98	2/5/98	2/5/98	2/5/98
MATRIX:		Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A8B060127008	A8B060127009	A8B060127010	A8B060127011	A8B060127012
EPA SAMPLE ID:		RAP307	RAP308	RAP401	RAP402	RAP403
SAMPLE TYPE:		N1	N1	N1	N1	N1
SDG NO:		CELOTEX2	CELOTEX2	CELOTEX2	CELOTEX2	CELOTEX2
Semivolatile Organic Compounds						
2-Methylnaphthalene	ug/kg	5600 U	450 J1	1200 U	620 U	360 J1
Acenaphthene	ug/kg	2800 J1	2800 J1	630 J1	340 J1	990 J1
Acenaphthylene	ug/kg	5600 U	4400 U	1200 U	620 U	2900 U
Anthracene	ug/kg	4000 J1	3600 J1	1300	780	2600 J1
Benzo(a)Anthracene	ug/kg	18000	16000	4600	2000	7800
Benzo(a)pyrene	ug/kg	21000	25000	5400	2200	7500
Benzo(b)fluoranthene	ug/kg	29000	34000	7300	3200	10000
Benzo(g,h,i)perylene	ug/kg	10000	12000	2300	830	2900 J1
Benzo(k)fluoranthene	ug/kg	10000	11000	2500	890	3300
Chrysene	ug/kg	16000	18000	4200	2000	6500
Dibenz(a,h)anthracene	ug/kg	3200 J1	3600 J1	720 J1	280 J1	1100 J1
Fluoranthene	ug/kg	32000	28000	8300	4500	15000
Fluorene	ug/kg	1400 J1	880 J1	420 J1	220 J1	1100 J1
Indeno(1,2,3-cd)pyrene	ug/kg	10000	12000	2500	890	3100
Naphthalene	ug/kg	1000 J1	1100 J1	220 J1	72 J1	460 J1
Phenanthrene	ug/kg	18000	13000	4700	3000	11000
Pyrene	ug/kg	21000	21000	6300	3200	9700

TABLE 3.1
SUMMARY OF DETECTED COMPOUNDS
PHASE II RESIDENTIAL AREA SAMPLING REPORT

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SSAS2-RAP4-SS04-0/3	SSAS2-RAP4-SS05-0/3	SSAS2-RAP4-SS06-0/3	SSAS2-RAP4-SS07-0/3	SSAS2-RAP4-SS08-0/3
LOCATION:		SSAS2-RAP4	SSAS2-RAP4	SSAS2-RAP4	SSAS2-RAP4	SSAS2-RAP4
DEPTH RANGE:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
SAMPLE DATE:		2/5/98	2/5/98	2/5/98	2/5/98	2/5/98
MATRIX:		Soil	Soil	Soil	Soil	Soil
SAMPLE TYPE:		Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
LAB SAMPLE ID:		A8B060127013	A8B060127014	A8B060127015	A8B060127016	A8B060127017
EPA SAMPLE ID:		RAP404	RAP405	RAP406	RAP407	RAP408
SAMPLE TYPE:		N1	N1	N1	N1	N1
SDG NO:		CELOTEX2	CELOTEX2	CELOTEX2	CELOTEX2	CELOTEX2
Semivolatile Organic Compounds						
2-Methylnaphthalene	ug/kg	350 J1	2200 U	2300 U	500 U	140 J1
Acenaphthene	ug/kg	840 J1	890 J1	1200 J1	170 J1	430 J1
Acenaphthylene	ug/kg	2000 U	2200 U	2300 U	500 U	1000 U
Anthracene	ug/kg	2700	2000 J1	1500 J1	440 J1	680 J1
Benzo(a)Anthracene	ug/kg	6000	6600	7500	1900	3900
Benzo(a)pyrene	ug/kg	6700	10000	12000	2000	3700
Benzo(b)fluoranthene	ug/kg	8600	12000	16000	3000	5500
Benzo(g,h,i)perylene	ug/kg	2800	4400	5700	800	1800
Benzo(k)fluoranthene	ug/kg	3000	4000	6600	890	1400
Chrysene	ug/kg	5900	8000	9400	1800	3100
Dibenz(a,h)anthracene	ug/kg	900 J1	1500 J1	2500	250 J1	520 J1
Fluoranthene	ug/kg	12000	14000	14000	3800	7100
Fluorene	ug/kg	1100 J1	450 J1	450 J1	110 J1	310 J1
Indeno(1,2,3-cd)pyrene	ug/kg	2800	4800	6100	1100	1800
Naphthalene	ug/kg	510 J1	380 J1	320 J1	61 J1	230 J1
Phenanthrene	ug/kg	8300	7300	6200	1800	3700
Pyrene	ug/kg	9600	11000	12000	3100	5400

TABLE 3.1
SUMMARY OF DETECTED COMPOUNDS
PHASE II RESIDENTIAL AREA SAMPLING REPORT

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

FIELD SAMPLE ID:		SSAS2-RAP4-SS96-0/3
LOCATION:		SSAS2-RAP4
DEPTH RANGE:		0 to 3 inches
SAMPLE DATE:		2/5/98
MATRIX:		Soil
SAMPLE TYPE:		Field Duplicate
LAB SAMPLE ID:		A8B060127018
EPA SAMPLE ID:		RAP496
SAMPLE TYPE:		FR1
SDG NO:		CELOTEX2
Semivolatile Organic Compounds		
2-Methylnaphthalene	ug/kg	2300 U
Acenaphthene	ug/kg	1100 J1
Acenaphthylene	ug/kg	2300 U
Anthracene	ug/kg	1200 J1
Benzo(a)Anthracene	ug/kg	7800
Benzo(a)pyrene	ug/kg	9500
Benzo(b)fluoranthene	ug/kg	12000
Benzo(g,h,i)perylene	ug/kg	4900
Benzo(k)fluoranthene	ug/kg	4800
Chrysene	ug/kg	7700
Dibenz(a,h)anthracene	ug/kg	1400 J1
Fluoranthene	ug/kg	12000
Fluorene	ug/kg	440 J1
Indeno(1,2,3-cd)pyrene	ug/kg	4300
Naphthalene	ug/kg	370 J1
Phenanthrene	ug/kg	6700
Pyrene	ug/kg	8800

NOTES:

D Reported from diluted sample run due to calibration exceedance in the original analysis.
U The analyte was analyzed for and is not present above the level of the associated value.
UJ The analyte was analyzed for but not detected. The reported detection limit has been qualified due to a QC anomaly . Refer to the numerical suffixes.
UB Analyte detected in the field or laboratory blank associated with this sample. Reported result should be considered estimated and biased high.
J The analyte was positively identified, but the associated numerical value may be imprecise due to a quality control (QC) anomaly.
J^1 Estimated value, greater than the method detection (MDL) or the instrument detection limit (IDL) but less than the project reporting limit (PRL).
J^5 Accuracy and/or precision outlier reported for MS/MSD or field duplicate samples associated with the reported result. Result should be considered estimated.

TABLE 3.2
SUMMARY OF BENZO(A)PYRENE EQUILVALENT CONCENTRATIONS

PHASE II RESIDENTIAL AREA SAMPLING REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	SSAS2-RAP1-SS01-0/3	SSAS2-RAP1-SS02-0/3	SSAS2-RAP1-SS92-0/3	SSAS2-RAP1-SS03-0/3	SSAS2-RAP1-SS04-0/3
	LOCATION:	SSAS2-RAP1	SSAS2-RAP1	SSAS2-RAP1	SSAS2-RAP1	SSAS2-RAP1
	DEPTH RANGE:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	SAMPLE DATE:	2/4/98	2/4/98	2/4/98	2/4/98	2/4/98
	MATRIX:	Soil	Soil	Soil	Soil	Soil
	SAMPLE TYPE:	Field Sample	Field Sample	Field Duplicate	Field Sample	Field Sample
	LAB SAMPLE ID:	A8B050150001	A8B050150002	A8B050150003	A8B050150004	A8B050150005
	EPA SAMPLE ID:	RAP101	RAP102	RAP192	RAP103	RAP104
	SAMPLE TYPE:	N1	N1	FR1	N1	N1
	SDG NO:	CELOTEX1	CELOTEX1	CELOTEX1	CELOTEX1	CELOTEX1
Benzo(a)pyrene Equivalents (mg/kg)	Relative Potency					
Benzo(a)anthracene	0.1	3.2	1.5	1.4	4.5	1.8
Chrysene	0.001	0.031	0.017	0.014	0.044	0.019
Benzo(b)fluoranthene	0.1	5	2.2	2.1	5.3	3.1
Benzo(k)fluoranthene	0.01	0.18	0.088	0.091	0.23	0.14
Benzo(a)pyrene	1	38	17	16	48	25
Indeno(1,2,3-cd)pyrene	0.1	1.8	0.87	0.78	2 J1	1.2
Dibenz(a,h)anthracene	1	5.1 J1	2.4 J1	2.1 J1	5.4 J1	3.4 J1
Benzo(a)pyrene (mg/kg)		38	17	16	48	25
Total Benzo(a)pyrene Equivalents (mg/kg)		53.311	24.075	22.485	65.474	34.659

TABLE 3.2
SUMMARY OF BENZO(A)PYRENE EQUILVALENT CONCENTRATIONS

PHASE II RESIDENTIAL AREA SAMPLING REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	SSAS2-RAP1-SS05-0/3	SSAS2-RAP1-SS06-0/3	SSAS2-RAP1-SS07-0/3	SSAS2-RAP1-SS08-0/3	SSAS2-RAP2-SS01-0/3
	LOCATION:	SSAS2-RAP1	SSAS2-RAP1	SSAS2-RAP1	SSAS2-RAP1	SSAS2-RAP2
	DEPTH RANGE:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	SAMPLE DATE:	2/4/98	2/4/98	2/4/98	2/4/98	2/4/98
	MATRIX:	Soil	Soil	Soil	Soil	Soil
	SAMPLE TYPE:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
	LAB SAMPLE ID:	A8B050150006	A8B050150007	A8B050150008	A8B050150009	A8B050150010
	EPA SAMPLE ID:	RAP105	RAP106	RAP107	RAP108	RAP201
	SAMPLE TYPE:	N1	N1	N1	N1	N1
	SDG NO:	CELOTEX1	CELOTEX1	CELOTEX1	CELOTEX1	CELOTEX1
Benzo(a)pyrene Equivalents (mg/kg)	Relative Potency					
Benzo(a)anthracene	0.1	0.98	3.1	32	1.3	0.61
Chrysene	0.001	0.01	0.03	0.31	0.013	0.0071
Benzo(b)fluoranthene	0.1	1.9	4.1	36	1.9	0.87
Benzo(k)fluoranthene	0.01	0.059	0.18	1.5	0.07	0.034 J1
Benzo(a)pyrene	1	15	35	340	15	6.7
Indeno(1,2,3-cd)pyrene	0.1	0.82	1.6	17	0.72	0.36 J1
Dibenz(a,h)anthracene	1	2.3 J1	4.2 J1	47 J1	2.4 J1	1 J1
Benzo(a)pyrene (mg/kg)		15	35	340	15	6.7
Total Benzo(a)pyrene Equivalents (mg/kg)		21.069	48.21	473.81	21.403	9.5811

TABLE 3.2
SUMMARY OF BENZO(A)PYRENE EQUILVALENT CONCENTRATIONS

PHASE II RESIDENTIAL AREA SAMPLING REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	SSAS2-RAP2-SS02-0/3	SSAS2-RAP2-SS03-0/3	SSAS2-RAP2-SS04-0/3	SSAS2-RAP2-SS05-0/3	SSAS2-RAP2-SS95-0/3
	LOCATION:	SSAS2-RAP2	SSAS2-RAP2	SSAS2-RAP2	SSAS2-RAP2	SSAS2-RAP2
	DEPTH RANGE:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	SAMPLE DATE:	2/4/98	2/4/98	2/4/98	2/4/98	2/4/98
	MATRIX:	Soil	Soil	Soil	Soil	Soil
	SAMPLE TYPE:	Field Sample	Field Sample	Field Sample	Field Sample	Field Duplicate
	LAB SAMPLE ID:	A8B050150011	A8B050150012	A8B050150013	A8B050150014	A8B050150015
	EPA SAMPLE ID:	RAP202	RAP203	RAP204	RAP205	RAP295
	SAMPLE TYPE:	N1	N1	N1	N1	FR1
	SDG NO:	CELOTEX1	CELOTEX1	CELOTEX1	CELOTEX1	CELOTEX1
Benzo(a)pyrene Equivalents (mg/kg)	Relative Potency					
Benzo(a)anthracene	0.1	1.6	1.6	2.2	1.3	1.1
Chrysene	0.001	0.016	0.016	0.023	0.014	0.011
Benzo(b)fluoranthene	0.1	2.5	2.5	3.6	2.3	1.8
Benzo(k)fluoranthene	0.01	0.095	0.1	0.12	0.092	0.07
Benzo(a)pyrene	1	19	2	29	18	14
Indeno(1,2,3-cd)pyrene	0.1	0.92	0.91	1.3	0.84	0.67
Dibenz(a,h)anthracene	1	2.8 J1	2.6 J1	3.6 J1	2.2 J1	1.9 J1
Benzo(a)pyrene (mg/kg)		19	2	29	18	14
Total Benzo(a)pyrene Equivalents (mg/kg)		26.931	9.726	39.843	24.746	19.551

TABLE 3.2
SUMMARY OF BENZO(A)PYRENE EQUILVALENT CONCENTRATIONS

PHASE II RESIDENTIAL AREA SAMPLING REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	SSAS2-RAP2-SS06-0/3	SSAS2-RAP2-SS07-0/3	SSAS2-RAP2-SS08-0/3	SSAS2-RAP3-SS01-0/3	SSAS2-RAP3-SS02-0/3
	LOCATION:	SSAS2-RAP2	SSAS2-RAP2	SSAS2-RAP2	SSAS2-RAP3	SSAS2-RAP3
	DEPTH RANGE:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	SAMPLE DATE:	2/4/98	2/4/98	2/4/98	2/5/98	2/5/98
	MATRIX:	Soil	Soil	Soil	Soil	Soil
	SAMPLE TYPE:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
	LAB SAMPLE ID:	A8B050150016	A8B050150017	A8B050150018	A8B060127001	A8B060127002
	EPA SAMPLE ID:	RAP206	RAP207	RAP208	RAP301	RAP302
	SAMPLE TYPE:	N1	N1	N1	N1	N1
	SDG NO:	CELOTEX1	CELOTEX1	CELOTEX1	CELOTEX2	CELOTEX2
Benzo(a)pyrene Equivalents (mg/kg)	Relative Potency					
Benzo(a)anthracene	0.1	1.7	0.99	1	1.6	2.1
Chrysene	0.001	0.019	0.01	0.0098	0.019	0.021
Benzo(b)fluoranthene	0.1	2.5	1.6	1.5	3	3.6
Benzo(k)fluoranthene	0.01	0.083	0.048	0.062 J1	0.12	0.12
Benzo(a)pyrene	1	19	12	13	25	27
Indeno(1,2,3-cd)pyrene	0.1	0.83	0.59	0.68 J1	1.2	1.3
Dibenz(a,h)anthracene	1	2.3 J1	2.3 J1	2 J1	3.3 J1	3.6 J1
Benzo(a)pyrene (mg/kg)		19	12	13	25	27
Total Benzo(a)pyrene Equivalents (mg/kg)		26.432	17.538	18.2518	34.239	37.741

TABLE 3.2
SUMMARY OF BENZO(A)PYRENE EQUILVALENT CONCENTRATIONS

PHASE II RESIDENTIAL AREA SAMPLING REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	SSAS2-RAP3-SS03-0/3	SSAS2-RAP3-SS04-0/3	SSAS2-RAP3-SS05-0/3	SSAS2-RAP3-SS95-0/3	SSAS2-RAP3-SS06-0/3
	LOCATION:	SSAS2-RAP3	SSAS2-RAP3	SSAS2-RAP3	SSAS2-RAP3	SSAS2-RAP3
	DEPTH RANGE:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	SAMPLE DATE:	2/5/98	2/5/98	2/5/98	2/5/98	2/5/98
	MATRIX:	Soil	Soil	Soil	Soil	Soil
	SAMPLE TYPE:	Field Sample	Field Sample	Field Sample	Field Duplicate	Field Sample
	LAB SAMPLE ID:	A8B060127003	A8B060127004	A8B060127005	A8B060127006	A8B060127007
	EPA SAMPLE ID:	RAP303	RAP304	RAP305	RAP395	RAP306
	SAMPLE TYPE:	N1	N1	N1	FR1	N1
	SDG NO:	CELOTEX2	CELOTEX2	CELOTEX2	CELOTEX2	CELOTEX2
Benzo(a)pyrene Equivalents (mg/kg)	Relative Potency					
Benzo(a)anthracene	0.1	1.9	2.3	2	1.9	2.4
Chrysene	0.001	0.021	0.026	0.018	0.018	0.025
Benzo(b)fluoranthene	0.1	3.8	4.2	3.1	3.2	4.2
Benzo(k)fluoranthene	0.01	0.11	0.18	0.11	0.1	0.15
Benzo(a)pyrene	1	26	34	24	24	32
Indeno(1,2,3-cd)pyrene	0.1	1.4	1.6	1.2	1.1	1.6
Dibenz(a,h)anthracene	1	3.7 J1	4.9 J1	3.6 J1	2.7 J1	4.6 J1
Benzo(a)pyrene (mg/kg)		26	34	24	24	32
Total Benzo(a)pyrene Equivalents (mg/kg)		36.931	47.206	34.028	33.018	44.975

TABLE 3.2
SUMMARY OF BENZO(A)PYRENE EQUILVALENT CONCENTRATIONS

PHASE II RESIDENTIAL AREA SAMPLING REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	SSAS2-RAP3-SS07-0/3	SSAS2-RAP3-SS08-0/3	SSAS2-RAP4-SS01-0/3	SSAS2-RAP4-SS02-0/3	SSAS2-RAP4-SS03-0/3
	LOCATION:	SSAS2-RAP3	SSAS2-RAP3	SSAS2-RAP4	SSAS2-RAP4	SSAS2-RAP4
	DEPTH RANGE:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	SAMPLE DATE:	2/5/98	2/5/98	2/5/98	2/5/98	2/5/98
	MATRIX:	Soil	Soil	Soil	Soil	Soil
	SAMPLE TYPE:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
	LAB SAMPLE ID:	A8B060127008	A8B060127009	A8B060127010	A8B060127011	A8B060127012
	EPA SAMPLE ID:	RAP307	RAP308	RAP401	RAP402	RAP403
	SAMPLE TYPE:	N1	N1	N1	N1	N1
	SDG NO:	CELOTEX2	CELOTEX2	CELOTEX2	CELOTEX2	CELOTEX2
Benzo(a)pyrene Equivalents (mg/kg)	Relative Potency					
Benzo(a)anthracene	0.1	1.8	1.6	0.46	0.2	0.78
Chrysene	0.001	0.016	0.018	0.0042	0.002	0.0065
Benzo(b)fluoranthene	0.1	2.9	3.4	0.73	0.32	1
Benzo(k)fluoranthene	0.01	0.1	0.11	0.025	0.0089	0.033
Benzo(a)pyrene	1	21	25	5.4	2.2	7.5
Indeno(1,2,3-cd)pyrene	0.1	1	1.2	0.25	0.089	0.31
Dibenz(a,h)anthracene	1	3.2 J1	3.6 J1	0.72 J1	0.28 J1	1.1 J1
Benzo(a)pyrene (mg/kg)		21	25	5.4	2.2	7.5
Total Benzo(a)pyrene Equivalents (mg/kg)		30.016	34.928	7.5892	3.0999	10.7295

TABLE 3.2
SUMMARY OF BENZO(A)PYRENE EQUILVALENT CONCENTRATIONS

PHASE II RESIDENTIAL AREA SAMPLING REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	SSAS2-RAP4-SS04-0/3	SSAS2-RAP4-SS05-0/3	SSAS2-RAP4-SS06-0/3	SSAS2-RAP4-SS07-0/3	SSAS2-RAP4-SS08-0/3
	LOCATION:	SSAS2-RAP4	SSAS2-RAP4	SSAS2-RAP4	SSAS2-RAP4	SSAS2-RAP4
	DEPTH RANGE:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	SAMPLE DATE:	2/5/98	2/5/98	2/5/98	2/5/98	2/5/98
	MATRIX:	Soil	Soil	Soil	Soil	Soil
	SAMPLE TYPE:	Field Sample	Field Sample	Field Sample	Field Sample	Field Sample
	LAB SAMPLE ID:	A8B060127013	A8B060127014	A8B060127015	A8B060127016	A8B060127017
	EPA SAMPLE ID:	RAP404	RAP405	RAP406	RAP407	RAP408
	SAMPLE TYPE:	N1	N1	N1	N1	N1
	SDG NO:	CELOTEX2	CELOTEX2	CELOTEX2	CELOTEX2	CELOTEX2
Benzo(a)pyrene Equivalents (mg/kg)	Relative Potency					
Benzo(a)anthracene	0.1	0.6	0.66	0.75	0.19	0.39
Chrysene	0.001	0.0059	0.008	0.0094	0.0018	0.0031
Benzo(b)fluoranthene	0.1	0.86	1.2	1.6	0.3	0.55
Benzo(k)fluoranthene	0.01	0.03	0.04	0.066	0.0089	0.014
Benzo(a)pyrene	1	6.7	10	12	2	3.7
Indeno(1,2,3-cd)pyrene	0.1	0.28	0.48	0.61	0.11	0.18
Dibenz(a,h)anthracene	1	0.9 J1	1.5 J1	2.5	0.25 J1	0.52 J1
Benzo(a)pyrene (mg/kg)		6.7	10	12	2	3.7
Total Benzo(a)pyrene Equivalents (mg/kg)		9.3759	13.888	17.5354	2.8607	5.3571

TABLE 3.2
SUMMARY OF BENZO(A)PYRENE EQUILVALENT CONCENTRATIONS

PHASE II RESIDENTIAL AREA SAMPLING REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	FIELD SAMPLE ID:	SSAS2-RAP4-SS96-0/3
	LOCATION:	SSAS2-RAP4
	DEPTH RANGE:	0 to 3 inches
	SAMPLE DATE:	2/5/98
	MATRIX:	Soil
	SAMPLE TYPE:	Field Duplicate
	LAB SAMPLE ID:	A8B060127018
	EPA SAMPLE ID:	RAP496
	SAMPLE TYPE:	FR1
	SDG NO:	CELOTEX2
Benzo(a)pyrene Equivalents (mg/kg)	Relative Potency	
Benzo(a)anthracene	0.1	0.78
Chrysene	0 001	0.0077
Benzo(b)fluoranthene	0 1	1 2
Benzo(k)fluoranthene	0.01	0 048
Benzo(a)pyrene	1	9.5
Indeno(1,2,3-cd)pyrene	0.1	0 43
Dibenz(a,h)anthracene	1	1.4 J1
Benzo(a)pyrene (mg/kg)		9.5
Total Benzo(a)pyrene Equivalents (mg/kg)		13.3657

SECTION 4
DATA EVALUATION

The four properties sampled as part of the adaptive sampling program executed during the Phase II RASAP consisted of (1) the residential property at which previous sampling had detected the highest BaPeq concentration (Property No. 1), and (2) the closest three residential properties on each side of Property No. 1 (Property Nos. 2, 3, and 4). The data generated from this adaptive sampling program indicated that the average BaPeq soil concentrations at the three new residential properties which were sampled (Property Nos. 2, 3, and 4) do not exceed the highest average BaPeq sample concentration previously detected at Property No. 1 (61 ppm BaPeq). This confirmed that further sampling may not reveal new locations that have a higher priority to be addressed than those previously identified. Therefore, based on the original sampling design, the new data provides support for stopping the residential sampling process at this point.

However, the new non-composite soil sample data reveal a far higher inter-sample variability in soil sample concentrations within the same properties than was expected based on the composite sample data (past residential data/data trends were generated from the analysis of composite soil samples). Specifically, the non-composite sample data reveal "spikes" of relatively high concentrations that do not appear to be clearly related to or necessarily consistent with a Site-related origin and deposition process.

This very high variability in soil concentrations suggests that additional sampling may not provide very much relevant new information about average soil concentrations. Although this determination could provide further reason to limit additional sampling, it also suggests that the statistical characteristics of soil concentrations have not been fully revealed by the analysis of the composite soil samples previously collected. Specifically, the presence of spikes may reflect contributions from a background process (i.e., non-site-related contamination). If so, these spikes should be removed from consideration when estimating the spatial pattern of site-related contamination. Removing them may lead to a different priority order for evaluating residential properties.

The statistical methodology that is being applied to this residential area evaluation process can be applied equally well to data values with or without the spikes removed. However, for this project, it appears to be desirable to use non-composite soil sample data, since the presence of spikes implies that the composite soil sample data may not represent site-related contamination alone.

Figure 4.1 displays the key data on which these conclusions are based. As specified in the Phase II RASAP, eight investigative soil samples and one field duplicate sample (for a total of nine samples) were collected from each of the four residential properties (RAP1 through RAP4), and the PAH data from each sample was converted to BaPeq (refer to Table 3.2). To evaluate the nature of the data for the nine samples, BaPeq sample concentrations were plotted on a property-by-property basis. Figure 4.1 presents the four plots for these 36 values. To assess the median concentration relative to the data set for each property, Table 4.1 lists the data values, rounded to the nearest integer. From these data evaluation tools, the following determinations were made:

- The median concentrations at each property (the bold value in each row of Table 4.1) typically lie within a factor of about 2 of the other sample values.
- The values in each row typically vary by less than an order of magnitude. (The final column of Table 4.1 shows the ratio of the highest to the lowest observed BaPeq values, rounded to the nearest integer.)
- Row 1 contains a dramatic exception. One observation (474 ppm BaPeq) is about seven times larger than the next highest value, and is over 20 times greater than the smallest of the five values obtained at that property.

The plot for residential property RAP1 (Figure 4.1) shows that this extreme value (474 ppm BaPeq) is inconsistent with the assumption of log-normal distribution. Even when this outlier is removed, Figure 4.2 suggests that the assumption that the four different locations have a common log-normal distribution of BaPeq concentrations may not be very useful.

FIGURE 4.1
PLOT OF BAPEQ SAMPLE CONCENTRATIONS FOR EACH PROPERTY

PHASE II RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

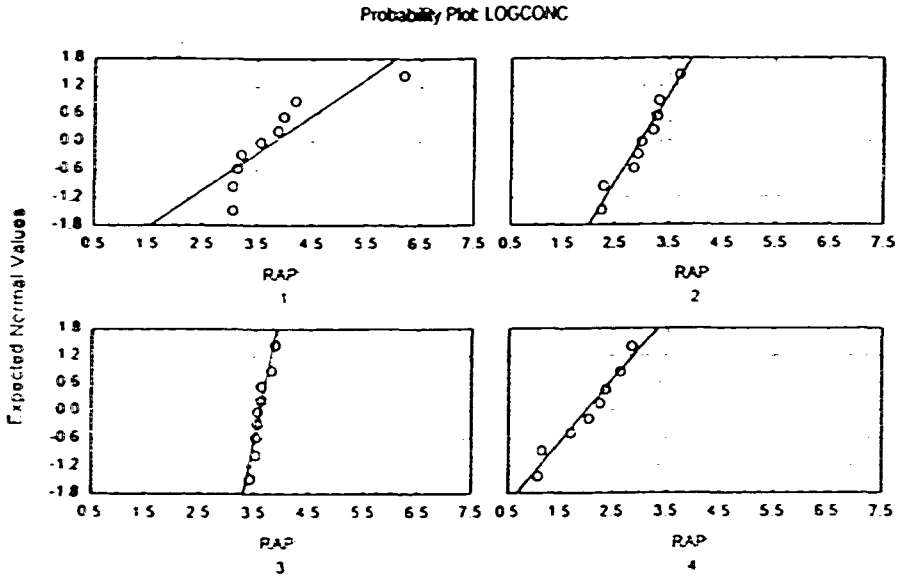
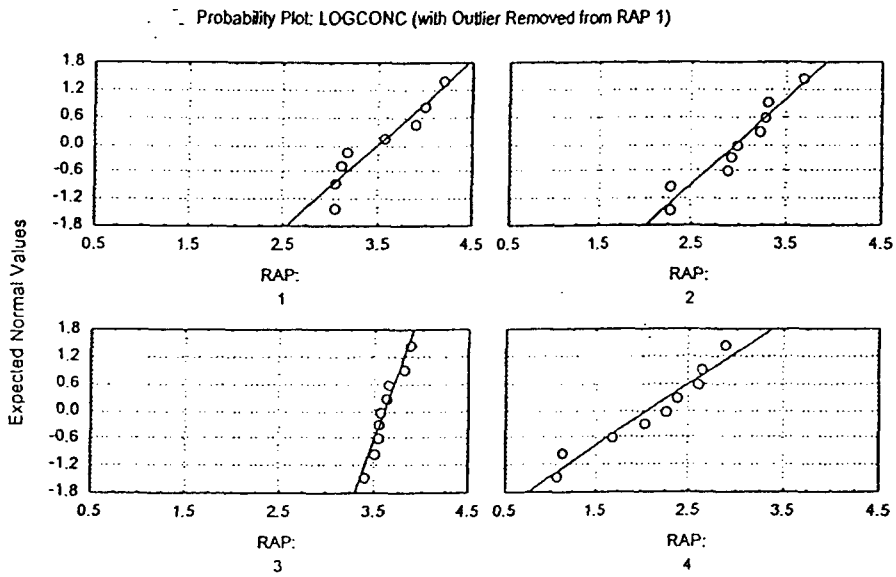


FIGURE 4.2
PLOT COMPARISON OF BAPEQ CONCENTRATIONS FOR EACH PROPERTY AFTER THE OUTLIER AT RAP1 IS REMOVED

PHASE II RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS



In summary, the assumption that concentrations are approximately log-normally distributed, as suggested by the initial analysis of the residential data generated from composited samples, may not be appropriate for these non-composite data. The variation in values at location RAP1 is far greater than would be expected based on the other values (and is somewhat greater even if the extreme value of 474 is ignored). It therefore seems prudent to further evaluate the sources of this extremely high variability before deciding on its implications for priority-setting.

Specifically, it is important to discover how frequently concentration "spikes" (like the value of 474 ppm BaPeq) occur within the residential area of interest. It is also important to decide whether these spikes should be dropped out of the data analysis process as non-site-related artifacts or whether, to the contrary, these data should be used to drive the allocation of remaining investigation and remediation efforts.

Table 4.1 shows clearly that allocating resources based on "median" values, for example, would give a very different priority ordering of locations than allocating resources based on "mean" values with the spike included. This is because the median is resistant to the influence of the outlier(s) while the mean is highly influenced by the outliers. How spikes should be treated will depend on how often they occur, and on whether they occur among background locations which are not considered to be Site-impacted.

Based on these considerations, the Respondents are proposing to perform another round of residential area sampling to clarify the issues noted above. It is noted that this additional round of sampling will have the added benefit of (1) increasing the coverage of sampled residential properties in the foreground (relative to the Site), and (2) expanding the existing data base used to evaluate Site-related impacts to residential properties located in the north-north-east octant. This new round of residential sampling is discussed in Section 5.

TABLE 4.1
STATISTICAL SUMMARY OF THE BAPEQ RESULTS BY PROPERTY

PHASE II RESIDENTIAL AREA SAMPLING REPORT
2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS

	SAMPLE LOCATION AND BAPEQ CONCENTRATIONS IN MG/KG									
PROPERTY LOCATION	SS01	SS02	SS03	SS04	SS05	SS06	SS07	SS08	DUP[1]	BAPEQ HIGH/ LOW RATIO
RAP1	53	24	65	**35**[2]	21	48	474	21	22	23
RAP2	10	27	10	40	25	26	18	18	**20**[2]	2
RAP3	34	38	37	47	34	45	30	**35**[2]	33	2
RAP4	8	3	11	**9**[2]	14	17	3	5	13	6

Notes

1. This is the duplicate sample result. For RAP1, the duplicate is of SS02; for RAP2, the duplicate is of SS05; for RAP3, the duplicate is of SS05; and for RAP4, the duplicate is of SS06.

2. These bolded values represent the median BaPeq concentration value for each property (i.e., the middle sample concentration when the sample data are ordered from lowest to highest concentration on a property-by-property basis).

SECTION 5
PROPOSED PHASE III ACTIVITIES

5.1 OVERVIEW

As discussed previously in Section 4, the non-composited samples collected as part of the most recent round of sampling revealed a higher inter-sample variability in soil sample concentrations within an individual property than might have been expected based on the previous composite sample data. To provide an adequate set of non-composite data values for use in further adaptive sampling activities and/or decision-making, and to better understand the phenomenon of concentration spikes in the residential area of interest (relative to background), it is considered essential to acquire additional data that is based on non-composite soil samples. As a result, the Respondents are proposing to perform additional residential area sampling.

This Phase III sampling event will entail collecting non-composite soil samples from various foreground and background properties. The data from this additional sampling effort will not replace the data generated previously from composite sample analysis; it will supplement this data base by providing the information needed to refine the adaptive sampling parameters. Once this is done, the data generated from the residential sampling programs (composite and/or non composite data) will be assessed based on the adaptive sampling optimization process, to determine follow-up measures. The manner of this assessment will be depend on what is determined relative to the concentration spikes. The approach for this Phase III sampling program is discussed further in the following subsections.

5.2 PROPOSED PHASE III SAMPLING AND ANALYSIS PROGRAM

Adaptive sampling plans which are based on composite samples typically recommend between 0 and 20 new "seeds" or sampling locations (properties) depending on how the goals for minimizing Type-1 and Type-2 errors are weighted. Furthermore, to evaluate the issue of "spikes" it is necessary to know what is the frequency of occurrence and the magnitude of the PAH spike concentrations in surface

soils located on properties within the foreground and background areas. To make these determinations, non-composite soil samples will be collected from residential properties located in both the foreground and the background. The proposed Phase III soil sample data collection activities are described below.

5.2.1 Foreground Sampling

There are approximately 49 residential properties within the north-north-east octant foreground area of concern (the area within 1200 feet from the Site). It is proposed that eight non-composited soil samples be collected from each of 10 additional residential properties located in the north-north-east octant. It is believed that data from these 10 properties (combined with the data from the four properties sampled during the Phase II RASAP) should provide sufficient non-composite data values to estimate adaptive sampling parameters for non-composite data.

The additional 10 properties will be selected at random; however, measures will be taken to ensure that the chosen properties are not too tightly clustered. The data from these properties will be used to interpolate sets of probable values at other nearby property locations via the adaptive sampling optimization procedure; therefore, the sampled properties need to be spaced across the entirety of the specified foreground area, to facilitate useful spatial interpolation.

An example of one approach that could be used to select the ten additional properties is partitioning the specified foreground area into a grid of three angular sectors with three distance bands within each sector, resulting in nine regions. One property could then be randomly selected from each of the nine regions, and the tenth property could be randomly selected from any of the nine regions. Other methods include using a random number generator computer program to select the properties based on specific minimum property distance separation criteria. The final decision on the selection process will be made prior to implementing the sampling program.

5.2.2 Background Sampling

The approach to sampling residential properties located in "background" areas near the Site is very similar to that described above for the foreground. It is proposed that eight non-composited soil samples be collected from each of 10 residential properties located in background locations within the vicinity of the Site. The residential area that will be targeted for this background sampling program is the area located to the west of the Site, beyond 1200 feet from the center of the Site. The goal of the residential background sampling program is to better understand how frequently (if at all) concentration spikes occur in background soil samples. The decision to sample 10 residential properties is somewhat arbitrary. However, if no concentration spikes or outliers are found in these 80 background soil samples, it may be prudent to conclude that the spikes observed in the north-north-east octant (1) could be site-related, and (2) should be included with the other data values when evaluating which locations to further investigate and/or remediate.

5.2.3 Summary

The Phase III residential area sampling program proposed by the Respondents will entail the sampling of 20 additional residential properties: 10 inside the area of greatest concern and 10 within background These data will be used to better characterize the statistical distribution of non-composite soil concentrations, including the likely existence (or not) of concentration spikes among background locations.

Specifically, the new background data will be analyzed using mixture modeling, to determine whether there is evidence of more than one component in the observed distribution of background concentrations. Technical references such as *Everitt BS, An Introduction to Finite Mixture Distributions, Stat Methods Med Res 1996 Jun;5(2):107-127;* and *Bohning et al., Recent Developments in Computer-Assisted Analysis of Mixtures, Biometrics 1998 Jun;54(2):525-536,* provide discussion on the topic of mixtures.

The site-related component that has been assumed to date, is one that follows a spatial gradient in which concentrations tend to decrease with increasing distance from the Site and is overlaid on a uniform background distribution that may be approximately log-normal. It now appears that there may be several components to the background distribution, including at least one that can produce very high "spikes" such as the spike that was seen in the Phase II non-composite data set. Mixture modeling will be used to study this issue and to characterize the composition of the background concentration distribution in terms of two or more components, if these components are evident based on the evaluation of new Phase II and III data. Specifically, this evaluation process will consist of the following steps:

1. Express the background distribution as a mixture of two or more component distributions having significantly different means. One component will contain the "spikes" or "outliers". The number of components must be estimated from the data, but is unlikely to exceed two or three. (If only one component can be found, then the background distribution will be treated as a single distribution without further decomposition.)

2. Estimate the proportion of the background data that is contributed by each component distribution. This will be done using the EM algorithm cited in the above references, or using similar statistical methods.

The practical value of this evaluation process will be to allow the sampling and remediation decisions to focus more accurately on site-related, rather than background-related, contributions to soil PAH concentrations. Depending on the outcome of this evaluation process, the expected result is that concentration spikes will be treated as either (1) potentially important parts of the site-related contamination, or (2) likely components of the background distribution.

The data generated from the Phase III sampling program (in conjunction with the Phase II non-composite data) will also be used to estimate parameter values for optimal adaptive sampling with non-composite data values. (Refer to Subsection 4.2 of the RACWP for the detailed discussion of the Adaptive Spatial Sampling Plan initially outlined for the residential area sampling program). The parameter values (N, K, S,

and T mentioned in Subsection 4.2 of the RACWP) were previously estimated to minimize expected errors based on composite data. Now that it appears that the non-composite data could be exhibiting a much higher concentration variance than indicated by the composite data (even if spikes are excluded), it may prove appropriate to change one or more of these parameter values to take into account the greater-than-expected variability in concentrations, relative to optimal sampling. To this end, the new sample data will be used to quantify the variability (e.g., the interquantile ranges) of the non-composite data. Comparing this variability to the variability of the composite data will provide an indication of how much the latter distribution must be dilated (if at all) to reproduce the distribution of the non-composite values. This information can be used in optimizing the adaptive sampling process (specifically, in the multiple imputation step for missing data values) to reflect the true variability in the non-composite values. The result may be a change in the parameter values that is expected to minimize errors when this true variability is taken into account.

A goal of this next phase is to obtain sufficient new data so that additional rounds of residential sampling will not be required. Whether this goal is met will depend on (and be determined by) the data values obtained during the Phase III residential sampling event. If, based on the new data, the adaptive sampling procedure determines that no further sampling is justified, sampling will cease. Otherwise, an additional, final round of sampling will be undertaken to reflect what has been learned from the non-composite data. The analytical, quality control, and sampling procedures that will be utilized during the Phase III RASAP will be identical to those used during the Phase II program.

APPENDIX A-4

EXCERPTS FROM PARSONS' PHASE III RESIDENTIAL AREA SAMPLING REPORT

DRAFT PHASE III RESIDENTIAL AREA SAMPLING REPORT

for the

ENGINEERING EVALUATION AND COST ANALYSIS OF THE FORMER CELOTEX SITE
2800 South Sacramento Avenue
Chicago, IL 60623

Prepared for:

ALLIEDSIGNAL, INC.
MORRISTOWN, NEW JERSEY
and
THE CELOTEX CORPORATION
TAMPA, FLORIDA

JUNE 1999

Prepared by:

PARSONS ENGINEERING SCIENCE, INC.
1000 JORIE BOULEVARD, SUITE 250
OAKBROOK, IL 60523

Parsons ES Project No. 730577

SECTION 2
FIELD INVESTIGATION ACTIVITIES

2.1 OVERVIEW

The approach and rationale for the Phase III residential sampling program was based on the sampling approach that was outlined in the *Draft Phase II Residential Area Sampling Report* (RASR), dated August 1998. The Phase III program was implemented with the concurrence of the USEPA Region V.

As specified in Section 5 of the Draft Phase II RASR, the Respondents intended the Phase III RASAP to entail the sampling of 20 additional residential properties: 10 properties inside the area of greatest concern and 10 properties within background areas. The area of greatest concern was defined to be the foreground area within the north-north-east octant as measured from the center of the Site. Background was defined to be the area located to the west of the Site, beyond 1,200 feet from the center of the Site at which there is no evidence that soil concentrations have been affected by past Site activities. The background area that was sampled during the Phase III RASAP was between 26th and 30th Streets and between Spaulding and Christiana Avenues.

Parsons ES (on behalf of the Respondents), with significant assistance from the USEPA Region V, attempted to contact the owners of properties within the specified foreground and background areas to obtain written permission to access their properties and collect soil samples. Permission was successfully obtained for only 10 properties - six background and four foreground locations. Figure 2.1 shows the locations of the 10 residential properties sampled during the Phase III RASAP as well as the locations of the four residential properties sampled during the Phase II RASAP. The addresses of the 10 properties sampled during the Phase III RASAP are presented in Table 2.1.

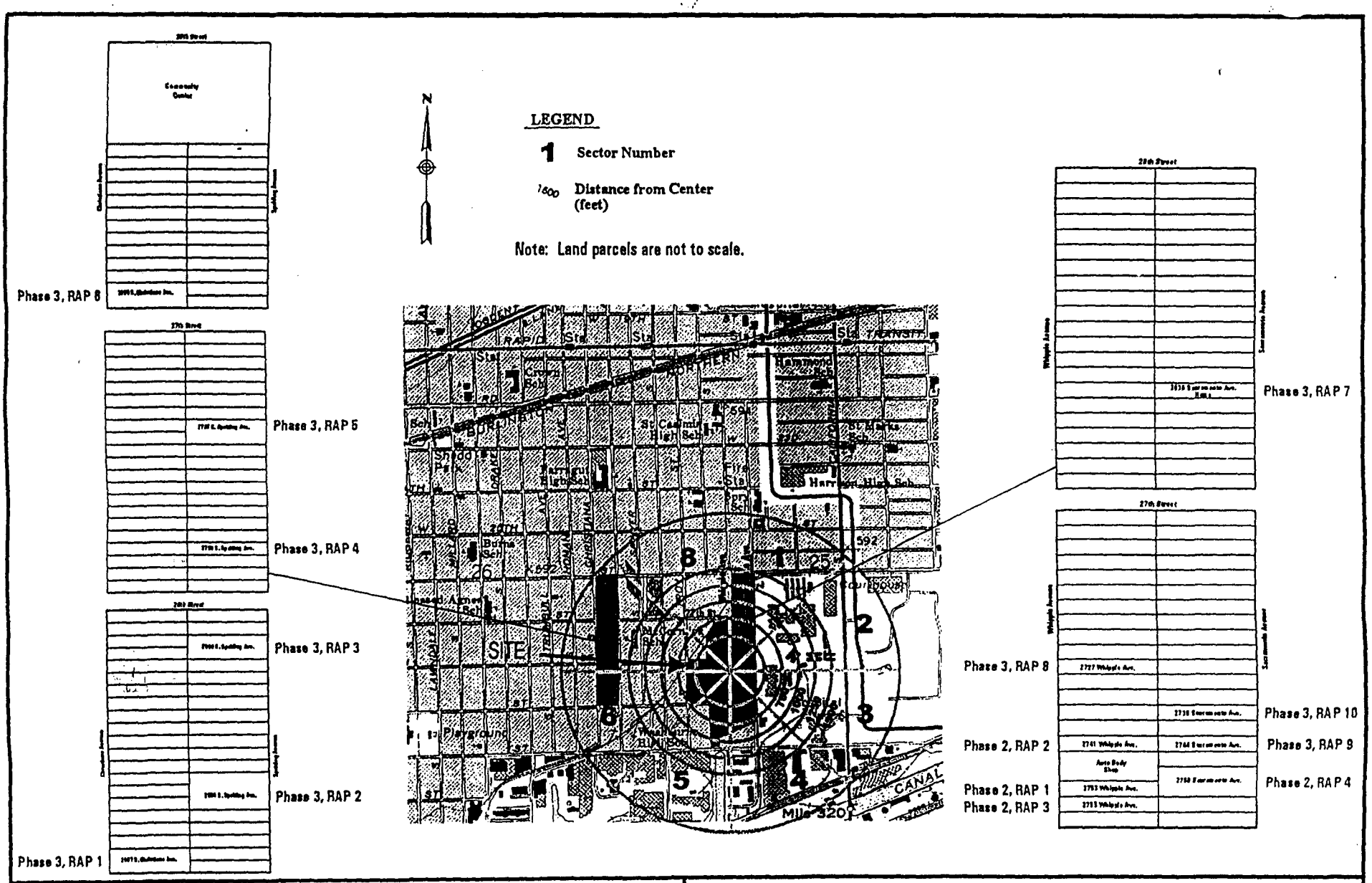
Discussion of the Phase II RASAP, including the addresses of the four properties sampled as part of this program, is presented in the Draft Phase II RASR. A summary

of the field conditions and activities performed during the Phase III RASAP is presented in the next subsection.

2.2 SAMPLING ACTIVITIES

The sample collection approach used during the Phase III RASAP was identical to the approach specified for the Phase II RASAP. Parsons ES collected eight surface soil samples from each property, for a total of 80 investigative samples. All soil samples were collected as grab samples (i.e., samples from multiple locations were not composited). The soil samples were collected from a depth of 0 to 3 inches below grade. The sample collection protocol entailed the use of a decontaminated stainless-steel spoon to remove the soil material down to a 3-inch depth and placement of the removed material into a decontaminated stainless-steel bowl. Once sufficient material had been removed to fill the necessary sample containers, the soils in the bowl were homogenized using a stainless-steel spoon and then placed into the appropriate sample container(s). Field duplicate and matrix spike/matrix spike duplicate (MS/MSD) samples were collected in accordance with the requirements specified in the Phase II RASAP. A total of eight field duplicate soil samples and four MS/MSD soil samples were collected and sent to the laboratory for analysis. All sample analyses were performed by the Quanterra, Inc. laboratory located in North Canton, Ohio.

At some of the properties, soil samples were collected from areas overlain with concrete. To access the soils beneath the concrete, Parsons ES used a hand-held concrete coring machine to drill through the concrete. The soil samples were collected from the soil material beneath the concrete. Care was taken to avoid collecting samples in areas that visually appeared to be impacted, such as in the vicinity of oil staining. Concrete cored areas were repaired by Parsons ES after sampling activities were completed at the property, using cement troweled by hand. Figures 2.2 through 2.11 show the layout of the 10 properties that were sampled during the Phase III RASAP, and the benzo(a)pyrene [B(a)P] equivalent concentrations exhibited by the soil sample collected from each sample location.



PARSONS ENGINEERING SCIENCE, INC.

FIGURE 2.1
SOIL SAMPLING PROPERTY LOCATIONS
AlliedSignal, Inc./The Celotex Corporation

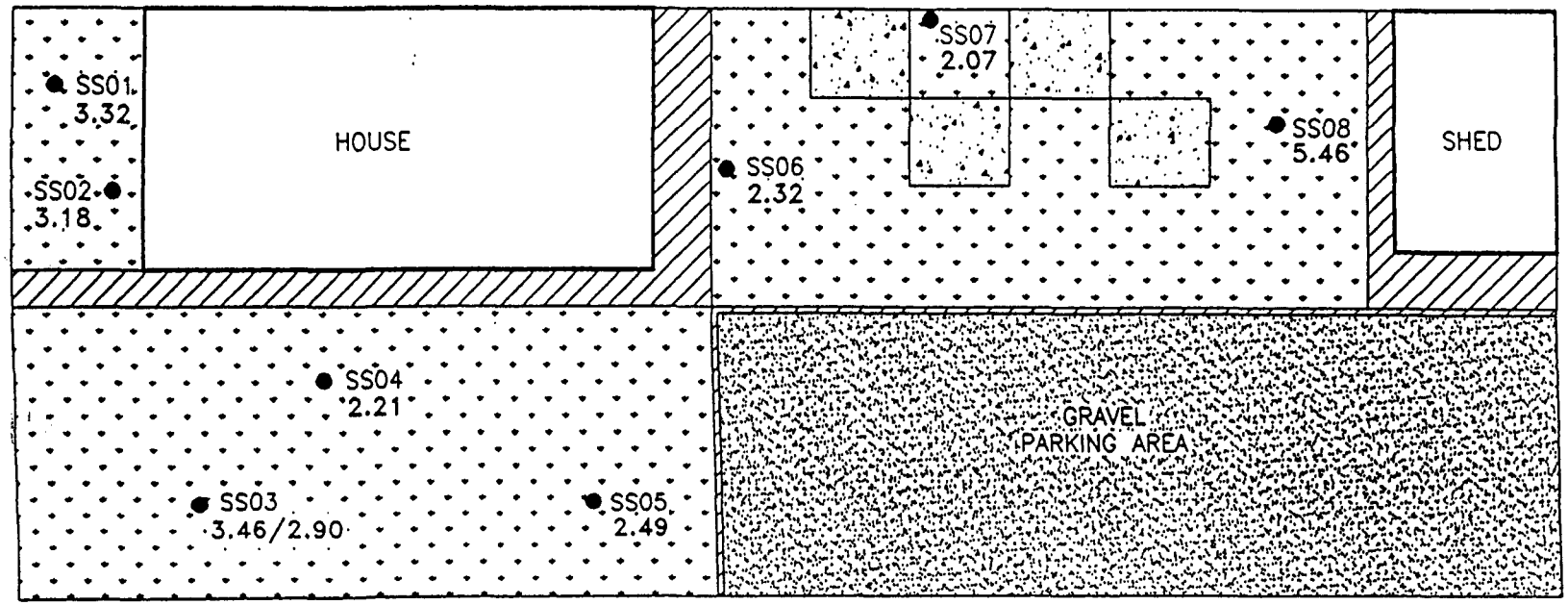
TABLE 2.1

RESIDENTIAL PROPERTY LOCATIONS
FOR THE PHASE III RASAP

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

Location of Property	Soil Sample Residential Property Identifier[1]	Address of Residence
Background	RAP1	2857 S. Christiana Ave
Background	RAP2	2834 S. Spaulding Ave.
Background	RAP3	2806 S. Spaulding Ave.
Background	RAP4	2750 S. Spaulding Ave.
Background	RAP5	2726 S. Spaulding Ave.
Background	RAP6	2655 S. Christiana Ave.
Foreground	RAP7	2638 S. Sacramento Ave.
Foreground	RAP8	2727 S. Whipple Ave.
Foreground	RAP9	2744 S. Sacramento Ave.
Foreground	RAP10	2736 S. Sacramento Ave.

[1] This identifier is part of the sample name. For example: SSAS3-RAP4-SS08-0/3 refers to a soil sample collected at residential property No. 4, located at 2750 S. Spaulding Ave.



LEGEND

- SIDEWALK
- GRASS
- GRAVEL
- CONCRETE
- ● SOIL SAMPLE LOCATION
- 3.32 Benzo(a)pyrene Equivalents Concentration in mg/kg

N

0 15 30

SCALE: 1"=15'

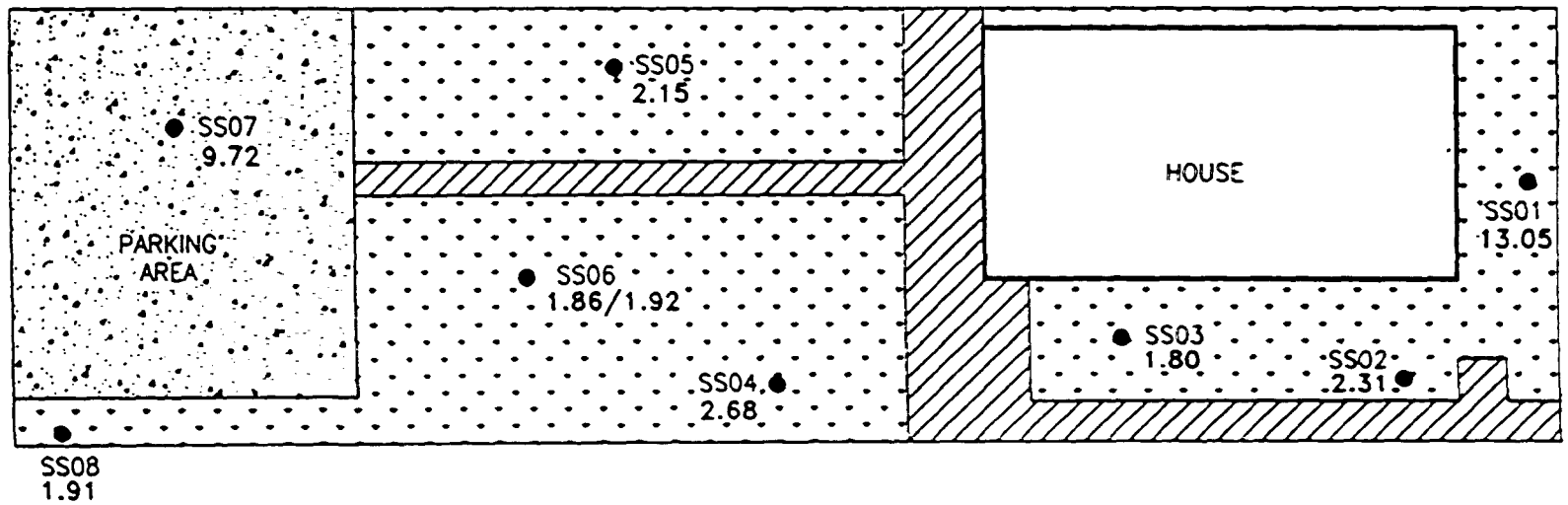
FIGURE 2.2

AlliedSignal/Celotex

PROPERTY LAYOUT
WITH SAMPLE LOCATIONS
AT 2857 S. CHRISTIANA

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1000 JORIE BLVD. • OAKBROOK, ILLINOIS 60523 • (630) 990-7200
OFFICES IN PRINCIPAL CITIES

DATE: 5/11/99 [NP]
P:\DRAWINGS\ALLIEDSI\30577024.DWG



LEGEND

- SIDEWALK
- CONCRETE
- GRASS
- SOIL SAMPLE LOCATION
- 1.91 Benzo(a)pyrene Equivalents Concentration in mg/kg

N

0 15 30

SCALE: 1"=15'

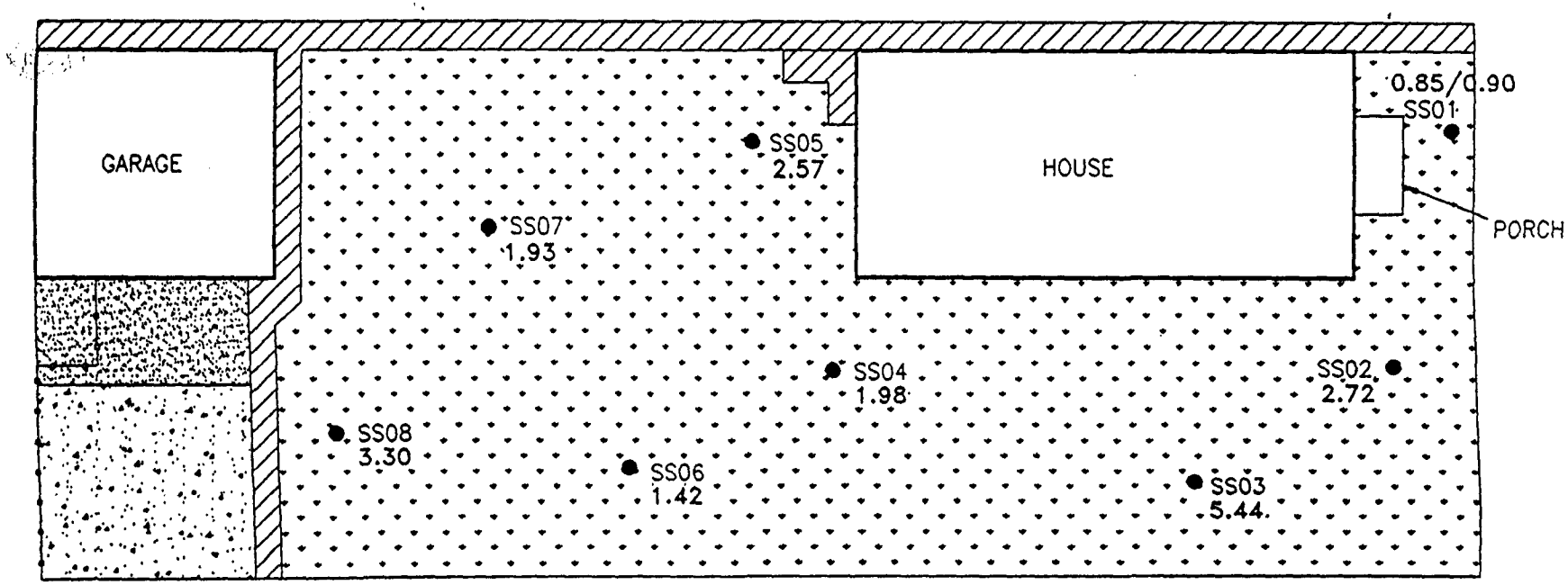
DATE: 5/11/99 [NP]
P:\DRAWINGS\ALLIEDSI\30577025.DWG

FIGURE 2.3

AlliedSignal/Celotex

PROPERTY LAYOUT
WITH SAMPLE LOCATIONS
AT 2834 S. SPAULDING

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1200 JORIE BLVD. • OAKBROOK, ILLINOIS 60523 • (630) 990-7200
OFFICES IN PRINCIPAL CITIES



LEGEND

- SIDEWALK
- CONCRETE
- GRAVEL
- GRASS
- FENCE
- ● SOIL SAMPLE LOCATION
- 1.93 Benzo(a)pyrene Equivalents Concentration in mg/kg

N

0 15 30

SCALE: 1"=15'

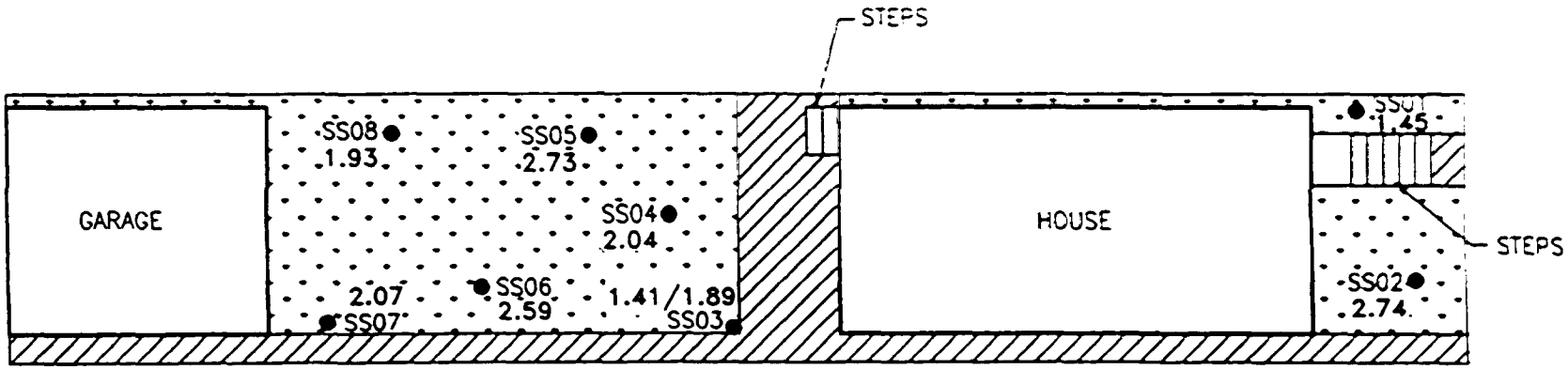
FIGURE 2.4

AlliedSignal/Celotex

PROPERTY LAYOUT
WITH SAMPLE LOCATIONS
AT 2806 S. SPAULDING

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1000 JORIE BLVD. • OAKBROOK, ILLINOIS 60523 • (630) 990-7200
OFFICES IN PRINCIPAL CITIES

DATE: 5/11/99 [NP]
P:\DRAWINGS\ALLIEDSI\30577026.DWG



LEGEND

SIDEWALK

GRASS

SOIL SAMPLE LOCATION

2.73 Benzo(a)pyrene Equivalents Concentration in mg/kg

N

0 15 30

SCALE: 1"=15'

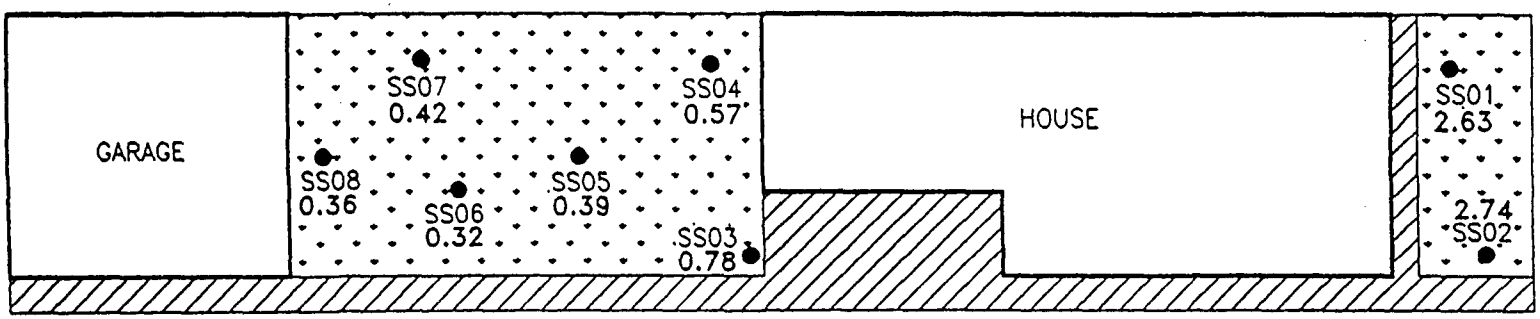
FIGURE 2.5

AlliedSignal/Celotex

PROPERTY LAYOUT WITH SAMPLE LOCATIONS AT 2750 S. SPAULDING

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1000 JORIE BLVD. • OAKBROOK, ILLINOIS 60523 • (630) 990-7200
OFFICES IN PRINCIPAL CITIES

DATE: 5/11/99 [NP]
P:\DRAWINGS\ALLIEDSI\30577027.DWG



LEGEND

SIDEWALK

GRASS

● SOIL SAMPLE LOCATION

0.39 Benzo(a)pyrene Equivalents Concentration in mg/kg

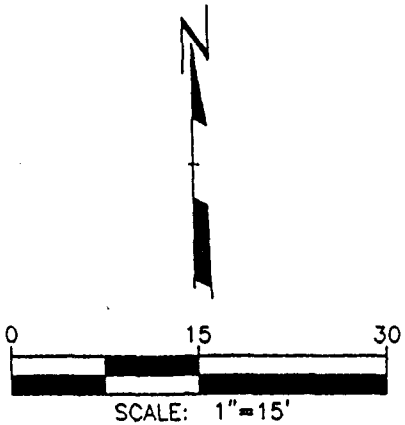


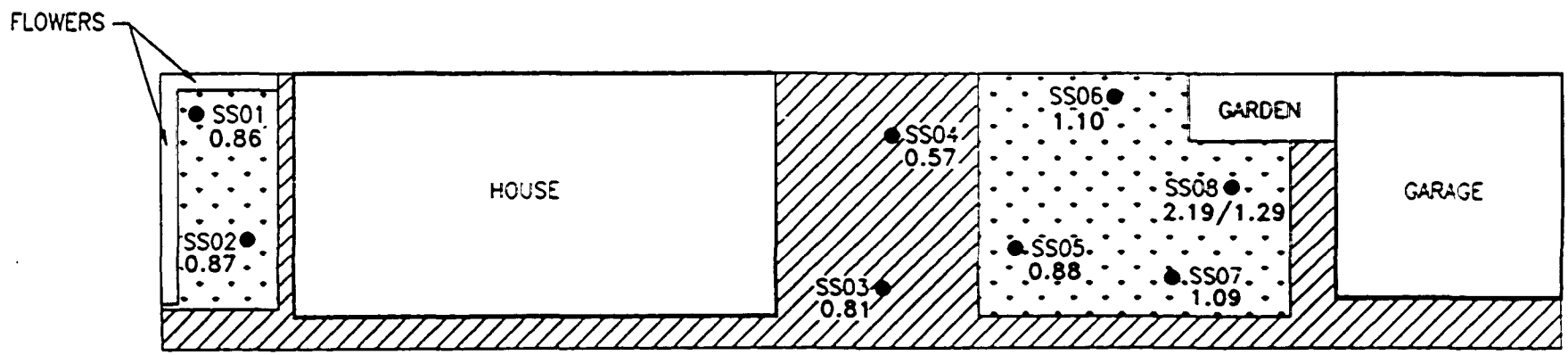
FIGURE 2.6

AlliedSignal/Celotex

PROPERTY LAYOUT
WITH SAMPLE LOCATIONS
AT 2726 S. SPAULDING

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1000 JORIE BLVD. • OAKBROOK, ILLINOIS 60523 • (630) 990-7200
OFFICES IN PRINCIPAL CITIES

DATE: 5/11/99 [NP]
P:\DRAWINGS\ALLIEDSI\30577028.DWG



LEGEND

SIDEWALK

GRASS

SOIL SAMPLE LOCATION

0.86 Benzo(a)pyrene Equivalents Concentration in mg/kg

N

0 15 30

SCALE: 1"=15'

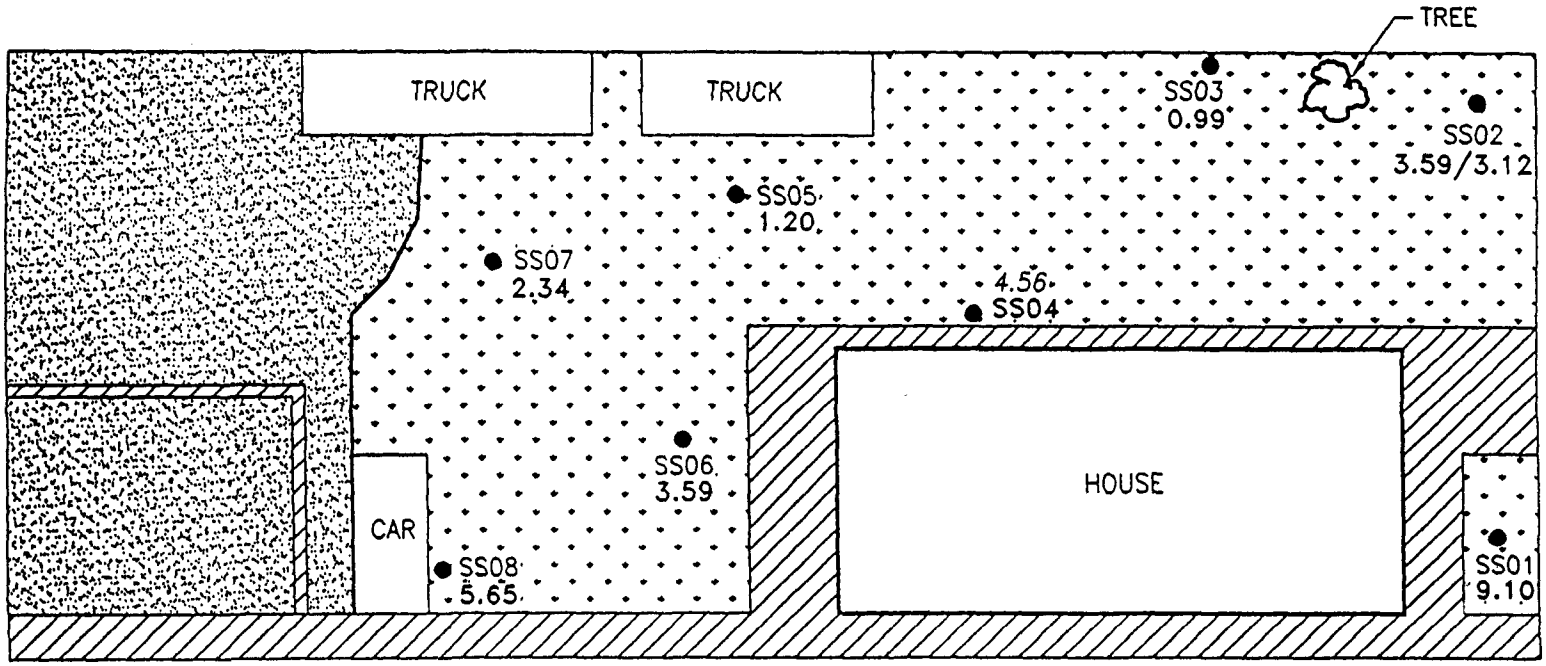
FIGURE 2.7

AlliedSignal/Celotex

PROPERTY LAYOUT
WITH SAMPLE LOCATIONS
AT 2655 S. CHRISTIANA

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1000 JORIE BLVD. • OAKBROOK, ILLINOIS 60523 • (630) 990-7200
OFFICES IN PRINCIPAL CITIES

DATE: 5/11/99 [NP]
P:\DRAWINGS\ALLIEDSI\30577029.DWG



LEGEND

- SIDEWALK
- GRAVEL
- GRASS
- ● SOIL SAMPLE LOCATION
- 3.59 Benzo(a)pyrene Equivalents Concentration in mg/kg

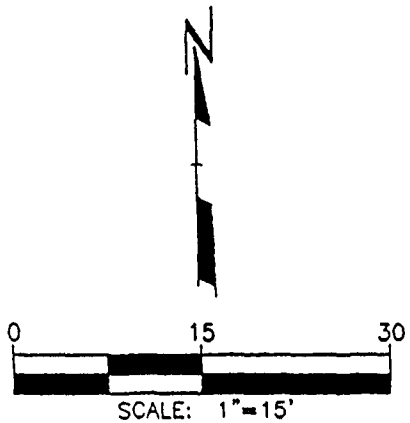


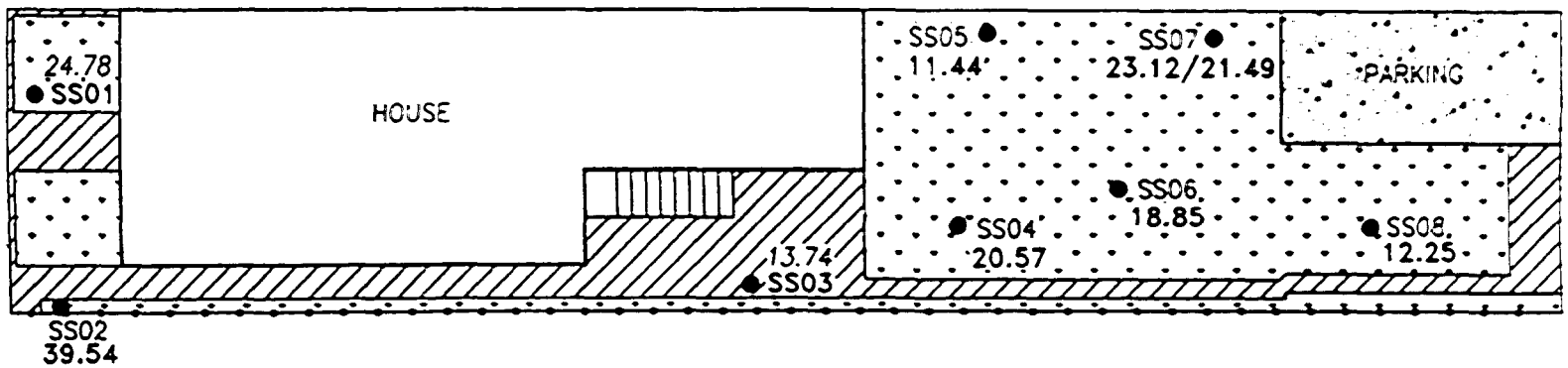
FIGURE 2.8

AlliedSignal/Celotex

PROPERTY LAYOUT
WITH SAMPLE LOCATIONS
AT 2638 S. SACRAMENTO

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1000 JORIE BLVD. • OAKBROOK, ILLINOIS 60523 • (630) 990-7200
OFFICES IN PRINCIPAL CITIES

DATE: 2/20/99 [NP]
P:\DRAWINGS\ALLIEDSI\30577030.DWG



LEGEND

- SIDEWALK
- CONCRETE
- GRASS
- FENCE
- ● SOIL SAMPLE LOCATION
- 39.54 Benzo(a)pyrene Equivalents Concentration in mg/kg

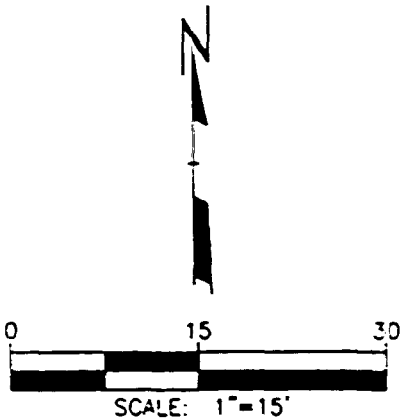


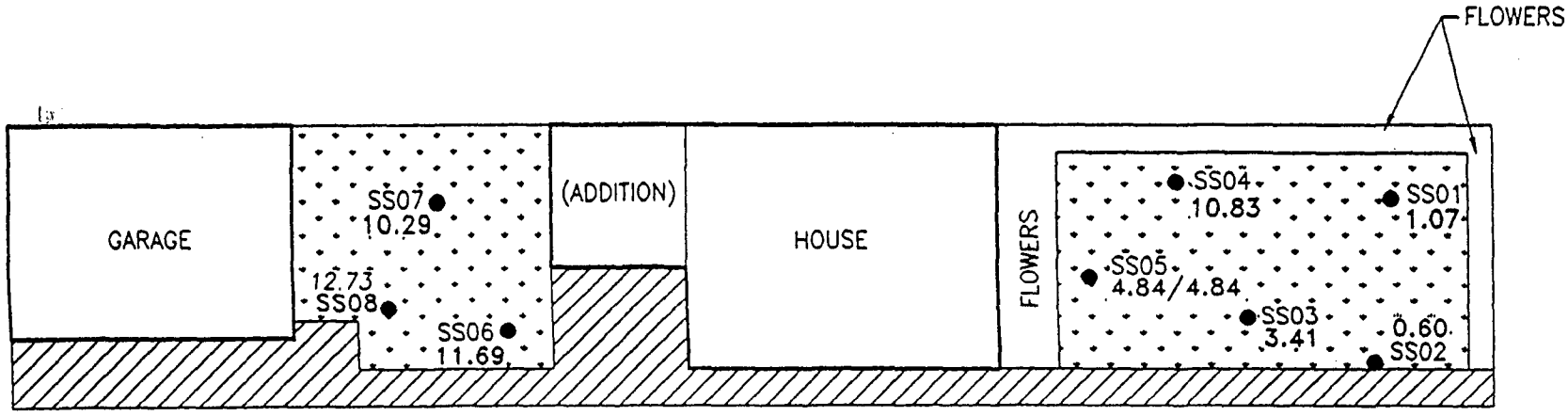
FIGURE 2.9

AlliedSignal/Celotex

PROPERTY LAYOUT
WITH SAMPLE LOCATIONS
AT 2727 S. WHIPPLE

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1000 JORIE BLVD. • OAKBROOK, ILLINOIS 60521 • (630) 990-7300
OFFICES IN PRINCIPAL CITIES

DATE: 5/11/99 (NP)
P:\DRAWINGS\ALLIEDSI\30577031.DWG



LEGEND

SIDEWALK

GRASS

SOIL SAMPLE LOCATION

10.29 Benzo(a)pyrene Equivalents Concentration in mg/kg

N

0 15 30

SCALE: 1"=15'

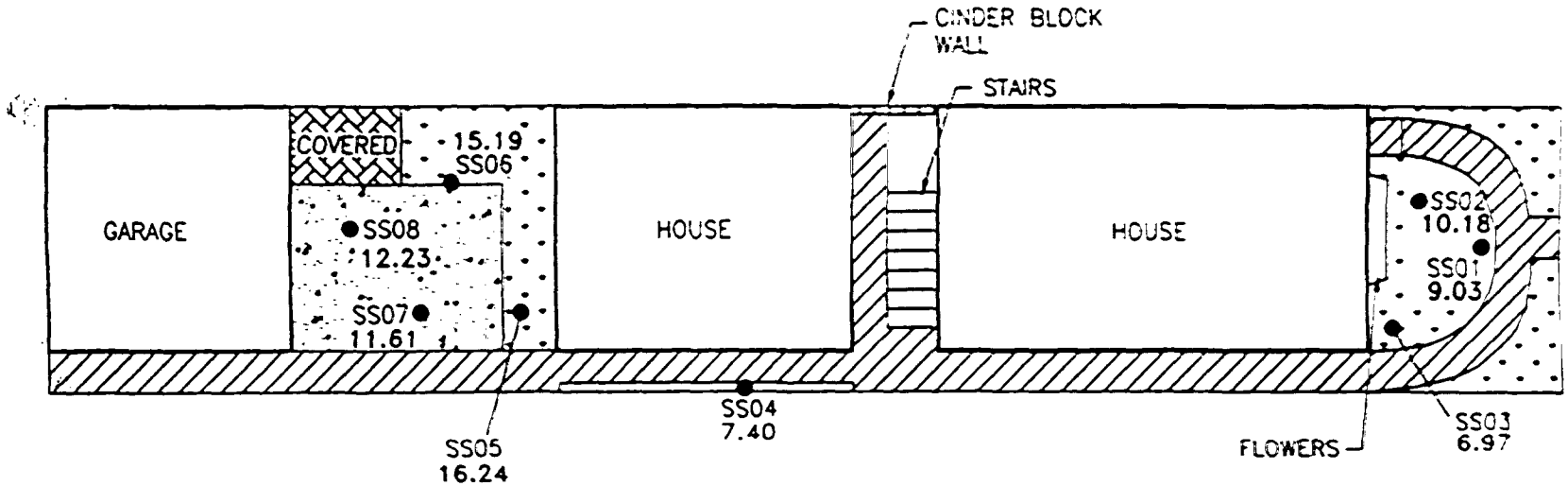
FIGURE 2.10

AlliedSignal/Celotex

PROPERTY LAYOUT
WITH SAMPLE LOCATIONS
AT 2744 S. SACRAMENTO

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1000 JORIE BLVD. • OAKBROOK, ILLINOIS 60523 • (630) 990-7200
OFFICES IN PRINCIPAL CITIES

DATE: 5/11/99 [NP]
P:\DRAWINGS\ALLIEDSI\30577032.DWG



LEGEND

- SIDEWALK
- CONCRETE
- GRASS
- ● SOIL SAMPLE LOCATION
- 11.61 Benzo(a)pyrene Equivalents Concentration in mg/kg

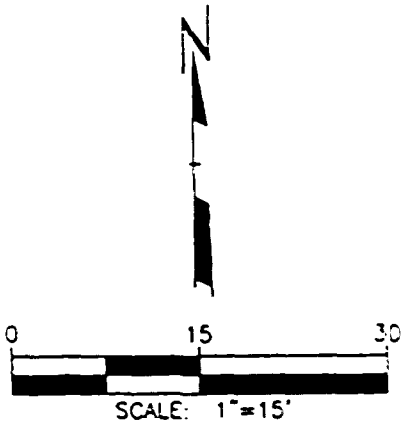


FIGURE 2.11

AlliedSignal/Celotex

PROPERTY LAYOUT
WITH SAMPLE LOCATIONS
AT 2736 S. SACRAMENTO

PARSONS ENGINEERING SCIENCE, INC.
DESIGN • RESEARCH • PLANNING
1200 JORIE BLVD. • OAKBROOK, ILLINOIS 60523 • (630) 990-7200
OFFICES IN PRINCIPAL CITIES

DATE: 5/11/99 (NP)
P:\DRAWINGS\ALLIEDSI\30577033.DWG

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

Client Sample ID:		SSAS3-RAP1-SS01-0/3	SSAS3-RAP1-SS02-0/3	SSAS3-RAP1-SS03-0/3	SSAS3-RAP1-SS04-0/3
Location:		Residential Property 1	Residential Property 1	Residential Property 1	Residential Property 1
Depth Range:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
Sample Type:		Field Sample	Field Sample	Field Sample	Field Sample
Lab Sample ID:		A8L210159001	A8L210159002	A8L210159004	A8L210159005
EPA Sample ID:		CPH62	CPH68	CPH6F	CPH6G
Sample Type:		N1	N1	N1	N1
Sampling Date:		12/16/98	12/16/98	12/16/98	12/16/98
PAHs	Units				
Anthracene	ug/kg	360 J1	350 J1	340 J1	200 J1
Pyrene	ug/kg	2900 J5	3900 J5	3500 J5	2600 J5
Benzo(g,h,i)perylene	ug/kg	1100	860	1200	760
Indeno(1,2,3-cd)pyrene	ug/kg	1300	950	1200	750
Benzo(b)fluoranthene	ug/kg	3200	3500	3400	2400
Fluoranthene	ug/kg	3700	4200	4000	2400
Benzo(k)fluoranthene	ug/kg	1000	900	1000	540
Acenaphthylene	ug/kg	900 U	850 U	920 U	460 U
Chrysene	ug/kg	2100	2400	2500	1600
Benzo(a)pyrene	ug/kg	2400	2200	2400	1500
Dibenz(a,h)anthracene	ug/kg	260 J1	270 J1	370 J1	230 J1
Benzo(a)Anthracene	ug/kg	2000	2500	2200	1600
Acenaphthene	ug/kg	240 J1	200 J1	240 J1	150 J1
Phenanthrene	ug/kg	2100	2400	2000	1200
Fluorene	ug/kg	160 J1	120 J1	140 J1	77 J1
Naphthalene	ug/kg	130 J1	98 J1	120 J1	58 J1
2-Methylnaphthalene	ug/kg	900 U	850 U	920 U	460 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP1-SS05-0/3	SSAS3-RAP1-SS06-0/3-MMSD	SSAS3-RAP1-SS07-0/3	SSAS3-RAP1-SS08-0/3
	Location:	Residential Property 1	Residential Property 1	Residential Property 1	Residential Property 1
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	MS/MSD	Field Sample	Field Sample
	Lab Sample ID:	A8L210159006	A8L210159007	A8L210159009	A8L210159008
	EPA Sample ID:	CPH6J	CPH6K	CPH6N	CPH6L
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/16/98	12/16/98	12/16/98	12/16/98
PAHs	Units				
Anthracene	ug/kg	200 J1	280 J1	180 J1	1200 J1
Pyrene	ug/kg	3100 J5	3600 J5	3100 J5	9700 J5
Benzo(g,h,i)perylene	ug/kg	860	900	780	1600 J1
Indeno(1,2,3-cd)pyrene	ug/kg	920	1000	830	1700 J1
Benzo(b)fluoranthene	ug/kg	2800	2800	2400	5400
Fluoranthene	ug/kg	3100	3600	2800	10000
Benzo(k)fluoranthene	ug/kg	770	810	630	2100
Acenaphthylene	ug/kg	530 U	450 U	440 U	1800 U
Chrysene	ug/kg	1800	2100	1400	4600
Benzo(a)pyrene	ug/kg	1700	1500	1400	3800
Dibenz(a,h)anthracene	ug/kg	230 J1	210 J1	190 J1	440 J1
Benzo(a)Anthracene	ug/kg	1800	2200	1500	4800
Acenaphthene	ug/kg	200 J1	220 J1	110 J1	390 J1
Phenanthrene	ug/kg	1400	2000	1200	6100
Fluorene	ug/kg	100 J1	130 J1	63 J1	420 J1
Naphthalene	ug/kg	91 J1	250 J1	58 J1	410 J1
1-Methylnaphthalene	ug/kg	530 U	200 J1	440 U	1800 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP1-SS93-0/3	SSAS3-RAP2-SS01-0/3	SSAS3-RAP2-SS02-0/3	SSAS3-RAP2-SS03-0/3
	Location:	Residential Property 2	Residential Property 2	Residential Property 2	Residential Property 2
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Duplicate	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L210159003	A8L210159011	A8L210159012	A8L210159013
	EPA Sample ID:	CPH6E	CPH6R	CPH6T	CPH6V
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/16/98	12/16/98	12/16/98	12/16/98
PAHs	**Units**				
Anthracene	ug/kg	290 J1	2000 J1	190 J1	170 J1
Pyrene	ug/kg	3000 J5	26000 J5	2400 J5	2800 J5
Benzo(g,h,i)perylene	ug/kg	900 J1	3200 J1	720	600
Indeno(1,2,3-cd)pyrene	ug/kg	1000	2800 J1	690	540
Benzo(b)fluoranthene	ug/kg	3100	14000	2700	2300
Fluoranthene	ug/kg	3800	23000	2800	2100
Benzo(k)fluoranthene	ug/kg	990	5400	610	520
Acenaphthylene	ug/kg	920 U	750 J1	600 U	420 U
Chrysene	ug/kg	2100	11000	1700	1500
Benzo(a)pyrene	ug/kg	2000	9100	1600	1200
Dibenz(a,h)anthracene	ug/kg	280 J1	1100 J1	180 J1	160 J1
Benzo(a)Anthracene	ug/kg	2000	11000	1800	1500
Acenaphthene	ug/kg	220 J1	740 J1	170 J1	130 J1
Phenanthrene	ug/kg	1800	15000	1400	1100
Fluorene	ug/kg	120 J1	1200 J1	93 J1	74 J1
Naphthalene	ug/kg	100 J1	1400 J1	77 J1	86 J1
2-Methylnaphthalene	ug/kg	920 U	5300 U	600 U	45 J1

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP2-SS04-0/3	SSAS3-RAP2-SS05-0/3	SSAS3-RAP2-SS06-0/3	SSAS3-RAP2-SS07-0/3
	Location:	Residential Property 2	Residential Property 2	Residential Property 2	Residential Property 2
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L210159015	A8L210159014	A8L210159018	A8L210159016
	EPA Sample ID:	CPH70	CPH6X	CPH77	CPH71
	Sample Type:	NI	NI	NI	NI
	Sampling Date:	12/16/98	12/16/98	12/16/98	12/16/98
PAHs	Units				
Anthracene	ug/kg	260 J1	210 J1	140 J1	970 J1
Pyrene	ug/kg	3300 J5	3100 J5	2100 J5	11000 J5
Benzo(g,h,i)perylene	ug/kg	980	780	630	4700
Indeno(1,2,3-cd)pyrene	ug/kg	790	790	580	3900
Benzo(b)fluoranthene	ug/kg	3000	2400	2100	10000
Fluoranthene	ug/kg	3200	2900	2000	11000
Benzo(k)fluoranthene	ug/kg	780	620	550	2800
Acenaphthylene	ug/kg	580 U	460 U	460 U	240 J1
Chrysene	ug/kg	2000	1500	1200	6000
Benzo(a)pyrene	ug/kg	1900	1500	1300	6600
Dibenz(a,h)anthracene	ug/kg	200 J1	170 J1	170 J1	1100 J1
Benzo(a)Anthracene	ug/kg	1900	1500	1200	6000
Acenaphthene	ug/kg	210 J1	120 J1	140 J1	560 J1
Phenanthrene	ug/kg	1900	1200	950	4900
Fluorene	ug/kg	180 J1	90 J1	70 J1	350 J1
Naphthalene	ug/kg	170 J1	60 J1	62 J1	320 J1
2-Methylnaphthalene	ug/kg	77 J1	460 U	460 U	260 J1

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP2-SS08-0/3	SSAS3-RAP2-SS96-0/3	SSAS3-RAP3-SS01-0/3	SSAS3-RAP3-SS02-0/3
	Location:	Residential Property 2	Residential Property 2	Residential Property 3	Residential Property 3
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Duplicate	Field Sample	Field Sample
	Lab Sample ID:	A8L210159017	A8L210159010	A8L210159019	A8L210162001
	EPA Sample ID:	CPH75	CPH6Q	CPH79	CPH7X
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/16/98	12/16/98	12/16/98	12/17/98
PAHs	Units				
Anthracene	ug/kg	2200 U	160 J1	90 J1	190 J1
Pyrene	ug/kg	2300 J5	2400 J5	1100	2700
Benzo(g,h,i)perylene	ug/kg	980 J1	540	330 J1	970
Indeno(1,2,3-cd)pyrene	ug/kg	730 J1	730	290 J1	820
Benzo(b)fluoranthene	ug/kg	1900 J1	2100	930	3000
Fluoranthene	ug/kg	1800 J1	2100	1100	2600
Benzo(k)fluoranthene	ug/kg	440 J1	600	300 J1	910
Acenaphthylene	ug/kg	2200 U	460 U	420 U	600 U
Chrysene	ug/kg	1300 J1	1200	690	1800
Benzo(a)pyrene	ug/kg	1300 J1	1300	600	1900
Dibenz(a,h)anthracene	ug/kg	230 J1	210 J1	63 J1	260 J1
Benzo(a)Anthracene	ug/kg	1100 J1	1200	620	1700
Acenaphthene	ug/kg	2200 U	110 J1	54 J1	160 J1
Phenanthrene	ug/kg	840 J1	880	490	1200
Fluorene	ug/kg	2200 U	60 J1	420 U	71 J1
Naphthalene	ug/kg	2200 U	62 J1	420 U	71 J1
2-Methylnaphthalene	ug/kg	2200 U	460 U	420 U	600 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP3-SS03-0/3	SSAS3-RAP3-SS04-0/3	SSAS3-RAP3-SS05-0/3	SSAS3-RAP3-SS06-0/3
	Location:	Residential Property 3	Residential Property 3	Residential Property 3	Residential Property 3
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L210162002	A8L210162003	A8L210162004	A8L210162005
	EPA Sample ID:	CPH86	CPH87	CPH89	CPH8A
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/17/98	12/17/98	12/17/98	12/17/98
PAHs	Units				
Anthracene	ug/kg	650 J1	170 J1	210 J1	130 J1
Pyrene	ug/kg	8200	2600	3200	2200
Benzo(g,h,i)perylene	ug/kg	2100	660	880	460
Indeno(1,2,3-cd)pyrene	ug/kg	1800	600	670	390 J1
Benzó(b)fluoranthene	ug/kg	5600	2600	2800	1700
Fluoranthene	ug/kg	6400	2300	2600	1700
Benzo(k)fluoranthene	ug/kg	2400	530	900	400 J1
Acenaphthylene	ug/kg	150 J1	430 U	610 U	440 U
Chrysene	ug/kg	4000	1700	1800	1200
Benzo(a)pyrene	ug/kg	3700	1300	1800	1000
Dibenz(a,h)anthracene	ug/kg	570 J1	190 J1	240 J1	96 J1
Benzo(a)Anthracene	ug/kg	4000	1600	1700	1100
Acenaphthene	ug/kg	280 J1	110 J1	160 J1	94 J1
Phenanthrene	ug/kg	3700	1000	1200	860
Fluorene	ug/kg	310 J1	71 J1	88 J1	58 J1
Naphthalene	ug/kg	140 J1	56 J1	74 J1	54 J1
2-Methylnaphthalene	ug/kg	1200 U	430 U	610 U	440 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

Client Sample ID:		SSAS3-RAP3-SS07-0/3	SSAS3-RAP3-SS08-0/3	SSAS3-RAP3-SS91-0/3	SSAS3-RAP4-SS01-0/3
Location:		Residential Property 3	Residential Property 3	Residential Property 3	Residential Property 4
Depth Range:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
Sample Type:		Field Sample	Field Sample	Duplicate	Field Sample
Lab Sample ID:		A8L210162006	A8L210162007	A8L210159020	A8L210162008
EPA Sample ID:		CPH8C	CPH8D	CPH7C	CPH8E
Sample Type:		N1	N1	N1	N1
Sampling Date:		12/17/98	12/17/98	12/16/98	12/17/98
PAHs	Units				
Anthracene	ug/kg	160 J1	270 J1	89 J1	190 J1
Pyrene	ug/kg	2600	6200	1200	2800
Benzo(g,h,i)perylene	ug/kg	550	880 J1	310 J1	470
Indeno(1,2,3-cd)pyrene	ug/kg	500	910 J1	300 J1	440
Benzo(b)fluoranthene	ug/kg	2100	3600	930	1700
Fluoranthene	ug/kg	1900	4200	980	2100
Benzo(k)fluoranthene	ug/kg	590	1100	350 J1	420
Acenaphthylene	ug/kg	470 U	910 U	410 U	380 U
Chrysene	ug/kg	1300	2700	650	1200
Benzo(a)pyrene	ug/kg	1400	2300	630	980
Dibenz(a,h)anthracene	ug/kg	130 J1	280 J1	91 J1	120 J1
Benzo(a)Anthracene	ug/kg	1300	2600	550	1300
Acenaphthene	ug/kg	100 J1	910 U	54 J1	90 J1
Phenanthrene	ug/kg	800	1900	490	1100
Fluorene	ug/kg	60 J1	110 J1	410 U	68 J1
Naphthalene	ug/kg	470 U	910 U	410 U	44 J1
2-Methylnaphthalene	ug/kg	470 U	910 U	410 U	380 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP4-SS02-0/3	SSAS3-RAP4-SS03-0/3	SSAS3-RAP4-SS04-0/3	SSAS3-RAP4-SS05-0/3
	Location:	Residential Property 4	Residential Property 4	Residential Property 4	Residential Property 4
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L210162009	A8L210162010	A8L210162012	A8L210162013
	EPA Sample ID:	CPH8H	CPH8J	CPH8L	CPH8M
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/17/98	12/17/98	12/17/98	12/17/98
PAHs	Units				
Anthracene	ug/kg	360 J1	150 J1	270 J1	490 J1
Pyrene	ug/kg	4500	2400	2700	5900
Benzo(g,h,i)perylene	ug/kg	970	560	840	660 J1
Indeno(1,2,3-cd)pyrene	ug/kg	890	540	670	750 J1
Benzo(b)fluoranthene	ug/kg	2500	1900	2600	2600
Fluoranthene	ug/kg	2900	1800	3400	3600
Benzo(k)fluoranthene	ug/kg	980	430 J1	580	910 J1
Acenaphthylene	ug/kg	810 U	480 U	540 U	920 U
Chrysene	ug/kg	1900	1400	1300	2400
Benzo(a)pyrene	ug/kg	2000	940	1400	2000
Dibenz(a,h)anthracene	ug/kg	200 J1	88 J1	130 J1	160 J1
Benzo(a)Anthracene	ug/kg	1900	1300	1800	2200
Acenaphthene	ug/kg	260 J1	100 J1	140 J1	150 J1
Phenanthrene	ug/kg	2300	820	1600	2200
Fluorene	ug/kg	180 J1	60 J1	91 J1	160 J1
Naphthalene	ug/kg	110 J1	51 J1	59 J1	920 U
2-Methylnaphthalene	ug/kg	87 J1	480 U	540 U	920 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

Client Sample ID:		SSAS3-RAP4-SS06-0/3	SSAS3-RAP4-SS07-0/3-MMSD	SSAS3-RAP4-SS08-0/3	SSAS3-RAP4-SS93-0/3
Location:		Residential Property 4	Residential Property 4	Residential Property 4	Residential Property 4
Depth Range:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
Sample Type:		Field Sample	MS/MSD	Field Sample	Duplicate
Lab Sample ID:		A8L210162014	A8L210162015	A8L210162016	A8L210162011
EPA Sample ID:		CPH8N	CPH8Q	CPH8R	CPH8K
Sample Type:		N1	N1	N1	N1
Sampling Date:		12/17/98	12/17/98	12/17/98	12/17/98
PAHs	Units				
Anthracene	ug/kg	330 J1	200 J1	200 J1	180 J1
Pyrene	ug/kg	3600	2900	3300	3000
Benzo(g,h,i)perylene	ug/kg	690	840	730	440 J1
Indeno(1,2,3-cd)pyrene	ug/kg	650 J1	670 J1	490 J1	560
Benzo(b)fluoranthene	ug/kg	2900	2700	2100	1700
Fluoranthene	ug/kg	3600	3100	2700	230 J10
Benzo(k)fluoranthene	ug/kg	640 J1	740	670	900
Acenaphthylene	ug/kg	690 U	690 U	640 U	490 U
Chrysene	ug/kg	1600	1700	1600	1900
Benzo(a)pyrene	ug/kg	1800	1400	1400	1400
Dibenz(a,h)anthracene	ug/kg	220 J1	150 J1	88 J1	110 J1
Benzo(a)Anthracene	ug/kg	2100	1700	1700	1400
Acenaphthene	ug/kg	170 J1	100 J1	100 J1	170 J1
Phenanthrene	ug/kg	1900	1200	1300	1100
Fluorene	ug/kg	130 J1	690 U	66 J1	110 J1
Naphthalene	ug/kg	690 U	690 U	640 U	61 J1
2-Methylnaphthalene	ug/kg	690 U	690 U	640 U	490 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

Client Sample ID:		SSAS3-RAP5-SS01-0/3	SSAS3-RAP5-SS02-0/3	SSAS3-RAP5-SS03-0/3	SSAS3-RAP5-SS04-0/3
Location:		Residential Property 5	Residential Property 5	Residential Property 5	Residential Property 5
Depth Range:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
Sample Type:		Field Sample	Field Sample	Field Sample	Field Sample
Lab Sample ID:		A8L210162017	A8L210162018	A8L210162019	A8L210162020
EPA Sample ID:		CPH8V	CPH8W	CPH8X	CPH90
Sample Type:		N1	N1	N1	N1
Sampling Date:		12/17/98	12/17/98	12/17/98	12/17/98
PAHs	Units				
Anthracene	ug/kg	420 J1	480 J1	90 J1	420 U
Pyrene	ug/kg	4500	5400	1100	650
Benzo(g,h,i)perylene	ug/kg	980	850	250 J1	200 J1
Indeno(1,2,3-cd)pyrene	ug/kg	910	670 J1	170 J1	140 J1
Benzo(b)fluoranthene	ug/kg	2600	2600	800	570
Fluoranthene	ug/kg	4100	3800	1100	690
Benzo(k)fluoranthene	ug/kg	1100	890	330 J1	160 J1
Acenaphthylene	ug/kg	770 U	850 U	410 U	420 U
Chrysene	ug/kg	1900	2100	630	410 J1
Benzo(a)pyrene	ug/kg	1900	2000	570	410 J1
Dibenz(a,h)anthracene	ug/kg	180 J1	190 J1	42 J1	51 J1
Benzo(a)Anthracene	ug/kg	1900	2100	640	380 J1
Acenaphthene	ug/kg	190 J1	200 J1	51 J1	420 U
Phenanthrene	ug/kg	2400	2200	660	280 J1
Fluorene	ug/kg	160 J1	150 J1	43 J1	420 U
Naphthalene	ug/kg	98 J1	850 U	410 U	420 U
2-Methylnaphthalene	ug/kg	770 U	850 U	410 U	420 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP5-SS05-0/3	SSAS3-RAP5-SS06-0/3	SSAS3-RAP5-SS07-0/3	SSAS3-RAP5-SS08-0/3
	Location:	Residential Property 5	Residential Property 5	Residential Property 5	Residential Property 5
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L220107001	A8L220107002	A8L220107003	A8L220107004
	EPA Sample ID:	CPHPX	CPHQ0	CPHQ1	CPHQ2
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/17/98	12/17/98	12/17/98	12/17/98
PAHs	Units				
Anthracene	ug/kg	420 U	400 U	37 J1	400 U
Pyrene	ug/kg	290 J1	260 J1	390 J1	340 J1
Benzo(g,h,i)perylene	ug/kg	200 J1	180 J1	210 J1	200 J1
Indeno(1,2,3-cd)pyrene	ug/kg	180 J1	150 J1	190 J1	170 J1
Benzo(b)fluoranthene	ug/kg	270 J1	230 J1	340 J1	310 J1
Fluoranthene	ug/kg	360 J1	300 J1	450	360 J1
Benzo(k)fluoranthene	ug/kg	140 J1	96 J1	120 J1	110 J1
Acenaphthylene	ug/kg	420 U	400 U	400 U	400 U
Chrysene	ug/kg	220 J1	190 J1	280 J1	240 J1
Benzo(a)pyrene	ug/kg	240 J1	200 J1	260 J1	230 J1
Dibenz(a,h)anthracene	ug/kg	83 J1	66 J1	79 J1	63 J1
Benzo(a)Anthracene	ug/kg	180 J1	150 J1	220 J1	190 J1
Acenaphthene	ug/kg	420 U	400 U	400 U	400 U
Phenanthrene	ug/kg	190 J1	120 J1	210 J1	170 J1
Fluorene	ug/kg	420 U	400 U	400 U	400 U
Naphthalene	ug/kg	420 U	400 U	400 U	400 U
2-Methylnaphthalene	ug/kg	420 U	400 U	400 U	400 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP6-SS01-0/3	SSAS3-RAP6-SS02-0/3	SSAS3-RAP6-SS03-0/3	SSAS3-RAP6-SS04-0/3
	Location:	Residential Property 6	Residential Property 6	Residential Property 6	Residential Property 6
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L220107006	A8L220107007	A8L220107005	A8L220107005
	EPA Sample ID:	CPHQ6	CPHQ8	CPHQ4	CPHQ9
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/17/98	12/17/98	12/17/98	12/17/98
PAHs	Units				
Anthracene	ug/kg	130 J1	99 J1	65 J1	72 J1
Pyrene	ug/kg	990	1000	840	740
Benzo(g,h,i)perylene	ug/kg	400 J1	370 J1	410 J1	270 J1
Indeno(1,2,3-cd)pyrene	ug/kg	350 J1	320 J1	360 J1	230 J1
Benzo(b)fluoranthene	ug/kg	780	810	720	480
Fluoranthene	ug/kg	1100	1100	910	700
Benzo(k)fluoranthene	ug/kg	260 J1	270 J1	280 J1	170 J1
Acenaphthylene	ug/kg	420 U	420 U	420 U	450 U
Chrysene	ug/kg	630	640	590	420 J1
Benzo(a)pyrene	ug/kg	580	590	530	390 J1
Dibenz(a,h)anthracene	ug/kg	110 J1	110 J1	120 J1	67 J1
Benzo(a)Anthracene	ug/kg	530	550	440	360 J1
Acenaphthene	ug/kg	52 J1	44 J1	420 U	450 U
Phenanthrene	ug/kg	640	600	450	390 J1
Fluorene	ug/kg	420 U	42 J1	420 U	450 U
Naphthalene	ug/kg	420 U	420 U	420 U	450 U
2-Methylnaphthalene	ug/kg	420 U	420 U	420 U	450 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

Client Sample ID:		SSAS3-RAP6-SS05-0/3	SSAS3-RAP6-SS06-0/3	SSAS3-RAP6-SS07-0/3	SSAS3-RAP6-SS08-0/3
Location:		Residential Property 6	Residential Property 6	Residential Property 6	Residential Property 6
Depth Range:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
Sample Type:		Field Sample	Field Sample	Field Sample	Field Sample
Lab Sample ID:		A8L220107009	A8L220107010	A8L220107011	A8L220107013
EPA Sample ID:		CPHQC	CPHQD	CPHQF	CPHQK
Sample Type:		N1	N1	N1	N1
Sampling Date:		12/17/98	12/17/98	12/17/98	12/17/98
PAHs	Units				
Anthracene	ug/kg	84 J1	190 J1	120 J1	200 J1
Pyrene	ug/kg	1000	1600	1300	2000
Benzo(g,h,i)perylene	ug/kg	410 J1	470	440	960
Indeno(1,2,3-cd)pyrene	ug/kg	350 J1	400 J1	380 J1	850
Benzo(b)fluoranthene	ug/kg	810	1000	990	2400
Fluoranthene	ug/kg	1100	1700	1400	2400
Benzo(k)fluoranthene	ug/kg	280 J1	370 J1	340 J1	740
Acenaphthylene	ug/kg	430 U	410 U	430 U	440 U
Chrysene	ug/kg	650	880	850	1600
Benzo(a)pyrene	ug/kg	600	760	770	1500
Dibenz(a,h)anthracene	ug/kg	110 J1	120 J1	110 J1	230 J1
Benzo(a)Anthracene	ug/kg	520	760	710	1300
Acenaphthene	ug/kg	430 U	53 J1	430 U	150 J1
Phenanthrene	ug/kg	530	990	620	1100
Fluorene	ug/kg	430 U	58 J1	430 U	80 J1
Naphthalene	ug/kg	430 U	410 U	430 U	73 J10
2-Methylnaphthalene	ug/kg	430 U	410 U	430 U	46 J1

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

Client Sample ID:		SSAS3-RAP6-SS98-0/3	SSAS3-RAP7-SS01-0/3 MMSD	SSAS3-RAP7-SS02-0/3	SSAS3-RAP7-SS03-0/3
Location:		Residential Property 6	Residential Property 7	Residential Property 7	Residential Property 7
Depth Range:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
Sample Type:		Duplicate	MS/MSD	Field Sample	Field Sample
Lab Sample ID:		A8L220107012	A8L220107014	A8L220107016	A8L220107017
EPA Sample ID:		CPHQH	CPHQN	CPHQQ	CPHQR
Sample Type:		N1	N1	N1	N1
Sampling Date:		12/17/98	12/17/98	12/17/98	12/17/98
PAHs	Units				
Anthracene	ug/kg	260 J1	1000 J1	400 J1	120 J1
Pyrene	ug/kg	1500	8600 J5	3400 J5	1100 J5
Benzo(g,h,i)perylene	ug/kg	480	4000	1700	390 J1
Indeno(1,2,3-cd)pyrene	ug/kg	430 J1	3500	1500	340 J1
Benzo(b)fluoranthene	ug/kg	1300	8700	3400	990
Fluoranthene	ug/kg	1800 J7	10000	4200	1200
Benzo(k)fluoranthene	ug/kg	390 J1	2800	1200	320 J1
Acenaphthylene	ug/kg	440 U	2100 U	830 U	420 U
Chrysene	ug/kg	1000	6100	2300	760
Benzo(a)pyrene	ug/kg	880	6300	2400	690
Dibenz(a,h)anthracene	ug/kg	140 J1	1000 J1	480 J1	100 J1
Benzo(a)Anthracene	ug/kg	880	5500	2100	630
Acenaphthene	ug/kg	160 J1	620 J1	200 J1	62 J1
Phenanthrene	ug/kg	1300	4800	2000	640
Fluorene	ug/kg	140 J1	360 J1	150 J1	50 J1
Naphthalene	ug/kg	280 J10	240 J1	830 U	57 J1
2-Methylnaphthalene	ug/kg	110 J1	2100 U	830 U	49 J1

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP7-SS04-0/3	SSAS3-RAP7-SS05-0/3	SSAS3-RAP7-SS06-0/3	SSAS3-RAP7-SS07-0/3
	Location:	Residential Property 7	Residential Property 7	Residential Property 7	Residential Property 7
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L220107018	A8L220107019	A8L220107020	A8L230102001
	EPA Sample ID:	CPHQV	CPHR0	CPHR2	CPJNV
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/17/98	12/17/98	12/17/98	12/18/98
PAHs	Units				
Anthracene	ug/kg	1100 J1	160 J1	380 J1	300 J1
Pyrene	ug/kg	5900 J5	1200 J5	3300 J5	2200 J5
Benzo(g,h,i)perylene	ug/kg	1700 J1	480	1800	1100
Indeno(1,2,3-cd)pyrene	ug/kg	1600 J1	440	1500	990
Benzo(b)fluoranthene	ug/kg	4400	1200	3200	2100
Fluoranthene	ug/kg	7000	1500	4000	2700
Benzo(k)fluoranthene	ug/kg	1600 J1	420	1100	700
Acenaphthylene	ug/kg	1700 U	390 U	890 U	420 U
Chrysene	ug/kg	3400	840	2300	1600
Benzo(a)pyrene	ug/kg	3200	820	2500	1600
Dibenz(a,h)anthracene	ug/kg	420 J1	140 J1	410 J1	280 J1
Benzo(a)Anthracene	ug/kg	3200	750	2000	1400
Acenaphthene	ug/kg	500 J1	64 J1	260 J1	150 J1
Phenanthrene	ug/kg	5500	730	2100	1400
Fluorene	ug/kg	720 J1	51 J1	170 J1	110 J1
Naphthalene	ug/kg	210 J1	40 J1	890 U	50 J1
2-Methylnaphthalene	ug/kg	150 J1	45 J1	890 U	420 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP7-SS08-0/3	SSAS3-RAP7-SS92-0/3	SSAS3-RAP8-SS01-0/3	SSAS3-RAP8-SS02-0/3
	Location:	Residential Property 7	Residential Property 8	Residential Property 8	Residential Property 8
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Duplicate	Field Sample	Field Sample
	Lab Sample ID:	A8L230102002	A8L220107015	A8L230102003	A8L230102004
	EPA Sample ID:	CPJNW	CPHQP	CPJNX	CPJP0
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/18/98	12/17/98	12/18/98	12/18/98
PAHs	Units				
Anthracene	ug/kg	570 J1	340 J1	2600 J1	4100 J1
Pyrene	ug/kg	5600 J5	2900 J5	22000 J5	35000 J5
Benzo(g,h,i)perylene	ug/kg	2300	1500	11000	18000
Indeno(1,2,3-cd)pyrene	ug/kg	2100	1300	9800	17000
Benzo(b)fluoranthene	ug/kg	4900	2800	22000	34000
Fluoranthene	ug/kg	5900	3700	28000	39000
Benzo(k)fluoranthene	ug/kg	1800	1000	8600	12000
Acenaphthylene	ug/kg	1300 U	810 U	5100 U	5200 U
Chrysene	ug/kg	3800	2000	16000	24000
Benzo(a)pyrene	ug/kg	4000	2100	17000	27000
Dibenz(a,h)anthracene	ug/kg	610 J1	420 J1	3100 J1	5200 J1
Benzo(a)Anthracene	ug/kg	3200	1800	14000	21000
Acenaphthene	ug/kg	360 J1	190 J1	1700 J1	3200 J1
Phenanthrene	ug/kg	2900	1800	13000	20000
Fluorene	ug/kg	220 J1	140 J1	1200 J1	1700 J1
Naphthalene	ug/kg	1300 U	810 U	5100 U	900 J1
2-Methylnaphthalene	ug/kg	1300 U	810 U	5100 U	5200 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

Client Sample ID:		SSAS3-RAP8-SS03-0/3	SSAS3-RAP8-SS04-0/3	SSAS3-RAP8-SS05-0/3	SSAS3-RAP8-SS06-0/3
Location:		Residential Property 8	Residential Property 8	Residential Property 8	Residential Property 8
Depth Range:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
Sample Type:		Field Sample	Field Sample	Field Sample	Field Sample
Lab Sample ID:		A8L230102005	A8L230102007	A8L230102008	A8L230102009
EPA Sample ID:		CPJP1	CPJP3	CPJP4	CPJP5
Sample Type:		N1	N1	N1	N1
Sampling Date:		12/18/98	12/18/98	12/18/98	12/18/98
PAHs	Units				
Anthracene	ug/kg	1400 J1	1700 J1	970 J1	1500 J1
Pyrene	ug/kg	11000 J5	15000 J5	11000 J5	14000 J5
Benzo(g,h,i)perylene	ug/kg	6400	10000	5700	8900
Indeno(1,2,3-cd)pyrene	ug/kg	5600	8900	4900	7700
Benzo(b)fluoranthene	ug/kg	12000	17000	9800	16000
Fluoranthene	ug/kg	14000	19000	12000	16000
Benzo(k)fluoranthene	ug/kg	4200	6400	3500	5300
Acenaphthylene	ug/kg	3200 U	3100 U	2400 U	3200 U
Chrysene	ug/kg	8600	12000	6800	10000
Benzo(a)pyrene	ug/kg	9400	14000	7800	13000
Dibenz(a,h)anthracene	ug/kg	1800 J1	2900 J1	1500 J1	2500 J1
Benzo(a)Anthracene	ug/kg	7300	10000	6300	9200
Acenaphthene	ug/kg	1200 J1	1700 J1	660 J1	1500 J1
Phenanthrene	ug/kg	6900	9000	4900	7400
Fluorene	ug/kg	560 J1	750 J1	310 J1	620 J1
Naphthalene	ug/kg	360 J1	490 J1	2400 U	480 J1
2-Methylnaphthalene	ug/kg	3200 U	3100 U	2400 U	3200 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP8-SS07-0/3	SSAS3-RAP8-SS08-0/3	SSAS3-RAP8-SS97-0/3	SSAS3-RAP9-SS01-0/3
	Location:	Residential Property 8	Residential Property 8	Residential Property 9	Residential Property 9
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Duplicate	Field Sample
	Lab Sample ID:	A8L230102010	A8L230102011	A8L230102006	A8L230102012
	EPA Sample ID:	CPJP7	CPJP8	CPJP2	CPJP9
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/18/98	12/18/98	12/18/98	12/18/98
PAHs	Units				
Anthracene	ug/kg	1900 J1	1200 J1	1800 J1	120 J1
Pyrene	ug/kg	21000 J5	9900 J5	20000	1100
Benzo(g,h,i)perylene	ug/kg	10000	6500	10000	430
Indeno(1,2,3-cd)pyrene	ug/kg	9300	5600	9000	400 J1
Benzo(b)fluoranthene	ug/kg	19000	10000	18000	970
Fluoranthene	ug/kg	22000	12000	20000	1200
Benzo(k)fluoranthene	ug/kg	7800	3900	7600	370 J1
Acenaphthylene	ug/kg	4500 U	2700 U	4400 U	410 U
Chrysene	ug/kg	14000	7400	13000	770
Benzo(a)pyrene	ug/kg	16000	8500	15000	750
Dibenz(a,h)anthracene	ug/kg	3000 J1	1500 J1	2500 J1	110 J1
Benzo(a)Anthracene	ug/kg	12000	6400	12000	640
Acenaphthene	ug/kg	1600 J1	1000 J1	1600 J1	75 J1
Phenanthrene	ug/kg	10000	6500	9600	740
Fluorene	ug/kg	730 J10	500 J1	4400 UJ7	61 J1
Naphthalene	ug/kg	4500 UJ7	490 J1	530 J10	410 U
2-Methylnaphthalene	ug/kg	4500 U	2700 U	4400 U	410 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

Client Sample ID:		SSAS3-RAP9-SS02-0/3	SSAS3-RAP9-SS03-0/3	SSAS3-RAP9-SS04-0/3	SSAS3-RAP9-SS05-0/3
Location:		Residential Property 9	Residential Property 9	Residential Property 9	Residential Property 9
Depth Range:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
Sample Type:		Field Sample	Field Sample	Field Sample	Field Sample
Lab Sample ID:		A8L230102013	A8L230102014	A8L230102015	A8L230102016
EPA Sample ID:		CPJPA	CPJPC	CPJPF	CPJPG
Sample Type:		N1	N1	N1	N1
Sampling Date:		12/18/98	12/18/98	12/18/98	12/18/98
PAHs	Units				
Anthracene	ug/kg	49 J1	320 J1	990 J1	560 J1
Pyrene	ug/kg	460	3200	10000	4700
Benzo(g,h,i)perylene	ug/kg	270 J1	1400	5400	1900
Indeno(1,2,3-cd)pyrene	ug/kg	240 J1	1300	4500	1800
Benzo(b)fluoranthene	ug/kg	550	3000	9400	4300
Fluoranthene	ug/kg	570	3600	11000	5500
Benzo(k)fluoranthene	ug/kg	200 J1	1200	3300	1700
Acenaphthylene	ug/kg	400 U	850 U	2700 U	1000 U
Chrysene	ug/kg	390 J1	2300	6800	3400
Benzo(a)pyrene	ug/kg	420	2400	7600	3400
Dibenz(a,h)anthracene	ug/kg	69 J1	380 J1	1200 J1	510 J1
Benzo(a)Anthracene	ug/kg	320 J1	1900	6000	3000
Acenaphthene	ug/kg	400 U	230 J1	580 J1	280 J1
Phenanthrene	ug/kg	250 J1	2000	4600	2700
Fluorene	ug/kg	400 U	140 J1	2700 U	200 J1
Naphthalene	ug/kg	400 U	110 J1	2700 U	1000 U
2-Methylnaphthalene	ug/kg	400 U	850 U	2700 U	1000 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

Client Sample ID:		SSAS3-RAP9-SS06-0/3	SSAS3-RAP9-SS07-0/3	SSAS3-RAP9-SS08-0/3	SSAS3-RAP9-SS95-0/3
Location:		Residential Property 9	Residential Property 9	Residential Property 9	Residential Property 9
Depth Range:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
Sample Type:		Field Sample	Field Sample	Field Sample	Duplicate
Lab Sample ID:		A8L230102018	A8L230102019	A8L230102020	A8L230102017
EPA Sample ID:		CPJPJ	CPJPK	CPJPL	CPJPH
Sample Type:		N1	N1	N1	N1
Sampling Date:		12/18/98	12/18/98	12/18/98	12/18/98
PAHs	Units				
Anthracene	ug/kg	1000 J1	840 J1	1000 J1	490 J1
Pyrene	ug/kg	8800	7300	9400	4500
Benzo(g,h,i)perylene	ug/kg	4900	4600	6100	1900
Indeno(1,2,3-cd)pyrene	ug/kg	4500	4200	5600	1800
Benzo(b)fluoranthene	ug/kg	10000	9300	11000	4400
Fluoranthene	ug/kg	10000	8200	9600	5100
Benzo(k)fluoranthene	ug/kg	4000	3200	4100	1600
Acenaphthylene	ug/kg	1700 U	1600 U	2100 U	1000 U
Chrysene	ug/kg	7100	6100	7200	3200
Benzo(a)pyrene	ug/kg	8200	7200	8800	3400
Dibenz(a,h)anthracene	ug/kg	1400 J1	1200 J1	1600 J1	510 J1
Benzo(a)Anthracene	ug/kg	5900	5000	6200	2900
Acenaphthene	ug/kg	900 J1	800 J1	1000 J1	270 J1
Phenanthrene	ug/kg	4900	4100	4700	2300
Fluorene	ug/kg	380 J1	330 J1	390 J1	160 J1
Naphthalene	ug/kg	310 J1	270 J1	290 J1	1000 U
2-Methylnaphthalene	ug/kg	1700 U	1600 U	2100 U	1000 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

Client Sample ID:		SSAS3-RAP10-SS01-0/3	SSAS3-RAP10-SS02-0/3	SSAS3-RAP10-SS03-0/3	SSAS3-RAP10-SS04-0/3
Location:		Residential Property 10	Residential Property 10	Residential Property 10	Residential Property 10
Depth Range:		0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
Sample Type:		Field Sample	Field Sample	Field Sample	Field Sample
Lab Sample ID:		A8L230155001	A8L230155002	A8L230155003	A8L230155004
EPA Sample ID:		CPK65	CPK6A	CPK6E	CPK6F
Sample Type:		N1	N1	N1	N1
Sampling Date:		12/21/98	12/21/98	12/21/98	12/21/98
PAHs	Units				
Anthracene	ug/kg	920 J1	800 J1	940 J1	780 J1
Pyrene	ug/kg	11000	12000	9100	10000
Benzo(g,h,i)perylene	ug/kg	2400	2800	2200	2600
Indeno(1,2,3-cd)pyrene	ug/kg	2800	3500	2100	2300
Benzo(b)fluoranthene	ug/kg	9300	10000	6800	7200
Fluoranthene	ug/kg	11000	9700	8400	6800
Benzo(k)fluoranthene	ug/kg	4200	3300	3000	2300
Acenaphthylene	ug/kg	2000 U	2100 U	1600 U	1700 U
Chrysene	ug/kg	6800	7000	4900	5100
Benzo(a)pyrene	ug/kg	6700	7600	5300	5200
Dibenz(a,h)anthracene	ug/kg	490 J1	570 J1	300 J1	700 J1
Benzo(a)Anthracene	ug/kg	5800	6200	4500	5200
Acenaphthene	ug/kg	670 J10	650 J10	700 J10	600 J10
Phenanthrene	ug/kg	4800	4200	4500	3800
Fluorene	ug/kg	420 J1	340 J1	320 J1	300 J1
Naphthalene	ug/kg	270 J1	240 J1	320 J1	280 J1
2-Methylnaphthalene	ug/kg	2000 U	2100 U	1600 U	1700 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.1
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
SOIL SAMPLING DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP10-SS05-0/3	SSAS3-RAP10-SS06-0/3	SSAS3-RAP10-SS07-0/3	SSAS3-RAP10-SS08-0/3
	Location:	Residential Property 10	Residential Property 10	Residential Property 10	Residential Property 10
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L230155005	A8L230155006	A8L230155007	A8L230155008
	EPA Sample ID:	CPK6H	CPK6K	CPK6M	CPK6Q
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/21/98	12/21/98	12/21/98	12/21/98
PAHs	Units				
Anthracene	ug/kg	1900 J1	1400	1100 J1	2000 J1
Pyrene	ug/kg	22000	19000	14000	16000
Benzo(g,h,i)perylene	ug/kg	5300	4800	3300	3400
Indeno(1,2,3-cd)pyrene	ug/kg	4700	5400	4100	3600
Benzo(b)fluoranthene	ug/kg	16000	13000	11000	12000
Fluoranthene	ug/kg	16000	17000	11000	16000
Benzo(k)fluoranthene	ug/kg	5500	5100	4400	4000
Acenaphthylene	ug/kg	2800 U	1100 U	2900 U	3100 U
Chrysene	ug/kg	11000	9700	7700	8200
Benzo(a)pyrene	ug/kg	12000	11000	8600	9300
Dibenz(a,h)anthracene	ug/kg	1000 J1	1300	760 J1	560 J1
Benzo(a)Anthracene	ug/kg	11000	9900	6900	7600
Acenaphthene	ug/kg	1400 J10	1100 J5	920 J10	1200 J10
Phenanthrene	ug/kg	9700	6800	5500	8700
Fluorene	ug/kg	750 J1	430 J1	360 J1	960 J1
Naphthalene	ug/kg	510 J1	450 J1	300 J1	350 J1
2-Methylnaphthalene	ug/kg	2800 U	1100 U	2900 U	3100 U

J1: Estimated value - Less than reporting limit.
J5: Estimated value - MS/MSD outlier.
J7: Estimated value - Field precision outlier.
J10: Estimated value - Multiple outliers.
U, UJ7: Not Detected.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP1-SS01-0/3	SSAS3-RAP1-SS02-0/3	SSAS3-RAP1-SS03-0/3	SSAS3-RAP1-SS04-0/3
	Location:	Residential Property 1	Residential Property 1	Residential Property 1	Residential Property 1
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L210159001	A8L210159002	A8L210159004	A8L210159005
	EPA Sample ID:	CPH62	CPH68	CPH6F	CPH6G
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/16/98	12/16/98	12/16/98	12/16/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	2000	2500	2200	1600
Benzo(a)pyrene (ug/kg)	1	2400	2200	2400	1500
Benzo(b)fluoranthene (ug/kg)	0.1	3200	3500	3400	2400
Benzo(k)fluoranthene (ug/kg)	0.01	1000	900	1000	540
Chrysene (ug/kg)	0.001	2100	2400	2500	1600
Dibenz(a,h)anthracene (ug/kg)	1	260 J1	270 J1	370 J1	230 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	1300	950	1200	750
Benzo(a)pyrene (ug/kg)		2400	2200	2400	1500
Total BAP equivalents (ug/kg)		3322	3176	3463	2212
Total BAP equivalents (mg/kg)		3.32	3.18	3.46	2.21

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP1-SS05-0/3	SSAS3-RAP1-SS06-0/3-MMSD	SSAS3-RAP1-SS07-0/3	SSAS3-RAP1-SS08-0/3
	Location:	Residential Property 1	Residential Property 1	Residential Property 1	Residential Property 1
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	MS/MSD	Field Sample	Field Sample
	Lab Sample ID:	A8L210159006	A8L210159007	A8L210159009	A8L210159008
	EPA Sample ID:	CPH6J	CPH6K	CPH6N	CPH6L
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/16/98	12/16/98	12/16/98	12/16/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	1800	2200	1500	4800
Benzo(a)pyrene (ug/kg)	1	1700	1500	1400	3800
Benzo(b)fluoranthene (ug/kg)	0.1	2800	2800	2400	5400
Benzo(k)fluoranthene (ug/kg)	0.01	770	810	630	2100
Chrysene (ug/kg)	0.001	1800	2100	1400	4600
Dibenz(a,h)anthracene (ug/kg)	1	230 J1	210 J1	190 J1	440 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	920	1000	830	1700 J1
Benzo(a)pyrene (ug/kg)		1700	1500	1400	3800
Total BAP equivalents (ug/kg)		2492	2320	2071	5456
Total BAP equivalents (mg/kg)		2.49	2.32	2.07	5.46

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP1-SS93-0/3	SSAS3-RAP2-SS01-0/3	SSAS3-RAP2-SS02-0/3	SSAS3-RAP2-SS03-0/3
	Location:	Residential Property 2	Residential Property 2	Residential Property 2	Residential Property 2
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Duplicate	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L210159003	A8L210159011	A8L210159012	A8L210159013
	EPA Sample ID:	CPH6E	CPH6R	CPH6T	CPH6V
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/16/98	12/16/98	12/16/98	12/16/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	2000	11000	1800	1500
Benzo(a)pyrene (ug/kg)	1	2000	9100	1600	1200
Benzo(b)fluoranthene (ug/kg)	0.1	3100	14000	2700	2300
Benzo(k)fluoranthene (ug/kg)	0.01	990	5400	610	520
Chrysene (ug/kg)	0.001	2100	11000	1700	1500
Dibenz(a,h)anthracene (ug/kg)	1	280 J1	1100 J1	180 J1	160 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	1000	2800 J1	690	540
Benzo(a)pyrene (ug/kg)		2000	9100	1600	1200
Total BAP equivalents (ug/kg)		2902	13045	2307	1801
Total BAP equivalents (mg/kg)		2.90	13.05	2.31	1.80

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP2-SS04-0/3	SSAS3-RAP2-SS05-0/3	SSAS3-RAP2-SS06-0/3	SSAS3-RAP2-SS07-0/3
	Location:	Residential Property 2	Residential Property 2	Residential Property 2	Residential Property 2
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L210159015	A8L210159014	A8L210159018	A8L210159016
	EPA Sample ID:	CPH70	CPH6X	CPH77	CPH71
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/16/98	12/16/98	12/16/98	12/16/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	1900	1500	1200	6000
Benzo(a)pyrene (ug/kg)	1	1900	1500	1300	6600
Benzo(b)fluoranthene (ug/kg)	0.1	3000	2400	2100	10000
Benzo(k)fluoranthene (ug/kg)	0.01	780	620	550	2800
Chrysene (ug/kg)	0.001	2000	1500	1200	6000
Dibenz(a,h)anthracene (ug/kg)	1	200 J1	170 J1	170 J1	1100 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	790	790	580	3900
Benzo(a)pyrene (ug/kg)		1900	1500	1300	6600
Total BAP equivalents (ug/kg)		2679	2147	1865	9724
Total BAP equivalents (mg/kg)		2.68	2.15	1.86	9.72

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP2-SS08-0/3	SSAS3-RAP2-SS96-0/3	SSAS3-RAP3-SS01-0/3	SSAS3-RAP3-SS02-0/3
	Location:	Residential Property 2	Residential Property 2	Residential Property 3	Residential Property 3
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Duplicate	Field Sample	Field Sample
	Lab Sample ID:	A8L210159017	A8L210159010	A8L210159019	A8L210162001
	EPA Sample ID:	CPH75	CPH6Q	CPH79	CPH7X
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/16/98	12/16/98	12/16/98	12/17/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	1100 J1	1200	620	1700
Benzo(a)pyrene (ug/kg)	1	1300 J1	1300	600	1900
Benzo(b)fluoranthene (ug/kg)	0.1	1900 J1	2100	930	3000
Benzo(k)fluoranthene (ug/kg)	0.01	440 J1	600	300 J1	910
Chrysene (ug/kg)	0.001	1300 J1	1200	690	1800
Dibenz(a,h)anthracene (ug/kg)	1	230 J1	210 J1	63 J1	260 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	730 J1	730	290 J1	820
Benzo(a)pyrene (ug/kg)		1300	1300	600	1900
Total BAP equivalents (ug/kg)		1909	1920	851	2723
Total BAP equivalents (mg/kg)		1.91	1.92	0.85	2.72

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP3-SS03-0/3	SSAS3-RAP3-SS04-0/3	SSAS3-RAP3-SS05-0/3	SSAS3-RAP3-SS06-0/3
	Location:	Residential Property 3	Residential Property 3	Residential Property 3	Residential Property 3
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L210162002	A8L210162003	A8L210162004	A8L210162005
	EPA Sample ID:	CPH86	CPH87	CPH89	CPHSA
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/17/98	12/17/98	12/17/98	12/17/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	4000	1600	1700	1100
Benzo(a)pyrene (ug/kg)	1	3700	1300	1800	1000
Benzo(b)fluoranthene (ug/kg)	0.1	5600	2600	2800	1700
Benzo(k)fluoranthene (ug/kg)	0.01	2400	530	900	400 J1
Chrysene (ug/kg)	0.001	4000	1700	1800	1200
Dibenz(a,h)anthracene (ug/kg)	1	570 J1	190 J1	240 J1	96 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	1800	600	670	390 J1
Benzo(a)pyrene (ug/kg)		3700	1300	1800	1000
Total BAP equivalents (ug/kg)		5438	1977	2568	1420
Total BAP equivalents (mg/kg)		5.44	1.98	2.57	1.42

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP3-SS07-0/3	SSAS3-RAP3-SS08-0/3	SSAS3-RAP3-SS91-0/3	SSAS3-RAP4-SS01-0/3
	Location:	Residential Property 3	Residential Property 3	Residential Property 3	Residential Property 4
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Duplicate	Field Sample
	Lab Sample ID:	A8L210162006	A8L210162007	A8L210159020	A8L210162008
	EPA Sample ID:	CPH8C	CPH8D	CPH7C	CPH8E
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/17/98	12/17/98	12/16/98	12/17/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	1300	2600	550	1300
Benzo(a)pyrene (ug/kg)	1	1400	2300	630	980
Benzo(b)fluoranthene (ug/kg)	0.1	2100	3600	930	1700
Benzo(k)fluoranthene (ug/kg)	0.01	590	1100	350 J1	420
Chrysene (ug/kg)	0.001	1300	2700	650	1200
Dibenz(a,h)anthracene (ug/kg)	1	130 J1	280 J1	91 J1	120 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	500	910 J1	300 J1	440
Benzo(a)pyrene (ug/kg)		1400	2300	630	980
Total BAP equivalents (ug/kg)		1927	3305	903	1449
Total BAP equivalents (mg/kg)		1.93	3.30	0.90	1.45

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP4-SS02-0/3	SSAS3-RAP4-SS03-0/3	SSAS3-RAP4-SS04-0/3	SSAS3-RAP4-SS05-0/3
	Location:	Residential Property 4	Residential Property 4	Residential Property 4	Residential Property 4
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L210162009	A8L210162010	A8L210162012	A8L210162013
	EPA Sample ID:	CPH8H	CPH8J	CPH8L	CPH8M
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/17/98	12/17/98	12/17/98	12/17/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	1900	1300	1800	2200
Benzo(a)pyrene (ug/kg)	1	2000	940	1400	2000
Benzo(b)fluoranthene (ug/kg)	0.1	2500	1900	2600	2600
Benzo(k)fluoranthene (ug/kg)	0.01	980	430 J1	580	910 J1
Chrysene (ug/kg)	0.001	1900	1400	1300	2400
Dibenz(a,h)anthracene (ug/kg)	1	200 J1	88 J1	130 J1	160 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	890	540	670	750 J1
Benzo(a)pyrene (ug/kg)		2000	940	1400	2000
Total BAP equivalents (ug/kg)		2741	1408	2044	2727
Total BAP equivalents (mg/kg)		2.74	1.41	2.04	2.73

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP4-SS06-0/3	SSAS3-RAP4-SS07-0/3-MMSD	SSAS3-RAP4-SS08-0/3	SSAS3-RAP4-SS93-0/3
	Location:	Residential Property 4	Residential Property 4	Residential Property 4	Residential Property 4
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	MS/MSD	Field Sample	Duplicate
	Lab Sample ID:	A8L210162014	A8L210162015	A8L210162016	A8L210162011
	EPA Sample ID:	CPH8N	CPH8Q	CPH8R	CPH8K
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/17/98	12/17/98	12/17/98	12/17/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	2100	1700	1700	1400
Benzo(a)pyrene (ug/kg)	1	1800	1400	1400	1400
Benzo(b)fluoranthene (ug/kg)	0.1	2900	2700	2100	1700
Benzo(k)fluoranthene (ug/kg)	0.01	640 J1	740	670	900
Chrysene (ug/kg)	0.001	1600	1700	1600	1900
Dibenz(a,h)anthracene (ug/kg)	1	220 J1	150 J1	88 J1	110 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	650 J1	670 J1	490 J1	560
Benzo(a)pyrene (ug/kg)		1800	1400	1400	1400
Total BAP equivalents (ug/kg)		2593	2066	1925	1887
Total BAP equivalents (mg/kg)		2.59	2.07	1.93	1.89

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP5-SS01-0/3	SSAS3-RAP5-SS02-0/3	SSAS3-RAP5-SS03-0/3	SSAS3-RAP5-SS04-0/3
	Location:	Residential Property 5	Residential Property 5	Residential Property 5	Residential Property 5
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L210162017	A8L210162018	A8L210162019	A8L210162020
	EPA Sample ID:	CPH8V	CPH8W	CPH8X	CPH90
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/17/98	12/17/98	12/17/98	12/17/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	1900	2100	640	380 J1
Benzo(a)pyrene (ug/kg)	1	1900	2000	570	410 J1
Benzo(b)fluoranthene (ug/kg)	0.1	2600	2600	800	570
Benzo(k)fluoranthene (ug/kg)	0.01	1100	890	330 J1	160 J1
Chrysene (ug/kg)	0.001	1900	2100	630	410 J1
Dibenz(a,h)anthracene (ug/kg)	1	180 J1	190 J1	42 J1	51 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	910	670 J1	170 J1	140 J1
Benzo(a)pyrene (ug/kg)		1900	2000	570	410
Total BAP equivalents (ug/kg)		2634	2738	777	572
Total BAP equivalents (mg/kg)		2.63	2.74	0.78	0.57

J1: Estimated value - Less than reporting limit

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP5-SS05-0/3	SSAS3-RAP5-SS06-0/3	SSAS3-RAP5-SS07-0/3	SSAS3-RAP5-SS08-0/3
	Location:	Residential Property 5	Residential Property 5	Residential Property 5	Residential Property 5
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L220107001	A8L220107002	A8L220107003	A8L220107004
	EPA Sample ID:	CPHPX	CPHQ0	CPHQ1	CPHQ2
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/17/98	12/17/98	12/17/98	12/17/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	180 J1	150 J1	220 J1	190 J1
Benzo(a)pyrene (ug/kg)	1	240 J1	200 J1	260 J1	230 J1
Benzo(b)fluoranthene (ug/kg)	0.1	270 J1	230 J1	340 J1	310 J1
Benzo(k)fluoranthene (ug/kg)	0.01	140 J1	96 J1	120 J1	110 J1
Chrysene (ug/kg)	0.001	220 J1	190 J1	280 J1	240 J1
Dibenz(a,h)anthracene (ug/kg)	1	83 J1	66 J1	79 J1	63 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	180 J1	150 J1	190 J1	170 J1
Benzo(a)pyrene (ug/kg)		240	200	260	230
Total BAP equivalents (ug/kg)		388	320	415	361
Total BAP equivalents (mg/kg)		0.39	0.32	0.42	0.36

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP6-SS01-0/3	SSAS3-RAP6-SS02-0/3	SSAS3-RAP6-SS03-0/3	SSAS3-RAP6-SS04-0/3
	Location:	Residential Property 6	Residential Property 6	Residential Property 6	Residential Property 6
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L220107006	A8L220107007	A8L220107005	A8L220107008
	EPA Sample ID:	CPHQ6	CPHQ8	CPHQ4	CPHQ9
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/17/98	12/17/98	12/17/98	12/17/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	530	550	440	360 J1
Benzo(a)pyrene (ug/kg)	1	580	590	530	390 J1
Benzo(b)fluoranthene (ug/kg)	0.1	780	810	720	480
Benzo(k)fluoranthene (ug/kg)	0.01	260 J1	270 J1	280 J1	170 J1
Chrysene (ug/kg)	0.001	630	640	590	420 J1
Dibenz(a,h)anthracene (ug/kg)	1	110 J1	110 J1	120 J1	67 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	350 J1	320 J1	360 J1	230 J1
Benzo(a)pyrene (ug/kg)		580	590	530	390
Total BAP equivalents (ug/kg)		859	871	805	566
Total BAP equivalents (mg/kg)		0.86	0.87	0.81	0.57

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP6-SS05-0/3	SSAS3-RAP6-SS06-0/3	SSAS3-RAP6-SS07-0/3	SSAS3-RAP6-SS08-0/3
	Location:	Residential Property 6	Residential Property 6	Residential Property 6	Residential Property 6
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L220107009	A8L220107010	A8L220107011	A8L220107013
	EPA Sample ID:	CPHQC	CPHQD	CPHQF	CPHQK
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/17/98	12/17/98	12/17/98	12/17/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	520	760	710	1300
Benzo(a)pyrene (ug/kg)	1	600	760	770	1500
Benzo(b)fluoranthene (ug/kg)	0.1	810	1000	990	2400
Benzo(k)fluoranthene (ug/kg)	0.01	280 J1	370 J1	340 J1	740
Chrysene (ug/kg)	0.001	650	880	850	1600
Dibenz(a,h)anthracene (ug/kg)	1	110 J1	120 J1	110 J1	230 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	350 J1	400 J1	380 J1	850
Benzo(a)pyrene (ug/kg)		600	760	770	1500
Total BAP equivalents (ug/kg)		881	1101	1092	2194
Total BAP equivalents (mg/kg)		0.88	1.10	1.09	2.19

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP6-SS98-0/3	SSAS3-RAP7-SS01-0/3 MMSD	SSAS3-RAP7-SS02-0/3	SSAS3-RAP7-SS03-0/3
	Location:	Residential Property 6	Residential Property 7	Residential Property 7	Residential Property 7
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Duplicate	MS/MSD	Field Sample	Field Sample
	Lab Sample ID:	A8L220107012	A8L220107014	A8L220107016	A8L220107017
	EPA Sample ID:	CPHQH	CPHQN	CPHQQ	CPHQR
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/17/98	12/17/98	12/17/98	12/17/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	880	5500	2100	630
Benzo(a)pyrene (ug/kg)	1	880	6300	2400	690
Benzo(b)fluoranthene (ug/kg)	0.1	1300	8700	3400	990
Benzo(k)fluoranthene (ug/kg)	0.01	390 J1	2800	1200	320 J1
Chrysene (ug/kg)	0.001	1000	6100	2300	760
Dibenz(a,h)anthracene (ug/kg)	1	140 J1	1000 J1	480 J1	100 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	430 J1	3500	1500	340 J1
Benzo(a)pyrene (ug/kg)		880	6300	2400	690
Total BAP equivalents (ug/kg)		1286	9104	3594	990
Total BAP equivalents (mg/kg)		1.29	9.10	3.59	0.99

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP7-SS04-0/3	SSAS3-RAP7-SS05-0/3	SSAS3-RAP7-SS06-0/3	SSAS3-RAP7-SS07-0/3
	Location:	Residential Property 7	Residential Property 7	Residential Property 7	Residential Property 7
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L220107018	A8L220107019	A8L220107020	A8L230102001
	EPA Sample ID:	CPHQV	CPHR0	CPHR2	CPJNV
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/17/98	12/17/98	12/17/98	12/18/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	3200	750	2000	1400
Benzo(a)pyrene (ug/kg)	1	3200	820	2500	1600
Benzo(b)fluoranthene (ug/kg)	0.1	4400	1200	3200	2100
Benzo(k)fluoranthene (ug/kg)	0.01	1600 J1	420	1100	700
Chrysene (ug/kg)	0.001	3400	840	2300	1600
Dibenz(a,h)anthracene (ug/kg)	1	420 J1	140 J1	410 J1	280 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	1600 J1	440	1500	990
Benzo(a)pyrene (ug/kg)		3200	820	2500	1600
Total BAP equivalents (ug/kg)		4559	1204	3593	2338
Total BAP equivalents (mg/kg)		4.56	1.20	3.59	2.34

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP7-SS08-0/3	SSAS3-RAP7-SS92-0/3	SSAS3-RAP8-SS01-0/3	SSAS3-RAP8-SS02-0/3
	Location:	Residential Property 7	Residential Property 8	Residential Property 8	Residential Property 8
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Duplicate	Field Sample	Field Sample
	Lab Sample ID:	A8L230102002	A8L220107015	A8L230102003	A8L230102004
	EPA Sample ID:	CPJNW	CPHQP	CPJNX	CPJP0
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/18/98	12/17/98	12/18/98	12/18/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	3200	1800	14000	21000
Benzo(a)pyrene (ug/kg)	1	4000	2100	17000	27000
Benzo(b)fluoranthene (ug/kg)	0.1	4900	2800	22000	34000
Benzo(k)fluoranthene (ug/kg)	0.01	1800	1000	8600	12000
Chrysene (ug/kg)	0.001	3800	2000	16000	24000
Dibenz(a,h)anthracene (ug/kg)	1	610 J1	420 J1	3100 J1	5200 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	2100	1300	9800	17000
Benzo(a)pyrene (ug/kg)		4000	2100	17000	27000
Total BAP equivalents (ug/kg)		5652	3122	24782	39544
Total BAP equivalents (mg/kg)		5.65	3.12	24.78	39.54

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP8-SS03-0/3	SSAS3-RAP8-SS04-0/3	SSAS3-RAP8-SS05-0/3	SSAS3-RAP8-SS06-0/3
	Location:	Residential Property 8	Residential Property 8	Residential Property 8	Residential Property 8
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L230102005	A8L230102007	A8L230102008	A8L230102009
	EPA Sample ID:	CPJP1	CPJP3	CPJP4	CPJP5
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/18/98	12/18/98	12/18/98	12/18/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	7300	10000	6300	9200
Benzo(a)pyrene (ug/kg)	1	9400	14000	7800	13000
Benzo(b)fluoranthene (ug/kg)	0.1	12000	17000	9800	16000
Benzo(k)fluoranthene (ug/kg)	0.01	4200	6400	3500	5300
Chrysene (ug/kg)	0.001	8600	12000	6800	10000
Dibenz(a,h)anthracene (ug/kg)	1	1800 J1	2900 J1	1500 J1	2500 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	5600	8900	4900	7700
Benzo(a)pyrene (ug/kg)		9400	14000	7800	13000
Total BAP equivalents (ug/kg)		13741	20566	11442	18853
Total BAP equivalents (mg/kg)		13.74	20.57	11.44	18.85

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP8-SS07-0/3	SSAS3-RAP8-SS08-0/3	SSAS3-RAP8-SS97-0/3	SSAS3-RAP9-SS01-0/3
	Location:	Residential Property 8	Residential Property 8	Residential Property 9	Residential Property 9
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Duplicate	Field Sample
	Lab Sample ID:	A8L230102010	A8L230102011	A8L230102006	A8L230102012
	EPA Sample ID:	CPJP7	CPJP8	CPJP2	CPJP9
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/18/98	12/18/98	12/18/98	12/18/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	12000	6400	12000	640
Benzo(a)pyrene (ug/kg)	1	16000	8500	15000	750
Benzo(b)fluoranthene (ug/kg)	0.1	19000	10000	18000	970
Benzo(k)fluoranthene (ug/kg)	0.01	7800	3900	7600	370 J1
Chrysene (ug/kg)	0.001	14000	7400	13000	770
Dibenz(a,h)anthracene (ug/kg)	1	3000 J1	1500 J1	2500 J1	110 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	9300	5600	9000	400 J1
Benzo(a)pyrene (ug/kg)		16000	8500	15000	750
Total BAP equivalents (ug/kg)		23122	12246	21489	1065
Total BAP equivalents (mg/kg)		23.12	12.25	21.49	1.07

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP9-SS02-0/3	SSAS3-RAP9-SS03-0/3	SSAS3-RAP9-SS04-0/3	SSAS3-RAP9-SS05-0/3
	Location:	Residential Property 9	Residential Property 9	Residential Property 9	Residential Property 9
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L230102013	A8L230102014	A8L230102015	A8L230102016
	EPA Sample ID:	CPJPA	CPJPC	CPJPF	CPJPG
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/18/98	12/18/98	12/18/98	12/18/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	320 J1	1900	6000	3000
Benzo(a)pyrene (ug/kg)	1	420	2400	7600	3400
Benzo(b)fluoranthene (ug/kg)	0.1	550	3000	9400	4300
Benzo(k)fluoranthene (ug/kg)	0.01	200 J1	1200	3300	1700
Chrysene (ug/kg)	0.001	390 J1	2300	6800	3400
Dibenz(a,h)anthracene (ug/kg)	1	69 J1	380 J1	1200 J1	510 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	240 J1	1300	4500	1800
Benzo(a)pyrene (ug/kg)		420	2400	7600	3400
Total BAP equivalents (ug/kg)		602	3414	10830	4840
Total BAP equivalents (mg/kg)		0.60	3.41	10.83	4.84

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP9-SS06-0/3	SSAS3-RAP9-SS07-0/3	SSAS3-RAP9-SS08-0/3	SSAS3-RAP9-SS95-0/3
	Location:	Residential Property 9	Residential Property 9	Residential Property 9	Residential Property 9
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Duplicate
	Lab Sample ID:	A8L230102018	A8L230102019	A8L230102020	A8L230102017
	EPA Sample ID:	CPJPJ	CPJPK	CPJPL	CPJPH
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/18/98	12/18/98	12/18/98	12/18/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	5900	5000	6200	2900
Benzo(a)pyrene (ug/kg)	1	8200	7200	8800	3400
Benzo(b)fluoranthene (ug/kg)	0.1	10000	9300	11000	4400
Benzo(k)fluoranthene (ug/kg)	0.01	4000	3200	4100	1600
Chrysene (ug/kg)	0.001	7100	6100	7200	3200
Dibenz(a,h)anthracene (ug/kg)	1	1400 J1	1200 J1	1600 J1	510 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	4500	4200	5600	1800
Benzo(a)pyrene (ug/kg)		8200	7200	8800	3400
Total BAP equivalents (ug/kg)		11687	10288	12728	4839
Total BAP equivalents (mg/kg)		11.69	10.29	12.73	4.84

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP10-SS01-0/3	SSAS3-RAP10-SS02-0/3	SSAS3-RAP10-SS03-0/3	SSAS3-RAP10-SS04-0/3
	Location:	Residential Property 10	Residential Property 10	Residential Property 10	Residential Property 10
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L230155001	A8L230155002	A8L230155003	A8L230155004
	EPA Sample ID:	CPK65	CPK6A	CPK6E	CPK6F
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/21/98	12/21/98	12/21/98	12/21/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	5800	6200	4500	5200
Benzo(a)pyrene (ug/kg)	1	6700	7600	5300	5200
Benzo(b)fluoranthene (ug/kg)	0.1	9300	10000	6800	7200
Benzo(k)fluoranthene (ug/kg)	0.01	4200	3300	3000	2300
Chrysene (ug/kg)	0.001	6800	7000	4900	5100
Dibenz(a,h)anthracene (ug/kg)	1	490 J1	570 J1	300 J1	700 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	2800	3500	2100	2300
Benzo(a)pyrene (ug/kg)		6700	7600	5300	5200
Total BAP equivalents (ug/kg)		9029	10180	6975	7398
Total BAP equivalents (mg/kg)		9.03	10.18	6.97	7.40

J1: Estimated value - Less than reporting limit.

TABLE 3.2
PHASE III RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAM
BENZO(A)PYRENE EQUIVALENTS DATA

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	Client Sample ID:	SSAS3-RAP10-SS05-0/3	SSAS3-RAP10-SS06-0/3	SSAS3-RAP10-SS07-0/3	SSAS3-RAP10-SS08-0/3
	Location:	Residential Property 10	Residential Property 10	Residential Property 10	Residential Property 10
	Depth Range:	0 to 3 inches	0 to 3 inches	0 to 3 inches	0 to 3 inches
	Sample Type:	Field Sample	Field Sample	Field Sample	Field Sample
	Lab Sample ID:	A8L230155005	A8L230155006	A8L230155007	A8L230155008
	EPA Sample ID:	CPK6H	CPK6K	CPK6M	CPK6Q
	Sample Type:	N1	N1	N1	N1
	Sampling Date:	12/21/98	12/21/98	12/21/98	12/21/98
Compound	Relative Potency				
Benzo(a)anthracene (ug/kg)	0.1	11000	9900	6900	7600
Benzo(a)pyrene (ug/kg)	1	12000	11000	8600	9300
Benzo(b)fluoranthene (ug/kg)	0.1	16000	13000	11000	12000
Benzo(k)fluoranthene (ug/kg)	0.01	5500	5100	4400	4000
Chrysene (ug/kg)	0.001	11000	9700	7700	8200
Dibenz(a,h)anthracene (ug/kg)	1	1000 J1	1300	760 J1	560 J1
Indeno(1,2,3-cd)pyrene (ug/kg	0.1	4700	5400	4100	3600
Benzo(a)pyrene (ug/kg)		12000	11000	8600	9300
Total BAP equivalents (ug/kg)		16236	15191	11612	12223
Total BAP equivalents (mg/kg)		16.24	15.19	11.61	12.23

J1: Estimated value - Less than reporting limit.

SECTION 4
DATA EVALUATION

4.1 OVERVIEW OF THE RESIDENTIAL AREA SAMPLING AND ANALYSIS PROGRAMS

To understand the implications of the Phase III RASAP relative to the EE/CA residential remedial evaluation process, it is important that the overall residential area assessment approach be understood. At the beginning of the residential area study, ERM-North Central, Inc. (ERM) executed a residential area sampling program (hereinafter referred to as the Phase I RASAP).

The Phase I RASAP encompassed over 100 soil samples collected from 57 residential properties located at varying distances from the Site. ERM collected composited surface soil samples from the zero to three-inch depth from each sampled property. A risk assessment was performed using the information generated from the Phase I RASAP, resulting in the report entitled "*Deterministic and Probabilistic Calculations to Estimate Risk-Based Cleanup Goals for Soils at Residences near the 2800 South Sacramento Avenue Site, Chicago, Illinois,*" Alceon Corporation, October 25, 1996 (also referred to as the residential area risk assessment).

Cox Associates (Cox) assessed the ERM residential data to determine the distance from the Site at which carcinogenic PAH levels (expressed as [B(a)P] equivalents) in surface soils become statistically indistinguishable from urban background levels. This study was presented as an appendix to the residential area risk assessment.

The Cox study assessed the limits of Site-related contamination in the residential neighborhoods surrounding the Site and concluded that a reasonable boundary for the outer limit of the area of impact could be set at a radius of 1,100 feet for the northwest and southwest quadrants, and at a radius of 1,300 feet for the northeast quadrant. Cox also performed various statistical evaluations of the Phase I data, using an adaptive

partitioning technique and spatial statistical methods. Cox determined that the only residential area that should be further assessed for potential impact from former Site activities is the area located within 1,300 feet of the center of the Site, in the north-northeast octant.

Based on the Phase I data, it was determined that risk management decisions relative to potential residential impacts and remedial requirements would be difficult to assess, primarily because soil PAH concentrations are highly variable, even on the same residential property. While data generated from soil sample collection activities at two different properties may suggest that one property is more contaminated than the other, collecting a second set of soil samples from the same two properties may reverse their ranking. In addition, the concentration of B(a)P equivalents among background surface soil locations appeared to overlap with the concentration of B(a)P equivalents among foreground surface soil locations. Thus, some background locations have higher B(a)P equivalent levels than some foreground locations.

Given these issues, the task of evaluating the 48 homes in the foreground area to determine which ones, if any, might require remediation, would be extremely difficult. To facilitate the decision process, an adaptive sampling program was developed by Cox. The basic premise of adaptive sampling is two-fold: (1) high contaminant concentrations are most likely to be found in the neighborhood of other already-discovered high concentrations, and (2) initial random sampling followed by exploration in the vicinity of the highest concentrations yet discovered, provides an effective way to focus evaluation efforts.

The Phase II RASAP Parsons ES performed in February 1998, was executed in accordance with protocols outlined in the "*Residential Area Conceptual Work Plan*," Parsons ES, May 1997, and was based on the adaptive sampling program developed by Cox. The data generated from the Phase II RASAP identified several apparent concentration "spikes" (values several times greater than the mean) in the new, non-

composited soil sample data. The magnitude and locations of these spikes suggested that:

1. The variability of B(a)P equivalents in residential area soils might be even greater than had initially been estimated based on the Phase I RASAP data.
2. The concentration spikes might not be related to the Site.

Given these findings, the Respondents proposed to the USEPA Region V that additional non-composited surface soil sampling at several randomly-selected locations (both "foreground" and "background") be performed to better understand and characterize the spatial distribution and variability of soil PAH concentrations in non-composited samples. This additional sampling effort would also provide a further check on how well the adaptive sampling process had succeeded in identifying the most contaminated residential properties.

With the approval of the USEPA Region V, in December 1998, Parsons ES performed the Phase III RASAP to address these additional issues. The following sections present discussions of the interpretation and implications of the RASAP data generated as part of this EE/CA.

4.2 COMPARISON OF RASAP BACKGROUND DATA

"Background" locations are defined, for purposes of this project, as locations at which there is no evidence that soil concentrations have been affected by the Site. To date, two sets of data relevant to the determination of the frequency distribution of B(a)P soil concentrations among "background" locations have been analyzed for this project. The two data sets are:

1. The 65 composited soil sample data obtained by ERM during the Phase I RASAP. These data are shown in Tables 4.1 and 4.2. Only locations outside 1,300 feet are shown, as these locations were previously determined to probably include most of the background and none of the foreground locations.

2. The new, non-composited soil sample data collected during the Phase III RASAP. Table 4.3 reproduces the non-composited sample data for the 10 newly sampled properties. As stated previously, these data were collected from six background and four foreground residential properties.

The mean of the 65 composited soil sample data is 3.32 parts per million (ppm) (within a 95% confidence interval (CI) of 2.5 to 4.1 ppm). The frequency distribution of PAH soil sample concentrations from the 65 composited soil sample data has an upper 5% tail (designated by the top three data points) ranging from 8.125 to 26 ppm.

By contrast, the non-composited soil sample data show greater variability within residential properties. The mean of the 53 non-composited sample data collected from the six background properties is 2.3 ppm (within a 95% CI of 1.72 to 2.9 ppm). The frequency distribution of PAH values for this data has an upper 5% tail ranging from 5.5 to 13 ppm. However, variability at discrete locations within individual properties is significant (Refer to Figures 2.2 to 2.11). Thus, it is likely that if non-composited soil sample data were collected for more than six background properties, the frequency distribution of the observed values would be much wider.

While a mean value of about 3 ppm, plus or minus 1 ppm, is realistic for the background soil concentration, when the non-composited soil sample data from the six background properties are assessed along with ERM's 65 composited soil sample background data, "spike" values in excess of 10 ppm are observed. Values greater than 20 or even 30 ppm could occur, but are expected to be relatively rare.

4.3 MAIN FINDINGS FROM THE ANALYSIS OF THE PHASE III RASAP NON-COMPOSITED SOIL SAMPLE DATA

The analysis of the Phase III RASAP non-composited soil sample data presented in Table 4.3 reveals several data trends. These trends are summarized below:

- ***High Variability:*** Variability among non-composited soil samples taken from the same residential property was confirmed to be very high, with sample values from the same property spanning a range of less than a factor of 2 (for

property B4) to over a factor of 5 for the six background properties (properties B2, B3, and B5). Refer to Table 4.3.

Among the four foreground properties, the variability of the sampled values within individual properties was even higher, with a high-to-low ratio of about 9 for property F7 and over 20 for property F9. An implication of this high variability is that ranking properties by the means, medians, upper confidence limits, lower confidence limits, greatest observed sample values, and smallest observed sample values of their soil concentration distributions, all give different rankings.

- *Range of Values:* None of the randomly sampled foreground properties had mean values (or medians, or 95% upper confidence limits) above 28 ppm. All four of the foreground properties have all their key statistics above 2.8 ppm. Thus, all the key values in the foreground samples fall within roughly one order of magnitude.

  For comparison, among the four properties previously identified by the adaptive spatial sampling protocol (Phase II RASAP), which deliberately sought the probable locations of the most-contaminated properties, one property had a mean value of 37 ppm and another had a mean value of 85 ppm. Thus, adaptive sampling was effective in finding especially contaminated locations, consistent with the "worst-first" approach.

- *Overlap of Foreground and Background Distributions:* Background and foreground PAH concentration distributions overlap, with some sampled values in background locations exceeding some sampled values in foreground locations. For example, all four foreground properties had soil concentration distributions that overlapped with the distribution of background location B2. Two of the four foreground properties (properties F7 and F9) had soil concentration distributions that overlapped with the distributions of all six background properties.

- *Spikes:* One of the six background properties (B2) contained a concentration spike that gave it a higher mean than one of the foreground locations. Thus, the possibility of such spikes among background locations raises troubling issues in terms of considering foreground locations for remediation.

Table 4.3 summarizes the Phase II and III RASAP B(a)P equivalent sample data based on various statistics, and Figure 4.1 displays this statistical information on a property-by-property basis.

4.4 SUMMARY

As indicated by the previous discussions, the new data (Phase III RASAP data) tend to support the calculations and approaches taken in this project to date. The findings confirm the presence of high variability of PAH concentrations in surface soils; the possibility of spikes in the data (even among background locations); and a relatively narrow range (about 1 order of magnitude) for mean and median concentrations.

The practical implication of these data findings is significant. A relatively small shift in the target concentration (or risk levels) used to determine further investigative actions or to set future remediation priorities - by about one order of magnitude - may make the difference between viewing with concern almost all residential properties within the foreground locations versus only a small number of properties identified by the Phase II RASAP adaptive sampling strategy.

TABLE 4.1
SUMMARY OF ERM DATA FOR BACKGROUND LOCATIONS
SORTED BY DISTANCE

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	MAP ID	EASTDIST	NORTHDIS	DISTANCE	BAPEQ (ppm)
1	ID53	-1207.33	598.913	1347.715	.651
2	ID68	-712.327	1208.913	1403.168	5.918
3	ID69	-592.327	1288.913	1418.502	2.666
4	ID70	-592.327	1288.913	1418.502	3.532
5	ID63	-712.327	1248.913	1437.774	2.240
6	ID65	-712.327	1248.913	1437.774	3.194
7	ID64	-712.327	1248.913	1437.774	3.410
8	ID66	-712.327	1248.913	1437.774	1.623
9	ID67	-712.327	1248.913	1437.774	3.575
10	ID47	-1427.33	-341.087	1467.516	3.831
11	ID56	-1452.33	288.913	1480.785	2.391
12	ID55	-1452.33	288.913	1480.785	4.537
13	ID54	-1452.33	288.913	1480.785	3.751
14	ID57	-1452.33	288.913	1480.785	1.718
15	ID234	-1542.33	408.913	1595.613	.798
16	ID235	-1647.33	408.913	1697.320	2.124
17	ID27	28.673	1700.913	1701.155	2.155
18	ID89	-617.327	1616.913	1730.751	3.011
19	ID90	-617.327	1616.913	1730.751	5.146
20	ID86	-1262.33	1200.913	1742.315	1.983
21	ID88	-1262.33	1200.913	1742.315	1.905
22	ID87	-1262.33	1200.913	1742.315	2.027
23	ID91	-122.327	1802.913	1807.058	5.034
24	ID29	209.673	1812.913	1824.998	4.906
25	ID28	209.673	1812.913	1824.998	5.514
26	ID84	-297.327	1829.913	1853.911	2.222
27	ID85	-297.327	1829.913	1853.911	1.144
28	ID83	-297.327	1829.913	1853.911	1.619
29	ID79	-967.327	1589.913	1861.060	2.415
30	ID18	198.673	1870.913	1881.432	5.006
31	ID19	198.673	1870.913	1881.432	4.290
32	ID236	-1842.33	-476.087	1902.847	1.171
33	ID31	705.673	1770.913	1906.333	8.125

TABLE 4.1
SUMMARY OF ERM DATA FOR BACKGROUND LOCATIONS
SORTED BY DISTANCE

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	MAP ID	EASTDIST	NORTHDIS	DISTANCE	BAPEQ (ppm)
34	ID30	705.673	1770.913	1906.333	26.019
35	ID20	439.673	1906.913	1956.944	2.415
36	ID21	439.673	1906.913	1956.944	2.849
37	ID22	439.673	1906.913	1956.944	3.623
38	ID239	-2012.33	603.913	2100.993	1.898
39	ID82	-527.327	2061.913	2128.276	2.633
40	ID81	-527.327	2061.913	2128.276	2.425
41	ID80	-527.327	2061.913	2128.276	2.114
42	ID78	-1386.33	1627.913	2138.224	1.531
43	ID237	-2177.33	-356.087	2206.253	1.798
44	ID32	1303.673	1825.913	2243.551	3.956
45	ID23	747.673	2133.913	2261.106	2.672
46	ID238	-2297.33	-216.087	2307.467	9.010
47	ID73	-1401.33	1865.913	2333.527	3.388
48	ID25	1303.673	1943.913	2340.590	4.545
49	ID26	1303.673	1943.913	2340.590	4.873
50	ID15	676.673	2246.913	2346.594	2.901
51	ID17	676.673	2246.913	2346.594	3.223
52	ID16	676.673	2246.913	2346.594	4.741
53	ID14	172.673	2363.913	2370.211	2.944
54	ID72	-1712.33	1669.913	2391.793	1.740
55	ID71	-1712.33	1669.913	2391.793	2.286
56	ID77	-331.327	2400.913	2423.667	1.966
57	ID24	1110.673	2157.913	2426.970	2.168
58	ID74	-768.327	2328.913	2452.379	1.644
59	ID75	-768.327	2328.913	2452.379	3.840
60	ID76	-768.327	2328.913	2452.379	1.485
61	ID240	-3007.33	528.913	3053.484	1.704
62	ID244	-2917.33	-1241.09	3170.346	1.889
63	ID243	-2917.33	-1241.09	3170.346	1.849
64	ID200	514.673	6564.913	6585.057	.664
65	ID229	514.673	6564.913	6585.057	1.921

TABLE 4.2
SUMMARY OF ERM DATA FOR BACKGROUND LOCATIONS SORTED BY SOIL CONCENTRATIONS

2800 SOUTH SACRAMENTO AVENUE SITE CHICAGO, ILLINOIS 60623

	MAP ID	EAST	NORTH	DISTANCE	BAPEQ (ppm)
1	ID53	-1207.33	598.913	1347.715	.651
2	ID200	514.673	6564.913	6585.057	.664
3	ID234	-1542.33	408.913	1595.613	.798
4	ID85	-297.327	1829.913	1853.911	1.144
5	ID236	-1842.33	-476.087	1902.847	1.171
6	ID76	-768.327	2328.913	2452.379	1.485
7	ID78	-1386.33	1627.913	2138.224	1.531
8	ID83	-297.327	1829.913	1853.911	1.619
9	ID66	-712.327	1248.913	1437.774	1.623
10	ID74	-768.327	2328.913	2452.379	1.644
11	ID240	-3007.33	528.913	3053.484	1.704
12	ID57	-1452.33	288.913	1480.785	1.718
13	ID72	-1712.33	1669.913	2391.793	1.740
14	ID237	-2177.33	-356.087	2206.253	1.798
15	ID243	-2917.33	-1241.09	3170.346	1.849
16	ID244	-2917.33	-1241.09	3170.346	1.889
17	ID239	-2012.33	603.913	2100.993	1.898
18	ID88	-1262.33	1200.913	1742.315	1.905
19	ID229	514.673	6564.913	6585.057	1.921
20	ID77	-331.327	2400.913	2423.667	1.966
21	ID86	-1262.33	1200.913	1742.315	1.983
22	ID87	-1262.33	1200.913	1742.315	2.027
23	ID80	-527.327	2061.913	2128.276	2.114
24	ID235	-1647.33	408.913	1697.320	2.124
25	ID27	28.673	1700.913	1701.155	2.155
26	ID24	1110.673	2157.913	2426.970	2.168
27	ID84	-297.327	1829.913	1853.911	2.222
28	ID63	-712.327	1248.913	1437.774	2.240
29	ID71	-1712.33	1669.913	2391.793	2.286
30	ID56	-1452.33	288.913	1480.785	2.391
31	ID20	439.673	1906.913	1956.944	2.415
32	ID79	-967.327	1589.913	1861.060	2.415
33	ID81	-527.327	2061.913	2128.276	2.425

TABLE 4.2
SUMMARY OF ERM DATA FOR BACKGROUND LOCATIONS
SORTED BY SOIL CONCENTRATIONS

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

	MAP ID	EASTDIST	NORTHDIS	DISTANCE	BAPEQ (ppm)
34	ID82	-527.327	2061.913	2128.276	2.633
35	ID69	-592.327	1288.913	1418.502	2.666
36	ID23	747.673	2133.913	2261.106	2.672
37	ID21	439.673	1906.913	1956.944	2.849
38	ID15	676.673	2246.913	2346.594	2.901
39	ID14	172.673	2363.913	2370.211	2.944
40	ID89	-617.327	1616.913	1730.751	3.011
41	ID65	-712.327	1248.913	1437.774	3.194
42	ID17	676.673	2246.913	2346.594	3.223
43	ID73	-1401.33	1865.913	2333.527	3.388
44	ID64	-712.327	1248.913	1437.774	3.410
45	ID70	-592.327	1288.913	1418.502	3.532
46	ID67	-712.327	1248.913	1437.774	3.575
47	ID22	439.673	1906.913	1956.944	3.623
48	ID54	-1452.33	288.913	1480.785	3.751
49	ID47	-1427.33	-341.087	1467.516	3.831
50	ID75	-768.327	2328.913	2452.379	3.840
51	ID32	1303.673	1825.913	2243.551	3.956
52	ID19	198.673	1870.913	1881.432	4.290
53	ID55	-1452.33	288.913	1480.785	4.537
54	ID25	1303.673	1943.913	2340.590	4.545
55	ID16	676.673	2246.913	2346.594	4.741
56	ID26	1303.673	1943.913	2340.590	4.873
57	ID29	209.673	1812.913	1824.998	4.906
58	ID18	198.673	1870.913	1881.432	5.006
59	ID91	-122.327	1802.913	1807.058	5.034
60	ID90	-617.327	1616.913	1730.751	5.146
61	ID28	209.673	1812.913	1824.998	5.514
62	ID68	-712.327	1208.913	1403.168	5.918
63	ID31	705.673	1770.913	1906.333	8.125
64	ID238	-2297.33	-216.087	2307.467	9.010
65	ID30	705.673	1770.913	1906.333	26.019

TABLE 4.3
TOTAL BAP EQUIVALENTS RESULTS FROM THE PHASE III RASAP NON-COMPOSITE SOIL SAMPLING EVENT

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

B1	B2	B3	B4	B5	B6	F7	F8	F9	F10
RAP-1	RAP-2	RAP-3	RAP-4	RAP-5	RAP-6	RAP-7	RAP-8	RAP-9	RAP-10
5.46	13.05	5.44	2.74	2.74	2.19 *	9.10	39.54	12.73	16.24
3.47	* 9.72	3.30	2.73	2.63	1.29 **	5.65	24.78	11.69	15.19
3.32	2.68	2.72	2.59	0.78	1.10	4.56	23.12	* 10.83	12.23
3.18	2.31	2.57	2.07	0.57	1.09	3.59	21.49	** 10.29	11.61
2.90	** 2.15	1.98	2.04	0.42	0.88	3.59	* 20.57	4.84	* 10.18
2.49	1.92	** 1.93	1.93	0.39	0.87	3.12	** 18.85	4.84	** 9.03
2.32	1.91	1.42	1.89	** 0.36	0.86	2.34	13.74	3.41	7.40
2.21	1.86	* 0.90	** 1.45	0.32	0.81	1.20	12.25	1.07	6.97
2.07	1.80	0.85	* 1.41	*					

Notes

All units are mg/kg
B1 to B6 = "background" locations
F7 to F10 = "foreground" locations

* This investigative sample result has an associated duplicate sample result that is identified by the double asterisk (**).

** This is the duplicate sample result for the investigative sample identified with the asterisk (*).

TABLE 4.4

ASSESSMENT OF BAP EQUIVALENTS DATA FROM THE PHASE II AND III RASAP EVENTS
BASED ON VARIOUS STATISTICS

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

Residential Properties	Mean (ppm)	-95% CI (ppm)	+95% CI (ppm)	Median (ppm)	Minimum (ppm)	Maximum (ppm)
B1	3.05	2.25	3.84	2.90	2.07	5.46
B2	4.16	0.93	7.38	2.15	1.80	13.05
B3	2.35	1.25	3.44	1.98	0.85	5.44
B4	2.09	1.71	2.48	2.04	1.41	2.74
B5	1.03	0.16	1.89	0.50	0.32	2.74
B6	1.07	0.71	1.43	0.88	0.57	2.19
F7	3.79	1.88	5.70	3.59	0.99	9.10
F8	20.64	14.06	27.23	20.57	11.44	39.54
F9	6.70	3.08	10.32	4.84	0.60	12.73
F10	11.11	8.27	13.94	10.90	6.97	16.24
AF11	84.96	(-27.81)	197.72	34.70	21.10	473.80
AF12	21.39	14.15	28.62	19.60	9.60	39.80
AF13	36.99	32.65	41.33	34.90	30.00	47.20
AF14	9.32	5.43	13.21	9.40	2.90	17.50

TABLE 4.4 (CONTINUED)

ASSESSMENT OF BAP EQUIVALENTS DATA FROM THE PHASE II AND III RASAP EVENTS BASED ON VARIOUS STATISTICS

2800 SOUTH SACRAMENTO AVENUE SITE
CHICAGO, ILLINOIS 60623

Notes

"Mean" refers to the mean B(a)P equivalent concentration for each property.

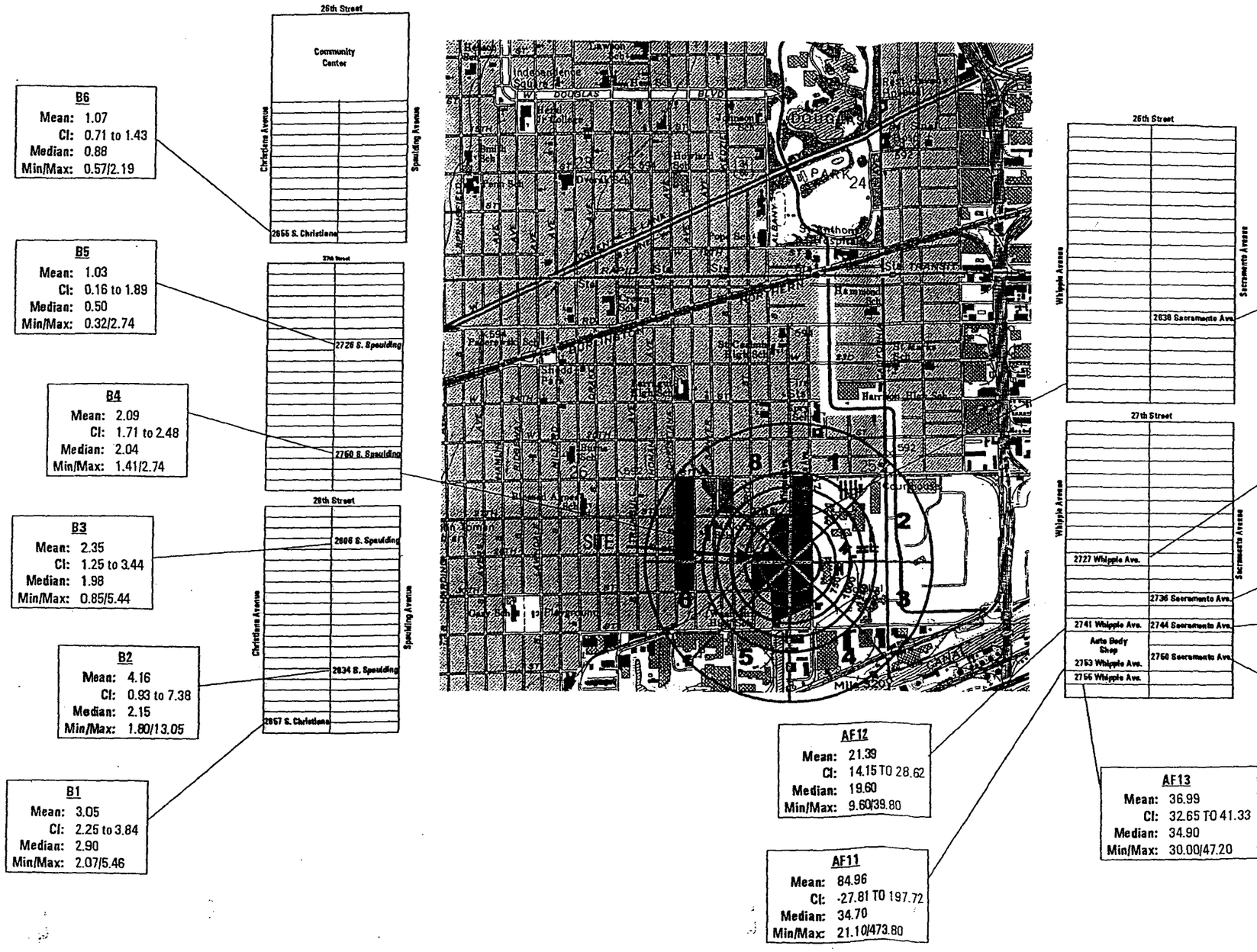
"CI" refers to the confidence interval.

"Median" refers to the median B(a)P equivalent concentration for each property.

"Minimum" and "Maximum" refer to minimum and maximum B(a)P equivalent concentration at each property.

Phase II RASAP properties: AF11 through AF14 (Foreground Area).

Phase III RASAP properties: B1 through B6 (Background Area) and F7 through F10 (Foreground Area).



LEGEND

1 Sector Number

1500 Distance from Center (feet)

"Mean" refers to the mean B(a)P equivalent concentration for each property
"Median" refers to the median B(a)P equivalent concentration for each property
"CI" refers to the upper/lower confidence interval
"Min/Max" refers to the minimum and maximum B(a)P equivalent concentration for each property
"3.05" refers to B(a)P equivalents in ppm
Phase II RASAP Properties: AF11 through AF14 (foreground area)
Phase III RASAP Properties: B1 through B6 (background area)
F7 through F10 (foreground area)

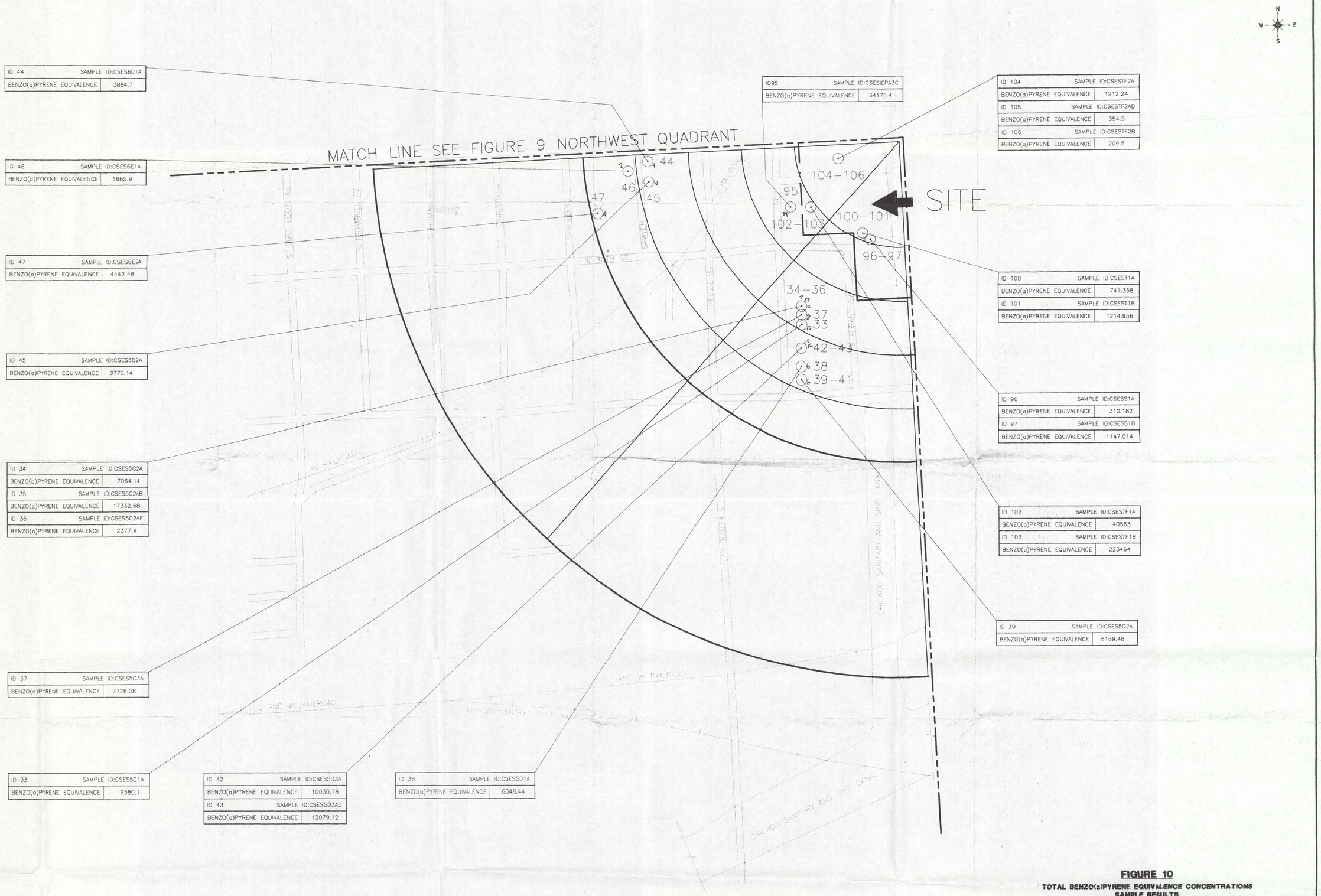
Note: Land parcels are not to scale.

Figure 4.1
B(a)P Equivalents Data from the Phase II and III RASAP Based on Various Statistics

AlliedSignal, Inc./The Celotex Corporation

PARSONS ENGINEERING SCIENCE, INC.

730577C1.CDR / 5-20-99 [NP]



ID 44	SAMPLE ID:CSES6D1A
BENZO(a)PYRENE EQUIVALENCE	3884.7

ID 46	SAMPLE ID:CSES6E1A
BENZO(a)PYRENE EQUIVALENCE	1665.9

ID 47	SAMPLE ID:CSES6E2A
BENZO(a)PYRENE EQUIVALENCE	4442.48

ID 45	SAMPLE ID:CSES6D2A
BENZO(a)PYRENE EQUIVALENCE	3770.14

ID 34	SAMPLE ID:CSES5C2A
BENZO(a)PYRENE EQUIVALENCE	7064.14
ID 35	SAMPLE ID:CSES5C2AB
BENZO(a)PYRENE EQUIVALENCE	17332.68
ID 36	SAMPLE ID:CSES5C2AF
BENZO(a)PYRENE EQUIVALENCE	2377.4

ID 37	SAMPLE ID:CSES5C3A
BENZO(a)PYRENE EQUIVALENCE	7726.08

ID 33	SAMPLE ID:CSES5C1A
BENZO(a)PYRENE EQUIVALENCE	9580.1

ID 42	SAMPLE ID:CSES5D3A
BENZO(a)PYRENE EQUIVALENCE	10030.78
ID 43	SAMPLE ID:CSES5D3AD
BENZO(a)PYRENE EQUIVALENCE	12079.12

ID 38	SAMPLE ID:CSES5D1A
BENZO(a)PYRENE EQUIVALENCE	6048.44

ID95	SAMPLE ID:CSESIEPA3C
BENZO(a)PYRENE EQUIVALENCE	34175.4

ID 104	SAMPLE ID:CSESTF2A
BENZO(a)PYRENE EQUIVALENCE	1212.24
ID 105	SAMPLE ID:CSESTF2AD
BENZO(a)PYRENE EQUIVALENCE	354.5
ID 106	SAMPLE ID:CSESTF2B
BENZO(a)PYRENE EQUIVALENCE	209.5

ID 100	SAMPLE ID:CSEST1A
BENZO(a)PYRENE EQUIVALENCE	741.358
ID 101	SAMPLE ID:CSEST1B
BENZO(a)PYRENE EQUIVALENCE	1214.956

ID 96	SAMPLE ID:CSESS1A
BENZO(a)PYRENE EQUIVALENCE	310.182
ID 97	SAMPLE ID:CSESS1B
BENZO(a)PYRENE EQUIVALENCE	1147.014

ID 102	SAMPLE ID:CSESTF1A
BENZO(a)PYRENE EQUIVALENCE	40563
ID 103	SAMPLE ID:CSESTF1B
BENZO(a)PYRENE EQUIVALENCE	223464

ID 39	SAMPLE ID:CSES5D2A
BENZO(a)PYRENE EQUIVALENCE	6169.48

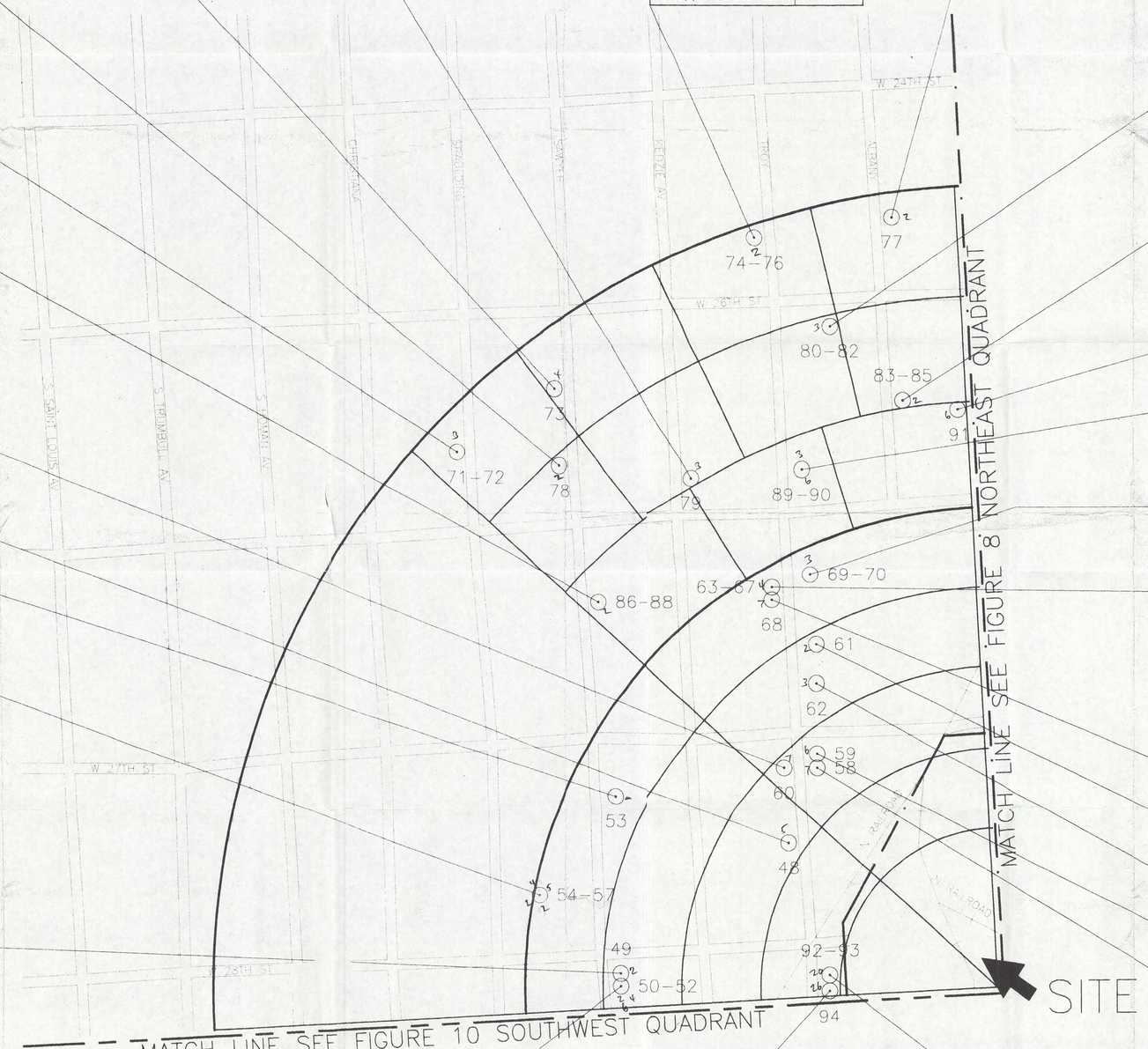
NOTE: ALL UNITS ARE IN ug/kg.

FIGURE 10

TOTAL BENZO(a)PYRENE EQUIVALENCE CONCENTRATIONS
SAMPLE RESULTS
SOUTHWEST QUADRANT
CELOTEX SITE
CHICAGO, ILLINOIS

ERM

10/26/95 TMP FILE A:\CPP215\ERM\ALM95\ITA\ACA\SEPA\FIGURE10.DWG OCT 06, 1995 10:21 AM



ID78	SAMPLE ID:CSES8FEA
BENZO(a)PYRENE EQUIVALENCE	1757.16

ID73	SAMPLE ID:CSES8FBA
BENZO(a)PYRENE EQUIVALENCE	3891.02

ID79	SAMPLE ID:CSES8FFA
BENZO(a)PYRENE EQUIVALENCE	2764.26

ID74	SAMPLE ID:CSES8FCA
BENZO(a)PYRENE EQUIVALENCE	1910.68
ID75	SAMPLE ID:CSES8FCAB
BENZO(a)PYRENE EQUIVALENCE	1961.44
ID76	SAMPLE ID:CSES8FCAF
BENZO(a)PYRENE EQUIVALENCE	1705.73

ID77	SAMPLE ID:CSES8FDA
BENZO(a)PYRENE EQUIVALENCE	2250

ID71	SAMPLE ID:CSES8FAA
BENZO(a)PYRENE EQUIVALENCE	2617.04

ID80	SAMPLE ID:CSES8FGA
BENZO(a)PYRENE EQUIVALENCE	2441.4
ID81	SAMPLE ID:CSES8FGAB
BENZO(a)PYRENE EQUIVALENCE	2787.38
ID82	SAMPLE ID:CSES8FGAF
BENZO(a)PYRENE EQUIVALENCE	3019.68

ID86	SAMPLE ID:CSES8FIA
BENZO(a)PYRENE EQUIVALENCE	2289
ID87	SAMPLE ID:CSES8FIAB
BENZO(a)PYRENE EQUIVALENCE	2314.16
ID88	SAMPLE ID:CSES8FIAF
BENZO(a)PYRENE EQUIVALENCE	2173.08

ID83	SAMPLE ID:CSES8FHA
BENZO(a)PYRENE EQUIVALENCE	1861.4
ID84	SAMPLE ID:CSES8FHAB
BENZO(a)PYRENE EQUIVALENCE	2557.44
ID85	SAMPLE ID:CSES8FHAF
BENZO(a)PYRENE EQUIVALENCE	1318.546

ID91	SAMPLE ID:CSES8FKA
BENZO(a)PYRENE EQUIVALENCE	5805.22

ID60	SAMPLE ID:CSES8C3A
BENZO(a)PYRENE EQUIVALENCE	4698.5

ID89	SAMPLE ID:CSES8FJA
BENZO(a)PYRENE EQUIVALENCE	3476.64
ID90	SAMPLE ID:CSES8FJAD
BENZO(a)PYRENE EQUIVALENCE	5897.16

ID48	SAMPLE ID:CSES7C1A
BENZO(a)PYRENE EQUIVALENCE	4904

ID69	SAMPLE ID:CSES8E3A
BENZO(a)PYRENE EQUIVALENCE	3052.32

ID53	SAMPLE ID:CSES7E1A
BENZO(a)PYRENE EQUIVALENCE	494.328

ID63	SAMPLE ID:CSES8E1A
BENZO(a)PYRENE EQUIVALENCE	2558.28
ID64	SAMPLE ID:CSES8E1AB
BENZO(a)PYRENE EQUIVALENCE	3937.04
ID65	SAMPLE ID:CSES8E1AF
BENZO(a)PYRENE EQUIVALENCE	3607.36
ID66	SAMPLE ID:CSES8E1AFD
BENZO(a)PYRENE EQUIVALENCE	1851.1

ID54	SAMPLE ID:CSES7E2A
BENZO(a)PYRENE EQUIVALENCE	4320.2
ID55	SAMPLE ID:CSES7E2AB
BENZO(a)PYRENE EQUIVALENCE	5209.24
ID56	SAMPLE ID:CSES7E2AD
BENZO(a)PYRENE EQUIVALENCE	2726.44
ID57	SAMPLE ID:CSES7E2AF
BENZO(a)PYRENE EQUIVALENCE	1169.3

ID68	SAMPLE ID:CSES8E2A
BENZO(a)PYRENE EQUIVALENCE	6783.86

ID61	SAMPLE ID:CSES8D1A
BENZO(a)PYRENE EQUIVALENCE	1988.04

ID62	SAMPLE ID:CSES8D2A
BENZO(a)PYRENE EQUIVALENCE	3020.22

ID59	SAMPLE ID:CSES8C2A
BENZO(a)PYRENE EQUIVALENCE	6442.82

ID49	SAMPLE ID:CSES7D1A
BENZO(a)PYRENE EQUIVALENCE	1542.1

ID58	SAMPLE ID:CSES8C1A
BENZO(a)PYRENE EQUIVALENCE	7320.94

ID50	SAMPLE ID:CSES7D2A
BENZO(a)PYRENE EQUIVALENCE	3489.36
ID51	SAMPLE ID:CSES7D2AB
BENZO(a)PYRENE EQUIVALENCE	6064.96
ID52	SAMPLE ID:CSES7D2AF
BENZO(a)PYRENE EQUIVALENCE	2244.2

ID94	SAMPLE ID:CSESIEPA2C
BENZO(a)PYRENE EQUIVALENCE	26,538.8

ID92	SAMPLE ID:CSESIEPA1C
BENZO(a)PYRENE EQUIVALENCE	17,067.4
ID93	SAMPLE ID:CSESIEPA1CD
BENZO(a)PYRENE EQUIVALENCE	20,996.4

APPROX. SCALE (ft.)
0 200

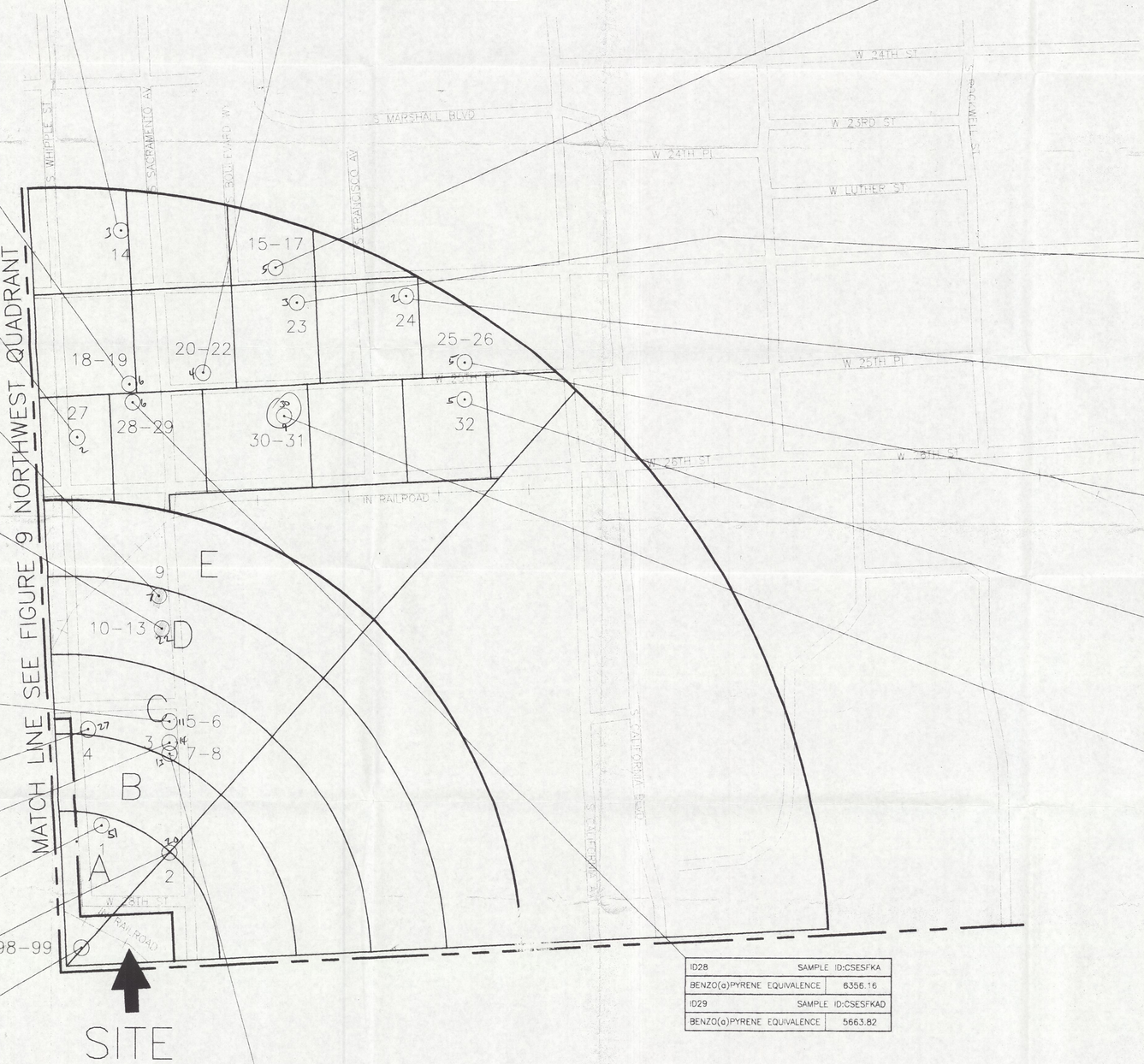
NOTE:
ALL UNITS ARE IN ug/kg.

FIGURE 9

TOTAL BENZO(a)PYRENE EQUIVALENCE CONCENTRATIONS
SAMPLE RESULTS
NORTHWEST QUADRANT
CELOTEX SITE
CHICAGO, ILLINOIS

ERM

10/6/95 DMP K:\CHRIS\ERM\ALL\95010\ACAD\SSPA\FIGURE9.DWG OCT 06, 1995 4:37 PM



ID14	SAMPLE ID:CSES1FAA
BENZO(a)PYRENE EQUIVALENCE	3421.78

ID18	SAMPLE ID:CSES1FEA
BENZO(a)PYRENE EQUIVALENCE	5692.5

ID27	SAMPLE ID:CSESJFJA
BENZO(a)PYRENE EQUIVALENCE	2478

ID9	SAMPLE ID:CSES1D1A
BENZO(a)PYRENE EQUIVALENCE	7242

ID10	SAMPLE ID:CSES1D2A
BENZO(a)PYRENE EQUIVALENCE	18882.36
ID11	SAMPLE ID:CSES1D2AB
BENZO(a)PYRENE EQUIVALENCE	22486
ID12	SAMPLE ID:CSES1D2ABD
BENZO(a)PYRENE EQUIVALENCE	22304.4
ID13	SAMPLE ID:CSES1D2AF
BENZO(a)PYRENE EQUIVALENCE	14472.02

ID5	SAMPLE ID:CSES1C3A
BENZO(a)PYRENE EQUIVALENCE	11128.46

ID4	SAMPLE ID:SCES1C2A
BENZO(a)PYRENE EQUIVALENCE	27301.2

ID3	SAMPLE ID:CSES1C1A
BENZO(a)PYRENE EQUIVALENCE	13989.78

ID1	SAMPLE ID:CSESIEPA4C
BENZO(a)PYRENE EQUIVALENCE	51,899

ID2	SAMPLE ID:CSESIEPA5C
BENZO(a)PYRENE EQUIVALENCE	20,435.6

ID20	SAMPLE ID:CSES1FFA
BENZO(a)PYRENE EQUIVALENCE	2780.88
ID21	SAMPLE ID:CSES1FFAB
BENZO(a)PYRENE EQUIVALENCE	3259.42
ID22	SAMPLE ID:CSES1FFAFM
BENZO(a)PYRENE EQUIVALENCE	4181.06

ID15	SAMPLE ID:CSES1FCA
BENZO(a)PYRENE EQUIVALENCE	3319.88
ID16	SAMPLE ID:CSES1FCAB
BENZO(a)PYRENE EQUIVALENCE	5442.92
ID17	SAMPLE ID:CSES1FCAF
BENZO(a)PYRENE EQUIVALENCE	3700.34

ID23	SAMPLE ID:CSES1FGA
BENZO(a)PYRENE EQUIVALENCE	3052.06

ID24	SAMPLE ID:CSES1FHA
BENZO(a)PYRENE EQUIVALENCE	2481.78

ID25	SAMPLE ID:CSES1FIA
BENZO(a)PYRENE EQUIVALENCE	5229.8

ID32	SAMPLE ID:CSES1FNA
BENZO(a)PYRENE EQUIVALENCE	4536.28

ID30	SAMPLE ID:CSES1FLA
BENZO(a)PYRENE EQUIVALENCE	30156
ID31	SAMPLE ID:CSES1FLAD
BENZO(a)PYRENE EQUIVALENCE	9395.66

ID28	SAMPLE ID:CSESFKA
BENZO(a)PYRENE EQUIVALENCE	6356.16
ID29	SAMPLE ID:CSESFKAD
BENZO(a)PYRENE EQUIVALENCE	5663.82

ID98	SAMPLE ID:CSESS2A
BENZO(a)PYRENE EQUIVALENCE	0.22
ID99	SAMPLE ID:SCESS2B
BENZO(a)PYRENE EQUIVALENCE	1550.18

ID7	SAMPLE ID:CSES1C4A
BENZO(a)PYRENE EQUIVALENCE	12522.18
ID8	SAMPLE ID:CSES1C4AD
BENZO(a)PYRENE EQUIVALENCE	13512.62

N
W E
S

APPROX. SCALE (ft.)
0 200

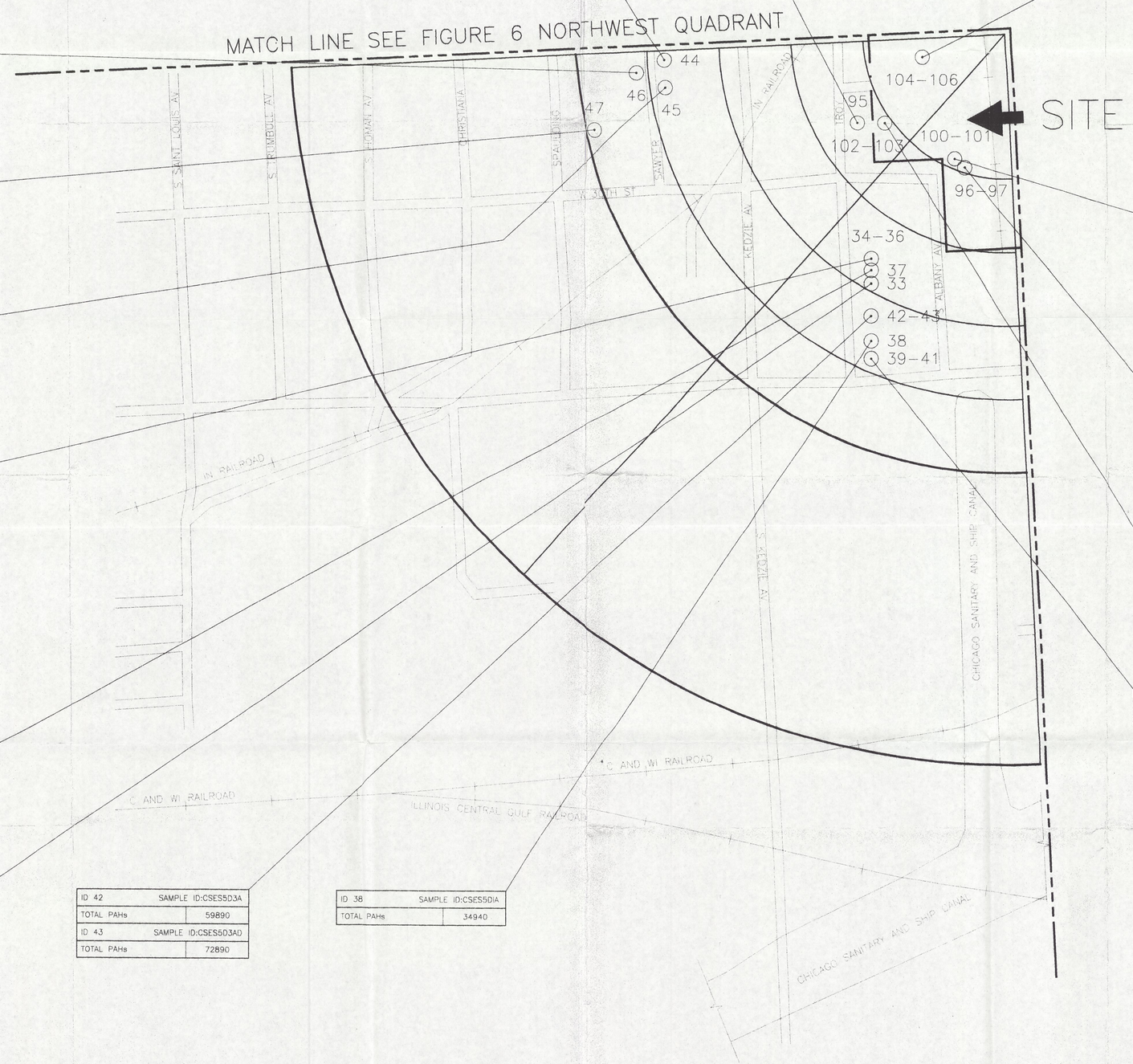
NOTE:
ALL UNITS ARE IN ug/kg.

FIGURE 8

TOTAL BENZO(a)PYRENE EQUIVALENCE CONCENTRATIONS
SAMPLE RESULTS
NORTHEAST QUADRANT
CELOTEX SITE
CHICAGO, ILLINOIS

ERM

DWG K:\CPF\LESLERMA\VB9\LD_ADM\SSP\FIGURES.DWG OCT. 06, 1995 10:17 AM
DWN DMP 10/6/95



ID 44	SAMPLE ID:CSES6D1A
TOTAL PAHs	24250

ID 46	SAMPLE ID:CSES6E1A
TOTAL PAHs	11550

ID 47	SAMPLE ID:CSES6E2A
TOTAL PAHs	30630

ID 45	SAMPLE ID:CSES6D2A
TOTAL PAHs	21830

ID 34	SAMPLE ID:CSES5C2A
TOTAL PAHs	49860
ID 35	SAMPLE ID:CSES5C2AB
TOTAL PAHs	88060
ID 36	SAMPLE ID:CSES5C2AF
TOTAL PAHs	14230

ID 37	SAMPLE ID:CSES5C3A
TOTAL PAHs	51870

ID 33	SAMPLE ID:CSES5C1A
TOTAL PAHs	53210

ID 42	SAMPLE ID:CSES5D3A
TOTAL PAHs	59890
ID 43	SAMPLE ID:CSES5D3AD
TOTAL PAHs	72890

ID 38	SAMPLE ID:CSES5D1A
TOTAL PAHs	34940

ID 95	SAMPLE ID:CSESIEPA3C
TOTAL PAHs	175,870

ID 104	SAMPLE ID:CSESTF2A
TOTAL PAHs	12275
ID 105	SAMPLE ID:CSESTF2AD
TOTAL PAHs	2819
ID 106	SAMPLE ID:CSESTF2B
TOTAL PAHs	1818

ID 100	SAMPLE ID:CSEST1A
TOTAL PAHs	6023
ID 101	SAMPLE ID:CSEST1B
TOTAL PAHs	8962

ID 96	SAMPLE ID:CSESS1A
TOTAL PAHs	1761
ID 97	SAMPLE ID:CSESS1B
TOTAL PAHs	6569

ID 102	SAMPLE ID:CSESTF1A
TOTAL PAHs	382000
ID 103	SAMPLE ID:CSESTF1B
TOTAL PAHs	2237000

ID 39	SAMPLE ID:CSES5D2A
TOTAL PAHs	38823

APPROX. SCALE (ft.)
0 200

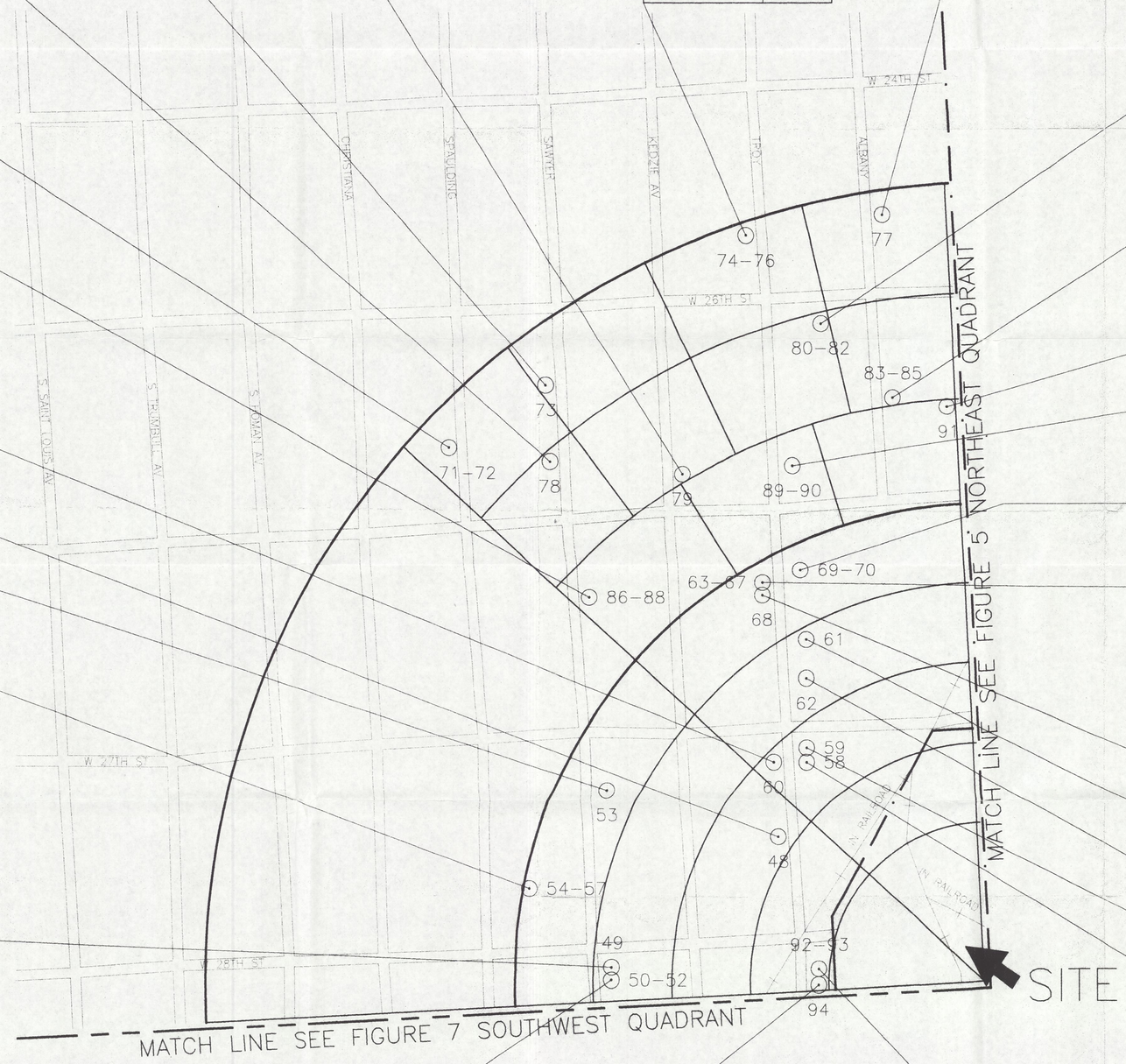
NOTE:
ALL UNITS ARE IN ug/kg.

FIGURE 7

TOTAL POLYNUCLEAR AROMATIC HYDROCARBONS SAMPLE RESULTS SOUTHWEST QUADRANT CELOTEX SITE CHICAGO, ILLINOIS

ERM

K:\OPTILES\ERM\A\\9301D\ADAD\SIPA\FIGURE7.DWG OCT 06, 1993 10:14 AM
TD/5/93 DMP



ID78	SAMPLE ID:CSES8FEA
TOTAL PAHs	11,784

ID73	SAMPLE ID:CSES8FBA
TOTAL PAHs	38,050

ID79	SAMPLE ID:CSES8FFA
TOTAL PAHs	18,844

ID74	SAMPLE ID:CSES8FCA
TOTAL PAHs	12,150
ID75	SAMPLE ID:CSES8FCAB
TOTAL PAHs	18,370
ID76	SAMPLE ID:CSES8FCAF
TOTAL PAHs	10,998

ID77	SAMPLE ID:CSES8FDA
TOTAL PAHs	13,078

ID71	SAMPLE ID:CSES8FAA
TOTAL PAHs	17,156

ID86	SAMPLE ID:CSES8FIA
TOTAL PAHs	14,589
ID87	SAMPLE ID:CSES8FIAB
TOTAL PAHs	17,536
ID88	SAMPLE ID:CSES8FIAF
TOTAL PAHs	14,015

ID60	SAMPLE ID:CSES8C3A
TOTAL PAHs	36,170

ID48	SAMPLE ID:CSES7C1A
TOTAL PAHs	30,530

ID53	SAMPLE ID:CSES7E1A
TOTAL PAHs	3,417

ID54	SAMPLE ID:CSES7E2A
TOTAL PAHs	29,620
ID55	SAMPLE ID:CSES7E2AB
TOTAL PAHs	42,350
ID56	SAMPLE ID:CSES7E2AD
TOTAL PAHs	18,134
ID57	SAMPLE ID:CSES7E2AF
TOTAL PAHs	16,141

ID49	SAMPLE ID:CSES7D1A
TOTAL PAHs	9,800

ID80	SAMPLE ID:CSES8FCA
TOTAL PAHs	13,671
ID81	SAMPLE ID:CSES8FGAB
TOTAL PAHs	16,005
ID82	SAMPLE ID:CSES8FGAF
TOTAL PAHs	18,045

ID83	SAMPLE ID:CSES8FHA
TOTAL PAHs	12,095
ID84	SAMPLE ID:CSES8FHAB
TOTAL PAHs	14,402
ID85	SAMPLE ID:CSES8FHAF
TOTAL PAHs	8,221

ID91	SAMPLE ID:CSES8FKA
TOTAL PAHs	30,230

ID89	SAMPLE ID:CSES8FJ1A
TOTAL PAHs	31,740
ID90	SAMPLE ID:CSES8FJ1AD
TOTAL PAHs	34,530

ID69	SAMPLE ID:CSES8E3A
TOTAL PAHs	18,574

ID63	SAMPLE ID:CSES8E1A
TOTAL PAHs	17,214
ID64	SAMPLE ID:CSES8E1AB
TOTAL PAHs	27,220
ID65	SAMPLE ID:CSES8E1AF
TOTAL PAHs	24,043
ID66	SAMPLE ID:CSES8E1AFD
TOTAL PAHs	12,166

ID68	SAMPLE ID:CSES8E2A
TOTAL PAHs	51,420

ID61	SAMPLE ID:CSES8D1A
TOTAL PAHs	12,790

ID62	SAMPLE ID:CSES8D2A
TOTAL PAHs	17,170

ID59	SAMPLE ID:CSES8C2A
TOTAL PAHs	44,670

ID58	SAMPLE ID:CSES8C1A
TOTAL PAHs	57,970

ID50	SAMPLE ID:CSES7D2A
TOTAL PAHs	21,130
ID51	SAMPLE ID:CSES7D2AB
TOTAL PAHs	39,785
ID52	SAMPLE ID:CSES7D2AF
TOTAL PAHs	19,070

ID94	SAMPLE ID:CSESIEPA2C
TOTAL PAHs	131,380

ID92	SAMPLE ID:CSESIEPA1C
TOTAL PAHs	106,800
ID93	SAMPLE ID:CSESIEPA1CD
TOTAL PAHs	124,640

FIGURE 6

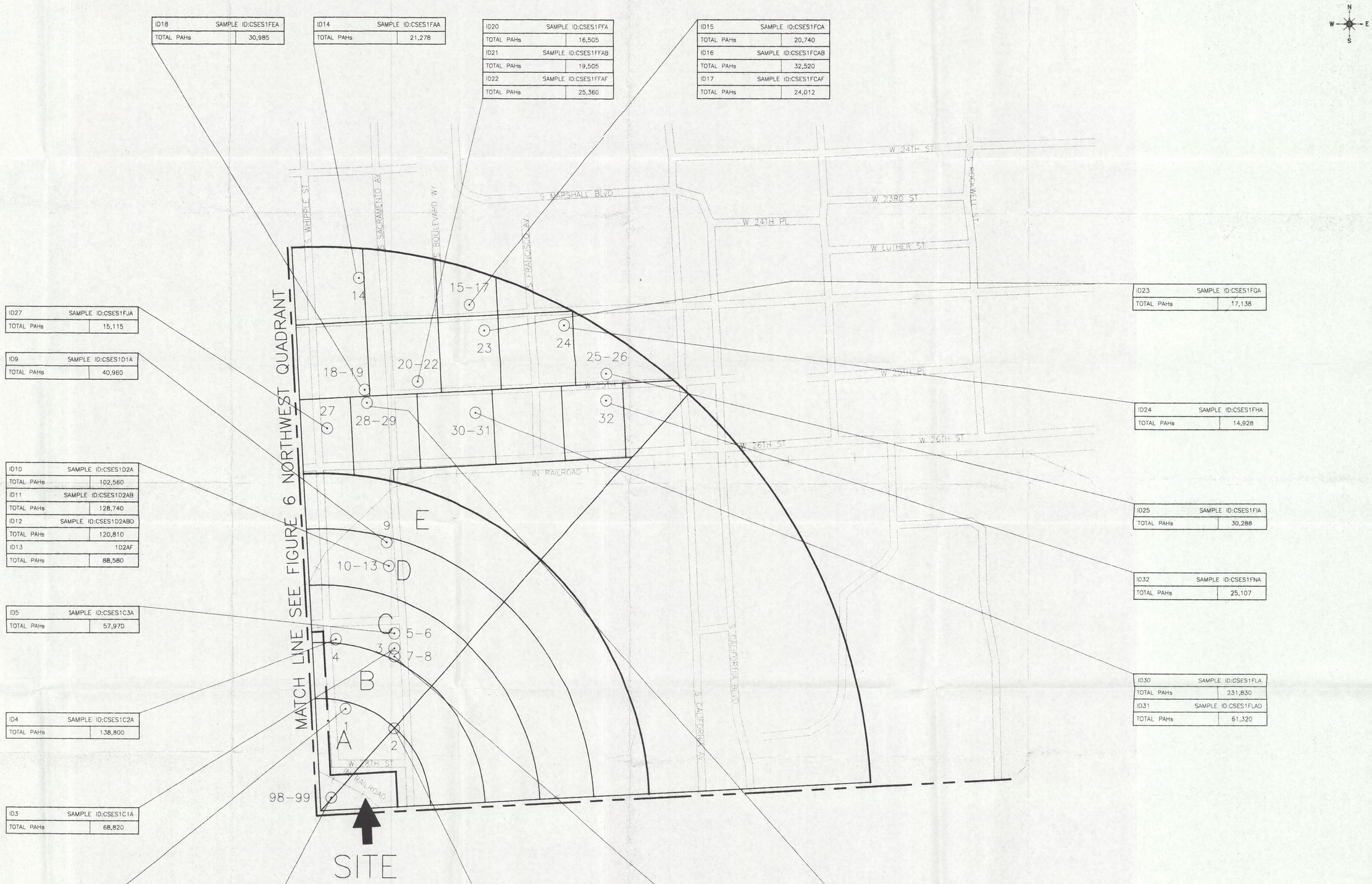
TOTAL POLYNUCLEAR AROMATIC HYDROCARBONS
SAMPLE RESULTS
NORTHWEST QUADRANT
CELOTEX SITE
CHICAGO, ILLINOIS

APPROX. SCALE (ft.)
0 200

NOTE:
ALL UNITS ARE IN ug/kg.

ERM

10/6/96 KCSB K:\CPTLES\DRAWINGS\BS0170.4CAD\CSEP\FIGURES.DWG OCT 06, 1996 4:21 PM



ID18	SAMPLE ID:CSES1FEA
TOTAL PAHs	30,985

ID14	SAMPLE ID:CSES1FAA
TOTAL PAHs	21,278

ID20	SAMPLE ID:CSES1FFA
TOTAL PAHs	16,505
ID21	SAMPLE ID:CSES1FFAB
TOTAL PAHs	19,505
ID22	SAMPLE ID:CSES1FFAF
TOTAL PAHs	25,360

ID15	SAMPLE ID:CSES1FCA
TOTAL PAHs	20,740
ID16	SAMPLE ID:CSES1FCAB
TOTAL PAHs	32,520
ID17	SAMPLE ID:CSES1FCAF
TOTAL PAHs	24,012

ID23	SAMPLE ID:CSES1FGA
TOTAL PAHs	17,138

ID24	SAMPLE ID:CSES1FHA
TOTAL PAHs	14,928

ID25	SAMPLE ID:CSES1FIA
TOTAL PAHs	30,288

ID32	SAMPLE ID:CSES1FNA
TOTAL PAHs	25,107

ID30	SAMPLE ID:CSES1FLA
TOTAL PAHs	231,830
ID31	SAMPLE ID:CSES1FLAD
TOTAL PAHs	61,320

ID27	SAMPLE ID:CSES1FJA
TOTAL PAHs	15,115

ID9	SAMPLE ID:CSES1D1A
TOTAL PAHs	40,960

ID10	SAMPLE ID:CSES1D2A
TOTAL PAHs	102,560
ID11	SAMPLE ID:CSES1D2AB
TOTAL PAHs	128,740
ID12	SAMPLE ID:CSES1D2ABD
TOTAL PAHs	120,810
ID13	1D2AF
TOTAL PAHs	88,580

ID5	SAMPLE ID:CSES1C3A
TOTAL PAHs	57,970

ID4	SAMPLE ID:CSES1C2A
TOTAL PAHs	138,800

ID3	SAMPLE ID:CSES1C1A
TOTAL PAHs	68,820

ID1	SAMPLE ID:CSESIEPA4C
TOTAL PAHs	291,800

ID98	SAMPLE ID:CSESS2A
TOTAL PAHs	284
ID99	SAMPLE ID:CSESS2B
TOTAL PAHs	16,370

ID2	SAMPLE ID:CSESIEPA5C
TOTAL PAHs	105,820

ID7	SAMPLE ID:CSES1C4A
TOTAL PAHs	66,790
ID8	SAMPLE ID:CSES1C4AD
TOTAL PAHs	66,300

ID28	SAMPLE ID:CSES1FKA
TOTAL PAHs	36,638
ID29	SAMPLE ID:CSES1FKAD
TOTAL PAHs	34,230

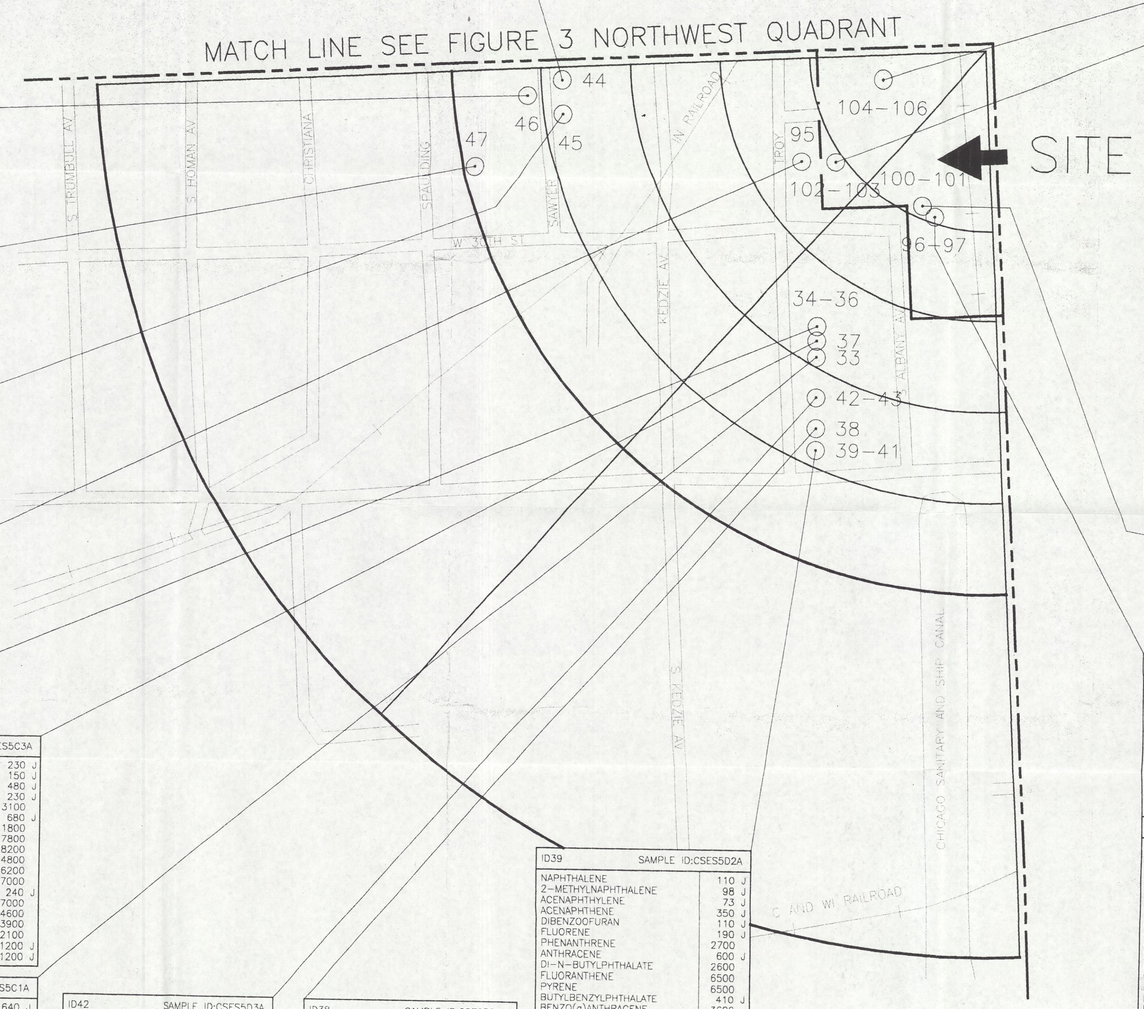
APPROX. SCALE (ft.)
0 200

NOTE:
ALL UNITS ARE IN ug/kg.

FIGURE 5
TOTAL POLYNUCLEAR AROMATIC HYDROCARBONS SAMPLE RESULTS NORTHWEST QUADRANT CELOTEX SITE CHICAGO, ILLINOIS

ERM

10/6/95 TK-- A:\CPFILES\ERM\ALL\20110\ACAD\SSP\FIGURES.DWG OCT 06, 1995 4:10 PM



ID44	SAMPLE ID:CSES6D1A
ACENAPHTHENE	230 J
PHENANTHRENE	1800
ANTHRACENE	340 J
FLUORANTHENE	3700
PYRENE	4400
BENZO(a)ANTHRACENE	2400
CHRYSENE	2900
bis(2-ETHYLHEXYL)PHTHALATE	9400
DI-N-OCTYLPHTHALATE	670 J
BENZO(b)FLUORANTHENE	2700
BENZO(k)FLUORANTHENE	1700
BENZO(a)PYRENE	2400
INDENO(1,2,3-cd)PYRENE	770 J
DIBENZO(a,h)ANTHRACENE	410 J
BENZO(g,h,i)PERYLENE	500 J

ID46	SAMPLE ID:CSES6E1A
ACENAPHTHENE	110 J
PHENANTHRENE	1000 J
ANTHRACENE	210 J
DI-N-BUTYLPHTHALATE	1100 J
FLUORANTHENE	1800
PYRENE	2200
BENZO(a)ANTHRACENE	1200 J
CHRYSENE	1300
bis(2-ETHYLHEXYL)PHTHALATE	6800
DI-N-OCTYLPHTHALATE	440 J
BENZO(b)FLUORANTHENE	1100 J
BENZO(k)FLUORANTHENE	840 J
BENZO(a)PYRENE	980 J
INDENO(1,2,3-cd)PYRENE	370 J
DIBENZO(a,h)ANTHRACENE	190 J
BENZO(g,h,i)PERYLENE	250 J

ID47	SAMPLE ID:CSES6E2A
ACENAPHTHENE	330 J
FLUORENE	210 J
PHENANTHRENE	2700
ANTHRACENE	580 J
CARBAZOLE	300 J
FLUORANTHENE	5200
PYRENE	5500
BENZO(a)ANTHRACENE	2900
CHRYSENE	3200
bis(2-ETHYLHEXYL)PHTHALATE	8300
DI-N-OCTYLPHTHALATE	400 J
BENZO(b)FLUORANTHENE	2600
BENZO(k)FLUORANTHENE	1800 J
BENZO(a)PYRENE	2500
INDENO(1,2,3-cd)PYRENE	1500 J
DIBENZO(a,h)ANTHRACENE	610 J
BENZO(g,h,i)PERYLENE	1000 J

ID45	SAMPLE ID:CSES6D2A
PHENANTHRENE	1500 J
ANTHRACENE	330 J
FLUORANTHENE	3100
PYRENE	3600
BENZO(a)ANTHRACENE	2300
CHRYSENE	2600
bis(2-ETHYLHEXYL)PHTHALATE	16000
DI-N-OCTYLPHTHALATE	1100 J
BENZO(b)FLUORANTHENE	2700
BENZO(k)FLUORANTHENE	1600 J
BENZO(a)PYRENE	2200 J
INDENO(1,2,3-cd)PYRENE	900 J
DIBENZO(a,h)ANTHRACENE	480 J
BENZO(g,h,i)PERYLENE	520 J

ID95	SAMPLE ID:CSESIEPA3C
NAPHTHALENE	1500 J
2-METHYLNAPHTHALENE	660 J
ACENAPHTHYLENE	570 J
ACENAPHTHENE	3100 J
FLUORENE	2000 J
4-NITROANILINE	1200 J
PHENANTHRENE	15000
ANTHRACENE	4200
CARBAZOLE	2600 J
FLUORANTHENE	22000
PYRENE	18000
BENZO(a)ANTHRACENE	18000
CHRYSENE	16000
bis(2-ETHYLHEXYL)PHTHALATE	3800 J
BENZO(b)FLUORANTHENE	19000
BENZO(k)FLUORANTHENE	11000
BENZO(a)PYRENE	17000
INDENO(1,2,3-cd)PYRENE	12000
DIBENZO(a,h)ANTHRACENE	7500
BENZO(g,h,i)PERYLENE	9000

ID34	SAMPLE ID:CSES5C2A
NAPHTHALENE	210 J
2-METHYLNAPHTHALENE	120 J
ACENAPHTHYLENE	150 J
ACENAPHTHENE	510 J
DIBENZOOFURAN	120 J
FLUORENE	240 J
PHENANTHRENE	3400
ANTHRACENE	670 J
CARBAZOLE	410 J
DI-N-BUTYLPHTHALATE	200 J
FLUORANTHENE	7400
PYRENE	8700
BENZO(a)ANTHRACENE	4500
CHRYSENE	5600
bis(2-ETHYLHEXYL)PHTHALATE	3000
BENZO(b)FLUORANTHENE	6700
BENZO(k)FLUORANTHENE	3800
BENZO(a)PYRENE	3600
INDENO(1,2,3-cd)PYRENE	2200
DIBENZO(a,h)ANTHRACENE	980 J
BENZO(g,h,i)PERYLENE	1200 J

ID35	SAMPLE ID:CSES5C2AB
NAPHTHALENE	340 J
ACENAPHTHENE	930 J
FLUORENE	390 J
PHENANTHRENE	5500
ANTHRACENE	1100 J
FLUORANTHENE	11000
PYRENE	13000
BENZO(a)ANTHRACENE	7600
CHRYSENE	9700
bis(2-ETHYLHEXYL)PHTHALATE	3300
BENZO(b)FLUORANTHENE	11000
BENZO(k)FLUORANTHENE	5700
BENZO(a)PYRENE	9800
INDENO(1,2,3-cd)PYRENE	5400
DIBENZO(a,h)ANTHRACENE	2900
BENZO(g,h,i)PERYLENE	3700

ID36	SAMPLE ID:CSES5C2AF
ACENAPHTHENE	140 J
PHENANTHRENE	1100
ANTHRACENE	210 J
FLUORANTHENE	2300
PYRENE	2200
BENZO(a)ANTHRACENE	1300
CHRYSENE	1600
bis(2-ETHYLHEXYL)PHTHALATE	1900
BENZO(b)FLUORANTHENE	1800
BENZO(k)FLUORANTHENE	950
BENZO(a)PYRENE	1500
INDENO(1,2,3-cd)PYRENE	530 J
DIBENZO(a,h)ANTHRACENE	220 J
BENZO(g,h,i)PERYLENE	380 J

ID37	SAMPLE ID:CSES5C3A
NAPHTHALENE	230 J
ACENAPHTHYLENE	150 J
ACENAPHTHENE	480 J
FLUORENE	230 J
PHENANTHRENE	3100
ANTHRACENE	680 J
DI-N-BUTYLPHTHALATE	1800
FLUORANTHENE	7800
PYRENE	8200
BENZO(a)ANTHRACENE	4800
CHRYSENE	6200
bis(2-ETHYLHEXYL)PHTHALATE	7000
DI-N-OCTYLPHTHALATE	240 J
BENZO(b)FLUORANTHENE	7000
BENZO(k)FLUORANTHENE	4600
BENZO(a)PYRENE	3900
INDENO(1,2,3-cd)PYRENE	2100
DIBENZO(a,h)ANTHRACENE	1200 J
BENZO(g,h,i)PERYLENE	1200 J

ID33	SAMPLE ID:CSES5C1A
ACENAPHTHENE	640 J
FLUORENE	260 J
PHENANTHRENE	3300
ANTHRACENE	810 J
FLUORANTHENE	7200
PYRENE	8500
BENZO(a)ANTHRACENE	5100
CHRYSENE	6000
bis(2-ETHYLHEXYL)PHTHALATE	6400
BENZO(b)FLUORANTHENE	6800
BENZO(k)FLUORANTHENE	4200
BENZO(a)PYRENE	5900
INDENO(1,2,3-cd)PYRENE	2000 J
DIBENZO(a,h)ANTHRACENE	1100 J
BENZO(g,h,i)PERYLENE	1400 J

ID42	SAMPLE ID:CSES5D3A
NAPHTHALENE	180 J
ACENAPHTHENE	430 J
FLUORENE	220 J
PHENANTHRENE	3500
ANTHRACENE	760 J
CARBAZOLE	600 J
DI-N-BUTYLPHTHALATE	3400 J
FLUORANTHENE	9300
PYRENE	9800
BENZO(a)ANTHRACENE	5700
CHRYSENE	7200
bis(2-ETHYLHEXYL)PHTHALATE	9100
DI-N-OCTYLPHTHALATE	250 J
BENZO(b)FLUORANTHENE	7100
BENZO(k)FLUORANTHENE	4000
BENZO(a)PYRENE	5600
INDENO(1,2,3-cd)PYRENE	2800
DIBENZO(a,h)ANTHRACENE	1500 J
BENZO(g,h,i)PERYLENE	1800 J

ID43	SAMPLE ID:CSES5D3AD
ACENAPHTHENE	460 J
FLUORENE	270 J
PHENANTHRENE	4400
ANTHRACENE	960 J
FLUORANTHENE	12000
PYRENE	12000
BENZO(a)ANTHRACENE	7200
CHRYSENE	8800
bis(2-ETHYLHEXYL)PHTHALATE	8100
BENZO(b)FLUORANTHENE	8700
BENZO(k)FLUORANTHENE	3900
BENZO(a)PYRENE	6600
INDENO(1,2,3-cd)PYRENE	3500
DIBENZO(a,h)ANTHRACENE	1900 J
BENZO(g,h,i)PERYLENE	2200 J

ID38	SAMPLE ID:CSES5D1A
NAPHTHALENE	140 J
2-METHYLNAPHTHALENE	99 J
ACENAPHTHENE	350 J
DIBENZOOFURAN	96 J
FLUORENE	180 J
PHENANTHRENE	2500
ANTHRACENE	570 J
DI-N-BUTYLPHTHALATE	860 J
FLUORANTHENE	5500
PYRENE	5200
BENZO(a)ANTHRACENE	3000
CHRYSENE	3600
bis(2-ETHYLHEXYL)PHTHALATE	5000
BENZO(b)FLUORANTHENE	5200
BENZO(k)FLUORANTHENE	2600
BENZO(a)PYRENE	3800
INDENO(1,2,3-cd)PYRENE	1000
DIBENZO(a,h)ANTHRACENE	600 J
BENZO(g,h,i)PERYLENE	700 J

ID39	SAMPLE ID:CSES5D2A
NAPHTHALENE	110 J
2-METHYLNAPHTHALENE	98 J
ACENAPHTHYLENE	73 J
ACENAPHTHENE	350 J
DIBENZOOFURAN	110 J
FLUORENE	190 J
PHENANTHRENE	2700
ANTHRACENE	600 J
DI-N-BUTYLPHTHALATE	2600
FLUORANTHENE	6500
PYRENE	6500
BUTYLBENZYLPHTHALATE	410 J
BENZO(a)ANTHRACENE	3600
CHRYSENE	4200
DI-N-OCTYLPHTHALATE	140 J
BENZO(b)FLUORANTHENE	5000
BENZO(k)FLUORANTHENE	3000
BENZO(a)PYRENE	4000
INDENO(1,2,3-cd)PYRENE	950
DIBENZO(a,h)ANTHRACENE	460 J
BENZO(g,h,i)PERYLENE	590 J

ID40	SAMPLE ID:CSES5D2C
NAPHTHALENE	320 J
2-METHYLNAPHTHALENE	180 J
DIMETHYLPHTHALATE	340 J
ACENAPHTHENE	550 J
2,6-DINITROTOLUENE	2000 J
FLUORENE	300 J
PHENANTHRENE	4500
ANTHRACENE	1000 J
CARBAZOLE	540 J
FLUORANTHENE	7800
PYRENE	9500
BENZO(a)ANTHRACENE	5200
CHRYSENE	6000
bis(2-ETHYLHEXYL)PHTHALATE	7900 J
BENZO(b)FLUORANTHENE	5200
BENZO(k)FLUORANTHENE	4300
BENZO(a)PYRENE	5500
INDENO(1,2,3-cd)PYRENE	2000 J
DIBENZO(a,h)ANTHRACENE	1100 J
BENZO(g,h,i)PERYLENE	1100 J

ID41	SAMPLE ID:CSES5D2CD
PHENANTHRENE	3000 J
ANTHRACENE	650 J
FLUORANTHENE	5900 J
PYRENE	6800
BENZO(a)ANTHRACENE	4200 J
CHRYSENE	4600 J
bis(2-ETHYLHEXYL)PHTHALATE	31000 J
BENZO(b)FLUORANTHENE	4200 J
BENZO(k)FLUORANTHENE	3300 J
BENZO(a)PYRENE	4200 J
INDENO(1,2,3-cd)PYRENE	1700 J
DIBENZO(a,h)ANTHRACENE	870 J
BENZO(g,h,i)PERYLENE	1100 J

ID102	SAMPLE ID:CSESTF1A
NAPHTHALENE	3900 J
2-METHYLNAPHTHALENE	3200 J
ACENAPHTHYLENE	2300 J
ACENAPHTHENE	5000 J
DIBENZOOFURAN	6900 J
FLUORENE	7900 J
PHENANTHRENE	65000
ANTHRACENE	17000
CARBAZOLE	5700 J
FLUORANTHENE	69000
PYRENE	57000
BENZO(a)ANTHRACENE	34000
CHRYSENE	30000
BENZO(b)FLUORANTHENE	22000
BENZO(k)FLUORANTHENE	20000
BENZO(a)PYRENE	22000
INDENO(1,2,3-cd)PYRENE	11000 J
DIBENZO(a,h)ANTHRACENE	5900 J
BENZO(g,h,i)PERYLENE	10000 J

ID103	SAMPLE ID:CSESTF1B
NAPHTHALENE	32000 J
2-METHYLNAPHTHALENE	27000 J
ACENAPHTHYLENE	11000 J
ACENAPHTHENE	40000 J
DIBENZOOFURAN	54000 J
FLUORENE	69000 J
PHENANTHRENE	410000
ANTHRACENE	140000
CARBAZOLE	51000 J
FLUORANTHENE	360000
PYRENE	300000
BENZO(a)ANTHRACENE	200000
CHRYSENE	170000
BENZO(b)FLUORANTHENE	160000
BENZO(k)FLUORANTHENE	140000
BENZO(a)PYRENE	130000
INDENO(1,2,3-cd)PYRENE	33000 J
DIBENZO(a,h)ANTHRACENE	22000 J
BENZO(g,h,i)PERYLENE	20000 J

ID104	SAMPLE ID:CSESTF2A
NAPHTHALENE	79 J
2-METHYLNAPHTHALENE	60 J
ACENAPHTHYLENE	36 J
ACENAPHTHENE	140 J
DIBENZOOFURAN	120 J
FLUORENE	220 J
PHENANTHRENE	2300 J
ANTHRACENE	550 J
CARBAZOLE	230 J
FLUORANTHENE	2600 J
PYRENE	1900 J
BENZO(a)ANTHRACENE	840 J
CHRYSENE	900 J
bis(2-ETHYLHEXYL)PHTHALATE	180 J
BENZO(b)FLUORANTHENE	850 J
BENZO(k)FLUORANTHENE	620 J
BENZO(a)PYRENE	740 J
INDENO(1,2,3-cd)PYRENE	230 J
DIBENZO(a,h)ANTHRACENE	120 J
BENZO(g,h,i)PERYLENE	150 J

ID105	SAMPLE ID:CSESTF2AD
NAPHTHALENE	39 J
2-METHYLNAPHTHALENE	44 J
DIBENZOOFURAN	38 J
FLUORENE	40 J
PHENANTHRENE	350 J
ANTHRACENE	110 J
FLUORANTHENE	450
PYRENE	450
BENZO(a)ANTHRACENE	220 J
CHRYSENE	260 J
bis(2-ETHYLHEXYL)PHTHALATE	310 J
BENZO(b)FLUORANTHENE	260 J
BENZO(k)FLUORANTHENE	180 J
BENZO(a)PYRENE	250 J
INDENO(1,2,3-cd)PYRENE	100 J
BENZO(g,h,i)PERYLENE	110 J

ID106	SAMPLE ID:CSESTF2B
2-METHYLNAPHTHALENE	41 J
FLUORENE	39 J
PHENANTHRENE	270 J
ANTHRACENE	74 J
FLUORANTHENE	280 J
PYRENE	280 J
BENZO(a)ANTHRACENE	140 J
CHRYSENE	170 J
bis(2-ETHYLHEXYL)PHTHALATE	64 J
BENZO(b)FLUORANTHENE	170 J
BENZO(k)FLUORANTHENE	120 J
BENZO(a)PYRENE	140 J
INDENO(1,2,3-cd)PYRENE	72 J
BENZO(g,h,i)PERYLENE	63 J

ID100	SAMPLE ID:CSEST1A
NAPHTHALENE	72 J
2-METHYLNAPHTHALENE	110 J
ACENAPHTHYLENE	32 J
ACENAPHTHENE	79 J
DIBENZOOFURAN	95 J
FLUORENE	120 J
PHENANTHRENE	850
ANTHRACENE	240 J
CARBAZOLE	82 J
FLUORANTHENE	970
PYRENE	920
BENZO(a)ANTHRACENE	550
CHRYSENE	520
bis(2-ETHYLHEXYL)PHTHALATE	66 J
BENZO(b)FLUORANTHENE	470
BENZO(k)FLUORANTHENE	420
BENZO(a)PYRENE	420
INDENO(1,2,3-cd)PYRENE	150 J
DIBENZO(a,h)ANTHRACENE	100 J
BENZO(g,h,i)PERYLENE	110 J

ID96	SAMPLE ID:CSESS1A
PHENANTHRENE	160 J
ANTHRACENE	47 J
FLUORANTHENE	290 J
PYRENE	240 J
BENZO(a)ANTHRACENE	160 J
CHRYSENE	170 J
bis(2-ETHYLHEXYL)PHTHALATE	60 J
BENZO(b)FLUORANTHENE	180 J
BENZO(k)FLUORANTHENE	150 J
BENZO(a)PYRENE	170 J
INDENO(1,2,3-cd)PYRENE	77 J
DIBENZO(a,h)ANTHRACENE	57 J
BENZO(g,h,i)PERYLENE	60 J

ID97	SAMPLE ID:CSESS1B
NAPHTHALENE	44 J
2-METHYLNAPHTHALENE	56 J
ACENAPHTHYLENE	39 J
ACENAPHTHENE	110 J
DIBENZOOFURAN	52 J
FLUORENE	86 J
PHENANTHRENE	670
ANTHRACENE	220 J
CARBAZOLE	56 J
FLUORANTHENE	850
PYRENE	840 J
BENZO(a)ANTHRACENE	630
CHRYSENE	560
bis(2-ETHYLHEXYL)PHTHALATE	110 J
BENZO(b)FLUORANTHENE	570
BENZO(k)FLUORANTHENE	600
BENZO(a)PYRENE	620
INDENO(1,2,3-cd)PYRENE	300 J
DIBENZO(a,h)ANTHRACENE	220 J
BENZO(g,h,i)PERYLENE	210 J

ID101	SAMPLE ID:CSEST1B
NAPHTHALENE	65 J
2-METHYLNAPHTHALENE	64 J
ACENAPHTHYLENE	46 J
ACENAPHTHENE	91 J
DIBENZOOFURAN	100 J
FLUORENE	140 J
PHENANTHRENE	1200
ANTHRACENE	360 J
CARBAZOLE	99 J
FLUORANTHENE	1400
PYRENE	1300
BENZO(a)ANTHRACENE	880
CHRYSENE	790
bis(2-ETHYLHEXYL)PHTHALATE	94 J
BENZO(b)FLUORANTHENE	750
BENZO(k)FLUORANTHENE	600
BENZO(a)PYRENE	650
INDENO(1,2,3-cd)PYRENE	290 J
DIBENZO(a,h)ANTHRACENE	200 J
BENZO(g,h,i)PERYLENE	200 J

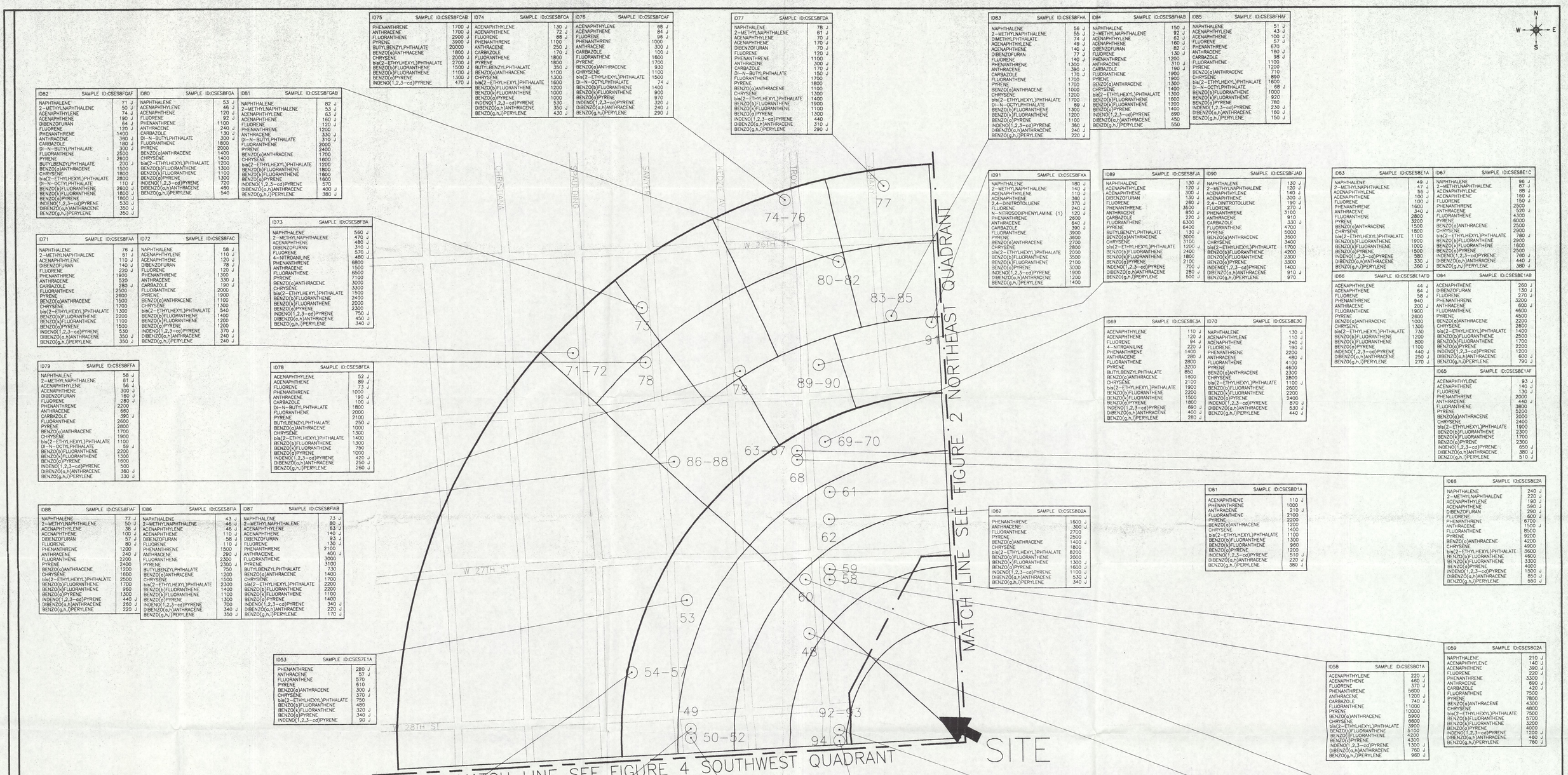
APPROX. SCALE (ft.)
0 200

FIGURE 4

SEMIVOLATILE ORGANIC COMPOUNDS
SAMPLE RESULTS
SOUTHWEST QUADRANT
CELOTEX SITE
CHICAGO, ILLINOIS

ERM

10/6/95 TK E:\CAPITLESS\ERMA\LA\55210\ACAD\SEPA\FIGURE4.DWG OCT 06, 1995 10:05 AM



SAMPLE ID:CSESBF7CAB	
PHENANTHRENE	1700 J
ANTHRACENE	1700 J
FLUORANTHENE	2900 J
PYRENE	3900 J
BUTYLBENZYLPHTHALATE	20000
BENZO(a)ANTHRACENE	1800 J
CHRYSENE	2000 J
bis(2-ETHYHLHEXYL)PHTHALATE	2700 J
BENZO(b)FLUORANTHENE	1500 J
BENZO(k)FLUORANTHENE	1100 J
BENZO(g)PYRENE	1300 J
INDENO(1,2,3-cd)PYRENE	470 J

SAMPLE ID:CSESBF7CA	
ACENAPHTHYLENE	130 J
ACENAPHTHENE	72 J
FLUORENE	88 J
PHENANTHRENE	1100
ANTHRACENE	250 J
CARBAZOLE	170 J
FLUORANTHENE	1800
PYRENE	1800
BUTYLBENZYLPHTHALATE	350 J
BENZO(a)ANTHRACENE	1100
CHRYSENE	1300
bis(2-ETHYLHEXYL)PHTHALATE	1600
BENZO(b)FLUORANTHENE	1200
BENZO(k)FLUORANTHENE	1000
BENZO(a)PYRENE	1000
INDENO(1,2,3-cd)PYRENE	530 J
DIBENZO(a,h)ANTHRACENE	350 J
BENZO(g,h,i)PERYLENE	430 J

SAMPLE ID:CSESBF7CAF	
ACENAPHTHYLENE	88 J
ACENAPHTHENE	84 J
FLUORENE	96 J
PHENANTHRENE	1000
ANTHRACENE	300 J
CARBAZOLE	100 J
FLUORANTHENE	1600
PYRENE	1700
BENZO(a)ANTHRACENE	930
CHRYSENE	1100
bis(2-ETHYHLHEXYL)PHTHALATE	1500
DI-N-OCTYLPHTHALATE	74 J
BENZO(b)FLUORANTHENE	1400
BENZO(k)FLUORANTHENE	900
BENZO(a)PYRENE	970
INDENO(1,2,3-cd)PYRENE	320 J
DIBENZO(a,h)ANTHRACENE	240 J
BENZO(g,h,i)PERYLENE	290 J

SAMPLE ID:CSESBF7DA	
NAPHTHALENE	78 J
2-METHYLNAPHTHALENE	61 J
ACENAPHTHYLENE	70 J
ACENAPHTHENE	170 J
DIBENZOFURAN	70 J
FLUORENE	120 J
PHENANTHRENE	1100
ANTHRACENE	300 J
CARBAZOLE	170 J
DI-N-BUTYLPHTHALATE	150 J
FLUORANTHENE	1700
PYRENE	1800
BENZO(a)ANTHRACENE	1100
CHRYSENE	1200
bis(2-ETHYLHEXYL)PHTHALATE	1400
BENZO(b)FLUORANTHENE	1900
BENZO(k)FLUORANTHENE	1300
BENZO(a)PYRENE	1300
INDENO(1,2,3-cd)PYRENE	440
DIBENZO(a,h)ANTHRACENE	310 J
BENZO(g,h,i)PERYLENE	290 J

SAMPLE ID:CSESBF7BA	
NAPHTHALENE	56 J
2-METHYLNAPHTHALENE	55 J
DIMETHYLPHTHALATE	74 J
ACENAPHTHYLENE	49 J
ACENAPHTHENE	140 J
DIBENZOFURAN	77 J
FLUORENE	140 J
PHENANTHRENE	1300
ANTHRACENE	390 J
CARBAZOLE	170 J
FLUORANTHENE	1700
PYRENE	1700
BENZO(a)ANTHRACENE	1000
CHRYSENE	1200
bis(2-ETHYLHEXYL)PHTHALATE	1700 J
DI-N-OCTYLPHTHALATE	89 J
BENZO(b)FLUORANTHENE	1300
BENZO(k)FLUORANTHENE	1200
BENZO(a)PYRENE	1100
INDENO(1,2,3-cd)PYRENE	350 J
DIBENZO(a,h)ANTHRACENE	240 J
BENZO(g,h,i)PERYLENE	220 J

SAMPLE ID:CSESBF7BAB	
NAPHTHALENE	51 J
ACENAPHTHYLENE	43 J
ACENAPHTHENE	100 J
FLUORENE	57 J
PHENANTHRENE	670
ANTHRACENE	160 J
CARBAZOLE	98 J
FLUORANTHENE	1100
PYRENE	1200
BENZO(a)ANTHRACENE	710
CHRYSENE	890
bis(2-ETHYHLHEXYL)PHTHALATE	1600
DI-N-OCTYLPHTHALATE	68 J
BENZO(b)FLUORANTHENE	1000
BENZO(k)FLUORANTHENE	910
BENZO(a)PYRENE	780
INDENO(1,2,3-cd)PYRENE	230 J
DIBENZO(a,h)ANTHRACENE	160 J
BENZO(g,h,i)PERYLENE	150 J

SAMPLE ID:CSESBF7BA1A	
NAPHTHALENE	49 J
2-METHYLNAPHTHALENE	47 J
ACENAPHTHYLENE	55 J
ACENAPHTHENE	100 J
FLUORENE	100 J
PHENANTHRENE	1600
ANTHRACENE	340 J
FLUORANTHENE	2800
PYRENE	3900
BENZO(a)ANTHRACENE	1500
CHRYSENE	1800
bis(2-ETHYHLHEXYL)PHTHALATE	1100
BENZO(b)FLUORANTHENE	1900
BENZO(k)FLUORANTHENE	1000
BENZO(a)PYRENE	1500
INDENO(1,2,3-cd)PYRENE	580
DIBENZO(a,h)ANTHRACENE	330 J
BENZO(g,h,i)PERYLENE	360 J

SAMPLE ID:CSESBF7BA1C	
NAPHTHALENE	96 J
2-METHYLNAPHTHALENE	87 J
ACENAPHTHYLENE	88 J
ACENAPHTHENE	160 J
FLUORENE	150 J
PHENANTHRENE	2500
ANTHRACENE	520 J
FLUORANTHENE	4300
PYRENE	6200
BENZO(a)ANTHRACENE	2500
CHRYSENE	2900
bis(2-ETHYHLHEXYL)PHTHALATE	780 J
BENZO(b)FLUORANTHENE	2900
BENZO(k)FLUORANTHENE	1600
BENZO(a)PYRENE	2500
INDENO(1,2,3-cd)PYRENE	760 J
DIBENZO(a,h)ANTHRACENE	440 J
BENZO(g,h,i)PERYLENE	380 J

SAMPLE ID:CSESBF7BA1D	
NAPHTHALENE	130 J
ACENAPHTHYLENE	120 J
ACENAPHTHENE	300 J
DIBENZOFURAN	130 J
FLUORENE	280 J
2,4-DINITROTOLUENE	260 J
FLUORENE	240 J
N-NITROSODIPHENYLAMINE (1)	120 J
PHENANTHRENE	2600
ANTHRACENE	640 J
CARBAZOLE	390 J
FLUORANTHENE	3900
PYRENE	3600
BENZO(a)ANTHRACENE	2700
CHRYSENE	2800
bis(2-ETHYHLHEXYL)PHTHALATE	2000
BENZO(b)FLUORANTHENE	3500
BENZO(k)FLUORANTHENE	2100
BENZO(a)PYRENE	3000
INDENO(1,2,3-cd)PYRENE	1900
DIBENZO(a,h)ANTHRACENE	1200
BENZO(g,h,i)PERYLENE	1400

SAMPLE ID:CSESBF7BA1E	
NAPHTHALENE	130 J
2-METHYLNAPHTHALENE	120 J
ACENAPHTHYLENE	140 J
ACENAPHTHENE	300 J
FLUORENE	190 J
2,4-DINITROTOLUENE	270 J
FLUORENE	270 J
PHENANTHRENE	3100
ANTHRACENE	910
CARBAZOLE	330 J
FLUORANTHENE	4700
PYRENE	5000
BENZO(a)ANTHRACENE	3600
CHRYSENE	3400
bis(2-ETHYHLHEXYL)PHTHALATE	1700
BENZO(b)FLUORANTHENE	4200
BENZO(k)FLUORANTHENE	2300
BENZO(a)PYRENE	3300
INDENO(1,2,3-cd)PYRENE	1400
DIBENZO(a,h)ANTHRACENE	910 J
BENZO(g,h,i)PERYLENE	970

SAMPLE ID:CSESBF7BA1F	
NAPHTHALENE	96 J
2-METHYLNAPHTHALENE	87 J
ACENAPHTHYLENE	88 J
ACENAPHTHENE	160 J
FLUORENE	150 J
PHENANTHRENE	2500
ANTHRACENE	520 J
FLUORANTHENE	4300
PYRENE	6200
BENZO(a)ANTHRACENE	2500
CHRYSENE	2900
bis(2-ETHYHLHEXYL)PHTHALATE	780 J
BENZO(b)FLUORANTHENE	2900
BENZO(k)FLUORANTHENE	1600
BENZO(a)PYRENE	2500
INDENO(1,2,3-cd)PYRENE	760 J
DIBENZO(a,h)ANTHRACENE	440 J
BENZO(g,h,i)PERYLENE	380 J

SAMPLE ID:CSESBF7BA2A	
NAPHTHALENE	350 J
2-METHYLNAPHTHALENE	310 J
ACENAPHTHYLENE	440 J
ACENAPHTHENE	320 J
DIBENZOFURAN	320 J
FLUORENE	490 J
PHENANTHRENE	5800
ANTHRACENE	1200 J
FLUORANTHENE	7500
PYRENE	7600
BENZO(a)ANTHRACENE	3700
CHRYSENE	4100
bis(2-ETHYHLHEXYL)PHTHALATE	1800
BENZO(b)FLUORANTHENE	3600
BENZO(k)FLUORANTHENE	2300
BENZO(a)PYRENE	3000
INDENO(1,2,3-cd)PYRENE	1100 J
DIBENZO(a,h)ANTHRACENE	670 J
BENZO(g,h,i)PERYLENE	500 J

SAMPLE ID:CSESBF7BA2B	
NAPHTHALENE	110 J
2-METHYLNAPHTHALENE	110 J
ACENAPHTHYLENE	54 J
ACENAPHTHENE	120 J
DIBENZOFURAN	76 J
FLUORENE	100 J
PHENANTHRENE	1500
ANTHRACENE	330 J
FLUORANTHENE	2900
PYRENE	3000
BENZO(a)ANTHRACENE	1600
CHRYSENE	1900
bis(2-ETHYHLHEXYL)PHTHALATE	1600
BENZO(b)FLUORANTHENE	2600
BENZO(k)FLUORANTHENE	1500
BENZO(a)PYRENE	1700
INDENO(1,2,3-cd)PYRENE	340 J
DIBENZO(a,h)ANTHRACENE	220 J
BENZO(g,h,i)PERYLENE	160 J

SAMPLE ID:CSESBF7BA2C	
NAPHTHALENE	710 J
ACENAPHTHYLENE	420 J
ACENAPHTHENE	2000 J
DIBENZOFURAN	470 J
FLUORENE	950 J
PHENANTHRENE	9300
ANTHRACENE	2500 J
CARBAZOLE	1500 J
FLUORANTHENE	16000
PYRENE	14000
BENZO(a)ANTHRACENE	11000
CHRYSENE	13000
bis(2-ETHYHLHEXYL)PHTHALATE	3900 J
BENZO(b)FLUORANTHENE	14000
BENZO(k)FLUORANTHENE	10000
BENZO(a)PYRENE	13000
INDENO(1,2,3-cd)PYRENE	9800
DIBENZO(a,h)ANTHRACENE	6300
BENZO(g,h,i)PERYLENE	8400

SAMPLE ID:CSESBF7BA2D	
NAPHTHALENE	110 J
2-METHYLNAPHTHALENE	120 J
ACENAPHTHYLENE	54 J
ACENAPHTHENE	120 J
DIBENZOFURAN	76 J
FLUORENE	100 J
PHENANTHRENE	1500
ANTHRACENE	330 J
FLUORANTHENE	2900
PYRENE	3000
BENZO(a)ANTHRACENE	1600
CHRYSENE	1900
bis(2-ETHYHLHEXYL)PHTHALATE	1600
BENZO(b)FLUORANTHENE	2600
BENZO(k)FLUORANTHENE	1500
BENZO(a)PYRENE	1700
INDENO(1,2,3-cd)PYRENE	340 J
DIBENZO(a,h)ANTHRACENE	220 J
BENZO(g,h,i)PERYLENE	160 J

SAMPLE ID:CSESBF7BA3A	
NAPHTHALENE	130 J
2-METHYLNAPHTHALENE	92 J
ACENAPHTHYLENE	62 J
ACENAPHTHENE	160 J
DIBENZOFURAN	82 J
FLUORENE	130 J
PHENANTHRENE	1200
ANTHRACENE	310 J
CARBAZOLE	190 J
FLUORANTHENE	1900
PYRENE	1900
BENZO(a)ANTHRACENE	1300
CHRYSENE	1400
bis(2-ETHYHLHEXYL)PHTHALATE	1300
BENZO(b)FLUORANTHENE	1600
BENZO(k)FLUORANTHENE	1200
BENZO(a)PYRENE	1400
INDENO(1,2,3-cd)PYRENE	690
DIBENZO(a,h)ANTHRACENE	450
BENZO(g,h,i)PERYLENE	550

SAMPLE ID:CSESBF7BA3B	
NAPHTHALENE	130 J
2-METHYLNAPHTHALENE	120 J
ACENAPHTHYLENE	140 J
ACENAPHTHENE	300 J
FLUORENE	190 J
2,4-DINITROTOLUENE	270 J
FLUORENE	270 J
PHENANTHRENE	3100
ANTHRACENE	910
CARBAZOLE	330 J
FLUORANTHENE	4700
PYRENE	5000
BENZO(a)ANTHRACENE	3600
CHRYSENE	3400
bis(2-ETHYHLHEXYL)PHTHALATE	1700
BENZO(b)FLUORANTHENE	4200
BENZO(k)FLUORANTHENE	2300
BENZO(a)PYRENE	3300
INDENO(1,2,3-cd)PYRENE	1400
DIBENZO(a,h)ANTHRACENE	910 J
BENZO(g,h,i)PERYLENE	970

SAMPLE ID:CSESBF7BA3C	
NAPHTHALENE	130 J
2-METHYLNAPHTHALENE	110 J
ACENAPHTHYLENE	110 J
ACENAPHTHENE	240 J
FLUORENE	190 J
PHENANTHRENE	2200
ANTHRACENE	480 J
FLUORANTHENE	4100
PYRENE	4600
BENZO(a)ANTHRACENE	2300
CHRYSENE	2800
bis(2-ETHYHLHEXYL)PHTHALATE	1100 J
BENZO(b)FLUORANTHENE	2600
BENZO(k)FLUORANTHENE	2200
BENZO(a)PYRENE	2400 J
INDENO(1,2,3-cd)PYRENE	870 J
DIBENZO(a,h)ANTHRACENE	530 J
BENZO(g,h,i)PERYLENE	440 J

SAMPLE ID:CSESBF7BA3D	
NAPHTHALENE	700 J
ACENAPHTHENE	1500 J
FLUORENE	640 J
PHENANTHRENE	8400
ANTHRACENE	1800 J
CARBAZOLE	1200 J
DI-N-BUTYLPHTHALATE	3300 J
FLUORANTHENE	18000
PYRENE	19000
BENZO(a)ANTHRACENE	12000
CHRYSENE	14000
bis(2-ETHYHLHEXYL)PHTHALATE	5200
BENZO(b)FLUORANTHENE	17000
BENZO(k)FLUORANTHENE	9400
BENZO(a)PYRENE	13000
INDENO(1,2,3-cd)PYRENE	4200 J
DIBENZO(a,h)ANTHRACENE	2000 J
BENZO(g,h,i)PERYLENE	3000 J

SAMPLE ID:CSESBF7BA3E	
NAPHTHALENE	240 J
2-METHYLNAPHTHALENE	220 J
ACENAPHTHYLENE	190 J
ACENAPHTHENE	590 J
DIBENZOFURAN	290 J
FLUORENE	600 J
PHENANTHRENE	6700
ANTHRACENE	1500 J
FLUORANTHENE	8500
PYRENE	9200
BENZO(a)ANTHRACENE	4200
CHRYSENE	4900
bis(2-ETHYHLHEXYL)PHTHALATE	3600
BENZO(b)FLUORANTHENE	4800
BENZO(k)FLUORANTHENE	3300
BENZO(a)PYRENE	4000
INDENO(1,2,3-cd)PYRENE	1500 J
DIBENZO(a,h)ANTHRACENE	850 J
BENZO(g,h,i)PERYLENE	550 J

SAMPLE ID:CSESBF7BA3F	
NAPHTHALENE	51 J
ACENAPHTHYLENE	43 J
ACENAPHTHENE	100 J
FLUORENE	57 J
PHENANTHRENE	670
ANTHRACENE	160 J
CARBAZOLE	98 J
FLUORANTHENE	1100
PYRENE	1200
BENZO(a)ANTHRACENE	710
CHRYSENE	890
bis(2-ETHYHLHEXYL)PHTHALATE	1600
DI-N-OCTYLPHTHALATE	68 J
BENZO(b)FLUORANTHENE	1000
BENZO(k)FLUORANTHENE	910
BENZO(a)PYRENE	780
INDENO(1,2,3-cd)PYRENE	230 J
DIBENZO(a,h)ANTHRACENE	160 J
BENZO(g,h,i)PERYLENE	150 J

SAMPLE ID:CSESBF7BA3G	
NAPHTHALENE	220 J
2-METHYLNAPHTHALENE	150 J
ACENAPHTHYLENE	130 J
ACENAPHTHENE	330 J
DIBENZOFURAN	150 J
FLUORENE	270 J
PHENANTHRENE	3500
ANTHRACENE	860 J
CARBAZOLE	380 J
FLUORANTHENE	6600
PYRENE	6100
BENZO(a)ANTHRACENE	3400
CHRYSENE	4000
bis(2-ETHYHLHEXYL)PHTHALATE	3500
BENZO(b)FLUORANTHENE	3700
BENZO(k)FLUORANTHENE	1900
BENZO(a)PYRENE	2700
INDENO(1,2,3-cd)PYRENE	1200 J
DIBENZO(a,h)ANTHRACENE	510 J
BENZO(g,h,i)PERYLENE	950 J

SAMPLE ID:CSESBF7CA	
NAPHTHALENE	120 J
2-METHYLNAPHTHALENE	180 J
ACENAPHTHYLENE	520 J
ACENAPHTHENE	270 J
DIBENZOFURAN	100 J
FLUORENE	370 J
PHENANTHRENE	3100
ANTHRACENE	840 J
FLUORANTHENE	4000
PYRENE	4200
BENZO(a)ANTHRACENE	3200
CHRYSENE	3000
bis(2-ETHYHLHEXYL)PHTHALATE	3000
BENZO(b)FLUORANTHENE	3000
BENZO(k)FLUORANTHENE	2100
BENZO(a)PYRENE	2500
INDENO(1,2,3-cd)PYRENE	1400
DIBENZO(a,h)ANTHRACENE	940
BENZO(g,h,i)PERYLENE	970

SAMPLE ID:CSESBF7CA1	
NAPHTHALENE	120 J
2-METHYLNAPHTHALENE	180 J
ACENAPHTHYLENE	520 J
ACENAPHTHENE	270 J
DIBENZOFURAN	100 J
FLUORENE	370 J
PHENANTHRENE	3100
ANTHRACENE	840 J
FLUORANTHENE	4000
PYRENE	4200
BENZO(a)ANTHRACENE	3200
CHRYSENE	3000
bis(2-ETHYHLHEXYL)PHTHALATE	3000
BENZO(b)FLUORANTHENE	3000
BENZO(k)FLUORANTHENE	2100
BENZO(a)PYRENE	2500
INDENO(1,2,3-cd)PYRENE	1400
DIBENZO(a,h)ANTHRACENE	940
BENZO(g,h,i)PERYLENE	970

SAMPLE ID:CSESBF7CA2	
NAPHTHALENE	110 J
2-METHYLNAPHTHALENE	110 J
ACENAPHTHYLENE	54 J
ACENAPHTHENE	120 J
DIBENZOFURAN	76 J
FLUORENE	100 J
PHENANTHRENE	1500
ANTHRACENE	330 J
FLUORANTHENE	2900
PYRENE	3000
BENZO(a)ANTHRACENE	1600
CHRYSENE	1900
bis(2-ETHYHLHEXYL)PHTHALATE	1600
BENZO(b)FLUORANTHENE	2600
BENZO(k)FLUORANTHENE	1500
BENZO(a)PYRENE	1700
INDENO(1,2,3-cd)PYRENE	340 J
DIBENZO(a,h)ANTHRACENE	220 J
BENZO(g,h,i)PERYLENE	160 J

SAMPLE ID:CSESBF7CA3	
NAPHTHALENE	220 J
2-METHYLNAPHTHALENE	150 J
ACENAPHTHYLENE	130 J
ACENAPHTHENE	330 J
DIBENZOFURAN	150 J
FLUORENE	270 J
PHENANTHRENE	3500
ANTHRACENE	860 J
CARBAZOLE	380 J
FLUORANTHENE	6600
PYRENE	6100
BENZO(a)ANTHRACENE	3400
CHRYSENE	4000
bis(2-ETHYHLHEXYL)PHTHALATE	3500
BENZO(b)FLUORANTHENE	3700
BENZO(k)FLUORANTHENE	1900
BENZO(a)PYRENE	2700
INDENO(1,2,3-cd)PYRENE	1200 J
DIBENZO(a,h)ANTHRACENE	510 J
BENZO(g,h,i)PERYLENE	950 J

SAMPLE ID:CSESBF7CA4	
NAPHTHALENE	110 J
2-METHYLNAPHTHALENE	110 J
ACENAPHTHYLENE	54 J
ACENAPHTHENE	120 J
DIBENZOFURAN	76 J
FLUORENE	100 J
PHENANTHRENE	1500
ANTHRACENE	330 J
FLUORANTHENE	2900
PYRENE	3000
BENZO(a)ANTHRACENE	1600
CHRYSENE	1900
bis(2-ETHYHLHEXYL)PHTHALATE	1600
BENZO(b)FLUORANTHENE	2600
BENZO(k)FLUORANTHENE	1500
BENZO(a)PYRENE	1700
INDENO(1,2,3-cd)PYRENE	340 J
DIBENZO(a,h)ANTHRACENE	220 J
BENZO(g,h,i)PERYLENE	160 J

SAMPLE ID:CSESBF7CA5	
NAPHTHALENE	350 J
2-METHYLNAPHTHALENE	310 J
ACENAPHTHYLENE	440 J
ACENAPHTHENE	320 J
DIBENZOFURAN	320 J
FLUORENE	490 J
PHENANTHRENE	5800
ANTHRACENE	1200 J
FLUORANTHENE	7500
PYRENE	7600
BENZO(a)ANTHRACENE	3700
CHRYSENE	4100
bis(2-ETHYHLHEXYL)PHTHALATE	1800
BENZO(b)FLUORANTHENE	3600
BENZO(k)FLUORANTHENE	2300
BENZO(a)PYRENE	3000
INDENO(1,2,3-cd)PYRENE	1100 J
DIBENZO(a,h)ANTHRACENE	670 J
BENZO(g,h,i)PERYLENE	500 J

SAMPLE ID:CSESBF7CA6	
NAPHTHALENE	700 J
ACENAPHTHENE	1500 J
FLUORENE	640 J
PHENANTHRENE	8400
ANTHRACENE	1800 J
CARBAZOLE	1200 J
DI-N-BUTYLPHTHALATE	3300 J
FLUORANTHENE	18000
PYRENE	19000
BENZO(a)ANTHRACENE	12000
CHRYSENE	14000
bis(2-ETHYHLHEXYL)PHTHALATE	5200
BENZO(b)FLUORANTHENE	17000
BENZO(k)FLUORANTHENE	9400
BENZO(a)PYRENE	13000
INDENO(1,2,3-cd)PYRENE	4200 J
DIBENZO(a,h)ANTHRACENE	2000 J
BENZO(g,h,i)PERYLENE	3000 J

SAMPLE ID:CSESBF7CA7	
NAPHTHALENE	51 J
ACENAPHTHYLENE	43 J
ACENAPHTHENE	100 J
FLUORENE	57 J
PHENANTHRENE	670
ANTHRACENE	160 J
CARBAZOLE	98 J
FLUORANTHENE	1100
PYRENE	1200
BENZO(a)ANTHRACENE	710
CHRYSENE	890
bis(2-ETHYHLHEXYL)PHTHALATE	1600
DI-N-OCTYLPHTHALATE	68 J
BENZO(b)FLUORANTHENE	1000
BENZO(k)FLUORANTHENE	910
BENZO(a)PYRENE	780
INDENO(1,2,3-cd)PYRENE	230 J
DIBENZO(a,h)ANTHRACENE	160 J
BENZO(g,h,i)PERYLENE	150 J

SAMPLE ID:CSESBF7CA8	
NAPHTHALENE	96 J
2-METHYLNAPHTHALENE	87 J
ACENAPHTHYLENE	88 J
ACENAPHTHENE	160 J
FLUORENE	150 J
PHENANTHRENE	2500
ANTHRACENE	520 J
FLUORANTHENE	4300
PYRENE	6200
BENZO(a)ANTHRACENE	2500
CHRYSENE	2900
bis(2-ETHYHLHEXYL)PHTHALATE	780 J
BENZO(b)FLUORANTHENE	2900
BENZO(k)FLUORANTHENE	1600
BENZO(a)PYRENE	2500
INDENO(1,2,3-cd)PYRENE	760 J
DIBENZO(a,h)ANTHRACENE	440 J
BENZO(g,h,i)PERYLENE	380 J

SAMPLE ID:CSESBF7CA9	
NAPHTHALENE	130 J
2-METHYLNAPHTHALENE	120 J
ACENAPHTHYLENE	140 J
ACENAPHTHENE	300 J
FLUORENE	190 J
2,4-DINITROTOLUENE	270 J
FLUORENE	270 J
PHENANTHRENE	3100
ANTHRACENE	910
CARBAZOLE	330 J
FLUORANTHENE	4700
PYRENE	5000
BENZO(a)ANTHRACENE	3600
CHRYSENE	3400
bis(2-ETHYHLHEXYL)PHTHALATE	1700
BENZO(b)FLUORANTHENE	4200
BENZO(k)FLUORANTHENE	2300
BENZO(a)PYRENE	3300
INDENO(1,2,3-cd)PYRENE	1400
DIBENZO(a,h)ANTHRACENE	910 J
BENZO(g,h,i)PERYLENE	970

SAMPLE ID:CSESBF7CA10	
NAPHTHALENE	96 J
2-METHYLNAPHTHALENE	87 J
ACENAPHTHYLENE	88 J
ACENAPHTHENE	160 J
FLUORENE	150 J
PHENANTHRENE	2500
ANTHRACENE	520 J
FLUORANTHENE	4300
PYRENE	6200
BENZO(a)ANTHRACENE	2500
CHRYSENE	2900
bis(2-ETHYHLHEXYL)PHTHALATE	780 J
BENZO(b)FLUORANTHENE	2900
BENZO(k)FLUORANTHENE	1600
BENZO(a)PYRENE	2500
INDENO(1,2,3-cd)PYRENE	760 J
DIBENZO(a,h)ANTHRACENE	440 J
BENZO(g,h,i)PERYLENE	380 J

SAMPLE ID:CSESBF7CA11	
NAPHTHALENE	130 J
2-METHYLNAPHTHALENE	120 J
ACENAPHTHYLENE	140 J
ACENAPHTHENE	300 J
FLUORENE	190 J
2,4-DINITROTOLUENE	270 J
FLUORENE	270 J
PHENANTHRENE	3100
ANTHRACENE	910
CARBAZOLE	330 J
FLUORANTHENE	4700
PYRENE	5000
BENZO(a)ANTHRACENE	3600
CHRYSENE	3400
bis(2-ETHYHLHEXYL)PHTHALATE	1700
BENZO(b)FLUORANTHENE	4200
BENZO(k)FLUORANTHENE	2300
BENZO(a)PYRENE	3300
INDENO(1,2,3-cd)PYRENE	1400
DIBENZO(a,h)ANTHRACENE	910 J
BENZO(g,h,i)PERYLENE	970

SAMPLE ID:CSESBF7CA12	
NAPHTHALENE	96 J
2-METHYLNAPHTHALENE	87 J
ACENAPHTHYLENE	88 J
ACENAPHTHENE	160 J
FLUORENE	150 J
PHENANTHRENE	2500
ANTHRACENE	520 J
FLUORANTHENE	4300
PYRENE	6200
BENZO(a)ANTHRACENE	2500
CHRYSENE	2900
bis(2-ETHYHLHEXYL)PHTHALATE	780 J
BENZO(b)FLUORANTHENE	2900
BENZO(k)FLUORANTHENE	1600
BENZO(a)PYRENE	2500
INDENO(1,2,3-cd)PYRENE	760 J
DIBENZO(a,h)ANTHRACENE	440 J
BENZO(g,h,i)PERYLENE	380 J

SAMPLE ID:CSESBF7CA13	
NAPHTHALENE	51 J
ACENAPHTHYLENE	43 J
ACENAPHTHENE	100 J
FLUORENE	57 J
PHENANTHRENE	670
ANTHRACENE	160 J
CARBAZOLE	98 J
FLUORANTHENE	1100
PYRENE	1200
BENZO(a)ANTHRACENE	710
CHRYSENE	890
bis(2-ETHYHLHEXYL)PHTHALATE	1600
DI-N-OCTYLPHTHALATE	68 J
BENZO(b)FLUORANTHENE	1000
BENZO(k)FLUORANTHENE	910
BENZO(a)PYRENE	780
INDENO(1,2,3-cd)PYRENE	230 J
DIBENZO(a,h)ANTHRACENE	160 J
BENZO(g,h,i)PERYLENE	150 J

SAMPLE ID:CSESBF7CA14	
NAPHTHALENE	96 J
2-METHYLNAPHTHALENE	87 J
ACENAPHTHYLENE	88 J
ACENAPHTHENE	160 J
FLUORENE	150 J
PHENANTHRENE	2500
ANTHRACENE	520 J
FLUORANTHENE	4300
PYRENE	6200
BENZO(a)ANTHRACENE	2500
CHRYSENE	2900
bis(2-ETHYHLHEXYL)PHTHALATE	780 J
BENZO(b)FLUORANTHENE	2900
BENZO(k)FLUORANTHENE	1600
BENZO(a)PYRENE	2500
INDENO(1,2,3-cd)PYRENE	760 J
DIBENZO(a,h)ANTHRACENE	440 J
BENZO(g,h,i)PERYLENE	380 J

SAMPLE ID:CSESBF7CA15	
NAPHTHALENE	51 J
ACENAPHTHYLENE	43 J
ACENAPHTHENE	100 J
FLUORENE	57 J
PHENANTHRENE	670
ANTHRACENE	160 J
CARBAZOLE	98 J
FLUORANTHENE	1100
PYRENE	1200
BENZO(a)ANTHRACENE	710

ID18	SAMPLE ID:CSES1FEA
NAPHTHALENE	390 J
2-METHYLNAPHTHALENE	250 J
ACENAPHTHYLENE	95 J
ACENAPHTHENE	410 J
DIBENZOFURAN	160 J
FLUORENE	300 J
PHENANTHRENE	2800
ANTHRACENE	650 J
CARBAZOLE	360 J
FLUORANTHENE	3500
PYRENE	4100
BENZO(a)ANTHRACENE	3000
CHRYSENE	3000
bis(2-ETHYLHEXYL)PHTHALATE	2100
BENZO(b)FLUORANTHENE	4400 J
BENZO(k)FLUORANTHENE	2300 J
BENZO(a)PYRENE	3300 J
INDENO(1,2,3-cd)PYRENE	1100 J
DIBENZO(a,h)ANTHRACENE	830 J
BENZO(g,h,i)PERYLENE	810 J

ID19	SAMPLE ID:CSES1FEC
NAPHTHALENE	260 J
2-METHYLNAPHTHALENE	200 J
ACENAPHTHYLENE	87 J
ACENAPHTHENE	370 J
DIBENZOFURAN	140 J
FLUORENE	280 J
PHENANTHRENE	2900
ANTHRACENE	590 J
CARBAZOLE	320 J
FLUORANTHENE	3500
PYRENE	3900
BENZO(a)ANTHRACENE	2800
CHRYSENE	2800
bis(2-ETHYLHEXYL)PHTHALATE	1800
BENZO(b)FLUORANTHENE	3800
BENZO(k)FLUORANTHENE	1700
BENZO(a)PYRENE	2800
INDENO(1,2,3-cd)PYRENE	1000
DIBENZO(a,h)ANTHRACENE	710 J
BENZO(g,h,i)PERYLENE	740 J

ID14	SAMPLE ID:CSES1FAA
NAPHTHALENE	250 J
2-METHYLNAPHTHALENE	110 J
ACENAPHTHYLENE	98 J
ACENAPHTHENE	310 J
FLUORENE	280 J
PHENANTHRENE	2000
ANTHRACENE	630
CARBAZOLE	290 J
FLUORANTHENE	2300
PYRENE	3400
BUTYLBENZYLPHTHALATE	1600
BENZO(a)ANTHRACENE	2200
CHRYSENE	2000
bis(2-ETHYLHEXYL)PHTHALATE	2600
BENZO(b)FLUORANTHENE	2000 J
BENZO(k)FLUORANTHENE	1800 J
BENZO(a)PYRENE	1800 J
INDENO(1,2,3-cd)PYRENE	940 J
DIBENZO(a,h)ANTHRACENE	610 J
BENZO(g,h,i)PERYLENE	660 J

ID20	SAMPLE ID:CSES1FFA
NAPHTHALENE	78 J
2-METHYLNAPHTHALENE	62 J
ACENAPHTHYLENE	57 J
ACENAPHTHENE	200 J
DIBENZOFURAN	87 J
FLUORENE	170 J
PHENANTHRENE	1600
ANTHRACENE	430
DI-N-BUTYLPHTHALATE	540
FLUORANTHENE	2200
PYRENE	2300
BUTYLBENZYLPHTHALATE	300 J
BENZO(a)ANTHRACENE	1700
CHRYSENE	1600
bis(2-ETHYLHEXYL)PHTHALATE	1100
BENZO(b)FLUORANTHENE	1900
BENZO(k)FLUORANTHENE	1100
BENZO(a)PYRENE	1500
INDENO(1,2,3-cd)PYRENE	720
DIBENZO(a,h)ANTHRACENE	470
BENZO(g,h,i)PERYLENE	480

ID21	SAMPLE ID:CSES1FFAB
NAPHTHALENE	95 J
2-METHYLNAPHTHALENE	54 J
ACENAPHTHYLENE	110 J
ACENAPHTHENE	200 J
DIBENZOFURAN	93 J
FLUORENE	180 J
PHENANTHRENE	1800
ANTHRACENE	440
DI-N-BUTYLPHTHALATE	350 J
FLUORANTHENE	3000
PYRENE	2600
BENZO(a)ANTHRACENE	1700
CHRYSENE	2000
bis(2-ETHYLHEXYL)PHTHALATE	1200
BENZO(b)FLUORANTHENE	2700
BENZO(k)FLUORANTHENE	1100
BENZO(a)PYRENE	1800
INDENO(1,2,3-cd)PYRENE	760
DIBENZO(a,h)ANTHRACENE	520
BENZO(g,h,i)PERYLENE	500

ID22	SAMPLE ID:CSES1FFAFM
NAPHTHALENE	110 J
2-METHYLNAPHTHALENE	86 J
ACENAPHTHYLENE	90 J
ACENAPHTHENE	280 J
DIBENZOFURAN	100 J
FLUORENE	220 J
PHENANTHRENE	2400
ANTHRACENE	610 J
FLUORANTHENE	3400
PYRENE	3400
BENZO(a)ANTHRACENE	2700
CHRYSENE	2500
bis(2-ETHYLHEXYL)PHTHALATE	2300
DI-N-OCTYLPHTHALATE	430 J
BENZO(b)FLUORANTHENE	2600
BENZO(k)FLUORANTHENE	2700
BENZO(a)PYRENE	2400
INDENO(1,2,3-cd)PYRENE	830
DIBENZO(a,h)ANTHRACENE	580 J
BENZO(g,h,i)PERYLENE	540 J

ID15	SAMPLE ID:CSES1FCA
ISOPHORONE	550
NAPHTHALENE	230 J
2-METHYLNAPHTHALENE	99 J
ACENAPHTHYLENE	120 J
ACENAPHTHENE	340 J
DIBENZOFURAN	130 J
FLUORENE	250 J
PHENANTHRENE	2100
ANTHRACENE	570
CARBAZOLE	340 J
DI-N-BUTYLPHTHALATE	280 J
FLUORANTHENE	3000
PYRENE	2600
BENZO(a)ANTHRACENE	1800
CHRYSENE	2000
bis(2-ETHYLHEXYL)PHTHALATE	940
BENZO(b)FLUORANTHENE	2800 J
BENZO(k)FLUORANTHENE	1500 J
BENZO(a)PYRENE	1900 J
INDENO(1,2,3-cd)PYRENE	640 J
DIBENZO(a,h)ANTHRACENE	460 J
BENZO(g,h,i)PERYLENE	430 J

ID17	SAMPLE ID:CSES1FCAF
4-METHYLPHENOL	53 J
NAPHTHALENE	380 J
2-METHYLNAPHTHALENE	160 J
ACENAPHTHYLENE	82 J
ACENAPHTHENE	480
FLUORENE	470
PHENANTHRENE	2700
ANTHRACENE	950
CARBAZOLE	520
DI-N-BUTYLPHTHALATE	250 J
FLUORANTHENE	3000
PYRENE	3300
BENZO(a)ANTHRACENE	2500
CHRYSENE	2200
bis(2-ETHYLHEXYL)PHTHALATE	1400
DI-N-OCTYLPHTHALATE	63 J
BENZO(b)FLUORANTHENE	2500
BENZO(k)FLUORANTHENE	1300
BENZO(a)PYRENE	2000
INDENO(1,2,3-cd)PYRENE	880
DIBENZO(a,h)ANTHRACENE	620
BENZO(g,h,i)PERYLENE	650

ID16	SAMPLE ID:CSES1FCAB
ISOPHORONE	850
NAPHTHALENE	110 J
2-METHYLNAPHTHALENE	93 J
ACENAPHTHYLENE	220 J
ACENAPHTHENE	330 J
DIBENZOFURAN	120 J
FLUORENE	280 J
4-NITROANILINE	260 J
PHENANTHRENE	3000
ANTHRACENE	740 J
CARBAZOLE	430 J
DI-N-BUTYLPHTHALATE	530 J
FLUORANTHENE	4400
PYRENE	4500
BENZO(a)ANTHRACENE	3500
CHRYSENE	3300
bis(2-ETHYLHEXYL)PHTHALATE	1500
BENZO(b)FLUORANTHENE	3600 J
BENZO(k)FLUORANTHENE	2800 J
BENZO(a)PYRENE	3100 J
INDENO(1,2,3-cd)PYRENE	1100 J
DIBENZO(a,h)ANTHRACENE	790 J
BENZO(g,h,i)PERYLENE	750 J

ID27	SAMPLE ID:CSES1FJA
NAPHTHALENE	83 J
2-METHYLNAPHTHALENE	88 J
ACENAPHTHYLENE	62 J
ACENAPHTHENE	150 J
FLUORENE	140 J
PHENANTHRENE	1400
ANTHRACENE	380 J
CARBAZOLE	190 J
FLUORANTHENE	2100
PYRENE	2100
BUTYLBENZYLPHTHALATE	370 J
BENZO(a)ANTHRACENE	1600
CHRYSENE	1500
bis(2-ETHYLHEXYL)PHTHALATE	2100
BENZO(b)FLUORANTHENE	1700
BENZO(k)FLUORANTHENE	1300
BENZO(a)PYRENE	1400
INDENO(1,2,3-cd)PYRENE	500 J
DIBENZO(a,h)ANTHRACENE	360 J
BENZO(g,h,i)PERYLENE	340 J

ID9	SAMPLE ID:CSES1D1A
NAPHTHALENE	330 J
2-METHYLNAPHTHALENE	280 J
ACENAPHTHYLENE	360 J
ACENAPHTHENE	450 J
DIBENZOFURAN	200 J
FLUORENE	430 J
PHENANTHRENE	3600
ANTHRACENE	1000
CARBAZOLE	510 J
FLUORANTHENE	4900
PYRENE	5100
BUTYLBENZYLPHTHALATE	370 J
BENZO(a)ANTHRACENE	4400
CHRYSENE	4000
bis(2-ETHYLHEXYL)PHTHALATE	2000
BENZO(b)FLUORANTHENE	5900 J
BENZO(k)FLUORANTHENE	2900 J
BENZO(a)PYRENE	4000 J
INDENO(1,2,3-cd)PYRENE	1500 J
DIBENZO(a,h)ANTHRACENE	1100 J
BENZO(g,h,i)PERYLENE	990 J

ID10	SAMPLE ID:CSES1D2A
NAPHTHALENE	540 J
2-METHYLNAPHTHALENE	380 J
ACENAPHTHYLENE	320 J
ACENAPHTHENE	1400 J
FLUORENE	1000 J
PHENANTHRENE	8700
ANTHRACENE	2600
CARBAZOLE	1300 J
FLUORANTHENE	13000
PYRENE	13000
BENZO(a)ANTHRACENE	11000
CHRYSENE	9900
bis(2-ETHYLHEXYL)PHTHALATE	4200
BENZO(b)FLUORANTHENE	14000
BENZO(k)FLUORANTHENE	5300
BENZO(a)PYRENE	10000
INDENO(1,2,3-cd)PYRENE	5000
DIBENZO(a,h)ANTHRACENE	3400
BENZO(g,h,i)PERYLENE	3400

ID11	SAMPLE ID:CSES1D2AB
NAPHTHALENE	740 J
2-METHYLNAPHTHALENE	500 J
ACENAPHTHYLENE	400 J
ACENAPHTHENE	1700 J
FLUORENE	1100 J
PHENANTHRENE	11000
ANTHRACENE	3300 J
CARBAZOLE	1800 J
FLUORANTHENE	18000
PYRENE	16000
BENZO(a)ANTHRACENE	14000
CHRYSENE	13000
bis(2-ETHYLHEXYL)PHTHALATE	4800
BENZO(b)FLUORANTHENE	15000
BENZO(k)FLUORANTHENE	11000
BENZO(a)PYRENE	13000
INDENO(1,2,3-cd)PYRENE	4400
DIBENZO(a,h)ANTHRACENE	3200 J
BENZO(g,h,i)PERYLENE	2900 J

ID12	SAMPLE ID:CSES1D2ABD
NAPHTHALENE	530 J
ACENAPHTHYLENE	380 J
ACENAPHTHENE	1500 J
DIBENZOFURAN	450 J
FLUORENE	1000 J
PHENANTHRENE	10000
ANTHRACENE	2900 J
CARBAZOLE	1300 J
FLUORANTHENE	17000
PYRENE	14000
BENZO(a)ANTHRACENE	13000
CHRYSENE	12000
bis(2-ETHYLHEXYL)PHTHALATE	3300 J
BENZO(b)FLUORANTHENE	16000
BENZO(k)FLUORANTHENE	7200
BENZO(a)PYRENE	12000
INDENO(1,2,3-cd)PYRENE	5700
DIBENZO(a,h)ANTHRACENE	3900
BENZO(g,h,i)PERYLENE	3700 J

ID13	SAMPLE ID:CSES1D2AF
NAPHTHALENE	2600
2-METHYLNAPHTHALENE	880 J
ACENAPHTHYLENE	180 J
ACENAPHTHENE	1600 J
DIBENZOFURAN	1200 J
FLUORENE	2000
4-NITROANILINE	250 J
PHENANTHRENE	9700
ANTHRACENE	3500
CARBAZOLE	1800 J
FLUORANTHENE	11000
PYRENE	10000
BENZO(a)ANTHRACENE	8700
CHRYSENE	7800
bis(2-ETHYLHEXYL)PHTHALATE	4100
BENZO(b)FLUORANTHENE	9200
BENZO(k)FLUORANTHENE	4800
BENZO(a)PYRENE	7600
INDENO(1,2,3-cd)PYRENE	4200
DIBENZO(a,h)ANTHRACENE	2700
BENZO(g,h,i)PERYLENE	3000

ID5	SAMPLE ID:CSES1C3A
NAPHTHALENE	460 J
2-METHYLNAPHTHALENE	270 J
ACENAPHTHYLENE	170 J
2,6-DINITROTOLUENE	830 J
ACENAPHTHENE	840 J
DIBENZOFURAN	270 J
FLUORENE	600 J
PHENANTHRENE	4800
ANTHRACENE	1500
CARBAZOLE	750 J
FLUORANTHENE	7500
PYRENE	6300
BENZO(a)ANTHRACENE	5900
CHRYSENE	5400
bis(2-ETHYLHEXYL)PHTHALATE	1900
BENZO(b)FLUORANTHENE	7900
BENZO(k)FLUORANTHENE	2700
BENZO(a)PYRENE	5600
INDENO(1,2,3-cd)PYRENE	3500
DIBENZO(a,h)ANTHRACENE	2300
BENZO(g,h,i)PERYLENE	2500

ID6	SAMPLE ID:CSES1C3C
NAPHTHALENE	530 J
2-METHYLNAPHTHALENE	330 J
2,6-DINITROTOLUENE	1400 J
ACENAPHTHENE	1300 J
DIBENZOFURAN	380 J
FLUORENE	810 J
PHENANTHRENE	7200
ANTHRACENE	2100 J
CARBAZOLE	1100 J
FLUORANTHENE	11000
PYRENE	11000
BENZO(a)ANTHRACENE	9100
CHRYSENE	8500
bis(2-ETHYLHEXYL)PHTHALATE	1500 J
BENZO(b)FLUORANTHENE	10000
BENZO(k)FLUORANTHENE	7000
BENZO(a)PYRENE	8800
INDENO(1,2,3-cd)PYRENE	4000
DIBENZO(a,h)ANTHRACENE	2600
BENZO(g,h,i)PERYLENE	2900

ID4	SAMPLE ID:CSES1C2A
NAPHTHALENE	600 J
ACENAPHTHENE	2700 J
DIBENZOFURAN	500 J
FLUORENE	1200 J
PHENANTHRENE	11000
ANTHRACENE	2900 J
CARBAZOLE	1700 J
FLUORANTHENE	18000
PYRENE	14000
BENZO(a)ANTHRACENE	12000
CHRYSENE	13000
bis(2-ETHYLHEXYL)PHTHALATE	2600 J
BENZO(b)FLUORANTHENE	14000
BENZO(k)FLUORANTHENE	12000
BENZO(a)PYRENE	13000
INDENO(1,2,3-cd)PYRENE	9500
DIBENZO(a,h)ANTHRACENE	6800
BENZO(g,h,i)PERYLENE	8100

ID3	SAMPLE ID:CSES1C1A
NAPHTHALENE	290 J
ACENAPHTHENE	1000 J
DIBENZOFURAN	200 J
FLUORENE	430 J
PHENANTHRENE	4800
ANTHRACENE	1200 J
FLUORANTHENE	9300
PYRENE	7700
BENZO(a)ANTHRACENE	5900
CHRYSENE	6700
bis(2-ETHYLHEXYL)PHTHALATE	1200 J
BENZO(b)FLUORANTHENE	8800
BENZO(k)FLUORANTHENE	4600
BENZO(a)PYRENE	7200
INDENO(1,2,3-cd)PYRENE	4600
DIBENZO(a,h)ANTHRACENE	3000
BENZO(g,h,i)PERYLENE	3500

ID1	SAMPLE ID:CSES1EPA4C
NAPHTHALENE	1400 J
ACENAPHTHYLENE	3400 J
DIBENZOFURAN	900 J
FLUORENE	1700 J
PHENANTHRENE	21000
ANTHRACENE	4900 J
FLUORANTHENE	41000
PYRENE	46000
BENZO(a)ANTHRACENE	27000
CHRYSENE	30000
bis(2-ETHYLHEXYL)PHTHALATE	2400 J
BENZO(b)FLUORANTHENE	34000
BENZO(k)FLUORANTHENE	16000
BENZO(a)PYRENE	29000
INDENO(1,2,3-cd)PYRENE	16000
DIBENZO(a,h)ANTHRACENE	8400 J
BENZO(g,h,i)PERYLENE	12000

ID89	SAMPLE ID:CSES3S29
NAPHTHALENE	680J
2-METHYLNAPHTHALENE	44J
ACENAPHTHYLENE	12J
ACENAPHTHENE	57J
DIBENZOFURAN	57J
FLUORENE	72J
PHENANTHRENE	290J
ANTHRACENE	95J
CARBAZOLE	32J
FLUORANTHENE	250J
PYRENE	220J
BENZO(a)ANTHRACENE	120J
CHRYSENE	110J
BENZO(b)FLUORANTHENE	88J
BENZO(k)FLUORANTHENE	89J
BENZO(a)PYRENE	92J
INDENO(1,2,3-CD)PYRENE	30J
DIBENZO(A,H)ANTHRACENE	18J
BENZO(G,H,I)PERYLENE	28J

ID88	SAMPLE ID:CSES1S3A
PHENANTHRENE	70 J
FLUORANTHENE	84 J
PYRENE	80 J
CHRYSENE	50 J

ID2	SAMPLE ID:CSES1EPA5C
NAPHTHALENE	580 J
2-METHYLNAPHTHALENE	320 J
ACENAPHTHYLENE	190 J
2,6-DINITROTOLUENE	1400 J
ACENAPHTHENE	1600 J
FLUORENE	850 J
PHENANTHRENE	8400
ANTHRACENE	2500
CARBAZOLE	1500 J
FLUORANTHENE	12000
PYRENE	12000
BENZO(a)ANTHRACENE	12000
CHRYSENE	10000
bis(2-ETHYLHEXYL)PHTHALATE	1400 J
BENZO(b)FLUORANTHENE	16000
BENZO(k)FLUORANTHENE	8000
BENZO(a)PYRENE	12000
INDENO(1,2,3-cd)PYRENE	4300
DIBENZO(a,h)ANTHRACENE	2600
BENZO(g,h,i)PERYLENE	2800

ID7	SAMPLE ID:CSES1C4A
NAPHTHALENE	350 J
2-METHYLNAPHTHALENE	180 J
2,6-DINITROTOLUENE	1000 J
ACENAPHTHENE	990 J
FLUORENE	550 J
PHENANTHRENE	5000
ANTHRACENE	1500 J
FLUORANTHENE	8100
PYRENE	8000
BENZO(a)ANTHRACENE	7300
CHRYSENE	6700
bis(2-ETHYLHEXYL)PHTHALATE	2100
DI-N-OCTYLPHTHALATE	1500 J
BENZO(b)FLUORANTHENE	8600
BENZO(k)FLUORANTHENE	5500
BENZO(a)PYRENE	7200
INDENO(1,2,3-cd)PYRENE	2600
DIBENZO(a,h)ANTHRACENE	1800
BENZO(g,h,i)PERYLENE	1800

ID8	SAMPLE ID:CSES1C4AD
NAPHTHALENE	330 J
ACENAPHTHENE	1000 J
DIBENZOFURAN	230 J
FLUORENE	470 J
PHENANTHRENE	4800
ANTHRACENE	1200 J
FLUORANTHENE	8900
PYRENE	7300
BENZO(a)ANTHRACENE	5500
CHRYSENE	6300
bis(2-ETHYLHEXYL)PHTHALATE	1400 J
BENZO(b)FLUORANTHENE	8900
BENZO(k)FLUORANTHENE	3700
BENZO(a)PYRENE	6800
INDENO(1,2,3-cd)PYRENE	4600
DIBENZO(a,h)ANTHRACENE	3000
BENZO(g,h,i)PERYLENE	3500

ID29	SAMPLE ID:CSES1FKAD
NAPHTHALENE	380 J
2-METHYLNAPHTHALENE	160 J
ACENAPHTHYLENE	130 J
ACENAPHTHENE	680 J
FLUORENE	460 J
PHENANTHRENE	3500
ANTHRACENE	800 J
CARBAZOLE	550 J
FLUORANTHENE	4500
PYRENE	4400
BENZO(a)ANTHRACENE	3500
CHRYSENE	3300
bis(2-ETHYLHEXYL)PHTHALATE	3900
BENZO(b)FLUORANTHENE	3800
BENZO(k)FLUORANTHENE	2300
BENZO(a)PYRENE	3000
INDENO(1,2,3-cd)PYRENE	1500
DIBENZO(a,h)ANTHRACENE	1000
BENZO(g,h,i)PERYLENE	1000

ID26	SAMPLE ID:CSES1FKA
2,4-DICHLOROPHENOL	110 J
NAPHTHALENE	370 J
2-METHYLNAPHTHALENE	160 J
ACENAPHTHYLENE	98 J
ACENAPHTHENE	690 J
DIBENZOFURAN	240 J
FLUORENE	470 J
PHENANTHRENE	3800
ANTHRACENE	910
CARBAZOLE	590 J
FLUORANTHENE	4800
PYRENE	4800
BUTYLBENZYLPHTHALATE	740 J
BENZO(a)ANTHRACENE	3800
CHRYSENE	3400
bis(2-ETHYLHEXYL)PHTHALATE	4400
BENZO(b)FLUORANTHENE	4300
BENZO(k)FLUORANTHENE	2100
BENZO(a)PYRENE	3300
INDENO(1,2,3-cd)PYRENE	1800
DIBENZO(a,h)ANTHRACENE	1200
BENZO(g,h,i)PERYLENE	1200

ID23	SAMPLE ID:CSES1FGA
NAPHTHALENE	59 J
ACENAPHTHYLENE	69 J
ACENAPHTHENE	220 J
DIBENZOFURAN	68 J
FLUORENE	140 J
PHENANTHRENE	1500
ANTHRACENE	380 J
DI-N-BUTYLPHTHALATE	220 J
FLUORANTHENE	2500
PYRENE	2300
BENZO(a)ANTHRACENE	1500
CHRYSENE	1700
bis(2-ETHYLHEXYL)PHTHALATE	1400
BENZO(b)FLUORANTHENE	2100
BENZO(k)FLUORANTHENE	1100
BENZO(a)PYRENE	1700
INDENO(1,2,3-cd)PYRENE	790
DIBENZO(a,h)ANTHRACENE	520
BENZO(g,h,i)PERYLENE	560

ID24	SAMPLE ID:CSES1FHA
NAPHTHALENE	65 J
2-METHYLNAPHTHALENE	46 J
ACENAPHTHYLENE	73 J
ACENAPHTHENE	200 J
DIBENZOFURAN	62 J
FLUORENE	120 J
PHENANTHRENE	1500
ANTHRACENE	370 J
CARBAZOLE	180 J
DI-N-BUTYLPHTHALATE	260 J
FLUORANTHENE	2200
PYRENE	2000
BUTYLBENZYLPHTHALATE	220 J
BENZO(a)ANTHRACENE	1200
CHRYSENE	1400
bis(2-ETHYLHEXYL)PHTHALATE	2600
DI-N-OCTYLPHTHALATE	57 J
BENZO(b)FLUORANTHENE	2100
BENZO(k)FLUORANTHENE	980
BENZO(a)PYRENE	1400
INDENO(1,2,3-cd)PYRENE	570
DIBENZO(a,h)ANTHRACENE	370 J
BENZO(g,h,i)PERYLENE	380 J

ID25	SAMPLE ID:CSES1FIA
NAPHTHALENE	98 J
ACENAPHTHYLENE	220 J
ACENAPHTHENE	280 J
DIBENZOFURAN	100 J
FLUORENE	200 J
4-NITROANILINE	210 J
PHENANTHRENE	2600
ANTHRACENE	530 J
FLUORANTHENE	4600
PYRENE	4000
BENZO(a)ANTHRACENE	2800
CHRYSENE	2900
bis(2-ETHYLHEXYL)PHTHALATE	3200
BENZO(b)FLUORANTHENE	3800
BENZO(k)FLUORANTHENE	2200
BENZO(a)PYRENE	2800
INDENO(1,2,3-cd)PYRENE	1400
DIBENZO(a,h)ANTHRACENE	980
BENZO(g,h,i)PERYLENE	1100

ID26	SAMPLE ID:CSES1FIC
NAPHTHALENE	100 J
ACENAPHTHYLENE	260 J
ACENAPHTHENE	280 J
DIBENZOFURAN	130 J
FLUORENE	280 J
4-NITROANILINE	100 J
PHENANTHRENE	3100
ANTHRACENE	790 J
FLUORANTHENE	4500
PYRENE	4700
BENZO(a)ANTHRACENE	3600
CHRYSENE	3400
bis(2-ETHYLHEXYL)PHTHALATE	1800
BENZO(b)FLUORANTHENE	3800
BENZO(k)FLUORANTHENE	3000
BENZO(a)PYRENE	3200
INDENO(1,2,3-cd)PYRENE	1200
DIBENZO(a,h)ANTHRACENE	780 J
BENZO(g,h,i)PERYLENE	760 J

ID32	SAMPLE ID:CSES1FNA
NAPHTHALENE	97 J
ACENAPHTHYLENE	120 J
ACENAPHTHENE	320 J
DIBENZOFURAN	100 J
FLUORENE	210 J
PHENANTHRENE	2200
ANTHRACENE	500 J
FLUORANTHENE	3700
PYRENE	3200
BENZO(a)ANTHRACENE	2000
CHRYSENE	2400
bis(2-ETHYLHEXYL)PHTHALATE	2400
BENZO(b)FLUORANTHENE	3400
BENZO(k)FLUORANTHENE	1400
BENZO(a)PYRENE	2400
INDENO(1,2,3-cd)PYRENE	1300
DIBENZO(a,h)ANTHRACENE	870
BENZO(g,h,i)PERYLENE	940

ID31	SAMPLE ID:CSES1FLAD
NAPHTHALENE	430 J
2-METHYLNAPHTHALENE	260 J
ACENAPHTHYLENE	240 J
ACENAPHTHENE	860 J
DIBENZOFURAN	370 J
FLUORENE	790 J
PHENANTHRENE	6800 J
ANTHRACENE	2000 J
FLUORANTHENE	8700 J
PYRENE	8600 J
BENZO(a)ANTHRACENE	6500 J
CHRYSENE	5900 J
bis(2-ETHYLHEXYL)PHTHALATE	2900
BENZO(b)FLUORANTHENE	5900 J
BENZO(k)FLUORANTHENE	3900
BENZO(a)PYRENE	4900 J
INDENO(1,2,3-cd)PYRENE	2400 J
DIBENZO(a,h)ANTHRACENE	1700 J
BENZO(g,h,i)PERYLENE	1700 J

ID30	SAMPLE ID:CSES1FLA
4-METHYLPHENOL	780 J
NAPHTHALENE	12000 J
2-METHYLNAPHTHALENE	4300 J
ACENAPHTHYLENE	430 J
2,6-DINITROTOLUENE	3000 J
ACENAPHTHENE	6100 J
DIBENZOFURAN	4400 J
FLUORENE	6000 J
PHENANTHRENE	32000 J
ANTHRACENE	12000 J
CARBAZOLE	5900 J
FLUORANTHENE	32000 J
PYRENE	27000 J
BENZO(a)ANTHRACENE	21000 J
CHRYSENE	18000 J
bis(2-ETHYLHEXYL)PHTHALATE	3800 J
BENZO(b)FLUORANTHENE	19000 J
BENZO(k)FLUORANTHENE	9100 J
BENZO(a)PYRENE	15000 J
INDENO(1,2,3-cd)PYRENE	9100 J
DIBENZO(a,h)ANTHRACENE	6000 J
BENZO(g,h,i)PERYLENE	7100 J

APPROX. SCALE (ft.)
0 200

NOTE:
ALL UNITS ARE IN ug/kg.

FIGURE 2

SEMIVOLATILE ORGANIC COMPOUNDS
SAMPLE RESULTS
NORTHEAST QUADRANT
CELOTEX SITE
CHICAGO, ILLINOIS

ERM

10/6/95 PCSR K:\PROJECTS\ERM\ALL\950170.ACAD\SSP\FIGURE2.DWG OCT. 06, 1995 10:01 AM