U.S. EPA Region 5 Targeted Brownfield Assessment Grant funded Project

COMPREHENSIVE SITE INVESTIGATION REPORT
FOR THE
KIMBALL AVENUE PARK
1807-15 NORTH KIMBALL AVENUE
CHICAGO, COOK COUNTY, ILLINOIS

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V
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and

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LIST OF ACRONYMS

%	Percent
°	Degree
ALMC	American Laundry Machinery Company
amsl	Above mean sea level
BEI	Brecheisen Engineering, Inc.
bgs	Below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylene
C	Celsius
cm	Centimeters
COC	Constituent of concern
Compco	Compco Corporation
CPD	Chicago Park District
CSIR	Comprehensive Site Investigation Report
CWE	Clean World Engineering, Ltd.
DO	Dissolved oxygen
DRO	Diesel range organics
EDR	Environmental Data Resources, Inc.
ELC	Elsmere Lumber Company
ESA	Environmental Site Assessment
f_{oc}	Fraction organic carbon
ft	Feet
GRO	gasoline range organics
IAC	Illinois Administrative Code
IEPA	Illinois Environmental Protection Agency
mg/kg	Milligram per kilogram
mg/L	Milligram per liter
mL/min	Milliliter per minute
NFR	No Further Remediation
ORP	Oxidation-reduction potential
PAH	Polycyclic aromatic hydrocarbons
PCB	Polychlorinated biphenyl
PID	Photoionization detector
PIN	Parcel identification number
PVC	Polyvinyl chloride
QAPP	Quality Assurance Project Plan
RAP	Remedial Action Plan
RBCA	Risk Based Corrective Action
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
ROR	Remediation Objectives Report
SAP	Sampling and Analysis Plan
sec	Second
Site	Kimball Avenue Park
SQG	Small quantity generator
SRO	Soil remediation objective
SRP	Site Remediation Program
SSL	Soil Screening Level
START	Superfund Technical Assessment and Response Team
SVOC	Semivolatile organic compound

LIST OF ACRONYMS (CONC'D)

TACO	Tiered Approach to Corrective Action Objectives
TBA	Targeted Brownfields Assessment
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
TPH	Total petroleum hydrocarbon
USCS	Unified Soil Classification System
U.S. EPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground storage tank
VOC	Volatile organic compound
WESTON	Weston Solutions, Inc.

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EXECUTIVE SUMMARY

This report is a Comprehensive Site Investigation Report (CSIR) for the Kimball Avenue Park (Site), located at 1807-1815 North Kimball Avenue, in Chicago, Cook County, Illinois. This report was prepared under a Targeted Brownfields Assessments (TBA) Grant for the United States Environmental Protection Agency in response to a request from the Chicago Park District (CPD) to conduct a Phase II Environmental Site Assessment (ESA) to determine the nature and extent of environmental impacts in order to acquire the Site for development as a City of Chicago greenspace park that will be connected to the Bloomingdale Trail, a greenspace corridor.

The primary objective of the project is to obtain Comprehensive No Further Remediation (NFR) letter from the Illinois Environmental Protection Agency (IEPA) Site Remediation Program (SRP) in accordance with 35 Illinois Administrative Code (IAC) Part 740. The NFR letter will address all of the constituents in 35 IAC Part 740, Appendix A. The purpose of this CSIR is to provide the information necessary for a comprehensive site investigation.

The Site is trapezoidal shaped and consists of three parcels (parcel identification numbers [PIN] 13-35-409-037/039/042) totaling approximately 0.41 acres. The Site is currently vacant and has mostly concrete surface cover with some areas containing grass and dirt. The Site is bordered to the north and east by residential properties, to the west by North Kimball Avenue and residential properties, and to the south by a vacant parcel of land, elevated approximately 15 to 16 feet (ft) above street level, and an abandoned railroad easement.

Sanborn maps obtained as part of the Phase I ESA Report, prepared by Clean World Engineering, Ltd. (CWE) in 2010 indicate the following operations/purposes at the Site:

- 1896: Site occupied by a single-family dwelling on northern portion of property and used for lumber storage for Elsmere Lumber Company (ELC; south adjoining property) on eastern and southern portion of property
- 1921: Site appears vacant with no structures

- 1950: Site occupied by a warehouse believed to be an extension of the American Laundry Machinery Company (ALMC; east adjoining property). The warehouse included a structure for painting operations and/or paint storage.
- 1975, 1988, 1991, and 1994: Site occupied by a warehouse believed to be an extension of the former ALMC, the Compco Corporation (Compco), a fluorescent light bulb and fixture manufacturer.
- 2002 and 2004: Site appears vacant with no structures

Two heating oil underground storage tanks (USTs) (23,000-gallon and 25,000-gallon) were installed on the east adjoining property (PINs 13-35-409-045/046) in November 1952; however, there is no record of their removal (CWE, 2010). The warehouse (100 by 75-ft) at the Site was demolished in July 2001.

A Phase II ESA was conducted by Brecheisen Engineering, Inc. (BEI) in August 2010 with findings presented in a Final Phase II ESA Report dated September 24, 2010. The Weston Solutions, Inc. (WESTON®) 2012 Site investigation activities were conducted between May 29 through 31, 2012. The 2012 sample design was developed to address data gaps from the 2010 Phase II ESA and to delineate known contamination at the Site. BEI collected a total of 26 soil samples from 8 soil boring locations in August 2010 and WESTON collected a total of 19 investigative soil samples from 10 soil borings location in May 2012. BEI completed three soil borings as 1-inch diameter polyvinyl chloride temporary monitoring wells and collected one round of groundwater samples in August 2010. WESTON completed three soil borings as 2-inch diameter polyvinyl chloride monitoring wells, collocated with the BEI wells, and collected one round of groundwater samples in June 2012.

SUMMARY OF TIER 1 EVALUATION

Soil sampling analytical results indicated the presence of volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, and metals at concentrations above the analytical laboratory method detection limits. Cyanide, polychlorinated biphenyls (PCBs), and herbicides were not detected above the analytical laboratory method detection limits. Constituents present in the soil samples at concentrations above at Tier 1 soil remediation objectives (SROs) include the following:

- VOCs – 1,1,2-trichloroethane, 1,1-dichloroethene, benzene, chloroform, cis-1,2-dichloroethene, tetrachloroethene, trans-1,2-dichloroethene, trichloroethene, and vinyl chloride
- SVOCs – benzo(a)anthracene, benzo(a)pyrene, benzo(b)-fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene
- Metals – total antimony, total arsenic, total and toxicity characteristic leaching procedure (TCLP) lead, total mercury, and total selenium

VOC concentrations exceeded Tier 1 SROs for the soil component of the groundwater migration exposure pathway for Class II groundwater at the deepest sampling interval at locations B-3/KP-SB09 (6 to 9 ft below ground surface [bgs]), B-4 (9 to 12 ft bgs), and KP-SB08 (15 to 17 ft bgs) located along the northern boundary of the Site. VOC concentrations exceeded Tier 1 SROs for the residential ingestion and inhalation pathways and soil component of the groundwater migration exposure pathway for Class II groundwater at the deepest sampling interval at locations B-2/KP-SB01 (18 to 20 ft bgs), B-5/KP-SB02 (18 to 20 ft bgs), KP-SB04 (14 to 16 ft bgs), KP-SB05 (14 to 16 ft bgs), KP-SB06 (14 to 16 ft bgs).

Metal concentrations exceeding Tier I SROs were limited to the uppermost 6 ft of the Site. The highest concentrations of antimony, arsenic, lead, mercury, and selenium were identified from the 3 to 6 foot depth interval along the eastern Site boundary (B-4, B-5 and B-6).

The horizontal extent of constituents of concern (COCs) at concentrations exceeding the SROs has been established by the property boundaries in all directions. The vertical extent of contamination is not defined at the following sampling locations for the listed COCs:

- B-2/KP-SB01 – trichloroethene at 18 to 20 ft bgs
- B-3/KP-SB09 – trichloroethene at 6 to 9 ft bgs
- B-4 – cis-1,2-dichloroethene and vinyl chloride at 9 to 12 ft bgs
- B-5/KP-SB02 – cis-1,2-dichloroethene, trichloroethene, and vinyl chloride at 18 to 20 ft bgs
- B-8/KP-SB10 – benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene at 12 to 14 ft bgs
- KP-SB04 – trichloroethene and vinyl chloride at 14 to 16 ft bgs
- KP-SB05 – trichloroethene and vinyl chloride at 14 to 16 ft bgs

- KP-SB06 – cis-1,2-Dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride at 14 to 16 ft bgs
- KP-SB08 – cis-1,2-dichloroethene and vinyl chloride at 15 to 17 ft bgs

Analytical results from groundwater samples indicated the presence of chloroform, cis-1,2-dichloroethene, trichloroethene, and vinyl chloride, and iron at concentrations exceeding the Tier 1 Class II groundwater remediation objectives for the groundwater component of the groundwater ingestion route. The extent of the groundwater plume has not been defined.

Based on observations during the field activities and evaluation of the analytical results, sources of chemical contamination at the Site may be attributed to: 1) former industrial use of the eastern adjacent property for manufacturing purposes as ELC, ALMC, and Compco; 2) long term historical Site uses that included painting, automobile warehousing, lumber storage and warehousing, and storage operations; 3) potential unregistered USTs on-site or adjacent to the Site; and 4) the presence of undocumented urban fill brought onto the Site.

Based on the findings of this investigation, WESTON recommends:

- Address potential vapor migration to nearby residential properties
- Define the vertical extent of soil contamination
- Define the vertical and horizontal extent of the groundwater plume
- Evaluate remedial technologies
- Develop Remediation Objectives Report
- Develop Remedial Action Plan

1. INTRODUCTION

The Weston Solutions, Inc. (WESTON®) Superfund Technical Assessment and Response Team (START) has prepared this Comprehensive Site Investigation Report (CSIR) for the Kimball Avenue Park (Site), located at 1807-1815 North Kimball Avenue, in Chicago, Cook County, Illinois, as shown in **Figure 1-1**. This report was prepared under a Targeted Brownfields Assessments (TBA) Grant for the United States Environmental Protection Agency (U.S. EPA) in response to a request from the Chicago Park District (CPD) to conduct a TBA Phase II Environmental Site Assessment (ESA) to determine the nature and extent of environmental impacts in order to acquire the Site for development as a City of Chicago greenspace park that will be connected to the Bloomingdale Trail, a greenspace corridor.

The 2012 TBA Phase II ESA scope of work was developed based on the findings and recommendations of the 2010 Final Phase I ESA prepared by Clean World Engineering, Ltd. (CWE) and the 2010 Final Phase II ESA prepared by Brecheisen Engineering, Inc. (BEI). The CWE (2010) Phase I and BEI (2010) Phase II ESAs are presented in **Appendix A** (electronic deliverable only).

The 2012 TBA Phase II ESA was performed in accordance with the following approved plans:

- *Sampling and Analysis Plan (SAP)* dated May 7, 2012
- *Quality Assurance Project Plan (QAPP) Addendum* dated May 7, 2012
- *Targeted Brownfields Assessment Grant Program Quality Assurance Project Plan (Generic QAPP)* dated October 2009

The objective of this CSIR is to provide documentation of the results of the investigations. The next step would be to prepare a Remedial Objectives Report (ROR) and Remedial Action Plan (RAP) and receive a Comprehensive No Further Remediation (NFR) letter from the Illinois Environmental Protection Agency (IEPA) Site Remediation Program (SRP) in accordance with 35 Illinois Administrative Code (IAC) Part 740. Specifically, this report contains the following four sections:

- Introduction – This section provides the site characterization and includes a description of the site history, general site geology/hydrogeology, migration pathways and exposure routes, and current and future use of the property.

- Field Activities – This section includes a description of the project sampling objectives, summarizes the types, quantities, and locations of samples that were collected, and provides a narrative description of field activities, site-specific geology and hydrogeology, and analytical results.

- Endangerment Assessment – This section includes a comparison of the soil analytical results to the most stringent applicable Tier 1 Soil Remediation Objectives (SROs) for Residential Properties presented in Appendix B, Table A of 35 IAC Part 742, Tiered Approach to Corrective Action Objectives (TACO), as well as the pH-specific SROs for the soil component of the groundwater ingestion exposure route provided in 35 IAC Part 742, Appendix B, Table C. Groundwater analytical results are compared to Class II Groundwater Remediation Objectives presented in Appendix B, Table E of TACO.

- Conclusions and Recommendations – This section presents a summary of the site characterization and presents the conclusions and recommendations based on the sample analytical results.

1.1 PROJECT OBJECTIVES

The primary objective of the project is to obtain a Comprehensive NFR letter for the Site located at 1807-1815 North Kimball Avenue, in Chicago, Cook County, Illinois. A Comprehensive NFR letter will make approximately 0.41 acres available for redevelopment. The purpose of this CSIR is to provide the information necessary for a comprehensive site investigation.

1.2 SITE DESCRIPTION

The Site is trapezoidal shaped and consists of three parcels (parcel identification numbers [PIN] 13-35-409-037/039/042) totaling approximately 0.41 acres (**Figure 1-2**). The Site is currently vacant and has mostly concrete surface cover with some areas containing grass and dirt. The Site is bordered to the north and east by residential properties, to the west by North Kimball Avenue and residential properties, and to the south by a vacant parcel of land, elevated approximately 15 to 16 feet (ft) above street level, and an abandoned railroad easement.

Based on a review of historical Sanborn maps by CWE (2010), the Site was utilized as a lumberyard for the Elsmere Lumber Company (ELC) in 1896. The lumberyard extended contiguously onto the eastern adjacent property. No structures existed at the Site in 1896.

By 1921, the Site was vacant and a concrete retaining wall existed along the southern Site boundary. Railroad spurs from the Chicago, Milwaukee, and St. Paul railroad were present south of the Site. The eastern adjacent property had been redeveloped into the American Laundry Machinery Company (ALMC). Historical operations at ALMC included woodworking, testing, painting, crating, shipping, lumber storage, and casting storage. In addition, machine shop operations were present.

By 1950, the ALMC had expanded westward onto the Site. A two-story structure was present along the southern portion of the Site, used for "Automobiles" and a "Stock Room" on the first floor, and a "Warehouse" on the second floor, with a two-story "Shipping" building and elevator. The northwest portion of the Site was also occupied by a small one-story "Automobile" garage, while the northern portion of the Site was largely vacant. The eastern adjacent site occupied by the ALMC had expanded since 1921 and a five-story "Factory" building built in 1928 was present. Machine shop, woodworking, testing, painting, crating, and shipping operations were still ongoing at the Site according to the 1950 Sanborn map, and "woodworking" activities were being conducted at the eastern adjacent site.

By 1975, the Compco Corporation (Compco) was present in place of ALMC in the vicinity of the Site and the eastern adjacent site. Compco is described on the 1975 Sanborn Map as "Manufacturers of Fluorescent Fixtures." Buildings along the southern portion of the Site were used for a "Stock Room," a "Warehouse," and "Shipping." The 1975 Sanborn map no longer denotes "Automobiles" in the southern portion of the Site. In addition, the former "Automobile" garage on the northwest portion of the Site is no longer present. However, a small building had been constructed in 1956 at the northwest portion of the Site building, and is described as "Paint."

By 1988, the Site remained an extension of the eastern adjacent Compco fluorescent fixture manufacturing facility. A building remained along the southern portion of the Site and is still described as "Warehouse," "Stock Room," "Shipping," and "Paint" on the 1988 Sanborn map. However, another addition to the Site building had been constructed on the central portion of the Site. The use of this portion of the Site building was not discernible on the 1988 Sanborn Map. The Site and the eastern adjacent Compco remained in this configuration through the 1994.

By 2002, both the subject Site and the interconnected eastern adjacent property were completely vacant, and remained in this configuration through the 2004. Prior to the Site's vacancy, two small structures were demolished by the City of Chicago, one in 2001, and one in 2002/2003. The Site has been vacant since 2003 and the City of Chicago acquired the Site through foreclosure in 2005. The CWE (2010) Final Phase I ESA located in **Appendix A** (electronic deliverable only) provides additional historical information.

1.2.1 Regional Topography

United States Geological Survey (USGS) topographic maps reviewed by CWE (2010) indicate the Site elevation is between 600 and 605 ft above mean sea level (amsl). The Site is relatively flat and the general topographic gradient in the area is to the east. The elevated embankment for the railroad parcel south of the Site consists of fill material at a higher elevation than the Site and the natural topography.

1.2.2 Regional Geology

According to information gathered from the Environmental Data Resources, Inc. (EDR) report obtained as part of the Phase I ESA conducted by CWE (2010), the regional geology is characterized as Paleozoic Era, Silurian System, Middle Silurian Series, stratified sequence. The major soil component name is Urbanland and the soil surface texture is variable. Urbanland soils are known to have been disturbed due to extensive urban development over time, consist of fill materials such as crushed rock or other materials resistant to weathering, are poorly drained, and

have silty and clayey subsoil. Much of the soils in the Chicago area, away from Lake Michigan, are comprised of dense gray clays with remnants of glacial deposits.

1.2.3 Regional Hydrogeology

During the Phase II ESA, conducted by BEI (2010), the depth to groundwater measured from 2.51 to 13.85-ft below ground surface (bgs) and the flow of groundwater was determined to be towards the northwest. However, numerous factors will influence flow through this zone, such as surface topography, underground structures, and seasonal fluctuations. Additionally, water-bearing zones within the surficial materials are likely to be perched and discontinuous. See **Subsection 2.3.2** for Site hydrogeological characteristics observed during the WESTON 2012 groundwater investigation.

According to information gathered from the EDR report obtained as part of the Phase I ESA conducted by CWE (2010), there are six water wells within 1-mile of the Site. However, the City of Chicago has a moratorium on drinking water supply wells in the City.

1.2.4 Surface Water

The closest surface water body is a small pond in Humboldt Park approximately 0.75 miles southeast of the Site. The north branch of the Chicago River is approximately 2.8 miles east of the Site. The North Branch of the Chicago River flows south into the Chicago Sanitary and Ship Canal, away from Lake Michigan. Lake Michigan is approximately 4.5 miles east of the Site. Lake Michigan is the sole source of the City of Chicago's drinking water.

1.3 RECOGNIZED ENVIRONMENTAL CONCERNS

Based on the Final Phase I ESA Report, prepared by CWE (2010), and the Final Phase II ESA Report, prepared by BEI (2010), the following recognized environmental conditions (RECs) were identified at the Site:

- Long term historical Site uses that included painting, automobile warehousing, lumber storage and warehousing, and storage operations assumed to be associated with the former eastern adjoining ALMC and Compco.

- The potential for unregistered underground storage tanks (USTs)
- The potential for urban fill being brought onto the Site from unknown sources
- Long-term historical industrial use of the eastern adjacent property for manufacturing purposes as ELC, ALMC, and Compco
- Records for two heating oil USTs (23,000-gallon and 25,000-gallon) installed on the eastern adjacent property in 1952 were identified, with no documentation on the disposition
- Listings of the eastern adjacent property a Resource Conservation and Recovery Act (RCRA) Small Quantity Generator (SQG) of hazardous waste and a RCRA non-generator

1.4 POTENTIAL SOURCES, MIGRATION PATHWAYS, AND EXPOSURE ROUTES

Based on historical Site use and RECs, the primary sources of contamination are likely derived from paint, lumber, and automobile warehouse operations at the Site, urban fill brought onto the Site, potential petroleum releases from two heating oil USTs (23,000-gallon and 25,000-gallon) installed on the eastern adjacent Site in 1952, and potential historical releases from the adjacent property formerly occupied by ELC, ALMC, and Compco. Leaching of contaminants from surface soils to subsurface soils, leaching of soil contaminants to shallow groundwater underlying the Site, and migration of contaminants in groundwater off-site each represent potential migration pathways at the Site. Potential exposure pathways of contaminant migration include ingestion of contaminants in soil, inhalation of airborne soil contaminants, and inhalation of constituents volatilized from soil and groundwater.

1.5 LEGAL DESCRIPTION

A copy of the legal description for the Site is presented in **Appendix B**.

1.6 SOURCES AND REFERENCES

Brecheisen Engineering, Inc. (BEI), 2010. *Final Phase II Environmental Site Assessment: Vacant Land, 1807-15 N. Kimball Ave., Chicago, Illinois 60647*.

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Clean World Engineering, Ltd. (CWE), 2010. *Final Phase I Environmental Site Assessment (ESA) Report, TOR #09 – DOE-0022, 1807 – 1815 North Kimball Avenue, Chicago Illinois, 60647*. Prepared for: City of Chicago Department of Environment.

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Illinois Environmental Protection Agency. Title 35 of the IAC, Subtitle G: Waste Disposal. Chapter I: Pollution Control Board. Part 240: Site Remediation Program.

Illinois Environmental Protection Agency. Title 35 of the IAC, Subtitle G: Waste Disposal. Chapter I: Pollution Control Board. Subchapter f: Risk Based Cleanup Objectives. Part 742: Tiered Approach to Corrective Action Objectives.

Illinois State Geological Survey. 1971. Circular 460 Summary of the Geology in the Chicago Area. Springfield, Illinois.

United States Geological Survey. 1997. Chicago Loop 7.5 Minute Quadrangle Map. Washington DC.

2. FIELD ACTIVITIES

This section presents a description of the site characterization field activities conducted at the Site. WESTON's site characterization activities were conducted in accordance with the approved site-specific QAPP Addendum and SAP. Field activities included soil boring and soil sample collection, monitoring well installation and development, groundwater sampling, surveying, and hydraulic conductivity testing.

2.1 SITE-SPECIFIC SAMPLING AND ANALYSIS PLAN

The complete site-specific QAPP Addendum and SAP were prepared for, and approved by, the U.S. EPA, with input from the CPD. The site-specific QAPP Addendum and SAP contain a description of the project sampling objectives; summarize the types, quantities, and locations of

samples collected; and describe the decontamination, sample packaging, and shipment procedures. The laboratory procedures and analytical requirements for the sampling were provided in the Generic QAPP and site-specific QAPP Addendum. Standard operating procedures for drilling, sampling, and well installation were presented in the Generic QAPP.

The sampling program included the collection and analysis of soil and groundwater samples. The overall objective of the field activities was to determine the nature and extent of constituents listed in the Target Compound List (TCL). The TCL is provided in Appendix A of 35 IAC, Part 740. The field investigation objectives were achieved through advancement of soil borings, installation of monitoring wells, collection of soil and groundwater samples, Site surveying, and hydraulic conductivity testing. The following sections document the previous and present soil and groundwater investigations.

2.2 SOIL INVESTIGATION

2.2.1 BEI 2010 Sampling Event

A Phase II ESA was conducted by BEI in August 2010 with findings presented in a Final Phase II ESA Report dated September 24, 2010. The Phase II ESA is presented in **Appendix A** (electronic deliverable only) and summarized in the following subsections. Analytical results derived from BEI's Phase II ESA were obtained by WESTON and were used in the endangerment assessment (**Section 3**).

On August 4, 2010, BEI oversaw the advancement of soil borings B-1 through B-8 at the Site in areas most likely to have been impacted based on historical operations (BEI, 2010; see **Appendix A** of electronic deliverable). **Figure 2-1** presents the 2010 soil sampling locations. One soil boring was advanced to a terminal depth of 24-ft to characterize the Site's geology and to determine the location of potential water bearing units. Two soil borings were advanced to a terminal depth of 20-ft. Four soil borings were advanced to a terminal depth of 16-ft. One soil boring was drilled to a terminal depth of 6-ft due to refusal. Subsurface penetration was achieved using a truck-mounted Geoprobe using standard dual-tube sampling techniques.

Twenty-six soil samples were collected continuously at 3-foot intervals and classified by BEI using the Unified Soil Classification System (USCS).

At least two soil samples from each soil boring were analyzed for various combinations of volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), pesticides, herbicides and RCRA metals. One shallow soil sample was collected from the surficial soils (0 to 3 ft below ground surface [bgs], except when there was no recovery) and at least one deeper soil sample was collected from the soil horizon potentially impacted based on field observations and photoionization detector (PID) field screenings. Where no potential impacts were observed, the soil interval above the soil-groundwater interface was collected for analysis.

Twenty-one soil samples were analyzed for VOCs, 10 soil samples were analyzed for SVOCs, eight soil samples were analyzed for PAHs, nine soil samples were analyzed for PCBs and pesticides, four soil samples were analyzed for TCL inorganics and pH, 11 soil samples were analyzed for RCRA metals and pH, four additional soil samples were analyzed for various individual metals, one soil sample was analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX),, two soil samples were analyzed for herbicides, and two soil samples were analyzed for fraction organic carbon (f_{oc}). Also, two soil samples were analyzed for toxicity characteristic leaching procedure (TCLP) VOCs, one soil sample was analyzed for TCLP RCRA metals, and one soil sample was analyzed for TCLP chromium. The soil samples with the highest detected concentrations of trichloroethylene, vinyl chloride, arsenic, chromium, lead, and mercury were designated for TCLP analyses in order to determine whether the soil at the Site exhibited hazardous toxicity characteristics. **Table 2-1** presents a summary of soil samples collected by BEI in 2010 and analyses performed on each sample.

2.2.2 WESTON 2012 Phase II ESA

WESTON was retained by the U.S. EPA to perform a Phase II ESA under a TBA grant to delineate known contamination at the Site, address data gaps from the 2010 Phase II ESA, and to delineate known contamination at the Site. Soil boring and sampling was conducted on May 29,

2012. WESTON and subcontractor Cabeno Environmental Field Services, LLC of Joliet, Illinois used a direct push 6600 Geoprobe® track-mounted rig to advance 10 soil borings, KP-SB01 through KP-SB10, to a maximum depth of 20 ft bgs. **Figure 2-1** presents the soil boring locations. Soil was collected at 5-foot intervals using macro core samplers. The soil from each 5-foot core was inspected and observations were recorded in a soil boring log. A qualified WESTON geologist described each soil sampling interval using the USCS. Soil descriptions were recorded onto a WESTON boring log to create a detailed record of the lithology and potential contaminant characteristics of each boring. Descriptions were provided of any fill materials, odors, discoloration, or staining suggesting the presence of contamination. In accordance with the SAP, each 2-foot depth interval was field screened for VOCs by placing a section of the 2-foot interval into a plastic, Ziploc-style bag, allowing contents to volatilize, then screening for VOCs using a MultiRAE PID. Field screening results were also recorded onto the boring logs. **Appendix C** provides the soil boring logs.

Based on historical property uses and analytical results from the ESAs listed above, the soil constituents of concern (COCs) for the Site were VOC, SVOCs, and metals. A total of 19 investigative soil samples were collected from the 10 soil boring locations. A summary of the sampling including the sampling identification, sampling horizon, and analytical parameters is presented in **Table 2-1** and summarized below:

- One subsurface soil sample was collected from each soil boring at KP-SB01 and KP-SB02 at a 2-ft depth interval between 6 and 12 ft bgs previously identified as being highly impacted with chlorinated VOCs. These samples were analyzed for total petroleum hydrocarbons (TPH) as diesel range organics (DRO) and TPH as gasoline range organics (GRO) to determine soil attenuation capacity.

- One subsurface soil sample was collected from each soil boring at KP-SB01 and KP-SB02 at a 2-foot depth interval below 12 ft bgs that was assumed to be unimpacted based on visual observations and PID headspace screenings. These samples were analyzed for TCL VOCs to delineate the vertical extent of VOC contamination.

- One subsurface soil sample was collected from KP-SB03 at a depth of 9 to 12 ft bgs and analyzed for TCL SVOCs and f_{oc}. Soil boring KP-SB03 was advanced in the same location as former BEI soil boring B-7. Soil at this location and depth was identified as unimpacted by VOCs during the 2010 investigation and therefore f_{oc}

data was collected to facilitate development of site-specific Tier 2 remediation objectives and modeling following Soil Screening Level (SSL) and Risk-Based Corrective Action (RBCA) methods.

- Two subsurface soil samples were collected from each soil boring at KP-SB04 through KP-SB08 at a 2-foot depth deemed the most impacted, based on visual observations and PID headspace screenings, and the bottom 2 ft of the unsaturated zone. These samples were analyzed for TCL VOCs to delineate the horizontal extent of VOC contamination. KP-SB04 through KP-SB08 were approximately 20 ft from borings previously identified as containing VOCs above TACO Tier 1 SROs for the inhalation pathway. One subsurface sample collected at KP-SB08 was also analyzed for TPH DRO and TPH GRO as a result of hydrocarbon staining observed in the field.

- One surface soil sample was collected from the soil boring at KP-SB09 and analyzed for VOCs, SVOCs, and f_{oc}. This location was a former sampling location lacking surface soil data.

- One subsurface soil sample collected from the soil boring at KP-SB09 and analyzed for f_{oc} for modeling purposes. Soil boring KP-SB09 was advanced in the same location as former BEI soil boring B-3. Soil at this location and depth was identified as unimpacted by organic contamination during the 2010 investigation.

- Two subsurface soil samples were collected from the soil boring at KP-SB10 and analyzed for PAHs to delineate the vertical extent of PAH contamination. Surface soil at this location was previously identified as impacted with PAHs.

Soil samples were submitted under chain of custody to a WESTON-procured laboratory, Pace Analytical Services, in Indianapolis, Indiana. Field duplicates were collected for quality assurance/quality control purposes in accordance with the SAP.

In accordance with the approved the site-specific health and safety plan, all soil sampling activities were conducted in Level D personal protective equipment. Fresh sampling gloves were donned before sampling activities began at each new location and for each sample to avoid cross contamination. Equipment that may cross-contaminate samples and was not disposable (e.g. Geoprobe cutting shoe) was decontaminated between each location using an alconox wash and potable water rinse. All water collected during decontamination activities was collected and containerized on site. All soil cuttings generated during soil boring activities were containerized in 55-gallon drums. Composite soil cuttings sample KP-SC01-052912 was submitted to Pace

Analytical Services in Indianapolis, Indiana and analyzed for TCLP VOCs, TCLP SVOCs, TCLP metals, flashpoint, and pH. At the time of this report, the containerized waste has been staged in a secure location at the Site and is awaiting transportation off-site as a hazardous waste.

2.2.3 Soil Sampling Analytical Results

Analytical results from soil samples indicate the presence of VOCs, SVOCs, pesticides, and metals at concentrations above the method detection limits. PCBs, cyanide, and herbicides were not detected in soil.

Tables 2-2 and **2-3** present the soil sampling analytical results for organics and inorganics, respectively. These tables solely present the results of detected constituents. **Appendix D** includes complete data tables for all of the analyses performed. Copies of the laboratory data sheets are provided in **Appendix E** (electronic deliverable only). Soil sampling analytical results were reviewed and validated in accordance with applicable U.S. EPA procedures. The data validation reports are included in **Appendix E** (electronic deliverable only). A detailed evaluation of the soil sampling analytical results is provided in **Section 3**.

2.2.4 Site Lithology

According to information collected during soil boring activities conducted by BEI (2010), surficial materials at the Site consist of concrete underlain by fill materials. The fill materials generally consisted of loose granular material including crushed concrete, gravel, and sand. Beneath the fill materials, native soils consisted predominantly of silty clay. The silty clay exhibited brown and gray color variations and generally held a soft to firm consistency to approximately 12 ft bgs, below which soils typically consisted of soft to very soft gray silty clay.

According to information collected during soil boring activities conducted by WESTON in June 2012, the subsurface stratigraphy encountered during field activities indicates the presence of a silty sand fill layer to a maximum depth of 3 ft bgs. This fill layer is primarily composed of fine to medium sand with silt and some small gravel and is nearly uniform across the site. Immediately underlying this fill layer is medium plasticity clay glacial till. Maximum boring

depths were not sufficient to characterize the thickness of the clay glacial till unit. As a result, the base of the clay glacial till was not determined during this investigation. Discontinuous seams of sand, silt, and gravel were noted throughout the clay glacial till unit. These units ranged from 1 ft to 3 ft in thickness.

A generalized Site geology is depicted on two cross-sections based on WESTON's geologic investigation. **Figure 2-2** presents the locations of the geologic cross-sections. **Figures 2-3**, **Figure 2-4**, and **Figure 2-5** present cross-sections A-A', B-B,' and C-C,' respectively. Boring logs are presented in **Appendix C.**

2.3 GROUNDWATER INVESTIGATION

2.3.1 BEI 2010 Groundwater Investigation

On August 4, 2010, BEI completed soil borings B-2, B-5 and B-7 as temporary monitoring wells TMW-1, TMW-2 and TMW-3, respectively. The monitoring well locations were intended to characterize the groundwater in areas most likely to have been impacted by historical operation at the Site. Monitoring wells were constructed of 1-inch diameter Schedule 40 polyvinyl chloride (PVC) materials and included a 10-foot screen with 0.010-inch slotted openings. The screened interval was constructed from approximately 6 to 16 ft bgs at TMW-1 and TMW-3 and approximately 8-18 ft bgs at TMW-2. Annular space surrounding the well screen was filled with filter sand (quartz no. 5) and then sealed with bentonite pellets. The temporary monitoring wells were completed approximately 6-inches above grade with a surficial bentonite seal. The temporary monitoring well construction logs are presented in **Appendix A** (electronic deliverable only). Monitoring wells were developed by purging groundwater from each well using a dedicated disposable bailer. Groundwater was purged until three well volumes were removed or until each well was dry.

BEI collected groundwater samples at the Site from August 10 to August 18, 2010 using dedicated bailers to extract groundwater from the monitoring wells. Groundwater sampling was conducted over several days due to insufficient groundwater within the wells. Groundwater was

transferred directly from the dedicated bailers into the laboratory provided sample containers. The groundwater sample collected from TMW-1 was analyzed for VOCs, PAHs, and TCL inorganics. The groundwater sample collected from TMW-2 was submitted for laboratory analyses for VOCs, SVOCs, PCBs, pesticides, and TCL metals. The groundwater sample collected from TMW-3 was analyzed for VOCs, PAHs, PCBs, pesticides, herbicides, and RCRA metals. Due to insufficient groundwater sample volume in TMW-1, the groundwater sampling activities were concluded without collecting a groundwater sample for the PCB and pesticides analysis.

2.3.2 WESTON 2012 Groundwater Investigation

The groundwater investigation consisted of the installation, development, groundwater sampling, and hydraulic conductivity testing of three monitoring wells, KP-MW01 through KP-MW03. **Figure 2-6** presents the monitoring well locations.

2.3.2.1 Monitoring Well Design, Installation, and Development

On May 29 and May 30 3012, WESTON subcontractor Cabeno Environmental Field Services, LLC performed monitoring well installation and development. Monitoring wells were constructed of 2-inch diameter flush-threaded polyvinyl chloride riser pipe and 0.010-inch slotted screen. A 10-ft screen was used for well construction and was located in such a manner as to straddle the inferred water table. A silica sand pack was placed in the borehole annulus around the well screen to a height of 2 ft above the top of the screen. The remainder of the borehole annulus was filled with bentonite pellet/chips seal placed directly above the sand pack. **Appendix C** provides the monitoring well construction diagrams.

A flush-mounted outer protective cover was set in a concrete pad (approximately 2 ft in diameter), which was sloped to divert rainwater away from the protective cover. The monitoring wells were developed approximately 24 hours after installation. Well development was conducted using a surge block and a submersible pump. During the development process the well was alternatively surged with the surge block and then purged of groundwater. Purged

groundwater generated during monitoring well development, as well as sampling activities was containerized in 55-gallon drums. At the time of this report, the waste has been staged in a secure location at the Site and is awaiting transportation off-site as a hazardous waste.

2.3.2.2 Groundwater Sampling and Analysis

On June 1, 2012 WESTON collected groundwater samples from KP-MW01, KP-MW02, and KP-MW03. Monitoring wells were sampled at least 24 hours after well development. In order to obtain samples that are representative of aquifer conditions, groundwater samples were obtained using a low-flow purging and sampling technique. Each well was purged at a rate of approximately 100 milliliter per minute (mL/min) using a bladder pump until field parameters indicated groundwater conditions to be stable. Field measurements (specific conductance, pH, oxidation-reduction potential [ORP],, temperature, dissolved oxygen [DO], and turbidity) were obtained at five-minute intervals. Groundwater sampling commenced once stabilization was achieved for three consecutive readings, pH (± 0.1 standard units), specific conductance (± 3 percent [%]), ORP (± 10 millivolts), DO (± 0.3 milligrams per liter [mg/L]),, temperature (± 0.5 degrees Celsius [°C], turbidity (± 10%). **Table 2-4** presents the field parameters collected during monitoring well purging.

Groundwater samples were analyzed for VOCs, SVOCs, pesticides, PCBs, metals, and cyanide as listed in 35 IAC Part 740, Appendix A: Site Remediation Program. Groundwater samples were submitted under chain of custody to a WESTON-procured laboratory, Pace Analytical Services in Indianapolis, Indiana. Field duplicates were collected for quality assurance/quality control purposes in accordance with the SAP. **Table 2-1** presents the sampling and analysis summary.

2.3.3 Groundwater Sampling Analytical Results

Analytical results from groundwater samples indicate the presence of VOCs, SVOCs, pesticides, and metals at concentrations above the method detection limits. PCBs and cyanide were not detected in groundwater. **Table 2-5** presents the groundwater sampling analytical results. This

table solely presents the results of detected constituents. **Appendix D** includes complete data tables for all of the groundwater analyses performed. Copies of the laboratory data sheets are provided in **Appendix E** (electronic deliverable only). Groundwater sampling analytical results were reviewed and validated in accordance with applicable U.S. EPA procedures. The data validation reports are included in **Appendix E** (electronic deliverable only). A detailed evaluation of the groundwater sampling analytical results is provided in **Section 3.**

2.3.4 Site Hydrogeology

Monitoring wells KP-MW01, KP-MW02, and KP-MW03 were installed adjacent to temporary wells TMW-1, TMW-2 and TMW-3, respectively. Monitoring well KP-MW01 is screened from 8 to 18 ft bgs across clay. Monitoring well KP-MW02 is screened from 9 to 19 ft bgs across a sand layer found within the overall clay. Monitoring well KP-MW03 is screened from 8 to 18 ft bgs across a silty sand layer within the overall clay.

Groundwater elevation measurements were collected on three separate dates. Elevations were measured on June 1, 2012 prior to monitoring well sampling, June 21, 2012, and July 12, 2012. Upon completion of monitoring well installation, Compass Surveying, LTD. of Aurora, Illinois, an Illinois Licensed Surveyor, surveyed the newly installed monitoring well locations for vertical control. Each monitoring well was surveyed at the ground surface and at a marked reference point on the inner well casing. The accuracy of all vertical field survey measurements was +/- 0.01 ft. Each of the soil borings and monitoring well locations was surveyed by WESTON using a Trimble Pro XR global positioning system for lateral control. The accuracy of the lateral field survey measurements was approximately +/- 3 ft.

Table 2-6 presents depth to groundwater measurements, top of casing elevations, and resulting groundwater elevations for each of the three monitoring wells. **Figure 2-7** presents the groundwater elevations and potentiometric surface map created based on data collected at KP-MW01, KP-MW02 and KP-MW03. It should be noted that KP-MW01 does not intersect any of the discontinuous silty sand to sandy silt lenses that were noted in various boring across the Site. KP-MW01 is set in clay and response to groundwater elevation changes are not pronounced and

differ by several feet compared to the other Site monitoring wells. Local flow across the Site appears to be to the north. The hydraulic gradient across the Site, based on the potentiometric surface contours depicted on **Figure 2-7,** was calculated to be approximately 0.07 ft/ft.

Hydraulic conductivity of the water-bearing zone encountered at the Site was estimated by aquifer testing (slug tests) of the three monitoring wells. Both rising and falling head tests were conducted by inserting and subsequently removing an inert slug from each well. The data were evaluated using the Bouwer and Rice (1976, 1989) solution method. Analysis was completed using AQTESOLV, version 4.50, software. Due to the highly variable data recorded at KP-MW01 for both the rising and falling head tests, this data was found to be unusable and the determination of hydraulic conductivity at this location was not conducted. **Table 2-7** presents the hydraulic conductivity testing results. **Appendix F** presents the data and associated plots for hydraulic conductivity tests. Results show that hydraulic conductivity in the water-bearing zone ranged from 2.8×10^{-4} to 8.4×10^{-7} centimeters per second (cm/sec) with a geometric mean of 1.3×10^{-5} cm/sec.

2.3.5 Justification for Groundwater Classification

The water-yielding zone has a hydraulic conductivity less than 1×10^{-4} cm/sec based on a geometric mean. Thus, pursuant to the requirements of 35 IAC Section 620.210, groundwater underlying the Site is not considered Class I (Potable Resource Groundwater) and is therefore considered to be Class II (General Resource Groundwater) for purposes of establishing a Tier 1 SRO for the soil component of the groundwater ingestion exposure route.

3. ENDANGERMENT ASSESSMENT

This section presents a detailed description of the nature and extent of contamination as identified in the soil and groundwater investigation. The data set included in this CSIR comprises soil and groundwater samples collected in 2010 and 2012. As discussed in **Subsection 2.3.1**, BEI collected a total of 26 investigative soil samples from eight soil boring locations, and conducted one round of groundwater sampling from three Site temporary wells. As discussed in

Subsection 2.3.2, WESTON collected a total of 19 investigative soil samples from 10 soil boring locations, and conducted one round of groundwater sampling from three Site monitoring wells. **Table 2-1** summarizes the samples and analyses included in the endangerment assessment.

3.1 TIER 1 EVALUATION PROCEDURES

3.1.1 Soil

Since the anticipated future development for the Site is a greenspace park that will be connected to the Bloomingdale Trail, Tier 1 residential SROs were used to evaluate the soil sampling analytical results. Organic constituents detected in soil were compared to the most stringent SRO from the ingestion, inhalation, and soil component of the groundwater ingestion exposure route for Class II groundwater as provided in 35 IAC Part 742, Appendix B, Table A to evaluate compliance with the SROs for residential properties. The Chicago background concentrations provided in 35 IAC Part 742 Appendix A, Table H were used as a basis of comparison for PAHs where less stringent that the Tier 1 SROs in accordance with 35 IAC Part 742.415(b). The total metal concentrations were compared against the most stringent SRO from the ingestion and inhalation exposure routes provided in 35 IAC Part 742, Appendix B, Table A as well as the pH-specific SROs for the soil component of the groundwater ingestion exposure route provided in 35 IAC Part 742, Appendix B, Table D. TCLP metal concentrations were compared to the SROs soil for the soil component of the groundwater ingestion exposure route for Class II groundwater provided in 35 IAC Part 742, Appendix B, Table A. A metal was only considered to be above the Tier 1 SROs if the total and TCLP concentrations exceeded SROs. In all cases, the Tier 1 SROs were considered to be met if the analyte was below the typical background concentration provided in 35 IAC Part 742 Appendix A, Table G, in accordance with 35 IAC Part 742.415(b).

Because construction activities are anticipated to take place at the Site, organic and inorganic constituents detected in soil were also compared to the most stringent construction worker SRO from the ingestion and inhalation exposure route as provided in 35 IAC Part 742, Appendix B, Table B.

3.1.2 Groundwater

Based on the Class II groundwater classification, groundwater analytical results were compared to the Tier 1 groundwater remediation objectives for Class II groundwater provided in 35 IAC Part 742, Appendix B, Table E.

3.2 SOIL DATA EVALUATION

Soil sampling analytical results indicated the presence of VOCs, SVOCs, pesticides, and metals at concentrations above the analytical laboratory method detection limits. Cyanide, PCBs, herbicides were not detected above the analytical laboratory method detection limits. The soil sampling analytical results are provided in **Table 2-2** and **Table 2-3** for the organic and inorganic constituents, respectively. These tables solely present the results of detected constituents and include shading to identify concentrations that exceeded SROs.

Constituents present in the soil samples at concentrations above at Tier 1 SROs include the following:

- VOCs – 1,1,2-trichloroethane, 1,1-dichloroethene, benzene, chloroform, cis-1,2-dichloroethene, tetrachloroethene, trans-1,2-dichloroethene, trichloroethene, and vinyl chloride
- SVOCs – benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene
- Metals – total antimony, total arsenic, total and TCLP lead, total mercury, and total selenium

The following sections present the data evaluation by exposure pathway.

3.2.1 Residential Ingestion Exposure Pathway

Four VOCs (cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride), five SVOCs (benzo[a]anthracene, benzo[a]pyrene, benzo[b[fluoranthene, dibenz[a,h]anthracene, and indeno[1,2,3-cd]pyrene), and three metals (antimony, arsenic, and lead) were detected at concentrations exceeding Tier I SROs for the residential ingestion exposure pathway.

Table 2-2 and **Figure 3-1** present the cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride concentrations exceeding their respective SROs for the residential ingestion pathway. **Table 2-2** and **Figure 3-2** present the benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene concentrations exceeding their respective SROs for the residential ingestion pathway. **Table 2-3** and **Figure 3-3** present the antimony, arsenic, and lead concentrations exceeding their respective SROs for the residential ingestion pathway.

3.2.2 Residential Inhalation Exposure Pathway

VOCs chloroform, tetrachloroethene, trichloroethene, and vinyl chloride were detected at concentrations exceeding Tier I SROs for the residential inhalation exposure pathway. **Table 2-2** and **Figure 3-1** present the VOC concentrations exceeding their respective SROs for the residential inhalation pathway.

3.2.3 Construction Worker Ingestion Exposure Pathway

Trichloroethene and lead were detected at concentrations exceeding the Tier I SRO for the construction work ingestion exposure pathway. **Table 2-2** and **Figure 3-1** present the trichloroethene concentrations exceeding the construction ingestion exposure SRO of 1,200 milligrams per kilogram (mg/kg). **Table 2-3** and **Figure 3-3** present the lead concentrations exceeding the construction ingestion exposure SRO of 700 mg/kg.

3.2.4 Construction Worker Inhalation Exposure Pathway

1,1-Dichloroethene, chloroform, trichloroethene, vinyl chloride, and mercury were detected at concentrations exceeding the Tier I SROs for construction worker inhalation exposure pathway. **Table 2-2** and **Figure 3-1** present the 1,1-dichloroethene, chloroform, trichloroethene, and vinyl chloride concentrations exceeding their respective SROs for the construction worker inhalation pathway. **Table 2-3** and **Figure 3-3** present the mercury concentrations exceeding the construction inhalation exposure SRO of 0.1 mg/kg.

3.2.5 Soil Component of the Groundwater Migration Exposure Pathway

Eight VOCs (1,1-dichloroethene, benzene, chloroform, cis-1,2,-dichloroethene, tetrachloroethene, trans-1,2-dichloroethene, trichloroethene, and vinyl chloride), one SVOC benzo[a]anthracnene) and four metals (total antimony, total lead, total selenium, and TCLP lead) were detected at concentrations exceeding Tier I SROs for the soil component of the groundwater migration exposure pathway for Class II groundwater.

Table 2-2 and **Figure 3-1** present the VOC concentrations that exceeded their respective SROs for the soil component of the groundwater migration exposure pathway for Class II groundwater. Benzo(a)anthracene was detected at a concentration exceeding the soil component of the groundwater migration exposure pathway for Class II groundwater of 8 mg/kg at sampling location B-8/KP-SB10 (0 to 3 ft bgs) at a concentration of 9.27 mg/kg. **Table 2-2** and **Figure 3-2** present the one benzo(a)anthracene concentration that exceeded the SRO for the soil component of the groundwater migration exposure pathway for Class II groundwater.

Table 2-3 and **Figure 3-3** present the one TCLP lead concentration that exceeded the SRO for the soil component of the groundwater migration exposure pathway for Class II groundwater and the total antimony, lead, and selenium concentration that exceeded their respective pH-specific SROs.

3.2.6 Soil Saturation

Trichloroethene was detected at concentrations exceeding the soil saturation limit of 1,300 mg/kg provided in 35 IAC Part 742, Appendix A, Table A. Trichloroethene concentrations exceeded the soil saturation limit at sampling location KP-SB04 (10 to 12 ft bgs) at a concentration of 3,510 mg/kg; KP-SB05 (11 to 13 ft bgs) at a concentration of 3,590 mg/kg; and KP-SB06 (10 to 12 ft bgs) at a concentration of 4,230 mg/kg.

3.3 GROUNDWATER DATA EVALUATION

Analytical results from groundwater samples collected from the Site indicated the presence of VOCs, SVOCs, pesticides, and metals at concentrations above the method detection limits. Analytical results did not indicate the presence of PCBs, herbicides, or cyanide in groundwater underlying the Site. The groundwater analytical results for detected constituents are provided in **Table 2-5**. **Table 2-5** also includes shading to identify concentrations that exceed groundwater remediation objectives. **Appendix D** includes complete data tables for all of the analyses performed.

Constituents present in the groundwater samples at concentrations above the Tier 1 Class II groundwater remediation objectives for the groundwater component of the groundwater ingestion route include the following:

- VOCs – chloroform, cis-1,2-dichloroethene, trichloroethene, and vinyl chloride
- Metals – iron

The concentrations of chlorinated VOCs at TMW-2/KP-MW02 was one to two orders of magnitude less during the 2012 sampling event than during the 2010 sampling event. Similar temporal decreases in VOC concentrations were observed at location TMW-1/ KP-MW01, located in the north region of the Site. BEI collected groundwater samples in 2010 using dedicated bailers to extract groundwater from the monitoring wells. The sampling methodology may have introduced sediment into the groundwater samples thereby elevating the concentrations of contaminants as a result of turbid samples. **Figure 3-4** presents constituents exceeding the Tier 1 Class II groundwater remediation objectives for the groundwater component of the groundwater ingestion route.

3.4 NATURE AND EXTENT OF CONTAMINATION

3.4.1 Soil

Soil sampling conducted by BEI in 2010 and WESTON in 2012 detected the presence of VOCs, SVOCs, pesticides, and metals in the Site's surficial (0 to 3 ft bgs) and subsurface soil (3 to 20 ft

bgs) at concentrations exceeding residential and construction worker Tier 1 SROs for ingestion, inhalation, and/or soil component of the groundwater ingestion route (Class II Groundwater) exposure pathways. Cyanide, PCBs, pesticides, and herbicides were not detected at concentrations exceeding the most stringent residential or construction worker Tier 1 SROs in any soil sample. The nature of contamination at the Site consists of the following COCs at the Site detected at concentrations exceeding at least one Tier 1 SRO:

- VOCs – 1,1,2-trichloroethane, 1,1-dichloroethene, benzene, chloroform, cis-1,2-dichloroethene, tetrachloroethene, trans-1,2-dichloroethene, trichloroethene, and vinyl chloride
- SVOCs – benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene
- Metals – total antimony, total arsenic, total and TCLP lead, total mercury, and total selenium

3.4.1.1 Volatile Organic Compounds

The highest concentrations of the VOCs were detected in the east and southeast regions of the Site where VOCs were detected at multiple subsurface intervals from 3 to 20 ft bgs. The extent of VOC impact was horizontally delineated by property boundaries to the north, east, and southeast, and by soil boring locations B-1 and B-7/KP-SB03 to the west and southwest where VOC concentrations did not exceed Tier 1 SROs. The extent if VOC impact was vertically delineated by concentrations below Tier I SROs for all COCs except cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride at the following locations:

- cis-1,2-Dichloroethene – B-4, B-5/KP-SB02, KP-SB06, and KP-SB08
- Tetrachloroethene – KP-SB06
- Trichloroethene – B-2/KP-SB01, B-3/KP-SB09, B-5/KP-SB02, KP-SB04, KP-SB05, and KP-SB06
- Vinyl chloride – B-4, B-5/KP-SB02, KP-SB04, KP-SB05, KP-SB06, and KP-SB08

VOC concentrations exceeded Tier 1 SROs for the soil component of the groundwater migration exposure pathway for Class II groundwater at the deepest sampling interval at locations

B-3/KP-SB09 (6 to 9 ft bgs), B-4 (9 to 12 ft bgs), and KP-SB08 (15 to 17 ft bgs) located along the northern boundary of the Site. VOC concentrations exceeded Tier 1 SROs for the residential ingestion and inhalation pathways and soil component of the groundwater migration exposure pathway for Class II groundwater at the deepest sampling interval at locations B-2/KP-SB01 (18 to 20 ft bgs), B-5/KP-SB02 (18 to 20 ft bgs), KP-SB04 (14 to 16 ft bgs), KP-SB05 (14 to 16 ft bgs), KP-SB06 (14 to 16 ft bgs).

3.4.1.2 Semivolatile Organic Compounds

The highest concentrations of the SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene were detected in the southwest region of the Site at location B-8/KP-SB10. This is the location of a former shipping building that was overlain by a ramp constructed of undocumented urban fill. SVOC impacts were limited to the Site's uppermost 6 ft of soil based on the results of the soil samples analyzed at all locations except B-8/KP-SB10 where SVOC concentrations exceeded Tier 1 SRO at 12 to 14 ft bgs. The horizontal extent of SVOC impact includes the west, south, and east perimeters of the property and is delineated by sampling locations B-2/KP-SB01 and B-3/KP-SB09 to the north and the property boundaries to the west, south, and east. The extent of SVOC impact was vertically delineated by concentrations below Tier I SROs except at location B-8/KP-SB10 where concentrations of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene were detected above the SRO for the residential ingestion pathway at 12 to 14 ft bgs.

3.4.1.3 Metals

Metal concentrations exceeding Tier I SROs were vertically delineated to the uppermost 6 ft of the Site. The highest concentrations of antimony, arsenic, lead, mercury, and selenium were identified from the 3 to 6 foot depth interval along the eastern Site boundary (B-4, B-5 and B-6). The horizontal extent of metals impact includes the east and northern portion of the Site delineated by sampling locations B-2/KP-SB01 and B-8/KP-SB03 to the southwest.

3.4.1.4 Extent of Soil Contamination Summary

As discussed in the previous subsections, the lateral extent of VOCs, SVOCs, and metals at concentrations above Tier 1 SROs includes the entire Site. The vertical extent of contamination is not defined at the following sampling locations for the listed COCs:

- B-2/KP-SB01 – trichloroethene at 18 to 20 ft bgs
- B-3/KP-SB09 – trichloroethene at 6 to 9 ft bgs
- B-4 – cis-1,2-dichloroethene and vinyl chloride at 9 to 12 ft bgs
- B-5/KP-SB02 – cis-1,2-dichloroethene, trichloroethene, and vinyl chloride at 18 to 20 ft bgs
- B-8/KP-SB10 – benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene at 12 to 14 ft bgs
- KP-SB04 – trichloroethene and vinyl chloride at 14 to 16 ft bgs
- KP-SB05 – trichloroethene and vinyl chloride at 14 to 16 ft bgs
- KP-SB06 – cis-1,2-Dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride at 14 to 16 ft bgs
- KP-SB08 – cis-1,2-dichloroethene and vinyl chloride at 15 to 17 ft bgs

3.4.2 Groundwater

Groundwater sampling conducted by BEI in 2010 and WESTON in 2012 detected the presence of VOCs - chloroform, cis-1,2-dichloroethene, trichloroethene, and vinyl chloride and iron at concentrations exceeding the Tier 1 Class II groundwater remediation objectives for the groundwater component of the groundwater ingestion route.

The highest concentrations of the trichloroethene, cis-1,2-dichloroethene, and vinyl chloride were detected at location TMW-2/KP-MW02, located along the eastern boundary of the Site where the highest concentrations of VOCs in soil are present. There were no detections of COCs exceeding Tier 1 Class II GROs for the groundwater component of the groundwater ingestion route at location upgradient monitoring well TMW-3/KP-MW03. The horizontal or vertical extent of the chlorinated VOC plume has not been defined.

4. CONCLUSIONS AND RECOMMENDATIONS

The 2010 and 2012 soil sampling analytical results indicated the presence the following COCs in soil at concentrations above Tier 1 SROs:

- VOCs – 1,1,2-trichloroethane, 1,1-dichloroethene, benzene, chloroform, cis-1,2-dichloroethene, tetrachloroethene, trans-1,2-dichloroethene, trichloroethene, and vinyl chloride
- SVOCs – benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene
- Metals – total antimony, total arsenic, total and TCLP lead, total mercury, and total selenium

The horizontal extent of COCs at concentrations exceeding the SROs in soils at the Site has been established by the property boundaries in all directions. The vertical extent of contamination is not defined at the following sampling locations for the listed COCs:

- B-2/KP-SB01 – trichloroethene at 18 to 20 ft bgs
- B-3/KP-SB09 – trichloroethene at 6 to 9 ft bgs
- B-4 - cis-1,2-dichloroethene and vinyl chloride at 9 to 12 ft bgs
- B-5/KP-SB02 – cis-1,2-dichloroethene, trichloroethene, and vinyl chloride at 18 to 20 ft bgs
- B-8/KP-SB10 – benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene at 12 to 14 ft bgs
- KP-SB04 – trichloroethene and vinyl chloride at 14 to 16 ft bgs
- KP-SB05 – trichloroethene and vinyl chloride at 14 to 16 ft bgs
- KP-SB06 – cis-1,2-Dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride at 14 to 16 ft bgs
- KP-SB08 – cis-1,2-dichloroethene and vinyl chloride at 15 to 17 ft bgs

Analytical results from groundwater samples indicated the presence of chloroform, cis-1,2-dichloroethene, trichloroethene, and vinyl chloride, and iron at concentrations exceeding the Tier 1 Class II groundwater remediation objectives for the groundwater component of the groundwater ingestion route. The vertical or horizontal extent of the groundwater plume has not been defined.

Based on observations during the field activities and evaluation of the analytical results, sources of chemical contamination at the Site may be attributed to: 1) former industrial use of the eastern adjacent property for manufacturing purposes as ELC, ALMC, and Compco; 2) long term historical Site uses that included painting, automobile warehousing, lumber storage and warehousing, and storage operations; 3) potential unregistered USTs on-site or adjacent to the Site; and 4) the presence of undocumented urban fill brought onto the Site.

Based on the findings of this investigation, WESTON recommends:

- Address potential vapor migration to nearby residential properties
- Define the vertical extent of soil contamination
- Define the vertical and horizontal extent of the groundwater plume
- Evaluate remedial technologies
- Develop Remediation Objectives Report
- Develop Remedial Action Plan

TABLES

Table 2-1
Summary of Sampling Program
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Sampling Location ID	Field Sample ID	Sampling Date	Sampling Interval (ft bgs)	Analytical Parameters															
				VOCs	BTEX	SVOCs	PAHs	TPH as GRO and DRO	PCBs	Pesticides	Herbicides	TCL Metals	RCRA Metals	Select Metals	TCLP Metals	Cyanide	Explosives	Fraction organic carbon	pH
Soil Samples																			
B-1	B-1 (0-3)	8/4/2010	0 - 3	X			X		X	X			X		Cr				X
	B-1 (3-6)	8/4/2010	3 - 6				X						X						X
	B-1 (6-9)	8/4/2010	6 - 9	X										Cr					X
	B-1 (9-12)	8/4/2010	9 - 12	X										Cr					
B-2/KP-SB01	B-2 (3-6)	8/4/2010	3 - 6	X		X			X	X		X				X			X
	B-2 (6-9)	8/4/2010	6 - 9	X		X							X						X
	KP-SB01(6-9)	5/29/2012	6 - 9					X											
	B-2 (9-12)	8/4/2010	9 - 12	X															
	KP-SB01(18-20)	5/29/2012	18 - 20	X															
	KP-SB01(18-20)	5/29/2012	18 - 20	X															
B-3/KP-SB09	KP-SB09(0-3)	5/29/2012	0 - 3	X		X												X	
	B-3 (3-6)	8/4/2010	3 - 6	X			X		X	X			X						X
	KP-SB09(3-6)	5/29/2012	3 - 6															X	
	B-3 (6-9)	8/4/2010	6 - 9	X			X						X						X
B-4	B-4 (0-3)	8/4/2010	0 - 3			X			X	X			X						X
	B-4 (3-6)	8/4/2010	3 - 6				X					X				X			X
	B-4 (6-9)	8/4/2010	6 - 9	X										Sb, As, Fe, Pb, Hg					
	B-4 (9-12)	8/4/2010	9 - 12	X		X													
B-5/KP-SB02	B-5 (0-3)	8/4/2010	0 - 3				X					X				X		X	X
	B-5 (3-6)	8/4/2010	3 - 6	X		X			X	X		X				X			X
	B-5 (6-9)	8/4/2010	6 - 9	X		X			X	X				Sb, As, Pb, Hg, Se					
	B-5 (9-12)	8/4/2010	9 - 12	X															
	KP-SB02(9-12)	5/29/2012	9 - 12					X											
	KP-SB02(18-20)	5/29/2012	18 - 20	X															
B-6	B-6 (0-3)	8/4/2010	0 - 3	X		X			X	X			X						X
	B-6 (3-6)	8/4/2010	3 - 6	X		X			X	X			X		RCRA				X
	B-6 (6-9)	8/4/2010	6 - 9	X										As, Cr, Pb, Hg					X
	B-6 (9-12)	8/4/2010	9 - 12	X															
B-7/KP-SB03	B-7 (0-3)	8/4/2010	0 - 3	X		X			X	X	X		X						X
	B-7 (3-6)	8/4/2010	3 - 6	X		X							X						X
	B-7 (6-9)	8/4/2010	6 - 9	X			X											X	
	B-7 (9-12)	8/4/2010	9 - 12	X															
	KP-SB03(9-12)	5/29/2012	9 - 12			X												X	

Table 2-1
Summary of Sampling Program
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Sampling Location ID	Field Sample ID	Sampling Date	Sampling Interval (ft bgs)	Analytical Parameters															
				VOCs	BTEX	SVOCs	PAHs	TPH as GRO and DRO	PCBs	Pesticides	Herbicides	TCL Metals	RCRA Metals	Select Metals	TCLP Metals	Cyanide	Explosives	Fraction organic carbon	pH
B-8/KP-SB10	B-8 (0-3)	8/4/2010	0 - 3		X		X				X		X						X
	KP-SB10(3-5)	5/29/2012	3 - 5				X												
	KP-SB10(12-14)	5/29/2012	12 - 14				X												
	KP-SB10(12-14)D	5/29/2012	12 - 14				X												
KP-SB04	KP-SB04(10-12)	5/29/2012	10 - 12	X															
	KP-SB04(14-16)	5/29/2012	14 - 16	X															
KP-SB05	KP-SB05(11-13)	5/29/2012	11 - 13	X															
	KP-SB05(14-16)	5/29/2012	14 - 16	X															
KP-SB06	KP-SB06(10-12)	5/29/2012	10 - 12	X															
	KP-SB06(14-16)	5/29/2012	14 - 16	X															
KP-SB07	KP-SB07(8-10)	5/29/2012	8 - 10	X															
	KP-SB07(14-16)	5/29/2012	14 - 16	X															
KP-SB08	KP-SB08(4-6)	5/29/2012	4 - 6	X															
	KP-SB08(15-17)	5/29/2012	15 - 17	X				X											
Total Number of Soil Samples Analyzed				35	1	12	11	3	9	9	2	4	11	5	2	4	0	5	17
Groundwater Samples																			
TMW-1/ KP-MW01	TMW-1	8/10/2010	6 - 17	X								X				X			
	TMW-1	8/17/2010	6 - 17				X												
	KP-MW01-	6/1/2012	8 - 18	X		X			X	X		X				X			
TMW-2/ KP-MW02	TMW-2	8/10/2010	8 - 18	X		X						X				X			
	TMW-2	8/11/2010	8 - 18						X	X									
	KP-MW02-060112	6/1/2012	9 - 19	X		X			X	X		X				X			
TMW-3/ KP-MW03	TMW-3	8/10/2010	6 - 16	X			X						X						
	TMW-3	8/11/2010	6 - 16						X	X									
	TMW-3	8/17/2010	6 - 16								X						X		
	KP-MW03-060112	6/1/2012	8 - 18	X		X			X	X		X				X			
	KP-MW03-060112D	6/1/2012	8 - 18	X		X			X	X		X				X			
Total Number of Groundwater Samples Analyzed				7	0	5	2	0	6	6	1	6	1	0	0	6	1	0	0

Table 2-1
Summary of Sampling Program
Kimball Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Notes:
Sample interval for monitoring wells identifies screened interval below ground surface.
BTEX = Benzene, toluene, ethylbenzene, xylene
-D = Field duplicate sample
DRO = Diesel range organic
ft bgs = Feet below ground surface
GRO = Gasoline range organic
IAC = Illinois Administrative Code
ID = Identification
PAH = Polycyclic aromatic hydrocarbon
PCB = Polychlorinated biphenyl
RCRA metals = Resource Conservation and Recovery Act metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver)
SVOC = Semivolatile organic compound
TCL = Target Compound List; 35 Illinois Administrative Code (IAC) Part 740, Appendix A.
TCLP = Toxicity characteristic leaching procedure
TPH = Total petroleum hydrocarbon
VOC = Volatile organic compound

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-1	B-1	B-1	B-1	B-2/KP-SB01
					Field Sample ID	B-1 (0-3)	B-1 (3-6)	B-1 (6-9)	B-1 (0-12)	B-2 (3-6)
					Sampling Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010
					Sampling Depth (ft bgs)	0- 3	3- 6	6- 9	9-12	3- 6
Fractional Organic Carbon	NA	NA	NA	NA	%	---	---	---	---	---
TPH										
TPH (C06-C10)	NA	NA	NA	NA	mg/kg	---	---	---	---	---
TPH-DRO (C10-C28)	NA	NA	NA	NA	mg/kg	---	---	---	---	---
VOCs										
1,1,2-Trichloroethane	NA	310	1,800	0.3	mg/kg	0.005 U	---	0.005 U	0.005 U	0.005 U
1,1-Dichloroethene	NA	290	3	0.3	mg/kg	0.005 U	---	0.005 U	0.005 U	0.005 U
1,2,4-Trimethylbenzene+	NA	87	8.9	NA	mg/kg	---	---	---	---	---
1,2-Dichlorobenzene	NA	560	310	43	mg/kg	---	---	---	---	---
1,3,5-Trimethylbenzene+	NA	780	0.79	10	mg/kg	---	---	---	---	---
1,4-Dichlorobenzene	NA	11,000	340	11	mg/kg	---	---	---	---	---
2-Butanone (MEK)+	NA	25,000	730	17	mg/kg	0.005 U	---	0.005 U	0.005 U	0.005 U
2-Hexanone+	NA	390	47	0.16	mg/kg	0.005 U	---	0.005 U	0.005 U	0.005 U
Acetone	NA	70,000	100,000	25	mg/kg	0.05 U	---	0.05 U	0.05 U	0.05 U
Benzene	NA	0.8	2.2	0.17	mg/kg	0.005 U	---	0.005 U	0.005 U	0.008
Carbon disulfide	NA	720	9	160	mg/kg	0.005 U	---	0.005 U	0.005 U	0.005 U
Chlorobenzene	NA	130	1.3	6.5	mg/kg	0.005 U	---	0.005 U	0.005 U	0.005 U
Chloroethane+	NA	1,500	39	NA	mg/kg	0.005 U	---	0.005 U	0.005 U	0.005 U
Chloroform	NA	0.3	0.76	2.9	mg/kg	0.005 U	---	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	NA	780	1,200	1.1	mg/kg	0.01	---	0.05	0.005 U	0.2
Ethylbenzene	NA	400	58	19	mg/kg	0.005 U	---	0.005 U	0.005 U	0.005 U
Isopropylbenzene (Cumene)+	NA	500	52	400	mg/kg	---	---	---	---	---
Naphthalene	0.04	170	1.8	18	mg/kg	---	---	---	---	---
n-Butylbenzene+	NA	3,900	20,000	87	mg/kg	---	---	---	---	---
n-Hexane+	NA	290	16	120	mg/kg	---	---	---	---	---
n-Propylbenzene+	NA	300	90	120	mg/kg	---	---	---	---	---
p-Isopropyltoluene	NA	NA	NA	NA	mg/kg	---	---	---	---	---
sec-Butylbenzene	NA	NA	NA	NA	mg/kg	---	---	---	---	---
Tetrachloroethene	NA	11	28	0.3	mg/kg	0.005 U	---	0.005 U	0.005 U	0.05
Toluene	NA	650	42	29	mg/kg	0.005 U	---	0.005 U	0.005 U	0.008
trans-1,2-Dichloroethene	NA	1,600	3,100	3.4	mg/kg	0.005 U	---	0.005 U	0.005 U	0.005 U
Trichloroethene	NA	5	12	0.3	mg/kg	0.03	---	0.09	0.005 U	0.3
Vinyl chloride	NA	0.28	1.1	0.07	mg/kg	0.002 U	---	0.002 U	0.002 U	0.002 U
Xylenes, Total	NA	320	5.6	150	mg/kg	0.005 U	---	0.005 U	0.005 U	0.006

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-1	B-1	B-1	B-1	B-2/KP-SB01
					Field Sample ID	B-1 (0-3)	B-1 (3-6)	B-1 (6-9)	B-1 (0-12)	B-2 (3-6)
					Sampling Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010
					Sampling Depth (ft bgs)	0- 3	3- 6	6- 9	9-12	3- 6
SVOCs										
2-Methylnaphthalene+	NA	310	820	9.5	mg/kg	---	---	---	---	0.12 U
Acenaphthene	0.09	4,700	120,000	2,900	mg/kg	0.05 U	0.05 U	---	---	0.15 U
Acenaphthylene+	0.03	2,300	61,000	420	mg/kg	0.05 U	0.05 U	---	---	0.07 U
Anthracene	0.25	23,000	610,000	59,000	mg/kg	0.12	0.08 U	---	---	0.3 U
Benzo(a)anthracene	1.1	0.9	170	8	mg/kg	**2.42**	0.008 U	---	---	0.07 U
Benzo(a)pyrene	1.3	0.09	17	82	mg/kg	**4.58**	0.02 U	---	---	0.07 U
Benzo(b)fluoranthene	1.5	0.9	170	25	mg/kg	**6.29**	0.05	---	---	0.06 U
Benzo(g,h,i)perylene+	0.68	2,300	61,000	130,000	mg/kg	3.76	0.15	---	---	0.12 U
Benzo(k)fluoranthene	0.99	9	1,700	250	mg/kg	2.09	0.02	---	---	0.12 U
Chrysene	1.2	88	17,000	800	mg/kg	2.58	0.05 U	---	---	0.09 U
Dibenz(a,h)anthracene	0.2	0.09	17	7.6	mg/kg	**0.25**	0.02 U	---	---	0.11 U
Fluoranthene	2.7	3,100	82,000	21,000	mg/kg	2.16	0.05 U	---	---	0.18
Fluorene	0.1	3,100	82,000	2,800	mg/kg	0.03 U	0.03 U	---	---	0.14 U
Indeno(1,2,3-cd)pyrene	0.86	0.9	170	69	mg/kg	**3.45**	0.11	---	---	0.13 U
Naphthalene	0.04	170	1.8	18	mg/kg	0.05 U	0.05 U	---	---	0.09 U
Phenanthrene+	1.3	2,300	61,000	1,100	mg/kg	0.45	0.03 U	---	---	0.12 U
Pyrene	1.9	2,300	61,000	21,000	mg/kg	1.94	0.05 U	---	---	0.23
Pesticides										
4,4'-Dichlorodiphenyltrichloroethane	NA	2	100	32	mg/kg	0.02 U	---	---	---	0.02 U
Endrin	NA	23	61	1	mg/kg	0.02 U	---	---	---	0.02 U
Endrin ketone	NA	NA	NA	NA	mg/kg	0.02 U	---	---	---	0.02 U
gamma-BHC (Lindane)	NA	0.5	96	0.009	mg/kg	0.008 U	---	---	---	0.008 U
PCBs										
Not Detected in any samples						ND	---	---	---	ND
Herbicides										
Not Detected in any samples						---	---	---	---	---
Sum of Organics					mg/kg	30.1	0.33	0.14	0.0	1.0

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01
					Field Sample ID	B-2 (6-9)	KP-SB01(6-9)	B-2 (9-12)	KP-SB01(18-20)
					Sampling Date	8/4/2010	5/29/2012	8/4/2010	5/29/2012
					Sampling Depth (ft bgs)	6- 9	6- 9	9-12	18- 20
Fractional Organic Carbon	NA	NA	NA	NA	%	---	---	---	---
TPH									
TPH (C06-C10)	NA	NA	NA	NA	mg/kg	---	20.3	---	---
TPH-DRO (C10-C28)	NA	NA	NA	NA	mg/kg	---	29	---	---
VOCs									
1,1,2-Trichloroethane	NA	310	1,800	0.3	mg/kg	0.005 U	---	0.05	0.0046 U
1,1-Dichloroethene	NA	290	3	0.3	mg/kg	0.005 U	---	0.05	0.0043 J
1,2,4-Trimethylbenzene+	NA	87	8.9	NA	mg/kg	---	---	---	0.0037 J
1,2-Dichlorobenzene	NA	560	310	43	mg/kg	---	---	---	0.0046 U
1,3,5-Trimethylbenzene+	NA	780	0.79	10	mg/kg	---	---	---	0.0046 U
1,4-Dichlorobenzene	NA	11,000	340	11	mg/kg	---	---	---	0.0046 U
2-Butanone (MEK)+	NA	25,000	730	17	mg/kg	0.005 U	---	0.005 U	0.023 U
2-Hexanone+	NA	390	47	0.16	mg/kg	0.005 U	---	0.005 U	0.092 U
Acetone	NA	70,000	100,000	25	mg/kg	0.05 U	---	0.05 U	0.092 U
Benzene	NA	0.8	2.2	0.17	mg/kg	***0.2***	---	0.005 U	0.0046 U
Carbon disulfide	NA	720	9	160	mg/kg	0.005 U	---	0.005 U	0.0092 U
Chlorobenzene	NA	130	1.3	6.5	mg/kg	0.005 U	---	0.005 U	0.0046 U
Chloroethane+	NA	1,500	39	NA	mg/kg	0.005 U	---	0.005 U	0.0046 U
Chloroform	NA	0.3	0.76	2.9	mg/kg	0.005 U	---	***6.13***	0.0061
cis-1,2-Dichloroethene	NA	780	1,200	1.1	mg/kg	***368***	---	***1.16***	0.077
Ethylbenzene	NA	400	58	19	mg/kg	3	---	0.01	0.0046 U
Isopropylbenzene (Cumene)+	NA	500	52	400	mg/kg	---	---	---	0.0046 U
Naphthalene	0.04	170	1.8	18	mg/kg	---	---	---	0.0046 U
n-Butylbenzene+	NA	3,900	20,000	87	mg/kg	---	---	---	0.0036 J
n-Hexane+	NA	290	16	120	mg/kg	---	---	---	0.019
n-Propylbenzene+	NA	300	90	120	mg/kg	---	---	---	0.0039 J
p-Isopropyltoluene	NA	NA	NA	NA	mg/kg	---	---	---	0.0046 U
sec-Butylbenzene	NA	NA	NA	NA	mg/kg	---	---	---	0.0046 U
Tetrachloroethene	NA	11	28	0.3	mg/kg	***1***	---	0.04	0.0046 U
Toluene	NA	650	42	29	mg/kg	10	---	0.28	0.0029 J
trans-1,2-Dichloroethene	NA	1,600	3,100	3.4	mg/kg	***8***	---	0.06	0.0034 J
Trichloroethene	NA	5	12	0.3	mg/kg	***599***	---	***408***	***8.2***
Vinyl chloride	NA	0.28	1.1	0.07	mg/kg	***11***	---	***0.16***	0.016
Xylenes, Total	NA	320	5.6	150	mg/kg	4	---	0.05	0.0092 U

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01
					Field Sample ID	B-2 (6-9)	KP-SB01(6-9)	B-2 (9-12)	KP-SB01(18-20)
					Sampling Date	8/4/2010	5/29/2012	8/4/2010	5/29/2012
					Sampling Depth (ft bgs)	6- 9	6- 9	9-12	18- 20
SVOCs									
2-Methylnaphthalene+	NA	310	820	9.5	mg/kg	0.12 U	---	---	---
Acenaphthene	0.09	4,700	120,000	2,900	mg/kg	0.15 U	---	---	---
Acenaphthylene+	0.03	2,300	61,000	420	mg/kg	0.07 U	---	---	---
Anthracene	0.25	23,000	610,000	59,000	mg/kg	0.3 U	---	---	---
Benzo(a)anthracene	1.1	0.9	170	8	mg/kg	0.07 U	---	---	---
Benzo(a)pyrene	1.3	0.09	17	82	mg/kg	0.07 U	---	---	---
Benzo(b)fluoranthene	1.5	0.9	170	25	mg/kg	0.06 U	---	---	---
Benzo(g,h,i)perylene+	0.68	2,300	61,000	130,000	mg/kg	0.12 U	---	---	---
Benzo(k)fluoranthene	0.99	9	1,700	250	mg/kg	0.12 U	---	---	---
Chrysene	1.2	88	17,000	800	mg/kg	0.09 U	---	---	---
Dibenz(a,h)anthracene	0.2	0.09	17	7.6	mg/kg	0.11 U	---	---	---
Fluoranthene	2.7	3,100	82,000	21,000	mg/kg	0.09 U	---	---	---
Fluorene	0.1	3,100	82,000	2,800	mg/kg	0.14 U	---	---	---
Indeno(1,2,3-cd)pyrene	0.86	0.9	170	69	mg/kg	0.13 U	---	---	---
Naphthalene	0.04	170	1.8	18	mg/kg	0.09 U	---	---	---
Phenanthrene+	1.3	2,300	61,000	1,100	mg/kg	0.12 U	---	---	---
Pyrene	1.9	2,300	61,000	21,000	mg/kg	0.07 U	---	---	---
Pesticides									
4,4'-Dichlorodiphenyltrichloroethane	NA	2	100	32	mg/kg	---	---	---	---
Endrin	NA	23	61	1	mg/kg	---	---	---	---
Endrin ketone	NA	NA	NA	NA	mg/kg	---	---	---	---
gamma-BHC (Lindane)	NA	0.5	96	0.009	mg/kg	---	---	---	---
PCBs									
Not Detected in any samples						---	---	---	---
Herbicides									
Not Detected in any samples						---	---	---	---
Sum of Organics					mg/kg	1,004	49.3	416	8.3

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-2/KP-SB01	B-3/KP-SB09	B-3/KP-SB09	B-3/KP-SB09
					Field Sample ID	KP-SB01(18-20)D	KP-SB09(0-3)	B-3 (3-6)	KP-SB09(3-6)
					Sampling Date	5/29/2012	5/29/2012	8/4/2010	5/29/2012
					Sampling Depth (ft bgs)	18- 20	0- 3	3- 6	3- 6
Fractional Organic Carbon	NA	NA	NA	NA	%	---	3	---	1.3
TPH									
TPH (C06-C10)	NA	NA	NA	NA	mg/kg	---	---	---	---
TPH-DRO (C10-C28)	NA	NA	NA	NA	mg/kg	---	---	---	---
VOCs									
1,1,2-Trichloroethane	NA	310	1,800	0.3	mg/kg	0.0062 U	0.0044 U	0.005 U	---
1,1-Dichloroethene	NA	290	3	0.3	mg/kg	0.0051 J	0.0044 U	0.005 U	---
1,2,4-Trimethylbenzene+	NA	87	8.9	NA	mg/kg	0.0062 U	0.019	---	---
1,2-Dichlorobenzene	NA	560	310	43	mg/kg	0.0062 U	0.0044 U	---	---
1,3,5-Trimethylbenzene+	NA	780	0.79	10	mg/kg	0.0062 U	0.0053	---	---
1,4-Dichlorobenzene	NA	11,000	340	11	mg/kg	0.0062 U	0.0044 U	---	---
2-Butanone (MEK)+	NA	25,000	730	17	mg/kg	0.031 U	0.022 U	0.005 U	---
2-Hexanone+	NA	390	47	0.16	mg/kg	0.12 U	0.088 U	0.005 U	---
Acetone	NA	70,000	100,000	25	mg/kg	0.12 U	0.088 U	0.05 U	---
Benzene	NA	0.8	2.2	0.17	mg/kg	0.0062 U	0.0018 J	0.005 U	---
Carbon disulfide	NA	720	9	160	mg/kg	0.012 U	0.0088 U	0.005 U	---
Chlorobenzene	NA	130	1.3	6.5	mg/kg	0.0062 U	0.0044 U	0.005 U	---
Chloroethane+	NA	1,500	39	NA	mg/kg	0.0062 U	0.0044 U	0.005 U	---
Chloroform	NA	0.3	0.76	2.9	mg/kg	0.0034 J	0.0044 U	0.005 U	---
cis-1,2-Dichloroethene	NA	780	1,200	1.1	mg/kg	0.045	0.0044 U	0.005 U	---
Ethylbenzene	NA	400	58	19	mg/kg	0.0062 U	0.0044 U	0.005 U	---
Isopropylbenzene (Cumene)+	NA	500	52	400	mg/kg	0.0062 U	0.005	---	---
Naphthalene	0.04	170	1.8	18	mg/kg	0.0062 U	0.0044 U	---	---
n-Butylbenzene+	NA	3,900	20,000	87	mg/kg	0.0062 U	0.0044 U	---	---
n-Hexane+	NA	290	16	120	mg/kg	0.0062 U	0.0044 U	---	---
n-Propylbenzene+	NA	300	90	120	mg/kg	0.0062 U	0.0045	---	---
p-Isopropyltoluene	NA	NA	NA	NA	mg/kg	0.0062 U	0.0044 U	---	---
sec-Butylbenzene	NA	NA	NA	NA	mg/kg	0.0062 U	0.0044 U	---	---
Tetrachloroethene	NA	11	28	0.3	mg/kg	0.0062 U	0.0044 U	0.005 U	---
Toluene	NA	650	42	29	mg/kg	0.0062 U	0.0044 U	0.005 U	---
trans-1,2-Dichloroethene	NA	1,600	3,100	3.4	mg/kg	0.0062 U	0.0044 U	0.005 U	---
Trichloroethene	NA	5	12	0.3	mg/kg	***9.6***	0.0044 U	0.01	---
Vinyl chloride	NA	0.28	1.1	0.07	mg/kg	0.012	0.0044 U	0.002 U	---
Xylenes, Total	NA	320	5.6	150	mg/kg	0.012 U	0.049	0.005 U	---

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-2/KP-SB01	B-3/KP-SB09	B-3/KP-SB09	B-3/KP-SB09
					Field Sample ID	KP-SB01(18-20)D	KP-SB09(0-3)	B-3 (3-6)	KP-SB09(3-6)
					Sampling Date	5/29/2012	5/29/2012	8/4/2010	5/29/2012
					Sampling Depth (ft bgs)	18- 20	0- 3	3- 6	3- 6
SVOCs									
2-Methylnaphthalene+	NA	310	820	9.5	mg/kg	---	0.41 U	---	---
Acenaphthene	0.09	4,700	120,000	2,900	mg/kg	---	0.41 UJ	0.05 U	---
Acenaphthylene+	0.03	2,300	61,000	420	mg/kg	---	0.41 UJ	0.05 U	---
Anthracene	0.25	23,000	610,000	59,000	mg/kg	---	0.41 U	0.08 U	---
Benzo(a)anthracene	1.1	0.9	170	8	mg/kg	---	0.41 UJ	0.008 U	---
Benzo(a)pyrene	1.3	0.09	17	82	mg/kg	---	0.41 U	0.02 U	---
Benzo(b)fluoranthene	1.5	0.9	170	25	mg/kg	---	0.41 U	0.01 U	---
Benzo(g,h,i)perylene+	0.68	2,300	61,000	130,000	mg/kg	---	0.41 U	0.02 U	---
Benzo(k)fluoranthene	0.99	9	1,700	250	mg/kg	---	0.41 U	0.01 U	---
Chrysene	1.2	88	17,000	800	mg/kg	---	0.41 UJ	0.05 U	---
Dibenz(a,h)anthracene	0.2	0.09	17	7.6	mg/kg	---	0.41 U	0.02 U	---
Fluoranthene	2.7	3,100	82,000	21,000	mg/kg	---	0.41 U	0.05 U	---
Fluorene	0.1	3,100	82,000	2,800	mg/kg	---	0.41 UJ	0.03 U	---
Indeno(1,2,3-cd)pyrene	0.86	0.9	170	69	mg/kg	---	0.41 U	0.02 U	---
Naphthalene	0.04	170	1.8	18	mg/kg	---	0.41 U	0.05 U	---
Phenanthrene+	1.3	2,300	61,000	1,100	mg/kg	---	0.41 U	0.03 U	---
Pyrene	1.9	2,300	61,000	21,000	mg/kg	---	0.22 J	0.05 U	---
Pesticides									
4,4'-Dichlorodiphenyltrichloroethane	NA	2	100	32	mg/kg	---	---	0.02 U	---
Endrin	NA	23	61	1	mg/kg	---	---	0.02 U	---
Endrin ketone	NA	NA	NA	NA	mg/kg	---	---	0.02 U	---
gamma-BHC (Lindane)	NA	0.5	96	0.009	mg/kg	---	---	0.008 U	---
PCBs									
Not Detected in any samples						---	---	ND	---
Herbicides									
Not Detected in any samples						---	---	---	---
Sum of Organics					mg/kg	9.7	0.30	0.01	0.0

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-3/KP-SB09	B-4	B-4	B-4	B-4
					Field Sample ID	B-3 (6-9)	B-4 (0-3)	B-4 (3-6)	B-4 (6-9)	B-4 (9-12)
					Sampling Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010
					Sampling Depth (ft bgs)	6- 9	0- 3	3- 6	6- 9	9- 12
Fractional Organic Carbon	NA	NA	NA	NA	%	---	---	---	---	---
TPH										
TPH (C06-C10)	NA	NA	NA	NA	mg/kg	---	---	---	---	---
TPH-DRO (C10-C28)	NA	NA	NA	NA	mg/kg	---	---	---	---	---
VOCs										
1,1,2-Trichloroethane	NA	310	1,800	0.3	mg/kg	0.005 U	---	---	0.005 U	0.005 U
1,1-Dichloroethene	NA	290	3	0.3	mg/kg	0.005 U	---	---	***2***	0.005 U
1,2,4-Trimethylbenzene+	NA	87	8.9	NA	mg/kg	---	---	---	---	---
1,2-Dichlorobenzene	NA	560	310	43	mg/kg	---	---	---	---	---
1,3,5-Trimethylbenzene+	NA	780	0.79	10	mg/kg	---	---	---	---	---
1,4-Dichlorobenzene	NA	11,000	340	11	mg/kg	---	---	---	---	---
2-Butanone (MEK)+	NA	25,000	730	17	mg/kg	0.005 U	---	---	0.005 U	0.005 U
2-Hexanone+	NA	390	47	0.16	mg/kg	0.005 U	---	---	0.005 U	0.005 U
Acetone	NA	70,000	100,000	25	mg/kg	0.05 U	---	---	0.05 U	0.05 U
Benzene	NA	0.8	2.2	0.17	mg/kg	0.005 U	---	---	0.005 U	0.005 U
Carbon disulfide	NA	720	9	160	mg/kg	0.005 U	---	---	0.005 U	0.005 U
Chlorobenzene	NA	130	1.3	6.5	mg/kg	0.005 U	---	---	0.005 U	0.005 U
Chloroethane+	NA	1,500	39	NA	mg/kg	0.005 U	---	---	0.005 U	0.3
Chloroform	NA	0.3	0.76	2.9	mg/kg	0.005 U	---	---	0.005 U	0.005 U
cis-1,2-Dichloroethene	NA	780	1,200	1.1	mg/kg	1	---	---	***872***	***20***
Ethylbenzene	NA	400	58	19	mg/kg	0.005 U	---	---	0.005 U	0.005 U
Isopropylbenzene (Cumene)+	NA	500	52	400	mg/kg	---	---	---	---	---
Naphthalene	0.04	170	1.8	18	mg/kg	---	---	---	---	---
n-Butylbenzene+	NA	3,900	20,000	87	mg/kg	---	---	---	---	---
n-Hexane+	NA	290	16	120	mg/kg	---	---	---	---	---
n-Propylbenzene+	NA	300	90	120	mg/kg	---	---	---	---	---
p-Isopropyltoluene	NA	NA	NA	NA	mg/kg	---	---	---	---	---
sec-Butylbenzene	NA	NA	NA	NA	mg/kg	---	---	---	---	---
Tetrachloroethene	NA	11	28	0.3	mg/kg	0.005 U	---	---	***5***	0.005 U
Toluene	NA	650	42	29	mg/kg	0.005 U	---	---	0.005 U	0.005 U
trans-1,2-Dichloroethene	NA	1,600	3,100	3.4	mg/kg	0.005 U	---	---	***15***	0.005 U
Trichloroethene	NA	5	12	0.3	mg/kg	***2***	---	---	0.005 U	0.005 U
Vinyl chloride	NA	0.28	1.1	0.07	mg/kg	0.002 U	---	---	***10***	***0.2***
Xylenes, Total	NA	320	5.6	150	mg/kg	0.005 U	---	---	0.005 U	0.005 U

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-3/KP-SB09	B-4	B-4	B-4	B-4
					Field Sample ID	B-3 (6-9)	B-4 (0-3)	B-4 (3-6)	B-4 (6-9)	B-4 (9-12)
					Sampling Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010
					Sampling Depth (ft bgs)	6- 9	0- 3	3- 6	6- 9	9- 12
SVOCs										
2-Methylnaphthalene+	NA	310	820	9.5	mg/kg	---	0.12 U	---	---	0.12 U
Acenaphthene	0.09	4,700	120,000	2,900	mg/kg	0.05 U	0.15 U	0.13	---	0.15 U
Acenaphthylene+	0.03	2,300	61,000	420	mg/kg	0.05 U	0.07 U	0.1	---	0.07 U
Anthracene	0.25	23,000	610,000	59,000	mg/kg	0.08 U	0.36	0.87	---	0.3 U
Benzo(a)anthracene	1.1	0.9	170	8	mg/kg	0.008 U	**1.28**	**2.83**	---	0.07 U
Benzo(a)pyrene	1.3	0.09	17	82	mg/kg	0.02 U	1.15	**2.77**	---	0.07 U
Benzo(b)fluoranthene	1.5	0.9	170	25	mg/kg	0.01 U	**1.57**	**3.48**	---	0.06 U
Benzo(g,h,i)perylene+	0.68	2,300	61,000	130,000	mg/kg	0.02 U	0.6	1.7	---	0.12 U
Benzo(k)fluoranthene	0.99	9	1,700	250	mg/kg	0.01 U	0.68	0.97	---	0.12 U
Chrysene	1.2	88	17,000	800	mg/kg	0.05 U	1.67	2.58	---	0.09 U
Dibenz(a,h)anthracene	0.2	0.09	17	7.6	mg/kg	0.02 U	0.11 U	0.1	---	0.11 U
Fluoranthene	2.7	3,100	82,000	21,000	mg/kg	0.05 U	2.33	4.95	---	0.09 U
Fluorene	0.1	3,100	82,000	2,800	mg/kg	0.03 U	0.14 U	0.18	---	0.14 U
Indeno(1,2,3-cd)pyrene	0.86	0.9	170	69	mg/kg	0.02 U	0.48	**1.43**	---	0.13 U
Naphthalene	0.04	170	1.8	18	mg/kg	0.05 U	0.09 U	0.25	---	0.09 U
Phenanthrene+	1.3	2,300	61,000	1,100	mg/kg	0.03 U	1.66	3.04	---	0.12 U
Pyrene	1.9	2,300	61,000	21,000	mg/kg	0.05 U	2.45	4.7	---	0.07 U
Pesticides										
4,4'-Dichlorodiphenyltrichloroethane	NA	2	100	32	mg/kg	---	0.02 U	---	---	---
Endrin	NA	23	61	1	mg/kg	---	0.02 U	---	---	---
Endrin ketone	NA	NA	NA	NA	mg/kg	---	0.02 U	---	---	---
gamma-BHC (Lindane)	NA	0.5	96	0.009	mg/kg	---	0.008 U	---	---	---
PCBs										
Not Detected in any samples						---	ND	---	---	---
Herbicides										
Not Detected in any samples						---	---	---	---	---
Sum of Organics					mg/kg	3.0	14.2	30.1	904	20.5

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02
					Field Sample ID	B-5 (0-3)	B-5 (3-6)	B-5 (6-9)	B-5 (9-12)
					Sampling Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010
					Sampling Depth (ft bgs)	0- 3	3- 6	6- 9	9- 12
Fractional Organic Carbon	NA	NA	NA	NA	%	---	---	---	---
TPH									
TPH (C06-C10)	NA	NA	NA	NA	mg/kg	---	---	---	---
TPH-DRO (C10-C28)	NA	NA	NA	NA	mg/kg	---	---	---	---
VOCs									
1,1,2-Trichloroethane	NA	310	1,800	0.3	mg/kg	---	0.005 U	0.005 U	0.005 U
1,1-Dichloroethene	NA	290	3	0.3	mg/kg	---	0.005 U	0.005 U	***4***
1,2,4-Trimethylbenzene+	NA	87	8.9	NA	mg/kg	---	---		---
1,2-Dichlorobenzene	NA	560	310	43	mg/kg	---	---		---
1,3,5-Trimethylbenzene+	NA	780	0.79	10	mg/kg	---	---		---
1,4-Dichlorobenzene	NA	11,000	340	11	mg/kg	---	---		---
2-Butanone (MEK)+	NA	25,000	730	17	mg/kg	---	0.005 U	0.005 U	0.005 U
2-Hexanone+	NA	390	47	0.16	mg/kg	---	0.005 U	0.005 U	0.005 U
Acetone	NA	70,000	100,000	25	mg/kg	---	0.05 U	0.05 U	0.05 U
Benzene	NA	0.8	2.2	0.17	mg/kg	---	***0.4***	0.005 U	0.005 U
Carbon disulfide	NA	720	9	160	mg/kg	---	0.005 U	0.005 U	0.005 U
Chlorobenzene	NA	130	1.3	6.5	mg/kg	---	0.005 U	0.005 U	0.005 U
Chloroethane+	NA	1,500	39	NA	mg/kg	---	0.005 U	0.005 U	0.005 U
Chloroform	NA	0.3	0.76	2.9	mg/kg	---	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	NA	780	1,200	1.1	mg/kg	---	***8***	***942***	***990***
Ethylbenzene	NA	400	58	19	mg/kg	---	0.005 U	0.005 U	0.005 U
Isopropylbenzene (Cumene)+	NA	500	52	400	mg/kg	---	---		---
Naphthalene	0.04	170	1.8	18	mg/kg	---	---		---
n-Butylbenzene+	NA	3,900	20,000	87	mg/kg	---	---		---
n-Hexane+	NA	290	16	120	mg/kg	---	---		---
n-Propylbenzene+	NA	300	90	120	mg/kg	---	---		---
p-Isopropyltoluene	NA	NA	NA	NA	mg/kg	---	---		---
sec-Butylbenzene	NA	NA	NA	NA	mg/kg	---	---		---
Tetrachloroethene	NA	11	28	0.3	mg/kg	---	***0.5***	0.005 U	***14***
Toluene	NA	650	42	29	mg/kg	---	0.3	0.005 U	0.005 U
trans-1,2-Dichloroethene	NA	1,600	3,100	3.4	mg/kg	---	0.005 U	***7.34***	***14***
Trichloroethene	NA	5	12	0.3	mg/kg	---	***73***	0.005 U	0.005 U
Vinyl chloride	NA	0.28	1.1	0.07	mg/kg	---	***26***	***44.2***	0.002 U
Xylenes, Total	NA	320	5.6	150	mg/kg	---	0.005 U	0.005 U	0.005 U

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02
					Field Sample ID	B-5 (0-3)	B-5 (3-6)	B-5 (6-9)	B-5 (9-12)
					Sampling Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010
					Sampling Depth (ft bgs)	0- 3	3- 6	6- 9	9- 12
SVOCs									
2-Methylnaphthalene+	NA	310	820	9.5	mg/kg	---	0.64	0.12 U	---
Acenaphthene	0.09	4,700	120,000	2,900	mg/kg	0.05 U	0.15 U	0.15 U	---
Acenaphthylene+	0.03	2,300	61,000	420	mg/kg	0.05 U	0.07 U	0.07 U	---
Anthracene	0.25	23,000	610,000	59,000	mg/kg	0.08 U	0.39	0.3 U	---
Benzo(a)anthracene	1.1	0.9	170	8	mg/kg	0.12	1.07	0.07 U	---
Benzo(a)pyrene	1.3	0.09	17	82	mg/kg	0.11	1.1	0.07 U	---
Benzo(b)fluoranthene	1.5	0.9	170	25	mg/kg	0.15	1.2	0.06 U	---
Benzo(g,h,i)perylene+	0.68	2,300	61,000	130,000	mg/kg	0.17	0.69	0.12 U	---
Benzo(k)fluoranthene	0.99	9	1,700	250	mg/kg	0.07	0.4	0.12 U	---
Chrysene	1.2	88	17,000	800	mg/kg	0.11	0.97	0.09 U	---
Dibenz(a,h)anthracene	0.2	0.09	17	7.6	mg/kg	0.02 U	0.11 U	0.11 U	---
Fluoranthene	2.7	3,100	82,000	21,000	mg/kg	0.21	1.9	0.09 U	---
Fluorene	0.1	3,100	82,000	2,800	mg/kg	0.03 U	0.14 U	0.14 U	---
Indeno(1,2,3-cd)pyrene	0.86	0.9	170	69	mg/kg	0.12	0.46	0.13 U	---
Naphthalene	0.04	170	1.8	18	mg/kg	0.05 U	0.49	0.09 U	---
Phenanthrene+	1.3	2,300	61,000	1,100	mg/kg	0.08	1.86	0.12 U	---
Pyrene	1.9	2,300	61,000	21,000	mg/kg	0.19	2.57	0.07 U	---
Pesticides									
4,4'-Dichlorodiphenyltrichloroethane	NA	2	100	32	mg/kg	---	0.02 U	0.02 U	---
Endrin	NA	23	61	1	mg/kg	---	0.02 U	0.02 U	---
Endrin ketone	NA	NA	NA	NA	mg/kg	---	0.02 U	0.02 U	---
gamma-BHC (Lindane)	NA	0.5	96	0.009	mg/kg	---	0.008 U	0.008 U	---
PCBs									
Not Detected in any samples						---	ND	ND	---
Herbicides									
Not Detected in any samples						---	---	---	---
Sum of Organics					mg/kg	1.3	122	994	1,022

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-5/KP-SB02	B-5/KP-SB02	B-6	B-6	B-6
					Field Sample ID	KP-SB02(9-12)	KP-SB02(18-20)	B-6 (0-3)	B-6 (3-6)	B-6 (6-9)
					Sampling Date	5/29/2012	5/29/2012	8/4/2010	8/4/2010	8/4/2010
					Sampling Depth (ft bgs)	9- 12	18- 20	0- 3	3- 6	6- 9
Fractional Organic Carbon	NA	NA	NA	NA	%	---	---	---	---	---
TPH										
TPH (C06-C10)	NA	NA	NA	NA	mg/kg	1,720	---	---	---	---
TPH-DRO (C10-C28)	NA	NA	NA	NA	mg/kg	43.6 J	---	---	---	---
VOCs										
1,1,2-Trichloroethane	NA	310	1,800	0.3	mg/kg	---	0.0047 U	0.005 U	0.005 U	0.005 U
1,1-Dichloroethene	NA	290	3	0.3	mg/kg	---	0.019 J	0.005 U	0.005 U	0.005 U
1,2,4-Trimethylbenzene+	NA	87	8.9	NA	mg/kg	---	0.0047 U	---	---	---
1,2-Dichlorobenzene	NA	560	310	43	mg/kg	---	0.0047 U	---	---	---
1,3,5-Trimethylbenzene+	NA	780	0.79	10	mg/kg	---	0.0047 U	---	---	---
1,4-Dichlorobenzene	NA	11,000	340	11	mg/kg	---	0.0047 U	---	---	---
2-Butanone (MEK)+	NA	25,000	730	17	mg/kg	---	0.024 U	0.005 U	0.005 U	0.005 U
2-Hexanone+	NA	390	47	0.16	mg/kg	---	0.095 U	0.005 U	0.005 U	0.005 U
Acetone	NA	70,000	100,000	25	mg/kg	---	0.095 U	0.05 U	0.05 U	0.05 U
Benzene	NA	0.8	2.2	0.17	mg/kg	---	0.0047 U	0.005 U	0.005 U	0.005 U
Carbon disulfide	NA	720	9	160	mg/kg	---	0.0095 U	0.005 U	0.005 U	0.005 U
Chlorobenzene	NA	130	1.3	6.5	mg/kg	---	0.0047 U	0.005 U	0.005 U	0.005 U
Chloroethane+	NA	1,500	39	NA	mg/kg	---	0.0047 U	0.005 U	0.005 U	0.005 U
Chloroform	NA	0.3	0.76	2.9	mg/kg	---	0.0047 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	NA	780	1,200	1.1	mg/kg	---	***56.6 J***	0.02	0.1	0.005 U
Ethylbenzene	NA	400	58	19	mg/kg	---	0.0047 U	0.005 U	0.005 U	0.005 U
Isopropylbenzene (Cumene)+	NA	500	52	400	mg/kg	---	0.0047 U	---	---	---
Naphthalene	0.04	170	1.8	18	mg/kg	---	0.0047 U	---	---	---
n-Butylbenzene+	NA	3,900	20,000	87	mg/kg	---	0.0047 U	---	---	---
n-Hexane+	NA	290	16	120	mg/kg	---	0.0047 U	---	---	---
n-Propylbenzene+	NA	300	90	120	mg/kg	---	0.0047 U	---	---	---
p-Isopropyltoluene	NA	NA	NA	NA	mg/kg	---	0.0047 U	---	---	---
sec-Butylbenzene	NA	NA	NA	NA	mg/kg	---	0.0047 U	---	---	---
Tetrachloroethene	NA	11	28	0.3	mg/kg	---	0.017 J	0.005 U	0.005 U	0.005 U
Toluene	NA	650	42	29	mg/kg	---	0.0027 J	0.005 U	0.005 U	0.005 U
trans-1,2-Dichloroethene	NA	1,600	3,100	3.4	mg/kg	---	0.054 J	0.005 U	0.005 U	0.005 U
Trichloroethene	NA	5	12	0.3	mg/kg	---	***803 J***	0.08	***1***	0.02
Vinyl chloride	NA	0.28	1.1	0.07	mg/kg	---	***3 J***	0.002 U	0.002 U	0.02
Xylenes, Total	NA	320	5.6	150	mg/kg	---	0.0095 U	0.005 U	0.01	0.005 U

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-5/KP-SB02	B-5/KP-SB02	B-6	B-6	B-6
					Field Sample ID	KP-SB02(9-12)	KP-SB02(18-20)	B-6 (0-3)	B-6 (3-6)	B-6 (6-9)
					Sampling Date	5/29/2012	5/29/2012	8/4/2010	8/4/2010	8/4/2010
					Sampling Depth (ft bgs)	9- 12	18- 20	0- 3	3- 6	6- 9
SVOCs										
2-Methylnaphthalene+	NA	310	820	9.5	mg/kg	---	---	0.19	0.12 U	---
Acenaphthene	0.09	4,700	120,000	2,900	mg/kg	---	---	0.15 U	0.15 U	---
Acenaphthylene+	0.03	2,300	61,000	420	mg/kg	---	---	0.07 U	0.07 U	---
Anthracene	0.25	23,000	610,000	59,000	mg/kg	---	---	0.73	0.3 U	---
Benzo(a)anthracene	1.1	0.9	170	8	mg/kg	---	---	**2.42**	0.21	---
Benzo(a)pyrene	1.3	0.09	17	82	mg/kg	---	---	**2.21**	0.29	---
Benzo(b)fluoranthene	1.5	0.9	170	25	mg/kg	---	---	**2.67**	0.36	---
Benzo(g,h,i)perylene+	0.68	2,300	61,000	130,000	mg/kg	---	---	0.99	0.25	---
Benzo(k)fluoranthene	0.99	9	1,700	250	mg/kg	---	---	0.81	0.16	---
Chrysene	1.2	88	17,000	800	mg/kg	---	---	2.2	0.25	---
Dibenz(a,h)anthracene	0.2	0.09	17	7.6	mg/kg	---	---	0.11 U	0.11 U	---
Fluoranthene	2.7	3,100	82,000	21,000	mg/kg	---	---	4.26	0.3	---
Fluorene	0.1	3,100	82,000	2,800	mg/kg	---	---	0.14 U	0.14 U	---
Indeno(1,2,3-cd)pyrene	0.86	0.9	170	69	mg/kg	---	---	0.88	0.19	---
Naphthalene	0.04	170	1.8	18	mg/kg	---	---	0.25	0.09 U	---
Phenanthrene+	1.3	2,300	61,000	1,100	mg/kg	---	---	3.95	0.12 U	---
Pyrene	1.9	2,300	61,000	21,000	mg/kg	---	---	5.47	0.44	---
Pesticides										
4,4'-Dichlorodiphenyltrichloroethane	NA	2	100	32	mg/kg	---	---	0.02 U	0.02 U	---
Endrin	NA	23	61	1	mg/kg	---	---	0.02 U	0.02 U	---
Endrin ketone	NA	NA	NA	NA	mg/kg	---	---	0.02 U	0.02 U	---
gamma-BHC (Lindane)	NA	0.5	96	0.009	mg/kg	---	---	0.04	0.008 U	---
PCBs										
Not Detected in any samples						---	---	ND	ND	---
Herbicides										
Not Detected in any samples						---	---	---	---	---
Sum of Organics					mg/kg	1,764	863	27.2	3.6	0.0

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-6	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03
					Field Sample ID	B-6 (9-12)	B-7 (0-3)	B-7 (3-6)	B-7 (6-9)	B-7 (9-12)
					Sampling Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010
					Sampling Depth (ft bgs)	9- 12	0- 3	3- 6	6- 9	9- 12
Fractional Organic Carbon	NA	NA	NA	NA	%	---	---	---	---	---
TPH										
TPH (C06-C10)	NA	NA	NA	NA	mg/kg	---	---	---	---	---
TPH-DRO (C10-C28)	NA	NA	NA	NA	mg/kg	---	---	---	---	---
VOCs										
1,1,2-Trichloroethane	NA	310	1,800	0.3	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,1-Dichloroethene	NA	290	3	0.3	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
1,2,4-Trimethylbenzene+	NA	87	8.9	NA	mg/kg	---	---	---	---	---
1,2-Dichlorobenzene	NA	560	310	43	mg/kg	---	---	---	---	---
1,3,5-Trimethylbenzene+	NA	780	0.79	10	mg/kg	---	---	---	---	---
1,4-Dichlorobenzene	NA	11,000	340	11	mg/kg	---	---	---	---	---
2-Butanone (MEK)+	NA	25,000	730	17	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
2-Hexanone+	NA	390	47	0.16	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Acetone	NA	70,000	100,000	25	mg/kg	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Benzene	NA	0.8	2.2	0.17	mg/kg	0.005 U	0.005 U	0.007	0.008	0.005 U
Carbon disulfide	NA	720	9	160	mg/kg	0.005 U	0.01	0.02	0.005 U	0.005 U
Chlorobenzene	NA	130	1.3	6.5	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chloroethane+	NA	1,500	39	NA	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Chloroform	NA	0.3	0.76	2.9	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	NA	780	1,200	1.1	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Ethylbenzene	NA	400	58	19	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Isopropylbenzene (Cumene)+	NA	500	52	400	mg/kg	---	---	---	---	---
Naphthalene	0.04	170	1.8	18	mg/kg	---	---	---	---	---
n-Butylbenzene+	NA	3,900	20,000	87	mg/kg	---	---	---	---	---
n-Hexane+	NA	290	16	120	mg/kg	---	---	---	---	---
n-Propylbenzene+	NA	300	90	120	mg/kg	---	---	---	---	---
p-Isopropyltoluene	NA	NA	NA	NA	mg/kg	---	---	---	---	---
sec-Butylbenzene	NA	NA	NA	NA	mg/kg	---	---	---	---	---
Tetrachloroethene	NA	11	28	0.3	mg/kg	0.08	0.005 U	0.005 U	0.005 U	0.005 U
Toluene	NA	650	42	29	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
trans-1,2-Dichloroethene	NA	1,600	3,100	3.4	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Trichloroethene	NA	5	12	0.3	mg/kg	0.005 U	0.03	0.04	0.009	0.005 U
Vinyl chloride	NA	0.28	1.1	0.07	mg/kg	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Xylenes, Total	NA	320	5.6	150	mg/kg	0.005 U	0.005 U	0.008	0.005 U	0.005 U

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-6	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03
					Field Sample ID	B-6 (9-12)	B-7 (0-3)	B-7 (3-6)	B-7 (6-9)	B-7 (9-12)
					Sampling Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010
					Sampling Depth (ft bgs)	9- 12	0- 3	3- 6	6- 9	9- 12
SVOCs										
2-Methylnaphthalene+	NA	310	820	9.5	mg/kg	---	0.12 U	0.4	---	---
Acenaphthene	0.09	4,700	120,000	2,900	mg/kg	---	0.15 U	0.15 U	0.05 U	---
Acenaphthylene+	0.03	2,300	61,000	420	mg/kg	---	0.07 U	0.07 U	0.05 U	---
Anthracene	0.25	23,000	610,000	59,000	mg/kg	---	0.41	0.43	0.08 U	---
Benzo(a)anthracene	1.1	0.9	170	8	mg/kg	---	**1.76**	**1.65**	0.008 U	---
Benzo(a)pyrene	1.3	0.09	17	82	mg/kg	---	**1.91**	**1.88**	0.02 U	---
Benzo(b)fluoranthene	1.5	0.9	170	25	mg/kg	---	**2.24**	**2.03**	0.01 U	---
Benzo(g,h,i)perylene+	0.68	2,300	61,000	130,000	mg/kg	---	1.21	1.21	0.02 U	---
Benzo(k)fluoranthene	0.99	9	1,700	250	mg/kg	---	0.66	0.75	0.01 U	---
Chrysene	1.2	88	17,000	800	mg/kg	---	1.95	1.53	0.05 U	---
Dibenz(a,h)anthracene	0.2	0.09	17	7.6	mg/kg	---	0.11 U	0.11 U	0.02 U	---
Fluoranthene	2.7	3,100	82,000	21,000	mg/kg	---	3.38	3.25	0.05 U	---
Fluorene	0.1	3,100	82,000	2,800	mg/kg	---	0.14 U	0.14 U	0.03 U	---
Indeno(1,2,3-cd)pyrene	0.86	0.9	170	69	mg/kg	---	0.82	0.87	0.02 U	---
Naphthalene	0.04	170	1.8	18	mg/kg	---	0.09 U	0.37	0.05 U	---
Phenanthrene+	1.3	2,300	61,000	1,100	mg/kg	---	2.25	2.51	0.03 U	---
Pyrene	1.9	2,300	61,000	21,000	mg/kg	---	4.56	4.77	0.05 U	---
Pesticides										
4,4'-Dichlorodiphenyltrichloroethane	NA	2	100	32	mg/kg	---	0.11	---	---	---
Endrin	NA	23	61	1	mg/kg	---	0.07	---	---	---
Endrin ketone	NA	NA	NA	NA	mg/kg	---	0.05	---	---	---
gamma-BHC (Lindane)	NA	0.5	96	0.009	mg/kg	---	0.008 U	---	---	---
PCBs										
Not Detected in any samples						---	ND	---	---	---
Herbicides										
Not Detected in any samples						---	ND	---	---	---
Sum of Organics					mg/kg	0.08	21.4	21.7	0.0	0.0

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-7/KP-SB03	B-8/KP-SB10	B-8/KP-SB10	B-8/KP-SB10
					Field Sample ID	KP-SB03(9-12)	B-8 (0-3)	KP-SB10(3-5)	KP-SB10(12-14)
					Sampling Date	5/29/2012	8/4/2010	5/29/2012	5/29/2012
					Sampling Depth (ft bgs)	9- 12	0- 3	3- 5	12- 14
Fractional Organic Carbon	NA	NA	NA	NA	%	1.4	---	---	---
TPH									
TPH (C06-C10)	NA	NA	NA	NA	mg/kg	---	---	---	---
TPH-DRO (C10-C28)	NA	NA	NA	NA	mg/kg	---	---	---	---
VOCs									
1,1,2-Trichloroethane	NA	310	1,800	0.3	mg/kg	---	---	---	---
1,1-Dichloroethene	NA	290	3	0.3	mg/kg	---	---	---	---
1,2,4-Trimethylbenzene+	NA	87	8.9	NA	mg/kg	---	---	---	---
1,2-Dichlorobenzene	NA	560	310	43	mg/kg	---	---	---	---
1,3,5-Trimethylbenzene+	NA	780	0.79	10	mg/kg	---	---	---	---
1,4-Dichlorobenzene	NA	11,000	340	11	mg/kg	---	---	---	---
2-Butanone (MEK)+	NA	25,000	730	17	mg/kg	---	---	---	---
2-Hexanone+	NA	390	47	0.16	mg/kg	---	---	---	---
Acetone	NA	70,000	100,000	25	mg/kg	---	---	---	---
Benzene	NA	0.8	2.2	0.17	mg/kg	---	0.005 U	---	---
Carbon disulfide	NA	720	9	160	mg/kg	---	---	---	---
Chlorobenzene	NA	130	1.3	6.5	mg/kg	---	---	---	---
Chloroethane+	NA	1,500	39	NA	mg/kg	---	---	---	---
Chloroform	NA	0.3	0.76	2.9	mg/kg	---	---	---	---
cis-1,2-Dichloroethene	NA	780	1,200	1.1	mg/kg	---	---	---	---
Ethylbenzene	NA	400	58	19	mg/kg	---	0.005 U	---	---
Isopropylbenzene (Cumene)+	NA	500	52	400	mg/kg	---	---	---	---
Naphthalene	0.04	170	1.8	18	mg/kg	---	---	---	---
n-Butylbenzene+	NA	3,900	20,000	87	mg/kg	---	---	---	---
n-Hexane+	NA	290	16	120	mg/kg	---	---	---	---
n-Propylbenzene+	NA	300	90	120	mg/kg	---	---	---	---
p-Isopropyltoluene	NA	NA	NA	NA	mg/kg	---	---	---	---
sec-Butylbenzene	NA	NA	NA	NA	mg/kg	---	---	---	---
Tetrachloroethene	NA	11	28	0.3	mg/kg	---	---	---	---
Toluene	NA	650	42	29	mg/kg	---	0.005 U	---	---
trans-1,2-Dichloroethene	NA	1,600	3,100	3.4	mg/kg	---	---	---	---
Trichloroethene	NA	5	12	0.3	mg/kg	---	---	---	---
Vinyl chloride	NA	0.28	1.1	0.07	mg/kg	---	---	---	---
Xylenes, Total	NA	320	5.6	150	mg/kg	---	0.005 U	---	---

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-7/KP-SB03	B-8/KP-SB10	B-8/KP-SB10	B-8/KP-SB10
					Field Sample ID	KP-SB03(9-12)	B-8 (0-3)	KP-SB10(3-5)	KP-SB10(12-14)
					Sampling Date	5/29/2012	8/4/2010	5/29/2012	5/29/2012
					Sampling Depth (ft bgs)	9- 12	0- 3	3- 5	12- 14
SVOCs									
2-Methylnaphthalene+	NA	310	820	9.5	mg/kg	0.4 U	---	0.14	0.21
Acenaphthene	0.09	4,700	120,000	2,900	mg/kg	0.4 UJ	0.67	0.36	0.52
Acenaphthylene+	0.03	2,300	61,000	420	mg/kg	0.4 UJ	0.35	0.12	0.096
Anthracene	0.25	23,000	610,000	59,000	mg/kg	0.4 U	2.47	0.94	1.2
Benzo(a)anthracene	1.1	0.9	170	8	mg/kg	0.4 UJ	***9.27***	**2.4**	**2.2**
Benzo(a)pyrene	1.3	0.09	17	82	mg/kg	0.4 U	**9.36**	**2.2**	**2**
Benzo(b)fluoranthene	1.5	0.9	170	25	mg/kg	0.4 U	**11.5**	**2.4**	**1.9**
Benzo(g,h,i)perylene+	0.68	2,300	61,000	130,000	mg/kg	0.4 U	4.63	1.5	1.2
Benzo(k)fluoranthene	0.99	9	1,700	250	mg/kg	0.4 U	3.95	2	1.8
Chrysene	1.2	88	17,000	800	mg/kg	0.4 UJ	8.17	2.8	2.5
Dibenz(a,h)anthracene	0.2	0.09	17	7.6	mg/kg	0.4 U	**0.35**	**0.77**	**0.66**
Fluoranthene	2.7	3,100	82,000	21,000	mg/kg	0.4 U	17.6	5.2	5.1
Fluorene	0.1	3,100	82,000	2,800	mg/kg	0.4 UJ	0.78	0.44	0.67
Indeno(1,2,3-cd)pyrene	0.86	0.9	170	69	mg/kg	0.4 U	**4.29**	**1.4**	**1.1**
Naphthalene	0.04	170	1.8	18	mg/kg	0.4 U	0.41	0.26	0.35
Phenanthrene+	1.3	2,300	61,000	1,100	mg/kg	0.4 U	7.63	3.9	4.6
Pyrene	1.9	2,300	61,000	21,000	mg/kg	0.4 U	15.2	4.3	4.1
Pesticides									
4,4'-Dichlorodiphenyltrichloroethane	NA	2	100	32	mg/kg	---	---	---	---
Endrin	NA	23	61	1	mg/kg	---	---	---	---
Endrin ketone	NA	NA	NA	NA	mg/kg	---	---	---	---
gamma-BHC (Lindane)	NA	0.5	96	0.009	mg/kg	---	---	---	---
PCBs									
Not Detected in any samples						---	---	---	---
Herbicides									
Not Detected in any samples						---	ND	---	---
Sum of Organics					mg/kg	0.0	96.6	31.1	30.2

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-8/KP-SB10	KP-SB04	KP-SB04
					Field Sample ID	KP-SB10(12-14)D	KP-SB04(10-12)	KP-SB04(14-16)
					Sampling Date	5/29/2012	5/29/2012	5/29/2012
					Sampling Depth (ft bgs)	12- 14	10- 12	14- 16
Fractional Organic Carbon	NA	NA	NA	NA	%	---	---	---
TPH								
TPH (C06-C10)	NA	NA	NA	NA	mg/kg	---	---	---
TPH-DRO (C10-C28)	NA	NA	NA	NA	mg/kg	---	---	---
VOCs								
1,1,2-Trichloroethane	NA	310	1,800	0.3	mg/kg	---	0.0045 U	0.0047 U
1,1-Dichloroethene	NA	290	3	0.3	mg/kg	---	***0.35 J***	0.18 J
1,2,4-Trimethylbenzene+	NA	87	8.9	NA	mg/kg	---	0.018 J	0.012 J
1,2-Dichlorobenzene	NA	560	310	43	mg/kg	---	0.0045 U	0.0047 U
1,3,5-Trimethylbenzene+	NA	780	0.79	10	mg/kg	---	0.0061 J	0.004 J
1,4-Dichlorobenzene	NA	11,000	340	11	mg/kg	---	0.0045 U	0.0047 U
2-Butanone (MEK)+	NA	25,000	730	17	mg/kg	---	0.022 U	0.024 U
2-Hexanone+	NA	390	47	0.16	mg/kg	---	0.09 U	0.095 U
Acetone	NA	70,000	100,000	25	mg/kg	---	0.09 U	0.095 U
Benzene	NA	0.8	2.2	0.17	mg/kg	---	0.0045 U	0.0015 J
Carbon disulfide	NA	720	9	160	mg/kg	---	0.009 U	0.0095 U
Chlorobenzene	NA	130	1.3	6.5	mg/kg	---	0.0045 U	0.0047 U
Chloroethane+	NA	1,500	39	NA	mg/kg	---	0.0045 U	0.0047 U
Chloroform	NA	0.3	0.76	2.9	mg/kg	---	0.0045 U	0.0047 U
cis-1,2-Dichloroethene	NA	780	1,200	1.1	mg/kg	---	***2.6 J***	0.28 J
Ethylbenzene	NA	400	58	19	mg/kg	---	0.008 J	0.0038 J
Isopropylbenzene (Cumene)+	NA	500	52	400	mg/kg	---	0.0045 U	0.0047 U
Naphthalene	0.04	170	1.8	18	mg/kg	---	0.0032 J	0.0039 J
n-Butylbenzene+	NA	3,900	20,000	87	mg/kg	---	0.0045 U	0.0047 U
n-Hexane+	NA	290	16	120	mg/kg	---	0.013 J	0.0079 J
n-Propylbenzene+	NA	300	90	120	mg/kg	---	0.0059 J	0.0029 J
p-Isopropyltoluene	NA	NA	NA	NA	mg/kg	---	0.0045 U	0.0047 U
sec-Butylbenzene	NA	NA	NA	NA	mg/kg	---	0.0045 U	0.0047 U
Tetrachloroethene	NA	11	28	0.3	mg/kg	---	***4.1 J***	0.28 J
Toluene	NA	650	42	29	mg/kg	---	0.036 J	0.016 J
trans-1,2-Dichloroethene	NA	1,600	3,100	3.4	mg/kg	---	0.028 J	0.011 J
Trichloroethene	NA	5	12	0.3	mg/kg	---	***3510 J***	***894 J***
Vinyl chloride	NA	0.28	1.1	0.07	mg/kg	---	***0.088 J***	***0.41 J***
Xylenes, Total	NA	320	5.6	150	mg/kg	---	0.033 J	0.011 J

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	B-8/KP-SB10	KP-SB04	KP-SB04
					Field Sample ID	KP-SB10(12-14)D	KP-SB04(10-12)	KP-SB04(14-16)
					Sampling Date	5/29/2012	5/29/2012	5/29/2012
					Sampling Depth (ft bgs)	12- 14	10- 12	14- 16
SVOCs								
2-Methylnaphthalene+	NA	310	820	9.5	mg/kg	0.11	---	---
Acenaphthene	0.09	4,700	120,000	2,900	mg/kg	0.36	---	---
Acenaphthylene+	0.03	2,300	61,000	420	mg/kg	0.095	---	---
Anthracene	0.25	23,000	610,000	59,000	mg/kg	0.89	---	---
Benzo(a)anthracene	1.1	0.9	170	8	mg/kg	**2.1**	---	---
Benzo(a)pyrene	1.3	0.09	17	82	mg/kg	**1.9**	---	---
Benzo(b)fluoranthene	1.5	0.9	170	25	mg/kg	**2.1**	---	---
Benzo(g,h,i)perylene+	0.68	2,300	61,000	130,000	mg/kg	1.3	---	---
Benzo(k)fluoranthene	0.99	9	1,700	250	mg/kg	1.7	---	---
Chrysene	1.2	88	17,000	800	mg/kg	2.4	---	---
Dibenz(a,h)anthracene	0.2	0.09	17	7.6	mg/kg	**0.66**	---	---
Fluoranthene	2.7	3,100	82,000	21,000	mg/kg	4.7	---	---
Fluorene	0.1	3,100	82,000	2,800	mg/kg	0.43	---	---
Indeno(1,2,3-cd)pyrene	0.86	0.9	170	69	mg/kg	**1.2**	---	---
Naphthalene	0.04	170	1.8	18	mg/kg	0.2	---	---
Phenanthrene+	1.3	2,300	61,000	1,100	mg/kg	3.5	---	---
Pyrene	1.9	2,300	61,000	21,000	mg/kg	3.8	---	---
Pesticides								
4,4'-Dichlorodiphenyltrichloroethane	NA	2	100	32	mg/kg	---	---	---
Endrin	NA	23	61	1	mg/kg	---	---	---
Endrin ketone	NA	NA	NA	NA	mg/kg	---	---	---
gamma-BHC (Lindane)	NA	0.5	96	0.009	mg/kg	---	---	---
PCBs								
Not Detected in any samples						---	---	---
Herbicides								
Not Detected in any samples						---	---	---
Sum of Organics					mg/kg	27.4	3,517	895

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	KP-SB05	KP-SB05	KP-SB06	KP-SB06
					Field Sample ID	KP-SB05(11-13)	KP-SB05(14-16)	KP-SB06(10-12)	KP-SB06(14-16)
					Sampling Date	5/29/2012	5/29/2012	5/29/2012	5/29/2012
					Sampling Depth (ft bgs)	11- 13	14- 16	10- 12	14- 16
Fractional Organic Carbon	NA	NA	NA	NA	%	---	---	---	---
TPH									
TPH (C06-C10)	NA	NA	NA	NA	mg/kg	---	---	---	---
TPH-DRO (C10-C28)	NA	NA	NA	NA	mg/kg	---	---	---	---
VOCs									
1,1,2-Trichloroethane	NA	310	1,800	0.3	mg/kg	0.0044 U	0.0062 U	0.0048 U	0.005 U
1,1-Dichloroethene	NA	290	3	0.3	mg/kg	***0.32 J***	0.081	***1.2 J***	0.26
1,2,4-Trimethylbenzene+	NA	87	8.9	NA	mg/kg	0.012 J	0.0062 U	0.05	0.028
1,2-Dichlorobenzene	NA	560	310	43	mg/kg	0.0044 U	0.0062 U	0.0048 U	0.005 U
1,3,5-Trimethylbenzene+	NA	780	0.79	10	mg/kg	0.0036 J	0.0062 U	0.018	0.011
1,4-Dichlorobenzene	NA	11,000	340	11	mg/kg	0.0044 U	0.0062 U	0.0048 U	0.005 U
2-Butanone (MEK)+	NA	25,000	730	17	mg/kg	0.022 U	0.031 U	0.024 U	0.025 U
2-Hexanone+	NA	390	47	0.16	mg/kg	0.089 U	0.12 U	0.27	0.099 U
Acetone	NA	70,000	100,000	25	mg/kg	0.089 U	0.12 U	0.096 U	0.099 U
Benzene	NA	0.8	2.2	0.17	mg/kg	0.0044 U	0.0062 U	0.0048 U	0.0039 J
Carbon disulfide	NA	720	9	160	mg/kg	0.0089 U	0.012 U	0.0096 U	0.0027 J
Chlorobenzene	NA	130	1.3	6.5	mg/kg	0.0044 U	0.0062 U	0.0048 U	0.005 U
Chloroethane+	NA	1,500	39	NA	mg/kg	0.0044 U	0.0062 U	0.0048 U	0.005 U
Chloroform	NA	0.3	0.76	2.9	mg/kg	0.0044 U	0.0062 U	0.0048 U	0.005 U
cis-1,2-Dichloroethene	NA	780	1,200	1.1	mg/kg	***6.3 J***	0.19	***22.2***	***22.4***
Ethylbenzene	NA	400	58	19	mg/kg	0.0056 J	0.0062 U	0.018	0.0073
Isopropylbenzene (Cumene)+	NA	500	52	400	mg/kg	0.0044 U	0.0062 U	0.01	0.0036 J
Naphthalene	0.04	170	1.8	18	mg/kg	0.0046 J	0.0062 U	0.0042 J	0.0027 J
n-Butylbenzene+	NA	3,900	20,000	87	mg/kg	0.0044 U	0.0062 U	0.0087	0.0032 J
n-Hexane+	NA	290	16	120	mg/kg	0.0098 J	0.0062 U	0.047	0.043
n-Propylbenzene+	NA	300	90	120	mg/kg	0.0037 J	0.0062 U	0.012	0.0068
p-Isopropyltoluene	NA	NA	NA	NA	mg/kg	0.0044 U	0.0062 U	0.015	0.0043 J
sec-Butylbenzene	NA	NA	NA	NA	mg/kg	0.0044 U	0.0062 U	0.0048	0.0027 J
Tetrachloroethene	NA	11	28	0.3	mg/kg	***2.7 J***	0.0061 J	***3.8***	***0.82 J***
Toluene	NA	650	42	29	mg/kg	0.033 J	0.0031 J	0.075	0.029
trans-1,2-Dichloroethene	NA	1,600	3,100	3.4	mg/kg	0.036 J	0.0058 J	0.18	0.12
Trichloroethene	NA	5	12	0.3	mg/kg	***3590 J***	***338***	***4230***	***1220***
Vinyl chloride	NA	0.28	1.1	0.07	mg/kg	***0.38 J***	***0.23***	***0.58***	***0.49***
Xylenes, Total	NA	320	5.6	150	mg/kg	0.022 J	0.012 U	0.072	0.026

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	KP-SB05	KP-SB05	KP-SB06	KP-SB06
					Field Sample ID	KP-SB05(11-13)	KP-SB05(14-16)	KP-SB06(10-12)	KP-SB06(14-16)
					Sampling Date	5/29/2012	5/29/2012	5/29/2012	5/29/2012
					Sampling Depth (ft bgs)	11- 13	14- 16	10- 12	14- 16
SVOCs									
2-Methylnaphthalene+	NA	310	820	9.5	mg/kg	---	---	---	---
Acenaphthene	0.09	4,700	120,000	2,900	mg/kg	---	---	---	---
Acenaphthylene+	0.03	2,300	61,000	420	mg/kg	---	---	---	---
Anthracene	0.25	23,000	610,000	59,000	mg/kg	---	---	---	---
Benzo(a)anthracene	1.1	0.9	170	8	mg/kg	---	---	---	---
Benzo(a)pyrene	1.3	0.09	17	82	mg/kg	---	---	---	---
Benzo(b)fluoranthene	1.5	0.9	170	25	mg/kg	---	---	---	---
Benzo(g,h,i)perylene+	0.68	2,300	61,000	130,000	mg/kg	---	---	---	---
Benzo(k)fluoranthene	0.99	9	1,700	250	mg/kg	---	---	---	---
Chrysene	1.2	88	17,000	800	mg/kg	---	---	---	---
Dibenz(a,h)anthracene	0.2	0.09	17	7.6	mg/kg	---	---	---	---
Fluoranthene	2.7	3,100	82,000	21,000	mg/kg	---	---	---	---
Fluorene	0.1	3,100	82,000	2,800	mg/kg	---	---	---	---
Indeno(1,2,3-cd)pyrene	0.86	0.9	170	69	mg/kg	---	---	---	---
Naphthalene	0.04	170	1.8	18	mg/kg	---	---	---	---
Phenanthrene+	1.3	2,300	61,000	1,100	mg/kg	---	---	---	---
Pyrene	1.9	2,300	61,000	21,000	mg/kg	---	---	---	---
Pesticides									
4,4'-Dichlorodiphenyltrichloroethane	NA	2	100	32	mg/kg	---	---	---	---
Endrin	NA	23	61	1	mg/kg	---	---	---	---
Endrin ketone	NA	NA	NA	NA	mg/kg	---	---	---	---
gamma-BHC (Lindane)	NA	0.5	96	0.009	mg/kg	---	---	---	---
PCBs									
Not Detected in any samples						---	---	---	---
Herbicides									
Not Detected in any samples						---	---	---	---
Sum of Organics					mg/kg	3,600	339	4,259	1,244

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	KP-SB07	KP-SB07	KP-SB08	KP-SB08
					Field Sample ID	KP-SB07(8-10)	KP-SB07(14-16)	KP-SB08(4-6)	KP-SB08(15-17)
					Sampling Date	5/29/2012	5/29/2012	5/29/2012	5/29/2012
					Sampling Depth (ft bgs)	8- 10	14- 16	4- 6	15- 17
Fractional Organic Carbon	NA	NA	NA	NA	%	---	---	---	---
TPH									
TPH (C06-C10)	NA	NA	NA	NA	mg/kg	---	---	---	5.5
TPH-DRO (C10-C28)	NA	NA	NA	NA	mg/kg	---	---	---	31.6
VOCs									
1,1,2-Trichloroethane	NA	310	1,800	0.3	mg/kg	0.0041 J	0.0046 U	0.0045 U	0.0055 U
1,1-Dichloroethene	NA	290	3	0.3	mg/kg	0.013	0.0046 U	0.0045 U	0.0055 U
1,2,4-Trimethylbenzene+	NA	87	8.9	NA	mg/kg	0.0043 U	0.0046 U	4.1	0.06
1,2-Dichlorobenzene	NA	560	310	43	mg/kg	0.0043 U	0.0046 U	0.042	0.0028 J
1,3,5-Trimethylbenzene+	NA	780	0.79	10	mg/kg	0.0043 U	0.0046 U	0.035	0.012
1,4-Dichlorobenzene	NA	11,000	340	11	mg/kg	0.0043 U	0.0046 U	0.0084	0.0055 U
2-Butanone (MEK)+	NA	25,000	730	17	mg/kg	0.021 U	0.023 U	0.022 U	0.046
2-Hexanone+	NA	390	47	0.16	mg/kg	0.085 U	0.093 U	0.31	0.11 U
Acetone	NA	70,000	100,000	25	mg/kg	0.085 U	0.093 U	0.16	0.093 J
Benzene	NA	0.8	2.2	0.17	mg/kg	0.0043 U	0.0046 U	0.0036 J	0.0055 U
Carbon disulfide	NA	720	9	160	mg/kg	0.0085 U	0.0093 U	0.0089 U	0.011 U
Chlorobenzene	NA	130	1.3	6.5	mg/kg	0.0043 U	0.0046 U	0.092	0.0062
Chloroethane+	NA	1,500	39	NA	mg/kg	0.0043 U	0.0046 U	0.0045 U	0.0055 U
Chloroform	NA	0.3	0.76	2.9	mg/kg	0.0043 U	0.0046 U	0.0045 U	0.0055 U
cis-1,2-Dichloroethene	NA	780	1,200	1.1	mg/kg	***31.2***	0.0046 U	0.0045 U	***28.1***
Ethylbenzene	NA	400	58	19	mg/kg	0.0043 U	0.0046 U	0.0034 J	0.0028 J
Isopropylbenzene (Cumene)+	NA	500	52	400	mg/kg	0.0043 U	0.0046 U	0.041	0.0065
Naphthalene	0.04	170	1.8	18	mg/kg	0.0043 U	0.0046 U	0.039	0.004 J
n-Butylbenzene+	NA	3,900	20,000	87	mg/kg	0.0043 U	0.0046 U	0.048	0.0057
n-Hexane+	NA	290	16	120	mg/kg	0.0043 U	0.0046 U	0.5	0.05
n-Propylbenzene+	NA	300	90	120	mg/kg	0.0043 U	0.0046 U	0.13	0.014
p-Isopropyltoluene	NA	NA	NA	NA	mg/kg	0.0043 U	0.0046 U	0.034	0.0069
sec-Butylbenzene	NA	NA	NA	NA	mg/kg	0.0043 U	0.0046 U	0.03	0.0034 J
Tetrachloroethene	NA	11	28	0.3	mg/kg	0.0043 U	0.0046 U	0.0045 U	0.0027 J
Toluene	NA	650	42	29	mg/kg	0.0043 U	0.0046 U	0.0027 J	0.0041 J
trans-1,2-Dichloroethene	NA	1,600	3,100	3.4	mg/kg	0.12	0.0046 U	0.0045 U	0.0086
Trichloroethene	NA	5	12	0.3	mg/kg	***68.3***	0.0046 U	0.0015 J	0.11
Vinyl chloride	NA	0.28	1.1	0.07	mg/kg	***2***	0.0046 U	0.0045 U	***0.14***
Xylenes, Total	NA	320	5.6	150	mg/kg	0.0085 U	0.0093 U	0.022	0.019

Table 2-2
Summary of Soil Analytical Results for Organic Compounds
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Chicago Background	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component of Groundwater Ingestion Exposure Route Value (Class II)	Location ID	KP-SB07	KP-SB07	KP-SB08	KP-SB08
					Field Sample ID	KP-SB07(8-10)	KP-SB07(14-16)	KP-SB08(4-6)	KP-SB08(15-17)
					Sampling Date	5/29/2012	5/29/2012	5/29/2012	5/29/2012
					Sampling Depth (ft bgs)	8- 10	14- 16	4- 6	15- 17
SVOCs									
2-Methylnaphthalene+	NA	310	820	9.5	mg/kg	---	---	---	---
Acenaphthene	0.09	4,700	120,000	2,900	mg/kg	---	---	---	---
Acenaphthylene+	0.03	2,300	61,000	420	mg/kg	---	---	---	---
Anthracene	0.25	23,000	610,000	59,000	mg/kg	---	---	---	---
Benzo(a)anthracene	1.1	0.9	170	8	mg/kg	---	---	---	---
Benzo(a)pyrene	1.3	0.09	17	82	mg/kg	---	---	---	---
Benzo(b)fluoranthene	1.5	0.9	170	25	mg/kg	---	---	---	---
Benzo(g,h,i)perylene+	0.68	2,300	61,000	130,000	mg/kg	---	---	---	---
Benzo(k)fluoranthene	0.99	9	1,700	250	mg/kg	---	---	---	---
Chrysene	1.2	88	17,000	800	mg/kg	---	---	---	---
Dibenz(a,h)anthracene	0.2	0.09	17	7.6	mg/kg	---	---	---	---
Fluoranthene	2.7	3,100	82,000	21,000	mg/kg	---	---	---	---
Fluorene	0.1	3,100	82,000	2,800	mg/kg	---	---	---	---
Indeno(1,2,3-cd)pyrene	0.86	0.9	170	69	mg/kg	---	---	---	---
Naphthalene	0.04	170	1.8	18	mg/kg	---	---	---	---
Phenanthrene+	1.3	2,300	61,000	1,100	mg/kg	---	---	---	---
Pyrene	1.9	2,300	61,000	21,000	mg/kg	---	---	---	---
Pesticides									
4,4'-Dichlorodiphenyltrichloroethane	NA	2	100	32	mg/kg	---	---	---	---
Endrin	NA	23	61	1	mg/kg	---	---	---	---
Endrin ketone	NA	NA	NA	NA	mg/kg	---	---	---	---
gamma-BHC (Lindane)	NA	0.5	96	0.009	mg/kg	---	---	---	---
PCBs									
Not Detected in any samples						---	---	---	---
Herbicides									
Not Detected in any samples						---	---	---	---
Sum of Organics					mg/kg	102	0.0	5.6	65.8

Table 2-2
Summary of Soil Analytical Results for Organic Constituents
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Notes:

Shaded values indicate concentration exceeds the Soil Remediation Objective for Residential Ingestion and/or Inhalation pathway.

Shaded and *italicized* values indicate concentration exceeds the Soil Remediation Objective for the Soil Component of the Groundwater Ingestion Route (Class II Groundwater)

Shaded, outlined, and *italicized* values indicate concentration exceeds the Soil Remediation Objective for the Soil Component of the Groundwater Ingestion Route (Class II Grou and the Residential Ingestion and/or Inhalation pathway.

Underlined values indicate concentration exceeds the Construction Worker Ingestion and/or Inhalation pathway.

-- = Constituent not analyzed
+ State of Illinois Non-TACO Objectives presented for this chemical
D = Duplicate
ID = Identification
ft bgs = Feet below ground surface
J = Concentration Estimated
mg/kg = Milligram per kilogram
NA = Not available
ND = Not detected
PCB = Polychlorinated biphenyl
SVOC = Semivolatile organic compound
TACO = Tiered Approach to Corrective Action Objectives
TPH = Total petroleum hydrocarbon
U = Constituent not detected. Reporting limit is presented
VOC = Volatile organic compound

Table 2-3
Summary of Soil Analytical Results for Inorganic Constituents
Kimball Avenue Park - 1807-15 N. Kimball Ave.
Chicago, Cook County, Illinois

Chemical Name	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component Groundwater Ingestion Exposure Route Value (Class II)[1]	Location ID	B-1		B-1		B-1		B-1	
				Field Sample ID	B-1 (0-3)		B-1 (3-6)		B-1 (6-9)		B-1 (9-12)	
				Sampling Date	8/4/2010		8/4/2010		8/4/2010		8/4/2010	
				Sampling Depth (ft bgs)	0- 3		3- 6		6- 9		9- 12	
				Units	Result	SRO-pH	Result	SRO-pH	Result	SRO-pH	Result	SRO-pH
pH	NA	NA	NA	SU	10.1	NA	8.1	NA	8.3 H	NA	---	---
TOTAL METALS												
Aluminum	NA	NA	NA	mg/kg	---	---	---	---	---	---	---	---
Antimony	31	82	NA	mg/kg	---	---	---	---	---	---	---	---
Arsenic	13	61	NA	mg/kg	3.3	130*	8.5	120	---	---	---	---
Barium	5,500	14,000	NA	mg/kg	32	2,100*	110	2,100	---	---	---	---
Beryllium	160	410	NA	mg/kg	---	---	---	---	---	---	---	---
Cadmium	78	200	NA	mg/kg	0.52 U	4,300*	0.51 U	4,300	---	---	---	---
Calcium	NA	NA	NA	mg/kg	---	---	---	---	---	---	---	---
Chromium	230	690	NA	mg/kg	88	NA	38	NA	28	NA	21	NA
Cobalt	4,700	12,000	NA	mg/kg	---	---	---	---	---	---	---	---
Copper	2,900	8,200	NA	mg/kg	---	---	---	---	---	---	---	---
Iron	NA	NA	NA	mg/kg	---	---	---	---	---	---	---	---
Lead	400	700	NA	mg/kg	14	3,760*	30	1,420	---	---	---	---
Magnesium	325,000	730,000	NA	mg/kg	---	---	---	---	---	---	---	---
Manganese	1,600	4,100	NA	mg/kg	---	---	---	---	---	---	---	---
Mercury	10	0.1	NA	mg/kg	0.025 U	40*	0.029 U	40	---	---	---	---
Nickel	1,600	4,100	NA	mg/kg	---	---	---	---	---	---	---	---
Potassium	NA	NA	NA	mg/kg	---	---	---	---	---	---	---	---
Selenium	390	1,000	NA	mg/kg	1 U	1.3*	1 U	2.4	---	---	---	---
Silver	390	1,000	NA	mg/kg	1 U	NA	1 U	NA	---	---	---	---
Sodium	NA	NA	NA	mg/kg	---	---	---	---	---	---	---	---
Thallium	6.3	160	NA	mg/kg	---	---	---	---	---	---	---	---
Vanadium	550	1,400	NA	mg/kg	---	---	---	---	---	---	---	---
Zinc	23,000	61,000	NA	mg/kg	---	---	---	---	---	---	---	---
Cyanide	1,600	4,100	NA	mg/kg	---	---	---	---	---	---	---	---
TCLP METALS												
Arsenic, TCLP	NA	NA	0.2 (5)	mg/L	---	---	---	---	---	---	---	---
Barium, TCLP	NA	NA	2 (100)	mg/L	---	---	---	---	---	---	---	---
Cadmium, TCLP	NA	NA	0.05 (1)	mg/L	---	---	---	---	---	---	---	---
Chromium, TCLP	NA	NA	1 (5)	mg/L	0.01 U	NA	---	---	---	---	---	---
Lead, TCLP	NA	NA	0.1 (5)	mg/L	---	---	---	---	---	---	---	---

Table 2-3
Summary of Soil Analytical Results for Inorganic Constituents
Kimball Avenue Park - 1807-15 N. Kimball Ave.
Chicago, Cook County, Illinois

Chemical Name	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component Groundwater Ingestion Exposure Route Value (Class II)[1]	Location ID	B-2		B-2		B-3		B-3	
				Field Sample ID	B-2 (3-6)		B-2 (6-9)		B-3 (3-6)		B-3 (6-9)	
				Sampling Date	8/4/2010		8/4/2010		8/4/2010		8/4/2010	
				Sampling Depth (ft bgs)	3- 6		6- 9		3- 6		6- 9	
				Units	Result	SRO-pH	Result	SRO-pH	Result	SRO-pH	Result	SRO-pH
pH	NA	NA	NA	SU	8.1	NA	8.7	NA	8.6	NA	8.2	NA
TOTAL METALS												
Aluminum	NA	NA	NA	mg/kg	22,000	NA	---	---	---	---	---	---
Antimony	31	82	NA	mg/kg	3.3	20	---	---	---	---	---	---
Arsenic	13	61	NA	mg/kg	11	120	9.9	130	4.8	130	9.5	120
Barium	5,500	14,000	NA	mg/kg	140	2,100	62	2,100*	84	2,100*	82	2,100
Beryllium	160	410	NA	mg/kg	1.6	1,000,000	---	---	---	---	---	---
Cadmium	78	200	NA	mg/kg	0.69	4,300	0.58 U	4,300*	0.59 U	4,300*	0.57 U	4,300
Calcium	NA	NA	NA	mg/kg	14,000	NA	---	---	---	---	---	---
Chromium	230	690	NA	mg/kg	37	NA	20	NA	23	NA	25	NA
Cobalt	4,700	12,000	NA	mg/kg	14	NA	---	---	---	---	---	---
Copper	2,900	8,200	NA	mg/kg	75	330,000	---	---	---	---	---	---
Iron	NA	NA	NA	mg/kg	30,000	NA	---	---	---	---	---	---
Lead	400	700	NA	mg/kg	180	1,420	16	1,420	14	1,420	18	1,420
Magnesium	325,000	730,000	NA	mg/kg	11,000	NA	---	---	---	---	---	---
Manganese	1,600	4,100	NA	mg/kg	330	NA	---	---	---	---	---	---
Mercury	10	0.1	NA	mg/kg	**0.84**	40	0.03 U	40*	0.028 U	40*	0.03 U	40
Nickel	1,600	4,100	NA	mg/kg	46	76,000	---	---	---	---	---	---
Potassium	NA	NA	NA	mg/kg	3,900	NA	---	---	---	---	---	---
Selenium	390	1,000	NA	mg/kg	***3***	2.4	1.2 U	1.8	1.2 U	1.8	1.1 U	2.4
Silver	390	1,000	NA	mg/kg	1.3 U	NA	1.2 U	NA	1.2 U	NA	1.1 U	NA
Sodium	NA	NA	NA	mg/kg	340	NA	---	---	---	---	---	---
Thallium	6.3	160	NA	mg/kg	1.3 U	38	---	---	---	---	---	---
Vanadium	550	1,400	NA	mg/kg	42	NA	---	---	---	---	---	---
Zinc	23,000	61,000	NA	mg/kg	110	110,000	---	---	---	---	---	---
Cyanide	1,600	4,100	NA	mg/kg	0.32 U	120	---	---	---	---	---	---
TCLP METALS												
Arsenic, TCLP	NA	NA	0.2 (5)	mg/L	---	---	---	---	---	---	---	---
Barium, TCLP	NA	NA	2 (100)	mg/L	---	---	---	---	---	---	---	---
Cadmium, TCLP	NA	NA	0.05 (1)	mg/L	---	---	---	---	---	---	---	---
Chromium, TCLP	NA	NA	1 (5)	mg/L	---	---	---	---	---	---	---	---
Lead, TCLP	NA	NA	0.1 (5)	mg/L	---	---	---	---	---	---	---	---

Table 2-3
Summary of Soil Analytical Results for Inorganic Constituents
Kimball Avenue Park - 1807-15 N. Kimball Ave.
Chicago, Cook County, Illinois

Chemical Name	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component Groundwater Ingestion Exposure Route Value (Class II)[1]	Location ID	B-4		B-4		B-4		B-4	
				Field Sample ID	B-4 (0-3)		B-4 (3-6)		B-4 (6-9)		B-4 (9-12)	
				Sampling Date	8/4/2010		8/4/2010		8/4/2010		8/4/2010	
				Sampling Depth (ft bgs)	0- 3		3- 6		6- 9		9- 12	
				Units	Result	SRO-pH	Result	SRO-pH	Result	SRO-pH	Result	SRO-pH
pH	NA	NA	NA	SU	10.8	NA	7.5	NA	---	---	---	---
TOTAL METALS												
Aluminum	NA	NA	NA	mg/kg	---	---	5,400	NA	---	---	---	---
Antimony	31	82	NA	mg/kg	---	---	***59***	20	2.3 U	20**	---	---
Arsenic	13	61	NA	mg/kg	**15**	130*	**18**	120	2.9	120**	---	---
Barium	5,500	14,000	NA	mg/kg	62	2,100*	220	1,800	---	---	---	---
Beryllium	160	410	NA	mg/kg	---	---	0.91	130,000	---	---	---	---
Cadmium	78	200	NA	mg/kg	0.55 U	4,300*	1.1	590	---	---	---	---
Calcium	NA	NA	NA	mg/kg	---	---	16,000	NA	---	---	---	---
Chromium	230	690	NA	mg/kg	24	NA	20	NA	---	---	---	---
Cobalt	4,700	12,000	NA	mg/kg	---	---	6.4	NA	---	---	---	---
Copper	2,900	8,200	NA	mg/kg	---	---	2,200	330,000	---	---	---	---
Iron	NA	NA	NA	mg/kg	---	---	86,000	NA	19,000	NA	---	---
Lead	400	700	NA	mg/kg	200	3,760*	**1,100**	1,420	14	1,420**	---	---
Magnesium	325,000	730,000	NA	mg/kg	---	---	4600	NA	---	---	---	---
Manganese	1,600	4,100	NA	mg/kg	---	---	630	NA	---	---	---	---
Mercury	10	0.1	NA	mg/kg	**0.17**	40*	**0.38**	32	0.03	32**	---	---
Nickel	1,600	4,100	NA	mg/kg	---	---	16	14,000	---	---	---	---
Potassium	NA	NA	NA	mg/kg	---	---	690	NA	---	---	---	---
Selenium	390	1,000	NA	mg/kg	1.1 U	1.3*	2.2	3.3	---	---	---	---
Silver	390	1,000	NA	mg/kg	1.1 U	NA	1.2	NA	---	---	---	---
Sodium	NA	NA	NA	mg/kg	---	---	460	NA	---	---	---	---
Thallium	6.3	160	NA	mg/kg	---	---	1.1 U	34	---	---	---	---
Vanadium	550	1,400	NA	mg/kg	---	---	26	NA	---	---	---	---
Zinc	23,000	61,000	NA	mg/kg	---	---	450	32,000	---	---	---	---
Cyanide	1,600	4,100	NA	mg/kg	---	---	0.28 U	120	---	---	---	---
TCLP METALS												
Arsenic, TCLP	NA	NA	0.2 (5)	mg/L	---	---	---	---	---	---	---	---
Barium, TCLP	NA	NA	2 (100)	mg/L	---	---	---	---	---	---	---	---
Cadmium, TCLP	NA	NA	0.05 (1)	mg/L	---	---	---	---	---	---	---	---
Chromium, TCLP	NA	NA	1 (5)	mg/L	---	---	---	---	---	---	---	---
Lead, TCLP	NA	NA	0.1 (5)	mg/L	---	---	---	---	---	---	---	---

Table 2-3
Summary of Soil Analytical Results for Inorganic Constituents
Kimball Avenue Park - 1807-15 N. Kimball Ave.
Chicago, Cook County, Illinois

Chemical Name	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component Groundwater Ingestion Exposure Route Value (Class II)[1]	Location ID	B-5		B-5		B-5	
				Field Sample ID	B-5 (0-3)		B-5 (3-6)		B-5 (6-9)	
				Sampling Date	8/4/2010		8/4/2010		8/4/2010	
				Sampling Depth (ft bgs)	0- 3		3- 6		6- 9	
				Units	Result	SRO-pH	Result	SRO-pH	Result	SRO-pH
pH	NA	NA	NA	SU	11.8	NA	7.8	NA	---	---
TOTAL METALS										
Aluminum	NA	NA	NA	mg/kg	2,800	NA	4,500	NA	---	---
Antimony	31	82	NA	mg/kg	17	20*	***26***	20	2.3 U	20**
Arsenic	13	61	NA	mg/kg	5.4	130*	**17**	120	4.6	120**
Barium	5,500	14,000	NA	mg/kg	51	2,100*	180	1,800	---	---
Beryllium	160	410	NA	mg/kg	0.5 U	1,000,000*	1.1	130,000	---	---
Cadmium	78	200	NA	mg/kg	0.5 U	4,300*	1.8	590	---	---
Calcium	NA	NA	NA	mg/kg	69,000	NA	27,000	NA	---	---
Chromium	230	690	NA	mg/kg	9.4	NA	18	NA	---	---
Cobalt	4,700	12,000	NA	mg/kg	3	NA	5.8	NA	---	---
Copper	2,900	8,200	NA	mg/kg	490	330,000*	580	330,000	---	---
Iron	NA	NA	NA	mg/kg	27,000	NA	25,000	NA	---	---
Lead	400	700	NA	mg/kg	160	3,760*	**840**	1,420	15	1,420**
Magnesium	325,000	730,000	NA	mg/kg	24,000	NA	5,900	NA	---	---
Manganese	1,600	4,100	NA	mg/kg	410	NA	260	NA	---	---
Mercury	10	0.1	NA	mg/kg	0.068	40*	**0.42**	32	0.031	32**
Nickel	1,600	4,100	NA	mg/kg	11	76,000*	17	14,000	---	---
Potassium	NA	NA	NA	mg/kg	390	NA	1,200	NA	---	---
Selenium	390	1,000	NA	mg/kg	1 U	1.3*	***7.2***	3.3	1.2 U	1.3**
Silver	390	1,000	NA	mg/kg	1 U	NA	1 U	NA	---	---
Sodium	NA	NA	NA	mg/kg	120	NA	430	NA	---	---
Thallium	6.3	160	NA	mg/kg	1 U	49*	1 U	34	---	---
Vanadium	550	1,400	NA	mg/kg	12	NA	23	NA	---	---
Zinc	23,000	61,000	NA	mg/kg	99	110,000*	320	32,000	---	---
Cyanide	1,600	4,100	NA	mg/kg	0.26 U	120*	0.3 U	120	---	---
TCLP METALS										
Arsenic, TCLP	NA	NA	0.2 (5)	mg/L	---	---	---	---	---	---
Barium, TCLP	NA	NA	2 (100)	mg/L	---	---	---	---	---	---
Cadmium, TCLP	NA	NA	0.05 (1)	mg/L	---	---	---	---	---	---
Chromium, TCLP	NA	NA	1 (5)	mg/L	---	---	---	---	---	---
Lead, TCLP	NA	NA	0.1 (5)	mg/L	---	---	---	---	---	---

Table 2-3
Summary of Soil Analytical Results for Inorganic Constituents
Kimball Avenue Park - 1807-15 N. Kimball Ave.
Chicago, Cook County, Illinois

Chemical Name	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component Groundwater Ingestion Exposure Route Value (Class II)[1]	Location ID	B-6		B-6		B-6		B-7	
				Field Sample ID	B-6 (0-3)		B-6 (3-6)		B-6 (6-9)		B-7 (0-3)	
				Sampling Date	8/4/2010		8/4/2010		8/4/2010		8/4/2010	
				Sampling Depth (ft bgs)	0- 3		3- 6		6- 9		0- 3	
				Units	Result	SRO-pH	Result	SRO-pH	Result	SRO-pH	Result	SRO-pH
pH	NA	NA	NA	SU	8.3	NA	8	NA	8.4 H	NA	8.5	NA
TOTAL METALS												
Aluminum	NA	NA	NA	mg/kg	---	---	---	---	---	---	---	---
Antimony	31	82	NA	mg/kg	---	---	---	---	---	---	---	---
Arsenic	13	61	NA	mg/kg	**14**	130	**29**	120	5	120	12	130
Barium	5,500	14,000	NA	mg/kg	130	2,100*	230	2,100	---	---	220	2,100*
Beryllium	160	410	NA	mg/kg	---	---	---	---	---	---	---	---
Cadmium	78	200	NA	mg/kg	1.6	4,300*	3.6	4,300	---	---	0.78	4,300*
Calcium	NA	NA	NA	mg/kg	---	---	---	---	---	---	---	---
Chromium	230	690	NA	mg/kg	22	NA	46	NA	24	NA	33	NA
Cobalt	4,700	12,000	NA	mg/kg	---	---	---	---	---	---	---	---
Copper	2,900	8,200	NA	mg/kg	---	---	---	---	---	---	---	---
Iron	NA	NA	NA	mg/kg	---	---	---	---	---	---	---	---
Lead	400	700	NA	mg/kg	**910**	1,420	***2,800***	1,420	18	1,420	180	1,420
Magnesium	325,000	730,000	NA	mg/kg	---	---	---	---	---	---	---	---
Manganese	1,600	4,100	NA	mg/kg	---	---	---	---	---	---	---	---
Mercury	10	0.1	NA	mg/kg	**0.82**	40*	**3**	40	0.03	40*	**0.15**	40*
Nickel	1,600	4,100	NA	mg/kg	---	---	---	---	---	---	---	---
Potassium	NA	NA	NA	mg/kg	---	---	---	---	---	---	---	---
Selenium	390	1,000	NA	mg/kg	1.1 U	1.8	1.3	2.4	---	---	1.1 U	1.8
Silver	390	1,000	NA	mg/kg	1.1 U	NA	2.5	NA	---	---	1.1 U	NA
Sodium	NA	NA	NA	mg/kg	---	---	---	---	---	---	---	---
Thallium	6.3	160	NA	mg/kg	---	---	---	---	---	---	---	---
Vanadium	550	1,400	NA	mg/kg	---	---	---	---	---	---	---	---
Zinc	23,000	61,000	NA	mg/kg	---	---	---	---	---	---	---	---
Cyanide	1,600	4,100	NA	mg/kg	---	---	---	---	---	---	---	---
TCLP METALS												
Arsenic, TCLP	NA	NA	0.2 (5)	mg/L	---	---	0.01 U	NA	---	---	---	---
Barium, TCLP	NA	NA	2 (100)	mg/L	---	---	0.88	NA	---	---	---	---
Cadmium, TCLP	NA	NA	0.05 (1)	mg/L	---	---	0.008	NA	---	---	---	---
Chromium, TCLP	NA	NA	1 (5)	mg/L	---	---	0.01 U	NA	---	---	---	---
Lead, TCLP	NA	NA	0.1 (5)	mg/L	---	---	***0.43***	NA	---	---	---	---

Table 2-3
Summary of Soil Analytical Results for Inorganic Constituents
Kimball Avenue Park - 1807-15 N. Kimball Ave.
Chicago, Cook County, Illinois

Chemical Name	Residential Ingestion/ Inhalation Value	Construction Worker Ingestion/ Inhalation Value	Soil Component Groundwater Ingestion Exposure Route Value (Class II)[1]	Location ID	B-7		B-7		B-8	
				Field Sample ID	B-7 (3-6)		B-7 (6-9)		B-8 (0-3)	
				Sampling Date	8/4/2010		8/4/2010		8/4/2010	
				Sampling Depth (ft bgs)	3- 6		6- 9		0- 3	
				Units	Result	SRO-pH	Result	SRO-pH	Result	SRO-pH
pH	NA	NA	NA	SU	7.7	NA	---	---	8.8	NA
TOTAL METALS										
Aluminum	NA	NA	NA	mg/kg	---	---	---	---	---	---
Antimony	31	82	NA	mg/kg	---	---	---	---	---	---
Arsenic	13	61	NA	mg/kg	5.3	120	---	---	5.8	130
Barium	5,500	14,000	NA	mg/kg	76	1,800	---	---	200	2,100*
Beryllium	160	410	NA	mg/kg	---	---	---	---	---	---
Cadmium	78	200	NA	mg/kg	1.8	590	---	---	0.8	4,300*
Calcium	NA	NA	NA	mg/kg	---	---	---	---	---	---
Chromium	230	690	NA	mg/kg	8.7	NA	---	---	19	NA
Cobalt	4,700	12,000	NA	mg/kg	---	---	---	---	---	---
Copper	2,900	8,200	NA	mg/kg	---	---	---	---	---	---
Iron	NA	NA	NA	mg/kg	---	---	---	---	---	---
Lead	400	700	NA	mg/kg	36	1,420	---	---	140	3,760
Magnesium	325,000	730,000	NA	mg/kg	---	---	---	---	---	---
Manganese	1,600	4,100	NA	mg/kg	---	---	---	---	---	---
Mercury	10	0.1	NA	mg/kg	0.034 U	32	---	---	0.063	40*
Nickel	1,600	4,100	NA	mg/kg	---	---	---	---	---	---
Potassium	NA	NA	NA	mg/kg	---	---	---	---	---	---
Selenium	390	1,000	NA	mg/kg	1.7	3.3	---	---	1.1 U	1.3
Silver	390	1,000	NA	mg/kg	1.3 U	NA	---	---	1.1 U	NA
Sodium	NA	NA	NA	mg/kg	---	---	---	---	---	---
Thallium	6.3	160	NA	mg/kg	---	---	---	---	---	---
Vanadium	550	1,400	NA	mg/kg	---	---	---	---	---	---
Zinc	23,000	61,000	NA	mg/kg	---	---	---	---	---	---
Cyanide	1,600	4,100	NA	mg/kg	---	---	---	---	---	---
TCLP METALS										
Arsenic, TCLP	NA	NA	0.2 (5)	mg/L	---	---	---	---	---	---
Barium, TCLP	NA	NA	2 (100)	mg/L	---	---	---	---	---	---
Cadmium, TCLP	NA	NA	0.05 (1)	mg/L	---	---	---	---	---	---
Chromium, TCLP	NA	NA	1 (5)	mg/L	---	---	---	---	---	---
Lead, TCLP	NA	NA	0.1 (5)	mg/L	---	---	---	---	---	---

Table 2-3
Summary of Soil Analytical Results for Inorganic Constituents
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Notes:

Shaded values indicate concentration exceeds the Soil Remediation Objective for Residential Ingestion and/or Inhalation pathway.

Shaded and *italicized* values indicate concentration exceeds the Soil Remediation Objective for the Soil Component of the Groundwater Ingestion Route (Class II Groundwater) and/or the pH-specific Soil Remediation Objective

Shaded, outlined, and *italicized* values indicate concentration exceeds the Soil Remediation Objective for the Soil Component of the Groundwater Ingestion Route (Class II Groundwater) and the Residential Ingestion and/or Inhalation pathway.

Underlined values indicate concentration exceeds the Construction Worker Ingestion and/or Inhalation pathway.

[1] Value in parentheses is TCLP regulatory limit
-- = Constituent not analyzed
* = Data is not available for this pH. The closest pH with data available was used as a comparison for this sample
** = pH data was not collected for this sample, the minimum Site pH of 7.5 was used to represent this sample

% = Percent
CW = Construction Worker
ID = Identification
ft bgs = Feet below ground surface
J = Concentration Estimated
mg/kg = Milligram per kilogram
mg/L = Milligram per liter
NA = Not available
SRO-pH = pH-specific soil remediation objective
SU = Standard unit
TCLP = Toxicity characteristic leaching procedure
U = Constituent not detected. Reporting limit presented.

Table 2-4
Field Parameters Collected During Monitoring Well Purging
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Location ID	Purge Date	Well Volume (liters)	Volume Purged (liters)	Depth to Water (ft below TOC)	Specific Conductivity (µS/cm)	pH (Standard Units)	Oxidation-Reduction Potential (mV)	Temperature (°C)	Dissolved Oxygen (mg/L)	Turbidity (NTU)
KP-MW01	6/1/2012	6.5	0.5	11.77	1,723	6.88	125.4	11.77	4.1	>1,000
			2.5	11.85	1,725	6.81	117.8	11.79	3.8	>1,000
			5.0	11.94	1,734	6.77	104.3	11.68	3.9	>1,000
			7.5	12.03	1,731	6.79	65.3	11.84	3.9	>1,000
			10.0	12.14	1,729	6.81	28.5	11.85	3.8	548
			12.5	12.19	1,736	6.78	27.4	11.86	3.8	312
			15.0	12.30	1,733	6.91	23.4	11.79	3.8	88.2
			17.5	12.36	1,732	6.83	25.1	11.81	3.7	79.1
			20.0	12.40	1,734	6.85	24.0	11.69	3.7	77.4
KP-MW02	6/1/2012	7.3	0.5	7.13	913	6.83	144.8	12.04	3.7	221
			2.5	7.18	878	6.77	131.5	12.07	3.6	217
			5.0	7.17	867	6.81	128.0	12.11	3.6	188
			7.5	7.20	854	6.79	88.4	12.13	3.5	89.3
			10.0	7.20	855	6.80	86.3	12.14	3.6	83.2
			12.5	7.21	857	6.81	85.4	12.13	3.6	34.2
			15.0	7.20	849	6.80	79.0	12.13	3.5	28.1
			17.5	7.20	855	6.77	81.2	12.13	3.5	26.5
KP-MW03	6/1/2012	7.0	0.5	6.57	1760	6.67	476.0	11.84	7.9	57.3
			2.5	6.60	1763	6.71	135.8	11.72	5.2	61.6
			5.0	6.62	1765	6.80	108.6	11.70	3.4	38.5
			7.5	6.65	1770	6.83	89.5	11.67	3.4	39.2
			10.0	6.70	1768	6.80	55.2	11.68	3.5	35.7
			12.5	6.71	1770	6.83	32.8	11.68	3.4	11.5
			15.0	6.71	1773	6.83	30.6	11.68	3.5	26.1
			17.5	6.71	1774	6.83	33.8	11.68	3.3	24.2

Notes:
° = Degrees
µS/cm = Microsiemens per centimeter
C = Celsius
ID = Identification
mg/L = Milligrams per liter
mV = Millivolts
pH = Hydrogen ion concentration
NTU = Nephelometric turbidity units
TOC = Top of casing

Table 2-5
Summary of Groundwater Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Class II Groundwater Remediation Objective	Location ID	TMW-1/ KP-MW01	TMW-1/ KP-MW01	TMW-1/ KP-MW01	TMW-2/ KP-MW02	TMW-2/ KP-MW02	TMW-2/ KP-MW02	TMW-3/ KP-MW03	TMW-3/ KP-MW03	TMW-3/ KP-MW03	TMW-3/ KP-MW03	TMW-3/ KP-MW03
		Field Sample ID	TMW-1	TMW-1	KP-MW01-060112	TMW-2	TMW-2	KP-MW02-060112	TMW-3	TMW-3	TMW-3	KP-MW03-060112	KP-MW03-060112D
		Sample Date	8/10/2010	8/17/2010	6/1/2012	8/10/2010	8/11/2010	6/1/2012	8/10/2010	8/11/2010	8/17/2010	6/1/2012	6/1/2012
		Screen Depth (ft bgs)	6-16	6-16	8-18	8-18	8-18	9-19	6-16	6-16	6-16	8-18	8-18
		Units											
VOCs													
1,1,2-Trichloroethane	0.05	mg/L	0.0093	---	0.005 U	2.5 U	---	0.025 U	0.005 U	---	---	0.005 U	0.005 U
1,1-Dichloroethene	0.035	mg/L	0.005 U	---	0.005 U	2.5 U	---	0.02 J	0.005 U	---	---	0.005 U	0.005 U
1,2,3-Trichlorobenzene	0.028		---	---	0.005 U	---	---	0.025 U	---	---		0.005 U	0.01
Acetone	6.3	mg/L	0.037	---	0.1 U	10 U	---	0.5 U	0.02 U	---	---	0.1 U	0.1 U
Chloroform	0.001	mg/L	**0.64**	---	**0.0098**	2.5 U	---	0.025 U	0.005 U	---	---	0.005 U	0.005 U
cis-1,2-Dichloroethene	0.2	mg/L	**0.9**	---	0.032	**120**	---	**2**	0.005 U	---	---	0.005 U	0.005 U
Methylene chloride	0.05	mg/L	0.0092	---	0.005 U	2.5 U	---	0.025 U	0.005 U	---	---	0.005 U	0.005 U
Toluene	2.5	mg/L	0.015	---	0.005 U	2.5 U	---	0.025 U	0.005 U	---	---	0.005 U	0.005 U
trans-1,2-Dichloroethene	0.5	mg/L	0.045	---	0.005 U	2.5 U	---	0.038	0.005 U	---	---	0.005 U	0.005 U
Trichloroethene	0.025	mg/L	**4**	---	**0.22**	**270**	---	**12.4**	0.0056	---	---	0.0042 J	0.0038 J
Vinyl chloride	0.01	mg/L	**0.12**	---	**0.022**	**22**	---	**0.34**	0.002 U	---	---	0.002 U	0.002 U
SVOCs													
Benzo(a)anthracene	0.00065	mg/L	---	0.0001 U	0.00011 U	0.00011	---	0.0001 U	0.0001 U	---	---	0.0001 U	0.0001 U
Bis(2-ethylhexyl)phthalate	0.06	mg/L	---	---	0.0048 J	0.005 U	---	0.0052 U	---	---	---	0.0052 U	0.0052 U
Carbazole	NA	mg/L	---	---	---	0.00022	---	---	---	---	---	---	---
Chrysene	0.0075	mg/L	---	0.0001 U	0.00054 U	0.00031	---	0.00052 U	0.0001 U	---	---	0.00052 U	0.00052 U
Pyridine+	0.007	mg/L	---	---	---	0.014	---	---	---	---	---	---	---
Pesticides													
Heptachlor	0.002	mg/L	---	---	0.000087	---	0.00005 U	0.000054 U	---	0.00005 U	---	0.000055 U	0.000054 U
PCBs													
Not Detected in any samples			---	---	---	---	ND	---	---	ND	---	---	---
Herbicides													
Not Detected in any samples			---	---	---	---	---	---	---	---	ND	---	---
Total Metals													
Aluminum	NA	mg/L	0.47	---	2.53	0.37	---	1.31	---	---	---	1 U	1 U
Antimony	0.024	mg/L	0.006 U	---	0.006 U	0.0064	---	0.003 J	---	---	---	0.006 U	0.006 U
Barium	2	mg/L	0.073	---	0.0907 J	0.093	---	0.096 J	0.098	---	---	0.056 J	0.047 J
Calcium	NA	mg/L	160	---	208	190	---	166	---	---	---	211	215
Chromium	1	mg/L	0.004 U	---	0.0084 J	0.004 U	---	0.01 U	0.004 U	---	---	0.01 U	0.01 U
Copper	0.65	mg/L	0.01 U	---	0.02 U	0.01 U	---	0.0232	---	---	---	0.02 U	0.02 U
Iron	5	mg/L	1.4	---	**10.9**	1.5	---	**6.7**	---	---	---	2.03	1.91
Lead	0.1	mg/L	0.0032	---	0.01 U	0.0025	---	0.01 U	0.0025	---	---	0.01 U	0.01 U
Magnesium	NA	mg/L	61	---	140	110	---	98.4	---	---	---	160	156
Manganese	10	mg/L	0.087	---	0.835	0.8	---	0.192	---	---	---	1	1.03
Nickel	2	mg/L	0.0055	---	0.05 U	0.004 U	---	0.05 U	---	---	---	0.05 U	0.05 U

Table 2-5
Summary of Groundwater Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Class II Groundwater Remediation Objective	Location ID	TMW-1/ KP-MW01	TMW-1/ KP-MW01	TMW-1/ KP-MW01	TMW-2/ KP-MW02	TMW-2/ KP-MW02	TMW-2/ KP-MW02	TMW-3/ KP-MW03	TMW-3/ KP-MW03	TMW-3/ KP-MW03	TMW-3/ KP-MW03	TMW-3/ KP-MW03
		Field Sample ID	TMW-1	TMW-1	KP-MW01-060112	TMW-2	TMW-2	KP-MW02-060112	TMW-3	TMW-3	TMW-3	KP-MW03-060112	KP-MW03-060112D
		Sample Date	8/10/2010	8/17/2010	6/1/2012	8/10/2010	8/11/2010	6/1/2012	8/10/2010	8/11/2010	8/17/2010	6/1/2012	6/1/2012
		Screen Depth (ft bgs)	6-16	6-16	8-18	8-18	8-18	9-19	6-16	6-16	6-16	8-18	8-18
		Units											
Potassium	NA	mg/L	14	---	6.8	14	---	9.42	---	---	---	1.8	1.57
Sodium	NA	mg/L	86	---	39.2	290	---	129	---	---	---	40.6	36.9
Zinc	10	mg/L	0.02 U	---	0.031 J	0.02 U	---	0.05 U	---	---	---	0.0208 J	0.0506

Notes:

Shaded values indicate concentration exceeds the Groundwater Remediation Objective (Class II) for the Groundwater Component of the Groundwater Ingestion Route.

+ State of Illinois Non-TACO Objectives presented for this chemical

-- = Constituent not analyzed

D = Duplicate

ft bgs - Feet below ground surface

ID = Identification

J = Concentration Estimated

mg/L = Milligram per liter

NA = Not available

ND = Not detected

PCB = Polychlorinated biphenyl

SVOC = Semivolatile organic compound

TACO = Tiered Approach to Corrective Action Objectives

U = Constituent not detected. Reporting limit presented.

VOC = Volatile organic compound

Table 2-6
Groundwater Elevations
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Monitoring Well ID	Depth to Groundwater (feet)			Reference Elevation Ground Surface (feet CCD)	Reference Elevation Top of Casing (feet CCD)	Groundwater Elevation (feet CCD)		
	6/1/2012	6/21/2012	7/12/2012			6/1/2012	6/21/2012	7/12/2012
KP-MW01	16.77	9.36	7.42	20.92	20.41	3.64	11.05	12.99
KP-MW02	7.13	3.54	3.75	21.95	21.38	14.25	17.84	17.63
KP-MW03	6.57	2.09	2.34	21.83	21.21	14.64	19.12	18.87

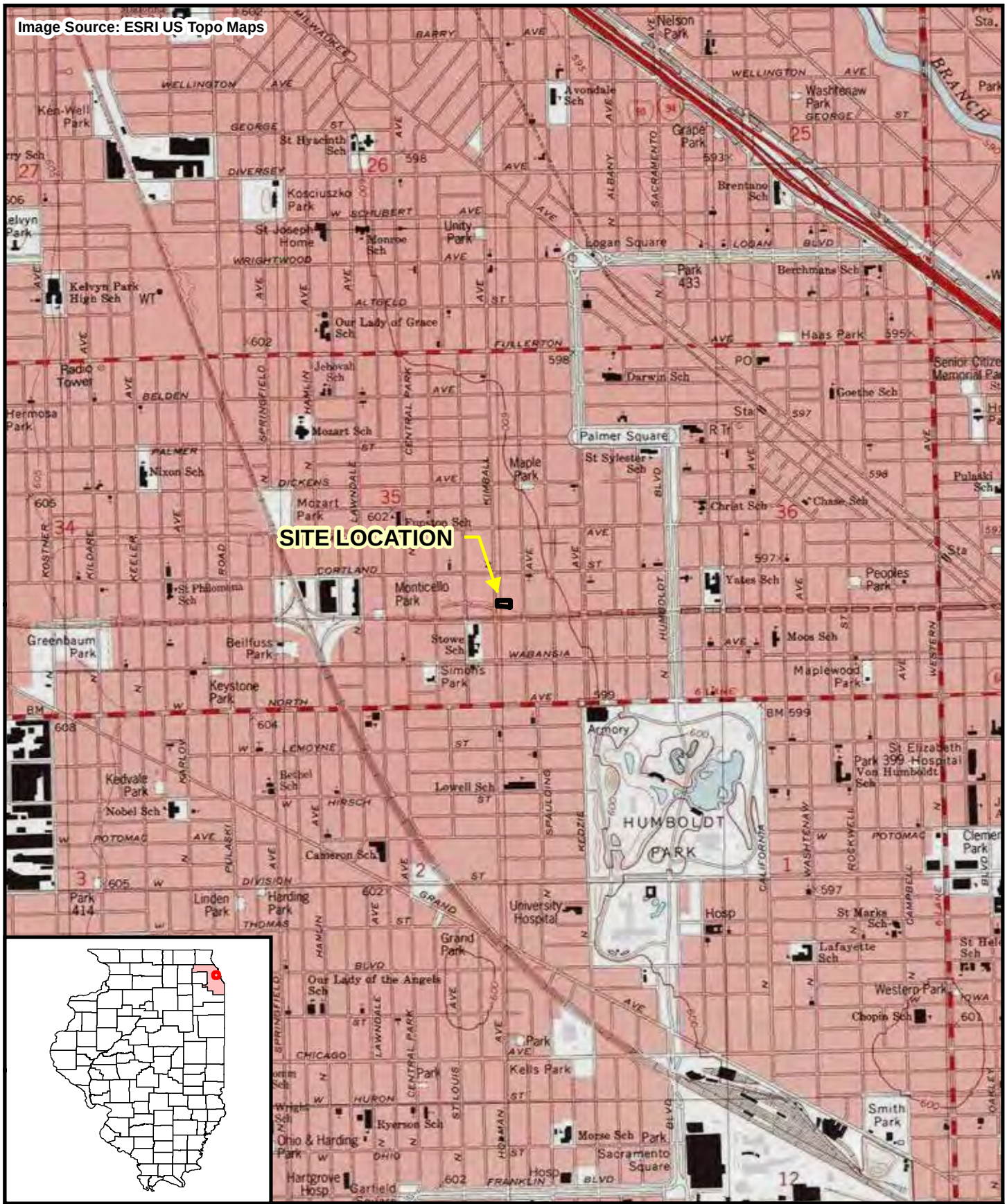
Notes:
CCD = Chicago City Datum
ID = Identification
PVC = Polyvinyl chloride
Reference elevation is the top of the inner (PVC) well casing

Table 2-7
Hydraulic Conductivity Testing Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Monitoring Well ID	Falling Head Test (cm/sec)	Rising Head Test (cm/sec)	Mean (cm/sec)
KP-MW01	---	---	---
KP-MW02	3.7E-07	8.4E-07	6.1E-07
KP-MW03	2.8E-04	2.9E-04	2.9E-04
Geometric Mean (cm/sec)	**1.3E-05**		
Geometric Mean (ft/min)	**2.5E-05**		
Geometric Mean (ft/day)	**3.6E-02**		

Notes:
--- = Data not useable
cm/sec = Centimeters per second
ID = Identification
ft/day = Feet per day
ft/min = Feet per minute

FIGURES



Prepared for:
U.S. EPA REGION V

Contract No: EP-S5-06-04
TDD: S05-0008-1110-024
DCN: 1657-2A-AWJZ

Prepared By:
WESTON SOLUTIONS, INC

750 E. Bunker Court
Suite 500
Vernon Hills, Illinois 60061

Figure 1-1
Site Location Map
Kimball Avenue Park
1807-15 N. Kimball Avenue
Chicago, Cook County, Illinois

FILE: D:\Bloomingdale_Trails\mxd\Kimball_ReportF1-1_Site_Location.mxd 7/25/2012 2:24:47 PM wojdakon

Legend

- Bloomingdale Trail
- Concrete Retaining Wall
- SRP Boundary

0 75 Feet

N

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Suite 500
Vernon Hills, Illinois 60061

Figure 1-2
Site Features Map
Kimball Avenue Park
1807-15 N. Kimball Avenue
Chicago, Cook County, Illinois

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Figure 2-1
Soil Sampling Location Map
Kimball Avenue Park
1807-15 N. Kimball Avenue
Chicago, Cook County, Illinois

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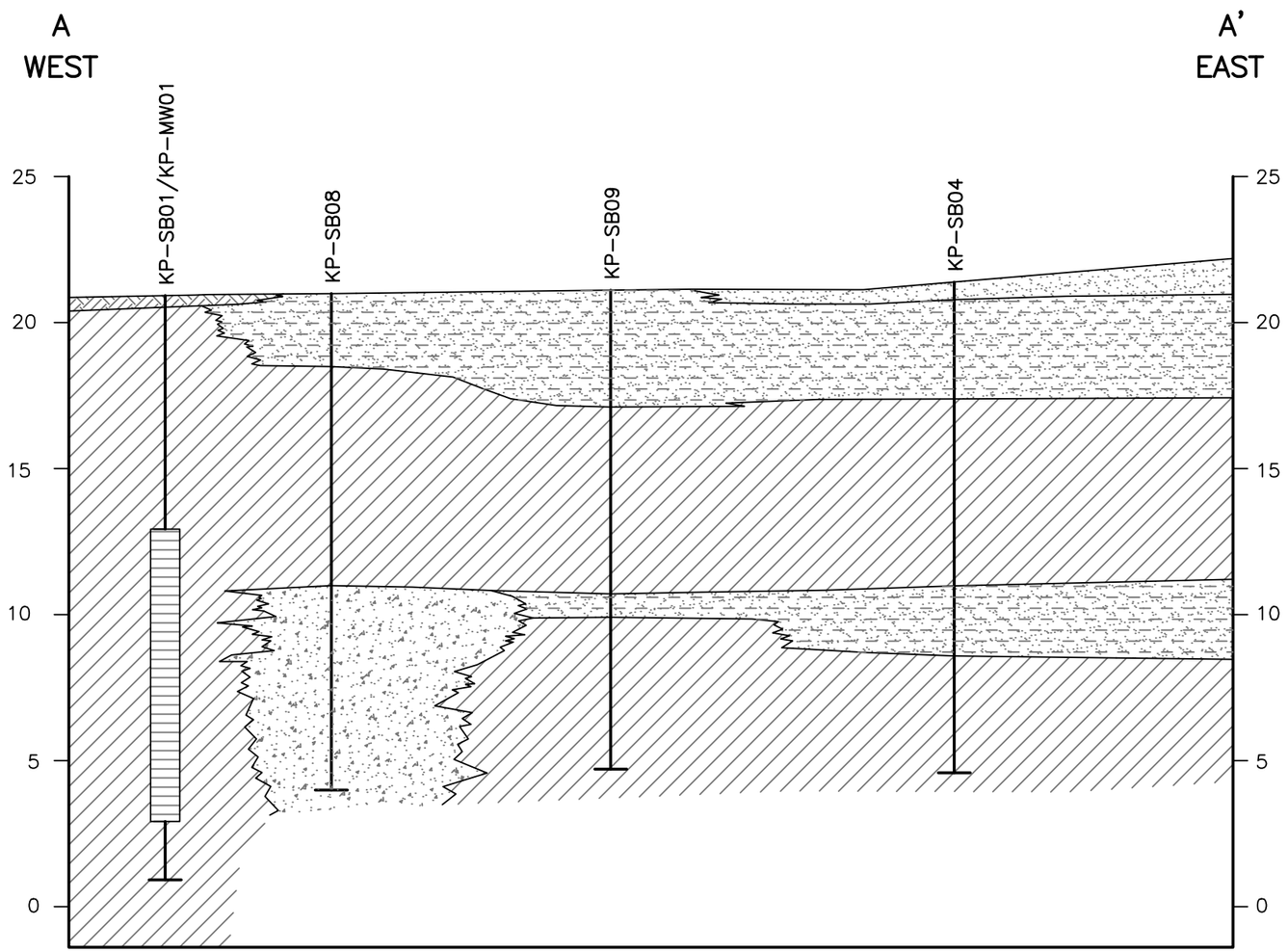
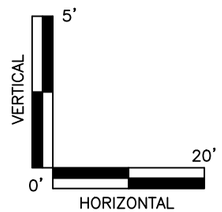
Figure 2-2
Cross Section Location Map
Kimball Avenue Park
1807-15 N. Kimball Avenue
Chicago, Cook County, Illinois



LEGEND

- FILL
- SILT
- GRAVEL
- CLAY
- SAND
- SILTY SAND
- MONITORING WELL SCREENED INTERVAL
- BORING



NOTE:
VERTICAL SCALE IS REFERENCED TO THE CHICAGO CITY DATUM (CCD).

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Figure 2-3
Geologic Cross Section A-A'
Kimball Avenue Park
1807-15 N. Kimball Avenue
Chicago, Cook County, Illinois

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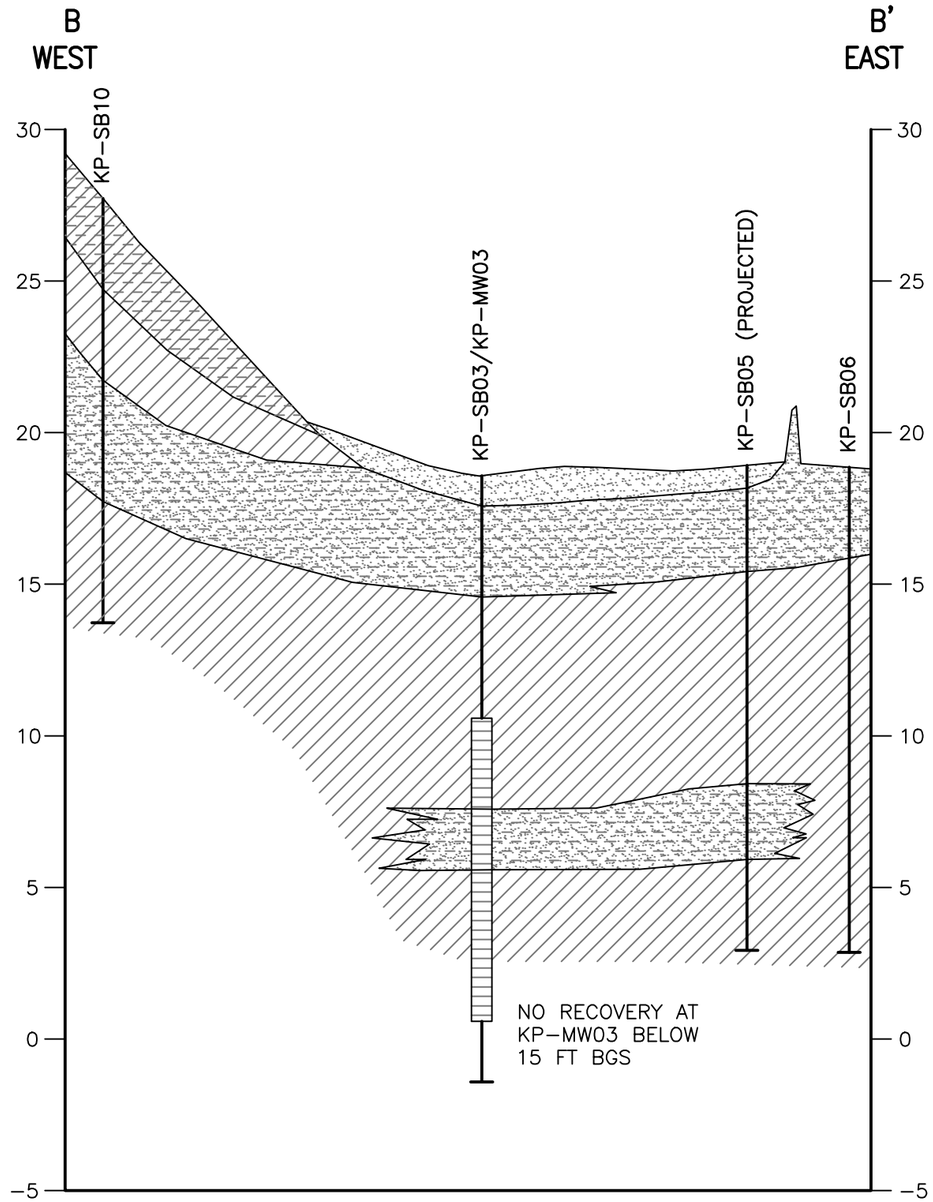
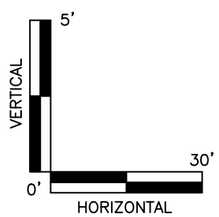


LEGEND

- FILL
- SILT
- SILTY CLAY
- CLAY
- SAND
- SILTY SAND
- MONITORING WELL SCREENED INTERVAL
- BORING
- BGS BELOW GROUND SURFACE



NOTE:
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Figure 2-4
Geologic Cross Section B-B"
Kimball Avenue Park
1807-15 N. Kimball Avenue
Chicago, Cook County, Illinois

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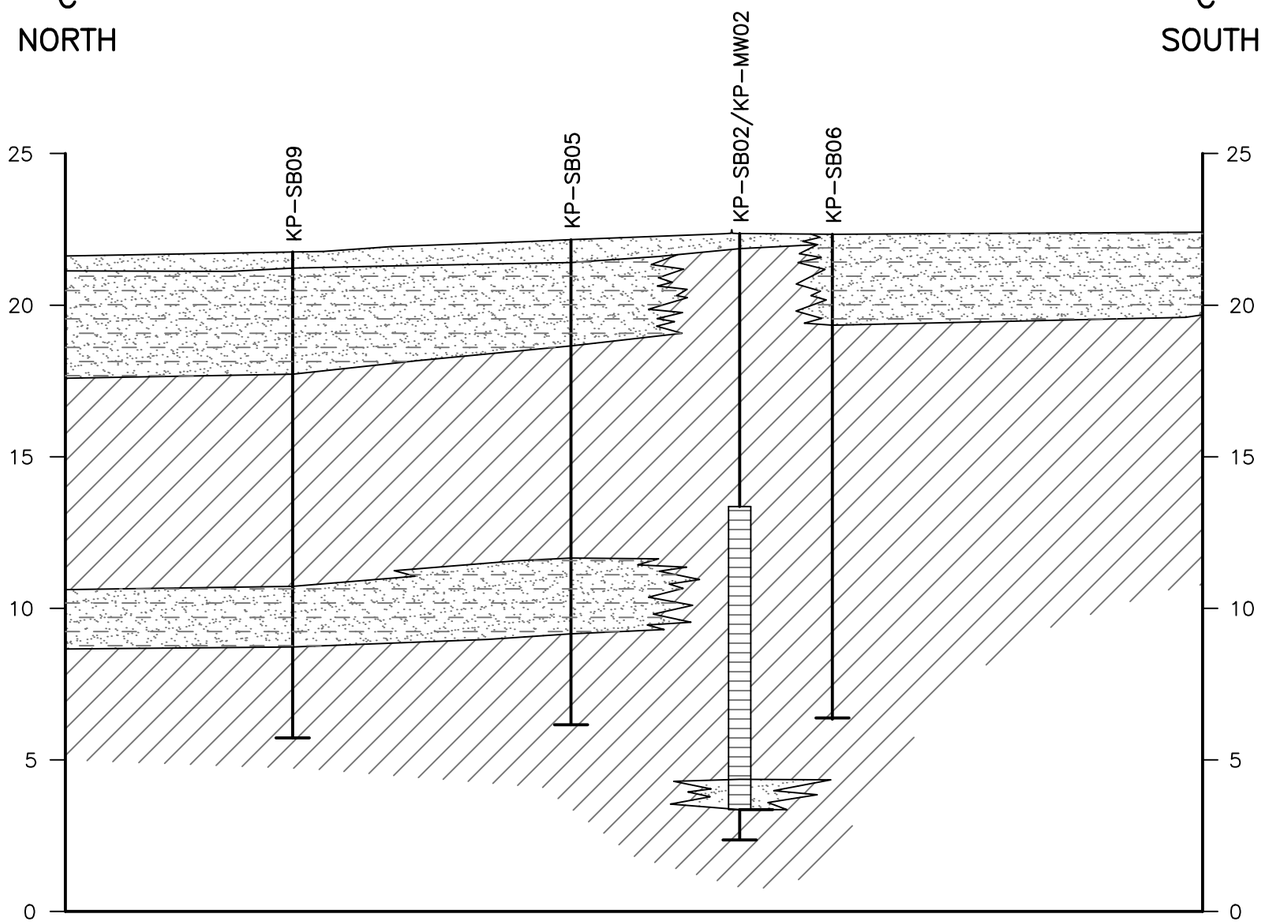
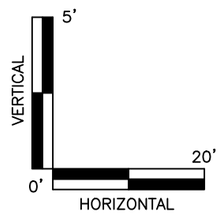


LEGEND

- FILL
- SILT
- SILTY CLAY
- CLAY
- SAND
- SILTY SAND
- MONITORING WELL SCREENED INTERVAL
- BORING



NOTE:
VERTICAL SCALE IS REFERENCED TO THE CHICAGO CITY DATUM (CCD).

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Vernon Hills, Illinois 60061

Figure 2-5
Geologic Cross Section C-C'
Kimball Avenue Park
1807-15 N. Kimball Avenue
Chicago, Cook County, Illinois

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Prepared By:
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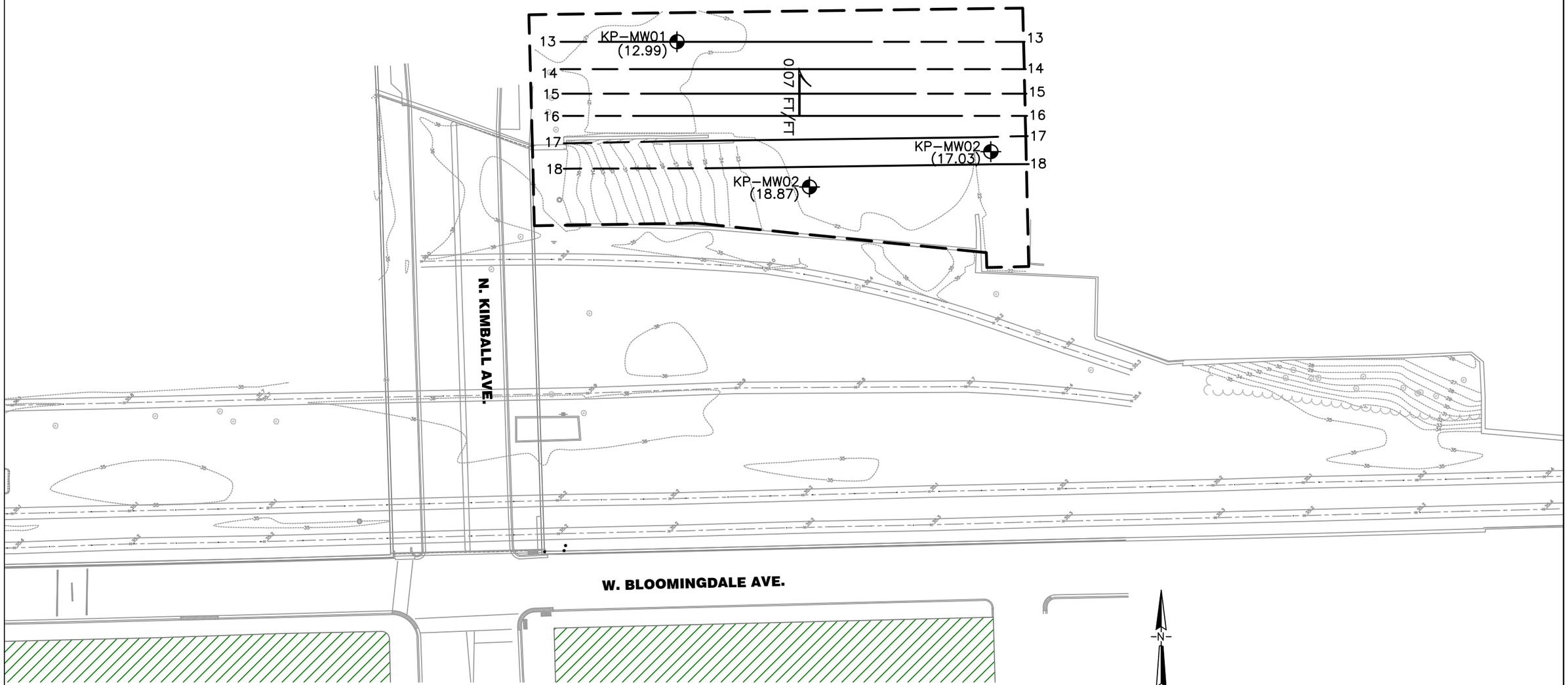
Vernon Hills, Illinois 60061

Figure 2-6
Monitoring Well Location Map
Kimball Avenue Park
1807-15 N. Kimball Avenue
Chicago, Cook County, Illinois



LEGEND

- MONITORING WELL LOCATION
- SRP SITE BOUNDARY
- 8.15 POTENTIOMETRIC SURFACE CONTOUR

Prepared for: U.S. EPA. REGION V Contract No: EP-S5-06-04 TDD: S05-0008-1110-024 DCN: 1657-2A-AWJZ	Prepared By: WESTON SOLUTIONS, INC 750 E. Bunker Ct., Suite 500 Vernon Hills, Illinois 60061	Figure 2-7 Potentiometric Surface Map Kimball Avenue Park 1807-15 N. Kimball Avenue Chicago, Cook County, Illinois

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Imagery Source: ESRI Bing Maps

KP-SB08 05/29/12

Depth	Parameter	Result	[Criteria]
4-6	2-Hexanone	0.31	[3]
15-17	cis-1,2-Dichloroethene	28.1	[3]
15-17	Vinyl chloride	0.14	[3]

B-3/KP-SB09 08/04/10

Depth	Parameter	Result	[Criteria]
6-9	Trichloroethene	2	[3]

B-2/KP-SB01 08/04/10

Depth	Parameter	Result	[Criteria]
6-9	Benzene	0.2	[3]
6-9	cis-1,2-Dichloroethene	368	[3]
6-9	Tetrachloroethene	1	[3]
6-9	trans-1,2-Dichloroethene	8	[3]
6-9	Trichloroethene	599	[1,2,3,4]
6-9	Vinyl chloride	11	[1,2,3,4]
9-12	Chloroform	6.13	[2,3,4]
9-12	cis-1,2-Dichloroethene	1.16	[3]
9-12	Trichloroethene	408	[1,2,3,4]
9-12	Vinyl chloride	0.16	[3]
18-20	Trichloroethene	8.2	[2,3]
18-20	Trichloroethene	9.6	[2,3]

KP-SB04 05/29/12

Depth	Parameter	Result		[Criteria]
10-12	1,1-Dichloroethene	0.35	J	[3]
10-12	cis-1,2-Dichloroethene	2.6	J	[3]
10-12	Tetrachloroethene	4.1	J	[3]
10-12	Trichloroethene	3510	J	[1,2,3,4,5]
10-12	Vinyl chloride	0.088	J	[3]
14-16	Trichloroethene	894	J	[1,2,3,4]
14-16	Vinyl chloride	0.41	J	[2,3]

B-4 08/04/10

Depth	Parameter	Result	[Criteria]
6-9	1,1-Dichloroethene	2	[3]
6-9	cis-1,2-Dichloroethene	872	[1,3]
6-9	Tetrachloroethene	5	[3]
6-9	trans-1,2-Dichloroethene	15	[3]
6-9	Vinyl chloride	10	[1,2,3,4]
9-12	cis-1,2-Dichloroethene	20	[3]
9-12	Vinyl chloride	0.2	[3]

KP-SB07 05/29/12

Depth	Parameter	Result	[Criteria]
8-10	cis-1,2-Dichloroethene	31.2	[3]
8-10	Trichloroethene	68.3	[1,2,3,4]
8-10	Vinyl chloride	2	[1,2,3,4]

14-16 VOCs Below Tier I SROs

B-5/KP-SB02 08/04/10

Depth	Parameter	Result		[Criteria]
3-6	Benzene	0.4		[3]
3-6	cis-1,2-Dichloroethene	8		[3]
3-6	Tetrachloroethene	0.5		[3]
3-6	Trichloroethene	73		[1,2,3,4]
3-6	Vinyl chloride	26		[1,2,3,4]
6-9	cis-1,2-Dichloroethene	942		[1,3]
6-9	trans-1,2-Dichloroethene	7.34		[3]
6-9	Vinyl chloride	44.2		[1,2,3,4]
9-12	1,1-Dichloroethene	4		[3,4]
9-12	cis-1,2-Dichloroethene	990		[1,3]
9-12	Tetrachloroethene	14		[1,2,3]
9-12	trans-1,2-Dichloroethene	14		[3]
18-20	cis-1,2-Dichloroethene	56.6	J	[3]
18-20	Trichloroethene	803	J	[1,2,3,4]
18-20	Vinyl chloride	3	J	[1,2,3,4]

KP-SB05 05/29/12

Depth	Parameter	Result		[Criteria]
11-13	1,1-Dichloroethene	0.32	J	[3]
11-13	cis-1,2-Dichloroethene	6.3	J	[3]
11-13	Tetrachloroethene	2.7	J	[3]
11-13	Trichloroethene	3590	J	[1,2,3,4,5]
11-13	Vinyl chloride	0.38	J	[2,3]
14-16	Trichloroethene	338		[1,2,3,4]
14-16	Vinyl chloride	0.23		[3]

B-6 08/04/10

Depth	Parameter	Result	[Criteria]
3-6	Trichloroethene	1	[3]

6-9 VOCs Below Tier I SROs

9-12 VOCs Below Tier I SROs

KP-SB06 05/29/12

Depth	Parameter	Result		[Criteria]
10-12	1,1-Dichloroethene	1.2	J	[3]
10-12	2-Hexanone	0.27		[3]
10-12	cis-1,2-Dichloroethene	22.2		[3]
10-12	Tetrachloroethene	3.8		[3]
10-12	Trichloroethene	4230		[1,2,3,4,5]
10-12	Vinyl chloride	0.58		[1,2,3]
14-16	cis-1,2-Dichloroethene	22.4		[3]
14-16	Tetrachloroethene	0.82	J	[3]
14-16	Trichloroethene	1220		[1,2,3,4]
14-16	Vinyl chloride	0.49		[1,2,3]

B-1 · B-8/KP-SB10 · B-7/KP-SB03

N Kimball Ave · N St Louis Ave · N Spaulding Ave · Bloomingdale Trail

Notes:
Criteria 1: Residential Ingestion
Criteria 2: Residential Inhalation
Criteria 3: Soil Component of the Groundwater Ingestion
Criteria 4: Construction Worker Inhalation and/or Ingestion
Criteria 5: Soil Saturation Limits

Legend

- At Least One Exceedance
- No Exceedances
- Bloomingdale Trail
- SRP Boundary

0 100 Feet

N

Prepared For:
US EPA Region V
Contract No.: EP-S5-06-04
TDD: S05-0008-1110-024
DCN: 1657-2A-AWFS

Prepared By:
WESTON SOLUTIONS, INC.
750 E. Bunker Court, Suite 500
Vernon Hills, Illinois 60061

Figure 3-1
Soil Analytical Results Exceeding
Tier I Soil Remediation Objectives - VOCs
Kimball Avenue Park - 1807-15 N. Kimball Avenue
Chicago, Cook County, Illinois

FILE: D:\Bloomingdale_Trails\mxd\Kimball_Report\F3-1_Soil_Exceeds_VOCs.mxd 7/25/2012 2:29:29 PM wojdakon

Imagery Source: ESRI Bing Maps

B-1 08/04/10

Depth	Parameter	Result	[Criteria]
0-3	Benzo(a)anthracene	2.42	[1]
0-3	Benzo(a)pyrene	4.58	[1]
0-3	Benzo(b)fluoranthene	6.29	[1]
0-3	Dibenz(a,h)anthracene	0.25	[1]
0-3	Indeno(1,2,3-cd)pyrene	3.45	[1]

3-6 SVOCs Below Tier I SROs

B-8/KP-SB10 08/04/10

Depth	Parameter	Result	[Criteria]
0-3	Benzo(a)anthracene	9.27	[13]
0-3	Benzo(a)pyrene	9.36	[1]
0-3	Benzo(b)fluoranthene	11.5	[1]
0-3	Dibenz(a,h)anthracene	0.35	[1]
0-3	Indeno(1,2,3-cd)pyrene	4.29	[1]
3-5	Benzo(a)anthracene	2.4	[1]
3-5	Benzo(a)pyrene	2.2	[1]
3-5	Benzo(b)fluoranthene	2.4	[1]
3-5	Dibenz(a,h)anthracene	0.77	[1]
3-5	Indeno(1,2,3-cd)pyrene	1.4	[1]
12-14	Benzo(a)anthracene	2.2	[1]
12-14	Benzo(a)anthracene	2.1	[1]
12-14	Benzo(a)pyrene	2	[1]
12-14	Benzo(a)pyrene	1.9	[1]
12-14	Benzo(b)fluoranthene	1.9	[1]
12-14	Benzo(b)fluoranthene	2.1	[1]
12-14	Dibenz(a,h)anthracene	0.66	[1]
12-14	Dibenz(a,h)anthracene	0.66	[1]
12-14	Indeno(1,2,3-cd)pyrene	1.1	[1]
12-14	Indeno(1,2,3-cd)pyrene	1.2	[1]

B-4 08/04/10

Depth	Parameter	Result	[Criteria]
0-3	Benzo(a)anthracene	1.28	[1]
0-3	Benzo(b)fluoranthene	1.57	[1]
3-6	Benzo(a)anthracene	2.83	[1]
3-6	Benzo(a)pyrene	2.77	[1]
3-6	Benzo(b)fluoranthene	3.48	[1]
3-6	Indeno(1,2,3-cd)pyrene	1.43	[1]

9-12 SVOCs Below Tier I SROs

B-6 08/04/10

Depth	Parameter	Result	[Criteria]
0-3	Benzo(a)anthracene	2.42	[1]
0-3	Benzo(a)pyrene	2.21	[1]
0-3	Benzo(b)fluoranthene	2.67	[1]

3-6 SVOCs Below Tier I SROs

B-7/KP-SB03 08/04/10

Depth	Parameter	Result	[Criteria]
0-3	Benzo(a)anthracene	1.76	[1]
0-3	Benzo(a)pyrene	1.91	[1]
0-3	Benzo(b)fluoranthene	2.24	[1]
3-6	Benzo(a)anthracene	1.65	[1]
3-6	Benzo(a)pyrene	1.88	[1]
3-6	Benzo(b)fluoranthene	2.03	[1]

6-9 SVOCs Below Tier I SROs

B-2/KP-SB01
KP-SB07
KP-SB08
B-3/KP-SB09
KP-SB04
KP-SB05
B-5/KP-SB02
KP-SB06

N St Louis Ave
N Kimball Ave
N Spaulding Ave
W Bloomingdale Ave

Notes:
Criteria 1: Residential Ingestion
Criteria 2: Residential Inhalation
Criteria 3: Soil Component of the Groundwater Ingestion
Criteria 4: Construction Worker Inhalation and/or Ingestion

Legend
- At Least One Exceedance
- No Exceedances
- Bloomingdale Trail
- Property Boundary

0 100 Feet

N

Prepared For:
US EPA Region V
Contract No.: EP-S5-06-04
TDD: S05-0008-1110-024
DCN: 1657-2A-AWFS

Prepared By:
WESTON SOLUTIONS, INC.
750 E. Bunker Court, Suite 500
Vernon Hills, Illinois 60061

Figure 3-2
Soil Analytical Results Exceeding
Tier I Soil Remediation Objectives - SVOCs
Kimball Avenue Park - 1807-15 N. Kimball Avenue
Chicago, Cook County, Illinois

FILE: D:\Bloomingdale_Trails\mxd\Kimball_Report\F3-2_Soil_Exceeds_SVOCs.mxd 7/25/2012 2:29:55 PM wojdakon

Imagery Source: ESRI Bing Maps

B-2/KP-SB01 08/04/10

Depth	Parameter	Result	[Criteria]
3-6	Mercury	0.84	[4]
3-6	Selenium	3	[3]

6-9 Inorganics below Tier 1 SROs

B-4 08/04/10

Depth	Parameter	Result	[Criteria]
0-3	Arsenic	15	[1]
0-3	Mercury	0.17	[4]
3-6	Antimony	59	[1,3]
3-6	Arsenic	18	[1]
3-6	Lead	1100	[1,4]
3-6	Mercury	0.38	[4]

6-9 Inorganics below Tier 1 SROs

B-5/KP-SB02 08/04/10

Depth	Parameter	Result	[Criteria]
3-6	Antimony	26	[3]
3-6	Arsenic	17	[1]
3-6	Lead	840	[1,4]
3-6	Mercury	0.42	[4]
3-6	Selenium	7.2	[3]

6-9 Inorganics below Tier 1 SROs

B-6 08/04/10

Depth	Parameter	Result	[Criteria]
0-3	Arsenic	14	[1]
0-3	Lead	910	[1,4]
0-3	Mercury	0.82	[4]
3-6	Arsenic	29	[1]
3-6	Lead	2800	[1,3,4]
3-6	Lead, TCLP	0.43	[3]
3-6	Mercury	3	[4]

6-9 Inorganics below Tier 1 SROs

B-7/KP-SB03 08/04/10

Depth	Parameter	Result	[Criteria]
0-3	Mercury	0.15	[4]

3-6 Inorganics below Tier 1 SROs

B-1
B-3/KP-SB09
B-8/KP-SB10
N Kimball Ave
N St Louis Ave
Bloomingdale
N Spaulding Ave

Notes:
Criteria 1: Residential Ingestion
Criteria 2: Residential Inhalation
Criteria 3: Soil Component of the Groundwater Ingestion
Criteria 4: Construction Worker Inhalation and/or Ingestion

Legend

- At Least One Exceedance
- No Exceedances
- Bloomingdale Trail
- Property Boundary

0 100 Feet

N

Prepared For:
US EPA Region V
Contract No.: EP-S5-06-04
TDD: S05-0008-1110-024
DCN: 1657-2A-AWFS

Prepared By:
WESTON SOLUTIONS, INC.
750 E. Bunker Court, Suite 500
Vernon Hills, Illinois 60061

Figure 3-3
Soil Analytical Results Exceeding
Tier I Soil Remediation Objectives - Inorganics
Kimball Avenue Park - 1807-15 N. Kimball Avenue
Chicago, Cook County, Illinois

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FILE: D:\Bloomingdale_Trails\mxd\Kimball_Report\F3-4_GW_Exceeds.mxd 7/25/2012 2:30:50 PM wojdakon

Legend

- At Least One Exceedance
- No Exceedances
- Bloomingdale Trail
- Property Boundary

0 100 Feet

N

Prepared For:
US EPA Region V
Contract No.: EP-S5-06-04
TDD: S05-0008-1110-024
DCN: 1657-2A-AWFS

Prepared By:
WESTON SOLUTIONS, INC.
750 E. Bunker Court, Suite 500
Vernon Hills, Illinois 60061

Figure 3-4
Groundwater Analytical Results
Exceeding Tier 1 Remediation Objectives
Kimball Avenue Park - 1807-15 N. Kimball Avenue
Chicago, Cook County, Illinois

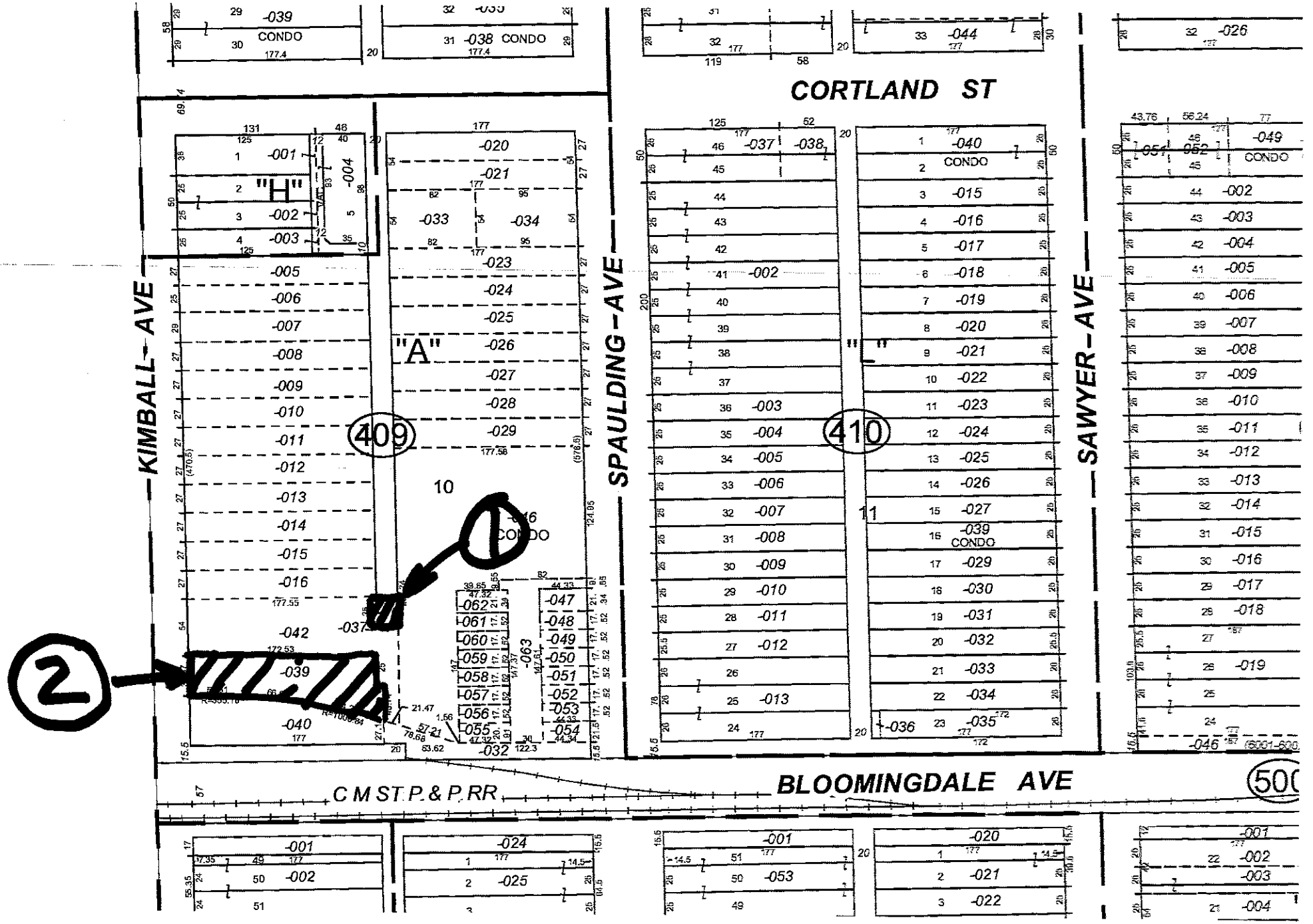
APPENDIX A
PREVIOUSLY PREPARED ENVIRONMENTAL REPORTS

(Presented In CD Copy Only)

APPENDIX B
PROPERTY LEGAL DESCRIPTION

(1) The North 25 feet of the South 146.85 feet of the East 25 feet of the West 197.55 feet of that part of Block 10 lying North of the right of way of the Chicago, Milwaukee and St. Paul Railroad in Simon's Subdivision of the Southeast 1/4 of Section 35, Township 40 North, Range 13, East of the Third Principal Meridian, in Cook County, Illinois.

(2) That part of Block 10 in E. Simon's Subdivision of the Southeast 1/4 of Section 35, Township 40 North, Range 13, East of the Third Principal Meridian, described as follows: commencing at a point on the North & South center line of said Block which is 23.47 feet North of the North line of the right of way of the Chicago Milwaukee and St. Paul Railroad Co., thence Northwesterly a distance of 10.68 feet to point 10 feet west of said North & South center line & 27.11 feet North of said North right of way line, to the point of beginning of this parcel of land; thence North 0 degrees 02 minutes 17 seconds west along a line 10.00 feet west of and parallel to said north and south center line, a distance of 40.74 feet to a point 25.00 feet South of the North line of the South 108.00 feet of said Block 10; thence North 89 degrees 28 minutes 00 seconds west, a distance of 5.00 feet; thence North 0 degrees 02 minutes 17 seconds west a distance of 25.25 feet to a point on a line 486.00 feet South of and parallel to the North line of said Block 10 and 15.00 feet west of the North and South center line of said Block 10; thence North 89 degrees 36 minutes 00 seconds west along the South line of the north 486 feet of said Block 10, a distance of 172.53 feet to its intersection with the west line of said Block 10; thence South 0 degrees 04 minutes 33 seconds East along said west line, 37.87 feet; thence South 87 degrees 01 minutes 33 seconds east, a distance of 50.31 feet; thence Easterly on a curve tangent to the last described course and concave southerly with a radius of 355.16 feet a chord distance of 66.01 feet (said chord having a bearing of south 81 degrees 41 minutes 35 seconds east) to a point of compound curvature; thence easterly on a curve concave southerly, with a radius of 1006.84 feet, a chord distance of 64.23 feet (said chord having a bearing of south 74 degrees 31 minutes 58 seconds East) to the point of beginning, all in Cook County, Illinois, commonly known as 1800-14 N. Spaulding/ 1807-11 N. Kimball, Chicago, Illinois., East of the Third Principal Meridian, in Cook County, Illinois, commonly known as 1800-14 N. Spaulding/1807-11 N. Kimball, Chicago, Illinois.


CORTLAND ST
KIMBALL AVE
SPAULDING AVE
SAWYER AVE
BLOOMINGDALE AVE
C M ST P & P RR
409
410
"A"
CONDO
1
2

APPENDIX C
SOIL BORING LOGS/MONITORING WELL CONSTRUCTION DIAGRAMS

Monitoring Well KP-MW01 / Soil Boring KP-SB01

U.S. EPA Region V
Contract: EP-S5-06-04

Kimball Avenue Park - 15 N. Kimball Ave.
Chicago, Cook County, Illinois

Date	: 05-29-12	Completion Depth	: 20'
Sample Date	: 05-29-12	WESTON Geologist	: J. Colomb
Collector	: WESTON		
Drilling Company	: Cabeno Environmental		
Drill Rig Type	: Geoprobe		

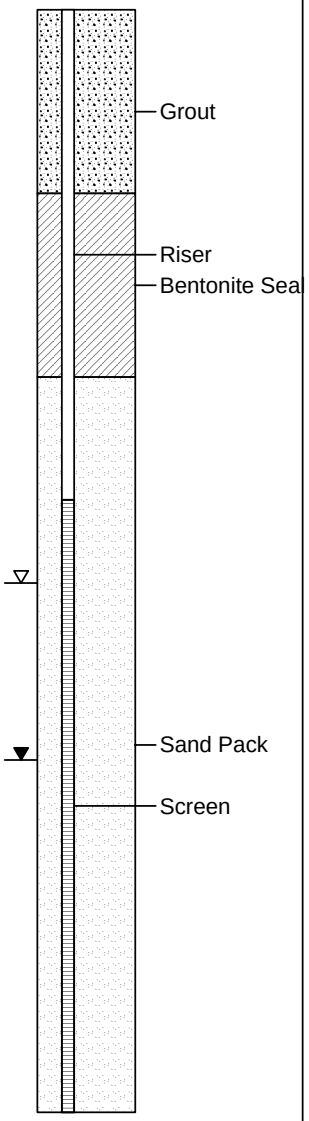
Samples Collected
- Investigative Sample
- Duplicate Sample
- MS/MSD Sample

Analyses Performed
TPH DRO, TPH GRO, TCL VOCs, % Moisture

Depth (ft)	USCS	DESCRIPTION	PID (parts per million)	Sample	REMARKS
0	CF	CONCRETE FILL			
1–2	CL	CLAY, light brown, trace fine sand, stiff, medium plasticity, moist, no odor	0.0		
3			1.2		
4–5	CL	CLAY, grey to black, some silt, stiff, medium plasticity, moist, mild product odor	12.6		
6–9	CL	CLAY, light brown, some silt, stiff, moist, mild product odor	0.3		KP-SB01(6-9)-052912
10–11	CL	CLAY, brown with black streaking, some silt, moist, no odor	0.2		
12–13	CL	CLAY, brown with black streaking, some silt, wet, no odor	0.8		
15–17	CL	CLAY, brown with black streaking, some silt, wet, no odor	0.0		
18–19					KP-SB01(18-20)-052912 KP-SB01(18-20)-052912D
20			0.0		

END OF BORING AT 20' bgs

Monitoring Well
KP-MW01
Elev.: 20.41 ft. (CCD)



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Monitoring Well KP-MW02 / Soil Boring KP-SB02

U.S. EPA Region V
Contract: EP-S5-06-04

Kimball Avenue Park - 15 N. Kimball Ave.
Chicago, Cook County, Illinois

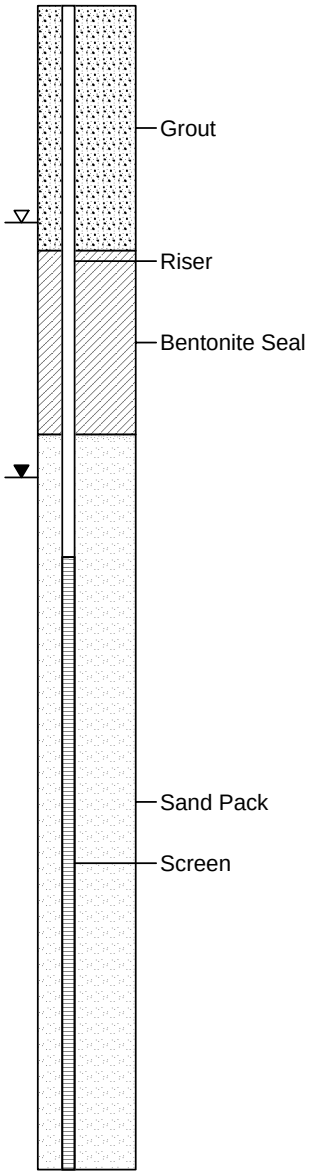
Date	: 05-29-12	Completion Depth	: 20'
Sample Date	: 05-29-12	WESTON Geologist	: J. Colomb
Collector	: WESTON		
Drilling Company	: Cabeno Environmental		
Drill Rig Type	: Geoprobe		

Samples Collected
- Investigative Sample
- Duplicate Sample
- MS/MSD Sample

Analyses Performed
TPH DRO, TPH GRO, TCL VOCs, % Moisture

Depth (ft)	USCS	DESCRIPTION	PID (parts per million)	Sample	REMARKS
0	SP	SAND, Poorly Graded, fine to medium grained, light brown, moist, no odor			
1	CL	CLAY, some small gravel, medium plasticity, dark brown, moist, no odor	13.1		
2					
3			18.4		
4					
5	CL	CLAY, dark brown with some black banding, moist, no odor			
6			26.2		
7					
8	CL	CLAY, light brown to grey, some silt, medium plasticity, wet, slight odor	205		
9					
10					
11					KP-SB02(9-12)-052912
12			594		
13			1375		
14	CL	CLAY, dark brown, trace fine sand, wet, slight product odor			
15					
16					
17			406		
18	SP	SAND, Poorly Graded, fine to medium grained, light brown to black, wet, no odor			
19	CL	CLAY, grey with brown streaking, medium plasticity, wet, no odor			KP-SB02(18-20)-052912
20			46.4		
21		END OF BORING AT 20' bgs			
22					

Monitoring Well
KP-MW02
Elev.: 21.38 ft. (CCD)



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Monitoring Well KP-MW03 / Soil Boring KP-SB03

U.S. EPA Region V
Contract: EP-S5-06-04

Kimball Avenue Park - 15 N. Kimball Ave.
Chicago, Cook County, Illinois

Date	: 05-29-12	Completion Depth	: 20'
Sample Date	: 05-29-12	WESTON Geologist	: J. Colomb
Collector	: WESTON		
Drilling Company	: Cabeno Environmental		
Drill Rig Type	: Geoprobe		

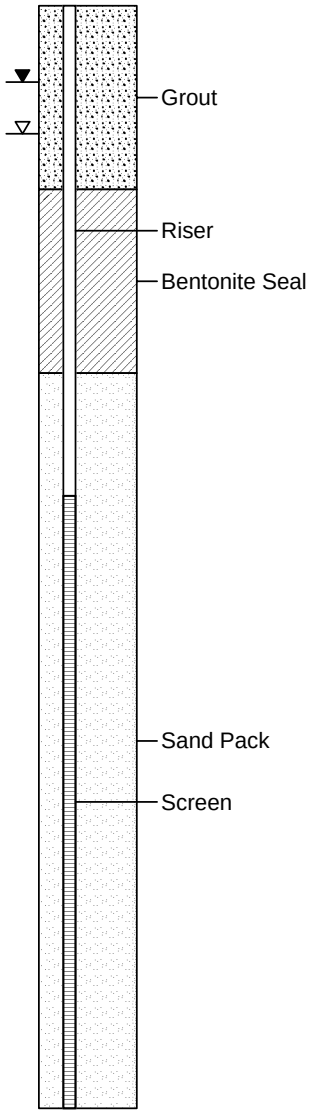
Samples Collected
- Investigative Sample
- Duplicate Sample
- MS/MSD Sample

Analyses Performed
TCL SVOCs, FOC,
% Moisture

Depth (ft)	USCS	DESCRIPTION	PID (parts per million)	Sample	REMARKS
0–1	SW	SAND, Well Graded, fine to medium grained, some small to medium gravel, light brown, dry, no odor			
1–4	SM	SANDY SILT, fine to medium sand, trace small gravel, black, wet, mild product odor	0.0 28.2		
4–6	CL	CLAY, dark brown, some fine to medium sand, wet, mild product odor	1.7		
6–11	CL	CLAY, grey-brown, some light brown streaking, moist, mild product odor	2.0	KP-SB03(9-12)-052912	
11–13	SM	SILTY SAND, fine to medium grained sand, light brown, wet/saturated, mild product odor	1.8		
13–15	CL	CLAY, grey-brown, some light brown streaking, wet, mild product odor			
15–20	NR	NO RECOVERY	0.6		

END OF BORING AT 20' bgs

Monitoring Well
KP-MW03
Elev.: 21.21 ft. (CCD)



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Soil Boring KP-SB04

Restoring Resource Efficiency

U.S. EPA Region V
Contract: EP-S5-06-04

Kimball Avenue Park - 15 N. Kimball Ave.
Chicago, Cook County, Illinois

Date Drilled	: 05-29-12	Completion Depth	: 16'
Sample Date	: 05-29-12	WESTON Geologist	: J. Colomb
Collector	: WESTON		
Drilling Company	: Cabeno Environmental		
Drill Rig Type	: Geoprobe		

Samples Collected
- Investigative Sample
- Duplicate Sample
- MS/MSD Sample

Analyses Performed
TCL VOCs, % Moisture

DEPTH (ft)	GRAPHIC	USCS	DESCRIPTION	PID (parts per million)	Sample	REMARKS
0		SW	SAND, Well Graded, fine to medium grained, some small to medium gravel, light brown, dry, no odor			
1		SM	SANDY SILT, fine to medium sand, trace small gravel, dark brown, moist, no odor	0.0		
2						
3				0.0		
4		CL	CLAY, light brown with dark brown banding, medium plasticity, moist, no odor	0.2		
5						
6				0.0		
7						
8		CL	CLAY, grey-brown, some light brown streaking, moist, no odor	0.1		
9				0.1		
10						
11		SM	SILTY SAND, fine to medium grained sand, light brown, wet/saturated, no odor	0.0		KP-SB04(10-12)-052912
12				0.0		
13		CL	CLAY, grey-brown, some light brown streaking, wet, no odor	0.0		
14						
15		CL	CLAY, grey with some light brown streaking, stiff, medium plasticity, dry, no odor	0.0		KP-SB04(14-16)-052912
16			END OF BORING AT 16'			
17						
18						

07-13-2012 C:\Users\colomb\Desktop\Kimball Park Logs\KP_SB_04.bor

Soil Boring KP-SB05

U.S. EPA Region V
Contract: EP-S5-06-04

Kimball Avenue Park - 15 N. Kimball Ave.
Chicago, Cook County, Illinois

Date Drilled	: 05-29-12	Completion Depth	: 16'
Sample Date	: 05-29-12	WESTON Geologist	: J. Colomb
Collector	: WESTON		
Drilling Company	: Cabeno Environmental		
Drill Rig Type	: Geoprobe		

Samples Collected
- Investigative Sample
- Duplicate Sample
- MS/MSD Sample

Analyses Performed
TCL VOCs, % Moisture

DEPTH (ft)	GRAPHIC	USCS	DESCRIPTION	PID (parts per million)	Sample	REMARKS
0		SW	SAND, Well Graded, fine to medium grained, some small gravel, light brown, dry, no odor			
1		SM	SANDY SILT, fine to medium sand, trace small gravel, dark brown, dry, no odor	0.0		
2						
3				0.1		
4		CL	CLAY, light brown with dark brown banding, medium plasticity, dry, no odor	0.1		
5						
6				0.0		
7		CL	CLAY, grey-brown, some light brown streaking, moist, no odor	0.0		
8						
9				0.0		
10						
11		SM	SILTY SAND, fine to medium grained sand, light brown, wet, no odor	0.0		
12				0.0		KP-SB05(11-13)-052912
13		CL	CLAY, grey-brown, some light brown streaking, wet, no odor	0.0		
14						
15		CL	CLAY, grey with some light brown streaking, stiff, medium plasticity, dry, no odor	0.0		KP-SB05(14-16)-052912
16			END OF BORING AT 16'			
17						
18						

07-13-2012 C:\Users\colomb\Desktop\Kimball Park Logs\KP_SB_05.bor

Soil Boring KP-SB06

U.S. EPA Region V
Contract: EP-S5-06-04

Kimball Avenue Park - 15 N. Kimball Ave.
Chicago, Cook County, Illinois

Date Drilled	: 05-29-12	Completion Depth	: 16'
Sample Date	: 05-29-12	WESTON Geologist	: J. Colomb
Collector	: WESTON		
Drilling Company	: Cabeno Environmental		
Drill Rig Type	: Geoprobe		

Samples Collected
- Investigative Sample
- Duplicate Sample
- MS/MSD Sample

Analyses Performed
TCL VOCs, % Moisture

DEPTH (ft)	GRAPHIC	USCS	DESCRIPTION	PID (parts per million)	Sample	REMARKS
0–3		SM	SILTY SAND, fine to medium grained sand, light brown, dry, no odor	0.0		
3–5		CL	CLAY, grey to brown, some light brown streaking, medium plasticity, wet, no odor	0.0 0.0		
5–7		CL	SANDY CLAY, dark brown to black, medium plasticity, wet, no odor	0.0		
7–10		CL	CLAY, grey with brown streaking, medium plasticity, moist, no odor	0.0 0.0		
10–12		CL	CLAY, light brown with black streaking, medium plasticity, moist, no odor	0.0 0.0	X	KP-SB06(10-12)-052912
12–16		CL	CLAY, grey with some light brown streaking, stiff, medium plasticity, wet, no odor	0.0 0.0 0.0	X	KP-SB06(14-16)-052912
16			END OF BORING AT 16'			

07-13-2012 C:\Users\colombj\Desktop\Kimball Park Logs\KP_SB_06.bor

Soil Boring KP-SB07

U.S. EPA Region V
Contract: EP-S5-06-04

Kimball Avenue Park - 15 N. Kimball Ave.
Chicago, Cook County, Illinois

Date Drilled	: 05-29-12	Completion Depth	: 16'
Sample Date	: 05-29-12	WESTON Geologist	: J. Colomb
Collector	: WESTON		
Drilling Company	: Cabeno Environmental		
Drill Rig Type	: Geoprobe		

Samples Collected
- Investigative Sample
- Duplicate Sample
- MS/MSD Sample

Analyses Performed
TCL VOCs, % Moisture

DEPTH (ft)	GRAPHIC	USCS	DESCRIPTION	PID (parts per million)	Sample	REMARKS
0–3		SP	SAND, Poorly Graded, fine to medium grained, dark brown with some black streaking, moist, no odor	0.2		
4–5		CL	CLAY, grey to brown, some light brown streaking, medium plasticity, wet, no odor	2.1		
5–7		CL	SANDY CLAY, dark brown to black, medium plasticity, wet, no odor	6.2		
7–10		CL	CLAY, grey with brown streaking, medium plasticity, moist, no odor	22.5	X	KP-SB07(8-10)-052912
10–12		CL	CLAY, light brown with black streaking, medium plasticity, moist, no odor	5.2		
13–16		CL	CLAY, grey with some light brown streaking, stiff, medium plasticity, wet, no odor	0.2	X	KP-SB07(14-16)-052912
16			END OF BORING AT 16'			

17
18

07-13-2012 C:\Users\colombj\Desktop\Kimball Park Logs\KP_SB_07.bor

Soil Boring KP-SB08

U.S. EPA Region V
Contract: EP-S5-06-04

Kimball Avenue Park - 15 N. Kimball Ave.
Chicago, Cook County, Illinois

Date Drilled	: 05-29-12	Completion Depth	: 17'
Sample Date	: 05-29-12	WESTON Geologist	: J. Colomb
Collector	: WESTON		
Drilling Company	: Cabeno Environmental		
Drill Rig Type	: Geoprobe		

Samples Collected
- Investigative Sample
- Duplicate Sample
- MS/MSD Sample

Analyses Performed
TCL VOCs, % Moisture, TPH GRO, TPH DRO

DEPTH (ft)	GRAPHIC	USCS	DESCRIPTION	PID (parts per million)	Sample	REMARKS
0–2		SM	SANDY SILT, fine to medium sand, trace small gravel, dark brown, moist, no odor	0.2		
3–6		CL	CLAY, grey with brown streaking, medium plasticity, stiff, slight product odor	33.8	X	KP-SB08(4-6)-052912
6–10		CL	CLAY, light brown with black streaking, medium plasticity, moist, no odor	0.0		
10–15		GP	GRAVEL, Poorly Graded, small to medium gravel, saturated, some product, strong product odor	0.0 0.0		
15–17		GP	GRAVEL, Poorly Graded, small to medium gravel, saturated, some product, strong product odor		X	KP-SB08(15-17)-052912
17			END OF BORING AT 17'			
18						

07-13-2012 C:\Users\colombj\Desktop\Kimball Park Logs\KP_SB_08.bor

Soil Boring KP-SB09

U.S. EPA Region V
Contract: EP-S5-06-04

Kimball Avenue Park - 15 N. Kimball Ave.
Chicago, Cook County, Illinois

Date Drilled	: 05-29-12	Completion Depth	: 16'
Sample Date	: 05-29-12	WESTON Geologist	: J. Colomb
Collector	: WESTON		
Drilling Company	: Cabeno Environmental		
Drill Rig Type	: Geoprobe		

Samples Collected
- Investigative Sample
- Duplicate Sample
- MS/MSD Sample

Analyses Performed
TCL VOCs, % Moisture, FOC, TCL SVOCs

DEPTH (ft)	GRAPHIC	USCS	DESCRIPTION	PID (parts per million)	Sample	REMARKS
0–4		SM	SANDY SILT, fine to medium sand, trace small gravel, dark brown, moist, no odor	0.0 0.2		KP-SB09(0-3)-052912
4–8		CL	CLAY, light brown with black streaking, medium plasticity, dry, no odor	0.2 0.1		KP-SB09(3-6)-052912
8–10		CL	CLAY, grey with brown streaking, medium plasticity, moist, no odor	0.0		
10–11		SM	SILTY SAND, fine to medium sand, black, wet, mild product odor	0.0		
11–16		CL	CLAY, light brown with some black streaking, moist, no odor	0.0 0.0 0.0		
16			END OF BORING AT 16'			

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Soil Boring KP-SB10

U.S. EPA Region V
Contract: EP-S5-06-04

Kimball Avenue Park - 15 N. Kimball Ave.
Chicago, Cook County, Illinois

Date Drilled	: 05-29-12	Completion Depth	: 14'
Sample Date	: 05-29-12	WESTON Geologist	: J. Colomb
Collector	: WESTON		
Drilling Company	: Cabeno Environmental		
Drill Rig Type	: Geoprobe		

Samples Collected
- Investigative Sample
- Duplicate Sample
- MS/MSD Sample

Analyses Performed
PAHs, % Moisture

DEPTH (ft)	GRAPHIC	USCS	DESCRIPTION	PID (parts per million)	Sample	REMARKS
0–3		CL	SILTY CLAY, some small to medium gravel, light brown, dry, no odor	0.0		
3–6		CL	CLAY, light brown, medium plasticity, dry, no odor	0.0 0.0		KP-SB10(3-5)-052912
6–10		SM	SANDY SILT, fine to medium grained, light brown, wet, no odor	0.0 0.0 0.0		
10–12		CL	CLAY, dark brown, medium plasticity, moist, no odor	0.0		
12–14		CL	CLAY, grey with some light brown streaking, moist, no odor	0.0 0.0		KP-SB10(12-14)-052912 KP-SB10(12-14)-052912D
14			END OF BORING AT 14'			

07-13-2012 C:\Users\colombj\Desktop\Kimball Park Logs\KP_SB_10.bor

APPENDIX D
DATA TABLES

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-1	B-1	B-1	B-1	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01
	Field Sample ID:	B-1 (0-3)	B-1 (3-6)	B-1 (6-9)	B-1 (9-12)	B-2 (3-6)	B-2 (6-9)	B-2 (9-12)	KP-SB01(18-20)	KP-SB01(18-20) D
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	0- 3	3- 6	6- 9	9- 12	3- 6	6- 9	9- 12	18- 20	18- 20
pH	SU	10.1	8.1	8.3	NA	8.1	8.7	NA	NA	NA
Fractional Organic Carbon	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Organic Carbon Content	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Inorganics										
Aluminum	mg/kg	NA	NA	NA	NA	22,000	NA	NA	NA	NA
Antimony	mg/kg	NA	NA	NA	NA	3.3	NA	NA	NA	NA
Arsenic	mg/kg	3.3	8.5	NA	NA	11	9.9	NA	NA	NA
Barium	mg/kg	32	110	NA	NA	140	62	NA	NA	NA
Beryllium	mg/kg	NA	NA	NA	NA	1.6	NA	NA	NA	NA
Cadmium	mg/kg	0.52 U	0.51 U	NA	NA	0.69	0.58 U	NA	NA	NA
Calcium	mg/kg	NA	NA	NA	NA	14,000	NA	NA	NA	NA
Chromium	mg/kg	88	38	28	21	37	20	NA	NA	NA
Cobalt	mg/kg	NA	NA	NA	NA	14	NA	NA	NA	NA
Copper	mg/kg	NA	NA	NA	NA	75	NA	NA	NA	NA
Cyanide	mg/kg	NA	NA	NA	NA	0.32 U	NA	NA	NA	NA
Iron	mg/kg	NA	NA	NA	NA	30,000	NA	NA	NA	NA
Lead	mg/kg	14	30	NA	NA	180	16	NA	NA	NA
Magnesium	mg/kg	NA	NA	NA	NA	11,000	NA	NA	NA	NA
Manganese	mg/kg	NA	NA	NA	NA	330	NA	NA	NA	NA
Mercury	mg/kg	0.025 U	0.029 U	NA	NA	0.84	0.03 U	NA	NA	NA
Nickel	mg/kg	NA	NA	NA	NA	46	NA	NA	NA	NA
Potassium	mg/kg	NA	NA	NA	NA	3,900	NA	NA	NA	NA
Selenium	mg/kg	1 U	1 U	NA	NA	3	1.2 U	NA	NA	NA
Silver	mg/kg	1 U	1 U	NA	NA	1.3 U	1.2 U	NA	NA	NA
Sodium	mg/kg	NA	NA	NA	NA	340	NA	NA	NA	NA
Thallium	mg/kg	NA	NA	NA	NA	1.3 U	NA	NA	NA	NA
Vanadium	mg/kg	NA	NA	NA	NA	42	NA	NA	NA	NA
Zinc	mg/kg	NA	NA	NA	NA	110	NA	NA	NA	NA
TCLP Metals										
Arsenic, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, TCLP	mg/L	0.01 U	NA	NA	NA	NA	NA	NA	NA	NA
Lead, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-1	B-1	B-1	B-1	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01
	Field Sample ID:	B-1 (0-3)	B-1 (3-6)	B-1 (6-9)	B-1 (9-12)	B-2 (3-6)	B-2 (6-9)	B-2 (9-12)	KP-SB01(18-20)	KP-SB01(18-20) D
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	0- 3	3- 6	6- 9	9- 12	3- 6	6- 9	9- 12	18- 20	18- 20
Pesticides										
4,4'-DDD	mg/kg	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA	NA
4,4'-DDE	mg/kg	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA	NA
4,4'-DDT	mg/kg	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA	NA
Aldrin	mg/kg	0.008 U	NA	NA	NA	0.008 U	NA	NA	NA	NA
alpha-BHC	mg/kg	0.008 U	NA	NA	NA	0.008 U	NA	NA	NA	NA
beta-BHC	mg/kg	0.008 U	NA	NA	NA	0.008 U	NA	NA	NA	NA
Chlordane (Technical)	mg/kg	0.08 U	NA	NA	NA	0.08 U	NA	NA	NA	NA
delta-BHC	mg/kg	0.008 U	NA	NA	NA	0.008 U	NA	NA	NA	NA
Dieldrin	mg/kg	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA	NA
Endosulfan I	mg/kg	0.008 U	NA	NA	NA	0.008 U	NA	NA	NA	NA
Endosulfan II	mg/kg	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA	NA
Endosulfan sulfate	mg/kg	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA	NA
Endrin	mg/kg	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA	NA
Endrin aldehyde	mg/kg	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA	NA
Endrin ketone	mg/kg	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA	NA
gamma-BHC (Lindane)	mg/kg	0.008 U	NA	NA	NA	0.008 U	NA	NA	NA	NA
Heptachlor	mg/kg	0.008 U	NA	NA	NA	0.008 U	NA	NA	NA	NA
Heptachlor epoxide	mg/kg	0.008 U	NA	NA	NA	0.008 U	NA	NA	NA	NA
Methoxychlor	mg/kg	0.08 U	NA	NA	NA	0.08 U	NA	NA	NA	NA
Toxaphene	mg/kg	0.16 U	NA	NA	NA	0.16 U	NA	NA	NA	NA
PCBS										
PCB-1016 (Aroclor 1016)	mg/kg	0.08 U	NA	NA	NA	0.08 U	NA	NA	NA	NA
PCB-1221 (Aroclor 1221)	mg/kg	0.08 U	NA	NA	NA	0.08 U	NA	NA	NA	NA
PCB-1232 (Aroclor 1232)	mg/kg	0.08 U	NA	NA	NA	0.08 U	NA	NA	NA	NA
PCB-1242 (Aroclor 1242)	mg/kg	0.08 U	NA	NA	NA	0.08 U	NA	NA	NA	NA
PCB-1248 (Aroclor 1248)	mg/kg	0.08 U	NA	NA	NA	0.08 U	NA	NA	NA	NA
PCB-1254 (Aroclor 1254)	mg/kg	0.16 U	NA	NA	NA	0.16 U	NA	NA	NA	NA
PCB-1260 (Aroclor 1260)	mg/kg	0.16 U	NA	NA	NA	0.16 U	NA	NA	NA	NA
Herbicides										
2,4,5-T	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-TP (Silvex)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-D	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dalapon	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dinoseb	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Picloram	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-1	B-1	B-1	B-1	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01
	Field Sample ID:	B-1 (0-3)	B-1 (3-6)	B-1 (6-9)	B-1 (9-12)	B-2 (3-6)	B-2 (6-9)	B-2 (9-12)	KP-SB01(18-20)	KP-SB01(18-20) D
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	0- 3	3- 6	6- 9	9- 12	3- 6	6- 9	9- 12	18- 20	18- 20
VOCs										
1,1,1,2-Tetrachloroethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
1,1,1-Trichloroethane	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0046 U	0.0062 U
1,1,2,2-Tetrachloroethane	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0046 U	0.0062 U
1,1,2-Trichloroethane	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.05	0.0046 U	0.0062 U
1,1-Dichloroethane	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0046 U	0.0062 U
1,1-Dichloroethene	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.05	0.0043 J	0.0051 J
1,1-Dichloropropene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
1,2,3-Trichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
1,2,3-Trichloropropane	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
1,2,4-Trichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
1,2,4-Trimethylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0037 J	0.0062 U
1,2-Dibromoethane (EDB)	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
1,2-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
1,2-Dichloroethane	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0046 U	0.0062 U
1,2-Dichloropropane	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0046 U	0.0062 U
1,3,5-Trimethylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
1,3-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
1,3-Dichloropropane	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
1,4-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
1,4-Difluorobenzene	mg/kg	0.05	NA	0.05	NA	0.06	0.06	NA	NA	NA
2,2-Dichloropropane	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
2-Butanone (MEK)	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.023 U	0.031 U
2-Chlorotoluene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
2-Hexanone	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.092 U	0.12 U
4-Chlorotoluene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
4-Methyl-2-pentanone (MIBK)	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.023 U	0.031 U
Acetone	mg/kg	0.05 U	NA	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.092 U	0.12 U
Acrolein	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.092 U	0.12 U
Acrylonitrile	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.092 U	0.12 U
Benzene	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.008	0.2	0.005 U	0.0046 U	0.0062 U
Bromobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
Bromochloromethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
Bromodichloromethane	mg/kg	0.002 U	NA	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.0046 U	0.0062 U
Bromoform	mg/kg	0.002 U	NA	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.0046 U	0.0062 U
Bromomethane	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0046 U	0.0062 U
Carbon disulfide	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0092 U	0.012 U
Carbon tetrachloride	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0046 U	0.0062 U

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

	Location ID	B-1	B-1	B-1	B-1	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01
	Field Sample ID:	B-1 (0-3)	B-1 (3-6)	B-1 (6-9)	B-1 (9-12)	B-2 (3-6)	B-2 (6-9)	B-2 (9-12)	KP-SB01(18-20)	KP-SB01(18-20) D
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	5/29/2012
Chemical Name	Depth Interval (ft bgs)	0- 3	3- 6	6- 9	9- 12	3- 6	6- 9	9- 12	18- 20	18- 20
Chlorobenzene	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0046 U	0.0062 U
Chloroethane	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0046 U	0.0062 U
Chloroform	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	6.13	0.0061	0.0034 J
Chloromethane	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0046 U	0.0062 U
cis-1,2-Dichloroethene	mg/kg	0.01	NA	0.05	0.005 U	0.2	368	1.16	0.077	0.045
cis-1,3-Dichloropropene	mg/kg	0.002 U	NA	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.0046 U	0.0062 U
Dibromochloromethane	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0046 U	0.0062 U
Dibromomethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
Dichlorodifluoromethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
Ethyl methacrylate	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.092 U	0.12 U
Ethylbenzene	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	3	0.01	0.0046 U	0.0062 U
Hexachloro-1,3-butadiene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
Iodomethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.092 U	0.12 U
Isopropylbenzene (Cumene)	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
Methylene Chloride	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.018 U	0.025 U
Methyl-tert-butyl ether	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0046 U	0.0062 U
Naphthalene, VOC	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
n-Butylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0036 J	0.0062 U
n-Hexane	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.019	0.0062 U
n-Propylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0039 J	0.0062 U
Pentafluorobenzene	mg/kg	0.05	NA	0.05	NA	0.06	0.06	NA	NA	NA
p-Isopropyltoluene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
sec-Butylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
Styrene	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0046 U	0.0062 U
tert-Butylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
Tetrachloroethene	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.05	1	0.04	0.0046 U	0.0062 U
Toluene	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.008	10	0.28	0.0029 J	0.0062 U
trans-1,2-Dichloroethene	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.005 U	8	0.06	0.0034 J	0.0062 U
trans-1,3-Dichloropropene	mg/kg	0.002 U	NA	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.0046 U	0.0062 U
trans-1,4-Dichloro-2-butene	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.092 U	0.12 U
Trichloroethene	mg/kg	0.03	NA	0.09	0.005 U	0.3	599	408	8.2	9.6
Trichlorofluoromethane	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.0046 U	0.0062 U
Vinyl acetate	mg/kg	NA	NA	NA	NA	NA	NA	NA	0.092 U	0.12 U
Vinyl chloride	mg/kg	0.002 U	NA	0.002 U	0.002 U	0.002 U	11	0.16	0.016	0.012
Xylene (Total)	mg/kg	0.005 U	NA	0.005 U	0.005 U	0.006	4	0.05	0.0092 U	0.012 U

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-1	B-1	B-1	B-1	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01
	Field Sample ID:	B-1 (0-3)	B-1 (3-6)	B-1 (6-9)	B-1 (9-12)	B-2 (3-6)	B-2 (6-9)	B-2 (9-12)	KP-SB01(18-20)	KP-SB01(18-20) D
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	0- 3	3- 6	6- 9	9- 12	3- 6	6- 9	9- 12	18- 20	18- 20
SVOCs										
1,2,4-Trichlorobenzene	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
1,2-Dichlorobenzene	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
1,3-Dichlorobenzene	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
1,4-Dichlorobenzene	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
2,4,5-Trichlorophenol	mg/kg	NA	NA	NA	NA	0.22 U	0.22 U	NA	NA	NA
2,4,6-Trichlorophenol	mg/kg	NA	NA	NA	NA	0.06 U	0.06 U	NA	NA	NA
2,4-Dichlorophenol	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
2,4-Dimethylphenol	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
2,4-Dinitrophenol	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
2,4-Dinitrotoluene	mg/kg	NA	NA	NA	NA	0.21 U	0.21 U	NA	NA	NA
2,6-Dinitrotoluene	mg/kg	NA	NA	NA	NA	0.1 U	0.1 U	NA	NA	NA
2-Chloronaphthalene	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
2-Chlorophenol	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
2-Methylnaphthalene	mg/kg	NA	NA	NA	NA	0.12 U	0.12 U	NA	NA	NA
2-Methylphenol(o-Cresol)	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
2-Nitroaniline	mg/kg	NA	NA	NA	NA	3.3 U	3.3 U	NA	NA	NA
2-Nitrophenol	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
3&4-Methylphenol(m&p Cresol)	mg/kg	NA	NA	NA	NA	0.83 U	0.83 U	NA	NA	NA
3,3'-Dichlorobenzidine	mg/kg	NA	NA	NA	NA	0.11 U	0.11 U	NA	NA	NA
3-Nitroaniline	mg/kg	NA	NA	NA	NA	3.3 U	3.3 U	NA	NA	NA
4,6-Dinitro-2-methylphenol	mg/kg	NA	NA	NA	NA	2 U	2 U	NA	NA	NA
4-Bromophenylphenyl ether	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
4-Chloro-3-methylphenol	mg/kg	NA	NA	NA	NA	1.3 U	1.3 U	NA	NA	NA
4-Chloroaniline	mg/kg	NA	NA	NA	NA	0.33 U	0.33 U	NA	NA	NA
4-Chlorophenylphenyl ether	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
4-Nitroaniline	mg/kg	NA	NA	NA	NA	3.3 U	3.3 U	NA	NA	NA
4-Nitrophenol	mg/kg	NA	NA	NA	NA	3.3 U	3.3 U	NA	NA	NA
Acenaphthene	mg/kg	0.05 U	0.05 U	NA	NA	0.15 U	0.15 U	NA	NA	NA
Acenaphthylene	mg/kg	0.05 U	0.05 U	NA	NA	0.07 U	0.07 U	NA	NA	NA
Anthracene	mg/kg	0.12	0.08 U	NA	NA	0.3 U	0.3 U	NA	NA	NA
Benzo(a)anthracene	mg/kg	2.42	0.008 U	NA	NA	0.07 U	0.07 U	NA	NA	NA
Benzo(a)pyrene	mg/kg	4.58	0.02 U	NA	NA	0.07 U	0.07 U	NA	NA	NA
Benzo(b)fluoranthene	mg/kg	6.29	0.05	NA	NA	0.06 U	0.06 U	NA	NA	NA
Benzo(g,h,i)perylene	mg/kg	3.76	0.15	NA	NA	0.12 U	0.12 U	NA	NA	NA
Benzo(k)fluoranthene	mg/kg	2.09	0.02	NA	NA	0.12 U	0.12 U	NA	NA	NA
Benzyl alcohol	mg/kg	NA	NA	NA	NA	1.3 U	1.3 U	NA	NA	NA
bis(2chloro1methylethyl) ether	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-1	B-1	B-1	B-1	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01	B-2/KP-SB01
	Field Sample ID:	B-1 (0-3)	B-1 (3-6)	B-1 (6-9)	B-1 (9-12)	B-2 (3-6)	B-2 (6-9)	B-2 (9-12)	KP-SB01(18-20)	KP-SB01(18-20) D
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	0- 3	3- 6	6- 9	9- 12	3- 6	6- 9	9- 12	18- 20	18- 20
bis(2-Chloroethoxy)methane	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
bis(2-Chloroethyl) ether	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
Bis(2-chloroisopropyl)ether	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
bis(2-Ethylhexyl)phthalate	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
Butylbenzylphthalate	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
Carbazole	mg/kg	NA	NA	NA	NA	0.13 U	0.13 U	NA	NA	NA
Chrysene	mg/kg	2.58	0.05 U	NA	NA	0.09 U	0.09 U	NA	NA	NA
Dibenz(a,h)anthracene	mg/kg	0.25	0.02 U	NA	NA	0.11 U	0.11 U	NA	NA	NA
Dibenzofuran	mg/kg	NA	NA	NA	NA	0.22 U	0.22 U	NA	NA	NA
Diethylphthalate	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
Dimethylphthalate	mg/kg	NA	NA	NA	NA	3.3 U	3.3 U	NA	NA	NA
Di-n-butylphthalate	mg/kg	NA	NA	NA	NA	0.5 U	0.5 U	NA	NA	NA
Di-n-octylphthalate	mg/kg	NA	NA	NA	NA	0.86 U	0.86 U	NA	NA	NA
Fluoranthene	mg/kg	2.16	0.05 U	NA	NA	0.18	0.09 U	NA	NA	NA
Fluorene	mg/kg	0.03 U	0.03 U	NA	NA	0.14 U	0.14 U	NA	NA	NA
Hexachloro-1,3-butadiene	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
Hexachlorobenzene	mg/kg	NA	NA	NA	NA	0.07 U	0.07 U	NA	NA	NA
Hexachlorocyclopentadiene	mg/kg	NA	NA	NA	NA	0.17 U	0.17 U	NA	NA	NA
Hexachloroethane	mg/kg	NA	NA	NA	NA	0.13 U	0.13 U	NA	NA	NA
Indeno(1,2,3-cd)pyrene	mg/kg	3.45	0.11	NA	NA	0.13 U	0.13 U	NA	NA	NA
Isophorone	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
Naphthalene	mg/kg	0.05 U	0.05 U	NA	NA	0.09 U	0.09 U	NA	NA	NA
Nitrobenzene	mg/kg	NA	NA	NA	NA	0.24 U	0.24 U	NA	NA	NA
N-Nitroso-di-n-propylamine	mg/kg	NA	NA	NA	NA	0.02 U	0.02 U	NA	NA	NA
N-Nitrosodiphenylamine	mg/kg	NA	NA	NA	NA	0.67 U	0.67 U	NA	NA	NA
Pentachlorophenol	mg/kg	NA	NA	NA	NA	0.03 U	0.03 U	NA	NA	NA
Phenanthrene	mg/kg	0.45	0.03 U	NA	NA	0.12 U	0.12 U	NA	NA	NA
Phenol	mg/kg	NA	NA	NA	NA	0.66 U	0.66 U	NA	NA	NA
Pyrene	mg/kg	1.94	0.05 U	NA	NA	0.23	0.07 U	NA	NA	NA
Petroleum Hydrocarbons										
TPH (C06-C10)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
TPH-DRO (C10-C28)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
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Chemical Name	Location ID	B-2/KP-SB01	B-3/KP-SB09	B-3/KP-SB09	B-3/KP-SB09	B-3/KP-SB09	B-4	B-4	B-4	B-4
	Field Sample ID:	KP-SB01(6-9)	B-3 (3-6)	B-3 (6-9)	KP-SB09(0-3)	KP-SB09(3-6)	B-4 (0-3)	B-4 (3-6)	B-4 (6-9)	B-4 (9-12)
	Sample Date	5/29/2012	8/4/2010	8/4/2010	5/29/2012	5/29/2012	8/4/2010	8/4/2010	8/4/2010	8/4/2010
	Depth Interval (ft bgs)	6- 9	3- 6	6- 9	0- 3	3- 6	0- 3	3- 6	6- 9	9- 12
pH	SU	NA	8.6	8.2	NA	NA	10.8	7.5	NA	NA
Fractional Organic Carbon	%	NA	NA	NA	3	1.3	NA	NA	NA	NA
Organic Carbon Content	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Inorganics										
Aluminum	mg/kg	NA	NA	NA	NA	NA	NA	5,400	NA	NA
Antimony	mg/kg	NA	NA	NA	NA	NA	NA	59	2.3 U	NA
Arsenic	mg/kg	NA	4.8	9.5	NA	NA	15	18	2.9	NA
Barium	mg/kg	NA	84	82	NA	NA	62	220	NA	NA
Beryllium	mg/kg	NA	NA	NA	NA	NA	NA	0.91	NA	NA
Cadmium	mg/kg	NA	0.59 U	0.57 U	NA	NA	0.55 U	1.1	NA	NA
Calcium	mg/kg	NA	NA	NA	NA	NA	NA	16,000	NA	NA
Chromium	mg/kg	NA	23	25	NA	NA	24	20	NA	NA
Cobalt	mg/kg	NA	NA	NA	NA	NA	NA	6.4	NA	NA
Copper	mg/kg	NA	NA	NA	NA	NA	NA	2,200	NA	NA
Cyanide	mg/kg	NA	NA	NA	NA	NA	NA	0.28 U	NA	NA
Iron	mg/kg	NA	NA	NA	NA	NA	NA	86,000	19,000	NA
Lead	mg/kg	NA	14	18	NA	NA	200	1,100	14	NA
Magnesium	mg/kg	NA	NA	NA	NA	NA	NA	4,600	NA	NA
Manganese	mg/kg	NA	NA	NA	NA	NA	NA	630	NA	NA
Mercury	mg/kg	NA	0.028 U	0.03 U	NA	NA	0.17	0.38	0.03	NA
Nickel	mg/kg	NA	NA	NA	NA	NA	NA	16	NA	NA
Potassium	mg/kg	NA	NA	NA	NA	NA	NA	690	NA	NA
Selenium	mg/kg	NA	1.2 U	1.1 U	NA	NA	1.1 U	2.2	NA	NA
Silver	mg/kg	NA	1.2 U	1.1 U	NA	NA	1.1 U	1.2	NA	NA
Sodium	mg/kg	NA	NA	NA	NA	NA	NA	460	NA	NA
Thallium	mg/kg	NA	NA	NA	NA	NA	NA	1.1 U	NA	NA
Vanadium	mg/kg	NA	NA	NA	NA	NA	NA	26	NA	NA
Zinc	mg/kg	NA	NA	NA	NA	NA	NA	450	NA	NA
TCLP Metals										
Arsenic, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
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Chemical Name	Location ID	B-2/KP-SB01	B-3/KP-SB09	B-3/KP-SB09	B-3/KP-SB09	B-3/KP-SB09	B-4	B-4	B-4	B-4
	Field Sample ID:	KP-SB01(6-9)	B-3 (3-6)	B-3 (6-9)	KP-SB09(0-3)	KP-SB09(3-6)	B-4 (0-3)	B-4 (3-6)	B-4 (6-9)	B-4 (9-12)
	Sample Date	5/29/2012	8/4/2010	8/4/2010	5/29/2012	5/29/2012	8/4/2010	8/4/2010	8/4/2010	8/4/2010
	Depth Interval (ft bgs)	6- 9	3- 6	6- 9	0- 3	3- 6	0- 3	3- 6	6- 9	9- 12
Pesticides										
4,4'-DDD	mg/kg	NA	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA
4,4'-DDE	mg/kg	NA	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA
4,4'-DDT	mg/kg	NA	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA
Aldrin	mg/kg	NA	0.008 U	NA	NA	NA	0.008 U	NA	NA	NA
alpha-BHC	mg/kg	NA	0.008 U	NA	NA	NA	0.008 U	NA	NA	NA
beta-BHC	mg/kg	NA	0.008 U	NA	NA	NA	0.008 U	NA	NA	NA
Chlordane (Technical)	mg/kg	NA	0.08 U	NA	NA	NA	0.08 U	NA	NA	NA
delta-BHC	mg/kg	NA	0.008 U	NA	NA	NA	0.008 U	NA	NA	NA
Dieldrin	mg/kg	NA	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA
Endosulfan I	mg/kg	NA	0.008 U	NA	NA	NA	0.008 U	NA	NA	NA
Endosulfan II	mg/kg	NA	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA
Endosulfan sulfate	mg/kg	NA	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA
Endrin	mg/kg	NA	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA
Endrin aldehyde	mg/kg	NA	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA
Endrin ketone	mg/kg	NA	0.02 U	NA	NA	NA	0.02 U	NA	NA	NA
gamma-BHC (Lindane)	mg/kg	NA	0.008 U	NA	NA	NA	0.008 U	NA	NA	NA
Heptachlor	mg/kg	NA	0.008 U	NA	NA	NA	0.008 U	NA	NA	NA
Heptachlor epoxide	mg/kg	NA	0.008 U	NA	NA	NA	0.008 U	NA	NA	NA
Methoxychlor	mg/kg	NA	0.08 U	NA	NA	NA	0.08 U	NA	NA	NA
Toxaphene	mg/kg	NA	0.16 U	NA	NA	NA	0.16 U	NA	NA	NA
PCBS										
PCB-1016 (Aroclor 1016)	mg/kg	NA	0.08 U	NA	NA	NA	0.08 U	NA	NA	NA
PCB-1221 (Aroclor 1221)	mg/kg	NA	0.08 U	NA	NA	NA	0.08 U	NA	NA	NA
PCB-1232 (Aroclor 1232)	mg/kg	NA	0.08 U	NA	NA	NA	0.08 U	NA	NA	NA
PCB-1242 (Aroclor 1242)	mg/kg	NA	0.08 U	NA	NA	NA	0.08 U	NA	NA	NA
PCB-1248 (Aroclor 1248)	mg/kg	NA	0.08 U	NA	NA	NA	0.08 U	NA	NA	NA
PCB-1254 (Aroclor 1254)	mg/kg	NA	0.16 U	NA	NA	NA	0.16 U	NA	NA	NA
PCB-1260 (Aroclor 1260)	mg/kg	NA	0.16 U	NA	NA	NA	0.16 U	NA	NA	NA
Herbicides										
2,4,5-T	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-TP (Silvex)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-D	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dalapon	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dinoseb	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Picloram	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
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	Location ID	B-2/KP-SB01	B-3/KP-SB09	B-3/KP-SB09	B-3/KP-SB09	B-3/KP-SB09	B-4	B-4	B-4	B-4
	Field Sample ID:	KP-SB01(6-9)	B-3 (3-6)	B-3 (6-9)	KP-SB09(0-3)	KP-SB09(3-6)	B-4 (0-3)	B-4 (3-6)	B-4 (6-9)	B-4 (9-12)
	Sample Date	5/29/2012	8/4/2010	8/4/2010	5/29/2012	5/29/2012	8/4/2010	8/4/2010	8/4/2010	8/4/2010
Chemical Name	Depth Interval (ft bgs)	6- 9	3- 6	6- 9	0- 3	3- 6	0- 3	3- 6	6- 9	9- 12
VOCs										
1,1,1,2-Tetrachloroethane	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.005 U
1,1,2,2-Tetrachloroethane	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.005 U
1,1,2-Trichloroethane	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.005 U
1,1-Dichloroethane	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.005 U
1,1-Dichloroethene	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	2	0.005 U
1,1-Dichloropropene	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	mg/kg	NA	NA	NA	0.019	NA	NA	NA	NA	NA
1,2-Dibromoethane (EDB)	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
1,2-Dichloroethane	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.005 U
1,2-Dichloropropane	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.005 U
1,3,5-Trimethylbenzene	mg/kg	NA	NA	NA	0.0053	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
1,3-Dichloropropane	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
1,4-Difluorobenzene	mg/kg	NA	0.05	0.07	NA	NA	NA	NA	0.05	0.05
2,2-Dichloropropane	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
2-Butanone (MEK)	mg/kg	NA	0.005 U	0.005 U	0.022 U	NA	NA	NA	0.005 U	0.005 U
2-Chlorotoluene	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
2-Hexanone	mg/kg	NA	0.005 U	0.005 U	0.088 U	NA	NA	NA	0.005 U	0.005 U
4-Chlorotoluene	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
4-Methyl-2-pentanone (MIBK)	mg/kg	NA	0.005 U	0.005 U	0.022 U	NA	NA	NA	0.005 U	0.005 U
Acetone	mg/kg	NA	0.05 U	0.05 U	0.088 U	NA	NA	NA	0.05 U	0.05 U
Acrolein	mg/kg	NA	NA	NA	0.088 U	NA	NA	NA	NA	NA
Acrylonitrile	mg/kg	NA	NA	NA	0.088 U	NA	NA	NA	NA	NA
Benzene	mg/kg	NA	0.005 U	0.005 U	0.0018 J	NA	NA	NA	0.005 U	0.005 U
Bromobenzene	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
Bromochloromethane	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
Bromodichloromethane	mg/kg	NA	0.002 U	0.002 U	0.0044 U	NA	NA	NA	0.002 U	0.002 U
Bromoform	mg/kg	NA	0.002 U	0.002 U	0.0044 U	NA	NA	NA	0.002 U	0.002 U
Bromomethane	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.005 U
Carbon disulfide	mg/kg	NA	0.005 U	0.005 U	0.0088 U	NA	NA	NA	0.005 U	0.005 U
Carbon tetrachloride	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.005 U

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Chemical Name	Location ID	B-2/KP-SB01	B-3/KP-SB09	B-3/KP-SB09	B-3/KP-SB09	B-3/KP-SB09	B-4	B-4	B-4	B-4
	Field Sample ID:	KP-SB01(6-9)	B-3 (3-6)	B-3 (6-9)	KP-SB09(0-3)	KP-SB09(3-6)	B-4 (0-3)	B-4 (3-6)	B-4 (6-9)	B-4 (9-12)
	Sample Date	5/29/2012	8/4/2010	8/4/2010	5/29/2012	5/29/2012	8/4/2010	8/4/2010	8/4/2010	8/4/2010
	Depth Interval (ft bgs)	6- 9	3- 6	6- 9	0- 3	3- 6	0- 3	3- 6	6- 9	9- 12
Chlorobenzene	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.005 U
Chloroethane	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.3
Chloroform	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.005 U
Chloromethane	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/kg	NA	0.005 U	1	0.0044 U	NA	NA	NA	872	20
cis-1,3-Dichloropropene	mg/kg	NA	0.002 U	0.002 U	0.0044 U	NA	NA	NA	0.002 U	0.002 U
Dibromochloromethane	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.005 U
Dibromomethane	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
Dichlorodifluoromethane	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
Ethyl methacrylate	mg/kg	NA	NA	NA	0.088 U	NA	NA	NA	NA	NA
Ethylbenzene	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.005 U
Hexachloro-1,3-butadiene	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
Iodomethane	mg/kg	NA	NA	NA	0.088 U	NA	NA	NA	NA	NA
Isopropylbenzene (Cumene)	mg/kg	NA	NA	NA	0.005	NA	NA	NA	NA	NA
Methylene Chloride	mg/kg	NA	0.005 U	0.005 U	0.018 U	NA	NA	NA	0.005 U	0.005 U
Methyl-tert-butyl ether	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.005 U
Naphthalene, VOC	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
n-Butylbenzene	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
n-Hexane	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
n-Propylbenzene	mg/kg	NA	NA	NA	0.0045	NA	NA	NA	NA	NA
Pentafluorobenzene	mg/kg	NA	0.05	0.07	NA	NA	NA	NA	0.05	0.05
p-Isopropyltoluene	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
sec-Butylbenzene	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
Styrene	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.005 U
tert-Butylbenzene	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
Tetrachloroethene	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	5	0.005 U
Toluene	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	0.005 U	0.005 U
trans-1,2-Dichloroethene	mg/kg	NA	0.005 U	0.005 U	0.0044 U	NA	NA	NA	15	0.005 U
trans-1,3-Dichloropropene	mg/kg	NA	0.002 U	0.002 U	0.0044 U	NA	NA	NA	0.002 U	0.002 U
trans-1,4-Dichloro-2-butene	mg/kg	NA	NA	NA	0.088 U	NA	NA	NA	NA	NA
Trichloroethene	mg/kg	NA	0.01	2	0.0044 U	NA	NA	NA	0.005 U	0.005 U
Trichlorofluoromethane	mg/kg	NA	NA	NA	0.0044 U	NA	NA	NA	NA	NA
Vinyl acetate	mg/kg	NA	NA	NA	0.088 U	NA	NA	NA	NA	NA
Vinyl chloride	mg/kg	NA	0.002 U	0.002 U	0.0044 U	NA	NA	NA	10	0.2
Xylene (Total)	mg/kg	NA	0.005 U	0.005 U	0.049	NA	NA	NA	0.005 U	0.005 U

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-2/KP-SB01	B-3/KP-SB09	B-3/KP-SB09	B-3/KP-SB09	B-3/KP-SB09	B-4	B-4	B-4	B-4
	Field Sample ID:	KP-SB01(6-9)	B-3 (3-6)	B-3 (6-9)	KP-SB09(0-3)	KP-SB09(3-6)	B-4 (0-3)	B-4 (3-6)	B-4 (6-9)	B-4 (9-12)
	Sample Date	5/29/2012	8/4/2010	8/4/2010	5/29/2012	5/29/2012	8/4/2010	8/4/2010	8/4/2010	8/4/2010
	Depth Interval (ft bgs)	6- 9	3- 6	6- 9	0- 3	3- 6	0- 3	3- 6	6- 9	9- 12
SVOCs										
1,2,4-Trichlorobenzene	mg/kg	NA	NA	NA	NA	NA	0.66 U	NA	NA	0.66 U
1,2-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	0.66 U	NA	NA	0.66 U
1,3-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	0.66 U	NA	NA	0.66 U
1,4-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	0.66 U	NA	NA	0.66 U
2,4,5-Trichlorophenol	mg/kg	NA	NA	NA	0.41 U	NA	0.22 U	NA	NA	0.22 U
2,4,6-Trichlorophenol	mg/kg	NA	NA	NA	0.41 U	NA	0.06 U	NA	NA	0.06 U
2,4-Dichlorophenol	mg/kg	NA	NA	NA	0.41 U	NA	0.66 U	NA	NA	0.66 U
2,4-Dimethylphenol	mg/kg	NA	NA	NA	0.41 U	NA	0.66 U	NA	NA	0.66 U
2,4-Dinitrophenol	mg/kg	NA	NA	NA	2 U	NA	0.66 U	NA	NA	0.66 U
2,4-Dinitrotoluene	mg/kg	NA	NA	NA	0.41 U	NA	0.21 U	NA	NA	0.21 U
2,6-Dinitrotoluene	mg/kg	NA	NA	NA	0.41 U	NA	0.1 U	NA	NA	0.1 U
2-Chloronaphthalene	mg/kg	NA	NA	NA	0.41 U	NA	0.66 U	NA	NA	0.66 U
2-Chlorophenol	mg/kg	NA	NA	NA	0.41 U	NA	0.66 U	NA	NA	0.66 U
2-Methylnaphthalene	mg/kg	NA	NA	NA	0.41 U	NA	0.12 U	NA	NA	0.12 U
2-Methylphenol(o-Cresol)	mg/kg	NA	NA	NA	0.41 U	NA	0.66 U	NA	NA	0.66 U
2-Nitroaniline	mg/kg	NA	NA	NA	2 U	NA	3.3 U	NA	NA	3.3 U
2-Nitrophenol	mg/kg	NA	NA	NA	0.41 U	NA	0.66 U	NA	NA	0.66 U
3&4-Methylphenol(m&p Cresol)	mg/kg	NA	NA	NA	0.82 U	NA	0.83 U	NA	NA	0.83 U
3,3'-Dichlorobenzidine	mg/kg	NA	NA	NA	0.82 U	NA	0.11 U	NA	NA	0.11 U
3-Nitroaniline	mg/kg	NA	NA	NA	2 U	NA	3.3 U	NA	NA	3.3 U
4,6-Dinitro-2-methylphenol	mg/kg	NA	NA	NA	2 U	NA	2 U	NA	NA	2 U
4-Bromophenylphenyl ether	mg/kg	NA	NA	NA	0.41 U	NA	0.66 U	NA	NA	0.66 U
4-Chloro-3-methylphenol	mg/kg	NA	NA	NA	0.82 U	NA	1.3 U	NA	NA	1.3 U
4-Chloroaniline	mg/kg	NA	NA	NA	0.82 U	NA	0.33 U	NA	NA	0.33 U
4-Chlorophenylphenyl ether	mg/kg	NA	NA	NA	0.41 U	NA	0.66 U	NA	NA	0.66 U
4-Nitroaniline	mg/kg	NA	NA	NA	2 U	NA	3.3 U	NA	NA	3.3 U
4-Nitrophenol	mg/kg	NA	NA	NA	2 U	NA	3.3 U	NA	NA	3.3 U
Acenaphthene	mg/kg	NA	0.05 U	0.05 U	0.41 UJ	NA	0.15 U	0.13	NA	0.15 U
Acenaphthylene	mg/kg	NA	0.05 U	0.05 U	0.41 UJ	NA	0.07 U	0.1	NA	0.07 U
Anthracene	mg/kg	NA	0.08 U	0.08 U	0.41 U	NA	0.36	0.87	NA	0.3 U
Benzo(a)anthracene	mg/kg	NA	0.008 U	0.008 U	0.41 UJ	NA	1.28	2.83	NA	0.07 U
Benzo(a)pyrene	mg/kg	NA	0.02 U	0.02 U	0.41 U	NA	1.15	2.77	NA	0.07 U
Benzo(b)fluoranthene	mg/kg	NA	0.01 U	0.01 U	0.41 U	NA	1.57	3.48	NA	0.06 U
Benzo(g,h,i)perylene	mg/kg	NA	0.02 U	0.02 U	0.41 U	NA	0.6	1.7	NA	0.12 U
Benzo(k)fluoranthene	mg/kg	NA	0.01 U	0.01 U	0.41 U	NA	0.68	0.97	NA	0.12 U
Benzyl alcohol	mg/kg	NA	NA	NA	0.82 U	NA	1.3 U	NA	NA	1.3 U
bis(2chloro1methylethyl) ether	mg/kg	NA	NA	NA	0.41 U	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-2/KP-SB01	B-3/KP-SB09	B-3/KP-SB09	B-3/KP-SB09	B-3/KP-SB09	B-4	B-4	B-4	B-4
	Field Sample ID:	KP-SB01(6-9)	B-3 (3-6)	B-3 (6-9)	KP-SB09(0-3)	KP-SB09(3-6)	B-4 (0-3)	B-4 (3-6)	B-4 (6-9)	B-4 (9-12)
	Sample Date	5/29/2012	8/4/2010	8/4/2010	5/29/2012	5/29/2012	8/4/2010	8/4/2010	8/4/2010	8/4/2010
	Depth Interval (ft bgs)	6- 9	3- 6	6- 9	0- 3	3- 6	0- 3	3- 6	6- 9	9- 12
bis(2-Chloroethoxy)methane	mg/kg	NA	NA	NA	0.41 U	NA	0.66 U	NA	NA	0.66 U
bis(2-Chloroethyl) ether	mg/kg	NA	NA	NA	0.41 U	NA	0.66 U	NA	NA	0.66 U
Bis(2-chloroisopropyl)ether	mg/kg	NA	NA	NA	NA	NA	0.66 U	NA	NA	0.66 U
bis(2-Ethylhexyl)phthalate	mg/kg	NA	NA	NA	0.41 U	NA	0.66 U	NA	NA	0.66 U
Butylbenzylphthalate	mg/kg	NA	NA	NA	0.41 U	NA	0.66 U	NA	NA	0.66 U
Carbazole	mg/kg	NA	NA	NA	NA	NA	0.13 U	NA	NA	0.13 U
Chrysene	mg/kg	NA	0.05 U	0.05 U	0.41 UJ	NA	1.67	2.58	NA	0.09 U
Dibenz(a,h)anthracene	mg/kg	NA	0.02 U	0.02 U	0.41 U	NA	0.11 U	0.1	NA	0.11 U
Dibenzofuran	mg/kg	NA	NA	NA	0.41 U	NA	0.22 U	NA	NA	0.22 U
Diethylphthalate	mg/kg	NA	NA	NA	0.41 U	NA	0.66 U	NA	NA	0.66 U
Dimethylphthalate	mg/kg	NA	NA	NA	0.41 U	NA	3.3 U	NA	NA	3.3 U
Di-n-butylphthalate	mg/kg	NA	NA	NA	0.41 U	NA	0.5 U	NA	NA	0.5 U
Di-n-octylphthalate	mg/kg	NA	NA	NA	0.41 U	NA	0.86 U	NA	NA	0.86 U
Fluoranthene	mg/kg	NA	0.05 U	0.05 U	0.41 U	NA	2.33	4.95	NA	0.09 U
Fluorene	mg/kg	NA	0.03 U	0.03 U	0.41 UJ	NA	0.14 U	0.18	NA	0.14 U
Hexachloro-1,3-butadiene	mg/kg	NA	NA	NA	0.41 U	NA	0.66 U	NA	NA	0.66 U
Hexachlorobenzene	mg/kg	NA	NA	NA	0.41 U	NA	0.07 U	NA	NA	0.07 U
Hexachlorocyclopentadiene	mg/kg	NA	NA	NA	0.41 U	NA	0.17 U	NA	NA	0.17 U
Hexachloroethane	mg/kg	NA	NA	NA	0.41 U	NA	0.13 U	NA	NA	0.13 U
Indeno(1,2,3-cd)pyrene	mg/kg	NA	0.02 U	0.02 U	0.41 U	NA	0.48	1.43	NA	0.13 U
Isophorone	mg/kg	NA	NA	NA	0.41 U	NA	0.66 U	NA	NA	0.66 U
Naphthalene	mg/kg	NA	0.05 U	0.05 U	0.41 U	NA	0.09 U	0.25	NA	0.09 U
Nitrobenzene	mg/kg	NA	NA	NA	0.41 U	NA	0.24 U	NA	NA	0.24 U
N-Nitroso-di-n-propylamine	mg/kg	NA	NA	NA	0.41 U	NA	0.02 U	NA	NA	0.02 U
N-Nitrosodiphenylamine	mg/kg	NA	NA	NA	0.41 U	NA	0.67 U	NA	NA	0.67 U
Pentachlorophenol	mg/kg	NA	NA	NA	2 U	NA	0.03 U	NA	NA	0.03 U
Phenanthrene	mg/kg	NA	0.03 U	0.03 U	0.41 U	NA	1.66	3.04	NA	0.12 U
Phenol	mg/kg	NA	NA	NA	0.41 U	NA	0.66 U	NA	NA	0.66 U
Pyrene	mg/kg	NA	0.05 U	0.05 U	0.22 J	NA	2.45	4.7	NA	0.07 U
Petroleum Hydrocarbons										
TPH (C06-C10)	mg/kg	20.3	NA	NA	NA	NA	NA	NA	NA	NA
TPH-DRO (C10-C28)	mg/kg	29	NA	NA	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-6	B-6	B-6
	Field Sample ID:	B-5 (0-3)	B-5 (3-6)	B-5 (6-9)	B-5 (9-12)	KP-SB02(18-20)	KP-SB02(9-12)	B-6 (0-3)	B-6 (3-6)	B-6 (6-9)
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	5/29/2012	8/4/2010	8/4/2010	8/4/2010
	Depth Interval (ft bgs)	0- 3	3- 6	6- 9	9- 12	18- 20	9- 12	0- 3	3- 6	6- 9
pH	SU	11.8	7.8	NA	NA	NA	NA	8.3	8	8.4
Fractional Organic Carbon	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Organic Carbon Content	%	2.8	NA	NA	NA	NA	NA	NA	NA	NA
Total Inorganics										
Aluminum	mg/kg	2,800	4,500	NA	NA	NA	NA	NA	NA	NA
Antimony	mg/kg	17	26	2.3 U	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	5.4	17	4.6	NA	NA	NA	14	29	5
Barium	mg/kg	51	180	NA	NA	NA	NA	130	230	NA
Beryllium	mg/kg	0.5 U	1.1	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	0.5 U	1.8	NA	NA	NA	NA	1.6	3.6	NA
Calcium	mg/kg	69,000	27,000	NA	NA	NA	NA	NA	NA	NA
Chromium	mg/kg	9.4	18	NA	NA	NA	NA	22	46	24
Cobalt	mg/kg	3	5.8	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	490	580	NA	NA	NA	NA	NA	NA	NA
Cyanide	mg/kg	0.26 U	0.3 U	NA	NA	NA	NA	NA	NA	NA
Iron	mg/kg	27,000	25,000	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	160	840	15	NA	NA	NA	910	2,800	18
Magnesium	mg/kg	24,000	5,900	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/kg	410	260	NA	NA	NA	NA	NA	NA	NA
Mercury	mg/kg	0.068	0.42	0.031	NA	NA	NA	0.82	3	0.03
Nickel	mg/kg	11	17	NA	NA	NA	NA	NA	NA	NA
Potassium	mg/kg	390	1,200	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	1 U	7.2	1.2 U	NA	NA	NA	1.1 U	1.3	NA
Silver	mg/kg	1 U	1 U	NA	NA	NA	NA	1.1 U	2.5	NA
Sodium	mg/kg	120	430	NA	NA	NA	NA	NA	NA	NA
Thallium	mg/kg	1 U	1 U	NA	NA	NA	NA	NA	NA	NA
Vanadium	mg/kg	12	23	NA	NA	NA	NA	NA	NA	NA
Zinc	mg/kg	99	320	NA	NA	NA	NA	NA	NA	NA
TCLP Metals										
Arsenic, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA
Barium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	0.88	NA
Cadmium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	0.008	NA
Chromium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA
Lead, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	0.43	NA
Mercury, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	0.0002 U	NA
Selenium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA
Silver, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA	0.01 U	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-6	B-6	B-6
	Field Sample ID:	B-5 (0-3)	B-5 (3-6)	B-5 (6-9)	B-5 (9-12)	KP-SB02(18-20)	KP-SB02(9-12)	B-6 (0-3)	B-6 (3-6)	B-6 (6-9)
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	5/29/2012	8/4/2010	8/4/2010	8/4/2010
	Depth Interval (ft bgs)	0- 3	3- 6	6- 9	9- 12	18- 20	9- 12	0- 3	3- 6	6- 9
Pesticides										
4,4'-DDD	mg/kg	NA	0.02 U	0.02 U	NA	NA	NA	0.02 U	0.02 U	NA
4,4'-DDE	mg/kg	NA	0.02 U	0.02 U	NA	NA	NA	0.02 U	0.02 U	NA
4,4'-DDT	mg/kg	NA	0.02 U	0.02 U	NA	NA	NA	0.02 U	0.02 U	NA
Aldrin	mg/kg	NA	0.008 U	0.008 U	NA	NA	NA	0.008 U	0.008 U	NA
alpha-BHC	mg/kg	NA	0.008 U	0.008 U	NA	NA	NA	0.008 U	0.008 U	NA
beta-BHC	mg/kg	NA	0.008 U	0.008 U	NA	NA	NA	0.008 U	0.008 U	NA
Chlordane (Technical)	mg/kg	NA	0.08 U	0.08 U	NA	NA	NA	0.08 U	0.08 U	NA
delta-BHC	mg/kg	NA	0.008 U	0.008 U	NA	NA	NA	0.008 U	0.008 U	NA
Dieldrin	mg/kg	NA	0.02 U	0.02 U	NA	NA	NA	0.02 U	0.02 U	NA
Endosulfan I	mg/kg	NA	0.008 U	0.008 U	NA	NA	NA	0.008 U	0.008 U	NA
Endosulfan II	mg/kg	NA	0.02 U	0.02 U	NA	NA	NA	0.02 U	0.02 U	NA
Endosulfan sulfate	mg/kg	NA	0.02 U	0.02 U	NA	NA	NA	0.02 U	0.02 U	NA
Endrin	mg/kg	NA	0.02 U	0.02 U	NA	NA	NA	0.02 U	0.02 U	NA
Endrin aldehyde	mg/kg	NA	0.02 U	0.02 U	NA	NA	NA	0.02 U	0.02 U	NA
Endrin ketone	mg/kg	NA	0.02 U	0.02 U	NA	NA	NA	0.02 U	0.02 U	NA
gamma-BHC (Lindane)	mg/kg	NA	0.008 U	0.008 U	NA	NA	NA	0.04	0.008 U	NA
Heptachlor	mg/kg	NA	0.008 U	0.008 U	NA	NA	NA	0.008 U	0.008 U	NA
Heptachlor epoxide	mg/kg	NA	0.008 U	0.008 U	NA	NA	NA	0.008 U	0.008 U	NA
Methoxychlor	mg/kg	NA	0.08 U	0.08 U	NA	NA	NA	0.08 U	0.08 U	NA
Toxaphene	mg/kg	NA	0.16 U	0.16 U	NA	NA	NA	0.16 U	0.16 U	NA
PCBS										
PCB-1016 (Aroclor 1016)	mg/kg	NA	0.08 U	0.08 U	NA	NA	NA	0.08 U	0.08 U	NA
PCB-1221 (Aroclor 1221)	mg/kg	NA	0.08 U	0.08 U	NA	NA	NA	0.08 U	0.08 U	NA
PCB-1232 (Aroclor 1232)	mg/kg	NA	0.08 U	0.08 U	NA	NA	NA	0.08 U	0.08 U	NA
PCB-1242 (Aroclor 1242)	mg/kg	NA	0.08 U	0.08 U	NA	NA	NA	0.08 U	0.08 U	NA
PCB-1248 (Aroclor 1248)	mg/kg	NA	0.08 U	0.08 U	NA	NA	NA	0.08 U	0.08 U	NA
PCB-1254 (Aroclor 1254)	mg/kg	NA	0.16 U	0.16 U	NA	NA	NA	0.16 U	0.16 U	NA
PCB-1260 (Aroclor 1260)	mg/kg	NA	0.16 U	0.16 U	NA	NA	NA	0.16 U	0.16 U	NA
Herbicides										
2,4,5-T	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-TP (Silvex)	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-D	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dalapon	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dinoseb	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Picloram	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

	Location ID	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-6	B-6	B-6
	Field Sample ID:	B-5 (0-3)	B-5 (3-6)	B-5 (6-9)	B-5 (9-12)	KP-SB02(18-20)	KP-SB02(9-12)	B-6 (0-3)	B-6 (3-6)	B-6 (6-9)
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	5/29/2012	8/4/2010	8/4/2010	8/4/2010
Chemical Name	Depth Interval (ft bgs)	0- 3	3- 6	6- 9	9- 12	18- 20	9- 12	0- 3	3- 6	6- 9
VOCs										
1,1,1,2-Tetrachloroethane	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
1,1,1-Trichloroethane	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U
1,1,2,2-Tetrachloroethane	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U
1,1,2-Trichloroethane	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U
1,1-Dichloroethane	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U
1,1-Dichloroethene	mg/kg	NA	0.005 U	0.005 U	4	0.019 J	NA	0.005 U	0.005 U	0.005 U
1,1-Dichloropropene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
1,2,3-Trichlorobenzene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
1,2,3-Trichloropropane	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
1,2,4-Trichlorobenzene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
1,2,4-Trimethylbenzene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
1,2-Dibromoethane (EDB)	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
1,2-Dichlorobenzene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
1,2-Dichloroethane	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U
1,2-Dichloropropane	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U
1,3,5-Trimethylbenzene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
1,3-Dichlorobenzene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
1,3-Dichloropropane	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
1,4-Dichlorobenzene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
1,4-Difluorobenzene	mg/kg	NA	0.07	NA	0.06	NA	NA	0.05	0.05	NA
2,2-Dichloropropane	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
2-Butanone (MEK)	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.024 U	NA	0.005 U	0.005 U	0.005 U
2-Chlorotoluene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
2-Hexanone	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.095 U	NA	0.005 U	0.005 U	0.005 U
4-Chlorotoluene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
4-Methyl-2-pentanone (MIBK)	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.024 U	NA	0.005 U	0.005 U	0.005 U
Acetone	mg/kg	NA	0.05 U	0.05 U	0.05 U	0.095 U	NA	0.05 U	0.05 U	0.05 U
Acrolein	mg/kg	NA	NA	NA	NA	0.095 U	NA	NA	NA	NA
Acrylonitrile	mg/kg	NA	NA	NA	NA	0.095 U	NA	NA	NA	NA
Benzene	mg/kg	NA	0.4	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U
Bromobenzene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
Bromochloromethane	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
Bromodichloromethane	mg/kg	NA	0.002 U	0.002 U	0.002 U	0.0047 U	NA	0.002 U	0.002 U	0.002 U
Bromoform	mg/kg	NA	0.002 U	0.002 U	0.002 U	0.0047 U	NA	0.002 U	0.002 U	0.002 U
Bromomethane	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U
Carbon disulfide	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0095 U	NA	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-6	B-6	B-6
	Field Sample ID:	B-5 (0-3)	B-5 (3-6)	B-5 (6-9)	B-5 (9-12)	KP-SB02(18-20)	KP-SB02(9-12)	B-6 (0-3)	B-6 (3-6)	B-6 (6-9)
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	5/29/2012	8/4/2010	8/4/2010	8/4/2010
	Depth Interval (ft bgs)	0- 3	3- 6	6- 9	9- 12	18- 20	9- 12	0- 3	3- 6	6- 9
Chlorobenzene	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U
Chloroethane	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U
Chloroform	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U
Chloromethane	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/kg	NA	8	942	990	56.6 J	NA	0.02	0.1	0.005 U
cis-1,3-Dichloropropene	mg/kg	NA	0.002 U	0.002 U	0.002 U	0.0047 U	NA	0.002 U	0.002 U	0.002 U
Dibromochloromethane	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U
Dibromomethane	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
Dichlorodifluoromethane	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
Ethyl methacrylate	mg/kg	NA	NA	NA	NA	0.095 U	NA	NA	NA	NA
Ethylbenzene	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U
Hexachloro-1,3-butadiene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
Iodomethane	mg/kg	NA	NA	NA	NA	0.095 U	NA	NA	NA	NA
Isopropylbenzene (Cumene)	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
Methylene Chloride	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.019 U	NA	0.005 U	0.005 U	0.005 U
Methyl-tert-butyl ether	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U
Naphthalene, VOC	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
n-Butylbenzene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
n-Hexane	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
n-Propylbenzene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
Pentafluorobenzene	mg/kg	NA	0.07	NA	0.06	NA	NA	0.05	0.05	NA
p-Isopropyltoluene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
sec-Butylbenzene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
Styrene	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0047 U	NA	0.005 U	0.005 U	0.005 U
tert-Butylbenzene	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
Tetrachloroethene	mg/kg	NA	0.5	0.005 U	14	0.017 J	NA	0.005 U	0.005 U	0.005 U
Toluene	mg/kg	NA	0.3	0.005 U	0.005 U	0.0027 J	NA	0.005 U	0.005 U	0.005 U
trans-1,2-Dichloroethene	mg/kg	NA	0.005 U	7.34	14	0.054 J	NA	0.005 U	0.005 U	0.005 U
trans-1,3-Dichloropropene	mg/kg	NA	0.002 U	0.002 U	0.002 U	0.0047 U	NA	0.002 U	0.002 U	0.002 U
trans-1,4-Dichloro-2-butene	mg/kg	NA	NA	NA	NA	0.095 U	NA	NA	NA	NA
Trichloroethene	mg/kg	NA	73	0.005 U	0.005 U	803 J	NA	0.08	1	0.02
Trichlorofluoromethane	mg/kg	NA	NA	NA	NA	0.0047 U	NA	NA	NA	NA
Vinyl acetate	mg/kg	NA	NA	NA	NA	0.095 U	NA	NA	NA	NA
Vinyl chloride	mg/kg	NA	26	44.2	0.002 U	3 J	NA	0.002 U	0.002 U	0.02
Xylene (Total)	mg/kg	NA	0.005 U	0.005 U	0.005 U	0.0095 U	NA	0.005 U	0.01	0.005 U

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-6	B-6	B-6
	Field Sample ID:	B-5 (0-3)	B-5 (3-6)	B-5 (6-9)	B-5 (9-12)	KP-SB02(18-20)	KP-SB02(9-12)	B-6 (0-3)	B-6 (3-6)	B-6 (6-9)
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	5/29/2012	8/4/2010	8/4/2010	8/4/2010
	Depth Interval (ft bgs)	0- 3	3- 6	6- 9	9- 12	18- 20	9- 12	0- 3	3- 6	6- 9
SVOCs										
1,2,4-Trichlorobenzene	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
1,2-Dichlorobenzene	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
1,3-Dichlorobenzene	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
1,4-Dichlorobenzene	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
2,4,5-Trichlorophenol	mg/kg	NA	0.22 U	0.22 U	NA	NA	NA	0.22 U	0.22 U	NA
2,4,6-Trichlorophenol	mg/kg	NA	0.06 U	0.06 U	NA	NA	NA	0.06 U	0.06 U	NA
2,4-Dichlorophenol	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
2,4-Dimethylphenol	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
2,4-Dinitrophenol	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
2,4-Dinitrotoluene	mg/kg	NA	0.21 U	0.21 U	NA	NA	NA	0.21 U	0.21 U	NA
2,6-Dinitrotoluene	mg/kg	NA	0.1 U	0.1 U	NA	NA	NA	0.1 U	0.1 U	NA
2-Chloronaphthalene	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
2-Chlorophenol	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
2-Methylnaphthalene	mg/kg	NA	0.64	0.12 U	NA	NA	NA	0.19	0.12 U	NA
2-Methylphenol(o-Cresol)	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
2-Nitroaniline	mg/kg	NA	3.3 U	3.3 U	NA	NA	NA	3.3 U	3.3 U	NA
2-Nitrophenol	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
3&4-Methylphenol(m&p Cresol)	mg/kg	NA	0.83 U	0.83 U	NA	NA	NA	0.83 U	0.83 U	NA
3,3'-Dichlorobenzidine	mg/kg	NA	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA
3-Nitroaniline	mg/kg	NA	3.3 U	3.3 U	NA	NA	NA	3.3 U	3.3 U	NA
4,6-Dinitro-2-methylphenol	mg/kg	NA	2 U	2 U	NA	NA	NA	2 U	2 U	NA
4-Bromophenylphenyl ether	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
4-Chloro-3-methylphenol	mg/kg	NA	1.3 U	1.3 U	NA	NA	NA	1.3 U	1.3 U	NA
4-Chloroaniline	mg/kg	NA	0.33 U	0.33 U	NA	NA	NA	0.33 U	0.33 U	NA
4-Chlorophenylphenyl ether	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
4-Nitroaniline	mg/kg	NA	3.3 U	3.3 U	NA	NA	NA	3.3 U	3.3 U	NA
4-Nitrophenol	mg/kg	NA	3.3 U	3.3 U	NA	NA	NA	3.3 U	3.3 U	NA
Acenaphthene	mg/kg	0.05 U	0.15 U	0.15 U	NA	NA	NA	0.15 U	0.15 U	NA
Acenaphthylene	mg/kg	0.05 U	0.07 U	0.07 U	NA	NA	NA	0.07 U	0.07 U	NA
Anthracene	mg/kg	0.08 U	0.39	0.3 U	NA	NA	NA	0.73	0.3 U	NA
Benzo(a)anthracene	mg/kg	0.12	1.07	0.07 U	NA	NA	NA	2.42	0.21	NA
Benzo(a)pyrene	mg/kg	0.11	1.1	0.07 U	NA	NA	NA	2.21	0.29	NA
Benzo(b)fluoranthene	mg/kg	0.15	1.2	0.06 U	NA	NA	NA	2.67	0.36	NA
Benzo(g,h,i)perylene	mg/kg	0.17	0.69	0.12 U	NA	NA	NA	0.99	0.25	NA
Benzo(k)fluoranthene	mg/kg	0.07	0.4	0.12 U	NA	NA	NA	0.81	0.16	NA
Benzyl alcohol	mg/kg	NA	1.3 U	1.3 U	NA	NA	NA	1.3 U	1.3 U	NA
bis(2chloro1methylethyl) ether	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

	Location ID	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-5/KP-SB02	B-6	B-6	B-6
	Field Sample ID:	B-5 (0-3)	B-5 (3-6)	B-5 (6-9)	B-5 (9-12)	KP-SB02(18-20)	KP-SB02(9-12)	B-6 (0-3)	B-6 (3-6)	B-6 (6-9)
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	5/29/2012	8/4/2010	8/4/2010	8/4/2010
Chemical Name	Depth Interval (ft bgs)	0- 3	3- 6	6- 9	9- 12	18- 20	9- 12	0- 3	3- 6	6- 9
bis(2-Chloroethoxy)methane	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
bis(2-Chloroethyl) ether	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
Bis(2-chloroisopropyl)ether	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
bis(2-Ethylhexyl)phthalate	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
Butylbenzylphthalate	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
Carbazole	mg/kg	NA	0.13 U	0.13 U	NA	NA	NA	0.13 U	0.13 U	NA
Chrysene	mg/kg	0.11	0.97	0.09 U	NA	NA	NA	2.2	0.25	NA
Dibenz(a,h)anthracene	mg/kg	0.02 U	0.11 U	0.11 U	NA	NA	NA	0.11 U	0.11 U	NA
Dibenzofuran	mg/kg	NA	0.22 U	0.22 U	NA	NA	NA	0.22 U	0.22 U	NA
Diethylphthalate	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
Dimethylphthalate	mg/kg	NA	3.3 U	3.3 U	NA	NA	NA	3.3 U	3.3 U	NA
Di-n-butylphthalate	mg/kg	NA	0.5 U	0.5 U	NA	NA	NA	0.5 U	0.5 U	NA
Di-n-octylphthalate	mg/kg	NA	0.86 U	0.86 U	NA	NA	NA	0.86 U	0.86 U	NA
Fluoranthene	mg/kg	0.21	1.9	0.09 U	NA	NA	NA	4.26	0.3	NA
Fluorene	mg/kg	0.03 U	0.14 U	0.14 U	NA	NA	NA	0.14 U	0.14 U	NA
Hexachloro-1,3-butadiene	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
Hexachlorobenzene	mg/kg	NA	0.07 U	0.07 U	NA	NA	NA	0.07 U	0.07 U	NA
Hexachlorocyclopentadiene	mg/kg	NA	0.17 U	0.17 U	NA	NA	NA	0.17 U	0.17 U	NA
Hexachloroethane	mg/kg	NA	0.13 U	0.13 U	NA	NA	NA	0.13 U	0.13 U	NA
Indeno(1,2,3-cd)pyrene	mg/kg	0.12	0.46	0.13 U	NA	NA	NA	0.88	0.19	NA
Isophorone	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
Naphthalene	mg/kg	0.05 U	0.49	0.09 U	NA	NA	NA	0.25	0.09 U	NA
Nitrobenzene	mg/kg	NA	0.24 U	0.24 U	NA	NA	NA	0.24 U	0.24 U	NA
N-Nitroso-di-n-propylamine	mg/kg	NA	0.02 U	0.02 U	NA	NA	NA	0.02 U	0.02 U	NA
N-Nitrosodiphenylamine	mg/kg	NA	0.67 U	0.67 U	NA	NA	NA	0.67 U	0.67 U	NA
Pentachlorophenol	mg/kg	NA	0.03 U	0.03 U	NA	NA	NA	0.03 U	0.03 U	NA
Phenanthrene	mg/kg	0.08	1.86	0.12 U	NA	NA	NA	3.95	0.12 U	NA
Phenol	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	0.66 U	0.66 U	NA
Pyrene	mg/kg	0.19	2.57	0.07 U	NA	NA	NA	5.47	0.44	NA
Petroleum Hydrocarbons										
TPH (C06-C10)	mg/kg	NA	NA	NA	NA	NA	1,720	NA	NA	NA
TPH-DRO (C10-C28)	mg/kg	NA	NA	NA	NA	NA	43.6 J	NA	NA	NA

Table D-1
Soil Analytical Results
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Chemical Name	Location ID	B-6	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-8/KP-SB10
	Field Sample ID:	B-6 (9-12)	B-7 (0-3)	B-7 (3-6)	B-7 (6-9)	B-7 (9-12)	KP-SB03(9-12)	B-8 (0-3)
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	8/4/2010
	Depth Interval (ft bgs)	9- 12	0- 3	3- 6	6- 9	9- 12	9- 12	0- 3
pH	SU	NA	8.5	7.7	NA	NA	NA	8.8
Fractional Organic Carbon	%	NA	NA	NA	NA	NA	1.4	NA
Organic Carbon Content	%	NA	NA	NA	4.1	NA	NA	NA
Total Inorganics								
Aluminum	mg/kg	NA	NA	NA	NA	NA	NA	NA
Antimony	mg/kg	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	NA	12	5.3	NA	NA	NA	5.8
Barium	mg/kg	NA	220	76	NA	NA	NA	200
Beryllium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	NA	0.78	1.8	NA	NA	NA	0.8
Calcium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Chromium	mg/kg	NA	33	8.7	NA	NA	NA	19
Cobalt	mg/kg	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	NA	NA	NA	NA	NA	NA	NA
Cyanide	mg/kg	NA	NA	NA	NA	NA	NA	NA
Iron	mg/kg	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	NA	180	36	NA	NA	NA	140
Magnesium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/kg	NA	NA	NA	NA	NA	NA	NA
Mercury	mg/kg	NA	0.15	0.034 U	NA	NA	NA	0.063
Nickel	mg/kg	NA	NA	NA	NA	NA	NA	NA
Potassium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	NA	1.1 U	1.7	NA	NA	NA	1.1 U
Silver	mg/kg	NA	1.1 U	1.3 U	NA	NA	NA	1.1 U
Sodium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Thallium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Vanadium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Zinc	mg/kg	NA	NA	NA	NA	NA	NA	NA
TCLP Metals								
Arsenic, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA
Barium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA
Cadmium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA
Chromium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA
Lead, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA
Mercury, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA
Selenium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA
Silver, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-6	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-8/KP-SB10
	Field Sample ID:	B-6 (9-12)	B-7 (0-3)	B-7 (3-6)	B-7 (6-9)	B-7 (9-12)	KP-SB03(9-12)	B-8 (0-3)
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	8/4/2010
	Depth Interval (ft bgs)	9- 12	0- 3	3- 6	6- 9	9- 12	9- 12	0- 3
Pesticides								
4,4'-DDD	mg/kg	NA	0.02 U	NA	NA	NA	NA	NA
4,4'-DDE	mg/kg	NA	0.02 U	NA	NA	NA	NA	NA
4,4'-DDT	mg/kg	NA	0.11	NA	NA	NA	NA	NA
Aldrin	mg/kg	NA	0.008 U	NA	NA	NA	NA	NA
alpha-BHC	mg/kg	NA	0.008 U	NA	NA	NA	NA	NA
beta-BHC	mg/kg	NA	0.008 U	NA	NA	NA	NA	NA
Chlordane (Technical)	mg/kg	NA	0.08 U	NA	NA	NA	NA	NA
delta-BHC	mg/kg	NA	0.008 U	NA	NA	NA	NA	NA
Dieldrin	mg/kg	NA	0.02 U	NA	NA	NA	NA	NA
Endosulfan I	mg/kg	NA	0.008 U	NA	NA	NA	NA	NA
Endosulfan II	mg/kg	NA	0.02 U	NA	NA	NA	NA	NA
Endosulfan sulfate	mg/kg	NA	0.02 U	NA	NA	NA	NA	NA
Endrin	mg/kg	NA	0.07	NA	NA	NA	NA	NA
Endrin aldehyde	mg/kg	NA	0.02 U	NA	NA	NA	NA	NA
Endrin ketone	mg/kg	NA	0.05	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	mg/kg	NA	0.008 U	NA	NA	NA	NA	NA
Heptachlor	mg/kg	NA	0.008 U	NA	NA	NA	NA	NA
Heptachlor epoxide	mg/kg	NA	0.008 U	NA	NA	NA	NA	NA
Methoxychlor	mg/kg	NA	0.08 U	NA	NA	NA	NA	NA
Toxaphene	mg/kg	NA	0.16 U	NA	NA	NA	NA	NA
PCBS								
PCB-1016 (Aroclor 1016)	mg/kg	NA	0.08 U	NA	NA	NA	NA	NA
PCB-1221 (Aroclor 1221)	mg/kg	NA	0.08 U	NA	NA	NA	NA	NA
PCB-1232 (Aroclor 1232)	mg/kg	NA	0.08 U	NA	NA	NA	NA	NA
PCB-1242 (Aroclor 1242)	mg/kg	NA	0.08 U	NA	NA	NA	NA	NA
PCB-1248 (Aroclor 1248)	mg/kg	NA	0.08 U	NA	NA	NA	NA	NA
PCB-1254 (Aroclor 1254)	mg/kg	NA	0.16 U	NA	NA	NA	NA	NA
PCB-1260 (Aroclor 1260)	mg/kg	NA	0.16 U	NA	NA	NA	NA	NA
Herbicides								
2,4,5-T	mg/kg	NA	0.01 U	NA	NA	NA	NA	0.01 U
2,4,5-TP (Silvex)	mg/kg	NA	0.01 U	NA	NA	NA	NA	0.01 U
2,4-D	mg/kg	NA	0.01 U	NA	NA	NA	NA	0.01 U
Dalapon	mg/kg	NA	0.05 U	NA	NA	NA	NA	0.05 U
Dinoseb	mg/kg	NA	0.02 U	NA	NA	NA	NA	0.02 U
Picloram	mg/kg	NA	0.01 U	NA	NA	NA	NA	0.01 U

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-6	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-8/KP-SB10
	Field Sample ID:	B-6 (9-12)	B-7 (0-3)	B-7 (3-6)	B-7 (6-9)	B-7 (9-12)	KP-SB03(9-12)	B-8 (0-3)
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	8/4/2010
	Depth Interval (ft bgs)	9- 12	0- 3	3- 6	6- 9	9- 12	9- 12	0- 3
VOCs								
1,1,1,2-Tetrachloroethane	mg/kg	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
1,1,2,2-Tetrachloroethane	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
1,1,2-Trichloroethane	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
1,1-Dichloroethane	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
1,1-Dichloroethene	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
1,1-Dichloropropene	mg/kg	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	mg/kg	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane (EDB)	mg/kg	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
1,2-Dichloropropane	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
1,3,5-Trimethylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
1,3-Dichloropropane	mg/kg	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
1,4-Difluorobenzene	mg/kg	NA	0.06	0.08	NA	NA	NA	0.06
2,2-Dichloropropane	mg/kg	NA	NA	NA	NA	NA	NA	NA
2-Butanone (MEK)	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
2-Chlorotoluene	mg/kg	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
4-Chlorotoluene	mg/kg	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone (MIBK)	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
Acetone	mg/kg	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	NA	NA
Acrolein	mg/kg	NA	NA	NA	NA	NA	NA	NA
Acrylonitrile	mg/kg	NA	NA	NA	NA	NA	NA	NA
Benzene	mg/kg	0.005 U	0.005 U	0.007	0.008	0.005 U	NA	0.005 U
Bromobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
Bromochloromethane	mg/kg	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	mg/kg	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA	NA
Bromoform	mg/kg	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA	NA
Bromomethane	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
Carbon disulfide	mg/kg	0.005 U	0.01	0.02	0.005 U	0.005 U	NA	NA
Carbon tetrachloride	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA

Table D-1
Soil Analytical Results
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Chemical Name	Location ID	B-6	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-8/KP-SB10
	Field Sample ID:	B-6 (9-12)	B-7 (0-3)	B-7 (3-6)	B-7 (6-9)	B-7 (9-12)	KP-SB03(9-12)	B-8 (0-3)
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	8/4/2010
	Depth Interval (ft bgs)	9- 12	0- 3	3- 6	6- 9	9- 12	9- 12	0- 3
Chlorobenzene	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
Chloroethane	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
Chloroform	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
Chloromethane	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
cis-1,2-Dichloroethene	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
cis-1,3-Dichloropropene	mg/kg	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA	NA
Dibromochloromethane	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
Dibromomethane	mg/kg	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	mg/kg	NA	NA	NA	NA	NA	NA	NA
Ethyl methacrylate	mg/kg	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	0.005 U
Hexachloro-1,3-butadiene	mg/kg	NA	NA	NA	NA	NA	NA	NA
Iodomethane	mg/kg	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene (Cumene)	mg/kg	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
Methyl-tert-butyl ether	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
Naphthalene, VOC	mg/kg	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
n-Hexane	mg/kg	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
Pentafluorobenzene	mg/kg	NA	0.06	0.08	NA	NA	NA	0.06
p-Isopropyltoluene	mg/kg	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
Styrene	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
tert-Butylbenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	mg/kg	0.08	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
Toluene	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	0.005 U
trans-1,2-Dichloroethene	mg/kg	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	NA	NA
trans-1,3-Dichloropropene	mg/kg	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA	NA
trans-1,4-Dichloro-2-butene	mg/kg	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	mg/kg	0.005 U	0.03	0.04	0.009	0.005 U	NA	NA
Trichlorofluoromethane	mg/kg	NA	NA	NA	NA	NA	NA	NA
Vinyl acetate	mg/kg	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	mg/kg	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	NA	NA
Xylene (Total)	mg/kg	0.005 U	0.005 U	0.008	0.005 U	0.005 U	NA	0.005 U

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

	Location ID	B-6	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-8/KP-SB10
	Field Sample ID:	B-6 (9-12)	B-7 (0-3)	B-7 (3-6)	B-7 (6-9)	B-7 (9-12)	KP-SB03(9-12)	B-8 (0-3)
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	8/4/2010
Chemical Name	Depth Interval (ft bgs)	9- 12	0- 3	3- 6	6- 9	9- 12	9- 12	0- 3
SVOCs								
1,2,4-Trichlorobenzene	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	NA
1,2-Dichlorobenzene	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	NA
1,3-Dichlorobenzene	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	NA
1,4-Dichlorobenzene	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	NA
2,4,5-Trichlorophenol	mg/kg	NA	0.22 U	0.22 U	NA	NA	0.4 U	NA
2,4,6-Trichlorophenol	mg/kg	NA	0.06 U	0.06 U	NA	NA	0.4 U	NA
2,4-Dichlorophenol	mg/kg	NA	0.66 U	0.66 U	NA	NA	0.4 U	NA
2,4-Dimethylphenol	mg/kg	NA	0.66 U	0.66 U	NA	NA	0.4 U	NA
2,4-Dinitrophenol	mg/kg	NA	0.66 U	0.66 U	NA	NA	1.9 U	NA
2,4-Dinitrotoluene	mg/kg	NA	0.21 U	0.21 U	NA	NA	0.4 U	NA
2,6-Dinitrotoluene	mg/kg	NA	0.1 U	0.1 U	NA	NA	0.4 U	NA
2-Chloronaphthalene	mg/kg	NA	0.66 U	0.66 U	NA	NA	0.4 U	NA
2-Chlorophenol	mg/kg	NA	0.66 U	0.66 U	NA	NA	0.4 U	NA
2-Methylnaphthalene	mg/kg	NA	0.12 U	0.4	NA	NA	0.4 U	NA
2-Methylphenol(o-Cresol)	mg/kg	NA	0.66 U	0.66 U	NA	NA	0.4 U	NA
2-Nitroaniline	mg/kg	NA	3.3 U	3.3 U	NA	NA	1.9 U	NA
2-Nitrophenol	mg/kg	NA	0.66 U	0.66 U	NA	NA	0.4 U	NA
3&4-Methylphenol(m&p Cresol)	mg/kg	NA	0.83 U	0.83 U	NA	NA	0.79 U	NA
3,3'-Dichlorobenzidine	mg/kg	NA	0.11 U	0.11 U	NA	NA	0.79 U	NA
3-Nitroaniline	mg/kg	NA	3.3 U	3.3 U	NA	NA	1.9 U	NA
4,6-Dinitro-2-methylphenol	mg/kg	NA	2 U	2 U	NA	NA	1.9 U	NA
4-Bromophenylphenyl ether	mg/kg	NA	0.66 U	0.66 U	NA	NA	0.4 U	NA
4-Chloro-3-methylphenol	mg/kg	NA	1.3 U	1.3 U	NA	NA	0.79 U	NA
4-Chloroaniline	mg/kg	NA	0.33 U	0.33 U	NA	NA	0.79 U	NA
4-Chlorophenylphenyl ether	mg/kg	NA	0.66 U	0.66 U	NA	NA	0.4 U	NA
4-Nitroaniline	mg/kg	NA	3.3 U	3.3 U	NA	NA	1.9 U	NA
4-Nitrophenol	mg/kg	NA	3.3 U	3.3 U	NA	NA	1.9 U	NA
Acenaphthene	mg/kg	NA	0.15 U	0.15 U	0.05 U	NA	0.4 UJ	0.67
Acenaphthylene	mg/kg	NA	0.07 U	0.07 U	0.05 U	NA	0.4 UJ	0.35
Anthracene	mg/kg	NA	0.41	0.43	0.08 U	NA	0.4 U	2.47
Benzo(a)anthracene	mg/kg	NA	1.76	1.65	0.008 U	NA	0.4 UJ	9.27
Benzo(a)pyrene	mg/kg	NA	1.91	1.88	0.02 U	NA	0.4 U	9.36
Benzo(b)fluoranthene	mg/kg	NA	2.24	2.03	0.01 U	NA	0.4 U	11.5
Benzo(g,h,i)perylene	mg/kg	NA	1.21	1.21	0.02 U	NA	0.4 U	4.63
Benzo(k)fluoranthene	mg/kg	NA	0.66	0.75	0.01 U	NA	0.4 U	3.95
Benzyl alcohol	mg/kg	NA	1.3 U	1.3 U	NA	NA	0.79 U	NA
bis(2chloro1methylethyl) ether	mg/kg	NA	NA	NA	NA	NA	0.4 U	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
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Chemical Name	Location ID	B-6	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-7/KP-SB03	B-8/KP-SB10
	Field Sample ID:	B-6 (9-12)	B-7 (0-3)	B-7 (3-6)	B-7 (6-9)	B-7 (9-12)	KP-SB03(9-12)	B-8 (0-3)
	Sample Date	8/4/2010	8/4/2010	8/4/2010	8/4/2010	8/4/2010	5/29/2012	8/4/2010
	Depth Interval (ft bgs)	9- 12	0- 3	3- 6	6- 9	9- 12	9- 12	0- 3
bis(2-Chloroethoxy)methane	mg/kg	NA	0.66 U	0.66 U	NA	NA	0.4 U	NA
bis(2-Chloroethyl) ether	mg/kg	NA	0.66 U	0.66 U	NA	NA	0.4 U	NA
Bis(2-chloroisopropyl)ether	mg/kg	NA	0.66 U	0.66 U	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	mg/kg	NA	0.66 U	0.66 U	NA	NA	0.4 U	NA
Butylbenzylphthalate	mg/kg	NA	0.66 U	0.66 U	NA	NA	0.4 U	NA
Carbazole	mg/kg	NA	0.13 U	0.13 U	NA	NA	NA	NA
Chrysene	mg/kg	NA	1.95	1.53	0.05 U	NA	0.4 UJ	8.17
Dibenz(a,h)anthracene	mg/kg	NA	0.11 U	0.11 U	0.02 U	NA	0.4 U	0.35
Dibenzofuran	mg/kg	NA	0.22 U	0.22 U	NA	NA	0.4 U	NA
Diethylphthalate	mg/kg	NA	0.66 U	0.66 U	NA	NA	0.4 U	NA
Dimethylphthalate	mg/kg	NA	3.3 U	3.3 U	NA	NA	0.4 U	NA
Di-n-butylphthalate	mg/kg	NA	0.5 U	0.5 U	NA	NA	0.4 U	NA
Di-n-octylphthalate	mg/kg	NA	0.86 U	0.86 U	NA	NA	0.4 U	NA
Fluoranthene	mg/kg	NA	3.38	3.25	0.05 U	NA	0.4 U	17.6
Fluorene	mg/kg	NA	0.14 U	0.14 U	0.03 U	NA	0.4 UJ	0.78
Hexachloro-1,3-butadiene	mg/kg	NA	0.66 U	0.66 U	NA	NA	0.4 U	NA
Hexachlorobenzene	mg/kg	NA	0.07 U	0.07 U	NA	NA	0.4 U	NA
Hexachlorocyclopentadiene	mg/kg	NA	0.17 U	0.17 U	NA	NA	0.4 U	NA
Hexachloroethane	mg/kg	NA	0.13 U	0.13 U	NA	NA	0.4 U	NA
Indeno(1,2,3-cd)pyrene	mg/kg	NA	0.82	0.87	0.02 U	NA	0.4 U	4.29
Isophorone	mg/kg	NA	0.66 U	0.66 U	NA	NA	0.4 U	NA
Naphthalene	mg/kg	NA	0.09 U	0.37	0.05 U	NA	0.4 U	0.41
Nitrobenzene	mg/kg	NA	0.24 U	0.24 U	NA	NA	0.4 U	NA
N-Nitroso-di-n-propylamine	mg/kg	NA	0.02 U	0.02 U	NA	NA	0.4 U	NA
N-Nitrosodiphenylamine	mg/kg	NA	0.67 U	0.67 U	NA	NA	0.4 U	NA
Pentachlorophenol	mg/kg	NA	0.03 U	0.03 U	NA	NA	1.9 U	NA
Phenanthrene	mg/kg	NA	2.25	2.51	0.03 U	NA	0.4 U	7.63
Phenol	mg/kg	NA	0.66 U	0.66 U	NA	NA	0.4 U	NA
Pyrene	mg/kg	NA	4.56	4.77	0.05 U	NA	0.4 U	15.2
Petroleum Hydrocarbons								
TPH (C06-C10)	mg/kg	NA	NA	NA	NA	NA	NA	NA
TPH-DRO (C10-C28)	mg/kg	NA	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
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Chemical Name	Location ID	B-8/KP-SB10	B-8/KP-SB10	B-8/KP-SB10	KP-SB04	KP-SB04	KP-SB05	KP-SB05
	Field Sample ID:	KP-SB10(12-14)	KP-SB10(12-14)D	KP-SB10(3-5)	KP-SB04(10-12)	KP-SB04(14-16)	KP-SB05(11-13)	KP-SB05(14-16)
	Sample Date	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	12- 14	12- 14	3- 5	10- 12	14- 16	11- 13	14- 16
pH	SU	NA	NA	NA	NA	NA	NA	NA
Fractional Organic Carbon	%	NA	NA	NA	NA	NA	NA	NA
Organic Carbon Content	%	NA	NA	NA	NA	NA	NA	NA
Total Inorganics								
Aluminum	mg/kg	NA	NA	NA	NA	NA	NA	NA
Antimony	mg/kg	NA	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	NA	NA	NA	NA	NA	NA	NA
Barium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Beryllium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Calcium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Chromium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Cobalt	mg/kg	NA	NA	NA	NA	NA	NA	NA
Copper	mg/kg	NA	NA	NA	NA	NA	NA	NA
Cyanide	mg/kg	NA	NA	NA	NA	NA	NA	NA
Iron	mg/kg	NA	NA	NA	NA	NA	NA	NA
Lead	mg/kg	NA	NA	NA	NA	NA	NA	NA
Magnesium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Manganese	mg/kg	NA	NA	NA	NA	NA	NA	NA
Mercury	mg/kg	NA	NA	NA	NA	NA	NA	NA
Nickel	mg/kg	NA	NA	NA	NA	NA	NA	NA
Potassium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Silver	mg/kg	NA	NA	NA	NA	NA	NA	NA
Sodium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Thallium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Vanadium	mg/kg	NA	NA	NA	NA	NA	NA	NA
Zinc	mg/kg	NA	NA	NA	NA	NA	NA	NA
TCLP Metals								
Arsenic, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA
Barium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA
Cadmium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA
Chromium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA
Lead, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA
Mercury, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA
Selenium, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA
Silver, TCLP	mg/L	NA	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-8/KP-SB10	B-8/KP-SB10	B-8/KP-SB10	KP-SB04	KP-SB04	KP-SB05	KP-SB05
	Field Sample ID:	KP-SB10(12-14)	KP-SB10(12-14)D	KP-SB10(3-5)	KP-SB04(10-12)	KP-SB04(14-16)	KP-SB05(11-13)	KP-SB05(14-16)
	Sample Date	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	12- 14	12- 14	3- 5	10- 12	14- 16	11- 13	14- 16
Pesticides								
4,4'-DDD	mg/kg	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	mg/kg	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	mg/kg	NA	NA	NA	NA	NA	NA	NA
Aldrin	mg/kg	NA	NA	NA	NA	NA	NA	NA
alpha-BHC	mg/kg	NA	NA	NA	NA	NA	NA	NA
beta-BHC	mg/kg	NA	NA	NA	NA	NA	NA	NA
Chlordane (Technical)	mg/kg	NA	NA	NA	NA	NA	NA	NA
delta-BHC	mg/kg	NA	NA	NA	NA	NA	NA	NA
Dieldrin	mg/kg	NA	NA	NA	NA	NA	NA	NA
Endosulfan I	mg/kg	NA	NA	NA	NA	NA	NA	NA
Endosulfan II	mg/kg	NA	NA	NA	NA	NA	NA	NA
Endosulfan sulfate	mg/kg	NA	NA	NA	NA	NA	NA	NA
Endrin	mg/kg	NA	NA	NA	NA	NA	NA	NA
Endrin aldehyde	mg/kg	NA	NA	NA	NA	NA	NA	NA
Endrin ketone	mg/kg	NA	NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	mg/kg	NA	NA	NA	NA	NA	NA	NA
Heptachlor	mg/kg	NA	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	mg/kg	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	mg/kg	NA	NA	NA	NA	NA	NA	NA
Toxaphene	mg/kg	NA	NA	NA	NA	NA	NA	NA
PCBS								
PCB-1016 (Aroclor 1016)	mg/kg	NA	NA	NA	NA	NA	NA	NA
PCB-1221 (Aroclor 1221)	mg/kg	NA	NA	NA	NA	NA	NA	NA
PCB-1232 (Aroclor 1232)	mg/kg	NA	NA	NA	NA	NA	NA	NA
PCB-1242 (Aroclor 1242)	mg/kg	NA	NA	NA	NA	NA	NA	NA
PCB-1248 (Aroclor 1248)	mg/kg	NA	NA	NA	NA	NA	NA	NA
PCB-1254 (Aroclor 1254)	mg/kg	NA	NA	NA	NA	NA	NA	NA
PCB-1260 (Aroclor 1260)	mg/kg	NA	NA	NA	NA	NA	NA	NA
Herbicides								
2,4,5-T	mg/kg	NA	NA	NA	NA	NA	NA	NA
2,4,5-TP (Silvex)	mg/kg	NA	NA	NA	NA	NA	NA	NA
2,4-D	mg/kg	NA	NA	NA	NA	NA	NA	NA
Dalapon	mg/kg	NA	NA	NA	NA	NA	NA	NA
Dinoseb	mg/kg	NA	NA	NA	NA	NA	NA	NA
Picloram	mg/kg	NA	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-8/KP-SB10	B-8/KP-SB10	B-8/KP-SB10	KP-SB04	KP-SB04	KP-SB05	KP-SB05
	Field Sample ID:	KP-SB10(12-14)	KP-SB10(12-14)D	KP-SB10(3-5)	KP-SB04(10-12)	KP-SB04(14-16)	KP-SB05(11-13)	KP-SB05(14-16)
	Sample Date	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	12- 14	12- 14	3- 5	10- 12	14- 16	11- 13	14- 16
VOCs								
1,1,1,2-Tetrachloroethane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
1,1,1-Trichloroethane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
1,1,2,2-Tetrachloroethane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
1,1,2-Trichloroethane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
1,1-Dichloroethane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
1,1-Dichloroethene	mg/kg	NA	NA	NA	0.35 J	0.18 J	0.32 J	0.081
1,1-Dichloropropene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
1,2,3-Trichlorobenzene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
1,2,3-Trichloropropane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
1,2,4-Trichlorobenzene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
1,2,4-Trimethylbenzene	mg/kg	NA	NA	NA	0.018 J	0.012 J	0.012 J	0.0062 U
1,2-Dibromoethane (EDB)	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
1,2-Dichlorobenzene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
1,2-Dichloroethane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
1,2-Dichloropropane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
1,3,5-Trimethylbenzene	mg/kg	NA	NA	NA	0.0061 J	0.004 J	0.0036 J	0.0062 U
1,3-Dichlorobenzene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
1,3-Dichloropropane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
1,4-Dichlorobenzene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
1,4-Difluorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
2,2-Dichloropropane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
2-Butanone (MEK)	mg/kg	NA	NA	NA	0.022 U	0.024 U	0.022 U	0.031 U
2-Chlorotoluene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
2-Hexanone	mg/kg	NA	NA	NA	0.09 U	0.095 U	0.089 U	0.12 U
4-Chlorotoluene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
4-Methyl-2-pentanone (MIBK)	mg/kg	NA	NA	NA	0.022 U	0.024 U	0.022 U	0.031 U
Acetone	mg/kg	NA	NA	NA	0.09 U	0.095 U	0.089 U	0.12 U
Acrolein	mg/kg	NA	NA	NA	0.09 U	0.095 U	0.089 U	0.12 U
Acrylonitrile	mg/kg	NA	NA	NA	0.09 U	0.095 U	0.089 U	0.12 U
Benzene	mg/kg	NA	NA	NA	0.0045 U	0.0015 J	0.0044 U	0.0062 U
Bromobenzene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Bromochloromethane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Bromodichloromethane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Bromoform	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Bromomethane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Carbon disulfide	mg/kg	NA	NA	NA	0.009 U	0.0095 U	0.0089 U	0.012 U
Carbon tetrachloride	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-8/KP-SB10	B-8/KP-SB10	B-8/KP-SB10	KP-SB04	KP-SB04	KP-SB05	KP-SB05
	Field Sample ID:	KP-SB10(12-14)	KP-SB10(12-14)D	KP-SB10(3-5)	KP-SB04(10-12)	KP-SB04(14-16)	KP-SB05(11-13)	KP-SB05(14-16)
	Sample Date	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	12- 14	12- 14	3- 5	10- 12	14- 16	11- 13	14- 16
Chlorobenzene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Chloroethane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Chloroform	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Chloromethane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
cis-1,2-Dichloroethene	mg/kg	NA	NA	NA	2.6 J	0.28 J	6.3 J	0.19
cis-1,3-Dichloropropene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Dibromochloromethane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Dibromomethane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Dichlorodifluoromethane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Ethyl methacrylate	mg/kg	NA	NA	NA	0.09 U	0.095 U	0.089 U	0.12 U
Ethylbenzene	mg/kg	NA	NA	NA	0.008 J	0.0038 J	0.0056 J	0.0062 U
Hexachloro-1,3-butadiene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Iodomethane	mg/kg	NA	NA	NA	0.09 U	0.095 U	0.089 U	0.12 U
Isopropylbenzene (Cumene)	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Methylene Chloride	mg/kg	NA	NA	NA	0.018 U	0.019 U	0.018 U	0.025 U
Methyl-tert-butyl ether	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Naphthalene, VOC	mg/kg	NA	NA	NA	0.0032 J	0.0039 J	0.0046 J	0.0062 U
n-Butylbenzene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
n-Hexane	mg/kg	NA	NA	NA	0.013 J	0.0079 J	0.0098 J	0.0062 U
n-Propylbenzene	mg/kg	NA	NA	NA	0.0059 J	0.0029 J	0.0037 J	0.0062 U
Pentafluorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
p-Isopropyltoluene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
sec-Butylbenzene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Styrene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
tert-Butylbenzene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Tetrachloroethene	mg/kg	NA	NA	NA	4.1 J	0.28 J	2.7 J	0.0061 J
Toluene	mg/kg	NA	NA	NA	0.036 J	0.016 J	0.033 J	0.0031 J
trans-1,2-Dichloroethene	mg/kg	NA	NA	NA	0.028 J	0.011 J	0.036 J	0.0058 J
trans-1,3-Dichloropropene	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
trans-1,4-Dichloro-2-butene	mg/kg	NA	NA	NA	0.09 U	0.095 U	0.089 U	0.12 U
Trichloroethene	mg/kg	NA	NA	NA	3,510 J	894 J	3,590 J	338
Trichlorofluoromethane	mg/kg	NA	NA	NA	0.0045 U	0.0047 U	0.0044 U	0.0062 U
Vinyl acetate	mg/kg	NA	NA	NA	0.09 U	0.095 U	0.089 U	0.12 U
Vinyl chloride	mg/kg	NA	NA	NA	0.088 J	0.41 J	0.38 J	0.23
Xylene (Total)	mg/kg	NA	NA	NA	0.033 J	0.011 J	0.022 J	0.012 U

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-8/KP-SB10	B-8/KP-SB10	B-8/KP-SB10	KP-SB04	KP-SB04	KP-SB05	KP-SB05
	Field Sample ID:	KP-SB10(12-14)	KP-SB10(12-14)D	KP-SB10(3-5)	KP-SB04(10-12)	KP-SB04(14-16)	KP-SB05(11-13)	KP-SB05(14-16)
	Sample Date	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	12- 14	12- 14	3- 5	10- 12	14- 16	11- 13	14- 16
SVOCs								
1,2,4-Trichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	mg/kg	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	mg/kg	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	mg/kg	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	mg/kg	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	mg/kg	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	mg/kg	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	mg/kg	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	mg/kg	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	mg/kg	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	mg/kg	0.21	0.11	0.14	NA	NA	NA	NA
2-Methylphenol(o-Cresol)	mg/kg	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	mg/kg	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	mg/kg	NA	NA	NA	NA	NA	NA	NA
3&4-Methylphenol(m&p Cresol)	mg/kg	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	mg/kg	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	mg/kg	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	mg/kg	NA	NA	NA	NA	NA	NA	NA
4-Bromophenylphenyl ether	mg/kg	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	mg/kg	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	mg/kg	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenylphenyl ether	mg/kg	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	mg/kg	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	mg/kg	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	mg/kg	0.52	0.36	0.36	NA	NA	NA	NA
Acenaphthylene	mg/kg	0.096	0.095	0.12	NA	NA	NA	NA
Anthracene	mg/kg	1.2	0.89	0.94	NA	NA	NA	NA
Benzo(a)anthracene	mg/kg	2.2	2.1	2.4	NA	NA	NA	NA
Benzo(a)pyrene	mg/kg	2	1.9	2.2	NA	NA	NA	NA
Benzo(b)fluoranthene	mg/kg	1.9	2.1	2.4	NA	NA	NA	NA
Benzo(g,h,i)perylene	mg/kg	1.2	1.3	1.5	NA	NA	NA	NA
Benzo(k)fluoranthene	mg/kg	1.8	1.7	2	NA	NA	NA	NA
Benzyl alcohol	mg/kg	NA	NA	NA	NA	NA	NA	NA
bis(2chloro1methylethyl) ether	mg/kg	NA	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	B-8/KP-SB10	B-8/KP-SB10	B-8/KP-SB10	KP-SB04	KP-SB04	KP-SB05	KP-SB05
	Field Sample ID:	KP-SB10(12-14)	KP-SB10(12-14)D	KP-SB10(3-5)	KP-SB04(10-12)	KP-SB04(14-16)	KP-SB05(11-13)	KP-SB05(14-16)
	Sample Date	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	12- 14	12- 14	3- 5	10- 12	14- 16	11- 13	14- 16
bis(2-Chloroethoxy)methane	mg/kg	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl) ether	mg/kg	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroisopropyl)ether	mg/kg	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	mg/kg	NA	NA	NA	NA	NA	NA	NA
Butylbenzylphthalate	mg/kg	NA	NA	NA	NA	NA	NA	NA
Carbazole	mg/kg	NA	NA	NA	NA	NA	NA	NA
Chrysene	mg/kg	2.5	2.4	2.8	NA	NA	NA	NA
Dibenz(a,h)anthracene	mg/kg	0.66	0.66	0.77	NA	NA	NA	NA
Dibenzofuran	mg/kg	NA	NA	NA	NA	NA	NA	NA
Diethylphthalate	mg/kg	NA	NA	NA	NA	NA	NA	NA
Dimethylphthalate	mg/kg	NA	NA	NA	NA	NA	NA	NA
Di-n-butylphthalate	mg/kg	NA	NA	NA	NA	NA	NA	NA
Di-n-octylphthalate	mg/kg	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	mg/kg	5.1	4.7	5.2	NA	NA	NA	NA
Fluorene	mg/kg	0.67	0.43	0.44	NA	NA	NA	NA
Hexachloro-1,3-butadiene	mg/kg	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	mg/kg	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	mg/kg	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	mg/kg	1.1	1.2	1.4	NA	NA	NA	NA
Isophorone	mg/kg	NA	NA	NA	NA	NA	NA	NA
Naphthalene	mg/kg	0.35	0.2	0.26	NA	NA	NA	NA
Nitrobenzene	mg/kg	NA	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	mg/kg	NA	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	mg/kg	NA	NA	NA	NA	NA	NA	NA
Pentachlorophenol	mg/kg	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	mg/kg	4.6	3.5	3.9	NA	NA	NA	NA
Phenol	mg/kg	NA	NA	NA	NA	NA	NA	NA
Pyrene	mg/kg	4.1	3.8	4.3	NA	NA	NA	NA
Petroleum Hydrocarbons								
TPH (C06-C10)	mg/kg	NA	NA	NA	NA	NA	NA	NA
TPH-DRO (C10-C28)	mg/kg	NA	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	KP-SB06	KP-SB06	KP-SB07	KP-SB07	KP-SB08	KP-SB08
	Field Sample ID:	KP-SB06(10-12)	KP-SB06(14-16)	KP-SB07(8-10)	KP-SB07(14-16)	KP-SB08(4-6)	KP-SB08(15-17)
	Sample Date	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	10- 12	14- 16	8- 10	14- 16	4- 6	15- 17
pH	SU	NA	NA	NA	NA	NA	NA
Fractional Organic Carbon	%	NA	NA	NA	NA	NA	NA
Organic Carbon Content	%	NA	NA	NA	NA	NA	NA
Total Inorganics							
Aluminum	mg/kg	NA	NA	NA	NA	NA	NA
Antimony	mg/kg	NA	NA	NA	NA	NA	NA
Arsenic	mg/kg	NA	NA	NA	NA	NA	NA
Barium	mg/kg	NA	NA	NA	NA	NA	NA
Beryllium	mg/kg	NA	NA	NA	NA	NA	NA
Cadmium	mg/kg	NA	NA	NA	NA	NA	NA
Calcium	mg/kg	NA	NA	NA	NA	NA	NA
Chromium	mg/kg	NA	NA	NA	NA	NA	NA
Cobalt	mg/kg	NA	NA	NA	NA	NA	NA
Copper	mg/kg	NA	NA	NA	NA	NA	NA
Cyanide	mg/kg	NA	NA	NA	NA	NA	NA
Iron	mg/kg	NA	NA	NA	NA	NA	NA
Lead	mg/kg	NA	NA	NA	NA	NA	NA
Magnesium	mg/kg	NA	NA	NA	NA	NA	NA
Manganese	mg/kg	NA	NA	NA	NA	NA	NA
Mercury	mg/kg	NA	NA	NA	NA	NA	NA
Nickel	mg/kg	NA	NA	NA	NA	NA	NA
Potassium	mg/kg	NA	NA	NA	NA	NA	NA
Selenium	mg/kg	NA	NA	NA	NA	NA	NA
Silver	mg/kg	NA	NA	NA	NA	NA	NA
Sodium	mg/kg	NA	NA	NA	NA	NA	NA
Thallium	mg/kg	NA	NA	NA	NA	NA	NA
Vanadium	mg/kg	NA	NA	NA	NA	NA	NA
Zinc	mg/kg	NA	NA	NA	NA	NA	NA
TCLP Metals							
Arsenic, TCLP	mg/L	NA	NA	NA	NA	NA	NA
Barium, TCLP	mg/L	NA	NA	NA	NA	NA	NA
Cadmium, TCLP	mg/L	NA	NA	NA	NA	NA	NA
Chromium, TCLP	mg/L	NA	NA	NA	NA	NA	NA
Lead, TCLP	mg/L	NA	NA	NA	NA	NA	NA
Mercury, TCLP	mg/L	NA	NA	NA	NA	NA	NA
Selenium, TCLP	mg/L	NA	NA	NA	NA	NA	NA
Silver, TCLP	mg/L	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	KP-SB06	KP-SB06	KP-SB07	KP-SB07	KP-SB08	KP-SB08
	Field Sample ID:	KP-SB06(10-12)	KP-SB06(14-16)	KP-SB07(8-10)	KP-SB07(14-16)	KP-SB08(4-6)	KP-SB08(15-17)
	Sample Date	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	10- 12	14- 16	8- 10	14- 16	4- 6	15- 17
Pesticides							
4,4'-DDD	mg/kg	NA	NA	NA	NA	NA	NA
4,4'-DDE	mg/kg	NA	NA	NA	NA	NA	NA
4,4'-DDT	mg/kg	NA	NA	NA	NA	NA	NA
Aldrin	mg/kg	NA	NA	NA	NA	NA	NA
alpha-BHC	mg/kg	NA	NA	NA	NA	NA	NA
beta-BHC	mg/kg	NA	NA	NA	NA	NA	NA
Chlordane (Technical)	mg/kg	NA	NA	NA	NA	NA	NA
delta-BHC	mg/kg	NA	NA	NA	NA	NA	NA
Dieldrin	mg/kg	NA	NA	NA	NA	NA	NA
Endosulfan I	mg/kg	NA	NA	NA	NA	NA	NA
Endosulfan II	mg/kg	NA	NA	NA	NA	NA	NA
Endosulfan sulfate	mg/kg	NA	NA	NA	NA	NA	NA
Endrin	mg/kg	NA	NA	NA	NA	NA	NA
Endrin aldehyde	mg/kg	NA	NA	NA	NA	NA	NA
Endrin ketone	mg/kg	NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	mg/kg	NA	NA	NA	NA	NA	NA
Heptachlor	mg/kg	NA	NA	NA	NA	NA	NA
Heptachlor epoxide	mg/kg	NA	NA	NA	NA	NA	NA
Methoxychlor	mg/kg	NA	NA	NA	NA	NA	NA
Toxaphene	mg/kg	NA	NA	NA	NA	NA	NA
PCBS							
PCB-1016 (Aroclor 1016)	mg/kg	NA	NA	NA	NA	NA	NA
PCB-1221 (Aroclor 1221)	mg/kg	NA	NA	NA	NA	NA	NA
PCB-1232 (Aroclor 1232)	mg/kg	NA	NA	NA	NA	NA	NA
PCB-1242 (Aroclor 1242)	mg/kg	NA	NA	NA	NA	NA	NA
PCB-1248 (Aroclor 1248)	mg/kg	NA	NA	NA	NA	NA	NA
PCB-1254 (Aroclor 1254)	mg/kg	NA	NA	NA	NA	NA	NA
PCB-1260 (Aroclor 1260)	mg/kg	NA	NA	NA	NA	NA	NA
Herbicides							
2,4,5-T	mg/kg	NA	NA	NA	NA	NA	NA
2,4,5-TP (Silvex)	mg/kg	NA	NA	NA	NA	NA	NA
2,4-D	mg/kg	NA	NA	NA	NA	NA	NA
Dalapon	mg/kg	NA	NA	NA	NA	NA	NA
Dinoseb	mg/kg	NA	NA	NA	NA	NA	NA
Picloram	mg/kg	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	KP-SB06	KP-SB06	KP-SB07	KP-SB07	KP-SB08	KP-SB08
	Field Sample ID:	KP-SB06(10-12)	KP-SB06(14-16)	KP-SB07(8-10)	KP-SB07(14-16)	KP-SB08(4-6)	KP-SB08(15-17)
	Sample Date	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	10- 12	14- 16	8- 10	14- 16	4- 6	15- 17
VOCs							
1,1,1,2-Tetrachloroethane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
1,1,1-Trichloroethane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
1,1,2,2-Tetrachloroethane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
1,1,2-Trichloroethane	mg/kg	0.0048 U	0.005 U	0.0041 J	0.0046 U	0.0045 U	0.0055 U
1,1-Dichloroethane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
1,1-Dichloroethene	mg/kg	1.2 J	0.26	0.013	0.0046 U	0.0045 U	0.0055 U
1,1-Dichloropropene	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
1,2,3-Trichlorobenzene	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
1,2,3-Trichloropropane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
1,2,4-Trichlorobenzene	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
1,2,4-Trimethylbenzene	mg/kg	0.05	0.028	0.0043 U	0.0046 U	4.1	0.06
1,2-Dibromoethane (EDB)	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
1,2-Dichlorobenzene	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.042	0.0028 J
1,2-Dichloroethane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
1,2-Dichloropropane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
1,3,5-Trimethylbenzene	mg/kg	0.018	0.011	0.0043 U	0.0046 U	0.035	0.012
1,3-Dichlorobenzene	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
1,3-Dichloropropane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
1,4-Dichlorobenzene	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0084	0.0055 U
1,4-Difluorobenzene	mg/kg	NA	NA	NA	NA	NA	NA
2,2-Dichloropropane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
2-Butanone (MEK)	mg/kg	0.024 U	0.025 U	0.021 U	0.023 U	0.022 U	0.046
2-Chlorotoluene	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
2-Hexanone	mg/kg	0.27	0.099 U	0.085 U	0.093 U	0.31	0.11 U
4-Chlorotoluene	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
4-Methyl-2-pentanone (MIBK)	mg/kg	0.024 U	0.025 U	0.021 U	0.023 U	0.022 U	0.027 U
Acetone	mg/kg	0.096 U	0.099 U	0.085 U	0.093 U	0.16	0.093 J
Acrolein	mg/kg	0.096 U	0.099 U	0.085 U	0.093 U	0.089 U	0.11 U
Acrylonitrile	mg/kg	0.096 U	0.099 U	0.085 U	0.093 U	0.089 U	0.11 U
Benzene	mg/kg	0.0048 U	0.0039 J	0.0043 U	0.0046 U	0.0036 J	0.0055 U
Bromobenzene	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
Bromochloromethane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
Bromodichloromethane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
Bromoform	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
Bromomethane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
Carbon disulfide	mg/kg	0.0096 U	0.0027 J	0.0085 U	0.0093 U	0.0089 U	0.011 U
Carbon tetrachloride	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	KP-SB06	KP-SB06	KP-SB07	KP-SB07	KP-SB08	KP-SB08
	Field Sample ID:	KP-SB06(10-12)	KP-SB06(14-16)	KP-SB07(8-10)	KP-SB07(14-16)	KP-SB08(4-6)	KP-SB08(15-17)
	Sample Date	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	10- 12	14- 16	8- 10	14- 16	4- 6	15- 17
Chlorobenzene	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.092	0.0062
Chloroethane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
Chloroform	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
Chloromethane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
cis-1,2-Dichloroethene	mg/kg	22.2	22.4	31.2	0.0046 U	0.0045 U	28.1
cis-1,3-Dichloropropene	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
Dibromochloromethane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
Dibromomethane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
Dichlorodifluoromethane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
Ethyl methacrylate	mg/kg	0.096 U	0.099 U	0.085 U	0.093 U	0.089 U	0.11 U
Ethylbenzene	mg/kg	0.018	0.0073	0.0043 U	0.0046 U	0.0034 J	0.0028 J
Hexachloro-1,3-butadiene	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
Iodomethane	mg/kg	0.096 U	0.099 U	0.085 U	0.093 U	0.089 U	0.11 U
Isopropylbenzene (Cumene)	mg/kg	0.01	0.0036 J	0.0043 U	0.0046 U	0.041	0.0065
Methylene Chloride	mg/kg	0.019 U	0.02 U	0.017 U	0.019 U	0.018 U	0.022 U
Methyl-tert-butyl ether	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
Naphthalene, VOC	mg/kg	0.0042 J	0.0027 J	0.0043 U	0.0046 U	0.039	0.004 J
n-Butylbenzene	mg/kg	0.0087	0.0032 J	0.0043 U	0.0046 U	0.048	0.0057
n-Hexane	mg/kg	0.047	0.043	0.0043 U	0.0046 U	0.5	0.05
n-Propylbenzene	mg/kg	0.012	0.0068	0.0043 U	0.0046 U	0.13	0.014
Pentafluorobenzene	mg/kg	NA	NA	NA	NA	NA	NA
p-Isopropyltoluene	mg/kg	0.015	0.0043 J	0.0043 U	0.0046 U	0.034	0.0069
sec-Butylbenzene	mg/kg	0.0048	0.0027 J	0.0043 U	0.0046 U	0.03	0.0034 J
Styrene	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
tert-Butylbenzene	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
Tetrachloroethene	mg/kg	3.8	0.82 J	0.0043 U	0.0046 U	0.0045 U	0.0027 J
Toluene	mg/kg	0.075	0.029	0.0043 U	0.0046 U	0.0027 J	0.0041 J
trans-1,2-Dichloroethene	mg/kg	0.18	0.12	0.12	0.0046 U	0.0045 U	0.0086
trans-1,3-Dichloropropene	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
trans-1,4-Dichloro-2-butene	mg/kg	0.096 U	0.099 U	0.085 U	0.093 U	0.089 U	0.11 U
Trichloroethene	mg/kg	4,230	1,220	68.3	0.0046 U	0.0015 J	0.11
Trichlorofluoromethane	mg/kg	0.0048 U	0.005 U	0.0043 U	0.0046 U	0.0045 U	0.0055 U
Vinyl acetate	mg/kg	0.096 U	0.099 U	0.085 U	0.093 U	0.089 U	0.11 U
Vinyl chloride	mg/kg	0.58	0.49	2	0.0046 U	0.0045 U	0.14
Xylene (Total)	mg/kg	0.072	0.026	0.0085 U	0.0093 U	0.022	0.019

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	KP-SB06	KP-SB06	KP-SB07	KP-SB07	KP-SB08	KP-SB08
	Field Sample ID:	KP-SB06(10-12)	KP-SB06(14-16)	KP-SB07(8-10)	KP-SB07(14-16)	KP-SB08(4-6)	KP-SB08(15-17)
	Sample Date	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	10- 12	14- 16	8- 10	14- 16	4- 6	15- 17
SVOCs							
1,2,4-Trichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	mg/kg	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	mg/kg	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	mg/kg	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	mg/kg	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	mg/kg	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	mg/kg	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	mg/kg	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	mg/kg	NA	NA	NA	NA	NA	NA
2-Chlorophenol	mg/kg	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	mg/kg	NA	NA	NA	NA	NA	NA
2-Methylphenol(o-Cresol)	mg/kg	NA	NA	NA	NA	NA	NA
2-Nitroaniline	mg/kg	NA	NA	NA	NA	NA	NA
2-Nitrophenol	mg/kg	NA	NA	NA	NA	NA	NA
3&4-Methylphenol(m&p Cresol)	mg/kg	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	mg/kg	NA	NA	NA	NA	NA	NA
3-Nitroaniline	mg/kg	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	mg/kg	NA	NA	NA	NA	NA	NA
4-Bromophenylphenyl ether	mg/kg	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	mg/kg	NA	NA	NA	NA	NA	NA
4-Chloroaniline	mg/kg	NA	NA	NA	NA	NA	NA
4-Chlorophenylphenyl ether	mg/kg	NA	NA	NA	NA	NA	NA
4-Nitroaniline	mg/kg	NA	NA	NA	NA	NA	NA
4-Nitrophenol	mg/kg	NA	NA	NA	NA	NA	NA
Acenaphthene	mg/kg	NA	NA	NA	NA	NA	NA
Acenaphthylene	mg/kg	NA	NA	NA	NA	NA	NA
Anthracene	mg/kg	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	mg/kg	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	mg/kg	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	mg/kg	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	mg/kg	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	mg/kg	NA	NA	NA	NA	NA	NA
Benzyl alcohol	mg/kg	NA	NA	NA	NA	NA	NA
bis(2chloro1methylethyl) ether	mg/kg	NA	NA	NA	NA	NA	NA

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID	KP-SB06	KP-SB06	KP-SB07	KP-SB07	KP-SB08	KP-SB08
	Field Sample ID:	KP-SB06(10-12)	KP-SB06(14-16)	KP-SB07(8-10)	KP-SB07(14-16)	KP-SB08(4-6)	KP-SB08(15-17)
	Sample Date	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012	5/29/2012
	Depth Interval (ft bgs)	10- 12	14- 16	8- 10	14- 16	4- 6	15- 17
bis(2-Chloroethoxy)methane	mg/kg	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl) ether	mg/kg	NA	NA	NA	NA	NA	NA
Bis(2-chloroisopropyl)ether	mg/kg	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	mg/kg	NA	NA	NA	NA	NA	NA
Butylbenzylphthalate	mg/kg	NA	NA	NA	NA	NA	NA
Carbazole	mg/kg	NA	NA	NA	NA	NA	NA
Chrysene	mg/kg	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	mg/kg	NA	NA	NA	NA	NA	NA
Dibenzofuran	mg/kg	NA	NA	NA	NA	NA	NA
Diethylphthalate	mg/kg	NA	NA	NA	NA	NA	NA
Dimethylphthalate	mg/kg	NA	NA	NA	NA	NA	NA
Di-n-butylphthalate	mg/kg	NA	NA	NA	NA	NA	NA
Di-n-octylphthalate	mg/kg	NA	NA	NA	NA	NA	NA
Fluoranthene	mg/kg	NA	NA	NA	NA	NA	NA
Fluorene	mg/kg	NA	NA	NA	NA	NA	NA
Hexachloro-1,3-butadiene	mg/kg	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	mg/kg	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	mg/kg	NA	NA	NA	NA	NA	NA
Hexachloroethane	mg/kg	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	mg/kg	NA	NA	NA	NA	NA	NA
Isophorone	mg/kg	NA	NA	NA	NA	NA	NA
Naphthalene	mg/kg	NA	NA	NA	NA	NA	NA
Nitrobenzene	mg/kg	NA	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	mg/kg	NA	NA	NA	NA	NA	NA
N-Nitrosodiphenylamine	mg/kg	NA	NA	NA	NA	NA	NA
Pentachlorophenol	mg/kg	NA	NA	NA	NA	NA	NA
Phenanthrene	mg/kg	NA	NA	NA	NA	NA	NA
Phenol	mg/kg	NA	NA	NA	NA	NA	NA
Pyrene	mg/kg	NA	NA	NA	NA	NA	NA
Petroleum Hydrocarbons							
TPH (C06-C10)	mg/kg	NA	NA	NA	NA	NA	5.5
TPH-DRO (C10-C28)	mg/kg	NA	NA	NA	NA	NA	31.6

Table D-1
Soil Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Notes:
% - Percent
D = Duplicate
ft bgs = Feet below ground surface
ID = Identification
J = Concentration estimated
mg/kg = Milligrams per kilogram
mg/L = Milligrams per liter
NA = Not analyzed
PCB = Polychlorinated biphenyls
SU = Standard unit
SVOC = Semivolatile organic compound
TPH = Total petroleum hydrocarbons
U = Constituent not detected. Reporting limit presented.
VOC = Volatile organic compound

Table D-2
Groundwater Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID:	TMW-1/KP-MW01	TMW-1/KP-MW01	TMW-1/KP-MW01	TMW-2/KP-MW02	TMW-2/KP-MW02	TMW-2/KP-MW02
	Field Sample ID:	TMW-1	TMW-1	KP-MW01-060112	TMW-2	TMW-2	KP-MW02-060112
	Sample Date:	8/10/2010	8/17/2010	6/1/2012	8/10/2010	8/11/2010	6/1/2012
	Screen Depth (ft bgs)	6-16	6-16	8-18	8-18	8-18	9-19
EXPLOSIVES							
2,4-DB	mg/L	NA	NA	NA	NA	NA	NA
Dicamba	mg/L	NA	NA	NA	NA	NA	NA
Dichlorprop	mg/L	NA	NA	NA	NA	NA	NA
MCPA	mg/L	NA	NA	NA	NA	NA	NA
MCPP	mg/L	NA	NA	NA	NA	NA	NA
TOTAL INORGANICS							
Aluminum	mg/L	0.47	NA	2.53	0.37	NA	1.31
Antimony	mg/L	0.006 U	NA	0.006 U	0.0064	NA	0.003 J
Arsenic	mg/L	0.004 U	NA	0.01 U	0.004 U	NA	0.01 U
Barium	mg/L	0.073	NA	0.0907 J	0.093	NA	0.096 J
Beryllium	mg/L	0.002 U	NA	0.004 U	0.002 U	NA	0.004 U
Cadmium	mg/L	0.002 U	NA	0.005 U	0.002 U	NA	0.005 U
Calcium	mg/L	160	NA	208	190	NA	166
Chromium	mg/L	0.004 U	NA	0.0084 J	0.004 U	NA	0.01 U
Cobalt	mg/L	0.004 U	NA	0.05 U	0.004 U	NA	0.05 U
Copper	mg/L	0.01 U	NA	0.02 U	0.01 U	NA	0.0232
Cyanide	mg/L	0.005 U	NA	0.01 U	0.005 U	NA	0.01 U
Iron	mg/L	1.4	NA	10.9	1.5	NA	6.7
Lead	mg/L	0.0032	NA	0.01 U	0.0025	NA	0.0093 J
Magnesium	mg/L	61	NA	140	110	NA	98.4
Manganese	mg/L	0.087	NA	0.835	0.8	NA	0.192
Mercury	mg/L	0.0002 U	NA	0.002 U	0.0002 U	NA	0.002 U
Nickel	mg/L	0.0055	NA	0.05 U	0.004 U	NA	0.05 U
Potassium	mg/L	14	NA	6.8	14	NA	9.42
Selenium	mg/L	0.004 U	NA	0.01 U	0.004 U	NA	0.01 U
Silver	mg/L	0.004 U	NA	0.05 U	0.004 U	NA	0.05 U
Sodium	mg/L	86	NA	39.2	290	NA	129
Thallium	mg/L	0.004 U	NA	0.002 U	0.004 U	NA	0.002 U
Vanadium	mg/L	0.004 U	NA	0.05 U	0.004 U	NA	0.05 U
Zinc	mg/L	0.02 U	NA	0.031 J	0.02 U	NA	0.05 U
PESTICIDES							
4,4'-DDD	mg/L	NA	NA	0.00011 U	NA	0.00005 U	0.00011 U
4,4'-DDE	mg/L	NA	NA	0.00011 U	NA	0.00005 U	0.00011 U
4,4'-DDT	mg/L	NA	NA	0.00011 U	NA	0.00005 U	0.00011 U
Aldrin	mg/L	NA	NA	0.000057 U	NA	0.00005 U	0.000054 U
alpha-BHC	mg/L	NA	NA	0.000057 U	NA	0.00005 U	0.000054 U
alpha-Chlordane	mg/L	NA	NA	0.000057 U	NA	0.00005 U	0.000054 U
beta-BHC	mg/L	NA	NA	0.000057 U	NA	0.00005 U	0.000054 U

Table D-2
Groundwater Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID:	TMW-1/KP-MW01	TMW-1/KP-MW01	TMW-1/KP-MW01	TMW-2/KP-MW02	TMW-2/KP-MW02	TMW-2/KP-MW02
	Field Sample ID:	TMW-1	TMW-1	KP-MW01-060112	TMW-2	TMW-2	KP-MW02-060112
	Sample Date:	8/10/2010	8/17/2010	6/1/2012	8/10/2010	8/11/2010	6/1/2012
	Screen Depth (ft bgs)	6-16	6-16	8-18	8-18	8-18	9-19
Chlordane (Technical)	mg/L	NA	NA	0.0011 U	NA	0.001 U	0.0011 U
delta-BHC	mg/L	NA	NA	0.000057 U	NA	0.00005 U	0.000054 U
Dieldrin	mg/L	NA	NA	0.00011 U	NA	0.00005 U	0.00011 U
Endosulfan I	mg/L	NA	NA	0.000057 U	NA	0.00005 U	0.000054 U
Endosulfan II	mg/L	NA	NA	0.00011 U	NA	0.00005 U	0.00011 U
Endosulfan sulfate	mg/L	NA	NA	0.00011 U	NA	0.00005 U	0.00011 U
Endrin	mg/L	NA	NA	0.00011 U	NA	0.00005 U	0.00011 U
Endrin aldehyde	mg/L	NA	NA	0.00011 U	NA	0.00005 U	0.00011 U
Endrin ketone	mg/L	NA	NA	0.00011 U	NA	0.00005 U	0.00011 U
gamma-BHC (Lindane)	mg/L	NA	NA	0.000057 U	NA	0.00005 U	0.000054 U
gamma-Chlordane	mg/L	NA	NA	0.000057 U	NA	0.00005 U	0.000054 U
Heptachlor	mg/L	NA	NA	0.000087	NA	0.00005 U	0.000054 U
Heptachlor epoxide	mg/L	NA	NA	0.000057 U	NA	0.00005 U	0.000054 U
Methoxychlor	mg/L	NA	NA	0.00057 U	NA	0.00005 U	0.00054 U
Toxaphene	mg/L	NA	NA	0.0034 U	NA	0.001 U	0.0033 U
HERBICIDES							
2,4,5-T	mg/L	NA	NA	NA	NA	NA	NA
2,4,5-TP (Silvex)	mg/L	NA	NA	NA	NA	NA	NA
2,4-D	mg/L	NA	NA	NA	NA	NA	NA
Dalapon	mg/L	NA	NA	NA	NA	NA	NA
Dinoseb	mg/L	NA	NA	NA	NA	NA	NA
Picloram	mg/L	NA	NA	NA	NA	NA	NA
PCBs							
PCB-1016 (Aroclor 1016)	mg/L	NA	NA	0.00052 U	NA	0.0005 U	0.00052 U
PCB-1221 (Aroclor 1221)	mg/L	NA	NA	0.00052 U	NA	0.0005 U	0.00052 U
PCB-1232 (Aroclor 1232)	mg/L	NA	NA	0.00052 U	NA	0.0005 U	0.00052 U
PCB-1242 (Aroclor 1242)	mg/L	NA	NA	0.00052 U	NA	0.0005 U	0.00052 U
PCB-1248 (Aroclor 1248)	mg/L	NA	NA	0.00052 U	NA	0.0005 U	0.00052 U
PCB-1254 (Aroclor 1254)	mg/L	NA	NA	0.00052 U	NA	0.0005 U	0.00052 U
PCB-1260 (Aroclor 1260)	mg/L	NA	NA	0.00052 U	NA	0.0005 U	0.00052 U
VOCs							
1,1,1,2-Tetrachloroethane	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
1,1,1-Trichloroethane	mg/L	0.005 U	NA	0.005 U	2.5 U	NA	0.025 U
1,1,2,2-Tetrachloroethane	mg/L	0.005 U	NA	0.005 U	2.5 U	NA	0.025 U
1,1,2-Trichloroethane	mg/L	0.0093	NA	0.005 U	2.5 U	NA	0.025 U
1,1-Dichloroethane	mg/L	0.005 U	NA	0.005 U	2.5 U	NA	0.025 U
1,1-Dichloroethene	mg/L	0.005 U	NA	0.005 U	2.5 U	NA	0.02 J
1,1-Dichloropropene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
1,2,3-Trichlorobenzene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U

Table D-2
Groundwater Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID:	TMW-1/KP-MW01	TMW-1/KP-MW01	TMW-1/KP-MW01	TMW-2/KP-MW02	TMW-2/KP-MW02	TMW-2/KP-MW02
	Field Sample ID:	TMW-1	TMW-1	KP-MW01-060112	TMW-2	TMW-2	KP-MW02-060112
	Sample Date:	8/10/2010	8/17/2010	6/1/2012	8/10/2010	8/11/2010	6/1/2012
	Screen Depth (ft bgs)	6-16	6-16	8-18	8-18	8-18	9-19
1,2,3-Trichloropropane	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
1,2,4-Trichlorobenzene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
1,2,4-Trimethylbenzene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
1,2-Dibromoethane (EDB)	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
1,2-Dichlorobenzene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
1,2-Dichloroethane	mg/L	0.005 U	NA	0.005 U	2.5 U	NA	0.025 U
1,2-Dichloropropane	mg/L	0.005 U	NA	0.005 U	2.5 U	NA	0.025 U
1,3,5-Trimethylbenzene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
1,3-Dichlorobenzene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
1,3-Dichloropropane	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
1,4-Dichlorobenzene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
2,2-Dichloropropane	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
2-Butanone (MEK)	mg/L	0.02 U	NA	0.025 U	10 U	NA	0.12 U
2-Chlorotoluene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
2-Hexanone	mg/L	0.02 U	NA	0.025 U	10 U	NA	0.12 U
4-Chlorotoluene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
4-Methyl-2-pentanone (MIBK)	mg/L	0.02 U	NA	0.025 U	10 U	NA	0.12 U
Acetone	mg/L	0.037	NA	0.1 U	10 U	NA	0.5 U
Acrolein	mg/L	NA	NA	0.05 U	NA	NA	0.25 U
Acrylonitrile	mg/L	NA	NA	0.1 U	NA	NA	0.5 U
Benzene	mg/L	0.005 U	NA	0.005 U	2.5 U	NA	0.025 U
Bromobenzene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
Bromochloromethane	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
Bromodichloromethane	mg/L	0.005 U	NA	0.005 U	2.5 U	NA	0.025 U
Bromoform	mg/L	0.005 U	NA	0.005 U	2.5 U	NA	0.025 U
Bromomethane	mg/L	0.01 U	NA	0.005 U	5 U	NA	0.025 U
Carbon disulfide	mg/L	0.01 U	NA	0.01 U	5 U	NA	0.05 U
Carbon tetrachloride	mg/L	0.005 U	NA	0.005 U	2.5 U	NA	0.025 U
Chlorobenzene	mg/L	0.005 U	NA	0.005 U	2.5 U	NA	0.025 U
Chloroethane	mg/L	0.01 U	NA	0.005 U	5 U	NA	0.025 U
Chloroform	mg/L	0.64	NA	0.0098	2.5 U	NA	0.025 U
Chloromethane	mg/L	0.01 U	NA	0.005 U	5 U	NA	0.025 U
cis-1,2-Dichloroethene	mg/L	0.9	NA	0.032	120	NA	2
cis-1,3-Dichloropropene	mg/L	0.001 U	NA	0.005 U	0.5 U	NA	0.025 U
Dibromochloromethane	mg/L	0.005 U	NA	0.005 U	2.5 U	NA	0.025 U
Dibromomethane	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
Dichlorodifluoromethane	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
Ethyl methacrylate	mg/L	NA	NA	0.1 U	NA	NA	0.5 U
Ethylbenzene	mg/L	0.005 U	NA	0.005 U	2.5 U	NA	0.025 U

Table D-2
Groundwater Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID:	TMW-1/KP-MW01	TMW-1/KP-MW01	TMW-1/KP-MW01	TMW-2/KP-MW02	TMW-2/KP-MW02	TMW-2/KP-MW02
	Field Sample ID:	TMW-1	TMW-1	KP-MW01-060112	TMW-2	TMW-2	KP-MW02-060112
	Sample Date:	8/10/2010	8/17/2010	6/1/2012	8/10/2010	8/11/2010	6/1/2012
	Screen Depth (ft bgs)	6-16	6-16	8-18	8-18	8-18	9-19
Hexachloro-1,3-butadiene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
Iodomethane	mg/L	NA	NA	0.01 U	NA	NA	0.05 U
Isopropylbenzene (Cumene)	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
Methylene Chloride	mg/L	0.0092	NA	0.005 U	2.5 U	NA	0.025 U
Methyl-tert-butyl ether	mg/L	0.005 U	NA	0.004 U	2.5 U	NA	0.02 U
Naphthalene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
n-Butylbenzene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
n-Propylbenzene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
p-Isopropyltoluene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
sec-Butylbenzene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
Styrene	mg/L	0.005 U	NA	0.005 U	2.5 U	NA	0.025 U
tert-Butylbenzene	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
Tetrachloroethene	mg/L	0.005 U	NA	0.005 U	2.5 U	NA	0.025 U
Toluene	mg/L	0.015	NA	0.005 U	2.5 U	NA	0.025 U
trans-1,2-Dichloroethene	mg/L	0.045	NA	0.005 U	2.5 U	NA	0.038
trans-1,3-Dichloropropene	mg/L	0.001 U	NA	0.005 U	0.5 U	NA	0.025 U
trans-1,4-Dichloro-2-butene	mg/L	NA	NA	0.1 U	NA	NA	0.5 U
Trichloroethene	mg/L	4	NA	0.22	270	NA	12.4
Trichlorofluoromethane	mg/L	NA	NA	0.005 U	NA	NA	0.025 U
Vinyl acetate	mg/L	NA	NA	0.05 U	NA	NA	0.25 U
Vinyl chloride	mg/L	0.12	NA	0.022	22	NA	0.34
Xylene (Total)	mg/L	0.015 U	NA	0.01 U	7.5 U	NA	0.05 U
SVOCs							
1,2,4-Trichlorobenzene	mg/L	NA	NA	NA	0.005 U	NA	NA
1,2-Dichlorobenzene	mg/L	NA	NA	NA	0.005 U	NA	NA
1,3-Dichlorobenzene	mg/L	NA	NA	NA	0.005 U	NA	NA
1,4-Dichlorobenzene	mg/L	NA	NA	NA	0.005 U	NA	NA
2,4,5-Trichlorophenol	mg/L	NA	NA	0.011 U	0.01 U	NA	0.01 U
2,4,6-Trichlorophenol	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
2,4-Dichlorophenol	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
2,4-Dimethylphenol	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
2,4-Dinitrophenol	mg/L	NA	NA	0.054 U	0.025 U	NA	0.052 U
2,4-Dinitrotoluene	mg/L	NA	NA	0.011 U	0.0001 U	NA	0.01 U
2,6-Dinitrotoluene	mg/L	NA	NA	0.011 U	0.0001 U	NA	0.01 U
2-Chloronaphthalene	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
2-Chlorophenol	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
2-Methylnaphthalene	mg/L	NA	NA	0.0011 U	0.005 U	NA	0.001 U
2-Methylphenol(o-Cresol)	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
2-Nitroaniline	mg/L	NA	NA	0.054 U	0.025 U	NA	0.052 U

Table D-2
Groundwater Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID:	TMW-1/KP-MW01	TMW-1/KP-MW01	TMW-1/KP-MW01	TMW-2/KP-MW02	TMW-2/KP-MW02	TMW-2/KP-MW02
	Field Sample ID:	TMW-1	TMW-1	KP-MW01-060112	TMW-2	TMW-2	KP-MW02-060112
	Sample Date:	8/10/2010	8/17/2010	6/1/2012	8/10/2010	8/11/2010	6/1/2012
	Screen Depth (ft bgs)	6-16	6-16	8-18	8-18	8-18	9-19
2-Nitrophenol	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
3&4-Methylphenol(m&p Cresol)	mg/L	NA	NA	0.022 U	NA	NA	0.021 U
3,3'-Dichlorobenzidine	mg/L	NA	NA	0.022 U	0.01 U	NA	0.021 U
3-Nitroaniline	mg/L	NA	NA	0.054 U	0.025 U	NA	0.052 U
4,6-Dinitro-2-methylphenol	mg/L	NA	NA	0.054 U	0.025 U	NA	0.052 U
4-Bromophenylphenyl ether	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
4-Chloro-3-methylphenol	mg/L	NA	NA	0.022 U	0.005 U	NA	0.021 U
4-Chloroaniline	mg/L	NA	NA	0.022 U	0.005 U	NA	0.021 U
4-Chlorophenylphenyl ether	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
4-Methylphenol	mg/L	NA	NA	NA	0.005 U	NA	NA
4-Nitroaniline	mg/L	NA	NA	0.054 U	0.025 U	NA	0.052 U
4-Nitrophenol	mg/L	NA	NA	0.054 U	0.025 U	NA	0.052 U
Acenaphthene	mg/L	NA	0.001 U	0.0011 U	0.001 U	NA	0.001 U
Acenaphthylene	mg/L	NA	0.001 U	0.0011 U	0.001 U	NA	0.001 U
Aniline	mg/L	NA	NA	NA	0.005 U	NA	NA
Anthracene	mg/L	NA	0.001 U	0.00011 U	0.001 U	NA	0.0001 U
Benzidine	mg/L	NA	NA	NA	0.005 U	NA	NA
Benzo(a)anthracene	mg/L	NA	0.0001 U	0.00011 U	0.00011	NA	0.0001 U
Benzo(a)pyrene	mg/L	NA	0.0001 U	0.00011 U	0.0001 U	NA	0.0001 U
Benzo(b)fluoranthene	mg/L	NA	0.0001 U	0.00011 U	0.0001 U	NA	0.0001 U
Benzo(g,h,i)perylene	mg/L	NA	0.001 U	0.00011 U	0.001 U	NA	0.0001 U
Benzo(k)fluoranthene	mg/L	NA	0.0001 U	0.00011 U	0.0001 U	NA	0.0001 U
Benzoic acid	mg/L	NA	NA	NA	0.025 U	NA	NA
Benzyl alcohol	mg/L	NA	NA	0.022 U	0.005 U	NA	0.021 U
bis(2chloro1methylethyl) ether	mg/L	NA	NA	0.0054 U	0.005 U	NA	0.0052 U
bis(2-Chloroethoxy)methane	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
bis(2-Chloroethyl) ether	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
bis(2-Ethylhexyl)phthalate	mg/L	NA	NA	0.0048 J	0.005 U	NA	0.0052 U
Butylbenzylphthalate	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
Carbazole	mg/L	NA	NA	NA	0.00022	NA	NA
Chrysene	mg/L	NA	0.0001 U	0.00054 U	0.00031	NA	0.00052 U
Dibenz(a,h)anthracene	mg/L	NA	0.0001 U	0.00011 U	0.0001 U	NA	0.0001 U
Dibenzofuran	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
Diethylphthalate	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
Dimethylphthalate	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
Di-n-butylphthalate	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
Di-n-octylphthalate	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
Fluoranthene	mg/L	NA	0.001 U	0.0011 U	0.001 U	NA	0.001 U
Fluorene	mg/L	NA	0.001 U	0.0011 U	0.001 U	NA	0.001 U

Table D-2
Groundwater Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID:	TMW-1/KP-MW01	TMW-1/KP-MW01	TMW-1/KP-MW01	TMW-2/KP-MW02	TMW-2/KP-MW02	TMW-2/KP-MW02
	Field Sample ID:	TMW-1	TMW-1	KP-MW01-060112	TMW-2	TMW-2	KP-MW02-060112
	Sample Date:	8/10/2010	8/17/2010	6/1/2012	8/10/2010	8/11/2010	6/1/2012
	Screen Depth (ft bgs)	6-16	6-16	8-18	8-18	8-18	9-19
Hexachloro-1,3-butadiene	mg/L	NA	NA	0.0054 U	0.005 U	NA	0.0052 U
Hexachlorobenzene	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
Hexachlorocyclopentadiene	mg/L	NA	NA	0.022 U	0.005 U	NA	0.021 U
Hexachloroethane	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
Indeno(1,2,3-cd)pyrene	mg/L	NA	0.0001 U	0.00011 U	0.0001 U	NA	0.0001 U
Isophorone	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
Naphthalene	mg/L	NA	0.001 U	0.0011 U	0.001 U	NA	0.001 U
Nitrobenzene	mg/L	NA	NA	0.011 U	0.001 U	NA	0.01 U
N-Nitrosodimethylamine	mg/L	NA	NA	NA	0.005 U	NA	NA
N-Nitroso-di-n-propylamine	mg/L	NA	NA	0.011 U	0.0001 U	NA	0.01 U
N-Nitrosodiphenylamine	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
Pentachlorophenol	mg/L	NA	NA	0.054 U	0.0001 U	NA	0.052 U
Phenanthrene	mg/L	NA	0.001 U	0.0011 U	0.001 U	NA	0.001 U
Phenol	mg/L	NA	NA	0.011 U	0.005 U	NA	0.01 U
Pyrene	mg/L	NA	0.001 U	0.0011 U	0.001 U	NA	0.001 U
Pyridine	mg/L	NA	NA	NA	0.014	NA	NA

Table D-2
Groundwater Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID:	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03
	Field Sample ID:	TMW-3	TMW-3	TMW-3	KP-MW03-060112	KP-MW03-060112D
	Sample Date:	8/10/2010	8/11/2010	8/17/2010	6/1/2012	6/1/2012
	Screen Depth (ft bgs)	6-16	6-16	6-16	8-18	8-18
EXPLOSIVES						
2,4-DB	mg/L	NA	NA	0.0001 U	NA	NA
Dicamba	mg/L	NA	NA	0.0001 U	NA	NA
Dichlorprop	mg/L	NA	NA	0.0001 U	NA	NA
MCPA	mg/L	NA	NA	0.0001 U	NA	NA
MCPP	mg/L	NA	NA	0.0001 U	NA	NA
TOTAL INORGANICS						
Aluminum	mg/L	NA	NA	NA	1 U	1 U
Antimony	mg/L	NA	NA	NA	0.006 U	0.006 U
Arsenic	mg/L	0.004 U	NA	NA	0.01 U	0.01 U
Barium	mg/L	0.098	NA	NA	0.056 J	0.047 J
Beryllium	mg/L	NA	NA	NA	0.004 U	0.004 U
Cadmium	mg/L	0.002 U	NA	NA	0.005 U	0.005 U
Calcium	mg/L	NA	NA	NA	211	215
Chromium	mg/L	0.004 U	NA	NA	0.01 U	0.01 U
Cobalt	mg/L	NA	NA	NA	0.05 U	0.05 U
Copper	mg/L	NA	NA	NA	0.02 U	0.02 U
Cyanide	mg/L	NA	NA	NA	0.01 U	0.01 U
Iron	mg/L	NA	NA	NA	2.03	1.91
Lead	mg/L	0.0025	NA	NA	0.01 U	0.01 U
Magnesium	mg/L	NA	NA	NA	160	156
Manganese	mg/L	NA	NA	NA	1	1.03
Mercury	mg/L	0.0002 U	NA	NA	0.002 U	0.002 U
Nickel	mg/L	NA	NA	NA	0.05 U	0.05 U
Potassium	mg/L	NA	NA	NA	1.8	1.57
Selenium	mg/L	0.004 U	NA	NA	0.01 U	0.01 U
Silver	mg/L	0.004 U	NA	NA	0.05 U	0.05 U
Sodium	mg/L	NA	NA	NA	40.6	36.9
Thallium	mg/L	NA	NA	NA	0.002 U	0.002 U
Vanadium	mg/L	NA	NA	NA	0.05 U	0.05 U
Zinc	mg/L	NA	NA	NA	0.0208 J	0.0506
PESTICIDES						
4,4'-DDD	mg/L	NA	0.00005 U	NA	0.00011 U	0.00011 U
4,4'-DDE	mg/L	NA	0.00005 U	NA	0.00011 U	0.00011 U
4,4'-DDT	mg/L	NA	0.00005 U	NA	0.00011 U	0.00011 U
Aldrin	mg/L	NA	0.00005 U	NA	0.000055 U	0.000054 U
alpha-BHC	mg/L	NA	0.00005 U	NA	0.000055 U	0.000054 U
alpha-Chlordane	mg/L	NA	0.00005 U	NA	0.000055 U	0.000054 U
beta-BHC	mg/L	NA	0.00005 U	NA	0.000055 U	0.000054 U

Table D-2
Groundwater Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID:	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03
	Field Sample ID:	TMW-3	TMW-3	TMW-3	KP-MW03-060112	KP-MW03-060112D
	Sample Date:	8/10/2010	8/11/2010	8/17/2010	6/1/2012	6/1/2012
	Screen Depth (ft bgs)	6-16	6-16	6-16	8-18	8-18
Chlordane (Technical)	mg/L	NA	0.001 U	NA	0.0011 U	0.0011 U
delta-BHC	mg/L	NA	0.00005 U	NA	0.000055 U	0.000054 U
Dieldrin	mg/L	NA	0.00005 U	NA	0.00011 U	0.00011 U
Endosulfan I	mg/L	NA	0.00005 U	NA	0.000055 U	0.000054 U
Endosulfan II	mg/L	NA	0.00005 U	NA	0.00011 U	0.00011 U
Endosulfan sulfate	mg/L	NA	0.00005 U	NA	0.00011 U	0.00011 U
Endrin	mg/L	NA	0.00005 U	NA	0.00011 U	0.00011 U
Endrin aldehyde	mg/L	NA	0.00005 U	NA	0.00011 U	0.00011 U
Endrin ketone	mg/L	NA	0.00005 U	NA	0.00011 U	0.00011 U
gamma-BHC (Lindane)	mg/L	NA	0.00005 U	NA	0.000055 U	0.000054 U
gamma-Chlordane	mg/L	NA	0.00005 U	NA	0.000055 U	0.000054 U
Heptachlor	mg/L	NA	0.00005 U	NA	0.000055 U	0.000054 U
Heptachlor epoxide	mg/L	NA	0.00005 U	NA	0.000055 U	0.000054 U
Methoxychlor	mg/L	NA	0.00005 U	NA	0.00055 U	0.00054 U
Toxaphene	mg/L	NA	0.001 U	NA	0.0033 U	0.0033 U
HERBICIDES						
2,4,5-T	mg/L	NA	NA	0.0001 U	NA	NA
2,4,5-TP (Silvex)	mg/L	NA	NA	0.0001 U	NA	NA
2,4-D	mg/L	NA	NA	0.0002 U	NA	NA
Dalapon	mg/L	NA	NA	0.001 U	NA	NA
Dinoseb	mg/L	NA	NA	0.0003 U	NA	NA
Picloram	mg/L	NA	NA	0.0001 U	NA	NA
PCBs						
PCB-1016 (Aroclor 1016)	mg/L	NA	0.0005 U	NA	0.00052 U	0.00053 U
PCB-1221 (Aroclor 1221)	mg/L	NA	0.0005 U	NA	0.00052 U	0.00053 U
PCB-1232 (Aroclor 1232)	mg/L	NA	0.0005 U	NA	0.00052 U	0.00053 U
PCB-1242 (Aroclor 1242)	mg/L	NA	0.0005 U	NA	0.00052 U	0.00053 U
PCB-1248 (Aroclor 1248)	mg/L	NA	0.0005 U	NA	0.00052 U	0.00053 U
PCB-1254 (Aroclor 1254)	mg/L	NA	0.0005 U	NA	0.00052 U	0.00053 U
PCB-1260 (Aroclor 1260)	mg/L	NA	0.0005 U	NA	0.00052 U	0.00053 U
VOCs						
1,1,1,2-Tetrachloroethane	mg/L	NA	NA	NA	0.005 U	0.005 U
1,1,1-Trichloroethane	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
1,1,2,2-Tetrachloroethane	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
1,1,2-Trichloroethane	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
1,1-Dichloroethane	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
1,1-Dichloroethene	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
1,1-Dichloropropene	mg/L	NA	NA	NA	0.005 U	0.005 U
1,2,3-Trichlorobenzene	mg/L	NA	NA	NA	0.005 U	0.01

Table D-2
Groundwater Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID:	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03
	Field Sample ID:	TMW-3	TMW-3	TMW-3	KP-MW03-060112	KP-MW03-060112D
	Sample Date:	8/10/2010	8/11/2010	8/17/2010	6/1/2012	6/1/2012
	Screen Depth (ft bgs)	6-16	6-16	6-16	8-18	8-18
1,2,3-Trichloropropane	mg/L	NA	NA	NA	0.005 U	0.005 U
1,2,4-Trichlorobenzene	mg/L	NA	NA	NA	0.005 U	0.005 U
1,2,4-Trimethylbenzene	mg/L	NA	NA	NA	0.005 U	0.005 U
1,2-Dibromoethane (EDB)	mg/L	NA	NA	NA	0.005 U	0.005 U
1,2-Dichlorobenzene	mg/L	NA	NA	NA	0.005 U	0.005 U
1,2-Dichloroethane	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
1,2-Dichloropropane	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
1,3,5-Trimethylbenzene	mg/L	NA	NA	NA	0.005 U	0.005 U
1,3-Dichlorobenzene	mg/L	NA	NA	NA	0.005 U	0.005 U
1,3-Dichloropropane	mg/L	NA	NA	NA	0.005 U	0.005 U
1,4-Dichlorobenzene	mg/L	NA	NA	NA	0.005 U	0.005 U
2,2-Dichloropropane	mg/L	NA	NA	NA	0.005 U	0.005 U
2-Butanone (MEK)	mg/L	0.02 U	NA	NA	0.025 U	0.025 U
2-Chlorotoluene	mg/L	NA	NA	NA	0.005 U	0.005 U
2-Hexanone	mg/L	0.02 U	NA	NA	0.025 U	0.025 U
4-Chlorotoluene	mg/L	NA	NA	NA	0.005 U	0.005 U
4-Methyl-2-pentanone (MIBK)	mg/L	0.02 U	NA	NA	0.025 U	0.025 U
Acetone	mg/L	0.02 U	NA	NA	0.1 U	0.1 U
Acrolein	mg/L	NA	NA	NA	0.05 U	0.05 U
Acrylonitrile	mg/L	NA	NA	NA	0.1 U	0.1 U
Benzene	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
Bromobenzene	mg/L	NA	NA	NA	0.005 U	0.005 U
Bromochloromethane	mg/L	NA	NA	NA	0.005 U	0.005 U
Bromodichloromethane	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
Bromoform	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
Bromomethane	mg/L	0.01 U	NA	NA	0.005 U	0.005 U
Carbon disulfide	mg/L	0.01 U	NA	NA	0.01 U	0.01 U
Carbon tetrachloride	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
Chlorobenzene	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
Chloroethane	mg/L	0.01 U	NA	NA	0.005 U	0.005 U
Chloroform	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
Chloromethane	mg/L	0.01 U	NA	NA	0.005 U	0.005 U
cis-1,2-Dichloroethene	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
cis-1,3-Dichloropropene	mg/L	0.001 U	NA	NA	0.005 U	0.005 U
Dibromochloromethane	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
Dibromomethane	mg/L	NA	NA	NA	0.005 U	0.005 U
Dichlorodifluoromethane	mg/L	NA	NA	NA	0.005 U	0.005 U
Ethyl methacrylate	mg/L	NA	NA	NA	0.1 U	0.1 U
Ethylbenzene	mg/L	0.005 U	NA	NA	0.005 U	0.005 U

Table D-2
Groundwater Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID:	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03
	Field Sample ID:	TMW-3	TMW-3	TMW-3	KP-MW03-060112	KP-MW03-060112D
	Sample Date:	8/10/2010	8/11/2010	8/17/2010	6/1/2012	6/1/2012
	Screen Depth (ft bgs)	6-16	6-16	6-16	8-18	8-18
Hexachloro-1,3-butadiene	mg/L	NA	NA	NA	0.005 U	0.005 U
Iodomethane	mg/L	NA	NA	NA	0.01 U	0.01 U
Isopropylbenzene (Cumene)	mg/L	NA	NA	NA	0.005 U	0.005 U
Methylene Chloride	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
Methyl-tert-butyl ether	mg/L	0.005 U	NA	NA	0.004 U	0.004 U
Naphthalene	mg/L	NA	NA	NA	0.005 U	0.005 U
n-Butylbenzene	mg/L	NA	NA	NA	0.005 U	0.005 U
n-Propylbenzene	mg/L	NA	NA	NA	0.005 U	0.005 U
p-Isopropyltoluene	mg/L	NA	NA	NA	0.005 U	0.005 U
sec-Butylbenzene	mg/L	NA	NA	NA	0.005 U	0.005 U
Styrene	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
tert-Butylbenzene	mg/L	NA	NA	NA	0.005 U	0.005 U
Tetrachloroethene	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
Toluene	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
trans-1,2-Dichloroethene	mg/L	0.005 U	NA	NA	0.005 U	0.005 U
trans-1,3-Dichloropropene	mg/L	0.001 U	NA	NA	0.005 U	0.005 U
trans-1,4-Dichloro-2-butene	mg/L	NA	NA	NA	0.1 U	0.1 U
Trichloroethene	mg/L	0.0056	NA	NA	0.0042 J	0.0038 J
Trichlorofluoromethane	mg/L	NA	NA	NA	0.005 U	0.005 U
Vinyl acetate	mg/L	NA	NA	NA	0.05 U	0.05 U
Vinyl chloride	mg/L	0.002 U	NA	NA	0.002 U	0.002 U
Xylene (Total)	mg/L	0.015 U	NA	NA	0.01 U	0.01 U
SVOCs						
1,2,4-Trichlorobenzene	mg/L	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	mg/L	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	mg/L	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	mg/L	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	mg/L	NA	NA	NA	0.01 U	0.01 U
2,4,6-Trichlorophenol	mg/L	NA	NA	NA	0.01 U	0.01 U
2,4-Dichlorophenol	mg/L	NA	NA	NA	0.01 U	0.01 U
2,4-Dimethylphenol	mg/L	NA	NA	NA	0.01 U	0.01 U
2,4-Dinitrophenol	mg/L	NA	NA	NA	0.052 U	0.052 U
2,4-Dinitrotoluene	mg/L	NA	NA	NA	0.01 U	0.01 U
2,6-Dinitrotoluene	mg/L	NA	NA	NA	0.01 U	0.01 U
2-Chloronaphthalene	mg/L	NA	NA	NA	0.01 U	0.01 U
2-Chlorophenol	mg/L	NA	NA	NA	0.01 U	0.01 U
2-Methylnaphthalene	mg/L	NA	NA	NA	0.001 U	0.001 U
2-Methylphenol(o-Cresol)	mg/L	NA	NA	NA	0.01 U	0.01 U
2-Nitroaniline	mg/L	NA	NA	NA	0.052 U	0.052 U

Table D-2
Groundwater Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Chemical Name	Location ID:	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03
	Field Sample ID:	TMW-3	TMW-3	TMW-3	KP-MW03-060112	KP-MW03-060112D
	Sample Date:	8/10/2010	8/11/2010	8/17/2010	6/1/2012	6/1/2012
	Screen Depth (ft bgs)	6-16	6-16	6-16	8-18	8-18
2-Nitrophenol	mg/L	NA	NA	NA	0.01 U	0.01 U
3&4-Methylphenol(m&p Cresol)	mg/L	NA	NA	NA	0.021 U	0.021 U
3,3'-Dichlorobenzidine	mg/L	NA	NA	NA	0.021 U	0.021 U
3-Nitroaniline	mg/L	NA	NA	NA	0.052 U	0.052 U
4,6-Dinitro-2-methylphenol	mg/L	NA	NA	NA	0.052 U	0.052 U
4-Bromophenylphenyl ether	mg/L	NA	NA	NA	0.01 U	0.01 U
4-Chloro-3-methylphenol	mg/L	NA	NA	NA	0.021 U	0.021 U
4-Chloroaniline	mg/L	NA	NA	NA	0.021 U	0.021 U
4-Chlorophenylphenyl ether	mg/L	NA	NA	NA	0.01 U	0.01 U
4-Methylphenol	mg/L	NA	NA	NA	NA	NA
4-Nitroaniline	mg/L	NA	NA	NA	0.052 U	0.052 U
4-Nitrophenol	mg/L	NA	NA	NA	0.052 U	0.052 U
Acenaphthene	mg/L	0.001 U	NA	NA	0.001 U	0.001 U
Acenaphthylene	mg/L	0.001 U	NA	NA	0.001 U	0.001 U
Aniline	mg/L	NA	NA	NA	NA	NA
Anthracene	mg/L	0.001 U	NA	NA	0.0001 U	0.0001 U
Benzidine	mg/L	NA	NA	NA	NA	NA
Benzo(a)anthracene	mg/L	0.0001 U	NA	NA	0.0001 U	0.0001 U
Benzo(a)pyrene	mg/L	0.0001 U	NA	NA	0.0001 U	0.0001 U
Benzo(b)fluoranthene	mg/L	0.0001 U	NA	NA	0.0001 U	0.0001 U
Benzo(g,h,i)perylene	mg/L	0.001 U	NA	NA	0.0001 U	0.0001 U
Benzo(k)fluoranthene	mg/L	0.0001 U	NA	NA	0.0001 U	0.0001 U
Benzoic acid	mg/L	NA	NA	NA	NA	NA
Benzyl alcohol	mg/L	NA	NA	NA	0.021 U	0.021 U
bis(2chloro1methylethyl) ether	mg/L	NA	NA	NA	0.0052 U	0.0052 U
bis(2-Chloroethoxy)methane	mg/L	NA	NA	NA	0.01 U	0.01 U
bis(2-Chloroethyl) ether	mg/L	NA	NA	NA	0.01 U	0.01 U
bis(2-Ethylhexyl)phthalate	mg/L	NA	NA	NA	0.0052 U	0.0052 U
Butylbenzylphthalate	mg/L	NA	NA	NA	0.01 U	0.01 U
Carbazole	mg/L	NA	NA	NA	NA	NA
Chrysene	mg/L	0.0001 U	NA	NA	0.00052 U	0.00052 U
Dibenz(a,h)anthracene	mg/L	0.0001 U	NA	NA	0.0001 U	0.0001 U
Dibenzofuran	mg/L	NA	NA	NA	0.01 U	0.01 U
Diethylphthalate	mg/L	NA	NA	NA	0.01 U	0.01 U
Dimethylphthalate	mg/L	NA	NA	NA	0.01 U	0.01 U
Di-n-butylphthalate	mg/L	NA	NA	NA	0.01 U	0.01 U
Di-n-octylphthalate	mg/L	NA	NA	NA	0.01 U	0.01 U
Fluoranthene	mg/L	0.001 U	NA	NA	0.001 U	0.001 U
Fluorene	mg/L	0.001 U	NA	NA	0.001 U	0.001 U

Table D-2
Groundwater Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

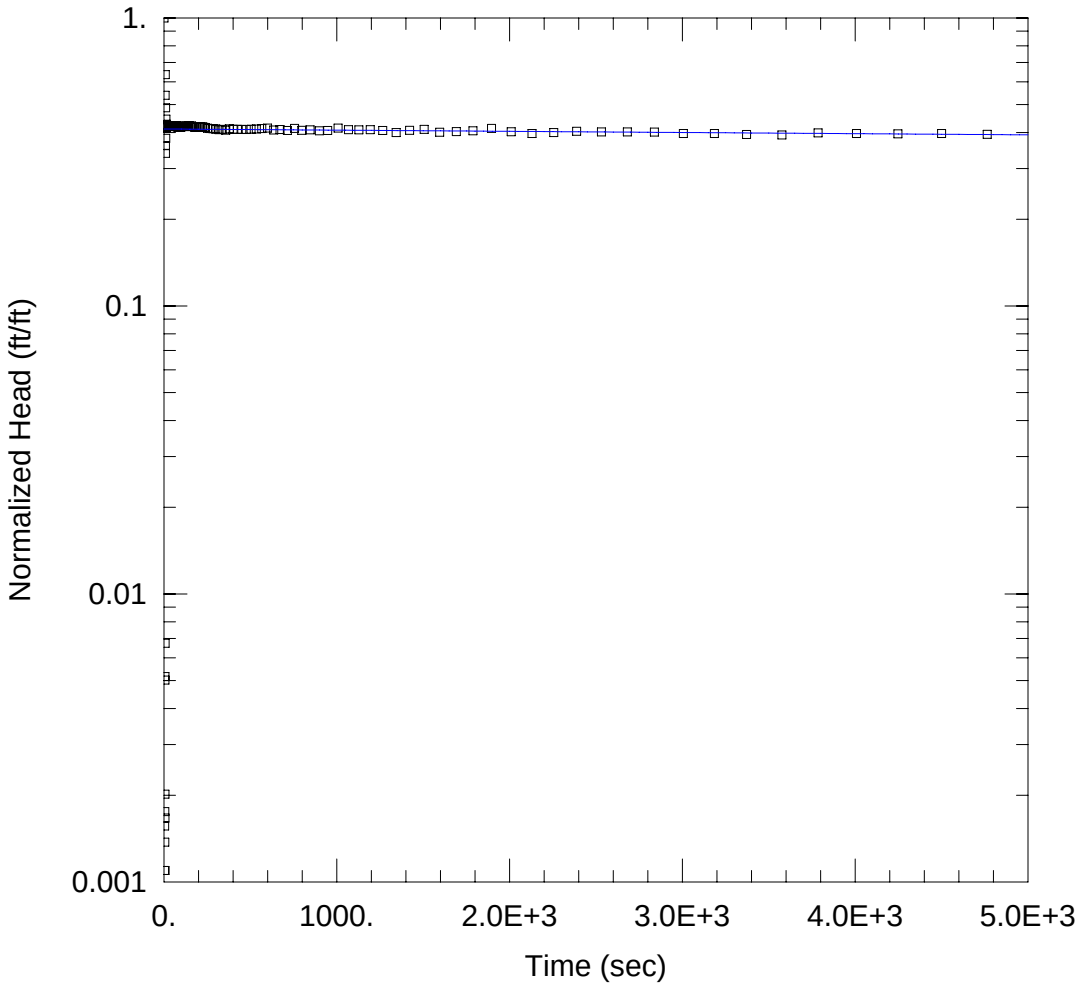
Chemical Name	Location ID:	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03	TMW-3/KP-MW03
	Field Sample ID:	TMW-3	TMW-3	TMW-3	KP-MW03-060112	KP-MW03-060112D
	Sample Date:	8/10/2010	8/11/2010	8/17/2010	6/1/2012	6/1/2012
	Screen Depth (ft bgs)	6-16	6-16	6-16	8-18	8-18
Hexachloro-1,3-butadiene	mg/L	NA	NA	NA	0.0052 U	0.0052 U
Hexachlorobenzene	mg/L	NA	NA	NA	0.01 U	0.01 U
Hexachlorocyclopentadiene	mg/L	NA	NA	NA	0.021 U	0.021 U
Hexachloroethane	mg/L	NA	NA	NA	0.01 U	0.01 U
Indeno(1,2,3-cd)pyrene	mg/L	0.0001 U	NA	NA	0.0001 U	0.0001 U
Isophorone	mg/L	NA	NA	NA	0.01 U	0.01 U
Naphthalene	mg/L	0.001 U	NA	NA	0.001 U	0.001 U
Nitrobenzene	mg/L	NA	NA	NA	0.01 U	0.01 U
N-Nitrosodimethylamine	mg/L	NA	NA	NA	NA	NA
N-Nitroso-di-n-propylamine	mg/L	NA	NA	NA	0.01 U	0.01 U
N-Nitrosodiphenylamine	mg/L	NA	NA	NA	0.01 U	0.01 U
Pentachlorophenol	mg/L	NA	NA	NA	0.052 U	0.052 U
Phenanthrene	mg/L	0.001 U	NA	NA	0.001 U	0.001 U
Phenol	mg/L	NA	NA	NA	0.01 U	0.01 U
Pyrene	mg/L	0.001 U	NA	NA	0.001 U	0.001 U
Pyridine	mg/L	NA	NA	NA	NA	NA

Table D-2
Groundwater Analytical Results
Kimball Avenue Park - 1807-15 North Kimball Avenue
Chicago, Cook County, Illinois

Notes:
D = Duplicate
ID - Identification
J = Concentration estimated
mg/L = Milligrams per liter
NA = Not analyzed
PCB = Polychlorinated biphenyls
SVOC = Semivolatile organic compound
U = Constituent not detected. Reporting limit presented.
VOC = Volatile organic compound

APPENDIX E
LABORATORY DATA AND DATA VALIDATION REPORTS
(Laboratory Analytical Results Presented In CD Copy Only)

APPENDIX F
AQUIFER TEST ANALYSES



MW-02 FALLING HEAD TEST

Data Set: K:\...\MW-2(Kimball)Fall.aqt
Date: 06/26/12 Time: 12:51:16

PROJECT INFORMATION

Company: WESTON
Client: U.S. EPA
Location: Kimball Field
Test Well: MW-2

AQUIFER DATA

Saturated Thickness: 11.81 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-01)

Initial Displacement: 4.023 ft Static Water Column Height: 11.81 ft
Total Well Penetration Depth: 11.81 ft Screen Length: 10. ft
Casing Radius: 0.083 ft Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice
K = 3.741E-7 cm/sec y0 = 1.656 ft

Data Set: K:\EPA\EPA R5 START3\Site Files\Brownfields - Bloomingdale Trail\Kimbal Field Documents\Slug Test\M
Title: MW-02 Falling Head Test
Date: 06/26/12
Time: 12:51:29

PROJECT INFORMATION

Company: WESTON
Client: U.S. EPA
Location: Kimball Field
Test Well: MW-2

AQUIFER DATA

Saturated Thickness: 11.81 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: MW-01

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 4.023 ft
Static Water Column Height: 11.81 ft
Casing Radius: 0.083 ft
Well Radius: 0.083 ft
Well Skin Radius: 0.33 ft
Screen Length: 10. ft
Total Well Penetration Depth: 11.81 ft

No. of Observations: 140

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.25	-0.002486	90.	1.678
0.5	-0.001874	94.8	1.678
0.75	-0.003499	100.8	1.685
1.	-0.004315	106.8	1.689
1.25	-0.001961	112.8	1.692
1.5	-0.003579	119.4	1.695
1.75	-0.004244	126.6	1.692
2.	-0.003183	134.4	1.688
2.25	-0.002822	142.2	1.694
2.5	-0.004852	150.6	1.694
2.75	0.000777	159.6	1.696
3.215	-0.003034	169.2	1.689
3.435	-0.002063	178.8	1.679
3.656	-0.002396	189.6	1.677
4.077	0.006293	201.	1.681
4.299	0.003978	213.	1.684
4.523	0.0038	225.6	1.682
4.742	0.007059	238.8	1.676
4.961	0.004411	253.2	1.665
5.18	0.004411	268.2	1.662
5.399	0.005528	283.8	1.659
5.618	0.006704	300.6	1.656
5.838	0.00812	318.6	1.646
6.058	0.02021	337.2	1.652
6.36	0.02077	357.6	1.639
6.72	0.02712	378.6	1.658
7.14	2.168	400.8	1.653
7.56	4.023	425.3	1.651
7.98	2.558	450.	1.65
8.46	1.45	476.4	1.65
9.	1.363	504.6	1.652

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
9.48	1.961	534.6	1.655
10.08	1.704	566.4	1.66
10.68	1.537	600.	1.667
11.28	1.791	636.	1.642
11.94	1.678	672.	1.648
12.66	1.668	714.	1.637
13.44	1.719	756.	1.663
14.22	1.676	798.	1.639
15.06	1.713	846.	1.645
15.96	1.688	900.	1.632
16.92	1.702	948.	1.637
17.88	1.698	1008.	1.667
18.96	1.702	1068.	1.647
20.1	1.702	1128.	1.645
21.3	1.702	1194.	1.646
22.56	1.7	1266.	1.635
23.88	1.701	1344.	1.61
25.32	1.7	1422.	1.637
26.82	1.7	1506.	1.65
28.38	1.7	1596.	1.613
30.06	1.699	1692.	1.622
31.86	1.698	1788.	1.632
33.72	1.695	1896.	1.663
35.76	1.692	2010.	1.618
37.86	1.689	2130.	1.596
40.08	1.689	2256.	1.609
42.48	1.688	2388.	1.626
45.	1.69	2532.	1.616
47.64	1.69	2682.	1.617
50.46	1.69	2838.	1.615
53.46	1.692	3006.	1.597
56.64	1.692	3186.	1.597
60.	1.696	3372.	1.584
63.6	1.699	3576.	1.579
67.2	1.698	3786.	1.604
71.4	1.692	4008.	1.597
75.6	1.688	4248.	1.592
79.8	1.682	4500.	1.597
84.6	1.682	4764.	1.586

SOLUTION

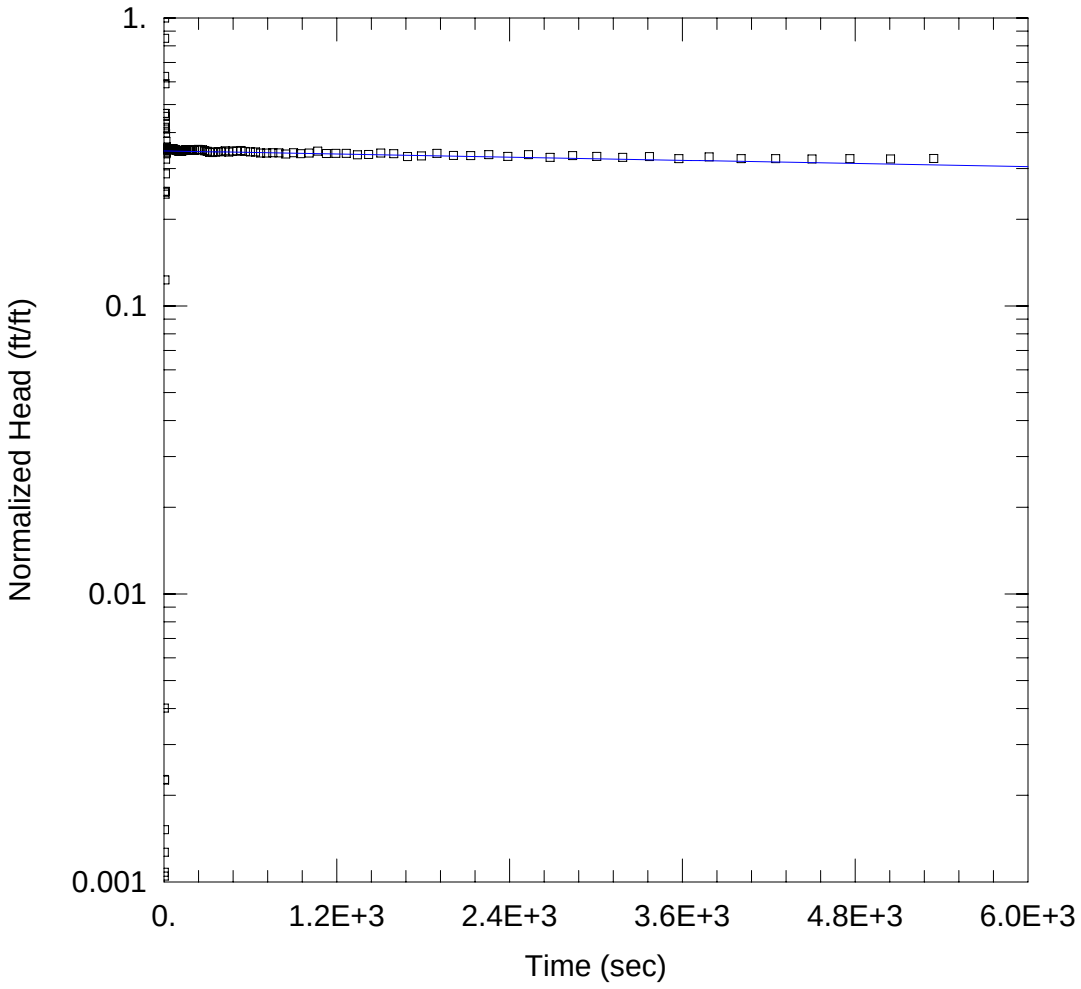
Slug Test
Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
ln(Re/rw): 3.803

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	3.741E-7	cm/sec
y0	1.656	ft

$T = K*b = 0.0001347$ cm²/sec



MW-02 RISING HEAD TEST

Data Set: K:\...\MW-2(Kimball)Rise.aqt
Date: 06/26/12 Time: 12:51:49

PROJECT INFORMATION

Company: WESTON
Client: U.S. EPA
Location: Kimball Field
Test Well: MW-2

AQUIFER DATA

Saturated Thickness: 11.81 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-01)

Initial Displacement: -4.863 ft Static Water Column Height: 11.81 ft
Total Well Penetration Depth: 11.81 ft Screen Length: 10. ft
Casing Radius: 0.083 ft Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice
K = 8.359E-7 cm/sec y0 = -1.679 ft

Data Set: K:\EPA\EPA R5 START3\Site Files\Brownfields - Bloomingdale Trail\Kimbal Field Documents\Slug Test\M
Title: MW-02 Rising Head Test
Date: 06/26/12
Time: 12:52:00

PROJECT INFORMATION

Company: WESTON
Client: U.S. EPA
Location: Kimball Field
Test Well: MW-2

AQUIFER DATA

Saturated Thickness: 11.81 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: MW-01

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: -4.863 ft
Static Water Column Height: 11.81 ft
Casing Radius: 0.083 ft
Well Radius: 0.083 ft
Well Skin Radius: 0.33 ft
Screen Length: 10. ft
Total Well Penetration Depth: 11.81 ft

No. of Observations: 142

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.251	-0.001182	94.8	-1.682
0.501	-0.001033	100.8	-1.679
0.751	-0.003562	106.8	-1.681
1.001	-0.002703	112.8	-1.678
1.251	-0.004175	119.4	-1.675
1.501	-0.004184	126.6	-1.68
1.751	-0.002515	134.4	-1.682
2.001	-0.003379	142.2	-1.686
2.251	-0.004748	150.6	-1.693
2.501	-0.005097	159.6	-1.696
2.751	-0.01951	169.2	-1.689
3.001	-0.006167	178.8	-1.685
3.251	-0.005252	189.6	-1.686
3.501	0.002807	201.	-1.688
3.751	0.002143	213.	-1.685
4.001	-0.007381	225.6	-1.693
4.251	-0.01104	238.8	-1.699
4.501	-0.01098	253.2	-1.698
4.751	-1.207	268.2	-1.695
5.001	-3.048	283.8	-1.68
5.251	-4.863	300.6	-1.675
5.501	-4.132	318.6	-1.659
5.751	-2.029	337.2	-1.656
6.001	0.2538	357.6	-1.666
6.361	-2.266	378.6	-1.671
6.721	-2.874	400.8	-1.668
7.141	-0.5989	425.3	-1.681
7.561	-2.267	450.	-1.663
7.981	-2.	476.4	-1.679
8.461	-1.188	504.6	-1.674
9.001	-2.211	534.6	-1.686

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
9.481	-1.216	566.4	-1.671
10.08	-2.093	600.	-1.666
10.68	-1.398	636.4	-1.665
11.28	-1.938	672.	-1.651
11.94	-1.573	714.	-1.65
12.66	-1.684	756.4	-1.655
13.44	-1.813	798.	-1.653
14.22	-1.64	846.4	-1.638
15.06	-1.654	900.	-1.656
15.96	-1.725	948.	-1.643
16.92	-1.733	1008.	-1.652
17.88	-1.713	1068.	-1.675
18.96	-1.704	1128.	-1.644
20.1	-1.702	1194.	-1.647
21.3	-1.705	1266.4	-1.646
22.56	-1.706	1344.	-1.628
23.88	-1.704	1422.	-1.631
25.32	-1.702	1506.4	-1.651
26.82	-1.702	1596.4	-1.641
28.38	-1.704	1692.	-1.605
30.06	-1.702	1788.	-1.612
31.86	-1.697	1896.4	-1.646
33.72	-1.701	2010.	-1.62
35.76	-1.703	2130.	-1.618
37.86	-1.705	2256.4	-1.63
40.08	-1.706	2388.	-1.607
42.48	-1.704	2532.	-1.629
45.	-1.705	2682.	-1.596
47.64	-1.703	2838.	-1.616
50.46	-1.704	3006.4	-1.608
53.46	-1.704	3186.4	-1.595
56.64	-1.703	3372.	-1.604
60.	-1.702	3576.4	-1.579
63.6	-1.703	3786.	-1.602
67.2	-1.703	4008.	-1.579
71.4	-1.7	4248.	-1.579
75.6	-1.698	4500.	-1.575
79.8	-1.693	4764.	-1.578
84.6	-1.689	5046.	-1.574
90.	-1.685	5346.	-1.58

SOLUTION

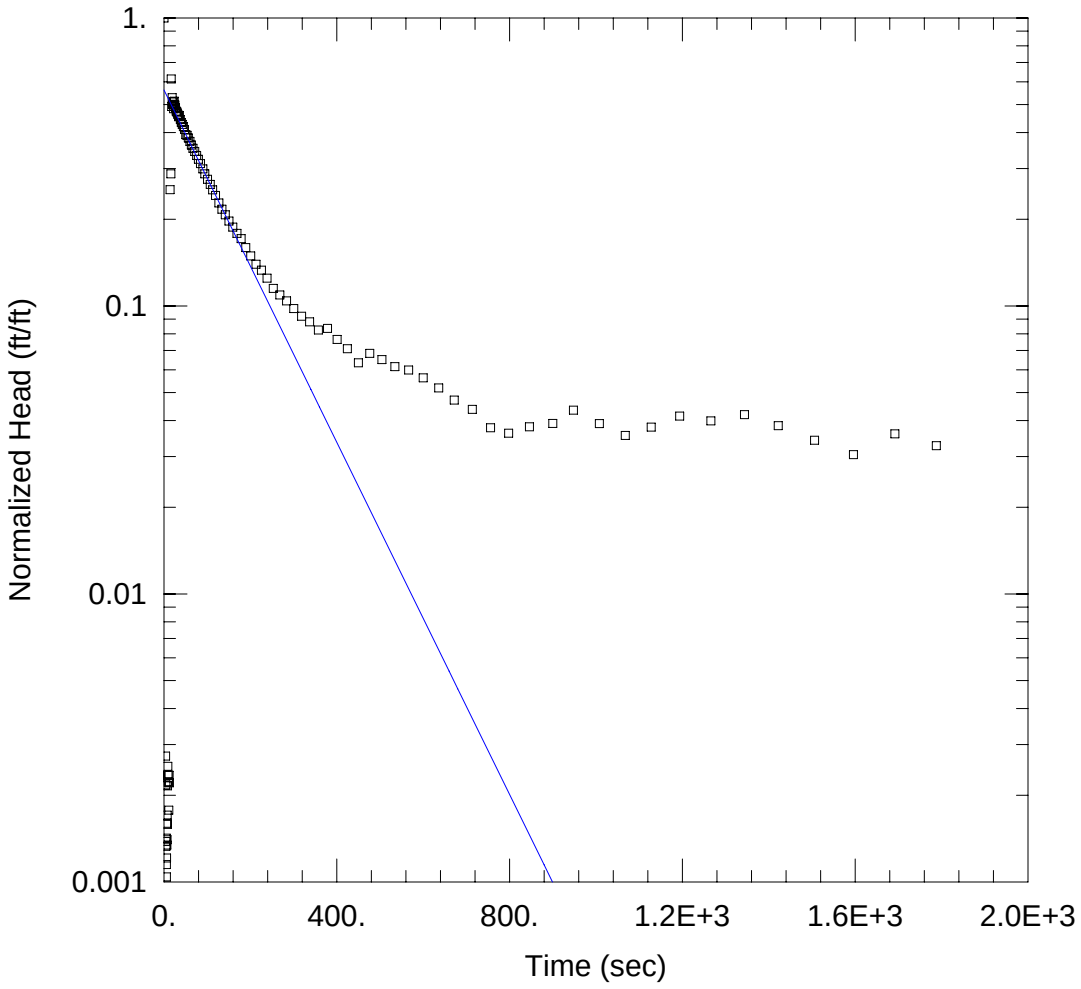
Slug Test
Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
ln(Re/rw): 3.803

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	8.359E-7	cm/sec
y0	-1.679	ft

$T = K*b = 0.0003009$ cm²/sec



MW-03 FALLING HEAD TEST

Data Set: K:\...\MW-3(Kimball)Fall.aqt
Date: 06/26/12 Time: 12:52:40

PROJECT INFORMATION

Company: WESTON
Client: U.S. EPA
Location: Kimball Field
Test Well: MW-3

AQUIFER DATA

Saturated Thickness: 11.3 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-01)

Initial Displacement: 2.682 ft Static Water Column Height: 11.3 ft
Total Well Penetration Depth: 11.3 ft Screen Length: 10. ft
Casing Radius: 0.083 ft Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice
K = 0.000279 cm/sec y0 = 1.507 ft

Data Set: K:\EPA\EPA R5 START3\Site Files\Brownfields - Bloomingdale Trail\Kimbal Field Documents\Slug Test\M
Title: MW-03 Falling Head Test
Date: 06/26/12
Time: 12:52:55

PROJECT INFORMATION

Company: WESTON
Client: U.S. EPA
Location: Kimball Field
Test Well: MW-3

AQUIFER DATA

Saturated Thickness: 11.3 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: MW-01

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: 2.682 ft
Static Water Column Height: 11.3 ft
Casing Radius: 0.083 ft
Well Radius: 0.083 ft
Well Skin Radius: 0.33 ft
Screen Length: 10. ft
Total Well Penetration Depth: 11.3 ft

No. of Observations: 123

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.251	0.000167	56.64	1.027
0.501	1.5E-5	60.	1.
0.751	0.000167	63.6	0.9703
1.001	-0.000289	67.2	0.9458
1.251	-0.000648	71.4	0.9218
1.501	-0.000126	75.6	0.8929
1.751	-0.00028	79.8	0.8658
2.001	0.001101	84.6	0.8372
2.251	0.000134	90.	0.8022
2.501	0.001147	94.8	0.771
2.751	0.002114	100.8	0.738
3.001	0.001706	107.1	0.709
3.251	0.002268	112.8	0.6784
3.501	-0.00114	119.4	0.6486
3.751	0.001658	127.1	0.6107
4.001	0.007335	134.4	0.5813
4.466	0.005824	142.2	0.5555
4.687	0.003565	150.6	0.5286
4.907	0.002015	159.6	0.5037
5.151	0.003705	169.2	0.4788
5.374	0.003806	178.8	0.4592
5.596	0.00308	189.6	0.4274
5.818	0.002793	201.	0.4001
6.039	0.003249	213.	0.3743
6.36	0.004285	225.6	0.3569
6.72	0.003603	238.8	0.3349
7.14	0.003757	253.2	0.3085
7.56	0.004574	268.2	0.2929
7.98	0.004251	283.8	0.2793
8.46	0.005779	300.6	0.2625
9.	0.006755	318.6	0.2469

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
9.48	0.006288	337.2	0.2362
10.08	0.005943	357.6	0.2214
10.68	0.005981	378.6	0.2241
11.28	0.004759	400.8	0.2051
11.94	0.006288	424.8	0.1905
12.66	0.005927	450.	0.1703
13.44	-0.02637	476.4	0.1835
14.22	0.6794	504.6	0.1747
15.06	2.682	534.6	0.165
15.96	0.7716	566.4	0.1607
16.92	1.647	600.	0.1509
17.88	1.321	636.	0.1393
18.96	1.418	672.	0.1263
20.1	1.345	714.	0.1173
21.3	1.369	756.	0.1012
22.56	1.298	798.	0.09698
23.88	1.378	846.	0.102
25.32	1.336	900.	0.1048
26.82	1.31	948.	0.1165
28.38	1.273	1008.	0.1047
30.06	1.263	1068.	0.0952
31.86	1.243	1128.	0.1018
33.72	1.217	1194.	0.1112
35.76	1.23	1266.	0.1069
37.86	1.189	1344.	0.1125
40.08	1.162	1422.	0.1029
42.48	1.145	1506.	0.0917
45.	1.125	1596.	0.08171
47.64	1.099	1692.	0.0965
50.46	1.055	1788.	0.08779
53.46	1.049		

SOLUTION

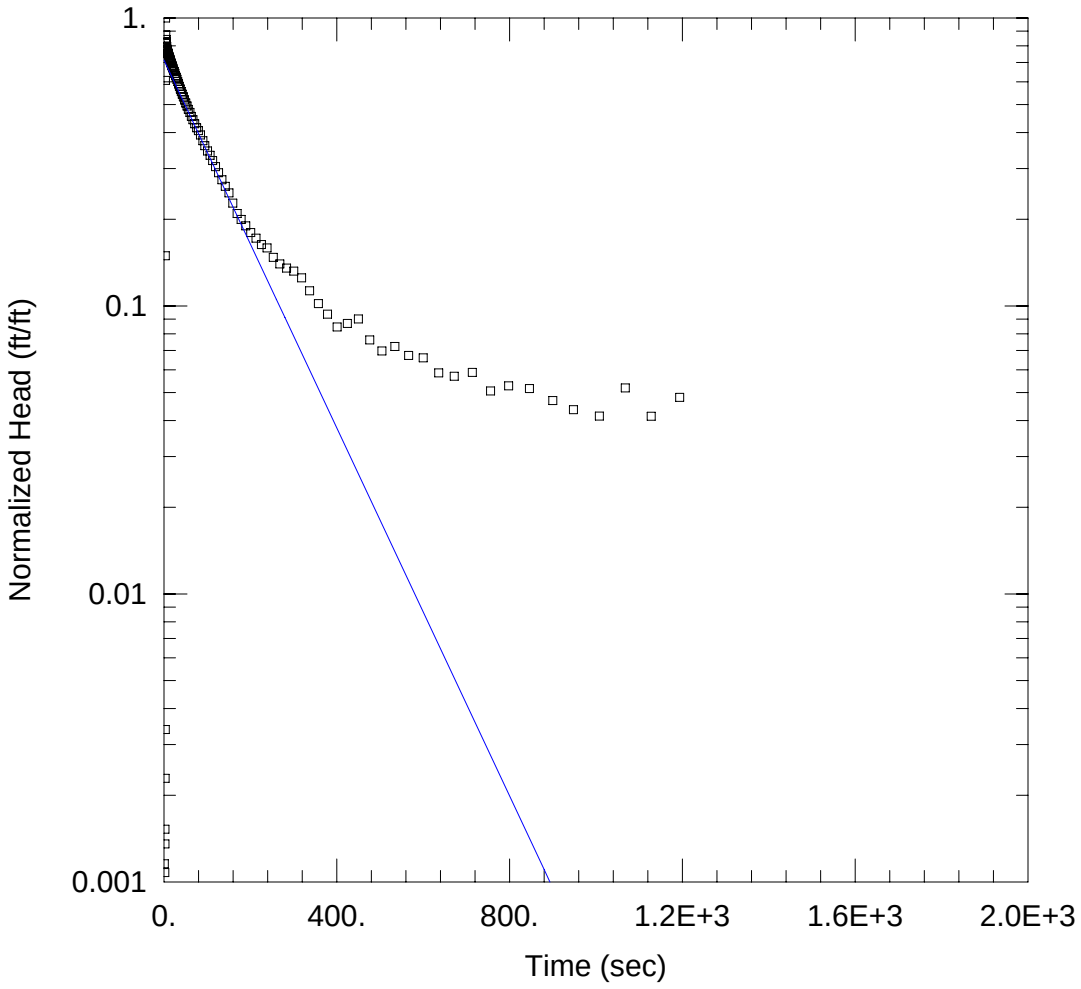
Slug Test
Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
ln(Re/rw): 3.775

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.000279	cm/sec
y0	1.507	ft

$T = K*b = 0.09609$ cm²/sec



MW-03 FALLING HEAD TEST

Data Set: K:\...\MW-3(Kimball)Rise.aqt
Date: 06/26/12 Time: 12:53:28

PROJECT INFORMATION

Company: WESTON
Client: U.S. EPA
Location: Kimball Field
Test Well: MW-3

AQUIFER DATA

Saturated Thickness: 11.3 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-01)

Initial Displacement: -1.812 ft Static Water Column Height: 11.3 ft
Total Well Penetration Depth: 11.3 ft Screen Length: 10. ft
Casing Radius: 0.083 ft Well Radius: 0.083 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 0.0002914 cm/sec y0 = -1.294 ft

Data Set: K:\EPA\EPA R5 START3\Site Files\Brownfields - Bloomingdale Trail\Kimbal Field Documents\Slug Test\M
Title: MW-03 Falling Head Test
Date: 06/26/12
Time: 12:53:41

PROJECT INFORMATION

Company: WESTON
Client: U.S. EPA
Location: Kimball Field
Test Well: MW-3

AQUIFER DATA

Saturated Thickness: 11.3 ft
Anisotropy Ratio (Kz/Kr): 1.

SLUG TEST WELL DATA

Test Well: MW-01

X Location: 0. ft
Y Location: 0. ft

Initial Displacement: -1.812 ft
Static Water Column Height: 11.3 ft
Casing Radius: 0.083 ft
Well Radius: 0.083 ft
Well Skin Radius: 0.33 ft
Screen Length: 10. ft
Total Well Penetration Depth: 11.3 ft

No. of Observations: 116

Observation Data

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
0.25	-0.001373	45.	-0.9636
0.5	-0.001742	47.64	-0.941
0.75	0.000141	50.46	-0.9183
1.	-0.002096	53.46	-0.8964
1.25	-0.001487	56.64	-0.8725
1.5	-0.000873	60.	-0.8512
1.75	-0.000773	63.6	-0.825
2.	-0.001953	67.2	-0.8023
2.25	-0.002457	71.4	-0.7777
2.5	-0.002762	75.6	-0.7531
2.75	-0.00415	79.8	-0.7361
3.	-0.006125	84.6	-0.7108
3.25	-0.2706	90.	-0.6792
3.5	-1.099	94.8	-0.6528
3.75	-1.482	100.8	-0.6254
3.995	-1.812	106.8	-0.6045
4.25	-1.581	112.8	-0.5794
4.5	-1.493	119.4	-0.5516
4.75	-1.493	126.6	-0.5257
5.	-1.526	134.4	-0.4968
5.25	-1.494	142.2	-0.4718
5.5	-1.434	150.6	-0.4472
5.75	-1.418	159.6	-0.4122
6.	-1.444	169.4	-0.3791
6.36	-1.446	178.8	-0.362
6.72	-1.405	189.6	-0.3438
7.14	-1.412	201.	-0.3257
7.56	-1.407	213.	-0.3114
7.98	-1.384	225.6	-0.2959
8.46	-1.389	238.8	-0.2882
9.	-1.371	253.2	-0.2674

Time (sec)	Displacement (ft)	Time (sec)	Displacement (ft)
9.48	-1.367	268.3	-0.2536
10.08	-1.356	283.8	-0.2452
10.68	-1.346	300.6	-0.2392
11.28	-1.336	318.6	-0.2269
11.94	-1.328	337.2	-0.2044
12.68	-1.316	357.6	-0.1846
13.44	-1.305	378.6	-0.1697
14.22	-1.295	400.8	-0.1532
15.06	-1.282	424.8	-0.1574
15.96	-1.271	450.	-0.1633
16.92	-1.259	476.4	-0.1382
18.32	-1.241	504.6	-0.1265
18.96	-1.233	534.6	-0.131
20.1	-1.221	566.4	-0.1219
21.3	-1.206	600.	-0.1197
22.56	-1.191	636.	-0.1061
23.88	-1.178	672.	-0.1032
25.32	-1.162	714.	-0.1065
26.82	-1.144	756.	-0.09187
28.38	-1.128	798.	-0.09568
30.06	-1.11	846.	-0.09355
31.86	-1.09	900.	-0.08507
33.72	-1.069	948.	-0.07908
35.76	-1.048	1008.	-0.07507
37.86	-1.026	1068.	-0.0941
40.08	-1.006	1128.	-0.07502
42.48	-0.9851	1194.	-0.08729

SOLUTION

Slug Test
Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
ln(Re/rw): 3.775

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0002914	cm/sec
y0	-1.294	ft

$T = K*b = 0.1004$ cm²/sec

January 22, 2013

Mr. Dave Graham
City of Chicago
Department of Fleet and Facility Management (2FM)
Bureau of Environmental Health & Safety Management (EHS)
Urban Management and Brownfields Redevelopment Division
30 North LaSalle Street, Suite 200
Chicago, Illinois 60602

RE: Preliminary Report
Phase II Site Investigation Summary
Proposed Kimball Park (Parcels 13-35-409-037; -039; and, -042)
1809 North Kimball Avenue
Chicago, Cook County, Illinois
City of Chicago Department of Environment Brownfield Assessments Project
Hazardous Substances Assessments
USEPA Cooperative Agreement No.: BF-00E683-01
Terracon Project No.: A2107017 Task 7A

Dear Mr. Graham:

Terracon Consultants, Inc. (Terracon) is pleased to submit this Preliminary Phase II Site Investigation Summary for the above-referenced site. Prior to the investigation, Terracon submitted a Property-Specific Sampling and Analysis Plan (SAP) which was approved by the US Environmental Protection Agency (USEPA) on August 20, 2012. The SAP was developed consistent with the Quality Assurance Project Plan, Revision 1 (QAPP), dated September 16, 2011. The QAPP was approved by the USEPA in December 2011.

BACKGROUND

The site is located at 1809 North Kimball Avenue in Chicago, Cook County, Illinois and is associated with Property Identification Numbers (PINs) 13-35-409-037; -039; and -042. The site location is depicted on Exhibit 1 – Topographic Vicinity Map included in Appendix A. The approximate 0.41-acre site is irregularly shaped and is currently vacant. There is remnant concrete surface cover on portions of the site and the remainder is grass or bare soil. An earthen ramp with a concrete retaining wall is located in the southwestern quadrant of the site. The ramp leads to an elevated rail line (approximately 15-20 feet above the site grade) which borders the site to the south.

The site is located in a mixed residential/commercial/industrial area of Chicago. The site is bordered on the north by single-family residential homes; on the south by a tract of land owned by Soo Line (railroad); on the east by a condominium complex (G&A Residences); and on the west by North Kimball Avenue followed by a multi-family residential development (Humboldt Ridge). These surrounding land uses are shown on Exhibit 2 – Site Diagram of Appendix A.

Based on information presented in a Phase I ESA prepared by Terracon dated August 21, 2012, and in a Comprehensive Site Investigation Report (CSIR) prepared for the site by Weston Solutions, Inc. (Weston) dated July 2012, the site history is summarized below.

- *1896:* Site occupied by a single-family dwelling on northern portion of property and used for lumber storage for Elsmere Lumber Company (ELC; south adjoining property) on eastern and southern portion of property
- *1921:* Site appears vacant with no structures;
- *1950:* Site occupied by a warehouse believed to be an extension of the American Laundry Machinery Company (ALMC; east adjoining property). The warehouse included a structure for painting operations and/or paint storage;
- *1975, 1988, 1991, and 1994:* Site occupied by a warehouse believed to be an extension of the former ALMC, the Compco Corporation (Compco), a fluorescent light bulb and fixture manufacturer; and,
- *2002 and 2004:* Site appears vacant with no structures.

The site was formerly a part of industrial and manufacturing operations that occurred on the adjoining east and south properties. The property to the west (across North Kimball Avenue) was historically industrial until recent redevelopment as a multi-family apartment complex. Properties to the north have historically been single-family residential.

According to the Weston CSIR, the horizontal extent of constituents of concern (COCs) at concentrations exceeding the Illinois Environmental Protection Agency's (IEPA's) Tiered Approach to Corrective Action Objectives (TACO) regulations (35 Illinois Administrative Code [IAC] Part 742) Tier 1 Soil Remediation Objectives (SROs) has been established by the property boundaries in all directions; however, the vertical extent of contamination is not defined at the following sampling locations for the listed COCs:

- B-2/KP-SB01 – trichloroethene at 18 to 20 feet below ground surface (bgs);
- B-3/KP-SB09 – trichloroethene at 6 to 9 feet bgs;
- B-4 – cis-1,2-dichloroethene and vinyl chloride at 9 to 12 feet bgs;

- B-5/KP-SB02 – cis-1,2-dichloroethene, trichloroethene, and vinyl chloride at 18 to 20 feet bgs;
- B-8/KP-SB10 – benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene at 12 to 14 feet bgs;
- KP-SB04 – trichloroethene and vinyl chloride at 14 to 16 feet bgs;
- KP-SB05 – trichloroethene and vinyl chloride at 14 to 16 feet bgs;
- KP-SB06 – cis-1,2-Dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride at 14 to 16 feet bgs; and,
- KP-SB08 – cis-1,2-dichloroethene and vinyl chloride at 15 to 17 feet bgs.

Analytical results from groundwater samples indicated the presence of chloroform, cis-1,2-dichloroethene, trichloroethene, and vinyl chloride, and iron at concentrations exceeding the Tier 1 Class II groundwater remediation objectives (GROs)[1] .The extent of the groundwater plume has not been defined.

The Phase II Investigation activities described below were performed in order to delineate the undefined exceedances noted by Weston. The investigation activities were proposed and described in the SAP which was approved by the USEPA on August 20, 2012. The goal of the activities was to vertically delineate the nature/extent of the soil impact, collect soil vapor samples, and further characterize groundwater on-site.

Phase II Investigation Activities

Based on findings of the Phase II ESA and as detailed in the approved SAP, Terracon conducted the following activities:

Soil Boring Activities

Before beginning subsurface investigation activities, Terracon contacted DIGGER (the City of Chicago Utility Locate system) and requested location and markings of subsurface utilities.

A total of five direct-push soil borings (denoted as TB-1 through TB-5) were advanced at the site in the vicinity of the soil borings that previously exhibited elevated VOC concentrations in an attempt to vertically delineate the extent of the soil impacts. The recent boring locations are depicted on the attached Exhibit 2, along with locations of the historical borings advanced during prior investigations. Soil boring logs are provided in Appendix B.

Terracon field screened the soil samples recovered from each soil boring for organic vapors using a photoionization detector (PID) equipped with an approximate 10 eV ultraviolet lamp source. This device provides a direct reading in parts per million (ppm)

[1] Weston conducted in-situ hydraulic conductivity testing that confirmed the site's Class II designation.

isobutylene equivalents. Upon removal of the sample liner from the borehole, Terracon placed soil samples in re-sealable Ziploc® plastic bags at two foot intervals. After a brief stabilization period, Terracon screened the headspace above the soil in each bag using the PID. The PID unit was calibrated daily using 100 ppm isobutylene gas in accordance with the manufacturer's recommendations. The PID readings were recorded in the field and are noted on the soil boring logs.

Soil Sample Collection and Handling

The soil samples were selected with the intent of vertically delineating previously identified exceedances by selecting deeper samples with no visual, olfactory, and/or elevated PID evidence of impact. The soil sampling equipment was cleaned with Alconox™ detergent and rinsed with clean water prior to commencing sampling as well as between each sampling point. Soil borings were backfilled with the soil boring cuttings and supplemented as needed with bentonite pellets.

Analytical Methods for Soil Investigation

The following table summarizes the soil sample locations, depth intervals, and analyses:

Sample Location	Sample Date	Interval Analyzed	Purpose[2]	Analyses
TB-1	8-20-12	23-25'	Vertically delineate extent of VOC impact in Borings B-2/KP-SB01& KP-SB08.	VOCs 8260B
TB-2	8-20-12	13-15'	Vertically delineate extent of VOC impact in Boring B-3/KP-SB09.	VOCs 8260B
TB-2 DUP	8-20-12	13-15	QA/QC Sample	VOCs 8260B
TB-3	8-21-12	23-25'	Vertically delineate extent of VOC impact in Borings B-4 & KP-SB04.	VOCs 8260B
TB-4	8-21-12	28-30'	Vertically delineate extent of VOC impact in Borings B-5, KP-SB05, KP-SB02, and KP-SB06.	VOCs 8260B
TB-5	8-21-12	15-17'	Vertically delineate extent of PNA impact in Borings B-8 & KP-SB10.	PNAs 8270C
TB-5 DUP	8-21-12	15-17	QA/QC Sample	PNAs 8270C

Soil samples were placed in laboratory supplied glassware and transported on ice to STAT Analysis Corporation (STAT Analysis), Terracon's subcontract laboratory, under standard chain-of-custody procedures. Laboratory analytical results are discussed below. Soil sample analytical results are presented in tabular form in Appendix B.

[2] Note: borings B-1, etc. were conducted by Brecheisen Engineering, Inc. (BEI) in August 2010; borings KP-SB04, etc. were advanced by Weston Solutions, Inc. (WESTON) July 2012.

Soil Vapor Sampling Activities

Six soil gas screening points (SV-1 through SV-6) were advanced with a truck-mounted Geoprobe® direct-push unit. The locations of the soil gas sampling points are shown on Exhibit 2 – Boring Location Diagram in Appendix A. Each soil gas sampling point was installed at the base of the boring through a Geoprobe PRT system, which provides an isolated interval open to surrounding soil at the base of the drill rod. Each soil vapor sampling probe was advanced to six feet bgs. The soil gas wells consisted of a six inch long stainless steel vapor sampling point with Teflon tubing extending to the ground surface. A fine-grained sand filter pack was installed in the annular space from the base of the well to approximately 6-inches above the sampling point. A bentonite product (approximate 1/8-inch diameter chips) was installed in the annular space from the top of the sand pack to the ground surface and hydrated with potable water.

The integral pump on the PID was used to purge three volumes of air from the tubing prior to sample collection. A flow rate of approximately 200 milliliters per minute (mL/min) was used to calculate the purge volume. After purging, soil vapor samples were collected from each sample point using 1-liter Summa canisters under vacuum using a 100 mL/min flow controller. The table below summarizes the soil vapor sampling points.

SV Location	Sample Date	Analyses
SV-01	08.21.12	VOCs TO-15
SV-02	08.21.12	VOCs TO-15
SV-03	08.21.12	VOCs TO-15
SV-04	08.21.12	VOCs TO-15
SV-004 DUP	08.21.12	VOCs TO-15
SV-05	08.21.12	VOCs TO-15
SV-06	08.21.12	VOCs TO-15

The analytical laboratory prepared a laboratory control sample (LCS), and a laboratory control duplicate sample (LCSD), using a 5 ppm TO-15 calibration gas and analyzed for internal QA/QC purposes. The laboratory LCS and LCSD sample results are provided in Appendix C.

Groundwater Monitoring Well Activities

Terracon's drilling subcontractor installed a total of four permanent groundwater monitoring wells (denoted as MW-4 through MW-7) using a hollow-stem auger drill rig. The wells were constructed using sections of flush-jointed, two-inch outside diameter, schedule 40 PVC threaded pipe. The screened section of each monitoring well consisted of a 0.01-inch slotted section of PVC pipe installed to intersect the water table. Terracon placed fine-grained sand filter pack into each well's annulus from the bottom to approximately one to two feet above the screened section. Terracon placed a bentonite product (approximate ⅛-inch diameter chips) in the annulus from above the filter pack to within two feet of the ground surface. The bentonite chips were then hydrated with

potable water. Each internal PVC casing was fitted with an expansion cap. Following installation, each monitoring well was developed by removing approximately three well casing volumes using a disposable bailer. The table below summarizes the groundwater locations and analysis.

MW Location	Sample Date	Analyses
MW-4	09.10.12	VOCs 5030B/8260B
MW-5	09.10.12	VOCs 5030B/8260B
MW-6	09.10.12	VOCs 5030B/8260B
MW-7	09.10.12	VOCs 5030B/8260B

Water Level Measurements

Following the completion of investigation activities, Terracon used laser surveying equipment to measure the ground surface and top of casing (TOC) elevation for each monitoring well relative to a convenient reference benchmark to the nearest 1/100th of a foot.

Terracon measured the depth to water level by lowering an electric water tape into each well casing. The electric water tape broadcasted an audible signal upon reaching the water table. Once contact with the groundwater was established, Terracon observed the measurement on the tape at the reference point (top of the well casing) to the nearest 0.01 foot. Terracon recorded this measurement on the boring logs. Water levels were measured from 7.6 to 15.1 feet bgs and are presented in the well logs included in Appendix B. The measured groundwater contours are presented in Exhibit 3 in Appendix A.

Groundwater Sample Collection and Handling

An eight day stabilization period passed before sampling activities and groundwater measurement were recorded Terracon returned to the site on September 10, 2012 to complete the sampling. Upon removal of the well cap, the distance to the static water level and the total depth of the well was measured using an electronic water level indicator. Terracon cleaned the electric water level indicator between each monitoring well by washing in an Alconox™ and water solution followed by rinsing in potable water. The wells were purged of three well volumes of water and allowed to recharge prior to collecting the samples. A disposable bailer was used to collect groundwater samples for VOC analysis. Terracon filled the laboratory containers directly from the bailer and immediately completed the chain-of-custody documentation and sample labeling. Terracon packaged each sample in an ice-filled cooler for transport to STAT Analysis.

Analytical Methods for Hydrogeological Investigation

The table below summarizes the analytical methods used by the laboratory to analyze groundwater samples.

Compound Group	Test Method
VOCs	USEPA SW5030B/SW8260B

Analytical Results

The soil and groundwater analytical results were compared to the Tier 1 Soil Remediation Objectives (SROs) and Groundwater Remediation Objectives (GROs) as set forth in IEPA TACO Regulations (35 IAC Part 742). Illinois has not formally adopted soil gas remediation objectives; however, draft Tier 1 Residential Soil Gas Remediation Objectives (ROs) for the Indoor Inhalation Exposure Route – Diffusion and Advection, have been proposed by the IEPA. Terracon compared the soil gas data to the proposed IEPA objectives and to the U.S. Environmental Protection Agency (USEPA) Office of Solid Waste and Emergency Response (OSWER) Guidance for Evaluation Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils dated November 2002. Terracon compared the soil vapor results to Table 2b Generic Screening Levels (GSLs) with a risk factor of 10^{-5}, Target Shallow Soil Gas Concentrations.

Soil Sample Results

Soil laboratory analytical results indicate that one constituent (trichloroethene [TCE]) was detected above the laboratory reporting limit (RL) in the sample from boring TB-4 (28-30' bgs). Analytical results did not indicate exceedances of Tier 1 SROs. Sample results are provided in tabular form as Table 1 of Appendix C.

Soil Vapor Sample Results

Numerous VOC constituents were detected above RLs in the soil gas samples collected from the site. Exceedances of the EPA OSWER Screening Levels were detected for 1,3-butadiene in sample SV-02 and SV-03; cis-1,2-dichloroethene in samples SV-01, SV-04, SV-04 DUP and SV-05; trichloroethene (TCE) in samples SV-01 through SV-06; and for vinyl chloride in samples SV-04 and SV-04 DUP.

Illinois does not currently evaluate soil vapor concentrations in its regulatory programs. In 2012, the IEPA proposed amendments adding soil gas evaluation to the TACO 742 regulations; however, the proposed IEPA TACO Tier 1 Indoor/Outdoor Inhalation Exposure Route levels[3] currently are not in force, and are presented for informational purposes only. Soil vapor results are presented in Table 2 of Appendix C.

[3] First Notice, Rulemaking Case R11-9 In the Matter of: Tiered Approach to Corrective Action Objectives (TACO) Indoor Inhalation: Amendments to Title 35 Illinois Administrative Code Part 742, April 19, 2012 See

Groundwater Sample Results

Laboratory analytical results for the four ground water monitoring wells (MW-4 through -MW-7) indicate that levels of the COCs were below their respective GROs for Class I groundwater for the site for VOCs, with the exception of MW-6. The groundwater sample from this location exhibited concentrations of TCE and vinyl chloride above the Class II GROs. Sample results are provided in tabular form in Table 3 of Appendix C.

Findings/Conclusions

Based on the information provided in this report, it appears the soil impacts have been vertically delineated. Soil vapor results from several samples indicated exceedances of OSWER Screening Levels and proposed Tier 1 soil gas ROs. Groundwater sample from one location (MW-6) exhibited concentrations of TCE and vinyl chloride above the Class II GROs.

If you have questions or comments please contact the undersigned. Terracon appreciates the opportunity to perform these services for you. Please contact us if you have questions regarding this information or if we can provide any other services.

Sincerely,
Terracon Consultants, Inc.

Matt Weiss, P.G.
Project Geologist

Matt Catlin, PE
Senior Principal

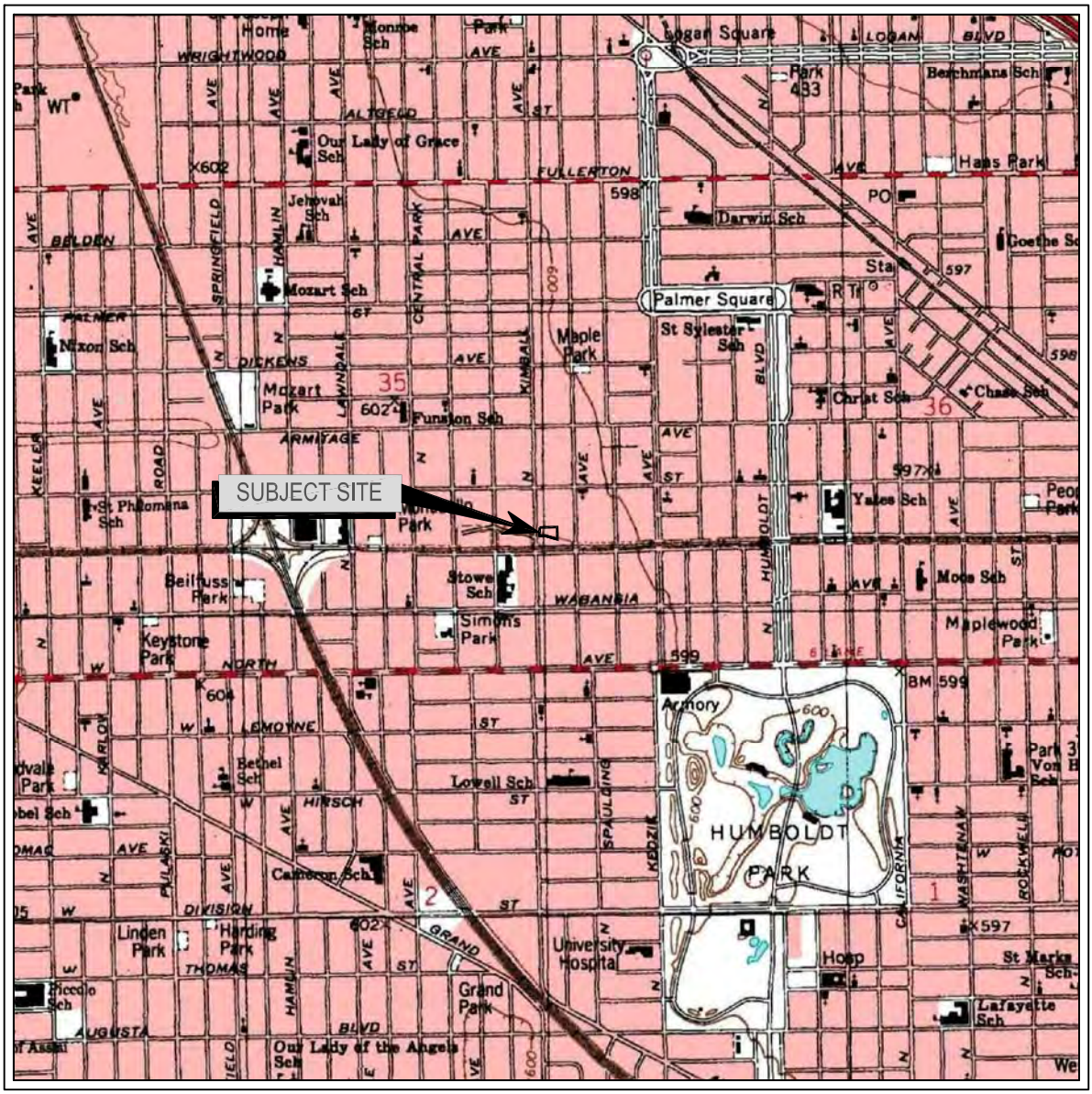
Appendices: Appendix A – Exhibits
Appendix B – Soil Boring/Monitoring Well Logs
Appendix C – Analytical Results Data and Tables

Appendix B, Table H. The proposed are not formally adopted by the IEPA.

Appendix A

Exhibits

UNITED STATES – DEPARTMENT OF THE INTERIOR – GEOLOGICAL SURVEY



SCALE 1:24 000

1 .5 0 KILOMETERS 1 2

1000 0 METERS 1000 2000

1 .5 0 1

MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10 000

FEET

CONTOUR INTERVAL 5 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

N

QUADRANGLE
CHICAGO LOOP, IL
1997
7.5 MINUTE SERIES (TOPOGRAPHIC)

Project Mngr: CCD	Project No. A2127017A	Terracon Consulting Engineers and Scientists	TOPOGRAPHIC VICINITY MAP	EXHIBIT
Drawn By: DWD	Scale: AS SHOWN		LIMITED SITE INVESTIGATION 1809 NORTH KIMBALL AVENUE CHICAGO, COOK COUNTY, ILLINOIS	1
Checked By: CCD/MRF	File No. LSI2127017A-1			
Approved By: CCD	Date: AUGUST 2012	650 West Lake Street, Suite 420 Chicago, Illinois 60661 (312) 575-0014 (312) 575-0111		

NORTH KIMBALL AVENUE

MW-04
SV-02
B-2
KP-SB01
MW-01
TB-1
KP-SB08
MW-05
SV-03
PARCEL #037
MW-06
PARCEL #042
KP-SB09
TB-2
KP-SB04
KP-SB07
MW-02
TB-3
SV-01
SV-06
SV-04
SV-05
KP-SB02
TB-4
KP-SB06
TB-5
PARCEL #039
MW-03
KP-SB03
B-7
MW-07
VENT PIPES
VAULTS
PARCEL #040
PARCEL #032

N

0 20
Approximate Scale (Feet)

LEGEND

SUBJECT SITE
RAILROAD
FENCE
2010 SAMPLING LOCAITON (BEI)
2012 SAMPLING LOCAITON (WESTERN)
2012 SAMPLING LOCAITON (TERRACON)
VENT PIPES
VAULT

THIS DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

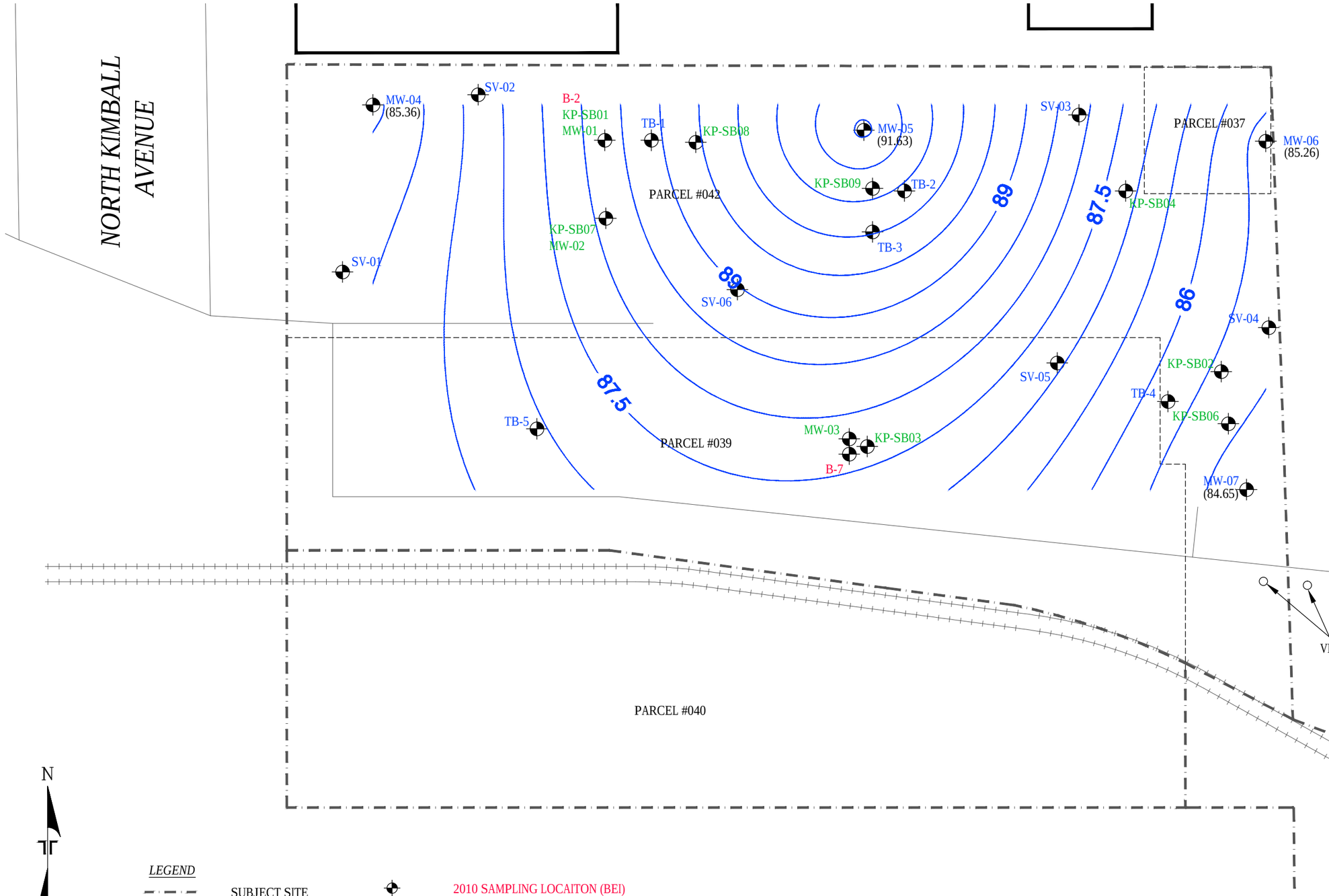
Project Mngr:	MKO
Drawn By:	TLY
Checked By:	CCD/MRF
Approved By:	MKO
Project No.	A2107017-7A
Scale:	AS SHOWN
File No.	LSIAS12107017-7A-I
Date:	SEPTEMBER 2012

Terracon
Consulting Engineers and Scientists
650 West Lake Street, Suite 420 Chicago, Illinois 60661
(312) 575-0014 (312) 575-0111

BORING LOCATION DIAGRAM

LIMITED SITE INVESTIGATION
1807-1815 NORTH KIMBALL AVENUE
CHICAGO, COOK COUNTY, ILLINOIS

EXHIBIT 2



THIS DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Project Mngr:	MKO
Drawn By:	TLY
Checked By:	CCD/MRF
Approved By:	MKO

Project No.	A2107017-7A
Scale:	AS SHOWN
File No.	LSIAS12107017-7A-4
Date:	DECEMBER 2012

Terracon
Consulting Engineers and Scientists
650 West Lake Street, Suite 420 Chicago, Illinois 60661
(312) 575-0014 (312) 575-0111

GROUNDWATER ELEVATION DIAGRAM-(9/10/2012)

LIMITED SITE INVESTIGATION
1809 NORTH KIMBALL AVENUE
CHICAGO, COOK COUNTY, ILLINOIS

EXHIBIT 3

Appendix B

Soil Boring/Monitoring Well Logs

LOG OF GEO PROBE NO. MW-4

CLIENT
Chicago Department of Environment

SITE
1809 North Kimball
Chicago, Illinois

PROJECT
Comprehensive Site Investigation

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - N BLOWS / ft.	TESTS WATER CONTENT, %	TESTS DRY UNIT WT pcf	TESTS SOIL SAMPLE SENT TO LABORATORY	PID, (ppm)
	0.5 **Approx. 6" Concrete**			1	MC	44					*ND
	FILL: SAND, GRAVEL AND CONCRETE, loose, moist										*ND
	3.5 **LEAN CLAY, TRACE SAND AND GRAVEL**, brown, stiff, moist										
	5 **LEAN CLAY, TRACE SAND AND GRAVEL**, dark gray, with black and brown streaks, stiff, moist	5		2	MC	60					1.5
											*ND
	dark gray, with black streaks	10		3	MC	60					*ND
											*ND
	gray fine sand seams from 14' to 14.5' gray with brown streaks, moist	15		4	MC	60					*ND
	saturated/soft from 17.5' to 20'										*ND
	20 BOTTOM OF PROBE	20									

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	▽ N/A	▼
WL	▼	▼
WL		

Terracon

BORING STARTED	8-20-12		
BORING COMPLETED	8-20-12		
RIG	Geo Probe	FOREMAN	SA
APPROVED	TRT	JOB #	A2107017

BORE2 TASK 7A A2107017.GPJ TERRACON.GDT 8/28/12

LOG OF GEO PROBE NO. MW-5

CLIENT
Chicago Department of Environment

SITE
1809 North Kimball
Chicago, Illinois

PROJECT
Comprehensive Site Investigation

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - N BLOWS / ft.	TESTS WATER CONTENT, %	TESTS DRY UNIT WT pcf	TESTS SOIL SAMPLE SENT TO LABORATORY	PID, (ppm)
	0.5 **Approx. 6" Concrete**			1	MC	52					*ND
	2.5 **FILL: SAND, GRAVEL AND CONCRETE**, loose, dry										*ND
	5 **SILTY CLAY, TRACE SAND AND GRAVEL**, dark brown, stiff, moist	5		2	MC	60					*ND
	LEAN CLAY, TRACE SAND AND GRAVEL, brownish gray, stiff, moist										*ND
	brown, with gray streaks	10		3	MC	60					*ND
	14										*ND
	15 **SAND, WITH GRAVEL**, dense, moist	15		4	MC	60					*ND
	LEAN CLAY, TRACE SAND AND GRAVEL, dark brown, with gray streaks, soft, moist										*ND
	20										
	BOTTOM OF PROBE	20									

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	▽ N/A	▼
WL	▼	▼
WL		

Terracon

BORING STARTED	8-20-12		
BORING COMPLETED	8-20-12		
RIG	Geo Probe	FOREMAN	SA
APPROVED	TRT	JOB #	A2107017

BORE2 TASK 7A A2107017.GPJ TERRACON.GDT 8/28/12

LOG OF GEO PROBE NO. MW-6

CLIENT
Chicago Department of Environment

SITE
1809 North Kimball
Chicago, Illinois

PROJECT
Comprehensive Site Investigation

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - N BLOWS / ft.	TESTS WATER CONTENT, %	TESTS DRY UNIT WT pcf	TESTS SOIL SAMPLE SENT TO LABORATORY	PID, (ppm)
	0.5 **Approx. 6" Concrete**			1	MC	36					*ND
	FILL: CONCRETE, SAND AND ASPHALT, loose, moist 3										*ND
	FILL: LEAN CLAY, TRACE SAND AND GRAVEL, dark brown and black, stiff										
	5.5 apparent slag material at 5.5'	5		2	MC	60				TB-06 7'-10'	36.2
	LEAN CLAY, TRACE SAND AND GRAVEL, gray, soft, moist										232
	brown, with gray streaks, stiff, moist	10		3	MC	42					*ND
											*ND
	soft/saturated from 14' to 15'										
	brown, with gray streaks, soft, saturated	15		4	MC	36					*ND
	sand seam with gravel from 17' to 17.5'										*ND
	20										
	BOTTOM OF PROBE	20									

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	▽ N/A	▼
WL	▼	▼
WL		

Terracon

BORING STARTED			8-20-12
BORING COMPLETED			8-20-12
RIG	Geo Probe	FOREMAN	SA
APPROVED	TRT	JOB #	A2107017

BORE2 TASK 7A A2107017.GPJ TERRACON.GDT 8/28/12

LOG OF GEO PROBE NO. MW-7

CLIENT
Chicago Department of Environment

SITE
1809 North Kimball
Chicago, Illinois

PROJECT
Comprehensive Site Investigation

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - N BLOWS / ft.	TESTS WATER CONTENT, %	TESTS DRY UNIT WT pcf	TESTS SOIL SAMPLE SENT TO LABORATORY	PID, (ppm)
	FILL: SILTY SAND, TRACE GRAVEL AND COAL, medium dense, moist			1	MC	50					*ND
	3										
	FILL: LEAN CLAY, TRACE SAND AND GRAVEL, gray, with brown streaks, stiff, moist, hydrocarbon odor										1.4
	5	5		2	MC	60					13.3
	LEAN CLAY, TRACE SAND AND GRAVEL, brown and gray, stiff, moist										35.3
	soft/saturated from 9' to 10' hydrocarbon odor	10		3	MC	60					*ND
	brown and gray, soft, moist hydrocarbon odor										*ND
	gray, stiff, moist	15		4	MC	60					*ND
	brown, with gray streaks, soft, moist										*ND
	20	20									
	BOTTOM OF PROBE										

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	▽ N/A	▼
WL	▼	▼
WL		

Terracon

BORING STARTED	8-20-12		
BORING COMPLETED	8-20-12		
RIG	Geo Probe	FOREMAN	SA
APPROVED	TRT	JOB #	A2107017

BORE2 TASK 7A A2107017.GPJ TERRACON.GDT 8/28/12

LOG OF GEO PROBE NO. TB-01

CLIENT
Chicago Department of Environment

SITE
1809 North Kimball
Chicago, Illinois

PROJECT
Comprehensive Site Investigation

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - N BLOWS / ft.	TESTS WATER CONTENT, %	TESTS DRY UNIT WT pcf	TESTS SOIL SAMPLE SENT TO LABORATORY	PID, (ppm)
	0.5 **Approx. 6" Concrete**			1	MC	30					4.1
	1 **Approx. 6" Sand Base Course**										
	FILL: LEAN CLAY, TRACE SAND, GRAVEL, dark gray, stiff, moist										3.2
	brick and sand from 4' to 5'										
	5 black sludge material at 5', strong hydrocarbon odor (from 5' to 20')	5		2	MC	60				TB-01 5'-7'	79.0
	LEAN CLAY, TRACE SAND AND GRAVEL, dark gray, moist										20.1
	stiff to hard	10		3	MC	60					47.1
											*ND
		15		4	MC	60					*ND
	17										
	SILTY CLAY, TRACE SAND AND GRAVEL, gray, soft, moist										*ND
		20		5	MC	60					*ND
										TB-01 23'-25'	*ND
	fine sand seam from 24' to 24.5'	25		6	MC	60					*ND
	solvent odor from 24'-25'										
	hard to stiff from 25' to 30'									TB-01 27'-29'	*ND
	fine sand seam from 26' to 26.5'										
	30	30									
	BOTTOM OF PROBE										

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	▽ N/A	▼
WL	▼	▼
WL		

Terracon

BORING STARTED	8-20-12		
BORING COMPLETED	8-20-12		
RIG	Geo Probe	FOREMAN	SA
APPROVED	TRT	JOB #	A2107017

BORE2 TASK 7A A2107017.GPJ TERRACON.GDT 8/28/12

LOG OF GEO PROBE NO. TB-02

CLIENT
Chicago Department of Environment

SITE
1809 North Kimball
Chicago, Illinois

PROJECT
Comprehensive Site Investigation

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - N BLOWS / ft.	TESTS WATER CONTENT, %	TESTS DRY UNIT WT pcf	TESTS SOIL SAMPLE SENT TO LABORATORY	PID, (ppm)
	0.5 **Approx. 6" Concrete**			1	MC	50					*ND
	1 **Approx. 6" Crushed Aggregates**										
	FILL: LEAN CLAY, TRACE SAND, GRAVEL AND BRICK, dark gray, stiff, moist										18.2
	5 strong hydrocarbon odor from 4' to 5' and 5' to 7'	5		2	MC	60					41.1
	7 **LEAN CLAY, TRACE SAND AND GRAVEL**, gray, stiff, moist										*ND
	SILTY CLAY, TRACE SAND AND GRAVEL, gray, soft, moist										
	10 **LEAN CLAY, TRACE SAND AND GRAVEL**, gray, with brown streaks, stiff, moist	10		3	MC	60					*ND
										TB-02 13'-15'	*ND
	dark gray, moist	15		4	MC	48					*ND
	soft/saturated from 17'-20'									TB-02 17'-19'	*ND
	20	20									
	BOTTOM OF PROBE										

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	▽ N/A	▼
WL	▼	▼
WL		

Terracon

BORING STARTED	8-20-12		
BORING COMPLETED	8-20-12		
RIG	Geo Probe	FOREMAN	SA
APPROVED	TRT	JOB #	A2107017

BORE2 TASK 7A A2107017.GPJ TERRACON.GDT 8/28/12

LOG OF GEO PROBE NO. TB-03

CLIENT
Chicago Department of Environment

SITE
1809 North Kimball
Chicago, Illinois

PROJECT
Comprehensive Site Investigation

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - N BLOWS / ft.	TESTS WATER CONTENT, %	TESTS DRY UNIT WT pcf	TESTS SOIL SAMPLE SENT TO LABORATORY	PID, (ppm)
	0.5 **Approx. 6" Concrete**			1	MC	30					5.2
	1 **Approx. 6" Crushed Aggregates**										
	3 **FILL: LEAN CLAY, TRACE SAND, GRAVEL AND ASPHALT FRAGMENTS**										2.2
	LEAN CLAY, TRACE SAND AND GRAVEL, dark gray, stiff, moist	5		2	MC	60					26.7
	gray, with brown streaks, moist										
	hydrocarbon odor from from 5' to 7'										1078
	10 **SILTY CLAY, TRACE SAND AND GRAVEL**, gray, stiff, moist	10		3	MC	45					1706
	solvent odor from 10'-15'										350
	dark gray, moist	15		4	MC	40					35.4
	soft/saturated from 17'-20'										*ND
		20		5	MC	48					4.8
	dark gray, soft, moist									TB-03 23'-25'	*ND
	25 **LEAN CLAY, TRACE SAND AND GRAVEL**, gray to dark gray, soft, moist	25		6	MC	54					*ND
										TB-03 27'-29'	*ND
	30 BOTTOM OF PROBE	30									

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	▽ N/A	▼
WL	▼	▼
WL		

Terracon

BORING STARTED	8-21-12		
BORING COMPLETED	8-21-12		
RIG	Geo Probe	FOREMAN	SA
APPROVED	TRT	JOB #	A2107017

BORE2 TASK 7A A2107017.GPJ TERRACON.GDT 8/28/12

LOG OF GEO PROBE NO. TB-04

CLIENT
Chicago Department of Environment

SITE
1809 North Kimball
Chicago, Illinois

PROJECT
Comprehensive Site Investigation

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - N BLOWS / ft.	TESTS WATER CONTENT, %	TESTS DRY UNIT WT pcf	TESTS SOIL SAMPLE SENT TO LABORATORY	PID, (ppm)
	0.5 **Approx. 6" Concrete**			1	MC	30					3.0
	1 **Approx. 6" Crushed Aggregates**										
	3 **FILL: LEAN CLAY, TRACE SAND, GRAVEL, CONCRETE, BRICK AND ASPHALT FRAGMENTS**, loose, dry										75.2
	LEAN CLAY, TRACE SAND AND GRAVEL, dark gray to black, moist, hydrocarbon odor	5		2	MC	60					755
	dark gray, with brown streaks, stiff, moist solvent odor from 5'-20'										2490
	10	10		3	MC	50					1205
	SILTY CLAY, TRACE SAND AND GRAVEL, gray, soft, moist										80.1
		15		4	MC	48					13.4
	20										*ND
	LEAN CLAY, TRACE SAND AND GRAVEL, gray, stiff, moist	20		5	MC	60					10.2
	22 sand seam from 21' to 22', gray, loose										*ND
	SILTY CLAY, TRACE SAND AND GRAVEL, gray, soft, moist										
	25	25		6	MC	60					*ND
	LEAN CLAY, TRACE SAND AND GRAVEL, gray, stiff, moist										*ND
										TB-04 28'-30'	
	30	30		7	MC	60					*ND
	SILTY CLAY, TRACE SAND AND GRAVEL, gray, stiff, moist									TB-04 32'-34'	*ND
	35	35									
	BOTTOM OF PROBE										

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	▽ N/A	▼
WL	▼	▼
WL		

Terracon

BORING STARTED	8-21-12		
BORING COMPLETED	8-21-12		
RIG	Geo Probe	FOREMAN	SA
APPROVED	TRT	JOB #	A2107017

BORE2 TASK 7A A2107017.GPJ TERRACON.GDT 8/28/12

LOG OF GEO PROBE NO. TB-05

CLIENT
Chicago Department of Environment

SITE
1809 North Kimball
Chicago, Illinois

PROJECT
Comprehensive Site Investigation

GRAPHIC LOG	DESCRIPTION	DEPTH, ft.	USCS SYMBOL	SAMPLES NUMBER	SAMPLES TYPE	SAMPLES RECOVERY, in.	SAMPLES SPT - N BLOWS / ft.	TESTS WATER CONTENT, %	TESTS DRY UNIT WT pcf	TESTS SOIL SAMPLE SENT TO LABORATORY	PID, (ppm)
	FILL: CRUSHED GRAVEL, BRICK, GLASS, SAND WOOD AND CONCRETE, loose, dry			1	MC	48					*ND
	5										*ND
	FILL: SILTY CLAY, TRACE SAND AND GRAVEL, black, soft, moist	5		2	MC	36					*ND
	7										
	FILL: COARSE SAND AND GRAVEL, loose, dry										*ND
	10	10		3	MC	48					*ND
	SILTY CLAY, TRACE SAND AND GRAVEL, black, soft, moist										
	12										*ND
	LEAN CLAY, TRACE SAND AND GRAVEL, brown, with gray, stiff, moist ▽										
	15	15		4	MC	60				TB-05 15'-17'	*ND
	16 **MEDIUM SAND**, gray, dense, wet										
	LEAN CLAY, TRACE SAND AND GRAVEL, gray, soft, moist									TB-05 18'-20'	*ND
	20	20									
	BOTTOM OF PROBE										

The stratification lines represent the approximate boundary lines between soil and rock types: in-situ, the transition may be gradual.

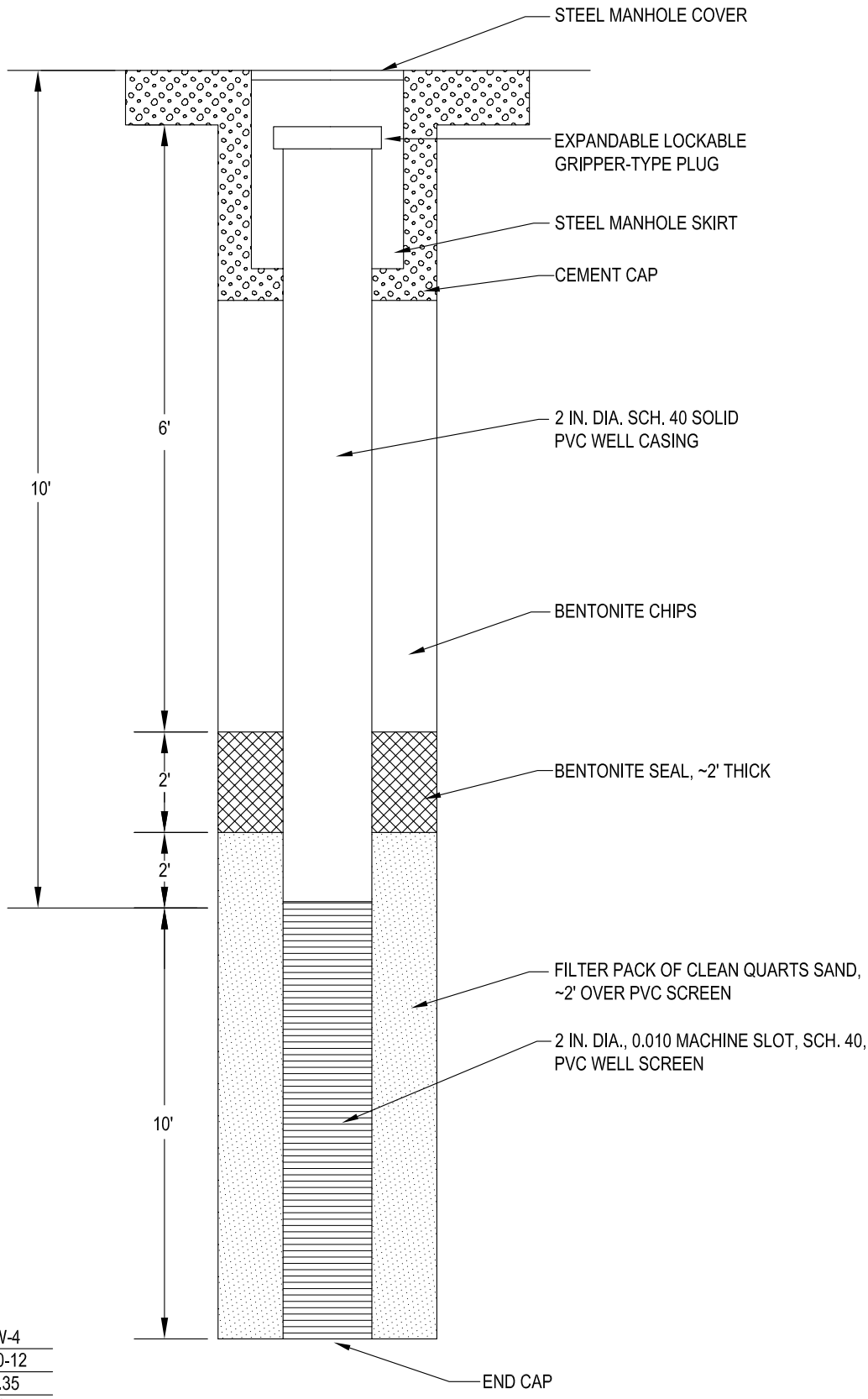
* ND indicates a reading of less than the field detection limit (FDL) of one (1) part per million isobutylene equivalents (ppmi).

WATER LEVEL OBSERVATIONS, ft		
WL	▽ 15.00	▼
WL	▼	▼
WL		

Terracon

BORING STARTED	8-21-12		
BORING COMPLETED	8-21-12		
RIG	Geo Probe	FOREMAN	SA
APPROVED	TRT	JOB #	A2107017

BORE2 TASK 7A A2107017.GPJ TERRACON.GDT 8/28/12



WELL NAME:	MW-4
INSTALLATION DATE:	8-20-12
TOP OF CASING ELEVATION	99.35
DEPTH TO WATER:	N/A
GROUNDWATER ELEVATION:	N/A
JOB NUMBER:	A2107017-7A

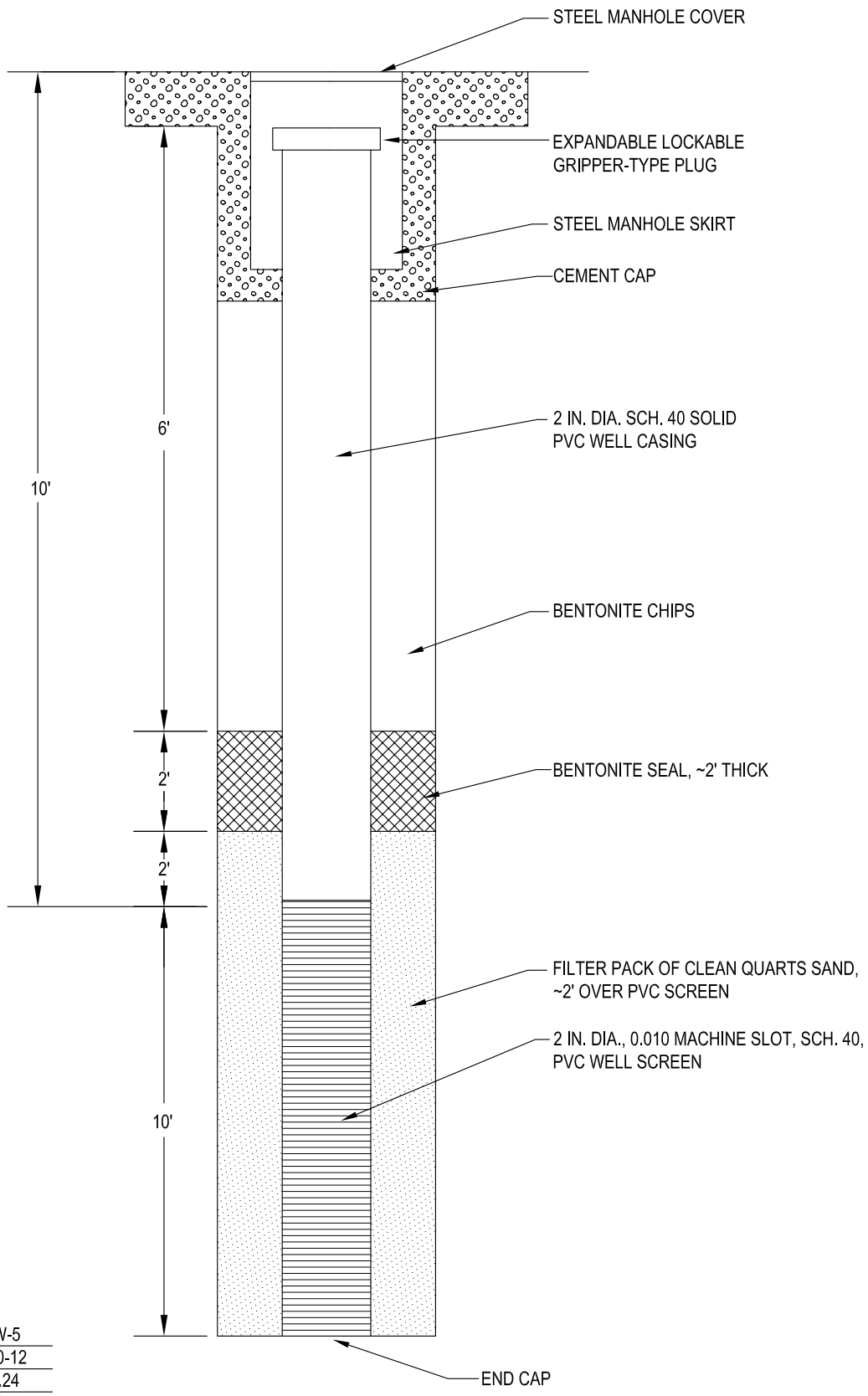
NOT TO SCALE

THIS DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Project Mngr: TT	Project No. A2107017-7A	Terracon Consulting Engineers and Scientists	MONITORING WELL CONSTRUCTION DIAGRAM
Drawn By: DWD	Scale: AS SHOWN		SITE REMEDIATION PROGRAM
Checked By: TT/MRF	File No. SRPA2107017-7A-1		PROPOSED KIMBALL PARK
Approved By: TT	Date: AUGUST 2012		1809 NORTH KIMBALL AVENUE
			CHICAGO, COOK COUNTY, IL

650 West Lake Street, Suite 420 Chicago, Illinois 60661
(312) 575-0014 (312) 575-0111

EXHIBIT 1



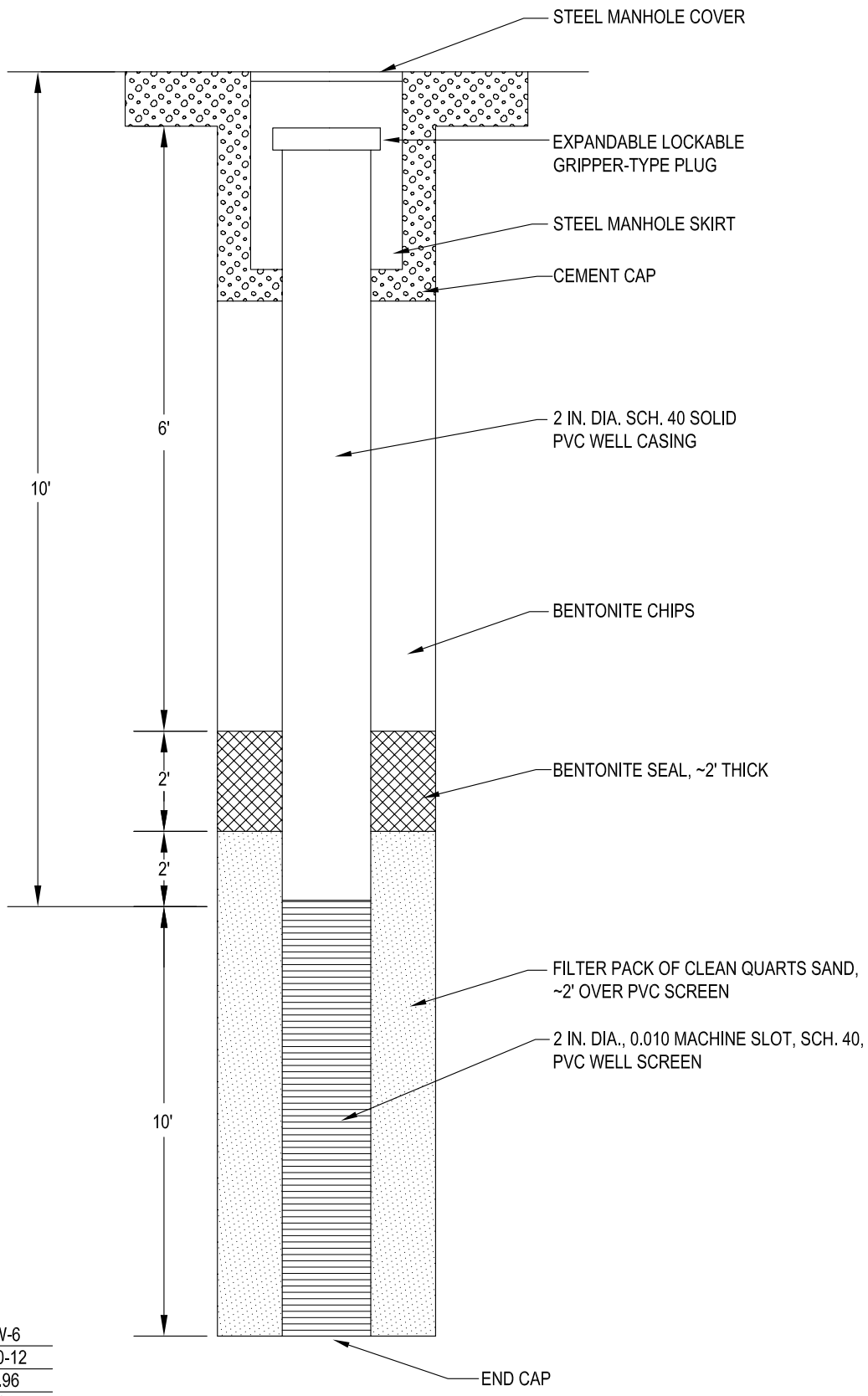
WELL NAME:	MW-5
INSTALLATION DATE:	8-20-12
TOP OF CASING ELEVATION	99.24
DEPTH TO WATER:	N/A
GROUNDWATER ELEVATION:	N/A
JOB NUMBER:	A2107017-7A

NOT TO SCALE

THIS DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Project Mngr: TT	Project No. A2107017-7A	Terracon Consulting Engineers and Scientists	MONITORING WELL CONSTRUCTION DIAGRAM
Drawn By: DWD	Scale: AS SHOWN	650 West Lake Street, Suite 420 Chicago, Illinois 60661	SITE REMEDIATION PROGRAM
Checked By: TT/MRF	File No. SRPA2107017-7A-2	(312) 575-0014 (312) 575-0111	PROPOSED KIMBALL PARK
Approved By: TT	Date: AUGUST 2012		1809 NORTH KIMBALL AVENUE
			CHICAGO, COOK COUNTY, IL

EXHIBIT 2



WELL NAME:	MW-6
INSTALLATION DATE:	8-20-12
TOP OF CASING ELEVATION	99.96
DEPTH TO WATER:	N/A
GROUNDWATER ELEVATION:	N/A
JOB NUMBER:	A2107017-7A

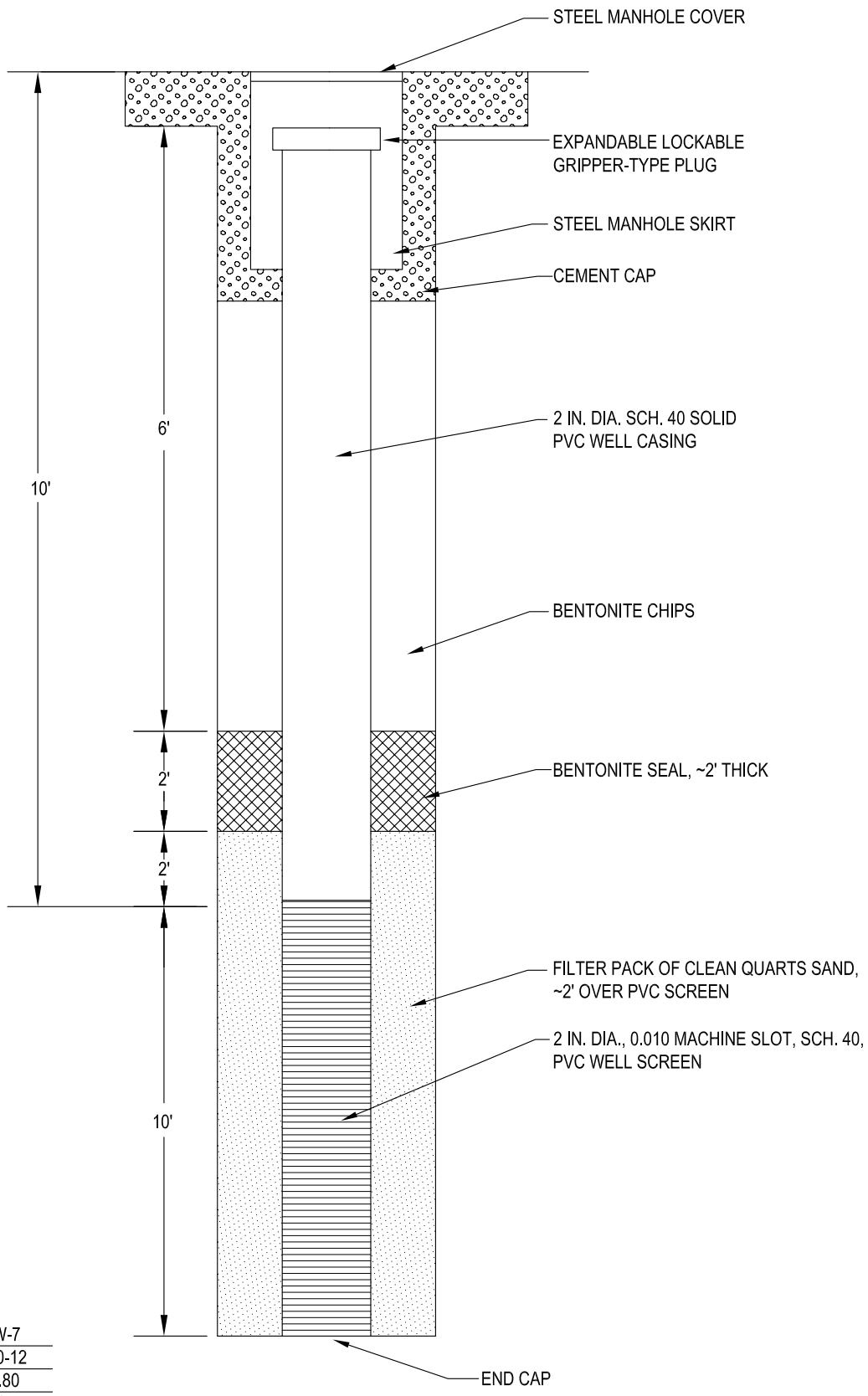
NOT TO SCALE

THIS DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Project Mngr: TT	Project No. A2107017-7A	Terracon Consulting Engineers and Scientists	MONITORING WELL CONSTRUCTION DIAGRAM
Drawn By: DWD	Scale: AS SHOWN		SITE REMEDIATION PROGRAM
Checked By: TT/MRF	File No. SRPA2107017-7A-3		PROPOSED KIMBALL PARK
Approved By: TT	Date: AUGUST 2012		1809 NORTH KIMBALL AVENUE
			CHICAGO, COOK COUNTY, IL

650 West Lake Street, Suite 420 Chicago, Illinois 60661
(312) 575-0014 (312) 575-0111

EXHIBIT 3



WELL NAME:	MW-7
INSTALLATION DATE:	8-20-12
TOP OF CASING ELEVATION	99.80
DEPTH TO WATER:	N/A
GROUNDWATER ELEVATION:	N/A
JOB NUMBER:	A2107017-7A

NOT TO SCALE

THIS DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Project Mngr: TT	Project No. A2107017-7A	Terracon Consulting Engineers and Scientists	MONITORING WELL CONSTRUCTION DIAGRAM
Drawn By: DWD	Scale: AS SHOWN		SITE REMEDIATION PROGRAM
Checked By: TT/MRF	File No. SRPA2107017-7A-4		PROPOSED KIMBALL PARK
Approved By: TT	Date: AUGUST 2012		1809 NORTH KIMBALL AVENUE
			CHICAGO, COOK COUNTY, IL

650 West Lake Street, Suite 420 Chicago, Illinois 60661
(312) 575-0014 (312) 575-0111

EXHIBIT 4

Appendix C

Analytical Results Data and Tables

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001;AIHA 101160; NVLAP LabCode 101202-

August 28, 2012

Terracon Consultants, Inc.
135 Ambassador Drive
Naperville, IL 60540
Telephone: (312) 575-0014
Fax: (312) 575-0111

RE: A2107017-7A, DOE-Kimball, Chicago, IL STAT Project No 12080686

Dear Tom Tucker:

STAT Analysis received 16 samples for the referenced project on 8/21/2012 1:30:00 PM. The analytical results are presented in the following report.

This report is revised to reflect changes made after the initial report was issued.

All analyses were performed in accordance with the requirements of 35 IAC part 186 / NELAC standards. Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided. A listing of accredited methods/parameters can also be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 733-0551.

Sincerely,

Kurt Clarkson
Senior Project Manager

Client: Terracon Consultants, Inc.
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab Order: 12080686

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12080686-001A	TB-01-5-7		8/2/2012 2:00:00 PM	8/21/2012
12080686-001B	TB-01-5-7		8/2/2012 2:00:00 PM	8/21/2012
12080686-002A	TB-01-23-25		8/20/2012 2:10:00 PM	8/21/2012
12080686-002B	TB-01-23-25		8/20/2012 2:10:00 PM	8/21/2012
12080686-003A	TB-01-27-29		8/20/2012 2:20:00 PM	8/21/2012
12080686-003B	TB-01-27-29		8/20/2012 2:20:00 PM	8/21/2012
12080686-004A	TB-02-13-15		8/20/2012 3:00:00 PM	8/21/2012
12080686-004B	TB-02-13-15		8/20/2012 3:00:00 PM	8/21/2012
12080686-005A	TB-02-Dup		8/20/2012 3:00:00 PM	8/21/2012
12080686-005B	TB-02-Dup		8/20/2012 3:00:00 PM	8/21/2012
12080686-006A	TB-02-17-19		8/20/2012 3:10:00 PM	8/21/2012
12080686-006B	TB-02-17-19		8/20/2012 3:10:00 PM	8/21/2012
12080686-007A	TB-03-23-25		8/21/2012 9:00:00 AM	8/21/2012
12080686-007B	TB-03-23-25		8/21/2012 9:00:00 AM	8/21/2012
12080686-008A	TB-03-27-29		8/21/2012 9:10:00 AM	8/21/2012
12080686-008B	TB-03-27-29		8/21/2012 9:10:00 AM	8/21/2012
12080686-009A	TB-04-28-30		8/21/2012 10:00:00 AM	8/21/2012
12080686-009B	TB-04-28-30		8/21/2012 10:00:00 AM	8/21/2012
12080686-010A	TB-04-32-34		8/21/2012 10:10:00 AM	8/21/2012
12080686-010B	TB-04-32-34		8/21/2012 10:10:00 AM	8/21/2012
12080686-011A	TB-05-15-17		8/21/2012 11:00:00 AM	8/21/2012
12080686-012A	TB-05-Dup		8/21/2012 11:00:00 AM	8/21/2012
12080686-013A	TC-05-18-20		8/21/2012 11:10:00 AM	8/21/2012
12080686-014A	TB-6			8/21/2012
12080686-014B	TB-6			8/21/2012
12080686-015A	Method Blank		8/21/2012 1:30:00 PM	8/21/2012
12080686-016A	Trip Blank			8/21/2012

STAT Analysis Corporation

Date: *August 28, 2012*

CLIENT: Terracon Consultants, Inc.
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab Order: 12080686

CASE NARRATIVE

The VOC soil Method Blank (MBLK) analyzed 08/22/2012 had recovery of the following compounds outside of control limits:
Dibromofluoromethane surrogate: (119% recovery, QC limits 83-119%.)

The VOC soil Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) analyzed 08/22/2012 had recovery of the following compounds outside of control limits:
Bromomethane: (136% (LCSD) recovery, QC limits 70-130%)
Carbon Disulfide: (135%/137% (LCS/LCSD) recovery, QC limits 70-130%)
Dibromofluoromethane surrogate: (124%/119% (LCS/LSCD) recovery, QC limits 83-119%).

The VOC soil Matrix Spike/Matrix Spike Duplicate (MS/MSD) prepared from sample TB-03-23-25 (12080686-007) had multiple compounds and RPD's outside control limits.

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Date Reported: August 28, 2012
Date Printed: August 28, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080686-002

Client Sample ID: TB-01-23-25
Collection Date 8/20/2012 2:10:00 PM
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW5035/8260B**			Prep Date: **8/21/2012**		Analyst: **PS**
Acetone	ND	0.073		mg/Kg-dry	1	8/22/2012
Benzene	ND	0.0049		mg/Kg-dry	1	8/22/2012
Bromodichloromethane	ND	0.0049		mg/Kg-dry	1	8/22/2012
Bromoform	ND	0.0049		mg/Kg-dry	1	8/22/2012
Bromomethane	ND	0.0098		mg/Kg-dry	1	8/22/2012
2-Butanone	ND	0.073		mg/Kg-dry	1	8/22/2012
Carbon disulfide	ND	0.049		mg/Kg-dry	1	8/22/2012
Carbon tetrachloride	ND	0.0049		mg/Kg-dry	1	8/22/2012
Chlorobenzene	ND	0.0049		mg/Kg-dry	1	8/22/2012
Chloroethane	ND	0.0098		mg/Kg-dry	1	8/22/2012
Chloroform	ND	0.0049		mg/Kg-dry	1	8/22/2012
Chloromethane	ND	0.0098		mg/Kg-dry	1	8/22/2012
Dibromochloromethane	ND	0.0049		mg/Kg-dry	1	8/22/2012
1,1-Dichloroethane	ND	0.0049		mg/Kg-dry	1	8/22/2012
1,2-Dichloroethane	ND	0.0049		mg/Kg-dry	1	8/22/2012
1,1-Dichloroethene	ND	0.0049		mg/Kg-dry	1	8/22/2012
cis-1,2-Dichloroethene	ND	0.0049		mg/Kg-dry	1	8/22/2012
trans-1,2-Dichloroethene	ND	0.0049		mg/Kg-dry	1	8/22/2012
1,2-Dichloropropane	ND	0.0049		mg/Kg-dry	1	8/22/2012
cis-1,3-Dichloropropene	ND	0.002		mg/Kg-dry	1	8/22/2012
trans-1,3-Dichloropropene	ND	0.002		mg/Kg-dry	1	8/22/2012
Ethylbenzene	ND	0.0049		mg/Kg-dry	1	8/22/2012
2-Hexanone	ND	0.02		mg/Kg-dry	1	8/22/2012
4-Methyl-2-pentanone	ND	0.02		mg/Kg-dry	1	8/22/2012
Methylene chloride	ND	0.0098		mg/Kg-dry	1	8/22/2012
Methyl tert-butyl ether	ND	0.0049		mg/Kg-dry	1	8/22/2012
Styrene	ND	0.0049		mg/Kg-dry	1	8/22/2012
1,1,2,2-Tetrachloroethane	ND	0.0049		mg/Kg-dry	1	8/22/2012
Tetrachloroethene	ND	0.0049		mg/Kg-dry	1	8/22/2012
Toluene	ND	0.0049		mg/Kg-dry	1	8/22/2012
1,1,1-Trichloroethane	ND	0.0049		mg/Kg-dry	1	8/22/2012
1,1,2-Trichloroethane	ND	0.0049		mg/Kg-dry	1	8/22/2012
Trichloroethene	ND	0.0049		mg/Kg-dry	1	8/22/2012
Vinyl chloride	ND	0.0049		mg/Kg-dry	1	8/22/2012
Xylenes, Total	ND	0.015		mg/Kg-dry	1	8/22/2012
Percent Moisture	**D2974**			Prep Date: **8/22/2012**		Analyst: **MNG**
Percent Moisture	20.4	0.2	*	wt%	1	8/23/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Date Reported: August 28, 2012
Date Printed: August 28, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080686-004

Client Sample ID: TB-02-13-15
Collection Date 8/20/2012 3:00:00 PM
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW5035/8260B**			Prep Date: **8/21/2012**		Analyst: **PS**
Acetone	ND	0.065		mg/Kg-dry	1	8/22/2012
Benzene	ND	0.0043		mg/Kg-dry	1	8/22/2012
Bromodichloromethane	ND	0.0043		mg/Kg-dry	1	8/22/2012
Bromoform	ND	0.0043		mg/Kg-dry	1	8/22/2012
Bromomethane	ND	0.0087		mg/Kg-dry	1	8/22/2012
2-Butanone	ND	0.065		mg/Kg-dry	1	8/22/2012
Carbon disulfide	ND	0.043		mg/Kg-dry	1	8/22/2012
Carbon tetrachloride	ND	0.0043		mg/Kg-dry	1	8/22/2012
Chlorobenzene	ND	0.0043		mg/Kg-dry	1	8/22/2012
Chloroethane	ND	0.0087		mg/Kg-dry	1	8/22/2012
Chloroform	ND	0.0043		mg/Kg-dry	1	8/22/2012
Chloromethane	ND	0.0087		mg/Kg-dry	1	8/22/2012
Dibromochloromethane	ND	0.0043		mg/Kg-dry	1	8/22/2012
1,1-Dichloroethane	ND	0.0043		mg/Kg-dry	1	8/22/2012
1,2-Dichloroethane	ND	0.0043		mg/Kg-dry	1	8/22/2012
1,1-Dichloroethene	ND	0.0043		mg/Kg-dry	1	8/22/2012
cis-1,2-Dichloroethene	ND	0.0043		mg/Kg-dry	1	8/22/2012
trans-1,2-Dichloroethene	ND	0.0043		mg/Kg-dry	1	8/22/2012
1,2-Dichloropropane	ND	0.0043		mg/Kg-dry	1	8/22/2012
cis-1,3-Dichloropropene	ND	0.0017		mg/Kg-dry	1	8/22/2012
trans-1,3-Dichloropropene	ND	0.0017		mg/Kg-dry	1	8/22/2012
Ethylbenzene	ND	0.0043		mg/Kg-dry	1	8/22/2012
2-Hexanone	ND	0.017		mg/Kg-dry	1	8/22/2012
4-Methyl-2-pentanone	ND	0.017		mg/Kg-dry	1	8/22/2012
Methylene chloride	ND	0.0087		mg/Kg-dry	1	8/22/2012
Methyl tert-butyl ether	ND	0.0043		mg/Kg-dry	1	8/22/2012
Styrene	ND	0.0043		mg/Kg-dry	1	8/22/2012
1,1,2,2-Tetrachloroethane	ND	0.0043		mg/Kg-dry	1	8/22/2012
Tetrachloroethene	ND	0.0043		mg/Kg-dry	1	8/22/2012
Toluene	ND	0.0043		mg/Kg-dry	1	8/22/2012
1,1,1-Trichloroethane	ND	0.0043		mg/Kg-dry	1	8/22/2012
1,1,2-Trichloroethane	ND	0.0043		mg/Kg-dry	1	8/22/2012
Trichloroethene	ND	0.0043		mg/Kg-dry	1	8/22/2012
Vinyl chloride	ND	0.0043		mg/Kg-dry	1	8/22/2012
Xylenes, Total	ND	0.013		mg/Kg-dry	1	8/22/2012
Percent Moisture	**D2974**			Prep Date: **8/22/2012**		Analyst: **MNG**
Percent Moisture	11.2	0.2	*	wt%	1	8/23/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
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R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Date Reported: August 28, 2012
Date Printed: August 28, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080686-005

Client Sample ID: TB-02-Dup
Collection Date 8/20/2012 3:00:00 PM
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW5035/8260B**			Prep Date: **8/21/2012**		Analyst: **PS**
Acetone	ND	0.07		mg/Kg-dry	1	8/23/2012
Benzene	ND	0.0047		mg/Kg-dry	1	8/23/2012
Bromodichloromethane	ND	0.0047		mg/Kg-dry	1	8/23/2012
Bromoform	ND	0.0047		mg/Kg-dry	1	8/23/2012
Bromomethane	ND	0.0094		mg/Kg-dry	1	8/23/2012
2-Butanone	ND	0.07		mg/Kg-dry	1	8/23/2012
Carbon disulfide	ND	0.047		mg/Kg-dry	1	8/23/2012
Carbon tetrachloride	ND	0.0047		mg/Kg-dry	1	8/23/2012
Chlorobenzene	ND	0.0047		mg/Kg-dry	1	8/23/2012
Chloroethane	ND	0.0094		mg/Kg-dry	1	8/23/2012
Chloroform	ND	0.0047		mg/Kg-dry	1	8/23/2012
Chloromethane	ND	0.0094		mg/Kg-dry	1	8/23/2012
Dibromochloromethane	ND	0.0047		mg/Kg-dry	1	8/23/2012
1,1-Dichloroethane	ND	0.0047		mg/Kg-dry	1	8/23/2012
1,2-Dichloroethane	ND	0.0047		mg/Kg-dry	1	8/23/2012
1,1-Dichloroethene	ND	0.0047		mg/Kg-dry	1	8/23/2012
cis-1,2-Dichloroethene	ND	0.0047		mg/Kg-dry	1	8/23/2012
trans-1,2-Dichloroethene	ND	0.0047		mg/Kg-dry	1	8/23/2012
1,2-Dichloropropane	ND	0.0047		mg/Kg-dry	1	8/23/2012
cis-1,3-Dichloropropene	ND	0.0019		mg/Kg-dry	1	8/23/2012
trans-1,3-Dichloropropene	ND	0.0019		mg/Kg-dry	1	8/23/2012
Ethylbenzene	ND	0.0047		mg/Kg-dry	1	8/23/2012
2-Hexanone	ND	0.019		mg/Kg-dry	1	8/23/2012
4-Methyl-2-pentanone	ND	0.019		mg/Kg-dry	1	8/23/2012
Methylene chloride	ND	0.0094		mg/Kg-dry	1	8/23/2012
Methyl tert-butyl ether	ND	0.0047		mg/Kg-dry	1	8/23/2012
Styrene	ND	0.0047		mg/Kg-dry	1	8/23/2012
1,1,2,2-Tetrachloroethane	ND	0.0047		mg/Kg-dry	1	8/23/2012
Tetrachloroethene	ND	0.0047		mg/Kg-dry	1	8/23/2012
Toluene	ND	0.0047		mg/Kg-dry	1	8/23/2012
1,1,1-Trichloroethane	ND	0.0047		mg/Kg-dry	1	8/23/2012
1,1,2-Trichloroethane	ND	0.0047		mg/Kg-dry	1	8/23/2012
Trichloroethene	ND	0.0047		mg/Kg-dry	1	8/23/2012
Vinyl chloride	ND	0.0047		mg/Kg-dry	1	8/23/2012
Xylenes, Total	ND	0.014		mg/Kg-dry	1	8/23/2012
Percent Moisture	**D2974**			Prep Date: **8/22/2012**		Analyst: **MNG**
Percent Moisture	19.8	0.2	*	wt%	1	8/23/2012

Qualifiers:
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R - RPD outside accepted recovery limits
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STAT Analysis Corporation
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Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Date Reported: August 28, 2012
Date Printed: August 28, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080686-007

Client Sample ID: TB-03-23-25
Collection Date 8/21/2012 9:00:00 AM
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW5035/8260B**			Prep Date: **8/21/2012**		Analyst: **PS**
Acetone	ND	0.063		mg/Kg-dry	1	8/23/2012
Benzene	ND	0.0042		mg/Kg-dry	1	8/23/2012
Bromodichloromethane	ND	0.0042		mg/Kg-dry	1	8/23/2012
Bromoform	ND	0.0042		mg/Kg-dry	1	8/23/2012
Bromomethane	ND	0.0084		mg/Kg-dry	1	8/23/2012
2-Butanone	ND	0.063		mg/Kg-dry	1	8/23/2012
Carbon disulfide	ND	0.042		mg/Kg-dry	1	8/23/2012
Carbon tetrachloride	ND	0.0042		mg/Kg-dry	1	8/23/2012
Chlorobenzene	ND	0.0042		mg/Kg-dry	1	8/23/2012
Chloroethane	ND	0.0084		mg/Kg-dry	1	8/23/2012
Chloroform	ND	0.0042		mg/Kg-dry	1	8/23/2012
Chloromethane	ND	0.0084		mg/Kg-dry	1	8/23/2012
Dibromochloromethane	ND	0.0042		mg/Kg-dry	1	8/23/2012
1,1-Dichloroethane	ND	0.0042		mg/Kg-dry	1	8/23/2012
1,2-Dichloroethane	ND	0.0042		mg/Kg-dry	1	8/23/2012
1,1-Dichloroethene	ND	0.0042		mg/Kg-dry	1	8/23/2012
cis-1,2-Dichloroethene	ND	0.0042		mg/Kg-dry	1	8/23/2012
trans-1,2-Dichloroethene	ND	0.0042		mg/Kg-dry	1	8/23/2012
1,2-Dichloropropane	ND	0.0042		mg/Kg-dry	1	8/23/2012
cis-1,3-Dichloropropene	ND	0.0017		mg/Kg-dry	1	8/23/2012
trans-1,3-Dichloropropene	ND	0.0017		mg/Kg-dry	1	8/23/2012
Ethylbenzene	ND	0.0042		mg/Kg-dry	1	8/23/2012
2-Hexanone	ND	0.017		mg/Kg-dry	1	8/23/2012
4-Methyl-2-pentanone	ND	0.017		mg/Kg-dry	1	8/23/2012
Methylene chloride	ND	0.0084		mg/Kg-dry	1	8/23/2012
Methyl tert-butyl ether	ND	0.0042		mg/Kg-dry	1	8/23/2012
Styrene	ND	0.0042		mg/Kg-dry	1	8/23/2012
1,1,2,2-Tetrachloroethane	ND	0.0042		mg/Kg-dry	1	8/23/2012
Tetrachloroethene	ND	0.0042		mg/Kg-dry	1	8/23/2012
Toluene	ND	0.0042		mg/Kg-dry	1	8/23/2012
1,1,1-Trichloroethane	ND	0.0042		mg/Kg-dry	1	8/23/2012
1,1,2-Trichloroethane	ND	0.0042		mg/Kg-dry	1	8/23/2012
Trichloroethene	ND	0.0042		mg/Kg-dry	1	8/23/2012
Vinyl chloride	ND	0.0042		mg/Kg-dry	1	8/23/2012
Xylenes, Total	ND	0.013		mg/Kg-dry	1	8/23/2012
Percent Moisture	**D2974**			Prep Date: **8/21/2012**		Analyst: **PBG**
Percent Moisture	18.4	0.2	*	wt%	1	8/22/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
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STAT Analysis Corporation
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Date Reported: August 28, 2012
Date Printed: August 28, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080686-009

Client Sample ID: TB-04-28-30
Collection Date 8/21/2012 10:00:00 AM
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW5035/8260B**			Prep Date: **8/21/2012**		Analyst: **PS**
Acetone	ND	0.071		mg/Kg-dry	1	8/23/2012
Benzene	ND	0.0047		mg/Kg-dry	1	8/23/2012
Bromodichloromethane	ND	0.0047		mg/Kg-dry	1	8/23/2012
Bromoform	ND	0.0047		mg/Kg-dry	1	8/23/2012
Bromomethane	ND	0.0095		mg/Kg-dry	1	8/23/2012
2-Butanone	ND	0.071		mg/Kg-dry	1	8/23/2012
Carbon disulfide	ND	0.047		mg/Kg-dry	1	8/23/2012
Carbon tetrachloride	ND	0.0047		mg/Kg-dry	1	8/23/2012
Chlorobenzene	ND	0.0047		mg/Kg-dry	1	8/23/2012
Chloroethane	ND	0.0095		mg/Kg-dry	1	8/23/2012
Chloroform	ND	0.0047		mg/Kg-dry	1	8/23/2012
Chloromethane	ND	0.0095		mg/Kg-dry	1	8/23/2012
Dibromochloromethane	ND	0.0047		mg/Kg-dry	1	8/23/2012
1,1-Dichloroethane	ND	0.0047		mg/Kg-dry	1	8/23/2012
1,2-Dichloroethane	ND	0.0047		mg/Kg-dry	1	8/23/2012
1,1-Dichloroethene	ND	0.0047		mg/Kg-dry	1	8/23/2012
cis-1,2-Dichloroethene	ND	0.0047		mg/Kg-dry	1	8/23/2012
trans-1,2-Dichloroethene	ND	0.0047		mg/Kg-dry	1	8/23/2012
1,2-Dichloropropane	ND	0.0047		mg/Kg-dry	1	8/23/2012
cis-1,3-Dichloropropene	ND	0.0019		mg/Kg-dry	1	8/23/2012
trans-1,3-Dichloropropene	ND	0.0019		mg/Kg-dry	1	8/23/2012
Ethylbenzene	ND	0.0047		mg/Kg-dry	1	8/23/2012
2-Hexanone	ND	0.019		mg/Kg-dry	1	8/23/2012
4-Methyl-2-pentanone	ND	0.019		mg/Kg-dry	1	8/23/2012
Methylene chloride	ND	0.0095		mg/Kg-dry	1	8/23/2012
Methyl tert-butyl ether	ND	0.0047		mg/Kg-dry	1	8/23/2012
Styrene	ND	0.0047		mg/Kg-dry	1	8/23/2012
1,1,2,2-Tetrachloroethane	ND	0.0047		mg/Kg-dry	1	8/23/2012
Tetrachloroethene	ND	0.0047		mg/Kg-dry	1	8/23/2012
Toluene	ND	0.0047		mg/Kg-dry	1	8/23/2012
1,1,1-Trichloroethane	ND	0.0047		mg/Kg-dry	1	8/23/2012
1,1,2-Trichloroethane	ND	0.0047		mg/Kg-dry	1	8/23/2012
Trichloroethene	0.0049	0.0047		mg/Kg-dry	1	8/23/2012
Vinyl chloride	ND	0.0047		mg/Kg-dry	1	8/23/2012
Xylenes, Total	ND	0.014		mg/Kg-dry	1	8/23/2012
Percent Moisture	**D2974**			Prep Date: **8/22/2012**		Analyst: **MNG**
Percent Moisture	18.4	0.2	*	wt%	1	8/23/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
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STAT Analysis Corporation
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Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Date Reported: August 28, 2012
Date Printed: August 28, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080686-011

Client Sample ID: TB-05-15-17
Collection Date 8/21/2012 11:00:00 AM
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/22/2012**		Analyst: **DM**
Acenaphthene	ND	0.041		mg/Kg-dry	1	8/22/2012
Acenaphthylene	ND	0.041		mg/Kg-dry	1	8/22/2012
Aniline	ND	0.42		mg/Kg-dry	1	8/22/2012
Anthracene	ND	0.041		mg/Kg-dry	1	8/22/2012
Benz(a)anthracene	ND	0.041		mg/Kg-dry	1	8/22/2012
Benzidine	ND	0.41		mg/Kg-dry	1	8/22/2012
Benzo(a)pyrene	ND	0.041		mg/Kg-dry	1	8/22/2012
Benzo(b)fluoranthene	ND	0.041		mg/Kg-dry	1	8/22/2012
Benzo(g,h,i)perylene	ND	0.041		mg/Kg-dry	1	8/22/2012
Benzo(k)fluoranthene	ND	0.041		mg/Kg-dry	1	8/22/2012
Benzoic acid	ND	1		mg/Kg-dry	1	8/22/2012
Benzyl alcohol	ND	0.21		mg/Kg-dry	1	8/22/2012
Bis(2-chloroethoxy)methane	ND	0.21		mg/Kg-dry	1	8/22/2012
Bis(2-chloroethyl)ether	ND	0.21		mg/Kg-dry	1	8/22/2012
Bis(2-ethylhexyl)phthalate	ND	1		mg/Kg-dry	1	8/22/2012
4-Bromophenyl phenyl ether	ND	0.21		mg/Kg-dry	1	8/22/2012
Butyl benzyl phthalate	ND	0.21		mg/Kg-dry	1	8/22/2012
Carbazole	ND	0.21		mg/Kg-dry	1	8/22/2012
4-Chloroaniline	ND	0.21		mg/Kg-dry	1	8/22/2012
4-Chloro-3-methylphenol	ND	0.41		mg/Kg-dry	1	8/22/2012
2-Chloronaphthalene	ND	0.21		mg/Kg-dry	1	8/22/2012
2-Chlorophenol	ND	0.21		mg/Kg-dry	1	8/22/2012
4-Chlorophenyl phenyl ether	ND	0.21		mg/Kg-dry	1	8/22/2012
Chrysene	ND	0.041		mg/Kg-dry	1	8/22/2012
Dibenz(a,h)anthracene	ND	0.041		mg/Kg-dry	1	8/22/2012
Dibenzofuran	ND	0.21		mg/Kg-dry	1	8/22/2012
1,2-Dichlorobenzene	ND	0.21		mg/Kg-dry	1	8/22/2012
1,3-Dichlorobenzene	ND	0.21		mg/Kg-dry	1	8/22/2012
1,4-Dichlorobenzene	ND	0.21		mg/Kg-dry	1	8/22/2012
3,3´-Dichlorobenzidine	ND	0.21		mg/Kg-dry	1	8/22/2012
2,4-Dichlorophenol	ND	0.21		mg/Kg-dry	1	8/22/2012
Diethyl phthalate	ND	0.21		mg/Kg-dry	1	8/22/2012
2,4-Dimethylphenol	ND	0.21		mg/Kg-dry	1	8/22/2012
Dimethyl phthalate	ND	0.21		mg/Kg-dry	1	8/22/2012
4,6-Dinitro-2-methylphenol	ND	0.41		mg/Kg-dry	1	8/22/2012
2,4-Dinitrophenol	ND	1		mg/Kg-dry	1	8/22/2012
2,4-Dinitrotoluene	ND	0.041		mg/Kg-dry	1	8/22/2012
2,6-Dinitrotoluene	ND	0.041		mg/Kg-dry	1	8/22/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
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R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Date Reported: August 28, 2012
Date Printed: August 28, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080686-011

Client Sample ID: TB-05-15-17
Collection Date 8/21/2012 11:00:00 AM
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/22/2012**		Analyst: **DM**
Di-n-butyl phthalate	ND	0.21		mg/Kg-dry	1	8/22/2012
Di-n-octyl phthalate	ND	0.21		mg/Kg-dry	1	8/22/2012
Fluoranthene	ND	0.041		mg/Kg-dry	1	8/22/2012
Fluorene	ND	0.041		mg/Kg-dry	1	8/22/2012
Hexachlorobenzene	ND	0.21		mg/Kg-dry	1	8/22/2012
Hexachlorobutadiene	ND	0.21		mg/Kg-dry	1	8/22/2012
Hexachlorocyclopentadiene	ND	0.21		mg/Kg-dry	1	8/22/2012
Hexachloroethane	ND	0.21		mg/Kg-dry	1	8/22/2012
Indeno(1,2,3-cd)pyrene	ND	0.041		mg/Kg-dry	1	8/22/2012
Isophorone	ND	0.21		mg/Kg-dry	1	8/22/2012
2-Methylnaphthalene	ND	0.21		mg/Kg-dry	1	8/22/2012
2-Methylphenol	ND	0.21		mg/Kg-dry	1	8/22/2012
4-Methylphenol	ND	0.21		mg/Kg-dry	1	8/22/2012
Naphthalene	ND	0.041		mg/Kg-dry	1	8/22/2012
2-Nitroaniline	ND	0.21		mg/Kg-dry	1	8/22/2012
3-Nitroaniline	ND	0.21		mg/Kg-dry	1	8/22/2012
4-Nitroaniline	ND	0.21		mg/Kg-dry	1	8/22/2012
2-Nitrophenol	ND	0.21		mg/Kg-dry	1	8/22/2012
4-Nitrophenol	ND	0.41		mg/Kg-dry	1	8/22/2012
Nitrobenzene	ND	0.041		mg/Kg-dry	1	8/22/2012
N-Nitrosodi-n-propylamine	ND	0.041		mg/Kg-dry	1	8/22/2012
N-Nitrosodimethylamine	ND	0.21		mg/Kg-dry	1	8/22/2012
N-Nitrosodiphenylamine	ND	0.041		mg/Kg-dry	1	8/22/2012
2, 2'-oxybis(1-Chloropropane)	ND	0.21		mg/Kg-dry	1	8/22/2012
Pentachlorophenol	ND	0.041		mg/Kg-dry	1	8/22/2012
Phenanthrene	ND	0.041		mg/Kg-dry	1	8/22/2012
Phenol	ND	0.21		mg/Kg-dry	1	8/22/2012
Pyrene	ND	0.041		mg/Kg-dry	1	8/22/2012
Pyridine	ND	0.84		mg/Kg-dry	1	8/22/2012
1,2,4-Trichlorobenzene	ND	0.21		mg/Kg-dry	1	8/22/2012
2,4,5-Trichlorophenol	ND	0.21		mg/Kg-dry	1	8/22/2012
2,4,6-Trichlorophenol	ND	0.21		mg/Kg-dry	1	8/22/2012
Percent Moisture	**D2974**			Prep Date: **8/21/2012**		Analyst: **PBG**
Percent Moisture	20.7	0.2	*	wt%	1	8/22/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Date Reported: August 28, 2012
Date Printed: August 28, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080686-012

Client Sample ID: TB-05-Dup
Collection Date 8/21/2012 11:00:00 AM
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/22/2012**		Analyst: **DM**
Acenaphthene	ND	0.039		mg/Kg-dry	1	8/23/2012
Acenaphthylene	ND	0.039		mg/Kg-dry	1	8/23/2012
Aniline	ND	0.39		mg/Kg-dry	1	8/23/2012
Anthracene	ND	0.039		mg/Kg-dry	1	8/23/2012
Benz(a)anthracene	ND	0.039		mg/Kg-dry	1	8/23/2012
Benzidine	ND	0.39		mg/Kg-dry	1	8/23/2012
Benzo(a)pyrene	ND	0.039		mg/Kg-dry	1	8/23/2012
Benzo(b)fluoranthene	ND	0.039		mg/Kg-dry	1	8/23/2012
Benzo(g,h,i)perylene	ND	0.039		mg/Kg-dry	1	8/23/2012
Benzo(k)fluoranthene	ND	0.039		mg/Kg-dry	1	8/23/2012
Benzoic acid	ND	0.97		mg/Kg-dry	1	8/23/2012
Benzyl alcohol	ND	0.2		mg/Kg-dry	1	8/23/2012
Bis(2-chloroethoxy)methane	ND	0.2		mg/Kg-dry	1	8/23/2012
Bis(2-chloroethyl)ether	ND	0.2		mg/Kg-dry	1	8/23/2012
Bis(2-ethylhexyl)phthalate	ND	0.97		mg/Kg-dry	1	8/23/2012
4-Bromophenyl phenyl ether	ND	0.2		mg/Kg-dry	1	8/23/2012
Butyl benzyl phthalate	ND	0.2		mg/Kg-dry	1	8/23/2012
Carbazole	ND	0.2		mg/Kg-dry	1	8/23/2012
4-Chloroaniline	ND	0.2		mg/Kg-dry	1	8/23/2012
4-Chloro-3-methylphenol	ND	0.39		mg/Kg-dry	1	8/23/2012
2-Chloronaphthalene	ND	0.2		mg/Kg-dry	1	8/23/2012
2-Chlorophenol	ND	0.2		mg/Kg-dry	1	8/23/2012
4-Chlorophenyl phenyl ether	ND	0.2		mg/Kg-dry	1	8/23/2012
Chrysene	ND	0.039		mg/Kg-dry	1	8/23/2012
Dibenz(a,h)anthracene	ND	0.039		mg/Kg-dry	1	8/23/2012
Dibenzofuran	ND	0.2		mg/Kg-dry	1	8/23/2012
1,2-Dichlorobenzene	ND	0.2		mg/Kg-dry	1	8/23/2012
1,3-Dichlorobenzene	ND	0.2		mg/Kg-dry	1	8/23/2012
1,4-Dichlorobenzene	ND	0.2		mg/Kg-dry	1	8/23/2012
3,3´-Dichlorobenzidine	ND	0.2		mg/Kg-dry	1	8/23/2012
2,4-Dichlorophenol	ND	0.2		mg/Kg-dry	1	8/23/2012
Diethyl phthalate	ND	0.2		mg/Kg-dry	1	8/23/2012
2,4-Dimethylphenol	ND	0.2		mg/Kg-dry	1	8/23/2012
Dimethyl phthalate	ND	0.2		mg/Kg-dry	1	8/23/2012
4,6-Dinitro-2-methylphenol	ND	0.39		mg/Kg-dry	1	8/23/2012
2,4-Dinitrophenol	ND	0.97		mg/Kg-dry	1	8/23/2012
2,4-Dinitrotoluene	ND	0.039		mg/Kg-dry	1	8/23/2012
2,6-Dinitrotoluene	ND	0.039		mg/Kg-dry	1	8/23/2012

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H - Holding time exceeded

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Date Reported: August 28, 2012
Date Printed: August 28, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080686-012

Client Sample ID: TB-05-Dup
Collection Date 8/21/2012 11:00:00 AM
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/22/2012**		Analyst: **DM**
Di-n-butyl phthalate	ND	0.2		mg/Kg-dry	1	8/23/2012
Di-n-octyl phthalate	ND	0.2		mg/Kg-dry	1	8/23/2012
Fluoranthene	ND	0.039		mg/Kg-dry	1	8/23/2012
Fluorene	ND	0.039		mg/Kg-dry	1	8/23/2012
Hexachlorobenzene	ND	0.2		mg/Kg-dry	1	8/23/2012
Hexachlorobutadiene	ND	0.2		mg/Kg-dry	1	8/23/2012
Hexachlorocyclopentadiene	ND	0.2		mg/Kg-dry	1	8/23/2012
Hexachloroethane	ND	0.2		mg/Kg-dry	1	8/23/2012
Indeno(1,2,3-cd)pyrene	ND	0.039		mg/Kg-dry	1	8/23/2012
Isophorone	ND	0.2		mg/Kg-dry	1	8/23/2012
2-Methylnaphthalene	ND	0.2		mg/Kg-dry	1	8/23/2012
2-Methylphenol	ND	0.2		mg/Kg-dry	1	8/23/2012
4-Methylphenol	ND	0.2		mg/Kg-dry	1	8/23/2012
Naphthalene	ND	0.039		mg/Kg-dry	1	8/23/2012
2-Nitroaniline	ND	0.2		mg/Kg-dry	1	8/23/2012
3-Nitroaniline	ND	0.2		mg/Kg-dry	1	8/23/2012
4-Nitroaniline	ND	0.2		mg/Kg-dry	1	8/23/2012
2-Nitrophenol	ND	0.2		mg/Kg-dry	1	8/23/2012
4-Nitrophenol	ND	0.39		mg/Kg-dry	1	8/23/2012
Nitrobenzene	ND	0.039		mg/Kg-dry	1	8/23/2012
N-Nitrosodi-n-propylamine	ND	0.039		mg/Kg-dry	1	8/23/2012
N-Nitrosodimethylamine	ND	0.2		mg/Kg-dry	1	8/23/2012
N-Nitrosodiphenylamine	ND	0.039		mg/Kg-dry	1	8/23/2012
2, 2'-oxybis(1-Chloropropane)	ND	0.2		mg/Kg-dry	1	8/23/2012
Pentachlorophenol	ND	0.039		mg/Kg-dry	1	8/23/2012
Phenanthrene	ND	0.039		mg/Kg-dry	1	8/23/2012
Phenol	ND	0.2		mg/Kg-dry	1	8/23/2012
Pyrene	ND	0.039		mg/Kg-dry	1	8/23/2012
Pyridine	ND	0.79		mg/Kg-dry	1	8/23/2012
1,2,4-Trichlorobenzene	ND	0.2		mg/Kg-dry	1	8/23/2012
2,4,5-Trichlorophenol	ND	0.2		mg/Kg-dry	1	8/23/2012
2,4,6-Trichlorophenol	ND	0.2		mg/Kg-dry	1	8/23/2012
Percent Moisture	**D2974**			Prep Date: **8/21/2012**		Analyst: **PBG**
Percent Moisture	14.9	0.2	*	wt%	1	8/22/2012

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R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Date Reported: August 28, 2012
Date Printed: August 28, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080686-015

Client Sample ID: Method Blank
Collection Date 8/21/2012 1:30:00 PM
Matrix: Trip Blank

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW5035/8260B**			Prep Date: **8/21/2012**		Analyst: **ERP**
Acetone	ND	0.075		mg/Kg	1	8/24/2012
Benzene	ND	0.005		mg/Kg	1	8/24/2012
Bromodichloromethane	ND	0.005		mg/Kg	1	8/24/2012
Bromoform	ND	0.005		mg/Kg	1	8/24/2012
Bromomethane	ND	0.01		mg/Kg	1	8/24/2012
2-Butanone	ND	0.075		mg/Kg	1	8/24/2012
Carbon disulfide	ND	0.05		mg/Kg	1	8/24/2012
Carbon tetrachloride	ND	0.005		mg/Kg	1	8/24/2012
Chlorobenzene	ND	0.005		mg/Kg	1	8/24/2012
Chloroethane	ND	0.01		mg/Kg	1	8/24/2012
Chloroform	ND	0.005		mg/Kg	1	8/24/2012
Chloromethane	ND	0.01		mg/Kg	1	8/24/2012
Dibromochloromethane	ND	0.005		mg/Kg	1	8/24/2012
1,1-Dichloroethane	ND	0.005		mg/Kg	1	8/24/2012
1,2-Dichloroethane	ND	0.005		mg/Kg	1	8/24/2012
1,1-Dichloroethene	ND	0.005		mg/Kg	1	8/24/2012
cis-1,2-Dichloroethene	ND	0.005		mg/Kg	1	8/24/2012
trans-1,2-Dichloroethene	ND	0.005		mg/Kg	1	8/24/2012
1,2-Dichloropropane	ND	0.005		mg/Kg	1	8/24/2012
cis-1,3-Dichloropropene	ND	0.002		mg/Kg	1	8/24/2012
trans-1,3-Dichloropropene	ND	0.002		mg/Kg	1	8/24/2012
Ethylbenzene	ND	0.005		mg/Kg	1	8/24/2012
2-Hexanone	ND	0.02		mg/Kg	1	8/24/2012
4-Methyl-2-pentanone	ND	0.02		mg/Kg	1	8/24/2012
Methylene chloride	ND	0.01		mg/Kg	1	8/24/2012
Methyl tert-butyl ether	ND	0.005		mg/Kg	1	8/24/2012
Styrene	ND	0.005		mg/Kg	1	8/24/2012
1,1,2,2-Tetrachloroethane	ND	0.005		mg/Kg	1	8/24/2012
Tetrachloroethene	ND	0.005		mg/Kg	1	8/24/2012
Toluene	ND	0.005		mg/Kg	1	8/24/2012
1,1,1-Trichloroethane	ND	0.005		mg/Kg	1	8/24/2012
1,1,2-Trichloroethane	ND	0.005		mg/Kg	1	8/24/2012
Trichloroethene	ND	0.005		mg/Kg	1	8/24/2012
Vinyl chloride	ND	0.005		mg/Kg	1	8/24/2012
Xylenes, Total	ND	0.015		mg/Kg	1	8/24/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
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Date Reported: August 28, 2012
Date Printed: August 28, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080686-016

Client Sample ID: Trip Blank
Collection Date
Matrix: Trip Blank

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW8260B (SW5030B)**			Prep Date:		Analyst: **ERP**
Acetone	ND	0.02		mg/L	1	8/23/2012
Benzene	ND	0.005		mg/L	1	8/23/2012
Bromodichloromethane	ND	0.005		mg/L	1	8/23/2012
Bromoform	ND	0.005		mg/L	1	8/23/2012
Bromomethane	ND	0.01		mg/L	1	8/23/2012
2-Butanone	ND	0.02		mg/L	1	8/23/2012
Carbon disulfide	ND	0.01		mg/L	1	8/23/2012
Carbon tetrachloride	ND	0.005		mg/L	1	8/23/2012
Chlorobenzene	ND	0.005		mg/L	1	8/23/2012
Chloroethane	ND	0.01		mg/L	1	8/23/2012
Chloroform	ND	0.005		mg/L	1	8/23/2012
Chloromethane	ND	0.01		mg/L	1	8/23/2012
Dibromochloromethane	ND	0.005		mg/L	1	8/23/2012
1,1-Dichloroethane	ND	0.005		mg/L	1	8/23/2012
1,2-Dichloroethane	ND	0.005		mg/L	1	8/23/2012
1,1-Dichloroethene	ND	0.005		mg/L	1	8/23/2012
cis-1,2-Dichloroethene	ND	0.005		mg/L	1	8/23/2012
trans-1,2-Dichloroethene	ND	0.005		mg/L	1	8/23/2012
1,2-Dichloropropane	ND	0.005		mg/L	1	8/23/2012
cis-1,3-Dichloropropene	ND	0.001		mg/L	1	8/23/2012
trans-1,3-Dichloropropene	ND	0.001		mg/L	1	8/23/2012
Ethylbenzene	ND	0.005		mg/L	1	8/23/2012
2-Hexanone	ND	0.02		mg/L	1	8/23/2012
4-Methyl-2-pentanone	ND	0.02		mg/L	1	8/23/2012
Methylene chloride	ND	0.005		mg/L	1	8/23/2012
Methyl tert-butyl ether	ND	0.005		mg/L	1	8/23/2012
Styrene	ND	0.005		mg/L	1	8/23/2012
1,1,2,2-Tetrachloroethane	ND	0.005		mg/L	1	8/23/2012
Tetrachloroethene	ND	0.005		mg/L	1	8/23/2012
Toluene	ND	0.005		mg/L	1	8/23/2012
1,1,1-Trichloroethane	ND	0.005		mg/L	1	8/23/2012
1,1,2-Trichloroethane	ND	0.005		mg/L	1	8/23/2012
Trichloroethene	ND	0.005		mg/L	1	8/23/2012
Vinyl chloride	ND	0.002		mg/L	1	8/23/2012
Xylenes, Total	ND	0.015		mg/L	1	8/23/2012

Qualifiers:
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J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
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CHAIN OF CUSTODY RECORD

Nº: 844732 Page: 1 of 1

Company: Terracon
Project Number: A2107017 - 7A Client Tracking No.:
Project Name: DOE - Kimball
Project Location: Chicago, IL
Sampler(s): Tom Tucker
Report To: Tom Tucker Phone: 312-575-0014
Matt Otto Fax: 312-575-0111
QC Level: 1 ____ 2 ____ 3 ____ 4 ____ e-mail:

P.O. No.:
Quote No.:

Turn Around: 3-Day
Results Needed: / / am/pm

Client Sample Number/Description:	Date Taken	Time Taken	Matrix	Comp.	Grab	Preserv.	No. of Containers	VOC	SVOC	Remarks	Lab No.:
TB-01-5-7	8-2-12	14:00	S			F	3	X		Hold	001
TB-01-23-25		14:10	S			F	3	X			002
TB-01-27-29		14:20	S			F	3	X		Hold	003
TB-02-13-15		15:00	S			F	3	X			004
TB-02-Dup		15:00	S			F	3	X			005
TB-02-17-19		15:10	S			F	3	X		Hold	006
TB-03-23-25	8-21-12	9:00	S			F	9	X		MS/MSD	007
TB-03-27-29		9:10	S			F	3	X		Hold	008
TB-04-28-30		10:00	S			F	3	X			009
TB-04-32-34		10:10	S			F	3	X		Hold	010
TB-05-15-17		11:00	S			A	3		X	MS/MSD	011
TB-05-Dup		11:00	S			A	1		X	[illegible]	012
TB-05-18-20		11:10	S			A	1		X	Hold	013

Relinquished by: (Signature) Date/Time: 8-21-12 12:36
Received by: (Signature) Date/Time: 8/21/12 1330
Relinquished by: (Signature) Date/Time:
Received by: (Signature) Date/Time:
Relinquished by: (Signature) Date/Time:
Received by: (Signature) Date/Time:

Comments: 3-Day TAT

Laboratory Work Order No.: 12080686

Received on Ice: Yes [X] No [ ]
Temperature: 3.2 °C

Preservation Code: A = None B = HNO_3 C = NaOH
D = H_2SO_4 E = HCl F = 5035/EnCore G = Other

STAT Analysis Corporation

Sample Receipt Checklist

Client Name TERRACON

Date and Time Received: 8/21/2012 1:30:00 PM

Work Order Number 12080686

Received by: MAM

Checklist completed by: [signature] 8-21-12 (Signature / Date)

Reviewed by: KC 8/22/12 (Initials / Date)

Matrix: Carrier name Client Delivered

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels/containers?	Yes ☐	No ☑	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container or Temp Blank temperature in compliance?	Yes ☑	No ☐	Temperature 3.2 °C
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☐	No ☐
Water - Samples pH checked?	Yes ☐	No ☐	Checked by:
Water - Samples properly preserved?	Yes ☐	No ☐	pH Adjusted?

Any No response must be detailed in the comments section below.

Comments: Additional samples 'TB-06, Method blank, and Trip Blank' received but not listed on COC.

Client / Person contacted: _____ Date contacted: _____ Contacted by: _____

Response: Percent moisture containers for samples 001–010 received 8-21-12 @ 5:00pm.

STAT Analysis Corporation

Date: 24-Aug-12

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Test No: SW5035/8260B **Matrix:** S

QC SUMMARY REPORT
SURROGATE RECOVERIES

Sample ID	BR4FBZ	BZMED8	DBFM	DCA12D4				
VBLK082212A-3	80.8	99.4	119 *	120				
VLCS082212A-3	99.7	109	124 *	109				
VLCSD082212A-3	98.3	109	119 *	109				
12080686-002A	77.0	96.0	97.3	113				
12080686-004A	79.2	99.6	112	123				
12080686-005A	64.9	94.8	129	143				
12080686-007A	80.0	99.2	107	118				
12080686-007AMS	82.1	102	142	144				
12080686-007AMSD	84.0	101	136	132				
12080686-009A	61.0	89.2	137	150				
VBLK082312-3	81.8	97.6	116	112				
VLCS082312r3	99.4	107	119 *	111				
VLCSD082312-3	99.4	107	118	111				
12080686-014A	52.6	86.3	135	132				
VBLK082412-3	83.0	97.6	115	117				
VLCS082412-3	96.9	109	118	107				
VLCSD082412-3	96.3	108	121 *	111				
12080686-015A	82.1	98.5	122	131				
12080686-014A:50	81.4	97.6	116	115				

Acronym		Surrogate	QC Limits
BR4FBZ	=	4-Bromofluorobenzene	63-110
BR4FBZ	=	4-Bromofluorobenzene	44-114
BZMED8	=	Toluene-d8	85-110
BZMED8	=	Toluene-d8	62-122
DBFM	=	Dibromofluoromethane	83-119
DBFM	=	Dibromofluoromethane	74-150
DCA12D4	=	1,2-Dichloroethane-d4	84-129
DCA12D4	=	1,2-Dichloroethane-d4	78-160

*** Surrogate recovery outside acceptance limits**

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82756

Sample ID: **VBLK082312-3** SampType: **MBLK** TestCode: **VOC_ENCOR** Units: **mg/Kg** Prep Date: Run ID: **VOA-3_120823A**
Client ID: **ZZZZZ** Batch ID: **R82756** TestNo: **SW5035/8260** Analysis Date: **8/23/2012** SeqNo: **2226089**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.0050									
1,1,2,2-Tetrachloroethane	ND	0.0050									
1,1,2-Trichloroethane	ND	0.0050									
1,1-Dichloroethane	ND	0.0050									
1,1-Dichloroethene	ND	0.0050									
1,2-Dichloroethane	ND	0.0050									
1,2-Dichloropropane	ND	0.0050									
2-Butanone	ND	0.075									
2-Hexanone	ND	0.020									
4-Methyl-2-pentanone	ND	0.020									
Acetone	0.00272	0.075									J
Benzene	ND	0.0050									
Bromodichloromethane	ND	0.0050									
Bromoform	ND	0.0050									
Bromomethane	ND	0.010									
Carbon disulfide	ND	0.050									
Carbon tetrachloride	ND	0.0050									
Chlorobenzene	ND	0.0050									
Chloroethane	ND	0.010									
Chloroform	ND	0.0050									
Chloromethane	ND	0.010									
cis-1,2-Dichloroethene	ND	0.0050									
cis-1,3-Dichloropropene	ND	0.0020									
Dibromochloromethane	ND	0.0050									
Ethylbenzene	ND	0.0050									
Methyl tert-butyl ether	ND	0.0050									
Methylene chloride	0.002	0.010									J
Styrene	ND	0.0050									
Tetrachloroethene	0.00118	0.0050									J
Toluene	ND	0.0050									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82756

Sample ID: **VBLK082312-3**	SampType: **MBLK**	TestCode: **VOC_ENCOR**	Units: **mg/Kg**	Prep Date:	Run ID: **VOA-3_120823A**
Client ID: **ZZZZZ**	Batch ID: **R82756**	TestNo: **SW5035/8260**		Analysis Date: **8/23/2012**	SeqNo: **2226089**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	ND	0.0050									
trans-1,3-Dichloropropene	ND	0.0020									
Trichloroethene	ND	0.0050									
Vinyl chloride	ND	0.0050									
Xylenes, Total	ND	0.015									

Sample ID: **VLCS082312r3**	SampType: **LCS**	TestCode: **VOC_ENCOR**	Units: **mg/Kg**	Prep Date:	Run ID: **VOA-3_120823A**
Client ID: **ZZZZZ**	Batch ID: **R82756**	TestNo: **SW5035/8260**		Analysis Date: **8/23/2012**	SeqNo: **2226090**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.05246	0.0050	0.05	0	105	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.05864	0.0050	0.05	0	117	70	130	0	0		
1,1,2-Trichloroethane	0.05394	0.0050	0.05	0	108	70	130	0	0		
1,1-Dichloroethane	0.05182	0.0050	0.05	0	104	70	130	0	0		
1,1-Dichloroethene	0.05131	0.0050	0.05	0	103	70	130	0	0		
1,2-Dichloroethane	0.05935	0.0050	0.05	0	119	70	130	0	0		
1,2-Dichloropropane	0.04941	0.0050	0.05	0	98.8	70	130	0	0		
2-Butanone	0.1024	0.075	0.1	0	102	70	130	0	0		
2-Hexanone	0.1064	0.020	0.1	0	106	70	130	0	0		
4-Methyl-2-pentanone	0.1033	0.020	0.1	0	103	70	130	0	0		
Acetone	0.1203	0.075	0.1	0.00272	118	50	150	0	0		
Benzene	0.04787	0.0050	0.05	0	95.7	70	130	0	0		
Bromodichloromethane	0.05788	0.0050	0.05	0	116	70	130	0	0		
Bromoform	0.05948	0.0050	0.05	0	119	70	130	0	0		
Bromomethane	0.05862	0.010	0.05	0	117	70	130	0	0		
Carbon disulfide	0.1165	0.050	0.1	0	116	70	130	0	0		
Carbon tetrachloride	0.05316	0.0050	0.05	0	106	70	130	0	0		
Chlorobenzene	0.05604	0.0050	0.05	0	112	70	130	0	0		
Chloroethane	0.05387	0.010	0.05	0	108	70	130	0	0		
Chloroform	0.05624	0.0050	0.05	0	112	70	130	0	0		
Chloromethane	0.05427	0.010	0.05	0	109	70	130	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82756

Sample ID: **VLCS082312r3**	SampType: **LCS**	TestCode: **VOC_ENCOR**	Units: **mg/Kg**	Prep Date:	Run ID: **VOA-3_120823A**
Client ID: **ZZZZZ**	Batch ID: **R82756**	TestNo: **SW5035/8260**		Analysis Date: **8/23/2012**	SeqNo: **2226090**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	0.0491	0.0050	0.05	0	98.2	70	130	0	0		
cis-1,3-Dichloropropene	0.05178	0.0020	0.05	0	104	70	130	0	0		
Dibromochloromethane	0.06015	0.0050	0.05	0	120	70	130	0	0		
Ethylbenzene	0.05173	0.0050	0.05	0	103	70	130	0	0		
Methyl tert-butyl ether	0.0563	0.0050	0.05	0	113	70	130	0	0		
Methylene chloride	0.05956	0.010	0.05	0.002	115	70	130	0	0		
Styrene	0.0542	0.0050	0.05	0	108	70	130	0	0		
Tetrachloroethene	0.04677	0.0050	0.05	0.00118	91.2	70	130	0	0		
Toluene	0.0477	0.0050	0.05	0	95.4	70	130	0	0		
trans-1,2-Dichloroethene	0.05377	0.0050	0.05	0	108	70	130	0	0		
trans-1,3-Dichloropropene	0.062	0.0020	0.05	0	124	70	130	0	0		
Trichloroethene	0.04652	0.0050	0.05	0	93	70	130	0	0		
Vinyl chloride	0.05087	0.0050	0.05	0	102	70	130	0	0		
Xylenes, Total	0.1621	0.015	0.15	0	108	70	130	0	0		

Sample ID: **VLCSD082312-3**	SampType: **LCSD**	TestCode: **VOC_ENCOR**	Units: **mg/Kg**	Prep Date:	Run ID: **VOA-3_120823A**
Client ID: **ZZZZZ**	Batch ID: **R82756**	TestNo: **SW5035/8260**		Analysis Date: **8/23/2012**	SeqNo: **2226091**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.05877	0.0050	0.05	0	118	70	130	0.05246	11.3	20	
1,1,2,2-Tetrachloroethane	0.05913	0.0050	0.05	0	118	70	130	0.05864	0.832	20	
1,1,2-Trichloroethane	0.0554	0.0050	0.05	0	111	70	130	0.05394	2.67	20	
1,1-Dichloroethane	0.05458	0.0050	0.05	0	109	70	130	0.05182	5.19	20	
1,1-Dichloroethene	0.05838	0.0050	0.05	0	117	70	130	0.05131	12.9	20	
1,2-Dichloroethane	0.06087	0.0050	0.05	0	122	70	130	0.05935	2.53	20	
1,2-Dichloropropane	0.05074	0.0050	0.05	0	101	70	130	0.04941	2.66	20	
2-Butanone	0.09976	0.075	0.1	0	99.8	70	130	0.1024	2.56	20	
2-Hexanone	0.107	0.020	0.1	0	107	70	130	0.1064	0.581	20	
4-Methyl-2-pentanone	0.1045	0.020	0.1	0	104	70	130	0.1033	1.14	20	
Acetone	0.1257	0.075	0.1	0.00272	123	50	150	0.1203	4.45	20	
Benzene	0.05109	0.0050	0.05	0	102	70	130	0.04787	6.51	20	

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82756

Sample ID: **VLCSD082312-3** SampType: **LCSD** TestCode: **VOC_ENCOR** Units: **mg/Kg** Prep Date: Run ID: **VOA-3_120823A**
Client ID: **ZZZZZ** Batch ID: **R82756** TestNo: **SW5035/8260** Analysis Date: **8/23/2012** SeqNo: **2226091**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	0.05902	0.0050	0.05	0	118	70	130	0.05788	1.95	20	
Bromoform	0.05983	0.0050	0.05	0	120	70	130	0.05948	0.587	20	
Bromomethane	0.06214	0.010	0.05	0	124	70	130	0.05862	5.83	20	
Carbon disulfide	0.1293	0.050	0.1	0	129	70	130	0.1165	10.4	20	
Carbon tetrachloride	0.05868	0.0050	0.05	0	117	70	130	0.05316	9.87	20	
Chlorobenzene	0.058	0.0050	0.05	0	116	70	130	0.05604	3.44	20	
Chloroethane	0.06015	0.010	0.05	0	120	70	130	0.05387	11.0	20	
Chloroform	0.05892	0.0050	0.05	0	118	70	130	0.05624	4.65	20	
Chloromethane	0.05778	0.010	0.05	0	116	70	130	0.05427	6.27	20	
cis-1,2-Dichloroethene	0.05172	0.0050	0.05	0	103	70	130	0.0491	5.20	20	
cis-1,3-Dichloropropene	0.05247	0.0020	0.05	0	105	70	130	0.05178	1.32	20	
Dibromochloromethane	0.06013	0.0050	0.05	0	120	70	130	0.06015	0.0333	20	
Ethylbenzene	0.05515	0.0050	0.05	0	110	70	130	0.05173	6.40	20	
Methyl tert-butyl ether	0.05604	0.0050	0.05	0	112	70	130	0.0563	0.463	20	
Methylene chloride	0.05935	0.010	0.05	0.002	115	70	130	0.05956	0.353	20	
Styrene	0.05651	0.0050	0.05	0	113	70	130	0.0542	4.17	20	
Tetrachloroethene	0.05085	0.0050	0.05	0.00118	99.3	70	130	0.04677	8.36	20	
Toluene	0.05115	0.0050	0.05	0	102	70	130	0.0477	6.98	20	
trans-1,2-Dichloroethene	0.05748	0.0050	0.05	0	115	70	130	0.05377	6.67	20	
trans-1,3-Dichloropropene	0.06352	0.0020	0.05	0	127	70	130	0.062	2.42	20	
Trichloroethene	0.05091	0.0050	0.05	0	102	70	130	0.04652	9.01	20	
Vinyl chloride	0.05922	0.0050	0.05	0	118	70	130	0.05087	15.2	20	
Xylenes, Total	0.1736	0.015	0.15	0	116	70	130	0.1621	6.86	20	

Qualifiers:
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H/HT - Holding Time Exceeded
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CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82762

Sample ID: **VBLK082312-7** SampType: **MBLK** TestCode: **VOC_W+** Units: **mg/L** Prep Date: Run ID: **VOA-7_120823A**
Client ID: **ZZZZZ** Batch ID: **R82762** TestNo: **SW8260B** Analysis Date: **8/23/2012** SeqNo: **2226273**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.0050									
1,1,2,2-Tetrachloroethane	ND	0.0050									
1,1,2-Trichloroethane	ND	0.0050									
1,1-Dichloroethane	ND	0.0050									
1,1-Dichloroethene	ND	0.0050									
1,2-Dichloroethane	ND	0.0050									
1,2-Dichloropropane	ND	0.0050									
2-Butanone	ND	0.020									
2-Hexanone	ND	0.020									
4-Methyl-2-pentanone	ND	0.020									
Acetone	ND	0.020									
Benzene	ND	0.0050									
Bromodichloromethane	ND	0.0050									
Bromoform	ND	0.0050									
Bromomethane	ND	0.010									
Carbon disulfide	ND	0.010									
Carbon tetrachloride	ND	0.0050									
Chlorobenzene	ND	0.0050									
Chloroethane	ND	0.010									
Chloroform	0.0005	0.0050									J
Chloromethane	ND	0.010									
cis-1,2-Dichloroethene	ND	0.0050									
cis-1,3-Dichloropropene	ND	0.0010									
Dibromochloromethane	ND	0.0050									
Ethylbenzene	ND	0.0050									
Methyl tert-butyl ether	ND	0.0050									
Methylene chloride	ND	0.0050									
Styrene	ND	0.0050									
Tetrachloroethene	ND	0.0050									
Toluene	ND	0.0050									
trans-1,2-Dichloroethene	ND	0.0050									

Qualifiers:
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R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82762

Sample ID: **VBLK082312-7**	SampType: **MBLK**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120823A**
Client ID: **ZZZZZ**	Batch ID: **R82762**	TestNo: **SW8260B**		Analysis Date: **8/23/2012**	SeqNo: **2226273**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	0.0010									
Trichloroethene	ND	0.0050									
Vinyl chloride	ND	0.0020									
Xylenes, Total	ND	0.015									

Sample ID: **VLCS082312-7**	SampType: **LCS**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120823A**
Client ID: **ZZZZZ**	Batch ID: **R82762**	TestNo: **SW8260B**		Analysis Date: **8/23/2012**	SeqNo: **2226275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.02182	0.0050	0.02	0	109	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.02056	0.0050	0.02	0	103	70	130	0	0		
1,1,2-Trichloroethane	0.02013	0.0050	0.02	0	101	70	130	0	0		
1,1-Dichloroethane	0.02027	0.0050	0.02	0	101	70	130	0	0		
1,1-Dichloroethene	0.02083	0.0050	0.02	0	104	70	130	0	0		
1,2-Dichloroethane	0.02099	0.0050	0.02	0	105	70	130	0	0		
1,2-Dichloropropane	0.02034	0.0050	0.02	0	102	70	130	0	0		
2-Butanone	0.04014	0.020	0.04	0	100	70	130	0	0		
2-Hexanone	0.03936	0.020	0.04	0	98.4	70	130	0	0		
4-Methyl-2-pentanone	0.03805	0.020	0.04	0	95.1	70	130	0	0		
Acetone	0.03386	0.020	0.04	0	84.6	50	150	0	0		
Benzene	0.02191	0.0050	0.02	0	110	70	130	0	0		
Bromodichloromethane	0.02166	0.0050	0.02	0	108	70	130	0	0		
Bromoform	0.01884	0.0050	0.02	0	94.2	70	130	0	0		
Bromomethane	0.01381	0.010	0.02	0	69	70	130	0	0		S
Carbon disulfide	0.0427	0.010	0.04	0	107	70	130	0	0		
Carbon tetrachloride	0.02187	0.0050	0.02	0	109	70	130	0	0		
Chlorobenzene	0.02432	0.0050	0.02	0	122	70	130	0	0		
Chloroethane	0.01992	0.010	0.02	0	99.6	70	130	0	0		
Chloroform	0.02243	0.0050	0.02	0.0005	110	70	130	0	0		
Chloromethane	0.02125	0.010	0.02	0	106	70	130	0	0		
cis-1,2-Dichloroethene	0.02042	0.0050	0.02	0	102	70	130	0	0		

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82762

Sample ID: **VLCS082312-7**	SampType: **LCS**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120823A**
Client ID: **ZZZZZ**	Batch ID: **R82762**	TestNo: **SW8260B**		Analysis Date: **8/23/2012**	SeqNo: **2226275**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	0.02123	0.0010	0.02	0	106	70	130	0	0		
Dibromochloromethane	0.02182	0.0050	0.02	0	109	70	130	0	0		
Ethylbenzene	0.02204	0.0050	0.02	0	110	70	130	0	0		
Methyl tert-butyl ether	0.02047	0.0050	0.02	0	102	50	150	0	0		
Methylene chloride	0.0208	0.0050	0.02	0	104	70	130	0	0		
Styrene	0.02094	0.0050	0.02	0	105	70	130	0	0		
Tetrachloroethene	0.02171	0.0050	0.02	0	109	70	130	0	0		
Toluene	0.02168	0.0050	0.02	0	108	70	130	0	0		
trans-1,2-Dichloroethene	0.02066	0.0050	0.02	0	103	70	130	0	0		
trans-1,3-Dichloropropene	0.02183	0.0010	0.02	0	109	70	130	0	0		
Trichloroethene	0.0217	0.0050	0.02	0	108	70	130	0	0		
Vinyl chloride	0.01997	0.0020	0.02	0	99.8	70	130	0	0		
Xylenes, Total	0.07012	0.015	0.06	0	117	70	130	0	0		

Sample ID: **VLCSD082312-7**	SampType: **LCSD**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120823A**
Client ID: **ZZZZZ**	Batch ID: **R82762**	TestNo: **SW8260B**		Analysis Date: **8/23/2012**	SeqNo: **2226276**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.02094	0.0050	0.02	0	105	70	130	0.02182	4.12	20	
1,1,2,2-Tetrachloroethane	0.01966	0.0050	0.02	0	98.3	70	130	0.02056	4.48	20	
1,1,2-Trichloroethane	0.01986	0.0050	0.02	0	99.3	70	130	0.02013	1.35	20	
1,1-Dichloroethane	0.01972	0.0050	0.02	0	98.6	70	130	0.02027	2.75	20	
1,1-Dichloroethene	0.02037	0.0050	0.02	0	102	70	130	0.02083	2.23	20	
1,2-Dichloroethane	0.02091	0.0050	0.02	0	105	70	130	0.02099	0.382	20	
1,2-Dichloropropane	0.01975	0.0050	0.02	0	98.8	70	130	0.02034	2.94	20	
2-Butanone	0.04341	0.020	0.04	0	109	70	130	0.04014	7.83	20	
2-Hexanone	0.03696	0.020	0.04	0	92.4	70	130	0.03936	6.29	20	
4-Methyl-2-pentanone	0.03756	0.020	0.04	0	93.9	70	130	0.03805	1.30	20	
Acetone	0.03546	0.020	0.04	0	88.7	50	150	0.03386	4.62	20	
Benzene	0.02105	0.0050	0.02	0	105	70	130	0.02191	4.00	20	
Bromodichloromethane	0.02033	0.0050	0.02	0	102	70	130	0.02166	6.33	20	

Qualifiers:
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H/HT - Holding Time Exceeded
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E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82762

Sample ID: **VLCSD082312-7**	SampType: **LCSD**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120823A**
Client ID: **ZZZZZ**	Batch ID: **R82762**	TestNo: **SW8260B**		Analysis Date: **8/23/2012**	SeqNo: **2226276**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.01901	0.0050	0.02	0	95	70	130	0.01884	0.898	20	
Bromomethane	0.0143	0.010	0.02	0	71.5	70	130	0.01381	3.49	20	
Carbon disulfide	0.04117	0.010	0.04	0	103	70	130	0.0427	3.65	20	
Carbon tetrachloride	0.02048	0.0050	0.02	0	102	70	130	0.02187	6.56	20	
Chlorobenzene	0.02219	0.0050	0.02	0	111	70	130	0.02432	9.16	20	
Chloroethane	0.02074	0.010	0.02	0	104	70	130	0.01992	4.03	20	
Chloroform	0.02175	0.0050	0.02	0.0005	106	70	130	0.02243	3.08	20	
Chloromethane	0.02215	0.010	0.02	0	111	70	130	0.02125	4.15	20	
cis-1,2-Dichloroethene	0.01965	0.0050	0.02	0	98.3	70	130	0.02042	3.84	20	
cis-1,3-Dichloropropene	0.02007	0.0010	0.02	0	100	70	130	0.02123	5.62	20	
Dibromochloromethane	0.02043	0.0050	0.02	0	102	70	130	0.02182	6.58	20	
Ethylbenzene	0.02051	0.0050	0.02	0	103	70	130	0.02204	7.19	20	
Methyl tert-butyl ether	0.02085	0.0050	0.02	0	104	50	150	0.02047	1.84	20	
Methylene chloride	0.01989	0.0050	0.02	0	99.4	70	130	0.0208	4.47	20	
Styrene	0.02025	0.0050	0.02	0	101	70	130	0.02094	3.35	20	
Tetrachloroethene	0.02004	0.0050	0.02	0	100	70	130	0.02171	8.00	20	
Toluene	0.02065	0.0050	0.02	0	103	70	130	0.02168	4.87	20	
trans-1,2-Dichloroethene	0.02043	0.0050	0.02	0	102	70	130	0.02066	1.12	20	
trans-1,3-Dichloropropene	0.02166	0.0010	0.02	0	108	70	130	0.02183	0.782	20	
Trichloroethene	0.01969	0.0050	0.02	0	98.4	70	130	0.0217	9.71	20	
Vinyl chloride	0.01822	0.0020	0.02	0	91.1	70	130	0.01997	9.16	20	
Xylenes, Total	0.06521	0.015	0.06	0	109	70	130	0.07012	7.26	20	

Qualifiers:
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R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82763

Sample ID: **12080686-007AMS**	SampType: **MS**	TestCode: **VOC_5035+**	Units: **mg/Kg-dry**	Prep Date: **8/21/2012**	Run ID: **VOA-3_120822B**
Client ID: **TB-03-23-25**	Batch ID: **R82763**	TestNo: **SW5035/8260**		Analysis Date: **8/23/2012**	SeqNo: **2226287**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.04216	0.0045	0.04519	0	93.3	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.02947	0.0045	0.04519	0	65.2	70	130	0	0		S
1,1,2-Trichloroethane	0.03217	0.0045	0.04519	0	71.2	70	130	0	0		
1,1-Dichloroethane	0.04072	0.0045	0.04519	0	90.1	70	130	0	0		
1,1-Dichloroethene	0.04265	0.0045	0.04519	0	94.4	70	130	0	0		
1,2-Dichloroethane	0.03654	0.0045	0.04519	0	80.9	70	130	0	0		
1,2-Dichloropropane	0.03189	0.0045	0.04519	0	70.6	70	130	0	0		
2-Butanone	0.09353	0.068	0.09039	0	103	70	130	0	0		
2-Hexanone	0.06399	0.018	0.09039	0	70.8	70	130	0	0		
4-Methyl-2-pentanone	0.07083	0.018	0.09039	0	78.4	70	130	0	0		
Acetone	0.1555	0.068	0.09039	0.01836	152	50	150	0	0		S
Benzene	0.03454	0.0045	0.04519	0.0005774	75.1	70	130	0	0		
Bromodichloromethane	0.03144	0.0045	0.04519	0	69.6	70	130	0	0		S
Bromoform	0.0204	0.0045	0.04519	0	45.1	70	130	0	0		S
Bromomethane	0.03326	0.0090	0.04519	0	73.6	70	130	0	0		
Carbon disulfide	0.1045	0.045	0.09039	0	116	70	130	0	0		
Carbon tetrachloride	0.0409	0.0045	0.04519	0	90.5	70	130	0	0		
Chlorobenzene	0.03537	0.0045	0.04519	0	78.3	70	130	0	0		
Chloroethane	0.03999	0.0090	0.04519	0	88.5	70	130	0	0		
Chloroform	0.04215	0.0045	0.04519	0	93.3	70	130	0	0		
Chloromethane	0.03971	0.0090	0.04519	0	87.9	70	130	0	0		
cis-1,2-Dichloroethene	0.03575	0.0045	0.04519	0	79.1	70	130	0	0		
cis-1,3-Dichloropropene	0.02473	0.0018	0.04519	0	54.7	70	130	0	0		S
Dibromochloromethane	0.02756	0.0045	0.04519	0	61	70	130	0	0		S
Ethylbenzene	0.03889	0.0045	0.04519	0	86.1	70	130	0	0		
Methyl tert-butyl ether	0.04641	0.0045	0.04519	0	103	70	130	0	0		
Methylene chloride	0.04421	0.0090	0.04519	0	97.8	70	130	0	0		
Styrene	0.03025	0.0045	0.04519	0	66.9	70	130	0	0		S
Tetrachloroethene	0.03898	0.0045	0.04519	0	86.2	70	130	0	0		
Toluene	0.03233	0.0045	0.04519	0.0004352	70.6	70	130	0	0		
trans-1,2-Dichloroethene	0.04499	0.0045	0.04519	0	99.5	70	130	0	0		

Qualifiers:
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* - Non Accredited Parameter
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R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82763

Sample ID: **12080686-007AMS**	SampType: **MS**	TestCode: **VOC_5035+**	Units: **mg/Kg-dry**	Prep Date: **8/21/2012**	Run ID: **VOA-3_120822B**
Client ID: **TB-03-23-25**	Batch ID: **R82763**	TestNo: **SW5035/8260**		Analysis Date: **8/23/2012**	SeqNo: **2226287**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	0.03014	0.0018	0.04519	0	66.7	70	130	0	0		S
Trichloroethene	0.03443	0.0045	0.04519	0.0004268	75.2	70	130	0	0		
Vinyl chloride	0.04144	0.0045	0.04519	0	91.7	70	130	0	0		
Xylenes, Total	0.1204	0.014	0.1356	0	88.8	70	130	0	0		

Sample ID: **12080686-007AMSD**	SampType: **MSD**	TestCode: **VOC_5035+**	Units: **mg/Kg-dry**	Prep Date: **8/21/2012**	Run ID: **VOA-3_120822B**
Client ID: **TB-03-23-25**	Batch ID: **R82763**	TestNo: **SW5035/8260**		Analysis Date: **8/23/2012**	SeqNo: **2226289**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.04238	0.0046	0.04611	0	91.9	70	130	0.04216	0.521	25	
1,1,2,2-Tetrachloroethane	0.024	0.0046	0.04611	0	52	70	130	0.02947	20.5	25	S
1,1,2-Trichloroethane	0.02948	0.0046	0.04611	0	63.9	70	130	0.03217	8.71	25	S
1,1-Dichloroethane	0.03831	0.0046	0.04611	0	83.1	70	130	0.04072	6.10	25	
1,1-Dichloroethene	0.04506	0.0046	0.04611	0	97.7	70	130	0.04265	5.51	25	
1,2-Dichloroethane	0.03391	0.0046	0.04611	0	73.5	70	130	0.03654	7.47	25	
1,2-Dichloropropane	0.02983	0.0046	0.04611	0	64.7	70	130	0.03189	6.69	25	S
2-Butanone	0.08321	0.069	0.09223	0	90.2	70	130	0.09353	11.7	25	
2-Hexanone	0.05085	0.018	0.09223	0	55.1	70	130	0.06399	22.9	25	S
4-Methyl-2-pentanone	0.05675	0.018	0.09223	0	61.5	70	130	0.07083	22.1	25	S
Acetone	0.13	0.069	0.09223	0.01836	121	50	150	0.1555	17.9	25	
Benzene	0.03398	0.0046	0.04611	0.0005774	72.4	70	130	0.03454	1.64	25	
Bromodichloromethane	0.0289	0.0046	0.04611	0	62.7	70	130	0.03144	8.40	25	S
Bromoform	0.01647	0.0046	0.04611	0	35.7	70	130	0.0204	21.3	25	S
Bromomethane	0.03104	0.0092	0.04611	0	67.3	70	130	0.03326	6.90	25	S
Carbon disulfide	0.1014	0.046	0.09223	0	110	70	130	0.1045	3.00	25	
Carbon tetrachloride	0.04155	0.0046	0.04611	0	90.1	70	130	0.0409	1.57	25	
Chlorobenzene	0.03263	0.0046	0.04611	0	70.8	70	130	0.03537	8.06	25	
Chloroethane	0.03797	0.0092	0.04611	0	82.3	70	130	0.03999	5.18	25	
Chloroform	0.03913	0.0046	0.04611	0	84.9	70	130	0.04215	7.42	25	
Chloromethane	0.03706	0.0092	0.04611	0	80.4	70	130	0.03971	6.91	25	
cis-1,2-Dichloroethene	0.03354	0.0046	0.04611	0	72.7	70	130	0.03575	6.37	25	

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82763

Sample ID: **12080686-007AMSD** SampType: **MSD** TestCode: **VOC_5035+** Units: **mg/Kg-dry** Prep Date: **8/21/2012** Run ID: **VOA-3_120822B**
Client ID: **TB-03-23-25** Batch ID: **R82763** TestNo: **SW5035/8260** Analysis Date: **8/23/2012** SeqNo: **2226289**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	0.02224	0.0018	0.04611	0	48.2	70	130	0.02473	10.6	25	S
Dibromochloromethane	0.02422	0.0046	0.04611	0	52.5	70	130	0.02756	12.9	25	S
Ethylbenzene	0.03769	0.0046	0.04611	0	81.7	70	130	0.03889	3.14	25	
Methyl tert-butyl ether	0.04275	0.0046	0.04611	0	92.7	70	130	0.04641	8.23	25	
Methylene chloride	0.04228	0.0092	0.04611	0	91.7	70	130	0.04421	4.47	25	
Styrene	0.02703	0.0046	0.04611	0	58.6	70	130	0.03025	11.2	25	S
Tetrachloroethene	0.03851	0.0046	0.04611	0	83.5	70	130	0.03898	1.19	25	
Toluene	0.03109	0.0046	0.04611	0.0004352	66.5	70	130	0.03233	3.92	25	S
trans-1,2-Dichloroethene	0.04343	0.0046	0.04611	0	94.2	70	130	0.04499	3.52	25	
trans-1,3-Dichloropropene	0.02815	0.0018	0.04611	0	61	70	130	0.03014	6.82	25	S
Trichloroethene	0.03449	0.0046	0.04611	0.0004268	73.9	70	130	0.03443	0.183	25	
Vinyl chloride	0.03949	0.0046	0.04611	0	85.6	70	130	0.04144	4.82	25	
Xylenes, Total	0.1164	0.014	0.1383	0	84.1	70	130	0.1204	3.45	25	

Sample ID: **VBLK082212A-3** SampType: **MBLK** TestCode: **VOC_ENCOR** Units: **mg/Kg** Prep Date: Run ID: **VOA-3_120822B**
Client ID: **ZZZZZ** Batch ID: **R82763** TestNo: **SW5035/8260** Analysis Date: **8/22/2012** SeqNo: **2226259**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.0050									
1,1,2,2-Tetrachloroethane	ND	0.0050									
1,1,2-Trichloroethane	ND	0.0050									
1,1-Dichloroethane	ND	0.0050									
1,1-Dichloroethene	ND	0.0050									
1,2-Dichloroethane	ND	0.0050									
1,2-Dichloropropane	ND	0.0050									
2-Butanone	ND	0.075									
2-Hexanone	ND	0.020									
4-Methyl-2-pentanone	ND	0.020									
Acetone	ND	0.075									
Benzene	ND	0.0050									
Bromodichloromethane	ND	0.0050									

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82763

Sample ID: **VBLK082212A-3** SampType: **MBLK** TestCode: **VOC_ENCOR** Units: **mg/Kg** Prep Date: Run ID: **VOA-3_120822B**
Client ID: **ZZZZZ** Batch ID: **R82763** TestNo: **SW5035/8260** Analysis Date: **8/22/2012** SeqNo: **2226259**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	ND	0.0050									
Bromomethane	ND	0.010									
Carbon disulfide	ND	0.050									
Carbon tetrachloride	ND	0.0050									
Chlorobenzene	ND	0.0050									
Chloroethane	ND	0.010									
Chloroform	ND	0.0050									
Chloromethane	ND	0.010									
cis-1,2-Dichloroethene	ND	0.0050									
cis-1,3-Dichloropropene	ND	0.0020									
Dibromochloromethane	ND	0.0050									
Ethylbenzene	ND	0.0050									
Methyl tert-butyl ether	ND	0.0050									
Methylene chloride	0.00248	0.010									J
Styrene	ND	0.0050									
Tetrachloroethene	ND	0.0050									
Toluene	ND	0.0050									
trans-1,2-Dichloroethene	ND	0.0050									
trans-1,3-Dichloropropene	ND	0.0020									
Trichloroethene	ND	0.0050									
Vinyl chloride	ND	0.0050									
Xylenes, Total	ND	0.015									

Sample ID: **VLCS082212A-3** SampType: **LCS** TestCode: **VOC_ENCOR** Units: **mg/Kg** Prep Date: Run ID: **VOA-3_120822B**
Client ID: **ZZZZZ** Batch ID: **R82763** TestNo: **SW5035/8260** Analysis Date: **8/22/2012** SeqNo: **2226261**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.05865	0.0050	0.05	0	117	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.06013	0.0050	0.05	0	120	70	130	0	0		
1,1,2-Trichloroethane	0.05545	0.0050	0.05	0	111	70	130	0	0		
1,1-Dichloroethane	0.05622	0.0050	0.05	0	112	70	130	0	0		

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82763

Sample ID: **VLCS082212A-3** SampType: **LCS** TestCode: **VOC_ENCOR** Units: **mg/Kg** Prep Date: Run ID: **VOA-3_120822B**
Client ID: **ZZZZZ** Batch ID: **R82763** TestNo: **SW5035/8260** Analysis Date: **8/22/2012** SeqNo: **2226261**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.05847	0.0050	0.05	0	117	70	130	0	0		
1,2-Dichloroethane	0.06042	0.0050	0.05	0	121	70	130	0	0		
1,2-Dichloropropane	0.05159	0.0050	0.05	0	103	70	130	0	0		
2-Butanone	0.1052	0.075	0.1	0	105	70	130	0	0		
2-Hexanone	0.111	0.020	0.1	0	111	70	130	0	0		
4-Methyl-2-pentanone	0.1101	0.020	0.1	0	110	70	130	0	0		
Acetone	0.1271	0.075	0.1	0	127	50	150	0	0		
Benzene	0.05089	0.0050	0.05	0	102	70	130	0	0		
Bromodichloromethane	0.06116	0.0050	0.05	0	122	70	130	0	0		
Bromoform	0.061	0.0050	0.05	0	122	70	130	0	0		
Bromomethane	0.05903	0.010	0.05	0	118	70	130	0	0		
Carbon disulfide	0.1348	0.050	0.1	0	135	70	130	0	0		S
Carbon tetrachloride	0.05884	0.0050	0.05	0	118	70	130	0	0		
Chlorobenzene	0.0599	0.0050	0.05	0	120	70	130	0	0		
Chloroethane	0.0606	0.010	0.05	0	121	70	130	0	0		
Chloroform	0.06144	0.0050	0.05	0	123	70	130	0	0		
Chloromethane	0.05201	0.010	0.05	0	104	70	130	0	0		
cis-1,2-Dichloroethene	0.05158	0.0050	0.05	0	103	70	130	0	0		
cis-1,3-Dichloropropene	0.05331	0.0020	0.05	0	107	70	130	0	0		
Dibromochloromethane	0.06209	0.0050	0.05	0	124	70	130	0	0		
Ethylbenzene	0.05677	0.0050	0.05	0	114	70	130	0	0		
Methyl tert-butyl ether	0.05566	0.0050	0.05	0	111	70	130	0	0		
Methylene chloride	0.06035	0.010	0.05	0.00248	116	70	130	0	0		
Styrene	0.05775	0.0050	0.05	0	116	70	130	0	0		
Tetrachloroethene	0.05149	0.0050	0.05	0	103	70	130	0	0		
Toluene	0.05245	0.0050	0.05	0	105	70	130	0	0		
trans-1,2-Dichloroethene	0.05926	0.0050	0.05	0	119	70	130	0	0		
trans-1,3-Dichloropropene	0.06231	0.0020	0.05	0	125	70	130	0	0		
Trichloroethene	0.05206	0.0050	0.05	0	104	70	130	0	0		
Vinyl chloride	0.05606	0.0050	0.05	0	112	70	130	0	0		
Xylenes, Total	0.1778	0.015	0.15	0	119	70	130	0	0		

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82763

Sample ID: **VLCSD082212A-3** SampType: **LCSD** TestCode: **VOC_ENCOR** Units: **mg/Kg** Prep Date: Run ID: **VOA-3_120822B**
Client ID: **ZZZZZ** Batch ID: **R82763** TestNo: **SW5035/8260** Analysis Date: **8/22/2012** SeqNo: **2226264**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.06001	0.0050	0.05	0	120	70	130	0.05865	2.29	20	
1,1,2,2-Tetrachloroethane	0.06097	0.0050	0.05	0	122	70	130	0.06013	1.39	20	
1,1,2-Trichloroethane	0.05516	0.0050	0.05	0	110	70	130	0.05545	0.524	20	
1,1-Dichloroethane	0.05602	0.0050	0.05	0	112	70	130	0.05622	0.356	20	
1,1-Dichloroethene	0.06061	0.0050	0.05	0	121	70	130	0.05847	3.59	20	
1,2-Dichloroethane	0.05922	0.0050	0.05	0	118	70	130	0.06042	2.01	20	
1,2-Dichloropropane	0.05102	0.0050	0.05	0	102	70	130	0.05159	1.11	20	
2-Butanone	0.1089	0.075	0.1	0	109	70	130	0.1052	3.49	20	
2-Hexanone	0.114	0.020	0.1	0	114	70	130	0.111	2.69	20	
4-Methyl-2-pentanone	0.1095	0.020	0.1	0	109	70	130	0.1101	0.583	20	
Acetone	0.132	0.075	0.1	0	132	50	150	0.1271	3.84	20	
Benzene	0.05112	0.0050	0.05	0	102	70	130	0.05089	0.451	20	
Bromodichloromethane	0.05901	0.0050	0.05	0	118	70	130	0.06116	3.58	20	
Bromoform	0.06082	0.0050	0.05	0	122	70	130	0.061	0.296	20	
Bromomethane	0.06795	0.010	0.05	0	136	70	130	0.05903	14.0	20	S
Carbon disulfide	0.1368	0.050	0.1	0	137	70	130	0.1348	1.53	20	S
Carbon tetrachloride	0.06048	0.0050	0.05	0	121	70	130	0.05884	2.75	20	
Chlorobenzene	0.0597	0.0050	0.05	0	119	70	130	0.0599	0.334	20	
Chloroethane	0.06087	0.010	0.05	0	122	70	130	0.0606	0.445	20	
Chloroform	0.06083	0.0050	0.05	0	122	70	130	0.06144	0.998	20	
Chloromethane	0.05345	0.010	0.05	0	107	70	130	0.05201	2.73	20	
cis-1,2-Dichloroethene	0.05148	0.0050	0.05	0	103	70	130	0.05158	0.194	20	
cis-1,3-Dichloropropene	0.05282	0.0020	0.05	0	106	70	130	0.05331	0.923	20	
Dibromochloromethane	0.06146	0.0050	0.05	0	123	70	130	0.06209	1.02	20	
Ethylbenzene	0.05716	0.0050	0.05	0	114	70	130	0.05677	0.685	20	
Methyl tert-butyl ether	0.05497	0.0050	0.05	0	110	70	130	0.05566	1.25	20	
Methylene chloride	0.05877	0.010	0.05	0.00248	113	70	130	0.06035	2.65	20	
Styrene	0.05791	0.0050	0.05	0	116	70	130	0.05775	0.277	20	
Tetrachloroethene	0.05255	0.0050	0.05	0	105	70	130	0.05149	2.04	20	
Toluene	0.05302	0.0050	0.05	0	106	70	130	0.05245	1.08	20	
trans-1,2-Dichloroethene	0.06053	0.0050	0.05	0	121	70	130	0.05926	2.12	20	

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82763

Sample ID: **VLCSD082212A-3** SampType: **LCSD** TestCode: **VOC_ENCOR** Units: **mg/Kg** Prep Date: Run ID: **VOA-3_120822B**
Client ID: **ZZZZZ** Batch ID: **R82763** TestNo: **SW5035/8260** Analysis Date: **8/22/2012** SeqNo: **2226264**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	0.06173	0.0020	0.05	0	123	70	130	0.06231	0.935	20	
Trichloroethene	0.05276	0.0050	0.05	0	106	70	130	0.05206	1.34	20	
Vinyl chloride	0.05785	0.0050	0.05	0	116	70	130	0.05606	3.14	20	
Xylenes, Total	0.1802	0.015	0.15	0	120	70	130	0.1778	1.33	20	

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CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82784

Sample ID: **VBLK082412-3** SampType: **MBLK** TestCode: **VOC_ENCOR** Units: **mg/Kg** Prep Date: Run ID: **VOA-3_120824A**
Client ID: **ZZZZZ** Batch ID: **R82784** TestNo: **SW5035/8260** Analysis Date: **8/24/2012** SeqNo: **2226852**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.0050									
1,1,2,2-Tetrachloroethane	ND	0.0050									
1,1,2-Trichloroethane	ND	0.0050									
1,1-Dichloroethane	ND	0.0050									
1,1-Dichloroethene	ND	0.0050									
1,2-Dichloroethane	ND	0.0050									
1,2-Dichloropropane	ND	0.0050									
2-Butanone	ND	0.075									
2-Hexanone	ND	0.020									
4-Methyl-2-pentanone	ND	0.020									
Acetone	ND	0.075									
Benzene	ND	0.0050									
Bromodichloromethane	ND	0.0050									
Bromoform	ND	0.0050									
Bromomethane	ND	0.010									
Carbon disulfide	ND	0.050									
Carbon tetrachloride	ND	0.0050									
Chlorobenzene	ND	0.0050									
Chloroethane	ND	0.010									
Chloroform	ND	0.0050									
Chloromethane	ND	0.010									
cis-1,2-Dichloroethene	ND	0.0050									
cis-1,3-Dichloropropene	ND	0.0020									
Dibromochloromethane	ND	0.0050									
Ethylbenzene	ND	0.0050									
Methyl tert-butyl ether	ND	0.0050									
Methylene chloride	0.00194	0.010									J
Styrene	ND	0.0050									
Tetrachloroethene	ND	0.0050									
Toluene	ND	0.0050									
trans-1,2-Dichloroethene	ND	0.0050									

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E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82784

Sample ID: **VBLK082412-3**	SampType: **MBLK**	TestCode: **VOC_ENCOR**	Units: **mg/Kg**	Prep Date:	Run ID: **VOA-3_120824A**
Client ID: **ZZZZZ**	Batch ID: **R82784**	TestNo: **SW5035/8260**		Analysis Date: **8/24/2012**	SeqNo: **2226852**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	0.0020									
Trichloroethene	0.00098	0.0050									J
Vinyl chloride	ND	0.0050									
Xylenes, Total	ND	0.015									

Sample ID: **VLCS082412-3**	SampType: **LCS**	TestCode: **VOC_ENCOR**	Units: **mg/Kg**	Prep Date:	Run ID: **VOA-3_120824A**
Client ID: **ZZZZZ**	Batch ID: **R82784**	TestNo: **SW5035/8260**		Analysis Date: **8/24/2012**	SeqNo: **2226858**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.05417	0.0050	0.05	0	108	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.0552	0.0050	0.05	0	110	70	130	0	0		
1,1,2-Trichloroethane	0.05269	0.0050	0.05	0	105	70	130	0	0		
1,1-Dichloroethane	0.05334	0.0050	0.05	0	107	70	130	0	0		
1,1-Dichloroethene	0.05327	0.0050	0.05	0	107	70	130	0	0		
1,2-Dichloroethane	0.06032	0.0050	0.05	0	121	70	130	0	0		
1,2-Dichloropropane	0.05103	0.0050	0.05	0	102	70	130	0	0		
2-Butanone	0.08692	0.075	0.1	0	86.9	70	130	0	0		
2-Hexanone	0.09233	0.020	0.1	0	92.3	70	130	0	0		
4-Methyl-2-pentanone	0.09667	0.020	0.1	0	96.7	70	130	0	0		
Acetone	0.1149	0.075	0.1	0	115	50	150	0	0		
Benzene	0.04934	0.0050	0.05	0	98.7	70	130	0	0		
Bromodichloromethane	0.05932	0.0050	0.05	0	119	70	130	0	0		
Bromoform	0.05603	0.0050	0.05	0	112	70	130	0	0		
Bromomethane	0.0574	0.010	0.05	0	115	70	130	0	0		
Carbon disulfide	0.116	0.050	0.1	0	116	70	130	0	0		
Carbon tetrachloride	0.05471	0.0050	0.05	0	109	70	130	0	0		
Chlorobenzene	0.05364	0.0050	0.05	0	107	70	130	0	0		
Chloroethane	0.0527	0.010	0.05	0	105	70	130	0	0		
Chloroform	0.05897	0.0050	0.05	0	118	70	130	0	0		
Chloromethane	0.05488	0.010	0.05	0	110	70	130	0	0		
cis-1,2-Dichloroethene	0.05041	0.0050	0.05	0	101	70	130	0	0		

Qualifiers:
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E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82784

Sample ID: **VLCS082412-3**	SampType: **LCS**	TestCode: **VOC_ENCOR**	Units: **mg/Kg**	Prep Date:	Run ID: **VOA-3_120824A**
Client ID: **ZZZZZ**	Batch ID: **R82784**	TestNo: **SW5035/8260**		Analysis Date: **8/24/2012**	SeqNo: **2226858**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	0.05241	0.0020	0.05	0	105	70	130	0	0		
Dibromochloromethane	0.05969	0.0050	0.05	0	119	70	130	0	0		
Ethylbenzene	0.04945	0.0050	0.05	0	98.9	70	130	0	0		
Methyl tert-butyl ether	0.05593	0.0050	0.05	0	112	70	130	0	0		
Methylene chloride	0.05839	0.010	0.05	0.00194	113	70	130	0	0		
Styrene	0.0523	0.0050	0.05	0	105	70	130	0	0		
Tetrachloroethene	0.04294	0.0050	0.05	0	85.9	70	130	0	0		
Toluene	0.04947	0.0050	0.05	0	98.9	70	130	0	0		
trans-1,2-Dichloroethene	0.05369	0.0050	0.05	0	107	70	130	0	0		
trans-1,3-Dichloropropene	0.05959	0.0020	0.05	0	119	70	130	0	0		
Trichloroethene	0.04867	0.0050	0.05	0.00098	95.4	70	130	0	0		
Vinyl chloride	0.05294	0.0050	0.05	0	106	70	130	0	0		
Xylenes, Total	0.155	0.015	0.15	0	103	70	130	0	0		

Sample ID: **VLCSD082412-3**	SampType: **LCSD**	TestCode: **VOC_ENCOR**	Units: **mg/Kg**	Prep Date:	Run ID: **VOA-3_120824A**
Client ID: **ZZZZZ**	Batch ID: **R82784**	TestNo: **SW5035/8260**		Analysis Date: **8/24/2012**	SeqNo: **2226867**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.05865	0.0050	0.05	0	117	70	130	0.05417	7.94	20	
1,1,2,2-Tetrachloroethane	0.05875	0.0050	0.05	0	118	70	130	0.0552	6.23	20	
1,1,2-Trichloroethane	0.05479	0.0050	0.05	0	110	70	130	0.05269	3.91	20	
1,1-Dichloroethane	0.05766	0.0050	0.05	0	115	70	130	0.05334	7.78	20	
1,1-Dichloroethene	0.05901	0.0050	0.05	0	118	70	130	0.05327	10.2	20	
1,2-Dichloroethane	0.06138	0.0050	0.05	0	123	70	130	0.06032	1.74	20	
1,2-Dichloropropane	0.05315	0.0050	0.05	0	106	70	130	0.05103	4.07	20	
2-Butanone	0.09997	0.075	0.1	0	100	70	130	0.08692	14.0	20	
2-Hexanone	0.1069	0.020	0.1	0	107	70	130	0.09233	14.6	20	
4-Methyl-2-pentanone	0.1057	0.020	0.1	0	106	70	130	0.09667	8.95	20	
Acetone	0.1288	0.075	0.1	0	129	50	150	0.1149	11.3	20	
Benzene	0.0518	0.0050	0.05	0	104	70	130	0.04934	4.86	20	
Bromodichloromethane	0.05951	0.0050	0.05	0	119	70	130	0.05932	0.320	20	

Qualifiers:
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B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82784

Sample ID: **VLCSD082412-3** SampType: **LCSD** TestCode: **VOC_ENCOR** Units: **mg/Kg** Prep Date: Run ID: **VOA-3_120824A**
Client ID: **ZZZZZ** Batch ID: **R82784** TestNo: **SW5035/8260** Analysis Date: **8/24/2012** SeqNo: **2226867**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.06013	0.0050	0.05	0	120	70	130	0.05603	7.06	20	
Bromomethane	0.06129	0.010	0.05	0	123	70	130	0.0574	6.55	20	
Carbon disulfide	0.1299	0.050	0.1	0	130	70	130	0.116	11.3	20	
Carbon tetrachloride	0.06044	0.0050	0.05	0	121	70	130	0.05471	9.95	20	
Chlorobenzene	0.05683	0.0050	0.05	0	114	70	130	0.05364	5.78	20	
Chloroethane	0.05988	0.010	0.05	0	120	70	130	0.0527	12.8	20	
Chloroform	0.06108	0.0050	0.05	0	122	70	130	0.05897	3.52	20	
Chloromethane	0.05701	0.010	0.05	0	114	70	130	0.05488	3.81	20	
cis-1,2-Dichloroethene	0.05347	0.0050	0.05	0	107	70	130	0.05041	5.89	20	
cis-1,3-Dichloropropene	0.05371	0.0020	0.05	0	107	70	130	0.05241	2.45	20	
Dibromochloromethane	0.06101	0.0050	0.05	0	122	70	130	0.05969	2.19	20	
Ethylbenzene	0.0545	0.0050	0.05	0	109	70	130	0.04945	9.72	20	
Methyl tert-butyl ether	0.05728	0.0050	0.05	0	115	70	130	0.05593	2.38	20	
Methylene chloride	0.05991	0.010	0.05	0.00194	116	70	130	0.05839	2.57	20	
Styrene	0.05519	0.0050	0.05	0	110	70	130	0.0523	5.38	20	
Tetrachloroethene	0.04803	0.0050	0.05	0	96.1	70	130	0.04294	11.2	20	
Toluene	0.05173	0.0050	0.05	0	103	70	130	0.04947	4.47	20	
trans-1,2-Dichloroethene	0.05924	0.0050	0.05	0	118	70	130	0.05369	9.83	20	
trans-1,3-Dichloropropene	0.06147	0.0020	0.05	0	123	70	130	0.05959	3.11	20	
Trichloroethene	0.05207	0.0050	0.05	0.00098	102	70	130	0.04867	6.75	20	
Vinyl chloride	0.06046	0.0050	0.05	0	121	70	130	0.05294	13.3	20	
Xylenes, Total	0.1682	0.015	0.15	0	112	70	130	0.155	8.16	20	

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CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Test No: SW8270C **Matrix:** S

QC SUMMARY REPORT
SURROGATE RECOVERIES

Sample ID	CLPH2D4	DCBZ12D4	NO2BZD5	PH246BR	PH2F	PHD5	PHEN2F	PHEND14
MB-64421-SVOC	68.8	68.0	71.6	90.6	63.6	74.7	81.7	109
LCS-64421-SVOC	58.2	57.4	66.0	84.1	49.8	64.3	69.0	108
12080686-011A	48.7	47.0	50.4	91.1	42.5	55.3	61.9	109
12080686-011AMS	59.6	59.2	64.4	99.8	52.0	64.0	74.3	109
12080686-011AMSD	49.0	47.6	55.1	82.7	43.3	53.9	61.8	98.7
12080686-012A	50.6	47.0	52.5	78.2	43.2	57.4	63.7	96.2

Acronym		Surrogate	QC Limits
CLPH2D4	=	2-Chlorophenol-d4	20-130
DCBZ12D4	=	1,2-Dichlorobenzene-d4	20-130
NO2BZD5	=	Nitrobenzene-d5	23-120
PH246BR	=	2,4,6-Tribromophenol	19-122
PH2F	=	2-Fluorophenol	25-121
PHD5	=	Phenol-d5	24-113
PHEN2F	=	2-Fluorobiphenyl	30-115
PHEND14	=	4-Terphenyl-d14	18-137

*** Surrogate recovery outside acceptance limits**

STAT Analysis Corporation

PREP BATCH REPORT

Prep Start Date: **8/22/2012 11:37:43**
Prep End Date: **8/24/2012 1:08:09 P**

Prep Batch **64421** Prep Code: **3550_SVOC** Technician: **FAC**

Prep Factor Units: **mL / Kg**

Sample ID	Matrix	pH	SampAmt	Sol Added	Sol Recov	Fin Vol	factor	PrepStart	PrepEnd
MB-64421-SVOC			0.03	0	0	1	33.333	8/22/2012	8/22/2012
LCS-64421-SVOC			0.03	0	0	1	33.333	8/22/2012	8/22/2012
12080686-011A	Soil		0.03017	0	0	1	33.146	8/22/2012	8/22/2012
12080686-011AMS	Soil		0.03018	0	0	1	33.135	8/22/2012	8/22/2012
12080686-011AMSD	Soil		0.03017	0	0	1	33.146	8/22/2012	8/22/2012
12080686-012A	Soil		0.03001	0	0	1	33.322	8/22/2012	8/22/2012
12080691-001B	Soil		0.03079	0	0	1	32.478	8/22/2012	8/22/2012
12080691-002B	Soil		0.03023	0	0	10	330.797	8/22/2012	8/22/2012
12080691-003A	Soil		0.0303	0	0	1	33.003	8/22/2012	8/22/2012
12080695-001B	Soil		0.03058	0	0	1	32.701	8/22/2012	8/22/2012
12080695-002B	Soil		0.03047	0	0	10	328.192	8/22/2012	8/22/2012
12080695-003B	Soil		0.03027	0	0	1	33.036	8/22/2012	8/22/2012
12080695-004B	Soil		0.03059	0	0	1	32.690	8/22/2012	8/22/2012
12080695-005B	Soil		0.03017	0	0	1	33.146	8/22/2012	8/22/2012
12080696-001B	Soil		0.03058	0	0	1	32.701	8/22/2012	8/22/2012
12080696-002B	Soil		0.03008	0	0	10	332.447	8/22/2012	8/22/2012
12080759-001A	Soil		0.03012	0	0	10	332.005	8/23/2012	8/23/2012
12080759-002A	Soil		0.03022	0	0	1	33.091	8/23/2012	8/23/2012
12080759-003A	Soil		0.03067	0	0	1	32.605	8/23/2012	8/23/2012
12080759-004A	Soil		0.03011	0	0	1	33.212	8/23/2012	8/23/2012
12080759-005A	Soil		0.03021	0	0	1	33.102	8/23/2012	8/23/2012
12080759-006A	Soil		0.03054	0	0	1	32.744	8/23/2012	8/23/2012
12080759-007A	Soil		0.03033	0	0	1	32.971	8/23/2012	8/23/2012
12080759-008A	Soil		0.03022	0	0	1	33.091	8/23/2012	8/23/2012

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: 64421

Sample ID: **MB-64421-SVOC** SampType: **MBLK** TestCode: **SVOC_SOIL** Units: **mg/Kg** Prep Date: **8/22/2012** Run ID: **SVOC-6_120822A**
Client ID: **ZZZZZ** Batch ID: **64421** TestNo: **SW8270C** Analysis Date: **8/22/2012** SeqNo: **2226017**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	0.033									
Acenaphthylene	ND	0.033									
Aniline	ND	0.33									
Anthracene	ND	0.033									
Benz(a)anthracene	ND	0.033									
Benzidine	ND	0.33									
Benzo(a)pyrene	ND	0.033									
Benzo(b)fluoranthene	ND	0.033									
Benzo(g,h,i)perylene	ND	0.033									
Benzo(k)fluoranthene	ND	0.033									
Benzoic acid	ND	0.83									
Benzyl alcohol	ND	0.17									
Bis(2-chloroethoxy)methane	ND	0.17									
Bis(2-chloroethyl)ether	ND	0.17									
Bis(2-ethylhexyl)phthalate	ND	0.83									
4-Bromophenyl phenyl ether	ND	0.17									
Butyl benzyl phthalate	ND	0.17									
Carbazole	ND	0.17									
4-Chloroaniline	ND	0.17									
4-Chloro-3-methylphenol	ND	0.33									
2-Chloronaphthalene	ND	0.17									
2-Chlorophenol	ND	0.17									
4-Chlorophenyl phenyl ether	ND	0.17									
Chrysene	ND	0.033									
Dibenz(a,h)anthracene	ND	0.033									
Dibenzofuran	ND	0.17									
1,2-Dichlorobenzene	ND	0.17									
1,3-Dichlorobenzene	ND	0.17									
1,4-Dichlorobenzene	ND	0.17									
3,3´-Dichlorobenzidine	ND	0.17									

Qualifiers:
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S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: 64421

Sample ID: **MB-64421-SVOC** SampType: **MBLK** TestCode: **SVOC_SOIL** Units: **mg/Kg** Prep Date: **8/22/2012** Run ID: **SVOC-6_120822A**
Client ID: **ZZZZZ** Batch ID: **64421** TestNo: **SW8270C** Analysis Date: **8/22/2012** SeqNo: **2226017**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-Dichlorophenol	ND	0.17									
Diethyl phthalate	ND	0.17									
2,4-Dimethylphenol	ND	0.17									
Dimethyl phthalate	ND	0.17									
4,6-Dinitro-2-methylphenol	ND	0.33									
2,4-Dinitrophenol	ND	0.83									
2,4-Dinitrotoluene	ND	0.033									
2,6-Dinitrotoluene	ND	0.033									
Di-n-butyl phthalate	ND	0.17									
Di-n-octyl phthalate	ND	0.17									
Fluoranthene	ND	0.033									
Fluorene	ND	0.033									
Hexachlorobenzene	ND	0.17									
Hexachlorobutadiene	ND	0.17									
Hexachlorocyclopentadiene	ND	0.17									
Hexachloroethane	ND	0.17									
Indeno(1,2,3-cd)pyrene	ND	0.033									
Isophorone	ND	0.17									
2-Methylnaphthalene	ND	0.17									
2-Methylphenol	ND	0.17									
4-Methylphenol	ND	0.17									
Naphthalene	ND	0.033									
2-Nitroaniline	ND	0.17									
3-Nitroaniline	ND	0.17									
4-Nitroaniline	ND	0.17									
2-Nitrophenol	ND	0.17									
4-Nitrophenol	ND	0.33									
Nitrobenzene	ND	0.033									
N-Nitrosodi-n-propylamine	ND	0.033									
N-Nitrosodimethylamine	ND	0.17									
N-Nitrosodiphenylamine	ND	0.033									

Qualifiers:
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* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: 64421

Sample ID: **MB-64421-SVOC**	SampType: **MBLK**	TestCode: **SVOC_SOIL**	Units: **mg/Kg**	Prep Date: **8/22/2012**	Run ID: **SVOC-6_120822A**
Client ID: **ZZZZZ**	Batch ID: **64421**	TestNo: **SW8270C**		Analysis Date: **8/22/2012**	SeqNo: **2226017**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2, 2'-oxybis(1-Chloropropane)	ND	0.17									
Pentachlorophenol	ND	0.033									
Phenanthrene	ND	0.033									
Phenol	ND	0.17									
Pyrene	ND	0.033									
Pyridine	ND	0.67									
1,2,4-Trichlorobenzene	ND	0.17									
2,4,5-Trichlorophenol	ND	0.17									
2,4,6-Trichlorophenol	ND	0.17									

Sample ID: **LCS-64421-SVOC**	SampType: **LCS**	TestCode: **SVOC_SOIL**	Units: **mg/Kg**	Prep Date: **8/22/2012**	Run ID: **SVOC-6_120822A**
Client ID: **ZZZZZ**	Batch ID: **64421**	TestNo: **SW8270C**		Analysis Date: **8/22/2012**	SeqNo: **2226018**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	1.146	0.033	1.667	0	68.8	37	134	0	0		
4-Chloro-3-methylphenol	2.397	0.33	3.333	0	71.9	29	134	0	0		
2-Chlorophenol	1.906	0.17	3.333	0	57.2	29	105	0	0		
1,4-Dichlorobenzene	0.8787	0.17	1.667	0	52.7	26	111	0	0		
2,4-Dinitrotoluene	1.247	0.033	1.667	0	74.8	46	125	0	0		
4-Nitrophenol	2.993	0.33	3.333	0	89.8	12	146	0	0		
N-Nitrosodi-n-propylamine	1.01	0.033	1.667	0	60.6	29	109	0	0		
Pentachlorophenol	2.522	0.033	3.333	0	75.7	10	192	0	0		
Phenol	2.027	0.17	3.333	0	60.8	27	104	0	0		
Pyrene	1.527	0.033	1.667	0	91.6	42	148	0	0		
1,2,4-Trichlorobenzene	0.9413	0.17	1.667	0	56.5	55	106	0	0		

Sample ID: **12080686-011AMS**	SampType: **MS**	TestCode: **SVOC_SOIL**	Units: **mg/Kg-dry**	Prep Date: **8/22/2012**	Run ID: **SVOC-6_120822A**
Client ID: **TB-05-15-17**	Batch ID: **64421**	TestNo: **SW8270C**		Analysis Date: **8/22/2012**	SeqNo: **2226020**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	1.558	0.041	2.09	0	74.5	24	139	0	0		

Qualifiers:
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R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: 64421

Sample ID: **12080686-011AMS**	SampType: **MS**	TestCode: **SVOC_SOIL**	Units: **mg/Kg-dry**	Prep Date: **8/22/2012**	Run ID: **SVOC-6_120822A**
Client ID: **TB-05-15-17**	Batch ID: **64421**	TestNo: **SW8270C**		Analysis Date: **8/22/2012**	SeqNo: **2226020**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloro-3-methylphenol	3.392	0.41	4.178	0	81.2	28	121	0	0		
2-Chlorophenol	2.416	0.21	4.178	0	57.8	21	102	0	0		
1,4-Dichlorobenzene	1.142	0.21	2.09	0	54.7	27	95	0	0		
2,4-Dinitrotoluene	1.676	0.041	2.09	0	80.2	32	127	0	0		
4-Nitrophenol	3.981	0.41	4.178	0	95.3	10	156	0	0		
N-Nitrosodi-n-propylamine	1.239	0.041	2.09	0	59.3	16	122	0	0		
Pentachlorophenol	3.602	0.041	4.178	0	86.2	10	204	0	0		
Phenol	2.544	0.21	4.178	0	60.9	20	103	0	0		
Pyrene	2.039	0.041	2.09	0	97.6	10	184	0	0		
1,2,4-Trichlorobenzene	1.238	0.21	2.09	0	59.3	55	106	0	0		

Sample ID: **12080686-011AMSD**	SampType: **MSD**	TestCode: **SVOC_SOIL**	Units: **mg/Kg-dry**	Prep Date: **8/22/2012**	Run ID: **SVOC-6_120822A**
Client ID: **TB-05-15-17**	Batch ID: **64421**	TestNo: **SW8270C**		Analysis Date: **8/22/2012**	SeqNo: **2226021**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	1.286	0.041	2.09	0	61.5	24	139	1.558	19.1	57	
4-Chloro-3-methylphenol	2.835	0.41	4.179	0	67.8	28	121	3.392	17.9	88	
2-Chlorophenol	2.032	0.21	4.179	0	48.6	21	102	2.416	17.3	49	
1,4-Dichlorobenzene	0.9609	0.21	2.09	0	46	27	95	1.142	17.3	43	
2,4-Dinitrotoluene	1.407	0.041	2.09	0	67.3	32	127	1.676	17.4	37	
4-Nitrophenol	3.558	0.41	4.179	0	85.1	10	156	3.981	11.2	56	
N-Nitrosodi-n-propylamine	1.022	0.041	2.09	0	48.9	16	122	1.239	19.3	47	
Pentachlorophenol	3.112	0.041	4.179	0	74.5	10	204	3.602	14.6	47	
Phenol	2.116	0.21	4.179	0	50.6	20	103	2.544	18.4	66	
Pyrene	1.814	0.041	2.09	0	86.8	10	184	2.039	11.7	51	
1,2,4-Trichlorobenzene	1.034	0.21	2.09	0	49.5	55	106	1.238	17.9	23	S

Qualifiers:

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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82724

Sample ID: **PMMBK2 8/21/12**	SampType: **MBLK**	TestCode: **PMOIST**	Units: **wt%**	Prep Date: **8/21/2012**	Run ID: **BALANCE_120821B**
Client ID: **ZZZZZ**	Batch ID: **R82724**	TestNo: **D2974**		Analysis Date: **8/22/2012**	SeqNo: **2225302**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	ND	0.200									*

Sample ID: **PMLCS-S2 8/21/12**	SampType: **LCS**	TestCode: **PMOIST**	Units: **wt%**	Prep Date: **8/21/2012**	Run ID: **BALANCE_120821B**
Client ID: **ZZZZZ**	Batch ID: **R82724**	TestNo: **D2974**		Analysis Date: **8/22/2012**	SeqNo: **2225303**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	4.52	0.200	5	0	90.4	80	120	0	0		*

Sample ID: **PMLCS-W2 8/21/12**	SampType: **LCS**	TestCode: **PMOIST**	Units: **wt%**	Prep Date: **8/21/2012**	Run ID: **BALANCE_120821B**
Client ID: **ZZZZZ**	Batch ID: **R82724**	TestNo: **D2974**		Analysis Date: **8/22/2012**	SeqNo: **2225304**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	99.79	0.200	99.8	0	100	80	120	0	0		*

Sample ID: **12080686-007B DUP**	SampType: **DUP**	TestCode: **PMOIST**	Units: **wt%**	Prep Date: **8/21/2012**	Run ID: **BALANCE_120821B**
Client ID: **TB-03-23-25**	Batch ID: **R82724**	TestNo: **D2974**		Analysis Date: **8/22/2012**	SeqNo: **2225321**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	18	0.200	0	0	0	0	0	18.45	2.47	20	*

Sample ID: **12080686-011ADUP**	SampType: **DUP**	TestCode: **PMOIST**	Units: **wt%**	Prep Date: **8/21/2012**	Run ID: **BALANCE_120821B**
Client ID: **TB-05-15-17**	Batch ID: **R82724**	TestNo: **D2974**		Analysis Date: **8/22/2012**	SeqNo: **2225323**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	21.42	0.200	0	0	0	0	0	20.74	3.23	20	*

Qualifiers:

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R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82754

Sample ID: **PMBLK2 8/22/12**	SampType: **MBLK**	TestCode: **PMOIST**	Units: **wt%**	Prep Date: **8/22/2012**	Run ID: **BALANCE_120822B**
Client ID: **ZZZZZ**	Batch ID: **R82754**	TestNo: **D2974**		Analysis Date: **8/23/2012**	SeqNo: **2226061**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	ND	0.200									*

Sample ID: **PMLCS-S2 8/22/12**	SampType: **LCS**	TestCode: **PMOIST**	Units: **wt%**	Prep Date: **8/22/2012**	Run ID: **BALANCE_120822B**
Client ID: **ZZZZZ**	Batch ID: **R82754**	TestNo: **D2974**		Analysis Date: **8/23/2012**	SeqNo: **2226062**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	4.37	0.200	5	0	87.4	80	120	0	0		*

Sample ID: **PMLCS-W2 8/22/12**	SampType: **LCS**	TestCode: **PMOIST**	Units: **wt%**	Prep Date: **8/22/2012**	Run ID: **BALANCE_120822B**
Client ID: **ZZZZZ**	Batch ID: **R82754**	TestNo: **D2974**		Analysis Date: **8/23/2012**	SeqNo: **2226063**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	99.72	0.200	99.8	0	99.9	80	120	0	0		*

Sample ID: **12080686-002B DUP**	SampType: **DUP**	TestCode: **PMOIST**	Units: **wt%**	Prep Date: **8/22/2012**	Run ID: **BALANCE_120822B**
Client ID: **TB-01-23-25**	Batch ID: **R82754**	TestNo: **D2974**		Analysis Date: **8/23/2012**	SeqNo: **2226065**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	21.04	0.200	0	0	0	0	0	20.42	2.99	20	*

Qualifiers:

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R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080686
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82761

Sample ID: **PMBLK4 8/22/12**	SampType: **MBLK**	TestCode: **PMOIST**	Units: **wt%**	Prep Date: **8/22/2012**	Run ID: **BALANCE_120822D**
Client ID: **ZZZZZ**	Batch ID: **R82761**	TestNo: **D2974**		Analysis Date: **8/23/2012**	SeqNo: **2226222**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	ND	0.200									*

Sample ID: **PMLCS-S4 8/22/12**	SampType: **LCS**	TestCode: **PMOIST**	Units: **wt%**	Prep Date: **8/22/2012**	Run ID: **BALANCE_120822D**
Client ID: **ZZZZZ**	Batch ID: **R82761**	TestNo: **D2974**		Analysis Date: **8/23/2012**	SeqNo: **2226223**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	4.36	0.200	5	0	87.2	80	120	0	0		*

Sample ID: **PMLCS-W4 8/22/12**	SampType: **LCS**	TestCode: **PMOIST**	Units: **wt%**	Prep Date: **8/22/2012**	Run ID: **BALANCE_120822D**
Client ID: **ZZZZZ**	Batch ID: **R82761**	TestNo: **D2974**		Analysis Date: **8/23/2012**	SeqNo: **2226224**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	99.78	0.200	99.8	0	100	80	120	0	0		*

Sample ID: **12080711-011B DUP**	SampType: **DUP**	TestCode: **PMOIST**	Units: **wt%**	Prep Date: **8/22/2012**	Run ID: **BALANCE_120822D**
Client ID: **ZZZZZ**	Batch ID: **R82761**	TestNo: **D2974**		Analysis Date: **8/23/2012**	SeqNo: **2226226**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	18.09	0.200	0	0	0	0	0	17.65	2.46	20	*

Qualifiers:

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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001;AIHA 101160; NVLAP LabCode 101202-

September 18, 2012

Terracon Consultants, Inc.
650 W. Lake Street
Suite 420
Chicago, IL 60661
Telephone: (312) 575-0014
Fax: (312) 575-0111

RE: A2107017-7A, DOE-Kimball STAT Project No: 12090402

Dear Rich O'Brien:

STAT Analysis received 7 samples for the referenced project on 9/10/2012 2:25:00 PM. The analytical results are presented in the following report.

All analyses were performed in accordance with the requirements of 35 IAC Part 186 / NELAC standards. Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided. A listing of accredited methods/parameters can also be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 733-0551.

Sincerely,

Katelin Lewis
Project Manager

Client: Terracon Consultants, Inc.
Project: A2107017-7A, DOE-Kimball
Lab Order: 12090402

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12090402-001A	GW-MW-04		9/10/2012 12:30:00 PM	9/10/2012
12090402-002A	GW-MW-04-FD		9/10/2012 12:35:00 PM	9/10/2012
12090402-003A	GW-MW-05		9/10/2012 1:10:00 PM	9/10/2012
12090402-004A	GW-MW-06		9/10/2012 1:40:00 PM	9/10/2012
12090402-005A	GW-MW-07		9/10/2012 2:10:00 PM	9/10/2012
12090402-006A	VOC Blank		9/10/2012 2:15:00 PM	9/10/2012
12090402-007A	Trip Blank			9/10/2012

CLIENT: Terracon Consultants, Inc.
Project: A2107017-7A, DOE-Kimball
Lab Order: 12090402

CASE NARRATIVE

The VOC water Matrix Spike/Matrix Spike Duplicate (MS/MSD) prepared from sample GW-MW-05 (12090402-003) had the following outside control limits:
Acetone: 69%/69% (MS/MSD) recovery (QC limits 70-130%).

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Date Reported: September 18, 2012
Date Printed: September 18, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12090402
Project: A2107017-7A, DOE-Kimball
Lab ID: 12090402-001

Client Sample ID: GW-MW-04
Collection Date: 9/10/2012 12:30:00 PM
Matrix: Water

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW8260B (SW5030B)**			Prep Date:		Analyst: **PS**
Acetone	ND	0.02		mg/L	1	9/17/2012
Benzene	ND	0.005		mg/L	1	9/17/2012
Bromodichloromethane	ND	0.005		mg/L	1	9/17/2012
Bromoform	ND	0.005		mg/L	1	9/17/2012
Bromomethane	ND	0.01		mg/L	1	9/17/2012
2-Butanone	ND	0.02		mg/L	1	9/17/2012
Carbon disulfide	ND	0.01		mg/L	1	9/17/2012
Carbon tetrachloride	ND	0.005		mg/L	1	9/17/2012
Chlorobenzene	ND	0.005		mg/L	1	9/17/2012
Chloroethane	ND	0.01		mg/L	1	9/17/2012
Chloroform	ND	0.005		mg/L	1	9/17/2012
Chloromethane	ND	0.01		mg/L	1	9/17/2012
Dibromochloromethane	ND	0.005		mg/L	1	9/17/2012
1,1-Dichloroethane	ND	0.005		mg/L	1	9/17/2012
1,2-Dichloroethane	ND	0.005		mg/L	1	9/17/2012
1,1-Dichloroethene	ND	0.005		mg/L	1	9/17/2012
cis-1,2-Dichloroethene	ND	0.005		mg/L	1	9/17/2012
trans-1,2-Dichloroethene	ND	0.005		mg/L	1	9/17/2012
1,2-Dichloropropane	ND	0.005		mg/L	1	9/17/2012
cis-1,3-Dichloropropene	ND	0.001		mg/L	1	9/17/2012
trans-1,3-Dichloropropene	ND	0.001		mg/L	1	9/17/2012
Ethylbenzene	ND	0.005		mg/L	1	9/17/2012
2-Hexanone	ND	0.02		mg/L	1	9/17/2012
4-Methyl-2-pentanone	ND	0.02		mg/L	1	9/17/2012
Methylene chloride	ND	0.005		mg/L	1	9/17/2012
Methyl tert-butyl ether	ND	0.005		mg/L	1	9/17/2012
Styrene	ND	0.005		mg/L	1	9/17/2012
1,1,2,2-Tetrachloroethane	ND	0.005		mg/L	1	9/17/2012
Tetrachloroethene	ND	0.005		mg/L	1	9/17/2012
Toluene	ND	0.005		mg/L	1	9/17/2012
1,1,1-Trichloroethane	ND	0.005		mg/L	1	9/17/2012
1,1,2-Trichloroethane	ND	0.005		mg/L	1	9/17/2012
Trichloroethene	ND	0.005		mg/L	1	9/17/2012
Vinyl chloride	ND	0.002		mg/L	1	9/17/2012
Xylenes, Total	ND	0.015		mg/L	1	9/17/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Date Reported: September 18, 2012
Date Printed: September 18, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12090402
Project: A2107017-7A, DOE-Kimball
Lab ID: 12090402-002

Client Sample ID: GW-MW-04-FD
Collection Date: 9/10/2012 12:35:00 PM
Matrix: Water

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW8260B (SW5030B)**			Prep Date:		Analyst: **PS**
Acetone	ND	0.02		mg/L	1	9/17/2012
Benzene	ND	0.005		mg/L	1	9/17/2012
Bromodichloromethane	ND	0.005		mg/L	1	9/17/2012
Bromoform	ND	0.005		mg/L	1	9/17/2012
Bromomethane	ND	0.01		mg/L	1	9/17/2012
2-Butanone	ND	0.02		mg/L	1	9/17/2012
Carbon disulfide	ND	0.01		mg/L	1	9/17/2012
Carbon tetrachloride	ND	0.005		mg/L	1	9/17/2012
Chlorobenzene	ND	0.005		mg/L	1	9/17/2012
Chloroethane	ND	0.01		mg/L	1	9/17/2012
Chloroform	ND	0.005		mg/L	1	9/17/2012
Chloromethane	ND	0.01		mg/L	1	9/17/2012
Dibromochloromethane	ND	0.005		mg/L	1	9/17/2012
1,1-Dichloroethane	ND	0.005		mg/L	1	9/17/2012
1,2-Dichloroethane	ND	0.005		mg/L	1	9/17/2012
1,1-Dichloroethene	ND	0.005		mg/L	1	9/17/2012
cis-1,2-Dichloroethene	ND	0.005		mg/L	1	9/17/2012
trans-1,2-Dichloroethene	ND	0.005		mg/L	1	9/17/2012
1,2-Dichloropropane	ND	0.005		mg/L	1	9/17/2012
cis-1,3-Dichloropropene	ND	0.001		mg/L	1	9/17/2012
trans-1,3-Dichloropropene	ND	0.001		mg/L	1	9/17/2012
Ethylbenzene	ND	0.005		mg/L	1	9/17/2012
2-Hexanone	ND	0.02		mg/L	1	9/17/2012
4-Methyl-2-pentanone	ND	0.02		mg/L	1	9/17/2012
Methylene chloride	ND	0.005		mg/L	1	9/17/2012
Methyl tert-butyl ether	ND	0.005		mg/L	1	9/17/2012
Styrene	ND	0.005		mg/L	1	9/17/2012
1,1,2,2-Tetrachloroethane	ND	0.005		mg/L	1	9/17/2012
Tetrachloroethene	ND	0.005		mg/L	1	9/17/2012
Toluene	ND	0.005		mg/L	1	9/17/2012
1,1,1-Trichloroethane	ND	0.005		mg/L	1	9/17/2012
1,1,2-Trichloroethane	ND	0.005		mg/L	1	9/17/2012
Trichloroethene	ND	0.005		mg/L	1	9/17/2012
Vinyl chloride	ND	0.002		mg/L	1	9/17/2012
Xylenes, Total	ND	0.015		mg/L	1	9/17/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Date Reported: September 18, 2012
Date Printed: September 18, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12090402
Project: A2107017-7A, DOE-Kimball
Lab ID: 12090402-003

Client Sample ID: GW-MW-05
Collection Date: 9/10/2012 1:10:00 PM
Matrix: Water

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW8260B (SW5030B)**			Prep Date:		Analyst: **ERP**
Acetone	ND	0.02		mg/L	1	9/18/2012
Benzene	ND	0.005		mg/L	1	9/18/2012
Bromodichloromethane	ND	0.005		mg/L	1	9/18/2012
Bromoform	ND	0.005		mg/L	1	9/18/2012
Bromomethane	ND	0.01		mg/L	1	9/18/2012
2-Butanone	ND	0.02		mg/L	1	9/18/2012
Carbon disulfide	ND	0.01		mg/L	1	9/18/2012
Carbon tetrachloride	ND	0.005		mg/L	1	9/18/2012
Chlorobenzene	ND	0.005		mg/L	1	9/18/2012
Chloroethane	ND	0.01		mg/L	1	9/18/2012
Chloroform	ND	0.005		mg/L	1	9/18/2012
Chloromethane	ND	0.01		mg/L	1	9/18/2012
Dibromochloromethane	ND	0.005		mg/L	1	9/18/2012
1,1-Dichloroethane	ND	0.005		mg/L	1	9/18/2012
1,2-Dichloroethane	ND	0.005		mg/L	1	9/18/2012
1,1-Dichloroethene	ND	0.005		mg/L	1	9/18/2012
cis-1,2-Dichloroethene	ND	0.005		mg/L	1	9/18/2012
trans-1,2-Dichloroethene	ND	0.005		mg/L	1	9/18/2012
1,2-Dichloropropane	ND	0.005		mg/L	1	9/18/2012
cis-1,3-Dichloropropene	ND	0.001		mg/L	1	9/18/2012
trans-1,3-Dichloropropene	ND	0.001		mg/L	1	9/18/2012
Ethylbenzene	ND	0.005		mg/L	1	9/18/2012
2-Hexanone	ND	0.02		mg/L	1	9/18/2012
4-Methyl-2-pentanone	ND	0.02		mg/L	1	9/18/2012
Methylene chloride	ND	0.005		mg/L	1	9/18/2012
Methyl tert-butyl ether	ND	0.005		mg/L	1	9/18/2012
Styrene	ND	0.005		mg/L	1	9/18/2012
1,1,2,2-Tetrachloroethane	ND	0.005		mg/L	1	9/18/2012
Tetrachloroethene	ND	0.005		mg/L	1	9/18/2012
Toluene	ND	0.005		mg/L	1	9/18/2012
1,1,1-Trichloroethane	ND	0.005		mg/L	1	9/18/2012
1,1,2-Trichloroethane	ND	0.005		mg/L	1	9/18/2012
Trichloroethene	ND	0.005		mg/L	1	9/18/2012
Vinyl chloride	ND	0.002		mg/L	1	9/18/2012
Xylenes, Total	ND	0.015		mg/L	1	9/18/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Date Reported: September 18, 2012
Date Printed: September 18, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12090402
Project: A2107017-7A, DOE-Kimball
Lab ID: 12090402-004

Client Sample ID: GW-MW-06
Collection Date: 9/10/2012 1:40:00 PM
Matrix: Water

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW8260B (SW5030B)**			Prep Date:		Analyst: **PS**
Acetone	ND	0.02		mg/L	1	9/17/2012
Benzene	ND	0.005		mg/L	1	9/17/2012
Bromodichloromethane	ND	0.005		mg/L	1	9/17/2012
Bromoform	ND	0.005		mg/L	1	9/17/2012
Bromomethane	ND	0.01		mg/L	1	9/17/2012
2-Butanone	ND	0.02		mg/L	1	9/17/2012
Carbon disulfide	ND	0.01		mg/L	1	9/17/2012
Carbon tetrachloride	ND	0.005		mg/L	1	9/17/2012
Chlorobenzene	ND	0.005		mg/L	1	9/17/2012
Chloroethane	ND	0.01		mg/L	1	9/17/2012
Chloroform	ND	0.005		mg/L	1	9/17/2012
Chloromethane	ND	0.01		mg/L	1	9/17/2012
Dibromochloromethane	ND	0.005		mg/L	1	9/17/2012
1,1-Dichloroethane	ND	0.005		mg/L	1	9/17/2012
1,2-Dichloroethane	ND	0.005		mg/L	1	9/17/2012
1,1-Dichloroethene	ND	0.005		mg/L	1	9/17/2012
cis-1,2-Dichloroethene	0.091	0.005		mg/L	1	9/17/2012
trans-1,2-Dichloroethene	ND	0.005		mg/L	1	9/17/2012
1,2-Dichloropropane	ND	0.005		mg/L	1	9/17/2012
cis-1,3-Dichloropropene	ND	0.001		mg/L	1	9/17/2012
trans-1,3-Dichloropropene	ND	0.001		mg/L	1	9/17/2012
Ethylbenzene	ND	0.005		mg/L	1	9/17/2012
2-Hexanone	ND	0.02		mg/L	1	9/17/2012
4-Methyl-2-pentanone	ND	0.02		mg/L	1	9/17/2012
Methylene chloride	ND	0.005		mg/L	1	9/17/2012
Methyl tert-butyl ether	ND	0.005		mg/L	1	9/17/2012
Styrene	ND	0.005		mg/L	1	9/17/2012
1,1,2,2-Tetrachloroethane	ND	0.005		mg/L	1	9/17/2012
Tetrachloroethene	ND	0.005		mg/L	1	9/17/2012
Toluene	ND	0.005		mg/L	1	9/17/2012
1,1,1-Trichloroethane	ND	0.005		mg/L	1	9/17/2012
1,1,2-Trichloroethane	ND	0.005		mg/L	1	9/17/2012
Trichloroethene	0.065	0.005		mg/L	1	9/17/2012
Vinyl chloride	0.021	0.002		mg/L	1	9/17/2012
Xylenes, Total	ND	0.015		mg/L	1	9/17/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Date Reported: September 18, 2012
Date Printed: September 18, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12090402
Project: A2107017-7A, DOE-Kimball
Lab ID: 12090402-005

Client Sample ID: GW-MW-07
Collection Date: 9/10/2012 2:10:00 PM
Matrix: Water

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW8260B (SW5030B)**			Prep Date:		Analyst: **ERP**
Acetone	ND	0.02		mg/L	1	9/18/2012
Benzene	ND	0.005		mg/L	1	9/18/2012
Bromodichloromethane	ND	0.005		mg/L	1	9/18/2012
Bromoform	ND	0.005		mg/L	1	9/18/2012
Bromomethane	ND	0.01		mg/L	1	9/18/2012
2-Butanone	ND	0.02		mg/L	1	9/18/2012
Carbon disulfide	ND	0.01		mg/L	1	9/18/2012
Carbon tetrachloride	ND	0.005		mg/L	1	9/18/2012
Chlorobenzene	ND	0.005		mg/L	1	9/18/2012
Chloroethane	ND	0.01		mg/L	1	9/18/2012
Chloroform	ND	0.005		mg/L	1	9/18/2012
Chloromethane	ND	0.01		mg/L	1	9/18/2012
Dibromochloromethane	ND	0.005		mg/L	1	9/18/2012
1,1-Dichloroethane	ND	0.005		mg/L	1	9/18/2012
1,2-Dichloroethane	ND	0.005		mg/L	1	9/18/2012
1,1-Dichloroethene	ND	0.005		mg/L	1	9/18/2012
cis-1,2-Dichloroethene	ND	0.005		mg/L	1	9/18/2012
trans-1,2-Dichloroethene	ND	0.005		mg/L	1	9/18/2012
1,2-Dichloropropane	ND	0.005		mg/L	1	9/18/2012
cis-1,3-Dichloropropene	ND	0.001		mg/L	1	9/18/2012
trans-1,3-Dichloropropene	ND	0.001		mg/L	1	9/18/2012
Ethylbenzene	ND	0.005		mg/L	1	9/18/2012
2-Hexanone	ND	0.02		mg/L	1	9/18/2012
4-Methyl-2-pentanone	ND	0.02		mg/L	1	9/18/2012
Methylene chloride	ND	0.005		mg/L	1	9/18/2012
Methyl tert-butyl ether	ND	0.005		mg/L	1	9/18/2012
Styrene	ND	0.005		mg/L	1	9/18/2012
1,1,2,2-Tetrachloroethane	ND	0.005		mg/L	1	9/18/2012
Tetrachloroethene	ND	0.005		mg/L	1	9/18/2012
Toluene	ND	0.005		mg/L	1	9/18/2012
1,1,1-Trichloroethane	ND	0.005		mg/L	1	9/18/2012
1,1,2-Trichloroethane	ND	0.005		mg/L	1	9/18/2012
Trichloroethene	ND	0.005		mg/L	1	9/18/2012
Vinyl chloride	ND	0.002		mg/L	1	9/18/2012
Xylenes, Total	ND	0.015		mg/L	1	9/18/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Date Reported: September 18, 2012
Date Printed: September 18, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12090402
Project: A2107017-7A, DOE-Kimball
Lab ID: 12090402-006

Client Sample ID: VOC Blank
Collection Date: 9/10/2012 2:15:00 PM
Matrix: Water

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW8260B (SW5030B)**			Prep Date:		Analyst: **ERP**
Acetone	ND	0.02		mg/L	1	9/18/2012
Benzene	ND	0.005		mg/L	1	9/18/2012
Bromodichloromethane	ND	0.005		mg/L	1	9/18/2012
Bromoform	ND	0.005		mg/L	1	9/18/2012
Bromomethane	ND	0.01		mg/L	1	9/18/2012
2-Butanone	ND	0.02		mg/L	1	9/18/2012
Carbon disulfide	ND	0.01		mg/L	1	9/18/2012
Carbon tetrachloride	ND	0.005		mg/L	1	9/18/2012
Chlorobenzene	ND	0.005		mg/L	1	9/18/2012
Chloroethane	ND	0.01		mg/L	1	9/18/2012
Chloroform	ND	0.005		mg/L	1	9/18/2012
Chloromethane	ND	0.01		mg/L	1	9/18/2012
Dibromochloromethane	ND	0.005		mg/L	1	9/18/2012
1,1-Dichloroethane	ND	0.005		mg/L	1	9/18/2012
1,2-Dichloroethane	ND	0.005		mg/L	1	9/18/2012
1,1-Dichloroethene	ND	0.005		mg/L	1	9/18/2012
cis-1,2-Dichloroethene	ND	0.005		mg/L	1	9/18/2012
trans-1,2-Dichloroethene	ND	0.005		mg/L	1	9/18/2012
1,2-Dichloropropane	ND	0.005		mg/L	1	9/18/2012
cis-1,3-Dichloropropene	ND	0.001		mg/L	1	9/18/2012
trans-1,3-Dichloropropene	ND	0.001		mg/L	1	9/18/2012
Ethylbenzene	ND	0.005		mg/L	1	9/18/2012
2-Hexanone	ND	0.02		mg/L	1	9/18/2012
4-Methyl-2-pentanone	ND	0.02		mg/L	1	9/18/2012
Methylene chloride	ND	0.005		mg/L	1	9/18/2012
Methyl tert-butyl ether	ND	0.005		mg/L	1	9/18/2012
Styrene	ND	0.005		mg/L	1	9/18/2012
1,1,2,2-Tetrachloroethane	ND	0.005		mg/L	1	9/18/2012
Tetrachloroethene	ND	0.005		mg/L	1	9/18/2012
Toluene	ND	0.005		mg/L	1	9/18/2012
1,1,1-Trichloroethane	ND	0.005		mg/L	1	9/18/2012
1,1,2-Trichloroethane	ND	0.005		mg/L	1	9/18/2012
Trichloroethene	ND	0.005		mg/L	1	9/18/2012
Vinyl chloride	ND	0.002		mg/L	1	9/18/2012
Xylenes, Total	ND	0.015		mg/L	1	9/18/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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Date Reported: September 18, 2012
Date Printed: September 18, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12090402
Project: A2107017-7A, DOE-Kimball
Lab ID: 12090402-007

Client Sample ID: Trip Blank
Collection Date:
Matrix: Water

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW8260B (SW5030B)**			Prep Date:		Analyst: **PS**
Acetone	ND	0.02		mg/L	1	9/17/2012
Benzene	ND	0.005		mg/L	1	9/17/2012
Bromodichloromethane	ND	0.005		mg/L	1	9/17/2012
Bromoform	ND	0.005		mg/L	1	9/17/2012
Bromomethane	ND	0.01		mg/L	1	9/17/2012
2-Butanone	ND	0.02		mg/L	1	9/17/2012
Carbon disulfide	ND	0.01		mg/L	1	9/17/2012
Carbon tetrachloride	ND	0.005		mg/L	1	9/17/2012
Chlorobenzene	ND	0.005		mg/L	1	9/17/2012
Chloroethane	ND	0.01		mg/L	1	9/17/2012
Chloroform	ND	0.005		mg/L	1	9/17/2012
Chloromethane	ND	0.01		mg/L	1	9/17/2012
Dibromochloromethane	ND	0.005		mg/L	1	9/17/2012
1,1-Dichloroethane	ND	0.005		mg/L	1	9/17/2012
1,2-Dichloroethane	ND	0.005		mg/L	1	9/17/2012
1,1-Dichloroethene	ND	0.005		mg/L	1	9/17/2012
cis-1,2-Dichloroethene	ND	0.005		mg/L	1	9/17/2012
trans-1,2-Dichloroethene	ND	0.005		mg/L	1	9/17/2012
1,2-Dichloropropane	ND	0.005		mg/L	1	9/17/2012
cis-1,3-Dichloropropene	ND	0.001		mg/L	1	9/17/2012
trans-1,3-Dichloropropene	ND	0.001		mg/L	1	9/17/2012
Ethylbenzene	ND	0.005		mg/L	1	9/17/2012
2-Hexanone	ND	0.02		mg/L	1	9/17/2012
4-Methyl-2-pentanone	ND	0.02		mg/L	1	9/17/2012
Methylene chloride	ND	0.005		mg/L	1	9/17/2012
Methyl tert-butyl ether	ND	0.005		mg/L	1	9/17/2012
Styrene	ND	0.005		mg/L	1	9/17/2012
1,1,2,2-Tetrachloroethane	ND	0.005		mg/L	1	9/17/2012
Tetrachloroethene	ND	0.005		mg/L	1	9/17/2012
Toluene	ND	0.005		mg/L	1	9/17/2012
1,1,1-Trichloroethane	ND	0.005		mg/L	1	9/17/2012
1,1,2-Trichloroethane	ND	0.005		mg/L	1	9/17/2012
Trichloroethene	ND	0.005		mg/L	1	9/17/2012
Vinyl chloride	ND	0.002		mg/L	1	9/17/2012
Xylenes, Total	ND	0.015		mg/L	1	9/17/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

STAT Analysis Corporation
2242 W. Harrison, Suite 200, Chicago, Illinois 60612 Phone: (312) 733-0551 Fax: (312) 733-2386
e-mail address: STATinfo@STATAnalysis.com AIHA, NVLAP and NELAP accredited

CHAIN OF CUSTODY RECORD

Nº: 845108 Page: 1 of 1

Company: Terracon
Project Number: A2107017 - 7A Client Tracking No.:
Project Name: DOE - Kimball
Project Location: Chicago, IL
Sampler(s): J. Juliano
Report To: Rich O'Brien Phone: 312-575-0014
Fax: 312-575-0111
QC Level: 1 ____ 2 ____ 3 ____ 4 ____ e-mail:

P.O. No.:
Quote No.:

Turn Around: Standard
Results Needed: / / am/pm

Client Sample Number/Description:	Date Taken	Time Taken	Matrix	Comp.	Grab	Preserv.	No. of Containers	VOC	Remarks	Lab No.:
GW-MW-04	9-10-12	1230	W		X		3	X		001
GW-MW-04-FD	9-10-12	1235	W		X		3	X		002
GW-MW-05	9-10-12	1310	W		X		9	X	MS/MSD	003
GW-MW-06	9-10-12	1340	W		X		3	X		004
GW-MW-07	9-10-12	1410	W		X		3	X		005
VOC Blank	9-10-12	1475			X		3	X		006
TRIP Blank							3	X		007

Relinquished by: (Signature) Date/Time: 9/10/12 1475
Received by: (Signature) Date/Time: 9/10/12 1425
Relinquished by: (Signature) Date/Time:
Received by: (Signature) Date/Time:
Relinquished by: (Signature) Date/Time:
Received by: (Signature) Date/Time:

Comments:

Laboratory Work Order No.: 12090402

Received on Ice: Yes [X] No [ ]

Temperature: 3.2 °C

Preservation Code: A = None B = HNO_3 C = NaOH
D = H_2SO_4 E = HCl F = 5035/EnCore G = Other

STAT Analysis Corporation

Sample Receipt Checklist

Client Name TERRACON - CHICAGO

Date and Time Received: 9/10/2012 2:25:00 PM

Work Order Number 12090402

Received by: CDF

Checklist completed by: Signature 9/12/12 Date

Reviewed by: KL Initials 9-14-12 Date

Matrix: Carrier name: Client Delivered

Shipping container/cooler in good condition?	Yes	☑	No	☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes	☐	No	☐	Not Present ☑
Custody seals intact on sample bottles?	Yes	☐	No	☐	Not Present ☑
Chain of custody present?	Yes	☑	No	☐	
Chain of custody signed when relinquished and received?	Yes	☑	No	☐	
Chain of custody agrees with sample labels/containers?	Yes	☑	No	☐	
Samples in proper container/bottle?	Yes	☑	No	☐	
Sample containers intact?	Yes	☑	No	☐	
Sufficient sample volume for indicated test?	Yes	☑	No	☐	
All samples received within holding time?	Yes	☑	No	☐	
Container or Temp Blank temperature in compliance?	Yes	☑	No	☐	Temperature 3.2 °C
Water - VOA vials have zero headspace?	No VOA vials submitted	☐	Yes	☐	No ☑
Water - Samples pH checked?	Yes	☐	No	☐	Checked by:
Water - Samples properly preserved?	Yes	☐	No	☐	pH Adjusted?

Any No response must be detailed in the comments section below.

Comments: All VOA Vials For VOC Blank Have Headspace.

Client / Person contacted: Date contacted: Contacted by:

Response:

CLIENT: Terracon Consultants, Inc.
Work Order: 12090402
Project: A2107017-7A, DOE-Kimball
Test No: SW8260B **Matrix:** W

QC SUMMARY REPORT
SURROGATE RECOVERIES

Sample ID	BR4FBZ	BZMED8	DBFM	DCA12D4				
VBLK091712-7	98.7	97.4	94.4	105				
VLCS091712-7	101	99.6	92.9	106				
VLCSD091712-7	104	101	94.9	103				
12090417-024AMS	103	99.6	95.0	102				
12090417-024AMSD	104	95.4	95.4	103				
12090402-007A	96.9	97.4	96.9	107				
12090402-001A	96.2	96.9	95.4	107				
12090402-002A	96.1	97.7	95.8	106				
12090402-004A	98.4	99.2	96.4	99.7				
VBLK091812-7	97.2	97.8	97.7	107				
VLCS091812-7	101	101	101	104				
12090402-006A	96.5	98.8	94.9	107				
12090402-003A	97.5	98.1	98.6	103				
12090402-003AMS	102	101	95.8	105				
12090402-003AMSD	99.3	98.6	97.9	104				
12090402-005A	96.3	96.3	97.2	102				

Acronym		Surrogate	QC Limits
BR4FBZ	=	4-Bromofluorobenzene	86-115
BZMED8	=	Toluene-d8	88-110
DBFM	=	Dibromofluoromethane	86-118
DCA12D4	=	1,2-Dichloroethane-d4	80-120

*** Surrogate recovery outside acceptance limit**

CLIENT: Terracon Consultants, Inc.
Work Order: 12090402
Project: A2107017-7A, DOE-Kimball

ANALYTICAL QC SUMMARY REPORT

BatchID: R83342

Sample ID: **VBLK091712-7** SampType: **MBLK** TestCode: **VOC_W+** Units: **mg/L** Prep Date: Run ID: **VOA-7_120917A**
Client ID: **ZZZZZ** Batch ID: **R83342** TestNo: **SW8260B** Analysis Date: **9/17/2012** SeqNo: **2242431**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.0050									
1,1,2,2-Tetrachloroethane	ND	0.0050									
1,1,2-Trichloroethane	ND	0.0050									
1,1-Dichloroethane	ND	0.0050									
1,1-Dichloroethene	ND	0.0050									
1,2-Dichloroethane	ND	0.0050									
1,2-Dichloropropane	ND	0.0050									
2-Butanone	ND	0.020									
2-Hexanone	ND	0.020									
4-Methyl-2-pentanone	ND	0.020									
Acetone	ND	0.020									
Benzene	ND	0.0050									
Bromodichloromethane	ND	0.0050									
Bromoform	ND	0.0050									
Bromomethane	ND	0.010									
Carbon disulfide	ND	0.010									
Carbon tetrachloride	ND	0.0050									
Chlorobenzene	ND	0.0050									
Chloroethane	ND	0.010									
Chloroform	ND	0.0050									
Chloromethane	ND	0.010									
cis-1,2-Dichloroethene	ND	0.0050									
cis-1,3-Dichloropropene	ND	0.0010									
Dibromochloromethane	ND	0.0050									
Ethylbenzene	ND	0.0050									
Methyl tert-butyl ether	ND	0.0050									
Methylene chloride	ND	0.0050									
Styrene	ND	0.0050									
Tetrachloroethene	ND	0.0050									
Toluene	ND	0.0050									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12090402
Project: A2107017-7A, DOE-Kimball

ANALYTICAL QC SUMMARY REPORT

BatchID: R83342

Sample ID: **VBLK091712-7**	SampType: **MBLK**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120917A**
Client ID: **ZZZZZ**	Batch ID: **R83342**	TestNo: **SW8260B**		Analysis Date: **9/17/2012**	SeqNo: **2242431**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	ND	0.0050									
trans-1,3-Dichloropropene	ND	0.0010									
Trichloroethene	ND	0.0050									
Vinyl chloride	ND	0.0020									
Xylenes, Total	ND	0.015									

Sample ID: **VLCS091712-7**	SampType: **LCS**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120917A**
Client ID: **ZZZZZ**	Batch ID: **R83342**	TestNo: **SW8260B**		Analysis Date: **9/17/2012**	SeqNo: **2242432**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.01879	0.0050	0.02	0	94	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.01965	0.0050	0.02	0	98.3	70	130	0	0		
1,1,2-Trichloroethane	0.01961	0.0050	0.02	0	98	70	130	0	0		
1,1-Dichloroethane	0.01808	0.0050	0.02	0	90.4	70	130	0	0		
1,1-Dichloroethene	0.01857	0.0050	0.02	0	92.8	70	130	0	0		
1,2-Dichloroethane	0.01746	0.0050	0.02	0	87.3	70	130	0	0		
1,2-Dichloropropane	0.0184	0.0050	0.02	0	92	70	130	0	0		
2-Butanone	0.03386	0.020	0.04	0	84.6	70	130	0	0		
2-Hexanone	0.03283	0.020	0.04	0	82.1	70	130	0	0		
4-Methyl-2-pentanone	0.03036	0.020	0.04	0	75.9	70	130	0	0		
Acetone	0.02543	0.020	0.04	0	63.6	50	150	0	0		
Benzene	0.01993	0.0050	0.02	0	99.7	70	130	0	0		
Bromodichloromethane	0.01824	0.0050	0.02	0	91.2	70	130	0	0		
Bromoform	0.0187	0.0050	0.02	0	93.5	70	130	0	0		
Bromomethane	0.01484	0.010	0.02	0	74.2	70	130	0	0		
Carbon disulfide	0.03946	0.010	0.04	0	98.6	70	130	0	0		
Carbon tetrachloride	0.01821	0.0050	0.02	0	91	70	130	0	0		
Chlorobenzene	0.02303	0.0050	0.02	0	115	70	130	0	0		
Chloroethane	0.0173	0.010	0.02	0	86.5	70	130	0	0		
Chloroform	0.01826	0.0050	0.02	0	91.3	70	130	0	0		
Chloromethane	0.01866	0.010	0.02	0	93.3	70	130	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12090402
Project: A2107017-7A, DOE-Kimball

ANALYTICAL QC SUMMARY REPORT

BatchID: R83342

Sample ID: **VLCS091712-7**	SampType: **LCS**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120917A**
Client ID: **ZZZZZ**	Batch ID: **R83342**	TestNo: **SW8260B**		Analysis Date: **9/17/2012**	SeqNo: **2242432**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,2-Dichloroethene	0.01846	0.0050	0.02	0	92.3	70	130	0	0		
cis-1,3-Dichloropropene	0.01833	0.0010	0.02	0	91.7	70	130	0	0		
Dibromochloromethane	0.02079	0.0050	0.02	0	104	70	130	0	0		
Ethylbenzene	0.02109	0.0050	0.02	0	105	70	130	0	0		
Methyl tert-butyl ether	0.01713	0.0050	0.02	0	85.7	50	150	0	0		
Methylene chloride	0.01723	0.0050	0.02	0	86.2	70	130	0	0		
Styrene	0.02048	0.0050	0.02	0	102	70	130	0	0		
Tetrachloroethene	0.0213	0.0050	0.02	0	106	70	130	0	0		
Toluene	0.01963	0.0050	0.02	0	98.2	70	130	0	0		
trans-1,2-Dichloroethene	0.01828	0.0050	0.02	0	91.4	70	130	0	0		
trans-1,3-Dichloropropene	0.02083	0.0010	0.02	0	104	70	130	0	0		
Trichloroethene	0.0185	0.0050	0.02	0	92.5	70	130	0	0		
Vinyl chloride	0.01776	0.0020	0.02	0	88.8	70	130	0	0		
Xylenes, Total	0.06748	0.015	0.06	0	112	70	130	0	0		

Sample ID: **VLCSD091712-7**	SampType: **LCSD**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120917A**
Client ID: **ZZZZZ**	Batch ID: **R83342**	TestNo: **SW8260B**		Analysis Date: **9/17/2012**	SeqNo: **2242433**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.01835	0.0050	0.02	0	91.8	70	130	0.01879	2.37	20	
1,1,2,2-Tetrachloroethane	0.01985	0.0050	0.02	0	99.2	70	130	0.01965	1.01	20	
1,1,2-Trichloroethane	0.01976	0.0050	0.02	0	98.8	70	130	0.01961	0.762	20	
1,1-Dichloroethane	0.01819	0.0050	0.02	0	91	70	130	0.01808	0.607	20	
1,1-Dichloroethene	0.01803	0.0050	0.02	0	90.2	70	130	0.01857	2.95	20	
1,2-Dichloroethane	0.01753	0.0050	0.02	0	87.6	70	130	0.01746	0.400	20	
1,2-Dichloropropane	0.01892	0.0050	0.02	0	94.6	70	130	0.0184	2.79	20	
2-Butanone	0.03282	0.020	0.04	0	82	70	130	0.03386	3.12	20	
2-Hexanone	0.03204	0.020	0.04	0	80.1	70	130	0.03283	2.44	20	
4-Methyl-2-pentanone	0.03029	0.020	0.04	0	75.7	70	130	0.03036	0.231	20	
Acetone	0.02487	0.020	0.04	0	62.2	50	150	0.02543	2.23	20	
Benzene	0.01955	0.0050	0.02	0	97.8	70	130	0.01993	1.93	20	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12090402
Project: A2107017-7A, DOE-Kimball

ANALYTICAL QC SUMMARY REPORT

BatchID: R83342

Sample ID: **VLCSD091712-7**	SampType: **LCSD**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120917A**
Client ID: **ZZZZZ**	Batch ID: **R83342**	TestNo: **SW8260B**		Analysis Date: **9/17/2012**	SeqNo: **2242433**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromodichloromethane	0.01758	0.0050	0.02	0	87.9	70	130	0.01824	3.69	20	
Bromoform	0.01867	0.0050	0.02	0	93.4	70	130	0.0187	0.161	20	
Bromomethane	0.01477	0.010	0.02	0	73.8	70	130	0.01484	0.473	20	
Carbon disulfide	0.03909	0.010	0.04	0	97.7	70	130	0.03946	0.942	20	
Carbon tetrachloride	0.0177	0.0050	0.02	0	88.5	70	130	0.01821	2.84	20	
Chlorobenzene	0.02275	0.0050	0.02	0	114	70	130	0.02303	1.22	20	
Chloroethane	0.01798	0.010	0.02	0	89.9	70	130	0.0173	3.85	20	
Chloroform	0.01892	0.0050	0.02	0	94.6	70	130	0.01826	3.55	20	
Chloromethane	0.01888	0.010	0.02	0	94.4	70	130	0.01866	1.17	20	
cis-1,2-Dichloroethene	0.01852	0.0050	0.02	0	92.6	70	130	0.01846	0.324	20	
cis-1,3-Dichloropropene	0.01812	0.0010	0.02	0	90.6	70	130	0.01833	1.15	20	
Dibromochloromethane	0.02051	0.0050	0.02	0	103	70	130	0.02079	1.36	20	
Ethylbenzene	0.02053	0.0050	0.02	0	103	70	130	0.02109	2.69	20	
Methyl tert-butyl ether	0.01755	0.0050	0.02	0	87.8	50	150	0.01713	2.42	20	
Methylene chloride	0.01689	0.0050	0.02	0	84.4	70	130	0.01723	1.99	20	
Styrene	0.02031	0.0050	0.02	0	102	70	130	0.02048	0.834	20	
Tetrachloroethene	0.02098	0.0050	0.02	0	105	70	130	0.0213	1.51	20	
Toluene	0.01973	0.0050	0.02	0	98.6	70	130	0.01963	0.508	20	
trans-1,2-Dichloroethene	0.01833	0.0050	0.02	0	91.7	70	130	0.01828	0.273	20	
trans-1,3-Dichloropropene	0.02022	0.0010	0.02	0	101	70	130	0.02083	2.97	20	
Trichloroethene	0.01899	0.0050	0.02	0	95	70	130	0.0185	2.61	20	
Vinyl chloride	0.01758	0.0020	0.02	0	87.9	70	130	0.01776	1.02	20	
Xylenes, Total	0.06731	0.015	0.06	0	112	70	130	0.06748	0.252	20	

Sample ID: **12090417-024AMS**	SampType: **MS**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120917A**
Client ID: **ZZZZZ**	Batch ID: **R83342**	TestNo: **SW8260B**		Analysis Date: **9/17/2012**	SeqNo: **2243190**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.1829	0.050	0.2	0	91.5	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.1971	0.050	0.2	0	98.6	70	130	0	0		
1,1,2-Trichloroethane	0.2088	0.050	0.2	0	104	70	130	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12090402
Project: A2107017-7A, DOE-Kimball

ANALYTICAL QC SUMMARY REPORT

BatchID: R83342

Sample ID: **12090417-024AMS** SampType: **MS** TestCode: **VOC_W+** Units: **mg/L** Prep Date: Run ID: **VOA-7_120917A**
Client ID: **ZZZZZ** Batch ID: **R83342** TestNo: **SW8260B** Analysis Date: **9/17/2012** SeqNo: **2243190**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethane	0.1776	0.050	0.2	0	88.8	70	130	0	0		
1,1-Dichloroethene	0.1811	0.050	0.2	0	90.6	70	130	0	0		
1,2-Dichloroethane	0.1772	0.050	0.2	0	88.6	70	130	0	0		
1,2-Dichloropropane	0.1906	0.050	0.2	0	95.3	70	130	0	0		
2-Butanone	0.3437	0.20	0.4	0	85.9	70	130	0	0		
2-Hexanone	0.3258	0.20	0.4	0	81.5	70	130	0	0		
4-Methyl-2-pentanone	0.3131	0.20	0.4	0	78.3	70	130	0	0		
Acetone	0.2804	0.20	0.4	0	70.1	70	130	0	0		
Benzene	0.1944	0.050	0.2	0	97.2	70	130	0	0		
Bromodichloromethane	0.1833	0.050	0.2	0	91.7	70	130	0	0		
Bromoform	0.1839	0.050	0.2	0	92	70	130	0	0		
Bromomethane	0.1524	0.10	0.2	0	76.2	70	130	0	0		
Carbon disulfide	0.4003	0.10	0.4	0	100	70	130	0	0		
Carbon tetrachloride	0.1763	0.050	0.2	0	88.2	70	130	0	0		
Chlorobenzene	0.2256	0.050	0.2	0	113	70	130	0	0		
Chloroethane	0.1792	0.10	0.2	0	89.6	70	130	0	0		
Chloroform	0.193	0.050	0.2	0	96.5	70	130	0	0		
Chloromethane	0.192	0.10	0.2	0	96	70	130	0	0		
cis-1,2-Dichloroethene	0.184	0.050	0.2	0	92	70	130	0	0		
cis-1,3-Dichloropropene	0.179	0.010	0.2	0	89.5	70	130	0	0		
Dibromochloromethane	0.2152	0.050	0.2	0	108	70	130	0	0		
Ethylbenzene	0.2058	0.050	0.2	0	103	70	130	0	0		
Methyl tert-butyl ether	0.1794	0.050	0.2	0	89.7	50	150	0	0		
Methylene chloride	0.1732	0.050	0.2	0	86.6	70	130	0	0		
Styrene	0.1993	0.050	0.2	0	99.7	70	130	0	0		
Tetrachloroethene	0.2211	0.050	0.2	0	111	70	130	0	0		
Toluene	0.1981	0.050	0.2	0	99	70	130	0	0		
trans-1,2-Dichloroethene	0.1821	0.050	0.2	0	91	70	130	0	0		
trans-1,3-Dichloropropene	0.2113	0.010	0.2	0	106	70	130	0	0		
Trichloroethene	0.1874	0.050	0.2	0	93.7	70	130	0	0		
Vinyl chloride	0.1815	0.020	0.2	0	90.8	70	130	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
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R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12090402
Project: A2107017-7A, DOE-Kimball

ANALYTICAL QC SUMMARY REPORT

BatchID: R83342

Sample ID: **12090417-024AMS**	SampType: **MS**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120917A**
Client ID: **ZZZZZ**	Batch ID: **R83342**	TestNo: **SW8260B**		Analysis Date: **9/17/2012**	SeqNo: **2243190**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Xylenes, Total	0.6727	0.15	0.6	0	112	70	130	0	0		

Sample ID: **12090417-024AMSD**	SampType: **MSD**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120917A**
Client ID: **ZZZZZ**	Batch ID: **R83342**	TestNo: **SW8260B**		Analysis Date: **9/17/2012**	SeqNo: **2243191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.178	0.050	0.2	0	89	70	130	0.1829	2.72	15	
1,1,2,2-Tetrachloroethane	0.2001	0.050	0.2	0	100	70	130	0.1971	1.51	15	
1,1,2-Trichloroethane	0.1967	0.050	0.2	0	98.4	70	130	0.2088	5.97	15	
1,1-Dichloroethane	0.18	0.050	0.2	0	90	70	130	0.1776	1.34	15	
1,1-Dichloroethene	0.1809	0.050	0.2	0	90.4	70	130	0.1811	0.110	15	
1,2-Dichloroethane	0.1727	0.050	0.2	0	86.4	70	130	0.1772	2.57	15	
1,2-Dichloropropane	0.1873	0.050	0.2	0	93.6	70	130	0.1906	1.75	15	
2-Butanone	0.3495	0.20	0.4	0	87.4	70	130	0.3437	1.67	15	
2-Hexanone	0.316	0.20	0.4	0	79	70	130	0.3258	3.05	15	
4-Methyl-2-pentanone	0.3182	0.20	0.4	0	79.6	70	130	0.3131	1.62	15	
Acetone	0.2589	0.20	0.4	0	64.7	70	130	0.2804	7.97	15	S
Benzene	0.1965	0.050	0.2	0	98.2	70	130	0.1944	1.07	15	
Bromodichloromethane	0.1813	0.050	0.2	0	90.7	70	130	0.1833	1.10	15	
Bromoform	0.1793	0.050	0.2	0	89.6	70	130	0.1839	2.53	15	
Bromomethane	0.1523	0.10	0.2	0	76.2	70	130	0.1524	0.0656	15	
Carbon disulfide	0.3852	0.10	0.4	0	96.3	70	130	0.4003	3.84	15	
Carbon tetrachloride	0.1751	0.050	0.2	0	87.6	70	130	0.1763	0.683	15	
Chlorobenzene	0.2219	0.050	0.2	0	111	70	130	0.2256	1.65	15	
Chloroethane	0.179	0.10	0.2	0	89.5	70	130	0.1792	0.112	15	
Chloroform	0.1826	0.050	0.2	0	91.3	70	130	0.193	5.54	15	
Chloromethane	0.1874	0.10	0.2	0	93.7	70	130	0.192	2.42	15	
cis-1,2-Dichloroethene	0.1837	0.050	0.2	0	91.8	70	130	0.184	0.163	15	
cis-1,3-Dichloropropene	0.1784	0.010	0.2	0	89.2	70	130	0.179	0.336	15	
Dibromochloromethane	0.1996	0.050	0.2	0	99.8	70	130	0.2152	7.52	15	
Ethylbenzene	0.2036	0.050	0.2	0	102	70	130	0.2058	1.07	15	

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12090402
Project: A2107017-7A, DOE-Kimball

ANALYTICAL QC SUMMARY REPORT

BatchID: R83342

Sample ID: **12090417-024AMSD** SampType: **MSD** TestCode: **VOC_W+** Units: **mg/L** Prep Date: Run ID: **VOA-7_120917A**
Client ID: **ZZZZZ** Batch ID: **R83342** TestNo: **SW8260B** Analysis Date: **9/17/2012** SeqNo: **2243191**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether	0.1712	0.050	0.2	0	85.6	50	150	0.1794	4.68	15	
Methylene chloride	0.1761	0.050	0.2	0	88	70	130	0.1732	1.66	15	
Styrene	0.2003	0.050	0.2	0	100	70	130	0.1993	0.501	15	
Tetrachloroethene	0.1966	0.050	0.2	0	98.3	70	130	0.2211	11.7	15	
Toluene	0.1821	0.050	0.2	0	91	70	130	0.1981	8.42	15	
trans-1,2-Dichloroethene	0.1813	0.050	0.2	0	90.7	70	130	0.1821	0.440	15	
trans-1,3-Dichloropropene	0.1955	0.010	0.2	0	97.8	70	130	0.2113	7.77	15	
Trichloroethene	0.1822	0.050	0.2	0	91.1	70	130	0.1874	2.81	15	
Vinyl chloride	0.1819	0.020	0.2	0	91	70	130	0.1815	0.220	15	
Xylenes, Total	0.6589	0.15	0.6	0	110	70	130	0.6727	2.07	15	

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CLIENT: Terracon Consultants, Inc.
Work Order: 12090402
Project: A2107017-7A, DOE-Kimball

ANALYTICAL QC SUMMARY REPORT

BatchID: R83375

Sample ID: **VBLK091812-7** SampType: **MBLK** TestCode: **VOC_W+** Units: **mg/L** Prep Date: Run ID: **VOA-7_120918A**
Client ID: **ZZZZZ** Batch ID: **R83375** TestNo: **SW8260B** Analysis Date: **9/18/2012** SeqNo: **2243214**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.0050									
1,1,2,2-Tetrachloroethane	ND	0.0050									
1,1,2-Trichloroethane	ND	0.0050									
1,1-Dichloroethane	ND	0.0050									
1,1-Dichloroethene	ND	0.0050									
1,2-Dichloroethane	ND	0.0050									
1,2-Dichloropropane	ND	0.0050									
2-Butanone	ND	0.020									
2-Hexanone	ND	0.020									
4-Methyl-2-pentanone	ND	0.020									
Acetone	0.00831	0.020									J
Benzene	ND	0.0050									
Bromodichloromethane	ND	0.0050									
Bromoform	ND	0.0050									
Bromomethane	ND	0.010									
Carbon disulfide	ND	0.010									
Carbon tetrachloride	ND	0.0050									
Chlorobenzene	ND	0.0050									
Chloroethane	ND	0.010									
Chloroform	ND	0.0050									
Chloromethane	ND	0.010									
cis-1,2-Dichloroethene	ND	0.0050									
cis-1,3-Dichloropropene	ND	0.0010									
Dibromochloromethane	ND	0.0050									
Ethylbenzene	ND	0.0050									
Methyl tert-butyl ether	ND	0.0050									
Methylene chloride	ND	0.0050									
Styrene	ND	0.0050									
Tetrachloroethene	ND	0.0050									
Toluene	ND	0.0050									
trans-1,2-Dichloroethene	ND	0.0050									

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CLIENT: Terracon Consultants, Inc.
Work Order: 12090402
Project: A2107017-7A, DOE-Kimball

ANALYTICAL QC SUMMARY REPORT

BatchID: R83375

Sample ID: **VBLK091812-7**	SampType: **MBLK**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120918A**
Client ID: **ZZZZZ**	Batch ID: **R83375**	TestNo: **SW8260B**		Analysis Date: **9/18/2012**	SeqNo: **2243214**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropene	ND	0.0010									
Trichloroethene	ND	0.0050									
Vinyl chloride	ND	0.0020									
Xylenes, Total	ND	0.015									

Sample ID: **VLCS091812-7**	SampType: **LCS**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120918A**
Client ID: **ZZZZZ**	Batch ID: **R83375**	TestNo: **SW8260B**		Analysis Date: **9/18/2012**	SeqNo: **2243219**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.01994	0.0050	0.02	0	99.7	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.01963	0.0050	0.02	0	98.2	70	130	0	0		
1,1,2-Trichloroethane	0.0201	0.0050	0.02	0	100	70	130	0	0		
1,1-Dichloroethane	0.01958	0.0050	0.02	0	97.9	70	130	0	0		
1,1-Dichloroethene	0.0196	0.0050	0.02	0	98	70	130	0	0		
1,2-Dichloroethane	0.01834	0.0050	0.02	0	91.7	70	130	0	0		
1,2-Dichloropropane	0.02081	0.0050	0.02	0	104	70	130	0	0		
2-Butanone	0.03814	0.020	0.04	0	95.4	70	130	0	0		
2-Hexanone	0.03284	0.020	0.04	0	82.1	70	130	0	0		
4-Methyl-2-pentanone	0.03242	0.020	0.04	0	81	70	130	0	0		
Acetone	0.0288	0.020	0.04	0.00831	51.2	50	150	0	0		
Benzene	0.0216	0.0050	0.02	0	108	70	130	0	0		
Bromodichloromethane	0.01964	0.0050	0.02	0	98.2	70	130	0	0		
Bromoform	0.01959	0.0050	0.02	0	98	70	130	0	0		
Bromomethane	0.01681	0.010	0.02	0	84	70	130	0	0		
Carbon disulfide	0.04295	0.010	0.04	0	107	70	130	0	0		
Carbon tetrachloride	0.01952	0.0050	0.02	0	97.6	70	130	0	0		
Chlorobenzene	0.02378	0.0050	0.02	0	119	70	130	0	0		
Chloroethane	0.01964	0.010	0.02	0	98.2	70	130	0	0		
Chloroform	0.02114	0.0050	0.02	0	106	70	130	0	0		
Chloromethane	0.02099	0.010	0.02	0	105	70	130	0	0		
cis-1,2-Dichloroethene	0.01992	0.0050	0.02	0	99.6	70	130	0	0		

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CLIENT: Terracon Consultants, Inc.
Work Order: 12090402
Project: A2107017-7A, DOE-Kimball

ANALYTICAL QC SUMMARY REPORT

BatchID: R83375

Sample ID: **VLCS091812-7**	SampType: **LCS**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120918A**
Client ID: **ZZZZZ**	Batch ID: **R83375**	TestNo: **SW8260B**		Analysis Date: **9/18/2012**	SeqNo: **2243219**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
cis-1,3-Dichloropropene	0.01943	0.0010	0.02	0	97.2	70	130	0	0		
Dibromochloromethane	0.0211	0.0050	0.02	0	106	70	130	0	0		
Ethylbenzene	0.02187	0.0050	0.02	0	109	70	130	0	0		
Methyl tert-butyl ether	0.01867	0.0050	0.02	0	93.4	50	150	0	0		
Methylene chloride	0.01822	0.0050	0.02	0	91.1	70	130	0	0		
Styrene	0.02157	0.0050	0.02	0	108	70	130	0	0		
Tetrachloroethene	0.02208	0.0050	0.02	0	110	70	130	0	0		
Toluene	0.02122	0.0050	0.02	0	106	70	130	0	0		
trans-1,2-Dichloroethene	0.02055	0.0050	0.02	0	103	70	130	0	0		
trans-1,3-Dichloropropene	0.02033	0.0010	0.02	0	102	70	130	0	0		
Trichloroethene	0.02049	0.0050	0.02	0	102	70	130	0	0		
Vinyl chloride	0.01936	0.0020	0.02	0	96.8	70	130	0	0		
Xylenes, Total	0.06988	0.015	0.06	0	116	70	130	0	0		

Sample ID: **12090402-003AMS**	SampType: **MS**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120918A**
Client ID: **GW-MW-05**	Batch ID: **R83375**	TestNo: **SW8260B**		Analysis Date: **9/18/2012**	SeqNo: **2243305**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.01878	0.0050	0.02	0	93.9	70	130	0	0		
1,1,2,2-Tetrachloroethane	0.02047	0.0050	0.02	0	102	70	130	0	0		
1,1,2-Trichloroethane	0.02066	0.0050	0.02	0	103	70	130	0	0		
1,1-Dichloroethane	0.01799	0.0050	0.02	0	90	70	130	0	0		
1,1-Dichloroethene	0.01854	0.0050	0.02	0	92.7	70	130	0	0		
1,2-Dichloroethane	0.0181	0.0050	0.02	0	90.5	70	130	0	0		
1,2-Dichloropropane	0.01955	0.0050	0.02	0	97.8	70	130	0	0		
2-Butanone	0.04223	0.020	0.04	0	106	70	130	0	0		
2-Hexanone	0.03634	0.020	0.04	0	90.8	70	130	0	0		
4-Methyl-2-pentanone	0.03307	0.020	0.04	0	82.7	70	130	0	0		
Acetone	0.02771	0.020	0.04	0	69.3	70	130	0	0		S
Benzene	0.02029	0.0050	0.02	0	101	70	130	0	0		
Bromodichloromethane	0.01896	0.0050	0.02	0	94.8	70	130	0	0		

Qualifiers:
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CLIENT: Terracon Consultants, Inc.
Work Order: 12090402
Project: A2107017-7A, DOE-Kimball

ANALYTICAL QC SUMMARY REPORT

BatchID: R83375

Sample ID: **12090402-003AMS**	SampType: **MS**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120918A**
Client ID: **GW-MW-05**	Batch ID: **R83375**	TestNo: **SW8260B**		Analysis Date: **9/18/2012**	SeqNo: **2243305**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromoform	0.01964	0.0050	0.02	0	98.2	70	130	0	0		
Bromomethane	0.01554	0.010	0.02	0	77.7	70	130	0	0		
Carbon disulfide	0.04124	0.010	0.04	0	103	70	130	0	0		
Carbon tetrachloride	0.01822	0.0050	0.02	0	91.1	70	130	0	0		
Chlorobenzene	0.02268	0.0050	0.02	0	113	70	130	0	0		
Chloroethane	0.01858	0.010	0.02	0	92.9	70	130	0	0		
Chloroform	0.01944	0.0050	0.02	0	97.2	70	130	0	0		
Chloromethane	0.01874	0.010	0.02	0	93.7	70	130	0	0		
cis-1,2-Dichloroethene	0.0192	0.0050	0.02	0	96	70	130	0	0		
cis-1,3-Dichloropropene	0.01813	0.0010	0.02	0	90.7	70	130	0	0		
Dibromochloromethane	0.02048	0.0050	0.02	0	102	70	130	0	0		
Ethylbenzene	0.02079	0.0050	0.02	0	104	70	130	0	0		
Methyl tert-butyl ether	0.01872	0.0050	0.02	0	93.6	50	150	0	0		
Methylene chloride	0.01824	0.0050	0.02	0	91.2	70	130	0	0		
Styrene	0.02047	0.0050	0.02	0	102	70	130	0	0		
Tetrachloroethene	0.02045	0.0050	0.02	0	102	70	130	0	0		
Toluene	0.02031	0.0050	0.02	0	102	70	130	0	0		
trans-1,2-Dichloroethene	0.01877	0.0050	0.02	0	93.8	70	130	0	0		
trans-1,3-Dichloropropene	0.02043	0.0010	0.02	0	102	70	130	0	0		
Trichloroethene	0.02009	0.0050	0.02	0	100	70	130	0	0		
Vinyl chloride	0.01764	0.0020	0.02	0	88.2	70	130	0	0		
Xylenes, Total	0.06722	0.015	0.06	0	112	70	130	0	0		

Sample ID: **12090402-003AMSD**	SampType: **MSD**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120918A**
Client ID: **GW-MW-05**	Batch ID: **R83375**	TestNo: **SW8260B**		Analysis Date: **9/18/2012**	SeqNo: **2243306**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	0.01919	0.0050	0.02	0	96	70	130	0.01878	2.16	15	
1,1,2,2-Tetrachloroethane	0.02041	0.0050	0.02	0	102	70	130	0.02047	0.294	15	
1,1,2-Trichloroethane	0.02022	0.0050	0.02	0	101	70	130	0.02066	2.15	15	
1,1-Dichloroethane	0.01829	0.0050	0.02	0	91.4	70	130	0.01799	1.65	15	

Qualifiers:
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H/HT - Holding Time Exceeded
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E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12090402
Project: A2107017-7A, DOE-Kimball

ANALYTICAL QC SUMMARY REPORT

BatchID: R83375

Sample ID: **12090402-003AMSD**	SampType: **MSD**	TestCode: **VOC_W+**	Units: **mg/L**	Prep Date:	Run ID: **VOA-7_120918A**
Client ID: **GW-MW-05**	Batch ID: **R83375**	TestNo: **SW8260B**		Analysis Date: **9/18/2012**	SeqNo: **2243306**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	0.01928	0.0050	0.02	0	96.4	70	130	0.01854	3.91	15	
1,2-Dichloroethane	0.01821	0.0050	0.02	0	91	70	130	0.0181	0.606	15	
1,2-Dichloropropane	0.01935	0.0050	0.02	0	96.8	70	130	0.01955	1.03	15	
2-Butanone	0.03837	0.020	0.04	0	95.9	70	130	0.04223	9.58	15	
2-Hexanone	0.0352	0.020	0.04	0	88	70	130	0.03634	3.19	15	
4-Methyl-2-pentanone	0.03374	0.020	0.04	0	84.4	70	130	0.03307	2.01	15	
Acetone	0.02756	0.020	0.04	0	68.9	70	130	0.02771	0.543	15	S
Benzene	0.0203	0.0050	0.02	0	102	70	130	0.02029	0.0493	15	
Bromodichloromethane	0.01869	0.0050	0.02	0	93.4	70	130	0.01896	1.43	15	
Bromoform	0.01925	0.0050	0.02	0	96.2	70	130	0.01964	2.01	15	
Bromomethane	0.01525	0.010	0.02	0	76.2	70	130	0.01554	1.88	15	
Carbon disulfide	0.04172	0.010	0.04	0	104	70	130	0.04124	1.16	15	
Carbon tetrachloride	0.01888	0.0050	0.02	0	94.4	70	130	0.01822	3.56	15	
Chlorobenzene	0.02256	0.0050	0.02	0	113	70	130	0.02268	0.531	15	
Chloroethane	0.01836	0.010	0.02	0	91.8	70	130	0.01858	1.19	15	
Chloroform	0.01982	0.0050	0.02	0	99.1	70	130	0.01944	1.94	15	
Chloromethane	0.02024	0.010	0.02	0	101	70	130	0.01874	7.70	15	
cis-1,2-Dichloroethene	0.01979	0.0050	0.02	0	99	70	130	0.0192	3.03	15	
cis-1,3-Dichloropropene	0.01876	0.0010	0.02	0	93.8	70	130	0.01813	3.42	15	
Dibromochloromethane	0.0205	0.0050	0.02	0	103	70	130	0.02048	0.0976	15	
Ethylbenzene	0.02089	0.0050	0.02	0	104	70	130	0.02079	0.480	15	
Methyl tert-butyl ether	0.01885	0.0050	0.02	0	94.2	50	150	0.01872	0.692	15	
Methylene chloride	0.01834	0.0050	0.02	0	91.7	70	130	0.01824	0.547	15	
Styrene	0.01986	0.0050	0.02	0	99.3	70	130	0.02047	3.03	15	
Tetrachloroethene	0.02083	0.0050	0.02	0	104	70	130	0.02045	1.84	15	
Toluene	0.02016	0.0050	0.02	0	101	70	130	0.02031	0.741	15	
trans-1,2-Dichloroethene	0.01915	0.0050	0.02	0	95.8	70	130	0.01877	2.00	15	
trans-1,3-Dichloropropene	0.02017	0.0010	0.02	0	101	70	130	0.02043	1.28	15	
Trichloroethene	0.02006	0.0050	0.02	0	100	70	130	0.02009	0.149	15	
Vinyl chloride	0.01844	0.0020	0.02	0	92.2	70	130	0.01764	4.43	15	
Xylenes, Total	0.06805	0.015	0.06	0	113	70	130	0.06722	1.23	15	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
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R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

STAT Analysis Corporation
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December 31, 2012

Terracon Consultants, Inc.
650 W. Lake Street
Suite 420
Chicago, IL 60661
Telephone: (312) 575-0014
Fax: (312) 575-0111

RE: A2107017-7A, DOE-Kimball, Chicago, IL STAT Project No 12080703

Dear Tom Tucker:

STAT Analysis received 8 samples for the referenced project on 8/21/2012 5:00:00 PM. The analytical results are presented in the following report.

This report is revised to reflect changes made after the initial report was issued.

All analyses were performed in accordance with the requirements of 35 IAC part 186 / NELAC standards. Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided. A listing of accredited methods/parameters can also be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 733-0551.

Sincerely,

Kurt Clarkson

Kurt Clarkson
Senior Project Manager

Client: Terracon Consultants, Inc.
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab Order: 12080703

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
12080703-001A	SV-01		8/21/2012 12:45:00 PM	8/21/2012
12080703-002A	SV-02		8/21/2012 1:19:00 PM	8/21/2012
12080703-003A	SV-03		8/21/2012 2:20:00 PM	8/21/2012
12080703-004A	SV-04		8/21/2012 2:46:00 PM	8/21/2012
12080703-005A	SV-04-DUP		8/21/2012 2:46:00 PM	8/21/2012
12080703-006A	SV-05		8/21/2012 3:25:00 PM	8/21/2012
12080703-007A	SV-06		8/21/2012 4:00:00 PM	8/21/2012
12080703-008A	Field Blank		8/21/2012	8/21/2012

STAT Analysis Corporation

Date: *December 31, 2012*

CLIENT: Terracon Consultants, Inc.
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab Order: 12080703

CASE NARRATIVE

The TO-15 LCS/LCSD analyzed 8/27/12 had the following outside of control limits:
1,1,2,2-Tetrachloroethane: 139/133% (LCS/LCSD) recovery (QC Limits 70-130%), not detected in the sample
2-Hexanone: 134% (LCS) recovery (QC Limits 70-130%), not detected in the sample
Heptane: 144/140% (LCS/LCSD) recovery (QC Limits 70-130%), not detected in the sample
Tetrahydrofuran: 130% (LCS) recovery (QC Limits 70-130%), not detected in the sample
The TO-15 LCS/LCSD analyzed 8/28/12 had the following outside of control limits:
Hexane: 138/139% (LCS/LCSD) recovery (QC Limits 70-130%)

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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-001

Client Sample ID: SV-01
Collection Date 8/21/2012 12:45:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	0.34		ppbv	1	8/24/2012
1,1,2,2-Tetrachloroethane	ND	0.34		ppbv	1	8/24/2012
1,1,2-Trichloroethane	ND	0.34		ppbv	1	8/24/2012
1,1-Dichloroethane	0.36	0.34		ppbv	1	8/24/2012
1,1-Dichloroethene	12	0.34		ppbv	1	8/24/2012
1,2,4-Trichlorobenzene	ND	0.34		ppbv	1	8/24/2012
1,2,4-Trimethylbenzene	0.9	0.34		ppbv	1	8/24/2012
1,2-Dibromoethane	ND	0.34		ppbv	1	8/24/2012
1,2-Dichlorobenzene	ND	0.34		ppbv	1	8/24/2012
1,2-Dichloroethane	ND	0.34		ppbv	1	8/24/2012
1,2-Dichloropropane	ND	0.34		ppbv	1	8/24/2012
1,3,5-Trimethylbenzene	ND	0.34		ppbv	1	8/24/2012
1,3-Butadiene	ND	0.34		ppbv	1	8/24/2012
1,3-Dichlorobenzene	ND	0.34		ppbv	1	8/24/2012
1,4-Dichlorobenzene	ND	0.34		ppbv	1	8/24/2012
1,4-Dioxane	ND	0.85		ppbv	1	8/24/2012
2-Butanone	3.5	0.85		ppbv	1	8/24/2012
2-Hexanone	ND	1.7		ppbv	1	8/24/2012
4-Ethyltoluene	0.37	0.34		ppbv	1	8/24/2012
4-Methyl-2-pentanone	ND	1.7		ppbv	1	8/24/2012
Acetone	27	3.4	*	ppbv	1	8/24/2012
Benzene	1.1	0.34		ppbv	1	8/24/2012
Benzyl chloride	ND	0.85		ppbv	1	8/24/2012
Bromodichloromethane	ND	0.34		ppbv	1	8/24/2012
Bromoform	ND	0.85		ppbv	1	8/24/2012
Bromomethane	ND	0.85		ppbv	1	8/24/2012
Carbon disulfide	ND	0.34		ppbv	1	8/24/2012
Carbon tetrachloride	ND	0.34		ppbv	1	8/24/2012
Chlorobenzene	ND	0.34		ppbv	1	8/24/2012
Chloroethane	ND	0.34		ppbv	1	8/24/2012
Chloroform	0.75	0.34		ppbv	1	8/24/2012
Chloromethane	ND	0.85		ppbv	1	8/24/2012
cis-1,2-Dichloroethene	1200	8.5		ppbv	25	8/25/2012
cis-1,3-Dichloropropene	ND	0.34		ppbv	1	8/24/2012
Cyclohexane	0.54	0.34		ppbv	1	8/24/2012
Dibromochloromethane	ND	0.34		ppbv	1	8/24/2012
Dichlorodifluoromethane	0.48	0.34		ppbv	1	8/24/2012
Ethyl acetate	ND	0.34		ppbv	1	8/24/2012

Qualifiers:
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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-001

Client Sample ID: SV-01
Collection Date 8/21/2012 12:45:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
Ethylbenzene	0.8	0.34		ppbv	1	8/24/2012
Freon-113	ND	0.34		ppbv	1	8/24/2012
Freon-114	ND	1.7		ppbv	1	8/24/2012
Heptane	0.56	0.34		ppbv	1	8/24/2012
Hexachlorobutadiene	ND	0.34		ppbv	1	8/24/2012
Hexane	1	0.85		ppbv	1	8/24/2012
Isopropyl Alcohol	ND	1.7		ppbv	1	8/24/2012
m,p-Xylene	2.9	0.68		ppbv	1	8/24/2012
Methyl tert-butyl ether	ND	0.34		ppbv	1	8/24/2012
Methylene chloride	ND	3.4		ppbv	1	8/24/2012
o-Xylene	0.9	0.34		ppbv	1	8/24/2012
Propene	4.4	3.4		ppbv	1	8/24/2012
Styrene	ND	0.34		ppbv	1	8/24/2012
Tetrachloroethene	10	0.34		ppbv	1	8/24/2012
Tetrahydrofuran	ND	0.85		ppbv	1	8/24/2012
Toluene	4.4	0.34		ppbv	1	8/24/2012
trans-1,2-Dichloroethene	46	0.34		ppbv	1	8/24/2012
trans-1,3-Dichloropropene	ND	0.34		ppbv	1	8/24/2012
Trichloroethene	3200	68		ppbv	200	8/28/2012
Trichlorofluoromethane	ND	0.34		ppbv	1	8/24/2012
Vinyl acetate	ND	3.4		ppbv	1	8/24/2012
Vinyl chloride	5.2	0.34		ppbv	1	8/24/2012
Xylenes, Total	3.8	1		ppbv	1	8/24/2012
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	1.9		µg/m³	1	8/24/2012
1,1,2,2-Tetrachloroethane	ND	2.4		µg/m³	1	8/24/2012
1,1,2-Trichloroethane	ND	1.9		µg/m³	1	8/24/2012
1,1-Dichloroethane	1.4	1.4		µg/m³	1	8/24/2012
1,1-Dichloroethene	48	1.4		µg/m³	1	8/24/2012
1,2,4-Trichlorobenzene	ND	2.5		µg/m³	1	8/24/2012
1,2,4-Trimethylbenzene	4.4	1.7		µg/m³	1	8/24/2012
1,2-Dibromoethane	ND	2.5		µg/m³	1	8/24/2012
1,2-Dichlorobenzene	ND	2		µg/m³	1	8/24/2012
1,2-Dichloroethane	ND	1.4		µg/m³	1	8/24/2012
1,2-Dichloropropane	ND	1.5		µg/m³	1	8/24/2012
1,3,5-Trimethylbenzene	ND	1.7		µg/m³	1	8/24/2012
1,3-Butadiene	ND	0.68		µg/m³	1	8/24/2012
1,3-Dichlorobenzene	ND	2		µg/m³	1	8/24/2012

Qualifiers:
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Date Reported: December 31, 2012
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Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-001

Client Sample ID: SV-01
Collection Date 8/21/2012 12:45:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,4-Dichlorobenzene	ND	2		µg/m³	1	8/24/2012
1,4-Dioxane	ND	3.1		µg/m³	1	8/24/2012
2-Butanone	10	2.5		µg/m³	1	8/24/2012
2-Hexanone	ND	7		µg/m³	1	8/24/2012
4-Ethyltoluene	1.8	1.7		µg/m³	1	8/24/2012
4-Methyl-2-pentanone	ND	7		µg/m³	1	8/24/2012
Acetone	63	8.1	*	µg/m³	1	8/24/2012
Benzene	3.6	1		µg/m³	1	8/24/2012
Benzyl chloride	ND	4.4		µg/m³	1	8/24/2012
Bromodichloromethane	ND	2.2		µg/m³	1	8/24/2012
Bromoform	ND	8.8		µg/m³	1	8/24/2012
Bromomethane	ND	3.2		µg/m³	1	8/24/2012
Carbon disulfide	ND	1.1		µg/m³	1	8/24/2012
Carbon tetrachloride	ND	2.2		µg/m³	1	8/24/2012
Chlorobenzene	ND	1.5		µg/m³	1	8/24/2012
Chloroethane	ND	0.85		µg/m³	1	8/24/2012
Chloroform	3.6	1.7		µg/m³	1	8/24/2012
Chloromethane	ND	1.7		µg/m³	1	8/24/2012
cis-1,2-Dichloroethene	4700	34		µg/m³	25	8/25/2012
cis-1,3-Dichloropropene	ND	1.5		µg/m³	1	8/24/2012
Cyclohexane	1.9	1.2		µg/m³	1	8/24/2012
Dibromochloromethane	ND	2.9		µg/m³	1	8/24/2012
Dichlorodifluoromethane	2.4	1.7		µg/m³	1	8/24/2012
Ethyl acetate	ND	1.2		µg/m³	1	8/24/2012
Ethylbenzene	3.5	1.5		µg/m³	1	8/24/2012
Freon-113	ND	2.5		µg/m³	1	8/24/2012
Freon-114	ND	12		µg/m³	1	8/24/2012
Heptane	2.3	1.4		µg/m³	1	8/24/2012
Hexachlorobutadiene	ND	3.6		µg/m³	1	8/24/2012
Hexane	3.5	3.1		µg/m³	1	8/24/2012
Isopropyl Alcohol	ND	4.2		µg/m³	1	8/24/2012
m,p-Xylene	12	2.9		µg/m³	1	8/24/2012
Methyl tert-butyl ether	ND	1.2		µg/m³	1	8/24/2012
Methylene chloride	ND	12		µg/m³	1	8/24/2012
o-Xylene	3.9	1.5		µg/m³	1	8/24/2012
Propene	7.6	5.8		µg/m³	1	8/24/2012
Styrene	ND	1.5		µg/m³	1	8/24/2012
Tetrachloroethene	70	2.4		µg/m³	1	8/24/2012

Qualifiers:
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Date Reported: December 31, 2012
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Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-001

Client Sample ID: SV-01
Collection Date 8/21/2012 12:45:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
Tetrahydrofuran	ND	2.5		µg/m³	1	8/24/2012
Toluene	16	1.4		µg/m³	1	8/24/2012
trans-1,2-Dichloroethene	180	1.4		µg/m³	1	8/24/2012
trans-1,3-Dichloropropene	ND	1.5		µg/m³	1	8/24/2012
Trichloroethene	17000	370		µg/m³	200	8/28/2012
Trichlorofluoromethane	ND	1.9		µg/m³	1	8/24/2012
Vinyl acetate	ND	12		µg/m³	1	8/24/2012
Vinyl chloride	13	0.85		µg/m³	1	8/24/2012
Xylenes, Total	16	4.4		µg/m³	1	8/24/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
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Date Reported: December 31, 2012
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Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-002

Client Sample ID: SV-02
Collection Date 8/21/2012 1:19:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	0.36		ppbv	1	8/24/2012
1,1,2,2-Tetrachloroethane	ND	0.36		ppbv	1	8/24/2012
1,1,2-Trichloroethane	ND	0.36		ppbv	1	8/24/2012
1,1-Dichloroethane	ND	0.36		ppbv	1	8/24/2012
1,1-Dichloroethene	ND	0.36		ppbv	1	8/24/2012
1,2,4-Trichlorobenzene	ND	0.36		ppbv	1	8/24/2012
1,2,4-Trimethylbenzene	0.7	0.36		ppbv	1	8/24/2012
1,2-Dibromoethane	ND	0.36		ppbv	1	8/24/2012
1,2-Dichlorobenzene	ND	0.36		ppbv	1	8/24/2012
1,2-Dichloroethane	ND	0.36		ppbv	1	8/24/2012
1,2-Dichloropropane	ND	0.36		ppbv	1	8/24/2012
1,3,5-Trimethylbenzene	ND	0.36		ppbv	1	8/24/2012
1,3-Butadiene	0.88	0.36		ppbv	1	8/24/2012
1,3-Dichlorobenzene	ND	0.36		ppbv	1	8/24/2012
1,4-Dichlorobenzene	ND	0.36		ppbv	1	8/24/2012
1,4-Dioxane	ND	0.9		ppbv	1	8/24/2012
2-Butanone	2.4	0.9		ppbv	1	8/24/2012
2-Hexanone	ND	1.8		ppbv	1	8/24/2012
4-Ethyltoluene	ND	0.36		ppbv	1	8/24/2012
4-Methyl-2-pentanone	ND	1.8		ppbv	1	8/24/2012
Acetone	34	3.6	*	ppbv	1	8/24/2012
Benzene	0.99	0.36		ppbv	1	8/24/2012
Benzyl chloride	ND	0.9		ppbv	1	8/24/2012
Bromodichloromethane	ND	0.36		ppbv	1	8/24/2012
Bromoform	ND	0.9		ppbv	1	8/24/2012
Bromomethane	ND	0.9		ppbv	1	8/24/2012
Carbon disulfide	1.3	0.36		ppbv	1	8/24/2012
Carbon tetrachloride	ND	0.36		ppbv	1	8/24/2012
Chlorobenzene	ND	0.36		ppbv	1	8/24/2012
Chloroethane	ND	0.36		ppbv	1	8/24/2012
Chloroform	ND	0.36		ppbv	1	8/24/2012
Chloromethane	ND	0.9		ppbv	1	8/24/2012
cis-1,2-Dichloroethene	5.1	0.36		ppbv	1	8/24/2012
cis-1,3-Dichloropropene	ND	0.36		ppbv	1	8/24/2012
Cyclohexane	ND	0.36		ppbv	1	8/24/2012
Dibromochloromethane	ND	0.36		ppbv	1	8/24/2012
Dichlorodifluoromethane	0.45	0.36		ppbv	1	8/24/2012
Ethyl acetate	ND	0.36		ppbv	1	8/24/2012

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Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-002

Client Sample ID: SV-02
Collection Date 8/21/2012 1:19:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS **TO-15**				Prep Date: **8/23/2012**		Analyst: **VP**
Ethylbenzene	0.69	0.36		ppbv	1	8/24/2012
Freon-113	ND	0.36		ppbv	1	8/24/2012
Freon-114	ND	1.8		ppbv	1	8/24/2012
Heptane	1.1	0.36		ppbv	1	8/24/2012
Hexachlorobutadiene	ND	0.36		ppbv	1	8/24/2012
Hexane	1.8	0.9		ppbv	1	8/24/2012
Isopropyl Alcohol	ND	1.8		ppbv	1	8/24/2012
m,p-Xylene	2.4	0.72		ppbv	1	8/24/2012
Methyl tert-butyl ether	ND	0.36		ppbv	1	8/24/2012
Methylene chloride	ND	3.6		ppbv	1	8/24/2012
o-Xylene	0.72	0.36		ppbv	1	8/24/2012
Propene	10	3.6		ppbv	1	8/24/2012
Styrene	ND	0.36		ppbv	1	8/24/2012
Tetrachloroethene	0.65	0.36		ppbv	1	8/24/2012
Tetrahydrofuran	ND	0.9		ppbv	1	8/24/2012
Toluene	4.4	0.36		ppbv	1	8/24/2012
trans-1,2-Dichloroethene	0.94	0.36		ppbv	1	8/24/2012
trans-1,3-Dichloropropene	ND	0.36		ppbv	1	8/24/2012
Trichloroethene	5.9	0.36		ppbv	1	8/24/2012
Trichlorofluoromethane	ND	0.36		ppbv	1	8/24/2012
Vinyl acetate	ND	3.6		ppbv	1	8/24/2012
Vinyl chloride	ND	0.36		ppbv	1	8/24/2012
Xylenes, Total	3.1	1.1		ppbv	1	8/24/2012
Volatile Organic Compounds in Air by GC/MS **TO-15**				Prep Date: **8/23/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	2		µg/m³	1	8/24/2012
1,1,2,2-Tetrachloroethane	ND	2.5		µg/m³	1	8/24/2012
1,1,2-Trichloroethane	ND	2		µg/m³	1	8/24/2012
1,1-Dichloroethane	ND	1.4		µg/m³	1	8/24/2012
1,1-Dichloroethene	ND	1.4		µg/m³	1	8/24/2012
1,2,4-Trichlorobenzene	ND	2.7		µg/m³	1	8/24/2012
1,2,4-Trimethylbenzene	3.5	1.8		µg/m³	1	8/24/2012
1,2-Dibromoethane	ND	2.7		µg/m³	1	8/24/2012
1,2-Dichlorobenzene	ND	2.2		µg/m³	1	8/24/2012
1,2-Dichloroethane	ND	1.4		µg/m³	1	8/24/2012
1,2-Dichloropropane	ND	1.6		µg/m³	1	8/24/2012
1,3,5-Trimethylbenzene	ND	1.8		µg/m³	1	8/24/2012
1,3-Butadiene	2	0.72		µg/m³	1	8/24/2012
1,3-Dichlorobenzene	ND	2.2		µg/m³	1	8/24/2012

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STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-002

Client Sample ID: SV-02
Collection Date 8/21/2012 1:19:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,4-Dichlorobenzene	ND	2.2		µg/m³	1	8/24/2012
1,4-Dioxane	ND	3.2		µg/m³	1	8/24/2012
2-Butanone	7	2.7		µg/m³	1	8/24/2012
2-Hexanone	ND	7.4		µg/m³	1	8/24/2012
4-Ethyltoluene	ND	1.8		µg/m³	1	8/24/2012
4-Methyl-2-pentanone	ND	7.4		µg/m³	1	8/24/2012
Acetone	80	8.7	*	µg/m³	1	8/24/2012
Benzene	3.2	1.1		µg/m³	1	8/24/2012
Benzyl chloride	ND	4.7		µg/m³	1	8/24/2012
Bromodichloromethane	ND	2.3		µg/m³	1	8/24/2012
Bromoform	ND	9.4		µg/m³	1	8/24/2012
Bromomethane	ND	3.4		µg/m³	1	8/24/2012
Carbon disulfide	4.2	1.1		µg/m³	1	8/24/2012
Carbon tetrachloride	ND	2.3		µg/m³	1	8/24/2012
Chlorobenzene	ND	1.6		µg/m³	1	8/24/2012
Chloroethane	ND	0.9		µg/m³	1	8/24/2012
Chloroform	ND	1.8		µg/m³	1	8/24/2012
Chloromethane	ND	1.8		µg/m³	1	8/24/2012
cis-1,2-Dichloroethene	20	1.4		µg/m³	1	8/24/2012
cis-1,3-Dichloropropene	ND	1.6		µg/m³	1	8/24/2012
Cyclohexane	ND	1.3		µg/m³	1	8/24/2012
Dibromochloromethane	ND	3.1		µg/m³	1	8/24/2012
Dichlorodifluoromethane	2.2	1.8		µg/m³	1	8/24/2012
Ethyl acetate	ND	1.3		µg/m³	1	8/24/2012
Ethylbenzene	3	1.6		µg/m³	1	8/24/2012
Freon-113	ND	2.7		µg/m³	1	8/24/2012
Freon-114	ND	13		µg/m³	1	8/24/2012
Heptane	4.4	1.4		µg/m³	1	8/24/2012
Hexachlorobutadiene	ND	3.8		µg/m³	1	8/24/2012
Hexane	6.2	3.2		µg/m³	1	8/24/2012
Isopropyl Alcohol	ND	4.5		µg/m³	1	8/24/2012
m,p-Xylene	10	3.1		µg/m³	1	8/24/2012
Methyl tert-butyl ether	ND	1.3		µg/m³	1	8/24/2012
Methylene chloride	ND	12		µg/m³	1	8/24/2012
o-Xylene	3.1	1.6		µg/m³	1	8/24/2012
Propene	18	6.1		µg/m³	1	8/24/2012
Styrene	ND	1.6		µg/m³	1	8/24/2012
Tetrachloroethene	4.4	2.5		µg/m³	1	8/24/2012

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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-002

Client Sample ID: SV-02
Collection Date 8/21/2012 1:19:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
Tetrahydrofuran	ND	2.7		µg/m³	1	8/24/2012
Toluene	17	1.4		µg/m³	1	8/24/2012
trans-1,2-Dichloroethene	3.7	1.4		µg/m³	1	8/24/2012
trans-1,3-Dichloropropene	ND	1.6		µg/m³	1	8/24/2012
Trichloroethene	32	2		µg/m³	1	8/24/2012
Trichlorofluoromethane	ND	2		µg/m³	1	8/24/2012
Vinyl acetate	ND	13		µg/m³	1	8/24/2012
Vinyl chloride	ND	0.9		µg/m³	1	8/24/2012
Xylenes, Total	13	4.7		µg/m³	1	8/24/2012

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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-003

Client Sample ID: SV-03
Collection Date 8/21/2012 2:20:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	0.36		ppbv	1	8/24/2012
1,1,2,2-Tetrachloroethane	ND	0.36		ppbv	1	8/24/2012
1,1,2-Trichloroethane	ND	0.36		ppbv	1	8/24/2012
1,1-Dichloroethane	ND	0.36		ppbv	1	8/24/2012
1,1-Dichloroethene	ND	0.36		ppbv	1	8/24/2012
1,2,4-Trichlorobenzene	ND	0.36		ppbv	1	8/24/2012
1,2,4-Trimethylbenzene	0.67	0.36		ppbv	1	8/24/2012
1,2-Dibromoethane	ND	0.36		ppbv	1	8/24/2012
1,2-Dichlorobenzene	ND	0.36		ppbv	1	8/24/2012
1,2-Dichloroethane	1.2	0.36		ppbv	1	8/24/2012
1,2-Dichloropropane	ND	0.36		ppbv	1	8/24/2012
1,3,5-Trimethylbenzene	ND	0.36		ppbv	1	8/24/2012
1,3-Butadiene	0.8	0.36		ppbv	1	8/24/2012
1,3-Dichlorobenzene	ND	0.36		ppbv	1	8/24/2012
1,4-Dichlorobenzene	ND	0.36		ppbv	1	8/24/2012
1,4-Dioxane	ND	0.89		ppbv	1	8/24/2012
2-Butanone	4.3	0.89		ppbv	1	8/24/2012
2-Hexanone	ND	1.8		ppbv	1	8/24/2012
4-Ethyltoluene	ND	0.36		ppbv	1	8/24/2012
4-Methyl-2-pentanone	ND	1.8		ppbv	1	8/24/2012
Acetone	47	3.6	*	ppbv	1	8/24/2012
Benzene	0.75	0.36		ppbv	1	8/24/2012
Benzyl chloride	ND	0.89		ppbv	1	8/24/2012
Bromodichloromethane	ND	0.36		ppbv	1	8/24/2012
Bromoform	ND	0.89		ppbv	1	8/24/2012
Bromomethane	ND	0.89		ppbv	1	8/24/2012
Carbon disulfide	1.2	0.36		ppbv	1	8/24/2012
Carbon tetrachloride	ND	0.36		ppbv	1	8/24/2012
Chlorobenzene	ND	0.36		ppbv	1	8/24/2012
Chloroethane	ND	0.36		ppbv	1	8/24/2012
Chloroform	0.44	0.36		ppbv	1	8/24/2012
Chloromethane	ND	0.89		ppbv	1	8/24/2012
cis-1,2-Dichloroethene	2.6	0.36		ppbv	1	8/24/2012
cis-1,3-Dichloropropene	ND	0.36		ppbv	1	8/24/2012
Cyclohexane	0.41	0.36		ppbv	1	8/24/2012
Dibromochloromethane	ND	0.36		ppbv	1	8/24/2012
Dichlorodifluoromethane	0.44	0.36		ppbv	1	8/24/2012
Ethyl acetate	ND	0.36		ppbv	1	8/24/2012

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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-003

Client Sample ID: SV-03
Collection Date 8/21/2012 2:20:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS **TO-15**				Prep Date: **8/23/2012**		Analyst: **VP**
Ethylbenzene	0.48	0.36		ppbv	1	8/24/2012
Freon-113	ND	0.36		ppbv	1	8/24/2012
Freon-114	ND	1.8		ppbv	1	8/24/2012
Heptane	1.5	0.36		ppbv	1	8/24/2012
Hexachlorobutadiene	ND	0.36		ppbv	1	8/24/2012
Hexane	3.1	0.89		ppbv	1	8/24/2012
Isopropyl Alcohol	19	1.8		ppbv	1	8/24/2012
m,p-Xylene	1.6	0.71		ppbv	1	8/24/2012
Methyl tert-butyl ether	ND	0.36		ppbv	1	8/24/2012
Methylene chloride	ND	3.6		ppbv	1	8/24/2012
o-Xylene	0.62	0.36		ppbv	1	8/24/2012
Propene	21	3.6		ppbv	1	8/24/2012
Styrene	ND	0.36		ppbv	1	8/24/2012
Tetrachloroethene	ND	0.36		ppbv	1	8/24/2012
Tetrahydrofuran	ND	0.89		ppbv	1	8/24/2012
Toluene	3.2	0.36		ppbv	1	8/24/2012
trans-1,2-Dichloroethene	ND	0.36		ppbv	1	8/24/2012
trans-1,3-Dichloropropene	ND	0.36		ppbv	1	8/24/2012
Trichloroethene	5.5	0.36		ppbv	1	8/24/2012
Trichlorofluoromethane	ND	0.36		ppbv	1	8/24/2012
Vinyl acetate	ND	3.6		ppbv	1	8/24/2012
Vinyl chloride	0.82	0.36		ppbv	1	8/24/2012
Xylenes, Total	2.2	1.1		ppbv	1	8/24/2012
Volatile Organic Compounds in Air by GC/MS **TO-15**				Prep Date: **8/23/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	2		µg/m³	1	8/24/2012
1,1,2,2-Tetrachloroethane	ND	2.5		µg/m³	1	8/24/2012
1,1,2-Trichloroethane	ND	2		µg/m³	1	8/24/2012
1,1-Dichloroethane	ND	1.4		µg/m³	1	8/24/2012
1,1-Dichloroethene	ND	1.4		µg/m³	1	8/24/2012
1,2,4-Trichlorobenzene	ND	2.7		µg/m³	1	8/24/2012
1,2,4-Trimethylbenzene	3.3	1.8		µg/m³	1	8/24/2012
1,2-Dibromoethane	ND	2.7		µg/m³	1	8/24/2012
1,2-Dichlorobenzene	ND	2.1		µg/m³	1	8/24/2012
1,2-Dichloroethane	4.8	1.4		µg/m³	1	8/24/2012
1,2-Dichloropropane	ND	1.6		µg/m³	1	8/24/2012
1,3,5-Trimethylbenzene	ND	1.8		µg/m³	1	8/24/2012
1,3-Butadiene	1.8	0.71		µg/m³	1	8/24/2012
1,3-Dichlorobenzene	ND	2.2		µg/m³	1	8/24/2012

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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-003

Client Sample ID: SV-03
Collection Date 8/21/2012 2:20:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,4-Dichlorobenzene	ND	2.1		µg/m³	1	8/24/2012
1,4-Dioxane	ND	3.2		µg/m³	1	8/24/2012
2-Butanone	13	2.7		µg/m³	1	8/24/2012
2-Hexanone	ND	7.3		µg/m³	1	8/24/2012
4-Ethyltoluene	ND	1.8		µg/m³	1	8/24/2012
4-Methyl-2-pentanone	ND	7.3		µg/m³	1	8/24/2012
Acetone	110	8.5	*	µg/m³	1	8/24/2012
Benzene	2.4	1.1		µg/m³	1	8/24/2012
Benzyl chloride	ND	4.6		µg/m³	1	8/24/2012
Bromodichloromethane	ND	2.3		µg/m³	1	8/24/2012
Bromoform	ND	9.2		µg/m³	1	8/24/2012
Bromomethane	ND	3.4		µg/m³	1	8/24/2012
Carbon disulfide	3.6	1.1		µg/m³	1	8/24/2012
Carbon tetrachloride	ND	2.3		µg/m³	1	8/24/2012
Chlorobenzene	ND	1.6		µg/m³	1	8/24/2012
Chloroethane	ND	0.89		µg/m³	1	8/24/2012
Chloroform	2.2	1.8		µg/m³	1	8/24/2012
Chloromethane	ND	1.8		µg/m³	1	8/24/2012
cis-1,2-Dichloroethene	10	1.4		µg/m³	1	8/24/2012
cis-1,3-Dichloropropene	ND	1.6		µg/m³	1	8/24/2012
Cyclohexane	1.4	1.2		µg/m³	1	8/24/2012
Dibromochloromethane	ND	3		µg/m³	1	8/24/2012
Dichlorodifluoromethane	2.2	1.8		µg/m³	1	8/24/2012
Ethyl acetate	ND	1.2		µg/m³	1	8/24/2012
Ethylbenzene	2.1	1.6		µg/m³	1	8/24/2012
Freon-113	ND	2.7		µg/m³	1	8/24/2012
Freon-114	ND	12		µg/m³	1	8/24/2012
Heptane	6.3	1.4		µg/m³	1	8/24/2012
Hexachlorobutadiene	ND	3.7		µg/m³	1	8/24/2012
Hexane	11	3.2		µg/m³	1	8/24/2012
Isopropyl Alcohol	47	4.4		µg/m³	1	8/24/2012
m,p-Xylene	6.9	3		µg/m³	1	8/24/2012
Methyl tert-butyl ether	ND	1.2		µg/m³	1	8/24/2012
Methylene chloride	ND	12		µg/m³	1	8/24/2012
o-Xylene	2.7	1.6		µg/m³	1	8/24/2012
Propene	36	6		µg/m³	1	8/24/2012
Styrene	ND	1.6		µg/m³	1	8/24/2012
Tetrachloroethene	ND	2.5		µg/m³	1	8/24/2012

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Date Reported: December 31, 2012
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Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-003

Client Sample ID: SV-03
Collection Date 8/21/2012 2:20:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
Tetrahydrofuran	ND	2.7		µg/m³	1	8/24/2012
Toluene	12	1.4		µg/m³	1	8/24/2012
trans-1,2-Dichloroethene	ND	1.4		µg/m³	1	8/24/2012
trans-1,3-Dichloropropene	ND	1.6		µg/m³	1	8/24/2012
Trichloroethene	30	2		µg/m³	1	8/24/2012
Trichlorofluoromethane	ND	2		µg/m³	1	8/24/2012
Vinyl acetate	ND	12		µg/m³	1	8/24/2012
Vinyl chloride	2.1	0.89		µg/m³	1	8/24/2012
Xylenes, Total	9.6	4.6		µg/m³	1	8/24/2012

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Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-004

Client Sample ID: SV-04
Collection Date 8/21/2012 2:46:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	0.42		ppbv	1	8/24/2012
1,1,2,2-Tetrachloroethane	ND	0.42		ppbv	1	8/24/2012
1,1,2-Trichloroethane	ND	0.42		ppbv	1	8/24/2012
1,1-Dichloroethane	ND	0.42		ppbv	1	8/24/2012
1,1-Dichloroethene	14	0.42		ppbv	1	8/24/2012
1,2,4-Trichlorobenzene	ND	0.42		ppbv	1	8/24/2012
1,2,4-Trimethylbenzene	ND	0.42		ppbv	1	8/24/2012
1,2-Dibromoethane	ND	0.42		ppbv	1	8/24/2012
1,2-Dichlorobenzene	ND	0.42		ppbv	1	8/24/2012
1,2-Dichloroethane	ND	0.42		ppbv	1	8/24/2012
1,2-Dichloropropane	ND	0.42		ppbv	1	8/24/2012
1,3,5-Trimethylbenzene	ND	0.42		ppbv	1	8/24/2012
1,3-Butadiene	ND	0.42		ppbv	1	8/24/2012
1,3-Dichlorobenzene	ND	0.42		ppbv	1	8/24/2012
1,4-Dichlorobenzene	ND	0.42		ppbv	1	8/24/2012
1,4-Dioxane	ND	1		ppbv	1	8/24/2012
2-Butanone	ND	1		ppbv	1	8/24/2012
2-Hexanone	ND	2.1		ppbv	1	8/24/2012
4-Ethyltoluene	ND	0.42		ppbv	1	8/24/2012
4-Methyl-2-pentanone	ND	2.1		ppbv	1	8/24/2012
Acetone	10	4.2	*	ppbv	1	8/24/2012
Benzene	ND	0.42		ppbv	1	8/24/2012
Benzyl chloride	ND	1		ppbv	1	8/24/2012
Bromodichloromethane	ND	0.42		ppbv	1	8/24/2012
Bromoform	ND	1		ppbv	1	8/24/2012
Bromomethane	ND	1		ppbv	1	8/24/2012
Carbon disulfide	ND	0.42		ppbv	1	8/24/2012
Carbon tetrachloride	ND	0.42		ppbv	1	8/24/2012
Chlorobenzene	ND	0.42		ppbv	1	8/24/2012
Chloroethane	ND	0.42		ppbv	1	8/24/2012
Chloroform	ND	0.42		ppbv	1	8/24/2012
Chloromethane	ND	1		ppbv	1	8/24/2012
cis-1,2-Dichloroethene	6300	83		ppbv	200	8/28/2012
cis-1,3-Dichloropropene	ND	0.42		ppbv	1	8/24/2012
Cyclohexane	ND	0.42		ppbv	1	8/24/2012
Dibromochloromethane	ND	0.42		ppbv	1	8/24/2012
Dichlorodifluoromethane	ND	0.42		ppbv	1	8/24/2012
Ethyl acetate	ND	0.42		ppbv	1	8/24/2012

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Date Reported: December 31, 2012
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Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-004

Client Sample ID: SV-04
Collection Date 8/21/2012 2:46:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
Ethylbenzene	ND	0.42		ppbv	1	8/24/2012
Freon-113	ND	0.42		ppbv	1	8/24/2012
Freon-114	ND	2.1		ppbv	1	8/24/2012
Heptane	ND	0.42		ppbv	1	8/24/2012
Hexachlorobutadiene	ND	0.42		ppbv	1	8/24/2012
Hexane	1.5	1		ppbv	1	8/24/2012
Isopropyl Alcohol	2.4	2.1		ppbv	1	8/24/2012
m,p-Xylene	ND	0.83		ppbv	1	8/24/2012
Methyl tert-butyl ether	ND	0.42		ppbv	1	8/24/2012
Methylene chloride	ND	4.2		ppbv	1	8/24/2012
o-Xylene	ND	0.42		ppbv	1	8/24/2012
Propene	4.9	4.2		ppbv	1	8/24/2012
Styrene	ND	0.42		ppbv	1	8/24/2012
Tetrachloroethene	ND	0.42		ppbv	1	8/24/2012
Tetrahydrofuran	ND	1		ppbv	1	8/24/2012
Toluene	1.1	0.42		ppbv	1	8/24/2012
trans-1,2-Dichloroethene	63	0.42		ppbv	1	8/24/2012
trans-1,3-Dichloropropene	ND	0.42		ppbv	1	8/24/2012
Trichloroethene	910	10		ppbv	25	8/25/2012
Trichlorofluoromethane	ND	0.42		ppbv	1	8/24/2012
Vinyl acetate	ND	4.2		ppbv	1	8/24/2012
Vinyl chloride	640	10		ppbv	25	8/25/2012
Xylenes, Total	ND	1.2		ppbv	1	8/24/2012
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	2.3		µg/m³	1	8/24/2012
1,1,2,2-Tetrachloroethane	ND	2.9		µg/m³	1	8/24/2012
1,1,2-Trichloroethane	ND	2.3		µg/m³	1	8/24/2012
1,1-Dichloroethane	ND	1.7		µg/m³	1	8/24/2012
1,1-Dichloroethene	57	1.7		µg/m³	1	8/24/2012
1,2,4-Trichlorobenzene	ND	3.1		µg/m³	1	8/24/2012
1,2,4-Trimethylbenzene	ND	2.1		µg/m³	1	8/24/2012
1,2-Dibromoethane	ND	3.1		µg/m³	1	8/24/2012
1,2-Dichlorobenzene	ND	2.5		µg/m³	1	8/24/2012
1,2-Dichloroethane	ND	1.7		µg/m³	1	8/24/2012
1,2-Dichloropropane	ND	1.9		µg/m³	1	8/24/2012
1,3,5-Trimethylbenzene	ND	2.1		µg/m³	1	8/24/2012
1,3-Butadiene	ND	0.83		µg/m³	1	8/24/2012
1,3-Dichlorobenzene	ND	2.5		µg/m³	1	8/24/2012

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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-004

Client Sample ID: SV-04
Collection Date 8/21/2012 2:46:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,4-Dichlorobenzene	ND	2.5		µg/m³	1	8/24/2012
1,4-Dioxane	ND	3.7		µg/m³	1	8/24/2012
2-Butanone	ND	3.1		µg/m³	1	8/24/2012
2-Hexanone	ND	8.5		µg/m³	1	8/24/2012
4-Ethyltoluene	ND	2.1		µg/m³	1	8/24/2012
4-Methyl-2-pentanone	ND	8.5		µg/m³	1	8/24/2012
Acetone	25	10	*	µg/m³	1	8/24/2012
Benzene	ND	1.2		µg/m³	1	8/24/2012
Benzyl chloride	ND	5.4		µg/m³	1	8/24/2012
Bromodichloromethane	ND	2.7		µg/m³	1	8/24/2012
Bromoform	ND	11		µg/m³	1	8/24/2012
Bromomethane	ND	3.9		µg/m³	1	8/24/2012
Carbon disulfide	ND	1.3		µg/m³	1	8/24/2012
Carbon tetrachloride	ND	2.7		µg/m³	1	8/24/2012
Chlorobenzene	ND	1.9		µg/m³	1	8/24/2012
Chloroethane	ND	1		µg/m³	1	8/24/2012
Chloroform	ND	2.1		µg/m³	1	8/24/2012
Chloromethane	ND	2.1		µg/m³	1	8/24/2012
cis-1,2-Dichloroethene	25000	330		µg/m³	200	8/28/2012
cis-1,3-Dichloropropene	ND	1.9		µg/m³	1	8/24/2012
Cyclohexane	ND	1.5		µg/m³	1	8/24/2012
Dibromochloromethane	ND	3.5		µg/m³	1	8/24/2012
Dichlorodifluoromethane	ND	2.1		µg/m³	1	8/24/2012
Ethyl acetate	ND	1.5		µg/m³	1	8/24/2012
Ethylbenzene	ND	1.9		µg/m³	1	8/24/2012
Freon-113	ND	3.1		µg/m³	1	8/24/2012
Freon-114	ND	15		µg/m³	1	8/24/2012
Heptane	ND	1.7		µg/m³	1	8/24/2012
Hexachlorobutadiene	ND	4.4		µg/m³	1	8/24/2012
Hexane	5.3	3.7		µg/m³	1	8/24/2012
Isopropyl Alcohol	6	5.2		µg/m³	1	8/24/2012
m,p-Xylene	ND	3.5		µg/m³	1	8/24/2012
Methyl tert-butyl ether	ND	1.5		µg/m³	1	8/24/2012
Methylene chloride	ND	14		µg/m³	1	8/24/2012
o-Xylene	ND	1.9		µg/m³	1	8/24/2012
Propene	8.4	7.1		µg/m³	1	8/24/2012
Styrene	ND	1.9		µg/m³	1	8/24/2012
Tetrachloroethene	ND	2.9		µg/m³	1	8/24/2012

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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-004

Client Sample ID: SV-04
Collection Date 8/21/2012 2:46:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
Tetrahydrofuran	ND	3.1		µg/m³	1	8/24/2012
Toluene	4.1	1.7		µg/m³	1	8/24/2012
trans-1,2-Dichloroethene	250	1.7		µg/m³	1	8/24/2012
trans-1,3-Dichloropropene	ND	1.9		µg/m³	1	8/24/2012
Trichloroethene	4900	57		µg/m³	25	8/25/2012
Trichlorofluoromethane	ND	2.3		µg/m³	1	8/24/2012
Vinyl acetate	ND	15		µg/m³	1	8/24/2012
Vinyl chloride	1600	26		µg/m³	25	8/25/2012
Xylenes, Total	ND	5.4		µg/m³	1	8/24/2012

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Date Reported: December 31, 2012
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Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-005

Client Sample ID: SV-04-DUP
Collection Date 8/21/2012 2:46:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	0.42		ppbv	1	8/24/2012
1,1,2,2-Tetrachloroethane	ND	0.42		ppbv	1	8/24/2012
1,1,2-Trichloroethane	ND	0.42		ppbv	1	8/24/2012
1,1-Dichloroethane	ND	0.42		ppbv	1	8/24/2012
1,1-Dichloroethene	75	0.42		ppbv	1	8/24/2012
1,2,4-Trichlorobenzene	ND	0.42		ppbv	1	8/24/2012
1,2,4-Trimethylbenzene	ND	0.42		ppbv	1	8/24/2012
1,2-Dibromoethane	ND	0.42		ppbv	1	8/24/2012
1,2-Dichlorobenzene	ND	0.42		ppbv	1	8/24/2012
1,2-Dichloroethane	0.96	0.42		ppbv	1	8/24/2012
1,2-Dichloropropane	ND	0.42		ppbv	1	8/24/2012
1,3,5-Trimethylbenzene	ND	0.42		ppbv	1	8/24/2012
1,3-Butadiene	ND	0.42		ppbv	1	8/24/2012
1,3-Dichlorobenzene	ND	0.42		ppbv	1	8/24/2012
1,4-Dichlorobenzene	ND	0.42		ppbv	1	8/24/2012
1,4-Dioxane	ND	1		ppbv	1	8/24/2012
2-Butanone	1	1		ppbv	1	8/24/2012
2-Hexanone	ND	2.1		ppbv	1	8/24/2012
4-Ethyltoluene	ND	0.42		ppbv	1	8/24/2012
4-Methyl-2-pentanone	ND	2.1		ppbv	1	8/24/2012
Acetone	20	4.2	*	ppbv	1	8/24/2012
Benzene	1.1	0.42		ppbv	1	8/24/2012
Benzyl chloride	ND	1		ppbv	1	8/24/2012
Bromodichloromethane	ND	0.42		ppbv	1	8/24/2012
Bromoform	ND	1		ppbv	1	8/24/2012
Bromomethane	ND	1		ppbv	1	8/24/2012
Carbon disulfide	ND	0.42		ppbv	1	8/24/2012
Carbon tetrachloride	ND	0.42		ppbv	1	8/24/2012
Chlorobenzene	ND	0.42		ppbv	1	8/24/2012
Chloroethane	ND	0.42		ppbv	1	8/24/2012
Chloroform	ND	0.42		ppbv	1	8/24/2012
Chloromethane	ND	1		ppbv	1	8/24/2012
cis-1,2-Dichloroethene	24000	210		ppbv	500	8/28/2012
cis-1,3-Dichloropropene	ND	0.42		ppbv	1	8/24/2012
Cyclohexane	0.94	0.42		ppbv	1	8/24/2012
Dibromochloromethane	ND	0.42		ppbv	1	8/24/2012
Dichlorodifluoromethane	ND	0.42		ppbv	1	8/24/2012
Ethyl acetate	ND	0.42		ppbv	1	8/24/2012

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Date Reported: December 31, 2012
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Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-005

Client Sample ID: SV-04-DUP
Collection Date 8/21/2012 2:46:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
Ethylbenzene	ND	0.42		ppbv	1	8/24/2012
Freon-113	ND	0.42		ppbv	1	8/24/2012
Freon-114	ND	2.1		ppbv	1	8/24/2012
Heptane	0.92	0.42		ppbv	1	8/24/2012
Hexachlorobutadiene	ND	0.42		ppbv	1	8/24/2012
Hexane	5.3	1		ppbv	1	8/24/2012
Isopropyl Alcohol	2.5	2.1		ppbv	1	8/24/2012
m,p-Xylene	0.83	0.83		ppbv	1	8/24/2012
Methyl tert-butyl ether	ND	0.42		ppbv	1	8/24/2012
Methylene chloride	ND	4.2		ppbv	1	8/24/2012
o-Xylene	ND	0.42		ppbv	1	8/24/2012
Propene	18	4.2		ppbv	1	8/24/2012
Styrene	ND	0.42		ppbv	1	8/24/2012
Tetrachloroethene	0.46	0.42		ppbv	1	8/24/2012
Tetrahydrofuran	ND	1		ppbv	1	8/24/2012
Toluene	2.7	0.42		ppbv	1	8/24/2012
trans-1,2-Dichloroethene	270	10		ppbv	25	8/25/2012
trans-1,3-Dichloropropene	ND	0.42		ppbv	1	8/24/2012
Trichloroethene	3200	210		ppbv	500	8/28/2012
Trichlorofluoromethane	ND	0.42		ppbv	1	8/24/2012
Vinyl acetate	ND	4.2		ppbv	1	8/24/2012
Vinyl chloride	3100	210		ppbv	500	8/28/2012
Xylenes, Total	1.2	1.2		ppbv	1	8/24/2012
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	2.3		µg/m³	1	8/24/2012
1,1,2,2-Tetrachloroethane	ND	2.9		µg/m³	1	8/24/2012
1,1,2-Trichloroethane	ND	2.3		µg/m³	1	8/24/2012
1,1-Dichloroethane	ND	1.7		µg/m³	1	8/24/2012
1,1-Dichloroethene	300	1.7		µg/m³	1	8/24/2012
1,2,4-Trichlorobenzene	ND	3.1		µg/m³	1	8/24/2012
1,2,4-Trimethylbenzene	ND	2.1		µg/m³	1	8/24/2012
1,2-Dibromoethane	ND	3.1		µg/m³	1	8/24/2012
1,2-Dichlorobenzene	ND	2.5		µg/m³	1	8/24/2012
1,2-Dichloroethane	3.9	1.7		µg/m³	1	8/24/2012
1,2-Dichloropropane	ND	1.9		µg/m³	1	8/24/2012
1,3,5-Trimethylbenzene	ND	2.1		µg/m³	1	8/24/2012
1,3-Butadiene	ND	0.83		µg/m³	1	8/24/2012
1,3-Dichlorobenzene	ND	2.5		µg/m³	1	8/24/2012

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Lab ID: 12080703-005

Client Sample ID: SV-04-DUP
Collection Date 8/21/2012 2:46:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,4-Dichlorobenzene	ND	2.5		µg/m³	1	8/24/2012
1,4-Dioxane	ND	3.7		µg/m³	1	8/24/2012
2-Butanone	3	2.9		µg/m³	1	8/24/2012
2-Hexanone	ND	8.5		µg/m³	1	8/24/2012
4-Ethyltoluene	ND	2.1		µg/m³	1	8/24/2012
4-Methyl-2-pentanone	ND	8.5		µg/m³	1	8/24/2012
Acetone	48	10	*	µg/m³	1	8/24/2012
Benzene	3.4	1.2		µg/m³	1	8/24/2012
Benzyl chloride	ND	5.4		µg/m³	1	8/24/2012
Bromodichloromethane	ND	2.7		µg/m³	1	8/24/2012
Bromoform	ND	11		µg/m³	1	8/24/2012
Bromomethane	ND	4		µg/m³	1	8/24/2012
Carbon disulfide	ND	1.3		µg/m³	1	8/24/2012
Carbon tetrachloride	ND	2.7		µg/m³	1	8/24/2012
Chlorobenzene	ND	1.9		µg/m³	1	8/24/2012
Chloroethane	ND	1		µg/m³	1	8/24/2012
Chloroform	ND	2.1		µg/m³	1	8/24/2012
Chloromethane	ND	2.1		µg/m³	1	8/24/2012
cis-1,2-Dichloroethene	96000	830		µg/m³	500	8/28/2012
cis-1,3-Dichloropropene	ND	1.9		µg/m³	1	8/24/2012
Cyclohexane	3.2	1.5		µg/m³	1	8/24/2012
Dibromochloromethane	ND	3.5		µg/m³	1	8/24/2012
Dichlorodifluoromethane	ND	2.1		µg/m³	1	8/24/2012
Ethyl acetate	ND	1.5		µg/m³	1	8/24/2012
Ethylbenzene	ND	1.9		µg/m³	1	8/24/2012
Freon-113	ND	3.1		µg/m³	1	8/24/2012
Freon-114	ND	15		µg/m³	1	8/24/2012
Heptane	3.8	1.7		µg/m³	1	8/24/2012
Hexachlorobutadiene	ND	4.4		µg/m³	1	8/24/2012
Hexane	19	3.7		µg/m³	1	8/24/2012
Isopropyl Alcohol	6.2	5.2		µg/m³	1	8/24/2012
m,p-Xylene	3.6	3.5		µg/m³	1	8/24/2012
Methyl tert-butyl ether	ND	1.5		µg/m³	1	8/24/2012
Methylene chloride	ND	14		µg/m³	1	8/24/2012
o-Xylene	ND	1.9		µg/m³	1	8/24/2012
Propene	32	7.1		µg/m³	1	8/24/2012
Styrene	ND	1.9		µg/m³	1	8/24/2012
Tetrachloroethene	3.1	2.9		µg/m³	1	8/24/2012

Qualifiers:
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H - Holding time exceeded

STAT Analysis Corporation
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Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-005

Client Sample ID: SV-04-DUP
Collection Date 8/21/2012 2:46:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
Tetrahydrofuran	ND	3.1		µg/m³	1	8/24/2012
Toluene	10	1.7		µg/m³	1	8/24/2012
trans-1,2-Dichloroethene	1100	42		µg/m³	25	8/25/2012
trans-1,3-Dichloropropene	ND	1.9		µg/m³	1	8/24/2012
Trichloroethene	17000	1100		µg/m³	500	8/28/2012
Trichlorofluoromethane	ND	2.3		µg/m³	1	8/24/2012
Vinyl acetate	ND	15		µg/m³	1	8/24/2012
Vinyl chloride	7900	520		µg/m³	500	8/28/2012
Xylenes, Total	5.3	5		µg/m³	1	8/24/2012

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E - Value above quantitation range
H - Holding time exceeded

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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-006

Client Sample ID: SV-05
Collection Date 8/21/2012 3:25:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	0.33		ppbv	1	8/24/2012
1,1,2,2-Tetrachloroethane	ND	0.33		ppbv	1	8/24/2012
1,1,2-Trichloroethane	ND	0.33		ppbv	1	8/24/2012
1,1-Dichloroethane	ND	0.33		ppbv	1	8/24/2012
1,1-Dichloroethene	ND	0.33		ppbv	1	8/24/2012
1,2,4-Trichlorobenzene	ND	0.33		ppbv	1	8/24/2012
1,2,4-Trimethylbenzene	ND	0.33		ppbv	1	8/24/2012
1,2-Dibromoethane	ND	0.33		ppbv	1	8/24/2012
1,2-Dichlorobenzene	ND	0.33		ppbv	1	8/24/2012
1,2-Dichloroethane	ND	0.33		ppbv	1	8/24/2012
1,2-Dichloropropane	ND	0.33		ppbv	1	8/24/2012
1,3,5-Trimethylbenzene	ND	0.33		ppbv	1	8/24/2012
1,3-Butadiene	ND	0.33		ppbv	1	8/24/2012
1,3-Dichlorobenzene	ND	0.33		ppbv	1	8/24/2012
1,4-Dichlorobenzene	ND	0.33		ppbv	1	8/24/2012
1,4-Dioxane	ND	0.82		ppbv	1	8/24/2012
2-Butanone	1.1	0.82		ppbv	1	8/24/2012
2-Hexanone	ND	1.6		ppbv	1	8/24/2012
4-Ethyltoluene	ND	0.33		ppbv	1	8/24/2012
4-Methyl-2-pentanone	ND	1.6		ppbv	1	8/24/2012
Acetone	17	3.3	*	ppbv	1	8/24/2012
Benzene	0.41	0.33		ppbv	1	8/24/2012
Benzyl chloride	ND	0.82		ppbv	1	8/24/2012
Bromodichloromethane	ND	0.33		ppbv	1	8/24/2012
Bromoform	ND	0.82		ppbv	1	8/24/2012
Bromomethane	ND	0.82		ppbv	1	8/24/2012
Carbon disulfide	0.35	0.33		ppbv	1	8/24/2012
Carbon tetrachloride	ND	0.33		ppbv	1	8/24/2012
Chlorobenzene	ND	0.33		ppbv	1	8/24/2012
Chloroethane	ND	0.33		ppbv	1	8/24/2012
Chloroform	ND	0.33		ppbv	1	8/24/2012
Chloromethane	ND	0.82		ppbv	1	8/24/2012
cis-1,2-Dichloroethene	150	8.2		ppbv	25	8/25/2012
cis-1,3-Dichloropropene	ND	0.33		ppbv	1	8/24/2012
Cyclohexane	ND	0.33		ppbv	1	8/24/2012
Dibromochloromethane	ND	0.33		ppbv	1	8/24/2012
Dichlorodifluoromethane	0.43	0.33		ppbv	1	8/24/2012
Ethyl acetate	ND	0.33		ppbv	1	8/24/2012

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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-006

Client Sample ID: SV-05
Collection Date 8/21/2012 3:25:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
Ethylbenzene	ND	0.33		ppbv	1	8/24/2012
Freon-113	ND	0.33		ppbv	1	8/24/2012
Freon-114	ND	1.6		ppbv	1	8/24/2012
Heptane	0.56	0.33		ppbv	1	8/24/2012
Hexachlorobutadiene	ND	0.33		ppbv	1	8/24/2012
Hexane	1.2	0.82		ppbv	1	8/24/2012
Isopropyl Alcohol	ND	1.6		ppbv	1	8/24/2012
m,p-Xylene	ND	0.66		ppbv	1	8/24/2012
Methyl tert-butyl ether	ND	0.33		ppbv	1	8/24/2012
Methylene chloride	ND	3.3		ppbv	1	8/24/2012
o-Xylene	ND	0.33		ppbv	1	8/24/2012
Propene	ND	3.3		ppbv	1	8/24/2012
Styrene	ND	0.33		ppbv	1	8/24/2012
Tetrachloroethene	ND	0.33		ppbv	1	8/24/2012
Tetrahydrofuran	ND	0.82		ppbv	1	8/24/2012
Toluene	1.4	0.33		ppbv	1	8/24/2012
trans-1,2-Dichloroethene	2.3	0.33		ppbv	1	8/28/2012
trans-1,3-Dichloropropene	ND	0.33		ppbv	1	8/24/2012
Trichloroethene	5.3	0.33		ppbv	1	8/28/2012
Trichlorofluoromethane	ND	0.33		ppbv	1	8/24/2012
Vinyl acetate	ND	3.3		ppbv	1	8/24/2012
Vinyl chloride	9.4	0.33		ppbv	1	8/28/2012
Xylenes, Total	ND	0.99		ppbv	1	8/24/2012
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	1.8		µg/m³	1	8/24/2012
1,1,2,2-Tetrachloroethane	ND	2.3		µg/m³	1	8/24/2012
1,1,2-Trichloroethane	ND	1.8		µg/m³	1	8/24/2012
1,1-Dichloroethane	ND	1.3		µg/m³	1	8/24/2012
1,1-Dichloroethene	ND	1.5		µg/m³	1	8/24/2012
1,2,4-Trichlorobenzene	ND	2.5		µg/m³	1	8/24/2012
1,2,4-Trimethylbenzene	ND	1.6		µg/m³	1	8/24/2012
1,2-Dibromoethane	ND	2.5		µg/m³	1	8/24/2012
1,2-Dichlorobenzene	ND	2		µg/m³	1	8/24/2012
1,2-Dichloroethane	ND	1.3		µg/m³	1	8/24/2012
1,2-Dichloropropane	ND	1.5		µg/m³	1	8/24/2012
1,3,5-Trimethylbenzene	ND	1.6		µg/m³	1	8/24/2012
1,3-Butadiene	ND	0.66		µg/m³	1	8/24/2012
1,3-Dichlorobenzene	ND	2		µg/m³	1	8/24/2012

Qualifiers:
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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-006

Client Sample ID: SV-05
Collection Date 8/21/2012 3:25:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,4-Dichlorobenzene	ND	2		µg/m³	1	8/24/2012
1,4-Dioxane	ND	3		µg/m³	1	8/24/2012
2-Butanone	3.2	2.5		µg/m³	1	8/24/2012
2-Hexanone	ND	6.7		µg/m³	1	8/24/2012
4-Ethyltoluene	ND	1.6		µg/m³	1	8/24/2012
4-Methyl-2-pentanone	ND	6.7		µg/m³	1	8/24/2012
Acetone	40	7.9	*	µg/m³	1	8/24/2012
Benzene	1.3	0.99		µg/m³	1	8/24/2012
Benzyl chloride	ND	4.3		µg/m³	1	8/24/2012
Bromodichloromethane	ND	2.1		µg/m³	1	8/24/2012
Bromoform	ND	8.5		µg/m³	1	8/24/2012
Bromomethane	ND	3.1		µg/m³	1	8/24/2012
Carbon disulfide	1.1	1		µg/m³	1	8/24/2012
Carbon tetrachloride	ND	2.1		µg/m³	1	8/24/2012
Chlorobenzene	ND	1.5		µg/m³	1	8/24/2012
Chloroethane	ND	0.82		µg/m³	1	8/24/2012
Chloroform	ND	1.6		µg/m³	1	8/24/2012
Chloromethane	ND	1.6		µg/m³	1	8/24/2012
cis-1,2-Dichloroethene	590	33		µg/m³	25	8/25/2012
cis-1,3-Dichloropropene	ND	1.5		µg/m³	1	8/24/2012
Cyclohexane	ND	1.2		µg/m³	1	8/24/2012
Dibromochloromethane	ND	2.8		µg/m³	1	8/24/2012
Dichlorodifluoromethane	2.1	1.6		µg/m³	1	8/24/2012
Ethyl acetate	ND	1.2		µg/m³	1	8/24/2012
Ethylbenzene	ND	1.5		µg/m³	1	8/24/2012
Freon-113	ND	2.5		µg/m³	1	8/24/2012
Freon-114	ND	12		µg/m³	1	8/24/2012
Heptane	2.3	1.3		µg/m³	1	8/24/2012
Hexachlorobutadiene	ND	3.5		µg/m³	1	8/24/2012
Hexane	4.1	3		µg/m³	1	8/24/2012
Isopropyl Alcohol	ND	4.1		µg/m³	1	8/24/2012
m,p-Xylene	ND	3		µg/m³	1	8/24/2012
Methyl tert-butyl ether	ND	1.2		µg/m³	1	8/24/2012
Methylene chloride	ND	11		µg/m³	1	8/24/2012
o-Xylene	ND	1.5		µg/m³	1	8/24/2012
Propene	ND	5.8		µg/m³	1	8/24/2012
Styrene	ND	1.5		µg/m³	1	8/24/2012
Tetrachloroethene	ND	2.3		µg/m³	1	8/24/2012

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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-006

Client Sample ID: SV-05
Collection Date 8/21/2012 3:25:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
Tetrahydrofuran	ND	2.5		µg/m³	1	8/24/2012
Toluene	5.3	1.3		µg/m³	1	8/24/2012
trans-1,2-Dichloroethene	8.9	1.3		µg/m³	1	8/24/2012
trans-1,2-Dichloroethene	9	1.3		µg/m³	1	8/28/2012
trans-1,3-Dichloropropene	ND	1.5		µg/m³	1	8/24/2012
Trichloroethene	30	1.8		µg/m³	1	8/24/2012
Trichloroethene	28	1.8		µg/m³	1	8/28/2012
Trichlorofluoromethane	ND	1.8		µg/m³	1	8/24/2012
Vinyl acetate	ND	12		µg/m³	1	8/24/2012
Vinyl chloride	23	0.82		µg/m³	1	8/24/2012
Vinyl chloride	24	0.82		µg/m³	1	8/28/2012
Xylenes, Total	ND	4.3		µg/m³	1	8/24/2012

Qualifiers:
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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-007

Client Sample ID: SV-06
Collection Date 8/21/2012 4:00:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	0.36		ppbv	1	8/28/2012
1,1,2,2-Tetrachloroethane	ND	0.36		ppbv	1	8/28/2012
1,1,2-Trichloroethane	ND	0.36		ppbv	1	8/28/2012
1,1-Dichloroethane	ND	0.36		ppbv	1	8/28/2012
1,1-Dichloroethene	ND	0.36		ppbv	1	8/28/2012
1,2,4-Trichlorobenzene	ND	0.36		ppbv	1	8/28/2012
1,2,4-Trimethylbenzene	ND	0.36		ppbv	1	8/28/2012
1,2-Dibromoethane	ND	0.36		ppbv	1	8/28/2012
1,2-Dichlorobenzene	ND	0.36		ppbv	1	8/28/2012
1,2-Dichloroethane	ND	0.36		ppbv	1	8/28/2012
1,2-Dichloropropane	ND	0.36		ppbv	1	8/28/2012
1,3,5-Trimethylbenzene	ND	0.36		ppbv	1	8/28/2012
1,3-Butadiene	ND	0.36		ppbv	1	8/28/2012
1,3-Dichlorobenzene	ND	0.36		ppbv	1	8/28/2012
1,4-Dichlorobenzene	ND	0.36		ppbv	1	8/28/2012
1,4-Dioxane	ND	0.9		ppbv	1	8/28/2012
2-Butanone	ND	0.9		ppbv	1	8/28/2012
2-Hexanone	ND	1.8		ppbv	1	8/28/2012
4-Ethyltoluene	ND	0.36		ppbv	1	8/28/2012
4-Methyl-2-pentanone	ND	1.8		ppbv	1	8/28/2012
Acetone	16	3.6	*	ppbv	1	8/28/2012
Benzene	ND	0.36		ppbv	1	8/28/2012
Benzyl chloride	ND	0.9		ppbv	1	8/28/2012
Bromodichloromethane	ND	0.36		ppbv	1	8/28/2012
Bromoform	ND	0.9		ppbv	1	8/28/2012
Bromomethane	ND	0.9		ppbv	1	8/28/2012
Carbon disulfide	ND	0.36		ppbv	1	8/28/2012
Carbon tetrachloride	ND	0.36		ppbv	1	8/28/2012
Chlorobenzene	ND	0.36		ppbv	1	8/28/2012
Chloroethane	ND	0.36		ppbv	1	8/28/2012
Chloroform	ND	0.36		ppbv	1	8/28/2012
Chloromethane	ND	0.9		ppbv	1	8/28/2012
cis-1,2-Dichloroethene	16	0.36		ppbv	1	8/28/2012
cis-1,3-Dichloropropene	ND	0.36		ppbv	1	8/28/2012
Cyclohexane	ND	0.36		ppbv	1	8/28/2012
Dibromochloromethane	ND	0.36		ppbv	1	8/28/2012
Dichlorodifluoromethane	0.47	0.36		ppbv	1	8/28/2012
Ethyl acetate	ND	0.36		ppbv	1	8/28/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
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E - Value above quantitation range
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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-007

Client Sample ID: SV-06
Collection Date 8/21/2012 4:00:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
Ethylbenzene	ND	0.36		ppbv	1	8/28/2012
Freon-113	ND	0.36		ppbv	1	8/28/2012
Freon-114	ND	1.8		ppbv	1	8/28/2012
Heptane	ND	0.36		ppbv	1	8/28/2012
Hexachlorobutadiene	ND	0.36		ppbv	1	8/28/2012
Hexane	ND	0.9		ppbv	1	8/28/2012
Isopropyl Alcohol	ND	1.8		ppbv	1	8/28/2012
m,p-Xylene	ND	0.72		ppbv	1	8/28/2012
Methyl tert-butyl ether	ND	0.36		ppbv	1	8/28/2012
Methylene chloride	ND	3.6		ppbv	1	8/28/2012
o-Xylene	ND	0.36		ppbv	1	8/28/2012
Propene	ND	3.6		ppbv	1	8/28/2012
Styrene	ND	0.36		ppbv	1	8/28/2012
Tetrachloroethene	ND	0.36		ppbv	1	8/28/2012
Tetrahydrofuran	ND	0.9		ppbv	1	8/28/2012
Toluene	0.43	0.36		ppbv	1	8/28/2012
trans-1,2-Dichloroethene	ND	0.36		ppbv	1	8/28/2012
trans-1,3-Dichloropropene	ND	0.36		ppbv	1	8/28/2012
Trichloroethene	0.78	0.36		ppbv	1	8/28/2012
Trichlorofluoromethane	ND	0.36		ppbv	1	8/28/2012
Vinyl acetate	ND	3.6		ppbv	1	8/28/2012
Vinyl chloride	0.9	0.36		ppbv	1	8/28/2012
Xylenes, Total	ND	1.1		ppbv	1	8/28/2012
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	2		µg/m³	1	8/28/2012
1,1,2,2-Tetrachloroethane	ND	2.5		µg/m³	1	8/28/2012
1,1,2-Trichloroethane	ND	2		µg/m³	1	8/28/2012
1,1-Dichloroethane	ND	1.4		µg/m³	1	8/28/2012
1,1-Dichloroethene	ND	1.4		µg/m³	1	8/28/2012
1,2,4-Trichlorobenzene	ND	2.7		µg/m³	1	8/28/2012
1,2,4-Trimethylbenzene	ND	1.8		µg/m³	1	8/28/2012
1,2-Dibromoethane	ND	2.7		µg/m³	1	8/28/2012
1,2-Dichlorobenzene	ND	2.2		µg/m³	1	8/28/2012
1,2-Dichloroethane	ND	1.4		µg/m³	1	8/28/2012
1,2-Dichloropropane	ND	1.6		µg/m³	1	8/28/2012
1,3,5-Trimethylbenzene	ND	1.8		µg/m³	1	8/28/2012
1,3-Butadiene	ND	0.72		µg/m³	1	8/28/2012
1,3-Dichlorobenzene	ND	2.2		µg/m³	1	8/28/2012

Qualifiers:
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R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

STAT Analysis Corporation
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Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-007

Client Sample ID: SV-06
Collection Date 8/21/2012 4:00:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,4-Dichlorobenzene	ND	2.2		µg/m³	1	8/28/2012
1,4-Dioxane	ND	3.2		µg/m³	1	8/28/2012
2-Butanone	ND	2.7		µg/m³	1	8/28/2012
2-Hexanone	ND	7.4		µg/m³	1	8/28/2012
4-Ethyltoluene	ND	1.8		µg/m³	1	8/28/2012
4-Methyl-2-pentanone	ND	7.4		µg/m³	1	8/28/2012
Acetone	39	8.7	*	µg/m³	1	8/28/2012
Benzene	ND	1.1		µg/m³	1	8/28/2012
Benzyl chloride	ND	4.7		µg/m³	1	8/28/2012
Bromodichloromethane	ND	2.3		µg/m³	1	8/28/2012
Bromoform	ND	9.4		µg/m³	1	8/28/2012
Bromomethane	ND	3.4		µg/m³	1	8/28/2012
Carbon disulfide	ND	1.1		µg/m³	1	8/28/2012
Carbon tetrachloride	ND	2.3		µg/m³	1	8/28/2012
Chlorobenzene	ND	1.6		µg/m³	1	8/28/2012
Chloroethane	ND	0.9		µg/m³	1	8/28/2012
Chloroform	ND	1.8		µg/m³	1	8/28/2012
Chloromethane	ND	1.8		µg/m³	1	8/28/2012
cis-1,2-Dichloroethene	64	1.4		µg/m³	1	8/28/2012
cis-1,3-Dichloropropene	ND	1.6		µg/m³	1	8/28/2012
Cyclohexane	ND	1.3		µg/m³	1	8/28/2012
Dibromochloromethane	ND	3.1		µg/m³	1	8/28/2012
Dichlorodifluoromethane	2.3	1.8		µg/m³	1	8/28/2012
Ethyl acetate	ND	1.3		µg/m³	1	8/28/2012
Ethylbenzene	ND	1.6		µg/m³	1	8/28/2012
Freon-113	ND	2.7		µg/m³	1	8/28/2012
Freon-114	ND	13		µg/m³	1	8/28/2012
Heptane	ND	1.4		µg/m³	1	8/28/2012
Hexachlorobutadiene	ND	3.8		µg/m³	1	8/28/2012
Hexane	ND	3.2		µg/m³	1	8/28/2012
Isopropyl Alcohol	ND	4.5		µg/m³	1	8/28/2012
m,p-Xylene	ND	3.1		µg/m³	1	8/28/2012
Methyl tert-butyl ether	ND	1.3		µg/m³	1	8/28/2012
Methylene chloride	ND	12		µg/m³	1	8/28/2012
o-Xylene	ND	1.6		µg/m³	1	8/28/2012
Propene	ND	6.1		µg/m³	1	8/28/2012
Styrene	ND	1.6		µg/m³	1	8/28/2012
Tetrachloroethene	ND	2.5		µg/m³	1	8/28/2012

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H - Holding time exceeded

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Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-007

Client Sample ID: SV-06
Collection Date 8/21/2012 4:00:00 PM
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
Tetrahydrofuran	ND	2.7		µg/m³	1	8/28/2012
Toluene	1.6	1.4		µg/m³	1	8/28/2012
trans-1,2-Dichloroethene	ND	1.4		µg/m³	1	8/28/2012
trans-1,3-Dichloropropene	ND	1.6		µg/m³	1	8/28/2012
Trichloroethene	4.2	2		µg/m³	1	8/28/2012
Trichlorofluoromethane	ND	2		µg/m³	1	8/28/2012
Vinyl acetate	ND	13		µg/m³	1	8/28/2012
Vinyl chloride	2.3	0.9		µg/m³	1	8/28/2012
Xylenes, Total	ND	4.7		µg/m³	1	8/28/2012

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H - Holding time exceeded

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Accreditation Numbers: IEPA ELAP 100445; ORELAP IL300001; AIHA 101160; NVLAP LabCode 101202

Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-008

Client Sample ID: Field Blank
Collection Date 8/21/2012
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	0.2		ppbv	1	8/23/2012
1,1,2,2-Tetrachloroethane	ND	0.2		ppbv	1	8/23/2012
1,1,2-Trichloroethane	ND	0.2		ppbv	1	8/23/2012
1,1-Dichloroethane	ND	0.2		ppbv	1	8/23/2012
1,1-Dichloroethene	ND	0.2		ppbv	1	8/23/2012
1,2,4-Trichlorobenzene	ND	0.2		ppbv	1	8/23/2012
1,2,4-Trimethylbenzene	ND	0.2		ppbv	1	8/23/2012
1,2-Dibromoethane	ND	0.2		ppbv	1	8/23/2012
1,2-Dichlorobenzene	ND	0.2		ppbv	1	8/23/2012
1,2-Dichloroethane	ND	0.2		ppbv	1	8/23/2012
1,2-Dichloropropane	ND	0.2		ppbv	1	8/23/2012
1,3,5-Trimethylbenzene	ND	0.2		ppbv	1	8/23/2012
1,3-Butadiene	ND	0.2		ppbv	1	8/23/2012
1,3-Dichlorobenzene	ND	0.2		ppbv	1	8/23/2012
1,4-Dichlorobenzene	ND	0.2		ppbv	1	8/23/2012
1,4-Dioxane	ND	0.5		ppbv	1	8/23/2012
2-Butanone	ND	0.5		ppbv	1	8/23/2012
2-Hexanone	ND	1		ppbv	1	8/23/2012
4-Ethyltoluene	ND	0.2		ppbv	1	8/23/2012
4-Methyl-2-pentanone	ND	1		ppbv	1	8/23/2012
Acetone	ND	2	*	ppbv	1	8/23/2012
Benzene	ND	0.2		ppbv	1	8/23/2012
Benzyl chloride	ND	0.5		ppbv	1	8/23/2012
Bromodichloromethane	ND	0.2		ppbv	1	8/23/2012
Bromoform	ND	0.5		ppbv	1	8/23/2012
Bromomethane	ND	0.5		ppbv	1	8/23/2012
Carbon disulfide	ND	0.2		ppbv	1	8/23/2012
Carbon tetrachloride	ND	0.2		ppbv	1	8/23/2012
Chlorobenzene	ND	0.2		ppbv	1	8/23/2012
Chloroethane	ND	0.2		ppbv	1	8/23/2012
Chloroform	ND	0.2		ppbv	1	8/23/2012
Chloromethane	ND	0.5		ppbv	1	8/23/2012
cis-1,2-Dichloroethene	ND	0.2		ppbv	1	8/23/2012
cis-1,3-Dichloropropene	ND	0.2		ppbv	1	8/23/2012
Cyclohexane	ND	0.2		ppbv	1	8/23/2012
Dibromochloromethane	ND	0.2		ppbv	1	8/23/2012
Dichlorodifluoromethane	ND	0.2		ppbv	1	8/23/2012
Ethyl acetate	ND	0.2		ppbv	1	8/23/2012

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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-008

Client Sample ID: Field Blank
Collection Date 8/21/2012
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
Ethylbenzene	ND	0.2		ppbv	1	8/23/2012
Freon-113	ND	0.2		ppbv	1	8/23/2012
Freon-114	ND	1		ppbv	1	8/23/2012
Heptane	ND	0.2		ppbv	1	8/23/2012
Hexachlorobutadiene	ND	0.2		ppbv	1	8/23/2012
Hexane	ND	0.5		ppbv	1	8/23/2012
Isopropyl Alcohol	ND	1		ppbv	1	8/23/2012
m,p-Xylene	ND	0.4		ppbv	1	8/23/2012
Methyl tert-butyl ether	ND	0.2		ppbv	1	8/23/2012
Methylene chloride	ND	2		ppbv	1	8/23/2012
o-Xylene	ND	0.2		ppbv	1	8/23/2012
Propene	ND	2		ppbv	1	8/23/2012
Styrene	ND	0.2		ppbv	1	8/23/2012
Tetrachloroethene	ND	0.2		ppbv	1	8/23/2012
Tetrahydrofuran	ND	0.5		ppbv	1	8/23/2012
Toluene	ND	0.2		ppbv	1	8/23/2012
trans-1,2-Dichloroethene	ND	0.2		ppbv	1	8/23/2012
trans-1,3-Dichloropropene	ND	0.2		ppbv	1	8/23/2012
Trichloroethene	ND	0.2		ppbv	1	8/23/2012
Trichlorofluoromethane	ND	0.2		ppbv	1	8/23/2012
Vinyl acetate	ND	2		ppbv	1	8/23/2012
Vinyl chloride	ND	0.2		ppbv	1	8/23/2012
Xylenes, Total	ND	0.6		ppbv	1	8/23/2012
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,1,1-Trichloroethane	ND	1.1		µg/m³	1	8/23/2012
1,1,2,2-Tetrachloroethane	ND	1.4		µg/m³	1	8/23/2012
1,1,2-Trichloroethane	ND	1.1		µg/m³	1	8/23/2012
1,1-Dichloroethane	ND	0.8		µg/m³	1	8/23/2012
1,1-Dichloroethene	ND	0.8		µg/m³	1	8/23/2012
1,2,4-Trichlorobenzene	ND	1.5		µg/m³	1	8/23/2012
1,2,4-Trimethylbenzene	ND	1		µg/m³	1	8/23/2012
1,2-Dibromoethane	ND	1.5		µg/m³	1	8/23/2012
1,2-Dichlorobenzene	ND	1.2		µg/m³	1	8/23/2012
1,2-Dichloroethane	ND	0.8		µg/m³	1	8/23/2012
1,2-Dichloropropane	ND	0.9		µg/m³	1	8/23/2012
1,3,5-Trimethylbenzene	ND	1		µg/m³	1	8/23/2012
1,3-Butadiene	ND	0.4		µg/m³	1	8/23/2012
1,3-Dichlorobenzene	ND	1.2		µg/m³	1	8/23/2012

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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-008

Client Sample ID: Field Blank
Collection Date 8/21/2012
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
1,4-Dichlorobenzene	ND	1.2		µg/m³	1	8/23/2012
1,4-Dioxane	ND	1.8		µg/m³	1	8/23/2012
2-Butanone	ND	1.5		µg/m³	1	8/23/2012
2-Hexanone	ND	4.1		µg/m³	1	8/23/2012
4-Ethyltoluene	ND	1		µg/m³	1	8/23/2012
4-Methyl-2-pentanone	ND	4.1		µg/m³	1	8/23/2012
Acetone	ND	4.8	*	µg/m³	1	8/23/2012
Benzene	ND	0.6		µg/m³	1	8/23/2012
Benzyl chloride	ND	2.6		µg/m³	1	8/23/2012
Bromodichloromethane	ND	1.3		µg/m³	1	8/23/2012
Bromoform	ND	5.2		µg/m³	1	8/23/2012
Bromomethane	ND	1.9		µg/m³	1	8/23/2012
Carbon disulfide	ND	0.62		µg/m³	1	8/23/2012
Carbon tetrachloride	ND	1.3		µg/m³	1	8/23/2012
Chlorobenzene	ND	0.9		µg/m³	1	8/23/2012
Chloroethane	ND	0.5		µg/m³	1	8/23/2012
Chloroform	ND	1		µg/m³	1	8/23/2012
Chloromethane	ND	1		µg/m³	1	8/23/2012
cis-1,2-Dichloroethene	ND	0.8		µg/m³	1	8/23/2012
cis-1,3-Dichloropropene	ND	0.9		µg/m³	1	8/23/2012
Cyclohexane	ND	0.7		µg/m³	1	8/23/2012
Dibromochloromethane	ND	1.7		µg/m³	1	8/23/2012
Dichlorodifluoromethane	ND	1		µg/m³	1	8/23/2012
Ethyl acetate	ND	0.7		µg/m³	1	8/23/2012
Ethylbenzene	ND	0.9		µg/m³	1	8/23/2012
Freon-113	ND	1.5		µg/m³	1	8/23/2012
Freon-114	ND	7		µg/m³	1	8/23/2012
Heptane	ND	0.8		µg/m³	1	8/23/2012
Hexachlorobutadiene	ND	2.1		µg/m³	1	8/23/2012
Hexane	ND	1.8		µg/m³	1	8/23/2012
Isopropyl Alcohol	ND	2.5		µg/m³	1	8/23/2012
m,p-Xylene	ND	1.7		µg/m³	1	8/23/2012
Methyl tert-butyl ether	ND	0.7		µg/m³	1	8/23/2012
Methylene chloride	ND	6.9		µg/m³	1	8/23/2012
o-Xylene	ND	0.9		µg/m³	1	8/23/2012
Propene	ND	3.4		µg/m³	1	8/23/2012
Styrene	ND	0.9		µg/m³	1	8/23/2012
Tetrachloroethene	ND	1.4		µg/m³	1	8/23/2012

Qualifiers:
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Date Reported: December 31, 2012
Date Printed: December 31, 2012

Client: Terracon Consultants, Inc.
Lab Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL
Lab ID: 12080703-008

Client Sample ID: Field Blank
Collection Date 8/21/2012
Matrix: Air

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds in Air by GC/MS	**TO-15**			Prep Date: **8/23/2012**		Analyst: **VP**
Tetrahydrofuran	ND	1.5		µg/m³	1	8/23/2012
Toluene	ND	0.8		µg/m³	1	8/23/2012
trans-1,2-Dichloroethene	ND	0.8		µg/m³	1	8/23/2012
trans-1,3-Dichloropropene	ND	0.9		µg/m³	1	8/23/2012
Trichloroethene	ND	1.1		µg/m³	1	8/23/2012
Trichlorofluoromethane	ND	1.1		µg/m³	1	8/23/2012
Vinyl acetate	ND	7		µg/m³	1	8/23/2012
Vinyl chloride	ND	0.5		µg/m³	1	8/23/2012
Xylenes, Total	ND	2.6		µg/m³	1	8/23/2012

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quanititation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

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e-mail address: STATinfo@STATAnalysis.com AIHA, NVLAP and NELAP accredited

CHAIN OF CUSTODY RECORD

№: 844733 Page: 1 of 1

Company: Terracon
Project Number: A2107617-7A Client Tracking No.:
Project Name: DCE-Kimball
Project Location: Chicago, IL
Sampler(s): Tom Tucker
Report To: Matt Ahn Phone: 312-575-0414
Tom Tucker Fax:
QC Level: 1 ____ 2 ____ 3 ____ 4 ____ e-mail:

P.O. No.:
Quote No.:

Turn Around: Standard
Results Needed: / / am/pm

Client Sample Number/Description:	Date Taken	Time Taken	Matrix	Comp.	Grab	Preserv.	No. of Containers	TO-15	Remarks	Lab No.:
SV-01	8-21-12	12:45	SV				1	X		001
SV-02		13:19	SV				1	X		002
SV-03		14:10	SV				1	X		003
SV-04		14:46	SV				1	X		004
SV-04-DUP		14:46	SV				1	X		005
SV-05		15:25	SV				1	X		006
SV-06	↓	Void	SV				1	X		007
Field Blank	8-21-12		SV				1	X		008

Relinquished by: (Signature)	Date/Time: 8-21-12 17:00	
Received by: (Signature)	Date/Time: 8/21/12 17:00	
Relinquished by: (Signature)	Date/Time:	
Received by: (Signature)	Date/Time:	
Relinquished by: (Signature)	Date/Time:	
Received by: (Signature)	Date/Time:	

Comments: 3-Day (24 Standard TAT

Laboratory Work Order No.: 12080703

Received on Ice: Yes ☐ No ☒

Temperature: Ambient °C

Preservation Code: A = None B = HNO_3 C = NaOH
D = H_2SO_4 E = HCl F = 5035/EnCore G = Other

STAT Analysis Corporation

Sample Receipt Checklist

Client Name TERRACON - CHICAGO

Date and Time Received: 8/21/2012 5:00:00 PM

Work Order Number 12080703

Received by: KDC

Checklist completed by: Signature 8/21/12 Date

Reviewed by: KL Initials 8/23/12 Date

Matrix: Carrier name: Client Delivered

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels/containers?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container or Temp Blank temperature in compliance?	Yes ☑	No ☐	Temperature Ambient °C
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☐	No ☐
Water - Samples pH checked?	Yes ☐	No ☐	Checked by: _____
Water - Samples properly preserved?	Yes ☐	No ☐	pH Adjusted? _____

Any No response must be detailed in the comments section below.

Comments: _____

Client / Person contacted: _____ Date contacted: _____ Contacted by: _____

Response: _____

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82785

Sample ID: **MB082312-5** SampType: **MBLK** TestCode: **TO_15A+** Units: **ppbv** Prep Date: Run ID: **VOA-5_120823A**
Client ID: **ZZZZZ** Batch ID: **R82785** TestNo: **TO-15** Analysis Date: **8/23/2012** SeqNo: **2226897**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.20									
1,1,2,2-Tetrachloroethane	ND	0.20									
1,1,2-Trichloroethane	ND	0.20									
1,1-Dichloroethane	ND	0.20									
1,1-Dichloroethene	ND	0.20									
1,2,4-Trichlorobenzene	ND	0.20									
1,2,4-Trimethylbenzene	ND	0.20									
1,2-Dibromoethane	ND	0.20									
1,2-Dichlorobenzene	ND	0.20									
1,2-Dichloroethane	ND	0.20									
1,2-Dichloropropane	ND	0.20									
1,3,5-Trimethylbenzene	ND	0.20									
1,3-Butadiene	ND	0.20									
1,3-Dichlorobenzene	ND	0.20									
1,4-Dichlorobenzene	ND	0.20									
1,4-Dioxane	ND	1.0									
2-Butanone	ND	0.50									
2-Hexanone	ND	1.0									
4-Ethyltoluene	ND	0.20									
4-Methyl-2-pentanone	ND	1.0									
Acetone	ND	2.0									*
Benzene	ND	0.20									
Benzyl chloride	ND	0.50									
Bromodichloromethane	ND	0.20									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon disulfide	ND	0.20									
Carbon tetrachloride	ND	0.20									
Chlorobenzene	ND	0.20									
Chloroethane	ND	0.20									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82785

Sample ID: **MB082312-5**	SampType: **MBLK**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120823A**
Client ID: **ZZZZZ**	Batch ID: **R82785**	TestNo: **TO-15**		Analysis Date: **8/23/2012**	SeqNo: **2226897**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloroform	ND	0.20									
Chloromethane	ND	0.50									
cis-1,2-Dichloroethene	ND	0.20									
cis-1,3-Dichloropropene	ND	0.20									
Cyclohexane	ND	0.20									
Dibromochloromethane	ND	0.20									
Dichlorodifluoromethane	ND	0.20									
Ethyl acetate	ND	0.20									
Ethylbenzene	ND	0.20									
Freon-113	ND	0.20									
Freon-114	ND	1.0									
Heptane	ND	0.20									
Hexachlorobutadiene	ND	0.20									
Hexane	ND	0.50									
Isopropyl Alcohol	ND	1.0									
m,p-Xylene	ND	0.40									
Methyl tert-butyl ether	ND	0.20									
Methylene chloride	ND	2.0									
o-Xylene	ND	0.20									
Propene	ND	2.0									
Styrene	ND	0.20									
Tetrachloroethene	ND	0.20									
Tetrahydrofuran	ND	0.50									
Toluene	ND	0.20									
trans-1,2-Dichloroethene	ND	0.20									
trans-1,3-Dichloropropene	ND	0.20									
Trichloroethene	ND	0.20									
Trichlorofluoromethane	ND	0.20									
Vinyl acetate	ND	2.0									
Vinyl chloride	ND	0.20									
Xylenes, Total	ND	0.60									

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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82785

Sample ID: **C082112-2**	SampType: **MBLK**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120823A**
Client ID: **ZZZZZ**	Batch ID: **R82785**	TestNo: **TO-15**		Analysis Date: **8/23/2012**	SeqNo: **2226905**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.20									
1,1,2,2-Tetrachloroethane	ND	0.20									
1,1,2-Trichloroethane	ND	0.20									
1,1-Dichloroethane	ND	0.20									
1,1-Dichloroethene	ND	0.20									
1,2,4-Trichlorobenzene	ND	0.20									
1,2,4-Trimethylbenzene	ND	0.20									
1,2-Dibromoethane	ND	0.20									
1,2-Dichlorobenzene	ND	0.20									
1,2-Dichloroethane	ND	0.20									
1,2-Dichloropropane	ND	0.20									
1,3,5-Trimethylbenzene	ND	0.20									
1,3-Butadiene	ND	0.20									
1,3-Dichlorobenzene	ND	0.20									
1,4-Dichlorobenzene	ND	0.20									
1,4-Dioxane	ND	1.0									
2-Butanone	ND	0.50									
2-Hexanone	ND	1.0									
4-Ethyltoluene	ND	0.20									
4-Methyl-2-pentanone	ND	1.0									
Acetone	ND	2.0									*
Benzene	ND	0.20									
Benzyl chloride	ND	0.50									
Bromodichloromethane	ND	0.20									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon disulfide	ND	0.20									
Carbon tetrachloride	ND	0.20									
Chlorobenzene	ND	0.20									
Chloroethane	ND	0.20									
Chloroform	ND	0.20									

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ANALYTICAL QC SUMMARY REPORT

BatchID: R82785

Sample ID: **C082112-2**	SampType: **MBLK**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120823A**
Client ID: **ZZZZZ**	Batch ID: **R82785**	TestNo: **TO-15**		Analysis Date: **8/23/2012**	SeqNo: **2226905**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.50									
cis-1,2-Dichloroethene	ND	0.20									
cis-1,3-Dichloropropene	ND	0.20									
Cyclohexane	ND	0.20									
Dibromochloromethane	ND	0.20									
Dichlorodifluoromethane	ND	0.20									
Ethyl acetate	ND	0.20									
Ethylbenzene	ND	0.20									
Freon-113	ND	0.20									
Freon-114	ND	1.0									
Heptane	ND	0.20									
Hexachlorobutadiene	ND	0.20									
Hexane	ND	0.50									
Isopropyl Alcohol	ND	1.0									
m,p-Xylene	ND	0.40									
Methyl tert-butyl ether	ND	0.20									
Methylene chloride	ND	2.0									
o-Xylene	ND	0.20									
Propene	ND	2.0									
Styrene	ND	0.20									
Tetrachloroethene	ND	0.20									
Tetrahydrofuran	ND	0.50									
Toluene	ND	0.20									
trans-1,2-Dichloroethene	ND	0.20									
trans-1,3-Dichloropropene	ND	0.20									
Trichloroethene	ND	0.20									
Trichlorofluoromethane	ND	0.20									
Vinyl acetate	ND	2.0									
Vinyl chloride	ND	0.20									
Xylenes, Total	ND	0.60									

Qualifiers:
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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82785

Sample ID: **LCS082312-5**	SampType: **LCS**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120823A**
Client ID: **ZZZZZ**	Batch ID: **R82785**	TestNo: **TO-15**		Analysis Date: **8/23/2012**	SeqNo: **2226899**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	4.26	0.20	5	0	85.2	70	130	0	0		
1,1,2,2-Tetrachloroethane	5.78	0.20	5	0	116	70	130	0	0		
1,1,2-Trichloroethane	5.4	0.20	5	0	108	70	130	0	0		
1,1-Dichloroethane	5.24	0.20	5	0	105	70	130	0	0		
1,1-Dichloroethene	5.04	0.20	5	0	101	70	130	0	0		
1,2,4-Trichlorobenzene	4.67	0.20	5	0	93.4	70	130	0	0		
1,2,4-Trimethylbenzene	4.79	0.20	5	0	95.8	70	130	0	0		
1,2-Dibromoethane	4.84	0.20	5	0	96.8	70	130	0	0		
1,2-Dichlorobenzene	4.98	0.20	5	0	99.6	70	130	0	0		
1,2-Dichloroethane	5.28	0.20	5	0	106	70	130	0	0		
1,2-Dichloropropane	5.15	0.20	5	0	103	70	130	0	0		
1,3,5-Trimethylbenzene	5.17	0.20	5	0	103	70	130	0	0		
1,3-Butadiene	4.97	0.20	5	0	99.4	70	130	0	0		
1,3-Dichlorobenzene	4.56	0.20	5	0	91.2	70	130	0	0		
1,4-Dichlorobenzene	4.79	0.20	5	0	95.8	70	130	0	0		
1,4-Dioxane	4.12	1.0	5	0	82.4	70	130	0	0		
2-Butanone	4.98	0.50	5	0	99.6	70	130	0	0		
2-Hexanone	4.62	1.0	5	0	92.4	70	130	0	0		
4-Ethyltoluene	4.86	0.20	5	0	97.2	70	130	0	0		
4-Methyl-2-pentanone	4.6	1.0	5	0	92	70	130	0	0		
Acetone	5.02	2.0	5	0	100	70	130	0	0		*
Benzene	4.9	0.20	5	0	98	70	130	0	0		
Benzyl chloride	4.57	0.50	5	0	91.4	70	130	0	0		
Bromodichloromethane	4.67	0.20	5	0	93.4	70	130	0	0		
Bromoform	4.59	0.50	5	0	91.8	70	130	0	0		
Bromomethane	4.42	0.50	5	0	88.4	70	130	0	0		
Carbon disulfide	4.48	0.20	5	0	89.6	70	130	0	0		
Carbon tetrachloride	4.51	0.20	5	0	90.2	70	130	0	0		
Chlorobenzene	4.65	0.20	5	0	93	70	130	0	0		
Chloroethane	5.54	0.20	5	0	111	70	130	0	0		
Chloroform	4.71	0.20	5	0	94.2	70	130	0	0		

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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82785

Sample ID: **LCS082312-5**	SampType: **LCS**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120823A**
Client ID: **ZZZZZ**	Batch ID: **R82785**	TestNo: **TO-15**		Analysis Date: **8/23/2012**	SeqNo: **2226899**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	4.02	0.50	5	0	80.4	70	130	0	0		
cis-1,2-Dichloroethene	4.76	0.20	5	0	95.2	70	130	0	0		
cis-1,3-Dichloropropene	5.32	0.20	5	0	106	70	130	0	0		
Cyclohexane	5.22	0.20	5	0	104	70	130	0	0		
Dibromochloromethane	4.73	0.20	5	0	94.6	70	130	0	0		
Dichlorodifluoromethane	4.22	0.20	5	0	84.4	70	130	0	0		
Ethyl acetate	5.21	0.20	5	0	104	70	130	0	0		
Ethylbenzene	4.87	0.20	5	0	97.4	70	130	0	0		
Freon-113	4.01	0.20	5	0	80.2	70	130	0	0		
Freon-114	3.97	1.0	5	0	79.4	70	130	0	0		
Heptane	5.95	0.20	5	0	119	70	130	0	0		
Hexachlorobutadiene	4	0.20	5	0	80	70	130	0	0		
Hexane	5.93	0.50	5	0	119	70	130	0	0		
Isopropyl Alcohol	5.42	1.0	5	0	108	70	130	0	0		
m,p-Xylene	9.84	0.40	10	0	98.4	70	130	0	0		
Methyl tert-butyl ether	5.28	0.20	5	0	106	70	130	0	0		
Methylene chloride	4.01	2.0	5	0	80.2	70	130	0	0		
o-Xylene	4.9	0.20	5	0	98	70	130	0	0		
Propene	4.87	2.0	5	0	97.4	70	130	0	0		
Styrene	5.33	0.20	5	0	107	70	130	0	0		
Tetrachloroethene	4.32	0.20	5	0	86.4	70	130	0	0		
Tetrahydrofuran	5.25	0.50	5	0	105	70	130	0	0		
Toluene	4.95	0.20	5	0	99	70	130	0	0		
trans-1,2-Dichloroethene	4.76	0.20	5	0	95.2	70	130	0	0		
trans-1,3-Dichloropropene	3.95	0.20	5	0	79	70	130	0	0		
Trichloroethene	4.55	0.20	5	0	91	70	130	0	0		
Trichlorofluoromethane	3.59	0.20	5	0	71.8	70	130	0	0		
Vinyl acetate	3.94	2.0	5	0	78.8	70	130	0	0		
Vinyl chloride	4.64	0.20	5	0	92.8	70	130	0	0		
Xylenes, Total	14.74	0.60	15	0	98.3	70	130	0	0		

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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82785

Sample ID: **LCSD082312-5** SampType: **LCSD** TestCode: **TO_15A+** Units: **ppbv** Prep Date: Run ID: **VOA-5_120823A**
Client ID: **ZZZZZ** Batch ID: **R82785** TestNo: **TO-15** Analysis Date: **8/23/2012** SeqNo: **2226900**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	4.33	0.20	5	0	86.6	70	130	4.26	1.63	25	
1,1,2,2-Tetrachloroethane	5.8	0.20	5	0	116	70	130	5.78	0.345	25	
1,1,2-Trichloroethane	5.45	0.20	5	0	109	70	130	5.4	0.922	25	
1,1-Dichloroethane	5.26	0.20	5	0	105	70	130	5.24	0.381	25	
1,1-Dichloroethene	5.07	0.20	5	0	101	70	130	5.04	0.593	25	
1,2,4-Trichlorobenzene	4.8	0.20	5	0	96	70	130	4.67	2.75	25	
1,2,4-Trimethylbenzene	4.89	0.20	5	0	97.8	70	130	4.79	2.07	25	
1,2-Dibromoethane	4.89	0.20	5	0	97.8	70	130	4.84	1.03	25	
1,2-Dichlorobenzene	4.98	0.20	5	0	99.6	70	130	4.98	0	25	
1,2-Dichloroethane	5.29	0.20	5	0	106	70	130	5.28	0.189	25	
1,2-Dichloropropane	5.18	0.20	5	0	104	70	130	5.15	0.581	25	
1,3,5-Trimethylbenzene	5.26	0.20	5	0	105	70	130	5.17	1.73	25	
1,3-Butadiene	4.97	0.20	5	0	99.4	70	130	4.97	0	25	
1,3-Dichlorobenzene	4.58	0.20	5	0	91.6	70	130	4.56	0.438	25	
1,4-Dichlorobenzene	4.77	0.20	5	0	95.4	70	130	4.79	0.418	25	
1,4-Dioxane	4.67	1.0	5	0	93.4	70	130	4.12	12.5	25	
2-Butanone	5.12	0.50	5	0	102	70	130	4.98	2.77	25	
2-Hexanone	5.34	1.0	5	0	107	70	130	4.62	14.5	25	
4-Ethyltoluene	4.91	0.20	5	0	98.2	70	130	4.86	1.02	25	
4-Methyl-2-pentanone	5.1	1.0	5	0	102	70	130	4.6	10.3	25	
Acetone	4.98	2.0	5	0	99.6	70	130	5.02	0.800	25	*
Benzene	4.94	0.20	5	0	98.8	70	130	4.9	0.813	25	
Benzyl chloride	4.98	0.50	5	0	99.6	70	130	4.57	8.59	25	
Bromodichloromethane	4.69	0.20	5	0	93.8	70	130	4.67	0.427	25	
Bromoform	4.67	0.50	5	0	93.4	70	130	4.59	1.73	25	
Bromomethane	4.38	0.50	5	0	87.6	70	130	4.42	0.909	25	
Carbon disulfide	4.4	0.20	5	0	88	70	130	4.48	1.80	25	
Carbon tetrachloride	4.49	0.20	5	0	89.8	70	130	4.51	0.444	25	
Chlorobenzene	4.69	0.20	5	0	93.8	70	130	4.65	0.857	25	
Chloroethane	5.6	0.20	5	0	112	70	130	5.54	1.08	25	
Chloroform	4.79	0.20	5	0	95.8	70	130	4.71	1.68	25	

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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82785

Sample ID: **LCSD082312-5**	SampType: **LCSD**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120823A**
Client ID: **ZZZZZ**	Batch ID: **R82785**	TestNo: **TO-15**		Analysis Date: **8/23/2012**	SeqNo: **2226900**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	4.01	0.50	5	0	80.2	70	130	4.02	0.249	25	
cis-1,2-Dichloroethene	4.84	0.20	5	0	96.8	70	130	4.76	1.67	25	
cis-1,3-Dichloropropene	5.37	0.20	5	0	107	70	130	5.32	0.935	25	
Cyclohexane	5.3	0.20	5	0	106	70	130	5.22	1.52	25	
Dibromochloromethane	4.73	0.20	5	0	94.6	70	130	4.73	0	25	
Dichlorodifluoromethane	4.23	0.20	5	0	84.6	70	130	4.22	0.237	25	
Ethyl acetate	5.33	0.20	5	0	107	70	130	5.21	2.28	25	
Ethylbenzene	4.89	0.20	5	0	97.8	70	130	4.87	0.410	25	
Freon-113	4.06	0.20	5	0	81.2	70	130	4.01	1.24	25	
Freon-114	4.04	1.0	5	0	80.8	70	130	3.97	1.75	25	
Heptane	5.96	0.20	5	0	119	70	130	5.95	0.168	25	
Hexachlorobutadiene	4.04	0.20	5	0	80.8	70	130	4	0.995	25	
Hexane	5.98	0.50	5	0	120	70	130	5.93	0.840	25	
Isopropyl Alcohol	5.63	1.0	5	0	113	70	130	5.42	3.80	25	
m,p-Xylene	9.92	0.40	10	0	99.2	70	130	9.84	0.810	25	
Methyl tert-butyl ether	5.35	0.20	5	0	107	70	130	5.28	1.32	25	
Methylene chloride	4.03	2.0	5	0	80.6	70	130	4.01	0.498	25	
o-Xylene	4.91	0.20	5	0	98.2	70	130	4.9	0.204	25	
Propene	4.84	2.0	5	0	96.8	70	130	4.87	0.618	25	
Styrene	5.39	0.20	5	0	108	70	130	5.33	1.12	25	
Tetrachloroethene	4.3	0.20	5	0	86	70	130	4.32	0.464	25	
Tetrahydrofuran	5.29	0.50	5	0	106	70	130	5.25	0.759	25	
Toluene	4.97	0.20	5	0	99.4	70	130	4.95	0.403	25	
trans-1,2-Dichloroethene	4.79	0.20	5	0	95.8	70	130	4.76	0.628	25	
trans-1,3-Dichloropropene	4.07	0.20	5	0	81.4	70	130	3.95	2.99	25	
Trichloroethene	4.55	0.20	5	0	91	70	130	4.55	0	25	
Trichlorofluoromethane	3.63	0.20	5	0	72.6	70	130	3.59	1.11	25	
Vinyl acetate	4.45	2.0	5	0	89	70	130	3.94	12.2	25	
Vinyl chloride	4.64	0.20	5	0	92.8	70	130	4.64	0	25	
Xylenes, Total	14.84	0.60	15	0	98.9	70	130	14.74	0.676	25	

Qualifiers:
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R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82785

Sample ID: **MB082312-5** SampType: **MBLK** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120823A**
Client ID: **ZZZZZ** Batch ID: **R82785** TestNo: **TO-15** Analysis Date: **8/23/2012** SeqNo: **2227096**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	1.1									
1,1,2,2-Tetrachloroethane	ND	1.4									
1,1,2-Trichloroethane	ND	1.1									
1,1-Dichloroethane	ND	0.80									
1,1-Dichloroethene	ND	0.80									
1,2,4-Trichlorobenzene	ND	1.5									
1,2,4-Trimethylbenzene	ND	1.0									
1,2-Dibromoethane	ND	1.5									
1,2-Dichlorobenzene	ND	1.2									
1,2-Dichloroethane	ND	0.80									
1,2-Dichloropropane	ND	0.90									
1,3,5-Trimethylbenzene	ND	1.0									
1,3-Butadiene	ND	0.40									
1,3-Dichlorobenzene	ND	1.2									
1,4-Dichlorobenzene	ND	1.2									
1,4-Dioxane	ND	1.8									
2-Butanone	ND	1.5									
2-Hexanone	ND	4.1									
4-Ethyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	4.1									
Acetone	ND	4.8									*
Benzene	ND	0.60									
Benzyl chloride	ND	2.6									
Bromodichloromethane	ND	1.3									
Bromoform	ND	5.2									
Bromomethane	ND	1.9									
Carbon disulfide	ND	0.60									
Carbon tetrachloride	ND	1.3									
Chlorobenzene	ND	0.90									
Chloroethane	ND	0.50									
Chloroform	ND	1.0									

Qualifiers:
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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82785

Sample ID: **MB082312-5** SampType: **MBLK** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120823A**
Client ID: **ZZZZZ** Batch ID: **R82785** TestNo: **TO-15** Analysis Date: **8/23/2012** SeqNo: **2227096**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									
cis-1,2-Dichloroethene	ND	0.80									
cis-1,3-Dichloropropene	ND	0.90									
Cyclohexane	ND	0.70									
Dibromochloromethane	ND	1.7									
Dichlorodifluoromethane	ND	1.0									
Ethyl acetate	ND	0.70									
Ethylbenzene	ND	0.90									
Freon-113	ND	1.5									
Freon-114	ND	7.0									
Heptane	ND	0.80									
Hexachlorobutadiene	ND	2.1									
Hexane	ND	1.8									
Isopropyl Alcohol	ND	2.5									
m,p-Xylene	ND	1.7									
Methyl tert-butyl ether	ND	0.70									
Methylene chloride	ND	6.9									
o-Xylene	ND	0.90									
Propene	ND	3.4									
Styrene	ND	0.90									
Tetrachloroethene	ND	1.4									
Tetrahydrofuran	ND	1.5									
Toluene	ND	0.80									
trans-1,2-Dichloroethene	ND	0.80									
trans-1,3-Dichloropropene	ND	0.90									
Trichloroethene	ND	1.1									
Trichlorofluoromethane	ND	1.1									
Vinyl acetate	ND	7.0									
Vinyl chloride	ND	0.50									
Xylenes, Total	ND	2.6									

Qualifiers:
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E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82785

Sample ID: **LCS082312-5**	SampType: **LCS**	TestCode: **TO_15UG+**	Units: **µg/m³**	Prep Date:	Run ID: **VOA-5_120823A**
Client ID: **ZZZZZ**	Batch ID: **R82785**	TestNo: **TO-15**		Analysis Date: **8/23/2012**	SeqNo: **2227097**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	23.24	1.1	27.28	0	85.2	70	130	0	0		
1,1,2,2-Tetrachloroethane	39.69	1.4	34.34	0	116	70	130	0	0		
1,1,2-Trichloroethane	29.46	1.1	27.28	0	108	70	130	0	0		
1,1-Dichloroethane	21.21	0.80	20.24	0	105	70	130	0	0		
1,1-Dichloroethene	19.98	0.80	19.82	0	101	70	130	0	0		
1,2,4-Trichlorobenzene	34.66	1.5	37.11	0	93.4	70	130	0	0		
1,2,4-Trimethylbenzene	23.55	1.0	24.58	0	95.8	70	130	0	0		
1,2-Dibromoethane	37.19	1.5	38.42	0	96.8	70	130	0	0		
1,2-Dichlorobenzene	29.94	1.2	30.06	0	99.6	70	130	0	0		
1,2-Dichloroethane	21.37	0.80	20.24	0	106	70	130	0	0		
1,2-Dichloropropane	23.8	0.90	23.11	0	103	70	130	0	0		
1,3,5-Trimethylbenzene	25.41	1.0	24.58	0	103	70	130	0	0		
1,3-Butadiene	10.99	0.40	11.06	0	99.4	70	130	0	0		
1,3-Dichlorobenzene	27.42	1.2	30.06	0	91.2	70	130	0	0		
1,4-Dichlorobenzene	28.8	1.2	30.06	0	95.8	70	130	0	0		
1,4-Dioxane	14.85	1.8	18.02	0	82.4	70	130	0	0		
2-Butanone	14.69	1.5	14.75	0	99.6	70	130	0	0		
2-Hexanone	18.93	4.1	20.48	0	92.4	70	130	0	0		
4-Ethyltoluene	23.89	1.0	24.58	0	97.2	70	130	0	0		
4-Methyl-2-pentanone	18.84	4.1	20.48	0	92	70	130	0	0		
Acetone	11.92	4.8	11.88	0	100	70	130	0	0		*
Benzene	15.65	0.60	15.97	0	98	70	130	0	0		
Benzyl chloride	23.66	2.6	25.89	0	91.4	70	130	0	0		
Bromodichloromethane	31.29	1.3	33.5	0	93.4	70	130	0	0		
Bromoform	47.45	5.2	51.68	0	91.8	70	130	0	0		
Bromomethane	17.16	1.9	19.42	0	88.4	70	130	0	0		
Carbon disulfide	13.95	0.60	15.57	0	89.6	70	130	0	0		
Carbon tetrachloride	28.37	1.3	31.46	0	90.2	70	130	0	0		
Chlorobenzene	21.41	0.90	23.02	0	93	70	130	0	0		
Chloroethane	14.62	0.50	13.19	0	111	70	130	0	0		
Chloroform	23	1.0	24.41	0	94.2	70	130	0	0		

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82785

Sample ID: **LCS082312-5** SampType: **LCS** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120823A**
Client ID: **ZZZZZ** Batch ID: **R82785** TestNo: **TO-15** Analysis Date: **8/23/2012** SeqNo: **2227097**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	8.301	1.0	10.33	0	80.4	70	130	0	0		
cis-1,2-Dichloroethene	18.87	0.80	19.82	0	95.2	70	130	0	0		
cis-1,3-Dichloropropene	24.15	0.90	22.69	0	106	70	130	0	0		
Cyclohexane	17.97	0.70	17.21	0	104	70	130	0	0		
Dibromochloromethane	40.29	1.7	42.59	0	94.6	70	130	0	0		
Dichlorodifluoromethane	20.87	1.0	24.73	0	84.4	70	130	0	0		
Ethyl acetate	18.78	0.70	18.02	0	104	70	130	0	0		
Ethylbenzene	21.15	0.90	21.71	0	97.4	70	130	0	0		
Freon-113	30.73	1.5	38.32	0	80.2	70	130	0	0		
Freon-114	27.75	7.0	34.95	0	79.4	70	130	0	0		
Heptane	24.38	0.80	20.49	0	119	70	130	0	0		
Hexachlorobutadiene	42.66	2.1	53.33	0	80	70	130	0	0		
Hexane	20.9	1.8	17.62	0	119	70	130	0	0		
Isopropyl Alcohol	13.32	2.5	12.29	0	108	70	130	0	0		
m,p-Xylene	42.72	1.7	43.42	0	98.4	70	130	0	0		
Methyl tert-butyl ether	19.04	0.70	18.03	0	106	70	130	0	0		
Methylene chloride	13.93	6.9	17.37	0	80.2	70	130	0	0		
o-Xylene	21.28	0.90	21.71	0	98	70	130	0	0		
Propene	8.382	3.4	8.605	0	97.4	70	130	0	0		
Styrene	22.7	0.90	21.3	0	107	70	130	0	0		
Tetrachloroethene	29.3	1.4	33.91	0	86.4	70	130	0	0		
Tetrahydrofuran	15.48	1.5	14.75	0	105	70	130	0	0		
Toluene	18.65	0.80	18.84	0	99	70	130	0	0		
trans-1,2-Dichloroethene	18.87	0.80	19.82	0	95.2	70	130	0	0		
trans-1,3-Dichloropropene	17.93	0.90	22.69	0	79	70	130	0	0		
Trichloroethene	24.45	1.1	26.87	0	91	70	130	0	0		
Trichlorofluoromethane	20.17	1.1	28.09	0	71.8	70	130	0	0		
Vinyl acetate	13.87	7.0	17.61	0	78.8	70	130	0	0		
Vinyl chloride	11.86	0.50	12.78	0	92.8	70	130	0	0		
Xylenes, Total	64	2.6	65.13	0	98.3	70	130	0	0		

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B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82785

Sample ID: **LCSD082312-5** SampType: **LCSD** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120823A**
Client ID: **ZZZZZ** Batch ID: **R82785** TestNo: **TO-15** Analysis Date: **8/23/2012** SeqNo: **2227098**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	23.62	1.1	27.28	0	86.6	70	130	23.24	1.63	25	
1,1,2,2-Tetrachloroethane	39.83	1.4	34.34	0	116	70	130	39.69	0.345	25	
1,1,2-Trichloroethane	29.74	1.1	27.28	0	109	70	130	29.46	0.922	25	
1,1-Dichloroethane	21.29	0.80	20.24	0	105	70	130	21.21	0.381	25	
1,1-Dichloroethene	20.1	0.80	19.82	0	101	70	130	19.98	0.593	25	
1,2,4-Trichlorobenzene	35.62	1.5	37.11	0	96	70	130	34.66	2.75	25	
1,2,4-Trimethylbenzene	24.04	1.0	24.58	0	97.8	70	130	23.55	2.07	25	
1,2-Dibromoethane	37.57	1.5	38.42	0	97.8	70	130	37.19	1.03	25	
1,2-Dichlorobenzene	29.94	1.2	30.06	0	99.6	70	130	29.94	0	25	
1,2-Dichloroethane	21.41	0.80	20.24	0	106	70	130	21.37	0.189	25	
1,2-Dichloropropane	23.94	0.90	23.11	0	104	70	130	23.8	0.581	25	
1,3,5-Trimethylbenzene	25.86	1.0	24.58	0	105	70	130	25.41	1.73	25	
1,3-Butadiene	10.99	0.40	11.06	0	99.4	70	130	10.99	0	25	
1,3-Dichlorobenzene	27.54	1.2	30.06	0	91.6	70	130	27.42	0.438	25	
1,4-Dichlorobenzene	28.68	1.2	30.06	0	95.4	70	130	28.8	0.418	25	
1,4-Dioxane	16.83	1.8	18.02	0	93.4	70	130	14.85	12.5	25	
2-Butanone	15.1	1.5	14.75	0	102	70	130	14.69	2.77	25	
2-Hexanone	21.88	4.1	20.48	0	107	70	130	18.93	14.5	25	
4-Ethyltoluene	24.14	1.0	24.58	0	98.2	70	130	23.89	1.02	25	
4-Methyl-2-pentanone	20.89	4.1	20.48	0	102	70	130	18.84	10.3	25	
Acetone	11.83	4.8	11.88	0	99.6	70	130	11.92	0.800	25	*
Benzene	15.78	0.60	15.97	0	98.8	70	130	15.65	0.813	25	
Benzyl chloride	25.78	2.6	25.89	0	99.6	70	130	23.66	8.59	25	
Bromodichloromethane	31.43	1.3	33.5	0	93.8	70	130	31.29	0.427	25	
Bromoform	48.27	5.2	51.68	0	93.4	70	130	47.45	1.73	25	
Bromomethane	17.01	1.9	19.42	0	87.6	70	130	17.16	0.909	25	
Carbon disulfide	13.7	0.60	15.57	0	88	70	130	13.95	1.80	25	
Carbon tetrachloride	28.25	1.3	31.46	0	89.8	70	130	28.37	0.444	25	
Chlorobenzene	21.59	0.90	23.02	0	93.8	70	130	21.41	0.857	25	
Chloroethane	14.78	0.50	13.19	0	112	70	130	14.62	1.08	25	
Chloroform	23.39	1.0	24.41	0	95.8	70	130	23	1.68	25	

Qualifiers:
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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82785

Sample ID: **LCSD082312-5** SampType: **LCSD** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120823A**
Client ID: **ZZZZZ** Batch ID: **R82785** TestNo: **TO-15** Analysis Date: **8/23/2012** SeqNo: **2227098**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	8.281	1.0	10.33	0	80.2	70	130	8.301	0.249	25	
cis-1,2-Dichloroethene	19.19	0.80	19.82	0	96.8	70	130	18.87	1.67	25	
cis-1,3-Dichloropropene	24.37	0.90	22.69	0	107	70	130	24.15	0.935	25	
Cyclohexane	18.24	0.70	17.21	0	106	70	130	17.97	1.52	25	
Dibromochloromethane	40.29	1.7	42.59	0	94.6	70	130	40.29	0	25	
Dichlorodifluoromethane	20.92	1.0	24.73	0	84.6	70	130	20.87	0.237	25	
Ethyl acetate	19.21	0.70	18.02	0	107	70	130	18.78	2.28	25	
Ethylbenzene	21.23	0.90	21.71	0	97.8	70	130	21.15	0.410	25	
Freon-113	31.11	1.5	38.32	0	81.2	70	130	30.73	1.24	25	
Freon-114	28.24	7.0	34.95	0	80.8	70	130	27.75	1.75	25	
Heptane	24.43	0.80	20.49	0	119	70	130	24.38	0.168	25	
Hexachlorobutadiene	43.09	2.1	53.33	0	80.8	70	130	42.66	0.995	25	
Hexane	21.08	1.8	17.62	0	120	70	130	20.9	0.840	25	
Isopropyl Alcohol	13.84	2.5	12.29	0	113	70	130	13.32	3.80	25	
m,p-Xylene	43.07	1.7	43.42	0	99.2	70	130	42.72	0.810	25	
Methyl tert-butyl ether	19.29	0.70	18.03	0	107	70	130	19.04	1.32	25	
Methylene chloride	14	6.9	17.37	0	80.6	70	130	13.93	0.498	25	
o-Xylene	21.32	0.90	21.71	0	98.2	70	130	21.28	0.204	25	
Propene	8.33	3.4	8.605	0	96.8	70	130	8.382	0.618	25	
Styrene	22.96	0.90	21.3	0	108	70	130	22.7	1.12	25	
Tetrachloroethene	29.16	1.4	33.91	0	86	70	130	29.3	0.464	25	
Tetrahydrofuran	15.6	1.5	14.75	0	106	70	130	15.48	0.759	25	
Toluene	18.73	0.80	18.84	0	99.4	70	130	18.65	0.403	25	
trans-1,2-Dichloroethene	18.99	0.80	19.82	0	95.8	70	130	18.87	0.628	25	
trans-1,3-Dichloropropene	18.47	0.90	22.69	0	81.4	70	130	17.93	2.99	25	
Trichloroethene	24.45	1.1	26.87	0	91	70	130	24.45	0	25	
Trichlorofluoromethane	20.39	1.1	28.09	0	72.6	70	130	20.17	1.11	25	
Vinyl acetate	15.67	7.0	17.61	0	89	70	130	13.87	12.2	25	
Vinyl chloride	11.86	0.50	12.78	0	92.8	70	130	11.86	0	25	
Xylenes, Total	64.43	2.6	65.13	0	98.9	70	130	64	0.676	25	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82861

Sample ID: **MB082412-5**	SampType: **MBLK**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120824A**
Client ID: **ZZZZZ**	Batch ID: **R82861**	TestNo: **TO-15**		Analysis Date: **8/24/2012**	SeqNo: **2229230**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.20									
1,1,2,2-Tetrachloroethane	ND	0.20									
1,1,2-Trichloroethane	ND	0.20									
1,1-Dichloroethane	ND	0.20									
1,1-Dichloroethene	ND	0.20									
1,2,4-Trichlorobenzene	ND	0.20									
1,2,4-Trimethylbenzene	ND	0.20									
1,2-Dibromoethane	ND	0.20									
1,2-Dichlorobenzene	ND	0.20									
1,2-Dichloroethane	ND	0.20									
1,2-Dichloropropane	ND	0.20									
1,3,5-Trimethylbenzene	ND	0.20									
1,3-Butadiene	ND	0.20									
1,3-Dichlorobenzene	ND	0.20									
1,4-Dichlorobenzene	ND	0.20									
1,4-Dioxane	ND	1.0									
2-Butanone	ND	0.50									
2-Hexanone	ND	1.0									
4-Ethyltoluene	ND	0.20									
4-Methyl-2-pentanone	ND	1.0									
Acetone	ND	2.0									*
Benzene	ND	0.20									
Benzyl chloride	ND	0.50									
Bromodichloromethane	ND	0.20									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon disulfide	ND	0.20									
Carbon tetrachloride	ND	0.20									
Chlorobenzene	ND	0.20									
Chloroethane	ND	0.20									
Chloroform	ND	0.20									

Qualifiers:
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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82861

Sample ID: **MB082412-5** SampType: **MBLK** TestCode: **TO_15A+** Units: **ppbv** Prep Date: Run ID: **VOA-5_120824A**
Client ID: **ZZZZZ** Batch ID: **R82861** TestNo: **TO-15** Analysis Date: **8/24/2012** SeqNo: **2229230**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.50									
cis-1,2-Dichloroethene	0.03	0.20									J
cis-1,3-Dichloropropene	ND	0.20									
Cyclohexane	ND	0.20									
Dibromochloromethane	ND	0.20									
Dichlorodifluoromethane	ND	0.20									
Ethyl acetate	ND	0.20									
Ethylbenzene	ND	0.20									
Freon-113	ND	0.20									
Freon-114	ND	1.0									
Heptane	ND	0.20									
Hexachlorobutadiene	ND	0.20									
Hexane	ND	0.50									
Isopropyl Alcohol	ND	1.0									
m,p-Xylene	ND	0.40									
Methyl tert-butyl ether	ND	0.20									
Methylene chloride	ND	2.0									
o-Xylene	ND	0.20									
Propene	ND	2.0									
Styrene	ND	0.20									
Tetrachloroethene	ND	0.20									
Tetrahydrofuran	ND	0.50									
Toluene	ND	0.20									
trans-1,2-Dichloroethene	ND	0.20									
trans-1,3-Dichloropropene	ND	0.20									
Trichloroethene	ND	0.20									
Trichlorofluoromethane	ND	0.20									
Vinyl acetate	ND	2.0									
Vinyl chloride	ND	0.20									
Xylenes, Total	ND	0.60									

Qualifiers:
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E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82861

Sample ID: **LCS082412-5**	SampType: **LCS**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120824A**
Client ID: **ZZZZZ**	Batch ID: **R82861**	TestNo: **TO-15**		Analysis Date: **8/24/2012**	SeqNo: **2229231**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	4.36	0.20	5	0	87.2	70	130	0	0		
1,1,2,2-Tetrachloroethane	5.93	0.20	5	0	119	70	130	0	0		
1,1,2-Trichloroethane	5.56	0.20	5	0	111	70	130	0	0		
1,1-Dichloroethane	5.25	0.20	5	0	105	70	130	0	0		
1,1-Dichloroethene	5.02	0.20	5	0	100	70	130	0	0		
1,2,4-Trichlorobenzene	4.55	0.20	5	0	91	70	130	0	0		
1,2,4-Trimethylbenzene	4.8	0.20	5	0	96	70	130	0	0		
1,2-Dibromoethane	5.01	0.20	5	0	100	70	130	0	0		
1,2-Dichlorobenzene	4.93	0.20	5	0	98.6	70	130	0	0		
1,2-Dichloroethane	5.51	0.20	5	0	110	70	130	0	0		
1,2-Dichloropropane	5.41	0.20	5	0	108	70	130	0	0		
1,3,5-Trimethylbenzene	5.21	0.20	5	0	104	70	130	0	0		
1,3-Butadiene	4.93	0.20	5	0	98.6	70	130	0	0		
1,3-Dichlorobenzene	4.55	0.20	5	0	91	70	130	0	0		
1,4-Dichlorobenzene	4.77	0.20	5	0	95.4	70	130	0	0		
1,4-Dioxane	4.11	1.0	5	0	82.2	70	130	0	0		
2-Butanone	5.06	0.50	5	0	101	70	130	0	0		
2-Hexanone	4.68	1.0	5	0	93.6	70	130	0	0		
4-Ethyltoluene	4.92	0.20	5	0	98.4	70	130	0	0		
4-Methyl-2-pentanone	4.82	1.0	5	0	96.4	70	130	0	0		
Acetone	4.74	2.0	5	0	94.8	70	130	0	0		*
Benzene	5.1	0.20	5	0	102	70	130	0	0		
Benzyl chloride	4.09	0.50	5	0	81.8	70	130	0	0		
Bromodichloromethane	4.9	0.20	5	0	98	70	130	0	0		
Bromoform	4.59	0.50	5	0	91.8	70	130	0	0		
Bromomethane	4.33	0.50	5	0	86.6	70	130	0	0		
Carbon disulfide	4.47	0.20	5	0	89.4	70	130	0	0		
Carbon tetrachloride	4.78	0.20	5	0	95.6	70	130	0	0		
Chlorobenzene	4.74	0.20	5	0	94.8	70	130	0	0		
Chloroethane	5.56	0.20	5	0	111	70	130	0	0		
Chloroform	4.94	0.20	5	0	98.8	70	130	0	0		

Qualifiers:
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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82861

Sample ID: **LCS082412-5**	SampType: **LCS**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120824A**
Client ID: **ZZZZZ**	Batch ID: **R82861**	TestNo: **TO-15**		Analysis Date: **8/24/2012**	SeqNo: **2229231**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	4.11	0.50	5	0	82.2	70	130	0	0		
cis-1,2-Dichloroethene	4.83	0.20	5	0.03	96	70	130	0	0		
cis-1,3-Dichloropropene	5.49	0.20	5	0	110	70	130	0	0		
Cyclohexane	5.43	0.20	5	0	109	70	130	0	0		
Dibromochloromethane	4.83	0.20	5	0	96.6	70	130	0	0		
Dichlorodifluoromethane	4.22	0.20	5	0	84.4	70	130	0	0		
Ethyl acetate	5.52	0.20	5	0	110	70	130	0	0		
Ethylbenzene	4.96	0.20	5	0	99.2	70	130	0	0		
Freon-113	4.05	0.20	5	0	81	70	130	0	0		
Freon-114	4.01	1.0	5	0	80.2	70	130	0	0		
Heptane	6.33	0.20	5	0	127	70	130	0	0		
Hexachlorobutadiene	3.88	0.20	5	0	77.6	70	130	0	0		
Hexane	6.23	0.50	5	0	125	70	130	0	0		
Isopropyl Alcohol	5.49	1.0	5	0	110	70	130	0	0		
m,p-Xylene	9.95	0.40	10	0	99.5	70	130	0	0		
Methyl tert-butyl ether	5.06	0.20	5	0	101	70	130	0	0		
Methylene chloride	4.09	2.0	5	0	81.8	70	130	0	0		
o-Xylene	4.94	0.20	5	0	98.8	70	130	0	0		
Propene	5.05	2.0	5	0	101	70	130	0	0		
Styrene	5.39	0.20	5	0	108	70	130	0	0		
Tetrachloroethene	4.38	0.20	5	0	87.6	70	130	0	0		
Tetrahydrofuran	5.55	0.50	5	0	111	70	130	0	0		
Toluene	5.06	0.20	5	0	101	70	130	0	0		
trans-1,2-Dichloroethene	4.75	0.20	5	0	95	70	130	0	0		
trans-1,3-Dichloropropene	4.11	0.20	5	0	82.2	70	130	0	0		
Trichloroethene	4.67	0.20	5	0	93.4	70	130	0	0		
Trichlorofluoromethane	3.65	0.20	5	0	73	70	130	0	0		
Vinyl acetate	4.05	2.0	5	0	81	70	130	0	0		
Vinyl chloride	4.63	0.20	5	0	92.6	70	130	0	0		
Xylenes, Total	14.89	0.60	15	0	99.3	70	130	0	0		

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E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82861

Sample ID: **LCSD082412-5**	SampType: **LCSD**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120824A**
Client ID: **ZZZZZ**	Batch ID: **R82861**	TestNo: **TO-15**		Analysis Date: **8/24/2012**	SeqNo: **2229232**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	4.35	0.20	5	0	87	70	130	4.36	0.230	25	
1,1,2,2-Tetrachloroethane	5.91	0.20	5	0	118	70	130	5.93	0.338	25	
1,1,2-Trichloroethane	5.55	0.20	5	0	111	70	130	5.56	0.180	25	
1,1-Dichloroethane	5.31	0.20	5	0	106	70	130	5.25	1.14	25	
1,1-Dichloroethene	5.09	0.20	5	0	102	70	130	5.02	1.38	25	
1,2,4-Trichlorobenzene	4.61	0.20	5	0	92.2	70	130	4.55	1.31	25	
1,2,4-Trimethylbenzene	4.87	0.20	5	0	97.4	70	130	4.8	1.45	25	
1,2-Dibromoethane	5.01	0.20	5	0	100	70	130	5.01	0	25	
1,2-Dichlorobenzene	4.95	0.20	5	0	99	70	130	4.93	0.405	25	
1,2-Dichloroethane	5.52	0.20	5	0	110	70	130	5.51	0.181	25	
1,2-Dichloropropane	5.41	0.20	5	0	108	70	130	5.41	0	25	
1,3,5-Trimethylbenzene	5.21	0.20	5	0	104	70	130	5.21	0	25	
1,3-Butadiene	4.88	0.20	5	0	97.6	70	130	4.93	1.02	25	
1,3-Dichlorobenzene	4.55	0.20	5	0	91	70	130	4.55	0	25	
1,4-Dichlorobenzene	4.77	0.20	5	0	95.4	70	130	4.77	0	25	
1,4-Dioxane	4.75	1.0	5	0	95	70	130	4.11	14.4	25	
2-Butanone	5.18	0.50	5	0	104	70	130	5.06	2.34	25	
2-Hexanone	5.49	1.0	5	0	110	70	130	4.68	15.9	25	
4-Ethyltoluene	4.94	0.20	5	0	98.8	70	130	4.92	0.406	25	
4-Methyl-2-pentanone	5.34	1.0	5	0	107	70	130	4.82	10.2	25	
Acetone	4.65	2.0	5	0	93	70	130	4.74	1.92	25	*
Benzene	5.08	0.20	5	0	102	70	130	5.1	0.393	25	
Benzyl chloride	4.58	0.50	5	0	91.6	70	130	4.09	11.3	25	
Bromodichloromethane	4.93	0.20	5	0	98.6	70	130	4.9	0.610	25	
Bromoform	4.66	0.50	5	0	93.2	70	130	4.59	1.51	25	
Bromomethane	4.41	0.50	5	0	88.2	70	130	4.33	1.83	25	
Carbon disulfide	4.51	0.20	5	0	90.2	70	130	4.47	0.891	25	
Carbon tetrachloride	4.88	0.20	5	0	97.6	70	130	4.78	2.07	25	
Chlorobenzene	4.74	0.20	5	0	94.8	70	130	4.74	0	25	
Chloroethane	5.66	0.20	5	0	113	70	130	5.56	1.78	25	
Chloroform	5	0.20	5	0	100	70	130	4.94	1.21	25	

Qualifiers:
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E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82861

Sample ID: **LCSD082412-5** SampType: **LCSD** TestCode: **TO_15A+** Units: **ppbv** Prep Date: Run ID: **VOA-5_120824A**
Client ID: **ZZZZZ** Batch ID: **R82861** TestNo: **TO-15** Analysis Date: **8/24/2012** SeqNo: **2229232**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	4.16	0.50	5	0	83.2	70	130	4.11	1.21	25	
cis-1,2-Dichloroethene	4.98	0.20	5	0.03	99	70	130	4.83	3.06	25	
cis-1,3-Dichloropropene	5.51	0.20	5	0	110	70	130	5.49	0.364	25	
Cyclohexane	5.46	0.20	5	0	109	70	130	5.43	0.551	25	
Dibromochloromethane	4.88	0.20	5	0	97.6	70	130	4.83	1.03	25	
Dichlorodifluoromethane	4.21	0.20	5	0	84.2	70	130	4.22	0.237	25	
Ethyl acetate	5.47	0.20	5	0	109	70	130	5.52	0.910	25	
Ethylbenzene	4.9	0.20	5	0	98	70	130	4.96	1.22	25	
Freon-113	4.1	0.20	5	0	82	70	130	4.05	1.23	25	
Freon-114	4.15	1.0	5	0	83	70	130	4.01	3.43	25	
Heptane	6.23	0.20	5	0	125	70	130	6.33	1.59	25	
Hexachlorobutadiene	3.9	0.20	5	0	78	70	130	3.88	0.514	25	
Hexane	6.21	0.50	5	0	124	70	130	6.23	0.322	25	
Isopropyl Alcohol	5.67	1.0	5	0	113	70	130	5.49	3.23	25	
m,p-Xylene	9.94	0.40	10	0	99.4	70	130	9.95	0.101	25	
Methyl tert-butyl ether	5.14	0.20	5	0	103	70	130	5.06	1.57	25	
Methylene chloride	4.1	2.0	5	0	82	70	130	4.09	0.244	25	
o-Xylene	4.96	0.20	5	0	99.2	70	130	4.94	0.404	25	
Propene	5	2.0	5	0	100	70	130	5.05	0.995	25	
Styrene	5.42	0.20	5	0	108	70	130	5.39	0.555	25	
Tetrachloroethene	4.36	0.20	5	0	87.2	70	130	4.38	0.458	25	
Tetrahydrofuran	5.61	0.50	5	0	112	70	130	5.55	1.08	25	
Toluene	5.04	0.20	5	0	101	70	130	5.06	0.396	25	
trans-1,2-Dichloroethene	4.83	0.20	5	0	96.6	70	130	4.75	1.67	25	
trans-1,3-Dichloropropene	4.18	0.20	5	0	83.6	70	130	4.11	1.69	25	
Trichloroethene	4.92	0.20	5	0	98.4	70	130	4.67	5.21	25	
Trichlorofluoromethane	3.76	0.20	5	0	75.2	70	130	3.65	2.97	25	
Vinyl acetate	4.52	2.0	5	0	90.4	70	130	4.05	11.0	25	
Vinyl chloride	4.66	0.20	5	0	93.2	70	130	4.63	0.646	25	
Xylenes, Total	14.9	0.60	15	0	99.3	70	130	14.89	0.0671	25	

Qualifiers:
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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82861

Sample ID: **MB082412-5** SampType: **MBLK** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120824A**
Client ID: **ZZZZZ** Batch ID: **R82861** TestNo: **TO-15** Analysis Date: **8/24/2012** SeqNo: **2317533**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	1.1									
1,1,2,2-Tetrachloroethane	ND	1.4									
1,1,2-Trichloroethane	ND	1.1									
1,1-Dichloroethane	ND	0.80									
1,1-Dichloroethene	ND	0.80									
1,2,4-Trichlorobenzene	ND	1.5									
1,2,4-Trimethylbenzene	ND	1.0									
1,2-Dibromoethane	ND	1.5									
1,2-Dichlorobenzene	ND	1.2									
1,2-Dichloroethane	ND	0.80									
1,2-Dichloropropane	ND	0.90									
1,3,5-Trimethylbenzene	ND	1.0									
1,3-Butadiene	ND	0.40									
1,3-Dichlorobenzene	ND	1.2									
1,4-Dichlorobenzene	ND	1.2									
1,4-Dioxane	ND	1.8									
2-Butanone	ND	1.5									
2-Hexanone	ND	4.1									
4-Ethyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	4.1									
Acetone	ND	4.8									*
Benzene	ND	0.60									
Benzyl chloride	ND	2.6									
Bromodichloromethane	ND	1.3									
Bromoform	ND	5.2									
Bromomethane	ND	1.9									
Carbon disulfide	ND	0.60									
Carbon tetrachloride	ND	1.3									
Chlorobenzene	ND	0.90									
Chloroethane	ND	0.50									
Chloroform	ND	1.0									

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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82861

Sample ID: **MB082412-5**	SampType: **MBLK**	TestCode: **TO_15UG+**	Units: **µg/m³**	Prep Date:	Run ID: **VOA-5_120824A**
Client ID: **ZZZZZ**	Batch ID: **R82861**	TestNo: **TO-15**		Analysis Date: **8/24/2012**	SeqNo: **2317533**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									
cis-1,2-Dichloroethene	0.1189	0.80									J
cis-1,3-Dichloropropene	ND	0.90									
Cyclohexane	ND	0.70									
Dibromochloromethane	ND	1.7									
Dichlorodifluoromethane	ND	1.0									
Ethyl acetate	ND	0.70									
Ethylbenzene	ND	0.90									
Freon-113	ND	1.5									
Freon-114	ND	7.0									
Heptane	ND	0.80									
Hexachlorobutadiene	ND	2.1									
Hexane	ND	1.8									
Isopropyl Alcohol	ND	2.5									
m,p-Xylene	ND	1.7									
Methyl tert-butyl ether	ND	0.70									
Methylene chloride	ND	6.9									
o-Xylene	ND	0.90									
Propene	ND	3.4									
Styrene	ND	0.90									
Tetrachloroethene	ND	1.4									
Tetrahydrofuran	ND	1.5									
Toluene	ND	0.80									
trans-1,2-Dichloroethene	ND	0.80									
trans-1,3-Dichloropropene	ND	0.90									
Trichloroethene	ND	1.1									
Trichlorofluoromethane	ND	1.1									
Vinyl acetate	ND	7.0									
Vinyl chloride	ND	0.50									
Xylenes, Total	ND	2.6									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82861

Sample ID: **LCS082412-5** SampType: **LCS** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120824A**
Client ID: **ZZZZZ** Batch ID: **R82861** TestNo: **TO-15** Analysis Date: **8/24/2012** SeqNo: **2317534**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	23.79	1.1	27.28	0	87.2	70	130	0	0		
1,1,2,2-Tetrachloroethane	40.72	1.4	34.34	0	119	70	130	0	0		
1,1,2-Trichloroethane	30.34	1.1	27.28	0	111	70	130	0	0		
1,1-Dichloroethane	21.25	0.80	20.24	0	105	70	130	0	0		
1,1-Dichloroethene	19.9	0.80	19.82	0	100	70	130	0	0		
1,2,4-Trichlorobenzene	33.77	1.5	37.11	0	91	70	130	0	0		
1,2,4-Trimethylbenzene	23.6	1.0	24.58	0	96	70	130	0	0		
1,2-Dibromoethane	38.49	1.5	38.42	0	100	70	130	0	0		
1,2-Dichlorobenzene	29.64	1.2	30.06	0	98.6	70	130	0	0		
1,2-Dichloroethane	22.3	0.80	20.24	0	110	70	130	0	0		
1,2-Dichloropropane	25	0.90	23.11	0	108	70	130	0	0		
1,3,5-Trimethylbenzene	25.61	1.0	24.58	0	104	70	130	0	0		
1,3-Butadiene	10.91	0.40	11.06	0	98.6	70	130	0	0		
1,3-Dichlorobenzene	27.36	1.2	30.06	0	91	70	130	0	0		
1,4-Dichlorobenzene	28.68	1.2	30.06	0	95.4	70	130	0	0		
1,4-Dioxane	14.81	1.8	18.02	0	82.2	70	130	0	0		
2-Butanone	14.92	1.5	14.75	0	101	70	130	0	0		
2-Hexanone	19.17	4.1	20.48	0	93.6	70	130	0	0		
4-Ethyltoluene	24.19	1.0	24.58	0	98.4	70	130	0	0		
4-Methyl-2-pentanone	19.75	4.1	20.48	0	96.4	70	130	0	0		
Acetone	11.26	4.8	11.88	0	94.8	70	130	0	0		*
Benzene	16.29	0.60	15.97	0	102	70	130	0	0		
Benzyl chloride	21.17	2.6	25.89	0	81.8	70	130	0	0		
Bromodichloromethane	32.83	1.3	33.5	0	98	70	130	0	0		
Bromoform	47.45	5.2	51.68	0	91.8	70	130	0	0		
Bromomethane	16.81	1.9	19.42	0	86.6	70	130	0	0		
Carbon disulfide	13.92	0.60	15.57	0	89.4	70	130	0	0		
Carbon tetrachloride	30.07	1.3	31.46	0	95.6	70	130	0	0		
Chlorobenzene	21.82	0.90	23.02	0	94.8	70	130	0	0		
Chloroethane	14.67	0.50	13.19	0	111	70	130	0	0		
Chloroform	24.12	1.0	24.41	0	98.8	70	130	0	0		

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82861

Sample ID: **LCS082412-5** SampType: **LCS** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120824A**
Client ID: **ZZZZZ** Batch ID: **R82861** TestNo: **TO-15** Analysis Date: **8/24/2012** SeqNo: **2317534**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	8.487	1.0	10.33	0	82.2	70	130	0	0		
cis-1,2-Dichloroethene	19.15	0.80	19.82	0.1189	96	70	130	0	0		
cis-1,3-Dichloropropene	24.92	0.90	22.69	0	110	70	130	0	0		
Cyclohexane	18.69	0.70	17.21	0	109	70	130	0	0		
Dibromochloromethane	41.14	1.7	42.59	0	96.6	70	130	0	0		
Dichlorodifluoromethane	20.87	1.0	24.73	0	84.4	70	130	0	0		
Ethyl acetate	19.89	0.70	18.02	0	110	70	130	0	0		
Ethylbenzene	21.54	0.90	21.71	0	99.2	70	130	0	0		
Freon-113	31.04	1.5	38.32	0	81	70	130	0	0		
Freon-114	28.03	7.0	34.95	0	80.2	70	130	0	0		
Heptane	25.94	0.80	20.49	0	127	70	130	0	0		
Hexachlorobutadiene	41.38	2.1	53.33	0	77.6	70	130	0	0		
Hexane	21.96	1.8	17.62	0	125	70	130	0	0		
Isopropyl Alcohol	13.49	2.5	12.29	0	110	70	130	0	0		
m,p-Xylene	43.2	1.7	43.42	0	99.5	70	130	0	0		
Methyl tert-butyl ether	18.24	0.70	18.03	0	101	70	130	0	0		
Methylene chloride	14.21	6.9	17.37	0	81.8	70	130	0	0		
o-Xylene	21.45	0.90	21.71	0	98.8	70	130	0	0		
Propene	8.691	3.4	8.605	0	101	70	130	0	0		
Styrene	22.96	0.90	21.3	0	108	70	130	0	0		
Tetrachloroethene	29.71	1.4	33.91	0	87.6	70	130	0	0		
Tetrahydrofuran	16.37	1.5	14.75	0	111	70	130	0	0		
Toluene	19.07	0.80	18.84	0	101	70	130	0	0		
trans-1,2-Dichloroethene	18.83	0.80	19.82	0	95	70	130	0	0		
trans-1,3-Dichloropropene	18.65	0.90	22.69	0	82.2	70	130	0	0		
Trichloroethene	25.1	1.1	26.87	0	93.4	70	130	0	0		
Trichlorofluoromethane	20.51	1.1	28.09	0	73	70	130	0	0		
Vinyl acetate	14.26	7.0	17.61	0	81	70	130	0	0		
Vinyl chloride	11.84	0.50	12.78	0	92.6	70	130	0	0		
Xylenes, Total	64.65	2.6	65.13	0	99.3	70	130	0	0		

Qualifiers:
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R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82861

Sample ID: **LCSD082412-5** SampType: **LCSD** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120824A**
Client ID: **ZZZZZ** Batch ID: **R82861** TestNo: **TO-15** Analysis Date: **8/24/2012** SeqNo: **2317535**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	23.73	1.1	27.28	0	87	70	130	23.79	0.230	25	
1,1,2,2-Tetrachloroethane	40.58	1.4	34.34	0	118	70	130	40.72	0.338	25	
1,1,2-Trichloroethane	30.28	1.1	27.28	0	111	70	130	30.34	0.180	25	
1,1-Dichloroethane	21.49	0.80	20.24	0	106	70	130	21.25	1.14	25	
1,1-Dichloroethene	20.18	0.80	19.82	0	102	70	130	19.9	1.38	25	
1,2,4-Trichlorobenzene	34.21	1.5	37.11	0	92.2	70	130	33.77	1.31	25	
1,2,4-Trimethylbenzene	23.94	1.0	24.58	0	97.4	70	130	23.6	1.45	25	
1,2-Dibromoethane	38.49	1.5	38.42	0	100	70	130	38.49	0	25	
1,2-Dichlorobenzene	29.76	1.2	30.06	0	99	70	130	29.64	0.405	25	
1,2-Dichloroethane	22.34	0.80	20.24	0	110	70	130	22.3	0.181	25	
1,2-Dichloropropane	25	0.90	23.11	0	108	70	130	25	0	25	
1,3,5-Trimethylbenzene	25.61	1.0	24.58	0	104	70	130	25.61	0	25	
1,3-Butadiene	10.8	0.40	11.06	0	97.6	70	130	10.91	1.02	25	
1,3-Dichlorobenzene	27.36	1.2	30.06	0	91	70	130	27.36	0	25	
1,4-Dichlorobenzene	28.68	1.2	30.06	0	95.4	70	130	28.68	0	25	
1,4-Dioxane	17.12	1.8	18.02	0	95	70	130	14.81	14.4	25	
2-Butanone	15.28	1.5	14.75	0	104	70	130	14.92	2.34	25	
2-Hexanone	22.49	4.1	20.48	0	110	70	130	19.17	15.9	25	
4-Ethyltoluene	24.28	1.0	24.58	0	98.8	70	130	24.19	0.406	25	
4-Methyl-2-pentanone	21.88	4.1	20.48	0	107	70	130	19.75	10.2	25	
Acetone	11.05	4.8	11.88	0	93	70	130	11.26	1.92	25	*
Benzene	16.23	0.60	15.97	0	102	70	130	16.29	0.393	25	
Benzyl chloride	23.71	2.6	25.89	0	91.6	70	130	21.17	11.3	25	
Bromodichloromethane	33.03	1.3	33.5	0	98.6	70	130	32.83	0.610	25	
Bromoform	48.17	5.2	51.68	0	93.2	70	130	47.45	1.51	25	
Bromomethane	17.12	1.9	19.42	0	88.2	70	130	16.81	1.83	25	
Carbon disulfide	14.04	0.60	15.57	0	90.2	70	130	13.92	0.891	25	
Carbon tetrachloride	30.7	1.3	31.46	0	97.6	70	130	30.07	2.07	25	
Chlorobenzene	21.82	0.90	23.02	0	94.8	70	130	21.82	0	25	
Chloroethane	14.93	0.50	13.19	0	113	70	130	14.67	1.78	25	
Chloroform	24.41	1.0	24.41	0	100	70	130	24.12	1.21	25	

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82861

Sample ID: **LCSD082412-5** SampType: **LCSD** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120824A**
Client ID: **ZZZZZ** Batch ID: **R82861** TestNo: **TO-15** Analysis Date: **8/24/2012** SeqNo: **2317535**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	8.591	1.0	10.33	0	83.2	70	130	8.487	1.21	25	
cis-1,2-Dichloroethene	19.74	0.80	19.82	0.1189	99	70	130	19.15	3.06	25	
cis-1,3-Dichloropropene	25.01	0.90	22.69	0	110	70	130	24.92	0.364	25	
Cyclohexane	18.79	0.70	17.21	0	109	70	130	18.69	0.551	25	
Dibromochloromethane	41.57	1.7	42.59	0	97.6	70	130	41.14	1.03	25	
Dichlorodifluoromethane	20.82	1.0	24.73	0	84.2	70	130	20.87	0.237	25	
Ethyl acetate	19.71	0.70	18.02	0	109	70	130	19.89	0.910	25	
Ethylbenzene	21.28	0.90	21.71	0	98	70	130	21.54	1.22	25	
Freon-113	31.42	1.5	38.32	0	82	70	130	31.04	1.23	25	
Freon-114	29.01	7.0	34.95	0	83	70	130	28.03	3.43	25	
Heptane	25.53	0.80	20.49	0	125	70	130	25.94	1.59	25	
Hexachlorobutadiene	41.59	2.1	53.33	0	78	70	130	41.38	0.514	25	
Hexane	21.89	1.8	17.62	0	124	70	130	21.96	0.322	25	
Isopropyl Alcohol	13.94	2.5	12.29	0	113	70	130	13.49	3.23	25	
m,p-Xylene	43.16	1.7	43.42	0	99.4	70	130	43.2	0.101	25	
Methyl tert-butyl ether	18.53	0.70	18.03	0	103	70	130	18.24	1.57	25	
Methylene chloride	14.24	6.9	17.37	0	82	70	130	14.21	0.244	25	
o-Xylene	21.54	0.90	21.71	0	99.2	70	130	21.45	0.404	25	
Propene	8.605	3.4	8.605	0	100	70	130	8.691	0.995	25	
Styrene	23.09	0.90	21.3	0	108	70	130	22.96	0.555	25	
Tetrachloroethene	29.57	1.4	33.91	0	87.2	70	130	29.71	0.458	25	
Tetrahydrofuran	16.55	1.5	14.75	0	112	70	130	16.37	1.08	25	
Toluene	18.99	0.80	18.84	0	101	70	130	19.07	0.396	25	
trans-1,2-Dichloroethene	19.15	0.80	19.82	0	96.6	70	130	18.83	1.67	25	
trans-1,3-Dichloropropene	18.97	0.90	22.69	0	83.6	70	130	18.65	1.69	25	
Trichloroethene	26.44	1.1	26.87	0	98.4	70	130	25.1	5.21	25	
Trichlorofluoromethane	21.13	1.1	28.09	0	75.2	70	130	20.51	2.97	25	
Vinyl acetate	15.92	7.0	17.61	0	90.4	70	130	14.26	11.0	25	
Vinyl chloride	11.91	0.50	12.78	0	93.2	70	130	11.84	0.646	25	
Xylenes, Total	64.69	2.6	65.13	0	99.3	70	130	64.65	0.0671	25	

Qualifiers:
ND - Not Detected at the Reporting Limit
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82862

Sample ID: **MB082712-5** SampType: **MBLK** TestCode: **TO_15A+** Units: **ppbv** Prep Date: Run ID: **VOA-5_120827A**
Client ID: **ZZZZZ** Batch ID: **R82862** TestNo: **TO-15** Analysis Date: **8/27/2012** SeqNo: **2229236**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.20									
1,1,2,2-Tetrachloroethane	ND	0.20									
1,1,2-Trichloroethane	ND	0.20									
1,1-Dichloroethane	ND	0.20									
1,1-Dichloroethene	ND	0.20									
1,2,4-Trichlorobenzene	ND	0.20									
1,2,4-Trimethylbenzene	ND	0.20									
1,2-Dibromoethane	ND	0.20									
1,2-Dichlorobenzene	ND	0.20									
1,2-Dichloroethane	ND	0.20									
1,2-Dichloropropane	ND	0.20									
1,3,5-Trimethylbenzene	ND	0.20									
1,3-Butadiene	ND	0.20									
1,3-Dichlorobenzene	ND	0.20									
1,4-Dichlorobenzene	ND	0.20									
1,4-Dioxane	ND	1.0									
2-Butanone	ND	0.50									
2-Hexanone	ND	1.0									
4-Ethyltoluene	ND	0.20									
4-Methyl-2-pentanone	ND	1.0									
Acetone	ND	2.0									*
Benzene	ND	0.20									
Benzyl chloride	ND	0.50									
Bromodichloromethane	ND	0.20									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon disulfide	ND	0.20									
Carbon tetrachloride	ND	0.20									
Chlorobenzene	ND	0.20									
Chloroethane	ND	0.20									
Chloroform	ND	0.20									

Qualifiers:
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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82862

Sample ID: **MB082712-5**	SampType: **MBLK**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120827A**
Client ID: **ZZZZZ**	Batch ID: **R82862**	TestNo: **TO-15**		Analysis Date: **8/27/2012**	SeqNo: **2229236**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.50									
cis-1,2-Dichloroethene	0.05	0.20									J
cis-1,3-Dichloropropene	ND	0.20									
Cyclohexane	ND	0.20									
Dibromochloromethane	ND	0.20									
Dichlorodifluoromethane	ND	0.20									
Ethyl acetate	ND	0.20									
Ethylbenzene	ND	0.20									
Freon-113	ND	0.20									
Freon-114	ND	1.0									
Heptane	ND	0.20									
Hexachlorobutadiene	ND	0.20									
Hexane	ND	0.50									
Isopropyl Alcohol	ND	1.0									
m,p-Xylene	ND	0.40									
Methyl tert-butyl ether	ND	0.20									
Methylene chloride	ND	2.0									
o-Xylene	ND	0.20									
Propene	ND	2.0									
Styrene	ND	0.20									
Tetrachloroethene	ND	0.20									
Tetrahydrofuran	ND	0.50									
Toluene	ND	0.20									
trans-1,2-Dichloroethene	ND	0.20									
trans-1,3-Dichloropropene	ND	0.20									
Trichloroethene	ND	0.20									
Trichlorofluoromethane	ND	0.20									
Vinyl acetate	ND	2.0									
Vinyl chloride	ND	0.20									
Xylenes, Total	ND	0.60									

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82862

Sample ID: **C082312**	SampType: **MBLK**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120827A**
Client ID: **ZZZZZ**	Batch ID: **R82862**	TestNo: **TO-15**		Analysis Date: **8/27/2012**	SeqNo: **2229866**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.20									
1,1,2,2-Tetrachloroethane	ND	0.20									
1,1,2-Trichloroethane	ND	0.20									
1,1-Dichloroethane	ND	0.20									
1,1-Dichloroethene	ND	0.20									
1,2,4-Trichlorobenzene	ND	0.20									
1,2,4-Trimethylbenzene	ND	0.20									
1,2-Dibromoethane	ND	0.20									
1,2-Dichlorobenzene	ND	0.20									
1,2-Dichloroethane	ND	0.20									
1,2-Dichloropropane	ND	0.20									
1,3,5-Trimethylbenzene	ND	0.20									
1,3-Butadiene	ND	0.20									
1,3-Dichlorobenzene	ND	0.20									
1,4-Dichlorobenzene	ND	0.20									
1,4-Dioxane	ND	1.0									
2-Butanone	ND	0.50									
2-Hexanone	ND	1.0									
4-Ethyltoluene	ND	0.20									
4-Methyl-2-pentanone	ND	1.0									
Acetone	ND	2.0									*
Benzene	ND	0.20									
Benzyl chloride	ND	0.50									
Bromodichloromethane	ND	0.20									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon disulfide	ND	0.20									
Carbon tetrachloride	ND	0.20									
Chlorobenzene	ND	0.20									
Chloroethane	ND	0.20									
Chloroform	ND	0.20									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82862

Sample ID: **C082312**	SampType: **MBLK**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120827A**
Client ID: **ZZZZZ**	Batch ID: **R82862**	TestNo: **TO-15**		Analysis Date: **8/27/2012**	SeqNo: **2229866**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.50									
cis-1,2-Dichloroethene	0.05	0.20									J
cis-1,3-Dichloropropene	ND	0.20									
Cyclohexane	ND	0.20									
Dibromochloromethane	ND	0.20									
Dichlorodifluoromethane	ND	0.20									
Ethyl acetate	ND	0.20									
Ethylbenzene	ND	0.20									
Freon-113	ND	0.20									
Freon-114	ND	1.0									
Heptane	ND	0.20									
Hexachlorobutadiene	ND	0.20									
Hexane	ND	0.50									
Isopropyl Alcohol	ND	1.0									
m,p-Xylene	ND	0.40									
Methyl tert-butyl ether	ND	0.20									
Methylene chloride	ND	2.0									
o-Xylene	ND	0.20									
Propene	ND	2.0									
Styrene	ND	0.20									
Tetrachloroethene	ND	0.20									
Tetrahydrofuran	ND	0.50									
Toluene	ND	0.20									
trans-1,2-Dichloroethene	ND	0.20									
trans-1,3-Dichloropropene	ND	0.20									
Trichloroethene	ND	0.20									
Trichlorofluoromethane	ND	0.20									
Vinyl acetate	ND	2.0									
Vinyl chloride	ND	0.20									
Xylenes, Total	ND	0.60									

Qualifiers:
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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82862

Sample ID: **C082412**	SampType: **MBLK**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120827A**
Client ID: **ZZZZZ**	Batch ID: **R82862**	TestNo: **TO-15**		Analysis Date: **8/27/2012**	SeqNo: **2229867**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.20									
1,1,2,2-Tetrachloroethane	ND	0.20									
1,1,2-Trichloroethane	ND	0.20									
1,1-Dichloroethane	ND	0.20									
1,1-Dichloroethene	ND	0.20									
1,2,4-Trichlorobenzene	ND	0.20									
1,2,4-Trimethylbenzene	ND	0.20									
1,2-Dibromoethane	ND	0.20									
1,2-Dichlorobenzene	ND	0.20									
1,2-Dichloroethane	ND	0.20									
1,2-Dichloropropane	ND	0.20									
1,3,5-Trimethylbenzene	ND	0.20									
1,3-Butadiene	ND	0.20									
1,3-Dichlorobenzene	ND	0.20									
1,4-Dichlorobenzene	ND	0.20									
1,4-Dioxane	ND	1.0									
2-Butanone	ND	0.50									
2-Hexanone	ND	1.0									
4-Ethyltoluene	ND	0.20									
4-Methyl-2-pentanone	ND	1.0									
Acetone	ND	2.0									*
Benzene	ND	0.20									
Benzyl chloride	ND	0.50									
Bromodichloromethane	ND	0.20									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon disulfide	ND	0.20									
Carbon tetrachloride	ND	0.20									
Chlorobenzene	ND	0.20									
Chloroethane	ND	0.20									
Chloroform	ND	0.20									

Qualifiers:
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H/HT - Holding Time Exceeded
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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82862

Sample ID: **C082412**	SampType: **MBLK**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120827A**
Client ID: **ZZZZZ**	Batch ID: **R82862**	TestNo: **TO-15**		Analysis Date: **8/27/2012**	SeqNo: **2229867**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.50									
cis-1,2-Dichloroethene	0.05	0.20									J
cis-1,3-Dichloropropene	ND	0.20									
Cyclohexane	ND	0.20									
Dibromochloromethane	ND	0.20									
Dichlorodifluoromethane	ND	0.20									
Ethyl acetate	ND	0.20									
Ethylbenzene	ND	0.20									
Freon-113	ND	0.20									
Freon-114	ND	1.0									
Heptane	ND	0.20									
Hexachlorobutadiene	ND	0.20									
Hexane	ND	0.50									
Isopropyl Alcohol	ND	1.0									
m,p-Xylene	ND	0.40									
Methyl tert-butyl ether	ND	0.20									
Methylene chloride	ND	2.0									
o-Xylene	ND	0.20									
Propene	ND	2.0									
Styrene	ND	0.20									
Tetrachloroethene	ND	0.20									
Tetrahydrofuran	ND	0.50									
Toluene	ND	0.20									
trans-1,2-Dichloroethene	ND	0.20									
trans-1,3-Dichloropropene	ND	0.20									
Trichloroethene	ND	0.20									
Trichlorofluoromethane	ND	0.20									
Vinyl acetate	ND	2.0									
Vinyl chloride	ND	0.20									
Xylenes, Total	ND	0.60									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82862

Sample ID: **LCS082712-5** SampType: **LCS** TestCode: **TO_15A+** Units: **ppbv** Prep Date: Run ID: **VOA-5_120827A**
Client ID: **ZZZZZ** Batch ID: **R82862** TestNo: **TO-15** Analysis Date: **8/28/2012** SeqNo: **2229237**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	4.94	0.20	5	0	98.8	70	130	0	0		
1,1,2,2-Tetrachloroethane	6.96	0.20	5	0	139	70	130	0	0		S
1,1,2-Trichloroethane	6.33	0.20	5	0	127	70	130	0	0		
1,1-Dichloroethane	5.97	0.20	5	0	119	70	130	0	0		
1,1-Dichloroethene	5.99	0.20	5	0	120	70	130	0	0		
1,2,4-Trichlorobenzene	5.45	0.20	5	0	109	70	130	0	0		
1,2,4-Trimethylbenzene	5.6	0.20	5	0	112	70	130	0	0		
1,2-Dibromoethane	5.73	0.20	5	0	115	70	130	0	0		
1,2-Dichlorobenzene	5.71	0.20	5	0	114	70	130	0	0		
1,2-Dichloroethane	6.45	0.20	5	0	129	70	130	0	0		
1,2-Dichloropropane	6.08	0.20	5	0	122	70	130	0	0		
1,3,5-Trimethylbenzene	6.05	0.20	5	0	121	70	130	0	0		
1,3-Butadiene	5.76	0.20	5	0	115	70	130	0	0		
1,3-Dichlorobenzene	5.33	0.20	5	0	107	70	130	0	0		
1,4-Dichlorobenzene	5.58	0.20	5	0	112	70	130	0	0		
1,4-Dioxane	5.63	1.0	5	0	113	70	130	0	0		
2-Butanone	6.12	0.50	5	0	122	70	130	0	0		
2-Hexanone	6.69	1.0	5	0	134	70	130	0	0		S
4-Ethyltoluene	5.67	0.20	5	0	113	70	130	0	0		
4-Methyl-2-pentanone	6.38	1.0	5	0	128	70	130	0	0		
Acetone	5.23	2.0	5	0	105	70	130	0	0		*
Benzene	5.67	0.20	5	0	113	70	130	0	0		
Benzyl chloride	5.42	0.50	5	0	108	70	130	0	0		
Bromodichloromethane	5.66	0.20	5	0	113	70	130	0	0		
Bromoform	5.4	0.50	5	0	108	70	130	0	0		
Bromomethane	4.65	0.50	5	0	93	70	130	0	0		
Carbon disulfide	4.95	0.20	5	0	99	70	130	0	0		
Carbon tetrachloride	5.85	0.20	5	0	117	70	130	0	0		
Chlorobenzene	5.37	0.20	5	0	107	70	130	0	0		
Chloroethane	6.15	0.20	5	0	123	70	130	0	0		
Chloroform	5.75	0.20	5	0	115	70	130	0	0		

Qualifiers:
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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82862

Sample ID: **LCS082712-5**	SampType: **LCS**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120827A**
Client ID: **ZZZZZ**	Batch ID: **R82862**	TestNo: **TO-15**		Analysis Date: **8/28/2012**	SeqNo: **2229237**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	5	0.50	5	0	100	70	130	0	0		
cis-1,2-Dichloroethene	6.05	0.20	5	0.05	120	70	130	0	0		
cis-1,3-Dichloropropene	6.16	0.20	5	0	123	70	130	0	0		
Cyclohexane	6.12	0.20	5	0	122	70	130	0	0		
Dibromochloromethane	5.64	0.20	5	0	113	70	130	0	0		
Dichlorodifluoromethane	4.97	0.20	5	0	99.4	70	130	0	0		
Ethyl acetate	6.45	0.20	5	0	129	70	130	0	0		
Ethylbenzene	5.54	0.20	5	0	111	70	130	0	0		
Freon-113	4.69	0.20	5	0	93.8	70	130	0	0		
Freon-114	5.1	1.0	5	0	102	70	130	0	0		
Heptane	7.22	0.20	5	0	144	70	130	0	0		S
Hexachlorobutadiene	4.48	0.20	5	0	89.6	70	130	0	0		
Hexane	7.06	0.50	5	0	141	70	130	0	0		S
Isopropyl Alcohol	6.25	1.0	5	0	125	70	130	0	0		
m,p-Xylene	11.39	0.40	10	0	114	70	130	0	0		
Methyl tert-butyl ether	5.8	0.20	5	0	116	70	130	0	0		
Methylene chloride	5.3	2.0	5	0	106	70	130	0	0		
o-Xylene	5.77	0.20	5	0	115	70	130	0	0		
Propene	5.8	2.0	5	0	116	70	130	0	0		
Styrene	6.2	0.20	5	0	124	70	130	0	0		
Tetrachloroethene	4.92	0.20	5	0	98.4	70	130	0	0		
Tetrahydrofuran	6.51	0.50	5	0	130	70	130	0	0		S
Toluene	5.69	0.20	5	0	114	70	130	0	0		
trans-1,2-Dichloroethene	5.56	0.20	5	0	111	70	130	0	0		
trans-1,3-Dichloropropene	4.68	0.20	5	0	93.6	70	130	0	0		
Trichloroethene	5.45	0.20	5	0	109	70	130	0	0		
Trichlorofluoromethane	4.7	0.20	5	0	94	70	130	0	0		
Vinyl acetate	5.4	2.0	5	0	108	70	130	0	0		
Vinyl chloride	5.57	0.20	5	0	111	70	130	0	0		
Xylenes, Total	17.16	0.60	15	0	114	70	130	0	0		

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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82862

Sample ID: **LCSD082712-5** SampType: **LCSD** TestCode: **TO_15A+** Units: **ppbv** Prep Date: Run ID: **VOA-5_120827A**
Client ID: **ZZZZZ** Batch ID: **R82862** TestNo: **TO-15** Analysis Date: **8/28/2012** SeqNo: **2229238**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	4.95	0.20	5	0	99	70	130	4.94	0.202	25	
1,1,2,2-Tetrachloroethane	6.66	0.20	5	0	133	70	130	6.96	4.41	25	S
1,1,2-Trichloroethane	6.11	0.20	5	0	122	70	130	6.33	3.54	25	
1,1-Dichloroethane	5.89	0.20	5	0	118	70	130	5.97	1.35	25	
1,1-Dichloroethene	5.67	0.20	5	0	113	70	130	5.99	5.49	25	
1,2,4-Trichlorobenzene	5.01	0.20	5	0	100	70	130	5.45	8.41	25	
1,2,4-Trimethylbenzene	5.3	0.20	5	0	106	70	130	5.6	5.50	25	
1,2-Dibromoethane	5.58	0.20	5	0	112	70	130	5.73	2.65	25	
1,2-Dichlorobenzene	5.43	0.20	5	0	109	70	130	5.71	5.03	25	
1,2-Dichloroethane	6.23	0.20	5	0	125	70	130	6.45	3.47	25	
1,2-Dichloropropane	5.93	0.20	5	0	119	70	130	6.08	2.50	25	
1,3,5-Trimethylbenzene	5.71	0.20	5	0	114	70	130	6.05	5.78	25	
1,3-Butadiene	5.62	0.20	5	0	112	70	130	5.76	2.46	25	
1,3-Dichlorobenzene	5.08	0.20	5	0	102	70	130	5.33	4.80	25	
1,4-Dichlorobenzene	5.27	0.20	5	0	105	70	130	5.58	5.71	25	
1,4-Dioxane	5.26	1.0	5	0	105	70	130	5.63	6.80	25	
2-Butanone	5.68	0.50	5	0	114	70	130	6.12	7.46	25	
2-Hexanone	6.21	1.0	5	0	124	70	130	6.69	7.44	25	
4-Ethyltoluene	5.36	0.20	5	0	107	70	130	5.67	5.62	25	
4-Methyl-2-pentanone	5.93	1.0	5	0	119	70	130	6.38	7.31	25	
Acetone	4.89	2.0	5	0	97.8	70	130	5.23	6.72	25	*
Benzene	5.52	0.20	5	0	110	70	130	5.67	2.68	25	
Benzyl chloride	5.1	0.50	5	0	102	70	130	5.42	6.08	25	
Bromodichloromethane	5.6	0.20	5	0	112	70	130	5.66	1.07	25	
Bromoform	5.2	0.50	5	0	104	70	130	5.4	3.77	25	
Bromomethane	4.46	0.50	5	0	89.2	70	130	4.65	4.17	25	
Carbon disulfide	4.85	0.20	5	0	97	70	130	4.95	2.04	25	
Carbon tetrachloride	5.81	0.20	5	0	116	70	130	5.85	0.686	25	
Chlorobenzene	5.17	0.20	5	0	103	70	130	5.37	3.80	25	
Chloroethane	5.91	0.20	5	0	118	70	130	6.15	3.98	25	
Chloroform	5.61	0.20	5	0	112	70	130	5.75	2.46	25	

Qualifiers:
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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82862

Sample ID: **LCSD082712-5**	SampType: **LCSD**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120827A**
Client ID: **ZZZZZ**	Batch ID: **R82862**	TestNo: **TO-15**		Analysis Date: **8/28/2012**	SeqNo: **2229238**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	4.97	0.50	5	0	99.4	70	130	5	0.602	25	
cis-1,2-Dichloroethene	5.4	0.20	5	0.05	107	70	130	6.05	11.4	25	
cis-1,3-Dichloropropene	6.01	0.20	5	0	120	70	130	6.16	2.47	25	
Cyclohexane	5.95	0.20	5	0	119	70	130	6.12	2.82	25	
Dibromochloromethane	5.46	0.20	5	0	109	70	130	5.64	3.24	25	
Dichlorodifluoromethane	4.77	0.20	5	0	95.4	70	130	4.97	4.11	25	
Ethyl acetate	6.32	0.20	5	0	126	70	130	6.45	2.04	25	
Ethylbenzene	5.34	0.20	5	0	107	70	130	5.54	3.68	25	
Freon-113	4.52	0.20	5	0	90.4	70	130	4.69	3.69	25	
Freon-114	4.86	1.0	5	0	97.2	70	130	5.1	4.82	25	
Heptane	6.98	0.20	5	0	140	70	130	7.22	3.38	25	S
Hexachlorobutadiene	4.12	0.20	5	0	82.4	70	130	4.48	8.37	25	
Hexane	6.83	0.50	5	0	137	70	130	7.06	3.31	25	S
Isopropyl Alcohol	5.59	1.0	5	0	112	70	130	6.25	11.1	25	
m,p-Xylene	10.85	0.40	10	0	108	70	130	11.39	4.86	25	
Methyl tert-butyl ether	5.54	0.20	5	0	111	70	130	5.8	4.59	25	
Methylene chloride	4.67	2.0	5	0	93.4	70	130	5.3	12.6	25	
o-Xylene	5.46	0.20	5	0	109	70	130	5.77	5.52	25	
Propene	5.58	2.0	5	0	112	70	130	5.8	3.87	25	
Styrene	5.92	0.20	5	0	118	70	130	6.2	4.62	25	
Tetrachloroethene	4.75	0.20	5	0	95	70	130	4.92	3.52	25	
Tetrahydrofuran	6.09	0.50	5	0	122	70	130	6.51	6.67	25	
Toluene	5.48	0.20	5	0	110	70	130	5.69	3.76	25	
trans-1,2-Dichloroethene	5.35	0.20	5	0	107	70	130	5.56	3.85	25	
trans-1,3-Dichloropropene	4.64	0.20	5	0	92.8	70	130	4.68	0.858	25	
Trichloroethene	5.16	0.20	5	0	103	70	130	5.45	5.47	25	
Trichlorofluoromethane	4.51	0.20	5	0	90.2	70	130	4.7	4.13	25	
Vinyl acetate	5.21	2.0	5	0	104	70	130	5.4	3.58	25	
Vinyl chloride	5.28	0.20	5	0	106	70	130	5.57	5.35	25	
Xylenes, Total	16.31	0.60	15	0	109	70	130	17.16	5.08	25	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82862

Sample ID: **MB082712-5** SampType: **MBLK** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120827A**
Client ID: **ZZZZZ** Batch ID: **R82862** TestNo: **TO-15** Analysis Date: **8/27/2012** SeqNo: **2317540**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	1.1									
1,1,2,2-Tetrachloroethane	ND	1.4									
1,1,2-Trichloroethane	ND	1.1									
1,1-Dichloroethane	ND	0.80									
1,1-Dichloroethene	ND	0.80									
1,2,4-Trichlorobenzene	ND	1.5									
1,2,4-Trimethylbenzene	ND	1.0									
1,2-Dibromoethane	ND	1.5									
1,2-Dichlorobenzene	ND	1.2									
1,2-Dichloroethane	ND	0.80									
1,2-Dichloropropane	ND	0.90									
1,3,5-Trimethylbenzene	ND	1.0									
1,3-Butadiene	ND	0.40									
1,3-Dichlorobenzene	ND	1.2									
1,4-Dichlorobenzene	ND	1.2									
1,4-Dioxane	ND	1.8									
2-Butanone	ND	1.5									
2-Hexanone	ND	4.1									
4-Ethyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	4.1									
Acetone	ND	4.8									*
Benzene	ND	0.60									
Benzyl chloride	ND	2.6									
Bromodichloromethane	ND	1.3									
Bromoform	ND	5.2									
Bromomethane	ND	1.9									
Carbon disulfide	ND	0.60									
Carbon tetrachloride	ND	1.3									
Chlorobenzene	ND	0.90									
Chloroethane	ND	0.50									
Chloroform	ND	1.0									

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B - Analyte detected in the associated Method Blank
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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82862

Sample ID: **MB082712-5**	SampType: **MBLK**	TestCode: **TO_15UG+**	Units: **µg/m³**	Prep Date:	Run ID: **VOA-5_120827A**
Client ID: **ZZZZZ**	Batch ID: **R82862**	TestNo: **TO-15**		Analysis Date: **8/27/2012**	SeqNo: **2317540**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									
cis-1,2-Dichloroethene	0.1982	0.80									J
cis-1,3-Dichloropropene	ND	0.90									
Cyclohexane	ND	0.70									
Dibromochloromethane	ND	1.7									
Dichlorodifluoromethane	ND	1.0									
Ethyl acetate	ND	0.70									
Ethylbenzene	ND	0.90									
Freon-113	ND	1.5									
Freon-114	ND	7.0									
Heptane	ND	0.80									
Hexachlorobutadiene	ND	2.1									
Hexane	ND	1.8									
Isopropyl Alcohol	ND	2.5									
m,p-Xylene	ND	1.7									
Methyl tert-butyl ether	ND	0.70									
Methylene chloride	ND	6.9									
o-Xylene	ND	0.90									
Propene	ND	3.4									
Styrene	ND	0.90									
Tetrachloroethene	ND	1.4									
Tetrahydrofuran	ND	1.5									
Toluene	ND	0.80									
trans-1,2-Dichloroethene	ND	0.80									
trans-1,3-Dichloropropene	ND	0.90									
Trichloroethene	ND	1.1									
Trichlorofluoromethane	ND	1.1									
Vinyl acetate	ND	7.0									
Vinyl chloride	ND	0.50									
Xylenes, Total	ND	2.6									

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82862

Sample ID: **LCS082712-5**	SampType: **LCS**	TestCode: **TO_15UG+**	Units: **µg/m³**	Prep Date:	Run ID: **VOA-5_120827A**
Client ID: **ZZZZZ**	Batch ID: **R82862**	TestNo: **TO-15**		Analysis Date: **8/28/2012**	SeqNo: **2317541**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	26.95	1.1	27.28	0	98.8	70	130	0	0		
1,1,2,2-Tetrachloroethane	47.79	1.4	34.34	0	139	70	130	0	0		S
1,1,2-Trichloroethane	34.54	1.1	27.28	0	127	70	130	0	0		
1,1-Dichloroethane	24.16	0.80	20.24	0	119	70	130	0	0		
1,1-Dichloroethene	23.75	0.80	19.82	0	120	70	130	0	0		
1,2,4-Trichlorobenzene	40.45	1.5	37.11	0	109	70	130	0	0		
1,2,4-Trimethylbenzene	27.53	1.0	24.58	0	112	70	130	0	0		
1,2-Dibromoethane	44.03	1.5	38.42	0	115	70	130	0	0		
1,2-Dichlorobenzene	34.33	1.2	30.06	0	114	70	130	0	0		
1,2-Dichloroethane	26.11	0.80	20.24	0	129	70	130	0	0		
1,2-Dichloropropane	28.1	0.90	23.11	0	122	70	130	0	0		
1,3,5-Trimethylbenzene	29.74	1.0	24.58	0	121	70	130	0	0		
1,3-Butadiene	12.74	0.40	11.06	0	115	70	130	0	0		
1,3-Dichlorobenzene	32.05	1.2	30.06	0	107	70	130	0	0		
1,4-Dichlorobenzene	33.55	1.2	30.06	0	112	70	130	0	0		
1,4-Dioxane	20.29	1.8	18.02	0	113	70	130	0	0		
2-Butanone	18.05	1.5	14.75	0	122	70	130	0	0		
2-Hexanone	27.41	4.1	20.48	0	134	70	130	0	0		S
4-Ethyltoluene	27.87	1.0	24.58	0	113	70	130	0	0		
4-Methyl-2-pentanone	26.14	4.1	20.48	0	128	70	130	0	0		
Acetone	12.42	4.8	11.88	0	105	70	130	0	0		*
Benzene	18.11	0.60	15.97	0	113	70	130	0	0		
Benzyl chloride	28.06	2.6	25.89	0	108	70	130	0	0		
Bromodichloromethane	37.93	1.3	33.5	0	113	70	130	0	0		
Bromoform	55.82	5.2	51.68	0	108	70	130	0	0		
Bromomethane	18.06	1.9	19.42	0	93	70	130	0	0		
Carbon disulfide	15.41	0.60	15.57	0	99	70	130	0	0		
Carbon tetrachloride	36.8	1.3	31.46	0	117	70	130	0	0		
Chlorobenzene	24.72	0.90	23.02	0	107	70	130	0	0		
Chloroethane	16.23	0.50	13.19	0	123	70	130	0	0		
Chloroform	28.08	1.0	24.41	0	115	70	130	0	0		

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82862

Sample ID: **LCS082712-5**	SampType: **LCS**	TestCode: **TO_15UG+**	Units: **µg/m³**	Prep Date:	Run ID: **VOA-5_120827A**
Client ID: **ZZZZZ**	Batch ID: **R82862**	TestNo: **TO-15**		Analysis Date: **8/28/2012**	SeqNo: **2317541**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	10.33	1.0	10.33	0	100	70	130	0	0		
cis-1,2-Dichloroethene	23.99	0.80	19.82	0.1982	120	70	130	0	0		
cis-1,3-Dichloropropene	27.96	0.90	22.69	0	123	70	130	0	0		
Cyclohexane	21.07	0.70	17.21	0	122	70	130	0	0		
Dibromochloromethane	48.04	1.7	42.59	0	113	70	130	0	0		
Dichlorodifluoromethane	24.58	1.0	24.73	0	99.4	70	130	0	0		
Ethyl acetate	23.24	0.70	18.02	0	129	70	130	0	0		
Ethylbenzene	24.05	0.90	21.71	0	111	70	130	0	0		
Freon-113	35.94	1.5	38.32	0	93.8	70	130	0	0		
Freon-114	35.65	7.0	34.95	0	102	70	130	0	0		
Heptane	29.59	0.80	20.49	0	144	70	130	0	0		S
Hexachlorobutadiene	47.78	2.1	53.33	0	89.6	70	130	0	0		
Hexane	24.88	1.8	17.62	0	141	70	130	0	0		S
Isopropyl Alcohol	15.36	2.5	12.29	0	125	70	130	0	0		
m,p-Xylene	49.45	1.7	43.42	0	114	70	130	0	0		
Methyl tert-butyl ether	20.91	0.70	18.03	0	116	70	130	0	0		
Methylene chloride	18.41	6.9	17.37	0	106	70	130	0	0		
o-Xylene	25.05	0.90	21.71	0	115	70	130	0	0		
Propene	9.982	3.4	8.605	0	116	70	130	0	0		
Styrene	26.41	0.90	21.3	0	124	70	130	0	0		
Tetrachloroethene	33.37	1.4	33.91	0	98.4	70	130	0	0		
Tetrahydrofuran	19.2	1.5	14.75	0	130	70	130	0	0		S
Toluene	21.44	0.80	18.84	0	114	70	130	0	0		
trans-1,2-Dichloroethene	22.04	0.80	19.82	0	111	70	130	0	0		
trans-1,3-Dichloropropene	21.24	0.90	22.69	0	93.6	70	130	0	0		
Trichloroethene	29.29	1.1	26.87	0	109	70	130	0	0		
Trichlorofluoromethane	26.41	1.1	28.09	0	94	70	130	0	0		
Vinyl acetate	19.01	7.0	17.61	0	108	70	130	0	0		
Vinyl chloride	14.24	0.50	12.78	0	111	70	130	0	0		
Xylenes, Total	74.51	2.6	65.13	0	114	70	130	0	0		

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82862

Sample ID: **LCSD082712-5** SampType: **LCSD** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120827A**
Client ID: **ZZZZZ** Batch ID: **R82862** TestNo: **TO-15** Analysis Date: **8/28/2012** SeqNo: **2317542**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	27.01	1.1	27.28	0	99	70	130	26.95	0.202	25	
1,1,2,2-Tetrachloroethane	45.73	1.4	34.34	0	133	70	130	47.79	4.41	25	S
1,1,2-Trichloroethane	33.34	1.1	27.28	0	122	70	130	34.54	3.54	25	
1,1-Dichloroethane	23.84	0.80	20.24	0	118	70	130	24.16	1.35	25	
1,1-Dichloroethene	22.48	0.80	19.82	0	113	70	130	23.75	5.49	25	
1,2,4-Trichlorobenzene	37.18	1.5	37.11	0	100	70	130	40.45	8.41	25	
1,2,4-Trimethylbenzene	26.05	1.0	24.58	0	106	70	130	27.53	5.50	25	
1,2-Dibromoethane	42.87	1.5	38.42	0	112	70	130	44.03	2.65	25	
1,2-Dichlorobenzene	32.65	1.2	30.06	0	109	70	130	34.33	5.03	25	
1,2-Dichloroethane	25.22	0.80	20.24	0	125	70	130	26.11	3.47	25	
1,2-Dichloropropane	27.4	0.90	23.11	0	119	70	130	28.1	2.50	25	
1,3,5-Trimethylbenzene	28.07	1.0	24.58	0	114	70	130	29.74	5.78	25	
1,3-Butadiene	12.43	0.40	11.06	0	112	70	130	12.74	2.46	25	
1,3-Dichlorobenzene	30.54	1.2	30.06	0	102	70	130	32.05	4.80	25	
1,4-Dichlorobenzene	31.68	1.2	30.06	0	105	70	130	33.55	5.71	25	
1,4-Dioxane	18.96	1.8	18.02	0	105	70	130	20.29	6.80	25	
2-Butanone	16.75	1.5	14.75	0	114	70	130	18.05	7.46	25	
2-Hexanone	25.44	4.1	20.48	0	124	70	130	27.41	7.44	25	
4-Ethyltoluene	26.35	1.0	24.58	0	107	70	130	27.87	5.62	25	
4-Methyl-2-pentanone	24.29	4.1	20.48	0	119	70	130	26.14	7.31	25	
Acetone	11.62	4.8	11.88	0	97.8	70	130	12.42	6.72	25	*
Benzene	17.63	0.60	15.97	0	110	70	130	18.11	2.68	25	
Benzyl chloride	26.4	2.6	25.89	0	102	70	130	28.06	6.08	25	
Bromodichloromethane	37.52	1.3	33.5	0	112	70	130	37.93	1.07	25	
Bromoform	53.75	5.2	51.68	0	104	70	130	55.82	3.77	25	
Bromomethane	17.32	1.9	19.42	0	89.2	70	130	18.06	4.17	25	
Carbon disulfide	15.1	0.60	15.57	0	97	70	130	15.41	2.04	25	
Carbon tetrachloride	36.55	1.3	31.46	0	116	70	130	36.8	0.686	25	
Chlorobenzene	23.8	0.90	23.02	0	103	70	130	24.72	3.80	25	
Chloroethane	15.59	0.50	13.19	0	118	70	130	16.23	3.98	25	
Chloroform	27.39	1.0	24.41	0	112	70	130	28.08	2.46	25	

Qualifiers:
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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82862

Sample ID: **LCSD082712-5** SampType: **LCSD** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120827A**
Client ID: **ZZZZZ** Batch ID: **R82862** TestNo: **TO-15** Analysis Date: **8/28/2012** SeqNo: **2317542**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	10.26	1.0	10.33	0	99.4	70	130	10.33	0.602	25	
cis-1,2-Dichloroethene	21.41	0.80	19.82	0.1982	107	70	130	23.99	11.4	25	
cis-1,3-Dichloropropene	27.28	0.90	22.69	0	120	70	130	27.96	2.47	25	
Cyclohexane	20.48	0.70	17.21	0	119	70	130	21.07	2.82	25	
Dibromochloromethane	46.51	1.7	42.59	0	109	70	130	48.04	3.24	25	
Dichlorodifluoromethane	23.59	1.0	24.73	0	95.4	70	130	24.58	4.11	25	
Ethyl acetate	22.78	0.70	18.02	0	126	70	130	23.24	2.04	25	
Ethylbenzene	23.19	0.90	21.71	0	107	70	130	24.05	3.68	25	
Freon-113	34.64	1.5	38.32	0	90.4	70	130	35.94	3.69	25	
Freon-114	33.97	7.0	34.95	0	97.2	70	130	35.65	4.82	25	
Heptane	28.61	0.80	20.49	0	140	70	130	29.59	3.38	25	S
Hexachlorobutadiene	43.94	2.1	53.33	0	82.4	70	130	47.78	8.37	25	
Hexane	24.07	1.8	17.62	0	137	70	130	24.88	3.31	25	S
Isopropyl Alcohol	13.74	2.5	12.29	0	112	70	130	15.36	11.1	25	
m,p-Xylene	47.11	1.7	43.42	0	109	70	130	49.45	4.86	25	
Methyl tert-butyl ether	19.97	0.70	18.03	0	111	70	130	20.91	4.59	25	
Methylene chloride	16.22	6.9	17.37	0	93.4	70	130	18.41	12.6	25	
o-Xylene	23.71	0.90	21.71	0	109	70	130	25.05	5.52	25	
Propene	9.604	3.4	8.605	0	112	70	130	9.982	3.87	25	
Styrene	25.22	0.90	21.3	0	118	70	130	26.41	4.62	25	
Tetrachloroethene	32.22	1.4	33.91	0	95	70	130	33.37	3.52	25	
Tetrahydrofuran	17.96	1.5	14.75	0	122	70	130	19.2	6.67	25	
Toluene	20.65	0.80	18.84	0	110	70	130	21.44	3.76	25	
trans-1,2-Dichloroethene	21.21	0.80	19.82	0	107	70	130	22.04	3.85	25	
trans-1,3-Dichloropropene	21.06	0.90	22.69	0	92.8	70	130	21.24	0.858	25	
Trichloroethene	27.73	1.1	26.87	0	103	70	130	29.29	5.47	25	
Trichlorofluoromethane	25.34	1.1	28.09	0	90.2	70	130	26.41	4.13	25	
Vinyl acetate	18.34	7.0	17.61	0	104	70	130	19.01	3.58	25	
Vinyl chloride	13.5	0.50	12.78	0	106	70	130	14.24	5.35	25	
Xylenes, Total	70.82	2.6	65.13	0	109	70	130	74.51	5.08	25	

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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82878

Sample ID: **MB082812-5** SampType: **MBLK** TestCode: **TO_15A+** Units: **ppbv** Prep Date: Run ID: **VOA-5_120828A**
Client ID: **ZZZZZ** Batch ID: **R82878** TestNo: **TO-15** Analysis Date: **8/28/2012** SeqNo: **2229709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	0.20									
1,1,2,2-Tetrachloroethane	ND	0.20									
1,1,2-Trichloroethane	ND	0.20									
1,1-Dichloroethane	ND	0.20									
1,1-Dichloroethene	ND	0.20									
1,2,4-Trichlorobenzene	ND	0.20									
1,2,4-Trimethylbenzene	ND	0.20									
1,2-Dibromoethane	ND	0.20									
1,2-Dichlorobenzene	ND	0.20									
1,2-Dichloroethane	ND	0.20									
1,2-Dichloropropane	ND	0.20									
1,3,5-Trimethylbenzene	ND	0.20									
1,3-Butadiene	ND	0.20									
1,3-Dichlorobenzene	ND	0.20									
1,4-Dichlorobenzene	ND	0.20									
1,4-Dioxane	ND	1.0									
2-Butanone	ND	0.50									
2-Hexanone	ND	1.0									
4-Ethyltoluene	ND	0.20									
4-Methyl-2-pentanone	ND	1.0									
Acetone	ND	2.0									*
Benzene	ND	0.20									
Benzyl chloride	ND	0.50									
Bromodichloromethane	ND	0.20									
Bromoform	ND	0.50									
Bromomethane	ND	0.50									
Carbon disulfide	ND	0.20									
Carbon tetrachloride	ND	0.20									
Chlorobenzene	ND	0.20									
Chloroethane	ND	0.20									
Chloroform	ND	0.20									

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82878

Sample ID: **MB082812-5**	SampType: **MBLK**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120828A**
Client ID: **ZZZZZ**	Batch ID: **R82878**	TestNo: **TO-15**		Analysis Date: **8/28/2012**	SeqNo: **2229709**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	0.50									
cis-1,2-Dichloroethene	ND	0.20									
cis-1,3-Dichloropropene	ND	0.20									
Cyclohexane	ND	0.20									
Dibromochloromethane	ND	0.20									
Dichlorodifluoromethane	ND	0.20									
Ethyl acetate	ND	0.20									
Ethylbenzene	ND	0.20									
Freon-113	ND	0.20									
Freon-114	0.05	1.0									J
Heptane	ND	0.20									
Hexachlorobutadiene	ND	0.20									
Hexane	ND	0.50									
Isopropyl Alcohol	ND	1.0									
m,p-Xylene	ND	0.40									
Methyl tert-butyl ether	ND	0.20									
Methylene chloride	ND	2.0									
o-Xylene	ND	0.20									
Propene	ND	2.0									
Styrene	ND	0.20									
Tetrachloroethene	ND	0.20									
Tetrahydrofuran	ND	0.50									
Toluene	ND	0.20									
trans-1,2-Dichloroethene	ND	0.20									
trans-1,3-Dichloropropene	ND	0.20									
Trichloroethene	ND	0.20									
Trichlorofluoromethane	ND	0.20									
Vinyl acetate	ND	2.0									
Vinyl chloride	ND	0.20									
Xylenes, Total	ND	0.60									

Qualifiers:
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B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82878

Sample ID: **LCS082812-5**	SampType: **LCS**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120828A**
Client ID: **ZZZZZ**	Batch ID: **R82878**	TestNo: **TO-15**		Analysis Date: **8/28/2012**	SeqNo: **2229710**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	4.96	0.20	5	0	99.2	70	130	0	0		
1,1,2,2-Tetrachloroethane	6.89	0.20	5	0	138	70	130	0	0		S
1,1,2-Trichloroethane	6.21	0.20	5	0	124	70	130	0	0		
1,1-Dichloroethane	5.97	0.20	5	0	119	70	130	0	0		
1,1-Dichloroethene	5.69	0.20	5	0	114	70	130	0	0		
1,2,4-Trichlorobenzene	5.36	0.20	5	0	107	70	130	0	0		
1,2,4-Trimethylbenzene	5.53	0.20	5	0	111	70	130	0	0		
1,2-Dibromoethane	5.67	0.20	5	0	113	70	130	0	0		
1,2-Dichlorobenzene	5.63	0.20	5	0	113	70	130	0	0		
1,2-Dichloroethane	6.43	0.20	5	0	129	70	130	0	0		
1,2-Dichloropropane	6.04	0.20	5	0	121	70	130	0	0		
1,3,5-Trimethylbenzene	5.96	0.20	5	0	119	70	130	0	0		
1,3-Butadiene	5.52	0.20	5	0	110	70	130	0	0		
1,3-Dichlorobenzene	5.26	0.20	5	0	105	70	130	0	0		
1,4-Dichlorobenzene	5.48	0.20	5	0	110	70	130	0	0		
1,4-Dioxane	5.48	1.0	5	0	110	70	130	0	0		
2-Butanone	5.9	0.50	5	0	118	70	130	0	0		
2-Hexanone	6.68	1.0	5	0	134	70	130	0	0		S
4-Ethyltoluene	5.58	0.20	5	0	112	70	130	0	0		
4-Methyl-2-pentanone	6.3	1.0	5	0	126	70	130	0	0		
Acetone	4.8	2.0	5	0	96	70	130	0	0		*
Benzene	5.57	0.20	5	0	111	70	130	0	0		
Benzyl chloride	5.39	0.50	5	0	108	70	130	0	0		
Bromodichloromethane	5.7	0.20	5	0	114	70	130	0	0		
Bromoform	5.3	0.50	5	0	106	70	130	0	0		
Bromomethane	4.54	0.50	5	0	90.8	70	130	0	0		
Carbon disulfide	4.83	0.20	5	0	96.6	70	130	0	0		
Carbon tetrachloride	5.95	0.20	5	0	119	70	130	0	0		
Chlorobenzene	5.31	0.20	5	0	106	70	130	0	0		
Chloroethane	5.93	0.20	5	0	119	70	130	0	0		
Chloroform	5.76	0.20	5	0	115	70	130	0	0		

Qualifiers:
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H/HT - Holding Time Exceeded
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E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82878

Sample ID: **LCS082812-5**	SampType: **LCS**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120828A**
Client ID: **ZZZZZ**	Batch ID: **R82878**	TestNo: **TO-15**		Analysis Date: **8/28/2012**	SeqNo: **2229710**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	4.87	0.50	5	0	97.4	70	130	0	0		
cis-1,2-Dichloroethene	5.42	0.20	5	0	108	70	130	0	0		
cis-1,3-Dichloropropene	6.16	0.20	5	0	123	70	130	0	0		
Cyclohexane	6.03	0.20	5	0	121	70	130	0	0		
Dibromochloromethane	5.59	0.20	5	0	112	70	130	0	0		
Dichlorodifluoromethane	4.83	0.20	5	0	96.6	70	130	0	0		
Ethyl acetate	6.59	0.20	5	0	132	70	130	0	0		S
Ethylbenzene	5.41	0.20	5	0	108	70	130	0	0		
Freon-113	4.55	0.20	5	0	91	70	130	0	0		
Freon-114	4.88	1.0	5	0.05	96.6	70	130	0	0		
Heptane	7.13	0.20	5	0	143	70	130	0	0		S
Hexachlorobutadiene	4.49	0.20	5	0	89.8	70	130	0	0		
Hexane	6.91	0.50	5	0	138	70	130	0	0		S
Isopropyl Alcohol	6.09	1.0	5	0	122	70	130	0	0		
m,p-Xylene	11.15	0.40	10	0	112	70	130	0	0		
Methyl tert-butyl ether	5.54	0.20	5	0	111	70	130	0	0		
Methylene chloride	4.69	2.0	5	0	93.8	70	130	0	0		
o-Xylene	5.67	0.20	5	0	113	70	130	0	0		
Propene	5.6	2.0	5	0	112	70	130	0	0		
Styrene	6.09	0.20	5	0	122	70	130	0	0		
Tetrachloroethene	4.79	0.20	5	0	95.8	70	130	0	0		
Tetrahydrofuran	6.44	0.50	5	0	129	70	130	0	0		
Toluene	5.57	0.20	5	0	111	70	130	0	0		
trans-1,2-Dichloroethene	5.31	0.20	5	0	106	70	130	0	0		
trans-1,3-Dichloropropene	4.76	0.20	5	0	95.2	70	130	0	0		
Trichloroethene	5.23	0.20	5	0	105	70	130	0	0		
Trichlorofluoromethane	4.58	0.20	5	0	91.6	70	130	0	0		
Vinyl acetate	5.48	2.0	5	0	110	70	130	0	0		
Vinyl chloride	5.29	0.20	5	0	106	70	130	0	0		
Xylenes, Total	16.81	0.60	15	0	112	70	130	0	0		

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R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82878

Sample ID: **LCSD082812-5**	SampType: **LCSD**	TestCode: **TO_15A+**	Units: **ppbv**	Prep Date:	Run ID: **VOA-5_120828A**
Client ID: **ZZZZZ**	Batch ID: **R82878**	TestNo: **TO-15**		Analysis Date: **8/28/2012**	SeqNo: **2229711**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	4.93	0.20	5	0	98.6	70	130	4.96	0.607	25	
1,1,2,2-Tetrachloroethane	6.86	0.20	5	0	137	70	130	6.89	0.436	25	S
1,1,2-Trichloroethane	6.2	0.20	5	0	124	70	130	6.21	0.161	25	
1,1-Dichloroethane	5.92	0.20	5	0	118	70	130	5.97	0.841	25	
1,1-Dichloroethene	5.63	0.20	5	0	113	70	130	5.69	1.06	25	
1,2,4-Trichlorobenzene	5.09	0.20	5	0	102	70	130	5.36	5.17	25	
1,2,4-Trimethylbenzene	5.43	0.20	5	0	109	70	130	5.53	1.82	25	
1,2-Dibromoethane	5.67	0.20	5	0	113	70	130	5.67	0	25	
1,2-Dichlorobenzene	5.55	0.20	5	0	111	70	130	5.63	1.43	25	
1,2-Dichloroethane	6.39	0.20	5	0	128	70	130	6.43	0.624	25	
1,2-Dichloropropane	6.08	0.20	5	0	122	70	130	6.04	0.660	25	
1,3,5-Trimethylbenzene	5.83	0.20	5	0	117	70	130	5.96	2.21	25	
1,3-Butadiene	5.48	0.20	5	0	110	70	130	5.52	0.727	25	
1,3-Dichlorobenzene	5.19	0.20	5	0	104	70	130	5.26	1.34	25	
1,4-Dichlorobenzene	5.4	0.20	5	0	108	70	130	5.48	1.47	25	
1,4-Dioxane	5.41	1.0	5	0	108	70	130	5.48	1.29	25	
2-Butanone	5.57	0.50	5	0	111	70	130	5.9	5.75	25	
2-Hexanone	6.27	1.0	5	0	125	70	130	6.68	6.33	25	
4-Ethyltoluene	5.51	0.20	5	0	110	70	130	5.58	1.26	25	
4-Methyl-2-pentanone	6.1	1.0	5	0	122	70	130	6.3	3.23	25	
Acetone	4.71	2.0	5	0	94.2	70	130	4.8	1.89	25	*
Benzene	5.58	0.20	5	0	112	70	130	5.57	0.179	25	
Benzyl chloride	5.26	0.50	5	0	105	70	130	5.39	2.44	25	
Bromodichloromethane	5.71	0.20	5	0	114	70	130	5.7	0.175	25	
Bromoform	5.23	0.50	5	0	105	70	130	5.3	1.33	25	
Bromomethane	4.5	0.50	5	0	90	70	130	4.54	0.885	25	
Carbon disulfide	4.83	0.20	5	0	96.6	70	130	4.83	0	25	
Carbon tetrachloride	6.05	0.20	5	0	121	70	130	5.95	1.67	25	
Chlorobenzene	5.28	0.20	5	0	106	70	130	5.31	0.567	25	
Chloroethane	5.98	0.20	5	0	120	70	130	5.93	0.840	25	
Chloroform	5.72	0.20	5	0	114	70	130	5.76	0.697	25	

Qualifiers:
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H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82878

Sample ID: **LCSD082812-5** SampType: **LCSD** TestCode: **TO_15A+** Units: **ppbv** Prep Date: Run ID: **VOA-5_120828A**
Client ID: **ZZZZZ** Batch ID: **R82878** TestNo: **TO-15** Analysis Date: **8/28/2012** SeqNo: **2229711**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	4.87	0.50	5	0	97.4	70	130	4.87	0	25	
cis-1,2-Dichloroethene	5.35	0.20	5	0	107	70	130	5.42	1.30	25	
cis-1,3-Dichloropropene	6.19	0.20	5	0	124	70	130	6.16	0.486	25	
Cyclohexane	6.01	0.20	5	0	120	70	130	6.03	0.332	25	
Dibromochloromethane	5.55	0.20	5	0	111	70	130	5.59	0.718	25	
Dichlorodifluoromethane	4.75	0.20	5	0	95	70	130	4.83	1.67	25	
Ethyl acetate	6.45	0.20	5	0	129	70	130	6.59	2.15	25	
Ethylbenzene	5.47	0.20	5	0	109	70	130	5.41	1.10	25	
Freon-113	4.52	0.20	5	0	90.4	70	130	4.55	0.662	25	
Freon-114	4.84	1.0	5	0.05	95.8	70	130	4.88	0.823	25	
Heptane	7.16	0.20	5	0	143	70	130	7.13	0.420	25	S
Hexachlorobutadiene	4.28	0.20	5	0	85.6	70	130	4.49	4.79	25	
Hexane	6.94	0.50	5	0	139	70	130	6.91	0.433	25	S
Isopropyl Alcohol	6.05	1.0	5	0	121	70	130	6.09	0.659	25	
m,p-Xylene	11.13	0.40	10	0	111	70	130	11.15	0.180	25	
Methyl tert-butyl ether	5.44	0.20	5	0	109	70	130	5.54	1.82	25	
Methylene chloride	4.66	2.0	5	0	93.2	70	130	4.69	0.642	25	
o-Xylene	5.61	0.20	5	0	112	70	130	5.67	1.06	25	
Propene	5.62	2.0	5	0	112	70	130	5.6	0.357	25	
Styrene	6.03	0.20	5	0	121	70	130	6.09	0.990	25	
Tetrachloroethene	4.78	0.20	5	0	95.6	70	130	4.79	0.209	25	
Tetrahydrofuran	6.28	0.50	5	0	126	70	130	6.44	2.52	25	
Toluene	5.6	0.20	5	0	112	70	130	5.57	0.537	25	
trans-1,2-Dichloroethene	5.31	0.20	5	0	106	70	130	5.31	0	25	
trans-1,3-Dichloropropene	4.77	0.20	5	0	95.4	70	130	4.76	0.210	25	
Trichloroethene	5.21	0.20	5	0	104	70	130	5.23	0.383	25	
Trichlorofluoromethane	4.53	0.20	5	0	90.6	70	130	4.58	1.10	25	
Vinyl acetate	5.38	2.0	5	0	108	70	130	5.48	1.84	25	
Vinyl chloride	5.18	0.20	5	0	104	70	130	5.29	2.10	25	
Xylenes, Total	16.73	0.60	15	0	112	70	130	16.81	0.477	25	

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B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82878

Sample ID: **MB082812-5** SampType: **MBLK** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120828A**
Client ID: **ZZZZZ** Batch ID: **R82878** TestNo: **TO-15** Analysis Date: **8/28/2012** SeqNo: **2230500**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	1.1									
1,1,2,2-Tetrachloroethane	ND	1.4									
1,1,2-Trichloroethane	ND	1.1									
1,1-Dichloroethane	ND	0.80									
1,1-Dichloroethene	ND	0.80									
1,2,4-Trichlorobenzene	ND	1.5									
1,2,4-Trimethylbenzene	ND	1.0									
1,2-Dibromoethane	ND	1.5									
1,2-Dichlorobenzene	ND	1.2									
1,2-Dichloroethane	ND	0.80									
1,2-Dichloropropane	ND	0.90									
1,3,5-Trimethylbenzene	ND	1.0									
1,3-Butadiene	ND	0.40									
1,3-Dichlorobenzene	ND	1.2									
1,4-Dichlorobenzene	ND	1.2									
1,4-Dioxane	ND	1.8									
2-Butanone	ND	1.5									
2-Hexanone	ND	4.1									
4-Ethyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	4.1									
Acetone	ND	4.8									*
Benzene	ND	0.60									
Benzyl chloride	ND	2.6									
Bromodichloromethane	ND	1.3									
Bromoform	ND	5.2									
Bromomethane	ND	1.9									
Carbon disulfide	ND	0.60									
Carbon tetrachloride	ND	1.3									
Chlorobenzene	ND	0.90									
Chloroethane	ND	0.50									
Chloroform	ND	1.0									

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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82878

Sample ID: **MB082812-5**	SampType: **MBLK**	TestCode: **TO_15UG+**	Units: **µg/m³**	Prep Date:	Run ID: **VOA-5_120828A**
Client ID: **ZZZZZ**	Batch ID: **R82878**	TestNo: **TO-15**		Analysis Date: **8/28/2012**	SeqNo: **2230500**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	ND	1.0									
cis-1,2-Dichloroethene	ND	0.80									
cis-1,3-Dichloropropene	ND	0.90									
Cyclohexane	ND	0.70									
Dibromochloromethane	ND	1.7									
Dichlorodifluoromethane	ND	1.0									
Ethyl acetate	ND	0.70									
Ethylbenzene	ND	0.90									
Freon-113	ND	1.5									
Freon-114	0.3495	7.0									J
Heptane	ND	0.80									
Hexachlorobutadiene	ND	2.1									
Hexane	ND	1.8									
Isopropyl Alcohol	ND	2.5									
m,p-Xylene	ND	1.7									
Methyl tert-butyl ether	ND	0.70									
Methylene chloride	ND	6.9									
o-Xylene	ND	0.90									
Propene	ND	3.4									
Styrene	ND	0.90									
Tetrachloroethene	ND	1.4									
Tetrahydrofuran	ND	1.5									
Toluene	ND	0.80									
trans-1,2-Dichloroethene	ND	0.80									
trans-1,3-Dichloropropene	ND	0.90									
Trichloroethene	ND	1.1									
Trichlorofluoromethane	ND	1.1									
Vinyl acetate	ND	7.0									
Vinyl chloride	ND	0.50									
Xylenes, Total	ND	2.6									

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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82878

Sample ID: **LCS082812-5** SampType: **LCS** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120828A**
Client ID: **ZZZZZ** Batch ID: **R82878** TestNo: **TO-15** Analysis Date: **8/28/2012** SeqNo: **2230501**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	27.06	1.1	27.28	0	99.2	70	130	0	0		
1,1,2,2-Tetrachloroethane	47.31	1.4	34.34	0	138	70	130	0	0		S
1,1,2-Trichloroethane	33.88	1.1	27.28	0	124	70	130	0	0		
1,1-Dichloroethane	24.16	0.80	20.24	0	119	70	130	0	0		
1,1-Dichloroethene	22.56	0.80	19.82	0	114	70	130	0	0		
1,2,4-Trichlorobenzene	39.78	1.5	37.11	0	107	70	130	0	0		
1,2,4-Trimethylbenzene	27.18	1.0	24.58	0	111	70	130	0	0		
1,2-Dibromoethane	43.57	1.5	38.42	0	113	70	130	0	0		
1,2-Dichlorobenzene	33.85	1.2	30.06	0	113	70	130	0	0		
1,2-Dichloroethane	26.03	0.80	20.24	0	129	70	130	0	0		
1,2-Dichloropropane	27.91	0.90	23.11	0	121	70	130	0	0		
1,3,5-Trimethylbenzene	29.3	1.0	24.58	0	119	70	130	0	0		
1,3-Butadiene	12.21	0.40	11.06	0	110	70	130	0	0		
1,3-Dichlorobenzene	31.62	1.2	30.06	0	105	70	130	0	0		
1,4-Dichlorobenzene	32.95	1.2	30.06	0	110	70	130	0	0		
1,4-Dioxane	19.75	1.8	18.02	0	110	70	130	0	0		
2-Butanone	17.4	1.5	14.75	0	118	70	130	0	0		
2-Hexanone	27.36	4.1	20.48	0	134	70	130	0	0		S
4-Ethyltoluene	27.43	1.0	24.58	0	112	70	130	0	0		
4-Methyl-2-pentanone	25.81	4.1	20.48	0	126	70	130	0	0		
Acetone	11.4	4.8	11.88	0	96	70	130	0	0		*
Benzene	17.79	0.60	15.97	0	111	70	130	0	0		
Benzyl chloride	27.9	2.6	25.89	0	108	70	130	0	0		
Bromodichloromethane	38.19	1.3	33.5	0	114	70	130	0	0		
Bromoform	54.78	5.2	51.68	0	106	70	130	0	0		
Bromomethane	17.63	1.9	19.42	0	90.8	70	130	0	0		
Carbon disulfide	15.04	0.60	15.57	0	96.6	70	130	0	0		
Carbon tetrachloride	37.43	1.3	31.46	0	119	70	130	0	0		
Chlorobenzene	24.45	0.90	23.02	0	106	70	130	0	0		
Chloroethane	15.65	0.50	13.19	0	119	70	130	0	0		
Chloroform	28.12	1.0	24.41	0	115	70	130	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
* - Non Accredited Parameter
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82878

Sample ID: **LCS082812-5** SampType: **LCS** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120828A**
Client ID: **ZZZZZ** Batch ID: **R82878** TestNo: **TO-15** Analysis Date: **8/28/2012** SeqNo: **2230501**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	10.06	1.0	10.33	0	97.4	70	130	0	0		
cis-1,2-Dichloroethene	21.49	0.80	19.82	0	108	70	130	0	0		
cis-1,3-Dichloropropene	27.96	0.90	22.69	0	123	70	130	0	0		
Cyclohexane	20.76	0.70	17.21	0	121	70	130	0	0		
Dibromochloromethane	47.62	1.7	42.59	0	112	70	130	0	0		
Dichlorodifluoromethane	23.89	1.0	24.73	0	96.6	70	130	0	0		
Ethyl acetate	23.75	0.70	18.02	0	132	70	130	0	0		S
Ethylbenzene	23.49	0.90	21.71	0	108	70	130	0	0		
Freon-113	34.87	1.5	38.32	0	91	70	130	0	0		
Freon-114	34.11	7.0	34.95	0.3495	96.6	70	130	0	0		
Heptane	29.22	0.80	20.49	0	143	70	130	0	0		S
Hexachlorobutadiene	47.89	2.1	53.33	0	89.8	70	130	0	0		
Hexane	24.36	1.8	17.62	0	138	70	130	0	0		S
Isopropyl Alcohol	14.97	2.5	12.29	0	122	70	130	0	0		
m,p-Xylene	48.41	1.7	43.42	0	112	70	130	0	0		
Methyl tert-butyl ether	19.97	0.70	18.03	0	111	70	130	0	0		
Methylene chloride	16.29	6.9	17.37	0	93.8	70	130	0	0		
o-Xylene	24.62	0.90	21.71	0	113	70	130	0	0		
Propene	9.638	3.4	8.605	0	112	70	130	0	0		
Styrene	25.94	0.90	21.3	0	122	70	130	0	0		
Tetrachloroethene	32.49	1.4	33.91	0	95.8	70	130	0	0		
Tetrahydrofuran	18.99	1.5	14.75	0	129	70	130	0	0		
Toluene	20.99	0.80	18.84	0	111	70	130	0	0		
trans-1,2-Dichloroethene	21.05	0.80	19.82	0	106	70	130	0	0		
trans-1,3-Dichloropropene	21.6	0.90	22.69	0	95.2	70	130	0	0		
Trichloroethene	28.11	1.1	26.87	0	105	70	130	0	0		
Trichlorofluoromethane	25.73	1.1	28.09	0	91.6	70	130	0	0		
Vinyl acetate	19.3	7.0	17.61	0	110	70	130	0	0		
Vinyl chloride	13.52	0.50	12.78	0	106	70	130	0	0		
Xylenes, Total	72.99	2.6	65.13	0	112	70	130	0	0		

Qualifiers:
ND - Not Detected at the Reporting Limit
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R - RPD outside accepted recovery limits
H/HT - Holding Time Exceeded
B - Analyte detected in the associated Method Blank
E - Value above quantitation range

CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82878

Sample ID: **LCSD082812-5** SampType: **LCSD** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120828A**
Client ID: **ZZZZZ** Batch ID: **R82878** TestNo: **TO-15** Analysis Date: **8/28/2012** SeqNo: **2230502**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	26.9	1.1	27.28	0	98.6	70	130	27.06	0.607	25	
1,1,2,2-Tetrachloroethane	47.11	1.4	34.34	0	137	70	130	47.31	0.436	25	S
1,1,2-Trichloroethane	33.83	1.1	27.28	0	124	70	130	33.88	0.161	25	
1,1-Dichloroethane	23.96	0.80	20.24	0	118	70	130	24.16	0.841	25	
1,1-Dichloroethene	22.32	0.80	19.82	0	113	70	130	22.56	1.06	25	
1,2,4-Trichlorobenzene	37.77	1.5	37.11	0	102	70	130	39.78	5.17	25	
1,2,4-Trimethylbenzene	26.69	1.0	24.58	0	109	70	130	27.18	1.82	25	
1,2-Dibromoethane	43.57	1.5	38.42	0	113	70	130	43.57	0	25	
1,2-Dichlorobenzene	33.37	1.2	30.06	0	111	70	130	33.85	1.43	25	
1,2-Dichloroethane	25.86	0.80	20.24	0	128	70	130	26.03	0.624	25	
1,2-Dichloropropane	28.1	0.90	23.11	0	122	70	130	27.91	0.660	25	
1,3,5-Trimethylbenzene	28.66	1.0	24.58	0	117	70	130	29.3	2.21	25	
1,3-Butadiene	12.12	0.40	11.06	0	110	70	130	12.21	0.727	25	
1,3-Dichlorobenzene	31.2	1.2	30.06	0	104	70	130	31.62	1.34	25	
1,4-Dichlorobenzene	32.47	1.2	30.06	0	108	70	130	32.95	1.47	25	
1,4-Dioxane	19.5	1.8	18.02	0	108	70	130	19.75	1.29	25	
2-Butanone	16.43	1.5	14.75	0	111	70	130	17.4	5.75	25	
2-Hexanone	25.69	4.1	20.48	0	125	70	130	27.36	6.33	25	
4-Ethyltoluene	27.09	1.0	24.58	0	110	70	130	27.43	1.26	25	
4-Methyl-2-pentanone	24.99	4.1	20.48	0	122	70	130	25.81	3.23	25	
Acetone	11.19	4.8	11.88	0	94.2	70	130	11.4	1.89	25	*
Benzene	17.83	0.60	15.97	0	112	70	130	17.79	0.179	25	
Benzyl chloride	27.23	2.6	25.89	0	105	70	130	27.9	2.44	25	
Bromodichloromethane	38.26	1.3	33.5	0	114	70	130	38.19	0.175	25	
Bromoform	54.06	5.2	51.68	0	105	70	130	54.78	1.33	25	
Bromomethane	17.47	1.9	19.42	0	90	70	130	17.63	0.885	25	
Carbon disulfide	15.04	0.60	15.57	0	96.6	70	130	15.04	0	25	
Carbon tetrachloride	38.06	1.3	31.46	0	121	70	130	37.43	1.67	25	
Chlorobenzene	24.31	0.90	23.02	0	106	70	130	24.45	0.567	25	
Chloroethane	15.78	0.50	13.19	0	120	70	130	15.65	0.840	25	
Chloroform	27.93	1.0	24.41	0	114	70	130	28.12	0.697	25	

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CLIENT: Terracon Consultants, Inc.
Work Order: 12080703
Project: A2107017-7A, DOE-Kimball, Chicago, IL

ANALYTICAL QC SUMMARY REPORT

BatchID: R82878

Sample ID: **LCSD082812-5** SampType: **LCSD** TestCode: **TO_15UG+** Units: **µg/m³** Prep Date: Run ID: **VOA-5_120828A**
Client ID: **ZZZZZ** Batch ID: **R82878** TestNo: **TO-15** Analysis Date: **8/28/2012** SeqNo: **2230502**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chloromethane	10.06	1.0	10.33	0	97.4	70	130	10.06	0	25	
cis-1,2-Dichloroethene	21.21	0.80	19.82	0	107	70	130	21.49	1.30	25	
cis-1,3-Dichloropropene	28.09	0.90	22.69	0	124	70	130	27.96	0.486	25	
Cyclohexane	20.69	0.70	17.21	0	120	70	130	20.76	0.332	25	
Dibromochloromethane	47.28	1.7	42.59	0	111	70	130	47.62	0.718	25	
Dichlorodifluoromethane	23.49	1.0	24.73	0	95	70	130	23.89	1.67	25	
Ethyl acetate	23.24	0.70	18.02	0	129	70	130	23.75	2.15	25	
Ethylbenzene	23.75	0.90	21.71	0	109	70	130	23.49	1.10	25	
Freon-113	34.64	1.5	38.32	0	90.4	70	130	34.87	0.662	25	
Freon-114	33.83	7.0	34.95	0.3495	95.8	70	130	34.11	0.823	25	
Heptane	29.34	0.80	20.49	0	143	70	130	29.22	0.420	25	S
Hexachlorobutadiene	45.65	2.1	53.33	0	85.6	70	130	47.89	4.79	25	
Hexane	24.46	1.8	17.62	0	139	70	130	24.36	0.433	25	S
Isopropyl Alcohol	14.87	2.5	12.29	0	121	70	130	14.97	0.659	25	
m,p-Xylene	48.33	1.7	43.42	0	111	70	130	48.41	0.180	25	
Methyl tert-butyl ether	19.61	0.70	18.03	0	109	70	130	19.97	1.82	25	
Methylene chloride	16.19	6.9	17.37	0	93.2	70	130	16.29	0.642	25	
o-Xylene	24.36	0.90	21.71	0	112	70	130	24.62	1.06	25	
Propene	9.672	3.4	8.605	0	112	70	130	9.638	0.357	25	
Styrene	25.69	0.90	21.3	0	121	70	130	25.94	0.990	25	
Tetrachloroethene	32.42	1.4	33.91	0	95.6	70	130	32.49	0.209	25	
Tetrahydrofuran	18.52	1.5	14.75	0	126	70	130	18.99	2.52	25	
Toluene	21.1	0.80	18.84	0	112	70	130	20.99	0.537	25	
trans-1,2-Dichloroethene	21.05	0.80	19.82	0	106	70	130	21.05	0	25	
trans-1,3-Dichloropropene	21.65	0.90	22.69	0	95.4	70	130	21.6	0.210	25	
Trichloroethene	28	1.1	26.87	0	104	70	130	28.11	0.383	25	
Trichlorofluoromethane	25.45	1.1	28.09	0	90.6	70	130	25.73	1.10	25	
Vinyl acetate	18.94	7.0	17.61	0	108	70	130	19.3	1.84	25	
Vinyl chloride	13.24	0.50	12.78	0	104	70	130	13.52	2.10	25	
Xylenes, Total	72.64	2.6	65.13	0	112	70	130	72.99	0.477	25	

Qualifiers:
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B - Analyte detected in the associated Method Blank
E - Value above quantitation range

Table 1: Soil Analytical Results
Limited Site Investigation
Proposed Kimbal Park
Chicago, IL
A2107017 Task 7A

Sample Location/Identification			TB-1	TB-2	TB-2-Dup	TB-3	TB-4	TB-5	TB-5-Dup	Tier 1 Soil Remediation Objectives for Residential Properties				Soil Component of the Groundwater Ingestion Route Values
Sample Depth (feet)			23-25	13-15	13-15	23-25	28-30	15-17	15-17					
Date Collected			8/20/2012	8/20/2012	8/20/2012	8/21/2012	8/21/2012	8/21/2012	8/21/2012	Occupants		Construction Workers	Background	
Units										Ingestion	Inhalation	Inhalation	Chicago	Class II
Volatile Organic Analytical Parameters														
74-87-3	Chloromethane	mg/kg	< 0.0098	< 0.0087	< 0.0094	< 0.0084	< 0.0095	--	--	310	110	1.1	---	0.68
74-83-9	Bromomethane	mg/kg	< 0.0098	< 0.0087	< 0.0094	< 0.0084	< 0.0095	--	--	110	10	3.9	---	1.2
75-01-4	Vinyl Chloride	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	0.46	0.28	---	---	0.07
75-00-3	Chloroethane	mg/kg	< 0.0098	< 0.0087	< 0.0094	< 0.0084	< 0.0095	--	--	31000	1500	94	---	70
75-09-2	Methylene Chloride	mg/kg	< 0.0098	< 0.0087	< 0.0094	< 0.0084	< 0.0095	--	--	85	13	---	---	0.2
67-64-1	Acetone	mg/kg	< 0.073	< 0.065	< 0.07	< 0.063	< 0.071	--	--	70000	100000	---	---	25
75-15-0	Carbon Disulfide	mg/kg	< 0.049	< 0.043	< 0.047	< 0.042	< 0.047	--	--	7800	720	9	---	160
75-35-4	1,1-Dichloroethene	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	3900	290	3	---	0.3
75-34-3	1,1-Dichloroethane	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	7800	1300	130	---	110
156-59-2	cis-1,2-Dichloroethene	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	780	1200	---	---	1.1
156-60-5	trans-1,2-Dichloroethene	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	1600	3100	---	---	3.4
67-66-3	Chloroform	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	100	0.3	---	---	2.9
107-06-2	1,2-Dichloroethane	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	7	0.4	---	---	0.1
78-93-3	2-Butanone	mg/kg	< 0.073	< 0.065	< 0.07	< 0.063	< 0.071	--	--	47000	25000	710	---	17
71-55-6	1,1,1-Trichloroethane	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	---	1200	---	---	9.6
56-23-5	Carbon Tetrachloride	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	5	0.3	---	---	0.33
75-27-4	Bromodichloromethane	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	10	3000	---	---	0.6
78-87-5	1,2-Dichloropropane	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	9	15	0.5	---	0.15
542-75-6	1,3-Dichloropropene (cis + trans)	mg/kg	< 0.002	< 0.0017	< 0.0019	< 0.0017	< 0.0019	--	--	6.4	1.1	0.39	---	0.02
79-01-6	Trichloroethene	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	0.0049	--	--	58	5	---	---	0.3
124-48-1	Dibromochloromethane	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	1600	1300	---	---	0.4
79-00-5	1,1,2-Trichloroethane	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	310	1800	---	---	0.3
71-43-2	Benzene	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	12	0.8	---	---	0.17
75-25-2	Bromoform	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	81	53	---	---	0.8
1634-04-4	Methyl Tertiary-Butyl Ether	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	780	8800	140	---	0.32
108-10-1	4-Methyl-2-pentanone	mg/kg	< 0.02	< 0.017	< 0.019	< 0.017	< 0.019	--	--	---	3100	340	---	2.5
591-78-6	2-Hexanone	mg/kg	< 0.02	< 0.017	< 0.019	< 0.017	< 0.019	--	--	3100	70	0.72	---	1.3
127-18-4	Tetrachloroethene	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	12	11	---	---	0.3
108-88-3	Toluene	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	16000	650	42	---	29
79-34-5	1,1,2,2-Tetrachloroethane	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	4700	2000	---	---	3.3
108-90-7	Chlorobenzene	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	1600	130	1.3	---	6.5
100-41-4	Ethylbenzene	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	7800	400	58	---	19
100-42-5	Styrene	mg/kg	< 0.0049	< 0.0043	< 0.0047	< 0.0042	< 0.0047	--	--	16000	1500	430	---	18
1330-20-7	Xylenes (total)	mg/kg	< 0.015	< 0.013	< 0.014	< 0.013	< 0.014	--	--	16000	320	5.6	---	150
Semivolatile Organic Analytical Parameters														
108-95-2	Phenol	mg/kg	--	--	--	--	--	< 0.21	< 0.2	23000	---	---	---	100
111-44-4	bis(2-Chloroethyl) ether	mg/kg	--	--	--	--	--	< 0.21	< 0.2	0.6	0.2	---	---	0.0004
95-57-8	2-Chlorophenol	mg/kg	--	--	--	--	--	< 0.21	< 0.2	390	53000	---	---	4
95-50-1	1,2-Dichlorobenzene	mg/kg	--	--	--	--	--	< 0.21	< 0.2	7000	560	310	---	43
541-73-1	1,3-Dichlorobenzene	mg/kg	--	--	--	--	--	< 0.21	< 0.2	70	570	---	---	1
106-46-7	1,4-Dichlorobenzene	mg/kg	--	--	--	--	--	< 0.21	< 0.2	---	11000	340	---	11
95-48-7	2-Methylphenol	mg/kg	--	--	--	--	--	< 0.21	< 0.2	3900	---	---	---	15
108-60-1	2,2'-oxybis (1-chloropropane)	mg/kg	--	--	--	--	--	< 0.21	< 0.2	3100	1300	---	---	2.4
106-44-5	4-Methylphenol	mg/kg	--	--	--	--	--	< 0.21	< 0.2	390	---	---	---	0.2
621-64-7	N-Nitroso-di-n-propylamine	mg/kg	--	--	--	--	--	< 0.041	< 0.039	0.09	---	---	---	0.00005
67-72-1	Hexachloroethane	mg/kg	--	--	--	--	--	< 0.21	< 0.2	78	---	---	---	2.6
98-95-3	Nitrobenzene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	39	92	9.4	---	0.1
78-59-1	Isophorone	mg/kg	--	--	--	--	--	< 0.21	< 0.2	15600	4600	---	---	8
88-75-5	2-Nitrophenol	mg/kg	--	--	--	--	--	< 0.21	< 0.2	---	---	---	---	---
105-67-9	2,4-Dimethylphenol	mg/kg	--	--	--	--	--	< 0.21	< 0.2	1600	---	---	---	9
111-91-1	bis(2-Chloroethoxy) methane	mg/kg	--	--	--	--	--	< 0.21	< 0.2	---	---	---	---	---
120-83-2	2,4-Dichlorophenol	mg/kg	--	--	--	--	--	< 0.21	< 0.2	230	---	---	---	1
120-82-1	1,2,4-Trichlorobenzene	mg/kg	--	--	--	--	--	< 0.21	< 0.2	780	3200	920	---	53
91-20-3	Naphthalene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	1600	170	1.8	0.04	18

Table 1: Soil Analytical Results
Limited Site Investigation
Proposed Kimbal Park
Chicago, IL
A2107017 Task 7A

Sample Location/Identification			TB-1	TB-2	TB-2-Dup	TB-3	TB-4	TB-5	TB-5-Dup	Tier 1 Soil Remediation Objectives for Residential Properties				Soil Component of the Groundwater Ingestion Route Values
Sample Depth (feet)			23-25	13-15	13-15	23-25	28-30	15-17	15-17					
Date Collected			8/20/2012	8/20/2012	8/20/2012	8/21/2012	8/21/2012	8/21/2012	8/21/2012	Occupants		Construction Workers	Background	
		Units								Ingestion	Inhalation	Inhalation	Chicago	Class II
106-47-8	4-Chloroaniline	mg/kg	--	--	--	--	--	< 0.21	< 0.2	310	---	---	---	0.7
87-68-3	Hexachlorobutadiene	mg/kg	--	--	--	--	--	< 0.21	< 0.2	16	1000	180	---	15
59-50-7	4-Chloro-3-methylphenol	mg/kg	--	--	--	--	--	< 0.41	< 0.39	5500	---	---	---	120
91-57-6	2-Methylnaphthalene	mg/kg	--	--	--	--	--	< 0.21	< 0.2	310	---	---	---	36
77-47-4	Hexachlorocyclopentadiene	mg/kg	--	--	--	--	--	< 0.21	< 0.2	550	10	1.1	---	2200
88-06-2	2,4,6-Trichlorophenol	mg/kg	--	--	--	--	--	< 0.21	< 0.2	58	200	---	---	0.77
95-95-4	2,4,5-Trichlorophenol	mg/kg	--	--	--	--	--	< 0.21	< 0.2	7800	---	---	---	1400
91-58-7	2-Chloronaphthalene	mg/kg	--	--	--	--	--	< 0.21	< 0.2	6300	---	---	---	240
88-74-4	2-Nitroaniline	mg/kg	--	--	--	--	--	< 0.21	< 0.2	230	35	3.6	---	0.14
131-11-3	Dimethylphthalate	mg/kg	--	--	--	--	--	< 0.21	< 0.2	780000	1300	---	---	380
208-96-8	Acenaphthylene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	2300	---	---	0.03	420
606-20-2	2,6-dinitrotoluene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	0.9	---	---	---	0.0007
99-09-2	3-Nitroanaline	mg/kg	--	--	--	--	--	< 0.21	< 0.2	23	250	26	---	0.01
83-32-9	Acenaphthene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	4700	---	---	0.09	2900
51-28-5	2,4-Dinitrophenol	mg/kg	--	--	--	--	--	< 1	< 0.97	160	---	---	---	0.2
100-02-7	4-Nitrophenol	mg/kg	--	--	--	--	--	< 0.41	< 0.39	630	---	---	---	---
132-64-9	Dibenzofuran	mg/kg	--	--	--	--	--	< 0.21	< 0.2	160	---	---	---	30
121-14-2	2,4-Dinitrotoluene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	0.9	---	---	---	0.0008
84-66-2	Diethylphthalate	mg/kg	--	--	--	--	--	< 0.21	< 0.2	63000	2000	---	---	470
7005-72-3	4-Chlorophenyl-phenyl ether	mg/kg	--	--	--	--	--	< 0.21	< 0.2	---	---	---	---	---
86-73-7	Fluorene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	3100	---	---	0.1	2800
100-01-6	4-Nitroaniline	mg/kg	--	--	--	--	--	< 0.21	< 0.2	230	1000	110	---	0.1
534-52-1	4,6-Dinitro-2-methylphenol	mg/kg	--	--	--	--	--	< 0.41	< 0.39	7.8	---	---	---	---
86-30-6	N-nitrosodiphenylamine	mg/kg	--	--	--	--	--	< 0.041	< 0.039	130	---	---	---	5.6
101-55-3	4-Bromophenyl-phenyl ether	mg/kg	--	--	--	--	--	< 0.21	< 0.2	---	---	---	---	---
118-74-1	Hexachlorobenzene	mg/kg	--	--	--	--	--	< 0.21	< 0.2	0.4	1	---	---	11
87-86-5	Pentachlorophenol	mg/kg	--	--	--	--	--	< 0.041	< 0.039	3	---	---	---	0.14
85-01-8	Phenanthrene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	2300	---	---	1.3	1000
120-12-7	Anthracene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	23000	---	---	0.25	59000
86-74-8	Carbazole	mg/kg	--	--	--	--	--	< 0.21	< 0.2	32	---	---	---	2.8
84-74-2	Di-n-butylphthalate	mg/kg	--	--	--	--	--	< 0.21	< 0.2	7800	2300	---	---	2300
206-44-0	Fluoranthene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	3100	---	---	2.7	21000
129-00-0	Pyrene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	2300	---	---	1.9	21000
85-68-7	Butylbenzylphthalate	mg/kg	--	--	--	--	--	< 0.21	< 0.2	16000	930	---	---	930
91-94-1	3,3'-Dichlorobenzidine	mg/kg	--	--	--	--	--	< 0.21	< 0.2	1	---	---	---	0.033
56-55-3	Benzo(a)anthracene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	0.9	---	---	1.1	8
218-01-9	Chrysene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	88	---	---	1.2	800
117-81-7	bis(2-Ethylhexyl)phthalate	mg/kg	--	--	--	--	--	< 1	< 0.97	46	31000	---	---	31000
117-84-0	Di-n-octylphthalate	mg/kg	--	--	--	--	--	< 0.21	< 0.2	1600	10000	---	---	10000
205-99-2	Benzo(b)fluoranthene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	0.9	---	---	1.5	25
207-08-9	Benzo(k)fluoranthene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	9	---	---	0.99	250
50-32-8	Benzo(a)pyrene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	0.09	---	---	1.3	82
193-39-5	Indeno(1,2,3-c,d)pyrene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	0.9	---	---	0.86	69
53-70-3	Dibenzo(a,h)anthracene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	0.09	---	---	0.2	7.6
191-24-2	Benzo(g,h,i)perylene	mg/kg	--	--	--	--	--	< 0.041	< 0.039	2300	---	---	0.68	130000

Table 2 - Terracon Soil Vapor Results
Proposed Kimbal Park
Chicago, Illinois

Sample Location/Identification			SV-01	SV-02	SV-03	SV-04	SV-04-DUP	SV-05	SV-06	Field Blank	Proposed Residential Soil Gas Remediation Objectives	EPA OSWER Screening Levels
Sample Depth (feet)												
Date Collected			8/21/12	8/21/12	8/21/12	8/21/12	8/21/12	8/21/12	8/21/12	8/21/12		
Units											Diffusion and Advection	
Volatile Organic Analytical Parameters												
71-55-6	1,1,1-Trichloroethane	µg/m3	< 1.9	< 2	< 2	< 2.3	< 2.3	< 1.8	< 2	< 1.1	6,600,000	220,000
79-34-5	1,1,2,2-Tetrachloroethane	µg/m3	< 2.4	< 2.5	< 2.5	< 2.9	< 2.9	< 2.3	< 2.5	< 1.4	--	4.2
79-00-5	1,1,2-Trichloroethane	µg/m3	< 1.9	< 2	< 2	< 2.3	< 2.3	< 1.8	< 2	< 1.1	170,000	150
75-34-3	1,1-Dichloroethane	µg/m3	1.4	< 1.4	< 1.4	< 1.7	< 1.7	< 1.3	< 1.4	< 0.8	690,000	5,000
75-35-4	1,1-Dichloroethene	µg/m3	48	< 1.4	< 1.4	57	300	< 1.5	< 1.4	< 0.8	240,000	2,000
120-82-1	1,2,4-Trichlorobenzene	µg/m3	< 2.5	< 2.7	< 2.7	< 3.1	< 3.1	< 2.5	< 2.7	< 1.5	5,400	2,000
95-63-6	1,2,4-Trimethylbenzene	µg/m3	4.4	3.5	3.3	< 2.1	< 2.1	< 1.6	< 1.8	< 1	--	60
106-93-4	1,2-Dibromoethane	µg/m3	**< 2.5**	**< 2.7**	**< 2.7**	**< 3.1**	**< 3.1**	**< 2.5**	**< 2.7**	**< 1.5**	7.8	1.1
95-50-1	1,2-Dichlorobenzene	µg/m3	< 2	< 2.2	< 2.1	< 2.5	< 2.5	< 2	< 2.2	< 1.2	290,000	2,000
107-06-2	1,2-Dichloroethane	µg/m3	< 1.4	< 1.4	4.8	< 1.7	3.9	< 1.3	< 1.4	< 0.8	99	9.4
78-87-5	1,2-Dichloropropane	µg/m3	< 1.5	< 1.6	< 1.6	< 1.9	< 1.9	< 1.5	< 1.6	< 0.9	310	40
108-67-8	1,3,5-Trimethylbenzene	µg/m3	< 1.7	< 1.8	< 1.8	< 2.1	< 2.1	< 1.6	< 1.8	< 1	--	60
106-99-0	1,3-Butadiene	µg/m3	< 0.68	2	1.8	< 0.83	< 0.83	< 0.66	< 0.72	< 0.4	--	0.87
541-73-1	1,3-Dichlorobenzene	µg/m3	< 2	< 2.2	< 2.2	< 2.5	< 2.5	< 2	< 2.2	< 1.2	--	1,100
106-46-7	1,4-Dichlorobenzene	µg/m3	< 2	< 2.2	< 2.1	< 2.5	< 2.5	< 2	< 2.2	< 1.2	1,200,000	8,000
123-91-1	1,4-Dioxane	µg/m3	< 3.1	< 3.2	< 3.2	< 3.7	< 3.7	< 3	< 3.2	< 1.8	220	---
67-64-1	Acetone	µg/m3	63	80	110	25	48	40	39	< 4.8	750,000,000	3,500
71-43-2	Benzene	µg/m3	3.6	3.2	2.4	< 1.2	3.4	1.3	< 1.1	< 0.6	370	31
100-44-7	Benzyl chloride	µg/m3	< 4.4	< 4.7	< 4.6	**< 5.4**	**< 5.4**	< 4.3	< 4.7	< 2.6	--	5
75-27-4	Bromodichloromethane	µg/m3	< 2.2	< 2.3	< 2.3	< 2.7	< 2.7	< 2.1	< 2.3	< 1.3	450,000,000	14
593-60-2	Bromoethene(Vinyl Bromide)	µg/m3	NA	NA	NA	NA	NA	NA	NA	NA	--	---
75-25-2	Bromoform	µg/m3	< 8.8	< 9.4	< 9.2	< 11	< 11	< 8.5	< 9.4	< 5.2	11,000	220
74-83-9	Bromomethane	µg/m3	< 3.2	< 3.4	< 3.4	< 3.9	< 4	< 3.1	< 3.4	< 1.9	6,900	---
75-15-0	Carbon disulfide	µg/m3	< 1.1	4.2	3.6	< 1.3	< 1.3	1.1	< 1.1	< 0.62	780,000	7,000
56-23-5	Carbon tetrachloride	µg/m3	< 2.2	< 2.3	< 2.3	< 2.7	< 2.7	< 2.1	< 2.3	< 1.3	210	16
108-90-7	Chlorobenzene	µg/m3	< 1.5	< 1.6	< 1.6	< 1.9	< 1.9	< 1.5	< 1.6	< 0.9	69,000	600
75-00-3	Chloroethane	µg/m3	< 0.85	< 0.9	< 0.89	< 1	< 1	< 0.82	< 0.9	< 0.5	---	100,000
67-66-3	Chloroform	µg/m3	3.6	< 1.8	2.2	< 2.1	< 2.1	< 1.6	< 1.8	< 1	110	11
74-87-3	Chloromethane	µg/m3	< 1.7	< 1.8	< 1.8	< 2.1	< 2.1	< 1.6	< 1.8	< 1	---	---
156-59-2	cis-1,2-Dichloroethene	µg/m3	4700	20	10	25000	96000	590	64	< 0.8	1,100,000,000	350
10061-01-5	cis-1,3-Dichloropropene	µg/m3	< 1.5	< 1.6	< 1.6	< 1.9	< 1.9	< 1.5	< 1.6	< 0.9	--	---
110-82-7	Cyclohexane	µg/m3	1.9	< 1.3	1.4	< 1.5	3.2	< 1.2	< 1.3	< 0.7	---	---
124-48-1	Dibromochloromethane	µg/m3	< 2.9	< 3.1	< 3	< 3.5	< 3.5	< 2.8	< 3.1	< 1.7	57,000,000	10
75-71-8	Dichlorodifluoromethane	µg/m3	2.4	2.2	2.2	< 2.1	< 2.1	2.1	2.3	< 1	270,000	2,000
100-41-4	Ethylbenzene	µg/m3	3.5	3	2.1	< 1.9	< 1.9	< 1.5	< 1.6	< 0.9	1,300	220
87-68-3	Hexachlorobutadiene	µg/m3	< 3.6	< 3.8	< 3.7	< 4.4	< 4.4	< 3.5	< 3.8	< 2.1	---	11
591-78-6	Methyl Butyl Ketone (2-Hexanone)	µg/m3	< 7	< 7.4	< 7.3	< 8.5	< 8.5	< 6.7	< 7.4	< 4.1	---	--
78-93-3	Methyl Ethyl Ketone (2-Butanone)	µg/m3	10	7	13	< 3.1	3	3.2	< 2.7	< 1.5	6,400,000	10,000
1634-04-4	Methyl tert-butyl ether	µg/m3	< 1.2	< 1.3	< 1.2	< 1.5	< 1.5	< 1.2	< 1.3	< 0.7	3,700,000	30,000
75-09-2	Methylene Chloride	µg/m3	< 12	< 12	< 12	< 14	< 14	< 11	< 12	< 6.9	5,600	520
100-42-5	Styrene	µg/m3	< 1.5	< 1.6	< 1.6	< 1.9	< 1.9	< 1.5	< 1.6	< 0.9	1,400,000	10,000
127-18-4	Tetrachloroethene (PCE)	µg/m3	70	4.4	< 2.5	< 2.9	3.1	< 2.3	< 2.5	< 1.4	550	81
109-99-9	Tetrahydrofuran	µg/m3	< 2.5	< 2.7	< 2.7	< 3.1	< 3.1	< 2.5	< 2.7	< 1.5	--	---
108-88-3	Toluene	µg/m3	16	17	12	4.1	10	5.3	1.6	< 0.8	6,200,000	4,000
156-60-5	trans-1,2-Dichloroethene	µg/m3	180	3.7	< 1.4	250	1100	8.9	< 1.4	< 0.8	85,000	700
10061-02-6	trans-1,3-Dichloropropene	µg/m3	< 1.5	< 1.6	< 1.6	< 1.9	< 1.9	< 1.5	< 1.6	< 0.9	--	---
79-01-6	Trichloroethene (TCE)	µg/m3	17000	32	30	4900	17000	30	4.2	< 1.1	1,500	2.2
75-01-4	Vinyl chloride	µg/m3	13	< 0.9	2.1	1600	7900	23	2.3	< 0.5	290	28
1330-20-7	Xylene (total)	µg/m3	16	13	9.6	< 5.4	5.3	< 4.3	< 4.7	< 2.6	140,000	---

Table 3: Groundwater Analytical Results
Limited Site Investigation
Proposed Kimbal Park
Chicago, IL
A2107017 Task 7A

	Sample Location/Identification		MW-04	MW-04-FD	MW-05	MW-06	MW-07	VOC Blank	Trip Blank	Tier 1 Groundwater
	Date Collected		9/10/2012	9/10/2012	9/10/2012	9/10/2012	9/10/2012	9/10/2012	9/10/2012	Remediation Objectives
	Units									Class II
Volatile Organic Analytical Parameters										
74-87-3	Chloromethane	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.14
74-83-9	Bromomethane	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.049
75-01-4	Vinyl Chloride	mg/L	< 0.002	< 0.002	< 0.002	0.021	< 0.002	< 0.002	< 0.002	0.01
75-00-3	Chloroethane	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	14
75-09-2	Methylene Chloride	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.05
67-64-1	Acetone	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	6.3
75-15-0	Carbon Disulfide	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	3.5
75-35-4	1,1-Dichloroethene	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.035
75-34-3	1,1-Dichloroethane	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.5
156-59-2	cis-1,2-Dichloroethene	mg/L	< 0.005	< 0.005	< 0.005	0.091	< 0.005	< 0.005	< 0.005	0.2
156-60-5	trans-1,2-Dichloroethene	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.5
67-66-3	Chloroform	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.001
107-06-2	1,2-Dichloroethane	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.025
78-93-3	2-Butanone	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	4.2
71-55-6	1,1,1-Trichloroethane	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1
56-23-5	Carbon Tetrachloride	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.025
75-27-4	Bromodichloromethane	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.0002
78-87-5	1,2-Dichloropropane	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.025
542-75-6	1,3-Dichloropropene (cis + trans)	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0025
79-01-6	Trichloroethene	mg/L	< 0.005	< 0.005	< 0.005	0.065	< 0.005	< 0.005	< 0.005	0.025
124-48-1	Dibromochloromethane	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.14
79-00-5	1,1,2-Trichloroethane	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.05
71-43-2	Benzene	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.025
75-25-2	Bromoform	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.001
1634-04-4	Methyl Tertiary-Butyl Ether	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.07
108-10-1	4-Methyl-2-pentanone	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.56
591-78-6	2-Hexanone	mg/L	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	0.28
127-18-4	Tetrachloroethene	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.025
108-88-3	Toluene	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.5
79-34-5	1,1,2,2-Tetrachloroethane	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.42
108-90-7	Chlorobenzene	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.5
100-41-4	Ethylbenzene	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1
100-42-5	Styrene	mg/L	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.5
1330-20-7	Xylenes (total)	mg/L	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	< 0.015	10

Table Notes

Remediation Objectives from 35 Illinois Administrative Code Chapter 742: *Tiered Approach to Corrective Action Objectives* (TACO).

Remediation Objectives for Non-TACO compounds from Illinois Environmental Protection Agency's (IEPA's) web site (http://www.epa.state.il.us/land/taco/chemicals-not-in-taco-tier-1-tables.html).

mg/L = milligrams per liter, generally equivalent to parts per million (ppm)

mg/kg = milligrams per kilogram, generally equivalent to ppm

μg/m3 = micrograms per cubic meter

TCLP = Toxicity Characteristic Leaching Procedure

SPLP = Synthetic Precipitation Leaching Procedure

Appendix B

Potable Well Survey Documents

Illinois Environmental Protection Agency (IEPA)
Source Water Assessment Program (SWAP)
Well Survey
1807-1815 N. Kimball Avenue, Chicago, Illinois

1,000 ft buffer: CWS, Non-CWS Wells, and ISGS Wells

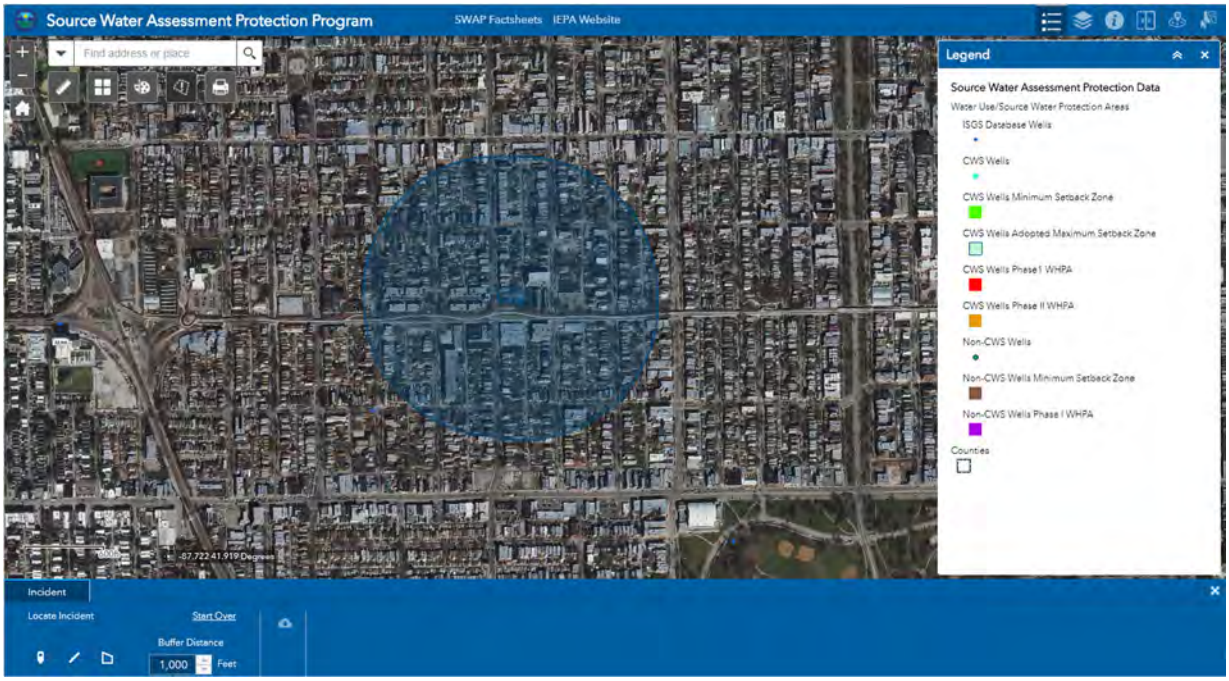


Image obtained from IEPA SWAP Web Mapping Tool October 23, 2020

2,500 ft buffer: CWS Wells

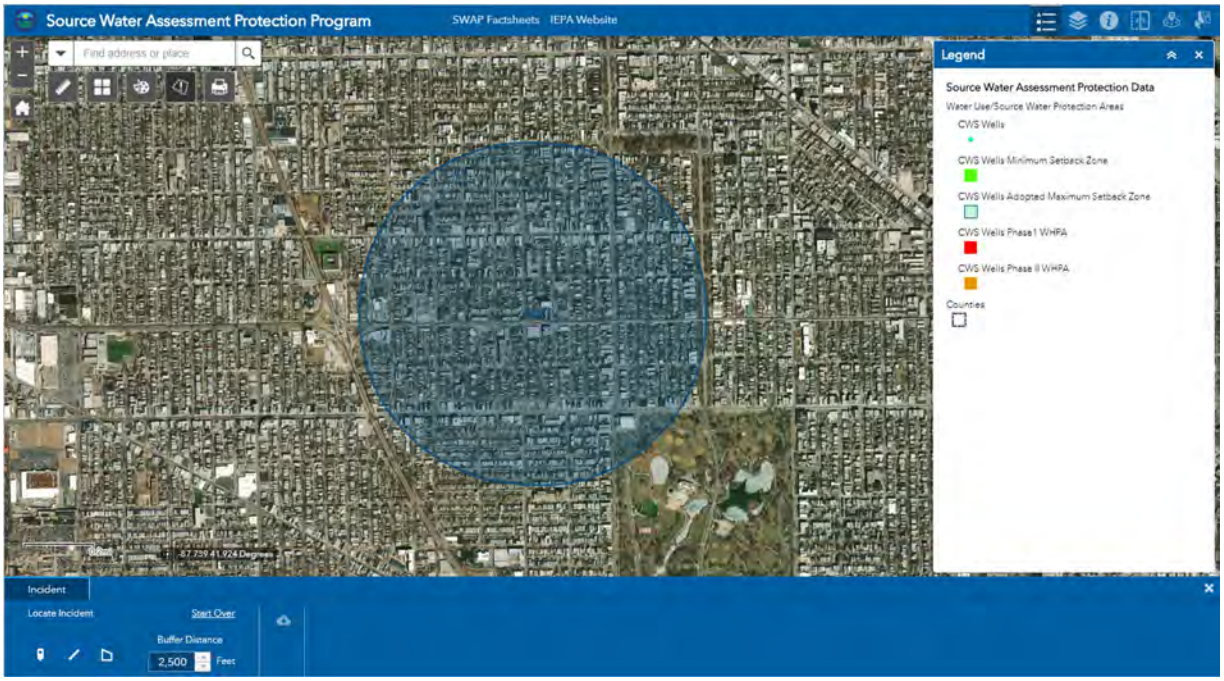
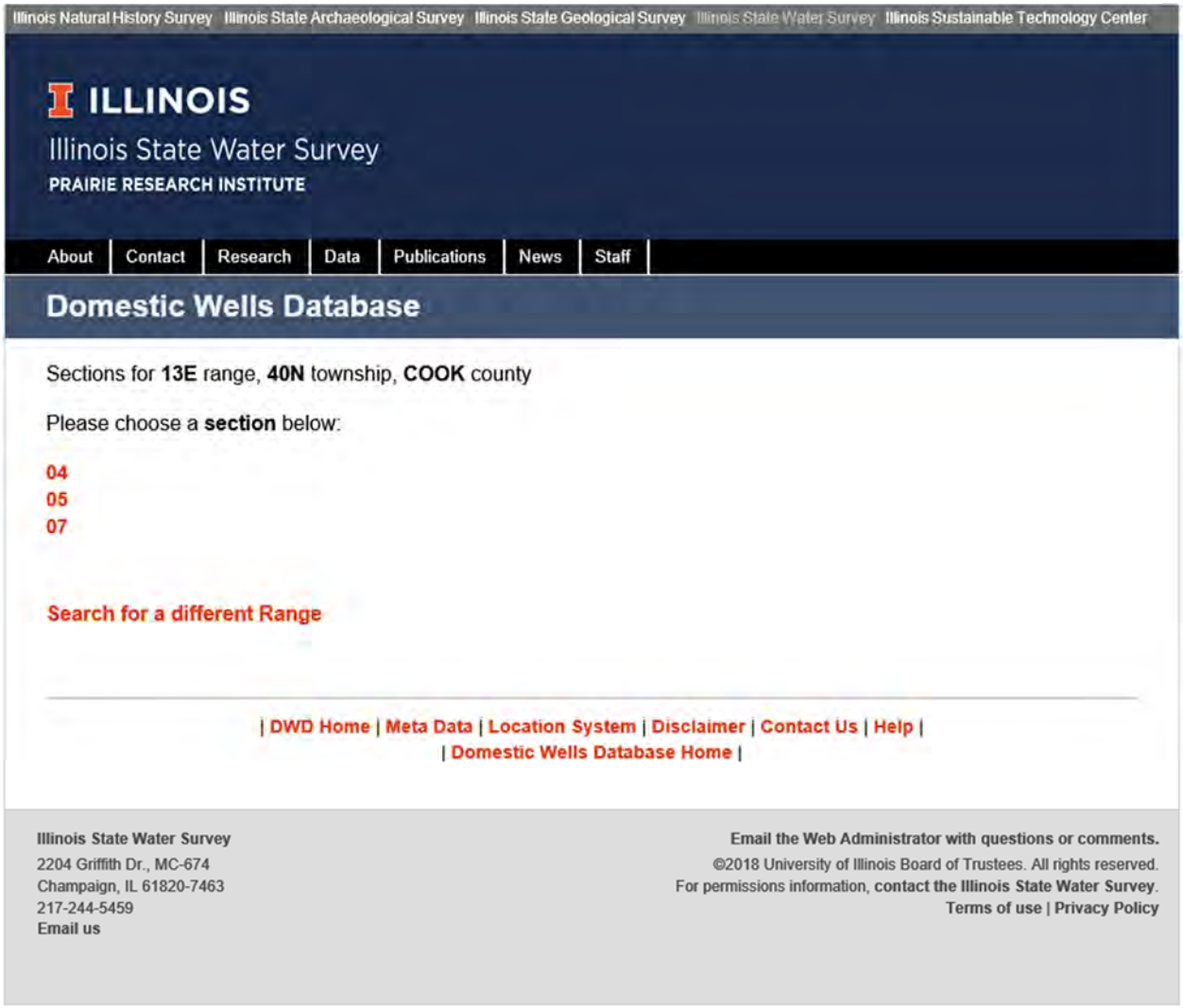
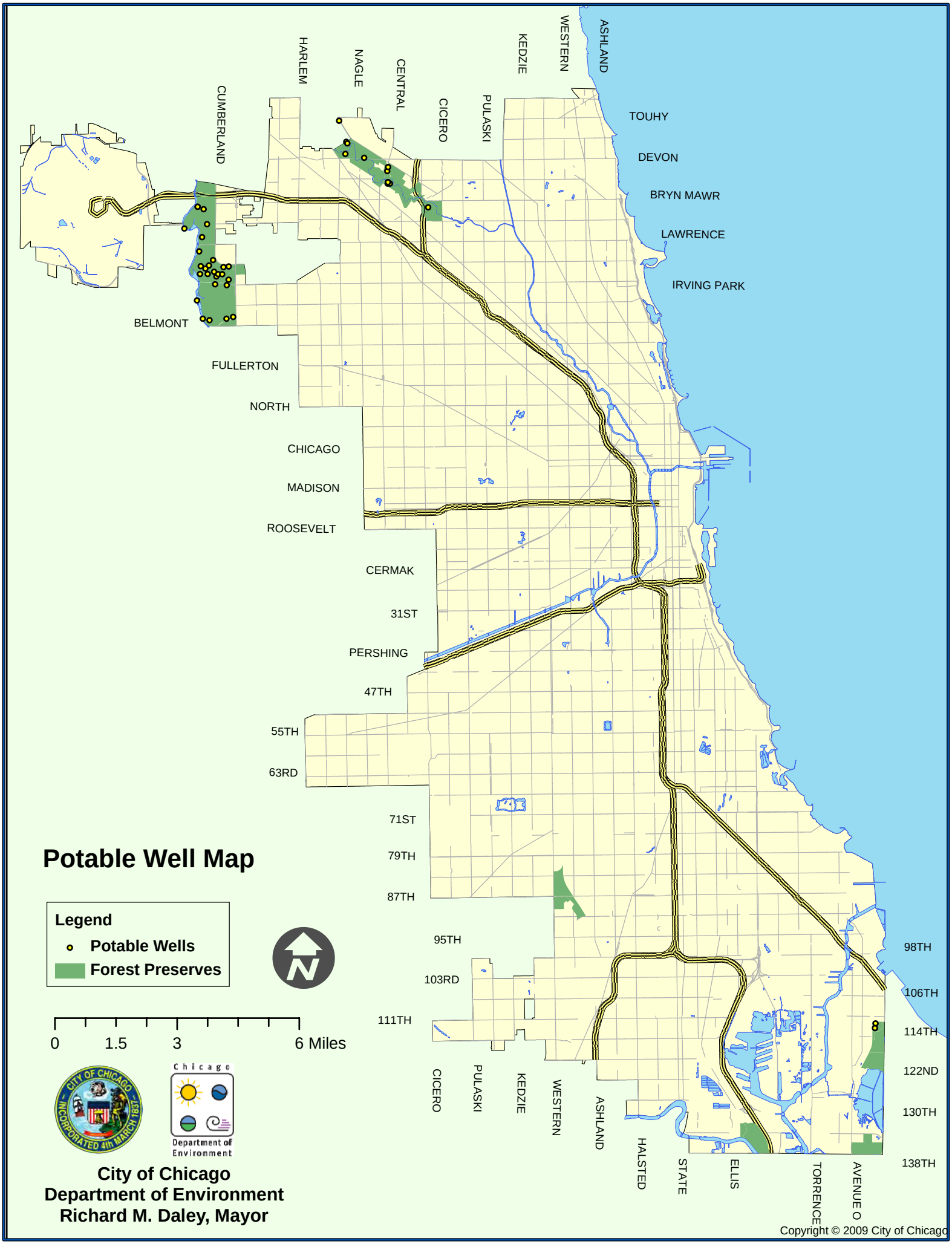


Image obtained from IEPA SWAP Web Mapping Tool October 23, 2020

Illinois State Water Survey
Domestic Wells Database
Well Survey
1807-1815 N. Kimball Avenue, Chicago, Illinois

No domestic wells listed for Township 40N, Range 13 E and Section 35.




HARLEM
NAGLE
CENTRAL
CICERO
PULASKI
KEDZIE
WESTERN
ASHLAND
CUMBERLAND
TOUHY
DEVON
BRYN MAWR
LAWRENCE
IRVING PARK
BELMONT
FULLERTON
NORTH
CHICAGO
MADISON
ROOSEVELT
CERMAK
31ST
PERSHING
47TH
55TH
63RD
71ST
79TH
87TH
95TH
103RD
111TH
98TH
106TH
114TH
122ND
130TH
138TH
HALSTED
STATE
ELLIS
TORRENCE
AVENUE O
Potable Well Map
Legend
Potable Wells
Forest Preserves
N
0
1.5
3
6 Miles
Chicago
Department of Environment
City of Chicago
Department of Environment
Richard M. Daley, Mayor
Copyright © 2009 City of Chicago

Appendix C

Legal Description

ORDER NUMBER:
1301 004412449 GITL

EFFECTIVE DATE:
June 4, 2012

EXHIBIT "A"

PARCEL 1:

THE NORTH 25 FEET OF THE SOUTH 146.85 FEET OF THE EAST 25 FEET OF THE WEST 197.55 FEET OF THAT PART OF BLOCK 10 LYING NORTH OF THE RIGHT OF WAY OF THE CHICAGO, MILWAUKEE AND ST. PAUL RAILROAD IN SIMON'S SUBDIVISION OF THE SOUTHEAST 1/ 4 OF SECTION 35, TOWNSHIP 40 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, IN COOK COUNTY, ILLINOIS.

PARCEL 2:

THAT PART OF BLOCK 10 IN E. SIMONS SUBDIVISION OF THE SOUTHEAST 1/ 4 OF SECTION 35, TOWNSHIP 40 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN DESCRIBED AS FOLLOWS: COMMENCING AT A POINT ON THE EAST LINE 324 FEET SOUTH OF THE NORTHEAST CORNER THENCE SOUTH ALONG THE EAST LINE 255.5 FEET TO THE NORTH LINE OF THE CHICAGO MILWAUKEE AND ST. PAUL RAILROAD RIGHT OF WAY; THENCE WEST ALONG RIGHT OF WAY LINE 123.86 FEET; THENCE NORTHWESTERLY 57.20 FEET TO A POINT ON THE EAST LINE EXTENDED SOUTHERLY OF A 20 FOOT WIDE ALLEY, SAID POINT BEING 10 FEET EASTERLY OF THE NORTH-SOUTH CENTER LINE OF SAID BLOCK 10 AND 19.80 FEET NORTH OF SAID RAILROAD RIGHT OF WAY FOR THE POINT OF BEGINNING; THENCE CONTINUING ALONG LAST DESCRIBED COURSE 21.40 FEET TO A POINT 10 FEET WEST OF SAID NORTH-SOUTH CENTER LINE AND 27.11 FEET NORTH OF SAID NORTH RIGHT OF WAY LINE; THENCE NORTH ALONG A LINE 10 FEET WEST OF AND PARALLEL WITH SAID NORTH-SOUTH CENTER LINE 40.74 FEET TO A POINT 25 FEET SOUTH OF THE NORTH LINE OF THE SOUTH 108 FEET OF SAID BLOCK 10; THENCE WEST 5 FEET; THENCE NORTH TO A POINT 486 FEET SOUTH OF AND PARALLEL WITH THE NORTH LINE OF SAID BLOCK 10 AND 15 FEET WEST OF THE NORTH-SOUTH CENTER LINE; THENCE WEST ALONG THE SOUTH LINE OF THE NORTH 486 FEET OF SAID BLOCK 10 A DISTANCE OF 172.53 FEET TO ITS INTERSECTION WITH THE WEST LINE OF SAID BLOCK THENCE NORTH ALONG SAID WEST LINE 54 FEET; THENCE EAST ALONG THE SOUTH LINE OF THE NORTH 432 FEET OF SAID BLOCK 10, 177.55 FEET TO ITS INTERSECTION WITH THE WEST LINE OF AN ALLEY BEING A LINE 10 FEET WEST OF AND PARALLEL WITH SAID NORTH-SOUTH CENTER LINE; THENCE SOUTH 0.69 FEET; THENCE WEST 5 FEET ON THE NORTH LINE OF THE ALLEY; THENCE SOUTH ALONG WEST LINE SAID ALLEY BEING A LINE 15 FEET WEST OF AND PARALLEL WITH SAID NORTH SOUTH CENTERLINE 25 FEET; THENCE EAST 25 FEET ALONG THE SOUTH LINE OF SAID ALLEY; THENCE SOUTH ALONG THE EAST LINE EXTENDED OF SAID ALLEY, BEING A LINE 10 FEET EAST OF AND PARALLEL WITH SAID NORTH-SOUTH CENTER LINE 101.44 FEET TO THE POINT OF BEGINNING, IN COOK COUNTY, ILLINOIS.

PARCEL 3:

THAT PART OF BLOCK 10 IN E. SIMON'S SUBDIVISION OF THE SOUTHEAST 1/ 4 OF SECTION 35, TOWNSHIP 40 NORTH, RANGE 13, EAST OF THE THIRD PRINCIPAL MERIDIAN, DESCRIBED AS FOLLOWS: COMMENCING AT A POINT ON THE NORTH AND SOUTH CENTER LINE OF SAID BLOCK WHICH IS 23.47 FEET NORTH OF THE NORTH LINE OF THE RIGHT OF WAY OF THE CHICAGO, MILWAUKEE AND ST. PAUL RAILROAD COMPANY; THENCE NORTHWESTERLY A DISTANCE OF 10.68 FEET TO A POINT 10 FEET WEST OF SAID NORTH AND SOUTH CENTER LINE AND 27.11 FEET NORTH OF SAID NORTH RIGHT OF WAY LINE, TO THE POINT OF BEGINNING OF THIS PARCEL OF LAND; THENCE NORTH 00 DEGREES 02 MINUTES 17 SECONDS WEST ALONG A LINE 10.00 FEET WEST OF AND PARALLEL TO SAID NORTH AND SOUTH CENTER LINE, A DISTANCE OF 40.74 FEET TO A POINT

ORDER NUMBER:
1301 004412449 GITL

EFFECTIVE DATE:
June 4, 2012

EXHIBIT "A"

25.00 FEET SOUTH OF THE NORTH LINE OF THE SOUTH 108.00 FEET OF SAID BLOCK 10; THENCE NORTH 89 DEGREES 28 MINUTES 00 SECONDS WEST, A DISTANCE OF 5.00 FEET; THENCE NORTH 0 DEGREES 02 MINUTES 17 SECONDS WEST, A DISTANCE OF 25.25 FEET TO A POINT ON A LINE 486.00 FEET SOUTH OF AND PARALLEL TO THE NORTH LINE OF SAID BLOCK 10 AND 15.00 FEET WEST OF THE NORTH AND SOUTH CENTER LINE OF SAID BLOCK 10; THENCE NORTH 89 DEGREES 36 MINUTES 00 SECONDS WEST ALONG THE SOUTH LINE OF THE NORTH 486.00 FEET OF SAID BLOCK 10, A DISTANCE OF 172.53 FEET TO ITS INTERSECTION WITH THE WEST LINE OF SAID BLOCK 10; THENCE SOUTH 00 DEGREES 04 MINUTES 33 SECONDS EAST ALONG SAID WEST LINE, 37.87 FEET; THENCE SOUTH 87 DEGREES 01 MINUTES 33 SECONDS EAST, A DISTANCE OF 50.31 FEET; THENCE EASTERLY ON A CURVE TANGENT TO THE LAST DESCRIBED COURSE AND CONCAVE SOUTHERLY WITH A RADIUS OF 355.16 FEET A CHORD DISTANCE OF 66.01 FEET (SAID CHORD HAVING A BEARING OF SOUTH 81 DEGREES 41 MINUTES 35 SECONDS EAST) TO A POINT OF COMPOUND CURVATURE; THENCE EASTERLY ON A CURVE CONCAVE SOUTHERLY, WITH A RADIUS OF 1006.84 FEET, A CHORD DISTANCE OF 64.23 FEET (SAID CHORD HAVING A BEARING OF SOUTH 74 DEGREES 31 MINUTES 58 SECONDS EAST) TO THE POINT OF BEGINNING, ALL IN COOK COUNTY, ILLINOIS.

Appendix D

EDI Field Work Summary

Environmental Design International inc.
Chicago & Baltimore

33 W. Monroe St., Suite 1825
Chicago, IL 60603-5326

phone: 312-345-1400
fax: 312-345-0529
web: envdesigni.com

January 14, 2019

Mr. Matthew Hildreth, PG
Project Manager, Environmental
AECOM
303 East Upper Wacker Drive, Suite 1400
Chicago, Illinois 60601

Subject: **Field Work Summary**
2FM Kimball Avenue
1807-15 North Kimball Avenue
Chicago, Illinois

Dear Mr. Hildreth:

Environmental Design International inc. (EDI) submits this summary outlining field activities performed by EDI during November 5 through 9, 2018.

Summary

EDI conducted a subsurface investigation in November 2018, in order to address potential data gaps and gather sufficient information to enroll the property into the Illinois Environmental Protection Agency's (IEPA) Site Remediation Program. In brief, the field work consisted of the following:

- Ground Penetration Radar and Electromagnetic survey;
- The advancement of 22 soil borings;
- The collection and analysis 66 soil samples from the 22 soil borings;
- The collection and analysis of one composite soil sample for waste characterization;
- The collection and analysis of four groundwater samples from four permanent monitoring wells;
- The installation of four-semi permanent soil gas implants; and
- The collection and analysis of four soil gas samples.

Soil

On November 5 through 8, 2018, EDI advanced 22 soil borings (DB-01 through DB-22) to approximately 30 feet below ground surface (bgs). These borings were advanced to fill potential data gaps and assist in characterizing the entire site. Two to four soils samples were collected from each boring for laboratory analysis, including duplicate and quality control/assurance samples.

Soil borings were advanced utilizing a track-mounted direct-push Geoprobe® system equipped with 5-foot long, 2-inch diameter Marco-Core® sample liners. A new liner was used for each sample interval and the probes were decontaminated before each use with an Alconox® and potable water solution. Soils were inspected for olfactory signs of contamination and were classified in terms of texture, color, and consistency. Headspace portions of each soil sample were field screened with a photoionization detector on an aliquot of soil recovered from each 2-foot interval and sealed in plastic bag. The field screening was performed upwind of the Geoprobe® and vehicle traffic. The soils selected for laboratory analysis were based on field screening results, visual observations, evident odors, subsurface conditions encountered, or to fill data gaps from prior investigations.

A new pair of nitrile gloves was donned for each sample portion to reduce cross contamination. Portions of soil were selected for laboratory analysis, placed into laboratory cleaned sample containers and placed into a cooler containing ice. Samples collected for volatile organic compound (VOC) analysis were collected using Environmental Protection Agency Method 5035A. Approximately five grams of soil from each sample location selected for VOC analysis, was placed in each of the three laboratory-supplied 40-ml vials. Each 40-ml vial was pre-weighted and were pre-preserved. The soil samples were submitted under proper chain of custody procedure to STAT Analysis Corporation (STAT) of Chicago, Illinois, an IEPA accredited laboratory.

Groundwater

EDI conducted low-flow groundwater sampling from four permanent groundwater monitoring wells (KP-MW02 and MW-4 through MW-6) on November 9, 2018. Monitoring well KP-MW02 was installed by Weston Solutions, Inc. (Weston) in May 2012 and monitoring wells MW-4 through MW-6 were installed by Terracon Consultants, Inc. (Terracon) in September 2012. Based on the well construction logs, Weston reported that KP-MW02 was constructed of 2-inch diameter flush-threated polyvinyl chloride (PVC) riser pipe and 0.010-inch slotted screen. A 10-foot screen was used for well construction and was located in such a manner as to straddle the inferred water table. A silica sand pack was placed in the borehole annulus around the well screen to a height of 2 feet above the top of the screen. The remainder of the borehole annulus was filled with bentonite pellet/chips seal placed directly above the sand pack. Terracon's well construction logs indicate that MW-4 through MW-6 were installed using a hollow-stem auger drill rig. The wells were constructed using sections of flush-jointed, two-inch outside diameter, schedule 40 PVC threated pipe. The screened section of each monitoring well consisted of 0.01-inch slotted section of PVC pipe installed to intersect the water table. Fine-grained sand filter pack was placed into each well's annulus from the bottom to approximately one to two feet above the screened section. A bentonite product (approximate 1/8-inch diameter chips) were placed in the annulus from above the filter pack to within two feet of ground surface. The bentonite chips were then

hydrated with potable water. Each internal PVC casing was fitted with an extension cap. All permanent monitoring wells were installed to an approximate depth of 20 feet bgs.

During sampling activities in November 2018, EDI purged and sampled wells KP-MW02 and MW-04 through MW-06, utilizing low flow sampling techniques. Purging and sampling utilized a submersible bladder pump, disposable tubing, and a water quality meter. Prior to purging, an electronic water level meter was utilized to record the water level. Dedicated disposable polyethylene tubing was then inserted into the screened interval of the well to a depth approximately in the middle of the observed water column and attached to the pump. The pump was then started, and the discharged water was passed through a flow-through cell for the water quality meter to obtain measurements of the select water quality parameters. Select water quality parameters recorded by EDI included: temperature, specific conductivity, pH, dissolved oxygen, turbidity, oxidation-reduction potential. Measurements of water quality parameters were recorded at approximate five-minute intervals until stability was achieved. Stability was considered achieved when readings for a minimum of four of the four of the six parameters were within ± 10% of their previous respective recorded readings.

Upon achieving stability, the water quality meter and flow-through cell were disconnected from the discharge of the pump. The groundwater sample was then subsequently collected into laboratory provided containers utilizing the pump, labeled, placed in a cooler with ice, and logged on a chain of custody form. The water samples collected were submitted and analyzed by STAT.

Soil Gas

EDI installed four semi-permanent soil vapor implants (SV-7 through SV-10) to depths of four feet bgs with six-inch retractions using a track-mounted Geoprobe®. Prior to use, all equipment in direct contact with the subsurface were decontaminated with an Alconox® and potable water solution. The annular void between the boreholes and the tubing were sealed using dry and hydrated bentonite. The voids were allowed to reach equilibrium. A leak test was performed using helium gas and shroud to ensure the integrity of the implants. No leaks were detected. The vapor implants were purged of a minimum of three internal tubing volumes prior to sampling. The samples were obtained using 1-liter Summa cannisters maintained at vacuum and connected to flow controllers to collect grab samples. The final pressure of the Summa canisters ranged between 3 to 5 in Hg.

We hope this summary meets your approval. Please feel free call me at (312) 345-1400 ext. 146 for any assistance.

Respectfully,

Environmental Design International inc.

Felix Moran, PE
Senior Project Manager

Table 1-1
Soil Volatile Organic Compounds Analytical Results Compared to
Soil Component of Groundwater Ingestion Exposure Route Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Soil Component of Groundwater Ingestion Exposure Route Values Class II	ADL	Laboratory ID : / Client Sample ID : / Boring Location : / Sample Interval : / Date Collected : 18110219-011 / DB011012 / DB-01 / 10-12 / 11/07/2018 14:20	18110219-012 / DB011012D (Duplicate) / DB-01 / 10-12 / 11/07/2018 14:22	18110219-013 / DB011618 / DB-01 / 16-18 / 11/07/2018 14:30	18110219-014 / DB012224 / DB-01 / 22-24 / 11/07/2018 14:35	18110137-006 / DB021012 / DB-02 / 10-12 / 11/05/2018 11:20	18110137-007 / DB021618 / DB-02 / 16-18 / 11/05/2018 11:25	18110137-008 / DB022224 / DB-02 / 22-24 / 11/05/2018 11:30	18110137-009 / DB031012 / DB-03 / 10-12 / 11/05/2018 12:10	18110137-010 / DB031618 / DB-03 / 16-18 / 11/05/2018 12:20	18110137-011 / DB031618D (Duplicate) / DB-03 / 16-18 / 11/05/2018 12:21	18110137-012 / DB032224 / DB-03 / 22-24 / 11/05/2018 12:30
VOCS													
Acetone	25	---	< 0.081	< 0.074	< 0.079	< 0.064	< 0.080	< 0.072	< 0.092	< 0.068	< 0.10	< 0.097	< 0.073
Benzene	0.17	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Bromodichloromethane	0.6	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Bromoform	0.8	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Bromomethane	1.2	---	< 0.011	< 0.0098	< 0.010	< 0.0085	< 0.011	< 0.0096	< 0.012	< 0.0092	< 0.014	< 0.013	< 0.0098
2-Butanone	---	---	< 0.081	< 0.074	< 0.079	< 0.064	< 0.080	< 0.072	< 0.092	< 0.068	< 0.10	< 0.097	< 0.073
Carbon disulfide	160	---	< 0.054	< 0.048	< 0.052	< 0.042	< 0.054	< 0.047	< 0.061	< 0.046	< 0.069	< 0.065	< 0.050
Carbon tetrachloride	0.33	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Chlorobenzene	6.5	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Chloroethane	---	---	< 0.011	< 0.0098	< 0.010	< 0.0085	< 0.011	< 0.0096	< 0.012	< 0.0092	< 0.014	< 0.013	< 0.0098
Chloroform	2.9	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Chloromethane	---	---	< 0.011	< 0.0098	< 0.010	< 0.0085	< 0.011	< 0.0096	< 0.012	< 0.0092	< 0.014	< 0.013	< 0.0098
Dibromochloromethane	0.4	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
1,1-Dichloroethane	110	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
1,2-Dichloroethane	0.1	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
1,1-Dichloroethene	0.3	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
cis-1,2-Dichloroethene	1.1	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
trans-1,2-Dichloroethene	3.4	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
1,2-Dichloropropane	0.15	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
cis-1,3-Dichloropropene	0.02	0.005	< 0.0021	< 0.0019	< 0.0021	< 0.0017	< 0.0022	< 0.0019	< 0.0025	< 0.0019	< 0.0027	< 0.0026	< 0.0020
trans-1,3-Dichloropropene	0.02	0.005	< 0.0021	< 0.0019	< 0.0021	< 0.0017	< 0.0022	< 0.0019	< 0.0025	< 0.0019	< 0.0027	< 0.0026	< 0.0020
Ethylbenzene	19	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
2-Hexanone	---	---	< 0.021	< 0.019	< 0.021	< 0.017	< 0.022	< 0.019	< 0.025	< 0.019	< 0.027	< 0.026	< 0.020
4-Methyl-2-pentanone	---	---	< 0.021	< 0.019	< 0.021	< 0.017	< 0.022	< 0.019	< 0.025	< 0.019	< 0.027	< 0.026	< 0.020
Methylene chloride	0.2	---	< 0.011	< 0.0098	< 0.010	< 0.0085	< 0.011	< 0.0096	< 0.012	< 0.0092	< 0.014	< 0.013	< 0.0098
Methyl tert-butyl ether	0.32	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Styrene	18	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
1,1,2,2-Tetrachloroethane	---	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Tetrachloroethene	0.3	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Toluene	29	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
1,1,1-Trichloroethane	9.6	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
1,1,2-Trichloroethane	0.3	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Trichloroethene	0.3	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Vinyl chloride	0.07	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Xylenes, Total	150	---	< 0.016	< 0.015	< 0.015	< 0.013	< 0.017	< 0.014	< 0.018	< 0.014	< 0.020	< 0.019	< 0.014

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-1
Soil Volatile Organic Compounds Analytical Results Compared to
Soil Component of Groundwater Ingestion Exposure Route Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Soil Component of Groundwater Ingestion Exposure Route Values Class II	ADL	Laboratory ID : / Client Sample ID : / Boring Location : / Sample Interval : / Date Collected :										
			18110187-018 / DB041012 / DB-04 / 10-12 / 11/06/2018 15:00	18110187-019 / DB041618 / DB-04 / 16-18 / 11/06/2018 15:10	18110187-020 / DB042224 / DB-04 / 22-24 / 11/06/2018 15:20	18110187-021 / DB041618D (Duplicate) / DB-04 / 16-18 / 11/06/2018 15:15	18110137-004 / DB052022 / DB-05 / 20-22 / 11/05/2018 10:20	18110137-005 / DB052426 / DB-05 / 24-26 / 11/05/2018 10:30	18110137-013 / DB061416 / DB-06 / 14-16 / 11/05/2018 12:40	18110137-014 / DB062224 / DB-06 / 22-24 / 11/05/2018 12:45	18110187-006 / DB071113 / DB-07 / 11-13 / 11/06/2018 11:30	18110187-007 / DB071618 / DB-07 / 16-18 / 11/06/2018 11:35	18110187-008 / DB072224 / DB-07 / 22-24 / 11/06/2018 11:40
VOCS													
Acetone	25	---	< 0.067	< 0.074	< 0.077	< 0.076	< 0.12	< 0.076	< 0.077	< 0.083	< 0.068	< 0.075	< 0.073
Benzene	0.17	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Bromodichloromethane	0.6	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Bromoform	0.8	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Bromomethane	1.2	---	< 0.0089	< 0.0099	< 0.010	< 0.010	< 0.016	< 0.010	< 0.010	< 0.011	< 0.0091	< 0.010	< 0.0097
2-Butanone	---	---	< 0.067	< 0.074	< 0.077	< 0.076	< 0.12	< 0.076	< 0.077	< 0.083	< 0.068	< 0.075	< 0.073
Carbon disulfide	160	---	< 0.045	< 0.049	< 0.052	< 0.050	< 0.083	< 0.050	< 0.052	< 0.056	< 0.045	< 0.050	< 0.048
Carbon tetrachloride	0.33	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Chlorobenzene	6.5	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Chloroethane	---	---	< 0.0089	< 0.0099	< 0.010	< 0.010	< 0.016	< 0.010	< 0.010	< 0.011	< 0.0091	< 0.010	< 0.0097
Chloroform	2.9	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Chloromethane	---	---	< 0.0089	< 0.0099	< 0.010	< 0.010	< 0.016	< 0.010	< 0.010	< 0.011	< 0.0091	< 0.010	< 0.0097
Dibromochloromethane	0.4	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
1,1-Dichloroethane	110	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
1,2-Dichloroethane	0.1	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
1,1-Dichloroethene	0.3	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	0.0055	< 0.0056	< 0.0045	< 0.0050	< 0.0048
cis-1,2-Dichloroethene	1.1	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	0.010	< 0.0056	0.010	< 0.0050	< 0.0048
trans-1,2-Dichloroethene	3.4	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
1,2-Dichloropropane	0.15	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
cis-1,3-Dichloropropene	0.02	0.005	< 0.0018	< 0.0020	< 0.0020	< 0.0020	< 0.0033	< 0.0020	< 0.0020	< 0.0023	< 0.0018	< 0.0020	< 0.0020
trans-1,3-Dichloropropene	0.02	0.005	< 0.0018	< 0.0020	< 0.0020	< 0.0020	< 0.0033	< 0.0020	< 0.0020	< 0.0023	< 0.0018	< 0.0020	< 0.0020
Ethylbenzene	19	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
2-Hexanone	---	---	< 0.018	< 0.020	< 0.020	< 0.020	< 0.033	< 0.020	< 0.020	< 0.023	< 0.018	< 0.020	< 0.020
4-Methyl-2-pentanone	---	---	< 0.018	< 0.020	< 0.020	< 0.020	< 0.033	< 0.020	< 0.020	< 0.023	< 0.018	< 0.020	< 0.020
Methylene chloride	0.2	---	< 0.0089	< 0.0099	< 0.010	< 0.010	< 0.016	< 0.010	< 0.010	< 0.011	< 0.0091	< 0.010	< 0.0097
Methyl tert-butyl ether	0.32	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Styrene	18	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
1,1,2,2-Tetrachloroethane	---	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Tetrachloroethene	0.3	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Toluene	29	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
1,1,1-Trichloroethane	9.6	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
1,1,2-Trichloroethane	0.3	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Trichloroethene	0.3	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	0.25	0.013	< 0.0045	< 0.0050	< 0.0048
Vinyl chloride	0.07	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	**0.29**	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Xylenes, Total	150	---	< 0.013	< 0.015	< 0.015	< 0.015	< 0.025	< 0.015	< 0.015	< 0.017	< 0.014	< 0.015	< 0.015

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-1
Soil Volatile Organic Compounds Analytical Results Compared to
Soil Component of Groundwater Ingestion Exposure Route Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Soil Component of Groundwater Ingestion Exposure Route Values Class II	ADL	Laboratory ID : / Client Sample ID : / Boring Location : / Sample Interval : / Date Collected :										
			18110219-008 / DB081113 / DB-08 / 11-13 / 11/07/2018 13:40	18110219-009 / DB081618 / DB-08 / 16-18 / 11/07/2018 13:45	18110219-010 / DB082224 / DB-08 / 22-24 / 11/07/2018 13:50	18110137-001 / DB091113 / DB-09 / 11-13 / 11/05/2018 09:30	18110137-002 / DB091618 / DB-09 / 16-18 / 11/05/2018 09:35	18110137-003 / DB092224 / DB-09 / 22-24 / 11/05/2018 09:40	18110219-001 / DB101820 / DB-10 / 18-20 / 11/07/2018 09:00	18110219-002 / DB102628 / DB-10 / 26-28 / 11/07/2018 09:10	18110137-015 / DB111214 / DB-11 / 12-14 / 11/05/2018 13:15	18110137-016 / DB111820 / DB-11 / 18-20 / 11/05/2018 13:25	18110137-017 / DB112628 / DB-11 / 26-28 / 11/05/2018 13:30
VOCS													
Acetone	25	---	< 0.074	< 0.073	< 0.065	< 410	< 0.090	< 0.069	< 0.071	< 0.065	< 340	< 0.077	< 0.066
Benzene	0.17	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Bromodichloromethane	0.6	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Bromoform	0.8	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Bromomethane	1.2	---	< 0.0098	< 0.0095	< 0.0086	< 54	< 0.012	< 0.0092	< 0.0093	< 0.0086	< 46	< 0.010	< 0.0088
2-Butanone	---	---	< 0.074	< 0.073	< 0.065	< 410	< 0.090	< 0.069	< 0.071	< 0.065	< 340	< 0.077	< 0.066
Carbon disulfide	160	---	< 0.048	< 0.048	< 0.043	< 280	< 0.059	< 0.046	< 0.047	< 0.043	< 230	< 0.050	< 0.044
Carbon tetrachloride	0.33	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Chlorobenzene	6.5	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Chloroethane	---	---	< 0.0098	< 0.0095	< 0.0086	< 54	< 0.012	< 0.0092	< 0.0093	< 0.0086	< 46	< 0.010	< 0.0088
Chloroform	2.9	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Chloromethane	---	---	< 0.0098	< 0.0095	< 0.0086	< 54	< 0.012	< 0.0092	< 0.0093	< 0.0086	< 46	< 0.010	< 0.0088
Dibromochloromethane	0.4	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
1,1-Dichloroethane	110	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
1,2-Dichloroethane	0.1	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
1,1-Dichloroethene	0.3	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
cis-1,2-Dichloroethene	1.1	---	0.017	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
trans-1,2-Dichloroethene	3.4	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
1,2-Dichloropropane	0.15	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
cis-1,3-Dichloropropene	0.02	0.005	< 0.0019	< 0.0019	< 0.0017	< 11	< 0.0024	< 0.0018	< 0.0019	< 0.0018	< 9.2	< 0.0020	< 0.0018
trans-1,3-Dichloropropene	0.02	0.005	< 0.0019	< 0.0019	< 0.0017	< 11	< 0.0024	< 0.0018	< 0.0019	< 0.0018	< 9.2	< 0.0020	< 0.0018
Ethylbenzene	19	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
2-Hexanone	---	---	< 0.019	< 0.019	< 0.017	< 110	< 0.024	< 0.018	< 0.019	< 0.018	< 92	< 0.020	< 0.018
4-Methyl-2-pentanone	---	---	< 0.019	< 0.019	< 0.017	< 110	< 0.024	< 0.018	< 0.019	< 0.018	< 92	< 0.020	< 0.018
Methylene chloride	0.2	---	< 0.0098	< 0.0095	< 0.0086	< 54	< 0.012	< 0.0092	< 0.0093	< 0.0086	< 46	< 0.010	< 0.0088
Methyl tert-butyl ether	0.32	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Styrene	18	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
1,1,2,2-Tetrachloroethane	---	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Tetrachloroethene	0.3	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Toluene	29	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
1,1,1-Trichloroethane	9.6	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
1,1,2-Trichloroethane	0.3	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Trichloroethene	0.3	---	0.016	< 0.0048	0.0071	**2,300**	0.06	< 0.0046	0.24	0.0079	**2,300**	< 0.0050	< 0.0044
Vinyl chloride	0.07	---	0.029	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Xylenes, Total	150	---	< 0.015	< 0.014	< 0.013	< 82	< 0.018	< 0.014	< 0.014	< 0.013	< 69	< 0.015	< 0.013

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-1
Soil Volatile Organic Compounds Analytical Results Compared to
Soil Component of Groundwater Ingestion Exposure Route Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Soil Component of Groundwater Ingestion Exposure Route Values Class II	ADL	Laboratory ID : / Client Sample ID : / Boring Location : / Sample Interval : / Date Collected : 18110137-018 / DB121214 / DB-12 / 12-14 / 11/05/2018 14:40	18110137-019 / DB121214D (Duplicate) / DB-12 / 12-14 / 11/05/2018 14:42	18110137-020 / DB121820 / DB-12 / 18-20 / 11/05/2018 14:45	18110137-021 / DB122628M (MS/MSD) / DB-12 / 26-28 / 11/05/2018 14:50	18110219-003 / DB131820 / DB-13 / 18-20 / 11/07/2018 10:00	18110219-004 / DB132426 / DB-13 / 24-26 / 11/07/2018 10:10	18110187-001 / DB141416 / DB-14 / 14-16 / 11/06/2018 09:00	18110187-002 / DB141820 / DB-14 / 18-20 / 11/06/2018 09:05	18110187-003 / DB151012 / DB-15 / 10-12 / 11/06/2018 10:50	18110187-004 / DB151618 / DB-15 / 16-18 / 11/06/2018 11:00	18110187-005 / DB152224 / DB-15 / 22-24 / 11/06/2018 11:15
VOCS													
Acetone	25	---	< 0.074	< 0.074	< 0.075	< 0.073	< 0.078	< 0.087	< 0.073	< 0.077	< 0.083	< 0.065	< 0.061
Benzene	0.17	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Bromodichloromethane	0.6	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Bromoform	0.8	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Bromomethane	1.2	---	< 0.010	< 0.0099	< 0.010	< 0.0097	< 0.010	< 0.012	< 0.0098	< 0.010	< 0.011	< 0.0086	< 0.0081
2-Butanone	---	---	< 0.074	< 0.074	< 0.075	< 0.073	< 0.078	< 0.087	< 0.073	< 0.077	< 0.083	< 0.065	< 0.061
Carbon disulfide	160	---	< 0.051	< 0.050	< 0.051	< 0.049	< 0.051	< 0.058	< 0.049	< 0.052	< 0.055	< 0.043	< 0.041
Carbon tetrachloride	0.33	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Chlorobenzene	6.5	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Chloroethane	---	---	< 0.010	< 0.0099	< 0.010	< 0.0097	< 0.010	< 0.012	< 0.0098	< 0.010	< 0.011	< 0.0086	< 0.0081
Chloroform	2.9	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Chloromethane	---	---	< 0.010	< 0.0099	< 0.010	< 0.0097	< 0.010	< 0.012	< 0.0098	< 0.010	< 0.011	< 0.0086	< 0.0081
Dibromochloromethane	0.4	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
1,1-Dichloroethane	110	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
1,2-Dichloroethane	0.1	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
1,1-Dichloroethene	0.3	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
cis-1,2-Dichloroethene	1.1	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
trans-1,2-Dichloroethene	3.4	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
1,2-Dichloropropane	0.15	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
cis-1,3-Dichloropropene	0.02	0.005	< 0.0020	< 0.0020	< 0.0020	< 0.0019	< 0.0020	< 0.0023	< 0.0020	< 0.0020	< 0.0022	< 0.0018	< 0.0016
trans-1,3-Dichloropropene	0.02	0.005	< 0.0020	< 0.0020	< 0.0020	< 0.0019	< 0.0020	< 0.0023	< 0.0020	< 0.0020	< 0.0022	< 0.0018	< 0.0016
Ethylbenzene	19	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
2-Hexanone	---	---	< 0.020	< 0.020	< 0.020	< 0.019	< 0.020	< 0.023	< 0.020	< 0.020	< 0.022	< 0.018	< 0.016
4-Methyl-2-pentanone	---	---	< 0.020	< 0.020	< 0.020	< 0.019	< 0.020	< 0.023	< 0.020	< 0.020	< 0.022	< 0.018	< 0.016
Methylene chloride	0.2	---	< 0.010	< 0.0099	< 0.010	< 0.0097	< 0.010	< 0.012	< 0.0098	< 0.010	< 0.011	< 0.0086	< 0.0081
Methyl tert-butyl ether	0.32	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Styrene	18	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
1,1,2,2-Tetrachloroethane	---	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Tetrachloroethene	0.3	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Toluene	29	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
1,1,1-Trichloroethane	9.6	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
1,1,2-Trichloroethane	0.3	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Trichloroethene	0.3	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	0.014	0.024	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Vinyl chloride	0.07	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Xylenes, Total	150	---	< 0.015	< 0.015	< 0.015	< 0.014	< 0.015	< 0.017	< 0.015	< 0.016	< 0.017	< 0.013	< 0.013

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-1
Soil Volatile Organic Compounds Analytical Results Compared to
Soil Component of Groundwater Ingestion Exposure Route Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Soil Component of Groundwater Ingestion Exposure Route Values Class II	ADL	Laboratory ID : / Client Sample ID : / Boring Location : / Sample Interval : / Date Collected :									
			18110187-009 / DB161012 / DB-16 / 10-12 / 11/06/2018 12:25	18110187-010 / DB161618 / DB-16 / 16-18 / 11/06/2018 12:30	18110187-011 / DB161618D (Duplicate) / DB-16 / 16-18 / 11/06/2018 12:35	18110187-012 / DB162224 / DB-16 / 22-24 / 11/06/2018 12:45	18110187-013 / DB171214 / DB-17 / 12-14 / 11/06/2018 13:20	18110187-014 / DB171618 / DB-17 / 16-18 / 11/06/2018 13:25	18110187-015 / DB172224 / DB-17 / 22-24 / 11/06/2018 13:30	18110219-005 / DB181012 / DB-18 / 10-12 / 11/07/2018 12:30	18110219-006 / DB181618 / DB-18 / 16-18 / 11/07/2018 12:40	18110219-007 / DB182224 / DB-18 / 22-24 / 11/07/2018 12:45	18110187-016 / DB191416 / DB-19 / 14-16 / 11/06/2018 14:20
VOCS													
Acetone	25	---	< 0.076	< 0.067	< 0.073	< 0.062	< 330	< 0.070	< 0.073	< 370	< 0.069	< 0.090	< 0.076
Benzene	0.17	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Bromodichloromethane	0.6	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Bromoform	0.8	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Bromomethane	1.2	---	< 0.010	< 0.0090	< 0.0099	< 0.0084	< 43	< 0.0092	< 0.0098	< 50	< 0.0091	< 0.012	< 0.010
2-Butanone	---	---	< 0.076	< 0.067	< 0.073	< 0.062	< 330	< 0.070	< 0.073	< 370	< 0.069	< 0.090	< 0.076
Carbon disulfide	160	---	< 0.051	< 0.045	< 0.049	< 0.042	< 220	< 0.047	< 0.049	< 260	< 0.046	< 0.060	< 0.051
Carbon tetrachloride	0.33	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Chlorobenzene	6.5	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Chloroethane	---	---	< 0.010	< 0.0090	< 0.0099	< 0.0084	< 43	< 0.0092	< 0.0098	< 50	< 0.0091	< 0.012	< 0.010
Chloroform	2.9	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Chloromethane	---	---	< 0.010	< 0.0090	< 0.0099	< 0.0084	< 43	< 0.0092	< 0.0098	< 50	< 0.0091	< 0.012	< 0.010
Dibromochloromethane	0.4	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
1,1-Dichloroethane	110	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
1,2-Dichloroethane	0.1	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
1,1-Dichloroethene	0.3	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
cis-1,2-Dichloroethene	1.1	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	**31**	< 0.0046	< 0.0060	< 0.0051
trans-1,2-Dichloroethene	3.4	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
1,2-Dichloropropane	0.15	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
cis-1,3-Dichloropropene	0.02	0.005	< 0.0020	< 0.0017	< 0.0020	< 0.0017	< 8.8	< 0.0019	< 0.0019	< 10	< 0.0018	< 0.0025	< 0.0020
trans-1,3-Dichloropropene	0.02	0.005	< 0.0020	< 0.0017	< 0.0020	< 0.0017	< 8.8	< 0.0019	< 0.0019	< 10	< 0.0018	< 0.0025	< 0.0020
Ethylbenzene	19	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
2-Hexanone	---	---	< 0.020	< 0.017	< 0.020	< 0.017	< 88	< 0.019	< 0.019	< 100	< 0.018	< 0.025	< 0.020
4-Methyl-2-pentanone	---	---	< 0.020	< 0.017	< 0.020	< 0.017	< 88	< 0.019	< 0.019	< 100	< 0.018	< 0.025	< 0.020
Methylene chloride	0.2	---	< 0.010	< 0.0090	< 0.0099	< 0.0084	< 43	< 0.0092	< 0.0098	< 50	< 0.0091	< 0.012	< 0.010
Methyl tert-butyl ether	0.32	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Styrene	18	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
1,1,2,2-Tetrachloroethane	---	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Tetrachloroethene	0.3	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Toluene	29	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
1,1,1-Trichloroethane	9.6	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
1,1,2-Trichloroethane	0.3	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Trichloroethene	0.3	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	**980**	0.034	< 0.0049	**3,200**	0.12	0.013	< 0.0051
Vinyl chloride	0.07	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Xylenes, Total	150	---	< 0.015	< 0.014	< 0.015	< 0.012	< 66	< 0.014	< 0.014	< 76	< 0.014	< 0.018	< 0.015

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-1
Soil Volatile Organic Compounds Analytical Results Compared to
Soil Component of Groundwater Ingestion Exposure Route Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Soil Component of Groundwater Ingestion Exposure Route Values Class II	ADL	Laboratory ID : / Client Sample ID : / Boring Location : / Sample Interval : / Date Collected :										
			18110187-017 / DB191820 / DB-19 / 18-20 / 11/06/2018 14:25	18110358-006 / DB201012 / DB-20 / 10-12 / 11/08/2018 14:00	18110358-007 / DB201618 / DB-20 / 16-18 / 11/08/2018 14:15	18110358-008 / DB201618M (MS/MSD) / DB-20 / 16-18 / 11/08/2018 14:16	18110358-009 / DB202426 / DB-20 / 24-26 / 11/08/2018 14:30	18110358-010 / DB202426D (Duplicate) / DB-20 / 24-26 / 11/08/2018 14:31	18110358-004 / DB211820 / DB-21 / 18-20 / 11/08/2018 12:00	18110358-005 / DB212325 / DB-21 / 23-25 / 11/08/2018 12:15	18110358-001 / DB221012 / DB-22 / 10-12 / 11/08/2018 10:40	18110358-002 / DB221618 / DB-22 / 16-18 / 11/08/2018 10:50	18110358-003 / DB222426 / DB-22 / 24-26 / 11/08/2018 11:00
VOCS													
Acetone	25	---	< 0.072	< 0.072	< 0.071	< 0.058	< 0.060	< 0.057	< 0.082	< 0.061	< 0.072	< 0.072	< 0.060
Benzene	0.17	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Bromodichloromethane	0.6	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Bromoform	0.8	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Bromomethane	1.2	---	< 0.0096	< 0.0096	< 0.0095	< 0.0077	< 0.0082	< 0.0076	< 0.011	< 0.0080	< 0.0096	< 0.0097	< 0.0080
2-Butanone	---	---	< 0.072	< 0.072	< 0.071	< 0.058	< 0.060	< 0.057	< 0.082	< 0.061	< 0.072	< 0.072	< 0.060
Carbon disulfide	160	---	< 0.048	< 0.048	< 0.048	< 0.038	< 0.040	< 0.038	< 0.055	< 0.041	< 0.049	< 0.048	< 0.041
Carbon tetrachloride	0.33	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Chlorobenzene	6.5	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Chloroethane	---	---	< 0.0096	< 0.0096	< 0.0095	< 0.0077	< 0.0082	< 0.0076	< 0.011	< 0.0080	< 0.0096	< 0.0097	< 0.0080
Chloroform	2.9	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Chloromethane	---	---	< 0.0096	< 0.0096	< 0.0095	< 0.0077	< 0.0082	< 0.0076	< 0.011	< 0.0080	< 0.0096	< 0.0097	< 0.0080
Dibromochloromethane	0.4	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
1,1-Dichloroethane	110	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
1,2-Dichloroethane	0.1	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
1,1-Dichloroethene	0.3	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
cis-1,2-Dichloroethene	1.1	---	< 0.0048	0.014	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	0.0082	< 0.0048	< 0.0041
trans-1,2-Dichloroethene	3.4	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
1,2-Dichloropropane	0.15	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
cis-1,3-Dichloropropene	0.02	0.005	< 0.0019	< 0.0019	< 0.0020	< 0.0015	< 0.0017	< 0.0015	< 0.0022	< 0.0016	< 0.0019	< 0.0020	< 0.0016
trans-1,3-Dichloropropene	0.02	0.005	< 0.0019	< 0.0019	< 0.0020	< 0.0015	< 0.0017	< 0.0015	< 0.0022	< 0.0016	< 0.0019	< 0.0020	< 0.0016
Ethylbenzene	19	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
2-Hexanone	---	---	< 0.019	< 0.019	< 0.020	< 0.015	< 0.017	< 0.015	< 0.022	< 0.016	< 0.019	< 0.020	< 0.016
4-Methyl-2-pentanone	---	---	< 0.019	< 0.019	< 0.020	< 0.015	< 0.017	< 0.015	< 0.022	< 0.016	< 0.019	< 0.020	< 0.016
Methylene chloride	0.2	---	< 0.0096	< 0.0096	< 0.0095	< 0.0077	< 0.0082	< 0.0076	< 0.011	< 0.0080	< 0.0096	< 0.0097	< 0.0080
Methyl tert-butyl ether	0.32	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Styrene	18	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
1,1,2,2-Tetrachloroethane	---	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Tetrachloroethene	0.3	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Toluene	29	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
1,1,1-Trichloroethane	9.6	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
1,1,2-Trichloroethane	0.3	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Trichloroethene	0.3	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Vinyl chloride	0.07	---	< 0.0048	0.017	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	0.023	< 0.0048	< 0.0041
Xylenes, Total	150	---	< 0.014	< 0.014	< 0.015	< 0.012	< 0.012	< 0.011	< 0.017	< 0.012	< 0.015	< 0.015	< 0.012

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-2
Soil Semivolatile Organic Compounds Analytical Results Compared to
Soil Component of Groundwater Ingestion Exposure Route Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

	Laboratory ID :		**18110137-006**	**18110187-007**	**18110187-013**	**18110358-004**	**18110358-005**
	Client Sample ID :		**DB021012**	**DB071618**	**DB171214**	**DB211820**	**DB212325**
	Boring Location :		**DB-02**	**DB-07**	**DB-17**	**DB-21**	**DB-21**
	Sample Interval :		**10-12**	**16-18**	**12-14**	**18-20**	**23-25**
	Date Collected :		**11/05/2018 11:20**	**11/06/2018 11:35**	**11/06/2018 13:20**	**11/08/2018 12:00**	**11/08/2018 12:15**
Analyte	**Soil Component of Groundwater Ingestion Exposure Route Values Class II**	**ADL**					
SVOCs							
Aniline	---	---	< 0.42	< 0.41	< 0.39	< 0.42	< 0.37
Benzidine	---	---	< 0.42	< 0.41	< 0.39	< 0.42	< 0.37
Benzoic acid	400	---	< 1.1	< 1.0	< 0.96	< 1.0	< 0.92
Benzyl alcohol	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Bis(2-chloroethoxy)methane	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Bis(2-chloroethyl)ether	0.0004	0.66	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Bis(2-ethylhexyl)phthalate	31,000	---	< 1.1	< 1.0	< 0.96	< 1.0	< 0.92
4-Bromophenyl phenyl ether		---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Butyl benzyl phthalate	930	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Carbazole	2.8	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Chloroaniline	0.7	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Chloro-3-methylphenol		---	< 0.42	< 0.41	< 0.39	< 0.42	< 0.37
2-Chloronaphthalene		---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2-Chlorophenol	4	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Chlorophenyl phenyl ether		---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Dibenzofuran		---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
1,2-Dichlorobenzene	43	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
1,3-Dichlorobenzene		---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
1,4-Dichlorobenzene	11	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
3,3´-Dichlorobenzidine	0.033	1.3	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2,4-Dichlorophenol	1	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Diethyl phthalate	470	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2,4-Dimethylphenol	9	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Dimethyl phthalate		---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4,6-Dinitro-2-methylphenol		---	< 0.42	< 0.41	< 0.39	< 0.42	< 0.37
2,4-Dinitrophenol	0.2	3.3	< 1.1	< 1.0	< 0.96	< 1.0	< 0.92
2,4-Dinitrotoluene	0.0008	0.25	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
2,6-Dinitrotoluene	0.0007	0.26	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Di-n-butyl phthalate	2,300	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Di-n-octyl phthalate	10,000	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Hexachlorobenzene	11	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Hexachlorobutadiene		---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Hexachlorocyclopentadiene	2,200	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Hexachloroethane	2.6	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Isophorone	8	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2-Methylnaphthalene		---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2-Methylphenol	15	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Methylphenol		---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2-Nitroaniline		---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
3-Nitroaniline		---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Nitroaniline		---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2-Nitrophenol		---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Nitrophenol		---	< 0.42	< 0.41	< 0.39	< 0.42	< 0.37
Nitrobenzene	0.1	0.26	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
N-Nitrosodi-n-propylamine	0.00005	0.0018	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
N-Nitrosodimethylamine		---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
N-Nitrosodiphenylamine	5.6	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.19
2, 2'-oxybis(1-Chloropropane)		---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Pentachlorophenol	0.14	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.074
Phenol	100	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Pyridine		---	< 0.85	< 0.81	< 0.79	< 0.84	< 0.74
1,2,4-Trichlorobenzene	53	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2,4,5-Trichlorophenol	1,400	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2,4,6-Trichlorophenol	0.77	0.66	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-3
Soil Polynuclear Aromatic Hydrocarbons Analytical Results Compared to
Soil Component of Groundwater Ingestion Exposure Route Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Soil Component of Groundwater Ingestion Exposure Route Values Class II	ADL	Laboratory ID : 18110137-006 Client Sample ID : DB021012 Boring Location : DB-02 Sample Interval : 10-12 Date Collected : 11/05/2018 11:20	Laboratory ID : 18110187-007 Client Sample ID : DB071618 Boring Location : DB-07 Sample Interval : 16-18 Date Collected : 11/06/2018 11:35	Laboratory ID : 18110187-013 Client Sample ID : DB171214 Boring Location : DB-17 Sample Interval : 12-14 Date Collected : 11/06/2018 13:20	Laboratory ID : 18110358-004 Client Sample ID : DB211820 Boring Location : DB-21 Sample Interval : 18-20 Date Collected : 11/08/2018 12:00	Laboratory ID : 18110358-005 Client Sample ID : DB212325 Boring Location : DB-21 Sample Interval : 23-25 Date Collected : 11/08/2018 12:15
PNAs							
Acenaphthene	2,900	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Acenaphthylene	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Anthracene	59,000	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Benz(a)anthracene	8	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Benzo(a)pyrene	82	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Benzo(b)fluoranthene	25	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Benzo(g,h,i)perylene		---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Benzo(k)fluoranthene	250	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Chrysene	800	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Dibenz(a,h)anthracene	7.6	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Fluoranthene	21,000	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Fluorene	2,800	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Indeno(1,2,3-cd)pyrene	69	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Naphthalene	18	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Phenanthrene		---	< 0.042	< 0.041	0.095	< 0.042	< 0.037
Pyrene	21,000	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-4
Soil Pesticides and Polychlorinated Biphenyls Analytical Results Compared to
Soil Component of Groundwater Ingestion Exposure Route Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Soil Component of Groundwater Ingestion Exposure Route Values Class II	ADL	Laboratory ID : 18110137-006 Client Sample ID : DB021012 Boring Location : DB-02 Sample Interval : 10-12 Date Collected : 11/05/2018 11:20	18110187-007 DB071618 DB-07 16-18 11/06/2018 11:35	18110187-013 DB171214 DB-17 12-14 11/06/2018 13:20	18110358-004 DB211820 DB-21 18-20 11/08/2018 12:00
PEST						
4,4´-DDD	80	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
4,4´-DDE	270	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
4,4´-DDT	160	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Aldrin	2.5	0.94	< 0.0020	< 0.0020	< 0.0019	< 0.0020
alpha-BHC	0.003	0.0074	< 0.0020	< 0.0020	< 0.0019	< 0.0020
alpha-Chlordane		---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
beta-BHC		---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Chlordane	48	---	< 0.020	< 0.020	< 0.019	< 0.020
delta-BHC		---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Dieldrin	0.02	0.603	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endosulfan I	90	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endosulfan II	90	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endosulfan sulfate		---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endrin	5	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endrin aldehyde		---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endrin ketone		---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
gamma-BHC	0.047	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
gamma-Chlordane		---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Heptachlor	110	0.871	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Heptachlor epoxide	3.3	1.005	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Methoxychlor	780	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Toxaphene	150	---	< 0.042	< 0.041	< 0.039	< 0.042
PCB						
Aroclor 1016	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1221	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1232	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1242	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1248	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1254	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1260	---	---	< 0.10	< 0.097	< 0.094	< 0.10

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-5
Soil Inorganics Analytical Results Compared to
Soil Component of Groundwater Ingestion Exposure Route Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Soil Component of Groundwater Ingestion Exposure Route Values Class II	ADL	Laboratory ID : 18110137-006 Client Sample ID : DB021012 Boring Location : DB-02 Sample Interval : 10-12 Date Collected : 11/05/2018 11:20	18110187-007 DB071618 DB-07 16-18 11/06/2018 11:35	18110187-013 DB171214 DB-17 12-14 11/06/2018 13:20	18110358-004 DB211820 DB-21 18-20 11/08/2018 12:00
Inorganics						
pH	pH 7.75 to 8.24		7.99	7.96	7.99	7.71
Aluminum	---	---	12,000	14,000	11,000	11,000
Antimony	20	---	< 2.2	< 2.2	< 2.0	< 2.2
Arsenic	120	---	6.8	6.2	7.2	7.5
Barium	2,100	---	56	58	34	55
Beryllium	1,000,000	---	0.60	0.68	0.54	0.66
Cadmium	4,300	---	< 0.55	< 0.54	< 0.49	< 0.56
Calcium	---	---	58,000	55,000	56,000	54,000
Chromium	No Data	---	23	23	19	22
Cobalt	See TCLP/SPLP	---	14	13	12	14
Copper	330,000	---	27	26	28	32
Cyanide	120	---	< 0.32	< 0.31	< 0.29	< 0.32
Iron	See TCLP/SPLP	---	23,000	27,000	24,000	23,000
Lead	1,420	---	13	13	14	15
Magnesium	---	---	28,000	33,000	31,000	27,000
Manganese	See TCLP/SPLP	---	400	390	420	400
Mercury	40	---	0.027	< 0.020	< 0.022	< 0.024
Nickel	76,000	---	35	34	31	38
Potassium	---	---	2,600	3,800	2,900	2,500
Selenium	2.4	---	< 1.1	< 1.1	< 0.98	< 1.1
Silver	---	---	< 1.1	< 1.1	< 0.98	< 1.1
Sodium	---	---	220	220	190	190
Thallium	38	---	< 1.1	< 1.1	< 0.98	< 1.1
Vanadium	980	---	24	24	21	23
Zinc	110,000	---	48	59	39	61

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-6
Soil Volatile Organic Compounds Analytical Results Compared to
Construction Worker Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Construction Worker Route Specific Values for Soil: Ingestion	Construction Worker Route Specific Values for Soil: Inhalation	ADL	Laboratory ID: 18110219-011 / Client Sample ID: DB011012 / Boring Location: DB-01 / Sample Interval: 10-12 / Date Collected: 11/07/2018 14:20	18110219-012 / DB011012D (Duplicate) / DB-01 / 10-12 / 11/07/2018 14:22	18110219-013 / DB011618 / DB-01 / 16-18 / 11/07/2018 14:30	18110219-014 / DB012224 / DB-01 / 22-24 / 11/07/2018 14:35	18110137-006 / DB021012 / DB-02 / 10-12 / 11/05/2018 11:20	18110137-007 / DB021618 / DB-02 / 16-18 / 11/05/2018 11:25	18110137-008 / DB022224 / DB-02 / 22-24 / 11/05/2018 11:30	18110137-009 / DB031012 / DB-03 / 10-12 / 11/05/2018 12:10	18110137-010 / DB031618 / DB-03 / 16-18 / 11/05/2018 12:20
VOCs												
Acetone	---	100,000	---	< 0.081	< 0.074	< 0.079	< 0.064	< 0.080	< 0.072	< 0.092	< 0.068	< 0.10
Benzene	2,300	2.2	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
Bromodichloromethane	2,000	3,000	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
Bromoform	16,000	140	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
Bromomethane	1,000	3.9	---	< 0.011	< 0.0098	< 0.010	< 0.0085	< 0.011	< 0.0096	< 0.012	< 0.0092	< 0.014
2-Butanone	---	---	---	< 0.081	< 0.074	< 0.079	< 0.064	< 0.080	< 0.072	< 0.092	< 0.068	< 0.10
Carbon disulfide	20,000	9.0	---	< 0.054	< 0.048	< 0.052	< 0.042	< 0.054	< 0.047	< 0.061	< 0.046	< 0.069
Carbon tetrachloride	410	0.90	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
Chlorobenzene	4,100	1.3	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
Chloroethane	---	---	---	< 0.011	< 0.0098	< 0.010	< 0.0085	< 0.011	< 0.0096	< 0.012	< 0.0092	< 0.014
Chloroform	2,000	0.76	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
Chloromethane	---	---	---	< 0.011	< 0.0098	< 0.010	< 0.0085	< 0.011	< 0.0096	< 0.012	< 0.0092	< 0.014
Dibromochloromethane	41,000	1,300	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
1,1-Dichloroethane	200,000	130	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
1,2-Dichloroethane	1,400	0.99	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
1,1-Dichloroethene	10,000	3.0	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
cis-1,2-Dichloroethene	20,000	1,200	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
trans-1,2-Dichloroethene	41,000	3,100	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
1,2-Dichloropropane	1,800	0.50	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
cis-1,3-Dichloropropene	1200	0.39	0.005	< 0.0021	< 0.0019	< 0.0021	< 0.0017	< 0.0022	< 0.0019	< 0.0025	< 0.0019	< 0.0027
trans-1,3-Dichloropropene	1200	0.39	0.005	< 0.0021	< 0.0019	< 0.0021	< 0.0017	< 0.0022	< 0.0019	< 0.0025	< 0.0019	< 0.0027
Ethylbenzene	20,000	58	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
2-Hexanone	---	---	---	< 0.021	< 0.019	< 0.021	< 0.017	< 0.022	< 0.019	< 0.025	< 0.019	< 0.027
4-Methyl-2-pentanone	---	---	---	< 0.021	< 0.019	< 0.021	< 0.017	< 0.022	< 0.019	< 0.025	< 0.019	< 0.027
Methylene chloride	12,000	34	---	< 0.011	< 0.0098	< 0.010	< 0.0085	< 0.011	< 0.0096	< 0.012	< 0.0092	< 0.014
Methyl tert-butyl ether	2,000	140	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
Styrene	41,000	430	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
1,1,2,2-Tetrachloroethane	---	---	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
Tetrachloroethene	2,400	28	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
Toluene	410,000	42	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
1,1,1-Trichloroethane	---	1,200	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
1,1,2-Trichloroethane	8,200	1,800	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
Trichloroethene	1,200	12	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
Vinyl chloride	170	1.1	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069
Xylenes, Total	41,000	5.6	---	< 0.016	< 0.015	< 0.015	< 0.013	< 0.017	< 0.014	< 0.018	< 0.014	< 0.020

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Remediation Objective for Construction Worker exposure route
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-6
Soil Volatile Organic Compounds Analytical Results Compared to
Construction Worker Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Construction Worker Route Specific Values for Soil: Ingestion	Construction Worker Route Specific Values for Soil: Inhalation	Construction Worker Route Specific Values for Soil: ADL	Laboratory ID : 18110137-011 / Client Sample ID : DB031618D (Duplicate) / Boring Location : DB-03 / Sample Interval : 16-18 / Date Collected : 11/05/2018 12:21	18110137-012 / DB032224 / DB-03 / 22-24 / 11/05/2018 12:30	18110187-018 / DB041012 / DB-04 / 10-12 / 11/06/2018 15:00	18110187-019 / DB041618 / DB-04 / 16-18 / 11/06/2018 15:10	18110187-020 / DB042224 / DB-04 / 22-24 / 11/06/2018 15:20	18110187-021 / DB041618D (Duplicate) / DB-04 / 16-18 / 11/06/2018 15:15	18110137-004 / DB052022 / DB-05 / 20-22 / 11/05/2018 10:20	18110137-005 / DB052426 / DB-05 / 24-26 / 11/05/2018 10:30	18110137-013 / DB061416 / DB-06 / 14-16 / 11/05/2018 12:40
VOCs												
Acetone	---	100,000	---	< 0.097	< 0.073	< 0.067	< 0.074	< 0.077	< 0.076	< 0.12	< 0.076	< 0.077
Benzene	2,300	2.2	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
Bromodichloromethane	2,000	3,000	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
Bromoform	16,000	140	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
Bromomethane	1,000	3.9	---	< 0.013	< 0.0098	< 0.0089	< 0.0099	< 0.010	< 0.010	< 0.016	< 0.010	< 0.010
2-Butanone	---	---	---	< 0.097	< 0.073	< 0.067	< 0.074	< 0.077	< 0.076	< 0.12	< 0.076	< 0.077
Carbon disulfide	20,000	9.0	---	< 0.065	< 0.050	< 0.045	< 0.049	< 0.052	< 0.050	< 0.083	< 0.050	< 0.052
Carbon tetrachloride	410	0.90	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
Chlorobenzene	4,100	1.3	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
Chloroethane	---	---	---	< 0.013	< 0.0098	< 0.0089	< 0.0099	< 0.010	< 0.010	< 0.016	< 0.010	< 0.010
Chloroform	2,000	0.76	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
Chloromethane	---	---	---	< 0.013	< 0.0098	< 0.0089	< 0.0099	< 0.010	< 0.010	< 0.016	< 0.010	< 0.010
Dibromochloromethane	41,000	1,300	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
1,1-Dichloroethane	200,000	130	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
1,2-Dichloroethane	1,400	0.99	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
1,1-Dichloroethene	10,000	3.0	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	0.0055
cis-1,2-Dichloroethene	20,000	1,200	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	0.010
trans-1,2-Dichloroethene	41,000	3,100	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
1,2-Dichloropropane	1,800	0.50	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
cis-1,3-Dichloropropene	1200	0.39	0.005	< 0.0026	< 0.0020	< 0.0018	< 0.0020	< 0.0020	< 0.0020	< 0.0033	< 0.0020	< 0.0020
trans-1,3-Dichloropropene	1200	0.39	0.005	< 0.0026	< 0.0020	< 0.0018	< 0.0020	< 0.0020	< 0.0020	< 0.0033	< 0.0020	< 0.0020
Ethylbenzene	20,000	58	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
2-Hexanone	---	---	---	< 0.026	< 0.020	< 0.018	< 0.020	< 0.020	< 0.020	< 0.033	< 0.020	< 0.020
4-Methyl-2-pentanone	---	---	---	< 0.026	< 0.020	< 0.018	< 0.020	< 0.020	< 0.020	< 0.033	< 0.020	< 0.020
Methylene chloride	12,000	34	---	< 0.013	< 0.0098	< 0.0089	< 0.0099	< 0.010	< 0.010	< 0.016	< 0.010	< 0.010
Methyl tert-butyl ether	2,000	140	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
Styrene	41,000	430	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
1,1,2,2-Tetrachloroethane	---	---	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
Tetrachloroethene	2,400	28	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
Toluene	410,000	42	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
1,1,1-Trichloroethane	---	1,200	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
1,1,2-Trichloroethane	8,200	1,800	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052
Trichloroethene	1,200	12	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	0.25
Vinyl chloride	170	1.1	---	< 0.0065	< 0.0050	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	0.29
Xylenes, Total	41,000	5.6	---	< 0.019	< 0.014	< 0.013	< 0.015	< 0.015	< 0.015	< 0.025	< 0.015	< 0.015

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Remediation Objective for Construction Worker exposure route
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-6
Soil Volatile Organic Compounds Analytical Results Compared to
Construction Worker Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Construction Worker Route Specific Values for Soil: Ingestion	Construction Worker Route Specific Values for Soil: Inhalation	ADL	Laboratory ID: 18110137-014 / Client Sample ID: DB062224 / Boring Location: DB-06 / Sample Interval: 22-24 / Date Collected: 11/05/2018 12:45	18110187-006 / DB071113 / DB-07 / 11-13 / 11/06/2018 11:30	18110187-007 / DB071618 / DB-07 / 16-18 / 11/06/2018 11:35	18110187-008 / DB072224 / DB-07 / 22-24 / 11/06/2018 11:40	18110219-008 / DB081113 / DB-08 / 11-13 / 11/07/2018 13:40	18110219-009 / DB081618 / DB-08 / 16-18 / 11/07/2018 13:45	18110219-010 / DB082224 / DB-08 / 22-24 / 11/07/2018 13:50	18110137-001 / DB091113 / DB-09 / 11-13 / 11/05/2018 09:30	18110137-002 / DB091618 / DB-09 / 16-18 / 11/05/2018 09:35
VOCs												
Acetone	---	100,000	---	< 0.083	< 0.068	< 0.075	< 0.073	< 0.074	< 0.073	< 0.065	< 410	< 0.090
Benzene	2,300	2.2	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
Bromodichloromethane	2,000	3,000	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
Bromoform	16,000	140	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
Bromomethane	1,000	3.9	---	< 0.011	< 0.0091	< 0.010	< 0.0097	< 0.0098	< 0.0095	< 0.0086	< 54	< 0.012
2-Butanone	---	---	---	< 0.083	< 0.068	< 0.075	< 0.073	< 0.074	< 0.073	< 0.065	< 410	< 0.090
Carbon disulfide	20,000	9.0	---	< 0.056	< 0.045	< 0.050	< 0.048	< 0.048	< 0.048	< 0.043	< 280	< 0.059
Carbon tetrachloride	410	0.90	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
Chlorobenzene	4,100	1.3	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
Chloroethane	---	---	---	< 0.011	< 0.0091	< 0.010	< 0.0097	< 0.0098	< 0.0095	< 0.0086	< 54	< 0.012
Chloroform	2,000	0.76	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
Chloromethane	---	---	---	< 0.011	< 0.0091	< 0.010	< 0.0097	< 0.0098	< 0.0095	< 0.0086	< 54	< 0.012
Dibromochloromethane	41,000	1,300	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
1,1-Dichloroethane	200,000	130	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
1,2-Dichloroethane	1,400	0.99	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
1,1-Dichloroethene	10,000	3.0	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
cis-1,2-Dichloroethene	20,000	1,200	---	< 0.0056	0.010	< 0.0050	< 0.0048	0.017	< 0.0048	< 0.0043	< 28	< 0.0059
trans-1,2-Dichloroethene	41,000	3,100	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
1,2-Dichloropropane	1,800	0.50	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
cis-1,3-Dichloropropene	1200	0.39	0.005	< 0.0023	< 0.0018	< 0.0020	< 0.0020	< 0.0019	< 0.0019	< 0.0017	< 11	< 0.0024
trans-1,3-Dichloropropene	1200	0.39	0.005	< 0.0023	< 0.0018	< 0.0020	< 0.0020	< 0.0019	< 0.0019	< 0.0017	< 11	< 0.0024
Ethylbenzene	20,000	58	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
2-Hexanone	---	---	---	< 0.023	< 0.018	< 0.020	< 0.020	< 0.019	< 0.019	< 0.017	< 110	< 0.024
4-Methyl-2-pentanone	---	---	---	< 0.023	< 0.018	< 0.020	< 0.020	< 0.019	< 0.019	< 0.017	< 110	< 0.024
Methylene chloride	12,000	34	---	< 0.011	< 0.0091	< 0.010	< 0.0097	< 0.0098	< 0.0095	< 0.0086	< 54	< 0.012
Methyl tert-butyl ether	2,000	140	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
Styrene	41,000	430	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
1,1,2,2-Tetrachloroethane	---	---	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
Tetrachloroethene	2,400	28	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
Toluene	410,000	42	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
1,1,1-Trichloroethane	---	1,200	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
1,1,2-Trichloroethane	8,200	1,800	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059
Trichloroethene	1,200	12	---	0.013	< 0.0045	< 0.0050	< 0.0048	0.016	< 0.0048	0.0071	**2,300**	0.060
Vinyl chloride	170	1.1	---	< 0.0056	< 0.0045	< 0.0050	< 0.0048	0.029	< 0.0048	< 0.0043	< 28	< 0.0059
Xylenes, Total	41,000	5.6	---	< 0.017	< 0.014	< 0.015	< 0.015	< 0.015	< 0.014	< 0.013	< 82	< 0.018

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Remediation Objective for Construction Worker exposure route
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-6
Soil Volatile Organic Compounds Analytical Results Compared to
Construction Worker Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Construction Worker Route Specific Values for Soil: Ingestion	Construction Worker Route Specific Values for Soil: Inhalation	ADL	Laboratory ID: 18110137-003 Client Sample ID: DB092224 Boring Location: DB-09 Sample Interval: 22-24 Date Collected: 11/05/2018 09:40	18110219-001 DB101820 DB-10 18-20 11/07/2018 09:00	18110219-002 DB102628 DB-10 26-28 11/07/2018 09:10	18110137-015 DB111214 DB-11 12-14 11/05/2018 13:15	18110137-016 DB111820 DB-11 18-20 11/05/2018 13:25	18110137-017 DB112628 DB-11 26-28 11/05/2018 13:30	18110137-018 DB121214 DB-12 12-14 11/05/2018 14:40	18110137-019 DB121214D (Duplicate) DB-12 12-14 11/05/2018 14:42	18110137-020 DB121820 DB-12 18-20 11/05/2018 14:45
VOCs												
Acetone	---	100,000	---	< 0.069	< 0.071	< 0.065	< 340	< 0.077	< 0.066	< 0.074	< 0.074	< 0.075
Benzene	2,300	2.2	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
Bromodichloromethane	2,000	3,000	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
Bromoform	16,000	140	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
Bromomethane	1,000	3.9	---	< 0.0092	< 0.0093	< 0.0086	< 46	< 0.010	< 0.0088	< 0.010	< 0.0099	< 0.010
2-Butanone	---	---	---	< 0.069	< 0.071	< 0.065	< 340	< 0.077	< 0.066	< 0.074	< 0.074	< 0.075
Carbon disulfide	20,000	9.0	---	< 0.046	< 0.047	< 0.043	< 230	< 0.050	< 0.044	< 0.051	< 0.050	< 0.051
Carbon tetrachloride	410	0.90	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
Chlorobenzene	4,100	1.3	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
Chloroethane	---	---	---	< 0.0092	< 0.0093	< 0.0086	< 46	< 0.010	< 0.0088	< 0.010	< 0.0099	< 0.010
Chloroform	2,000	0.76	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
Chloromethane	---	---	---	< 0.0092	< 0.0093	< 0.0086	< 46	< 0.010	< 0.0088	< 0.010	< 0.0099	< 0.010
Dibromochloromethane	41,000	1,300	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
1,1-Dichloroethane	200,000	130	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
1,2-Dichloroethane	1,400	0.99	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
1,1-Dichloroethene	10,000	3.0	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
cis-1,2-Dichloroethene	20,000	1,200	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
trans-1,2-Dichloroethene	41,000	3,100	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
1,2-Dichloropropane	1,800	0.50	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
cis-1,3-Dichloropropene	1200	0.39	0.005	< 0.0018	< 0.0019	< 0.0018	< 9.2	< 0.0020	< 0.0018	< 0.0020	< 0.0020	< 0.0020
trans-1,3-Dichloropropene	1200	0.39	0.005	< 0.0018	< 0.0019	< 0.0018	< 9.2	< 0.0020	< 0.0018	< 0.0020	< 0.0020	< 0.0020
Ethylbenzene	20,000	58	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
2-Hexanone	---	---	---	< 0.018	< 0.019	< 0.018	< 92	< 0.020	< 0.018	< 0.020	< 0.020	< 0.020
4-Methyl-2-pentanone	---	---	---	< 0.018	< 0.019	< 0.018	< 92	< 0.020	< 0.018	< 0.020	< 0.020	< 0.020
Methylene chloride	12,000	34	---	< 0.0092	< 0.0093	< 0.0086	< 46	< 0.010	< 0.0088	< 0.010	< 0.0099	< 0.010
Methyl tert-butyl ether	2,000	140	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
Styrene	41,000	430	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
1,1,2,2-Tetrachloroethane	---	---	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
Tetrachloroethene	2,400	28	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
Toluene	410,000	42	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
1,1,1-Trichloroethane	---	1,200	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
1,1,2-Trichloroethane	8,200	1,800	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
Trichloroethene	1,200	12	---	< 0.0046	0.24	0.0079	**2,300**	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
Vinyl chloride	170	1.1	---	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044	< 0.0051	< 0.0050	< 0.0051
Xylenes, Total	41,000	5.6	---	< 0.014	< 0.014	< 0.013	< 69	< 0.015	< 0.013	< 0.015	< 0.015	< 0.015

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Remediation Objective for Construction Worker exposure route
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-6
Soil Volatile Organic Compounds Analytical Results Compared to
Construction Worker Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Construction Worker Route Specific Values for Soil: Ingestion	Construction Worker Route Specific Values for Soil: Inhalation	ADL	Laboratory ID: 18110137-021 / Client Sample ID: DB122628M (MS/MSD) / Boring Location: DB-12 / Sample Interval: 26-28 / Date Collected: 11/05/2018 14:50	18110219-003 / DB131820 / DB-13 / 18-20 / 11/07/2018 10:00	18110219-004 / DB132426 / DB-13 / 24-26 / 11/07/2018 10:10	18110187-001 / DB141416 / DB-14 / 14-16 / 11/06/2018 09:00	18110187-002 / DB141820 / DB-14 / 18-20 / 11/06/2018 09:05	18110187-003 / DB151012 / DB-15 / 10-12 / 11/06/2018 10:50	18110187-004 / DB151618 / DB-15 / 16-18 / 11/06/2018 11:00	18110187-005 / DB152224 / DB-15 / 22-24 / 11/06/2018 11:15	18110187-009 / DB161012 / DB-16 / 10-12 / 11/06/2018 12:25
VOCs												
Acetone	---	100,000	---	< 0.073	< 0.078	< 0.087	< 0.073	< 0.077	< 0.083	< 0.065	< 0.061	< 0.076
Benzene	2,300	2.2	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
Bromodichloromethane	2,000	3,000	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
Bromoform	16,000	140	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
Bromomethane	1,000	3.9	---	< 0.0097	< 0.010	< 0.012	< 0.0098	< 0.010	< 0.011	< 0.0086	< 0.0081	< 0.010
2-Butanone	---	---	---	< 0.073	< 0.078	< 0.087	< 0.073	< 0.077	< 0.083	< 0.065	< 0.061	< 0.076
Carbon disulfide	20,000	9.0	---	< 0.049	< 0.051	< 0.058	< 0.049	< 0.052	< 0.055	< 0.043	< 0.041	< 0.051
Carbon tetrachloride	410	0.90	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
Chlorobenzene	4,100	1.3	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
Chloroethane	---	---	---	< 0.0097	< 0.010	< 0.012	< 0.0098	< 0.010	< 0.011	< 0.0086	< 0.0081	< 0.010
Chloroform	2,000	0.76	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
Chloromethane	---	---	---	< 0.0097	< 0.010	< 0.012	< 0.0098	< 0.010	< 0.011	< 0.0086	< 0.0081	< 0.010
Dibromochloromethane	41,000	1,300	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
1,1-Dichloroethane	200,000	130	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
1,2-Dichloroethane	1,400	0.99	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
1,1-Dichloroethene	10,000	3.0	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
cis-1,2-Dichloroethene	20,000	1,200	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
trans-1,2-Dichloroethene	41,000	3,100	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
1,2-Dichloropropane	1,800	0.50	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
cis-1,3-Dichloropropene	1200	0.39	0.005	< 0.0019	< 0.0020	< 0.0023	< 0.0020	< 0.0020	< 0.0022	< 0.0018	< 0.0016	< 0.0020
trans-1,3-Dichloropropene	1200	0.39	0.005	< 0.0019	< 0.0020	< 0.0023	< 0.0020	< 0.0020	< 0.0022	< 0.0018	< 0.0016	< 0.0020
Ethylbenzene	20,000	58	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
2-Hexanone	---	---	---	< 0.019	< 0.020	< 0.023	< 0.020	< 0.020	< 0.022	< 0.018	< 0.016	< 0.020
4-Methyl-2-pentanone	---	---	---	< 0.019	< 0.020	< 0.023	< 0.020	< 0.020	< 0.022	< 0.018	< 0.016	< 0.020
Methylene chloride	12,000	34	---	< 0.0097	< 0.010	< 0.012	< 0.0098	< 0.010	< 0.011	< 0.0086	< 0.0081	< 0.010
Methyl tert-butyl ether	2,000	140	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
Styrene	41,000	430	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
1,1,2,2-Tetrachloroethane	---	---	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
Tetrachloroethene	2,400	28	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
Toluene	410,000	42	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
1,1,1-Trichloroethane	---	1,200	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
1,1,2-Trichloroethane	8,200	1,800	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
Trichloroethene	1,200	12	---	< 0.0049	0.014	0.024	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
Vinyl chloride	170	1.1	---	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041	< 0.0051
Xylenes, Total	41,000	5.6	---	< 0.014	< 0.015	< 0.017	< 0.015	< 0.016	< 0.017	< 0.013	< 0.013	< 0.015

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Remediation Objective for Construction Worker exposure route
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-6
Soil Volatile Organic Compounds Analytical Results Compared to
Construction Worker Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Construction Worker Route Specific Values for Soil: Ingestion	Construction Worker Route Specific Values for Soil: Inhalation	ADL	Laboratory ID: 18110187-010 Client Sample ID: DB161618 Boring Location: DB-16 Sample Interval: 16-18 Date Collected: 11/06/2018 12:30	18110187-011 DB161618D (Duplicate) DB-16 16-18 11/06/2018 12:35	18110187-012 DB162224 DB-16 22-24 11/06/2018 12:45	18110187-013 DB171214 DB-17 12-14 11/06/2018 13:20	18110187-014 DB171618 DB-17 16-18 11/06/2018 13:25	18110187-015 DB172224 DB-17 22-24 11/06/2018 13:30	18110219-005 DB181012 DB-18 10-12 11/07/2018 12:30	18110219-006 DB181618 DB-18 16-18 11/07/2018 12:40	18110219-007 DB182224 DB-18 22-24 11/07/2018 12:45
VOCs												
Acetone	---	100,000	---	< 0.067	< 0.073	< 0.062	< 330	< 0.070	< 0.073	< 370	< 0.069	< 0.090
Benzene	2,300	2.2	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
Bromodichloromethane	2,000	3,000	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
Bromoform	16,000	140	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
Bromomethane	1,000	3.9	---	< 0.0090	< 0.0099	< 0.0084	< 43	< 0.0092	< 0.0098	< 50	< 0.0091	< 0.012
2-Butanone	---	---	---	< 0.067	< 0.073	< 0.062	< 330	< 0.070	< 0.073	< 370	< 0.069	< 0.090
Carbon disulfide	20,000	9.0	---	< 0.045	< 0.049	< 0.042	< 220	< 0.047	< 0.049	< 260	< 0.046	< 0.060
Carbon tetrachloride	410	0.90	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
Chlorobenzene	4,100	1.3	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
Chloroethane	---	---	---	< 0.0090	< 0.0099	< 0.0084	< 43	< 0.0092	< 0.0098	< 50	< 0.0091	< 0.012
Chloroform	2,000	0.76	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
Chloromethane	---	---	---	< 0.0090	< 0.0099	< 0.0084	< 43	< 0.0092	< 0.0098	< 50	< 0.0091	< 0.012
Dibromochloromethane	41,000	1,300	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
1,1-Dichloroethane	200,000	130	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
1,2-Dichloroethane	1,400	0.99	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
1,1-Dichloroethene	10,000	3.0	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
cis-1,2-Dichloroethene	20,000	1,200	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	31	< 0.0046	< 0.0060
trans-1,2-Dichloroethene	41,000	3,100	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
1,2-Dichloropropane	1,800	0.50	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
cis-1,3-Dichloropropene	1200	0.39	0.005	< 0.0017	< 0.0020	< 0.0017	< 8.8	< 0.0019	< 0.0019	< 10	< 0.0018	< 0.0025
trans-1,3-Dichloropropene	1200	0.39	0.005	< 0.0017	< 0.0020	< 0.0017	< 8.8	< 0.0019	< 0.0019	< 10	< 0.0018	< 0.0025
Ethylbenzene	20,000	58	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
2-Hexanone	---	---	---	< 0.017	< 0.020	< 0.017	< 88	< 0.019	< 0.019	< 100	< 0.018	< 0.025
4-Methyl-2-pentanone	---	---	---	< 0.017	< 0.020	< 0.017	< 88	< 0.019	< 0.019	< 100	< 0.018	< 0.025
Methylene chloride	12,000	34	---	< 0.0090	< 0.0099	< 0.0084	< 43	< 0.0092	< 0.0098	< 50	< 0.0091	< 0.012
Methyl tert-butyl ether	2,000	140	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
Styrene	41,000	430	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
1,1,2,2-Tetrachloroethane	---	---	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
Tetrachloroethene	2,400	28	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
Toluene	410,000	42	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
1,1,1-Trichloroethane	---	1,200	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
1,1,2-Trichloroethane	8,200	1,800	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
Trichloroethene	1,200	12	---	< 0.0045	< 0.0049	< 0.0042	**980**	0.034	< 0.0049	**3,200**	0.12	0.013
Vinyl chloride	170	1.1	---	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060
Xylenes, Total	41,000	5.6	---	< 0.014	< 0.015	< 0.012	< 66	< 0.014	< 0.014	< 76	< 0.014	< 0.018

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Remediation Objective for Construction Worker exposure route
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-6
Soil Volatile Organic Compounds Analytical Results Compared to
Construction Worker Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Construction Worker Route Specific Values for Soil: Ingestion	Construction Worker Route Specific Values for Soil: Inhalation	ADL	Laboratory ID: 18110187-016 Client Sample ID: DB191416 Boring Location: DB-19 Sample Interval: 14-16 Date Collected: 11/06/2018 14:20	Laboratory ID: 18110187-017 Client Sample ID: DB191820 Boring Location: DB-19 Sample Interval: 18-20 Date Collected: 11/06/2018 14:25	Laboratory ID: 18110358-006 Client Sample ID: DB201012 Boring Location: DB-20 Sample Interval: 10-12 Date Collected: 11/08/2018 14:00	Laboratory ID: 18110358-007 Client Sample ID: DB201618 Boring Location: DB-20 Sample Interval: 16-18 Date Collected: 11/08/2018 14:15	Laboratory ID: 18110358-008 Client Sample ID: DB201618M (MS/MSD) Boring Location: DB-20 Sample Interval: 16-18 Date Collected: 11/08/2018 14:16	Laboratory ID: 18110358-009 Client Sample ID: DB202426 Boring Location: DB-20 Sample Interval: 24-26 Date Collected: 11/08/2018 14:30	Laboratory ID: 18110358-010 Client Sample ID: DB202426D (Duplicate) Boring Location: DB-20 Sample Interval: 24-26 Date Collected: 11/08/2018 14:31	Laboratory ID: 18110358-004 Client Sample ID: DB211820 Boring Location: DB-21 Sample Interval: 18-20 Date Collected: 11/08/2018 12:00	Laboratory ID: 18110358-005 Client Sample ID: DB212325 Boring Location: DB-21 Sample Interval: 23-25 Date Collected: 11/08/2018 12:15
VOCs												
Acetone	---	100,000	---	< 0.076	< 0.072	< 0.072	< 0.071	< 0.058	< 0.060	< 0.057	< 0.082	< 0.061
Benzene	2,300	2.2	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
Bromodichloromethane	2,000	3,000	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
Bromoform	16,000	140	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
Bromomethane	1,000	3.9	---	< 0.010	< 0.0096	< 0.0096	< 0.0095	< 0.0077	< 0.0082	< 0.0076	< 0.011	< 0.0080
2-Butanone	---	---	---	< 0.076	< 0.072	< 0.072	< 0.071	< 0.058	< 0.060	< 0.057	< 0.082	< 0.061
Carbon disulfide	20,000	9.0	---	< 0.051	< 0.048	< 0.048	< 0.048	< 0.038	< 0.040	< 0.038	< 0.055	< 0.041
Carbon tetrachloride	410	0.90	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
Chlorobenzene	4,100	1.3	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
Chloroethane	---	---	---	< 0.010	< 0.0096	< 0.0096	< 0.0095	< 0.0077	< 0.0082	< 0.0076	< 0.011	< 0.0080
Chloroform	2,000	0.76	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
Chloromethane	---	---	---	< 0.010	< 0.0096	< 0.0096	< 0.0095	< 0.0077	< 0.0082	< 0.0076	< 0.011	< 0.0080
Dibromochloromethane	41,000	1,300	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
1,1-Dichloroethane	200,000	130	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
1,2-Dichloroethane	1,400	0.99	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
1,1-Dichloroethene	10,000	3.0	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
cis-1,2-Dichloroethene	20,000	1,200	---	< 0.0051	< 0.0048	0.014	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
trans-1,2-Dichloroethene	41,000	3,100	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
1,2-Dichloropropane	1,800	0.50	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
cis-1,3-Dichloropropene	1200	0.39	0.005	< 0.0020	< 0.0019	< 0.0019	< 0.0020	< 0.0015	< 0.0017	< 0.0015	< 0.0022	< 0.0016
trans-1,3-Dichloropropene	1200	0.39	0.005	< 0.0020	< 0.0019	< 0.0019	< 0.0020	< 0.0015	< 0.0017	< 0.0015	< 0.0022	< 0.0016
Ethylbenzene	20,000	58	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
2-Hexanone	---	---	---	< 0.020	< 0.019	< 0.019	< 0.020	< 0.015	< 0.017	< 0.015	< 0.022	< 0.016
4-Methyl-2-pentanone	---	---	---	< 0.020	< 0.019	< 0.019	< 0.020	< 0.015	< 0.017	< 0.015	< 0.022	< 0.016
Methylene chloride	12,000	34	---	< 0.010	< 0.0096	< 0.0096	< 0.0095	< 0.0077	< 0.0082	< 0.0076	< 0.011	< 0.0080
Methyl tert-butyl ether	2,000	140	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
Styrene	41,000	430	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
1,1,2,2-Tetrachloroethane	---	---	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
Tetrachloroethene	2,400	28	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
Toluene	410,000	42	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
1,1,1-Trichloroethane	---	1,200	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
1,1,2-Trichloroethane	8,200	1,800	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
Trichloroethene	1,200	12	---	< 0.0051	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
Vinyl chloride	170	1.1	---	< 0.0051	< 0.0048	0.017	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041
Xylenes, Total	41,000	5.6	---	< 0.015	< 0.014	< 0.014	< 0.015	< 0.012	< 0.012	< 0.011	< 0.017	< 0.012

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Remediation Objective for Construction Worker exposure route
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-6
Soil Volatile Organic Compounds Analytical Results Compared to
Construction Worker Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Construction Worker Route Specific Values for Soil			Laboratory ID :	18110358-001	18110358-002	18110358-003
				Client Sample ID :	DB221012	DB221618	DB222426
				Boring Location :	DB-22	DB-22	DB-22
				Sample Interval :	10-12	16-18	24-26
				Date Collected :	11/08/2018 10:40	11/08/2018 10:50	11/08/2018 11:00
	Ingestion	Inhalation	ADL				
VOCs							
Acetone	---	100,000	---	< 0.072	< 0.072	< 0.060
Benzene	2,300	2.2	---	< 0.0049	< 0.0048	< 0.0041
Bromodichloromethane	2,000	3,000	---	< 0.0049	< 0.0048	< 0.0041
Bromoform	16,000	140	---	< 0.0049	< 0.0048	< 0.0041
Bromomethane	1,000	3.9	---	< 0.0096	< 0.0097	< 0.0080
2-Butanone	---	---	---	< 0.072	< 0.072	< 0.060
Carbon disulfide	20,000	9.0	---	< 0.049	< 0.048	< 0.041
Carbon tetrachloride	410	0.90	---	< 0.0049	< 0.0048	< 0.0041
Chlorobenzene	4,100	1.3	---	< 0.0049	< 0.0048	< 0.0041
Chloroethane	---	---	---	< 0.0096	< 0.0097	< 0.0080
Chloroform	2,000	0.76	---	< 0.0049	< 0.0048	< 0.0041
Chloromethane	---	---	---	< 0.0096	< 0.0097	< 0.0080
Dibromochloromethane	41,000	1,300	---	< 0.0049	< 0.0048	< 0.0041
1,1-Dichloroethane	200,000	130	---	< 0.0049	< 0.0048	< 0.0041
1,2-Dichloroethane	1,400	0.99	---	< 0.0049	< 0.0048	< 0.0041
1,1-Dichloroethene	10,000	3.0	---	< 0.0049	< 0.0048	< 0.0041
cis-1,2-Dichloroethene	20,000	1,200	---	0.0082	< 0.0048	< 0.0041
trans-1,2-Dichloroethene	41,000	3,100	---	< 0.0049	< 0.0048	< 0.0041
1,2-Dichloropropane	1,800	0.50	---	< 0.0049	< 0.0048	< 0.0041
cis-1,3-Dichloropropene	1200	0.39	0.005	< 0.0019	< 0.0020	< 0.0016
trans-1,3-Dichloropropene	1200	0.39	0.005	< 0.0019	< 0.0020	< 0.0016
Ethylbenzene	20,000	58	---	< 0.0049	< 0.0048	< 0.0041
2-Hexanone	---	---	---	< 0.019	< 0.020	< 0.016
4-Methyl-2-pentanone	---	---	---	< 0.019	< 0.020	< 0.016
Methylene chloride	12,000	34	---	< 0.0096	< 0.0097	< 0.0080
Methyl tert-butyl ether	2,000	140	---	< 0.0049	< 0.0048	< 0.0041
Styrene	41,000	430	---	< 0.0049	< 0.0048	< 0.0041
1,1,2,2-Tetrachloroethane	---	---	---	< 0.0049	< 0.0048	< 0.0041
Tetrachloroethene	2,400	28	---	< 0.0049	< 0.0048	< 0.0041
Toluene	410,000	42	---	< 0.0049	< 0.0048	< 0.0041
1,1,1-Trichloroethane	---	1,200	---	< 0.0049	< 0.0048	< 0.0041
1,1,2-Trichloroethane	8,200	1,800	---	< 0.0049	< 0.0048	< 0.0041
Trichloroethene	1,200	12	---	< 0.0049	< 0.0048	< 0.0041
Vinyl chloride	170	1.1	---	0.023	< 0.0048	< 0.0041
Xylenes, Total	41,000	5.6	---	< 0.015	< 0.015	< 0.012

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Remediation Objective for Construction Worker exposure route
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-7
Soil Semivolatile Organic Compounds Analytical Results Compared to
Construction Worker Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Costruction Worker Route Specific Values for Soil: Ingestion	Inhalation	ADL	Laboratory ID : 18110137-006 Client Sample ID : DB021012 Boring Location : DB-02 Sample Interval : 10-12 Date Collected : 11/05/2018 11:20	18110187-007 DB071618 DB-07 16-18 11/06/2018 11:35	18110187-013 DB171214 DB-17 12-14 11/06/2018 13:20	18110358-004 DB211820 DB-21 18-20 11/08/2018 12:00	18110358-005 DB212325 DB-21 23-25 11/08/2018 12:15
SVOCs								
Aniline	---	---	---	< 0.42	< 0.41	< 0.39	< 0.42	< 0.37
Benzidine	---	---	---	< 0.42	< 0.41	< 0.39	< 0.42	< 0.37
Benzoic acid	820,000	---	---	< 1.1	< 1.0	< 0.96	< 1.0	< 0.92
Benzyl alcohol	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Bis(2-chloroethoxy)methane	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Bis(2-chloroethyl)ether	75	0.66	0.66	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Bis(2-ethylhexyl)phthalate	4,100	31,000	---	< 1.1	< 1.0	< 0.96	< 1.0	< 0.92
4-Bromophenyl phenyl ether	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Butyl benzyl phthalate	410,000	930	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Carbazole	6,200	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Chloroaniline	820	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Chloro-3-methylphenol	---	---	---	< 0.42	< 0.41	< 0.39	< 0.42	< 0.37
2-Chloronaphthalene	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2-Chlorophenol	10,000	53,000	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Chlorophenyl phenyl ether	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Dibenzofuran	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
1,2-Dichlorobenzene	18,000	310	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
1,3-Dichlorobenzene	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
1,4-Dichlorobenzene	---	340	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
3,3´-Dichlorobenzidine	280	---	1.3	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2,4-Dichlorophenol	610	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Diethyl phthalate	1,000,000	2,000	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2,4-Dimethylphenol	41,000	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Dimethyl phthalate	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4,6-Dinitro-2-methylphenol	---	---	---	< 0.42	< 0.41	< 0.39	< 0.42	< 0.37
2,4-Dinitrophenol	410	---	3.3	< 1.1	< 1.0	< 0.96	< 1.0	< 0.92
2,4-Dinitrotoluene	180	---	0.25	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
2,6-Dinitrotoluene	180	---	0.26	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Di-n-butyl phthalate	200,000	2,300	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Di-n-octyl phthalate	4,100	10,000	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Hexachlorobenzene	78	2.6	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Hexachlorobutadiene	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Hexachlorocyclopentadiene	14,000	1.1	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Hexachloroethane	2,000	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Isophorone	410,000	4,600	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2-Methylnaphthalene	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2-Methylphenol	100,000	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Methylphenol	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2-Nitroaniline	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
3-Nitroaniline	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Nitroaniline	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2-Nitrophenol	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Nitrophenol	---	---	---	< 0.42	< 0.41	< 0.39	< 0.42	< 0.37
Nitrobenzene	1,000	9.4	0.26	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
N-Nitrosodi-n-propylamine	18	---	0.0018	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
N-Nitrosodimethylamine	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
N-Nitrosodiphenylamine	25,000	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.19
2, 2'-oxybis(1-Chloropropane)	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Pentachlorophenol	520	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.074
Phenol	61,000	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Pyridine	---	---	---	< 0.85	< 0.81	< 0.79	< 0.84	< 0.74
1,2,4-Trichlorobenzene	2,000	920	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2,4,5-Trichlorophenol	200,000	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2,4,6-Trichlorophenol	11,000	540	0.66	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Construction Worker Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-8
Soil Polynuclear Aromatic Hydrocarbons Analytical Results Compared to
Construction Worker Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Costruction Worker Route Specific Values for Soil			Laboratory ID :	18110137-006	18110187-007	18110187-013	18110358-004	18110358-005
				Client Sample ID :	DB021012	DB071618	DB171214	DB211820	DB212325
				Boring Location :	DB-02	DB-07	DB-17	DB-21	DB-21
				Sample Interval :	10-12	16-18	12-14	18-20	23-25
				Date Collected :	11/05/2018 11:20	11/06/2018 11:35	11/06/2018 13:20	11/08/2018 12:00	11/08/2018 12:15
	Ingestion	Inhalation	ADL						
PNAs									
Acenaphthene	120,000	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Acenaphthylene	---	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Anthracene	610,000	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Benz(a)anthracene	170	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Benzo(a)pyrene	17	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Benzo(b)fluoranthene	170	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Benzo(g,h,i)perylene	---	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Benzo(k)fluoranthene	1,700	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Chrysene	17,000	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Dibenz(a,h)anthracene	17	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Fluoranthene	82,000	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Fluorene	82,000	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Indeno(1,2,3-cd)pyrene	170	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Naphthalene	4,100	1.8	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Phenanthrene	---	---	---	< 0.042	< 0.041	0.095	< 0.042	< 0.037
Pyrene	61,000	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Construction Worker Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-9
Soil Pesticides and Polychlorinated Biphenyls Analytical Results Compared to Construction Worker Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Costruction Worker Route Specific Values for Soil			Laboratory ID :	18110137-006	18110187-007	18110187-013	18110358-004
				Client Sample ID :	DB021012	DB071618	DB171214	DB211820
				Boring Location :	DB-02	DB-07	DB-17	DB-21
				Sample Interval :	10-12	16-18	12-14	18-20
				Date Collected :	11/05/2018 11:20	11/06/2018 11:35	11/06/2018 13:20	11/08/2018 12:00
	Ingestion	Inhalation	ADL					
Pesticides								
4,4´-DDD	520	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
4,4´-DDE	370	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
4,4´-DDT	100	2,100	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Aldrin	6.1	9.3	0.94	< 0.0020	< 0.0020	< 0.0019	< 0.0020
alpha-BHC	20	2.1	0.0074	< 0.0020	< 0.0020	< 0.0019	< 0.0020
alpha-Chlordane	---	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
beta-BHC	---	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Chlordane	100	22	---	< 0.020	< 0.020	< 0.019	< 0.020
delta-BHC	---	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Dieldrin	7.8	3.1	0.603	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endosulfan I	1,200	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endosulfan II	1,200	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endosulfan sulfate	---	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endrin	61	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endrin aldehyde	---	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endrin ketone	---	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
gamma-BHC	96	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
gamma-Chlordane	---	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Heptachlor	28	16	0.871	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Heptachlor epoxide	2.7	13	1.005	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Methoxychlor	1,000	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Toxaphene	110	240	---	< 0.042	< 0.041	< 0.039	< 0.042
PCB								
Aroclor 1016	1	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1221	1	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1232	1	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1242	1	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1248	1	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1254	1	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1260	1	---	---	< 0.10	< 0.097	< 0.094	< 0.10

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Construction Worker Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-10
Soil Inorganics Analytical Results Compared to
Construction Worker Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Costruction Worker Route Specific Values for Soil			Laboratory ID :	18110137-006	18110187-007	18110187-013	18110358-004
				Client Sample ID :	DB021012	DB071618	DB171214	DB211820
				Boring Location :	DB-02	DB-07	DB-17	DB-21
				Sample Interval :	10-12	16-18	12-14	18-20
				Date Collected :	11/05/2018 11:20	11/06/2018 11:35	11/06/2018 13:20	11/08/2018 12:00
	Ingestion	Inhalation	ADL					
Inorganics								
Aluminum	---	---	---	12,000	14,000	11,000	11,000
Antimony	82	---	---	< 2.2	< 2.2	< 2.0	< 2.2
Arsenic	61	25,000	---	6.8	6.2	7.2	7.5
Barium	14,000	870,000	---	56	58	34	55
Beryllium	410	44,000	---	0.60	0.68	0.54	0.66
Cadmium	200	59,000	---	< 0.55	< 0.54	< 0.49	< 0.56
Calcium	---	---	---	58,000	55,000	56,000	54,000
Chromium	4,100	690	---	23	23	19	22
Cobalt	12,000	---	---	14	13	12	14
Copper	8,200	---	---	27	26	28	32
Cyanide	4,100	---	---	< 0.32	< 0.31	< 0.29	< 0.32
Iron	---	---	---	23,000	27,000	24,000	23,000
Lead	700	---	---	13	13	14	15
Magnesium	730,000	---	---	28,000	33,000	31,000	27,000
Manganese	4,100	8,700	---	400	390	420	400
Mercury	61	0.1	---	0.027	< 0.020	< 0.022	< 0.024
Nickel	4,100	440,000	---	35	34	31	38
Potassium	---	---	---	2,600	3,800	2,900	2,500
Selenium	1,000	---	---	< 1.1	< 1.1	< 0.98	< 1.1
Silver	1,000	---	---	< 1.1	< 1.1	< 0.98	< 1.1
Sodium	---	---	---	220	220	190	190
Thallium	160	---	---	< 1.1	< 1.1	< 0.98	< 1.1
Vanadium	1,400	---	---	24	24	21	23
Zinc	61,000	---	---	48	59	39	61

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Construction Worker Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-11
Soil Volatile Organic Compounds Analytical Results Compared to
Residential Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Tier 1 Residential Soil Remediation Objectives: Ingestion	Tier 1 Residential Soil Remediation Objectives: Inhalation	ADL	Laboratory ID: 18110219-011 / Client Sample ID: DB011012 / Boring Location: DB-01 / Sample Interval: 10-12 / Date Collected: 11/07/2018 14:20	Laboratory ID: 18110219-012 / Client Sample ID: DB011012D (Duplicate) / Boring Location: DB-01 / Sample Interval: 10-12 / Date Collected: 11/07/2018 14:22	Laboratory ID: 18110219-013 / Client Sample ID: DB011618 / Boring Location: DB-01 / Sample Interval: 16-18 / Date Collected: 11/07/2018 14:30	Laboratory ID: 18110219-014 / Client Sample ID: DB012224 / Boring Location: DB-01 / Sample Interval: 22-24 / Date Collected: 11/07/2018 14:35	Laboratory ID: 18110137-006 / Client Sample ID: DB021012 / Boring Location: DB-02 / Sample Interval: 10-12 / Date Collected: 11/05/2018 11:20	Laboratory ID: 18110137-007 / Client Sample ID: DB021618 / Boring Location: DB-02 / Sample Interval: 16-18 / Date Collected: 11/05/2018 11:25	Laboratory ID: 18110137-008 / Client Sample ID: DB022224 / Boring Location: DB-02 / Sample Interval: 22-24 / Date Collected: 11/05/2018 11:30	Laboratory ID: 18110137-009 / Client Sample ID: DB031012 / Boring Location: DB-03 / Sample Interval: 10-12 / Date Collected: 11/05/2018 12:10	Laboratory ID: 18110137-010 / Client Sample ID: DB031618 / Boring Location: DB-03 / Sample Interval: 16-18 / Date Collected: 11/05/2018 12:20	Laboratory ID: 18110137-011 / Client Sample ID: DB031618D (Duplicate) / Boring Location: DB-03 / Sample Interval: 16-18 / Date Collected: 11/05/2018 12:21	Laboratory ID: 18110137-012 / Client Sample ID: DB032224 / Boring Location: DB-03 / Sample Interval: 22-24 / Date Collected: 11/05/2018 12:30
VOCs															
Acetone	70,000	100,000	---	< 0.081	< 0.074	< 0.079	< 0.064	< 0.080	< 0.072	< 0.092	< 0.068	< 0.10	< 0.097	< 0.073
Benzene	12	0.8	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Bromodichloromethane	10	3,000	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Bromoform	81	53	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Bromomethane	110	10 / 3.9*	---	< 0.011	< 0.0098	< 0.010	< 0.0085	< 0.011	< 0.0096	< 0.012	< 0.0092	< 0.014	< 0.013	< 0.0098
2-Butanone	---	---	---	< 0.081	< 0.074	< 0.079	< 0.064	< 0.080	< 0.072	< 0.092	< 0.068	< 0.10	< 0.097	< 0.073
Carbon disulfide	7,800	720 / 9.0*	---	< 0.054	< 0.048	< 0.052	< 0.042	< 0.054	< 0.047	< 0.061	< 0.046	< 0.069	< 0.065	< 0.050
Carbon tetrachloride	5	0.3	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Chlorobenzene	1,600	130 / 1.3*	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Chloroethane	---	---	---	< 0.011	< 0.0098	< 0.010	< 0.0085	< 0.011	< 0.0096	< 0.012	< 0.0092	< 0.014	< 0.013	< 0.0098
Chloroform	100	0.3	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Chloromethane	---	---	---	< 0.011	< 0.0098	< 0.010	< 0.0085	< 0.011	< 0.0096	< 0.012	< 0.0092	< 0.014	< 0.013	< 0.0098
Dibromochloromethane	1,600	1,300	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
1,1-Dichloroethane	7,800	1,300 / 130*	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
1,2-Dichloroethane	7	0.4	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
1,1-Dichloroethene	3,900	290 / 3.0*	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
cis-1,2-Dichloroethene	780	1,200	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
trans-1,2-Dichloroethene	1,600	3,100	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
1,2-Dichloropropane	9	15 / 0.50*	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
cis-1,3-Dichloropropene	6.4	1.1 / 0.39*	0.005	< 0.0021	< 0.0019	< 0.0021	< 0.0017	< 0.0022	< 0.0019	< 0.0025	< 0.0019	< 0.0027	< 0.0026	< 0.0020
trans-1,3-Dichloropropene	6.4	1.1 / 0.39*	0.005	< 0.0021	< 0.0019	< 0.0021	< 0.0017	< 0.0022	< 0.0019	< 0.0025	< 0.0019	< 0.0027	< 0.0026	< 0.0020
Ethylbenzene	7,800	400 / 58*	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
2-Hexanone	---	---	---	< 0.021	< 0.019	< 0.021	< 0.017	< 0.022	< 0.019	< 0.025	< 0.019	< 0.027	< 0.026	< 0.020
4-Methyl-2-pentanone	---	---	---	< 0.021	< 0.019	< 0.021	< 0.017	< 0.022	< 0.019	< 0.025	< 0.019	< 0.027	< 0.026	< 0.020
Methylene chloride	85	13	---	< 0.011	< 0.0098	< 0.010	< 0.0085	< 0.011	< 0.0096	< 0.012	< 0.0092	< 0.014	< 0.013	< 0.0098
Methyl tert-butyl ether	780	8,800 / 140*	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Styrene	16,000	1,500 / 430*	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
1,1,2,2-Tetrachloroethane	---	---	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Tetrachloroethene	12	11	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Toluene	16,000	650 / 42*	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
1,1,1-Trichloroethane	---	1,200	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
1,1,2-Trichloroethane	310	1,800	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Trichloroethene	58	5	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Vinyl chloride	0.46	0.28	---	< 0.0054	< 0.0048	< 0.0052	< 0.0042	< 0.0054	< 0.0047	< 0.0061	< 0.0046	< 0.0069	< 0.0065	< 0.0050
Xylenes, Total	16,000	320 / 5.6*	---	< 0.016	< 0.015	< 0.015	< 0.013	< 0.017	< 0.014	< 0.018	< 0.014	< 0.020	< 0.019	< 0.014

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-11
Soil Volatile Organic Compounds Analytical Results Compared to
Residential Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Tier 1 Residential Soil Remediation Objectives: Ingestion	Tier 1 Residential Soil Remediation Objectives: Inhalation	ADL	Laboratory ID: 18110187-018	18110187-019	18110187-020	18110187-021	18110137-004	18110137-005	18110137-013	18110137-014	18110187-006	18110187-007	18110187-008
				Client Sample ID: DB041012	DB041618	DB042224	DB041618D (Duplicate)	DB052022	DB052426	DB061416	DB062224	DB071113	DB071618	DB072224
				Boring Location: DB-04	DB-04	DB-04	DB-04	DB-05	DB-05	DB-06	DB-06	DB-07	DB-07	DB-07
				Sample Interval: 10-12	16-18	22-24	16-18	20-22	24-26	14-16	22-24	11-13	16-18	22-24
				Date Collected: 11/06/2018 15:00	11/06/2018 15:10	11/06/2018 15:20	11/06/2018 15:15	11/05/2018 10:20	11/05/2018 10:30	11/05/2018 12:40	11/05/2018 12:45	11/06/2018 11:30	11/06/2018 11:35	11/06/2018 11:40
VOCs														
Acetone	70,000	100,000	---	< 0.067	< 0.074	< 0.077	< 0.076	< 0.12	< 0.076	< 0.077	< 0.083	< 0.068	< 0.075	< 0.073
Benzene	12	0.8	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Bromodichloromethane	10	3,000	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Bromoform	81	53	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Bromomethane	110	10 / 3.9*	---	< 0.0089	< 0.0099	< 0.010	< 0.010	< 0.016	< 0.010	< 0.010	< 0.011	< 0.0091	< 0.010	< 0.0097
2-Butanone	---	---	---	< 0.067	< 0.074	< 0.077	< 0.076	< 0.12	< 0.076	< 0.077	< 0.083	< 0.068	< 0.075	< 0.073
Carbon disulfide	7,800	720 / 9.0*	---	< 0.045	< 0.049	< 0.052	< 0.050	< 0.083	< 0.050	< 0.052	< 0.056	< 0.045	< 0.050	< 0.048
Carbon tetrachloride	5	0.3	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Chlorobenzene	1,600	130 / 1.3*	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Chloroethane	---	---	---	< 0.0089	< 0.0099	< 0.010	< 0.010	< 0.016	< 0.010	< 0.010	< 0.011	< 0.0091	< 0.010	< 0.0097
Chloroform	100	0.3	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Chloromethane	---	---	---	< 0.0089	< 0.0099	< 0.010	< 0.010	< 0.016	< 0.010	< 0.010	< 0.011	< 0.0091	< 0.010	< 0.0097
Dibromochloromethane	1,600	1,300	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
1,1-Dichloroethane	7,800	1,300 / 130*	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
1,2-Dichloroethane	7	0.4	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
1,1-Dichloroethene	3,900	290 / 3.0*	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	0.0055	< 0.0056	< 0.0045	< 0.0050	< 0.0048
cis-1,2-Dichloroethene	780	1,200	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	0.010	< 0.0056	0.010	< 0.0050	< 0.0048
trans-1,2-Dichloroethene	1,600	3,100	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
1,2-Dichloropropane	9	15 / 0.50*	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
cis-1,3-Dichloropropene	6.4	1.1 / 0.39*	0.005	< 0.0018	< 0.0020	< 0.0020	< 0.0020	< 0.0033	< 0.0020	< 0.0020	< 0.0023	< 0.0018	< 0.0020	< 0.0020
trans-1,3-Dichloropropene	6.4	1.1 / 0.39*	0.005	< 0.0018	< 0.0020	< 0.0020	< 0.0020	< 0.0033	< 0.0020	< 0.0020	< 0.0023	< 0.0018	< 0.0020	< 0.0020
Ethylbenzene	7,800	400 / 58*	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
2-Hexanone	---	---	---	< 0.018	< 0.020	< 0.020	< 0.020	< 0.033	< 0.020	< 0.020	< 0.023	< 0.018	< 0.020	< 0.020
4-Methyl-2-pentanone	---	---	---	< 0.018	< 0.020	< 0.020	< 0.020	< 0.033	< 0.020	< 0.020	< 0.023	< 0.018	< 0.020	< 0.020
Methylene chloride	85	13	---	< 0.0089	< 0.0099	< 0.010	< 0.010	< 0.016	< 0.010	< 0.010	< 0.011	< 0.0091	< 0.010	< 0.0097
Methyl tert-butyl ether	780	8,800 / 140*	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Styrene	16,000	1,500 / 430*	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
1,1,2,2-Tetrachloroethane	---	---	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Tetrachloroethene	12	11	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Toluene	16,000	650 / 42*	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
1,1,1-Trichloroethane	---	1,200	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
1,1,2-Trichloroethane	310	1,800	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	< 0.0052	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Trichloroethene	58	5	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	0.25	0.013	< 0.0045	< 0.0050	< 0.0048
Vinyl chloride	0.46	0.28	---	< 0.0045	< 0.0049	< 0.0052	< 0.0050	< 0.0083	< 0.0050	**0.29**	< 0.0056	< 0.0045	< 0.0050	< 0.0048
Xylenes, Total	16,000	320 / 5.6*	---	< 0.013	< 0.015	< 0.015	< 0.015	< 0.025	< 0.015	< 0.015	< 0.017	< 0.014	< 0.015	< 0.015

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-11
Soil Volatile Organic Compounds Analytical Results Compared to
Residential Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Tier 1 Residential Soil Remediation Objectives: Ingestion	Tier 1 Residential Soil Remediation Objectives: Inhalation	ADL	Laboratory ID: 18110219-008 / Client Sample ID: DB081113 / Boring Location: DB-08 / Sample Interval: 11-13 / Date Collected: 11/07/2018 13:40	Laboratory ID: 18110219-009 / Client Sample ID: DB081618 / Boring Location: DB-08 / Sample Interval: 16-18 / Date Collected: 11/07/2018 13:45	Laboratory ID: 18110219-010 / Client Sample ID: DB082224 / Boring Location: DB-08 / Sample Interval: 22-24 / Date Collected: 11/07/2018 13:50	Laboratory ID: 18110137-001 / Client Sample ID: DB091113 / Boring Location: DB-09 / Sample Interval: 11-13 / Date Collected: 11/05/2018 09:30	Laboratory ID: 18110137-002 / Client Sample ID: DB091618 / Boring Location: DB-09 / Sample Interval: 16-18 / Date Collected: 11/05/2018 09:35	Laboratory ID: 18110137-003 / Client Sample ID: DB092224 / Boring Location: DB-09 / Sample Interval: 22-24 / Date Collected: 11/05/2018 09:40	Laboratory ID: 18110219-001 / Client Sample ID: DB101820 / Boring Location: DB-10 / Sample Interval: 18-20 / Date Collected: 11/07/2018 09:00	Laboratory ID: 18110219-002 / Client Sample ID: DB102628 / Boring Location: DB-10 / Sample Interval: 26-28 / Date Collected: 11/07/2018 09:10	Laboratory ID: 18110137-015 / Client Sample ID: DB111214 / Boring Location: DB-11 / Sample Interval: 12-14 / Date Collected: 11/05/2018 13:15	Laboratory ID: 18110137-016 / Client Sample ID: DB111820 / Boring Location: DB-11 / Sample Interval: 18-20 / Date Collected: 11/05/2018 13:25	Laboratory ID: 18110137-017 / Client Sample ID: DB112628 / Boring Location: DB-11 / Sample Interval: 26-28 / Date Collected: 11/05/2018 13:30
VOCs															
Acetone	70,000	100,000	---	< 0.074	< 0.073	< 0.065	< 410	< 0.090	< 0.069	< 0.071	< 0.065	< 340	< 0.077	< 0.066
Benzene	12	0.8	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Bromodichloromethane	10	3,000	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Bromoform	81	53	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Bromomethane	110	10 / 3.9*	---	< 0.0098	< 0.0095	< 0.0086	< 54	< 0.012	< 0.0092	< 0.0093	< 0.0086	< 46	< 0.010	< 0.0088
2-Butanone	---	---	---	< 0.074	< 0.073	< 0.065	< 410	< 0.090	< 0.069	< 0.071	< 0.065	< 340	< 0.077	< 0.066
Carbon disulfide	7,800	720 / 9.0*	---	< 0.048	< 0.048	< 0.043	< 280	< 0.059	< 0.046	< 0.047	< 0.043	< 230	< 0.050	< 0.044
Carbon tetrachloride	5	0.3	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Chlorobenzene	1,600	130 / 1.3*	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Chloroethane	---	---	---	< 0.0098	< 0.0095	< 0.0086	< 54	< 0.012	< 0.0092	< 0.0093	< 0.0086	< 46	< 0.010	< 0.0088
Chloroform	100	0.3	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Chloromethane	---	---	---	< 0.0098	< 0.0095	< 0.0086	< 54	< 0.012	< 0.0092	< 0.0093	< 0.0086	< 46	< 0.010	< 0.0088
Dibromochloromethane	1,600	1,300	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
1,1-Dichloroethane	7,800	1,300 / 130*	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
1,2-Dichloroethane	7	0.4	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
1,1-Dichloroethene	3,900	290 / 3.0*	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
cis-1,2-Dichloroethene	780	1,200	---	0.017	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
trans-1,2-Dichloroethene	1,600	3,100	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
1,2-Dichloropropane	9	15 / 0.50*	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
cis-1,3-Dichloropropene	6.4	1.1 / 0.39*	0.005	< 0.0019	< 0.0019	< 0.0017	< 11	< 0.0024	< 0.0018	< 0.0019	< 0.0018	< 9.2	< 0.0020	< 0.0018
trans-1,3-Dichloropropene	6.4	1.1 / 0.39*	0.005	< 0.0019	< 0.0019	< 0.0017	< 11	< 0.0024	< 0.0018	< 0.0019	< 0.0018	< 9.2	< 0.0020	< 0.0018
Ethylbenzene	7,800	400 / 58*	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
2-Hexanone	---	---	---	< 0.019	< 0.019	< 0.017	< 110	< 0.024	< 0.018	< 0.019	< 0.018	< 92	< 0.020	< 0.018
4-Methyl-2-pentanone	---	---	---	< 0.019	< 0.019	< 0.017	< 110	< 0.024	< 0.018	< 0.019	< 0.018	< 92	< 0.020	< 0.018
Methylene chloride	85	13	---	< 0.0098	< 0.0095	< 0.0086	< 54	< 0.012	< 0.0092	< 0.0093	< 0.0086	< 46	< 0.010	< 0.0088
Methyl tert-butyl ether	780	8,800 / 140*	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Styrene	16,000	1,500 / 430*	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
1,1,2,2-Tetrachloroethane	---	---	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Tetrachloroethene	12	11	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Toluene	16,000	650 / 42*	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
1,1,1-Trichloroethane	---	1,200	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
1,1,2-Trichloroethane	310	1,800	---	< 0.0048	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Trichloroethene	58	5	---	0.016	< 0.0048	0.0071	**2,300**	0.06	< 0.0046	0.24	0.0079	**2,300**	< 0.0050	< 0.0044
Vinyl chloride	0.46	0.28	---	0.029	< 0.0048	< 0.0043	< 28	< 0.0059	< 0.0046	< 0.0047	< 0.0043	< 23	< 0.0050	< 0.0044
Xylenes, Total	16,000	320 / 5.6*	---	< 0.015	< 0.014	< 0.013	< 82	< 0.018	< 0.014	< 0.014	< 0.013	< 69	< 0.015	< 0.013

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-11
Soil Volatile Organic Compounds Analytical Results Compared to
Residential Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Tier 1 Residential Soil Remediation Objectives: Ingestion	Tier 1 Residential Soil Remediation Objectives: Inhalation	ADL	Laboratory ID: 18110137-018 Client Sample ID: DB121214 Boring Location: DB-12 Sample Interval: 12-14 Date Collected: 11/05/2018 14:40	Laboratory ID: 18110137-019 Client Sample ID: DB121214D (Duplicate) Boring Location: DB-12 Sample Interval: 12-14 Date Collected: 11/05/2018 14:42	Laboratory ID: 18110137-020 Client Sample ID: DB121820 Boring Location: DB-12 Sample Interval: 18-20 Date Collected: 11/05/2018 14:45	Laboratory ID: 18110137-021 Client Sample ID: DB122628M (MS/MSD) Boring Location: DB-12 Sample Interval: 26-28 Date Collected: 11/05/2018 14:50	Laboratory ID: 18110219-003 Client Sample ID: DB131820 Boring Location: DB-13 Sample Interval: 18-20 Date Collected: 11/07/2018 10:00	Laboratory ID: 18110219-004 Client Sample ID: DB132426 Boring Location: DB-13 Sample Interval: 24-26 Date Collected: 11/07/2018 10:10	Laboratory ID: 18110187-001 Client Sample ID: DB141416 Boring Location: DB-14 Sample Interval: 14-16 Date Collected: 11/06/2018 09:00	Laboratory ID: 18110187-002 Client Sample ID: DB141820 Boring Location: DB-14 Sample Interval: 18-20 Date Collected: 11/06/2018 09:05	Laboratory ID: 18110187-003 Client Sample ID: DB151012 Boring Location: DB-15 Sample Interval: 10-12 Date Collected: 11/06/2018 10:50	Laboratory ID: 18110187-004 Client Sample ID: DB151618 Boring Location: DB-15 Sample Interval: 16-18 Date Collected: 11/06/2018 11:00	Laboratory ID: 18110187-005 Client Sample ID: DB152224 Boring Location: DB-15 Sample Interval: 22-24 Date Collected: 11/06/2018 11:15
VOCs															
Acetone	70,000	100,000	---	< 0.074	< 0.074	< 0.075	< 0.073	< 0.078	< 0.087	< 0.073	< 0.077	< 0.083	< 0.065	< 0.061
Benzene	12	0.8	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Bromodichloromethane	10	3,000	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Bromoform	81	53	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Bromomethane	110	10 / 3.9*	---	< 0.010	< 0.0099	< 0.010	< 0.0097	< 0.010	< 0.012	< 0.0098	< 0.010	< 0.011	< 0.0086	< 0.0081
2-Butanone	---	---	---	< 0.074	< 0.074	< 0.075	< 0.073	< 0.078	< 0.087	< 0.073	< 0.077	< 0.083	< 0.065	< 0.061
Carbon disulfide	7,800	720 / 9.0*	---	< 0.051	< 0.050	< 0.051	< 0.049	< 0.051	< 0.058	< 0.049	< 0.052	< 0.055	< 0.043	< 0.041
Carbon tetrachloride	5	0.3	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Chlorobenzene	1,600	130 / 1.3*	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Chloroethane	---	---	---	< 0.010	< 0.0099	< 0.010	< 0.0097	< 0.010	< 0.012	< 0.0098	< 0.010	< 0.011	< 0.0086	< 0.0081
Chloroform	100	0.3	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Chloromethane	---	---	---	< 0.010	< 0.0099	< 0.010	< 0.0097	< 0.010	< 0.012	< 0.0098	< 0.010	< 0.011	< 0.0086	< 0.0081
Dibromochloromethane	1,600	1,300	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
1,1-Dichloroethane	7,800	1,300 / 130*	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
1,2-Dichloroethane	7	0.4	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
1,1-Dichloroethene	3,900	290 / 3.0*	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
cis-1,2-Dichloroethene	780	1,200	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
trans-1,2-Dichloroethene	1,600	3,100	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
1,2-Dichloropropane	9	15 / 0.50*	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
cis-1,3-Dichloropropene	6.4	1.1 / 0.39*	0.005	< 0.0020	< 0.0020	< 0.0020	< 0.0019	< 0.0020	< 0.0023	< 0.0020	< 0.0020	< 0.0022	< 0.0018	< 0.0016
trans-1,3-Dichloropropene	6.4	1.1 / 0.39*	0.005	< 0.0020	< 0.0020	< 0.0020	< 0.0019	< 0.0020	< 0.0023	< 0.0020	< 0.0020	< 0.0022	< 0.0018	< 0.0016
Ethylbenzene	7,800	400 / 58*	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
2-Hexanone	---	---	---	< 0.020	< 0.020	< 0.020	< 0.019	< 0.020	< 0.023	< 0.020	< 0.020	< 0.022	< 0.018	< 0.016
4-Methyl-2-pentanone	---	---	---	< 0.020	< 0.020	< 0.020	< 0.019	< 0.020	< 0.023	< 0.020	< 0.020	< 0.022	< 0.018	< 0.016
Methylene chloride	85	13	---	< 0.010	< 0.0099	< 0.010	< 0.0097	< 0.010	< 0.012	< 0.0098	< 0.010	< 0.011	< 0.0086	< 0.0081
Methyl tert-butyl ether	780	8,800 / 140*	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Styrene	16,000	1,500 / 430*	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
1,1,2,2-Tetrachloroethane	---	---	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Tetrachloroethene	12	11	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Toluene	16,000	650 / 42*	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
1,1,1-Trichloroethane	---	1,200	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
1,1,2-Trichloroethane	310	1,800	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Trichloroethene	58	5	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	0.014	0.024	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Vinyl chloride	0.46	0.28	---	< 0.0051	< 0.0050	< 0.0051	< 0.0049	< 0.0051	< 0.0058	< 0.0049	< 0.0052	< 0.0055	< 0.0043	< 0.0041
Xylenes, Total	16,000	320 / 5.6*	---	< 0.015	< 0.015	< 0.015	< 0.014	< 0.015	< 0.017	< 0.015	< 0.016	< 0.017	< 0.013	< 0.013

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-11
Soil Volatile Organic Compounds Analytical Results Compared to
Residential Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Tier 1 Residential Soil Remediation Objectives: Ingestion	Tier 1 Residential Soil Remediation Objectives: Inhalation	Tier 1 Residential Soil Remediation Objectives: ADL	Laboratory ID : 18110187-009 Client Sample ID : DB161012 Boring Location : DB-16 Sample Interval : 10-12 Date Collected : 11/06/2018 12:25	Laboratory ID : 18110187-010 Client Sample ID : DB161618 Boring Location : DB-16 Sample Interval : 16-18 Date Collected : 11/06/2018 12:30	Laboratory ID : 18110187-011 Client Sample ID : DB161618D (Duplicate) Boring Location : DB-16 Sample Interval : 16-18 Date Collected : 11/06/2018 12:35	Laboratory ID : 18110187-012 Client Sample ID : DB162224 Boring Location : DB-16 Sample Interval : 22-24 Date Collected : 11/06/2018 12:45	Laboratory ID : 18110187-013 Client Sample ID : DB171214 Boring Location : DB-17 Sample Interval : 12-14 Date Collected : 11/06/2018 13:20	Laboratory ID : 18110187-014 Client Sample ID : DB171618 Boring Location : DB-17 Sample Interval : 16-18 Date Collected : 11/06/2018 13:25	Laboratory ID : 18110187-015 Client Sample ID : DB172224 Boring Location : DB-17 Sample Interval : 22-24 Date Collected : 11/06/2018 13:30	Laboratory ID : 18110219-005 Client Sample ID : DB181012 Boring Location : DB-18 Sample Interval : 10-12 Date Collected : 11/07/2018 12:30	Laboratory ID : 18110219-006 Client Sample ID : DB181618 Boring Location : DB-18 Sample Interval : 16-18 Date Collected : 11/07/2018 12:40	Laboratory ID : 18110219-007 Client Sample ID : DB182224 Boring Location : DB-18 Sample Interval : 22-24 Date Collected : 11/07/2018 12:45	Laboratory ID : 18110187-016 Client Sample ID : DB191416 Boring Location : DB-19 Sample Interval : 14-16 Date Collected : 11/06/2018 14:20
VOCs														
Acetone	70,000	100,000	---	< 0.076	< 0.067	< 0.073	< 0.062	< 330	< 0.070	< 0.073	< 370	< 0.069	< 0.090	< 0.076
Benzene	12	0.8	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Bromodichloromethane	10	3,000	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Bromoform	81	53	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Bromomethane	110	10 / 3.9*	---	< 0.010	< 0.0090	< 0.0099	< 0.0084	< 43	< 0.0092	< 0.0098	< 50	< 0.0091	< 0.012	< 0.010
2-Butanone	---	---	---	< 0.076	< 0.067	< 0.073	< 0.062	< 330	< 0.070	< 0.073	< 370	< 0.069	< 0.090	< 0.076
Carbon disulfide	7,800	720 / 9.0*	---	< 0.051	< 0.045	< 0.049	< 0.042	< 220	< 0.047	< 0.049	< 260	< 0.046	< 0.060	< 0.051
Carbon tetrachloride	5	0.3	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Chlorobenzene	1,600	130 / 1.3*	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Chloroethane	---	---	---	< 0.010	< 0.0090	< 0.0099	< 0.0084	< 43	< 0.0092	< 0.0098	< 50	< 0.0091	< 0.012	< 0.010
Chloroform	100	0.3	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Chloromethane	---	---	---	< 0.010	< 0.0090	< 0.0099	< 0.0084	< 43	< 0.0092	< 0.0098	< 50	< 0.0091	< 0.012	< 0.010
Dibromochloromethane	1,600	1,300	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
1,1-Dichloroethane	7,800	1,300 / 130*	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
1,2-Dichloroethane	7	0.4	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
1,1-Dichloroethene	3,900	290 / 3.0*	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
cis-1,2-Dichloroethene	780	1,200	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	31	< 0.0046	< 0.0060	< 0.0051
trans-1,2-Dichloroethene	1,600	3,100	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
1,2-Dichloropropane	9	15 / 0.50*	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
cis-1,3-Dichloropropene	6.4	1.1 / 0.39*	0.005	< 0.0020	< 0.0017	< 0.0020	< 0.0017	< 8.8	< 0.0019	< 0.0019	< 10	< 0.0018	< 0.0025	< 0.0020
trans-1,3-Dichloropropene	6.4	1.1 / 0.39*	0.005	< 0.0020	< 0.0017	< 0.0020	< 0.0017	< 8.8	< 0.0019	< 0.0019	< 10	< 0.0018	< 0.0025	< 0.0020
Ethylbenzene	7,800	400 / 58*	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
2-Hexanone	---	---	---	< 0.020	< 0.017	< 0.020	< 0.017	< 88	< 0.019	< 0.019	< 100	< 0.018	< 0.025	< 0.020
4-Methyl-2-pentanone	---	---	---	< 0.020	< 0.017	< 0.020	< 0.017	< 88	< 0.019	< 0.019	< 100	< 0.018	< 0.025	< 0.020
Methylene chloride	85	13	---	< 0.010	< 0.0090	< 0.0099	< 0.0084	< 43	< 0.0092	< 0.0098	< 50	< 0.0091	< 0.012	< 0.010
Methyl tert-butyl ether	780	8,800 / 140*	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Styrene	16,000	1,500 / 430*	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
1,1,2,2-Tetrachloroethane	---	---	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Tetrachloroethene	12	11	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Toluene	16,000	650 / 42*	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
1,1,1-Trichloroethane	---	1,200	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
1,1,2-Trichloroethane	310	1,800	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Trichloroethene	58	5	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	**980**	0.034	< 0.0049	**3,200**	0.12	0.013	< 0.0051
Vinyl chloride	0.46	0.28	---	< 0.0051	< 0.0045	< 0.0049	< 0.0042	< 22	< 0.0047	< 0.0049	< 26	< 0.0046	< 0.0060	< 0.0051
Xylenes, Total	16,000	320 / 5.6*	---	< 0.015	< 0.014	< 0.015	< 0.012	< 66	< 0.014	< 0.014	< 76	< 0.014	< 0.018	< 0.015

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-11
Soil Volatile Organic Compounds Analytical Results Compared to
Residential Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Tier 1 Residential Soil Remediation Objectives			Laboratory ID :	18110187-017	18110358-006	18110358-007	18110358-008	18110358-009	18110358-010	18110358-004	18110358-005	18110358-001	18110358-002	18110358-003
				Client Sample ID :	DB191820	DB201012	DB201618	DB201618M (MS/MSD)	DB202426	DB202426D (Duplicate)	DB211820	DB212325	DB221012	DB221618	DB222426
				Boring Location :	DB-19	DB-20	DB-20	DB-20	DB-20	DB-20	DB-21	DB-21	DB-22	DB-22	DB-22
				Sample Interval :	18-20	10-12	16-18	16-18	24-26	24-26	18-20	23-25	10-12	16-18	24-26
				Date Collected :	11/06/2018 14:25	11/08/2018 14:00	11/08/2018 14:15	11/08/2018 14:16	11/08/2018 14:30	11/08/2018 14:31	11/08/2018 12:00	11/08/2018 12:15	11/08/2018 10:40	11/08/2018 10:50	11/08/2018 11:00
	Ingestion	Inhalation	ADL												
VOCs															
Acetone	70,000	100,000	---	< 0.072	< 0.072	< 0.071	< 0.058	< 0.060	< 0.057	< 0.082	< 0.061	< 0.072	< 0.072	< 0.060
Benzene	12	0.8	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Bromodichloromethane	10	3,000	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Bromoform	81	53	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Bromomethane	110	10 / 3.9*	---	< 0.0096	< 0.0096	< 0.0095	< 0.0077	< 0.0082	< 0.0076	< 0.011	< 0.0080	< 0.0096	< 0.0097	< 0.0080
2-Butanone	---	---	---	< 0.072	< 0.072	< 0.071	< 0.058	< 0.060	< 0.057	< 0.082	< 0.061	< 0.072	< 0.072	< 0.060
Carbon disulfide	7,800	720 / 9.0*	---	< 0.048	< 0.048	< 0.048	< 0.038	< 0.040	< 0.038	< 0.055	< 0.041	< 0.049	< 0.048	< 0.041
Carbon tetrachloride	5	0.3	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Chlorobenzene	1,600	130 / 1.3*	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Chloroethane	---	---	---	< 0.0096	< 0.0096	< 0.0095	< 0.0077	< 0.0082	< 0.0076	< 0.011	< 0.0080	< 0.0096	< 0.0097	< 0.0080
Chloroform	100	0.3	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Chloromethane	---	---	---	< 0.0096	< 0.0096	< 0.0095	< 0.0077	< 0.0082	< 0.0076	< 0.011	< 0.0080	< 0.0096	< 0.0097	< 0.0080
Dibromochloromethane	1,600	1,300	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
1,1-Dichloroethane	7,800	1,300 / 130*	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
1,2-Dichloroethane	7	0.4	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
1,1-Dichloroethene	3,900	290 / 3.0*	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
cis-1,2-Dichloroethene	780	1,200	---	< 0.0048	0.014	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	0.0082	< 0.0048	< 0.0041
trans-1,2-Dichloroethene	1,600	3,100	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
1,2-Dichloropropane	9	15 / 0.50*	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
cis-1,3-Dichloropropene	6.4	1.1 / 0.39*	0.005	< 0.0019	< 0.0019	< 0.0020	< 0.0015	< 0.0017	< 0.0015	< 0.0022	< 0.0016	< 0.0019	< 0.0020	< 0.0016
trans-1,3-Dichloropropene	6.4	1.1 / 0.39*	0.005	< 0.0019	< 0.0019	< 0.0020	< 0.0015	< 0.0017	< 0.0015	< 0.0022	< 0.0016	< 0.0019	< 0.0020	< 0.0016
Ethylbenzene	7,800	400 / 58*	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
2-Hexanone	---	---	---	< 0.019	< 0.019	< 0.020	< 0.015	< 0.017	< 0.015	< 0.022	< 0.016	< 0.019	< 0.020	< 0.016
4-Methyl-2-pentanone	---	---	---	< 0.019	< 0.019	< 0.020	< 0.015	< 0.017	< 0.015	< 0.022	< 0.016	< 0.019	< 0.020	< 0.016
Methylene chloride	85	13	---	< 0.0096	< 0.0096	< 0.0095	< 0.0077	< 0.0082	< 0.0076	< 0.011	< 0.0080	< 0.0096	< 0.0097	< 0.0080
Methyl tert-butyl ether	780	8,800 / 140*	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Styrene	16,000	1,500 / 430*	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
1,1,2,2-Tetrachloroethane	---	---	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Tetrachloroethene	12	11	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Toluene	16,000	650 / 42*	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
1,1,1-Trichloroethane	---	1,200	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
1,1,2-Trichloroethane	310	1,800	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Trichloroethene	58	5	---	< 0.0048	< 0.0048	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	< 0.0049	< 0.0048	< 0.0041
Vinyl chloride	0.46	0.28	---	< 0.0048	0.017	< 0.0048	< 0.0038	< 0.0040	< 0.0038	< 0.0055	< 0.0041	0.023	< 0.0048	< 0.0041
Xylenes, Total	16,000	320 / 5.6*	---	< 0.014	< 0.014	< 0.015	< 0.012	< 0.012	< 0.011	< 0.017	< 0.012	< 0.015	< 0.015	< 0.012

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-12
Soil Semivolatile Organic Compounds Analytical Results Compared to
Residential Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Residential Route Specific Values for Soil: Ingestion	Residential Route Specific Values for Soil: Inhalation	ADL	Laboratory ID : 18110137-006 Client Sample ID : DB021012 Boring Location : DB-02 Sample Interval : 10-12 Date Collected : 11/05/2018 11:20	18110187-007 DB071618 DB-07 16-18 11/06/2018 11:35	18110187-013 DB171214 DB-17 12-14 11/06/2018 13:20	18110358-004 DB211820 DB-21 18-20 11/08/2018 12:00	18110358-005 DB212325 DB-21 23-25 11/08/2018 12:15
SVOCs								
Aniline	---	---	---	< 0.42	< 0.41	< 0.39	< 0.42	< 0.37
Benzidine	---	---	---	< 0.42	< 0.41	< 0.39	< 0.42	< 0.37
Benzoic acid	310,000	---	---	< 1.1	< 1.0	< 0.96	< 1.0	< 0.92
Benzyl alcohol	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Bis(2-chloroethoxy)methane	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Bis(2-chloroethyl)ether	0.6	0.2	0.66	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Bis(2-ethylhexyl)phthalate	46	31,000	---	< 1.1	< 1.0	< 0.96	< 1.0	< 0.92
4-Bromophenyl phenyl ether			---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Butyl benzyl phthalate	16,000	930	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Carbazole	32	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Chloroaniline	310	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Chloro-3-methylphenol	---	---	---	< 0.42	< 0.41	< 0.39	< 0.42	< 0.37
2-Chloronaphthalene	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2-Chlorophenol	390	53,000	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Chlorophenyl phenyl ether	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Dibenzofuran	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
1,2-Dichlorobenzene	7,000	560 / 310*	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
1,3-Dichlorobenzene	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
1,4-Dichlorobenzene	---	11,000 / 340*	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
3,3´-Dichlorobenzidine	1	---	1.3	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2,4-Dichlorophenol	230	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Diethyl phthalate	63,000	2,000	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2,4-Dimethylphenol	1,600	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Dimethyl phthalate	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4,6-Dinitro-2-methylphenol	---	---	---	< 0.42	< 0.41	< 0.39	< 0.42	< 0.37
2,4-Dinitrophenol	160	---	3.3	< 1.1	< 1.0	< 0.96	< 1.0	< 0.92
2,4-Dinitrotoluene	0.9	---	0.25	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
2,6-Dinitrotoluene	0.9	---	0.26	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Di-n-butyl phthalate	7,800	2,300	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Di-n-octyl phthalate	1,600	10,000	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Hexachlorobenzene	0.4	1	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Hexachlorobutadiene	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Hexachlorocyclopentadiene	550	10 / 1.1*	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Hexachloroethane	78	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Isophorone	15,600	4,600	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2-Methylnaphthalene	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2-Methylphenol	3,900	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Methylphenol	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2-Nitroaniline	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
3-Nitroaniline	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Nitroaniline	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2-Nitrophenol	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
4-Nitrophenol	---	---	---	< 0.42	< 0.41	< 0.39	< 0.42	< 0.37
Nitrobenzene	39	92/9.4*	0.26	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
N-Nitrosodi-n-propylamine	0.09	---	0.0018	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
N-Nitrosodimethylamine	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
N-Nitrosodiphenylamine	130	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.19
2, 2'-oxybis(1-Chloropropane)	---	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Pentachlorophenol	3	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.074
Phenol	23,000	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
Pyridine	---	---	---	< 0.85	< 0.81	< 0.79	< 0.84	< 0.74
1,2,4-Trichlorobenzene	780	3,200 / 920*	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2,4,5-Trichlorophenol	7,800	---	---	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19
2,4,6-Trichlorophenol	58	200	0.66	< 0.22	< 0.21	< 0.20	< 0.22	< 0.19

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-13
Soil Polynuclear Aromatic Hydrocarbons Analytical Results Compared to
Residential Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Residential Route Specific Values for Soil Ingestion	ADL	Laboratory ID : 18110137-006 Client Sample ID : DB021012 Boring Location : DB-02 Sample Interval : 10-12 Date Collected : 11/05/2018 11:20	18110187-007 DB071618 DB-07 16-18 11/06/2018 11:35	18110187-013 DB171214 DB-17 12-14 11/06/2018 13:20	18110358-004 DB211820 DB-21 18-20 11/08/2018 12:00	18110358-005 DB212325 DB-21 23-25 11/08/2018 12:15
Polynuclear Aromatic Hydrocarbons							
Acenaphthene	4,700	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Acenaphthylene	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Anthracene	23,000	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Benz(a)anthracene	0.9	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Benzo(a)pyrene	0.09	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Benzo(b)fluoranthene	0.9	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Benzo(g,h,i)perylene	---	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Benzo(k)fluoranthene	9	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Chrysene	88	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Dibenz(a,h)anthracene	0.09	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Fluoranthene	3,100	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Fluorene	3,100	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Indeno(1,2,3-cd)pyrene	0.9	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Naphthalene	1,600	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037
Phenanthrene	---	---	< 0.042	< 0.041	0.095	< 0.042	< 0.037
Pyrene	2,300	---	< 0.042	< 0.041	< 0.039	< 0.042	< 0.037

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-14
Soil Pesticides and Polychlorinated Biphenyls Analytical Results Compared to Residential Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

		Laboratory ID :	18110137-006	18110187-007	18110187-013	18110358-004
		Client Sample ID :	DB021012	DB071618	DB171214	DB211820
		Boring Location :	DB-02	DB-07	DB-17	DB-21
		Sample Interval :	10-12	16-18	12-14	18-20
		Date Collected :	11/05/2018 11:20	11/06/2018 11:35	11/06/2018 13:20	11/08/2018 12:00
	Residential Route Specific Values for Soil					
Analyte	Ingestion	Inhalation	ADL			
Pesticides						
4,4´-DDD	3	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
4,4´-DDE	2	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
4,4´-DDT	2	--- / 2,100*	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Aldrin	0.04	3	0.94	< 0.0020	< 0.0020	< 0.0019	< 0.0020
alpha-BHC	0.1	0.8	0.0074	< 0.0020	< 0.0020	< 0.0019	< 0.0020
alpha-Chlordane	---	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
beta-BHC	---	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Chlordane	1.8	72 / 22*	---	< 0.020	< 0.020	< 0.019	< 0.020
delta-BHC	---	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Dieldrin	0.04	1	0.603	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endosulfan I	470	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endosulfan II	470	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endosulfan sulfate	---	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endrin	23	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endrin aldehyde	---	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Endrin ketone	---	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
gamma-BHC	0.5	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
gamma-Chlordane	---	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Heptachlor	0.1	0.1	0.871	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Heptachlor epoxide	0.07	5	1.005	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Methoxychlor	390	---	---	< 0.0020	< 0.0020	< 0.0019	< 0.0020
Toxaphene	0.6	89	---	< 0.042	< 0.041	< 0.039	< 0.042
Polychlorinated Biphenyls						
Aroclor 1016	1	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1221	1	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1232	1	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1242	1	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1248	1	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1254	1	---	---	< 0.10	< 0.097	< 0.094	< 0.10
Aroclor 1260	1	---	---	< 0.10	< 0.097	< 0.094	< 0.10

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 1-15
Soil Inorganics Analytical Results Compared to
Residential Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Residential Route Specific Values for Soil: Ingestion	Residential Route Specific Values for Soil: Inhalation	ADL	Laboratory ID: 18110137-006 / Client Sample ID: DB021012 / Boring Location: DB-02 / Sample Interval: 10-12 / Date Collected: 11/05/2018 11:20	18110187-007 / DB071618 / DB-07 / 16-18 / 11/06/2018 11:35	18110187-013 / DB171214 / DB-17 / 12-14 / 11/06/2018 13:20	18110358-004 / DB211820 / DB-21 / 18-20 / 11/08/2018 12:00
Inorganics							
Aluminum	---	---	---	12,000	14,000	11,000	11,000
Antimony	31	---	---	< 2.2	< 2.2	< 2.0	< 2.2
Arsenic	13.0/11.3	750	---	6.8	6.2	7.2	7.5
Barium	5,500	690,000	---	56	58	34	55
Beryllium	160	1,300	---	0.60	0.68	0.54	0.66
Cadmium	78	1,800	---	< 0.55	< 0.54	< 0.49	< 0.56
Calcium	---	---	---	58,000	55,000	56,000	54,000
Chromium	230	270	---	23	23	19	22
Cobalt	4,700	---	---	14	13	12	14
Copper	2,900	---	---	27	26	28	32
Cyanide	1,600	---	---	< 0.32	< 0.31	< 0.29	< 0.32
Iron	---	---	---	23,000	27,000	24,000	23,000
Lead	400	---	---	13	13	14	15
Magnesium	325,000	---	---	28,000	33,000	31,000	27,000
Manganese	1,600	69,000 / 8,700*	---	400	390	420	400
Mercury	23	10 / 0.1*	---	0.027	< 0.020	< 0.022	< 0.024
Nickel	1,600	13,000	---	35	34	31	38
Potassium	---	---	---	2,600	3,800	2,900	2,500
Selenium	390	---	---	< 1.1	< 1.1	< 0.98	< 1.1
Silver	390	---	---	< 1.1	< 1.1	< 0.98	< 1.1
Sodium	---	---	---	220	220	190	190
Thallium	6.3	---	---	< 1.1	< 1.1	< 0.98	< 1.1
Vanadium	550	---	---	24	24	21	23
Zinc	23,000	---	---	48	59	39	61

Notes:
All units presented in mg/kg
Concentration above TACO Tier 1 Soil Remediation Objective
Objectives - Based on 35 IAC Part 742 Appendix B Table B.

Table 2-1
Groundwater Volatile Organic Compounds Analytical Results Compared to
Class II Groundwater Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Units	Groundwater Remediation Objective Class II	Indoor Inhalation Remediation Objective - Diffusion and Advection Residential	Laboratory ID : 18110358-011 Client Sample ID : MW6 Date Collected : 11/09/2018 12:05	18110358-012 KPMW02 11/09/2018 16:20	18110358-013 MW5 11/09/2018 13:30	18110358-014 MW4 11/09/2018 14:40
Volatile Organic Compounds							
Acetone	mg/L	6.3	1,000,000.0	< 0.020	< 0.020	< 0.020	< 0.020
Benzene	mg/L	0.025	0.11	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Bromodichloromethane	mg/L	0.0002	6,700	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Bromoform	mg/L	0.001	3.1	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Bromomethane	mg/L	0.049	1.5	< 0.010	< 0.010	< 0.010	< 0.010
2-Butanone	mg/L		10,000.0	< 0.020	< 0.020	< 0.020	< 0.020
Carbon disulfide	mg/L	3.5	67.0	< 0.010	< 0.010	< 0.010	< 0.010
Carbon tetrachloride	mg/L	0.025	0.02	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chlorobenzene	mg/L	0.5	26.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chloroethane	mg/L			< 0.010	< 0.010	< 0.010	< 0.010
Chloroform	mg/L	0.001	0.07	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Chloromethane	mg/L			< 0.010	< 0.010	< 0.010	< 0.010
Dibromochloromethane	mg/L	0.14		< 0.0050	< 0.0050	< 0.0050	< 0.0050
1,1-Dichloroethane	mg/L	3.5	180.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050
1,2-Dichloroethane	mg/L	0.025	0.054	< 0.0050	0.030	< 0.0050	< 0.0050
1,1-Dichloroethene	mg/L	0.035	24.0	< 0.0050	4.4	< 0.0050	< 0.0050
cis-1,2-Dichloroethene	mg/L	0.2	3,500.0	0.50	69	< 0.0050	0.043
trans-1,2-Dichloroethene	mg/L	0.5	3,500.0	0.024	6.3	< 0.0050	< 0.0050
1,2-Dichloropropane	mg/L	0.025	0.12	< 0.0050	< 0.0050	< 0.0050	< 0.0050
cis-1,3-Dichloropropene	mg/L	0.005	0.14	< 0.0010	< 0.0010	< 0.0010	< 0.0010
trans-1,3-Dichloropropene	mg/L	0.005	0.14	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Ethylbenzene	mg/L	1.0	0.37	< 0.0050	< 0.0050	< 0.0050	< 0.0050
2-Hexanone	mg/L			< 0.020	< 0.020	< 0.020	< 0.020
4-Methyl-2-pentanone	mg/L			< 0.020	< 0.020	< 0.020	< 0.020
Methylene chloride	mg/L	0.05	0.37	< 0.0050	0.011	< 0.0050	< 0.0050
Methyl tert-butyl ether	mg/L	0.07	1,900.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Styrene	mg/L	0.5	310.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050
1,1,2,2-Tetrachloroethane	mg/L			< 0.0050	< 0.0050	< 0.0050	< 0.0050
Tetrachloroethene	mg/L	0.025	0.091	< 0.0050	**0.10**	< 0.0050	< 0.0050
Toluene	mg/L	2.5	530.0	< 0.0050	0.024	< 0.0050	< 0.0050
1,1,1-Trichloroethane	mg/L	1.0	1,000.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050
1,1,2-Trichloroethane	mg/L	0.05	4,400.0	< 0.0050	0.13	< 0.0050	< 0.0050
Trichloroethene	mg/L	0.025	0.34	0.26	**350**	0.033	0.016
Vinyl chloride	mg/L	0.01	0.028	**0.062**	**7.4**	< 0.0020	0.007
Xylenes, Total	mg/L	10.0	30.0	< 0.015	< 0.015	< 0.015	< 0.015

Notes:
All units presented in mg/L
Shaded values exceed TACO Tier 1 Class II Groundwater Remediation Objectives; 35 IAC Section 742, Appendix B, Table E.
Bold values exceed TACO Tier 1 Groundwater Remediation Objectives for the Indoor Inhalation Exposure Route - Diffusion and Advection; 35 IAC Section 742, Appendix B, Table H.

Table 2-2
Groundwater Semivolatile Organic Compounds Analytical Results Compared to Class II Groundwater Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Units	Groundwater Remediation Objective Class II	Laboratory ID : 18110358-012 Client Sample ID : KPMW02 Date Collected : 11/09/2018 16:20	18110358-014 MW4 11/09/2018 14:40
Semivolatile Organic Compounds				
Aniline	mg/L	---	< 0.0050	< 0.0050
Benzidine	mg/L	---	< 0.0050	< 0.0050
Benzoic acid	mg/L	28	< 0.025	< 0.025
Benzyl alcohol	mg/L	---	< 0.0050	< 0.0050
Bis(2-chloroethoxy)methane	mg/L	---	< 0.0050	< 0.0050
Bis(2-chloroethyl)ether	mg/L	0.01	< 0.0050	< 0.0050
Bis(2-ethylhexyl)phthalate	mg/L	0.06	< 0.0050	< 0.0050
4-Bromophenyl phenyl ether	mg/L	---	< 0.0050	< 0.0050
Butyl benzyl phthalate	mg/L	7.0	< 0.0050	< 0.0050
Carbazole	mg/L	---	< 0.00050	< 0.00050
4-Chloroaniline	mg/L	0.028	< 0.0050	< 0.0050
4-Chloro-3-methylphenol	mg/L	---	< 0.0050	< 0.0050
2-Chloronaphthalene	mg/L	---	< 0.0050	< 0.0050
2-Chlorophenol	mg/L	0.035*	< 0.0050	< 0.0050
4-Chlorophenyl phenyl ether	mg/L	---	< 0.0050	< 0.0050
Dibenzofuran	mg/L	---	< 0.0050	< 0.0050
1,2-Dichlorobenzene	mg/L	1.5	< 0.0050	< 0.0050
1,3-Dichlorobenzene	mg/L	---	< 0.0050	< 0.0050
1,4-Dichlorobenzene	mg/L	0.375	< 0.0050	< 0.0050
3,3´-Dichlorobenzidine	mg/L	0.1	< 0.010	< 0.010
2,4-Dichlorophenol	mg/L	0.021	< 0.0050	< 0.0050
Diethyl phthalate	mg/L	5.6	< 0.0050	< 0.0050
2,4-Dimethylphenol	mg/L	0.14	< 0.0050	< 0.0050
Dimethyl phthalate	mg/L	---	< 0.0050	< 0.0050
4,6-Dinitro-2-methylphenol	mg/L	---	< 0.025	< 0.025
2,4-Dinitrophenol	mg/L	0.014	< 0.025	< 0.025
2,4-Dinitrotoluene	mg/L	0.00002	< 0.00010	< 0.00010
2,6-Dinitrotoluene	mg/L	0.00031	< 0.00010	< 0.00010
Di-n-butyl phthalate	mg/L	3.5	< 0.0050	< 0.0050
Di-n-octyl phthalate	mg/L	0.7	< 0.0050	< 0.0050
Hexachlorobenzene	mg/L	0.0003	< 0.0050	< 0.0050
Hexachlorobutadiene	mg/L	---	< 0.0050	< 0.0050
Hexachlorocyclopentadiene	mg/L	0.5	< 0.0050	< 0.0050
Hexachloroethane	mg/L	0.035	< 0.0050	< 0.0050
Isophorone	mg/L	1.4	< 0.0050	< 0.0050
2-Methylnaphthalene	mg/L	---	< 0.0050	< 0.0050
2-Methylphenol	mg/L	0.35	< 0.0050	< 0.0050
4-Methylphenol	mg/L	---	< 0.0050	< 0.0050
2-Nitroaniline	mg/L	---	< 0.025	< 0.025
3-Nitroaniline	mg/L	---	< 0.025	< 0.025
4-Nitroaniline	mg/L	---	< 0.025	< 0.025
2-Nitrophenol	mg/L	---	< 0.0050	< 0.0050
4-Nitrophenol	mg/L	---	< 0.025	< 0.025
Nitrobenzene	mg/L	0.0035	< 0.0010	< 0.0010
N-Nitrosodi-n-propylamine	mg/L	0.0018	< 0.00010	< 0.00010
N-Nitrosodimethylamine	mg/L	---	< 0.0050	< 0.0050
N-Nitrosodiphenylamine	mg/L	0.016	< 0.0050	< 0.0050
2, 2'-oxybis(1-Chloropropane)	mg/L	---	< 0.0050	< 0.0050
Pentachlorophenol	mg/L	0.005	< 0.00050	< 0.00050
Phenol	mg/L	0.1	< 0.0050	< 0.0050
Pyridine	mg/L	---	< 0.0050	< 0.0050
1,2,4-Trichlorobenzene	mg/L	0.7	< 0.0050	< 0.0050
2,4,5-Trichlorophenol	mg/L	0.7*	< 0.010	< 0.010
2,4,6-Trichlorophenol	mg/L	0.01*	< 0.0050	< 0.0050

Notes:
All units presented in mg/L
Concentration above TACO Tier 1 Class II Groundwater Remediation Objective Objectives - Based on 35 IAC Part 742 Appendix B Table E.

Table 2-3
Groundwater Polynuclear Aromatic Hydrocarbons Analytical Results Compared to
Class II Groundwater Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Units	Groundwater Remediation Objective Class II	Indoor Inhalation Remediation Objective - Diffusion and Advection Residential	Laboratory ID : 18110358-011 Client Sample ID : MW6 Date Collected : 11/09/2018 12:05	18110358-012 KPMW02 11/09/2018 16:20	18110358-013 MW5 11/09/2018 13:30	18110358-014 MW4 11/09/2018 14:40
Polynuclear Aromatic Hydrocarbons							
Acenaphthene	mg/L	2.1		< 0.0010	< 0.0010	< 0.0010	< 0.0010
Acenaphthylene	mg/L	---		< 0.0010	< 0.0010	< 0.0010	< 0.0010
Anthracene	mg/L	10.5		< 0.0010	< 0.0010	< 0.0010	< 0.0010
Benz(a)anthracene	mg/L	0.00065		< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(a)pyrene	mg/L	0.002		< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(b)fluoranthene	mg/L	0.0009		< 0.00010	< 0.00010	< 0.00010	< 0.00010
Benzo(g,h,i)perylene	mg/L	---		< 0.0010	< 0.0010	< 0.0010	< 0.0010
Benzo(k)fluoranthene	mg/L	0.00085		< 0.00010	< 0.00010	< 0.00010	< 0.00010
Chrysene	mg/L	0.0075		< 0.00010	< 0.00010	< 0.00010	< 0.00010
Dibenz(a,h)anthracene	mg/L	0.0015		< 0.00010	< 0.00010	< 0.00010	< 0.00010
Fluoranthene	mg/L	1.4		< 0.0010	< 0.0010	< 0.0010	< 0.0010
Fluorene	mg/L	1.4		< 0.0010	< 0.0010	< 0.0010	< 0.0010
Indeno(1,2,3-cd)pyrene	mg/L	0.00215		< 0.00010	< 0.0010	< 0.00010	< 0.0010
Naphthalene	mg/L	0.22	0.075	< 0.0010	< 0.00010	< 0.0010	< 0.00010
Phenanthrene	mg/L	---		< 0.0010	< 0.0010	< 0.0010	< 0.0010
Pyrene	mg/L	1.05		< 0.0010	< 0.0010	< 0.0010	< 0.0010

Notes:
All units presented in mg/L
Shaded values exceed TACO Tier 1 Class II Groundwater Remediation Objectives; 35 IAC Section 742, Appendix B, Table E.
Bold values exceed TACO Tier 1 Groundwater Remediation Objectives for the Indoor Inhalation Exposure Route - Diffusion and Advection; 35 IAC Section 742, Appendix B, Table H.

Table 2-4
Groundwater Pesticides and Polychlorinated Biphenyls Analytical Results Compared to Class II Groundwater Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Units	Groundwater Remediation Objective Class II	Laboratory ID : 18110358-012 Client Sample ID : KPMW02 Date Collected : 11/09/2018 16:20	Laboratory ID : 18110358-014 Client Sample ID : MW4 Date Collected : 11/09/2018 14:40
Pesticides				
4,4´-DDD	mg/L	0.07	< 0.000050	< 0.000050
4,4´-DDE	mg/L	0.05	< 0.000050	< 0.000050
4,4´-DDT	mg/L	0.03	< 0.000050	< 0.000050
Aldrin	mg/L	0.07	< 0.000050	< 0.000050
alpha-BHC	mg/L	0.00055	< 0.000050	< 0.000050
alpha-Chlordane	mg/L	---	< 0.000050	< 0.000050
beta-BHC	mg/L	---	< 0.000050	< 0.000050
Chlordane	mg/L	0.01	< 0.0010	< 0.0010
delta-BHC	mg/L	---	< 0.000050	< 0.000050
Dieldrin	mg/L	0.045	< 0.000050	< 0.000050
Endosulfan I	mg/L	0.21	< 0.000050	< 0.000050
Endosulfan II	mg/L	0.21	< 0.000050	< 0.000050
Endosulfan sulfate	mg/L	---	< 0.000050	< 0.000050
Endrin	mg/L	0.01	< 0.000050	< 0.000050
Endrin aldehyde	mg/L	---	< 0.000050	< 0.000050
Endrin ketone	mg/L	---	< 0.000050	< 0.000050
gamma-BHC	mg/L	0.001	< 0.000050	< 0.000050
gamma-Chlordane	mg/L	---	< 0.000050	< 0.000050
Heptachlor	mg/L	0.002	< 0.000050	< 0.000050
Heptachlor epoxide	mg/L	0.001	< 0.000050	< 0.000050
Methoxychlor	mg/L	0.2	< 0.000050	< 0.000050
Toxaphene	mg/L	0.015	< 0.0010	< 0.0010
Polychlorinated Biphenyls				
Aroclor 1016	mg/L	0.0025	< 0.00050	< 0.00050
Aroclor 1221	mg/L	0.0025	< 0.00050	< 0.00050
Aroclor 1232	mg/L	0.0025	< 0.00050	< 0.00050
Aroclor 1242	mg/L	0.0025	< 0.00050	< 0.00050
Aroclor 1248	mg/L	0.0025	< 0.00050	< 0.00050
Aroclor 1254	mg/L	0.0025	< 0.00050	< 0.00050
Aroclor 1260	mg/L	0.0025	< 0.00050	< 0.00050

Notes:
All units presented in mg/L
Concentration above TACO Tier 1 Class II Groundwater Remediation Objective Objectives - Based on 35 IAC Part 742 Appendix B Table E.

Table 2-5
Groundwater Inorganics Analytical Results Compared to
Class II Groundwater Remediation Objectives
1807-1815 North Kinball Avenue
Chicago, IL 60647

Analyte	Units	Groundwater Remediation Objective Class II	Indoor Inhalation Remediation Objective - Diffusion and Advection Residential	Laboratory ID : 18110358-011 Client Sample ID : MW6 Date Collected : 11/09/2018 12:05	18110358-012 KPMW02 11/09/2018 16:20	18110358-013 MW5 11/09/2018 13:30	18110358-014 MW4 11/09/2018 14:40
Inorganics							
Aluminum	mg/L	---		---	< 0.040	---	< 0.040
Antimony	mg/L	0.024			< 0.0060	---	< 0.0060
Arsenic	mg/L	0.2		0.0077	0.0055	0.0060	< 0.0040
Barium	mg/L	2.0		0.027	0.024	0.023	0.030
Beryllium	mg/L	0.5		---	< 0.0020	---	< 0.0020
Cadmium	mg/L	0.05		< 0.0020	< 0.0020	< 0.0020	< 0.0020
Calcium	mg/L	---		---	150	---	150
Chromium	mg/L	1.0		< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cobalt	mg/L	1.0		---	< 0.0040	---	< 0.0040
Copper	mg/L	0.65		---	< 0.010	---	< 0.010
Cyanide	mg/L	0.6		---	< 0.0050	---	< 0.0050
Iron	mg/L	5.0		---	0.83	---	0.14
Lead	mg/L	0.1		< 0.0020	< 0.0020	< 0.0020	< 0.0020
Magnesium	mg/L	---		---	92	---	82
Manganese	mg/L	10.0		---	0.33	---	0.34
Mercury	mg/L	0.01	0.053	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Nickel	mg/L	2.0		---	< 0.0080	---	< 0.0080
Potassium	mg/L	---		---	3.2	---	3.7
Selenium	mg/L	0.05		< 0.0040	< 0.0040	< 0.0040	< 0.0040
Silver	mg/L	---		< 0.0040	< 0.0040	< 0.0040	< 0.0040
Sodium	mg/L	---		---	160	---	87
Thallium	mg/L	0.02		---	< 0.0020	---	< 0.0020
Vanadium	mg/L	0.1		---	0.015	---	0.014
Zinc	mg/L	10		---	< 0.020	---	< 0.020

Notes:
All units presented in mg/L
Shaded values exceed TACO Tier 1 Class II Groundwater Remediation Objectives; 35 IAC Section 742, Appendix B, Table E.
Bold values exceed TACO Tier 1 Groundwater Remediation Objectives for the Indoor Inhalation Exposure Route - Diffusion and Advection; 35 IAC Section 742, Appendix B, Table H.

Table 3-1
Soil Gas Analytical Results Compared to Indoor Inhalation Remediation Objectives
1807-1815 North Kimball Avenue
Chicago, IL 60647

Analyte	Indoor Inhalation Route - Tier 1 Soil Gas Remediation Objectives		Laboratory ID : 18110358-015 Client Sample ID : SV-7 Date Collected : 11/08/2018 13:13	18110358-016 SV-8 11/08/2018 14:52	18110358-017 SV-9 11/08/2018 16:03	18110358-018 SV-10 11/09/2018 11:14
	Residential Diffusion and Advection	Residential Diffusion Only				
Acetone	750,000	750,000	0.021	0.045	0.032	0.038
Benzene	0.37	41	< 0.0020	0.010	0.015	< 0.0018
Bromodichloromethane	450,000	450,000	< 0.0043	< 0.0040	< 0.0037	< 0.0038
Bromoform	11	1,800	< 0.017	< 0.016	< 0.015	< 0.015
2-Butanone	6,400	380,000	< 0.0049	0.011	< 0.0043	< 0.0044
Carbon disulfide	780	81,000	< 0.0020	0.025	0.024	< 0.0018
Carbon tetrachloride	0.21	24	< 0.0043	< 0.0040	< 0.0037	< 0.0038
Chlorobenzene	69	8,300	< 0.0029	< 0.0028	< 0.0026	< 0.0027
Dibromochloromethane	57,000	57,000	< 0.0056	< 0.0052	< 0.0049	< 0.0050
Chloroform	0.11	12	< 0.0033	< 0.0031	< 0.0029	< 0.0029
1,2-Dibromoethane	0.0078	1.1	< 0.0049	< 0.0046	< 0.0043	< 0.0044
1,2-Dichlorobenzene	290	11,000	< 0.0039	< 0.0037	< 0.0034	< 0.0035
1,4-Dichlorobenzene	1,200	8,400	< 0.0039	< 0.0037	< 0.0034	< 0.0035
Dichlorodifluoromethane	270	32,000	< 0.0033	< 0.0031	< 0.0029	< 0.0029
1,1-Dichloroethane	690	81,000	< 0.0026	< 0.0025	< 0.0023	< 0.0024
1,2-Dichloroethane	0.099	10	< 0.0026	< 0.0025	0.012	< 0.0024
1,1-Dichloroethene	240	27,000	< 0.0026	< 0.0025	< 5.7	< 0.0024
cis-1,2-Dichloroethene	1,100,000	1,100,000	0.0029	0.014	310	0.17
trans-1,2-Dichloroethene	85	10,000	< 0.0026	< 0.0025	5.9	0.0035
1,2-Dichloropropane	0.31	36	< 0.0029	< 0.0028	< 0.0026	< 0.0027
cis-1,3-Dichloropropene	0.90	110	< 0.0029	< 0.0028	< 0.0026	< 0.0027
trans-1,3-Dichloropropene	0.90	110	< 0.0029	< 0.0028	< 0.0026	< 0.0027
1,4-Dioxane	0.22	15	< 0.0059	< 0.0056	< 0.0051	< 0.0053
Ethylbenzene	1.3	150	< 0.0029	0.0066	0.0057	< 0.0027
Bromomethane	6.9	830	< 0.0062	< 0.0059	< 0.0054	< 0.0056
Methyl tert-butyl ether	3,700	420,000	< 0.0023	< 0.0022	< 0.0020	< 0.0021
Methylene chloride	5.6	590	< 0.023	< 0.021	0.056	< 0.020
Naphthalene	0.11	14	< 0.0033	< 0.0031	< 0.0029	< 0.0029
Styrene	1,400	34,000	< 0.0029	< 0.0028	< 0.0026	< 0.0027
Tetrachloroethene	0.55	66	< 0.0046	0.032	< 0.0040	< 0.0041
Toluene	6,200	140,000	0.0038	0.017	0.023	< 0.0024
1,2,4-Trichlorobenzene	5.4	800	< 0.0049	< 0.0046	< 0.0043	< 0.0044
1,1,1-Trichloroethane	6,600	770,000	< 0.0036	< 0.0034	< 0.0031	< 0.0032
1,1,2-Trichloroethane	170,000	170,000	< 0.0036	< 0.0034	< 0.0031	< 0.0032
Trichloroethene	1.5	180	0.025	0.043	110	0.057
Trichlorofluoromethane	860	97,000	< 0.0036	< 0.0034	< 0.0031	< 0.0032
Vinyl acetate	250	28,000	< 0.023	< 0.022	< 0.020	< 0.021
Vinyl chloride	0.29	30	0.0034	0.0056	**52**	0.03
o-Xylene	120	14,000	< 0.0029	0.0038	0.0038	< 0.0027
m,p-Xylene	140/130	17,000/16,000	< 0.0056	0.0090	0.0093	< 0.0050
Xylenes, Total	140	17,000	< 0.0085	0.013	0.013	< 0.0077

Notes:

All units presented in mg/m^3

Concentration above TACO Tier 1 Indoor Inhalation Exposure Route for Advection and Diffusion

Bold Concentration above TACO Tier 1 Indoor Inhalation Exposure Route for Diffusion Only

Diffusion and Advection Objectives - Based on 35 IAC Part 742 Appendix B Table H.

Diffusion Only Objectives - Based on 35 IAC Part 742 Appendix B Table I.

Table 3-2
Soil Gas Analytical Results Compared to Outdoor Inhalation Remediation Objectives
1807-1815 North Kimball Avenue
Chicago, IL 60647

Analyte	Laboratory ID: / Client Sample ID: / Date Collected: Outdoor Inhalation Route - Tier 1 Soil Gas Remediation Objectives Residential	18110358-015 SV-7 11/08/2018 13:13	18110358-016 SV-8 11/08/2018 14:52	18110358-017 SV-9 11/08/2018 16:03	18110358-018 SV-10 11/09/2018 11:14
Acetone	750000	0.021	0.045	0.032	0.038
Benzene	420	< 0.0020	0.010	0.015	< 0.0018
Bromodichloromethane	450000	< 0.0043	< 0.0040	< 0.0037	< 0.0038
Bromoform	1800	< 0.017	< 0.016	< 0.015	< 0.015
2-Butanone	380000	< 0.0049	0.011	< 0.0043	< 0.0044
Carbon disulfide	1500000	< 0.0020	0.025	0.024	< 0.0018
Carbon tetrachloride	290	< 0.0043	< 0.0040	< 0.0037	< 0.0038
Chlorobenzene	36000	< 0.0029	< 0.0028	< 0.0026	< 0.0027
Dibromochloromethane	57000	< 0.0056	< 0.0052	< 0.0049	< 0.0050
Chloroform	110	< 0.0033	< 0.0031	< 0.0029	< 0.0029
1,2-Dibromoethane	2.9	< 0.0049	< 0.0046	< 0.0043	< 0.0044
1,2-Dichlorobenzene	11000	< 0.0039	< 0.0037	< 0.0034	< 0.0035
1,4-Dichlorobenzene	8400	< 0.0039	< 0.0037	< 0.0034	< 0.0035
Dichlorodifluoromethane	890000	< 0.0033	< 0.0031	< 0.0029	< 0.0029
1,1-Dichloroethane	870000	< 0.0026	< 0.0025	< 0.0023	< 0.0024
1,2-Dichloroethane	67	< 0.0026	< 0.0025	0.012	< 0.0024
1,1-Dichloroethene	520000	< 0.0026	< 0.0025	< 5.7	< 0.0024
cis-1,2-Dichloroethene	1100000	0.0029	0.014	310	0.17
trans-1,2-Dichloroethene	120000	< 0.0026	< 0.0025	5.9	0.0035
1,2-Dichloropropane	240	< 0.0029	< 0.0028	< 0.0026	< 0.0027
cis-1,3-Dichloropropene	1900	< 0.0029	< 0.0028	< 0.0026	< 0.0027
trans-1,3-Dichloropropene	1900	< 0.0029	< 0.0028	< 0.0026	< 0.0027
1,4-Dioxane	16	< 0.0059	< 0.0056	< 0.0051	< 0.0053
Ethylbenzene	59000	< 0.0029	0.0066	0.0057	< 0.0027
Bromomethane	12000	< 0.0062	< 0.0059	< 0.0054	< 0.0056
Methyl tert-butyl ether	1200000	< 0.0023	< 0.0022	< 0.0020	< 0.0021
Methylene chloride	6100	< 0.023	< 0.021	0.056	< 0.020
Naphthalene	560	< 0.0033	< 0.0031	< 0.0029	< 0.0029
Styrene	34000	< 0.0029	< 0.0028	< 0.0026	< 0.0027
Tetrachloroethene	360	< 0.0046	0.032	< 0.0040	< 0.0041
Toluene	140000	0.0038	0.017	0.023	< 0.0024
1,2,4-Trichlorobenzene	1000	< 0.0049	< 0.0046	< 0.0043	< 0.0044
1,1,1-Trichloroethane	870000	< 0.0036	< 0.0034	< 0.0031	< 0.0032
1,1,2-Trichloroethane	170000	< 0.0036	< 0.0034	< 0.0031	< 0.0032
Trichloroethene	1700	0.025	0.043	110	0.057
Trichlorofluoromethane	2100000	< 0.0036	< 0.0034	< 0.0031	< 0.0032
Vinyl acetate	160000	< 0.023	< 0.022	< 0.020	< 0.021
Vinyl chloride	780	0.0034	0.0056	52	0.03
o-Xylene	41000	< 0.0029	0.0038	0.0038	< 0.0027
m,p-Xylene	52,000/55,000	< 0.0056	0.0090	0.0093	< 0.0050
Xylenes, Total	49000	< 0.0085	0.013	0.013	< 0.0077

Notes:

All units presented in mg/m^3

Concentration above TACO Tier 1 Outdoor Inhalation Exposure Route Objectives - Based on 35 IAC Part 742 Appendix B Table G.

	Client:	City of Chicago	***BORING ID:*** DB-01
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/07/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.0	CM	0"-10" Concrete/CA-8	0'-5' 60"	
			SC	10"-2' Black sandy clay, loose, dry		
		0.0	CL	2'-3' Olive gray silty clay, dry, stiff		
		0.0		3'-5' Olive gray/brown silty clay, trace gravel, stiff, dry		
5		0.0				
		0.0		5'-11' Brown/gray silty clay, trace gravel, dry, stiff	5'-10' 54"	
		0.0				
10		0.0				
		0.0	CH	11'-13' Gray silty clay with sand, soft, moist	10'-15' 38"	
		0.0				
15		0.0		13'-23' Gray silty clay, trace gravel, moist, soft	15'-20' 48"	
		0.0				
		0.0				
20		0.0			20'-25' 60"	
		0.0	SC	23'-23.5' Sandy clay, hard, dry		
		0.0		23.5'-24' Coarse sand, loose, dry		
		0.0	CL	24'-30' Gray silty clay, dry, hard, trace gravel	25'-30' 60"	
		0.0				

END OF BORING @30' below ground surface (bgs)

	Client:	City of Chicago	***BORING ID:*** DB-02
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/05/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.0		0"-7" Concrete		
		1.2	CL	7"-8' Brown/gray sandy silty clay with trace gravel and pebbles, stiff, dry	0'-5' 70%	
5		19.7				
		0.0			5'-10' 95%	
		0.0	CL	8'-13' Brown/gray sandy silty clay with trace gravel and pebbles, medium soft, moist		
10		0.0				
		0.0			10'-15' 80%	
		0.0	CH	13'-23' Gray clay, trace gravel, soft, moist		
15		0.0				
		0.0			15'-20' 80%	
		0.0				
20		0.0				
		0.0			20'-25' 100%	
		0.0	SC	23'-24' Gray clay, sand, hard, dry		
		0.0	CL	24'-30' Gray clay, hard, dry, trace gravel		
		0.0			25'-30' 100%	
		0.0				

END OF BORING @30' below ground surface (bgs)

	Client:	City of Chicago	***BORING ID:*** DB-03
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/05/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.0	CL	0"-7" Concrete	0'-5' 90%	
		0.0		7"-3' Olive green/dark brown clay with little gravel and pebbles, dry, stiff		
5		0.0	CL	3'-10' Gray/brown silty sandy clay, trace gravel, stiff, dry	5'-10' 70%	
		0.0				
		0.0				
10		0.0		10'-13' Gray/brown silty sandy clay, trace gravel, soft, moist	10'-15' 75%	
		0.0				
15		0.0	CH	13'-13' Gray clay, trace gravel, moist, soft	15'-20' 75%	
		0.0				
		0.0				
20		0.0			20'-25' 100%	
		0.0	SC	23'-24' Clay sand, hard, dry		
		0.0	CL	24'-30' Gray clay, hard, dry	25'-30' 100%	
		0.0				

END OF BORING @30' below ground surface (bgs)

	Client:	City of Chicago	***BORING ID:*** DB-04
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/06/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.0	SW	0"-6" Brown sand and gravel, loose, dry	0'-5' 56"	
			GW	6"-12" Gravel and rocks, loose, dry		
		0.0	SC	1'-2' Brown/black sandy clay, medium soft, moist		
5		0.0	CL	2'-12' Brown/gray silty clay, with trace gravel, stiff, dry, high plasticity		
		0.0			5'-10' 48"	
		0.0				
10		0.0				
		0.0			10'-15' 40"	
		0.0	CH	12'-13' Gray clay with sand layers, soft, moist		
15		0.0		13'-20' Gray clay, very soft, high plasticity, moist		
		0.0			15'-20' 45"	
		0.0				
20		0.0	SC	20'-21' Sandy clay, very soft, moist	20'-25' 60"	
			CS	21'-22' Coarse sand, moist, soft		
		0.0	SC	22'-24' Gray clay with trace gravel, moist, very soft		
		0.0	CL	24'-30' Gray silty clay, hard, dry, trace gravel		
		0.0			25'-30' 55"	
		0.0				

END OF BORING @30' below ground surface (bgs)

	Client:	City of Chicago	***BORING ID:*** DB-05
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/05/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.0	SW	0"-7" Concrete	0'-5' 90%	
			CL	7"-1.5' Dark brown sand, loose, saturated		
		0.0		1.5'-3' Olive gray/brown clay, medium soft, moist, some sand		
5		0.2	CL	3'-12' Gray brown sand, silty clay, stiff, some gravel, dry	5'-10' 75%	
		2.8				
		12.3				
10		5.5			10'-15' 75%	
		0.0	CH	12'-23' Gray clay, trace gravel, soft, moist		
		0.0			15'-20' 70%	
15		0.0				
		0.0				
20		0.0			20'-25' 85%	
		0.0	SC	23'-24' Gray sandy silty clay, medium soft, moist		
		0.0	CL	24'-30' Gray clay, dry, hard, trace gravel	25'-30' 100%	
		0.0				
		0.0				

END OF BORING @30' below ground surface (bgs)

	Client:	City of Chicago	***BORING ID:*** DB-06
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/05/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.4	SW	0"-7" Concrete	0'-5' 80%	
			SC	7"-10" Slag black		
		42.8		10"-3' Black/brown sandy clay fill, little gravel, medium soft, moist		
5		53.8	CL	3'-9' Brown/gray silty sandy clay, stiff, dry, trace gravel and pebbles	5'-10' 95%	
		77.4				
		339.4				
10		412.6	CL	9'-14' Brown/gray silty clay, moist, soft, trace gravel. Sand lenses from 11'-14'	10'-15' 70%	
		360.4				
15		40.7	CH	14'-22' Gray clay, trace gravel, soft, moist	15'-20' 70%	
		0.8				
		0.4				
20		0.0			20'-25' 50%	
		0.0	SC	22'-23' Gray clay sand		
		0.0	CL	23'-30' Gray clay, hard, dry	25'-30' 100%	
		0.0				
		0.0				

END OF BORING @30' below ground surface (bgs)

	Client:	City of Chicago	***BORING ID:*** DB-07
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/06/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.0	SP	0'-1.5' Brown sand, urban fill, a lot of gravel, loose, dry	0'-5' 60"	
		0.0	SW	1.5'-2.5' Black sand, slag and coal, dry, loose		
5		0.0	CL	2.5'-7' Gray/Brown silty clay, medium soft, moist		
		0.0				
		0.0	MH	7'-7.5' Gray/brown silty clay, medium soft, wet (purge water)	5'-10' 54"	
10		0.0		7.5'-13' Brown silty clay, soft, moist		
		0.0	MH			
		0.0	CH	13'-14' Gray clay, soft, moist, with sand lenses	10'-15' 56"	
15		0.2	CH	14'-23' Gray clay, very soft, moist, trace gravel	15'-20' 52"	
		0.2				
		0.0				
20		0.0			20'-25' 60"	
		0.0				
		0.0	SM	23'-25' Sand with some clay and gravel, hard, dry		
		0.0	CL	25'-30' Gray silty clay, trace gravel and pebbles	25'-30' 60"	
		0.0				
		0.0				

END OF BORING @30' below ground surface (bgs)

	Client:	City of Chicago	***BORING ID:*** DB-08
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/07/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.0	GP	0'-1' White/orange gravely sand, loose, dry	0'-5' 48"	
		0.0	SC	1'-2.5' Brown/black saturated sand, soft		
		0.0	CL	2.5'-4' Dark gray clay, trace gravel, medium soft, moist		
5		0.0	CL	4'-7' Gray/brown silty clay, trace gravel, stiff, dry	5'-10' 37"	
		0.0	CL	7'-9' Gray/brown silty clay, trace gravel, soft, moist		
		0.0	CL	9'-12' Brown silty clay, medium soft, moist, lenses of sand		
10		0.0			10'-15' 42"	
		0.0	CH	12'-14' Gray silty clay with lenses of sand, soft, moist		
15		0.0		14'-24' Gray silty clay, trace gravel, very soft, moist	15'-20' 48"	
		0.0				
		0.0				
20		0.0			20'-25' 36"	
		0.0				
		0.0		24'-25' Sandy clay, medium soft		
		0.0			25'-30' 0"	No recovery from 25' to 30'
		0.0				
		0.0				

END OF BORING @30' below ground surface (bgs)

	Client:	City of Chicago	***BORING ID:*** DB-09
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/07/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.0	GP	0"-6" Concrete with gravel	0'-5' 70%	
			CL	6"-2' Brown fill, some slag, silty sand, loose, moist		
		1.2	CL	2'-3' Gray clay, soft, moist, trace gravel		
5		7.0		3'-8' Brown/gray silty sandy clay, dry, hard		
		45.6			5'-10' 65%	
		53.8	CL	8'-13' Gray/brown silty sandy clay, trace gravel, moist, medium soft, high plasticity		
10		117.6				
		105.4			10'-15' 70%	
		0.0	CH	13'-21' Gray clay, trace gravel, moist, soft, high plasticity		
15		0.0			15'-20' 60%	
		0.0				
		0.0				
20		0.0				
		0.0	SP	21'-22' Coarse sand with some clay	20'-25' 40%	
		0.0	CL	22'-30' Gray clay, hard, dry, trace gravel		
		0.0				
		0.0			25'-30' 100%	
		0.0				

END OF BORING @30' below ground surface (bgs)

	Client:	City of Chicago	***BORING ID:*** DB-10
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/07/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.0	SC	0'-2' Silty clay, sand with gravel, loose, dry	0'-5' 50"	
		0.0	CL	2'-2.5' Black sandy clay, soft, moist		
5		0.3		2.5'-8' Brown/gray silty clay, trace gravel, dry, stiff		
		27.4			5'-10' 52"	
		17.2	CL	8'-12' Brown/gray silty clay, trace gravel, soft, moist		
10		311				
		71.4	SC	12'-13' Brown/gray sandy clay, soft, moist	10'-15' 52"	
		0.5	CH	13'-24' Gray clay, very soft, moist		
15		0.0			15'-20' 54"	
		0.0				
20		0.0			20'-25' 48"	
		0.0				
		0.0	CL	24'-30' Silty sandy clay, with gravel, dry, hard	25'-30' 60"	
		0.0				

END OF BORING @30' below ground surface (bgs)

	Client:	City of Chicago	***BORING ID:*** DB-11
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/05/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		2.6	SC	0"-7" Concrete	0'-5' 65%	
				7"-2' Black sandy clay fill with slag, gravel		
		4.8	CL	2'-4' Black/dark fill, gray clay, stiff, dry, trace gravel		
5		9.4	CL	4'-6' Brown/gray silty sandy clay, medium soft, moist, medium plasticity		
		34.4	CL	6'-9' Gray silty clay, very soft, wet	5'-10' 60%	
		99.7				
10		180.4	CL	9'-13' Brown/gray silty clay, stiff, dry	10'-15' 95%	
		77.4				
15		0.8				
		0.4	CH	13'-23.5' Gray clay, soft, moist, trace gravel	15'-20' 70%	
		0.3				
20		0.2			20'-25' 80%	
		0.0				
			SP	23.5'-24' Coarse gray/black sand, coarse, dry		
		0.2	CL	24'-30' Gray clay, trace gravel, dry, hard	25'-30' 100%	
		0.2				
		0.0				

END OF BORING @30' below ground surface (bgs)

	Client:	City of Chicago	***BORING ID:*** DB-12
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/05/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		33.4	SC	0"-7" Concrete	0'-5' 85%	
				7"-2.5' Black/brown clay, loam, loose, dry, little gravel and pebbles. Coal pieces at 2.5 feet		
		23.4	CL	2.5'-4' Black/dark gray clay, medium soft, stiff, dry		
5		58.4	CL	4'-12' Gray/brown silty clay, dry, stiff	5'-10' 90%	
		184.9				
		415.2				
10		696.7			10'-15' 50%	
		814.2	CH	12'-24.5' Gray clay, trace gravel, soft, moist		
15		2.6			15'-20' 70%	
		1.2				
		0.8				
20		0.4			20'-25' 80%	
		0.0				
		0.0	SC	24.5'-25' Coarse sandy clay, hard, dry		
		0.1	CL	25'-30' Gray clay, trace gravel, hard, dry	25'-30' 100%	
		0.2				

END OF BORING @30' below ground surface (bgs)

Client:	City of Chicago	***BORING ID:***	
Project Number:	60623205		DB-13
Boring Location:	1809-1815 N. Kimball Avenue		
	Chicago, IL		*Sheet:* 1 of 1
Drilling Method:	Geoprobe	*Date:*	*11/07/18*
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.2	GP	0'-1' Gray/brown gravely sand, loose, dry	0'-5' 36"	
			SC	1'-2' Black sandy clay, very soft, saturated		
		4.0	CL	2'-4' Dark gray silty clay, moist, medium soft		
5		35.1	CL	4'-10' Gray/brown silty clay, dry, stiff		
		714			5'-10' 40"	
		148.6				
10		120.4	CH	10'-13' Gray clay, soft, moist, sand lenses	10'-15' 32"	
		398.8				
15		8.0	CH	13'-25' Gray silty clay, very soft, moist, trace gravel		
		0.3			15'-20' 38"	
		0.0				
20		0.0			20'-25' 24"	
		0.0				
		0.0				
		0.0	CL	25'-30' Gray sandy silty clay, trace pebbles, dry, hard	25'-30' 38"	
		0.0				

END OF BORING @30' below ground surface (bgs)

	Client:	City of Chicago	***BORING ID:*** DB-14
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/06/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.0	GP	0'-1' Dark brown urban fill with gray gravel	0'-5' 53"	
			GW	1'-2' Brown gravely sand, loose, dry		
		0.0	SC	2'-3' Black sandy clay with pieces of cool and wood		
			CL	3'-4' Black/dark gray clay, trace gravel, stiff, dry		
5		0.0	CL	4'-12' Brown/gray silty clay, medium soft, moist		
		0.0			5'-10' 47"	
		0.0				
10		0.0				
		0.0	CH	12'-14' Gray clay, soft, moist, with sand lenses	10'-15' 50"	
15		0.0	CH	14'-21' Gray clay, trace gravel, soft, moist		
		0.0			15'-20' 49"	
		0.0				
20		0.0				
		0.0	CL	21'-22' Silty clay, dry, stiff	20'-25' 54"	
		0.0	SC	22'-24' Clay sand, with some gravels, medium soft, moist		
25		0.0	CL	24'-30' Gray clay, hard, dry, little gravel		
		0.0			25'-30' 60"	
		0.0				
30						
35						
40						

END OF BORING @30' below ground surface (bgs)

NOTES:

Date:_____ Checked by:_____

	Client:	City of Chicago	***BORING ID:*** DB-15
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* *11/08/18*
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.0	SC	0"-7" Concrete	0'-5' 23"	
				7"-3' Black/brown clay sand, loose, dry		
		37.8	LL	3'-6' Dark gray silty clay, stiff, dry		
5		0.4				
		2.7	CL	6'-8' Gray/brown silty clay, stiff, dry	5'-10' 50"	
		0.8	CL	8'-9' Gray silty clay, soft, moist		
10		0.0	CL	9'-13.5' Brown silty clay, medium soft, moist	10'-15' 32"	
		0.0				
		0.0	CH	13.5'-15' Gray clay, soft, moist with sand lenses		
15		0.0	SC	15'-16' Gray sandy clay, soft, moist	15'-20' 45"	
		0.0	SC	16'-18' Gray sand, stiff, moist		
		0.0	CH	18'-23.5' Gray clay, trace gravel, very soft, moist		
20		0.1			20'-25' 54"	
		0.0	SC	23.5'-25' Clay sand, hard, dry		
25		0.0	CL	25'-30' Dry hard gray silty clay, with trace gravel	25'-30' 60"	
		0.0				
		0.0				
30						
35						
40						

END OF BORING @30' below ground surface (bgs)

NOTES:

Date:_____ Checked by:_____

	Client:	City of Chicago	***BORING ID:*** DB-16
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/06/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.0	GP	0'-2' Urban fill, brown sand with gray gravels and pebbles	0'-5' 44"	
		125.4	SC	2'-3' Black clay sand with wood and coal, moist, soft		
			CL	3'-4' Dark gray/black clay, medium soft, dry		
5		1.1	CL	4'-7' Gray/brown silty clay, stiff, dry	5'-10' 56"	
		1.4				
		0.0	CL	7'-13' Brown silty clay, medium soft, moist		
10		0.0			10'-15' 40"	
		0.0				
			CH	13'-14' Gray clay with sand lenses, soft, moist		
15		0.0	CH	14'-22' Gray clay, very soft, moist, trace gravel	15'-20' 54"	
		0.0				
		0.0				
20		0.0			20'-25' 60"	
		0.0	SC	22'-23' Sandy clay, moist, medium soft		
				23'-24' Clay sand, dense, moist		
25		0.0	CL	24'-30' Gray silty clay, trace gravel, stiff, dry	25'-30' 60"	
		0.0				
		0.0				
30						
35						

END OF BORING @30' below ground surface (bgs)

	Client:	City of Chicago	***BORING ID:*** DB-17
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/06/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.0	SC	0"-7" Concrete	0'-5' 42"	
				7"-10" CA-6 Limestone		
		0.0		10"-1.5' Black sandy clay, loose, dry		
				1.5'-3' Dark gray/black silty clay, soft, moist		
5		0.0	CL	3'-10' Brown/gray silty clay, trace gravel, stiff, dry		
		0.0			5'-10' 25"	
		0.0				
10		42.5	CH	10'-13' Gray silty sandy clay, moist, soft	10'-15' 60"	
		1460.0	SP	13'-14' Coarse sand, saturated, with grit, looks like filter oil		
15		1144	CH	14'-24' Gray clay, soft, moist, high plasticity		
		0.3			15'-20' 60"	
20		0.0				
		0.0			20'-25' 60"	
		0.2				
25		0.1	SC	24'-24.5' Coarse sand, hard, dry		
		0.0	CL	24.5'-30' Gray silty clay, stiff, dry	25'-30' 50"	
30		0.0				

END OF BORING @30' below ground surface (bgs)

	Client:	City of Chicago	***BORING ID:*** DB-18
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/07/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.4	SC	0'-1' Broken concrete and gravels	0'-5' 46"	
				1'-3' Brown/black silty clay sand, soft, moist		
		6.3	ML	3'-4' Dark gray silty clay, trace gravel, medium soft, moist		
5		41.7	CL	4'-8' Gray/brown silty clay, stiff, dry	5'-10' 46"	
		45.3				
		71.4	CL	8'-13' Brown silty clay with sand lenses, medium soft, moist		
10		373			10'-15' 44"	
		180				
			MH	13'-14' Gray silty clay with sand lenses, medium soft, moist		
15		1.0	CH	14'-23.5' Gray silty clay, soft to very soft, moist, trace gravel	15'-20' 48"	
		0.0				
		0.0				
20		0.0			20'-25' 52"	
		0.0				
			SC	23.5'-24.5' Sandy clay, hard, dry		
25		0.0	SC	24.5'-25' Gray clay sand		
		0.0	CL	15'-30' Gray silty clay, trace gravel and pebbles, dry, hard	25'-30' 60"	
		0.0				
30						
35						
40						

END OF BORING @30' below ground surface (bgs)

NOTES:

Date:_____ Checked by:_____

	Client:	City of Chicago	***BORING ID:*** DB-19
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/06/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.0	GP	0'-7' Concrete, 7"-12" Black sand, slag, loose, dry	0'-5' 38"	
			CL	12"-2' Dark gray/black silty clay, hard, dry		
		0.0	CL	2'-13' Brown/gray silty clay, stiff, dry		
5		0.0				
		0.0			5'-10' 48"	
		0.0				
10		0.0				
		0.0			10'-15' 48"	
		0.0	MH	13'-14' Gray clay with sand lenses, soft, moist		
15		0.0	CH	14'-24' Gray clay, trace gravel, high plasticity, soft, moist		
		0.0			15'-20' 54"	
		0.0				
20		0.0				
		0.0			20'-25' 60"	
		0.0				
25		0.0	SC	24'-25' Gray clay silty sand, dense, dry		
		0.0	CL	25'-30' Gray silty clay, hard, dry	25'-30' 60"	
		0.0				
30						
35						
40						

END OF BORING @30' below ground surface (bgs)

NOTES:

	Client:	City of Chicago	***BORING ID:*** DB-20
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/08/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.6	GP	0"-6" Concrete, 6"-1' Brown gravel, sand, loose, dry	0'-5' 36"	
			GM	1'-2.5' White silty gravel (lime), CA-6, loose, dry		
		0.6	CL	2.5'-3.5' Olive gray/black clay with some sand, stiff, dry		
5		0.3	CL	3.5'-7' Brown/gray silty clay, trace gravel, medium soft, stiff, dry		
		14.0			5'-10' 34"	
		0.2	CL	7'-11' Brown silty clay with sand lenses, moist, soft		
10		0.4			10'-15' 46"	
				11'-13' Gray silty clay with sand lenses and trace gravel, soft, moist		
		0.1				
15		0.0	CH	13'-20' Gray silty clay, very soft, moist		
		0.2			15'-20' 44"	
		0.2				
20		0.6	SC	20'-25' Gray sandy clay, some gravel, hard, dry	20'-25' 34"	
		0.2				
25		0.3	CL	25'-28' Gray silty clay, hard, dry	25'-30' 60"	
		0.5				
		0.2	ML	28'-30' Clay silt, hard, dry		
30						
35						
40						

END OF BORING @30' below ground surface (bgs)

NOTES:

Date:_____ Checked by:_____

	Client:	City of Chicago	***BORING ID:*** DB-21
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/08/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.4	GP	0'-1' Brown silty gravely sand, loose, dry	0'-5' 58"	
			GM	1'-1.5' Gray silty gravel with concrete, loose, dry		
		3.2	CL	1.5'-3' Black/Olive gray silty clay with some sand		
5			CL	3'-5' Gray clay with sand lenses, dry, stiff		
		17.8	GC	5'-6' Gravely clay, saturated, purge water, soft	5'-10' 39"	
		215.4	CL	6'-9' Gray/brown silty clay, stiff, dry		
		144.1				
10			CL	9'-15' Brown/gray silty clay, sand lenses, soft, moist		
		0.1			10'-15' 40"	
		0.7				
15		0.1	CH	15'-23.5' Gray silty clay, very soft, high plasticity, moist, trace gravel	15'-20' no recovery	
		0.8				
		0.0				
20		0.1			20'-25' 44"	
		0.1				
			SC	23.5'-24' Gray clay, sand, hard, dry		
25		0.1	CL	24'-30' Gray silty clay, hard, dry, with trace gravel and pebbles		
		0.0			25'-30' 60"	
		0.7				
30						
35						

END OF BORING @30' below ground surface (bgs)

	Client:	City of Chicago	***BORING ID:*** DB-22
	Project Number:	60623205	
	Boring Location:	1809-1815 N. Kimball Avenue	
		Chicago, IL	*Sheet:* 1 of 1
	Drilling Method:	Geoprobe	*Date:* 11/08/18
Logged By:	AP		
Drilled By:	Earth Solution		

Depth (ft)	Samples	PID reading*	USCS	Lithologic Description	Recovery	Notes
1		0.3	GP	0"-6" Concrete, 6"-1' Brown gravely sand, loose, dry	0'-5' 28" plus 6" concrete	
			GM	1'-3.5' Silty gravely loam, CA-6, loose, dry, white		
		0.7	CH	3.5'-4.5' Olive gray silty clay with some sand, medium soft, stiff		
5		1.4	CL	4.5'-10' Brown/gray silty clay, stiff, dry, trace gravel	5'-10' 38"	
		1.0				
		3.5				
10		0.9	ML	10'-12' Brown silty clay with sand lenses, stiff, dry	10'-15' 51"	
		0.0	MH	12'-13' Gray clay, with sand lenses, soft, moist		
			ML	13'-15' Gray clay with little gravel, moist, medium soft		
15		0.0	CH	15'-24' Gray silty clay, trace gravel, soft, moist	15'-20' 54"	
		0.2				
		0.3				
20		0.1			20'-25' 58"	
		0.0				
25		0.2	SC	24'-25' Clay, sand, hard, dry		
		0.5	CL	25'-28' Gray silty clay, hard, dry, trace gravel and pebbles	25'-30' 60"	
		0.1	ML	28'-30' Gray caly, silt, hard, dry		
30						

END OF BORING @30' below ground surface (bgs)

Appendix E

Csat Calculations

Appendix E
Site Specific Csat Calculation
1807-1815 N. Kimball Avenue, Chicago, Illinois

Table E-1 Site Specific C_{sat} Calculation: Clayey Sand

Equation S29 -

$$C_{sat} = \frac{S}{p_b} * [(K_d * pb) + \Theta_w + (H' * \Theta_a]$$

Subsurface Soil - Soil Migration to Groundwater Csat [(a)]							
Chemical	S (mg/L)	Subsurface Soil p_b (kg/L)	Subsurface Soil K_d (L/kg)	Θ_w [(b)] (unitless)	H' (unitless)	Θ_a [(b)] (unitless)	Site-specific Soil Migration to Groundwater C_{sat} (mg/kg)
TCE	1.50E+03	1.75E+00	3.31E-01	1.75E-01	4.10E-01	1.65E-01	704

Equation S19 -

$$K_d = Koc * foc$$

Chemical	K_{OC} (L/kg)	Subsurface Soil f_{OC} [(c)] (unitless)	Subsurface Soil K_d (L/kg)
TCE	1.00E+02	3.31E-03	3.31E-01

Notes:
NA - Not Applicable

(a) Based on default values for clayey sand and a site-specific f_{oc} of 0.0057 for subsurface soil.
(b) Based on default values for subsurface soil.
(c) Based on the fraction of organic carbon in subsurface soil multiplied by 0.58.

Appendix E
Site Specific Csat Calculation
1807-1815 N. Kimball Avenue, Chicago, Illinois

Table E-2 Site Specific C_{sat} Calculation: Silty Clay

Equation S29 -

$$C_{sat} = \frac{S}{p_b} * [(K_d * pb) + \Theta_w + (H' * \Theta_a]$$

Subsurface Soil - Soil Migration to Groundwater Csat [(a)]							
Chemical	S (mg/L)	Subsurface Soil p_b (kg/L)	Subsurface Soil K_d (L/kg)	Θ_w [(b)] (unitless)	H' (unitless)	Θ_a [(b)] (unitless)	Site-specific Soil Migration to Groundwater C_{sat} (mg/kg)
TCE	1.50E+03	1.65E+00	5.16E-01	1.65E-01	4.10E-01	2.15E-01	1,004

Equation S19 -

$$K_d = Koc * foc$$

Chemical	K_{OC} (L/kg)	Subsurface Soil f_{OC} [(c)] (unitless)	Subsurface Soil K_d (L/kg)
TCE	1.00E+02	5.16E-03	5.16E-01

Notes:
NA - Not Applicable

(a) Based on default values for silty clay and a site-specific f_{oc} of 0.0089 for subsurface soil.
(b) Based on default values for subsurface soil.
(c) Based on the fraction of organic carbon in subsurface soil multiplied by 0.58.

Appendix F

Tier 2 Calculations

Appendix F
Tier 2 Remediation Objective Calculations
1807-1815 N. Kimball Avenue, Chicago, Illinois

Table F-1
Tier 2 Soil Ingestion Remediation Objectives
Residential Ingestion Exposure Route

Parameter		Unit	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Dibenz(a,h)anthracene	Indeno(1,2,3-cd)pyrene	Rationale
Target Cancer Risk	TR	Unitless	1.00E-06	1.00E-06	1.00E-06	1.00E-06	1.00E-06	TACO default value 35 IAC 742 Appendix C, Table B.
Averaging Time for Carcinogens	ATc	yr	70	70	70	70	70	TACO default value 35 IAC 742 Appendix C, Table B.
Target Hazard Quotient	THQ	Unitless	1	1	1	1	1	TACO default value 35 IAC 742 Appendix C, Table B.
Averaging Time for Non-Carcinogens	ATnc	yr	NA	30	NA	NA	NA	TACO default value 35 IAC 742 Appendix C, Table B. Residential
Exposure Frequency	EF	day/yr	350	350	350	350	350	TACO default value 35 IAC 742 Appendix C, Table B. Residential
Exposure Duration	ED	yr	30	30	30	30	30	TACO default value 35 IAC 742 Appendix C, Table B. Residential
Body Weight	BW	kg	70	70	70	70	70	TACO default value 35 IAC 742 Appendix C, Table B.
Soil Ingestion Rate	IR_{soil}	mg/day	200	200	200	200	200	TACO default value 35 IAC 742 Appendix C, Table B. Residential
Oral reference dose	RfD_o	mg/kg-day	NA	3.00E-04	NA	NA	NA	Toxicity data used from USEPA RSL website, last updated June 2017.
Oral cancer slope factor	SF_o	$mg/kg\text{-}day^{-1}$	0.1	1	0.1	1	0.1	Toxicity data used from USEPA RSL website, last updated June 2017.
Tier 2 Soil Ingestion Remediation Objective - Carcinogenic	**SRO**	**mg/kg**	**8.5**	**0.85**	**8.5**	**0.85**	**8.5**	**Calculated value. 35 IAC 742 Appendix C, Table A SSL Equation: S3.**
Tier 2 Soil Ingestion Remediation Objective - Non-carcinogenic	**SRO**	**mg/kg**	**NA**	**110**	**NA**	**NA**	**NA**	**Calculated value. 35 IAC 742 Appendix C, Table A SSL Equation: S1.**