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# REMEDIAL INVESTIGATION REPORT

**RIVERSIDE CENTER – PARCEL 2  
17-29 WEST END AVENUE, MANHATTAN**

**OER VCP NO.: 13CVCP082M  
OER PROJECT NO.: 13RHAZ013M  
CEQR NO.: 09DCP020M**

**Prepared for:**

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**August 2012  
170201301**



# REMEDIAL INVESTIGATION REPORT

## TABLE OF CONTENTS

TABLE OF CONTENTS.....	ii
LIST OF ACRONYMS.....	iv
CERTIFICATION.....	v
EXECUTIVE SUMMARY.....	vi
REMEDIAL INVESTIGATION REPORT.....	1
1.0 SITE BACKGROUND.....	1
1.1 Site Location and Current Usage.....	1
1.2 Proposed Redevelopment Plan.....	2
1.3 Description of Surrounding Properties.....	2
2.0 SITE HISTORY.....	4
2.1 Past Uses and Ownership.....	4
2.2 Previous Investigations.....	4
2.3 Site Inspection.....	10
2.4 Areas of Concern.....	11
3.0 PROJECT MANAGEMENT.....	13
3.1 Project Organization.....	13
3.2 Health and Safety.....	13
3.3 Materials Management.....	13
4.0 REMEDIAL INVESTIGATION ACTIVITIES.....	14
4.1 Geophysical Investigation.....	14
4.2 Soil Investigation.....	14
4.3 Groundwater Investigation.....	15
4.4 Soil Vapor Investigation.....	16
4.5 Sample collection and Chemical Analysis.....	16
5.0 ENVIRONMENTAL EVALUATION.....	20
5.1 Geological and Hydrological Conditions.....	20
5.2 Soil Chemistry.....	21
5.3 Groundwater Chemistry.....	22
5.4 Soil Vapor Chemistry.....	24
5.5 Quality Control Samples.....	24
5.6 Prior Activity.....	25
5.7 Impediments to Remedial Action.....	25

## **FIGURES**

Figure 1	New York City Tax Map
Figure 2	Site Location Plan
Figure 3	Site Plan
Figure 4	Redevelopment Plan
Figure 5	Surrounding Land Use Plan
Figure 6	Map of Areas of Concern
Figure 7	Groundwater Contour Plan
Figure 8	Soil Sample Exceedance Plan
Figure 9	Groundwater Sample Exceedance Plan
Figure 10	Soil Vapor Sample Exceedance Plan

## **TABLES**

Table 1	Soil Boring and Monitoring Well Construction Detail Summary
Table 2	Remedial Investigation Sample Summary
Table 3	Groundwater Elevation Summary
Table 4	Soil Analytical Detection Summary
Table 5	Groundwater Analytical Detection Summary
Table 6	Soil Vapor Analytical Detection Summary
Table 7	QA/QC Sample Detection Summary

## **APPENDICES**

Appendix A	Proposed Development Plans
Appendix B	Previous Reports
Appendix C	Geophysical Report
Appendix D	Soil Boring Logs
Appendix E	Monitoring Well Construction Logs
Appendix F	Groundwater Sampling Logs
Appendix G	Soil Vapor Sample Log
Appendix H	Laboratory Certification
Appendix I	Laboratory Data Reports

## LIST OF ACRONYMS

<b>Acronym</b>	<b>Definition</b>
AOC	Area of Concern
CAMP	Community Air Monitoring Plan
COC	Contaminant of Concern
CPP	Citizen Participation Plan
CSM	Conceptual Site Model
DER-10	New York State Department of Environmental Conservation Technical Guide 10
FID	Flame Ionization Detector
GPS	Global Positioning System
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
IRM	Interim Remedial Measure
NAPL	Non-aqueous Phase Liquid
NYC VCP	New York City Voluntary Cleanup Program
NYC DOHMH	New York City Department of Health and Mental Hygiene
NYC OER	New York City Office of Environmental Remediation
NYS DOH ELAP	New York State Department of Health Environmental Laboratory Accreditation Program
OSHA	Occupational Safety and Health Administration
PID	Photoionization Detector
QEP	Qualified Environmental Professional
RI	Remedial Investigation
RIR	Remedial Investigation Report
SCO	Soil Cleanup Objective
SPEED	Searchable Property Environmental Electronic Database

### **CERTIFICATION**

I, Joel B. Landes am a Qualified Environmental Professional, as defined in RCNY § 43-1402(ar). I have primary direct responsibility for implementation of the Remedial Investigation for the Riverside Center Site, (NYCOER VCP Site No. 13CVCP082M). I am responsible for the content of this Remedial Investigation Report (RIR), have reviewed its contents and certify that this RIR is accurate to the best of my knowledge and contains all available environmental information and data regarding the property.

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Qualified Environmental Professional

Date

Signature

## EXECUTIVE SUMMARY

The Remedial Investigation Report (RIR) provides sufficient information for establishment of remedial action objectives, evaluation of remedial action alternatives, and selection of a remedy pursuant to RCNY§ 43-1407(f). The remedial investigation (RI) described in this document is consistent with applicable guidance.

### Site Location and Current Usage

The Site is located at 17-29 West End Avenue, New York, New York and is in the Lincoln Square section of Manhattan. The Site is identified as the northeastern portion of Block 1171 and Lot 165 on the New York City Tax Map (Figure 1). The Site has an area of 84,000 square feet and is bounded by a projection of West 61<sup>st</sup> Street to the north, a commercial parking lot followed by West 59<sup>th</sup> Street to the south, West End Avenue to the east, and commercial parking lot followed by Joe DiMaggio Highway to the west. Maps showing the regional location of the Site and the approximate site boundary is provided as Figure 2 and 3.

Currently, the Site is used for asphalt-paved commercial parking lot and contains hydraulic car lifts in the northwestern portion of the Site and a former warehouse footprint (concrete platform). Two passenger railroad tracks (Amtrak easement) transect the eastern portion of the Site in an approximately north to south orientation. The western embankment of the track easement is overgrown with invasive vegetation including weeds and trees. The entrance to the parking area is located along the West 60<sup>th</sup> Street projection and is accessed via West End Avenue.

### Summary of Proposed Redevelopment Plan

The proposed future use of the Site consists of a mixed-use educational, residential and commercial development. A layout of the proposed site development is presented in Figure 4 and additional proposed development plans are provided in Appendix A. The current zoning designation is C4-7, which is assigned to densely built areas of Manhattan with regional commercial centers located outside of central business districts, including specialty and department stores, theaters and other commercial and office uses. The proposed use is consistent with existing zoning for the property.

The proposed development, referred to as Riverside Center Building 2, will be located on the northeast portion of the Riverside Center property. Building 2 is anticipated to be a 43-story building with retail, educational (school) and residential usage, plus parking and mechanical areas. Included in the project are construction of two private streets; the continuation of West 60th Street to the south and Freedom Place to the west. The anticipated building footprint will be 38,041 square feet with a gross square footage of 762,671 square feet, of which 14 percent (approximately 107,000 square feet) will be educational space from the cellar (partial) to the 5th

Floor, 2 percent (approximately 15,300 square feet) will be commercial space on the 1<sup>st</sup> Floor, and 84 percent (approximately 641,000 square feet) will be residential space that includes 616 apartment units, on floors 5 through 43.

The common foundation cellar space will primarily consist of a health club, swimming pool, storage areas, and ventilated parking garage space. The proposed development depth for the cellar slab ranges from approximately el 6 to 9<sup>1</sup> with foundation or elevator components extending to a maximum elevation of el -6. Foundation and elevator pit excavations are the only areas expected to potentially extend below the groundwater table. Approximately 45,000 tons (30,000 cubic yards) of soil and fill material is anticipated to be excavated and disposed during the proposed development.

### **Summary of Past Uses of Site and Areas of Concern**

A review of historic Sanborn fire insurance and topographic maps, aerial photographs, and various databases revealed that the Site was occupied by railroad tracks that were part of the larger Union Stock Yard and Market Company and N.Y. Central System R.R. rail yard from as early as 1892 through 1951. By 1976, a warehouse with an office had been built at the Site on a concrete slab and the western portion of the Site was improved with a paved driveway and that a tunnel for a single remaining rail line on the eastern portion of the Site had been built. The warehouse and office were no longer present in the 1985 and the Site has remained virtually unchanged since.

The surrounding area has been primarily occupied by a rail yard to the north and west, manufacturing and industrial facilities to the south, and automobile service stations, repair shops, and gasoline stations to the east and southeast. Multiple fuel oil and gasoline storage tanks were present on properties up-gradient of the Site to the east and southeast.

The Areas of Concern identified during previous investigations are described below.

#### AOC 1 - Potential On-Site Petroleum UST

According to historical records, a 550-gallon UST may be present at the Site near the former warehouse building. During site reconnaissance activities, three potential metal fill, vent or utility conduit ports of unknown usage were observed in poor condition in the southern area of warehouse slab footprint. The potential presence of a UST is considered an AOC as soil, groundwater, and/or soil vapor at the Site may have been adversely impacted by leaks or spills from the tank.

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<sup>1</sup> Elevations are presented in Borough President of Manhattan Datum, which is 2.750 feet above the USGS NGVD at Sandy Hook, NJ.

### AOC 2 – Staining and Evidence of Oil Leaks Adjacent to Hydraulic Car Lifts

Black staining was observed on pavement at the base of hydraulic lifts at the Site. The hydraulic oil supply lines have leaked to the asphalt at several locations and may have adversely impacted soil, groundwater, and/or soil vapor at the Site. Black staining was evident near the track “sleepers” and beside the railroad tracks located on the eastern portion of the Site, the source of the staining was unknown but may be related to usage of creosote to preserve the wooden sleepers and/or track maintenance operations. Additionally, orange rust stains were observed adjacent to the railroad tracks. The presence of stains related to hydraulic fluid leaks, potential creosote covered sleepers, and rusting steel may have adversely impacted soil, groundwater, and/or soil vapor at the Site.

### AOC 3 – Contaminated Historic Urban Fill Material

The Site elevation was increased by filling along the eastern shoreline of the Hudson River between 1865 and 1897 fill material of an unknown origin. According to historical map review, a small cove and stream were historically located at the Site. Historic fill may include ash, slag, demolition debris and municipal waste products. Laboratory analysis of Site historic fill samples documented in previous investigation reports confirmed the presence of contaminants at concentrations exceeding the 6 NYCRR Part 375 SCOs. Additionally, organic material within the fill and former riverbed may have degraded and generated methane. Historical soil vapor sampling in the northeastern and east central portions of the former rail yards revealed the presence of elevated levels of methane.

### AOC 4 – Historic Site Use

The Site was occupied by railroad tracks that were part of the larger Union Stock Yard and Market Company and N.Y. Central System Rail Road yard from as early as 1892 and through 1951. Use of the Site as a rail yard may have impacted the site subsurface with petroleum, solvents, PCBs, metals, pesticides and herbicides.

### AOC 5 - Adjoining and Surrounding Properties - Current and Historic Use

Potential spills and leaks of petroleum products, solvents, or other hazardous substances from the adjoining and surrounding property conditions listed below may have migrated onto Site and impacted Site groundwater and soil vapor:

#### *Historic Use*

Adjoining and surrounding properties were historically occupied by automobile service stations, gasoline filling stations, and a power plant facility. Historical operations at these facilities including the use of petroleum compounds, solvents, PCBs, dielectric fluid, and other commercial and industrial compounds may have resulted in adverse impacts to soil and groundwater quality at the Site.

### *Spills*

Three open off-site NYSDEC Spill sites (No. 86-08088, No. 05-02880, and No. 83-03208) exist up-gradient and may have impacted Site groundwater or soil vapor. Two spills involved dielectric fluid that may contain PCBs. The remaining spill was related to a petroleum release.

### **Summary of the Work Performed under the Remedial Investigation**

In addition to previous Phase II subsurface investigations conducted at the Site by Langan in 2005 and AKRF in 2009, Langan performed the following scope of work on behalf of the Volunteer in 2012 to establish a more comprehensive site character:

1. Conducted a Site inspection on June 26, 2012 and a geophysical survey on July 10, 2012 to identify AOCs, physical obstructions and subsurface utilities and structures;
2. Installed 6 soil borings across the Site, and collected 18 soil samples for laboratory analysis from the soil borings to evaluate soil quality between July 10 and 18, 2012;
3. Installed 5 groundwater monitoring wells throughout the Site to establish groundwater flow direction and collected 4 groundwater samples for laboratory analysis to evaluate groundwater quality on July 18 and 19, 2012;
4. Installed 2 soil vapor probes in the central portion of the Site and collected one ambient air and 2 soil vapor samples for laboratory analysis on July 17, 2012.

### **Summary of Environmental Findings**

The findings from the 2012 Langan remedial investigation only are summarized below:

1. Elevation of the property ranges from el 13 to el 24.
2. Depth to groundwater ranges from 9 to 16 feet at the Site and groundwater elevation ranges from approximately el 1.5 to el 8.1.
3. Groundwater flow is generally from east-northeast to west-southwest beneath the Site.
4. Depth to bedrock was encountered at approximately 27 to 37 feet at the Site.
5. The stratigraphy observed at the site, from the surface down, consists of up to 32 feet of historic urban fill material underlain by 6 to 12 feet of native sand, silty clay and gravel underlain by bedrock.
6. Soil/fill samples collected and analyzed as a part of the 2012 remedial investigation revealed the following:
  - a. VOCs – one or more VOCs were detected in 12 of the 18 soil samples collected. However, no VOC hit registered at a level exceeding Track 1 Unrestricted SCOs.

- b. SVOCs – polyaromatic hydrocarbon (PAH) SVOC exceedances were reported at 2 of 6 soil boring locations, LB-1 and LB-3, in the southern portion of the Site. Six or more SVOCs were reported at concentrations exceeding Track 1 Unrestricted Use SCOs in surficial fill material collected from the 1-to-2 foot interval at both locations including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, indeno(1,2,3-cd)pyrene, and dibenzo(a,h)anthracene (LB-1 only). Additionally, indeno(1,2,3-cd)pyrene and 3-methylphenol/4-methylphenol were reported as the sole exceedances in samples collected from the 9-to-11 foot and 11-to-13 foot intervals of LB-1, respectively. Borings with SVOCs exceedances are located in the southern portion of the Site, west of the Amtrak Easement. Total SVOCs ranged from 12.15 mg/kg and 12.1 mg/kg in the 1-to-2 foot intervals of borings LB-1 and LB-3 to non-detect at multiple locations and depth intervals. The distribution of SVOC exceedances with the largest quantity of exceedances near to the surface may indicate the impacts are the result of historic on-site operations in the southern portion of the Site and/or historic fill.
  - c. Metals – Metal exceedances were reported throughout the Site in all 6 soil boring locations at one or more sample collection depth interval. Metals that exceed Track 1/Unrestricted SCOs are: arsenic (18 mg/kg), copper (ranging from 55 to 360 mg/kg), lead (ranging from 68 mg/kg to 570 mg/kg), mercury (ranging from 0.54 mg/kg to 9.5 mg/kg), nickel (41 mg/kg), and zinc (ranging from 120 mg/kg to 430 mg/kg). Track 1 Unrestricted Use Metal SCO exceedances appear to be distributed throughout the Site at varying depth intervals at concentrations typical of fill material in New York City and are likely associated with the quality of the fill at the Site.
  - d. Pesticides – Track 1 Unrestricted Use exceedances were reported in one (1) sample collection interval at two soil boring locations, LB-3 (1 to 2 ft) and LB-4 (11 to 12 ft) in the central portion of the Site. The exceeding analytes were 4,4'-DDD (LB-4 only) at a concentration of 0.00415 mg/kg and 4,4'-DDT at concentrations of 0.0214 and 0.00752 mg/kg at LB-3 and LB-4 respectively. The distribution of pesticide exceedances with Track 1 exceedances limited to the central portion of the Site may indicate the impacts are the result of historic on-site operations; however the variation in depth interval suggests that the pesticides are attributed to historic fill quality areas.
  - e. Herbicides – Herbicides were not detected in any of the eighteen samples analyzed.
  - f. PCBs – PCBs were detected at levels not exceeding Track 1 Unrestricted Use SCOs in samples collected from soil borings LB-3 (1 to 2 ft) and LB-4 (11 to 12 ft)
7. Groundwater samples collected and analyzed as a part of the 2012 RI showed the following:
    - a. Four groundwater samples were analyzed for VOCs, SVOCs, metals (filtered and unfiltered) and PCBs during the RI. A summary of the RI groundwater sample

laboratory detections is presented in Table 5. Groundwater sample locations and exceedances are presented in Figure 9. Complete laboratory analytical reports are provided in Appendix I. Data collected during the RI is sufficient to delineate the distribution of contaminants in groundwater at the Site. The following is a summary of New York State 6NYCRR Part 703.5 New York State Department of Conservation Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS) for Class GA groundwater exceedances organized by analytical parameter.

- b. VOCs - Several VOCs were detected at monitoring well LB-6. One VOC, isopropylbenzene, was detected at a concentration exceeding the AWQS at 15 ug/L. Isopropylbenzene, more commonly known as cumene, is a constituent of crude oil and refined fuels. Considering the groundwater flow direction and the lack of VOCs in Site soils, the presence of isopropylbenzene in groundwater at LB-6, which is located near the site boundary in the northeast corner of the Site, may indicate an up-gradient groundwater condition.
  - c. SVOCs - One SVOC, acenaphthene, was detected at a marginal level (0.41 ug/L) in LB-6; however, it did not exceed the AWQS..
  - d. Metals - Metal exceedances were reported throughout the Site in all 4 monitoring well locations sampled during this investigation. Metals were analyzed for both total metals and dissolved metals. Metals that exceeded the AWQS were: antimony (unfiltered only) ranging from 3.3 to 4.4 µg/L, iron ranging from 570 to 886 µg/L in filtered samples and 2,530 to 17,100 µg/L in unfiltered samples, lead (unfiltered LB-1 duplicate only) at 96.3 µg/L, manganese ranging from 336.5 to 2,232 µg/L in filtered samples and 568 to 2,027 µg/L in unfiltered, and sodium ranging from 57,600 to 220,000 µg/L in filtered samples and 66,700 to 213,000 µg/L in unfiltered samples. Metal AWQS exceedances, although generally lower in the filtered samples, are distributed throughout groundwater at the Site are likely associated with the dissolved naturally occurring mineral constituents from regional soil or quality of the fill material. Dissolved sodium levels were found to be particularly elevated, but can be attributed to possible intrusion or road salting, as sodium is a salinity indicator.
  - e. PCBs - PCBs were not detected in groundwater.
8. Soil vapor samples collected during the RI did not report VOCs elevated above the NYSDOH Final Guidance on Soil Vapor Intrusion (October 2006) values (AGVs). Several VOCs were elevated above of or more of the following criteria: NYSDOH Fuel Oil Indoor Air Upper Fence Values, U.S. EPA 2001 Base Database: 90<sup>th</sup> Percentile Values for Indoor Air, and/or the HEI 2005 95<sup>th</sup> Percentile Values for Indoor Air.

# REMEDIAL INVESTIGATION REPORT

## 1.0 SITE BACKGROUND

Langan Engineering and Environmental Services, Inc., P.C. (Langan) was retained by Riverside Center Parcel 2 BIT Associates, LLC c/o The Dermot Company (the "Volunteer") to complete a Remedial Investigation (RI) for the development of the property located at 17-29 West End Avenue – Parcel 2, New York, New York (The "Site"). New York City tax maps identify the Site as the northeastern portion of Block 1171, Lot 165. The proposed development consists of one building, Building 2, which will be part of a larger 5-building development, referred to as Riverside Center. Per City Environmental Quality Review (CEQR) No. 09DCP020M, Block 1171, Lot 165 has a Restrictive Declaration that requires coordination with the New York City Office of Environmental Remediation (OER) to satisfy environmental requirements. The Volunteer has enrolled in the New York City Voluntary Cleanup Program (NYC VCP) to investigate and remediate the Site.

The RI work was performed between July 10 and August 9, 2012. This Remedial Investigation Report (RIR) summarizes the nature and extent of contamination and provides sufficient information for establishment of remedial action objectives, evaluation of remedial action alternatives, and selection of a remedy that is protective of human health and the environment consistent with the proposed use of the property pursuant to RCNY§ 43-1407(f).

### 1.1 Site Location and Current Usage

The Site is located at 17-29 West End Avenue, New York, New York and is in the Lincoln Square section of Manhattan. The Site is identified as the northeastern portion of Block 1171 and Lot 165 on the New York City Tax Map (Figure 1). The Site has an area of 84,000 square feet and is bounded by a projection of West 61<sup>st</sup> Street to the north, a commercial parking lot followed by West 59<sup>th</sup> Street to the south, West End Avenue to the east, and commercial parking lot followed by Joe DiMaggio Highway to the west. Maps showing the regional location of the Site and the approximate site boundary is provided as Figure 2 and 3.

Currently, the Site is used for asphalt-paved commercial parking lot and contains hydraulic car lifts in the northwestern portion of the Site and a former warehouse footprint (concrete platform). Two passenger railroad tracks (Amtrak easement) transect the eastern portion of the Site in an approximately north to south orientation. The western embankment of the track easement is overgrown with invasive vegetation including weeds and trees. The entrance to the parking area is located along the West 60<sup>th</sup> Street projection and is accessed via West End Avenue.

## **1.2 Proposed Redevelopment Plan**

The proposed future use of the Site consists of a mixed-use educational, residential and commercial development. A layout of the proposed site development is presented in Figure 4 and additional proposed development plans are provided in Appendix A. The current zoning designation is C4-7, which is assigned to densely built areas of Manhattan with regional commercial centers located outside of central business districts, including specialty and department stores, theaters and other commercial and office uses. The proposed use is consistent with existing zoning for the property.

The proposed development, referred to as Riverside Center Building 2, will be located on the northeast portion of the Riverside Center property. Building 2 is anticipated to be a 43-story building with retail, educational (school) and residential usage, plus parking and mechanical areas. Included in the project are construction of two private streets; the continuation of West 60th Street to the south and Freedom Place to the west. The anticipated building footprint will be 38,041 square feet with a gross square footage of 762,671 square feet, of which 14 percent will be educational space from the cellar (partial) to the 5th Floor, 2 percent will be commercial space on the 1<sup>st</sup> Floor, and 84 percent will be residential space that includes 616 apartment units, on floors 5 through 43.

The common foundation cellar space will primarily consist of a health club, swimming pool, storage areas, and ventilated parking garage space. The proposed development depth for the cellar slab ranges from approximately el 6 to 9<sup>2</sup> with foundation or elevator components extending to a maximum elevation of el -6. Foundation and elevator pit excavations are the only areas expected to potentially extend below the groundwater table. Approximately 45,000 tons (30,000 cubic yards) of soil and fill material is anticipated to be excavated and disposed during the proposed development.

## **1.3 Description of Surrounding Properties**

The Site is located in an area generally characterized by multi-story commercial, residential and educational buildings in zoning districts designated for commercial, residential and manufacturing uses, which are summarized in the table below:

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<sup>2</sup> Elevations are presented in Borough President of Manhattan Datum, which is 2.750 feet above the USGS NGVD at Sandy Hook, NJ.

DIRECTION	ADJOINING PROPERTIES	SURROUNDING PROPERTIES
North	West 61 <sup>st</sup> Street projection followed by a 25-story mixed residential and commercial building (33 West End Avenue)	Multi-story residential and commercial buildings and vacant land to the northwest, open space
East	West End Avenue followed by the Abraham Joshua Heschel School (20 West End Avenue)	Multi-story residential, commercial, office, and school buildings
South	Parking lot within the same Block and Lot	West 59 <sup>th</sup> Street followed by a power plant owned by the City of New York and operated by ConEd, vacant land, multi-story residential and commercial buildings, industrial buildings
West	Parking Lot within the same Block and Lot, vacant land	West Side Highway, Riverside Park, and the Hudson River

The Site is adjoined to the north by the West 61<sup>st</sup> Street projection followed by a 25-story mixed residential and commercial building (33 West End Avenue), multi-story residential and commercial buildings, and vacant land to the northwest. West End Avenue followed by a the Abraham Joshua Heschel School (20 West End Avenue) adjoin the Site to the west, followed by multi-story residential, commercial, office, and public school buildings. The Site is adjoined to the south by a parking lot within the same Block and Lot, followed by 59<sup>th</sup> Street and a power plant owned by the City of New York and operated by ConEd, vacant land, multi-story residential and commercial buildings, and industrial buildings. A parking lot within the same Block and Lot adjoins the property to the west, followed by additional parking, vacant land, the West Side Highway, Riverside Park, and the Hudson River.

Nearby sensitive receptors include the private Heschel Lower and High Schools located approximately 105 ft east of the Site, and the public Beacon School and P.S. 191 Amsterdam School located approximately 265 ft and 685 ft east of the Site. The nearest hospital is St. Luke’s Roosevelt Hospital, located approximately 0.25 miles to the southeast. Daycare facilities are located 370 ft and 950 ft to the north of the Site. A Surrounding Land Use Plan is provided as Figure 5.

## **2.0 SITE HISTORY**

### **2.1 Past Uses and Ownership**

A review of historic Sanborn fire insurance and topographic maps, aerial photographs, and various databases revealed that the Site was occupied by railroad tracks that were part of the larger Union Stock Yard and Market Company and N.Y. Central System R.R. rail yard from as early as 1892 through 1951. By 1976, a warehouse with an office had been built at the Site on a concrete slab and the western portion of the Site was improved with a paved driveway and that a tunnel for a single remaining rail line on the eastern portion of the Site had been built. The warehouse and office were no longer present in the 1985 and the Site has remained virtually unchanged since.

The surrounding area has been primarily occupied by a rail yard to the north and west, manufacturing and industrial facilities to the south, and automobile service stations, repair shops, and gasoline stations to the east and southeast. Multiple fuel oil and gasoline storage tanks were present on properties up-gradient of the Site to the east and southeast.

### **2.2 Previous Investigations**

Previous environmental reports provided to Langan for review as part of this RIR. These reports are summarized below and are included in Appendix B.

#### **October 1992 Final Environmental Impact Statement (FEIS), AKRF, Inc.**

The FEIS states that there is no planned future usage of or potential exposure to onsite groundwater and as such administrative and regulatory issues pertaining to impacted groundwater on the former rail yards have been addressed.

Although soil vapor testing specifically for methane has not been conducted in Parcel N, elevated methane levels were detected in the northeastern and east central portions of the former rail yards. Elevated methane levels were identified within the FEIS as a potential explosion hazard during and after site development given the potential for methane build-up beneath covered and enclosed areas. The FEIS identified that lower explosive limits (LEL) must be monitored in areas previously identified as having elevated methane levels during previous environmental site investigations. If methane levels over 1% LEL are detected, the use of soil aeration techniques is required. Additional measures such as the installation of sub-slab ventilation systems below man-made structures were also recommended if soil aeration techniques failed to adequately reduce methane concentrations.

**July 2005 Phase I and Phase II Environmental Site Assessment, West Side Site – Parcel N, 1-33 West End Avenue, New York, New York, prepared by Langan**

This report pertains to all of Parcel N; therefore, only a portion of the report pertains to the Building 2 Site. The Phase I assessment included a site inspection, review of historical information, completion of a federal, state and local database search, and interviews with local and state agencies in order to assess current and past site conditions. Recognized environmental conditions (RECs) identified by the Phase I included:

- The potential presence of an underground storage tank (UST) on the Building 2 Site. New York City Department of Buildings (NYCDOB) records indicated a possible 550-gallon, #2 Fuel Oil UST located near a former warehouse north of the former West 60<sup>th</sup> Street extension. An application for the installation of one 550-gallon UST was submitted on March 12, 1962 and approved on June 19, 1962. No records pertaining to the removal of this tank have been identified.
- The Amtrak building (Located south of the Building 2 Site) was considered a potential source of petroleum impact.

The report also identified the following non-ASTM subsurface environmental risks for the Building 2 Site:

- Potential for serpentinite bedrock with naturally occurring asbestos.
- Potential for methane in Site soil vapor.

The Phase II assessment included a geophysical survey, installation of five soil borings and one monitoring well, and collection of soil and groundwater samples for laboratory analysis. The results of the geophysical survey and soil and groundwater sampling did not reveal evidence of USTs or spills. Semivolatile organic compounds (SVOC) and metals were identified in soil and groundwater and attributed to urban fill conditions at the Site.

**December 2008 Phase I Environmental Site Assessment, West Side Site – Parcel N, 1-33 West End Avenue, New York, New York, prepared by Langan**

In 2005, Langan conducted supplemental site assessment and initial environmental records review. Updated Phase I ESA's were prepared for the West Side Site including Parcel N at 1-33 West End Avenue, Parcel L at 20 Riverside Boulevard, and Parcel M at 10 Riverside Boulevard.

Parcel N Site Assessment

During Langan's site inspection, hundreds of hydraulically driven car lifts and twelve reservoirs and pumps were observed on-site. Regular hydraulic line failures associated with these lifts that result in the release of several gallons of hydraulic fluid at a time were documented based

on discussions with The Site operator. Each incident was reportedly addressed immediately, however, given the amount of equipment and the frequency of equipment failures reported, there is a potential that subsurface soils below the asphalt pavement could be impacted by hydraulic oil. Due to the limited surficial extents of any releases, significant impacts on site redevelopment are not likely. A contingency plan for addressing the presence of oil impacted soil was recommended to be developed and implemented that includes methods to identify, delineate, dispose, or reuse any impacted soil encountered.

### Environmental Records Review

The updated ESA report described several additions to the database review. The only addition of note regards a spill that was referenced in the previous report where 25,000-gallons of dielectric fluid were released by Consolidated Edison in 1983 adjacent to the subject property. Due to the age of the spill and its regulatory status this was not listed as an REC. Two spills that occurred in 2005 were listed on the current EDR report that indicated that dielectric fluid was discovered. In June 2005 approximately 50-gallons of oil was found in a Con Edison manhole on the corner of 59th Street and West End Avenue. In July 2005, an unknown petroleum product was found in an excavation near the same location. The oil discovered in the manhole was deemed likely to be remnants of the 1983 spill.

### **June 2009 Draft Subsurface (Phase II) Investigation – Riverside Center, prepared by AKRF, Inc.**

A Phase II investigation was conducted in June 2009 to supplement existing data and assess subsurface conditions on Parcels L, M and N. The Phase II investigation involved the advancement of 13 soil borings with the collection of 26 soil samples and seven groundwater samples. Of these 13 borings, 2 (SB-1/GW-1 and SB-5/GW-5) are located on the Building 2 Site. Two soil samples were collected from each boring; one shallow and one deep. A groundwater sample was also collected from an existing well (MW-N) on the Building 2 Site. The origin of MW-N was reported as unknown. Sample analysis included volatile organic compounds (VOC), SVOCs, metals, polychlorinated biphenyls (PCB) and pesticides. The investigation findings and results for Building 2 are as follows:

- Uncontrolled fill containing brick, asphalt, slag, wood, coal, ash, concrete, sand, gravel, silt and miscellaneous building materials was observed from surface grade to between 4 and 28 feet below grade surface (bgs). The fill is underlain by organic silty clay and the bedrock. Groundwater was encountered at depths of approximately 7 to 23 feet bgs. Groundwater flow was estimated to be in a westerly direction toward the Hudson River. Flow may be affected by dewatering for the Amtrak tracks.
- No odor, staining, or elevated instrument readings were observed. Instrument readings were collected for methane with a landfill gas monitor and VOCs with a photoionization detector.

- Soil Laboratory Results were compared to 6 NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives (SCOs).
  - Both SB-5 samples had a VOC (acetone) exceedance (common laboratory contaminant).
  - Shallow SB-5 sample had SVOC exceedance.
  - Samples had metals exceedances, with the exception of the shallow SB-1 sample.
  - No PCB or pesticide exceedances.
- Groundwater Laboratory Results were compared to TOGS 1.1.1 AWQS for Class GA water standards. Metals and SVOCs exceedances were present in groundwater samples GW-1, GW-5 and MW-N. The exceedances are attributed to suspended soil particles in the samples. Acetone exceeded its standard in a sample from GW-1 in the northeastern corner of the Site; however, this is likely due to laboratory contamination or an off-site source.

Based on a review of historical reports for the Site, several RECs were identified and are listed as follows:

- Spills and staining from the Site due to use as a parking lot with a hydraulic lift and known hydraulic spills. Hydraulic fluid spills and leaks may migrate through cracks in the asphalt and concrete parking areas and contaminate soil beneath the paved parking areas. Given the low viscosity of hydraulic fluid and estimated depth to groundwater, the potential for groundwater contamination by hydraulic oil is low.
- The potential existence of a 550-gallon #2 fuel oil UST on Site near the former warehouse building. Leaks or spills of fuel oil from a potential UST system may have impacted soil, groundwater, and/or soil vapor at the Site.
- The historical usage of the Site for railroad operations as documented from at least 1897 may have contributed to contamination at the property. Railroad operations typically involve the use of petroleum products, metals, solvents, PCBs, pesticides and herbicides, which may have impacted Site soil, groundwater and/or soil vapor.
- The presence of historic urban fill with known exceedances of NYS Unrestricted Use standards. Additionally, the historic urban fill overlies a riverbed may have caused the elevated concentrations of methane in soil vapor.
- Based on geotechnical boring data collected from within the area of the Site, serpentinite bedrock may be present beneath the Site. Serpentinite is a naturally occurring asbestos type of bedrock.
- Properties adjoining the Site were previously occupied by residential structures, a stable, livestock houses, yards and marketing stores, railroad operations, auto repair

shops and gasoline service stations between 1897 and 1996. Impacts to Site media may have resulted from historic use.

### **October 2010 Final Supplemental Environmental Impact Statement, AKRF, Inc.**

The Notice of Completion (NOC) of the Supplemental Environmental Impact Statement (SEIS) for the project requires that NYCOER approve an environmental RAP and CHASP for The Site. According to the NOC, at a minimum the RAP/CHASP must include a plan for: “conducting soil disturbance [including] proper handling and disposal of excavated soil, and implementing other practices to protect workers and the surrounding neighborhood. In addition, the buildings would be constructed with waterproofing which would also serve as a vapor barrier to any remaining VOCs or methane [present in the subsurface].” The SEIS more specifically outlines additional requirements including:

- The completion of a Stormwater Pollution Prevention Plan (SWPPP);
- Continuous air monitoring for VOCs, methane, and dust particulates and continuous soil contamination screening during excavation activities;
- The testing of groundwater prior to dewatering activities to determine whether pre-treatment is required prior to discharge to the city’s sewers as required by NYCDEP sewer discharge permits;
- Soil management and disposal procedures;
- Dust control; and,
- Contingency measures to address the discovery of tanks, petroleum impacts, asbestos-containing serpentinite bedrock, or other unexpected contamination that may be encountered during site excavation.

Upon the completion of site remediation activities, a post-excavation Remedial Closure Report (RCR) must be submitted to NYCOER for their review.

### **July 2012 Soil Vapor Intrusion Potential Assessment (VIPA), Langan**

In order to assess site soil vapor quality and evaluate potential vapor intrusion conditions (pVICs), five vapor points were installed and sampled on April 23, 2012. All samples were collected from within the footprint of Parcel 2. The temporary points were installed to depths ranging between 13 to 15 feet bgs.

Laboratory analytical data results show concentrations of gasoline-related VOCs including benzene, toluene, ethylbenzene, and xylenes (BTEX). However, with the exception of m,p-Xylene in SV-5, all concentrations were reported below the reference values identified in the New York State Department of Health (NYSDOH) 2003 Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes [NYSDOH 2003 Study] and United States Environmental

Protection Agency (USEPA) 2001 Building Assessment and Survey Evaluation (BASE) Database [USEPA 2001 BASE Study] using Summa Canister Method. Concentrations of 1,2,4-Trimethylbenzene and 1,3,5-Trimethylbenzene were also detected in all five samples; however, these contaminants were only detected in SV-2 at concentrations marginally above the NYSDOH 2003 Study and USEPA 2001 BASE Study reference values.

### **August 2012 Phase I Environmental Site Assessment, Langan**

A Phase I ESA was conducted to identify recognized environmental conditions (REC) associated with the Site. In general, the scope of this assessment consisted of obtaining information from the User; reviewing reasonably ascertainable information and environmental data relating to the Site; reviewing maps and records maintained by federal, state, and local regulatory agencies; interviewing persons knowledgeable about the Site; and conducting a site inspection. The Phase I ESA identified the following RECs for the project Site:

#### REC 1 – Potential On-Site Petroleum UST

According to historical records, a 550-gallon UST may be present at the Site near the former warehouse building. During site reconnaissance activities, three potential metal fill or vent ports of unknown usage and in poor condition were observed in the southern area of warehouse slab footprint. The potential presence of a UST is considered a REC as soil, groundwater, and/or soil vapor within the extents of the Site may have been adversely impacted by leaks or spills from the tank.

#### REC 2 – Staining and Evidence of Oil Leaks Adjacent to Hydraulic Car Lifts

Black staining was observed on pavement at the base of hydraulic lifts at the Site. The hydraulic oil supply lines have leaked at several locations and may have adversely impacted soil, groundwater, and/or soil vapor at the Site. Black staining was evident near the track “sleepers” and beside the railroad tracks located on the eastern portion of the Site, the source of the staining was unknown but may be related to usage of creosote to preserve the wooden sleepers and track maintenance operations. Orange rust stains were evident adjacent to the railroad tracks. The presence of stains related to hydraulic fluid leaks, potential creosote covered sleepers, and rusting steel tracks are considered RECs as soil, groundwater, and/or soil vapor at the Site may have been adversely impacted.

#### REC 3 – Contaminated Historic Urban Fill Material

The Site was created by filling along the eastern shoreline of the Hudson River between 1865 and 1897; the source of the fill is unknown. According to historical map review, a small cove and stream were historically located at the Site. Historic fill can include ash, slag, demolition debris and municipal waste products. Laboratory analysis of Site historic fill samples confirmed the presence of contaminants at concentrations exceeding the

New York State Unrestricted Use Soil Cleanup Objectives (6 NYCRR Part 375). Organic material within the fill and former riverbed may degrade and generate methane. Historical soil vapor sampling in the northeastern and east central portions of the former rail yards revealed the presence of elevated levels of methane.

#### REC 4 – Restricted Use Declaration

Per City Environmental Quality Review (CEQR) No. 09DCP020M, Block 1171, Lot 165 has a Restrictive Declaration that requires coordination with OER to satisfy environmental requirements. The Declaration prevents the issuance of DOB construction permits and Certificates of Occupancy, and requires that OER approve a Remedial Action Plan to satisfy the Restrictive Declaration requirements before development can proceed.

#### REC 5 – Historic Site Use

The Site was occupied by railroad tracks that were part of the larger Union Stock Yard and Market Company and N.Y. Central System R.R. rail yard from as early as 1892 and through 1951. Use of the Site as a rail yard may have impacted the site subsurface with petroleum, solvents, PCBs, metals, pesticides and herbicides.

#### REC 6 - Adjoining and Surrounding Properties - Current and Historic Use

Potential spills and leaks of petroleum products, solvents, or other hazardous substances from the adjoining and surrounding property conditions listed below may have migrated to the Site and impacted Site groundwater and soil vapor:

##### *Historic Use*

Adjoining and surrounding properties were historically occupied by automobile service stations, gasoline filling stations, and a power plant facility. Historical operations at these facilities and the use of petroleum compounds, solvents, PCBs, dielectric fluid, and other commercial and industrial compounds may have resulted in adverse soil and groundwater quality impacts at the Site.

##### *Spills*

Three open, off-site, up-gradient NYSDEC Spill sites exist that have the potential to impact Site groundwater or soil vapor. Two spills involved dielectric fluid that may contain PCBs. The remaining spill was related to petroleum.

## **2.3 Site Inspection**

To assist in an assessment of site history and observe current conditions, a site inspection was performed at 9:40 AM on June 26, 2012 by Luke McCartney of Langan. The weather at the

time of the inspection was sunny and approximately 73° F. An asphalt-paved parking area with hydraulic car lifts and a concrete slab (former warehouse footprint) were observed in the western section of the Site. The hydraulic lifts were observed in the paved parking area along the west side of the concrete platform and along the northwestern Site boundary. Multiple cars and storage trucks were parked in the asphalt and concrete areas.

Passenger railroad tracks (Amtrak easement) with sloped, earthen embankments to the east and west transect the eastern section of the Site in a north to south orientation. The western embankment of the railroad tracks was overgrown with weeds, small trees, and vegetation. To the east of the railroad tracks, on top of the eastern embankment, a flat area, adjacent to West End Avenue, was observed with exposed soil and weeds. The Amtrak easement, including both embankments and the portion of the property immediately adjacent to West End Avenue was fenced off and inaccessible during the Site reconnaissance. However, observations of these areas were made from outside the fence line.

Electrical panels for parking lot lighting were observed in the southeast corner of the Site. Significant findings included stained soil associated with hydraulic lift and railroad operations and 3 damaged metal ports observed along the southern side of the remaining concrete slab of the former warehouse building. The ports were in very poor condition, but may be associated with a former UST(s) or utility conduits.

## **2.4 Areas of Concern**

The Areas of Concern (AOC) identified during previous investigations are described below. Approximate AOC locations are shown on Figure 6.

### AOC 1 - Potential On-Site Petroleum UST

According to historical records, a 550-gallon UST may be present at the Site near the former warehouse building. During site reconnaissance activities, three potential metal fill, vent or utility conduit ports of unknown usage were observed in poor condition in the southern area of warehouse slab footprint. The potential presence of a UST is considered an AOC as soil, groundwater, and/or soil vapor at the Site may have been adversely impacted by leaks or spills from the tank.

### AOC 2 – Staining and Evidence of Oil Leaks Adjacent to Hydraulic Cars

Black staining was observed on pavement at the base of hydraulic lifts at the Site. The hydraulic oil supply lines have leaked to the asphalt at several locations and may have adversely impacted soil, groundwater, and/or soil vapor at the Site. Black staining was evident near the track “sleepers” and beside the railroad tracks located on the eastern portion of the Site, the source of the staining was unknown but may be related to usage of creosote to preserve the

wooden sleepers and/or track maintenance operations. Additionally, orange rust stains were observed adjacent to the railroad tracks. The presence of stains related to hydraulic fluid leaks, potential creosote covered sleepers, and rusting steel may have adversely impacted soil, groundwater, and/or soil vapor at the Site.

#### AOC 3 – Contaminated Historic Urban Fill Material

The Site elevation was increased by filling along the eastern shoreline of the Hudson River between 1865 and 1897 fill material of an unknown origin. According to historical map review, a small cove and stream were historically located at the Site. Historic fill may include ash, slag, demolition debris and municipal waste products. Laboratory analysis of Site historic fill samples documented in previous investigation reports confirmed the presence of contaminants at concentrations exceeding the 6 NYCRR Part 375 SCOs. Additionally, organic material within the fill and former riverbed may have degraded and generated methane. Historical soil vapor sampling in the northeastern and east central portions of the former rail yards revealed the presence of elevated levels of methane.

#### AOC 4 – Historic Site Use

The Site was occupied by railroad tracks that were part of the larger Union Stock Yard and Market Company and N.Y. Central System Rail Road yard from as early as 1892 and through 1951. Use of the Site as a rail yard may have impacted the site subsurface with petroleum, solvents, PCBs, metals, pesticides and herbicides.

#### AOC 5 - Adjoining and Surrounding Properties - Current and Historic Use

Potential spills and leaks of petroleum products, solvents, or other hazardous substances from the adjoining and surrounding property conditions listed below may have migrated onto Site and impacted Site groundwater and soil vapor:

##### *Historic Use*

Adjoining and surrounding properties were historically occupied by automobile service stations, gasoline filling stations, and a power plant facility. Historical operations at these facilities including the use of petroleum compounds, solvents, PCBs, dielectric fluid, and other commercial and industrial compounds may have resulted in adverse impacts to soil and groundwater quality at the Site.

##### *Spills*

Three open off-site NYSDEC Spill sites exist up-gradient and may have impacted Site groundwater or soil vapor. Two spills involved dielectric fluid that may contain PCBs. The remaining spill was related to a petroleum release.

### **3.0 PROJECT MANAGEMENT**

#### **3.1 Project Organization**

The Qualified Environmental Profession (QEP) responsible for preparation of this RIR is Joel B. Landes, P.E.

#### **3.2 Health and Safety**

All work described in this RIR was performed in full compliance with applicable laws and regulations, including Site and OSHA worker safety requirements and HAZWOPER requirements.

#### **3.3 Materials Management**

All material encountered during the RI was managed in accordance with applicable laws and regulations. Excess soils and purge water generated during the RI were containerized in 2 steel, DOT-approved, 55-gallon drums, which are pending off-site disposal by Environmental Closures, Inc. of Mineola, New York.

## **4.0 REMEDIAL INVESTIGATION ACTIVITIES**

To supplement existing site data, Langan performed the following scope of work on behalf of the Volunteer:

5. Conducted a Site inspection and a geophysical survey to identify AOCs, physical obstructions and subsurface utilities and structures;
6. Installed 6 soil borings across the Site, and collected 18 soil samples for laboratory analysis from the soil borings to evaluate soil quality;
7. Installed 5 groundwater monitoring wells throughout the Site to establish groundwater flow direction and collected 4 groundwater samples for laboratory analysis to evaluate groundwater quality;
8. Installed 2 soil vapor probes in the central portion of the Site and collected one ambient air and 2 soil vapor samples for laboratory analysis.

### **4.1 Geophysical Investigation**

Prior to commencement of intrusive field activities (i.e., soil borings, well installation and soil vapor sampling), Diversified Geophysics, Inc. (Diversified) of Mineola, New York conducted a geophysical survey under supervision of a Langan field engineer on July 10, 2012. Diversified utilized ground penetrating radar (GPR) and electromagnetic detection equipment to survey potential UST locations as identified by previous investigation and to identify buried utilities or other subsurface structures at the investigation boring and soil probe locations. No USTs were located and no obstructions were encountered at the boring or soil probe locations. A copy of the Geophysical Report is provided as Appendix C.

### **4.2 Soil Investigation**

#### Drilling Procedures

Between July 10 and 18, 2012, 6 soil borings were completed at the Site by Aquifer Drilling & Testing, Inc. (ADT) of Mineola, New York under the supervision of a Langan field engineer. Four of the borings, LB-1 through LB-4, were advanced to the west of the Amtrak Easement and to collect environmental and geotechnical information using a truck-mounted drill rig via the mud-rotary method. The remaining 2 environmental soil borings, LB-5 and LB-6, were advanced east of the Amtrak Easement using a hollow-stem auger rig and a Geoprobe® via the hydraulic-push method, respectively. Soil boring LB-5 was advanced off Site in the West End Avenue sidewalk adjacent to the Site. Borings LB-1 through LB-4 were advanced approximately 10 feet into bedrock to depths ranging from 37 to 47 ft bgs and Borings LB-5 and LB-6 terminated in the overburden at approximately 20 ft bgs. Soil boring locations are presented on Figure 3.

Soil samples were collected continuously to bedrock in a 2-foot split spoon sampler from borings LB-1 through LB-5, and to completion depth in 5-foot macrocore<sup>®</sup> sample barrels with dedicated acetate liners from boring LB-6. Soil samples were inspected for visual and olfactory evidence of contamination and screened for VOCs with a photoionization detector (PID) equipped with a 10.6 electron volt (eV) lamp. Field observations were documented in boring logs that are presented in Appendix D. A summary of soil boring information is included in Table 1.

#### Soil Observations

Soils at the Site are generally composed of historic urban fill material consisting of black to brown sand with silt and gravel, and some brick, wood and weathered mica schist rock fragments. The fill material was underlain by native sand, silt, and gravel deposits followed by bedrock. No visual, olfactory or instrumental (PID) evidence of environmental impacts was observed in soil during drilling activities. Bedrock, consisting of mica schist and pegmatite, was encountered between 27 and 37 ft bgs west of the Amtrak Easement.

### **4.3 Groundwater Investigation**

#### Monitoring Well Construction

Five of the 6 soil borings (LB-1, LB-2, LB-4, LB-5, and LB-5) were converted into groundwater monitoring wells; however, following installation, LB-4 did not produce enough water to sample. Monitoring wells installed in borings LB-1 through LB-5 were constructed with 10- to 20-foot lengths of slotted, 2-inch diameter, Schedule 40 polyvinyl chloride (PVC) screen, with attached solid riser pipe to grade. The groundwater monitoring well installed at boring LB-6 was constructed with a 20-foot length of slotted, 1-inch diameter, Schedule 40 PVC screen, with attached solid riser pipe to grade. Based on field observations of soil saturation, screened interval were placed at depths thought to include the interval straddling the observed groundwater table. Clean sand (Morie #2) was used to fill the annulus around the well screen to approximately 2 to 7 feet above the top of the screened interval. A minimum 2-foot hydrated bentonite clay layer was placed above the sand pack to seal the well. The remainder of the annular space was filled with sand and soil cuttings to just below grade. Well construction was completed with a flush-mount, protective steel manhole cover at all well locations with the exception of LB-6, which was constructed as a PVC stick-up well with a tight-fitting cap. Following installation, the wells were developed by purging a minimum of 3 well volumes using a peristaltic pump.

#### Groundwater Elevation Survey

The top of each PVC well casing was surveyed by Langan on July 27, 2011. Langan completed a synoptic groundwater level gauging event on August 9, 2012. Groundwater levels were

measured using an oil/water interface probe, recorded in a field log, and compared to top-of-casing elevations to calculate groundwater elevation and determine flow direction at the Site.

#### Groundwater Observations

Groundwater was observed during drilling activities at approximately 13 ft bgs west of the Amtrak Easement (LB-1 through LB-4) and approximately 16 to 19 ft bgs east of the Amtrak Easement (LB-5 and LB-6). No sheen or evidence of free product was observed during gauging and sampling activities. An organic odor and headspace PID reading of 10.7 ppm were detected at boring location LB-6. A summary of monitoring well construction is presented in Table 1. Groundwater monitoring well locations are shown on Figure 3. Well construction logs and groundwater sampling logs are included as Appendix E and F, respectively.

#### **4.4 Soil Vapor Investigation**

Two soil vapor samples and one ambient air sample were collected for laboratory analysis during this RI. Soil vapor points, SG-1 and SG-2, were advanced with a Geoprobe® to 8 and 12 ft bgs, respectively. The points were constructed with double woven stainless steel soil vapor sampling mesh attached to polyethylene tubing. Approximately 2 ft of clean sand (Morie #1) filter pack was installed around the screen implant by pouring the material into the annulus. The remaining annular space was backfilled to grade with hydrated bentonite. Soil vapor and ambient air sampling locations are shown in Figure 2.

#### **4.5 Sample collection and Chemical Analysis**

Soil, groundwater and soil vapor samples were collected throughout the Site to supplement existing data in order to evaluate environmental conditions related to the AOCs. Discrete (grab) samples have been used to delineate the nature and extent of environmental impacts and to determine the impact of contaminants on public health and the environment. The sampling performed and presented in this RIR provides sufficient basis for evaluation of remedial action alternatives, establishment of a qualitative human health exposure assessment, and selection of a final remedy.

#### Soil Sampling Procedures

A total of 18 soil samples were collected and submitted for laboratory analysis during the RI between July 10 and 18, 2012. Three grab soil samples were collected from each boring location to represent (1) the surficial 2 to 3 feet, (2) the most impacted interval as determined by visual, olfactory and instrumental (PID) observations, and (3) the anticipated approximate base of the proposed development excavation cut. One duplicate soil sample was collected from soil boring LB-6 from the 14 to 15 ft interval.

Soil samples were collected into pre-cleaned laboratory-supplied glassware and placed in a laboratory-supplied cooler, packed with ice (to maintain a temperature of 4°C). The coolers were picked up at the end of each day by a laboratory courier and transported under standard chain-of-custody protocol to Alpha Analytical, Inc. (Alpha); a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP) certified laboratory in Westborough, MA.

Soil samples were analyzed for TCL VOCs via U.S. Environmental Protection Agency (EPA) Method 8260, TCL SVOCs via EPA Method 8270, TAL metals via EPA 6000/7000 Series Methods, PCBs via EPA Method 8082, pesticides via EPA Method 8081 and herbicides via EPA Method 8151.

Soil sampling locations are shown on Figure 3 and 8 and a summary of soil samples and analyses is provided in Table 2.

#### Groundwater Sampling Procedures

On July 18 and 19, 2012, groundwater samples were collected from monitoring wells LB-1, LB-2, LB-5 and LB-6 and a duplicate sample was collected from LB-1. Monitoring well LB-4 did not contain sufficient groundwater for sample collection. The wells were purged and sampled at least 24 hours after development.

Prior to sampling, the static water level was measured to the nearest 0.01 ft with a decontaminated oil/water interface probe. A minimum of 3 volumes were purged from each monitoring well location using a peristaltic pump prior to sampling. The pump was fitted with dedicated, disposable polyethylene tubing prior to sample collection. Purging rates were maintained at less than 0.5 liters per minute in order to minimize drawdown and sample turbidity. During purging and sampling, monitoring well effluent was pumped into a flow-through cell with a Horiba U-52 water quality monitoring probe attached. The Horiba U-52 was used to monitor the purge water for hydrogen ion concentration (pH), oxidation/reduction potential, conductivity, temperature, dissolved oxygen, and turbidity. Groundwater samples were collected once the parameters had stabilized to approximately 10 percent of their respective values, and the turbidity was below 50 nephelometric turbidity units (NTU) except at monitoring well LB-5, where groundwater recharge was poor.

Groundwater samples were collected directly from the discharge line into pre-cleaned, laboratory-provided containers. The sample containers were labeled, placed in a laboratory-supplied cooler, packed with ice to maintain a temperature of 4°C, and transported by a laboratory courier to Alpha under chain of custody protocol for analysis of TCL VOCs via EPA Method 8260 and SVOCs via EPA Method 8270, TAL metals via EPA 6000/7000 Series Methods (filtered and unfiltered), and PCBs via EPA Method 8082. Groundwater sampling

locations are shown on Figures 2 and 9 and a summary of groundwater samples and analyses is provided in Table 2. Groundwater sampling logs are provided in Appendix F.

#### Soil Vapor and Ambient Air Sampling

Following soil vapor sample point construction, a PID (which pumps air at approximately 0.2 liters per minute) was attached to the polyethylene tubing and a minimum of three times the tubing and screen setup volume was purged. The purged soil vapor was also monitored with the PID and the value was recorded. Soil vapor and ambient air samples were collected in laboratory-cleaned and certified evacuated 1 liter stainless steel summa canisters with regulators that were supplied by Alpha. As a quality assurance/quality control (QA/QC) measure, an inert tracer gas (helium) test was completed to document that the soil vapor sampling points were properly sealed, thereby preventing subsurface infiltration of ambient air. Each Summa canister arrived from the lab with approximately 28 to 30 inches of mercury vacuum. Sampling was started by opening the canister valves. Soil vapor samples were collected over an approximately 1 hour period and the ambient sample was collected over an approximately 6 hour period. The samples were transported by laboratory courier to Alpha for analysis of VOCs via EPA Method TO-15 and methane.

Soil vapor sampling locations are shown in Figure 2 and 10. Soil vapor sample collection data is summarized in Table 2. The soil vapor sampling log is included in Appendix G. Methodologies used for soil vapor assessment conform to the NYSDOH Final Guidance on Soil Vapor Intrusion, October 2006.

#### Quality Control Sampling

During the RI, field blanks, trip blanks, and coded field duplicate samples, and an ambient air sample were collected and submitted for laboratory analysis for quality assurance/quality control (QA/QC). During the course of the investigation, the following quality control samples were collected:

##### Soil samples:

- One coded field duplicate sample;
- One field blank sample;
- One trip blank sample (submitted with the field blank).

##### Groundwater samples:

- One coded field duplicate sample;
- One field blank sample; and
- Two trip blank samples (one submitted with each groundwater submittal).

Soil vapor samples:

- One ambient air sample.

Chemical Analysis

Laboratory analytical work presented in this RIR has been performed as summarized in the table below. Laboratory analytical results for soil, groundwater and soil vapor are summarized in Tables 4, 5 and 6, respectively. Laboratory analytical results for QA/QC trip and field blank samples are summarized in Table 7. Alpha’s current ELAP certification is provided in Appendix H and completed laboratory analytical reports for all samples evaluated in this RIR are provided in digital form in Appendix I.

<b>Factor</b>	<b>Description</b>
Quality Assurance Officer	The chemical analytical quality assurance is directed by Stuart Knoop.
Chemical Analytical Laboratory	Chemical analytical laboratory(s) used in the RI is NYS ELAP certified and was Alpha Analytical, Inc.
Chemical Analytical Methods	<p>Soil analytical methods:</p> <ul style="list-style-type: none"> <li>• TAL Metals by EPA Method 6010C (rev. 2007);</li> <li>• VOCs by EPA Method 8260C (rev. 2006);</li> <li>• SVOCs by EPA Method 8270D (rev. 2007);</li> <li>• Pesticides by EPA Method 8081B (rev. 2000);</li> <li>• Herbicides by EPA Method 8151A (update 3 of SW846, 1997)</li> <li>• PCBs by EPA Method 8082A (rev. 2000);</li> </ul> <p>Groundwater analytical methods:</p> <ul style="list-style-type: none"> <li>• TAL Metals by EPA Method 6010C (rev. 2007);</li> <li>• VOCs by EPA Method 8260C (rev. 2006);</li> <li>• SVOCs by EPA Method 8270D (rev. 2007);</li> <li>• Pesticides by EPA Method 8081B (rev. 2000);</li> <li>• PCBs by EPA Method 8082A (rev. 2000);</li> </ul> <p>Soil vapor and ambient air analytical methods:</p> <ul style="list-style-type: none"> <li>• VOCs by TO-15 VOC parameters.</li> <li>• Methane by Method 51, 3C</li> </ul> <p>Field blank and trip blank analytical methods:</p> <ul style="list-style-type: none"> <li>• VOCs by EP Method 8260C (rev. 2006)</li> </ul>

## **5.0 ENVIRONMENTAL EVALUATION**

### **5.1 Geological and Hydrological Conditions**

According to United States Geologic Survey (USGS) maps and historic topographic maps, New York City geology is generally characterized by layers of fill and native soil overburden underlain by metamorphic bedrock. The native overburden was generally deposited during the last continental glaciation. The overburden generally consists of glacial till and outwash predominantly in inland areas, and riverine deposits (peat, organic silt and clay) along the shorelines that have been filled in over time. Three formations of metamorphic rock, the Manhattan Schist, the Inwood Marble, and the Fordham Gneiss, are commonly found in New York City.

Beneath the ground surface, water (“groundwater”) is contained within the unconsolidated geologic materials and fractured bedrock. The upper surface of the groundwater reservoir is marked by the water table surface, which fluctuates seasonally, in response to precipitation events and tides (along shorelines). The overburden deposits typical to the project area can have low to moderate hydraulic conductivities. The bedrock is relatively impermeable except where concentrations of fractures, faults or joints are present. Preferential flow occurs through the more permeable zones of the overburden, such as individual sand or gravel layers, and through bedrock fractures and joints. Groundwater flow in an urban setting can be interrupted by the presence of pumping stations, building foundations, utilities, retaining walls, or other buried structures.

#### Stratigraphy

The generalized stratigraphy underlying the Site is composed of a surficial layer of historic fill overlying natural sand, clay and gravel deposits followed by bedrock; except at LB-1 in the southwest portion of the Site, where the fill layer was found directly overlying bedrock. The surficial fill layer ranges in thickness from approximately 15 to 32 ft and predominately comprises black to brown, sand containing some gravel, brick, wood, silt, and pieces of decomposed mica schist. The native overburden layer ranges in thickness from approximately 6 to 12 ft thick in the northern and central portions of the Site. Bedrock was encountered at depths ranging from 27 to 37 ft bgs west of the Amtrak Easement mainly consisting of dark grey mica schist. Pink-grey crystalline bedrock (potentially granite pegmatite or granitoid) was observed at LB-2 in the northwest portion of the Site. Bedrock was not observed on the east side of the Amtrak Easement as those boring only extended to approximately 20 ft bgs. There were no elevated PID readings and no visual or olfactory evidence of petroleum impacts observed in Site soils during the RI.

## Hydrogeology

Groundwater underlying the Site ranged from approximately 9 to 16 ft below the current site grade (approximately el 1.5 to el 8.1) based on a synoptic gauging event of five site wells on August 9, 2012. Groundwater elevation data recorded during the RI are summarized in Table 3. A groundwater elevation iso-contour map, based on representative groundwater elevations recorded from Site monitoring wells, is provided as Figure 7. Regional topography and RI groundwater elevation data indicates that the groundwater flow at the Site is in a southwesterly direction towards the Hudson River. No sheen or evidence of free product was observed during gauging and sampling activities. An organic odor and headspace PID reading of 10.7 ppm were detected at boring location LB-6.

## **5.2 Soil Chemistry**

Eighteen soil samples were collected and analyzed for VOCs, SVOCs, metals, pesticides, herbicides and PCBs during the RI. A summary of soil sample laboratory detections, collected during the RI, with comparison to the Unrestricted Use Track 1 SCOs is provided in Table 4. Complete laboratory analytical reports are provided in Appendix I. Soil SCO exceedances are shown on Figure 8. Data collected during the RI is sufficient to delineate the vertical and horizontal distribution of contaminants in soil/fill at the Site. The following is a summary of SCO exceedances organized by analytical parameter.

VOCs – One or more VOCs were detected in 12 of 18 soil samples collected; however, no VOCs exceeded the Track 1 Unrestricted SCOs.

SVOCs – PAH SVOC exceedances were reported at 2 of 6 soil boring locations, LB-1 and LB-3, in the southern portion of the Site. Six or more SVOCs were reported at concentrations exceeding Track 1 Unrestricted Use SCOs in surficial fill material collected from the 1-to-2 foot interval at both locations including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, indeno(1,2,3-cd)pyrene, and dibenzo(a,h)anthracene (LB-1 only). Additionally, indeno(1,2,3-cd)pyrene and 3-methylphenol/4-methylphenol were reported as the sole exceedances in samples collected from the 9-to-11 foot and 11-to-13 foot intervals of LB-1, respectively.

Borings with SVOCs exceedances are located in the southern portion of the Site, west of the Amtrak Easement. Total SVOCs ranged from 12.15 mg/kg and 12.1 mg/kg in the 1-to-2 foot intervals of borings LB-1 and LB-3 to non-detect at multiple locations and depth intervals. The distribution of SVOC exceedances with the largest quantity of exceedances near to the surface may indicate the impacts are the result of historic on-site operations in the southern portion of the Site and/or historic fill.

Metals– Metal exceedances were reported throughout the Site in all 6 soil boring locations at one or more sample collection depth interval. Metals that exceed Track 1 Unrestricted SCOs are: arsenic (18 mg/kg), copper (ranging from 55 to 360 mg/kg), lead (ranging from 68 mg/kg to 570 mg/kg), mercury (ranging from 0.54 mg/kg to 9.5 mg/kg), nickel (41mg/kg), and zinc (ranging from 120 mg/kg to 430 mg/kg). Metal exceedances by location and depth range are summarized in the table below:

Analyte	LB-1			LB-2			LB-3			LB-4			LB-5			LB-6		
	1-2	9-11	11-13	1-3	7-9	9-13	1-2	5-6	9-11	1-2	7-8	11-12	1-2	10-12	17-19	1-2	8-10	14-15
Arsenic	X																	
Copper	X	X				X	X				X							
Lead	X	X		X			X			X	X	X				X	X	X*
Mercury	X	X	X				X	X		X	X							X*
Nickel						X												
Zinc	X	X				X	X	X		X	X	X					X	

\* = An exceedances was reported for the duplicate, but not in the parent sample.

Track 1 Unrestricted Use Metal SCO exceedances appear to be distributed throughout the Site at varying depth intervals at concentrations typical of fill material in New York City and are likely associated with the quality of the fill at the Site.

Pesticides – Track 1 Unrestricted Use exceedances were reported in one sample collection interval at 2 soil boring locations, LB-3 (1 to 2 ft) and LB-4 (11 to 12 ft) in the central portion of the Site. The exceeding analytes were 4,4'-DDD (LB-4 only) at a concentration of 0.00415 mg/kg and 4,4'-DDT at concentrations of 0.0214 and 0.00752 mg/kg at LB-3 and LB-4 respectively.

The distribution of pesticide exceedances with Track 1 exceedances limited to the central portion of the Site may indicate the impacts are the result of historic on-site operations; however the variation in depth interval suggests that the pesticides are attributed to historic fill quality areas.

Herbicides – Herbicides were not detected in any of the 18 samples analyzed.

PCBs – PCBs were detected in samples collected from soil borings LB-3 (1 to 2 ft) and LB-4 (11 to 12 ft); however, there were no PCB Track 1 Unrestricted Use SCO exceedances.

### 5.3 Groundwater Chemistry

Four groundwater samples were analyzed for VOCs, SVOCs, metals (filtered and unfiltered) and PCBs during the RI. A summary of the RI groundwater sample laboratory detections is presented in Table 5. Groundwater sample locations and exceedances are presented in

Figure 9. Complete laboratory analytical reports are provided in Appendix I. Data collected during the RI is sufficient to delineate the distribution of contaminants in groundwater at the Site. The following is a summary of New York State 6NYCRR Part 703.5 New York State Department of Conservation Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS) for Class GA groundwater exceedances organized by analytical parameter.

VOCs - Several VOCs were detected at one monitoring well location, LB-6. Laboratory analysis reported one analyte, isopropylbenzene (15 ug/L), in exceedance of the AWQS. Isopropylbenzene, more commonly known as cumene, is a constituent of crude oil and refined fuels. Considering the groundwater flow direction and the lack of VOCs in Site soils, the presence of isopropylbenzene in groundwater at LB-6, which is located near the site boundary in the northeast corner of the Site, may indicate an up-gradient groundwater condition.

SVOCs - One SVOC, acenaphthene, was detected at a marginal level (0.41 ug/L) in monitoring well LB-6; however no SVOCs were detected above the AWQS.

Metals - Metal exceedances were reported throughout the Site in all 4 monitoring well locations sampled during this investigation. Metals were analyzed for both total metals and dissolved metals. Metals that exceeded the AWQS were: antimony (unfiltered only) ranging from 3.3 to 4.4 µg/L, iron ranging from 570 to 886 µg/L in filtered samples and 2,530 to 17,100 µg/L in unfiltered samples, lead (unfiltered LB-1 duplicate only) at 96.3 µg/L, manganese ranging from 336.5 to 2,232 µg/L in filtered samples and 568 to 2,027 µg/L in unfiltered, and sodium ranging from 57,600 to 220,000 µg/L in filtered samples and 66,700 to 213,000 µg/L in unfiltered samples. Metal exceedances are summarized in the tables below:

Analyte	LB-1	LB-2	LB-5	LB-6
Antimony	X*	X	X	X
Iron	<b>X</b>	<b>X</b>		X
Lead	X*			
Manganese	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Sodium	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>

Plain Text = Unfiltered metal AWQS exceedances.

**Bold** = Filtered and unfiltered metal AWQS exceedances.

\* = An exceedances was reported for the duplicate, but not in the parent sample.

Metal AWQS exceedances, although generally lower in the filtered samples, are distributed throughout groundwater at the Site are likely associated with the dissolved naturally occurring mineral constituents from regional soil or quality of the fill material. Dissolved sodium levels were found to be particularly elevated, but can be attributed to possible seawater intrusion or road salting, as sodium is a salinity indicator.

PCB - PCBs were not detected in groundwater.

#### 5.4 Soil Vapor Chemistry

Two soil vapor samples were collected during the RI. A summary of soil vapor and ambient air analytical results are presented in Table 6. Soil vapor sample locations and results are presented in Figure 10. Soil vapor analytical results were compared to NYSDOH Final Guidance on Soil Vapor Intrusion (October 2006) values (AGVs), NYSDOH Fuel Oil Indoor Air Upper Fence Values, U.S. EPA 2001 Base Database: 90<sup>th</sup> Percentile Values for Indoor Air, and the HEI 2005 95<sup>th</sup> Percentile Values for Indoor Air; however, there is currently no regulatory criteria established by which to determine exceedances. There were no VOC concentrations elevated above the NYSDOH AGVs. Data collected during the RI and Langan's April 2012 VIPA is sufficient to delineate the distribution of contaminants in soil vapor at the Site.

VOCs detected in the soil vapor samples included:

- 1,2,4-Trimethylbenzene
- 1,3-Butadiene
- 2-Butanone (MEK)
- 2-Hexanone (MBK)
- Acetone
- Benzene
- Carbon disulfide
- Cyclohexane
- Ethanol
- Isopropanol
- m,p-Xylene
- M-Hexane
- o-Xylene
- Propylene
- Tetrachloroethene
- Toluene

Total soil vapor VOCs ranged from 3,271.39  $\mu\text{g}/\text{m}^3$  at SG-1 to 2,618.36  $\mu\text{g}/\text{m}^3$  at SG-2. The total VOCs detected in the ambient air sample was 47.85  $\mu\text{g}/\text{m}^3$  including four analytes, Freon 11, Freon 12 and Freon 13 and chloromethane, which were not detected in the soil vapor samples. Methane was not detected at either soil vapor sampling location. Considering no soil VOC exceedances of the SCOs were reported at the Site, the soil vapor impacts are likely related to an unknown off-site source.

#### 5.5 Quality Control Samples

Duplicate soil and groundwater sample analytical results are included with their parent samples in Tables 4 and 5, respectively and the ambient air analytical results are shown with soil vapor in Table 6. Trip blank and field blank analytical results are summarized in Table 7. Two metal exceedances were reported in both the duplicate soil and groundwater sample; however, due to the site-wide distribution of metals in soil and groundwater and the highly heterogenic nature of fill material this does not significantly impact the finding of the RI.

## **5.6 Prior Activity**

Based on an evaluation of the data and information from the RIR, disposal of significant amounts of hazardous waste is not suspected at this site.

## **5.7 Impediments to Remedial Action**

There are no known impediments to remedial action at this property.

# TABLES

**Table 1. Soil Boring and Monitoring Well Construction Detail Summary**  
**Riverside Center - Building 2**  
**17-29 West End Ave, New York, New York**  
**Langan Project No. 170201301**

Location Identification Number	Date of Completion/Construction	Well Status	Total Depth (ft)	Diameter (in)	Approximate Ground Surface Elevation (BPMD)	Screened Interval (ft)	Construction Material	Approximate Latitude/Longitude Coordinates (Decimal Degrees)
<b>Soil Borings</b>								
LB-1	7/16/2012	NA	45	2	14.91	NA	NA	40.772831°/-73.991024°
LB-2	7/11/2012	NA	37	2	13.77	NA	NA	40.773162°/-73.990611°
LB-3	7/12/2012	NA	39	2	20.0	NA	NA	40.772933°/-73.990453°
LB-4	7/13/2012	NA	47	2	17.09	NA	NA	40.772579°/-73.990603°
LB-5	7/18/2012	NA	21	2	24.47	NA	NA	40.772482°/-73.990037°
LB-6	7/17/2012	NA	20	2	24.3	NA	NA	40.77286°/-73.989817°
<b>Monitoring Wells</b>								
LB/MW-1	7/16/2012	Permanent	24.5	2	14.91	4.5 to 24.5	2" PVC	40.772831°/-73.991024°
LB/MW-2	7/11/2012	Permanent	18	2	13.77	8 to 18	2" PVC	40.773162°/-73.990611°
LB/MW-4	7/13/2012	Permanent	14.8	2	17.09	4.8 to 14.8	2" PVC	40.772579°/-73.990603°
LB/MW-5	7/18/2012	Permanent	21	2	24.47	10 to 21	2" PVC	40.772482°/-73.990037°
LB/MW-6	7/17/2012	Permanent	20	1	24.3	10 to 20	1" PVC	40.77286°/-73.989817°

Notes:

- 1.) NA = Not Applicable
- 2.) PVC = Polychlorinated Vinyl
- 3.) BPMD = Borough President Of Manhattan Datum

**Table 2. Remedial Investigation Sample Summary**  
**Riverside Center - Building 2**  
**17-29 West End Avenue, New York, New York**  
**Langan Project No. 170201301**

Sample ID	Location ID	Location Description	Date	Sample Material Type	Sample Depth Interval (ft bgs)	Sample Analysis
<b>SOIL SAMPLES</b>						
LB-1 (1-2)	LB-1	Southwest Portion of Site (West of Amtrak Easement)	7/16/2012	Fill Material	1.0 to 2.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-1 (9-11)				Fill Material	9.0 to 11.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-1 (11-13)				Fill Material	11.0 to 13.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-2 (1-3)	LB-2	Northwest Portion of Site (West of Amtrak Easement)	7/10/2012	Fill Material	1.0 to 3.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-2 (7-9)				Fill Material	7.0 to 9.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-2 (9-13)				Fill Material	9.0 to 13.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-3 (1-2)	LB-3	Southern Portion of Site (West of Amtrak Easement)	7/11/2012	Fill Material	1.0 to 2.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-3 (5-6)				Fill Material	5.0 to 6.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-3 (9-11)				Fill Material	9.0 to 13.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-4 (1-2)	LB-4	Northcentral Portion of Site (West of Amtrak Easement)	7/12/2012	Fill Material	1.0 to 2.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-4 (7-8)				Fill Material	7.0 to 8.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-4 (11-12)				Fill Material	11.0 to 12.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-5 (1-2)	LB-5	Southeast Portion of Site (East of Amtrak Easement)	7/18/2012	Fill Material	1.0 to 2.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-5 (10-12)				Fill Material	10.0 to 12.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-5 (17-19)				Fill Material	17.0 to 19.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-6 (1-2)	LB-6	Northeast Portion of Site (East of Amtrak Easement)	7/17/2012	Fill Material	1.0 to 2.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-6 (8-10)				Fill Material	8.0 to 10.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
LB-6 (14-15)				Fill Material	14.0 to 15.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
<b>GROUNDWATER SAMPLES</b>						
LB/MW-1	LB/MW-1	Southwest Portion of Site (West of Amtrak Easement)	7/18/2012	Groundwater	NA	VOCs, SVOCs, TAL Metals, PCBs
LB/MW-2	LB/MW-2	Northwest Portion of Site (West of Amtrak Easement)	7/19/2012	Groundwater	NA	VOCs, SVOCs, TAL Metals, PCBs
LB/MW-5	LB/MW-4	Southeast Portion of Site (East of Amtrak Easement)	7/19/2012	Groundwater	NA	VOCs, SVOCs, TAL Metals, PCBs
LB/MW-6	LB/MW-5	Northeast Portion of Site (East of Amtrak Easement)	7/19/2012	Groundwater	NA	VOCs, SVOCs, TAL Metals, PCBs
<b>SOIL VAPOR SAMPLES</b>						
SG-1	SG-1	Northwest Portion of Site (West of Amtrak Easement)	7/17/2012	Soil Vapor	8.0	VOCs by EPA Method TO-15 and Methane
SG-2	SG-2	Southcentral Portion of Site (West of Amtrak Easement)	7/17/2012	Soil Vapor	12.0	VOCs by EPA Method TO-15 and Methane
<b>QA/QC SAMPLES</b>						
DUP#1 (Soil)	LB-6	Northeast Portion of Site (East of Amtrak Easement)	7/17/2012	Fill Material	14.0 to 15.0	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
DUP#1 (Groundwater)	LB/MW-1	Northwest Portion of Site (West of Amtrak Easement)	7/18/2012	Groundwater	NA	VOCs, SVOCs, TAL Metals, PCBs
Field Blank #1	NA	NA	7/10/2012	Water	NA	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
Field Blank #2	NA	NA	7/17/2012	Water	NA	VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Herbicides
Trip Blank #1	NA	NA	7/18/2012	Water	NA	VOCs
Trip Blank #2	NA	NA	7/19/2012	Water	NA	VOCs

Notes:

1. VOCs = Volatile organic compound.
2. SVOCs = Semi-volatile organic compound.
3. PCBs = Polychlorinated biphenyl.
4. NA = Not Applicable

**Table 3.  
Groundwater Elevation Summary  
17 - 29 West End Ave  
New York, New York  
Langan Project No. 170201301**

<b>Well Location</b>	<b>PVC Elevation (BPMD)</b>	<b>Screened Interval (ft bgs)</b>	<b>Total Depth (ft bgs)</b>	<b>Date Gauged</b>	<b>Time Gauged</b>	<b>Depth to Groundwater (ft bgs)</b>	<b>Groundwater Elevation (ft)</b>
MW-LB1	14.41	4.5 - 24.5	24.5	8/9/2012	13:20	12.95	1.5
MW-LB2	13.44	8 - 18	18.0	8/9/2012	13:07	9.95	3.5
MW-LB4	16.82	4.8 - 14.8	14.8	8/9/2012	13:12	14.37	2.5
MW-LB5	23.72	10.6 - 20.6	20.6	8/9/2012	13:32	19.14	4.6
MW-LB6	27.28	10 - 20	19.3	8/9/2012	12:38	19.20	8.1

Notes:

- 1.) BPMD - Borough President Manhattan Datum
- 2.) Monitoring well MW-LB-4 did not contain water following installation during 3 gauging attempts between July 13 and July 19, 2012.

**Table 4.**  
**Soil Sample Detection Summary**  
**Riverside Center Building 2**  
**17-29 West End Avenue**  
**New York, New York**  
**Langran Project No. 170201301**

LOCATION SAMPLING DATE LAB SAMPLE ID	NYSDEC PART 375 UNRESTRICTED SCOs	DUPLICATE																		
		LB-1 (MW) 1'-2' 7/16/2012 L1212729-01	LB-1 (MW) 9'-11' 7/16/2012 L1212729-02	LB-1 (MW) 11'-13' 7/16/2012 L1212729-03	LB2-1'-3' 7/10/2012 L1212237-02	LB2-7'-9' 7/10/2012 L1212237-03	LB2-9'-13' 7/10/2012 L1212237-04	LB3-1'-2' 7/11/2012 L1212547-01	LB3-5'-6' 7/11/2012 L1212547-02	LB3-9'-11' 7/12/2012 L1212547-03	LB4(MW)-1'-2' 7/12/2012 L1212547-04	LB4(MW)-7'-8' 7/12/2012 L1212547-05	LB4(MW)-11'-12' 7/12/2012 L1212547-06	LB5(MW)1-2 7/18/2012 L1212835-04	LB5(MW)10-12 7/18/2012 L1212835-05	LB5(MW)17-19 7/18/2012 L1212835-06	LB-6 (MW) 1-2 7/17/2012 L1212729-05	LB-6 (MW) 8-10 7/17/2012 L1212729-06	LB-6 (MW) 14-15 7/17/2012 L1212729-07	DUP#1 7/17/2012 L1212729-08
<b>General Chemistry</b>																				
Solids, Total		77	67	85	78	89	76	85	83	81	81	84	75	89	92	86	92	85	90	82
<b>Volatile Organics (mg/kg)</b>																				
Methylene chloride	0.05	0.032 U	0.037 U	0.029 U	0.032 U	0.028 U	0.033 U	0.0066 J	0.0039 J	0.0033 J	0.0048 J	0.0039 J	0.005 J	0.0043 J	0.027 U	0.029 U	0.027 U	0.0025 J	0.028 U	0.03 U
Chloroform	0.37	0.001 J	0.0083 U	0.0044 U	0.0048 U	0.0042 U	0.0049 U	0.0044 U	0.0045 U	0.0046 U	0.0046 U	0.0045 U	0.005 U	0.0042 U	0.0041 U	0.0044 U	0.0041 U	0.0044 U	0.0042 U	0.0046 U
cis-1,2-Dichloroethene	0.25	0.0032 U	0.0037 U	0.0029 U	0.0032 U	0.0028 U	0.0033 U	0.0029 U	0.003 U	0.0031 U	0.0031 U	0.0031 U	0.003 U	0.0033 U	0.002 J	0.0018 J	0.0029 U	0.0027 U	0.0029 U	0.003 U
Acetone	0.05	0.032 U	0.037 U	0.029 U	0.032 U	0.028 U	0.015 J	0.029 U	0.03 U	0.031 U	0.031 U	0.03 U	0.033 U	0.028 U	0.027 U	0.029 U	0.027 U	0.029 U	0.028 U	0.03 U
1,2,3-Trichlorobenzene		0.016 U	0.019 U	0.015 U	0.016 U	0.014 U	0.016 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.017 U	0.0025 J	0.014 U	0.014 U	0.014 U	0.015 U	0.014 U	0.015 U
1,2,4-Trichlorobenzene		0.016 U	0.019 U	0.015 U	0.016 U	0.014 U	0.016 U	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	0.017 U	0.0022 J	0.014 U	0.014 U	0.014 U	0.015 U	0.014 U	0.015 U
<b>Semivolatile Organics (mg/kg)</b>																				
Acenaphthene	20	0.39	0.072 J	0.09 J	0.68 U	0.15 U	0.17 U	0.32	0.045 J	0.16 U	0.16 U	0.16 U	0.17 U	1.5 U	0.14 U	0.15 U	0.14 U	0.15 U	0.15 U	0.16 U
1,2,4-Trichlorobenzene	-	0.43 U	0.24 U	0.19 U	0.84 U	0.18 U	0.21 U	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	1.9 U	0.18 U	0.19 U	0.18 U	0.19 U	0.18 U	0.2 U
Hexachlorobenzene	0.33	0.26 U	0.14 U	0.12 U	0.57 U	0.11 U	0.13 U	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U	0.13 U	7.1 U	0.11 U	0.12 U	0.11 U	0.12 U	0.11 U	0.12 U
1,2-Dichlorobenzene	1.1	0.43 U	0.24 U	0.19 U	0.84 U	0.18 U	0.21 U	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	7.9 U	0.18 U	0.19 U	0.18 U	0.19 U	0.18 U	0.2 U
1,4-Dichlorobenzene	1.8	0.43 U	0.24 U	0.19 U	0.84 U	0.18 U	0.21 U	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	7.9 U	0.18 U	0.19 U	0.18 U	0.19 U	0.18 U	0.2 U
Fluoranthene	100	6.8	1.5	1.2	1.3	0.11 U	0.077 J	4.6	0.61	0.12 U	0.12 U	0.12 U	0.13 U	0.33 J	0.17	0.12 U	0.36	0.12 U	0.11 U	0.12 U
Naphthalene	12	0.25	0.24 U	0.16 J	0.84 U	0.18 U	0.21 U	0.17 J	0.14 J	0.2 U	0.2 U	0.2 U	0.22 U	1.9 U	0.18 U	0.19 U	0.18 U	0.19 U	0.18 U	0.2 U
Bis(2-Ethylhexyl)phthalate	-	0.18 J	0.2 J	0.19 U	0.5 J	0.18 U	0.17 J	0.44	0.2 U	0.29	0.14 J	0.14 J	0.067 J	1.9 U	0.18 U	0.19 U	0.18 U	0.19 U	0.18 U	0.2 U
Benzo(a)anthracene	1	<b>2.5</b>	0.73	0.59	0.59	0.11 U	0.13 U	<b>2</b>	0.25	0.12 U	0.12 U	0.12 U	0.13 U	1.1 U	0.085 J	0.12 U	0.16	0.12 U	0.11 U	0.12 U
Benzo(a)pyrene	1	<b>2.6</b>	0.69	0.51	0.51 J	0.15 U	0.17 U	<b>2.3</b>	0.26	0.16 U	0.16 U	0.16 U	0.17 U	1.5 U	0.1 J	0.15 U	0.15	0.15 U	0.15 U	0.16 U
Benzo(b)fluoranthene	1	<b>3.4</b>	0.95	0.65	0.58	0.11 U	0.13 U	<b>3.3</b>	0.28	0.12 U	0.12 U	0.12 U	0.13 U	1.1 U	0.13	0.12 U	0.18	0.12 U	0.11 U	0.12 U
Benzo(k)fluoranthene	0.8	<b>1.2</b>	0.31	0.22	0.21 J	0.11 U	0.13 U	<b>1.1</b>	0.1	0.12 U	0.12 U	0.12 U	0.13 U	1.1 U	0.047 J	0.12 U	0.072 J	0.12 U	0.11 U	0.12 U
Chrysene	1	<b>2.6</b>	0.75	0.59	0.6	0.11 U	0.041 J	<b>2.1</b>	0.25	0.12 U	0.12 U	0.12 U	0.13 U	1.1 U	0.099 J	0.12 U	0.16	0.12 U	0.11 U	0.12 U
Acenaphthylene	100	0.21 J	0.19 U	0.07 J	0.68 U	0.15 U	0.17 U	0.5	0.1 J	0.16 U	0.16 U	0.16 U	0.17 U	1.5 U	0.14 U	0.15 U	0.14 U	0.15 U	0.15 U	0.16 U
Anthracene	100	1.4	0.24	0.27	0.29 J	0.11 U	0.13 U	1.7	0.15	0.12 U	0.12 U	0.12 U	0.13 U	1.1 U	0.024 J	0.15 U	0.075 J	0.12 U	0.11 U	0.12 U
Benzo(ghi)perylene	100	1.7	0.41	0.24	0.31 J	0.15 U	0.17 U	1	0.13 J	0.16 U	0.16 U	0.16 U	0.17 U	1.5 U	0.076 J	0.15 U	0.079 J	0.15 U	0.15 U	0.16 U
Fluorene	30	0.39 J	0.24 U	0.12 J	0.84 U	0.18 U	0.21 U	0.46	0.083 J	0.2 U	0.2 U	0.2 U	0.22 U	1.9 U	0.18 U	0.19 U	0.338 J	0.19 U	0.18 U	0.2 U
Phenanthrene	100	5.2	1	0.81	1.2	0.11 U	0.084 J	3.8	0.7	0.12 U	0.12 U	0.12 U	0.13 U	1.1 U	0.11	0.12 U	0.32	0.12 U	0.11 U	0.12 U
Dibenzo(a,h)anthracene	0.33	<b>0.45</b>	0.11 J	0.081 J	0.57 U	0.11 U	0.13 U	0.27	0.12 U	0.12 U	0.12 U	0.12 U	0.13 U	1.1 U	0.11 U	0.12 U	0.11 U	0.12 U	0.11 U	0.12 U
Indeno(1,2,3-cd)Pyrene	0.5	<b>2</b>	<b>0.5</b>	0.31	0.31 J	0.15 U	0.17 U	<b>1.3</b>	0.15 J	0.16 U	0.16 U	0.16 U	0.17 U	1.5 U	0.082 J	0.15 U	0.088 J	0.15 U	0.15 U	0.16 U
Pyrene	100	5.8	1.4	1	1.4	0.11 U	0.078 J	4.2	0.61	0.12 U	0.12 U	0.12 U	0.13 U	1.1 U	0.18	0.12 U	0.3	0.12 U	0.11 U	0.12 U
Dibenzofuran	7	0.26 J	0.24 U	0.12 J	0.84 U	0.18 U	0.21 U	0.28	0.054 J	0.2 U	0.2 U	0.2 U	0.22 U	1.9 U	0.18 U	0.19 U	0.18 U	0.19 U	0.18 U	0.2 U
2-Methylnaphthalene	-	0.52 U	0.29 U	0.23 U	1 U	0.22 U	0.26 U	0.15 J	0.24 U	0.24 U	0.24 U	0.24 U	0.26 U	2.2 U	0.21 U	0.23 U	0.21 U	0.23 U	0.22 U	0.24 U
Pentachlorophenol	0.8	0.34 U	0.19 U	0.16 U	0.68 U	0.15 U	0.17 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.17 U	1.5 U	0.14 U	0.15 U	0.14 U	0.15 U	0.15 U	0.16 U
Phenol	0.33	0.43 U	0.24 U	0.19 U	0.64 U	0.18 U	0.21 U	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	1.9 U	0.18 U	0.19 U	0.18 U	0.19 U	0.18 U	0.2 U
2-Methylphenol	0.33	0.43 U	0.24 U	0.19 U	0.84 U	0.18 U	0.21 U	0.19 U	0.2 U	0.2 U	0.2 U	0.2 U	0.22 U	1.9 U	0.18 U	0.19 U	0.18 U	0.19 U	0.18 U	0.2 U
3-Methylphenol/4-Methylphenol	0.33	0.62 U	0.35 U	<b>0.61</b>	1.2	0.26 U	0.31 U	0.28 U	0.29 U	0.29 U	0.29 U	0.29 U	0.31 U	2.7 U	0.26 U	0.28 U	0.26 U	0.28 U	0.26 U	0.28 U
Carbazole	-	0.24 J	0.073 J	0.076 J	0.84 U	0.18 U	0.21 U	0.44	0.056 J	0.2 U	0.2 U	0.2 U	0.22 U	1.9 U	0.18 U	0.19 U	0.036 J	0.19 U	0.18 U	0.2 U
<b>Total Metals (mg/kg)</b>																				
Aluminum, Total	-	6000	5100	7900	11000	6800	26000	4900 R1	8000 R1	13000 R1	5500 R1	6600 R1	8800 R1	5000	7600	10000	9000	8900	9700	8500
Antimony, Total	-	5.2	7.8	2.1 J	2.9 J	1.6 J	5.4	3.7 J	2.4 J	2.6 J	1.3 J	2.7 J	0.85 J	4.1 U	4.5 U	2 J	1.5 J	4.1 J	1.6 J	1.6 J
Arsenic, Total	13	<b>18</b>	7.6	1.3	6.4	1.7	3	9.4	2.4	1.2	1.3	6	11	6.9	2.8	2.4	4.2	12	2.7	3.9
Barium, Total	350	190	130	53	85	31	270	110	45	57	17	56	300	100	52	120	74	130	50	120
Beryllium, Total	7.2	0.41 J	0.25 J	0.64	0.57	0.18 J	0.48 J	0.34 J	0.34 J	0.46 J	0.22 J	0.3 J	0.54 J	0.34 J	0.36 J	0.76	0.42	0.47	0.42 J	0.42 J
Cadmium, Total	2.5	0.6 J	0.14 J	0.94 U	0.2 J	0.86 U	0.14 J	1.6	0.42 J	0.97 U	0.94 U	0.19 J	1 U	0.87	0.3 J	0.33 J	0.16 J	0.07 J	0.07 J	0.95 U
Calcium, Total	-	6400	13000	2000	22000	5000	2600	13000	1300	1400	1700	2300	3400	100000	4300	3000	9100	4000	2200	4300
Chromium, Total	-	25	12	25	34	9.3	47	20	12	17	10	15	10	16	13	20	17	12	19	11
Cobalt, Total	-	7.5	5.1	7.4	3.9	4.4	20	4.3	4.9	6.2	4.3	6.2	8	5.2	5.8	7.8	7.2	6.1	6.7	5.5
Copper, Total	50	<b>360</b>	<b>180</b>	22	25	14	<b>55</b>	<b>58</b>	45	29	12	23	<b>77</b>	39	18	39	23	24	13	13
Iron, Total	-	30000	18000	12000	16000	10000	39000	16000	14000	17000	12000	20000	12000	21000	14000	18000	16000	14000	16000	10000
Lead, Total	63	<b>570</b>	<b>350</b>	15	<b>73</b>	3.5 J	13	<b>290</b>	35	12	10	<b>120</b>	<b>360</b>	<b>88</b>	18	27	<b>68</b>	<b>200</b>	28	<b>90</b>
Magnesium, Total	-	3100	1700	4500	2700	4000	13000	3500	2900	5000	1500	2300	1100	32000	4100	4700	5200	1900	3500	2100
Manganese, Total	1600	210	210	120	250	220	400	260	98	63	180	230	420	350	370	340	220	350	180	180
Mercury, Total	0.18	<b>1.3</b>	<b>2.5</b>	<b>0.8</b>	0.17	0.09 U	0.04 J	<b>0.55</b>	<b>0.54</b>											

**Table 5**  
**Groundwater Sample Detection Summary**  
**17-29 West End Avenue - Riverside Center**  
**New York, New York**  
**Langan Project No. 170201301**

LOCATION SAMPLING DATE LAB SAMPLE ID	NYSDEC TOGS AWQS 1.1.1	DUPLICATE		LB-2 (MW) 7/19/2012 L1212928-04	LB-5 (MW) 7/19/2012 L1212928-02	LB-6 (MW) 7/19/2012 L1212928-03					
		LB-1 (MW) 7/18/2012 L1212835-02	DUP#1 7/18/2012 L1212835-03								
<b>Volatile Organics (µg/L)</b>											
Chloroform	7	1.8	J	2	J	2.5	U	2.5	U	2.5	U
1,2-Dichloropropane	1	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	1	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Chlorobenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	3.2	U
trans-1,3-Dichloropropene	0.4	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.4	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Dibromomethane	5	5	U	5	U	5	U	5	U	5	U
1,2,3-Trichloropropane	0.04	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Acrylonitrile	5	5	U	5	U	5	U	5	U	5	U
Acetone	50	1.7	J	1.9	J	1.8	J	2.2	J	5	U
1,2-Dibromoethane	0.0006	2	U	2	U	2	U	2	U	2	U
sec-Butylbenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	3.4	U
tert-Butylbenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	0.74	J
1,2-Dibromo-3-chloropropane	0.04	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Hexachlorobutadiene	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Isopropylbenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	<b>15</b>	U
n-Propylbenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.3	J
<b>Semivolatile Organics (µg/L)</b>											
1,2,4-Trichlorobenzene	5	5	U	5	U	5	U	5	U	5	U
Bis(2-chloroethyl)ether	1	2	U	2	U	2	U	2	U	2	U
3,3'-Dichlorobenzidine	5	5	U	5	U	5	U	5	U	5	U
2,4-Dinitrotoluene	5	5	U	5	U	5	U	5	U	5	U
2,6-Dinitrotoluene	5	5	U	5	U	5	U	5	U	5	U
Bis(2-chloroethoxy)methane	5	5	U	5	U	5	U	5	U	5	U
Hexachlorocyclopentadiene	5	20	U	20	U	20	U	20	U	20	U
Nitrobenzene	0.4	2	U	2	U	2	U	2	U	2	U
4-Chloroaniline	5	5	U	5	U	5	U	5	U	5	U
2-Nitroaniline	5	5	U	5	U	5	U	5	U	5	U
3-Nitroaniline	5	5	U	5	U	5	U	5	U	5	U
4-Nitroaniline	5	5	U	5	U	5	U	5	U	5	U
1,2,4,5-Tetrachlorobenzene	5	10	U	10	U	10	U	10	U	10	U
2,4-Dichlorophenol	1	5	U	5	U	5	U	5	U	5	U
2,4-Dinitrophenol	10	20	U	20	U	20	U	20	U	20	U
Phenol	1	5	U	5	U	5	U	5	U	5	U
Acenaphthene	20	0.2	U	0.2	U	0.2	U	0.2	U	0.41	U
Hexachlorobutadiene	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzo(a)pyrene	0	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Benzo(b)fluoranthene	0.002	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Benzo(k)fluoranthene	0.002	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Chrysene	0.002	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Indeno(1,2,3-cd)Pyrene	0.002	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Hexachlorobenzene	0.04	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
<b>Total Metals (µg/L)</b>											
Aluminum, Total	-	202		10700	R3	86		122		1320	R1
Antimony, Total	3	2		<b>4.4</b>		<b>3.3</b>		<b>3.7</b>		<b>3.7</b>	
Arsenic, Total	25	3.1		3.8		5.6		2.4		14.7	
Barium, Total	1000	258.9		538.2		136.1		69.5		252.6	
Beryllium, Total	3	0.5	U	1		0.5	U	0.5	U	0.2	J
Cadmium, Total	5	0.5	U	0.1	J	0.2	U	0.2	U	0.2	U
Calcium, Total	-	133000	R1	112000	R1	86600	R1	31700		58000	R1
Chromium, Total	50	0.8	J	12.7		0.8	J	0.5	J	2.8	
Cobalt, Total	-	2.5		10.2		0.8		0.9		1.3	
Copper, Total	200	1.7		104.4		1.5		3.1		6	
Iron, Total	300	<b>7350</b>		<b>17100</b>		<b>2530</b>		282		<b>9680</b>	
Lead, Total	25	0.9	J	<b>96.3</b>		0.8	J	1.6		3.3	
Magnesium, Total	35000	27500		28000		12700		5040		8900	
Manganese, Total	300	<b>1371</b>	R1	<b>1418</b>	R1	<b>568</b>	R1	<b>378.4</b>		<b>2027</b>	R1
Mercury, Total	0.7	0.2	U	0.5		0.2	U	0.2	U	0.2	U
Nickel, Total	100	9.4		29.7		2.1		2.5		3.2	
Potassium, Total	-	22900	R1	29600		11300		11600		7930	
Selenium, Total	10	1	J	2	J	1	J	2	J	2	J
Sodium, Total	20000	<b>151000</b>	R1	<b>156000</b>	R1	<b>66700</b>	R1	<b>114000</b>	R1	<b>213000</b>	R1
Thallium, Total	0.5	0.5	U	0.1	J	0.5	U	0.5	U	0.5	U
Vanadium, Total	-	0.6	J	18.4		0.5	J	1	J	4.8	J
Zinc, Total	2000	19.6		103.9		16.7		2.2	J	9.2	J
<b>Dissolved Metals (µg/L)</b>											
Aluminum, Dissolved	-	22		32		2	J	35		5	J
Antimony, Dissolved	3	2.9		2.7		1.9		1.7		1	
Arsenic, Dissolved	25	1.2		1.4		2.7		0.9		7.1	
Barium, Dissolved	1000	202.8		202.6		117.7		64.8		178.7	
Cadmium, Dissolved	5	0.1	J	0.5	U	0.5	U	0.5	U	0.5	U
Calcium, Dissolved	-	129000	R1	125000	R1	94100	R1	26000		67600	R1
Chromium, Dissolved	50	0.2	J	1	U	0.2	J	0.3	J	1	U
Cobalt, Dissolved	-	1.9		2		0.7		0.9		0.1	J
Copper, Dissolved	200	1.2		0.6	J	0.7	J	2.8		0.2	J
Iron, Dissolved	300	<b>570</b>		<b>886</b>		<b>777</b>		117		191	
Lead, Dissolved	25	1	U	1	U	1	U	1.1		1	U
Magnesium, Dissolved	35000	23400		23800		11600		4510		8600	
Manganese, Dissolved	300	<b>1222</b>	R1	<b>1204</b>	R1	<b>563.9</b>	R1	<b>336.5</b>		<b>2232</b>	R1
Nickel, Dissolved	100	7.4		7.9		1.9		2.4		0.9	
Potassium, Dissolved	-	22800		23100		10600		7530		9580	
Selenium, Dissolved	10	5	U	5	U	1	J	2	J	1	J
Sodium, Dissolved	20000	<b>136000</b>	R1	<b>135000</b>	R1	<b>57600</b>	R1	<b>96900</b>	R1	<b>220000</b>	R1
Thallium, Dissolved	0.5	0.04	J	0.04	J	0.5	U	0.5	U	0.5	U
Vanadium, Dissolved	-	5	U	0.1	J	5	U	1.1	J	0.2	J
Zinc, Dissolved	2000	22.1		9.9	J	15.4		5.5	J	1.8	J
<b>Polychlorinated Biphenyls (PCBs) (µg/L)</b>											
Total PCBs	-	ND		ND		ND		ND		ND	

**Notes:**

- Groundwater sample analytical results are compared to the New York State Department of Environmental Conservation (NYCDEC) Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS).
- Only compounds with detections are shown in table.
- Bold and highlighted compounds exceed the AWQS.
- Italicized compounds were not detected; however, the Method Detection Limit is greater than the AWQS for these compounds.

**Qualifiers:**

- U = Analyte included in the analysis, but not detected.
- J = Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration.
- \* = Not available
- ND = Not Detected
- R1, R3 = Reanalyzed

**Table 6**  
**Soil Vapor TO-15 Detection Summary**  
**17-29 West End Avenue - Riverside Center**  
**Langan Project No. 170201301**

Location Laboratory Sample ID Sample Date Dilution	NYSDOH AGV	NYSDOH 2003 Fuel Oil Indoor Air Upper Fence Value	EPA 2001 Base Database: 90 Percentile Indoor Air	HEI 2005 95 Percentile Indoor Air	SG-1 L1212732-01 7/17/2012 10	SV-2 L1212732-02 7/17/2012 10	AA L1212844-01 7/17/2012 1
<b>VOCs (ug/m3)</b>							
1,1,2-Trichlorotrifluoroethane (Freon 113)	-	2.5	-	-	15.3 U	15.3 U	<b>6.97</b>
1,2,4-Trimethylbenzene	-	9.8	9.5	-	<b>18.7</b>	<b>19.4</b>	0.983 U
1,3-Butadiene	-	-	<3.0	-	4.42 U	<b>7.46</b>	0.442 U
2-Butanone (MEK)	-	16	12	-	<b>45.4</b>	<b>38.3</b>	1.89
2-Hexanone (MBK)	-	-	-	-	13.7	11.6	0.82
Acetone	-	115	98.9	45.8	<b>3020</b> R	<b>2160</b> R	21.3
Benzene	-	13	9.4	10	6.39 U	7	0.639 U
Carbon disulfide	-	-	4.2	-	<b>23.7</b>	<b>75.4</b>	0.623 U
Chloromethane	-	4.2	3.7	-	4.13 U	4.13 U	1.4
Cyclohexane	-	6.3	-	-	6.88 U	<b>21.6</b>	0.688 U
Dichlorodifluoromethane (Freon12)	-	10	16.5	-	9.89 U	9.89 U	3.84
Ethanol	-	1300	210	-	47.1 U	49.9	7.29
Heptane	-	-	-	-	8.2 U	8.56	0.82 U
Isopropanol	-	-	250	-	32.7	12.3 U	1.23 U
m,p-Xylene	-	11	22.2	22.2	<b>29</b>	<b>29.4</b>	1.74 U
n-Hexane	-	7.9	10.2	-	7.05 U	<b>14.2</b>	0.708
o-Xylene	-	7.1	7.9	7.24	<b>10.6</b>	<b>10.7</b>	0.869 U
Propylene	-	-	-	-	9.79	109	0.86 U
Tetrachloroethene	100	2.5	15.9	6.01	<b>27.9</b>	<b>21.4</b>	1.36 U
Toluene	-	57	43	39.8	<b>39.9</b>	<b>43</b>	1.08
Trichloroethene	5	0.5	4.2	1.36	2.2	1.07 U	1.07 U
Trichlorofluoromethane (Freon 11)	-	12	3.5	-	11.2 U	11.2 U	2.55
Total Detected VOCs	-	-	-	-	3,271.39	2,618.36	47.85
Methane (%)	-	-	-	-	0.216 U	0.18 U	0.23 U

**Notes and Qualifiers:**

- Results exceeding the New York State Department of Health (NYSDOH) Air Guideline Value (AGV) Exceedances are highlighted and **BOLD**.
- Results exceeding one or more of the following background databases are **BOLD**: NYSDOH Fuel Oil 2003 Upper Fence Value, US Environmental Protection Agency (EPA) Base Database 90th Percentile Indoor Air, and Health Effects Institute (HEI) 2005 95th Percentile Indoor Air.
- Undetected analytes with detection limits exceeding one or more of the following background databases are *italicized*: NYSDOH AGV, NYSDOH Fuel Oil 2003 Upper Fence Value, US EPA Base Database 90th Percentile Indoor Air, and HEI 2005 95th Percentile Indoor Air.

VOC = Volatile Organic Compound

µg/m<sup>3</sup> = micrograms per cubic meter

U = Analyte was not detected at or above the reporting limit

R = Analyte was rerun by laboratory

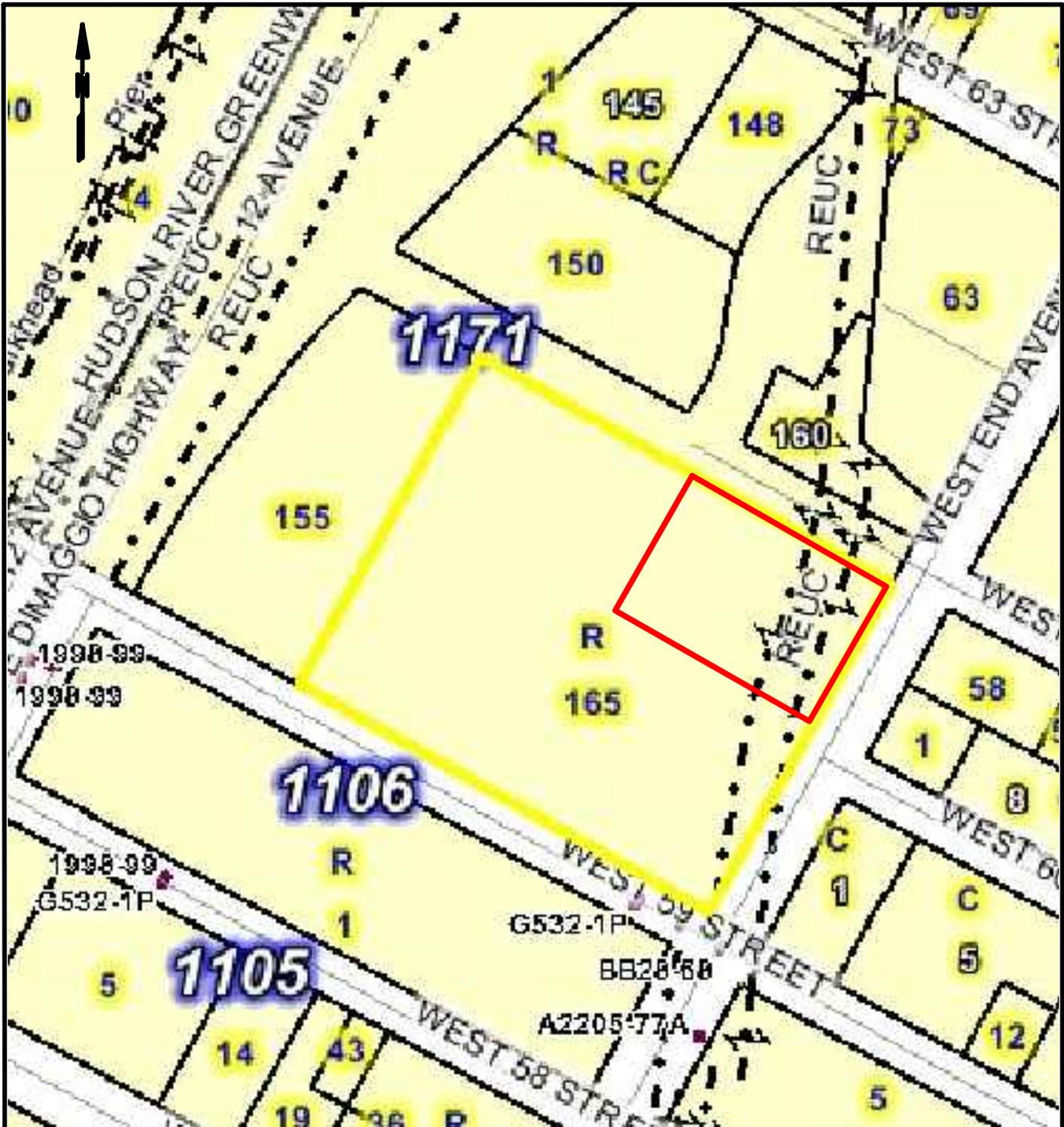
**Table 7**  
**QA/QC Sample Detection Summary**  
**17-29 West End Avenue - Riverside Center**  
**New York, New York**  
**Langan Project No. 170201301**

LOCATION SAMPLING DATE LAB SAMPLE ID	NYSDEC TOGS AWQS 1.1.1	Field Blank #1 7/10/2012 L1212237-01	Field Blank #2 7/17/2012 L1212729-04	Trip Blank #1 7/18/2012 L1212835-01	Trip Blank #2 7/19/2012 L1212928-01
<b>Volatile Organics (µg/L)</b>					
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1	1.5 U	1.5 U	1.5 U	1.5 U
trans-1,3-Dichloropropene	0.4	0.5 U	0.5 U	0.5 U	0.5 U
cis-1,3-Dichloropropene	0.4	0.5 U	0.5 U	0.5 U	0.5 U
Dibromomethane	5	5 U	5 U	5 U	5 U
1,2,3-Trichloropropane	0.04	2.5 U	2.5 U	2.5 U	2.5 U
Acrylonitrile	5	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	5	5 U	5 U	5 U	5 U
1,2-Dibromoethane	0.0006	2 U	2 U	2 U	2 U
1,2-Dibromo-3-chloropropane	0.04	2.5 U	2.5 U	2.5 U	2.5 U
Hexachlorobutadiene	0.5	2.5 U	2.5 U	2.5 U	2.5 U
<b>Semivolatile Organics (µg/L)</b>					
1,2,4-Trichlorobenzene	5	5 U	5 U	-	-
Bis(2-chloroethyl)ether	1	2 U	2 U	-	-
3,3'-Dichlorobenzidine	5	5 U	5 U	-	-
2,4-Dinitrotoluene	5	5 U	5 U	-	-
2,6-Dinitrotoluene	5	5 U	5 U	-	-
Bis(2-chloroethoxy)methane	5	5 U	5 U	-	-
Hexachlorocyclopentadiene	5	20 U	20 U	-	-
Nitrobenzene	0.4	2 U	2 U	-	-
4-Chloroaniline	5	5 U	5 U	-	-
2-Nitroaniline	5	5 U	5 U	-	-
3-Nitroaniline	5	5 U	5 U	-	-
4-Nitroaniline	5	5 U	5 U	-	-
1,2,4,5-Tetrachlorobenzene	5	10 U	10 U	-	-
2,4-Dichlorophenol	1	5 U	5 U	-	-
2,4-Dinitrophenol	10	20 U	20 U	-	-
Phenol	1	5 U	5 U	-	-
Hexachlorobutadiene	0.5	0.5 U	2 U	-	-
Benzo(a)pyrene	0	0.2 U	2 U	-	-
Benzo(b)fluoranthene	0.002	0.2 U	2 U	-	-
Benzo(k)fluoranthene	0.002	0.2 U	2 U	-	-
Chrysene	0.002	0.2 U	2 U	-	-
Indeno(1,2,3-cd)Pyrene	0.002	0.2 U	2 U	-	-
Pentachlorophenol	1	0.8 U	10 U	-	-
Hexachlorobenzene	0.04	0.8 U	2 U	-	-
<b>Total Metals (µg/L)</b>					
Aluminum, Total		3 J	3 J	-	-
Antimony, Total	3	0.5 U	0.7 U	-	-
Arsenic, Total	25	0.3 J	0.8 U	-	-
Barium, Total	1000	0.3 J	0.5 U	-	-
Calcium, Total		112	100 U	-	-
Chromium, Total	50	1.6	0.3 J	-	-
Copper, Total	200	0.5 J	0.1 J	-	-
Iron, Total	300	242	50 U	-	-
Manganese, Total	300	3.2	0.5 U	-	-
Nickel, Total	100	0.1 J	0.5 U	-	-
Sodium, Total	20000	62 J	50 J	-	-
Thallium, Total	0.5	0.5 U	0.5 U	-	-
Zinc, Total	2000	2.2 J	10 U	-	-
<b>Herbicides (µg/L)</b>					
Total Herbicides	-	ND	ND	-	-
<b>Pesticides (µg/L)</b>					
Alpha-BHC	0.01	0.023 U	0.021 U	-	-
Aldrin	0	0.023 U	0.021 U	-	-
Endrin	0	0.047 U	0.042 U	-	-
Dieldrin	0.004	0.047 U	0.042 U	-	-
Toxaphene	0.06	0.232 U	0.21 U	-	-
Chlordane	0.05	0.232 U	0.21 U	-	-
<b>Polychlorinated Biphenyls (PCBs) (µg/L)</b>					
Total PCBs	-	ND	ND	-	-

**Notes:**  
1. Groundwater sample analytical results are compared to the New York State Department of Environmental Conservation (NYCDEC) Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS).  
2. Only compounds with detections are shown in table.  
3. Bold and highlighted compounds exceed the AWQS.  
4. Italicized compounds were not detected; however, the Method Detection Limit is greater the AWQS for these compounds.

# FIGURES

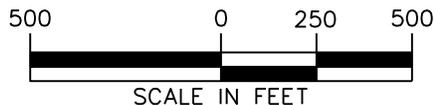
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Base map from: <http://gis.nyc.gov/dof/dtm/mapviewer.jsf>

LEGEND:

APPROXIMATE SITE BOUNDARY



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NJ Certificate of Authorization No: 24GA27996400

**NEW YORK CITY TAX MAP**  
**Riverside Center 17-29 West End Avenue**

NEW YORK		NEW YORK	
Project No. 170201301	Date 08/01/2012	Scale 1" = 500'	Dwg. No. 1



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## SITE LOCATION PLAN

17-29 West End Avenue

New York

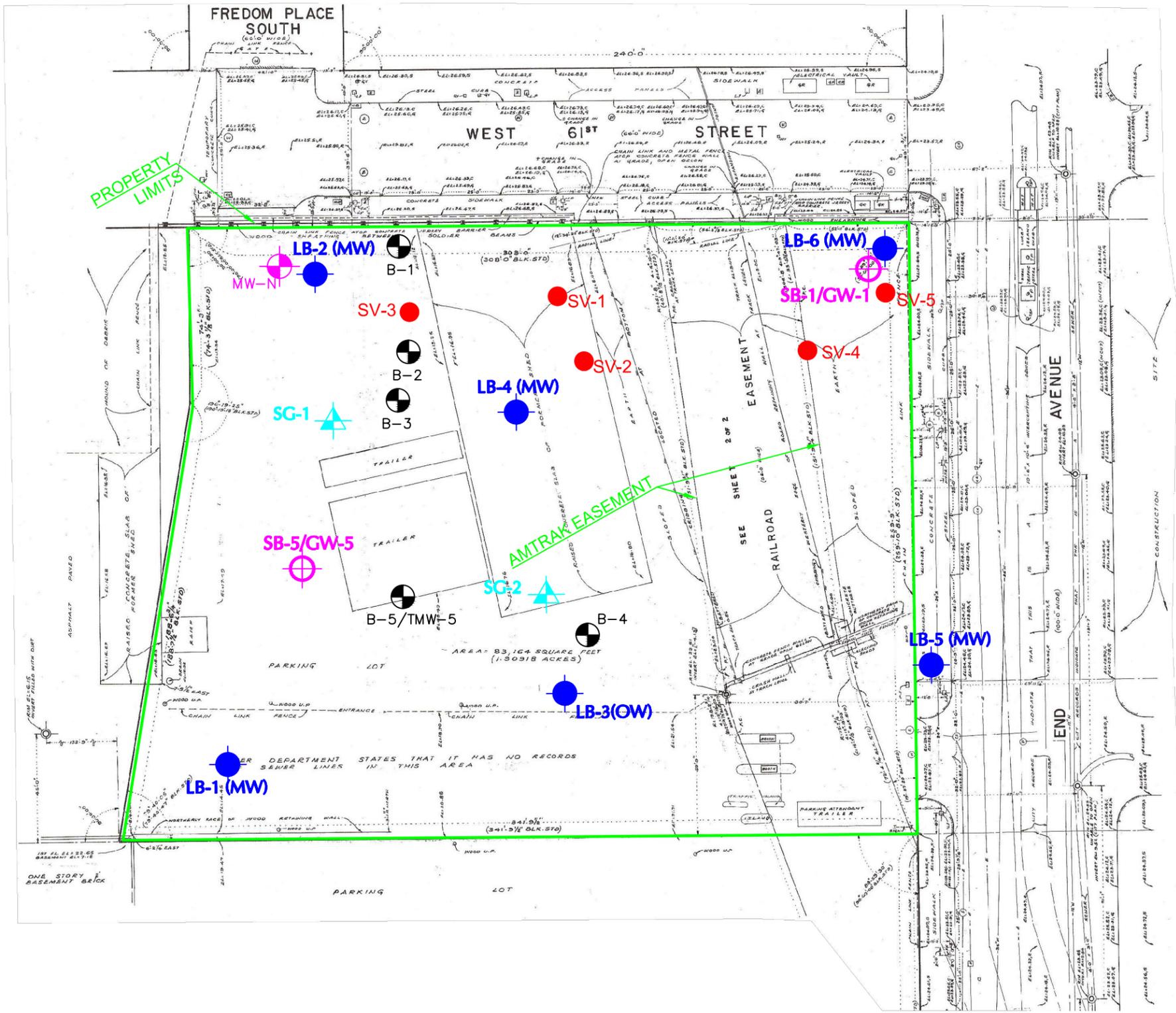
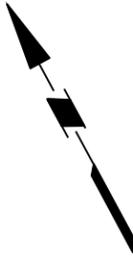
New York

Project No.  
170201301

Date  
7/30/2012

Scale  
NTS

Dwg. No.  
2

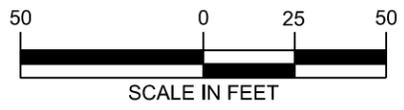


**NOTES:**

1. BASE PLAN PREPARED BY S.P. BELCHER, INC., DATED 1 JUNE 2012
2. AMTRAK EASEMENT BASED ON DRAWING NO. B-1, TITLED "BORING LOCATION PLAN" PREPARED BY MUESER RUTLEDGE CONSULTING ENGINEERS (MRCE), DATED 13 SEPTEMBER 2011.
3. ELEVATIONS ARE REFERENCED TO THE BOROUGH PRESIDENT OF MANHATTAN DATUM (BPM D) WHICH IS 2.75 FT ABOVE MEAN SEA LEVEL AT SANDY HOOK, NJ (NGVD, 1929). [BPM D = NGVD - 2.75]

**LEGEND:**

-  **LB-1 (MW)** JULY 2012 BORING LOCATION (MW) = MONITORING WELL, PERFORMED BY LANGAN
-  **SG-2** JULY 2012 TEMPORARY SOIL VAPOR POINT, PERFORMED BY LANGAN
-  **SB-1/GW-1** JUNE 2009 SOIL BORING/GROUNDWATER SAMPLE LOCATION, SAMPLED BY AKRF
-  **SV-4** MAY 2012 SOIL VAPOR LOCATION, PERFORMED BY LANGAN
-  **B-4** JULY 2005 SOIL BORING LOCATION, PERFORMED BY LANGAN
-  **B-5/TMW-5** JULY 2005 SOIL BORING/TEMPORARY MONITORING WELL, PERFORMED BY LANGAN
-  **MW-1** JUNE 2009 EXISTING MONITORING WELL, SAMPLED BY AKRF



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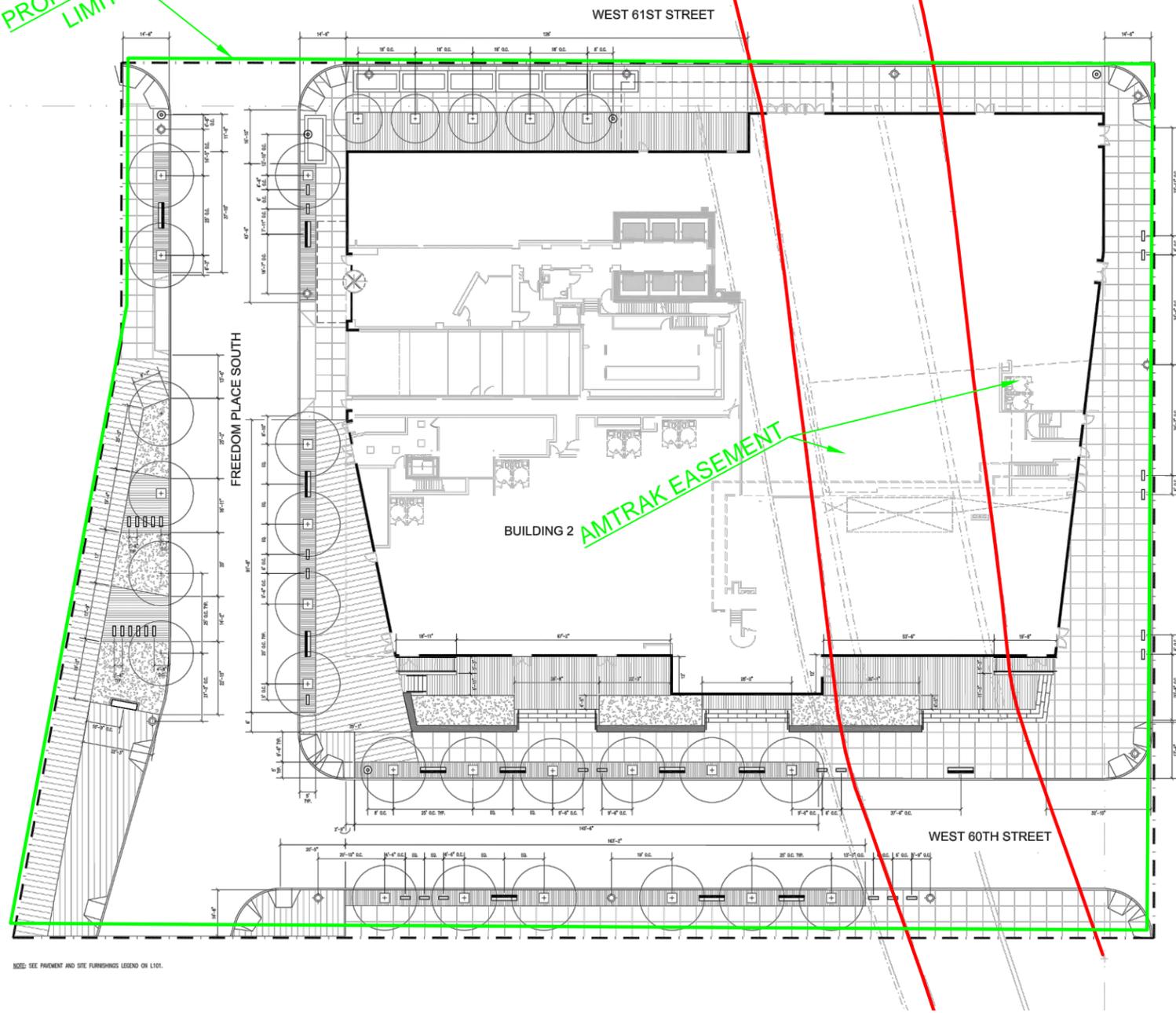
17-29 WEST END AVENUE  
**SITE PLAN**

NEW YORK NEW YORK

Project No.	Date	Scale	Dwg. No.
170201301	7/23/2012	1" = 50'	3

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PROPERTY LIMITS



**NOTES:**

1. BASE PLAN TAKEN FROM SLCE ARCHITECTS - MATERIALS PLAN DRAWING L101, DATED 8 DECEMBER 2011
2. AMTRAK EASEMENT BASED ON DRAWING NO. B-1, TITLED "BORING LOCATION PLAN" PREPARED BY MUESER RUTLEDGE CONSULTING ENGINEERS (MRCE), DATED 13 SEPTEMBER 2011.

PAVEMENT & PLANTING:		SITE FURNISHINGS:		SITE LIGHTING:	
SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
[Symbol]	CONCRETE PAVEMENT	[Symbol]	BACKED BENCH	[Symbol]	TREE PIT
[Symbol]	GRANITE UNIT PAVEMENT TYPE 1 (LARGE)	[Symbol]	BACKLESS BENCH	[Symbol]	SITE LIGHTING:
[Symbol]	GRANITE UNIT PAVEMENT TYPE 2 (SMALL)	[Symbol]	SEATWALL	[Symbol]	
[Symbol]	GRANITE UNIT PAVEMENT TYPE 3 (TREE TRENCH)	[Symbol]	TRASH RECEPTACLE	[Symbol]	NAME
[Symbol]	PLANTING AREA - SHRUBS & GROUNDCOVER	[Symbol]	BICYCLE RACK	[Symbol]	STREET LIGHT

NOTE: SEE PAVEMENT AND SITE FURNISHINGS LEGEND ON L101.



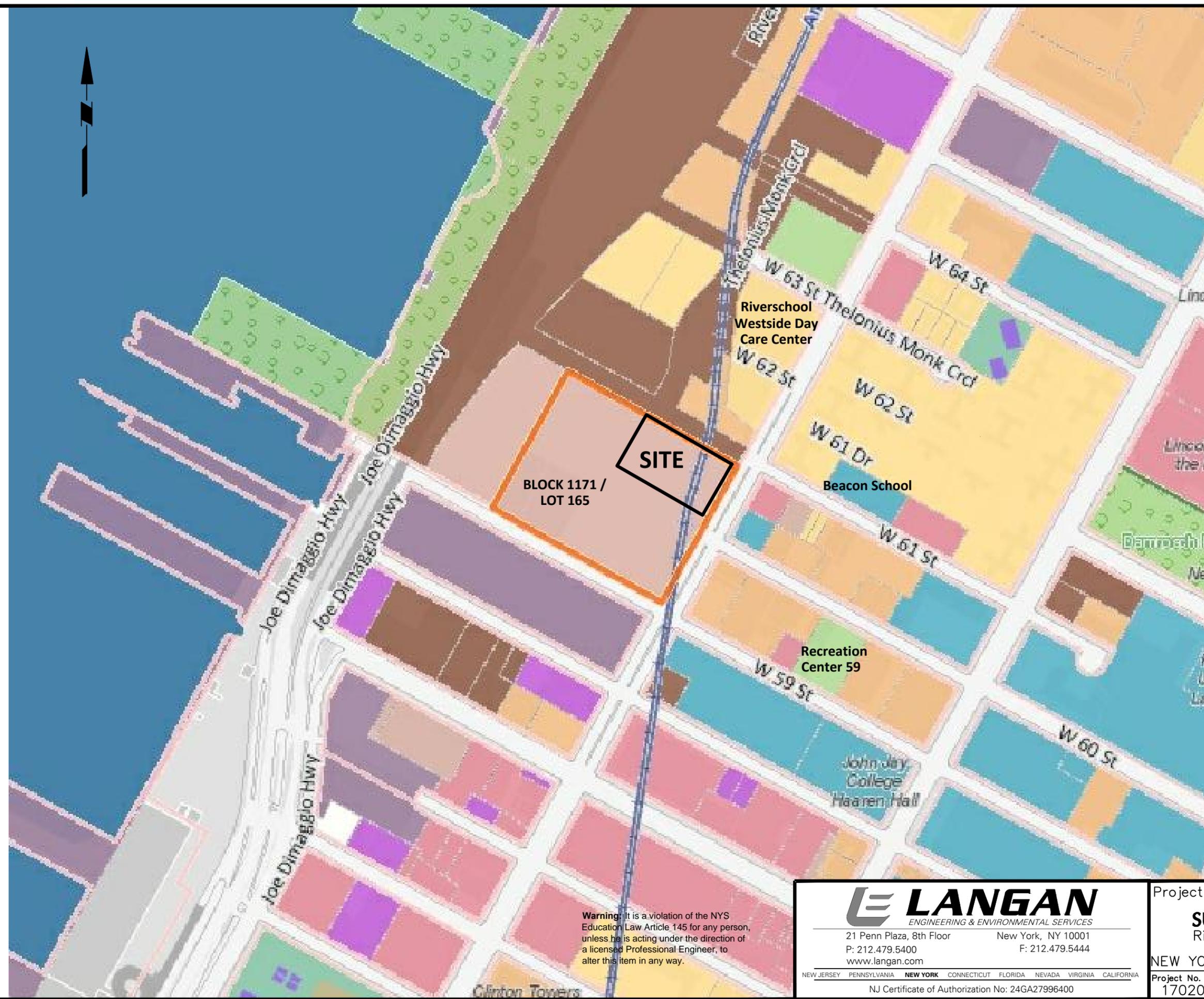
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17-29 WEST END AVENUE  
**REDEVELOPMENT PLAN**

NEW YORK	NEW YORK
Project No. 170201301	Date 7/23/2012
Scale 1" = 50'	Dwg. No. 4

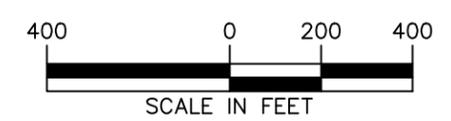


LEGEND

- 1 & 2 FAMILY RESIDENTIAL
- MULTI-FAMILY RESIDENTIAL
- MIXED USE
- OPEN SPACE & OUTDOOR RECREATION
- COMMERCIAL
- INSTITUTIONS
- INDUSTRIAL
- PARKING
- TRANSPORTATION/UTILITIES
- VACANT LOTS
- APPROXIMATE SITE BOUNDARY
- APPROXIMATE BLOCK BOUNDARIES

NOTES

1. BACKGROUND FIGURE TAKEN FROM OASISNYC.NET



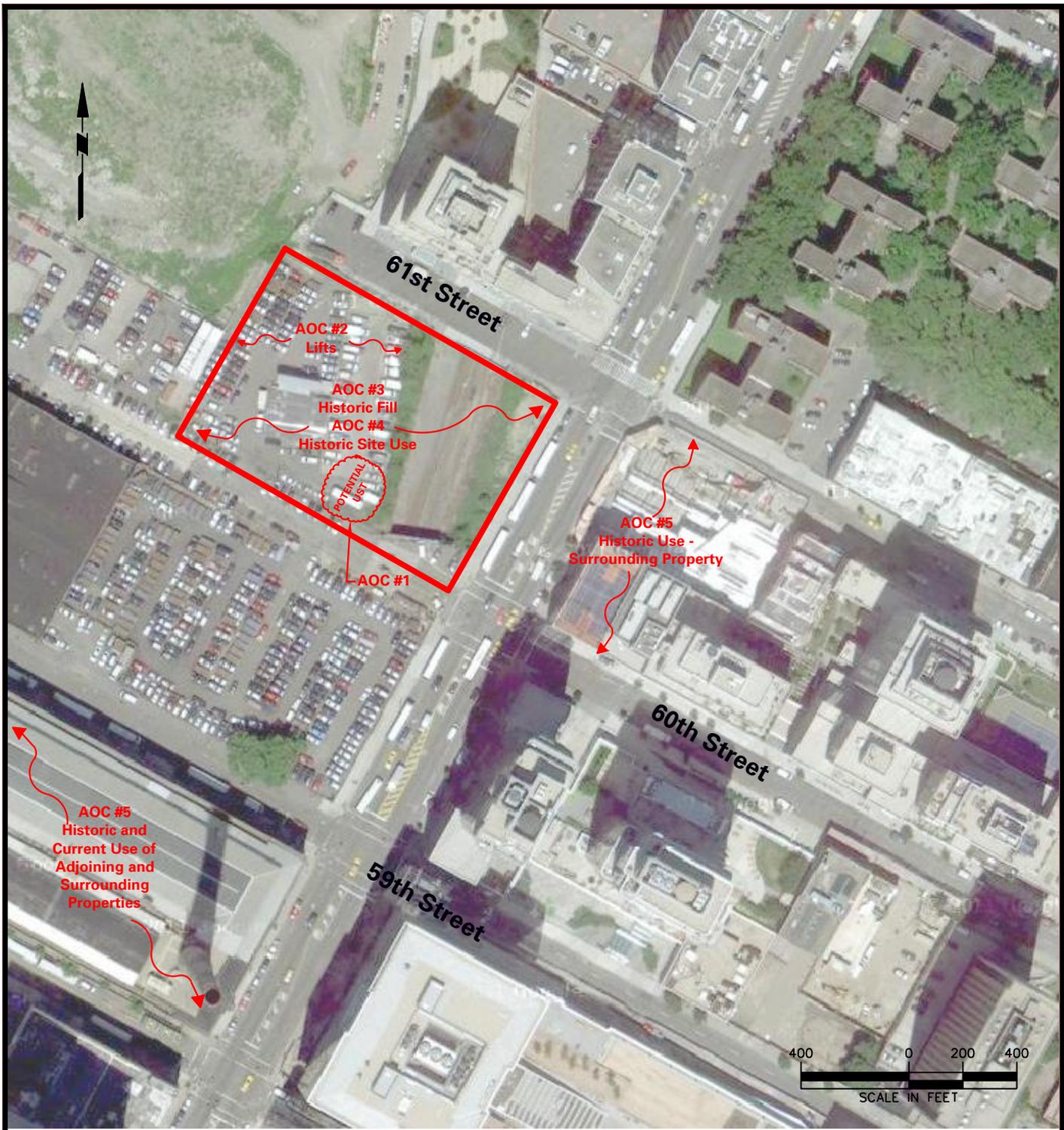
Warning: It is a violation of the NYS Education Law Article 145 for any person, unless he is acting under the direction of a licensed Professional Engineer, to alter this item in any way.



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Project		NEW YORK	
SURROUNDING LAND USE PLAN		NEW YORK	
Riverside Center 17-29 West End Avenue			
Project No.	Date	Scale	Dwg. No.
170201301	07/30/2012	1"=400'	5



Base map from [www.oasichnyc.com/map.aspx](http://www.oasichnyc.com/map.aspx)

LEGEND:

- SITE BORDER
- AOC AREA OF CONCERN

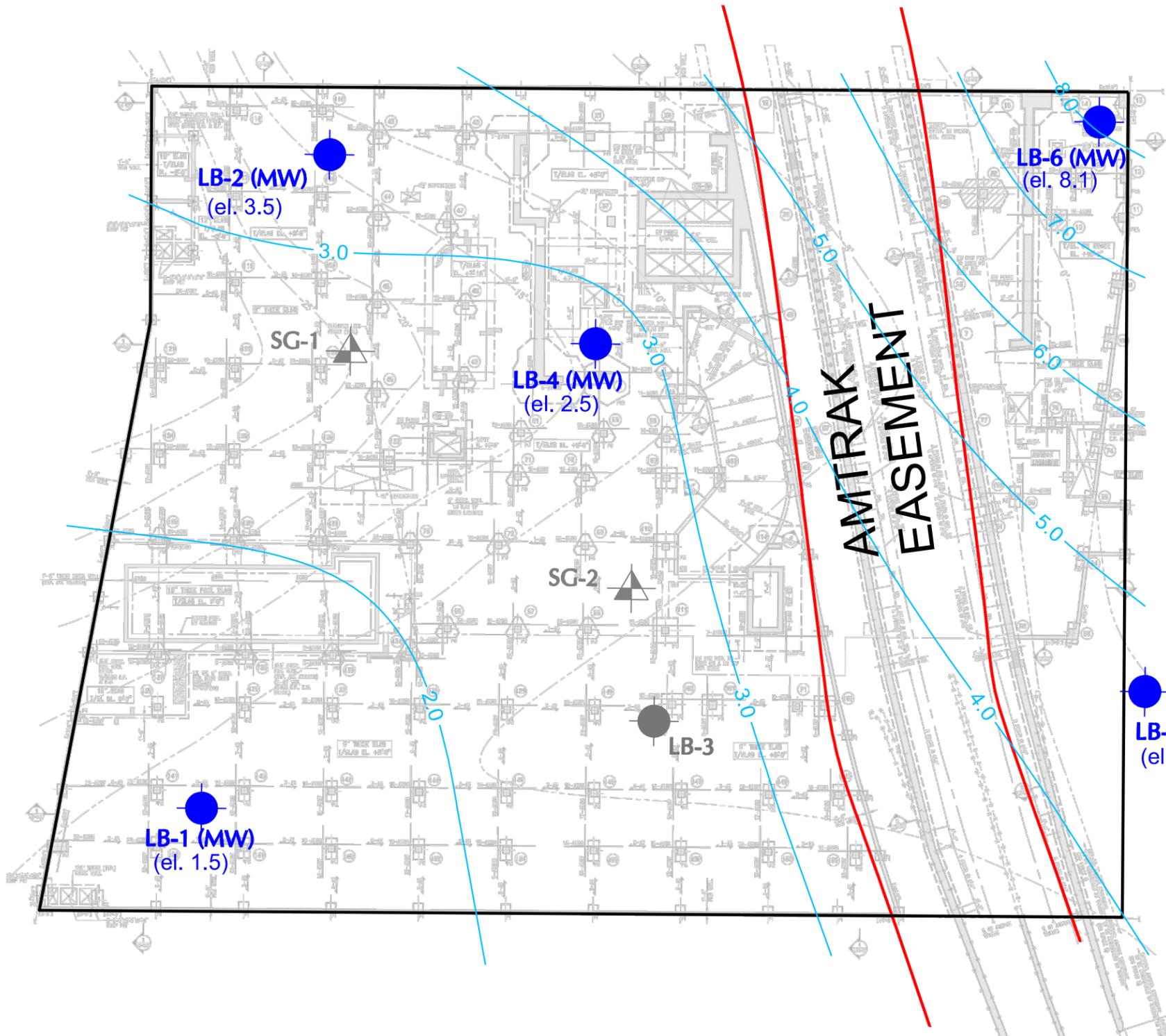
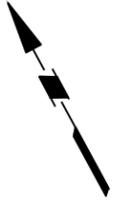


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**AREAS OF CONCERN LOCATION MAP**  
**17-29 West End Avenue**

New York		NEW YORK	
Project No.	Date	Scale	Dwg. No.
170201301	08/01/2012	1" = 400'	6



- LEGEND:**
- LB-2 (MW)** GROUNDWATER SAMPLE LOCATION (MW) = MONITORING WELL
  - SG-1** TEMPORARY SOIL VAPOR SAMPLE LOCATION
  - APPROXIMATE PROPERTY LIMITS
  - 6.0 GROUNDWATER ELEVATION CONTOUR (BPMD)

- GENERAL NOTES**
1. GROUNDWATER ELEVATIONS ARE WITH RESPECT TO THE BOROUGH PRESIDENT OF MANHATTAN DATUM (BPMD).
  2. CONTOUR INTERVAL IS 1.0 FEET.
  3. LB-3 IS NOT INCLUDED.
  4. GROUNDWATER CONTOURS BASED ON MEASUREMENTS COLLECTED FROM THE SITE WELLS ON AUGUST 9, 2012 BETWEEN 12:30 PM AND 1:30 PM.



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17-29 WEST END AVENUE

**GROUNDWATER CONTOUR MAP**

NEW YORK NEW YORK

Project No.	Date	Scale	Dwg. No.
170201301	8/09/2012	1" = 40'	7

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LB-2			
	LB2-1'-3'	LB2-7'-9'	LB2-9'-13'
<b>VOCs (mg/kg)</b>	ND	ND	NE
<b>SVOCs (mg/kg)</b>	NE	ND	NE
<b>Total Metals (mg/kg)</b>			
Copper, Total	NE	NE	55
Lead, Total	73	NE	NE
Nickle, Total	NE	NE	41
Zinc, Total	NE	NE	120
<b>Herbicides (mg/kg)</b>	ND	ND	ND
<b>Pesticides (mg/kg)</b>	ND	ND	ND
<b>PCBs (mg/kg)</b>	ND	ND	ND

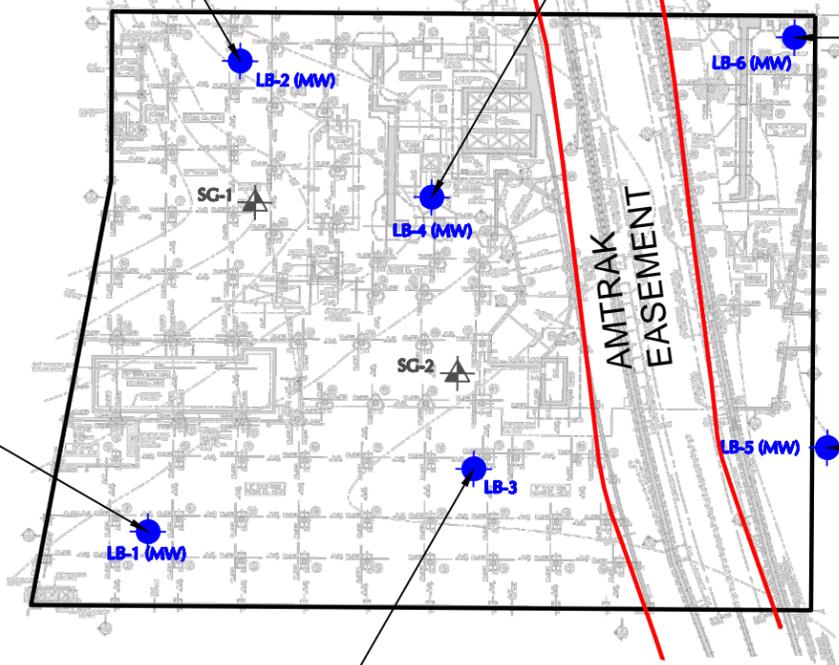
LB-1			
	LB-1 (MW) 1'-2'	LB-1 (MW) 9'-11'	LB-1 (MW) 11'-13'
<b>VOCs (mg/kg)</b>	NE	NE	ND
<b>SVOCs (mg/kg)</b>			
Benzo(a)anthracene	2.5	NE	NE
Benzo(a)pyrene	2.6	NE	NE
Benzo(b)fluoranthene	3.4	NE	NE
Benzo(k)fluoranthene	1.2	NE	NE
Chrysene	2.6	NE	NE
Dibenzo(a,h)anthracene	0.45	NE	NE
Indeno(1,2,3-cd)Pyrene	2.0	0.5	NE
3-Methylphenol/4-Methylphenol	ND	ND	0.61
<b>Total Metals (mg/kg)</b>			
Arsenic, Total	18	NE	NE
Copper, Total	360	180	NE
Lead, Total	570	350	NE
Mercury, Total	1.3	2.5	0.8
Zinc, Total	430	150	NE
<b>Herbicides (mg/kg)</b>	ND	ND	ND
<b>Pesticides (mg/kg)</b>	ND	ND	ND
<b>PCBs (mg/kg)</b>	ND	ND	ND

LB-3			
	LB3-1'-2'	LB3-5'-6'	LB3-9'-11'
<b>VOCs (mg/kg)</b>	NE	NE	NE
<b>SVOCs (mg/kg)</b>			
Benzo(a)anthracene	2.0	NE	ND
Benzo(a)pyrene	2.3	NE	ND
Benzo(b)fluoranthene	3.3	NE	ND
Benzo(k)fluoranthene	1.1	NE	ND
Chrysene	2.1	NE	ND
Indeno(1,2,3-cd)Pyrene	1.3	NE	ND
<b>Total Metals (mg/kg)</b>			
Copper, Total	58	NE	NE
Lead, Total	290	NE	NE
Mercury, Total	0.55	0.54	NE
Zinc, Total	220	230	NE
<b>Herbicides (mg/kg)</b>	ND	ND	ND
<b>Pesticides (mg/kg)</b>			
4,4'-DDT	0.0214	NE	ND
<b>PCBs (mg/kg)</b>	NE	ND	ND

LB-4			
	LB4(MW)-1'-2'	LB4(MW)-7'-8'	LB4(MW)-11'-12'
<b>VOCs (mg/kg)</b>	NE	NE	NE
<b>SVOCs (mg/kg)</b>	NE	NE	NE
<b>Total Metals (mg/kg)</b>			
Copper, Total	NE	NE	77
Lead, Total	NE	120	360
Mercury, Total	NE	4.3	9.5
Zinc, Total	NE	170	150
<b>Herbicides (mg/kg)</b>	ND	ND	ND
<b>Pesticides (mg/kg)</b>			
4,4'-DDD	ND	ND	0.00415
4,4'-DDT	ND	ND	0.00752
<b>PCBs (mg/kg)</b>	ND	ND	ND

LB-6			
	LB-6 (MW) 1-2	LB-6 (MW) 8-10	LB-6 (MW) 14-15
<b>VOCs (mg/kg)</b>	ND	NE	ND
<b>SVOCs (mg/kg)</b>	NE	ND	ND
<b>Total Metals (mg/kg)</b>			
Lead, Total	68	200	NE
Zinc, Total	NE	140	NE
<b>Herbicides (mg/kg)</b>	ND	ND	ND
<b>Pesticides (mg/kg)</b>	ND	ND	ND
<b>PCBs (mg/kg)</b>	ND	ND	ND

LB-5			
	LB5(MW)1-2	LB5(MW)10-12	LB5(MW)17-19
<b>VOCs (mg/kg)</b>	NE	ND	ND
<b>SVOCs (mg/kg)</b>	NE	NE	ND
<b>Total Metals (mg/kg)</b>			
Lead, Total	88	NE	NE
Zinc, Total	130	NE	NE
<b>Herbicides (mg/kg)</b>	ND	ND	ND
<b>Pesticides (mg/kg)</b>	ND	ND	ND
<b>PCBs (mg/kg)</b>	ND	ND	ND



**LEGEND:**

- LB-2 (MW) SOIL SAMPLE LOCATION (MW) = MONITORING WELL
- SG-1 TEMPORARY SOIL VAPOR SAMPLE LOCATION
- APPROXIMATE PROPERTY LIMITS

- GENERAL NOTES**
- BASE PLAN TAKEN FROM FOUNDATION PLAN FO-100.00 DATED 15 JULY 2011.
  - SOIL SAMPLES ANALYTICAL RESULTS ARE COMPARED TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) TITLE 6 OF THE OFFICIAL COMPILATION OF NEW YORK CODES, RULES, AND REGULATION (NYCRR) PART 375 UNRESTRICTED USE SOIL CLEANUP OBJECTIVES (SCO).
  - ONLY EXCEEDANCES ARE SHOWN ON FIGURE.
  - VOC = VOLATILE ORGANIC COMPOUND
  - SVOC = SEMI-VOLATILE ORGANIC COMPOUND
  - PCB = POLYCHLORINATED BIPHENYL
  - mg/kg = MILLIGRAMS PER KILOGRAM
  - NE = NO EXCEEDANCE
  - ND = NO DETECTION

NYSDEC PART 375 UNRESTRICTED USE SOIL CLEANUP OBJECTIVE	
<b>SVOC (mg/kg)</b>	
Benzo(a)anthracene	1
Benzo(a)pyrene	1
Benzo(b)fluoranthene	1
Benzo(k)fluoranthene	0.8
Chrysene	1
Dibenzo(a,h)anthracene	0.33
Indeno(1,2,3-cd)pyrene	0.5
3-Methylphenol/4-Methylphenol	0.33
Total SVOC	-
<b>Metals (mg/kg)</b>	
Arsenic	13
Copper	50
Lead	63
Nickel	30
Zinc	109
Mercury	0.18
<b>Pesticides (mg/kg)</b>	
4,4'-DDD (p,p')	0.003
4,4'-DDT (p,p')	0.003



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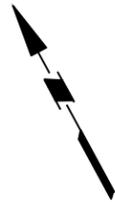
NJ Certificate of Authorization No: 24GA27996400

17-29 WEST END AVENUE  
**SOIL SAMPLE LOCATION AND RESULT MAP**

NEW YORK NEW YORK

Project No. 170201301 Date 7/31/2012 Scale 1"=80' Dwg. No. 8

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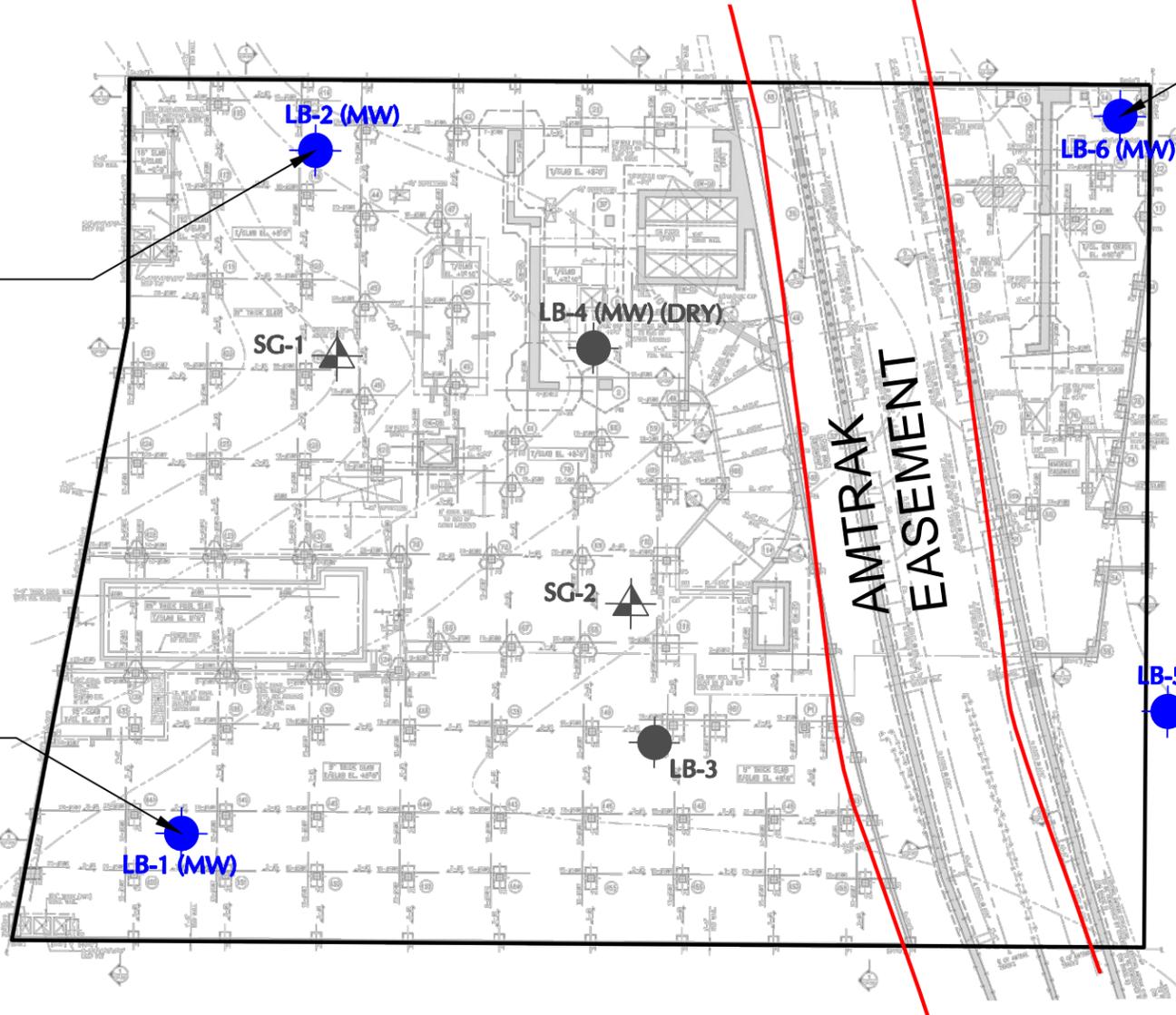


LB-2 (MW)	
VOCs (ug/L)	NE
SVOCs (ug/L)	ND
<b>Total Metals (ug/L)</b>	
Antimony, Total	3.3
Iron, Total	2,530
Manganese, Total	568
Sodium, Total	66,700
<b>Dissolved Metals (ug/L)</b>	
Iron, Dissolved	777
Manganese, Dissolved	563.9
Sodium, Dissolved	57,600
PCBs (ug/L)	ND

LB-1 (MW)	
VOCs (ug/L)	NE
SVOCs (ug/L)	ND
<b>Total Metals (ug/L)</b>	
Iron, Total	7,350
Manganese, Total	1,371
Sodium, Total	151,000
<b>Dissolved Metals (ug/L)</b>	
Iron, Dissolved	570
Manganese, Dissolved	1,222
Sodium, Dissolved	136,000
PCBs (ug/L)	ND

<b>VOCs (ug/L)</b>	
Isopropylbenzene	15
<b>SVOCs (ug/L)</b>	
ND	
<b>Total Metals (ug/L)</b>	
Antimony, Total	3.7
Iron, Total	9,680
Manganese, Total	2,027
Sodium, Total	213,000
<b>Dissolved Metals (ug/L)</b>	
Manganese, Dissolved	2,232
Sodium, Dissolved	220,000
<b>PCBs (ug/L)</b>	
ND	

LB-5 (MW)	
VOCs (ug/L)	NE
SVOCs (ug/L)	NE
<b>Total Metals (ug/L)</b>	
Antimony, Total	3.7
Manganese, Total	378.4
Sodium, Total	114,000
<b>Dissolved Metals (ug/L)</b>	
Manganese, Dissolved	336.5
Sodium, Dissolved	96,900
PCBs (ug/L)	ND



- LEGEND:**
- LB-2 (MW) GROUNDWATER SAMPLE LOCATION (MW) = MONITORING WELL
  - LB-3 BORING/MONITORING WELL NOT INCLUDED IN SAMPLING EVENT
  - ▲ SG-1 TEMPORARY SOIL VAPOR SAMPLE LOCATION
  - APPROXIMATE PROPERTY LIMITS

NYSDEC TOGS 1.1.1 AWQS	
<b>VOCs (ug/L)</b>	
Isopropylbenzene	5
Total VOC	-
<b>Total Metals (ug/L)</b>	
Antimony, Total	3
Iron, Total	300
Lead, Total	25
Manganese, Total	300
Sodium, Total	20,000
<b>Dissolved Metals (ug/L)</b>	
Iron, Total	300
Manganese, Total	300
Sodium, Total	20,000

**GENERAL NOTES**

1. BASE PLAN TAKEN FROM FOUNDATION PLAN FO-100.00 DATED 15 JULY 2011.
2. GROUNDWATER SAMPLES ANALYTICAL RESULTS ARE COMPARED TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) TECHNICAL AND ENVIRONMENTAL GUIDANCE SERIES (TOGS) 1.1.1 AMBIENT WATER QUALITY STANDARDS (AWQS) AND GUIDANCE VALUES.
3. MONITORING WELL LB-4 WAS DRY DURING OUR JULY 2012 SAMPLING EVENT. THE SUSPECTED CAUSE IS PUMPING BY AMTRAK.
4. ONLY EXCEEDANCES ARE SHOWN ON FIGURE.
5. VOCs = VOLATILE ORGANIC COMPOUNDS
6. SVOCs = SEMI-VOLATILE ORGANIC COMPOUNDS
7. ug/l = MICROGRAMS PER LITER
8. NE = NO EXCEEDANCE
9. ND = NO DETECTION



**LANGAN**  
ENGINEERING & ENVIRONMENTAL SERVICES

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P: 212.479.5400 F: 212.479.5444  
www.langan.com

NEW JERSEY PENNSYLVANIA NEW YORK CONNECTICUT FLORIDA NEVADA VIRGINIA CALIFORNIA

NJ Certificate of Authorization No: 24GA27996400

17-29 WEST END AVENUE  
**GROUNDWATER SAMPLE LOCATION  
AND RESULT MAP**

NEW YORK NEW YORK

Project No.	Date	Scale	Dwg. No.
170201301	7/31/2012	1"=50'	9

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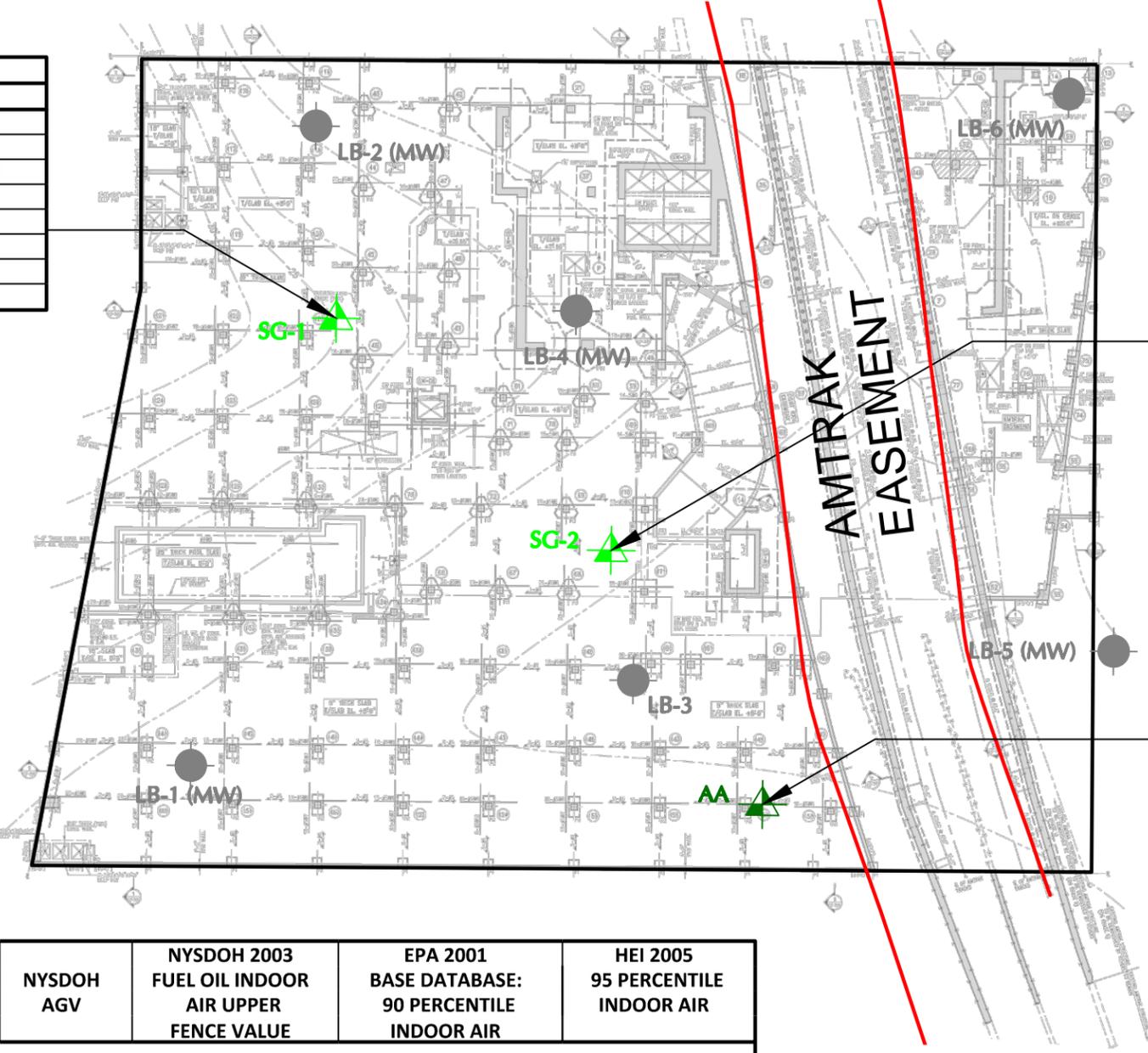
**LEGEND:**

- ▲ SG-1 TEMPORARY SOIL VAPOR SAMPLE LOCATION
- ▲▲ TEMPORARY AMBIENT AIR SAMPLE LOCATION
- LB-2 (MW) SOIL SAMPLE LOCATION (MW) = MONITORING WELL
- APPROXIMATE PROPERTY LIMITS

**GENERAL NOTES**

1. BASE PLAN TAKEN FROM FOUNDATION PLAN FO-100.00 DATED 15 JULY 2011.
2. SOIL VAPOR SAMPLES ANALYTICAL RESULTS ARE COMPARED TO THE NEW YORK STATE DEPARTMENT OF HEALTH (NYSDOH) AIR GUIDELINE VALUES, NYSDOH FUEL OIL 2003 UPPER FENCE VALUE, US ENVIRONMENTAL PROTECTION AGENCY (EPA) BASE DATABASE 90TH PERCENTILE INDOOR AIR, AND HEALTH EFFECTS INSTITUTE (HEI) 2005 95TH PERCENTILE INDOOR AIR.
3. COMPOUNDS REPORTED ABOVE ONE OR MORE OF THE GUIDELINE VALUES ARE SHOWN ON FIGURE.
4. VOC = VOLATILE ORGANIC COMPOUND
5. ug/m3 = MICROGRAMS PER CUBIC METER

SG-1	
<b>VOCs (ug/m3)</b>	
1,2,4-Trimethylbenzene	18.7
2-Butanone	45.4
Acetone	3,020
Carbon Disulfide	23.7
m,p-Xylene	29
o-Xylene	10.6
Tetrachloroethene	27.9
Toluene	39.9



SG-2	
<b>VOCs (ug/m3)</b>	
1,2,4-Trimethylbenzene	19.4
1,3-Butadiene	7.46
2-Butanone	38.3
Acetone	2,160
Carbon Disulfide	75.4
Cyclohexane	21.6
m,p-Xylene	29.4
n-Hexane	14.2
o-Xylene	10.7
Tetrachloroethene	21.4
Toluene	43

AA	
<b>VOCs (ug/m3)</b>	
1,1,2-Trichlorotrifluoroethane (Freon 113)	6.97

ANALYTE	NYSDOH AGV	NYSDOH 2003 FUEL OIL INDOOR AIR UPPER FENCE VALUE	EPA 2001 BASE DATABASE: 90 PERCENTILE INDOOR AIR	HEI 2005 95 PERCENTILE INDOOR AIR
<b>VOCs (ug/m3)</b>				
1,1,2-Trichlorotrifluoroethane (Freon 113)	-	2.5	-	-
1,2,4-Trimethylbenzene	-	9.8	9.5	-
1,3-Butadiene	-	-	<3.0	-
2-Butanone	-	16	12.0	-
Acetone	-	115	98.9	45.8
Carbon disulfide	-	-	4.2	-
Cyclohexane	-	6.3	-	-
m,p-Xylene	-	11	22.2	22.2
n-Hexane	-	7.9	10.2	-
o-Xylene	-	7.1	7.9	7.24
Tetrachloroethene	100	2.5	65.7	6.01
Toluene	-	57	43	39.8
Total VOCs	-	-	-	-



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NJ Certificate of Authorization No: 24GA27996400

17-29 WEST END AVENUE  
**SOIL VAPOR SAMPLE LOCATION AND RESULT MAP**

NEW YORK NEW YORK

Project No. 170201301	Date 8/1/2012	Scale 1"=50'	Dwg. No. 10
--------------------------	------------------	-----------------	----------------

APPENDIX A  
PROPOSED DEVELOPMENT PLANS



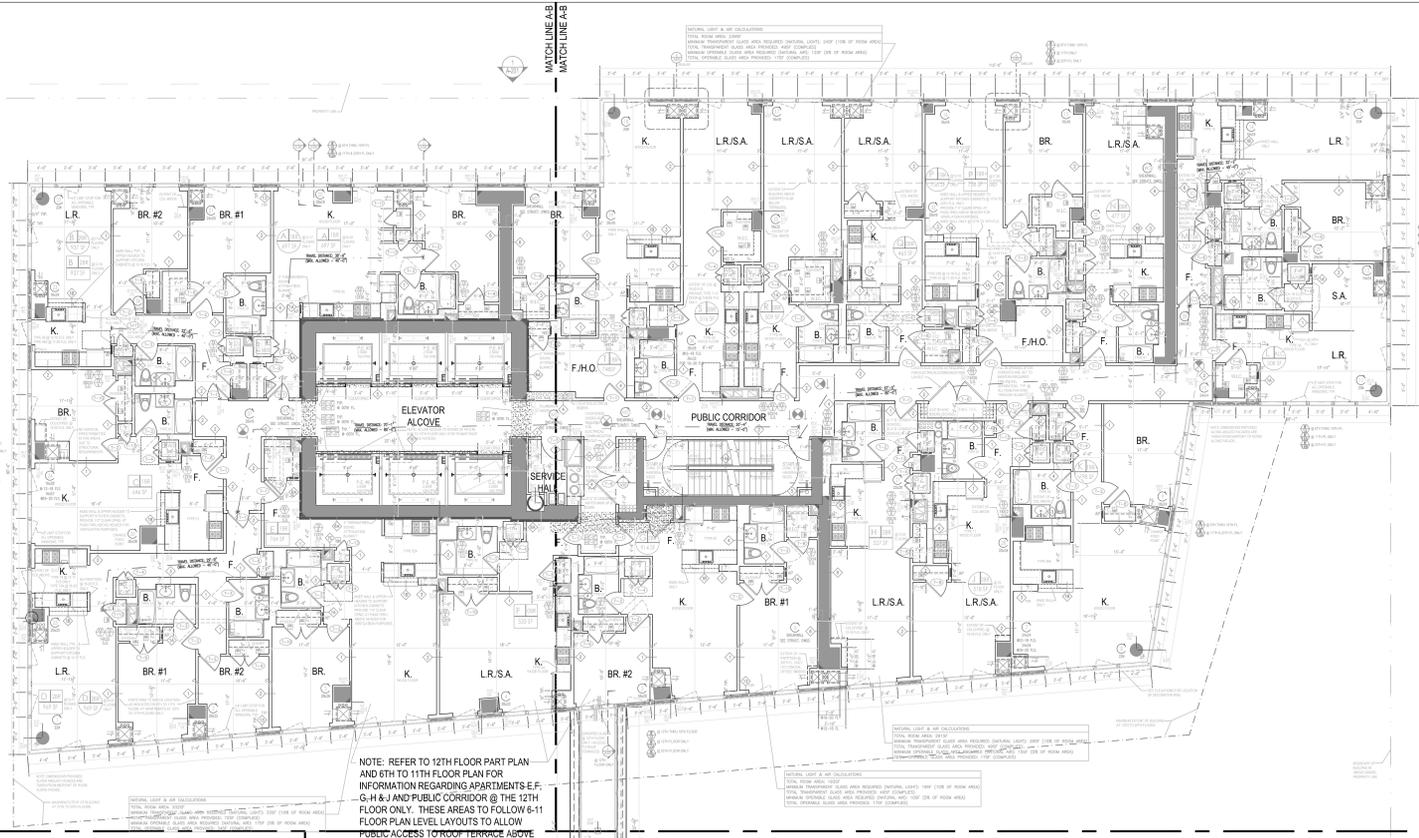




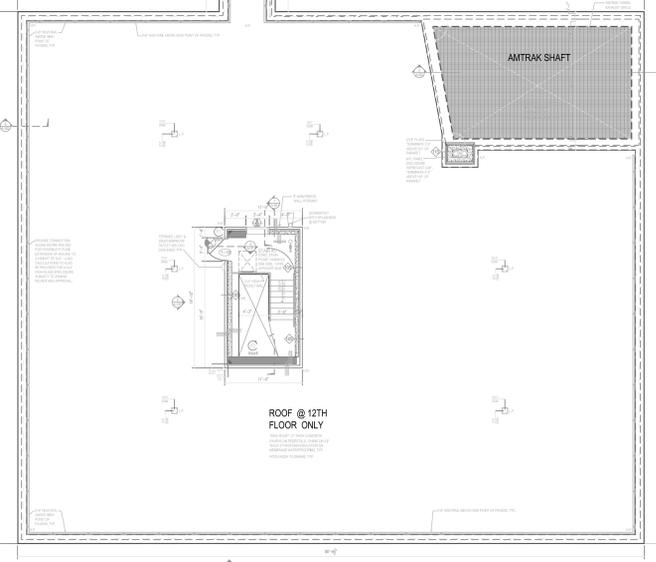
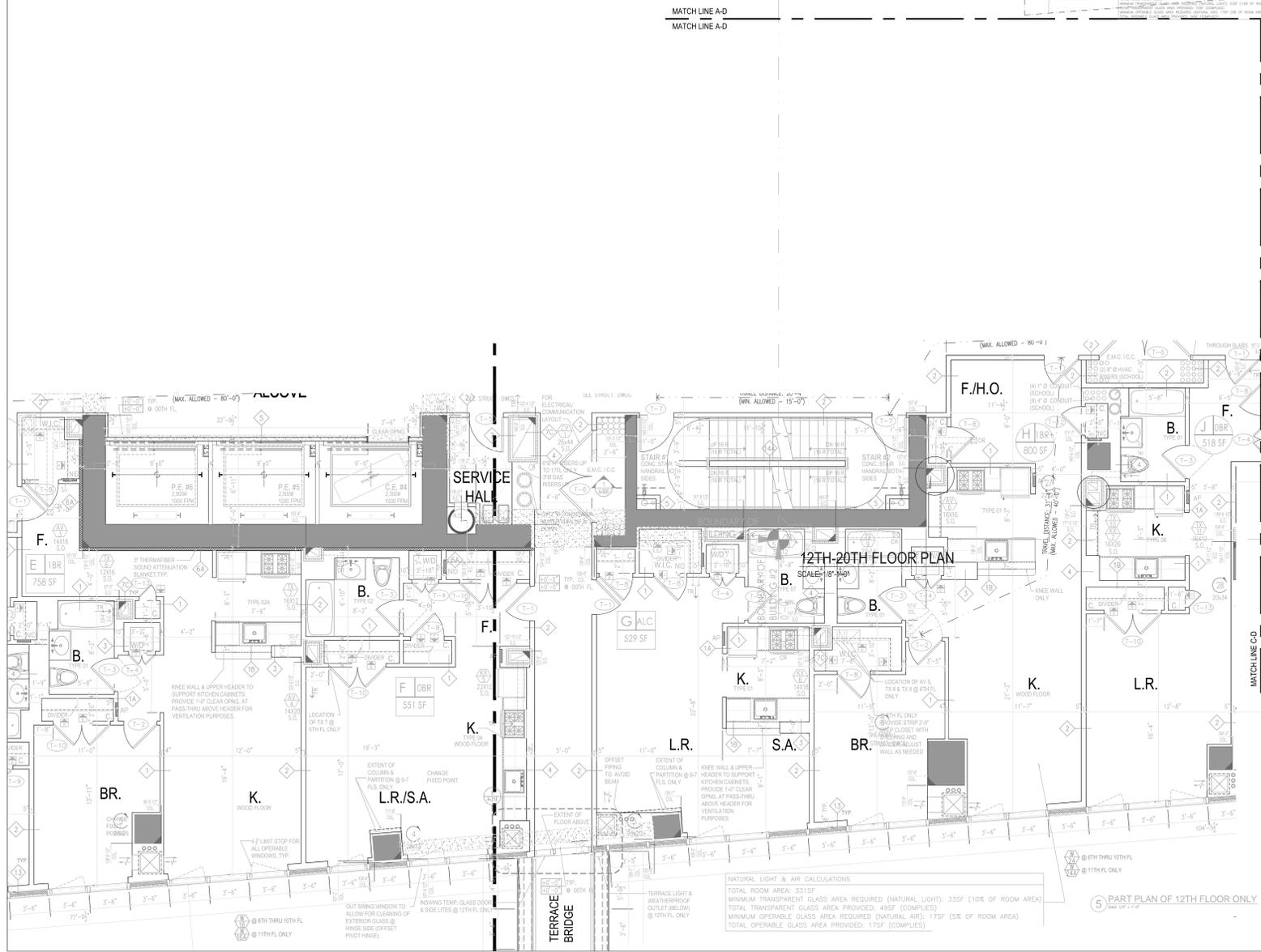








NOTE: REFER TO 12TH FLOOR PART PLAN AND 6TH TO 11TH FLOOR PLAN FOR INFORMATION REGARDING APARTMENTS E-F, G-H & J AND PUBLIC CORRIDOR @ THE 12TH FLOOR ONLY. THESE AREAS TO FOLLOW 6-11 FLOOR PLAN LEVEL LAYOUTS TO ALLOW PUBLIC ACCESS TO ROOF TERRACE ABOVE CURB.



- 2 PART PLAN OF STAIRS #1 & #2 @ 12TH FLOOR
- 3 PART PLAN OF STAIRS #1 & #2 @ 20TH FLOOR
- 4 ROOF BULKHEAD PLAN

NATURAL LIGHT & AIR CALCULATIONS  
TOTAL ROOM AREA: 331 SF  
MINIMUM TRANSPARENT GLASS AREA REQUIRED (NATURAL LIGHT): 33SF (10% OF ROOM AREA)  
TOTAL TRANSPARENT GLASS AREA PROVIDED: 49SF (COMPLIES)  
MINIMUM OPERABLE GLASS AREA REQUIRED (NATURAL AIR): 17SF (5% OF ROOM AREA)  
TOTAL OPERABLE GLASS AREA PROVIDED: 17SF (COMPLIES)

FOR OVERALL VIEW OF PLAN,  
SEE PARTIAL PLANS FOR SPECIFIC  
INFORMATION.

REVISION	DATE	BY	CHKD
1	02/01/2011	RL	RL
2	02/01/2011	RL	RL
3	02/01/2011	RL	RL
4	02/01/2011	RL	RL
5	02/01/2011	RL	RL
6	02/01/2011	RL	RL
7	02/01/2011	RL	RL
8	02/01/2011	RL	RL
9	02/01/2011	RL	RL
10	02/01/2011	RL	RL

PROJECT: RIVERSIDE CENTER BUILDING 2

DRAWING TITLE: 12TH TO 20TH FLOOR PLAN

SCALE: AS NOTED

DATE: 02/01/2011

PROJECT NO: 201102

DRAWN BY: RL

CHECKED BY: RL

DRAWING NO: A134.00

CADD FILE NO:







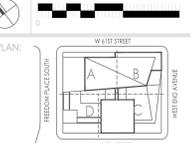




BOUNDARY OF BUILDING #2  
0'-0"

**SECOND FLOOR PLAN**  
SCALE: 1/8"=1'-0"

NO.	DATE	DESCRIPTION
1	02/01/2011	ISSUED FOR PERMITS
2	02/01/2011	ISSUED FOR PERMITS
3	02/01/2011	ISSUED FOR PERMITS
4	02/01/2011	ISSUED FOR PERMITS
5	02/01/2011	ISSUED FOR PERMITS
6	02/01/2011	ISSUED FOR PERMITS
7	02/01/2011	ISSUED FOR PERMITS
8	02/01/2011	ISSUED FOR PERMITS
9	02/01/2011	ISSUED FOR PERMITS
10	02/01/2011	ISSUED FOR PERMITS



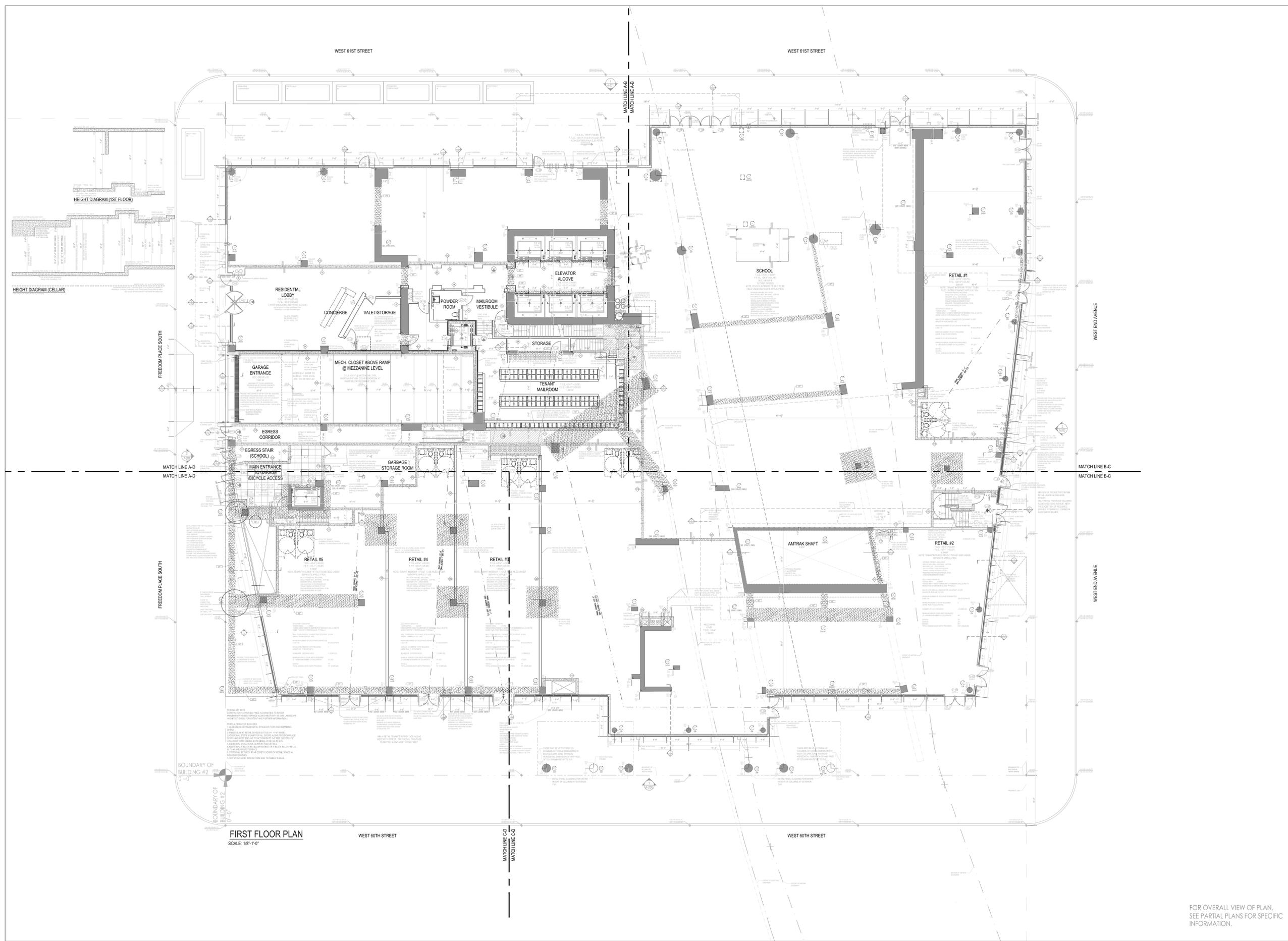
PROJECT:  
RIVERSIDE CENTER  
BUILDING 2

DRAWING TITLE:  
2ND FLOOR PLAN

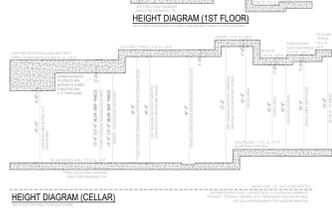
SEAL & SIGNATURE:	DATE: 02/11/2011
	PROJECT NO: 2011-01
	DRAWN BY: RL
	CHECKED BY: SB
	DRAWING NO: A111.00
	CADD FILE NO:

FOR OVERALL VIEW OF PLAN,  
SEE PARTIAL PLANS FOR SPECIFIC  
INFORMATION.





**FIRST FLOOR PLAN**  
SCALE: 1/8"=1'-0"



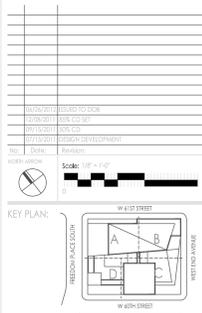
**RIVERSIDE CENTER  
BUILDING TWO**  
NEW YORK, NY

RIVERSIDE CENTER  
PARCEL 2  
BIT ASSOCIATES, LLC  
228 SEVEN AVENUE 13th  
NEW YORK, NY 10019  
T: 212.262.1222  
F: 212.262.1988

ARCHITECT OF RECORD:  
**SLCE Architects**  
861 BROADWAY  
NEW YORK, NY 10003  
T: 212.979.2400  
F: 212.979.9882

STRUCTURAL ENGINEER:  
**WSP CANTOR SEINUK**  
228 EAST 43RD STREET 3RD FLOOR  
NEW YORK, NY 10017  
T: 212.487.7888  
F: 484.487.2001

MECHANICAL ENGINEER:  
**WSP FLACK+KURTZ**  
228 SEVEN AVENUE  
NEW YORK, NY 10017  
T: 212.522.9600



PROJECT:  
**RIVERSIDE CENTER  
BUILDING 2**

DRAWING TITLE:  
**1ST FLOOR PLAN**

SEAL & SIGNATURE:	DATE: 09/15/2011
	PROJECT NO: 2011-01
	DRAWN BY: EL
	CHECKED BY: WS
	DRAWING NO: A106.00
	CADD FILE NO:

FOR OVERALL VIEW OF PLAN,  
SEE PARTIAL PLANS FOR SPECIFIC  
INFORMATION.

**RIVERSIDE CENTER BUILDING TWO**  
 21 WEST END AVENUE NEW YORK, NY

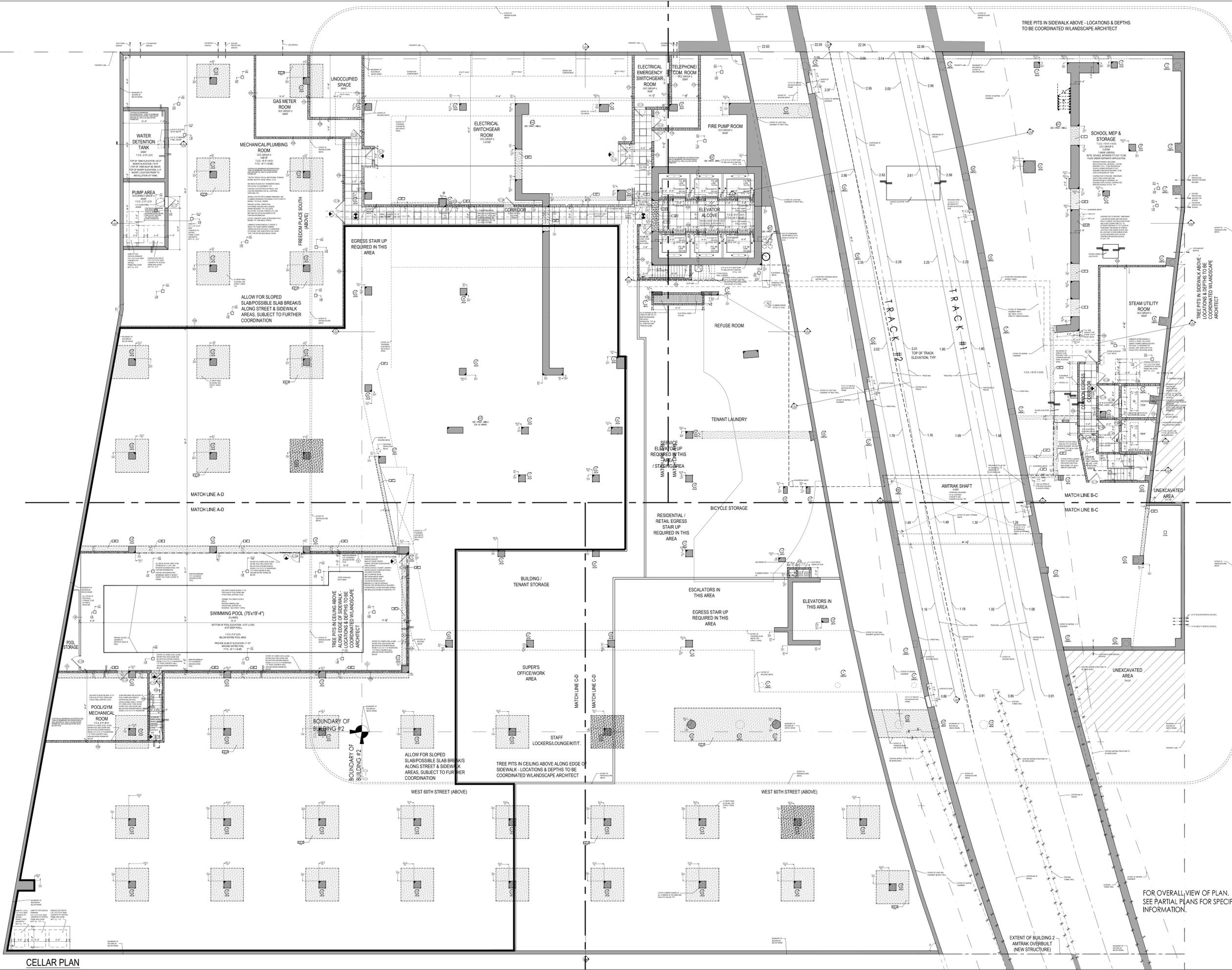
OWNER: RIVERSIDE CENTER  
**RIVERSIDE CENTER PARCEL 2**  
**BIT ASSOCIATES, LLC**

739 SEVENTH AVENUE 10/F  
 NEW YORK, NY 10019  
 T. 212.262.1200  
 F. 212.262.1088

ARCHITECT OF RECORD:  
**SLCE Architects**  
 641 BROADWAY  
 NEW YORK, NY 10003  
 T. 212.778.6400  
 F. 212.779.8387

STRUCTURAL ENGINEER:  
**WSP CANTOR SEINUK**  
 228 EAST 43RD STREET 3RD FLOOR  
 NEW YORK, NY 10017  
 T. 212.687.9888  
 F. 646.487.5501

MECHANICAL ENGINEER:  
**WSP FLACK+KURTZ**  
 512 SEVENTH AVENUE  
 NEW YORK, NY 10017  
 T. 212.532.9600



TREE PITS IN SIDEWALK ABOVE - LOCATIONS & DEPTHS TO BE COORDINATED W/ LANDSCAPE ARCHITECT

TREE PITS IN CEILING ABOVE ALONG EDGE OF SIDEWALK - LOCATIONS & DEPTHS TO BE COORDINATED W/ LANDSCAPE ARCHITECT

TREE PITS IN SIDEWALK ABOVE - LOCATIONS & DEPTHS TO BE COORDINATED W/ LANDSCAPE ARCHITECT

UNEXCAVATED AREA

UNEXCAVATED AREA

UNEXCAVATED AREA

AMTRAK SHAFT

AMTRAK SHAFT

SWIMMING POOL (75x19'4")

SWIMMING POOL (75x19'4")

POOLGYM MECHANICAL ROOM

POOLGYM MECHANICAL ROOM

STAFF LOCKERS/LOUNGE/KIT

STAFF LOCKERS/LOUNGE/KIT

BOUNDARY OF BUILDING #2

BOUNDARY OF BUILDING #2

WEST 60TH STREET (ABOVE)

WEST 60TH STREET (ABOVE)

FOR OVERALL VIEW OF PLAN, SEE PARTIAL PLANS FOR SPECIFIC INFORMATION.

FOR OVERALL VIEW OF PLAN, SEE PARTIAL PLANS FOR SPECIFIC INFORMATION.

KEY PLAN:

KEY PLAN:

PROJECT: RIVERSIDE CENTER BUILDING 2

DRAWING TITLE: CELLAR FLOOR PLAN

DATE: SEPT. 15, 2011

PROJECT NO.: 201102

DRAWN BY: [Name]

CHECKED BY: [Name]

DRAWING NO.: A101.00

DOB NO.: 121-32-4717

CELLAR PLAN

APPENDIX B  
PREVIOUS REPORTS  
(PROVIDED ON A CD)

APPENDIX C  
GEOPHYSICAL REPORT



# DIVERSIFIED GEOPHYSICS, INC.

**Subsurface Geophysical Investigations**

75 East 2<sup>nd</sup> Street, Mineola NY 11501  
(516) 326.0586 voice (516) 616.6194 fax

02 August 2012

Ms. Karen Merrill, Senior Staff Geologist  
Langan Engineering & Environmental Services  
21 Penn Plaza  
360 West 31<sup>st</sup> Street, 8<sup>th</sup> Floor  
New York, NY 10001-2727

Re: **Geophysical Investigations –West End Avenue  
Project # 170201301**

**Via Email**

Ms. Merrill:

On Tuesday, July 10<sup>th</sup>, 2012, Diversified Geophysics, Inc. (DGI) performed a geophysical investigation on the property located at 17-29 West End Avenue, in Manhattan, NY (-the Site). Ms. Courtney Mann, Staff Engineer and Mr. Clay Patterson, Project Manager for Langan met with DGI personnel and directed the on-site operations throughout the day. Ms Demetra Tsiamis, an intern with Langan, was also present for the drilling program. DGI personnel on site were Mr. Anthony Menno III and Mr. Andrew Silver.

The purpose of this investigation was to survey potential buried tank locations as identified by previous investigations; locate buried structures (including potential underground storage tanks (USTs) and associated piping); and confirm that sample locations were clear of subsurface utilities.

The geophysical investigation (site-wide) was comprised of a series of single-line Ground Penetrating Radar (GPR) traverses; one XY GPR grid survey, and multiple radio frequency (RF) surveys.

RF scans were made by using instrumentation that has a transmitter and receiver. The transmitter can be used to send electromagnetic waves of known frequencies along buried metallic conduits housing utilities, or through the utilities themselves. The receiver is used to trace the signal (audibly and/or graphically) and locate the direction of travel -in some cases the depth, of the utility below the surface. Receivers can also be used in stand-alone mode to detect frequencies in the range of 60Hz, often emitted by active electrical services in the United States. In addition, some RF/EM instruments can detect frequencies emitted by gas and water services. These utilities absorb and radiate VLF radio waves. Both technologies, GPR and RF/EM complement one another to provide the most useful data set necessary for the locating, tracing and characterization of subsurface anomalies.

Ground Penetrating Radar (GPR) data was collected with a Sensors and Software 250 MHz Noggin<sup>Plus</sup> SmartCart<sup>®</sup>. The depth of penetration was set to ten (10) feet below grade. During this investigation, GPR surveys were constructed as single-line traverses that ran parallel and perpendicular to the site footprint. GPR scans represent anomalies graphically as hyperbolas, their crests indicating position and depth below the surface to the target. In general, when scanning for linear targets such as utilities or tank plumbing, single-line scans are designed to traverse possible targets in directions perpendicular to the long-axis of the target. When a series of parallel scans detect anomalies at similar positions and depths, these results are interpreted to be evidence of utilities, conduit, re-bar or linear structures. Buried tanks are evidenced when linear anomalies are found that delineate the long-axis of the tank, and these anomalies occur at depths consistent with tank emplacement. When real-time (single-line) GPR returns were interpreted to suggest a UST or structure, an XY GRP grid survey with a four (4) foot spacing between traverse lines was performed over these areas of interest (AOI's) to collect data for post-processing and examination in greater detail -using state-of-the-art software programs. All on-site results were exhibited in real-time on the monitor of the GPR, and all structures, utilities or unknown linear anomalies were marked on the ground with paint.



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The Site is currently being used as a public parking facility. Six (6) proposed boring locations were surveyed with GPR and RF technology for the potential presence of subsurface utilities, structures and/or anomalies, -prior to selection as drill sites for the installation of monitoring or observation wells. Two (2) proposed locations were surveyed (using GPR and RF) and cleared of obstructions in order to advance temporary soil vapor points.

Active electric was traced using a Ridgid® SeekTech SR-60 RF receiver and a 3M Dynatel® 2250 M-iD pipe and cable locator (both transmitter and receiver) and marked on the asphalt in all areas of interest.

## **Results:**

### **Parking Facility-**

All utilities were traced and marked in areas proximal to the proposed boring locations. All drilling locations were selected after clearing the areas of obstructions (which included utilities and structures). Some selected locations were subsequently moved, in order to facilitate the ingress and egress of stored vehicles. These choices were based upon the absence of a utility network in the immediate area of the proposed or selected boring location, and were made after DGI personnel were no longer on-site.

The area investigated for the possible presence of UST's and/or related plumbing was surveyed with both GPR and RF instruments. The substrate consisted of a reinforced concrete slab that was used for long-term parking and was elevated from the remainder of the parking areas in the facility to the west. Three remnants of threaded pipe were examined along a structural break between the concrete slab and an asphalt pavement along the southern edge of the parking area. A direct connection to each conduit was made using the transmitter of the Ridgid® instrument package. All three conduits were filled with soil. All three conduits traced along the same trend line in a northeasterly direction. The terminus of the signal return traced to the eastern perimeter of this easternmost lot of the parking facility, where, a four foot drop in elevation occurred (a wall). No conduits were observed exiting the concrete slab at this junction where the substrate beneath the slab was exposed. A second trace with a weaker signal return trended to the south toward an earthen berm that flanked the asphalt paved entry road to the facility.

An XY GPR grid having four (4) foot spacing between traverse lines in both directions was constructed, and covered the areas surrounding the exposed piping (24ft X, 28ft Y). Real-time and post-processed data sets did not have the return signatures of buried tanks or associated plumbing.

### **West End Avenue-**

Two boring locations were chosen along West End Avenue, one in the south and one in a gated, weed filled area at the north end of the avenue where it intersected with West 61<sup>st</sup> Street (within the confines of the AMTRAK easement). Gas mains trending north/south down the center of the sidewalk along with traffic control and electric were evidenced by RF and GPR survey. Boring LB-5 (MW) was relocated from the proposed location at the curb-line to an area proximal to the eastern fence-line of the facility. Both locations (LB-5 (MW) and LB-6 (MW) to the north) were cleared for drilling with a Geoprobe®.

---

Andrew D. Silver  
Vice President/Engineering Geologist  
Diversified Geophysics, Inc.



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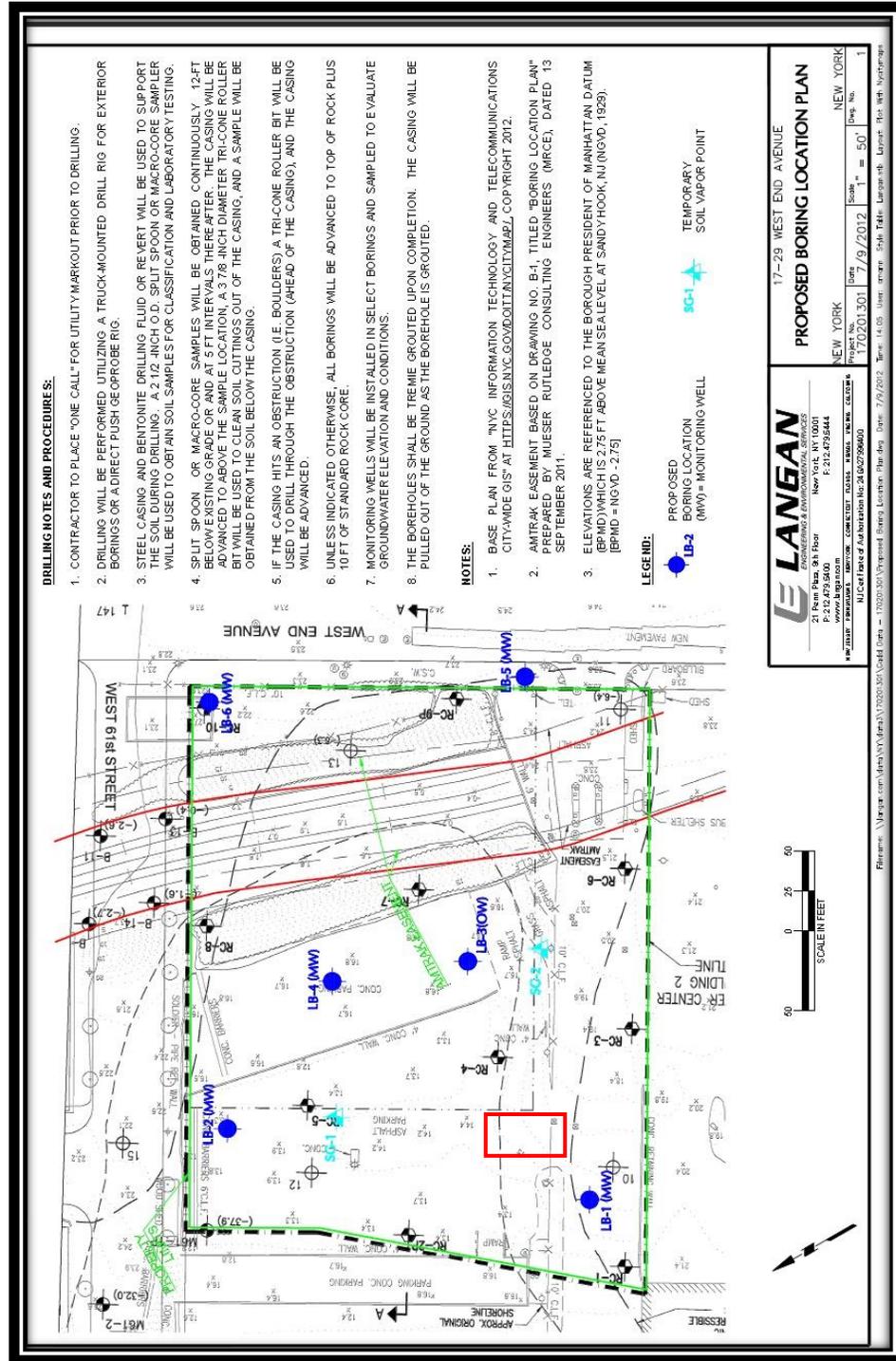


Figure 1. Site Plan Showing Site Footprint, Boring Locations and Grid Location Boxed In Red



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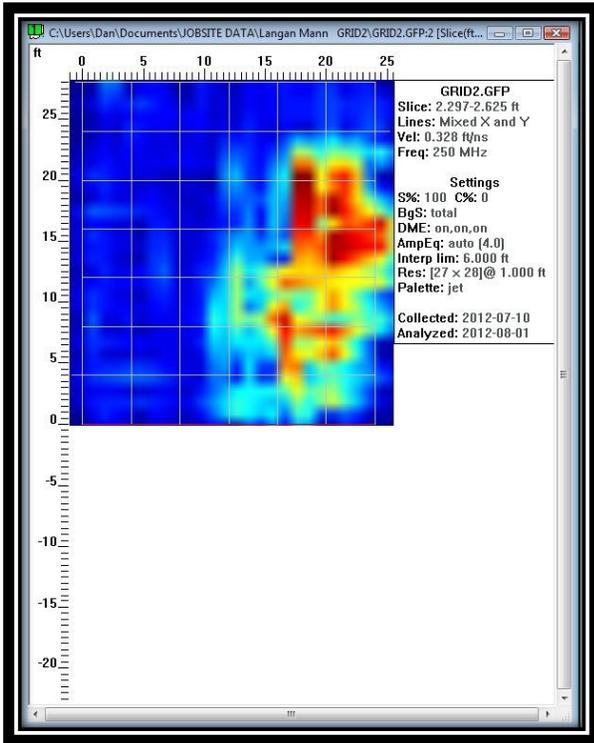
Figure 2. Satellite View Of Site



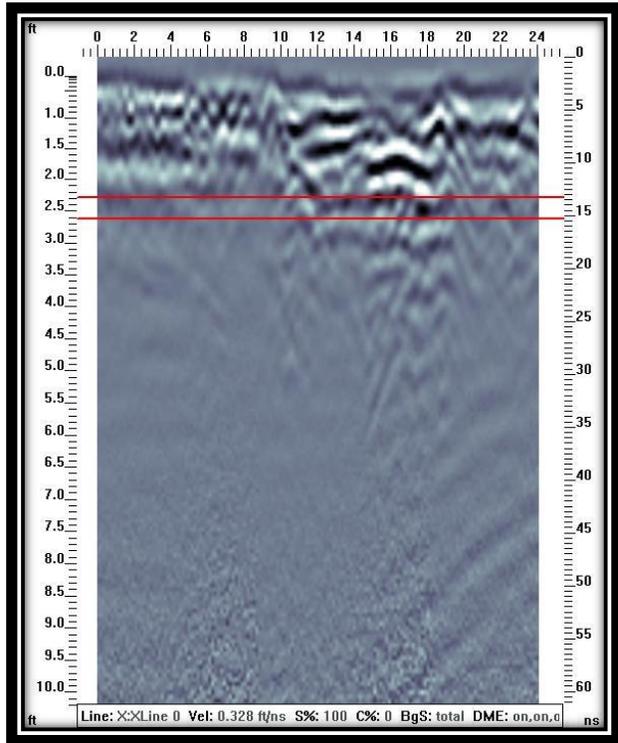
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(516) 326.0586 voice (516) 616.6194 fax



**Figure 3.** Colorimetric Plan View Of Grid 2 Showing Scattered Anomalies (Red) Top Of Grid Is East



**Figure 4.** Corresponding Profile View Grid 2 Showing Rebar Network Between 0 and 8ft And Disturbance Between 10 and 24ft.



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## PHOTOGRAPHS



# DIVERSIFIED GEOPHYSICS, INC.

**Subsurface Geophysical Investigations**

75 East 2<sup>nd</sup> Street, Mineola NY 11501  
(516) 326.0586 voice (516) 616.6194 fax



**Photo 1.** View South On West End Ave Showing Gas Mains And Associated Manholes.



**Photo 2.** Boring LB-5 View West Utility Panel Inside Fence Line. Feed From South



**Photo 3.** LB-6 Location



**Photo 4.** Intersection Of W61st Street With West End Avenue Showing Utility Network In Sidewalk



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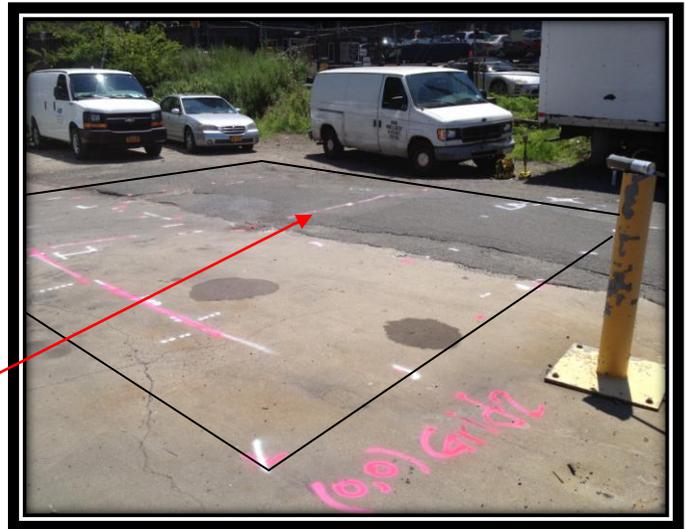
**Photo 5.** View North Of Grid 2 Area Showing Three Truncated Metal Conduits and Trace Of RF Signal



**Photo 6.** Close-up View Of Truncated Threaded Metal Pipe



**Photo 7.** View South Of RF Signal Indicated With Red Arrows



**Photo 8.** Grid 2 Showing Origin. View Southeast

APPENDIX D  
SOIL BORING LOGS

PROJECT <u>Riverside Parcel 2</u>			PROJECT NO. <u>170201301</u>		
LOCATION <u>17-29 West End Ave Manhattan, NY</u>			ELEVATION AND DATUM <u>18.4</u>		
DRILLING AGENCY <u>ADT</u>			DATE STARTED <u>7/16/12</u>	DATE FINISHED <u>7/16</u>	
DRILLING EQUIPMENT <u>Truck mounted drill rig</u>			COMPLETION DEPTH <u>45</u>	ROCK DEPTH <u>35</u>	
SIZE AND TYPE OF BIT <u>5 7/8 Tricone Roller Bit</u>			NO. SAMPLES	DIST. <u>6</u>	UNDIST. <u>0</u> CORE <u>5</u>
CASING <u>4 1/2 FLUSH JOINT STEEL</u>			WATER LEVEL	FIRST <u>0</u>	COMPL. <u>13.4</u> 24 HR. <u>13.2</u>
CASING HAMMER <u>Auto</u>	WEIGHT <u>140 lbs</u>	DROP <u>30"</u>	FOREMAN <u>Paul Gaddis</u>		
SAMPLER <u>2.0" O.D. Split Spoon NX CORE BARREL</u>			INSPECTOR <u>COURTNEY MANN</u>		
SAMPLER HAMMER <u>Auto</u>	WEIGHT <u>140 lbs</u>	DROP <u>30"</u>			

SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES			REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
		NO. LOC.	TYPE	RECOV. FT. PENETR. RESIST. BLG/IN.	
ASPHALT	0				← Z
Black/Brown c-f SAND, sm. c-f gravel, PID 0.0, no odor (dry) [Fill]	1	1	55	7	LB-1 moved 5' north bc of parking lot constraints
NO RECOVERY	2	1	55	8	
	3	1	55	3	
	4	1	55	1	60th St 45' Brick Building
	5	1	55	1	
Brown c-f SAND, sm. c-f gravel, tr. rock fragments PID 0.0 no odor (dry) [Fill]	6	2	55	2	845 started drilling
	7	1	55	1	900 env sample LB-1(MW) 1-2
Brown/black, tan c-f GRAVEL sm. m-f sand, tr. shells PID 0.0 no odor (dry) [Fill]	8	2	55	2	S2 no recovery cleaning hole to 5' - Brown/grey flush water
↓ 9-11'	9	1	55	1	S3 geo sample
	10	3	55	3	not enough to fill 3 jars went back down 2 more times - no recovery
	11	2	55	2	935 env sample LB-1(MW) 9-11
Brown m-f SAND, tr. wood, tr. decomposed rock, tr. c-f gravel PID 0.0 no odor (moist) [Fill]	12	2	55	1	300 geo sample
	13	4	55	4	1000 env sample LB-1(MW) 11-13
	14	2	55	1	▽ approx water table 13

JOB NO. 170201301

LOG OF BORING NO. LB-1

DATE 7/16/12

SHEET 2 OF 3

DEPTH SCALE	SAMPLE DESCRIPTION	SAMPLES				REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
		NO. LOC.	TYPE	RECOV. FT.	PENETR. RESIST. BL/S IN.	
15	Blackish brown c-f SAND, tr. c-f gravel, tr. brick, tr. decomposed rock PID 0.0 no odor (moist) [S]	57	SS	00	5 9	geo sample 57
16	Black m-f SAND, tr. c-f gravel, tr. decomposed rock PID 0.0 no odor (moist) [DR]	58	SS	00	7 30	geo sample 58 refusal @ 16.5
17	Grey m-f SAND, tr. rock fragments PID 0.0 no odor (dry) [DR]	59	SS	-	100+R	geo sample 59 refusal @ 17.5 just reached 500lbs
18						drilling casing to 25' through decomposed rock bc of little to no material in sample tubes
19						grey/brown flush water
20						
21						
22						
23						
24						
25	Black m-f SAND, sm. decomposed rock (mica schist) PID 0.0 (moist) [DR]	510	SS	00	100+R	refusal @ 25.5 30 geo sample drilling to 30', grey flush water
26						hammering casing to 30'
27						
28						
29						
30						
31					12.5 15 FT 6.5 mg	@ 1204 started casing 300 lbs pressure

JOB NO. 170201301

LOG OF BORING NO. LB-1

DATE 7/11/12

SHEET 3 OF 3

SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES				REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
		NO. LOC.	TYPE	REC. FT.	PENETR. RESIST. BL/6 IN.	
Rock	32					increased
Black outside, brown/grey/black inside, moderately to extremely fractured, medium to soft fine grained rock, vertical breaks	33	CORE #1	NX CORE BARREL	REC = 60/60	70%	increased speed core jam @ 33' emptied 30" of rock from core drilled core final 2'
	34			3.5	4 1/3	
	35			3.5	4 1/3	
Black + grey, slightly to moderately fractured, hard to medium, fine to med grained rock	36	CORE #2	NX CORE BARREL	REC = 60/60	9	core jam @ 35.5', core emptied chilled core final 4.5' grey flush water @ 1350 completed CORE #2
	37			0.5	0 1/3	
	38			0.5	0 1/3	
	39			0.5	0 1/3	
Grey, slightly fractured, hard, slightly weathered, fine to med grained rock	40	CORE #3	NX CORE BARREL	REC = 60/60	7.5	no issues w/ core @ 1405 started @ 1430 finished
	41			7.5	7 1/3	
	42			7.5	7 1/3	
	43			7.5	7 1/3	
	44			7.5	7 1/3	
	45			7.5	7	
End of Boring @ 45'	45					
	46					
	47					
	48					

PROJECT <u>Riverside Parcel 2</u>			PROJECT NO. <u>170201301</u>		
LOCATION <u>17-29 West End Ave Manhattan, NY</u>			ELEVATION AND DATUM <u>13.3' el</u>		
DRILLING AGENCY <u>ADT</u>			DATE STARTED <u>7/10/12</u>		DATE FINISHED <u>7/11/12</u>
DRILLING EQUIPMENT <u>Truck mounted drilling rig</u>			COMPLETION DEPTH <u>37'</u>		ROCK DEPTH <u>21'</u>
SIZE AND TYPE OF BIT <u>5 7/8" Tricone Roller bit</u>			NO. SAMPLES	DIST. <u>12'</u>	UNDIST.   CORE <u>2</u>
CASING <u>4 1/2" FLUSH JOINT STEEL</u>			WATER LEVEL	FIRST <u>13</u>	COMPL.   24 HR.
CASING HAMMER <u>Auto</u>	WEIGHT <u>140 lbs</u>	DROP <u>30"</u>	FOREMAN <u>Paul Gaddis</u>		
SAMPLER <u>2.0" O.D. Split Spoon NX CORE BARREL</u>			INSPECTOR <u>COURTNEY MANN</u>		
CASING HAMMER <u>Auto</u>	WEIGHT <u>140 lbs</u>	DROP <u>30"</u>			

SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES				REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
		NO. LOC.	TYPE	RECOV. FT.	PENETR. RESIST. BL/6 IN.	
asphalt 1'	1					<p>CONCRETE WALL</p> <p>11' TIMBER LAGGING</p> <p>24'</p> <p>12'</p> <p>LB-2</p> <p>7/10/12</p> <p>+ Driller arrived @ 10:45 am 1145 Env Field Blank #1 - Start drilling 11:55 - Tri-Cone through ± 12" asphalt - Env sample LB-2-1-3 12' 15" P1000 - cleaned hole to 3'; sampled 3-5 + spin casing - 4" casing to 5' 3 7/8" bit clean hole to 5', dark, grey/black fluid return - sample 5-7' - clean hole to 7' - heavy chatter @ 7' glass Env sample LB-2-7-9 P1000 geo sample 7-9 clean hole to 9' glass Env sample LB-2-9-13 P1000 clean hole to 11' clean hole to 13' sample geo 13-15'</p>
Brown/black c-m SAND, sm. c-f gravel, tr. brick (dry) [Fill] no odor PID 0.0	2	S-1	SS	5"	10	
Black c-m SAND, sm. c-f gravel, tr. bricks (dry) [Fill] PID 0.0 no odor	3	S-2	SS	7"	5	
Black/brown c-m SAND, sm. c-f gravel, sm. brick (dry) [Fill] PID 0.0 no odor	4	S-3	SS	10"	6	
Brown/tan m-f SAND, sm. brick, sm. c-f gravel, tr. silt & debris (dry) [Fill] PID 0.0 no odor	5	S-4	SS	7"	2	
Black/brown m-f SAND, sm. c-f gravel, tr. silt, (moist) [Fill] PID 0.0 no odor	6	S-5	SS	14"	10	
Black/brown m-f SAND, sm. c-f gravel, tr. silt, (moist) [Fill] PID 0.0 no odor	7	S-6	SS	6"	1	
Black/brown m-f SAND, sm. c-f gravel, tr. weathered rock m.ca schist (moist) [Fill] PID 0.0 no odor	8	S-7	SS	7"	2	
Black/brown SAND, sm. c-f gravel	9	S-8	SS	12"	3	
	10					
	11					
	12					
	13					
	14					

JOB NO. 170201301

LOG OF BORING NO. LB-2

DATE \_\_\_\_\_

SHEET 2 OF 3

DEPTH SCALE	SAMPLE DESCRIPTION	SAMPLES				REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
		NO. LOC.	TYPE	RECOV. FT.	PENETR. RESIST. BL/6 IN.	
15	tr weathered rock (wet) [Fill] PID 0.0 no odor ORGANIC			2	1	Water table @ 13'
16	Grey organic CLAY, sm. silt, tr. organic materials (wet) [OH]	S-8	SS	28"	WH	weight of hammer pushed thru sample geo 15'-17'
17	Grey organic clayey SILT, tr. organics (wet) [OH]				WH	driller has no Shelby tubes clean hole to 17'
18	Grey organic clayey SILT, tr. organics (wet) [OH]	S-9	SS	30"	WH	Sample geo 17'-19'
19					WH	clean hole to 19'
20	Grey organic clayey SILT, tr. organics, tr. rock (wet) [OH]	S-10	SS	3"	WH	sample geo 19'-21"
21					WH	clean hole to 21'
22	Grey organic clayey SILT, tr. organics, tr. rock (wet) [OH]	S-11	SS	14"	WH	grey fluid return
23					3	
24	Grey GRAVEL and SILT, sm. m-f sand (wet) [G]	U-1	ST	9"	POST	last casing for the day drove down to 19' to preserve the hole @ 1440
25						7/11/12
26	Grey weathered rock, sm. c-f gravel and m-f sand (wet) [WR]	S-12	SS	6"	100%	@ 740 clean hole to 23' Grey flush return
27	ROCK					Attempting Shelby tube @ 755 Shelby tube down
28	Grey/Pink pegmatite, slightly fractured, medium-hard, slightly weathered, very coarse grained					@ 820 pulled Shelby tube 30" - 19" = 11" recovery recovered something bottom - dented 9"
29						> 100 hammer in 1st 6" refusal, looks like white granite at end of sampler
30						Roller bit to 27'
31						Grey flush return at first Hard drilling Shelby tube possibly pushed rock down hole

JOB NO. 170201301  
 DATE \_\_\_\_\_

LOG OF BORING NO. LB-2  
 SHEET 3 OF 3

SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES			REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
		NO. LOC.	TYPE	RECOVER. FT.	
<p>Gray slightly fractured, very hard, slightly to moderately weathered, med-fine grained granite rock</p>	32	CORE # 2	NIX CORE BARREL	5.5 min	water loss isolating drive shaft - screwed on 1' casing + hammered
	33			5 min	hard drilling water loss
<p>End of Boring @ 37'</p>	34	CORE # 2	NIX CORE BARREL	5.5 min	- screwed on another 1' of casing bc weathered rock was washed away
	35			7 min	- hammering casing
	36			8 min	- drilling 25' - 27' 300-400 lbs pressure greyish + clear + flush return
	37				@ 9:47 started rock coring @ 27'
	38				@ 10:15 finished coring to 32'
	39				@ 10:19 started rock coring @ 32'
	40				losing water @ 34' (possible fracture in rock)
	41				stopped @ 10:30 to fill mud tub
	42				started again @ 10:36
	43				losing water
	44				400 lbs pressure on rig
	45				stopped @ 10:51 @ 37'
	46				
	47				
	48				

PROJECT <b>Riverside Parcel 2</b>			PROJECT NO. <b>170201301</b>		
LOCATION <b>17-29 West End Ave Manhattan, NY</b>			ELEVATION AND DATUM <b>203</b>		
DRILLING AGENCY <b>ADT</b>			DATE STARTED <b>7/11/12</b>		DATE FINISHED <b>7/12/12</b>
DRILLING EQUIPMENT <b>Truck mounted drilling rig</b>			COMPLETION DEPTH <b>39'</b>		ROCK DEPTH <b>29'</b>
SIZE AND TYPE OF BIT <b>5 7/8 tricone roller bit</b>			NO. SAMPLES	DIST. <b>14</b>	UNDIST. <b>0</b>
CASING <b>4 1/2 FLUSH JOINT STEEL</b>			WATER LEVEL	FIRST <b>n/a</b>	COMPL. <b>24 HR.</b>
CASING HAMMER <b>Auto</b>	WEIGHT <b>140 lbs</b>	DROP <b>30"</b>	FOREMAN <b>Paul Gaddis</b>		
SAMPLER <b>2.0" O.D. Split Spoon NX CORE BARREL</b>			INSPECTOR <b>COURTNEY MANN</b>		
SAMPLER HAMMER <b>Auto</b>	WEIGHT <b>140 lbs</b>	DROP <b>30"</b>			

SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES				REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
		NO. LOC.	TYPE	RECOV. FT.	PENETR. RESIST. BL/6 IN.	
asphalt						@ 1400 started drilling roller bit through asphalt
Black/grey m-f SAND, sm. c-f gravel, tr. shells (most) [Fill] no odor PID=0.0 ppm	1	51/LB3-1-2	SS	5	5	@ 1405 Env sample LB 3-1-2
	2			35		- roller bit to 3'. Rig chattering grey flush return
Black/grey m-f SAND and c-f GRAVEL, tr. shells, tr. brick, tr. glass (most) [Fill] no odor PID=0.0	3			3	8	- sample LB 3-3-5 taken
	4			5		- cleaning hole to 5'
Tan m-f SAND, tr. c-f gravel, tr. silt, tr. mica schist (most) [Fill] no odor PID 0.0	5			3	5	- Env sample LB 3-5-7 taken
	6			3	2	clean hole to 7'
Brown m-f SAND and decomposed rock, tr. c-f gravel, tr. brick, tr. silt no odor PID 0.0 (most) [DR] [Fill]	7	53	SS	3	4	done for day @ 1430
	8			2	3	7/12/11
Decomposed rock (mica schist), tr. m-f sand, tr. c-f gravel, tr. silt (most) [DR] PID 0.0	9			6	3	@ 718 clean hole to 7'
	10			5	3	- go sample 54 7-9' cleaning hole to 9'
Decomposed rock (mica schist), tr. m-f sand, tr. silt (most) [DR] PID 0.0	11			4	10	had to send sampler down twice to get enough soil
	12			4	7	env sample LB 3-9-10' @ 735
Decomposed rock (mica schist), tr. m-f sand, tr. silt (most) [DR] PID 0.0	13			7	7	cleaning hole to 11'
	14			3	5	go sample 56 11-13
Decomposed rock (mica schist), tr. m-f sand, tr. silt (wet) [DR] PID 0.0				2	2	cleaning hole to 13' grey flush wash
						had to send down twice 1st time recovery 2"

JOB NO. 170201301

LOG OF BORING NO. LB 3

DATE 7/12/12

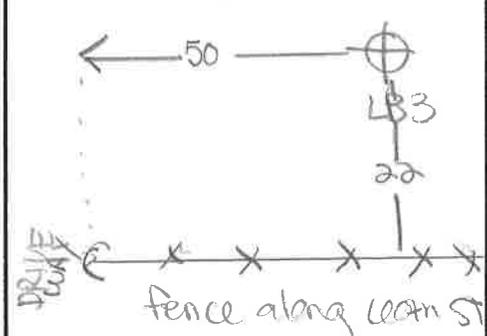
SHEET 2 OF 3

DEPTH SCALE	SAMPLE DESCRIPTION	SAMPLES				REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
		NO. LOC.	TYPE	RECOV. FT.	PENETR. RESIST. BLGS IN.	
15	top 2" Brown clayey silt, sm. m-f sand, tr. c-f gravel	57	SS	2"	2	2 <sup>nd</sup> time no recovery
16	bottom 11" tan clay, sm. silt, green serpentine, tr. orange clay	58	SS	13"	2	- geosample 57 13'-15'
17	P100.0 (wet) [O/Fill]				3	- top 2" geo 58A
18	top 10" : Brown clayey silt, bottom 2" Black organic silty clay, sm. organic material (wet) 10/Fill	59	SS	10"	3	- bottom 11" geo 58B
19	P100.0				2	- geo sample 59 A - top 10" 59 B - top 2"
20	Brown m-f SAND, sm. silt + 1 tr. fibrous organic material	510	SS	10"	10	- clean hole to 19'
21	tr. brick, tr. wood (wet) [O]				6	green wash - possible serpentine
22	Brown m-f SAND, tr. silt, P100.0 (wet) [S] [Fill]	511	SS	7"	5	very green - Kelly green clay coming from hole
23	Tan m-f SAND, sm. silt, tr. clay (wet) [S] P100.0	512	SS	12"	5	up to 250 lbs pressure + removal from Shelby tube
24	Reddish Brown m-f SAND, sm. silt, tr. clay (wet) [S] P100.0				5	took tube out, did not do sample
25	Reddish Brown m-f SAND, sm. silt, tr. clay (wet) [S] P100.0				8	geo sample 510 19'-21'
26	Reddish Brown c-f SAND, sm. c-f gravel, tr. highly weathered rock (wet) [S] P100.0	513	SS	17"	6	cleaned hole to 21' some water loss
27	Reddish Brown c-f SAND, sm. c-f gravel, tr. highly weathered rock (wet) [S] P100.0				10	- geo sample 511 21'-23'
28	Grey, slightly fractured, hard, slightly weathered, medium to fine grained, rock	514	SS	11"	13	cleaned hole to 23' some water loss
29					45+	- geo sample 512 23'-25'
30					8	- driving the casing to 24'
31					1mm Ft	- cleaning hole to 25' light brown flush water
					5mm Ft	- geo sample 5-13 25'-27'
						refusal @ 28.5' geo sample 514
						- water seen ~ 15' bgs in hole

JOB NO. 170201301  
 DATE 7/12/12

LOG OF BORING NO. LB3

SHEET 3 OF 3

SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES				REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)	
		NO. LOC.	TYPE	RECOV. FT.	PENETR. RESIST. BLG IN.		
Grey, slightly fractured, hard, slightly weathered, fine to medium grained rock	32	CORE #1	IN CORE BARREL	5.0 mm	15'	- hammering casing to 29' + cleaning hole - possibly in rock trying to get a seal - water loss / waiting for water to recover - coring rock @ 29' 1040 mm - tannish white color flush water - @ 1127 CORE #2 @ 34' - stopped @ 1140, truck on top of hole - filling up rig w/ water tank - 1200 started coring - 1240 done coring - map of boring ↑ N 	
	33			5.5 mm	15'		
	34			8 mm	15'		
	35			10 mm	15'		
	36			4 mm	15'		
	37			4 mm	15'		
	38			4 mm	15'		
	39			4 mm	15'		
	40						
	41						
	42						
	43						
	44						
	45						
	46						
47							
48							

PROJECT <u>Riverside Parcel 2</u>		PROJECT NO. <u>170201301</u>	
LOCATION <u>17-29 West End Ave Manhattan, NY</u>		ELEVATION AND DATUM <u>116.7</u>	
DRILLING AGENCY <u>ADT</u>		DATE STARTED <u>7/12/12</u>	DATE FINISHED <u>7/13/12</u>
DRILLING EQUIPMENT <u>Truck mounted drilling rig</u>		COMPLETION DEPTH <u>47</u>	ROCK DEPTH <u>37</u>
SIZE AND TYPE OF BIT <u>5 7/8 tricone roller bit</u>		NO. SAMPLES	DIST. <u>18</u> UNDIST. CORE <u>2</u>
CASING <u>4 1/2 FLUSH JOINT STEEL</u>		WATER LEVEL	FIRST <u>9.75</u> COMPL. <u>dry</u> 24 HR.
CASING HAMMER <u>Auto</u>	WEIGHT <u>140 lbs</u>	DROP <u>30"</u>	
SAMPLER <u>2.0" O.D. Split Spoon NX CORE BARREL</u>		FOREMAN <u>Paul Gaddis</u>	
CASING HAMMER <u>Auto</u>	WEIGHT <u>140 lbs</u>	DROP <u>30"</u>	
INSPECTOR <u>COURTNEY MANN</u>			

SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES				REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
		NO. LOC.	TYPE	RECOV. FT.	PENETR. RESIST. B/L6 IN.	
Cement 6"						Cored through 6" cement
Brown fine SAND (clean fill), no odor PID=0.0 dry [FILL]	1				4	started drilling @ 1400
	2				7	@ 1400 env sample LB4-1-2
	3				9	geo sample S-2 3'-5'
Black/brown/tan m-f SAND, tr. gravel, tr. silt (mica schist) no odor PID=0.0 dry [FILL]	4				6	cleaning hole to 5'
	5				14	hammering casing
	6				15	brown flush
Brown/black m-f SAND, tr. gravel, tr. silt (mica schist) no odor PID 0.0 dry [FILL]	7				18	
	8				9	geo sample S-3
	9				10	cleaning hole to 7', brown flush
	10				21	@ 1437 env samples LB4-7-8
Brown/black m-f SAND, tr. gravel, tr. silt (mica schist) tr. back to odor PID=0.0 ppm dry [FILL]	11				17	cleaning hole to 9'
	12				5	geo sample S-5 9-11
	13				2	
Brown/black m-f SAND, tr. gravel, tr. weathered rock, tr. silt no odor PID 0.0 dry [FILL]	14				3	@ 1500 env LB4 11-12
	15				5	geo sample S-7 13-15
	16				2	done for day @ 1515
Brown/black m-f SAND, tr. gravel, tr. weathered rock, tr. silt no odor PID 0.0 dry [FILL]	17				1	7/13/12
	18				1	Diversified geophysics on site marking at LB-5 (mw) on sidewalk
top 2" Brown sand, tr. gravel, tr. silt, tr. silt (dry) [FILL]	19				3	ADT drillers onsite
	20				9	

JOB NO. 170201301  
 DATE 7/13/12

LOG OF BORING NO. LB-4

SHEET 2 OF 3

DEPTH SCALE	SAMPLE DESCRIPTION	SAMPLES				REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
		NO. LOC.	TYPE	REC'D. FT.	PENETR. RESIST. BLG IN.	
15	bottom 3" grey/brown m-f SAND, some weathered rock (mica schist), tr. silt no odor PID 0.0 (moist) [DR]	57	SS	11	11	started drilling 740 geo sample S8
16	Reddish brown m-f SAND, sm. c-f gravel, tr. organics (moist) [FII] no odor PID 0.0	58	SS	6	6	
17	Brown m-f SAND, sm. black/brown decomposed rock, tr. c-f gravel, tr. silt no odor PID 0.0 (moist) [DR]	59	SS	8	8	geo sample S9
18		60	SS	4	4	cleaning hole to 19' - water loss
19				5	5	geo sample S10 19'-20'
20	Brown m-f SAND and decomposed rock, sm. c-f gravel, tr. silt no odor PID 0.0 (moist) [DR]	61	SS	1	1	cleaning hole to 21' - under loss
21		62	SS	1	1	geo sample S11 21-23
22	Black m-f SAND, sm. fibrous organics, sm. decomposed rock, tr. wood organic odor PID 0.0 (wet) [S]	63	SS	10	10	cleaning hole to 23' - water loss
23				5	5	geo sample S12 23-25
24	Brown m-f SAND, sm. c-f gravel, tr. decomposed rock, tr. wood organic odor PID 0.0 (wet) [S]	64	SS	4	4	driving casing to 25'
25		65	SS	5	5	cleaning the hole to 25' brown flush
26	Brown m-f SAND, sm. silt, tr. clay organic odor PID 0.0 (wet) [S]	66	SS	7	7	geo sample S13 25-27
27		67	SS	4	4	cleaning hole to 27
28	Brown m-f SAND, sm. silt, tr. clay tr. gravel organic odor PID 0.0 (wet) [S]	68	SS	8	8	geo sample S14 27-29
29		69	SS	5	5	cleaning hole to 29
30	Reddish brown fine SAND, sm. silt, rock fragments at bottom 2" organic odor PID 0.0 (moist) [S]	70	SS	1	1	geo sample S15 29-31
31		71	SS	5	5	cleaning hole to 31
		72	SS	7	7	Red/Brown flush water
		73	SS	8	8	cleaning hole to 33
		74	SS	7	7	
		75	SS	10	10	SSE 1st ST
		76	SS	20	20	CONCRETE
		77	SS	20	20	AMTRAK tracks
		78	SS	18	18	
		79	SS	22	22	

JOB NO. 170201301  
 DATE 7/13/12

LOG OF BORING NO. LB-4  
 SHEET 3 OF 3

SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES				REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
		NO. LOC.	TYPE	RECOV. FT.	PENETR. RESIST. BLKS IN.	
Reddish brown fine SAND, sm. silt, tr. decomposed rock organic odor P100.0 (moist) [S]	32	S16	SS	24		geo sample S16
Reddish Brown fine SAND, sm. silt, tr. decomposed rock organic odor P100.0 (moist) [S]	33	S17	SS	35		cleaning hole to 33' - reddish brown wash
Reddish Brown fine SAND, sm. silt, tr. decomposed rock organic odor P100.0 (moist) [S]	34	S18	SS	19		geo sample S17
Brown fine SAND, sm. silt, tr. decomposed rock (white, yellow, green) organic odor P100.0 (moist) [S]	35	S19	SS	30		cleaning hole to 35' - reddish brown wash
Brown fine SAND, sm. silt, tr. decomposed rock (white, yellow, green) organic odor P100.0 (moist) [S]	36	S20	SS	46		geo sample S18
Rock	37	S21	SS	32		cleaning hole to 37'
No recovery	38	S22	SS	38		brown wash, hard drilling + chattering
Grey, slightly fractured, hard fine to medium grained, slightly weathered rock	39	S23	SS	43		S19 no recovery
	40	S24	SS	100	R	clean hole to 37'
	41	S25	SS	85	R	@ 1045 started rock core #1
	42	S26	SS	0	R	
	43	S27	SS	0	R	
	44	S28	SS	4.5	R	
	45	S29	SS	4.5	R	
	46	S30	SS	5	R	
	47	S31	SS	6	R	
	48	S32	SS	5	R	

End of boring @ 47'

1120 finished core #1  
 @ 1127 started rock core #2 @ 42'  
 the missing 4" of rock from core #1 came out in core #2  
 1156 finished rock core #2 @ 47'  
 DTU measured in casing 1125' - 1.5' = 9.75' from platform surface

RC-9

PROJECT <b>Riverside Parcel 2</b>		PROJECT NO. <b>170201301</b>	
LOCATION <b>17-29 West End Ave Manhattan, NY</b>		ELEVATION AND DATUM <b>23.8</b>	
DRILLING AGENCY <b>ADT</b>		DATE STARTED <b>7/18/12</b>	DATE FINISHED <b>7/18/12</b>
DRILLING EQUIPMENT <b>HSA drilling rig</b>		COMPLETION DEPTH <b>21</b>	ROCK DEPTH <b>NA</b>
SIZE AND TYPE OF BIT		NO. SAMPLES	DIST. UNDIST. CORE
CASING <b>4 1/4 HSA</b>		WATER LEVEL	FIRST COMPL. 24 HR.
CASING HAMMER	WEIGHT	DROP	
SAMPLER <b>2.0" O.D. split spoon</b>		FOREMAN <b>Joe</b>	
CASING HAMMER	WEIGHT	DROP	
		INSPECTOR <b>COURTNEY MANN</b>	

DEPTH SCALE	SAMPLE DESCRIPTION	SAMPLES				REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
		NO. LOC.	TYPE	REC'D. FT.	PENETR. RESIST. BUS IN.	
1	CONCRETE					<div style="text-align: right;"> </div> <p>940 started drilling</p> <p>1000 env sample LB5(MW) 1-2</p> <p>1030 env sample LB5(MW) 10-12</p> <p>1045 env sample LB5(MW) 13-14 <span style="float: right;">NOT SENT TO LAB</span></p> <p>gw estimated btw 13-19 used BTW meter in casings ~ 19' bgs ▽ refusal @ 21' bgs ▽ screenng well from 10'-21' 11' screen 10' nscr</p> <p>extra sample taken @ 1115 LB5(MW) 17-19 <span style="float: right;">SENT TO LAB</span></p>
2	Brown m-f SAND, tr. gravel, tr. brick, tr. silt (dry) [Fill] PID 0.0 no odor			20	7	
3	Brown m-f SAND, sm. brick, tr. decomposed rock, tr. silt, tr. gravel (dry) [Fill] PID 0.0 no odor			20	24	
4	Brown m-f SAND, sm. brick, tr. gravel (dry) [Fill] PID 0.1 no odor			20	16	
5	Brown m-f SAND, sm. brick, tr. gravel (dry) [Fill] PID 0.1 no odor			20	14	
6	Brown m-f SAND, sm. brick, tr. gravel, tr. decomposed rock (dry) [Fill] PID 0.0 no odor			20	13	
7	Brown m-f SAND, tr. decomposed rock tr. gravel (dry) [s] PID 0.0 no odor			20	11	
8	Brown m-f SAND and weathered rock, tr. gravel, tr. silt (dry) [Fill] PID 0.0 no odor			20	9	
9	Brown m-f SAND, sm. c-gravel, tr. silt, tr. decomposed rock			20	3	
10				20	4	
11				20	4	
12				20	7	
13				20	9	
14				20	3	

JOB NO. 170201301  
 DATE 7/18/12

LOG OF BORING NO. LB-5

SHEET 2 OF 2

DEPTH SCALE	SAMPLE DESCRIPTION	SAMPLES			REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
		NO. LOC.	TYPE	RECOV. FT. PENETR. RESIST. BL/6 IN.	
	(moist) [Fill] PID 0.0 nodular			7 3	
15	Brown m-f SAND, sm. decomposed rock, tr. gravel, tr. silt			4	
16	(moist) [Fill] PID 0.0 nodular			2 15	
17	Brown m-f SAND, sm. decomposed rock, tr. gravel, tr. silt			10" 25 19	
18	(moist) [Fill] PID 0.0 nodular			6 9	
19				3 13	
20	Brown m-f SAND, sm. decomposed rock, tr. gravel, tr. silt			10' 5 2	
21	(wet) [Fill] PID 0.0			5 13	
22	end of boring @ 21' refusal				
23					
24					
25					
26					
27					
28					
29					
30					
31					

PROJECT <u>Riverside Parcel 2</u>		PROJECT NO. <u>170201301</u>	
LOCATION <u>17-29 West End Ave Manhattan, NY</u>		ELEVATION AND DATUM <u>23.9</u>	
DRILLING AGENCY <u>ADT</u>		DATE STARTED <u>7/17/12</u>	DATE FINISHED <u>7/17/12</u>
DRILLING EQUIPMENT <u>hydraulic push Geoprobe</u>		COMPLETION DEPTH <u>20</u>	ROCK DEPTH <u>NA</u>
SIZE AND TYPE OF BIT		NO. SAMPLES	DIST.
CASING <u>24</u>		WATER LEVEL	FIRST <u>15.5</u> COMPL. <u>16.4</u> 24 HR. <u>16.7</u>
CASING HAMMER	WEIGHT	FOREMAN <u>Bernie</u>	
SAMPLER <u>2" Geoprobe</u>	DROP	INSPECTOR <u>COURTNEY MANN</u>	
SAMPLER HAMMER	WEIGHT	DROP	

DEPTH SCALE	SAMPLE DESCRIPTION	SAMPLES				REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
		NO. LOC.	TYPE	RECOVER FT.	PENETR. RESIST. BLU/IN.	
1	① 1330 env sample LB6(MW) 1-2					1-2 Tan. m-f SAND, sm silt, tr. gravel (dry) [Fill]
2				5'		2-3 Brown m-f SAND, sm silt (dry) [Fill]
3	① 1340 env sample LB6(MW) 8-10					3-5 Blackish brown m-f SAND, sm silt, tr. gravel (dry) [Fill]
4	*DUP #1 @ 1340 8'-10'					PI 0.0 reader
5						
6	① 1400 env sample LB6(MW) 14-15			3'		7-8 Brown m-f SAND, tr. gravel, tr. silt, tr. decomposed rock (dry) [Fill]
7						
8						8-9 Grey fine SAND, sm silt (dry) [Fill]
9						8.9-9 weathered rock
10						9-10 Brown fine SAND, tr. weathered rock
11						PI 0.0 reader
12				10'		10-11 Grey + Black Decomposed rock and brownish grey m-f SAND
13						11-15 Brown/tan fine SAND (dry) [S] PI 0.0 reader
14						

JOB NO. 170201301  
 DATE 7/17/12

LOG OF BORING NO. LB-6  
 SHEET 2 OF 2

SAMPLE DESCRIPTION	DEPTH SCALE	SAMPLES				REMARKS (DRILLING FLUID, DEPTH OF CASING, CASING BLOWS, FLUID LOSS, ETC.)
		NO. LOC.	TYPE	RECOV. FT.	PENETR. RESIST. BLG IN.	
	15					15-15.5 Brown m-f SAND sm. decomposed rock (moist) [8]
	16					
	17					15.5-18 Brownish organic SAND, tr. silt (wet) [5]
	18					
	19					18-20 Brownish grey SAND, tr. silt (wet) [5]
	20					
	21					⊙ 1400 end of boring 20'
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30					
	31					

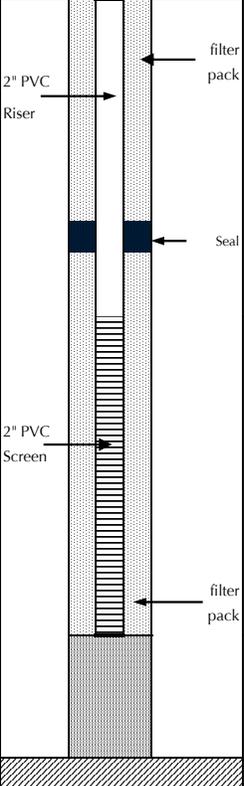
APPENDIX E  
MONITORING WELL CONSTRUCTION LOG

## WELL CONSTRUCTION SUMMARY

Well No. LB-1 (MW)

<b>PROJECT</b> 17-29 West End Avenue			<b>PROJECT NO.</b> 170201301		
<b>LOCATION</b> 17-29 West End Avenue, Manhattan, NY			<b>ELEVATION AND DATUM</b> (BPMD) EL. + 14.9		
<b>DRILLING AGENCY</b> ADT		<b>DATE STARTED</b> 7/16/2012		<b>DATE FINISHED</b> 7/16/2012	
<b>DRILLING EQUIPMENT</b> CME-75 Truck-Mounted Drill Rig			<b>DRILLER</b> Paul Gaddis		
<b>SIZE AND TYPE OF BIT</b> 2 7/8", 3 7/8" Tricone Roller, NX core			<b>INSPECTOR</b> Courtney Mann		
<b>METHOD OF INSTALLATION</b> 2-inch PVC screen and riser were installed and the annular space was filled with No. 1 filter sand, and bentonite pellets. Backfilled material on top of bentonite seal were on-site soil and filter sand.					
<b>METHOD OF WELL DEVELOPMENT</b> Purged with peristaltic pump.					
<b>TYPE OF CASING</b> PVC		<b>DIAMETER</b> 2-inch		<b>TYPE OF BACKFILL MATERIAL</b> On-site soil and Clean coarse filter sand	
<b>TYPE OF SCREEN</b> PVC		<b>DIAMETER</b> 2-inch		<b>TYPE OF SEAL MATERIAL</b> Bentonite Pellets	
<b>BOREHOLE DIAMETER</b> 5"			<b>TYPE OF FILTER MATERIAL</b> Clean coarse filter sand		
<b>TOP OF CASING</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>	<p>The diagram illustrates a vertical well casing with a 2-inch PVC riser and a 2-inch PVC screen. A seal is located at a depth of 4.5 feet. The well is filled with filter pack and backfilled with on-site soil and clean coarse filter sand. The casing is surrounded by bentonite and sand, and the bottom is set in rock.</p>		<b>DEPTH (FT) bgs</b>
<b>TOP OF SEAL</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>			0.5
<b>TOP OF FILTER</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>			3.0
<b>TOP OF SCREEN</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>			4.5
<b>BOTTOM OF WELL</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>			24.5
<b>SCREEN LENGTH</b>					4.5
<b>SCREEN LENGTH</b>					20 ft
<b>SLOT SIZE</b>					0.01-in
<b>GROUNDWATER ELEVATIONS</b>					24.5
<b>ELEVATION</b>	<b>DATE</b>	<b>DEPTH TO WATER</b>			
1.0	7/16/2012	13.4			
<b>ELEVATION</b>					
1.2	7/17/2012	13.2			
<b>ELEVATION</b>					
1.4	7/18/2012	13.0			
<b>ELEVATION</b>					
1.4	8/9/2012	13.0			
<b>ELEVATION</b>					
<b>ELEVATION</b>					
			Bentonite + Sand		
			Rock		
<b>LANGAN Engineering and Environmental Services, PC</b> 21 Penn Plaza, 360 W 31st Street, 8th Floor, New York					

**WELL CONSTRUCTION SUMMARY**  
Well No. LB-2 (MW)

<b>PROJECT</b> 17-29 West End Avenue			<b>PROJECT NO.</b> 170201301			
<b>LOCATION</b> 17-29 West End Avenue, Manhattan, NY			<b>ELEVATION AND DATUM</b> (BPMD) EL. +13.8			
<b>DRILLING AGENCY</b> ADT			<b>DATE STARTED</b> 7/11/2012		<b>DATE FINISHED</b> 7/11/2012	
<b>DRILLING EQUIPMENT</b> CME-75 Truck-Mounted Drill Rig			<b>DRILLER</b> Paul Gaddis			
<b>SIZE AND TYPE OF BIT</b> 2 7/8", 3 7/8" Tricone Roller, NX core			<b>INSPECTOR</b> Courtney Mann			
<b>METHOD OF INSTALLATION</b> 2-inch PVC screen and riser were installed and the annular space was filled with No. 1 filter sand, and bentonite pellets. Backfilled material on top of bentonite seal were on-site soil and filter sand. Boring was filled from 37' bgs to 19' bgs with quartz sand.						
<b>METHOD OF WELL DEVELOPMENT</b> 7/12/2012 12:20-12:45 3 well volumes with a peristaltic pump.						
<b>TYPE OF CASING</b> PVC		<b>DIAMETER</b> 2-inch	<b>TYPE OF BACKFILL MATERIAL</b> On-site soil and Clean coarse filter sand			
<b>TYPE OF SCREEN</b> PVC		<b>DIAMETER</b> 2-inch	<b>TYPE OF SEAL MATERIAL</b> Bentonite Pellets			
<b>BOREHOLE DIAMETER</b> 5"			<b>TYPE OF FILTER MATERIAL</b> Clean coarse filter sand			
<b>TOP OF CASING</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>	<b>WELL DETAILS</b> 		<b>SUMMARY SOIL CLASSIFICATION</b>	<b>DEPTH (FT) bgs</b>
	13.4 ±	0.4				
<b>TOP OF SEAL</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>				
	12.8 ±	1				
<b>TOP OF FILTER</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>				
	8.8 ±	5				
<b>TOP OF SCREEN</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>				
	5.8 ±	8				
<b>BOTTOM OF WELL</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>				
	-4.2 ±	18				
<b>SCREEN LENGTH</b> 10 ft					8.0	
<b>SLOT SIZE</b> 0.01-in						
<b>GROUNDWATER ELEVATIONS</b>						
<b>ELEVATION</b>	<b>DATE</b>	<b>DEPTH TO WATER</b>				
3.6	7/12/2012	9.8				
<b>ELEVATION</b>						
3.7	7/16/2012	9.7				
<b>ELEVATION</b>						
4.0	7/19/2012	9.4				
<b>ELEVATION</b>						
3.4	8/9/2012	10.0			18.0	
<b>ELEVATION</b>						
				Quartz Sand		
<b>ELEVATION</b>				Rock	37.0	
<b>LANGAN Engineering and Environmental Services, PC</b> 21 Penn Plaza, 360 W 31st Street, 8th Floor, New York						

## WELL CONSTRUCTION SUMMARY

Well No. LB-4 (MW)

<b>PROJECT</b> 17-29 West End Avenue			<b>PROJECT NO.</b> 170201301		
<b>LOCATION</b> 17-29 West End Avenue, Manhattan, NY			<b>ELEVATION AND DATUM</b> (BPMD) EL. + 17.1		
<b>DRILLING AGENCY</b> ADT			<b>DATE STARTED</b> 7/13/2012		<b>DATE FINISHED</b> 7/13/2012
<b>DRILLING EQUIPMENT</b> CME-75 Truck Mounted Drill Rig			<b>DRILLER</b> Paul Gaddis		
<b>SIZE AND TYPE OF BIT</b> 2 7/8", 3 7/8" Tricone Roller, NX core			<b>INSPECTOR</b> Courtney Mann		
<b>METHOD OF INSTALLATION</b> 2-inch PVC screen and riser were installed and the annular space was filled with No. 1 filter sand, and bentonite pellets. Backfilled material on top of bentonite seal were on-site soil and filter sand. Boring was filled from 47' bgs to --- bgs with bentonite pellets.					
<b>METHOD OF WELL DEVELOPMENT</b> Purged with a peristaltic pump.					
<b>TYPE OF CASING</b> PVC		<b>DIAMETER</b> 2-inch	<b>TYPE OF BACKFILL MATERIAL</b> On-site soil and Clean coarse filter sand		
<b>TYPE OF SCREEN</b> PVC		<b>DIAMETER</b> 2-inch	<b>TYPE OF SEAL MATERIAL</b> Bentonite Pellets		
<b>BOREHOLE DIAMETER</b> 5"			<b>TYPE OF FILTER MATERIAL</b> Clean coarse filter sand		
<b>TOP OF CASING</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>			<b>DEPTH (FT) bgs</b>
	16.8 ±	0.3			
<b>TOP OF SEAL</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>			0.3
	16.1 ±	1			
<b>TOP OF FILTER</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>			
	14.1 ±	3			
<b>TOP OF SCREEN</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>			
	12.3 ±	4.8			
<b>BOTTOM OF WELL</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>			
	2.3 ±	14.8			
<b>SCREEN LENGTH</b> 10 ft					
<b>SLOT SIZE</b> 0.01-in					
<b>GROUNDWATER ELEVATIONS</b>					
<b>ELEVATION</b>	<b>DATE</b>	<b>DEPTH TO WATER</b>			
7.0	7/13/2012	9.8			
<b>ELEVATION</b>					
2.4	7/16/2012	14.8 (dry)			
<b>ELEVATION</b>					
2.4	7/19/2012	14.8 (dry)			
<b>ELEVATION</b>					
2.4	8/9/2012	14.4			
<b>ELEVATION</b>					
<b>ELEVATION</b>					
<b>LANGAN Engineering and Environmental Services, PC</b> 21 Penn Plaza, 360 W 31st Street, 8th Floor, New York					

## WELL CONSTRUCTION SUMMARY

Well No. LB-5 (MW)

<b>PROJECT</b> 17-29 West End Avenue			<b>PROJECT NO.</b> 170201301				
<b>LOCATION</b> 17-29 West End Avenue, Manhattan, NY			<b>ELEVATION AND DATUM</b> (BPMD) EL. + 24.5				
<b>DRILLING AGENCY</b> ADT			<b>DATE STARTED</b> 7/18/2012		<b>DATE FINISHED</b> 7/18/2012		
<b>DRILLING EQUIPMENT</b> HSA Drill Rig			<b>DRILLER</b> Joe				
<b>SIZE AND TYPE OF BIT</b> 2 7/8", 3 7/8" Tricone Roller, NX core			<b>INSPECTOR</b> Courtney Mann				
<b>METHOD OF INSTALLATION</b> 2-inch PVC screen and riser were installed and the annular space was filled with No. 1 filter sand, and bentonite pellets. Backfilled material on top of bentonite seal were on-site soil and filter sand.							
<b>METHOD OF WELL DEVELOPMENT</b> Purging 3 well volumes							
<b>TYPE OF CASING</b> PVC		<b>DIAMETER</b> 2-inch		<b>TYPE OF BACKFILL MATERIAL</b> On-site soil and Clean coarse filter sand			
<b>TYPE OF SCREEN</b> PVC		<b>DIAMETER</b> 2-inch		<b>TYPE OF SEAL MATERIAL</b> Bentonite Pellets			
<b>BOREHOLE DIAMETER</b> 5"			<b>TYPE OF FILTER MATERIAL</b> Clean coarse filter sand				
<b>TOP OF CASING</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>			<b>SUMMARY SOIL CLASSIFICATION</b>	<b>DEPTH (FT) bgs</b>	
	23.7 ±	0.8					
<b>TOP OF SEAL</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>					0.8
	23.5 ±	1					
<b>TOP OF FILTER</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>					
	21.5 ±	3					
<b>TOP OF SCREEN</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>					
	14.5 ±	10					
<b>BOTTOM OF WELL</b>	<b>ELEVATION</b>	<b>DEPTH (ft)</b>					
	3.5 ±	21					
<b>SCREEN LENGTH</b> 11 ft					10.0		
<b>SLOT SIZE</b> 0.01-in							
<b>GROUNDWATER ELEVATIONS</b>							
<b>ELEVATION</b>	<b>DATE</b>	<b>DEPTH TO WATER</b>					
4.3	7/18/2012	19.4					
<b>ELEVATION</b>							
4.7	7/19/2012	19.0					
<b>ELEVATION</b>							
4.6	8/9/2012	19.1					
<b>ELEVATION</b>							
<b>ELEVATION</b>							
<b>ELEVATION</b>					21.0		
<b>ROCK</b>							
<b>LANGAN Engineering and Environmental Services, PC</b> 21 Penn Plaza, 360 W 31st Street, 8th Floor, New York							

## WELL CONSTRUCTION SUMMARY

Well No. LB-6 (MW)

PROJECT 17-29 West End Avenue			PROJECT NO. 170201301			
LOCATION 17-29 West End Avenue, Manhattan, NY			ELEVATION AND DATUM (BPM D) EL. + 24.3			
DRILLING AGENCY ADT		DATE STARTED 7/17/2012		DATE FINISHED 7/17/2012		
DRILLING EQUIPMENT Geoprobe			DRILLER Bernie			
SIZE AND TYPE OF BIT			INSPECTOR Courtney Mann			
METHOD OF INSTALLATION 1-inch PVC screen and riser were installed and the annular space was filled with No. 1 filter sand, and bentonite pellets. Backfilled material on top of bentonite seal were on-site soil and filter sand.						
METHOD OF WELL DEVELOPMENT Purging 3 well volumes						
TYPE OF CASING PVC		DIAMETER 1-inch		TYPE OF BACKFILL MATERIAL On-site soil and Clean coarse filter sand		
TYPE OF SCREEN PVC		DIAMETER 1-inch		TYPE OF SEAL MATERIAL Bentonite Pellets		
BOREHOLE DIAMETER 5"			TYPE OF FILTER MATERIAL Clean coarse filter sand			
TOP OF CASING	ELEVATION	DEPTH (ft)	<p>The diagram illustrates a vertical well casing with a 1-inch PVC riser extending to a depth of 3 feet. A seal is located at 10 feet depth. A 1-inch PVC screen is installed from 10 feet to 20 feet depth. The annular space is filled with filter sand and bentonite pellets. The well is shown to be 20 feet deep.</p>		SUMMARY SOIL CLASSIFICATION	DEPTH (FT) bgs
TOP OF SEAL	ELEVATION	DEPTH (ft)			-3.0	
TOP OF FILTER	ELEVATION	DEPTH (ft)			10.0	
TOP OF SCREEN	ELEVATION	DEPTH (ft)			20.0	
BOTTOM OF WELL	ELEVATION	DEPTH (ft)				
SCREEN LENGTH					10 ft	
SLOT SIZE					0.01-in	
<b>GROUNDWATER ELEVATIONS</b>						
ELEVATION	DATE	DEPTH TO WATER				
7.9	7/17/2012	19.4				
ELEVATION						
7.6	7/19/2012	19.7				
ELEVATION						
8.1	8/9/2012	19.2				
ELEVATION						
ELEVATION						
ELEVATION						
<b>LANGAN Engineering and Environmental Services, PC</b> 21 Penn Plaza, 360 W 31st Street, 8th Floor, New York						

APPENDIX F  
GROUNDWATER SAMPLING LOGS









APPENDIX G  
SOIL VAPOR SAMPLE LOG



APPENDIX H  
LABORATORY CERTIFICATION

NEW YORK STATE DEPARTMENT OF HEALTH  
WADSWORTH CENTER



Expires 12:01 AM April 01, 2013  
Issued April 1, 2012

**CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE**  
*Issued in accordance with and pursuant to section 502 Public Health Law of New York State*

MR. CHRISTOPHER WAKEFIELD  
ALPHA ANALYTICAL  
8 WALKUP DR  
WESTBOROUGH, MA 01581-1019

NY Lab Id. No: 11148

is hereby APPROVED as an Environmental Laboratory in conformance with the  
National Environmental Laboratory Accreditation Conference Standards (2003) for the category  
**ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE**

All approved analytes are listed below:

**Volatile Organics**

4-Methyl-2-Pentanone	EPA 8260B
Acetone	EPA 8260B
Carbon Disulfide	EPA 8260B
Cyclohexane	EPA 8260B
Methyl acetate	EPA 8260B
Methyl cyclohexane	EPA 8260B
Methyl tert-butyl ether	EPA 8260B
tert-butyl alcohol	EPA 8260B
Vinyl acetate	EPA 8260B

**Sample Preparation Methods**

EPA 1311  
EPA 1312  
EPA 3005A  
EPA 3050B  
EPA 3540C  
EPA 3546  
EPA 3580  
EPA 3580A  
EPA 5030B  
EPA 5035  
EPA 9010B  
EPA 9030B

Serial No.: 46277

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.



NEW YORK STATE DEPARTMENT OF HEALTH  
WADSWORTH CENTER



Expires 12:01 AM April 01, 2013  
Issued April 1, 2012

**CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE**

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. CHRISTOPHER WAKEFIELD  
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**ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE**

All approved analytes are listed below:

**Volatile Aromatics**

Naphthalene, Volatile	EPA 8260B
n-Butylbenzene	EPA 8260B
n-Propylbenzene	EPA 8260B
p-Isopropyltoluene (P-Cymene)	EPA 8260B
sec-Butylbenzene	EPA 8260B
Styrene	EPA 8260B
tert-Butylbenzene	EPA 8260B
Toluene	EPA 8260B
Total Xylenes	EPA 8260B

**Volatile Halocarbons**

Bromodichloromethane	EPA 8260B
Bromoform	EPA 8260B
Bromomethane	EPA 8260B
Carbon tetrachloride	EPA 8260B
Chloroethane	EPA 8260B
Chloroform	EPA 8260B
Chloromethane	EPA 8260B
cis-1,2-Dichloroethene	EPA 8260B
cis-1,3-Dichloropropene	EPA 8260B
Dibromochloromethane	EPA 8260B
Dibromomethane	EPA 8260B
Dichlorodifluoromethane	EPA 8260B
Hexachlorobutadiene, Volatile	EPA 8260B
Methylene chloride	EPA 8260B
Tetrachloroethene	EPA 8260B
trans-1,2-Dichloroethene	EPA 8260B
trans-1,3-Dichloropropene	EPA 8260B
trans-1,4-Dichloro-2-butene	EPA 8260B
Trichloroethene	EPA 8260B
Trichlorofluoromethane	EPA 8260B
Vinyl chloride	EPA 8260B

**Volatile Halocarbons**

1,1,1-Trichloroethane	EPA 8260B
1,1,1,2-Tetrachloroethane	EPA 8260B
1,1,2-Trichloro-1,2,2-Trifluoroethane	EPA 8260B
1,1,2-Trichloroethane	EPA 8260B
1,1-Dichloroethane	EPA 8260B
1,1-Dichloroethene	EPA 8260B
1,1-Dichloropropene	EPA 8260B
1,2,3-Trichloropropane	EPA 8260B
1,2-Dibromo-3-chloropropane	EPA 8260B
1,2-Dibromoethane	EPA 8260B
1,2-Dichloroethane	EPA 8260B
1,2-Dichloropropane	EPA 8260B
1,3-Dichloropropane	EPA 8260B
2,2-Dichloropropane	EPA 8260B
Bromochloromethane	EPA 8260B

**Volatile Organics**

1,4-Dioxane	EPA 8260B
2-Butanone (Methylethyl ketone)	EPA 8260B
2-Hexanone	EPA 8260B

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NEW YORK STATE DEPARTMENT OF HEALTH  
WADSWORTH CENTER



Expires 12:01 AM April 01, 2013  
Issued April 1, 2012

**CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE**  
Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. CHRISTOPHER WAKEFIELD  
ALPHA ANALYTICAL  
8 WALKUP DR  
WESTBOROUGH, MA 01581-1019

NY Lab Id No: 11148

is hereby APPROVED as an Environmental Laboratory in conformance with the  
National Environmental Laboratory Accreditation Conference Standards (2003) for the category  
**ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE**  
All approved analytes are listed below:

Priority Pollutant Phenols		Semi-Volatile Organics	
2-Nitrophenol	EPA 8270D	Benzaldehyde	EPA 8270C
3-Methylphenol	EPA 8270D		EPA 8270D
4-Chloro-3-methylphenol	EPA 8270C	Benzoic Acid	EPA 8270C
	EPA 8270D		EPA 8270D
4-Methylphenol	EPA 8270C	Benzyl alcohol	EPA 8270C
	EPA 8270D		EPA 8270D
4-Nitrophenol	EPA 8270C	Caprolactam	EPA 8270C
	EPA 8270D		EPA 8270D
Pentachlorophenol	EPA 8270C	Dibenzofuran	EPA 8270C
	EPA 8270D		EPA 8270D
Phenol	EPA 8270C	Isosafrole	EPA 8270D
	EPA 8270D		
Semi-Volatile Organics		Volatile Aromatics	
1,1'-Biphenyl	EPA 8270C	1,2,4-Trichlorobenzene, Volatile	EPA 8260B
	EPA 8270D	1,2,4-Trimethylbenzene	EPA 8260B
1,2-Dichlorobenzene, Semi-volatile	EPA 8270C	1,2-Dichlorobenzene	EPA 8260B
	EPA 8270D	1,3,5-Trimethylbenzene	EPA 8260B
1,3-Dichlorobenzene, Semi-volatile	EPA 8270C	1,3-Dichlorobenzene	EPA 8260B
	EPA 8270D	1,4-Dichlorobenzene	EPA 8260B
1,4-Dichlorobenzene, Semi-volatile	EPA 8270C	2-Chlorotoluene	EPA 8260B
	EPA 8270D	4-Chlorotoluene	EPA 8260B
2-Methylnaphthalene	EPA 8270C	Benzene	EPA 8260B
	EPA 8270D	Bromobenzene	EPA 8260B
Acetophenone	EPA 8270C	Chlorobenzene	EPA 8260B
	EPA 8270D	Ethyl benzene	EPA 8260B
		Isopropylbenzene	EPA 8260B

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**ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE**  
All approved analytes are listed below:

**Polynuclear Aromatic Hydrocarbons**

Acenaphthene	EPA 8270C
	EPA 8270D
Acenaphthylene	EPA 8270C
	EPA 8270D
Anthracene	EPA 8270C
	EPA 8270D
Benzo(a)anthracene	EPA 8270C
	EPA 8270D
Benzo(a)pyrene	EPA 8270C
	EPA 8270D
Benzo(b)fluoranthene	EPA 8270C
	EPA 8270D
Benzo(ghi)perylene	EPA 8270C
	EPA 8270D
Benzo(k)fluoranthene	EPA 8270C
	EPA 8270D
Chrysene	EPA 8270C
	EPA 8270D
Dibenzo(a,h)anthracene	EPA 8270C
	EPA 8270D
Fluoranthene	EPA 8270C
	EPA 8270D
Fluorene	EPA 8270C
	EPA 8270D
Indeno(1,2,3-cd)pyrene	EPA 8270C

**Polynuclear Aromatic Hydrocarbons**

Indeno(1,2,3-cd)pyrene	EPA 8270D
Naphthalene	EPA 8270C
	EPA 8270D
Phenanthrene	EPA 8270C
	EPA 8270D
Pyrene	EPA 8270C
	EPA 8270D

**Priority Pollutant Phenols**

2,4,5-Trichlorophenol	EPA 8270C
	EPA 8270D
2,4,6-Trichlorophenol	EPA 8270C
	EPA 8270D
2,4-Dichlorophenol	EPA 8270C
	EPA 8270D
2,4-Dimethylphenol	EPA 8270C
	EPA 8270D
2,4-Dinitrophenol	EPA 8270C
	EPA 8270D
2-Chlorophenol	EPA 8270C
	EPA 8270D
2-Methyl-4,6-dinitrophenol	EPA 8270C
	EPA 8270D
2-Methylphenol	EPA 8270C
	EPA 8270D
2-Nitrophenol	EPA 8270C

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**ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE**

All approved analytes are listed below:

<b>Nitroaromatics and Isophorone</b>		<b>Phthalate Esters</b>	
Nitrobenzene	EPA 8330	Dimethyl phthalate	EPA 8270D
Octahydro-tetranitro-tetrazocine	EPA 8330	Di-n-butyl phthalate	EPA 8270C
Pyridine	EPA 8270C		EPA 8270D
	EPA 8270D	Di-n-octyl phthalate	EPA 8270C
			EPA 8270D
<b>Nitrosoamines</b>		<b>Polychlorinated Biphenyls</b>	
N-Nitrosodimethylamine	EPA 8270C	PCB-1016	EPA 8082
	EPA 8270D		EPA 8082A
N-Nitrosodi-n-propylamine	EPA 8270C	PCB-1221	EPA 8082
	EPA 8270D		EPA 8082A
N-Nitrosodiphenylamine	EPA 8270C	PCB-1232	EPA 8082
	EPA 8270D		EPA 8082A
<b>Petroleum Hydrocarbons</b>		PCB-1242	EPA 8082
Diesel Range Organics	EPA 8015 B		EPA 8082A
	EPA 8015C	PCB-1248	EPA 8082
Gasoline Range Organics	EPA 8015 B		EPA 8082A
	EPA 8015C	PCB-1254	EPA 8082
<b>Phthalate Esters</b>			EPA 8082A
Benzyl butyl phthalate	EPA 8270C	PCB-1260	EPA 8082
	EPA 8270D		EPA 8082A
Bis(2-ethylhexyl) phthalate	EPA 8270C	PCB-1262	EPA 8082
	EPA 8270D		EPA 8082A
Diethyl phthalate	EPA 8270C	PCB-1268	EPA 8082
	EPA 8270D		EPA 8082A
Dimethyl phthalate	EPA 8270C		

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**ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE**  
All approved analytes are listed below.

Metals II		Miscellaneous	
Arsenic, Total	EPA 6010B EPA 6010C	Cyanide, Total	EPA 9012A EPA 9014
Beryllium, Total	EPA 6010B EPA 6010C	Phenols	EPA 9065
Chromium VI	EPA 7196A	Specific Conductance	EPA 9050A
Mercury, Total	EPA 7471A EPA 7471B	<b>Nitroaromatics and Isophorone</b>	
Selenium, Total	EPA 6010B EPA 6010C	1,3,5-Trinitrobenzene	EPA 8330
Vanadium, Total	EPA 6010B EPA 6010C	1,3-Dinitrobenzene	EPA 8330
Zinc, Total	EPA 6010B EPA 6010C	2,4,6-Trinitrotoluene	EPA 8330
		2,4-Dinitrotoluene	EPA 8270C EPA 8270D EPA 8330
		2,6-Dinitrotoluene	EPA 8270C EPA 8270D EPA 8330
Metals III		2-Amino-4,6-dinitrotoluene	EPA 8330
Cobalt, Total	EPA 6010B EPA 6010C	2-Nitrotoluene	EPA 8330
Molybdenum, Total	EPA 6010B EPA 6010C	3-Nitrotoluene	EPA 8330
Thallium, Total	EPA 6010B EPA 6010C	4-Amino-2,6-dinitrotoluene	EPA 8330
Tin, Total	EPA 6010B EPA 6010C	4-Nitrotoluene	EPA 8330
		Hexahydro-1,3,5-trinitro-1,3,5-triazine	EPA 8330
		Isophorone	EPA 8270C EPA 8270D
Miscellaneous		Methyl-2,4,6-trinitrophenylamine	EPA 8330
Boron, Total	EPA 6010B EPA 6010C	Nitrobenzene	EPA 8270C EPA 8270D

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**ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE**

All approved analytes are listed below:

**Haloethers**

Bis (2-chloroisopropyl) ether	EPA 8270D
Bis(2-chloroethoxy)methane	EPA 8270C
	EPA 8270D
Bis(2-chloroethyl)ether	EPA 8270C
	EPA 8270D

**Metals I**

Chromium, Total	EPA 6010B
	EPA 6010C
Copper, Total	EPA 6010B
	EPA 6010C
Iron, Total	EPA 6010B
	EPA 6010C
Lead, Total	EPA 6010B
	EPA 6010C
Magnesium, Total	EPA 6010B
	EPA 6010C
Manganese, Total	EPA 6010B
	EPA 6010C
Nickel, Total	EPA 6010B
	EPA 6010C
Potassium, Total	EPA 6010B
	EPA 6010C
Silver, Total	EPA 6010B
	EPA 6010C
Sodium, Total	EPA 6010B
	EPA 6010C

**Low Level Polynuclear Aromatic Hydrocarbons**

Benzo(a)anthracene	EPA 8270C SIM
	EPA 8270D SIM
Benzo(a)pyrene	EPA 8270C SIM
	EPA 8270D SIM
Benzo(b)fluoranthene	EPA 8270C SIM
	EPA 8270D SIM
Benzo(k)fluoroanthene	EPA 8270C SIM
	EPA 8270D SIM
Dibenzo(a,h)anthracene	EPA 8270C SIM
	EPA 8270D SIM
Indeno(1,2,3-cd)pyrene	EPA 8270C SIM
	EPA 8270D SIM

**Metals I**

Barium, Total	EPA 6010B
	EPA 6010C
Cadmium, Total	EPA 6010B
	EPA 6010C
Calcium, Total	EPA 6010B
	EPA 6010C

**Metals II**

Aluminum, Total	EPA 6010B
	EPA 6010C
Antimony, Total	EPA 6010B
	EPA 6010C

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ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE

All approved analytes are listed below:

**Chlorinated Hydrocarbon Pesticides**

Endosulfan I	EPA 8081A
	EPA 8081B
Endosulfan II	EPA 8081A
	EPA 8081B
Endosulfan sulfate	EPA 8081A
	EPA 8081B
Endrin	EPA 8081A
	EPA 8081B
Endrin aldehyde	EPA 8081A
	EPA 8081B
Endrin Ketone	EPA 8081A
	EPA 8081B
gamma-Chlordane	EPA 8081A
	EPA 8081B
Heptachlor	EPA 8081A
	EPA 8081B
Heptachlor epoxide	EPA 8081A
	EPA 8081B
Lindane	EPA 8081A
	EPA 8081B
Methoxychlor	EPA 8081A
	EPA 8081B
Toxaphene	EPA 8081A
	EPA 8081B

**Chlorinated Hydrocarbons**

1,2,4,5-Tetrachlorobenzene	EPA 8270C
	EPA 8270D
1,2,4-Trichlorobenzene	EPA 8270C
	EPA 8270D
2-Chloronaphthalene	EPA 8270C
	EPA 8270D
Hexachlorobenzene	EPA 8270C
	EPA 8270D
Hexachlorobutadiene	EPA 8270C
	EPA 8270D
Hexachlorocyclopentadiene	EPA 8270C
	EPA 8270D
Hexachloroethane	EPA 8270C
	EPA 8270D

**Chlorophenoxy Acid Pesticides**

2,4,5-T	EPA 8151A
2,4,5-TP (Silvex)	EPA 8151A
2,4-D	EPA 8151A
Dicamba	EPA 8151A

**Haloothers**

4-Bromophenylphenyl ether	EPA 8270C
	EPA 8270D
4-Chlorophenylphenyl ether	EPA 8270C
	EPA 8270D
Bis (2-chloroisopropyl) ether	EPA 8270C

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Acrylates		Characteristic Testing	
Acrolein (Propenal)	EPA 8260B	Ignitability	EPA 1010
Acrylonitrile	EPA 8260B		EPA 1030
Ethyl methacrylate	EPA 8260B		
Amines		Chlorinated Hydrocarbon Pesticides	
1,2-Diphenylhydrazine	EPA 8270C	4,4'-DDD	EPA 8081A
	EPA 8270D		EPA 8081B
2-Nitroaniline	EPA 8270C	4,4'-DDE	EPA 8081A
	EPA 8270D		EPA 8081B
3-Nitroaniline	EPA 8270C	4,4'-DDT	EPA 8081A
	EPA 8270D		EPA 8081B
4-Chloroaniline	EPA 8270C	Aldrin	EPA 8081A
	EPA 8270D		EPA 8081B
4-Nitroaniline	EPA 8270C	alpha-BHC	EPA 8081A
	EPA 8270D		EPA 8081B
Aniline	EPA 8270D	alpha-Chlordane	EPA 8081A
Carbazole	EPA 8270C		EPA 8081B
	EPA 8270D	Atrazine	EPA 8270C
			EPA 8270D
Benzidines		beta-BHC	EPA 8081A
3,3'-Dichlorobenzidine	EPA 8270C		EPA 8081B
	EPA 8270D	Chlordane Total	EPA 8081A
Benzidine	EPA 8270D		EPA 8081B
Characteristic Testing		delta-BHC	EPA 8081A
Corrosivity	EPA 9040B		EPA 8081B
	EPA 9045C	Dieldrin	EPA 8081A
			EPA 8081B

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**ENVIRONMENTAL ANALYSES NON POTABLE WATER**

All approved analytes are listed below:

**Sample Preparation Methods**

- EPA 9030B
- SM 18-20 4500-CN C
- SM 18-21 4500-NH3 B (97)

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**ENVIRONMENTAL ANALYSES NON POTABLE WATER**

All approved analytes are listed below:

**Wastewater Metals II**

Zinc, Total  
EPA 6010B  
EPA 6010C  
EPA 6020  
EPA 6020A

**Wastewater Metals III**

Cobalt, Total  
EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
EPA 6010B  
EPA 6010C  
EPA 6020  
EPA 6020A

Molybdenum, Total  
EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
EPA 6010B  
EPA 6010C  
EPA 6020  
EPA 6020A

Thallium, Total  
EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
EPA 6010B  
EPA 6010C  
EPA 6020  
EPA 6020A

Tin, Total  
EPA 200.7 Rev. 4.4  
EPA 6010B

**Wastewater Metals III**

Tin, Total  
EPA 6010C  
Titanium, Total  
EPA 200.7 Rev. 4.4

**Wastewater Miscellaneous**

Boron, Total  
EPA 200.7 Rev. 4.4  
EPA 6010B  
Bromide  
EPA 300.0 Rev. 2.1  
Color  
SM 18-21.2120B (01)  
Cyanide, Total  
LACHAT 10-204-00-1-A  
SM 18-21 4500-CN E (99)  
Oil & Grease Total Recoverable (HEM)  
EPA 1664A  
Organic Carbon, Total  
SM 18-21 5310C (00)  
Phenols  
EPA 420.1 Rev. 1978  
SM 14 510C  
Silica, Dissolved  
EPA 200.7 Rev. 4.4  
Specific Conductance  
EPA 120.1 Rev. 1982  
SM 18-21 2510B (97)  
Sulfide (as S)  
SM 18-21 4500-S-D (00)  
Surfactant (MBAS)  
SM 18-21 5540C (00)  
Total Petroleum Hydrocarbons  
EPA 1664A

**Sample Preparation Methods**

EPA 3005A  
EPA 3015  
EPA 3510C  
EPA 5030B  
EPA 9010B

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**ENVIRONMENTAL ANALYSES NON POTABLE WATER**

All approved analytes are listed below:

**Wastewater Metals I**

Silver, Total  
EPA 6010C  
EPA 6020  
EPA 6020A  
Sodium, Total  
EPA 200.7 Rev. 4.4  
EPA 6010B  
EPA 6010C

**Wastewater Metals II**

Beryllium, Total  
EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
EPA 6010B  
EPA 6010C  
EPA 6020  
EPA 6020A  
EPA 7196A  
Chromium VI  
SM 18-19 3500-Cr D

**Wastewater Metals II**

Aluminum, Total  
EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
EPA 6010B  
EPA 6010C  
EPA 6020  
EPA 6020A  
Antimony, Total  
EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
EPA 6010B  
EPA 6010C  
EPA 6020

Mercury, Total  
EPA 245.1 Rev. 3.0  
EPA 245.2 Rev. 1974  
EPA 7470A

Selenium, Total  
EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
EPA 6010B  
EPA 6010C

Arsenic, Total  
EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
EPA 6010B  
EPA 6010C  
EPA 6020  
EPA 6020A

Vanadium, Total  
EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
EPA 6010B  
EPA 6010C  
EPA 6020  
EPA 6020A

Zinc, Total  
EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4

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NEW YORK STATE DEPARTMENT OF HEALTH  
WADSWORTH CENTER



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Issued April 1, 2012

**CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE**

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. CHRISTOPHER WAKEFIELD  
ALPHA ANALYTICAL  
8 WALKUP DR  
WESTBOROUGH, MA 01581-1019

NY Lab Id No: 11148

is hereby APPROVED as an Environmental Laboratory in conformance with the  
National Environmental Laboratory Accreditation Conference Standards (2003) for the category  
**ENVIRONMENTAL ANALYSES NON POTABLE WATER**  
All approved analytes are listed below:

**Wastewater Metals I**

**Wastewater Metals I**

Cadmium, Total  
EPA 200.8 Rev. 5.4  
EPA 6010B  
EPA 6010C  
EPA 6020  
EPA 6020A  
Calcium, Total  
EPA 200.7 Rev. 4.4  
EPA 6010B  
EPA 6010C  
Chromium, Total  
EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
EPA 6010B  
EPA 6010C  
EPA 6020  
EPA 6020A  
Copper, Total  
EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
EPA 6010B  
EPA 6010C  
EPA 6020  
EPA 6020A  
Iron, Total  
EPA 200.7 Rev. 4.4  
EPA 6010B  
EPA 6010C  
Lead, Total  
EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4

Lead, Total  
EPA 6010B  
EPA 6010C  
EPA 6020  
EPA 6020A  
Magnesium, Total  
EPA 200.7 Rev. 4.4  
EPA 6010B  
EPA 6010C  
Manganese, Total  
EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
EPA 6010B  
EPA 6010C  
EPA 6020  
EPA 6020A  
Nickel, Total  
EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
EPA 6010B  
EPA 6010C  
EPA 6020  
EPA 6020A  
Potassium, Total  
EPA 200.7 Rev. 4.4  
EPA 6010B  
EPA 6010C  
Silver, Total  
EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
EPA 6010B

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**Volatile Halocarbons**

Chloroethane	EPA 624
	EPA 8260B
Chloroform	EPA 624
	EPA 8260B
Chloromethane	EPA 624
	EPA 8260B
cis-1,2-Dichloroethene	EPA 624
	EPA 8260B
cis-1,3-Dichloropropene	EPA 624
	EPA 8260B
Dibromochloromethane	EPA 624
	EPA 8260B
Dibromomethane	EPA 8260B
Dichlorodifluoromethane	EPA 624
	EPA 8260B
Hexachlorobutadiene, Volatile	EPA 8260B
Methylene chloride	EPA 624
	EPA 8260B
Tetrachloroethene	EPA 624
	EPA 8260B
trans-1,2-Dichloroethene	EPA 624
	EPA 8260B
trans-1,3-Dichloropropene	EPA 624
	EPA 8260B
trans-1,4-Dichloro-2-butene	EPA 8260B

**Volatile Halocarbons**

Trichloroethene	EPA 624
	EPA 8260B
Trichlorofluoromethane	EPA 624
	EPA 8260B
Vinyl chloride	EPA 624
	EPA 8260B

**Volatiles Organics**

1,4-Dioxane	EPA 8260B
2-Butanone (Methylethyl ketone)	EPA 8260B
2-Hexanone	EPA 8260B
4-Methyl-2-Pentanone	EPA 8260B
Acetone	EPA 8260B
Carbon Disulfide	EPA 8260B
Cyclohexane	EPA 8260B
Methyl acetate	EPA 8260B
Methyl cyclohexane	EPA 8260B
Vinyl acetate	EPA 8260B

**Wastewater Metals I**

Barium, Total	EPA 200.7 Rev. 4.4
	EPA 200.8 Rev. 5.4
	EPA 6010B
	EPA 6010C
	EPA 6020
	EPA 6020A
Cadmium, Total	EPA 200.7 Rev. 4.4

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**ENVIRONMENTAL ANALYSES NON POTABLE WATER**

All approved analytes are listed below:

**Volatile Aromatics**

**Volatile Halocarbons**

Chlorobenzene	EPA 624 EPA 8260B	1,1-Dichloroethane	EPA 624 EPA 8260B
Ethyl benzene	EPA 624 EPA 8260B	1,1-Dichloroethene	EPA 624 EPA 8260B
Isopropylbenzene	EPA 8260B	1,1-Dichloropropene	EPA 8260B
Naphthalene, Volatile	EPA 8260B	1,2,3-Trichloropropane	EPA 8260B
n-Butylbenzene	EPA 8260B	1,2-Dibromo-3-chloropropane	EPA 8260B
n-Propylbenzene	EPA 8260B	1,2-Dibromoethane	EPA 8260B
p-Isopropyltoluene (P-Cymene)	EPA 8260B	1,2-Dichloroethane	EPA 624 EPA 8260B
sec-Butylbenzene	EPA 8260B	1,2-Dichloropropane	EPA 624 EPA 8260B
Styrene	EPA 624 EPA 8260B	1,3-Dichloropropane	EPA 8260B
tert-Butylbenzene	EPA 8260B	2,2-Dichloropropane	EPA 8260B
Toluene	EPA 624 EPA 8260B	2-Chloroethylvinyl ether	EPA 624 EPA 8260B
Total Xylenes	EPA 624 EPA 8260B	Bromochloromethane	EPA 8260B
<b>Volatile Halocarbons</b>		Bromodichloromethane	EPA 624 EPA 8260B
1,1,1-Trichloroethane	EPA 624 EPA 8260B	Bromoform	EPA 624 EPA 8260B
1,1,2,2-Tetrachloroethane	EPA 624 EPA 8260B	Bromomethane	EPA 624 EPA 8260B
1,1,2-Trichloro-1,2,2-Trifluoroethane	EPA 8260B	Carbon tetrachloride	EPA 624 EPA 8260B
1,1,2-Trichloroethane	EPA 624 EPA 8260B		

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**Priority Pollutant Phenols**

4-Methylphenol	EPA 8270C
	EPA 8270D
4-Nitrophenol	EPA 625
	EPA 8270C
	EPA 8270D
Pentachlorophenol	EPA 625
	EPA 8270C
	EPA 8270D
Phenol	EPA 625
	EPA 8270C
	EPA 8270D

**Semi-Volatile Organics**

2-Methylnaphthalene	EPA 8270D
Acetophenone	EPA 8270C
	EPA 8270D
Benzaldehyde	EPA 8270C
	EPA 8270D
Benzoic Acid	EPA 8270C
	EPA 8270D
Benzyl alcohol	EPA 8270C
	EPA 8270D
Caprolactam	EPA 8270C
	EPA 8270D
Dibenzofuran	EPA 8270C
	EPA 8270D

**Residue**

Solids, Total	SM 18-21 2540B (97)
Solids, Total Dissolved	SM 18-21 2540C (97)
Solids, Total Suspended	SM 18-21 2540D (97)

**Volatile Aromatics**

1,2,4-Trichlorobenzene, Volatile	EPA 8260B
1,2,4-Trimethylbenzene	EPA 8260B
1,2-Dichlorobenzene	EPA 624
	EPA 8260B
1,3,5-Trimethylbenzene	EPA 8260B
1,3-Dichlorobenzene	EPA 624
	EPA 8260B
1,4-Dichlorobenzene	EPA 624
	EPA 8260B
Benzene	EPA 624
	EPA 8260B

**Semi-Volatile Organics**

1,1'-Biphenyl	EPA 8270C
	EPA 8270D
1,2-Dichlorobenzene, Semi-volatile	EPA 8270C
	EPA 8270D
1,3-Dichlorobenzene, Semi-volatile	EPA 8270C
	EPA 8270D
1,4-Dichlorobenzene, Semi-volatile	EPA 8270C
	EPA 8270D
2-Methylnaphthalene	EPA 8270C

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Polynuclear Aromatics		Priority Pollutant Phenols	
Dibenzo(a,h)anthracene	EPA 625 EPA 8270C EPA 8270D	2,4,6-Trichlorophenol	EPA 8270D
Fluoranthene	EPA 625 EPA 8270C EPA 8270D	2,4-Dichlorophenol	EPA 625 EPA 8270C EPA 8270D
Fluorene	EPA 625 EPA 8270C EPA 8270D	2,4-Dimethylphenol	EPA 625 EPA 8270C EPA 8270D
Indeno(1,2,3-cd)pyrene	EPA 625 EPA 8270C EPA 8270D	2,4-Dinitrophenol	EPA 625 EPA 8270C EPA 8270D
Naphthalene	EPA 625 EPA 8270C EPA 8270D	2-Chlorophenol	EPA 625 EPA 8270C EPA 8270D
Phenanthrene	EPA 625 EPA 8270C EPA 8270D	2-Methyl-4,6-dinitrophenol	EPA 625 EPA 8270C EPA 8270D
Pyrene	EPA 625 EPA 8270C	2-Methylphenol	EPA 8270D EPA 8270C EPA 8270D
Priority Pollutant Phenols		2-Nitrophenol	EPA 625 EPA 8270C EPA 8270D
2,4,5-Trichlorophenol	EPA 625 EPA 8270C EPA 8270D	3-Methylphenol	EPA 8270D EPA 8270D
2,4,6-Trichlorophenol	EPA 625 EPA 8270C	4-Chloro-3-methylphenol	EPA 625 EPA 8270C EPA 8270D

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**Polychlorinated Biphenyls**

PCB-1221	EPA 608
	EPA 8082
	EPA 8082A
PCB-1232	EPA 608
	EPA 8082
	EPA 8082A
PCB-1242	EPA 608
	EPA 8082
	EPA 8082A
PCB-1248	EPA 608
	EPA 8082
	EPA 8082A
PCB-1254	EPA 608
	EPA 8082
	EPA 8082A
PCB-1260	EPA 608
	EPA 8082
	EPA 8082A
PCB-1262	EPA 8082
	EPA 8082A
PCB-1268	EPA 8082
	EPA 8082A

**Polynuclear Aromatics**

Acenaphthene	EPA 8270D
Acenaphthylene	EPA 625
	EPA 8270C
	EPA 8270D
Anthracene	EPA 625
	EPA 8270C
	EPA 8270D
Benzo(a)anthracene	EPA 625
	EPA 8270C
	EPA 8270D
Benzo(a)pyrene	EPA 625
	EPA 8270C
	EPA 8270D
Benzo(b)fluoranthene	EPA 625
	EPA 8270C
	EPA 8270D
Benzo(ghi)perylene	EPA 625
	EPA 8270C
	EPA 8270D
Benzo(k)fluoranthene	EPA 625
	EPA 8270C
	EPA 8270D
Chrysene	EPA 625
	EPA 8270C
	EPA 8270D

**Polynuclear Aromatics**

Acenaphthene	EPA 625
	EPA 8270C

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**Nitroaromatics and Isophorone**

Nitrobenzene EPA 8270C  
EPA 8270D  
EPA 8330  
Octahydro-tetranitro-tetrazocine EPA 8330

**Nitrosoamines**

N-Nitrosodimethylamine EPA 625  
EPA 8270C  
EPA 8270D  
N-Nitrosodi-n-propylamine EPA 625  
EPA 8270C  
EPA 8270D  
N-Nitrosodiphenylamine EPA 625  
EPA 8270C  
EPA 8270D

**Nutrient**

Ammonia (as N) EPA 350.1 Rev. 2.0  
SM 18 4500-NH3 H  
Kjeldahl Nitrogen, Total EPA 351.1 Rev. 1978  
LAGHAT 10-107-06-2  
Nitrate (as N) EPA 300.0 Rev. 2.1  
EPA 353.2 Rev. 2.0  
SM 18-21 4500-NO3 F (00)  
Nitrite (as N) SM 18-21 4500-NO2 B (00)  
Orthophosphate (as-P) SM 18-21 4500-P E  
Phosphorus, Total SM 18-21 4500-P E

**Organophosphate Pesticides**

Atrazine EPA 8270C  
EPA 8270D

**Phthalate Esters**

Benzyl butyl phthalate EPA 625  
EPA 8270C  
EPA 8270D  
Bis(2-ethylhexyl) phthalate EPA 625  
EPA 8270C  
EPA 8270D  
Diethyl phthalate EPA 625  
EPA 8270C  
Dimethyl phthalate EPA 8270D  
EPA 625  
EPA 8270C  
EPA 8270D  
Di-n-butyl phthalate EPA 625  
EPA 8270C  
EPA 8270D  
Di-n-octyl phthalate EPA 625  
EPA 8270C  
EPA 8270D

**Polychlorinated Biphenyls**

PCB-1016 EPA 608  
EPA 8082  
EPA 8082A

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**Low Level Polynuclear Aromatics**

Acenaphthene	EPA 8270D
Acenaphthylene	EPA 8270D
Anthracene	EPA 8270D
Benzo(a)anthracene	EPA 8270C SIM
	EPA 8270D SIM
Benzo(a)pyrene	EPA 8270C SIM
	EPA 8270D SIM
Benzo(b)fluoranthene	EPA 8270C SIM
	EPA 8270D SIM
Benzo(k)fluoroanthene	EPA 8270C SIM
	EPA 8270D SIM
Dibenzo(a,h)anthracene	EPA 8270C SIM
	EPA 8270D SIM
Indeno(1,2,3-cd)pyrene	EPA 8270C SIM
	EPA 8270D SIM

**Mineral**

Sulfate (as SO4)	EPA 300.0 Rev. 2.1
	SM 15 426 C

**Nitroaromatics and Isophorone**

1,3,5-Trinitrobenzene	EPA 8330
1,3-Dinitrobenzene	EPA 8330
2,4,6-Trinitrotoluene	EPA 8330
2,4-Dinitrotoluene	EPA 625
	EPA 8270C
	EPA 8270D
	EPA 8330
2,6-Dinitrotoluene	EPA 625
	EPA 8270C
	EPA 8270D
	EPA 8330

2-Amino-4,6-dinitrotoluene	EPA 8330
2-Nitrotoluene	EPA 8330
3-Nitrotoluene	EPA 8330
4-Amino-2,6-dinitrotoluene	EPA 8330
4-Nitrotoluene	EPA 8330
Hexahydro-1,3,5-trinitro-1,3,5-triazine	EPA 8330
Isophorone	EPA 625
	EPA 8270C
	EPA 8270D
Methyl-2,4,6-trinitrophenylamine	EPA 8330
Nitrobenzene	EPA 625

**Mineral**

Acidity	SM 18-21 2310B.4a (97)
Alkalinity	SM 18-21 2320B (97)
Chloride	EPA 300.0 Rev. 2.1
	SM 18-21 4500-Cl- E (97)
Fluoride, Total	EPA 300.0 Rev. 2.1
	SM 18-21 4500-F C (97)
Hardness, Total	EPA 200.7 Rev. 4.4

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<b>Chlorinated Hydrocarbons</b>		<b>Demand</b>	
1,2,4,5-Tetrachlorobenzene	EPA 8270D	Carbonaceous BOD	SM 18-21 5210B (01)
1,2,4-Trichlorobenzene	EPA 625	Chemical Oxygen Demand	EPA 410.4 Rev. 2.0
	EPA 8270C		SM 18-21 5220D (97)
	EPA 8270D	<b>Fuel Oxygenates</b>	
2-Chloronaphthalene	EPA 625	Di-isopropyl ether	EPA 8260B
	EPA 8270C	Methyl tert-butyl ether	EPA 8260B
	EPA 8270D	tert-butyl alcohol	EPA 8260B
Hexachlorobenzene	EPA 625	tert-butyl ethyl ether (ETBE)	EPA 8260B
	EPA 8270C	<b>Haloethers</b>	
	EPA 8270D	4-Bromophenylphenyl ether	EPA 625
Hexachlorobutadiene	EPA 625		EPA 8270C
	EPA 8270C		EPA 8270D
	EPA 8270D	4-Chlorophenylphenyl ether	EPA 625
Hexachlorocyclopentadiene	EPA 625		EPA 8270C
	EPA 8270C		EPA 8270D
	EPA 8270D	Bis (2-chloroisopropyl) ether	EPA 625
Hexachloroethane	EPA 625		EPA 8270C
	EPA 8270C		EPA 8270D
	EPA 8270D	Bis(2-chloroethoxy)methane	EPA 625
<b>Chlorophenoxy Acid Pesticides</b>			EPA 8270C
2,4,5-T	EPA 8151A		EPA 8270D
2,4,5-TP (Silvex)	EPA 8151A	Bis(2-chloroethyl) ether	EPA 625
2,4-D	EPA 8151A		EPA 8270C
<b>Demand</b>			EPA 8270D
Biochemical Oxygen Demand	SM 18-21 5210B (01)		

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is hereby APPROVED as an Environmental Laboratory in conformance with the  
National Environmental Laboratory Accreditation Conference Standards (2003) for the category  
ENVIRONMENTAL ANALYSES NON POTABLE WATER

All approved analytes are listed below:

**Chlorinated Hydrocarbon Pesticides**

alpha-Chlordane	EPA 8081B
beta-BHC	EPA 608
	EPA 8081A
	EPA 8081B
Chlordane Total	EPA 608
	EPA 8081A
	EPA 8081B
delta-BHC	EPA 608
	EPA 8081A
	EPA 8081B
Dieldrin	EPA 608
	EPA 8081A
	EPA 8081B
Endosulfan I	EPA 608
	EPA 8081A
	EPA 8081B
Endosulfan II	EPA 608
	EPA 8081A
	EPA 8081B
Endosulfan sulfate	EPA 608
	EPA 8081A
	EPA 8081B
Endrin	EPA 608
	EPA 8081A
	EPA 8081B

**Chlorinated Hydrocarbon Pesticides**

Endrin aldehyde	EPA 608
	EPA 8081A
	EPA 8081B
Endrin Ketone	EPA 8081A
	EPA 8081B
gamma-Chlordane	EPA 8081A
	EPA 8081B
Heptachlor	EPA 608
	EPA 8081A
	EPA 8081B
Heptachlor epoxide	EPA 608
	EPA 8081A
	EPA 8081B
Lindane	EPA 608
	EPA 8081A
	EPA 8081B
Methoxychlor	EPA 608
	EPA 8081A
	EPA 8081B
Toxaphene	EPA 608
	EPA 8081A
	EPA 8081B

**Chlorinated Hydrocarbons**

1,2,3-Trichlorobenzene	EPA 8260B
1,2,4,5-Tetrachlorobenzene	EPA 8270C

Serial No.: 46276

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NEW YORK STATE DEPARTMENT OF HEALTH  
WADSWORTH CENTER

Expires 12:01 AM April 01, 2013  
Issued April 1, 2012



**CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE**

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. CHRISTOPHER WAKEFIELD  
ALPHA ANALYTICAL  
8 WALKUP DR  
WESTBOROUGH, MA 01581-1019

NY Lab Id No: 11148

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National Environmental Laboratory Accreditation Conference Standards (2003) for the category  
**ENVIRONMENTAL ANALYSES NON POTABLE WATER**

All approved analytes are listed below:

<b>Acrylates</b>		<b>Bacteriology</b>	
Acrolein (Propenal)	EPA 624	Standard Plate Count	SM 18-21 9215B
	EPA 8260B		
Acrylonitrile	EPA 624	<b>Benzidines</b>	
	EPA 8260B	3,3'-Dichlorobenzidine	EPA 625
Ethyl methacrylate	EPA 8260B		EPA 8270C
			EPA 8270D
<b>Amines</b>		<b>Benzidine</b>	EPA 625
2-Nitroaniline	EPA 8270C		EPA 8270C
	EPA 8270D		EPA 8270D
3-Nitroaniline	EPA 8270C	<b>Chlorinated Hydrocarbon Pesticides</b>	
	EPA 8270D	4,4'-DDD	EPA 608
4-Chloroaniline	EPA 8270C		EPA 8081A
	EPA 8270D		EPA 8081B
4-Nitroaniline	EPA 8270C	4,4'-DDE	EPA 608
	EPA 8270D		EPA 8081A
Aniline	EPA 8270D		EPA 8081B
Carbazole	EPA 8270C	4,4'-DDT	EPA 608
	EPA 8270D		EPA 8081A
Pyridine	EPA 625		EPA 8081B
	EPA 8270C	<b>Aldrin</b>	EPA 608
	EPA 8270D		EPA 8081A
<b>Bacteriology</b>			EPA 8081B
Coliform, Fecal	SM 18-21 9221E (99)	alpha-BHC	EPA 608
	SM 18-21 9222D (97)		EPA 8081A
Coliform, Total	SM 18-21 9221B (99)	alpha-Chlordane	EPA 8081B
	SM 18-21 9222B (97)		EPA 8081A

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**ENVIRONMENTAL ANALYSES POTABLE WATER**

*All approved analytes are listed below:*

**Volatile Halocarbons**

2,2-Dichloropropane	EPA 524.2
Bromochloromethane	EPA 524.2
Bromomethane	EPA 524.2
Carbon tetrachloride	EPA 524.2
Chloroethane	EPA 524.2
Chloromethane	EPA 524.2
cis-1,2-Dichloroethene	EPA 524.2
cis-1,3-Dichloropropene	EPA 524.2
Dibromomethane	EPA 524.2
Dichlorodifluoromethane	EPA 524.2
Methylene chloride	EPA 524.2
Tetrachloroethene	EPA 524.2
trans-1,2-Dichloroethene	EPA 524.2
trans-1,3-Dichloropropene	EPA 524.2
Trichloroethene	EPA 524.2
Trichlorofluoromethane	EPA 524.2
Vinyl chloride	EPA 524.2

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**ENVIRONMENTAL ANALYSES POTABLE WATER**

All approved analytes are listed below:

**Drinking Water Non-Metals**

Sulfate (as SO<sub>4</sub>) EPA 300.0 Rev. 2.1

**Drinking Water Trihalomethanes**

Bromodichloromethane EPA 524.2

Bromoform EPA 524.2

Chloroform EPA 524.2

Dibromochloromethane EPA 524.2

Total Trihalomethanes EPA 524.2

**Fuel Additives**

Methyl tert-butyl ether EPA 524.2

Naphthalene EPA 524.2

**Microextractibles**

1,2-Dibromo-3-chloropropane EPA 504.1

1,2-Dibromoethane EPA 504.1

**Volatile Aromatics**

1,2,3-Trichlorobenzene EPA 524.2

1,2,4-Trichlorobenzene EPA 524.2

1,2,4-Trimethylbenzene EPA 524.2

1,2-Dichlorobenzene EPA 524.2

1,3,5-Trimethylbenzene EPA 524.2

1,3-Dichlorobenzene EPA 524.2

1,4-Dichlorobenzene EPA 524.2

2-Chlorotoluene EPA 524.2

4-Chlorotoluene EPA 524.2

Benzene EPA 524.2

**Volatile Aromatics**

Bromobenzene EPA 524.2

Chlorobenzene EPA 524.2

Ethyl benzene EPA 524.2

Hexachlorobutadiene EPA 524.2

Isopropylbenzene EPA 524.2

n-Butylbenzene EPA 524.2

n-Propylbenzene EPA 524.2

p-Isopropyltoluene (P-Cymene) EPA 524.2

sec-Butylbenzene EPA 524.2

Styrene EPA 524.2

tert-Butylbenzene EPA 524.2

Toluene EPA 524.2

Total Xylenes EPA 524.2

**Volatile Halocarbons**

1,1,1,2-Tetrachloroethane EPA 524.2

1,1,1-Trichloroethane EPA 524.2

1,1,2,2-Tetrachloroethane EPA 524.2

1,1,2-Trichloroethane EPA 524.2

1,1-Dichloroethane EPA 524.2

1,1-Dichloroethene EPA 524.2

1,1-Dichloropropene EPA 524.2

1,2,3-Trichloropropane EPA 524.2

1,2-Dichloroethane EPA 524.2

1,2-Dichloropropane EPA 524.2

1,3-Dichloropropane EPA 524.2

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**ENVIRONMENTAL ANALYSES POTABLE WATER**

All approved analytes are listed below:

**Drinking Water Bacteriology**

Coliform, Total / E. coli (Qualitative) SM 18-21 9222B(97)/40CFR141.21(F)6;  
SM 18-21 9223B (97) (Colifert)  
Standard Plate Count SM 18-21 9215B

**Drinking Water Metals II**

Beryllium, Total EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
Nickel, Total EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
Thallium, Total EPA 200.8 Rev. 5.4

**Drinking Water Metals I**

Arsenic, Total EPA 200.8 Rev. 5.4  
Barium, Total EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
Cadmium, Total EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
Chromium, Total EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
Copper, Total EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
Iron, Total EPA 200.7 Rev. 4.4  
Lead, Total EPA 200.8 Rev. 5.4  
Manganese, Total EPA 200.7 Rev. 4.4  
Mercury, Total EPA 245.2 Rev. 1974  
Selenium, Total EPA 200.8 Rev. 5.4  
Silver, Total EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4  
Zinc, Total EPA 200.7 Rev. 4.4  
EPA 200.8 Rev. 5.4

**Drinking Water Metals III**

Calcium, Total EPA 200.7 Rev. 4.4  
Magnesium, Total EPA 200.7 Rev. 4.4  
Sodium, Total EPA 200.7 Rev. 4.4

**Drinking Water Miscellaneous**

Organic Carbon, Total SM 18-21 5310C (00)  
Perchlorate EPA 332.0 Rev. 1

**Drinking Water Non-Metals**

Alkalinity SM 18-21 2320B (97)  
Calcium Hardness EPA 200.7 Rev. 4.4  
Chloride EPA 300.0 Rev. 2.1  
Color SM 18-21 2120B (01)  
Cyanide SM 18-21 4500-CNE (99)  
Fluoride, Total EPA 300.0 Rev. 2.1  
SM 18-21 4500-F C (97)  
Nitrate (as N) SM 18-21 4500-NO3 F (00)  
Nitrite (as N) SM 18-21 4500-NO3 F (00)  
Solids, Total Dissolved SM 18-21 2540C (97)  
Specific Conductance SM 18-21 2510B (97)

**Drinking Water Metals II**

Aluminum, Total EPA 200.7 Rev. 4.4  
Antimony, Total EPA 200.8 Rev. 5.4

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APPENDIX I  
LABORATORY ANALYTICAL REPORTS



## ANALYTICAL REPORT

Lab Number:	L1212928
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Jason Hayes
Phone:	(212) 479-5427
Project Name:	RIVERSIDE PARCEL 2
Project Number:	170201301
Report Date:	07/27/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1212928-01	TRIP BLANK #2	17-29 WEST END AVE.	07/19/12 00:00
L1212928-02	LB5 (MW)	17-29 WEST END AVE.	07/19/12 09:00
L1212928-03	LB6 (MW)	17-29 WEST END AVE.	07/19/12 12:00
L1212928-04	LB2 (MW)	17-29 WEST END AVE.	07/19/12 14:00

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

### Case Narrative (continued)

#### Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Sample Receipt

At the client's request, sample "TRIP BLANK #2" was analyzed for Volatile Organics.

#### Dissolved Metals

The WG549796-4 MS recovery for Sodium (131%), performed on L1212928-02, does not apply because the sample concentration is greater than four times the spike amount added.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 07/27/12

# ORGANICS

# VOLATILES

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

**Lab ID:** L1212928-01  
**Client ID:** TRIP BLANK #2  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/24/12 14:47  
**Analyst:** PD

**Date Collected:** 07/19/12 00:00  
**Date Received:** 07/19/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.16	1
1,2-Dichloropropane	ND		ug/l	1.0	0.30	1
Dibromochloromethane	ND		ug/l	0.50	0.19	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.16	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19	1
Benzene	ND		ug/l	0.50	0.19	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.18	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

Lab ID: L1212928-01  
 Client ID: TRIP BLANK #2  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/19/12 00:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.0	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Diethylbenzene	ND		ug/l	2.0	0.70	1
4-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

Lab ID: L1212928-01  
 Client ID: TRIP BLANK #2  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/19/12 00:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

Lab ID: L1212928-02  
 Client ID: LB5 (MW)  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8260B  
 Analytical Date: 07/24/12 15:13  
 Analyst: PD

Date Collected: 07/19/12 09:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.16	1
1,2-Dichloropropane	ND		ug/l	1.0	0.30	1
Dibromochloromethane	ND		ug/l	0.50	0.19	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.16	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.19	1
Benzene	ND		ug/l	0.50	0.19	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.18	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212928

Project Number: 170201301

Report Date: 07/27/12

## SAMPLE RESULTS

Lab ID: L1212928-02  
 Client ID: LB5 (MW)  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/19/12 09:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.2	J	ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.0	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Diethylbenzene	ND		ug/l	2.0	0.70	1
4-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

Lab ID: L1212928-02  
 Client ID: LB5 (MW)  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/19/12 09:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	101		70-130

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

Lab ID: L1212928-03  
 Client ID: LB6 (MW)  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8260B  
 Analytical Date: 07/24/12 15:39  
 Analyst: PD

Date Collected: 07/19/12 12:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.16	1
1,2-Dichloropropane	ND		ug/l	1.0	0.30	1
Dibromochloromethane	ND		ug/l	0.50	0.19	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	3.2		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.16	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19	1
Benzene	ND		ug/l	0.50	0.19	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.18	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212928

Project Number: 170201301

Report Date: 07/27/12

## SAMPLE RESULTS

Lab ID: L1212928-03  
 Client ID: LB6 (MW)  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/19/12 12:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.0	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	3.4		ug/l	2.5	0.70	1
tert-Butylbenzene	0.74	J	ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	15		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	2.3	J	ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Diethylbenzene	ND		ug/l	2.0	0.70	1
4-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

Lab ID: L1212928-03  
 Client ID: LB6 (MW)  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/19/12 12:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	96		70-130

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

**Lab ID:** L1212928-04  
**Client ID:** LB2 (MW)  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/24/12 16:05  
**Analyst:** PD

**Date Collected:** 07/19/12 14:00  
**Date Received:** 07/19/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.16	1
1,2-Dichloropropane	ND		ug/l	1.0	0.30	1
Dibromochloromethane	ND		ug/l	0.50	0.19	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.16	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19	1
Benzene	ND		ug/l	0.50	0.19	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.18	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212928

Project Number: 170201301

Report Date: 07/27/12

## SAMPLE RESULTS

Lab ID: L1212928-04  
 Client ID: LB2 (MW)  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/19/12 14:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.8	J	ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.0	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Diethylbenzene	ND		ug/l	2.0	0.70	1
4-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

Lab ID: L1212928-04  
 Client ID: LB2 (MW)  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/19/12 14:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	99		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/24/12 09:12  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG550477-3					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.16
1,2-Dichloropropane	ND		ug/l	1.0	0.30
Dibromochloromethane	ND		ug/l	0.50	0.19
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.16
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19
Benzene	ND		ug/l	0.50	0.19
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.33
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.18
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.17
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/24/12 09:12  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG550477-3					
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.0
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.0
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/24/12 09:12  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG550477-3					
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Diethylbenzene	ND		ug/l	2.0	0.70
4-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	100		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212928

Project Number: 170201301

Report Date: 07/27/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG550477-1 WG550477-2								
Methylene chloride	98		87		70-130	12		20
1,1-Dichloroethane	105		91		70-130	14		20
Chloroform	103		88		70-130	16		20
Carbon tetrachloride	98		82		63-132	18		20
1,2-Dichloropropane	102		88		70-130	15		20
Dibromochloromethane	95		86		63-130	10		20
1,1,2-Trichloroethane	99		89		70-130	11		20
Tetrachloroethene	102		87		70-130	16		20
Chlorobenzene	108		95		75-130	13		20
Trichlorofluoromethane	123		108		62-150	13		20
1,2-Dichloroethane	96		87		70-130	10		20
1,1,1-Trichloroethane	99		83		67-130	18		20
Bromodichloromethane	99		88		67-130	12		20
trans-1,3-Dichloropropene	89		84		70-130	6		20
cis-1,3-Dichloropropene	93		83		70-130	11		20
1,1-Dichloropropene	100		85		70-130	16		20
Bromoform	91		85		54-136	7		20
1,1,2,2-Tetrachloroethane	95		90		67-130	5		20
Benzene	106		93		70-130	13		20
Toluene	110		95		70-130	15		20
Ethylbenzene	112		96		70-130	15		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212928

Project Number: 170201301

Report Date: 07/27/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG550477-1 WG550477-2								
Chloromethane	77		64		64-130	18		20
Bromomethane	79		76		39-139	4		20
Vinyl chloride	120		104		55-140	14		20
Chloroethane	125		113		55-138	10		20
1,1-Dichloroethene	104		87		61-145	18		20
trans-1,2-Dichloroethene	104		86		70-130	19		20
Trichloroethene	103		86		70-130	18		20
1,2-Dichlorobenzene	102		92		70-130	10		20
1,3-Dichlorobenzene	108		95		70-130	13		20
1,4-Dichlorobenzene	106		93		70-130	13		20
Methyl tert butyl ether	80		75		63-130	6		20
p/m-Xylene	113		97		70-130	15		20
o-Xylene	110		95		70-130	15		20
cis-1,2-Dichloroethene	101		86		70-130	16		20
Dibromomethane	96		87		70-130	10		20
1,2,3-Trichloropropane	100		94		64-130	6		20
Acrylonitrile	88		80		70-130	10		20
Styrene	110		96		70-130	14		20
Dichlorodifluoromethane	93		79		36-147	16		20
Acetone	95		78		58-148	20		20
Carbon disulfide	100		84		51-130	17		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212928

Project Number: 170201301

Report Date: 07/27/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG550477-1 WG550477-2								
2-Butanone	68		65		63-138	5		20
Vinyl acetate	80		80		70-130	0		20
4-Methyl-2-pentanone	65		62		59-130	5		20
2-Hexanone	71		62		57-130	14		20
Bromochloromethane	109		93		70-130	16		20
2,2-Dichloropropane	85		84		63-133	1		20
1,2-Dibromoethane	92		85		70-130	8		20
1,3-Dichloropropane	98		90		70-130	9		20
1,1,1,2-Tetrachloroethane	104		90		64-130	14		20
Bromobenzene	103		91		70-130	12		20
n-Butylbenzene	114		100		53-136	13		20
sec-Butylbenzene	114		96		70-130	17		20
tert-Butylbenzene	111		94		70-130	17		20
o-Chlorotoluene	117		103		70-130	13		20
p-Chlorotoluene	113		98		70-130	14		20
1,2-Dibromo-3-chloropropane	92		82		41-144	11		20
Hexachlorobutadiene	87		70		63-130	22	Q	20
Isopropylbenzene	116		99		70-130	16		20
p-Isopropyltoluene	113		98		70-130	14		20
Naphthalene	73		65	Q	70-130	12		20
n-Propylbenzene	116		99		69-130	16		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212928

Project Number: 170201301

Report Date: 07/27/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG550477-1 WG550477-2								
1,2,3-Trichlorobenzene	75		65	Q	70-130	14		20
1,2,4-Trichlorobenzene	82		72		70-130	13		20
1,3,5-Trimethylbenzene	115		100		64-130	14		20
1,2,4-Trimethylbenzene	115		100		70-130	14		20
1,4-Diethylbenzene	103		89		70-130	15		20
4-Ethyltoluene	106		92		70-130	14		20
1,2,4,5-Tetramethylbenzene	100		86		70-130	15		20
Ethyl ether	114		104		59-134	9		20
trans-1,4-Dichloro-2-butene	77		76		70-130	1		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	93		97		70-130
Toluene-d8	101		100		70-130
4-Bromofluorobenzene	93		94		70-130
Dibromofluoromethane	97		99		70-130

# SEMIVOLATILES

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

Lab ID: L1212928-02  
 Client ID: LB5 (MW)  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8270C  
 Analytical Date: 07/23/12 20:05  
 Analyst: AS

Date Collected: 07/19/12 09:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/21/12 11:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND		ug/l	0.20	0.06	1
2-Chloronaphthalene	ND		ug/l	0.20	0.07	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.20	0.06	1
Benzo(a)anthracene	ND		ug/l	0.20	0.06	1
Benzo(a)pyrene	ND		ug/l	0.20	0.07	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07	1
Chrysene	ND		ug/l	0.20	0.05	1
Acenaphthylene	ND		ug/l	0.20	0.05	1
Anthracene	ND		ug/l	0.20	0.06	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.07	1
Fluorene	ND		ug/l	0.20	0.06	1
Phenanthrene	ND		ug/l	0.20	0.06	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08	1
Pyrene	ND		ug/l	0.20	0.06	1
2-Methylnaphthalene	ND		ug/l	0.20	0.06	1
Pentachlorophenol	ND		ug/l	0.80	0.19	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.07	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	89		10-120
4-Terphenyl-d14	106		41-149

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

**Lab ID:** L1212928-02  
**Client ID:** LB5 (MW)  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water  
**Analytical Method:** 1,8270C  
**Analytical Date:** 07/24/12 11:20  
**Analyst:** RC

**Date Collected:** 07/19/12 09:00  
**Date Received:** 07/19/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 07/21/12 11:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40	1
Hexachlorocyclopentadiene	ND		ug/l	20	2.1	1
Isophorone	ND		ug/l	5.0	0.35	1
Nitrobenzene	ND		ug/l	2.0	0.50	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Butyl benzyl phthalate	ND		ug/l	5.0	0.46	1
Di-n-butylphthalate	ND		ug/l	5.0	0.54	1
Di-n-octylphthalate	ND		ug/l	5.0	0.53	1
Diethyl phthalate	ND		ug/l	5.0	0.45	1
Dimethyl phthalate	ND		ug/l	5.0	0.45	1
Biphenyl	ND		ug/l	2.0	0.50	1
4-Chloroaniline	ND		ug/l	5.0	0.83	1
2-Nitroaniline	ND		ug/l	5.0	0.40	1
3-Nitroaniline	ND		ug/l	5.0	0.59	1
4-Nitroaniline	ND		ug/l	5.0	0.55	1
Dibenzofuran	ND		ug/l	2.0	0.47	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65	1
Acetophenone	ND		ug/l	5.0	0.55	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

Lab ID: L1212928-02  
 Client ID: LB5 (MW)  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/19/12 09:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.34	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.43	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.2	1
2-Nitrophenol	ND		ug/l	10	0.48	1
4-Nitrophenol	ND		ug/l	10	1.2	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59	1
Phenol	ND		ug/l	5.0	0.26	1
2-Methylphenol	ND		ug/l	5.0	0.53	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.53	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	38		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	89		41-149

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

**Lab ID:** L1212928-03  
**Client ID:** LB6 (MW)  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water  
**Analytical Method:** 1,8270C  
**Analytical Date:** 07/23/12 20:27  
**Analyst:** AS

**Date Collected:** 07/19/12 12:00  
**Date Received:** 07/19/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 07/21/12 11:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	0.41		ug/l	0.20	0.06	1
2-Chloronaphthalene	ND		ug/l	0.20	0.07	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.20	0.06	1
Benzo(a)anthracene	ND		ug/l	0.20	0.06	1
Benzo(a)pyrene	ND		ug/l	0.20	0.07	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07	1
Chrysene	ND		ug/l	0.20	0.05	1
Acenaphthylene	ND		ug/l	0.20	0.05	1
Anthracene	ND		ug/l	0.20	0.06	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.07	1
Fluorene	ND		ug/l	0.20	0.06	1
Phenanthrene	ND		ug/l	0.20	0.06	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08	1
Pyrene	ND		ug/l	0.20	0.06	1
2-Methylnaphthalene	ND		ug/l	0.20	0.06	1
Pentachlorophenol	ND		ug/l	0.80	0.19	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.07	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	106		10-120
4-Terphenyl-d14	112		41-149

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

Lab ID: L1212928-03  
 Client ID: LB6 (MW)  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8270C  
 Analytical Date: 07/24/12 11:48  
 Analyst: RC

Date Collected: 07/19/12 12:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/21/12 11:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40	1
Hexachlorocyclopentadiene	ND		ug/l	20	2.1	1
Isophorone	ND		ug/l	5.0	0.35	1
Nitrobenzene	ND		ug/l	2.0	0.50	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Butyl benzyl phthalate	ND		ug/l	5.0	0.46	1
Di-n-butylphthalate	ND		ug/l	5.0	0.54	1
Di-n-octylphthalate	ND		ug/l	5.0	0.53	1
Diethyl phthalate	ND		ug/l	5.0	0.45	1
Dimethyl phthalate	ND		ug/l	5.0	0.45	1
Biphenyl	ND		ug/l	2.0	0.50	1
4-Chloroaniline	ND		ug/l	5.0	0.83	1
2-Nitroaniline	ND		ug/l	5.0	0.40	1
3-Nitroaniline	ND		ug/l	5.0	0.59	1
4-Nitroaniline	ND		ug/l	5.0	0.55	1
Dibenzofuran	ND		ug/l	2.0	0.47	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65	1
Acetophenone	ND		ug/l	5.0	0.55	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

Lab ID: L1212928-03  
 Client ID: LB6 (MW)  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/19/12 12:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.34	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.43	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.2	1
2-Nitrophenol	ND		ug/l	10	0.48	1
4-Nitrophenol	ND		ug/l	10	1.2	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59	1
Phenol	ND		ug/l	5.0	0.26	1
2-Methylphenol	ND		ug/l	5.0	0.53	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.53	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	64		15-120
2,4,6-Tribromophenol	93		10-120
4-Terphenyl-d14	87		41-149

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

Lab ID: L1212928-04  
 Client ID: LB2 (MW)  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8270C  
 Analytical Date: 07/23/12 20:49  
 Analyst: AS

Date Collected: 07/19/12 14:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/21/12 11:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND		ug/l	0.20	0.06	1
2-Chloronaphthalene	ND		ug/l	0.20	0.07	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.20	0.06	1
Benzo(a)anthracene	ND		ug/l	0.20	0.06	1
Benzo(a)pyrene	ND		ug/l	0.20	0.07	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07	1
Chrysene	ND		ug/l	0.20	0.05	1
Acenaphthylene	ND		ug/l	0.20	0.05	1
Anthracene	ND		ug/l	0.20	0.06	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.07	1
Fluorene	ND		ug/l	0.20	0.06	1
Phenanthrene	ND		ug/l	0.20	0.06	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08	1
Pyrene	ND		ug/l	0.20	0.06	1
2-Methylnaphthalene	ND		ug/l	0.20	0.06	1
Pentachlorophenol	ND		ug/l	0.80	0.19	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.07	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	53		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	95		41-149

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

**Lab ID:** L1212928-04  
**Client ID:** LB2 (MW)  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water  
**Analytical Method:** 1,8270C  
**Analytical Date:** 07/24/12 12:15  
**Analyst:** RC

**Date Collected:** 07/19/12 14:00  
**Date Received:** 07/19/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 07/21/12 11:25

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40	1
Hexachlorocyclopentadiene	ND		ug/l	20	2.1	1
Isophorone	ND		ug/l	5.0	0.35	1
Nitrobenzene	ND		ug/l	2.0	0.50	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Butyl benzyl phthalate	ND		ug/l	5.0	0.46	1
Di-n-butylphthalate	ND		ug/l	5.0	0.54	1
Di-n-octylphthalate	ND		ug/l	5.0	0.53	1
Diethyl phthalate	ND		ug/l	5.0	0.45	1
Dimethyl phthalate	ND		ug/l	5.0	0.45	1
Biphenyl	ND		ug/l	2.0	0.50	1
4-Chloroaniline	ND		ug/l	5.0	0.83	1
2-Nitroaniline	ND		ug/l	5.0	0.40	1
3-Nitroaniline	ND		ug/l	5.0	0.59	1
4-Nitroaniline	ND		ug/l	5.0	0.55	1
Dibenzofuran	ND		ug/l	2.0	0.47	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65	1
Acetophenone	ND		ug/l	5.0	0.55	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**SAMPLE RESULTS**

Lab ID: L1212928-04  
 Client ID: LB2 (MW)  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/19/12 14:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.34	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.43	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.2	1
2-Nitrophenol	ND		ug/l	10	0.48	1
4-Nitrophenol	ND		ug/l	10	1.2	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59	1
Phenol	ND		ug/l	5.0	0.26	1
2-Methylphenol	ND		ug/l	5.0	0.53	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.53	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	79		10-120
4-Terphenyl-d14	84		41-149

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/24/12 09:02  
**Analyst:** RC

**Extraction Method:** EPA 3510C  
**Extraction Date:** 07/21/12 11:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG549992-1					
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40
Hexachlorocyclopentadiene	ND		ug/l	20	2.1
Isophorone	ND		ug/l	5.0	0.35
Nitrobenzene	ND		ug/l	2.0	0.50
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4
Butyl benzyl phthalate	ND		ug/l	5.0	0.46
Di-n-butylphthalate	ND		ug/l	5.0	0.54
Di-n-octylphthalate	ND		ug/l	5.0	0.53
Diethyl phthalate	ND		ug/l	5.0	0.45
Dimethyl phthalate	ND		ug/l	5.0	0.45
Biphenyl	ND		ug/l	2.0	0.50
4-Chloroaniline	ND		ug/l	5.0	0.83
2-Nitroaniline	ND		ug/l	5.0	0.40
3-Nitroaniline	ND		ug/l	5.0	0.59
4-Nitroaniline	ND		ug/l	5.0	0.55
Dibenzofuran	ND		ug/l	2.0	0.47
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65
Acetophenone	ND		ug/l	5.0	0.55

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/24/12 09:02  
**Analyst:** RC

**Extraction Method:** EPA 3510C  
**Extraction Date:** 07/21/12 11:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG549992-1					
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.34
2,4-Dichlorophenol	ND		ug/l	5.0	0.43
2,4-Dimethylphenol	ND		ug/l	5.0	1.2
2-Nitrophenol	ND		ug/l	10	0.48
4-Nitrophenol	ND		ug/l	10	1.2
2,4-Dinitrophenol	ND		ug/l	20	1.4
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59
Phenol	ND		ug/l	5.0	0.26
2-Methylphenol	ND		ug/l	5.0	0.53
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45
Benzoic Acid	ND		ug/l	50	1.0
Benzyl Alcohol	ND		ug/l	2.0	0.47
Carbazole	ND		ug/l	2.0	0.53

Tentatively Identified Compounds

No Tentatively Identified Compounds      ND      ug/l

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212928**Project Number:** 170201301**Report Date:** 07/27/12**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8270C  
 Analytical Date: 07/24/12 09:02  
 Analyst: RC

Extraction Method: EPA 3510C  
 Extraction Date: 07/21/12 11:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG549992-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	27		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	59		15-120
2,4,6-Tribromophenol	76		10-120
4-Terphenyl-d14	84		41-149

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270C  
Analytical Date: 07/23/12 12:12  
Analyst: AS

Extraction Method: EPA 3510C  
Extraction Date: 07/21/12 11:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02-04 Batch: WG549993-1					
Acenaphthene	ND		ug/l	0.20	0.06
2-Chloronaphthalene	ND		ug/l	0.20	0.07
Fluoranthene	ND		ug/l	0.20	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.20	0.06
Benzo(a)anthracene	ND		ug/l	0.20	0.06
Benzo(a)pyrene	ND		ug/l	0.20	0.07
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07
Chrysene	ND		ug/l	0.20	0.05
Acenaphthylene	ND		ug/l	0.20	0.05
Anthracene	ND		ug/l	0.20	0.06
Benzo(ghi)perylene	ND		ug/l	0.20	0.07
Fluorene	ND		ug/l	0.20	0.06
Phenanthrene	ND		ug/l	0.20	0.06
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08
Pyrene	ND		ug/l	0.20	0.06
2-Methylnaphthalene	ND		ug/l	0.20	0.06
Pentachlorophenol	ND		ug/l	0.80	0.19
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.07

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212928

Project Number: 170201301

Report Date: 07/27/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270C  
 Analytical Date: 07/23/12 12:12  
 Analyst: AS

Extraction Method: EPA 3510C  
 Extraction Date: 07/21/12 11:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02-04 Batch: WG549993-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	59		15-120
2,4,6-Tribromophenol	77		10-120
4-Terphenyl-d14	102		41-149

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212928

Project Number: 170201301

Report Date: 07/27/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG549992-2 WG549992-3								
1,2,4-Trichlorobenzene	63		57		39-98	10		30
Bis(2-chloroethyl)ether	81		70		40-140	15		30
1,2-Dichlorobenzene	60		54		40-140	11		30
1,3-Dichlorobenzene	57		53		40-140	7		30
1,4-Dichlorobenzene	58		52		36-97	11		30
3,3'-Dichlorobenzidine	78		72		40-140	8		30
2,4-Dinitrotoluene	104	Q	86		24-96	19		30
2,6-Dinitrotoluene	90		80		40-140	12		30
4-Chlorophenyl phenyl ether	86		75		40-140	14		30
4-Bromophenyl phenyl ether	87		77		40-140	12		30
Bis(2-chloroisopropyl)ether	90		80		40-140	12		30
Bis(2-chloroethoxy)methane	82		70		40-140	16		30
Hexachlorocyclopentadiene	39	Q	37	Q	40-140	5		30
Isophorone	81		71		40-140	13		30
Nitrobenzene	89		78		40-140	13		30
NitrosoDiPhenylAmine(NDPA)/DPA	85		73		40-140	15		30
n-Nitrosodi-n-propylamine	80		70		29-132	13		30
Bis(2-Ethylhexyl)phthalate	115		98		40-140	16		30
Butyl benzyl phthalate	106		96		40-140	10		30
Di-n-butylphthalate	107		92		40-140	15		30
Di-n-octylphthalate	124		106		40-140	16		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212928

Project Number: 170201301

Report Date: 07/27/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG549992-2 WG549992-3								
Diethyl phthalate	98		85		40-140	14		30
Dimethyl phthalate	94		80		40-140	16		30
Biphenyl	87		74			16		30
4-Chloroaniline	53		47		40-140	12		30
2-Nitroaniline	94		82		52-143	14		30
3-Nitroaniline	60		53		25-145	12		30
4-Nitroaniline	85		73		51-143	15		30
Dibenzofuran	90		78		40-140	14		30
1,2,4,5-Tetrachlorobenzene	82		72		2-134	13		30
Acetophenone	84		74		39-129	13		30
2,4,6-Trichlorophenol	94		82		30-130	14		30
P-Chloro-M-Cresol	94		82		23-97	14		30
2-Chlorophenol	83		73		27-123	13		30
2,4-Dichlorophenol	92		82		30-130	11		30
2,4-Dimethylphenol	64		43		30-130	<b>39</b>	Q	30
2-Nitrophenol	88		76		30-130	15		30
4-Nitrophenol	66		57		10-80	15		30
2,4-Dinitrophenol	101		82		20-130	21		30
4,6-Dinitro-o-cresol	93		78		20-164	18		30
Phenol	42		38		12-110	10		30
2-Methylphenol	75		61		30-130	21		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212928

Project Number: 170201301

Report Date: 07/27/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG549992-2 WG549992-3								
3-Methylphenol/4-Methylphenol	72		63		30-130	13		30
2,4,5-Trichlorophenol	91		81		30-130	12		30
Benzoic Acid	45		36			22		30
Benzyl Alcohol	75		65			14		30
Carbazole	95		82		55-144	15		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	62		54		21-120
Phenol-d6	42		37		10-120
Nitrobenzene-d5	87		75		23-120
2-Fluorobiphenyl	81		73		15-120
2,4,6-Tribromophenol	112		93		10-120
4-Terphenyl-d14	100		87		41-149

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212928

Project Number: 170201301

Report Date: 07/27/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02-04 Batch: WG549993-2 WG549993-3								
Acenaphthene	91		89		37-111	2		40
2-Chloronaphthalene	86		85		40-140	1		40
Fluoranthene	106		112		40-140	6		40
Hexachlorobutadiene	73		71		40-140	3		40
Naphthalene	83		83		40-140	0		40
Benzo(a)anthracene	93		97		40-140	4		40
Benzo(a)pyrene	83		89		40-140	7		40
Benzo(b)fluoranthene	77		82		40-140	6		40
Benzo(k)fluoranthene	89		96		40-140	8		40
Chrysene	93		96		40-140	3		40
Acenaphthylene	99		96		40-140	3		40
Anthracene	89		97		40-140	9		40
Benzo(ghi)perylene	91		103		40-140	12		40
Fluorene	98		96		40-140	2		40
Phenanthrene	89		93		40-140	4		40
Dibenzo(a,h)anthracene	89		101		40-140	13		40
Indeno(1,2,3-cd)Pyrene	97		109		40-140	12		40
Pyrene	103		109		26-127	6		40
2-Methylnaphthalene	85		87		40-140	2		40
Pentachlorophenol	94		102		9-103	8		40
Hexachlorobenzene	89		94		40-140	5		40

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02-04 Batch: WG549993-2 WG549993-3								
Hexachloroethane	83		81		40-140	2		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	65		63		21-120
Phenol-d6	48		47		10-120
Nitrobenzene-d5	104		101		23-120
2-Fluorobiphenyl	84		86		15-120
2,4,6-Tribromophenol	107		110		10-120
4-Terphenyl-d14	123		131		41-149

# PCBS

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**SAMPLE RESULTS**

Lab ID: L1212928-02  
 Client ID: LB5 (MW)  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8082  
 Analytical Date: 07/24/12 05:39  
 Analyst: KB

Date Collected: 07/19/12 09:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/21/12 16:03  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/22/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/22/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.083	0.055	1
Aroclor 1221	ND		ug/l	0.083	0.053	1
Aroclor 1232	ND		ug/l	0.083	0.031	1
Aroclor 1242	ND		ug/l	0.083	0.060	1
Aroclor 1248	ND		ug/l	0.083	0.051	1
Aroclor 1254	ND		ug/l	0.083	0.034	1
Aroclor 1260	ND		ug/l	0.083	0.032	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	89		30-150
Decachlorobiphenyl	93		30-150
2,4,5,6-Tetrachloro-m-xylene	79		30-150
Decachlorobiphenyl	74		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**SAMPLE RESULTS**

Lab ID: L1212928-03  
 Client ID: LB6 (MW)  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8082  
 Analytical Date: 07/24/12 05:51  
 Analyst: KB

Date Collected: 07/19/12 12:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/21/12 16:03  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/22/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/22/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.083	0.055	1
Aroclor 1221	ND		ug/l	0.083	0.053	1
Aroclor 1232	ND		ug/l	0.083	0.031	1
Aroclor 1242	ND		ug/l	0.083	0.060	1
Aroclor 1248	ND		ug/l	0.083	0.051	1
Aroclor 1254	ND		ug/l	0.083	0.034	1
Aroclor 1260	ND		ug/l	0.083	0.032	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	84		30-150
Decachlorobiphenyl	62		30-150
2,4,5,6-Tetrachloro-m-xylene	82		30-150
Decachlorobiphenyl	53		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**SAMPLE RESULTS**

Lab ID: L1212928-04  
 Client ID: LB2 (MW)  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8082  
 Analytical Date: 07/24/12 06:04  
 Analyst: KB

Date Collected: 07/19/12 14:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/21/12 16:03  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/22/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/22/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.083	0.055	1
Aroclor 1221	ND		ug/l	0.083	0.053	1
Aroclor 1232	ND		ug/l	0.083	0.031	1
Aroclor 1242	ND		ug/l	0.083	0.060	1
Aroclor 1248	ND		ug/l	0.083	0.051	1
Aroclor 1254	ND		ug/l	0.083	0.034	1
Aroclor 1260	ND		ug/l	0.083	0.032	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	84		30-150
Decachlorobiphenyl	76		30-150
2,4,5,6-Tetrachloro-m-xylene	75		30-150
Decachlorobiphenyl	60		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**Method Blank Analysis  
 Batch Quality Control**

Analytical Method: 1,8082  
 Analytical Date: 07/24/12 06:16  
 Analyst: KB

Extraction Method: EPA 3510C  
 Extraction Date: 07/21/12 16:03  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/22/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/22/12

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 02-04 Batch: WG550016-1					
Aroclor 1016	ND		ug/l	0.083	0.055
Aroclor 1221	ND		ug/l	0.083	0.053
Aroclor 1232	ND		ug/l	0.083	0.031
Aroclor 1242	ND		ug/l	0.083	0.060
Aroclor 1248	ND		ug/l	0.083	0.051
Aroclor 1254	ND		ug/l	0.083	0.034
Aroclor 1260	ND		ug/l	0.083	0.032

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	84		30-150
Decachlorobiphenyl	103		30-150
2,4,5,6-Tetrachloro-m-xylene	85		30-150
Decachlorobiphenyl	84		30-150



### Lab Control Sample Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 02-04 Batch: WG550016-2 WG550016-3								
Aroclor 1016	97		93		40-140	5		50
Aroclor 1260	107		104		40-140	3		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	85		75		30-150
Decachlorobiphenyl	99		97		30-150
2,4,5,6-Tetrachloro-m-xylene	78		72		30-150
Decachlorobiphenyl	79		74		30-150

## METALS

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**SAMPLE RESULTS**

**Lab ID:** L1212928-02  
**Client ID:** LB5 (MW)  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water

**Date Collected:** 07/19/12 09:00  
**Date Received:** 07/19/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	0.122		mg/l	0.010	0.002	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Antimony, Total	0.0037		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Arsenic, Total	0.0024		mg/l	0.0005	0.0002	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Barium, Total	0.0695		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Beryllium, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Cadmium, Total	ND		mg/l	0.0002	0.0001	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Calcium, Total	31.7		mg/l	0.100	0.032	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Chromium, Total	0.0005	J	mg/l	0.0010	0.0002	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Cobalt, Total	0.0009		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Copper, Total	0.0031		mg/l	0.0010	0.0001	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Iron, Total	0.282		mg/l	0.050	0.013	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Lead, Total	0.0016		mg/l	0.0010	0.0002	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Magnesium, Total	5.04		mg/l	0.100	0.023	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Manganese, Total	0.3784		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Mercury, Total	ND		mg/l	0.0002	0.0001	1	07/24/12 14:30	07/25/12 13:20	EPA 7470A	1,7470A	JH
Nickel, Total	0.0025		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Potassium, Total	11.6		mg/l	0.100	0.027	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Selenium, Total	0.002	J	mg/l	0.005	0.0003	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Silver, Total	ND		mg/l	0.0004	0.0001	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Thallium, Total	ND		mg/l	0.0005	0.00003	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Vanadium, Total	0.0010	J	mg/l	0.0050	0.0001	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
Zinc, Total	0.0022	J	mg/l	0.0100	0.0012	1	07/20/12 07:40	07/24/12 13:27	EPA 3005A	1,6020	AK
<b>Dissolved Metals - Westborough Lab</b>											
Aluminum, Dissolved	0.035		mg/l	0.010	0.002	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Antimony, Dissolved	0.0017		mg/l	0.0005	0.0001	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Arsenic, Dissolved	0.0009		mg/l	0.0005	0.0002	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Barium, Dissolved	0.0648		mg/l	0.0005	0.0001	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Beryllium, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Cadmium, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Calcium, Dissolved	26.0		mg/l	0.100	0.032	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**SAMPLE RESULTS**

**Lab ID:** L1212928-02  
**Client ID:** LB5 (MW)  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water

**Date Collected:** 07/19/12 09:00  
**Date Received:** 07/19/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Chromium, Dissolved	0.0003	J	mg/l	0.0010	0.0002	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Cobalt, Dissolved	0.0009		mg/l	0.0005	0.0001	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Copper, Dissolved	0.0028		mg/l	0.0010	0.0001	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Iron, Dissolved	0.117		mg/l	0.050	0.013	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Lead, Dissolved	0.0011		mg/l	0.0010	0.0002	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Magnesium, Dissolved	4.51		mg/l	0.100	0.023	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Manganese, Dissolved	0.3365		mg/l	0.0005	0.0001	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Mercury, Dissolved	ND		mg/l	0.0002	0.0001	1	07/24/12 14:30	07/25/12 12:21	EPA 7470A	1,7470A	JH
Nickel, Dissolved	0.0024		mg/l	0.0005	0.0001	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Potassium, Dissolved	7.53		mg/l	0.100	0.027	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Selenium, Dissolved	0.002	J	mg/l	0.005	0.0003	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Silver, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Thallium, Dissolved	ND		mg/l	0.0005	0.00003	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Vanadium, Dissolved	0.0011	J	mg/l	0.0050	0.0001	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK
Zinc, Dissolved	0.0055	J	mg/l	0.0100	0.0012	1	07/20/12 12:30	07/26/12 10:11	NA	1,6020	AK



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**SAMPLE RESULTS**

Lab ID: L1212928-02 D  
 Client ID: LB5 (MW)  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water

Date Collected: 07/19/12 09:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Sodium, Total	114		mg/l	1.00	0.150	10	07/20/12 07:40	07/24/12 13:38	EPA 3005A	1,6020	AK
<b>Dissolved Metals - Westborough Lab</b>											
Sodium, Dissolved	96.9		mg/l	1.00	0.150	10	07/20/12 12:30	07/26/12 10:40	NA	1,6020	AK



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**SAMPLE RESULTS**

**Lab ID:** L1212928-03  
**Client ID:** LB6 (MW)  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water

**Date Collected:** 07/19/12 12:00  
**Date Received:** 07/19/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Antimony, Total	0.0037		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Arsenic, Total	0.0147		mg/l	0.0005	0.0002	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Barium, Total	0.2526		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Beryllium, Total	0.0002	J	mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Cadmium, Total	ND		mg/l	0.0002	0.0001	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Chromium, Total	0.0028		mg/l	0.0010	0.0002	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Cobalt, Total	0.0013		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Copper, Total	0.0060		mg/l	0.0010	0.0001	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Iron, Total	9.68		mg/l	0.050	0.013	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Lead, Total	0.0033		mg/l	0.0010	0.0002	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Magnesium, Total	8.90		mg/l	0.100	0.023	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Mercury, Total	ND		mg/l	0.0002	0.0001	1	07/24/12 14:30	07/25/12 13:22	EPA 7470A	1,7470A	JH
Nickel, Total	0.0032		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Potassium, Total	7.93		mg/l	0.100	0.027	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Selenium, Total	0.002	J	mg/l	0.005	0.0003	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Silver, Total	ND		mg/l	0.0004	0.0001	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Thallium, Total	ND		mg/l	0.0005	0.00003	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Vanadium, Total	0.0048	J	mg/l	0.0050	0.0001	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
Zinc, Total	0.0092	J	mg/l	0.0100	0.0012	1	07/20/12 07:40	07/24/12 13:29	EPA 3005A	1,6020	AK
<b>Dissolved Metals - Westborough Lab</b>											
Aluminum, Dissolved	0.005	J	mg/l	0.010	0.002	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Antimony, Dissolved	0.0010		mg/l	0.0005	0.0001	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Arsenic, Dissolved	0.0071		mg/l	0.0005	0.0002	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Barium, Dissolved	0.1787		mg/l	0.0005	0.0001	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Beryllium, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Cadmium, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Chromium, Dissolved	ND		mg/l	0.0010	0.0002	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Cobalt, Dissolved	0.0001	J	mg/l	0.0005	0.0001	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Copper, Dissolved	0.0002	J	mg/l	0.0010	0.0001	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Iron, Dissolved	0.191		mg/l	0.050	0.013	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**SAMPLE RESULTS**

**Lab ID:** L1212928-03  
**Client ID:** LB6 (MW)  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water

**Date Collected:** 07/19/12 12:00  
**Date Received:** 07/19/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Lead, Dissolved	ND		mg/l	0.0010	0.0002	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Magnesium, Dissolved	8.60		mg/l	0.100	0.023	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Mercury, Dissolved	ND		mg/l	0.0002	0.0001	1	07/24/12 14:30	07/25/12 12:22	EPA 7470A	1,7470A	JH
Nickel, Dissolved	0.0009		mg/l	0.0005	0.0001	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Potassium, Dissolved	9.58		mg/l	0.100	0.027	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Selenium, Dissolved	0.001	J	mg/l	0.005	0.0003	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Silver, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Thallium, Dissolved	ND		mg/l	0.0005	0.00003	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Vanadium, Dissolved	0.0002	J	mg/l	0.0050	0.0001	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK
Zinc, Dissolved	0.0018	J	mg/l	0.0100	0.0012	1	07/20/12 08:05	07/26/12 10:21	NA	1,6020	AK



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**SAMPLE RESULTS**

Lab ID: L1212928-03 D  
 Client ID: LB6 (MW)  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water

Date Collected: 07/19/12 12:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	1.32		mg/l	0.100	0.020	10	07/20/12 07:40	07/24/12 13:41	EPA 3005A	1,6020	AK
Calcium, Total	58.0		mg/l	1.00	0.320	10	07/20/12 07:40	07/24/12 13:41	EPA 3005A	1,6020	AK
Manganese, Total	2.027		mg/l	0.0050	0.0010	10	07/20/12 07:40	07/24/12 13:41	EPA 3005A	1,6020	AK
Sodium, Total	213		mg/l	1.00	0.150	10	07/20/12 07:40	07/24/12 13:41	EPA 3005A	1,6020	AK
<b>Dissolved Metals - Westborough Lab</b>											
Calcium, Dissolved	67.6		mg/l	1.00	0.320	10	07/20/12 08:05	07/26/12 10:51	NA	1,6020	AK
Manganese, Dissolved	2.232		mg/l	0.0050	0.0010	10	07/20/12 08:05	07/26/12 10:51	NA	1,6020	AK
Sodium, Dissolved	220		mg/l	1.00	0.150	10	07/20/12 08:05	07/26/12 10:51	NA	1,6020	AK



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**SAMPLE RESULTS**

**Lab ID:** L1212928-04  
**Client ID:** LB2 (MW)  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water

**Date Collected:** 07/19/12 14:00  
**Date Received:** 07/19/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	0.086		mg/l	0.010	0.002	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Antimony, Total	0.0033		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Arsenic, Total	0.0056		mg/l	0.0005	0.0002	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Barium, Total	0.1361		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Beryllium, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Cadmium, Total	ND		mg/l	0.0002	0.0001	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Chromium, Total	0.0008	J	mg/l	0.0010	0.0002	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Cobalt, Total	0.0008		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Copper, Total	0.0015		mg/l	0.0010	0.0001	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Iron, Total	2.53		mg/l	0.050	0.013	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Lead, Total	0.0008	J	mg/l	0.0010	0.0002	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Magnesium, Total	12.7		mg/l	0.100	0.023	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Mercury, Total	ND		mg/l	0.0002	0.0001	1	07/24/12 14:30	07/25/12 13:28	EPA 7470A	1,7470A	JH
Nickel, Total	0.0021		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Potassium, Total	11.3		mg/l	0.100	0.027	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Selenium, Total	0.001	J	mg/l	0.005	0.0003	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Silver, Total	ND		mg/l	0.0004	0.0001	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Thallium, Total	ND		mg/l	0.0005	0.00003	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Vanadium, Total	0.0005	J	mg/l	0.0050	0.0001	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
Zinc, Total	0.0167		mg/l	0.0100	0.0012	1	07/20/12 07:40	07/24/12 13:32	EPA 3005A	1,6020	AK
<b>Dissolved Metals - Westborough Lab</b>											
Aluminum, Dissolved	0.002	J	mg/l	0.010	0.002	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Antimony, Dissolved	0.0019		mg/l	0.0005	0.0001	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Arsenic, Dissolved	0.0027		mg/l	0.0005	0.0002	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Barium, Dissolved	0.1177		mg/l	0.0005	0.0001	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Beryllium, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Cadmium, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Chromium, Dissolved	0.0002	J	mg/l	0.0010	0.0002	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Cobalt, Dissolved	0.0007		mg/l	0.0005	0.0001	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Copper, Dissolved	0.0007	J	mg/l	0.0010	0.0001	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**SAMPLE RESULTS**

Lab ID: L1212928-04  
 Client ID: LB2 (MW)  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water

Date Collected: 07/19/12 14:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Iron, Dissolved	0.777		mg/l	0.050	0.013	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Lead, Dissolved	ND		mg/l	0.0010	0.0002	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Magnesium, Dissolved	11.6		mg/l	0.100	0.023	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Mercury, Dissolved	ND		mg/l	0.0002	0.0001	1	07/24/12 14:30	07/25/12 12:24	EPA 7470A	1,7470A	JH
Nickel, Dissolved	0.0019		mg/l	0.0005	0.0001	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Potassium, Dissolved	10.6		mg/l	0.100	0.027	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Selenium, Dissolved	0.001	J	mg/l	0.005	0.0003	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Silver, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Thallium, Dissolved	ND		mg/l	0.0005	0.00003	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Vanadium, Dissolved	ND		mg/l	0.0050	0.0001	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK
Zinc, Dissolved	0.0154		mg/l	0.0100	0.0012	1	07/20/12 08:05	07/26/12 10:24	NA	1,6020	AK



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**SAMPLE RESULTS**

Lab ID: L1212928-04 D  
 Client ID: LB2 (MW)  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water

Date Collected: 07/19/12 14:00  
 Date Received: 07/19/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Calcium, Total	86.6		mg/l	1.00	0.320	10	07/20/12 07:40	07/24/12 13:46	EPA 3005A	1,6020	AK
Manganese, Total	0.5680		mg/l	0.0050	0.0010	10	07/20/12 07:40	07/24/12 13:46	EPA 3005A	1,6020	AK
Sodium, Total	66.7		mg/l	1.00	0.150	10	07/20/12 07:40	07/24/12 13:46	EPA 3005A	1,6020	AK
<b>Dissolved Metals - Westborough Lab</b>											
Calcium, Dissolved	94.1		mg/l	1.00	0.320	10	07/20/12 08:05	07/26/12 10:53	NA	1,6020	AK
Manganese, Dissolved	0.5639		mg/l	0.0050	0.0010	10	07/20/12 08:05	07/26/12 10:53	NA	1,6020	AK
Sodium, Dissolved	57.6		mg/l	1.00	0.150	10	07/20/12 08:05	07/26/12 10:53	NA	1,6020	AK



Project Name: RIVERSIDE PARCEL 2  
Project Number: 170201301

Lab Number: L1212928  
Report Date: 07/27/12

## Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 02-04 Batch: WG549702-1										
Aluminum, Total	ND		mg/l	0.010	0.002	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Antimony, Total	0.0003	J	mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Arsenic, Total	0.0004	J	mg/l	0.0005	0.0002	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Barium, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Beryllium, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Cadmium, Total	ND		mg/l	0.0002	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Calcium, Total	ND		mg/l	0.100	0.032	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Chromium, Total	ND		mg/l	0.0010	0.0002	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Cobalt, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Copper, Total	0.0003	J	mg/l	0.0010	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Iron, Total	ND		mg/l	0.050	0.013	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Lead, Total	ND		mg/l	0.0010	0.0002	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Magnesium, Total	ND		mg/l	0.100	0.023	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Manganese, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Nickel, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Potassium, Total	ND		mg/l	0.100	0.027	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Selenium, Total	ND		mg/l	0.005	0.0003	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Silver, Total	ND		mg/l	0.0004	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Sodium, Total	0.022	J	mg/l	0.100	0.015	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Thallium, Total	ND		mg/l	0.0005	0.00003	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Vanadium, Total	ND		mg/l	0.0050	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Zinc, Total	ND		mg/l	0.0100	0.0012	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK

### Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 02-04 Batch: WG549796-1										
Aluminum, Dissolved	ND		mg/l	0.010	0.002	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Antimony, Dissolved	0.0003	J	mg/l	0.0005	0.0001	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Arsenic, Dissolved	ND		mg/l	0.0005	0.0002	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Barium, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

### Method Blank Analysis Batch Quality Control

Beryllium, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Cadmium, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Calcium, Dissolved	ND		mg/l	0.100	0.032	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Chromium, Dissolved	ND		mg/l	0.0010	0.0002	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Cobalt, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Copper, Dissolved	ND		mg/l	0.0010	0.0001	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Iron, Dissolved	ND		mg/l	0.050	0.013	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Lead, Dissolved	ND		mg/l	0.0010	0.0002	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Magnesium, Dissolved	ND		mg/l	0.100	0.023	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Manganese, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Nickel, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Potassium, Dissolved	ND		mg/l	0.100	0.027	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Selenium, Dissolved	ND		mg/l	0.005	0.0003	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Silver, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Sodium, Dissolved	0.016	J	mg/l	0.100	0.015	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Thallium, Dissolved	ND		mg/l	0.0005	0.00003	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Vanadium, Dissolved	ND		mg/l	0.0050	0.0001	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK
Zinc, Dissolved	ND		mg/l	0.0100	0.0012	1	07/20/12 12:30	07/26/12 10:03	1,6020	AK

#### Prep Information

Digestion Method: NA

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 02-04 Batch: WG550442-1										
Mercury, Total	ND		mg/l	0.0002	0.0001	1	07/24/12 14:30	07/25/12 12:30	1,7470A	JH

#### Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 02-04 Batch: WG550552-1										
Mercury, Dissolved	ND		mg/l	0.0002	0.0001	1	07/24/12 14:30	07/25/12 11:58	1,7470A	JH



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

## Method Blank Analysis Batch Quality Control

### Prep Information

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Digestion Method: EPA 7470A

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212928

Project Number: 170201301

Report Date: 07/27/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Westborough Lab Associated sample(s): 02-04 Batch: WG549702-2								
Aluminum, Total	91		-		80-120	-		
Antimony, Total	83		-		80-120	-		
Arsenic, Total	82		-		80-120	-		
Barium, Total	92		-		80-120	-		
Beryllium, Total	90		-		80-120	-		
Cadmium, Total	92		-		80-120	-		
Calcium, Total	91		-		80-120	-		
Chromium, Total	92		-		80-120	-		
Cobalt, Total	93		-		80-120	-		
Copper, Total	92		-		80-120	-		
Iron, Total	94		-		80-120	-		
Lead, Total	97		-		80-120	-		
Magnesium, Total	88		-		80-120	-		
Manganese, Total	96		-		80-120	-		
Nickel, Total	94		-		80-120	-		
Potassium, Total	90		-		80-120	-		
Selenium, Total	88		-		80-120	-		
Silver, Total	91		-		80-120	-		
Sodium, Total	93		-		80-120	-		
Thallium, Total	88		-		80-120	-		
Vanadium, Total	95		-		80-120	-		

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Lab Number:** L1212928

**Project Number:** 170201301

**Report Date:** 07/27/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 02-04 Batch: WG549702-2					
Zinc, Total	90	-	80-120	-	

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Lab Number:** L1212928

**Project Number:** 170201301

**Report Date:** 07/27/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02-04 Batch: WG549796-2					
Aluminum, Dissolved	88	-	80-120	-	
Antimony, Dissolved	90	-	80-120	-	
Arsenic, Dissolved	97	-	80-120	-	
Barium, Dissolved	91	-	80-120	-	
Beryllium, Dissolved	91	-	80-120	-	
Cadmium, Dissolved	99	-	80-120	-	
Calcium, Dissolved	81	-	80-120	-	
Chromium, Dissolved	90	-	80-120	-	
Cobalt, Dissolved	92	-	80-120	-	
Copper, Dissolved	91	-	80-120	-	
Iron, Dissolved	91	-	80-120	-	
Lead, Dissolved	95	-	80-120	-	
Magnesium, Dissolved	85	-	80-120	-	
Manganese, Dissolved	91	-	80-120	-	
Nickel, Dissolved	93	-	80-120	-	
Potassium, Dissolved	82	-	80-120	-	
Selenium, Dissolved	105	-	80-120	-	
Silver, Dissolved	95	-	80-120	-	
Sodium, Dissolved	88	-	80-120	-	
Thallium, Dissolved	88	-	80-120	-	
Vanadium, Dissolved	92	-	80-120	-	

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Project Number:** 170201301

**Lab Number:** L1212928

**Report Date:** 07/27/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02-04 Batch: WG549796-2					
Zinc, Dissolved	95	-	80-120	-	
Total Metals - Westborough Lab Associated sample(s): 02-04 Batch: WG550442-2					
Mercury, Total	118	-	80-120	-	
Dissolved Metals - Westborough Lab Associated sample(s): 02-04 Batch: WG550552-2					
Mercury, Dissolved	107	-	70-130	-	

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG549702-4 QC Sample: L1212729-04 Client ID: MS Sample												
Aluminum, Total	0.003J	2	1.74	87	-	-	-	-	80-120	-	-	20
Antimony, Total	0.0007	0.5	0.4264	85	-	-	-	-	80-120	-	-	20
Arsenic, Total	0.0008	0.12	0.0986	81	-	-	-	-	80-120	-	-	20
Barium, Total	ND	2	1.748	87	-	-	-	-	80-120	-	-	20
Beryllium, Total	ND	0.05	0.0421	84	-	-	-	-	80-120	-	-	20
Cadmium, Total	ND	0.051	0.0460	90	-	-	-	-	80-120	-	-	20
Calcium, Total	ND	10	8.42	84	-	-	-	-	80-120	-	-	20
Chromium, Total	0.0003J	0.2	0.1707	85	-	-	-	-	80-120	-	-	20
Cobalt, Total	ND	0.5	0.4379	88	-	-	-	-	80-120	-	-	20
Copper, Total	0.0001J	0.25	0.2217	89	-	-	-	-	80-120	-	-	20
Iron, Total	ND	1	0.852	85	-	-	-	-	80-120	-	-	20
Lead, Total	ND	0.51	0.4733	93	-	-	-	-	80-120	-	-	20
Magnesium, Total	ND	10	8.56	86	-	-	-	-	80-120	-	-	20
Manganese, Total	ND	0.5	0.4471	89	-	-	-	-	80-120	-	-	20
Nickel, Total	ND	0.5	0.4381	88	-	-	-	-	80-120	-	-	20
Potassium, Total	ND	10	6.43	64	Q	-	-	-	80-120	-	-	20
Selenium, Total	ND	0.12	0.098	82	-	-	-	-	80-120	-	-	20
Silver, Total	ND	0.05	0.0435	87	-	-	-	-	80-120	-	-	20
Sodium, Total	0.050J	10	9.06	91	-	-	-	-	80-120	-	-	20
Thallium, Total	ND	0.12	0.1021	85	-	-	-	-	80-120	-	-	20
Vanadium, Total	ND	0.5	0.4370	87	-	-	-	-	80-120	-	-	20

**Matrix Spike Analysis**  
Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212928

Project Number: 170201301

Report Date: 07/27/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG549702-4 QC Sample: L1212729-04 Client ID: MS Sample									
Zinc, Total	ND	0.5	0.4251	85	-	-	80-120	-	20

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02-04    QC Batch ID: WG549796-4    QC Sample: L1212928-02    Client ID: LB5 (MW)									
Aluminum, Dissolved	0.035	2	1.90	93	-	-	80-120	-	20
Antimony, Dissolved	0.0017	0.5	0.4654	93	-	-	80-120	-	20
Arsenic, Dissolved	0.0009	0.12	0.1242	103	-	-	80-120	-	20
Barium, Dissolved	0.0648	2	1.936	94	-	-	80-120	-	20
Beryllium, Dissolved	ND	0.05	0.0492	98	-	-	80-120	-	20
Cadmium, Dissolved	ND	0.051	0.0531	104	-	-	80-120	-	20
Calcium, Dissolved	26.0	10	35.0	90	-	-	80-120	-	20
Chromium, Dissolved	0.0003J	0.2	0.1882	94	-	-	80-120	-	20
Cobalt, Dissolved	0.0009	0.5	0.4747	95	-	-	80-120	-	20
Copper, Dissolved	0.0028	0.25	0.2319	92	-	-	80-120	-	20
Iron, Dissolved	0.117	1	1.04	92	-	-	80-120	-	20
Lead, Dissolved	0.0011	0.51	0.5003	98	-	-	80-120	-	20
Magnesium, Dissolved	4.51	10	13.6	91	-	-	80-120	-	20
Manganese, Dissolved	0.3365	0.5	0.8063	94	-	-	80-120	-	20
Nickel, Dissolved	0.0024	0.5	0.4720	94	-	-	80-120	-	20
Potassium, Dissolved	7.53	10	16.4	89	-	-	80-120	-	20
Selenium, Dissolved	0.002J	0.12	0.124	103	-	-	80-120	-	20
Silver, Dissolved	ND	0.05	0.0473	95	-	-	80-120	-	20
Sodium, Dissolved	96.9	10	110	131	Q	-	80-120	-	20
Thallium, Dissolved	ND	0.12	0.1068	89	-	-	80-120	-	20
Vanadium, Dissolved	0.0011J	0.5	0.4827	96	-	-	80-120	-	20

### Matrix Spike Analysis Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212928

Project Number: 170201301

Report Date: 07/27/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG549796-4 QC Sample: L1212928-02 Client ID: LB5 (MW)									
Zinc, Dissolved	0.0055J	0.5	0.4967	99	-	-	80-120	-	20
Total Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG550442-4 QC Sample: L1212720-10 Client ID: MS Sample									
Mercury, Total	0.0003	0.001	0.0005	24	Q	-	70-130	-	20
Dissolved Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG550552-4 QC Sample: L1212928-04 Client ID: LB2 (MW)									
Mercury, Dissolved	ND	0.001	0.0012	125	-	-	70-130	-	20

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212928

Report Date: 07/27/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG549702-3 QC Sample: L1212729-04 Client ID: DUP Sample						
Aluminum, Total	0.003J	0.003J	mg/l	NC		20
Antimony, Total	0.0007	0.0007	mg/l	3		20
Arsenic, Total	0.0008	0.0009	mg/l	6		20
Barium, Total	ND	ND	mg/l	NC		20
Beryllium, Total	ND	ND	mg/l	NC		20
Cadmium, Total	ND	ND	mg/l	NC		20
Calcium, Total	ND	0.043J	mg/l	NC		20
Chromium, Total	0.0003J	0.0002J	mg/l	NC		20
Cobalt, Total	ND	ND	mg/l	NC		20
Copper, Total	0.0001J	ND	mg/l	NC		20
Iron, Total	ND	ND	mg/l	NC		20
Lead, Total	ND	ND	mg/l	NC		20
Magnesium, Total	ND	ND	mg/l	NC		20
Manganese, Total	ND	ND	mg/l	NC		20
Nickel, Total	ND	ND	mg/l	NC		20
Potassium, Total	ND	ND	mg/l	NC		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Sodium, Total	0.050J	0.025J	mg/l	NC		20

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212928

Report Date: 07/27/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG549702-3 QC Sample: L1212729-04 Client ID: DUP Sample					
Thallium, Total	ND	ND	mg/l	NC	20
Vanadium, Total	ND	ND	mg/l	NC	20
Zinc, Total	ND	0.0019J	mg/l	NC	20

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212928

Report Date: 07/27/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG549796-3 QC Sample: L1212928-02 Client ID: LB5 (MW)					
Aluminum, Dissolved	0.035	0.037	mg/l	6	20
Antimony, Dissolved	0.0017	0.0015	mg/l	12	20
Arsenic, Dissolved	0.0009	0.0010	mg/l	9	20
Barium, Dissolved	0.0648	0.0623	mg/l	4	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	ND	ND	mg/l	NC	20
Calcium, Dissolved	26.0	26.9	mg/l	3	20
Chromium, Dissolved	0.0003J	0.0003J	mg/l	NC	20
Cobalt, Dissolved	0.0009	0.0009	mg/l	6	20
Copper, Dissolved	0.0028	0.0029	mg/l	5	20
Iron, Dissolved	0.117	0.125	mg/l	7	20
Lead, Dissolved	0.0011	0.0011	mg/l	4	20
Magnesium, Dissolved	4.51	4.43	mg/l	2	20
Manganese, Dissolved	0.3365	0.3484	mg/l	3	20
Nickel, Dissolved	0.0024	0.0023	mg/l	4	20
Potassium, Dissolved	7.53	8.08	mg/l	7	20
Selenium, Dissolved	0.002J	0.001J	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Thallium, Dissolved	ND	ND	mg/l	NC	20

### Lab Duplicate Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG549796-3 QC Sample: L1212928-02 Client ID: LB5 (MW)					
Vanadium, Dissolved	0.0011J	0.0011J	mg/l	NC	20
Zinc, Dissolved	0.0055J	0.0050J	mg/l	NC	20
Dissolved Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG549796-3 QC Sample: L1212928-02 Client ID: LB5 (MW)					
Sodium, Dissolved	96.9	108	mg/l	11	20
Total Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG550442-3 QC Sample: L1212720-10 Client ID: DUP Sample					
Mercury, Total	0.0003	0.0002	mg/l	8	20
Dissolved Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG550552-3 QC Sample: L1212928-04 Client ID: LB2 (MW)					
Mercury, Dissolved	ND	ND	mg/l	NC	20



Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212928

Project Number: 170201301

Report Date: 07/27/12

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

## Cooler Information Custody Seal

## Cooler

A Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212928-01A	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1212928-02A	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1212928-02B	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1212928-02C	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1212928-02D	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1212928-02E	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1212928-02F	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8082-1200ML(7)
L1212928-02G	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8082-1200ML(7)
L1212928-02H	Plastic 500ml HNO3 preserved	A	<2	2	Y	Absent	BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1212928-02I	Plastic 500ml unpreserved	A	7	2	Y	Absent	-
L1212928-02X	Plastic 500ml HNO3 preserved spl	A	<2	2	Y	Absent	CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1212928-03A	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1212928-03B	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)

\*Values in parentheses indicate holding time in days

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212928

Report Date: 07/27/12

## Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212928-03C	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1212928-03D	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1212928-03E	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1212928-03F	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8082-1200ML(7)
L1212928-03G	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8082-1200ML(7)
L1212928-03H	Plastic 500ml HNO3 preserved	A	<2	2	Y	Absent	BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1212928-03I	Plastic 500ml unpreserved	A	7	2	Y	Absent	-
L1212928-03X	Plastic 500ml HNO3 preserved spl	A	<2	2	Y	Absent	CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1212928-04A	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1212928-04B	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1212928-04C	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1212928-04D	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1212928-04E	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1212928-04F	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8082-1200ML(7)
L1212928-04G	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8082-1200ML(7)

\*Values in parentheses indicate holding time in days

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212928

Report Date: 07/27/12

## Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212928-04H	Plastic 500ml HNO3 preserved	A	<2	2	Y	Absent	BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1212928-04I	Plastic 500ml unpreserved	A	7	2	Y	Absent	-
L1212928-04X	Plastic 500ml HNO3 preserved spl	A	<2	2	Y	Absent	CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)

\*Values in parentheses indicate holding time in days



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

## GLOSSARY

### Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

### Data Qualifiers

- |           |   |
|-----------|---|
| <b>A</b>  | - Spectra identified as "Aldol Condensation Product".   |
| <b>B</b>  | - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. |
| <b>C</b>  | - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.  |
| <b>D</b>  | - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.   |
| <b>E</b>  | - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.  |
| <b>G</b>  | - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.  |
| <b>H</b>  | - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.  |
| <b>I</b>  | - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.  |
| <b>M</b>  | - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.  |
| <b>NJ</b> | - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.  |

Report Format: DU Report with "J" Qualifiers



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

**Data Qualifiers**

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL). This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample.

Report Format: DU Report with "J" Qualifiers

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**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212928  
**Report Date:** 07/27/12

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



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Last revised May 11, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.  
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

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*Drinking Water* (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D, Fecal Coliform-EC Medium 9221E).

*Wastewater/Non-Potable Water* (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterolert, E.Coli 9223.

*Solid Waste/Soil* (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics, Acid Extractables (Phenols), Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

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*Drinking Water* (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500CI-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

*Wastewater/Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8082, 8330, 8151A, 8260B, 8270C, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

*Solid Waste/Soil* (Inorganic Parameters: 9010B, 9012A, 9014A, 9030B, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

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*Drinking Water* (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

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*Drinking Water* (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6010C, 6020, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9030B, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8081B, 8151A.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 6010B, 6010C, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050, 9065, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, 8151A, 8015B, 8082, 8082A, 8081A, 8081B.)

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*Drinking Water* (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, 2540G, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ OQA-QAM-025 Rev.7, NJ EPH.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

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*Drinking Water* (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 624, 8260B, 8270C, 8270D, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012A, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C, 3546, 3580, 3580A, 5030B, 5035.)

Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Certificate/Lab ID : 68-03671. **NELAP Accredited.**  
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 3005A, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**  
Refer to MA-DEP Certificate for Potable and Non-Potable Water.  
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**  
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S<sup>2-</sup> D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Certificate/Lab ID: 460195. **NELAP Accredited.**  
Non-Potable Water (Inorganic Parameters: EPA 3005A,3015,1312,6010B,6010C,SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B, 8015B, 8015C.)

Certificate/Lab ID: L2217.  
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

Parameter List:  
Organic Parameters: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. Inorganic Parameters: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. Other Parameters: Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). Soil Parameters: 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix, SO4 in a soil matrix. Other Parameters: Total Petroleum Hydrocarbons, Oil & Grease



# CHAIN OF CUSTODY

PAGE 1 OF 2

WESTBORO, MA  
TEL: 508-898-9220  
FAX: 508-898-9193

MANSFIELD, MA  
TEL: 508-822-9300  
FAX: 508-822-3288

### Client Information

Client: **Langan Engineering**  
Address: **360 W. 21st St. 8th flr.**  
**NY, NY 10001**  
Phone: **212-471-5400**  
Fax: **212-471-5400**

Email: **jhayes@langan.com**

Other Project Specific Requirements/Comments/Detection Limits:

**Project Information**  
Project Name: **Riverside Parcel 2**  
Project Location: **17-29 West End Ave.**  
Project #: **170201301**  
Project Manager: **Dason Hayes**  
ALPHA Quote #:

Turn-Around Time

Standard  RUSH (only confirmed if pre-approved)

Date Due: **7/12/12** Time:

Date Rec'd in Lab: **7/19/12**

ALPHA Job #:

**L1212928**

**Report Information - Data Deliverables**  
 FAX  EMAIL  
 ADEX  Add'l Deliverables

**Billing Information**  
 Same as Client info PO #:

**Regulatory Requirements/Report Limits**  
State/Fed Program Criteria

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		

12928.1	Trip Blank #2	7/19			
2	LB5 (MW)		9:00	GW	CM X
2	LB5 (MW)				X
2	LB5 (MW)				X
2	LB5 (MW)				X
2	LB5 (MW)				X
3	LB6 (MW)		12:00		X
3	LB6 (MW)				X
3	LB6 (MW)				X
3	LB6 (MW)				X

TOTAL # BOTTLES	ANALYSIS					
	TCLSVOC	TCLVOC	PCB	TAL Metals Total	TAL Metals Dissolved	
2						
3						
2						
1						
1						
2						
3						
2						
1						

Sample Specific Comments

**SAMPLE HANDLING**  
Filtration \_\_\_\_\_  
 Done  
 Not needed  
 Lab to do  
 Preservation  
 Lab to do  
(Please specify below)

Container Type	Date/Time			
	Preservative	Relinquished By:	Received By:	State/Fed Program
A	7/19/12 15:00	Stuebel	7/19/12 15:00	
V	7/19/12 15:00	Stuebel	7/19/12 15:00	
B	7/19/12 22:50	Stuebel	7/19/12 22:50	
A				
V				
A				
P				
P				
C				

Relinquished By:

Received By:

Date/Time

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. Samples submitted are subject to Alpha's Terms and Conditions. See reverse side.





## ANALYTICAL REPORT

Lab Number:	L1212844
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Jason Hayes
Phone:	(212) 479-5427
Project Name:	RIVERSIDE PARCEL 2
Project Number:	Not Specified
Report Date:	07/31/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

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320 Forbes Boulevard, Mansfield, MA 02048-1806  
508-822-9300 (Fax) 508-822-3288 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212844  
**Report Date:** 07/31/12

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1212844-01	AA	17-29 WEST END AVE	07/17/12 19:37

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212844  
**Report Date:** 07/31/12

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212844  
**Report Date:** 07/31/12

### Case Narrative (continued)

#### REISSUE

##### Report Submission

This report replaces the report issued July 24, 2012. The report is being re-issued to report the routine TO-15 list instead of the shorter list originally reported.

##### Volatile Organics in Air

Canisters were released from the laboratory on July 12, 2012. The canister certification results are provided as an addendum.

WG549580-5: The relative percent difference for 1,2-Dichloroethane (26%) is above the RPD limit of 25%. This compound represented less than 10% of the compounds detected, therefore no further action was taken.

##### Method 3C; Methane

L1212844-01: Prior to sample analysis, the canister was pressurized with UHP Nitrogen in order to facilitate the transfer of sample to the Gas Chromatograph. The addition of Nitrogen resulted in a dilution of the sample. The reporting limits have been elevated accordingly.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 07/31/12

**AIR**

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212844  
**Report Date:** 07/31/12

### SAMPLE RESULTS

Lab ID: L1212844-01  
 Client ID: AA  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 07/19/12 22:26  
 Analyst: MB

Date Collected: 07/17/12 19:37  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Propylene	ND	0.500	--	ND	0.860	--		1
Dichlorodifluoromethane	0.776	0.200	--	3.84	0.989	--		1
Chloromethane	0.678	0.200	--	1.40	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	3.87	2.50	--	7.29	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	8.95	1.00	--	21.3	2.38	--		1
Trichlorofluoromethane	0.454	0.200	--	2.55	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	0.910	0.200	--	6.97	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	0.640	0.200	--	1.89	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212844  
**Report Date:** 07/31/12

### SAMPLE RESULTS

Lab ID: L1212844-01  
 Client ID: AA  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/17/12 19:37  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	0.201	0.200	--	0.708	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.286	0.200	--	1.08	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1



**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212844**Project Number:** Not Specified**Report Date:** 07/31/12**SAMPLE RESULTS**

Lab ID: L1212844-01  
 Client ID: AA  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/17/12 19:37  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	67		60-140
Bromochloromethane	70		60-140
chlorobenzene-d5	91		60-140



Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212844

Project Number: Not Specified

Report Date: 07/31/12

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/19/12 14:14

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG549580-4								
Propylene	ND	0.500	--	ND	0.860	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.200	--	ND	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212844

Project Number: Not Specified

Report Date: 07/31/12

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/19/12 14:14

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG549580-4								
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212844

Project Number: Not Specified

Report Date: 07/31/12

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/19/12 14:14

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG549580-4								
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212844

Project Number: Not Specified

Report Date: 07/31/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG549580-3								
Propylene	94		-		70-130	-		
Dichlorodifluoromethane	90		-		70-130	-		
Chloromethane	93		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	88		-		70-130	-		
Vinyl chloride	87		-		70-130	-		
1,3-Butadiene	94		-		70-130	-		
Bromomethane	82		-		70-130	-		
Chloroethane	83		-		70-130	-		
Ethyl Alcohol	87		-		70-130	-		
Vinyl bromide	82		-		70-130	-		
Acetone	92		-		70-130	-		
Trichlorofluoromethane	89		-		70-130	-		
iso-Propyl Alcohol	103		-		70-130	-		
1,1-Dichloroethene	84		-		70-130	-		
Methylene chloride	78		-		70-130	-		
3-Chloropropene	87		-		70-130	-		
Carbon disulfide	91		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	82		-		70-130	-		
trans-1,2-Dichloroethene	75		-		70-130	-		
1,1-Dichloroethane	79		-		70-130	-		
Methyl tert butyl ether	81		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Project Number:** Not Specified

**Lab Number:** L1212844

**Report Date:** 07/31/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG549580-3								
Vinyl acetate	94		-		70-130	-		
2-Butanone	92		-		70-130	-		
cis-1,2-Dichloroethene	88		-		70-130	-		
Ethyl Acetate	95		-		70-130	-		
Chloroform	79		-		70-130	-		
Tetrahydrofuran	82		-		70-130	-		
1,2-Dichloroethane	81		-		70-130	-		
n-Hexane	97		-		70-130	-		
1,1,1-Trichloroethane	98		-		70-130	-		
Benzene	84		-		70-130	-		
Carbon tetrachloride	103		-		70-130	-		
Cyclohexane	99		-		70-130	-		
1,2-Dichloropropane	92		-		70-130	-		
Bromodichloromethane	96		-		70-130	-		
1,4-Dioxane	100		-		70-130	-		
Trichloroethene	92		-		70-130	-		
2,2,4-Trimethylpentane	95		-		70-130	-		
Heptane	99		-		70-130	-		
cis-1,3-Dichloropropene	97		-		70-130	-		
4-Methyl-2-pentanone	120		-		70-130	-		
trans-1,3-Dichloropropene	89		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212844

Project Number: Not Specified

Report Date: 07/31/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG549580-3								
1,1,2-Trichloroethane	96		-		70-130	-		
Toluene	79		-		70-130	-		
2-Hexanone	121		-		70-130	-		
Dibromochloromethane	102		-		70-130	-		
1,2-Dibromoethane	91		-		70-130	-		
Tetrachloroethene	86		-		70-130	-		
Chlorobenzene	86		-		70-130	-		
Ethylbenzene	85		-		70-130	-		
p/m-Xylene	85		-		70-130	-		
Bromoform	94		-		70-130	-		
Styrene	91		-		70-130	-		
1,1,2,2-Tetrachloroethane	101		-		70-130	-		
o-Xylene	83		-		70-130	-		
4-Ethyltoluene	84		-		70-130	-		
1,3,5-Trimethylbenzene	90		-		70-130	-		
1,2,4-Trimethylbenzene	99		-		70-130	-		
Benzyl chloride	116		-		70-130	-		
1,3-Dichlorobenzene	99		-		70-130	-		
1,4-Dichlorobenzene	97		-		70-130	-		
1,2-Dichlorobenzene	102		-		70-130	-		
1,2,4-Trichlorobenzene	120		-		70-130	-		

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Lab Number:** L1212844

**Project Number:** Not Specified

**Report Date:** 07/31/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG549580-3								
Hexachlorobutadiene	112		-		70-130	-		

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: Not Specified

Lab Number: L1212844

Report Date: 07/31/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG549580-5 QC Sample: L1212839-02 Client ID: DUP Sample						
Propylene	ND	ND	ppbV	NC		25
Dichlorodifluoromethane	0.519	0.476	ppbV	9		25
Chloromethane	0.636	0.612	ppbV	4		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	26.7	22.9	ppbV	15		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	17.2	15.1	ppbV	13		25
Trichlorofluoromethane	0.262	0.247	ppbV	6		25
iso-Propyl Alcohol	3.32	2.84	ppbV	16		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25

## Lab Duplicate Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: Not Specified

Lab Number: L1212844

Report Date: 07/31/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG549580-5 QC Sample: L1212839-02 Client ID: DUP Sample					
Vinyl acetate	ND	ND	ppbV	NC	25
2-Butanone	0.997	0.830	ppbV	18	25
Ethyl Acetate	ND	ND	ppbV	NC	25
Chloroform	0.339	0.309	ppbV	9	25
Tetrahydrofuran	ND	ND	ppbV	NC	25
1,2-Dichloroethane	0.300	0.230	ppbV	26	25
n-Hexane	0.576	0.522	ppbV	10	25
Benzene	0.239	0.236	ppbV	1	25
Cyclohexane	0.331	0.285	ppbV	15	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
Bromodichloromethane	ND	ND	ppbV	NC	25
1,4-Dioxane	ND	ND	ppbV	NC	25
2,2,4-Trimethylpentane	0.310	0.251	ppbV	21	25
Heptane	0.335	0.290	ppbV	14	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
4-Methyl-2-pentanone	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	2.23	1.92	ppbV	15	25

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: Not Specified

Lab Number: L1212844

Report Date: 07/31/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG549580-5 QC Sample: L1212839-02 Client ID: DUP Sample					
2-Hexanone	ND	ND	ppbV	NC	25
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	0.221	0.206	ppbV	7	25
p/m-Xylene	0.733	0.626	ppbV	16	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	0.277	0.249	ppbV	11	25
4-Ethyltoluene	ND	ND	ppbV	NC	25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC	25
1,2,4-Trimethylbenzene	0.369	0.309	ppbV	18	25
Benzyl chloride	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	0.277	0.240	ppbV	14	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212844**Project Number:** Not Specified**Report Date:** 07/31/12**SAMPLE RESULTS**

**Lab ID:** L1212844-01      D  
**Client ID:** AA  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Air  
**Analytical Method:** 51,3C  
**Analytical Date:** 07/21/12 12:04  
**Analyst:** RY

**Date Collected:** 07/17/12 19:37  
**Date Received:** 07/18/12  
**Field Prep:** Not Specified  
**Extraction Method:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Fixed Gases by GC - Mansfield Lab						
Methane	ND		%	0.230	--	2.296

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212844  
**Report Date:** 07/31/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 51,3C  
Analytical Date: 07/21/12 09:52  
Analyst: RY

<b>Parameter</b>	<b>Result</b>	<b>Qualifier</b>	<b>Units</b>	<b>RL</b>	<b>MDL</b>
Fixed Gases by GC - Mansfield Lab for sample(s): 01 Batch: WG549969-2					
Methane	ND		%	0.100	--

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Lab Number:** L1212844

**Project Number:** Not Specified

**Report Date:** 07/31/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Fixed Gases by GC - Mansfield Lab Associated sample(s): 01 Batch: WG549969-1								
Methane	106		-		80-120	-		

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: Not Specified

Lab Number: L1212844

Report Date: 07/31/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Fixed Gases by GC - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG549969-3 QC Sample: L1212732-01 Client ID: DUP Sample						
Methane	ND	ND	%	NC		5
Fixed Gases by GC - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG549969-4 QC Sample: L1212732-02 Client ID: DUP Sample						
Methane	ND	ND	%	NC		5
Fixed Gases by GC - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG549969-5 QC Sample: L1212733-01 Client ID: DUP Sample						
Methane	ND	ND	%	NC		5
Fixed Gases by GC - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG549969-6 QC Sample: L1212844-01 Client ID: AA						
Methane	ND	ND	%	NC		5

Project Name: RIVERSIDE PARCEL 2

Serial\_No:07311213:14  
Lab Number: L1212844

Project Number:

Report Date: 07/31/12

### Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1212844-01	AA	0133	#16 AMB	07/12/12	79303		-	-	-	Pass	6.0	5.9	2
L1212844-01	AA	1730	2.7L Can	07/12/12	79303	L1211626-01	Pass	-29.6	-8.6	-	-	-	-

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L1211626  
**Report Date:** 07/31/12

### Air Canister Certification Results

Lab ID: L1211626-01  
 Client ID: CAN 153 SHELF 9  
 Sample Location:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 07/03/12 18:56  
 Analyst: MB

Date Collected: 06/28/12 14:41  
 Date Received: 06/29/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.860	--		1
Propane	ND	0.200	--	ND	0.361	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.200	--	ND	0.434	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L1211626  
**Report Date:** 07/31/12

### Air Canister Certification Results

Lab ID: L1211626-01  
 Client ID: CAN 153 SHELF 9  
 Sample Location:

Date Collected: 06/28/12 14:41  
 Date Received: 06/29/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.200	--	ND	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L1211626  
**Report Date:** 07/31/12

### Air Canister Certification Results

Lab ID: L1211626-01  
 Client ID: CAN 153 SHELF 9  
 Sample Location:

Date Collected: 06/28/12 14:41  
 Date Received: 06/29/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.20	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L1211626  
**Report Date:** 07/31/12

### Air Canister Certification Results

Lab ID: L1211626-01  
 Client ID: CAN 153 SHELF 9  
 Sample Location:

Date Collected: 06/28/12 14:41  
 Date Received: 06/29/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds



**Project Name:** BATCH CANISTER CERTIFICATION**Lab Number:** L1211626**Project Number:** CANISTER QC BAT**Report Date:** 07/31/12**Air Canister Certification Results**

Lab ID: L1211626-01

Date Collected: 06/28/12 14:41

Client ID: CAN 153 SHELF 9

Date Received: 06/29/12

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	93		60-140

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L1211626  
**Report Date:** 07/31/12

### Air Canister Certification Results

Lab ID: L1211626-01  
 Client ID: CAN 153 SHELF 9  
 Sample Location:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 06/29/12 20:55  
 Analyst: RY

Date Collected: 06/28/12 14:41  
 Date Received: 06/29/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.050	--	ND	0.247	--		1
Chloromethane	ND	0.500	--	ND	1.03	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	ND	2.00	--	ND	4.75	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.08	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L1211626  
**Report Date:** 07/31/12

### Air Canister Certification Results

Lab ID: L1211626-01  
 Client ID: CAN 153 SHELF 9  
 Sample Location:

Date Collected: 06/28/12 14:41  
 Date Received: 06/29/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.500	--	ND	2.46	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.500	--	ND	2.74	--		1
p-Isopropyltoluene	ND	0.500	--	ND	2.74	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.500	--	ND	2.74	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L1211626  
**Report Date:** 07/31/12

### Air Canister Certification Results

Lab ID: L1211626-01      Date Collected: 06/28/12 14:41  
 Client ID: CAN 153 SHELF 9      Date Received: 06/29/12  
 Sample Location:      Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	83		60-140
bromochloromethane	106		60-140
chlorobenzene-d5	87		60-140

# **AIR Petro Can Certification**

**Project Name:** BATCH CANISTER CERTIFICATION**Lab Number:** L1211626**Project Number:** CANISTER QC BAT**Report Date:** 07/31/12**AIR CAN CERTIFICATION RESULTS**

**Lab ID:** L1211626-01  
**Client ID:** CAN 153 SHELF 9  
**Sample Location:** Not Specified  
**Matrix:** Air  
**Analytical Method:** 96,APH  
**Analytical Date:** 06/29/12 20:55  
**Analyst:** RY

**Date Collected:** 06/28/12 14:41  
**Date Received:** 06/29/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Petroleum Hydrocarbons in Air - Mansfield Lab</b>						
1,3-Butadiene	ND		ug/m3	2.0	--	1
Methyl tert butyl ether	ND		ug/m3	2.0	--	1
Benzene	ND		ug/m3	2.0	--	1
Toluene	ND		ug/m3	2.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/m3	12	--	1
Ethylbenzene	ND		ug/m3	2.0	--	1
p/m-Xylene	ND		ug/m3	4.0	--	1
o-Xylene	ND		ug/m3	2.0	--	1
Naphthalene	ND		ug/m3	2.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/m3	14	--	1
C9-C10 Aromatics Total	ND		ug/m3	10	--	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212844**Project Number:** Not Specified**Report Date:** 07/31/12**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

**Cooler Information Custody Seal****Cooler**

N/A Absent

**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212844-01A	Canister - 2.7 Liter	N/A	N/A		Y	Absent	FIXGAS(30),TO15-LL(30)

\*Values in parentheses indicate holding time in days

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212844  
**Report Date:** 07/31/12

## GLOSSARY

### Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

### Data Qualifiers

<b>A</b>	- Spectra identified as "Aldol Condensation Product".
<b>B</b>	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
<b>C</b>	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
<b>D</b>	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
<b>E</b>	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
<b>G</b>	- The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
<b>H</b>	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
<b>I</b>	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
<b>M</b>	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
<b>NJ</b>	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: Data Usability Report



**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212844**Project Number:** Not Specified**Report Date:** 07/31/12**Data Qualifiers**

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212844  
**Report Date:** 07/31/12

## REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.
- 51 Determination of Carbon Dioxide, Methane, Nitrogen and Oxygen from Stationary Sources. Method 3C. Appendix A, Part 60, 40 CFR (Code of Federal Regulations). June 20, 1996.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Ohio Environmental Protection Agency  
 Last revised May 10, 2012 – Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Ohio Environmental Protection Agency Certificate/Lab ID: PH-0141.

*Wastewater/Non-Potable Water* (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable). Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

*Solid Waste/Soil* (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Titanium, Vanadium, Zinc, Total Organic Carbon, Corrosivity, TCLP 1311, SPLP 1312. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Ohio Environmental Protection Agency Certificate/Lab ID: E87814. **NELAP Accredited.**

*Non-Potable Water* (Inorganic Parameters: SM2320B, SM2540D, SM2540G.)

*Solid & Chemical Materials* (Inorganic Parameters: 6020, 7470, 7471, 9045. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

*Air & Emissions* (EPA TO-15.)

Ohio Environmental Protection Agency Certificate/Lab ID: 03090. **NELAP Accredited.**

*Non-Potable Water* (Inorganic Parameters: EPA 180.1, 245.7, 1631E, 3020A, 6020A, 7470A, 9040, 9050A, SM2320B, 2540D, 2540G, 4500H-B, Organic Parameters: EPA 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 5030B, 8015D, 3570, 8081B, 8082A, 8260B, 8270C, 8270D.)

*Solid & Chemical Materials* (Inorganic Parameters: EPA 1311, 3050B, 3051A, 3060A, 6020A, 7196A, 7470A, 7471B, 7474, 9040B, 9045C, 9060. Organic Parameters: EPA 3540C, 3570, 3580A, 3630C, 3640A, 3660, 3665A, 5035, 8015D, 8081B, 8082A, 8260B, 8270C, 8270D.)

*Biological Tissue* (Inorganic Parameters: EPA 6020A. Organic Parameters: EPA 3570, 3510C, 3610B, 3630C, 3640A, 8270C, 8270D.)

*Air & Emissions* (EPA TO-15.)

Ohio Environmental Protection Agency Certificate/Lab ID: 2206. **NELAP Accredited.**

*Non-Potable Water* (Inorganic Parameters: EPA 180.1, 1631E, 6020A, 7470A, 9040B, 9050A, SM2540D, 2540G, 4500H+B, 2320B. Organic Parameters: EPA 8081B, 8082A, 8270C, 8270D, 8015D.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 1311, 3050B, 3051A, 3060A, 6020A, 7470A, 7471B, 9040B, 9045C, 7196A. Organic Parameters: SW-846 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 8270C, 8015D, 8082A, 8081B.)

Ohio Environmental Protection Agency Certificate/Lab ID: MA015. **NELAP Accredited.**

*Non-Potable Water* (Inorganic Parameters: SW-846 1312, 3020A, SM2320B, SM2540D, 2540G, 4500H-B, EPA 180.1, 1631E, SW-846 7470A, 9040B, 9040C, 6020A, 9050A. Organic Parameters: SW-846 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 8015D, 8081B, 8082A, 8270C, 8270D)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 1311, 1312, 3050B, 3051A, 6020A, 7471B, 7474, 9040B, 9040C, 9045C, 9060. Organic Parameters: SW-846 3540C, 3570, 3580A, 3630C, 3640A, 3660B, 3665A, 8081B, 8082A, 8270C, 8270D, 8015D.)





# AIR ANALYSIS

CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048  
 TEL: 508-822-9300 FAX: 508-822-3288

PAGE \_\_\_\_\_ OF \_\_\_\_\_

Date Rec'd in Lab:

ALPHA Job #: **L1212844**

**Client Information**

Client: **Langan Engineering**  
 Address: **300 W 31st St**  
**NY, NY 10001**  
 Phone: **212-479-5400**  
 Fax:

**Project Information**

Project Name: **Riverside Parcel 2**  
 Project Location: **17-29 West End Ave**  
 Project #: **170201301**  
 Project Manager: **Jason Hayes**  
 ALPHA Quote #:

**Report Information - Data Deliverables**

FAX  
 ADEX  
 Criteria Checker: \_\_\_\_\_  
(Default based on Regulatory Criteria Indicated)  
 Other Formats: \_\_\_\_\_  
 EMAIL (standard pdf report)  
 Additional Deliverables: \_\_\_\_\_  
 Report to: (if different than Project Manager)

**Billing Information**

Same as Client info PO #:

**Regulatory Requirements/Report Limits**

State/Fed	Program	Criteria

**Turn-Around Time**

**5 days**  
 Standard  RUSH (only confirmed if pre-approved!)

Date Due: \_\_\_\_\_ Time: \_\_\_\_\_

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments:

**ANALYSIS**

**All Columns Below Must Be Filled Out**

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection					Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-14 by TO-15	TO-15 CH-4	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4/TO-10	Sample Comments (i.e. PID)
		Date	Start Time	End Time	Initial Vacuum	Final Vacuum													
L1212844-01	AA	7/17	1410	737	30.34	7.79	AA	cm	2.7	133		X							

\*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)  
 SV = Soil Vapor/Landfill Gas/SVE  
 Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:

Date/Time

Received By:

Date/Time

*[Signature]*

7/18/12 16:00

*[Signature]*

7/18/12 16:00

*[Signature]*

7/18/12 23:00

*[Signature]*

7/18/12 15:30

7/19/12 05:20

*[Signature]*

7/18/12 23:20

7/19/12 09:10



## ANALYTICAL REPORT

Lab Number:	L1212835
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Jason Hayes
Phone:	(212) 479-5427
Project Name:	RIVERSIDE PARCEL 2
Project Number:	170201301
Report Date:	07/26/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1212835-01	TRIP BLANK #1	17-29 WEST END AVE.	07/18/12 00:00
L1212835-02	LB1(MW)	17-29 WEST END AVE.	07/18/12 15:15
L1212835-03	DUP#1	17-29 WEST END AVE.	07/18/12 00:00
L1212835-04	LB5(MW)1-2	17-29 WEST END AVE.	07/18/12 10:00
L1212835-05	LB5(MW)10-12	17-29 WEST END AVE.	07/18/12 10:30
L1212835-06	LB5(MW)17-19	17-29 WEST END AVE.	07/18/12 11:15

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

### Case Narrative (continued)

#### Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Semivolatile Organics

L1212835-04 has elevated detection limits due to the dilution required by the sample matrix.

#### Pesticides

L1212835-04 has elevated detection limits due to the dilution required by the sample matrix.

#### Total Metals

L1212835-04 through -06 have elevated detection limits for all elements, with the exception of Mercury, due to the dilutions required by matrix interferences encountered during analyses.

#### Dissolved Metals

The WG549711-1 Method Blank, associated with L1212835-02 and -03, has a concentration above the reporting limit for Calcium. Since the associated sample concentrations are greater than 5x the blank concentration for this element, no qualification of the results was performed.

The WG550047-1 Method Blank, associated with L1212835-02 and -03, has a concentration above the reporting limit for Mercury. Since the samples were non-detect for this target element, no further actions were taken. The results of the original analyses are reported.

The WG549711-4 MS recovery, performed on L1212835-02, is below the acceptance criteria for Potassium (50%). A post digestion spike was performed with an acceptable recovery of 116%.

The WG549711-3 Laboratory Duplicate RPD, performed on L1212835-02, is above the acceptance criteria for Antimony (25%); however, the sample and duplicate results are less than five times the reporting limit.

Therefore, the RPD is valid.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 07/26/12

# ORGANICS

# VOLATILES

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

**Lab ID:** L1212835-01  
**Client ID:** TRIP BLANK #1  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/23/12 19:13  
**Analyst:** PD

**Date Collected:** 07/18/12 00:00  
**Date Received:** 07/18/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.16	1
1,2-Dichloropropane	ND		ug/l	1.0	0.30	1
Dibromochloromethane	ND		ug/l	0.50	0.19	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.16	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19	1
Benzene	ND		ug/l	0.50	0.19	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.18	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-01  
 Client ID: TRIP BLANK #1  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 00:00  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.0	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Diethylbenzene	ND		ug/l	2.0	0.70	1
4-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-01  
 Client ID: TRIP BLANK #1  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 00:00  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	91		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	97		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-02  
 Client ID: LB1(MW)  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8260B  
 Analytical Date: 07/23/12 19:38  
 Analyst: PD

Date Collected: 07/18/12 15:15  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	1.8	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.16	1
1,2-Dichloropropane	ND		ug/l	1.0	0.30	1
Dibromochloromethane	ND		ug/l	0.50	0.19	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.16	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.19	1
Benzene	ND		ug/l	0.50	0.19	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.18	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

## SAMPLE RESULTS

Lab ID: L1212835-02  
 Client ID: LB1(MW)  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 15:15  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.7	J	ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.0	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Diethylbenzene	ND		ug/l	2.0	0.70	1
4-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-02  
 Client ID: LB1(MW)  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 15:15  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	99		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-03  
 Client ID: DUP#1  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8260B  
 Analytical Date: 07/23/12 20:04  
 Analyst: PD

Date Collected: 07/18/12 00:00  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	2.0	J	ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.16	1
1,2-Dichloropropane	ND		ug/l	1.0	0.30	1
Dibromochloromethane	ND		ug/l	0.50	0.19	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.16	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19	1
Benzene	ND		ug/l	0.50	0.19	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.18	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

## SAMPLE RESULTS

Lab ID: L1212835-03  
 Client ID: DUP#1  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 00:00  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.9	J	ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.0	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Diethylbenzene	ND		ug/l	2.0	0.70	1
4-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-03  
 Client ID: DUP#1  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 00:00  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	99		70-130

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

**Lab ID:** L1212835-04  
**Client ID:** LB5(MW)1-2  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/20/12 05:23  
**Analyst:** JL  
**Percent Solids:** 89%

**Date Collected:** 07/18/12 10:00  
**Date Received:** 07/18/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	4.3	J	ug/kg	28	2.3	1
1,1-Dichloroethane	ND		ug/kg	4.2	0.83	1
Chloroform	ND		ug/kg	4.2	0.91	1
Carbon tetrachloride	ND		ug/kg	2.8	0.59	1
1,2-Dichloropropane	ND		ug/kg	9.8	0.72	1
Dibromochloromethane	ND		ug/kg	2.8	0.86	1
1,1,2-Trichloroethane	ND		ug/kg	4.2	1.1	1
Tetrachloroethene	ND		ug/kg	2.8	0.86	1
Chlorobenzene	ND		ug/kg	2.8	0.52	1
Trichlorofluoromethane	ND		ug/kg	14	1.1	1
1,2-Dichloroethane	ND		ug/kg	2.8	0.64	1
1,1,1-Trichloroethane	ND		ug/kg	2.8	0.76	1
Bromodichloromethane	ND		ug/kg	2.8	1.1	1
trans-1,3-Dichloropropene	ND		ug/kg	2.8	0.84	1
cis-1,3-Dichloropropene	ND		ug/kg	2.8	0.75	1
1,1-Dichloropropene	ND		ug/kg	14	1.3	1
Bromoform	ND		ug/kg	11	1.4	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.8	0.67	1
Benzene	ND		ug/kg	2.8	0.83	1
Toluene	ND		ug/kg	4.2	0.68	1
Ethylbenzene	ND		ug/kg	2.8	0.62	1
Chloromethane	ND		ug/kg	14	2.2	1
Bromomethane	ND		ug/kg	5.6	1.8	1
Vinyl chloride	ND		ug/kg	5.6	2.1	1
Chloroethane	ND		ug/kg	5.6	1.2	1
1,1-Dichloroethene	ND		ug/kg	2.8	0.73	1
trans-1,2-Dichloroethene	ND		ug/kg	4.2	1.1	1
Trichloroethene	ND		ug/kg	2.8	0.63	1
1,2-Dichlorobenzene	ND		ug/kg	14	1.0	1
1,3-Dichlorobenzene	ND		ug/kg	14	1.1	1
1,4-Dichlorobenzene	ND		ug/kg	14	1.2	1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

## SAMPLE RESULTS

Lab ID: L1212835-04  
 Client ID: LB5(MW)1-2  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 10:00  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	5.6	1.4	1
p/m-Xylene	ND		ug/kg	5.6	1.2	1
o-Xylene	ND		ug/kg	5.6	1.2	1
cis-1,2-Dichloroethene	2.0	J	ug/kg	2.8	0.85	1
Dibromomethane	ND		ug/kg	28	1.2	1
Styrene	ND		ug/kg	5.6	2.0	1
Dichlorodifluoromethane	ND		ug/kg	28	1.1	1
Acetone	ND		ug/kg	28	9.1	1
Carbon disulfide	ND		ug/kg	28	1.0	1
2-Butanone	ND		ug/kg	28	11.	1
Vinyl acetate	ND		ug/kg	28	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	28	2.3	1
1,2,3-Trichloropropane	ND		ug/kg	28	1.1	1
2-Hexanone	ND		ug/kg	28	1.1	1
Bromochloromethane	ND		ug/kg	14	0.85	1
2,2-Dichloropropane	ND		ug/kg	14	2.2	1
1,2-Dibromoethane	ND		ug/kg	11	1.1	1
1,3-Dichloropropane	ND		ug/kg	14	1.6	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.8	0.92	1
Bromobenzene	ND		ug/kg	14	0.62	1
n-Butylbenzene	ND		ug/kg	2.8	0.88	1
sec-Butylbenzene	ND		ug/kg	2.8	0.77	1
tert-Butylbenzene	ND		ug/kg	14	1.7	1
o-Chlorotoluene	ND		ug/kg	14	0.88	1
p-Chlorotoluene	ND		ug/kg	14	1.0	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	14	2.4	1
Hexachlorobutadiene	ND		ug/kg	14	1.3	1
Isopropylbenzene	ND		ug/kg	2.8	0.50	1
p-Isopropyltoluene	ND		ug/kg	2.8	0.77	1
Naphthalene	ND		ug/kg	14	2.2	1
Acrylonitrile	ND		ug/kg	28	1.0	1
n-Propylbenzene	ND		ug/kg	2.8	0.80	1
1,2,3-Trichlorobenzene	2.5	J	ug/kg	14	1.1	1
1,2,4-Trichlorobenzene	2.2	J	ug/kg	14	2.2	1
1,3,5-Trimethylbenzene	ND		ug/kg	14	1.7	1
1,2,4-Trimethylbenzene	ND		ug/kg	14	1.6	1
1,4-Diethylbenzene	ND		ug/kg	11	0.56	1
4-Ethyltoluene	ND		ug/kg	11	0.27	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	11	0.51	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-04  
 Client ID: LB5(MW)1-2  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 10:00  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	14	1.1	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	14	4.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

**Lab ID:** L1212835-05  
**Client ID:** LB5(MW)10-12  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/20/12 05:51  
**Analyst:** JL  
**Percent Solids:** 92%

**Date Collected:** 07/18/12 10:30  
**Date Received:** 07/18/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	27	5.4	1
1,1-Dichloroethane	ND		ug/kg	4.1	0.80	1
Chloroform	ND		ug/kg	4.1	0.88	1
Carbon tetrachloride	ND		ug/kg	2.7	0.57	1
1,2-Dichloropropane	ND		ug/kg	9.5	0.69	1
Dibromochloromethane	ND		ug/kg	2.7	0.84	1
1,1,2-Trichloroethane	ND		ug/kg	4.1	1.1	1
Tetrachloroethene	ND		ug/kg	2.7	0.83	1
Chlorobenzene	ND		ug/kg	2.7	0.50	1
Trichlorofluoromethane	ND		ug/kg	14	1.1	1
1,2-Dichloroethane	ND		ug/kg	2.7	0.62	1
1,1,1-Trichloroethane	ND		ug/kg	2.7	0.73	1
Bromodichloromethane	ND		ug/kg	2.7	1.0	1
trans-1,3-Dichloropropene	ND		ug/kg	2.7	0.82	1
cis-1,3-Dichloropropene	ND		ug/kg	2.7	0.73	1
1,1-Dichloropropene	ND		ug/kg	14	1.2	1
Bromoform	ND		ug/kg	11	1.3	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.7	0.65	1
Benzene	ND		ug/kg	2.7	0.81	1
Toluene	ND		ug/kg	4.1	0.66	1
Ethylbenzene	ND		ug/kg	2.7	0.60	1
Chloromethane	ND		ug/kg	14	2.1	1
Bromomethane	ND		ug/kg	5.4	1.8	1
Vinyl chloride	ND		ug/kg	5.4	2.0	1
Chloroethane	ND		ug/kg	5.4	1.2	1
1,1-Dichloroethene	ND		ug/kg	2.7	0.70	1
trans-1,2-Dichloroethene	ND		ug/kg	4.1	1.1	1
Trichloroethene	ND		ug/kg	2.7	0.61	1
1,2-Dichlorobenzene	ND		ug/kg	14	0.99	1
1,3-Dichlorobenzene	ND		ug/kg	14	1.1	1
1,4-Dichlorobenzene	ND		ug/kg	14	1.1	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-05  
 Client ID: LB5(MW)10-12  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 10:30  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	5.4	1.3	1
p/m-Xylene	ND		ug/kg	5.4	1.2	1
o-Xylene	ND		ug/kg	5.4	1.1	1
cis-1,2-Dichloroethene	1.8	J	ug/kg	2.7	0.82	1
Dibromomethane	ND		ug/kg	27	1.2	1
Styrene	ND		ug/kg	5.4	2.0	1
Dichlorodifluoromethane	ND		ug/kg	27	1.0	1
Acetone	ND		ug/kg	27	8.8	1
Carbon disulfide	ND		ug/kg	27	1.0	1
2-Butanone	ND		ug/kg	27	10.	1
Vinyl acetate	ND		ug/kg	27	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	27	2.2	1
1,2,3-Trichloropropane	ND		ug/kg	27	1.0	1
2-Hexanone	ND		ug/kg	27	1.1	1
Bromochloromethane	ND		ug/kg	14	0.82	1
2,2-Dichloropropane	ND		ug/kg	14	2.2	1
1,2-Dibromoethane	ND		ug/kg	11	1.1	1
1,3-Dichloropropane	ND		ug/kg	14	1.5	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.7	0.89	1
Bromobenzene	ND		ug/kg	14	0.60	1
n-Butylbenzene	ND		ug/kg	2.7	0.85	1
sec-Butylbenzene	ND		ug/kg	2.7	0.75	1
tert-Butylbenzene	ND		ug/kg	14	1.6	1
o-Chlorotoluene	ND		ug/kg	14	0.85	1
p-Chlorotoluene	ND		ug/kg	14	0.98	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	14	2.3	1
Hexachlorobutadiene	ND		ug/kg	14	1.2	1
Isopropylbenzene	ND		ug/kg	2.7	0.48	1
p-Isopropyltoluene	ND		ug/kg	2.7	0.74	1
Naphthalene	ND		ug/kg	14	2.1	1
Acrylonitrile	ND		ug/kg	27	1.0	1
n-Propylbenzene	ND		ug/kg	2.7	0.77	1
1,2,3-Trichlorobenzene	ND		ug/kg	14	1.1	1
1,2,4-Trichlorobenzene	ND		ug/kg	14	2.1	1
1,3,5-Trimethylbenzene	ND		ug/kg	14	1.6	1
1,2,4-Trimethylbenzene	ND		ug/kg	14	1.6	1
1,4-Diethylbenzene	ND		ug/kg	11	0.54	1
4-Ethyltoluene	ND		ug/kg	11	0.26	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	11	0.49	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-05  
 Client ID: LB5(MW)10-12  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 10:30  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	14	1.0	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	14	4.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	99		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-06  
 Client ID: LB5(MW)17-19  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8260B  
 Analytical Date: 07/20/12 06:18  
 Analyst: JL  
 Percent Solids: 86%

Date Collected: 07/18/12 11:15  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	29	5.8	1
1,1-Dichloroethane	ND		ug/kg	4.4	0.86	1
Chloroform	ND		ug/kg	4.4	0.94	1
Carbon tetrachloride	ND		ug/kg	2.9	0.61	1
1,2-Dichloropropane	ND		ug/kg	10	0.74	1
Dibromochloromethane	ND		ug/kg	2.9	0.89	1
1,1,2-Trichloroethane	ND		ug/kg	4.4	1.1	1
Tetrachloroethene	ND		ug/kg	2.9	0.89	1
Chlorobenzene	ND		ug/kg	2.9	0.54	1
Trichlorofluoromethane	ND		ug/kg	14	1.1	1
1,2-Dichloroethane	ND		ug/kg	2.9	0.66	1
1,1,1-Trichloroethane	ND		ug/kg	2.9	0.78	1
Bromodichloromethane	ND		ug/kg	2.9	1.1	1
trans-1,3-Dichloropropene	ND		ug/kg	2.9	0.87	1
cis-1,3-Dichloropropene	ND		ug/kg	2.9	0.78	1
1,1-Dichloropropene	ND		ug/kg	14	1.3	1
Bromoform	ND		ug/kg	12	1.4	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.9	0.70	1
Benzene	ND		ug/kg	2.9	0.86	1
Toluene	ND		ug/kg	4.4	0.70	1
Ethylbenzene	ND		ug/kg	2.9	0.64	1
Chloromethane	ND		ug/kg	14	2.3	1
Bromomethane	ND		ug/kg	5.8	1.9	1
Vinyl chloride	ND		ug/kg	5.8	2.2	1
Chloroethane	ND		ug/kg	5.8	1.3	1
1,1-Dichloroethene	ND		ug/kg	2.9	0.76	1
trans-1,2-Dichloroethene	ND		ug/kg	4.4	1.1	1
Trichloroethene	ND		ug/kg	2.9	0.65	1
1,2-Dichlorobenzene	ND		ug/kg	14	1.0	1
1,3-Dichlorobenzene	ND		ug/kg	14	1.2	1
1,4-Dichlorobenzene	ND		ug/kg	14	1.2	1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

## SAMPLE RESULTS

Lab ID: L1212835-06  
 Client ID: LB5(MW)17-19  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 11:15  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	5.8	1.4	1
p/m-Xylene	ND		ug/kg	5.8	1.2	1
o-Xylene	ND		ug/kg	5.8	1.2	1
cis-1,2-Dichloroethene	ND		ug/kg	2.9	0.88	1
Dibromomethane	ND		ug/kg	29	1.3	1
Styrene	ND		ug/kg	5.8	2.1	1
Dichlorodifluoromethane	ND		ug/kg	29	1.1	1
Acetone	ND		ug/kg	29	9.4	1
Carbon disulfide	ND		ug/kg	29	1.1	1
2-Butanone	ND		ug/kg	29	11.	1
Vinyl acetate	ND		ug/kg	29	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	29	2.4	1
1,2,3-Trichloropropane	ND		ug/kg	29	1.1	1
2-Hexanone	ND		ug/kg	29	1.2	1
Bromochloromethane	ND		ug/kg	14	0.88	1
2,2-Dichloropropane	ND		ug/kg	14	2.3	1
1,2-Dibromoethane	ND		ug/kg	12	1.2	1
1,3-Dichloropropane	ND		ug/kg	14	1.6	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.9	0.95	1
Bromobenzene	ND		ug/kg	14	0.64	1
n-Butylbenzene	ND		ug/kg	2.9	0.91	1
sec-Butylbenzene	ND		ug/kg	2.9	0.80	1
tert-Butylbenzene	ND		ug/kg	14	1.8	1
o-Chlorotoluene	ND		ug/kg	14	0.91	1
p-Chlorotoluene	ND		ug/kg	14	1.0	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	14	2.4	1
Hexachlorobutadiene	ND		ug/kg	14	1.3	1
Isopropylbenzene	ND		ug/kg	2.9	0.51	1
p-Isopropyltoluene	ND		ug/kg	2.9	0.79	1
Naphthalene	ND		ug/kg	14	2.2	1
Acrylonitrile	ND		ug/kg	29	1.1	1
n-Propylbenzene	ND		ug/kg	2.9	0.82	1
1,2,3-Trichlorobenzene	ND		ug/kg	14	1.2	1
1,2,4-Trichlorobenzene	ND		ug/kg	14	2.3	1
1,3,5-Trimethylbenzene	ND		ug/kg	14	1.7	1
1,2,4-Trimethylbenzene	ND		ug/kg	14	1.7	1
1,4-Diethylbenzene	ND		ug/kg	12	0.58	1
4-Ethyltoluene	ND		ug/kg	12	0.28	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	12	0.53	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-06  
 Client ID: LB5(MW)17-19  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 11:15  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	14	1.1	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	14	4.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	100		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/19/12 21:07  
Analyst: JL

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04-06 Batch: WG549767-3					
Methylene chloride	2.0	J	ug/kg	25	2.0
1,1-Dichloroethane	ND		ug/kg	3.8	0.74
Chloroform	ND		ug/kg	3.8	0.81
Carbon tetrachloride	ND		ug/kg	2.5	0.53
1,2-Dichloropropane	ND		ug/kg	8.8	0.64
Dibromochloromethane	ND		ug/kg	2.5	0.77
1,1,2-Trichloroethane	ND		ug/kg	3.8	0.98
Tetrachloroethene	ND		ug/kg	2.5	0.76
Chlorobenzene	ND		ug/kg	2.5	0.46
Trichlorofluoromethane	ND		ug/kg	12	0.98
1,2-Dichloroethane	ND		ug/kg	2.5	0.57
1,1,1-Trichloroethane	ND		ug/kg	2.5	0.67
Bromodichloromethane	ND		ug/kg	2.5	0.96
trans-1,3-Dichloropropene	ND		ug/kg	2.5	0.75
cis-1,3-Dichloropropene	ND		ug/kg	2.5	0.67
1,1-Dichloropropene	ND		ug/kg	12	1.1
Bromoform	ND		ug/kg	10	1.2
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.5	0.60
Benzene	ND		ug/kg	2.5	0.74
Toluene	ND		ug/kg	3.8	0.60
Ethylbenzene	ND		ug/kg	2.5	0.55
Chloromethane	ND		ug/kg	12	2.0
Bromomethane	ND		ug/kg	5.0	1.6
Vinyl chloride	ND		ug/kg	5.0	1.9
Chloroethane	ND		ug/kg	5.0	1.1
1,1-Dichloroethene	ND		ug/kg	2.5	0.65
trans-1,2-Dichloroethene	ND		ug/kg	3.8	0.98
Trichloroethene	ND		ug/kg	2.5	0.56
1,2-Dichlorobenzene	ND		ug/kg	12	0.91
1,3-Dichlorobenzene	ND		ug/kg	12	1.0
1,4-Dichlorobenzene	ND		ug/kg	12	1.0

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/19/12 21:07  
Analyst: JL

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04-06 Batch: WG549767-3					
Methyl tert butyl ether	ND		ug/kg	5.0	1.2
p/m-Xylene	ND		ug/kg	5.0	1.1
o-Xylene	ND		ug/kg	5.0	1.0
cis-1,2-Dichloroethene	ND		ug/kg	2.5	0.75
Dibromomethane	ND		ug/kg	25	1.1
Styrene	ND		ug/kg	5.0	1.8
Dichlorodifluoromethane	ND		ug/kg	25	0.97
Acetone	ND		ug/kg	25	8.1
Carbon disulfide	ND		ug/kg	25	0.94
2-Butanone	ND		ug/kg	25	9.7
Vinyl acetate	ND		ug/kg	25	1.9
4-Methyl-2-pentanone	ND		ug/kg	25	2.0
1,2,3-Trichloropropane	ND		ug/kg	25	0.97
2-Hexanone	ND		ug/kg	25	0.99
Bromochloromethane	ND		ug/kg	12	0.76
2,2-Dichloropropane	ND		ug/kg	12	2.0
1,2-Dibromoethane	ND		ug/kg	10	1.0
1,3-Dichloropropane	ND		ug/kg	12	1.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.5	0.82
Bromobenzene	ND		ug/kg	12	0.55
n-Butylbenzene	ND		ug/kg	2.5	0.79
sec-Butylbenzene	ND		ug/kg	2.5	0.69
tert-Butylbenzene	ND		ug/kg	12	1.5
o-Chlorotoluene	ND		ug/kg	12	0.78
p-Chlorotoluene	ND		ug/kg	12	0.90
1,2-Dibromo-3-chloropropane	ND		ug/kg	12	2.1
Hexachlorobutadiene	ND		ug/kg	12	1.1
Isopropylbenzene	ND		ug/kg	2.5	0.44
p-Isopropyltoluene	ND		ug/kg	2.5	0.68
Naphthalene	ND		ug/kg	12	1.9
Acrylonitrile	ND		ug/kg	25	0.94

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/19/12 21:07  
Analyst: JL

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04-06 Batch: WG549767-3					
Isopropyl Ether	ND		ug/kg	10	1.0
tert-Butyl Alcohol	ND		ug/kg	150	3.1
n-Propylbenzene	ND		ug/kg	2.5	0.71
1,2,3-Trichlorobenzene	ND		ug/kg	12	1.0
1,2,4-Trichlorobenzene	ND		ug/kg	12	2.0
1,3,5-Trimethylbenzene	ND		ug/kg	12	1.5
1,2,4-Trimethylbenzene	ND		ug/kg	12	1.4
Methyl Acetate	ND		ug/kg	50	50.
Ethyl Acetate	ND		ug/kg	50	50.
Acrolein	ND		ug/kg	62	7.5
Cyclohexane	ND		ug/kg	50	50.
1,4-Dioxane	ND		ug/kg	250	44.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	50	0.99
1,4-Diethylbenzene	ND		ug/kg	10	0.50
4-Ethyltoluene	ND		ug/kg	10	0.24
1,2,4,5-Tetramethylbenzene	ND		ug/kg	10	0.45
Tetrahydrofuran	ND		ug/kg	50	2.8
Ethyl ether	ND		ug/kg	12	0.95
trans-1,4-Dichloro-2-butene	ND		ug/kg	12	3.7
Methyl cyclohexane	ND		ug/kg	10	10.
Ethyl-Tert-Butyl-Ether	ND		ug/kg	10	2.2
Tertiary-Amyl Methyl Ether	ND		ug/kg	10	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	100		70-130



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/23/12 09:51  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG550454-3					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.16
1,2-Dichloropropane	ND		ug/l	1.0	0.30
Dibromochloromethane	ND		ug/l	0.50	0.19
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.16
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19
Benzene	ND		ug/l	0.50	0.19
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.33
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.18
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.17
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/23/12 09:51  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG550454-3					
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.0
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.0
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/23/12 09:51  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG550454-3					
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	76.
1,4-Diethylbenzene	ND		ug/l	2.0	0.70
4-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Tentatively Identified Compounds

No Tentatively Identified Compounds      ND      ug/l

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	99		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06 Batch: WG549767-1 WG549767-2								
Methylene chloride	101		101		70-130	0		30
1,1-Dichloroethane	101		101		70-130	0		30
Chloroform	100		100		70-130	0		30
Carbon tetrachloride	100		100		70-130	0		30
1,2-Dichloropropane	102		101		70-130	1		30
Dibromochloromethane	96		97		70-130	1		30
1,1,2-Trichloroethane	96		97		70-130	1		30
Tetrachloroethene	102		100		70-130	2		30
Chlorobenzene	99		98		70-130	1		30
Trichlorofluoromethane	105		104		70-139	1		30
1,2-Dichloroethane	99		98		70-130	1		30
1,1,1-Trichloroethane	102		101		70-130	1		30
Bromodichloromethane	99		98		70-130	1		30
trans-1,3-Dichloropropene	96		95		70-130	1		30
cis-1,3-Dichloropropene	100		99		70-130	1		30
1,1-Dichloropropene	102		100		70-130	2		30
Bromoform	94		95		70-130	1		30
1,1,2,2-Tetrachloroethane	93		93		70-130	0		30
Benzene	102		100		70-130	2		30
Toluene	95		94		70-130	1		30
Ethylbenzene	99		97		70-130	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06 Batch: WG549767-1 WG549767-2								
Chloromethane	99		97		52-130	2		30
Bromomethane	99		94		57-147	5		30
Vinyl chloride	106		105		67-130	1		30
Chloroethane	110		107		50-151	3		30
1,1-Dichloroethene	103		103		65-135	0		30
trans-1,2-Dichloroethene	104		104		70-130	0		30
Trichloroethene	104		102		70-130	2		30
1,2-Dichlorobenzene	96		95		70-130	1		30
1,3-Dichlorobenzene	98		96		70-130	2		30
1,4-Dichlorobenzene	98		96		70-130	2		30
Methyl tert butyl ether	97		97		66-130	0		30
p/m-Xylene	101		98		70-130	3		30
o-Xylene	101		99		70-130	2		30
cis-1,2-Dichloroethene	103		102		70-130	1		30
Dibromomethane	100		100		70-130	0		30
Styrene	100		98		70-130	2		30
Dichlorodifluoromethane	93		92		30-146	1		30
Acetone	112		95		54-140	16		30
Carbon disulfide	102		101		59-130	1		30
2-Butanone	99		88		70-130	12		30
Vinyl acetate	97		98		70-130	1		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06 Batch: WG549767-1 WG549767-2								
4-Methyl-2-pentanone	98		97		70-130	1		30
1,2,3-Trichloropropane	92		93		68-130	1		30
2-Hexanone	90		88		70-130	2		30
Bromochloromethane	105		104		70-130	1		30
2,2-Dichloropropane	102		101		70-130	1		30
1,2-Dibromoethane	96		97		70-130	1		30
1,3-Dichloropropane	95		96		69-130	1		30
1,1,1,2-Tetrachloroethane	98		96		70-130	2		30
Bromobenzene	97		96		70-130	1		30
n-Butylbenzene	98		96		70-130	2		30
sec-Butylbenzene	97		95		70-130	2		30
tert-Butylbenzene	98		96		70-130	2		30
o-Chlorotoluene	96		95		70-130	1		30
p-Chlorotoluene	96		95		70-130	1		30
1,2-Dibromo-3-chloropropane	95		98		68-130	3		30
Hexachlorobutadiene	98		95		67-130	3		30
Isopropylbenzene	96		96		70-130	0		30
p-Isopropyltoluene	98		96		70-130	2		30
Naphthalene	93		93		70-130	0		30
Acrylonitrile	101		102		70-130	1		30
Isopropyl Ether	98		98		66-130	0		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06 Batch: WG549767-1 WG549767-2								
tert-Butyl Alcohol	97		96		70-130	1		30
n-Propylbenzene	97		96		70-130	1		30
1,2,3-Trichlorobenzene	97		96		70-130	1		30
1,2,4-Trichlorobenzene	99		97		70-130	2		30
1,3,5-Trimethylbenzene	98		96		70-130	2		30
1,2,4-Trimethylbenzene	97		95		70-130	2		30
Methyl Acetate	96		95		70-130	1		30
Ethyl Acetate	97		96		70-130	1		30
Acrolein	99		102		70-130	3		30
Cyclohexane	98		96		70-130	2		30
1,4-Dioxane	114		109		65-136	4		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	98		97		70-130	1		30
1,4-Diethylbenzene	99		97		70-130	2		30
4-Ethyltoluene	97		96		70-130	1		30
1,2,4,5-Tetramethylbenzene	97		95		70-130	2		30
Tetrahydrofuran	98		96		66-130	2		30
Ethyl ether	94		101		67-130	7		30
trans-1,4-Dichloro-2-butene	92		92		70-130	0		30
Methyl cyclohexane	97		96		70-130	1		30
Ethyl-Tert-Butyl-Ether	99		99		70-130	0		30
Tertiary-Amyl Methyl Ether	97		98		70-130	1		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06 Batch: WG549767-1 WG549767-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		96		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	96		97		70-130
Dibromofluoromethane	100		100		70-130

Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG550454-1 WG550454-2								
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Methylene chloride	96		102		70-130	6		20
1,1-Dichloroethane	97		104		70-130	7		20
Chloroform	94		103		70-130	9		20
Carbon tetrachloride	92		101		63-132	9		20
1,2-Dichloropropane	93		101		70-130	8		20
Dibromochloromethane	91		99		63-130	8		20
1,1,2-Trichloroethane	95		101		70-130	6		20
Tetrachloroethene	96		103		70-130	7		20
Chlorobenzene	99		107		75-130	8		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG550454-1 WG550454-2								
Trichlorofluoromethane	125		132		62-150	5		20
1,2-Dichloroethane	91		98		70-130	7		20
1,1,1-Trichloroethane	92		100		67-130	8		20
Bromodichloromethane	90		100		67-130	11		20
trans-1,3-Dichloropropene	89		94		70-130	5		20
cis-1,3-Dichloropropene	87		96		70-130	10		20
1,1-Dichloropropene	95		100		70-130	5		20
Bromoform	92		101		54-136	9		20
1,1,1,2-Tetrachloroethane	94		103		67-130	9		20
Benzene	96		106		70-130	10		20
Toluene	101		107		70-130	6		20
Ethylbenzene	104		112		70-130	7		20
Chloromethane	71		87		64-130	20		20
Bromomethane	97		86		39-139	12		20
Vinyl chloride	118		127		55-140	7		20
Chloroethane	123		133		55-138	8		20
1,1-Dichloroethene	94		105		61-145	11		20
trans-1,2-Dichloroethene	93		101		70-130	8		20
Trichloroethene	95		101		70-130	6		20
1,2-Dichlorobenzene	98		104		70-130	6		20
1,3-Dichlorobenzene	102		109		70-130	7		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG550454-1 WG550454-2								
1,4-Dichlorobenzene	100		107		70-130	7		20
Methyl tert butyl ether	75		82		63-130	9		20
p/m-Xylene	104		111		70-130	7		20
o-Xylene	101		109		70-130	8		20
cis-1,2-Dichloroethene	91		100		70-130	9		20
Dibromomethane	91		100		70-130	9		20
1,2,3-Trichloropropane	100		107		64-130	7		20
Acrylonitrile	82		93		70-130	13		20
Styrene	102		109		70-130	7		20
Dichlorodifluoromethane	92		100		36-147	8		20
Acetone	105		97		58-148	8		20
Carbon disulfide	94		101		51-130	7		20
2-Butanone	71		74		63-138	4		20
Vinyl acetate	85		87		70-130	2		20
4-Methyl-2-pentanone	62		70		59-130	12		20
2-Hexanone	64		69		57-130	8		20
Bromochloromethane	100		109		70-130	9		20
2,2-Dichloropropane	96		92		63-133	4		20
1,2-Dibromoethane	88		96		70-130	9		20
1,3-Dichloropropane	95		101		70-130	6		20
1,1,1,2-Tetrachloroethane	98		106		64-130	8		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG550454-1 WG550454-2								
Bromobenzene	98		105		70-130	7		20
n-Butylbenzene	107		114		53-136	6		20
sec-Butylbenzene	104		113		70-130	8		20
tert-Butylbenzene	102		110		70-130	8		20
o-Chlorotoluene	109		118		70-130	8		20
p-Chlorotoluene	106		113		70-130	6		20
1,2-Dibromo-3-chloropropane	88		95		41-144	8		20
Hexachlorobutadiene	75		86		63-130	14		20
Isopropylbenzene	106		115		70-130	8		20
p-Isopropyltoluene	105		113		70-130	7		20
Naphthalene	67	Q	77		70-130	14		20
n-Propylbenzene	109		116		69-130	6		20
1,2,3-Trichlorobenzene	67	Q	80		70-130	18		20
1,2,4-Trichlorobenzene	76		86		70-130	12		20
1,3,5-Trimethylbenzene	107		113		64-130	5		20
1,2,4-Trimethylbenzene	106		114		70-130	7		20
1,4-Dioxane	50	Q	66		56-162	28	Q	20
1,4-Diethylbenzene	94		102		70-130	8		20
4-Ethyltoluene	98		106		70-130	8		20
1,2,4,5-Tetramethylbenzene	92		100		70-130	8		20
Ethyl ether	106		120		59-134	12		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG550454-1 WG550454-2								
trans-1,4-Dichloro-2-butene	90		98		70-130	9		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		94		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	91		93		70-130
Dibromofluoromethane	97		98		70-130

# SEMIVOLATILES

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-02  
 Client ID: LB1(MW)  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8270C  
 Analytical Date: 07/22/12 19:12  
 Analyst: JB

Date Collected: 07/18/12 15:15  
 Date Received: 07/18/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/20/12 20:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40	1
Hexachlorocyclopentadiene	ND		ug/l	20	2.1	1
Isophorone	ND		ug/l	5.0	0.35	1
Nitrobenzene	ND		ug/l	2.0	0.50	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Butyl benzyl phthalate	ND		ug/l	5.0	0.46	1
Di-n-butylphthalate	ND		ug/l	5.0	0.54	1
Di-n-octylphthalate	ND		ug/l	5.0	0.53	1
Diethyl phthalate	ND		ug/l	5.0	0.45	1
Dimethyl phthalate	ND		ug/l	5.0	0.45	1
Biphenyl	ND		ug/l	2.0	0.50	1
4-Chloroaniline	ND		ug/l	5.0	0.83	1
2-Nitroaniline	ND		ug/l	5.0	0.40	1
3-Nitroaniline	ND		ug/l	5.0	0.59	1
4-Nitroaniline	ND		ug/l	5.0	0.55	1
Dibenzofuran	ND		ug/l	2.0	0.47	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65	1
Acetophenone	ND		ug/l	5.0	0.55	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-02  
 Client ID: LB1(MW)  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 15:15  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.34	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.43	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.2	1
2-Nitrophenol	ND		ug/l	10	0.48	1
4-Nitrophenol	ND		ug/l	10	1.2	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59	1
Phenol	ND		ug/l	5.0	0.26	1
2-Methylphenol	ND		ug/l	5.0	0.53	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.53	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	96		10-120
4-Terphenyl-d14	92		41-149

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-02  
 Client ID: LB1(MW)  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8270C  
 Analytical Date: 07/23/12 17:27  
 Analyst: AS

Date Collected: 07/18/12 15:15  
 Date Received: 07/18/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/20/12 20:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND		ug/l	0.20	0.06	1
2-Chloronaphthalene	ND		ug/l	0.20	0.07	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.20	0.06	1
Benzo(a)anthracene	ND		ug/l	0.20	0.06	1
Benzo(a)pyrene	ND		ug/l	0.20	0.07	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07	1
Chrysene	ND		ug/l	0.20	0.05	1
Acenaphthylene	ND		ug/l	0.20	0.05	1
Anthracene	ND		ug/l	0.20	0.06	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.07	1
Fluorene	ND		ug/l	0.20	0.06	1
Phenanthrene	ND		ug/l	0.20	0.06	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08	1
Pyrene	ND		ug/l	0.20	0.06	1
2-Methylnaphthalene	ND		ug/l	0.20	0.06	1
Pentachlorophenol	ND		ug/l	0.80	0.19	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.07	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	37		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	54		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	88		41-149

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

## SAMPLE RESULTS

Lab ID: L1212835-03  
 Client ID: DUP#1  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8270C  
 Analytical Date: 07/22/12 19:35  
 Analyst: JB

Date Collected: 07/18/12 00:00  
 Date Received: 07/18/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/20/12 20:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40	1
Hexachlorocyclopentadiene	ND		ug/l	20	2.1	1
Isophorone	ND		ug/l	5.0	0.35	1
Nitrobenzene	ND		ug/l	2.0	0.50	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Butyl benzyl phthalate	ND		ug/l	5.0	0.46	1
Di-n-butylphthalate	ND		ug/l	5.0	0.54	1
Di-n-octylphthalate	ND		ug/l	5.0	0.53	1
Diethyl phthalate	ND		ug/l	5.0	0.45	1
Dimethyl phthalate	ND		ug/l	5.0	0.45	1
Biphenyl	ND		ug/l	2.0	0.50	1
4-Chloroaniline	ND		ug/l	5.0	0.83	1
2-Nitroaniline	ND		ug/l	5.0	0.40	1
3-Nitroaniline	ND		ug/l	5.0	0.59	1
4-Nitroaniline	ND		ug/l	5.0	0.55	1
Dibenzofuran	ND		ug/l	2.0	0.47	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65	1
Acetophenone	ND		ug/l	5.0	0.55	1

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-03  
 Client ID: DUP#1  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 00:00  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.34	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.43	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.2	1
2-Nitrophenol	ND		ug/l	10	0.48	1
4-Nitrophenol	ND		ug/l	10	1.2	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59	1
Phenol	ND		ug/l	5.0	0.26	1
2-Methylphenol	ND		ug/l	5.0	0.53	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.53	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	85		10-120
4-Terphenyl-d14	92		41-149

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-03  
 Client ID: DUP#1  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8270C  
 Analytical Date: 07/23/12 17:50  
 Analyst: AS

Date Collected: 07/18/12 00:00  
 Date Received: 07/18/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/20/12 20:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND		ug/l	0.20	0.06	1
2-Chloronaphthalene	ND		ug/l	0.20	0.07	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.20	0.06	1
Benzo(a)anthracene	ND		ug/l	0.20	0.06	1
Benzo(a)pyrene	ND		ug/l	0.20	0.07	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07	1
Chrysene	ND		ug/l	0.20	0.05	1
Acenaphthylene	ND		ug/l	0.20	0.05	1
Anthracene	ND		ug/l	0.20	0.06	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.07	1
Fluorene	ND		ug/l	0.20	0.06	1
Phenanthrene	ND		ug/l	0.20	0.06	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08	1
Pyrene	ND		ug/l	0.20	0.06	1
2-Methylnaphthalene	ND		ug/l	0.20	0.06	1
Pentachlorophenol	ND		ug/l	0.80	0.19	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.07	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	34		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	54		15-120
2,4,6-Tribromophenol	74		10-120
4-Terphenyl-d14	86		41-149

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-04 D  
 Client ID: LB5(MW)1-2  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/22/12 01:29  
 Analyst: JB  
 Percent Solids: 89%

Date Collected: 07/18/12 10:00  
 Date Received: 07/18/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/19/12 17:16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	1500	400	10
1,2,4-Trichlorobenzene	ND		ug/kg	1900	540	10
Hexachlorobenzene	ND		ug/kg	1100	290	10
Bis(2-chloroethyl)ether	ND		ug/kg	1700	350	10
2-Chloronaphthalene	ND		ug/kg	1900	560	10
1,2-Dichlorobenzene	ND		ug/kg	1900	550	10
1,3-Dichlorobenzene	ND		ug/kg	1900	580	10
1,4-Dichlorobenzene	ND		ug/kg	1900	530	10
3,3'-Dichlorobenzidine	ND		ug/kg	1900	670	10
2,4-Dinitrotoluene	ND		ug/kg	1900	560	10
2,6-Dinitrotoluene	ND		ug/kg	1900	610	10
Fluoranthene	330	J	ug/kg	1100	240	10
4-Chlorophenyl phenyl ether	ND		ug/kg	1900	330	10
4-Bromophenyl phenyl ether	ND		ug/kg	1900	390	10
Bis(2-chloroisopropyl)ether	ND		ug/kg	2200	530	10
Bis(2-chloroethoxy)methane	ND		ug/kg	2000	470	10
Hexachlorobutadiene	ND		ug/kg	1900	500	10
Hexachlorocyclopentadiene	ND		ug/kg	5300	1500	10
Hexachloroethane	ND		ug/kg	1500	270	10
Isophorone	ND		ug/kg	1700	440	10
Naphthalene	ND		ug/kg	1900	590	10
Nitrobenzene	ND		ug/kg	1700	540	10
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	1500	470	10
n-Nitrosodi-n-propylamine	ND		ug/kg	1900	520	10
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	1900	390	10
Butyl benzyl phthalate	ND		ug/kg	1900	520	10
Di-n-butylphthalate	ND		ug/kg	1900	320	10
Di-n-octylphthalate	ND		ug/kg	1900	500	10
Diethyl phthalate	ND		ug/kg	1900	320	10
Dimethyl phthalate	ND		ug/kg	1900	310	10
Benzo(a)anthracene	ND		ug/kg	1100	370	10

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-04 D  
 Client ID: LB5(MW)1-2  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 10:00  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Benzo(a)pyrene	ND		ug/kg	1500	440	10
Benzo(b)fluoranthene	ND		ug/kg	1100	330	10
Benzo(k)fluoranthene	ND		ug/kg	1100	290	10
Chrysene	ND		ug/kg	1100	290	10
Acenaphthylene	ND		ug/kg	1500	480	10
Anthracene	ND		ug/kg	1100	260	10
Benzo(ghi)perylene	ND		ug/kg	1500	470	10
Fluorene	ND		ug/kg	1900	340	10
Phenanthrene	ND		ug/kg	1100	310	10
Dibenzo(a,h)anthracene	ND		ug/kg	1100	340	10
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	1500	460	10
Pyrene	ND		ug/kg	1100	310	10
Biphenyl	ND		ug/kg	4200	1300	10
4-Chloroaniline	ND		ug/kg	1900	630	10
2-Nitroaniline	ND		ug/kg	1900	340	10
3-Nitroaniline	ND		ug/kg	1900	210	10
4-Nitroaniline	ND		ug/kg	1900	1100	10
Dibenzofuran	ND		ug/kg	1900	380	10
2-Methylnaphthalene	ND		ug/kg	2200	730	10
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	1900	590	10
Acetophenone	ND		ug/kg	1900	600	10
2,4,6-Trichlorophenol	ND		ug/kg	1100	340	10
P-Chloro-M-Cresol	ND		ug/kg	1900	380	10
2-Chlorophenol	ND		ug/kg	1900	580	10
2,4-Dichlorophenol	ND		ug/kg	1700	540	10
2,4-Dimethylphenol	ND		ug/kg	1900	770	10
2-Nitrophenol	ND		ug/kg	4000	1400	10
4-Nitrophenol	ND		ug/kg	2600	800	10
2,4-Dinitrophenol	ND		ug/kg	9000	2900	10
4,6-Dinitro-o-cresol	ND		ug/kg	4800	1800	10
Pentachlorophenol	ND		ug/kg	1500	440	10
Phenol	ND		ug/kg	1900	580	10
2-Methylphenol	ND		ug/kg	1900	460	10
3-Methylphenol/4-Methylphenol	ND		ug/kg	2700	810	10
2,4,5-Trichlorophenol	ND		ug/kg	1900	430	10
Benzoic Acid	ND		ug/kg	6000	1600	10
Benzyl Alcohol	ND		ug/kg	1900	430	10
Carbazole	ND		ug/kg	1900	300	10

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-04 D  
 Client ID: LB5(MW)1-2  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 10:00  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	62		25-120
Phenol-d6	63		10-120
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	64		30-120
2,4,6-Tribromophenol	77		0-136
4-Terphenyl-d14	69		18-120

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-05  
 Client ID: LB5(MW)10-12  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/22/12 01:55  
 Analyst: JB  
 Percent Solids: 92%

Date Collected: 07/18/12 10:30  
 Date Received: 07/18/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/19/12 17:19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	140	38.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	52.	1
Hexachlorobenzene	ND		ug/kg	110	28.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	34.	1
2-Chloronaphthalene	ND		ug/kg	180	53.	1
1,2-Dichlorobenzene	ND		ug/kg	180	52.	1
1,3-Dichlorobenzene	ND		ug/kg	180	55.	1
1,4-Dichlorobenzene	ND		ug/kg	180	50.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	64.	1
2,4-Dinitrotoluene	ND		ug/kg	180	53.	1
2,6-Dinitrotoluene	ND		ug/kg	180	58.	1
Fluoranthene	170		ug/kg	110	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	31.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	37.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	50.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	44.	1
Hexachlorobutadiene	ND		ug/kg	180	47.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	140	1
Hexachloroethane	ND		ug/kg	140	26.	1
Isophorone	ND		ug/kg	160	42.	1
Naphthalene	ND		ug/kg	180	56.	1
Nitrobenzene	ND		ug/kg	160	52.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	44.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	50.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	37.	1
Butyl benzyl phthalate	ND		ug/kg	180	50.	1
Di-n-butylphthalate	ND		ug/kg	180	30.	1
Di-n-octylphthalate	ND		ug/kg	180	48.	1
Diethyl phthalate	ND		ug/kg	180	31.	1
Dimethyl phthalate	ND		ug/kg	180	29.	1
Benzo(a)anthracene	85	J	ug/kg	110	35.	1

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-05  
 Client ID: LB5(MW)10-12  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 10:30  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Benzo(a)pyrene	100	J	ug/kg	140	42.	1
Benzo(b)fluoranthene	130		ug/kg	110	31.	1
Benzo(k)fluoranthene	47	J	ug/kg	110	27.	1
Chrysene	99	J	ug/kg	110	28.	1
Acenaphthylene	ND		ug/kg	140	46.	1
Anthracene	24	J	ug/kg	110	24.	1
Benzo(ghi)perylene	76	J	ug/kg	140	45.	1
Fluorene	ND		ug/kg	180	32.	1
Phenanthrene	110		ug/kg	110	30.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	33.	1
Indeno(1,2,3-cd)Pyrene	82	J	ug/kg	140	43.	1
Pyrene	180		ug/kg	110	29.	1
Biphenyl	ND		ug/kg	400	120	1
4-Chloroaniline	ND		ug/kg	180	60.	1
2-Nitroaniline	ND		ug/kg	180	32.	1
3-Nitroaniline	ND		ug/kg	180	20.	1
4-Nitroaniline	ND		ug/kg	180	110	1
Dibenzofuran	ND		ug/kg	180	36.	1
2-Methylnaphthalene	ND		ug/kg	210	70.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	56.	1
Acetophenone	ND		ug/kg	180	57.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	32.	1
P-Chloro-M-Cresol	ND		ug/kg	180	36.	1
2-Chlorophenol	ND		ug/kg	180	55.	1
2,4-Dichlorophenol	ND		ug/kg	160	51.	1
2,4-Dimethylphenol	ND		ug/kg	180	73.	1
2-Nitrophenol	ND		ug/kg	380	130	1
4-Nitrophenol	ND		ug/kg	250	76.	1
2,4-Dinitrophenol	ND		ug/kg	850	270	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	170	1
Pentachlorophenol	ND		ug/kg	140	42.	1
Phenol	ND		ug/kg	180	56.	1
2-Methylphenol	ND		ug/kg	180	44.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	76.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	41.	1
Benzoic Acid	ND		ug/kg	570	150	1
Benzyl Alcohol	ND		ug/kg	180	41.	1
Carbazole	ND		ug/kg	180	28.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-05  
 Client ID: LB5(MW)10-12  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 10:30  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	73		23-120
2-Fluorobiphenyl	73		30-120
2,4,6-Tribromophenol	85		0-136
4-Terphenyl-d14	92		18-120

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-06  
 Client ID: LB5(MW)17-19  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/22/12 02:20  
 Analyst: JB  
 Percent Solids: 86%

Date Collected: 07/18/12 11:15  
 Date Received: 07/18/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/19/12 17:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	150	42.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	56.	1
Hexachlorobenzene	ND		ug/kg	120	30.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	36.	1
2-Chloronaphthalene	ND		ug/kg	190	58.	1
1,2-Dichlorobenzene	ND		ug/kg	190	57.	1
1,3-Dichlorobenzene	ND		ug/kg	190	60.	1
1,4-Dichlorobenzene	ND		ug/kg	190	55.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	70.	1
2,4-Dinitrotoluene	ND		ug/kg	190	58.	1
2,6-Dinitrotoluene	ND		ug/kg	190	63.	1
Fluoranthene	ND		ug/kg	120	25.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	34.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	40.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	54.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	48.	1
Hexachlorobutadiene	ND		ug/kg	190	51.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	150	1
Hexachloroethane	ND		ug/kg	150	28.	1
Isophorone	ND		ug/kg	170	46.	1
Naphthalene	ND		ug/kg	190	61.	1
Nitrobenzene	ND		ug/kg	170	56.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	48.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	54.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	190	40.	1
Butyl benzyl phthalate	ND		ug/kg	190	54.	1
Di-n-butylphthalate	ND		ug/kg	190	33.	1
Di-n-octylphthalate	ND		ug/kg	190	52.	1
Diethyl phthalate	ND		ug/kg	190	33.	1
Dimethyl phthalate	ND		ug/kg	190	32.	1
Benzo(a)anthracene	ND		ug/kg	120	38.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-06  
 Client ID: LB5(MW)17-19  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 11:15  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	120	34.	1
Benzo(k)fluoranthene	ND		ug/kg	120	30.	1
Chrysene	ND		ug/kg	120	30.	1
Acenaphthylene	ND		ug/kg	150	50.	1
Anthracene	ND		ug/kg	120	27.	1
Benzo(ghi)perylene	ND		ug/kg	150	49.	1
Fluorene	ND		ug/kg	190	36.	1
Phenanthrene	ND		ug/kg	120	32.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	36.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	47.	1
Pyrene	ND		ug/kg	120	32.	1
Biphenyl	ND		ug/kg	440	130	1
4-Chloroaniline	ND		ug/kg	190	65.	1
2-Nitroaniline	ND		ug/kg	190	35.	1
3-Nitroaniline	ND		ug/kg	190	22.	1
4-Nitroaniline	ND		ug/kg	190	120	1
Dibenzofuran	ND		ug/kg	190	40.	1
2-Methylnaphthalene	ND		ug/kg	230	76.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	61.	1
Acetophenone	ND		ug/kg	190	62.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	35.	1
P-Chloro-M-Cresol	ND		ug/kg	190	39.	1
2-Chlorophenol	ND		ug/kg	190	60.	1
2,4-Dichlorophenol	ND		ug/kg	170	56.	1
2,4-Dimethylphenol	ND		ug/kg	190	80.	1
2-Nitrophenol	ND		ug/kg	420	140	1
4-Nitrophenol	ND		ug/kg	270	82.	1
2,4-Dinitrophenol	ND		ug/kg	930	300	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	180	1
Pentachlorophenol	ND		ug/kg	150	46.	1
Phenol	ND		ug/kg	190	60.	1
2-Methylphenol	ND		ug/kg	190	48.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	83.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	45.	1
Benzoic Acid	ND		ug/kg	620	160	1
Benzyl Alcohol	ND		ug/kg	190	45.	1
Carbazole	ND		ug/kg	190	31.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

Lab ID: L1212835-06  
 Client ID: LB5(MW)17-19  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/18/12 11:15  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	64		30-120
2,4,6-Tribromophenol	91		0-136
4-Terphenyl-d14	83		18-120

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/21/12 16:33  
**Analyst:** JB

**Extraction Method:** EPA 3546  
**Extraction Date:** 07/19/12 16:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04-06 Batch: WG549611-1					
Acenaphthene	ND		ug/kg	130	36.
1,2,4-Trichlorobenzene	ND		ug/kg	170	48.
Hexachlorobenzene	ND		ug/kg	100	26.
Bis(2-chloroethyl)ether	ND		ug/kg	150	31.
2-Chloronaphthalene	ND		ug/kg	170	50.
1,2-Dichlorobenzene	ND		ug/kg	170	49.
1,3-Dichlorobenzene	ND		ug/kg	170	51.
1,4-Dichlorobenzene	ND		ug/kg	170	47.
3,3'-Dichlorobenzidine	ND		ug/kg	170	60.
2,4-Dinitrotoluene	ND		ug/kg	170	50.
2,6-Dinitrotoluene	ND		ug/kg	170	54.
Fluoranthene	ND		ug/kg	100	22.
4-Chlorophenyl phenyl ether	ND		ug/kg	170	29.
4-Bromophenyl phenyl ether	ND		ug/kg	170	34.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	47.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	42.
Hexachlorobutadiene	ND		ug/kg	170	44.
Hexachlorocyclopentadiene	ND		ug/kg	480	130
Hexachloroethane	ND		ug/kg	130	24.
Isophorone	ND		ug/kg	150	40.
Naphthalene	ND		ug/kg	170	53.
Nitrobenzene	ND		ug/kg	150	48.
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	130	42.
n-Nitrosodi-n-propylamine	ND		ug/kg	170	46.
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	170	34.
Butyl benzyl phthalate	ND		ug/kg	170	46.
Di-n-butylphthalate	ND		ug/kg	170	28.
Di-n-octylphthalate	ND		ug/kg	170	45.
Diethyl phthalate	ND		ug/kg	170	29.
Dimethyl phthalate	ND		ug/kg	170	27.
Benzo(a)anthracene	ND		ug/kg	100	33.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/21/12 16:33  
**Analyst:** JB

**Extraction Method:** EPA 3546  
**Extraction Date:** 07/19/12 16:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04-06 Batch: WG549611-1					
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	100	29.
Benzo(k)fluoranthene	ND		ug/kg	100	26.
Chrysene	ND		ug/kg	100	26.
Acenaphthylene	ND		ug/kg	130	43.
Anthracene	ND		ug/kg	100	23.
Benzo(ghi)perylene	ND		ug/kg	130	42.
Fluorene	ND		ug/kg	170	30.
Phenanthrene	ND		ug/kg	100	28.
Dibenzo(a,h)anthracene	ND		ug/kg	100	31.
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	130	40.
Pyrene	ND		ug/kg	100	27.
Biphenyl	ND		ug/kg	380	120
4-Chloroaniline	ND		ug/kg	170	56.
2-Nitroaniline	ND		ug/kg	170	30.
3-Nitroaniline	ND		ug/kg	170	19.
4-Nitroaniline	ND		ug/kg	170	100
Dibenzofuran	ND		ug/kg	170	34.
2-Methylnaphthalene	ND		ug/kg	200	65.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	53.
Acetophenone	ND		ug/kg	170	53.
2,4,6-Trichlorophenol	ND		ug/kg	100	30.
P-Chloro-M-Cresol	ND		ug/kg	170	34.
2-Chlorophenol	ND		ug/kg	170	52.
2,4-Dichlorophenol	ND		ug/kg	150	48.
2,4-Dimethylphenol	ND		ug/kg	170	68.
2-Nitrophenol	ND		ug/kg	360	120
4-Nitrophenol	ND		ug/kg	230	71.
2,4-Dinitrophenol	ND		ug/kg	800	260
4,6-Dinitro-o-cresol	ND		ug/kg	430	160
Pentachlorophenol	ND		ug/kg	130	39.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/21/12 16:33  
**Analyst:** JB

**Extraction Method:** EPA 3546  
**Extraction Date:** 07/19/12 16:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04-06 Batch: WG549611-1					
Phenol	ND		ug/kg	170	52.
2-Methylphenol	ND		ug/kg	170	41.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	72.
2,4,5-Trichlorophenol	ND		ug/kg	170	39.
Benzoic Acid	ND		ug/kg	540	140
Benzyl Alcohol	ND		ug/kg	170	38.
Carbazole	ND		ug/kg	170	27.

Tentatively Identified Compounds

No Tentatively Identified Compounds      ND      ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	107		0-136
4-Terphenyl-d14	102		18-120

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/23/12 00:59  
**Analyst:** AS

**Extraction Method:** EPA 3510C  
**Extraction Date:** 07/20/12 20:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02-03 Batch: WG549890-1					
Acenaphthene	ND		ug/l	0.20	0.06
2-Chloronaphthalene	ND		ug/l	0.20	0.07
Fluoranthene	ND		ug/l	0.20	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.20	0.06
Benzo(a)anthracene	ND		ug/l	0.20	0.06
Benzo(a)pyrene	ND		ug/l	0.20	0.07
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07
Chrysene	ND		ug/l	0.20	0.05
Acenaphthylene	ND		ug/l	0.20	0.05
Anthracene	ND		ug/l	0.20	0.06
Benzo(ghi)perylene	ND		ug/l	0.20	0.07
Fluorene	ND		ug/l	0.20	0.06
Phenanthrene	ND		ug/l	0.20	0.06
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08
Pyrene	ND		ug/l	0.20	0.06
2-Methylnaphthalene	ND		ug/l	0.20	0.06
Pentachlorophenol	ND		ug/l	0.80	0.19
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	0.09	J	ug/l	0.80	0.07

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270C  
 Analytical Date: 07/23/12 00:59  
 Analyst: AS

Extraction Method: EPA 3510C  
 Extraction Date: 07/20/12 20:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02-03 Batch: WG549890-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	74		10-120
4-Terphenyl-d14	96		41-149

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/22/12 15:42  
**Analyst:** JB

**Extraction Method:** EPA 3510C  
**Extraction Date:** 07/20/12 20:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG549891-1					
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40
Hexachlorocyclopentadiene	ND		ug/l	20	2.1
Isophorone	ND		ug/l	5.0	0.35
Nitrobenzene	ND		ug/l	2.0	0.50
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4
Butyl benzyl phthalate	ND		ug/l	5.0	0.46
Di-n-butylphthalate	ND		ug/l	5.0	0.54
Di-n-octylphthalate	ND		ug/l	5.0	0.53
Diethyl phthalate	ND		ug/l	5.0	0.45
Dimethyl phthalate	ND		ug/l	5.0	0.45
Biphenyl	ND		ug/l	2.0	0.50
4-Chloroaniline	ND		ug/l	5.0	0.83
2-Nitroaniline	ND		ug/l	5.0	0.40
3-Nitroaniline	ND		ug/l	5.0	0.59
4-Nitroaniline	ND		ug/l	5.0	0.55
Dibenzofuran	ND		ug/l	2.0	0.47
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65
Acetophenone	ND		ug/l	5.0	0.55

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/22/12 15:42  
**Analyst:** JB

**Extraction Method:** EPA 3510C  
**Extraction Date:** 07/20/12 20:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG549891-1					
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.34
2,4-Dichlorophenol	ND		ug/l	5.0	0.43
2,4-Dimethylphenol	ND		ug/l	5.0	1.2
2-Nitrophenol	ND		ug/l	10	0.48
4-Nitrophenol	ND		ug/l	10	1.2
2,4-Dinitrophenol	ND		ug/l	20	1.4
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59
Phenol	ND		ug/l	5.0	0.26
2-Methylphenol	ND		ug/l	5.0	0.53
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45
Benzoic Acid	ND		ug/l	50	1.0
Benzyl Alcohol	ND		ug/l	2.0	0.47
Carbazole	ND		ug/l	2.0	0.53

Tentatively Identified Compounds

Unknown	4.6	J	ug/l
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Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8270C  
 Analytical Date: 07/22/12 15:42  
 Analyst: JB

Extraction Method: EPA 3510C  
 Extraction Date: 07/20/12 20:06

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-03 Batch: WG549891-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	109		10-120
4-Terphenyl-d14	105		41-149

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06 Batch: WG549611-2 WG549611-3								
Acenaphthene	80		79		31-137	1		50
1,2,4-Trichlorobenzene	76		70		38-107	8		50
Hexachlorobenzene	95		90		40-140	5		50
Bis(2-chloroethyl)ether	73		65		40-140	12		50
2-Chloronaphthalene	82		80		40-140	2		50
1,2-Dichlorobenzene	78		68		40-140	14		50
1,3-Dichlorobenzene	74		69		40-140	7		50
1,4-Dichlorobenzene	75		67		28-104	11		50
3,3'-Dichlorobenzidine	68		65		40-140	5		50
2,4-Dinitrotoluene	91	Q	87		28-89	4		50
2,6-Dinitrotoluene	92		87		40-140	6		50
Fluoranthene	87		81		40-140	7		50
4-Chlorophenyl phenyl ether	82		80		40-140	2		50
4-Bromophenyl phenyl ether	88		85		40-140	3		50
Bis(2-chloroisopropyl)ether	41		36	Q	40-140	13		50
Bis(2-chloroethoxy)methane	73		72		40-117	1		50
Hexachlorobutadiene	76		75		40-140	1		50
Hexachlorocyclopentadiene	63		61		40-140	3		50
Hexachloroethane	80		71		40-140	12		50
Isophorone	73		72		40-140	1		50
Naphthalene	77		74		40-140	4		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06 Batch: WG549611-2 WG549611-3								
Nitrobenzene	79		71		40-140	11		50
NitrosoDiPhenylAmine(NDPA)/DPA	84		81			4		50
n-Nitrosodi-n-propylamine	75		66		32-121	13		50
Bis(2-Ethylhexyl)phthalate	87		82		40-140	6		50
Butyl benzyl phthalate	92		88		40-140	4		50
Di-n-butylphthalate	89		85		40-140	5		50
Di-n-octylphthalate	96		91		40-140	5		50
Diethyl phthalate	90		85		40-140	6		50
Dimethyl phthalate	85		81		40-140	5		50
Benzo(a)anthracene	82		78		40-140	5		50
Benzo(a)pyrene	83		81		40-140	2		50
Benzo(b)fluoranthene	90		84		40-140	7		50
Benzo(k)fluoranthene	78		77		40-140	1		50
Chrysene	81		77		40-140	5		50
Acenaphthylene	84		82		40-140	2		50
Anthracene	83		81		40-140	2		50
Benzo(ghi)perylene	89		85		40-140	5		50
Fluorene	84		80		40-140	5		50
Phenanthrene	82		79		40-140	4		50
Dibenzo(a,h)anthracene	100		91		40-140	9		50
Indeno(1,2,3-cd)Pyrene	101		94		40-140	7		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06 Batch: WG549611-2 WG549611-3								
Pyrene	86		81		35-142	6		50
Biphenyl	81		79			3		50
4-Chloroaniline	58		55		40-140	5		50
2-Nitroaniline	93		94		47-134	1		50
3-Nitroaniline	68		66		26-129	3		50
4-Nitroaniline	85		83		41-125	2		50
Dibenzofuran	82		81		40-140	1		50
2-Methylnaphthalene	81		77		40-140	5		50
1,2,4,5-Tetrachlorobenzene	79		76		40-117	4		50
Acetophenone	83		74		14-144	11		50
2,4,6-Trichlorophenol	86		87		30-130	1		50
P-Chloro-M-Cresol	93		88		26-103	6		50
2-Chlorophenol	90		78		25-102	14		50
2,4-Dichlorophenol	88		88		30-130	0		50
2,4-Dimethylphenol	80		78		30-130	3		50
2-Nitrophenol	87		81		30-130	7		50
4-Nitrophenol	99		98		11-114	1		50
2,4-Dinitrophenol	72		77		4-130	7		50
4,6-Dinitro-o-cresol	86		80		10-130	7		50
Pentachlorophenol	85		80		17-109	6		50
Phenol	75		72		26-90	4		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-06 Batch: WG549611-2 WG549611-3								
2-Methylphenol	84		74		30-130.	13		50
3-Methylphenol/4-Methylphenol	86		78		30-130	10		50
2,4,5-Trichlorophenol	91		87		30-130	4		50
Benzoic Acid	20		29			37		50
Benzyl Alcohol	84		78		40-140	7		50
Carbazole	89		83		54-128	7		50

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
2-Fluorophenol	86		80		25-120
Phenol-d6	85		76		10-120
Nitrobenzene-d5	80		71		23-120
2-Fluorobiphenyl	78		78		30-120
2,4,6-Tribromophenol	108		107		0-136
4-Terphenyl-d14	98		94		18-120

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02-03 Batch: WG549890-2 WG549890-3								
Acenaphthene	88		91		37-111	3		40
2-Chloronaphthalene	83		86		40-140	4		40
Fluoranthene	104		109		40-140	5		40
Hexachlorobutadiene	66		69		40-140	4		40
Naphthalene	85		88		40-140	3		40
Benzo(a)anthracene	118		120		40-140	2		40
Benzo(a)pyrene	89		93		40-140	4		40
Benzo(b)fluoranthene	98		103		40-140	5		40
Benzo(k)fluoranthene	96		102		40-140	6		40
Chrysene	97		101		40-140	4		40
Acenaphthylene	93		97		40-140	4		40
Anthracene	94		98		40-140	4		40
Benzo(ghi)perylene	107		113		40-140	5		40
Fluorene	94		99		40-140	5		40
Phenanthrene	92		94		40-140	2		40
Dibenzo(a,h)anthracene	92		98		40-140	6		40
Indeno(1,2,3-cd)Pyrene	98		103		40-140	5		40
Pyrene	98		102		26-127	4		40
2-Methylnaphthalene	84		88		40-140	5		40
Pentachlorophenol	91		99		9-103	8		40
Hexachlorobenzene	82		85		40-140	4		40

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02-03 Batch: WG549890-2 WG549890-3								
Hexachloroethane	79		83		40-140	5		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	60		60		21-120
Phenol-d6	42		43		10-120
Nitrobenzene-d5	96		101		23-120
2-Fluorobiphenyl	83		85		15-120
2,4,6-Tribromophenol	79		78		10-120
4-Terphenyl-d14	91		99		41-149

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG549891-2 WG549891-3								
1,2,4-Trichlorobenzene	73		62		39-98	16		30
Bis(2-chloroethyl)ether	79		69		40-140	14		30
1,2-Dichlorobenzene	72		62		40-140	15		30
1,3-Dichlorobenzene	67		56		40-140	18		30
1,4-Dichlorobenzene	68		56		36-97	19		30
3,3'-Dichlorobenzidine	77		88		40-140	13		30
2,4-Dinitrotoluene	106	Q	99	Q	24-96	7		30
2,6-Dinitrotoluene	95		93		40-140	2		30
4-Chlorophenyl phenyl ether	95		92		40-140	3		30
4-Bromophenyl phenyl ether	103		99		40-140	4		30
Bis(2-chloroisopropyl)ether	73		68		40-140	7		30
Bis(2-chloroethoxy)methane	86		77		40-140	11		30
Hexachlorocyclopentadiene	31	Q	35	Q	40-140	12		30
Isophorone	87		81		40-140	7		30
Nitrobenzene	83		80		40-140	4		30
NitrosoDiPhenylAmine(NDPA)/DPA	94		92		40-140	2		30
n-Nitrosodi-n-propylamine	86		79		29-132	8		30
Bis(2-Ethylhexyl)phthalate	107		100		40-140	7		30
Butyl benzyl phthalate	101		103		40-140	2		30
Di-n-butylphthalate	101		97		40-140	4		30
Di-n-octylphthalate	109		103		40-140	6		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG549891-2 WG549891-3								
Diethyl phthalate	101		97		40-140	4		30
Dimethyl phthalate	100		95		40-140	5		30
Biphenyl	80		74			8		30
4-Chloroaniline	54		60		40-140	11		30
2-Nitroaniline	93		94		52-143	1		30
3-Nitroaniline	78		82		25-145	5		30
4-Nitroaniline	96		96		51-143	0		30
Dibenzofuran	98		89		40-140	10		30
1,2,4,5-Tetrachlorobenzene	80		69		2-134	15		30
Acetophenone	80		72		39-129	11		30
2,4,6-Trichlorophenol	95		92		30-130	3		30
P-Chloro-M-Cresol	95		88		23-97	8		30
2-Chlorophenol	87		76		27-123	13		30
2,4-Dichlorophenol	95		89		30-130	7		30
2,4-Dimethylphenol	77		66		30-130	15		30
2-Nitrophenol	89		84		30-130	6		30
4-Nitrophenol	61		58		10-80	5		30
2,4-Dinitrophenol	97		93		20-130	4		30
4,6-Dinitro-o-cresol	97		92		20-164	5		30
Phenol	41		36		12-110	13		30
2-Methylphenol	78		65		30-130	18		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03 Batch: WG549891-2 WG549891-3								
3-Methylphenol/4-Methylphenol	77		69		30-130	11		30
2,4,5-Trichlorophenol	101		93		30-130	8		30
Benzoic Acid	37		39			5		30
Benzyl Alcohol	76		68			11		30
Carbazole	98		96		55-144	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	62		49		21-120
Phenol-d6	43		35		10-120
Nitrobenzene-d5	91		82		23-120
2-Fluorobiphenyl	88		84		15-120
2,4,6-Tribromophenol	109		104		10-120
4-Terphenyl-d14	95		94		41-149

# PCBS

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

**Lab ID:** L1212835-02  
**Client ID:** LB1(MW)  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water  
**Analytical Method:** 1,8082  
**Analytical Date:** 07/22/12 16:54  
**Analyst:** BA

**Date Collected:** 07/18/12 15:15  
**Date Received:** 07/18/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 07/20/12 05:21  
**Cleanup Method1:** EPA 3665A  
**Cleanup Date1:** 07/21/12  
**Cleanup Method2:** EPA 3660B  
**Cleanup Date2:** 07/21/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.083	0.055	1
Aroclor 1221	ND		ug/l	0.083	0.053	1
Aroclor 1232	ND		ug/l	0.083	0.031	1
Aroclor 1242	ND		ug/l	0.083	0.060	1
Aroclor 1248	ND		ug/l	0.083	0.051	1
Aroclor 1254	ND		ug/l	0.083	0.034	1
Aroclor 1260	ND		ug/l	0.083	0.032	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	102		30-150
Decachlorobiphenyl	82		30-150
2,4,5,6-Tetrachloro-m-xylene	95		30-150
Decachlorobiphenyl	69		30-150

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

**Lab ID:** L1212835-03  
**Client ID:** DUP#1  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water  
**Analytical Method:** 1,8082  
**Analytical Date:** 07/22/12 17:07  
**Analyst:** BA

**Date Collected:** 07/18/12 00:00  
**Date Received:** 07/18/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3510C  
**Extraction Date:** 07/20/12 05:21  
**Cleanup Method1:** EPA 3665A  
**Cleanup Date1:** 07/21/12  
**Cleanup Method2:** EPA 3660B  
**Cleanup Date2:** 07/21/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.083	0.055	1
Aroclor 1221	ND		ug/l	0.083	0.053	1
Aroclor 1232	ND		ug/l	0.083	0.031	1
Aroclor 1242	ND		ug/l	0.083	0.060	1
Aroclor 1248	ND		ug/l	0.083	0.051	1
Aroclor 1254	ND		ug/l	0.083	0.034	1
Aroclor 1260	ND		ug/l	0.083	0.032	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	110		30-150
Decachlorobiphenyl	88		30-150
2,4,5,6-Tetrachloro-m-xylene	102		30-150
Decachlorobiphenyl	74		30-150

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

**Lab ID:** L1212835-04  
**Client ID:** LB5(MW)1-2  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8082  
**Analytical Date:** 07/23/12 17:19  
**Analyst:** KB  
**Percent Solids:** 89%

**Date Collected:** 07/18/12 10:00  
**Date Received:** 07/18/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 07/20/12 03:57  
**Cleanup Method1:** EPA 3665A  
**Cleanup Date1:** 07/21/12  
**Cleanup Method2:** EPA 3660B  
**Cleanup Date2:** 07/21/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	35.3	6.96	1
Aroclor 1221	ND		ug/kg	35.3	10.6	1
Aroclor 1232	ND		ug/kg	35.3	7.49	1
Aroclor 1242	ND		ug/kg	35.3	6.69	1
Aroclor 1248	ND		ug/kg	35.3	4.27	1
Aroclor 1254	ND		ug/kg	35.3	5.56	1
Aroclor 1260	ND		ug/kg	35.3	6.12	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	73		30-150
Decachlorobiphenyl	57		30-150
2,4,5,6-Tetrachloro-m-xylene	66		30-150
Decachlorobiphenyl	52		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-05  
 Client ID: LB5(MW)10-12  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8082  
 Analytical Date: 07/23/12 18:21  
 Analyst: KB  
 Percent Solids: 92%

Date Collected: 07/18/12 10:30  
 Date Received: 07/18/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/20/12 03:57  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/21/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/21/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	34.1	6.73	1
Aroclor 1221	ND		ug/kg	34.1	10.3	1
Aroclor 1232	ND		ug/kg	34.1	7.24	1
Aroclor 1242	ND		ug/kg	34.1	6.47	1
Aroclor 1248	ND		ug/kg	34.1	4.12	1
Aroclor 1254	ND		ug/kg	34.1	5.37	1
Aroclor 1260	ND		ug/kg	34.1	5.91	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	82		30-150
Decachlorobiphenyl	74		30-150
2,4,5,6-Tetrachloro-m-xylene	74		30-150
Decachlorobiphenyl	66		30-150

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12**SAMPLE RESULTS**

**Lab ID:** L1212835-06  
**Client ID:** LB5(MW)17-19  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8082  
**Analytical Date:** 07/23/12 18:33  
**Analyst:** KB  
**Percent Solids:** 86%

**Date Collected:** 07/18/12 11:15  
**Date Received:** 07/18/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 07/20/12 03:57  
**Cleanup Method1:** EPA 3665A  
**Cleanup Date1:** 07/21/12  
**Cleanup Method2:** EPA 3660B  
**Cleanup Date2:** 07/21/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	37.4	7.38	1
Aroclor 1221	ND		ug/kg	37.4	11.3	1
Aroclor 1232	ND		ug/kg	37.4	7.94	1
Aroclor 1242	ND		ug/kg	37.4	7.10	1
Aroclor 1248	ND		ug/kg	37.4	4.52	1
Aroclor 1254	ND		ug/kg	37.4	5.89	1
Aroclor 1260	ND		ug/kg	37.4	6.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	145		30-150
Decachlorobiphenyl	136		30-150
2,4,5,6-Tetrachloro-m-xylene	138		30-150
Decachlorobiphenyl	127		30-150

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8082  
 Analytical Date: 07/23/12 17:31  
 Analyst: KB

Extraction Method: EPA 3546  
 Extraction Date: 07/20/12 03:57  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/21/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/21/12

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 04-06 Batch: WG549693-1					
Aroclor 1016	ND		ug/kg	33.0	6.52
Aroclor 1221	ND		ug/kg	33.0	9.96
Aroclor 1232	ND		ug/kg	33.0	7.01
Aroclor 1242	ND		ug/kg	33.0	6.26
Aroclor 1248	ND		ug/kg	33.0	3.99
Aroclor 1254	ND		ug/kg	33.0	5.20
Aroclor 1260	ND		ug/kg	33.0	5.73

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	88		30-150
Decachlorobiphenyl	73		30-150
2,4,5,6-Tetrachloro-m-xylene	83		30-150
Decachlorobiphenyl	69		30-150

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212835**Project Number:** 170201301**Report Date:** 07/26/12

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8082  
 Analytical Date: 07/22/12 15:13  
 Analyst: BA

Extraction Method: EPA 3510C  
 Extraction Date: 07/20/12 05:21  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/21/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/21/12

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 02-03 Batch: WG549700-1					
Aroclor 1016	ND		ug/l	0.083	0.055
Aroclor 1221	ND		ug/l	0.083	0.053
Aroclor 1232	ND		ug/l	0.083	0.031
Aroclor 1242	ND		ug/l	0.083	0.060
Aroclor 1248	ND		ug/l	0.083	0.051
Aroclor 1254	ND		ug/l	0.083	0.034
Aroclor 1260	ND		ug/l	0.083	0.032

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	84		30-150
Decachlorobiphenyl	107		30-150
2,4,5,6-Tetrachloro-m-xylene	78		30-150
Decachlorobiphenyl	88		30-150

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 04-06 Batch: WG549693-2 WG549693-3								
Aroclor 1016	77		84		40-140	9		50
Aroclor 1260	71		82		40-140	14		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	83		85		30-150
Decachlorobiphenyl	70		78		30-150
2,4,5,6-Tetrachloro-m-xylene	77		82		30-150
Decachlorobiphenyl	63		69		30-150

Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 02-03 Batch: WG549700-2 WG549700-3								
Aroclor 1016	81		79		40-140	2		50
Aroclor 1260	84		79		40-140	6		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	99		86		30-150
Decachlorobiphenyl	104		92		30-150
2,4,5,6-Tetrachloro-m-xylene	92		84		30-150
Decachlorobiphenyl	90		92		30-150

# PESTICIDES

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-04  
 Client ID: LB5(MW)1-2  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 07/25/12 08:16  
 Analyst: SH  
 Percent Solids: 89%

Date Collected: 07/18/12 10:00  
 Date Received: 07/18/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 8151A  
 Extraction Date: 07/22/12 16:28  
 Methylation Date: 07/24/12 14:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	183	73.2	1
2,4,5-T	ND		ug/kg	183	52.1	1
2,4,5-TP (Silvex)	ND		ug/kg	183	63.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	97		30-150	A
DCAA	116		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-04 D  
 Client ID: LB5(MW)1-2  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/23/12 15:24  
 Analyst: BW  
 Percent Solids: 89%

Date Collected: 07/18/12 10:00  
 Date Received: 07/18/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/21/12 01:02  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/23/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	16.9	3.31	10
Lindane	ND		ug/kg	7.04	3.15	10
Alpha-BHC	ND		ug/kg	7.04	2.00	10
Beta-BHC	ND		ug/kg	16.9	6.41	10
Heptachlor	ND		ug/kg	8.45	3.79	10
Aldrin	ND		ug/kg	16.9	5.95	10
Heptachlor epoxide	ND		ug/kg	31.7	9.51	10
Endrin	ND		ug/kg	7.04	2.89	10
Endrin ketone	ND		ug/kg	16.9	4.35	10
Dieldrin	ND		ug/kg	10.6	5.28	10
4,4'-DDE	ND		ug/kg	16.9	3.91	10
4,4'-DDD	ND		ug/kg	16.9	6.03	10
4,4'-DDT	ND		ug/kg	31.7	13.6	10
Endosulfan I	ND		ug/kg	16.9	3.99	10
Endosulfan II	ND		ug/kg	16.9	5.65	10
Endosulfan sulfate	ND		ug/kg	7.04	3.22	10
Methoxychlor	ND		ug/kg	31.7	9.86	10
Toxaphene	ND		ug/kg	317	88.8	10
trans-Chlordane	ND		ug/kg	21.1	5.58	10
Chlordane	ND		ug/kg	137	56.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		30-150	A
Decachlorobiphenyl	114		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	150		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-05  
 Client ID: LB5(MW)10-12  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/23/12 15:37  
 Analyst: BW  
 Percent Solids: 92%

Date Collected: 07/18/12 10:30  
 Date Received: 07/18/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/21/12 01:02  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/23/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	1.66	0.324	1
Lindane	ND		ug/kg	0.690	0.308	1
Alpha-BHC	ND		ug/kg	0.690	0.196	1
Beta-BHC	ND		ug/kg	1.66	0.628	1
Heptachlor	ND		ug/kg	0.828	0.371	1
Aldrin	ND		ug/kg	1.66	0.583	1
Heptachlor epoxide	ND		ug/kg	3.10	0.932	1
Endrin	ND		ug/kg	0.690	0.283	1
Endrin ketone	ND		ug/kg	1.66	0.426	1
Dieldrin	ND		ug/kg	1.04	0.518	1
4,4'-DDE	ND		ug/kg	1.66	0.383	1
4,4'-DDD	ND		ug/kg	1.66	0.591	1
4,4'-DDT	ND		ug/kg	3.10	1.33	1
Endosulfan I	ND		ug/kg	1.66	0.391	1
Endosulfan II	ND		ug/kg	1.66	0.553	1
Endosulfan sulfate	ND		ug/kg	0.690	0.315	1
Methoxychlor	ND		ug/kg	3.10	0.966	1
Toxaphene	ND		ug/kg	31.0	8.70	1
trans-Chlordane	ND		ug/kg	2.07	0.546	1
Chlordane	ND		ug/kg	13.4	5.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	91		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	94		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-05  
 Client ID: LB5(MW)10-12  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 07/25/12 08:36  
 Analyst: SH  
 Percent Solids: 92%

Date Collected: 07/18/12 10:30  
 Date Received: 07/18/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 8151A  
 Extraction Date: 07/22/12 16:28  
 Methylation Date: 07/24/12 14:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	176	70.4	1
2,4,5-T	ND		ug/kg	176	50.1	1
2,4,5-TP (Silvex)	ND		ug/kg	176	60.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	94		30-150	A
DCAA	115		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-06  
 Client ID: LB5(MW)17-19  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/23/12 15:50  
 Analyst: BW  
 Percent Solids: 86%

Date Collected: 07/18/12 11:15  
 Date Received: 07/18/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/21/12 01:02  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/23/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	1.81	0.354	1
Lindane	ND		ug/kg	0.753	0.337	1
Alpha-BHC	ND		ug/kg	0.753	0.214	1
Beta-BHC	ND		ug/kg	1.81	0.685	1
Heptachlor	ND		ug/kg	0.904	0.405	1
Aldrin	ND		ug/kg	1.81	0.636	1
Heptachlor epoxide	ND		ug/kg	3.39	1.02	1
Endrin	ND		ug/kg	0.753	0.309	1
Endrin ketone	ND		ug/kg	1.81	0.465	1
Dieldrin	ND		ug/kg	1.13	0.565	1
4,4'-DDE	ND		ug/kg	1.81	0.418	1
4,4'-DDD	ND		ug/kg	1.81	0.645	1
4,4'-DDT	ND		ug/kg	3.39	1.45	1
Endosulfan I	ND		ug/kg	1.81	0.427	1
Endosulfan II	ND		ug/kg	1.81	0.604	1
Endosulfan sulfate	ND		ug/kg	0.753	0.344	1
Methoxychlor	ND		ug/kg	3.39	1.05	1
Toxaphene	ND		ug/kg	33.9	9.49	1
trans-Chlordane	ND		ug/kg	2.26	0.596	1
Chlordane	ND		ug/kg	14.7	5.99	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	90		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	85		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-06  
 Client ID: LB5(MW)17-19  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 07/25/12 08:56  
 Analyst: SH  
 Percent Solids: 86%

Date Collected: 07/18/12 11:15  
 Date Received: 07/18/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 8151A  
 Extraction Date: 07/22/12 16:28  
 Methylation Date: 07/24/12 14:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	192	76.9	1
2,4,5-T	ND		ug/kg	192	54.7	1
2,4,5-TP (Silvex)	ND		ug/kg	192	66.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	81		30-150	A
DCAA	99		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8081A  
Analytical Date: 07/23/12 17:58  
Analyst: BW

Extraction Method: EPA 3546  
Extraction Date: 07/21/12 01:02  
Cleanup Method1: EPA 3620B  
Cleanup Date1: 07/23/12

Parameter	Result	Qualifier	Units	RL	MDL
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 04-06 Batch: WG549931-1					
Delta-BHC	ND		ug/kg	1.58	0.310
Lindane	ND		ug/kg	0.660	0.295
Alpha-BHC	ND		ug/kg	0.660	0.187
Beta-BHC	ND		ug/kg	1.58	0.601
Heptachlor	ND		ug/kg	0.792	0.355
Aldrin	ND		ug/kg	1.58	0.558
Heptachlor epoxide	ND		ug/kg	2.97	0.891
Endrin	ND		ug/kg	0.660	0.271
Endrin ketone	ND		ug/kg	1.58	0.408
Dieldrin	ND		ug/kg	0.990	0.495
4,4'-DDE	ND		ug/kg	1.58	0.366
4,4'-DDD	ND		ug/kg	1.58	0.565
4,4'-DDT	ND		ug/kg	2.97	1.27
Endosulfan I	ND		ug/kg	1.58	0.374
Endosulfan II	ND		ug/kg	1.58	0.529
Endosulfan sulfate	ND		ug/kg	0.660	0.302
Methoxychlor	ND		ug/kg	2.97	0.924
Toxaphene	ND		ug/kg	29.7	8.32
cis-Chlordane	ND		ug/kg	1.98	0.552
trans-Chlordane	ND		ug/kg	1.98	0.523
Chlordane	ND		ug/kg	12.9	5.25

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	90		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	83		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8151A  
**Analytical Date:** 07/25/12 06:35  
**Analyst:** SH

**Extraction Method:** EPA 8151A  
**Extraction Date:** 07/22/12 16:28

**Methylation Date:** 07/24/12 14:33

Parameter	Result	Qualifier	Units	RL	MDL
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 04-06 Batch: WG550083-1					
2,4-D	ND		ug/kg	166	66.6
2,4,5-T	ND		ug/kg	166	47.4
2,4,5-TP (Silvex)	ND		ug/kg	166	57.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	121		30-150	A
DCAA	176	Q	30-150	B

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 04-06 Batch: WG549931-2 WG549931-3								
Delta-BHC	76		80		30-150	5		30
Lindane	77		81		30-150	5		30
Alpha-BHC	77		76		30-150	1		30
Beta-BHC	80		84		30-150	5		30
Heptachlor	81		86		30-150	6		30
Aldrin	79		84		30-150	6		30
Heptachlor epoxide	72		76		30-150	5		30
Endrin	87		91		30-150	4		30
Endrin ketone	68		72		30-150	6		30
Dieldrin	78		82		30-150	5		30
4,4'-DDE	77		80		30-150	4		30
4,4'-DDD	78		81		30-150	4		30
4,4'-DDT	80		84		30-150	5		30
Endosulfan I	77		82		30-150	6		30
Endosulfan II	74		78		30-150	5		30
Endosulfan sulfate	72		77		30-150	7		30
Methoxychlor	70		73		30-150	4		30
cis-Chlordane	77		81		30-150	5		30
trans-Chlordane	78		80		30-150	3		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 04-06 Batch: WG549931-2 WG549931-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	83		87		30-150	A
Decachlorobiphenyl	104		114		30-150	A
2,4,5,6-Tetrachloro-m-xylene	76		81		30-150	B
Decachlorobiphenyl	102		102		30-150	B

Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 04-06 Batch: WG550083-2 WG550083-3

Dicamba	74		78		30-150	5	30
2,4-D	102		107		30-150	5	30
2,4,5-T	93		96		30-150	3	30
2,4,5-TP (Silvex)	88		92		30-150	4	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	90		93		30-150	A
DCAA	113		124		30-150	B

## METALS

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

**Lab ID:** L1212835-02  
**Client ID:** LB1(MW)  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water

**Date Collected:** 07/18/12 15:15  
**Date Received:** 07/18/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	0.202		mg/l	0.010	0.002	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Antimony, Total	0.0020		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Arsenic, Total	0.0031		mg/l	0.0005	0.0002	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Barium, Total	0.2589		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Beryllium, Total	ND		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Cadmium, Total	ND		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Calcium, Total	133		mg/l	1.00	0.320	10	07/19/12 13:05	07/25/12 13:51	EPA 3005A	1,6020	AK
Chromium, Total	0.0008	J	mg/l	0.0010	0.0002	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Cobalt, Total	0.0025		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Copper, Total	0.0017		mg/l	0.0010	0.0001	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Iron, Total	7.35		mg/l	0.050	0.013	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Lead, Total	0.0009	J	mg/l	0.0010	0.0002	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Magnesium, Total	27.5		mg/l	0.100	0.023	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Manganese, Total	1.371		mg/l	0.0050	0.0010	10	07/19/12 13:05	07/25/12 13:51	EPA 3005A	1,6020	AK
Mercury, Total	ND		mg/l	0.0002	0.0001	1	07/22/12 15:05	07/23/12 15:12	EPA 7470A	1,7470A	JH
Nickel, Total	0.0094		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Potassium, Total	22.9		mg/l	1.00	0.270	10	07/19/12 13:05	07/25/12 13:51	EPA 3005A	1,6020	AK
Selenium, Total	0.001	J	mg/l	0.005	0.0003	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Silver, Total	ND		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Sodium, Total	151		mg/l	1.00	0.150	10	07/19/12 13:05	07/25/12 13:51	EPA 3005A	1,6020	AK
Thallium, Total	ND		mg/l	0.0005	0.00003	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Vanadium, Total	0.0006	J	mg/l	0.0050	0.0001	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK
Zinc, Total	0.0196		mg/l	0.0100	0.0012	1	07/19/12 13:05	07/25/12 13:48	EPA 3005A	1,6020	AK

**Dissolved Metals - Westborough Lab**

Aluminum, Dissolved	0.022		mg/l	0.010	0.002	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Antimony, Dissolved	0.0029		mg/l	0.0005	0.0001	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Arsenic, Dissolved	0.0012		mg/l	0.0005	0.0002	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Barium, Dissolved	0.2028		mg/l	0.0005	0.0001	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Beryllium, Dissolved	ND		mg/l	0.0005	0.0001	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Cadmium, Dissolved	0.0001	J	mg/l	0.0005	0.0001	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

**Lab ID:** L1212835-02  
**Client ID:** LB1(MW)  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water

**Date Collected:** 07/18/12 15:15  
**Date Received:** 07/18/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Calcium, Dissolved	129		mg/l	1.00	0.320	10	07/19/12 07:15	07/25/12 11:29	NA	1,6020	AK
Chromium, Dissolved	0.0002	J	mg/l	0.0010	0.0002	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Cobalt, Dissolved	0.0019		mg/l	0.0005	0.0001	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Copper, Dissolved	0.0012		mg/l	0.0010	0.0001	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Iron, Dissolved	0.570		mg/l	0.050	0.013	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Lead, Dissolved	ND		mg/l	0.0010	0.0002	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Magnesium, Dissolved	23.4		mg/l	0.100	0.023	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Manganese, Dissolved	1.222		mg/l	0.0050	0.0010	10	07/19/12 07:15	07/25/12 11:29	NA	1,6020	AK
Mercury, Dissolved	ND		mg/l	0.0002	0.0001	1	07/22/12 15:05	07/23/12 17:27	EPA 7470A	1,7470A	JH
Nickel, Dissolved	0.0074		mg/l	0.0005	0.0001	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Potassium, Dissolved	22.8		mg/l	0.100	0.027	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Selenium, Dissolved	ND		mg/l	0.005	0.0003	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Silver, Dissolved	ND		mg/l	0.0005	0.0001	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Sodium, Dissolved	136		mg/l	1.00	0.150	10	07/19/12 07:15	07/25/12 11:29	NA	1,6020	AK
Thallium, Dissolved	0.00004	J	mg/l	0.00050	0.00003	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Vanadium, Dissolved	ND		mg/l	0.0050	0.0001	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK
Zinc, Dissolved	0.0221		mg/l	0.0100	0.0012	1	07/19/12 07:15	07/25/12 11:13	NA	1,6020	AK



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

**Lab ID:** L1212835-03  
**Client ID:** DUP#1  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water

**Date Collected:** 07/18/12 00:00  
**Date Received:** 07/18/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	10.7		mg/l	5.00	1.00	500	07/19/12 13:05	07/25/12 18:14	EPA 3005A	1,6020	AK
Antimony, Total	0.0044		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Arsenic, Total	0.0038		mg/l	0.0005	0.0002	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Barium, Total	0.5382		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Beryllium, Total	0.0010		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Cadmium, Total	0.0001	J	mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Calcium, Total	112		mg/l	1.00	0.320	10	07/19/12 13:05	07/25/12 13:56	EPA 3005A	1,6020	AK
Chromium, Total	0.0127		mg/l	0.0010	0.0002	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Cobalt, Total	0.0102		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Copper, Total	0.1044		mg/l	0.0010	0.0001	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Iron, Total	17.1		mg/l	0.050	0.013	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Lead, Total	0.0963		mg/l	0.0010	0.0002	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Magnesium, Total	28.0		mg/l	0.100	0.023	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Manganese, Total	1.418		mg/l	0.0050	0.0010	10	07/19/12 13:05	07/25/12 13:56	EPA 3005A	1,6020	AK
Mercury, Total	0.0005		mg/l	0.0002	0.0001	1	07/22/12 15:05	07/23/12 15:14	EPA 7470A	1,7470A	JH
Nickel, Total	0.0297		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Potassium, Total	29.6		mg/l	0.100	0.027	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Selenium, Total	0.002	J	mg/l	0.005	0.0003	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Silver, Total	ND		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Sodium, Total	156		mg/l	1.00	0.150	10	07/19/12 13:05	07/25/12 13:56	EPA 3005A	1,6020	AK
Thallium, Total	0.0001	J	mg/l	0.0005	0.00003	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Vanadium, Total	0.0184		mg/l	0.0050	0.0001	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK
Zinc, Total	0.1039		mg/l	0.0100	0.0012	1	07/19/12 13:05	07/25/12 13:54	EPA 3005A	1,6020	AK

**Dissolved Metals - Westborough Lab**

Aluminum, Dissolved	0.032		mg/l	0.010	0.002	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Antimony, Dissolved	0.0027		mg/l	0.0005	0.0001	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Arsenic, Dissolved	0.0014		mg/l	0.0005	0.0002	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Barium, Dissolved	0.2026		mg/l	0.0005	0.0001	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Beryllium, Dissolved	ND		mg/l	0.0005	0.0001	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Cadmium, Dissolved	ND		mg/l	0.0005	0.0001	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

**Lab ID:** L1212835-03  
**Client ID:** DUP#1  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water

**Date Collected:** 07/18/12 00:00  
**Date Received:** 07/18/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Calcium, Dissolved	125		mg/l	1.00	0.320	10	07/19/12 07:15	07/25/12 11:45	NA	1,6020	AK
Chromium, Dissolved	ND		mg/l	0.0010	0.0002	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Cobalt, Dissolved	0.0020		mg/l	0.0005	0.0001	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Copper, Dissolved	0.0006	J	mg/l	0.0010	0.0001	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Iron, Dissolved	0.886		mg/l	0.050	0.013	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Lead, Dissolved	ND		mg/l	0.0010	0.0002	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Magnesium, Dissolved	23.8		mg/l	0.100	0.023	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Manganese, Dissolved	1.204		mg/l	0.0050	0.0010	10	07/19/12 07:15	07/25/12 11:45	NA	1,6020	AK
Mercury, Dissolved	ND		mg/l	0.0002	0.0001	1	07/22/12 15:05	07/23/12 17:32	EPA 7470A	1,7470A	JH
Nickel, Dissolved	0.0079		mg/l	0.0005	0.0001	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Potassium, Dissolved	23.1		mg/l	0.100	0.027	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Selenium, Dissolved	ND		mg/l	0.005	0.0003	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Silver, Dissolved	ND		mg/l	0.0005	0.0001	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Sodium, Dissolved	135		mg/l	1.00	0.150	10	07/19/12 07:15	07/25/12 11:45	NA	1,6020	AK
Thallium, Dissolved	0.00004	J	mg/l	0.00050	0.00003	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Vanadium, Dissolved	0.0001	J	mg/l	0.0050	0.0001	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK
Zinc, Dissolved	0.00990	J	mg/l	0.0100	0.0012	1	07/19/12 07:15	07/25/12 11:24	NA	1,6020	AK



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-04  
 Client ID: LB5(MW)1-2  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Percent Solids: 89%

Date Collected: 07/18/12 10:00  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	5000		mg/kg	8.6	1.9	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Antimony, Total	0.85	J	mg/kg	4.3	0.83	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Arsenic, Total	6.9		mg/kg	0.86	0.30	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Barium, Total	100		mg/kg	0.86	0.07	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Beryllium, Total	0.34	J	mg/kg	0.43	0.03	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Cadmium, Total	0.87		mg/kg	0.86	0.05	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Calcium, Total	100000		mg/kg	8.6	1.9	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Chromium, Total	16		mg/kg	0.86	0.18	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Cobalt, Total	5.2		mg/kg	1.7	0.18	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Copper, Total	39		mg/kg	0.86	0.40	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Iron, Total	21000		mg/kg	4.3	1.5	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Lead, Total	88		mg/kg	4.3	0.24	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Magnesium, Total	32000		mg/kg	8.6	3.9	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Manganese, Total	420		mg/kg	0.86	0.09	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Mercury, Total	0.12		mg/kg	0.09	0.02	1	07/24/12 17:43	07/25/12 09:38	EPA 7471A	1,7471A	KL
Nickel, Total	14		mg/kg	2.2	0.24	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Potassium, Total	1600		mg/kg	220	69.	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Selenium, Total	ND		mg/kg	1.7	0.28	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Silver, Total	ND		mg/kg	0.86	0.14	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Sodium, Total	230		mg/kg	170	69.	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Thallium, Total	ND		mg/kg	1.7	0.54	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Vanadium, Total	18		mg/kg	0.86	0.19	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS
Zinc, Total	130		mg/kg	4.3	0.47	2	07/23/12 12:18	07/26/12 19:02	EPA 3050B	1,6010B	MS



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-05  
 Client ID: LB5(MW)10-12  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Percent Solids: 92%

Date Collected: 07/18/12 10:30  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	7600		mg/kg	8.2	1.8	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Antimony, Total	ND		mg/kg	4.1	0.79	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Arsenic, Total	2.8		mg/kg	0.82	0.28	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Barium, Total	52		mg/kg	0.82	0.07	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Beryllium, Total	0.36	J	mg/kg	0.41	0.03	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Cadmium, Total	0.30	J	mg/kg	0.82	0.05	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Calcium, Total	4300		mg/kg	8.2	1.8	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Chromium, Total	13		mg/kg	0.82	0.17	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Cobalt, Total	5.8		mg/kg	1.6	0.18	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Copper, Total	18		mg/kg	0.82	0.38	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Iron, Total	14000		mg/kg	4.1	1.4	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Lead, Total	18		mg/kg	4.1	0.23	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Magnesium, Total	4100		mg/kg	8.2	3.7	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Manganese, Total	350		mg/kg	0.82	0.08	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Mercury, Total	0.10		mg/kg	0.08	0.02	1	07/24/12 17:43	07/25/12 09:39	EPA 7471A	1,7471A	KL
Nickel, Total	13		mg/kg	2.0	0.23	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Potassium, Total	1700		mg/kg	200	66.	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Selenium, Total	ND		mg/kg	1.6	0.27	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Silver, Total	ND		mg/kg	0.82	0.13	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Sodium, Total	220		mg/kg	160	65.	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Thallium, Total	ND		mg/kg	1.6	0.51	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Vanadium, Total	15		mg/kg	0.82	0.18	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS
Zinc, Total	46		mg/kg	4.1	0.44	2	07/23/12 12:18	07/26/12 19:05	EPA 3050B	1,6010B	MS



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

Lab ID: L1212835-06  
 Client ID: LB5(MW)17-19  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Percent Solids: 86%

Date Collected: 07/18/12 11:15  
 Date Received: 07/18/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	10000		mg/kg	9.0	2.0	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Antimony, Total	ND		mg/kg	4.5	0.86	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Arsenic, Total	2.4		mg/kg	0.90	0.31	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Barium, Total	120		mg/kg	0.90	0.08	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Beryllium, Total	0.76		mg/kg	0.45	0.03	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Cadmium, Total	0.33	J	mg/kg	0.90	0.06	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Calcium, Total	3000		mg/kg	9.0	1.9	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Chromium, Total	20		mg/kg	0.90	0.18	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Cobalt, Total	7.8		mg/kg	1.8	0.19	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Copper, Total	19		mg/kg	0.90	0.42	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Iron, Total	18000		mg/kg	4.5	1.6	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Lead, Total	27		mg/kg	4.5	0.25	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Magnesium, Total	4700		mg/kg	9.0	4.0	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Manganese, Total	370		mg/kg	0.90	0.09	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Mercury, Total	0.13		mg/kg	0.09	0.02	1	07/24/12 17:43	07/25/12 09:41	EPA 7471A	1,7471A	KL
Nickel, Total	25		mg/kg	2.2	0.25	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Potassium, Total	4500		mg/kg	220	72.	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Selenium, Total	ND		mg/kg	1.8	0.29	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Silver, Total	ND		mg/kg	0.90	0.15	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Sodium, Total	350		mg/kg	180	71.	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Thallium, Total	ND		mg/kg	1.8	0.56	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Vanadium, Total	25		mg/kg	0.90	0.20	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS
Zinc, Total	56		mg/kg	4.5	0.48	2	07/23/12 12:18	07/26/12 19:08	EPA 3050B	1,6010B	MS



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

## Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>Total Metals - Westborough Lab for sample(s): 02-03 Batch: WG549530-1</b>										
Aluminum, Total	ND		mg/l	0.010	0.002	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Antimony, Total	ND		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Arsenic, Total	ND		mg/l	0.0005	0.0002	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Barium, Total	ND		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Beryllium, Total	ND		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Cadmium, Total	ND		mg/l	0.0002	0.0001	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Calcium, Total	0.065	J	mg/l	0.100	0.032	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Chromium, Total	ND		mg/l	0.0010	0.0002	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Cobalt, Total	ND		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Copper, Total	ND		mg/l	0.0010	0.0001	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Iron, Total	ND		mg/l	0.050	0.013	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Lead, Total	ND		mg/l	0.0010	0.0002	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Magnesium, Total	ND		mg/l	0.100	0.023	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Manganese, Total	ND		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Nickel, Total	ND		mg/l	0.0005	0.0001	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Potassium, Total	ND		mg/l	0.100	0.027	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Selenium, Total	ND		mg/l	0.005	0.0003	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Silver, Total	ND		mg/l	0.0004	0.0001	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Sodium, Total	ND		mg/l	0.100	0.015	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Thallium, Total	ND		mg/l	0.0005	0.00003	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Vanadium, Total	ND		mg/l	0.0050	0.0001	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK
Zinc, Total	0.0019	J	mg/l	0.0100	0.0012	1	07/19/12 13:05	07/25/12 09:55	1,6020	AK

### Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>Dissolved Metals - Westborough Lab for sample(s): 02-03 Batch: WG549711-1</b>										
Aluminum, Dissolved	ND		mg/l	0.010	0.002	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Antimony, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Arsenic, Dissolved	ND		mg/l	0.0005	0.0002	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Barium, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

### Method Blank Analysis Batch Quality Control

Beryllium, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Cadmium, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Calcium, Dissolved	0.135		mg/l	0.100	0.032	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Chromium, Dissolved	ND		mg/l	0.0010	0.0002	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Cobalt, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Copper, Dissolved	ND		mg/l	0.0010	0.0001	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Iron, Dissolved	ND		mg/l	0.050	0.013	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Lead, Dissolved	ND		mg/l	0.0010	0.0002	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Magnesium, Dissolved	ND		mg/l	0.100	0.023	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Manganese, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Nickel, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Potassium, Dissolved	ND		mg/l	0.100	0.027	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Selenium, Dissolved	ND		mg/l	0.005	0.0003	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Silver, Dissolved	ND		mg/l	0.0005	0.0001	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Sodium, Dissolved	ND		mg/l	0.100	0.015	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Thallium, Dissolved	ND		mg/l	0.0005	0.00003	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Vanadium, Dissolved	ND		mg/l	0.0050	0.0001	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK
Zinc, Dissolved	0.0025	J	mg/l	0.0100	0.0012	1	07/20/12 08:00	07/25/12 11:05	1,6020	AK

#### Prep Information

Digestion Method: NA

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 02-03 Batch: WG550045-1										
Mercury, Total	ND		mg/l	0.0002	0.0001	1	07/22/12 15:05	07/23/12 14:32	1,7470A	JH

#### Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 02-03 Batch: WG550047-1										
Mercury, Dissolved	0.0003		mg/l	0.0002	0.0001	1	07/22/12 15:05	07/23/12 16:15	1,7470A	JH



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

## Method Blank Analysis Batch Quality Control

### Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 04-06 Batch: WG550205-1										
Aluminum, Total	ND		mg/kg	4.0	0.89	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Antimony, Total	ND		mg/kg	2.0	0.38	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Arsenic, Total	ND		mg/kg	0.40	0.14	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Barium, Total	ND		mg/kg	0.40	0.03	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Beryllium, Total	ND		mg/kg	0.20	0.01	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Cadmium, Total	ND		mg/kg	0.40	0.03	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Calcium, Total	ND		mg/kg	4.0	0.87	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Chromium, Total	ND		mg/kg	0.40	0.08	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Cobalt, Total	ND		mg/kg	0.80	0.09	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Copper, Total	ND		mg/kg	0.40	0.18	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Iron, Total	1.0	J	mg/kg	2.0	0.69	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Lead, Total	ND		mg/kg	2.0	0.11	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Magnesium, Total	ND		mg/kg	4.0	1.8	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Manganese, Total	ND		mg/kg	0.40	0.04	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Nickel, Total	ND		mg/kg	1.0	0.11	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Potassium, Total	ND		mg/kg	100	32.	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Selenium, Total	ND		mg/kg	0.80	0.13	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Silver, Total	ND		mg/kg	0.40	0.07	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Sodium, Total	ND		mg/kg	80	32.	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Thallium, Total	ND		mg/kg	0.80	0.25	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Vanadium, Total	ND		mg/kg	0.40	0.09	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS
Zinc, Total	ND		mg/kg	2.0	0.22	1	07/23/12 12:18	07/24/12 20:55	1,6010B	MS

### Prep Information

Digestion Method: EPA 3050B



Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 04-06 Batch: WG550490-1									
Mercury, Total	ND	mg/kg	0.08	0.02	1	07/24/12 17:43	07/25/12 09:11	1,7471A	KL

### Prep Information

Digestion Method: EPA 7471A

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Westborough Lab Associated sample(s): 02-03 Batch: WG549530-2								
Aluminum, Total	93		-		80-120	-		
Antimony, Total	91		-		80-120	-		
Arsenic, Total	99		-		80-120	-		
Barium, Total	94		-		80-120	-		
Beryllium, Total	99		-		80-120	-		
Cadmium, Total	101		-		80-120	-		
Calcium, Total	94		-		80-120	-		
Chromium, Total	94		-		80-120	-		
Cobalt, Total	97		-		80-120	-		
Copper, Total	97		-		80-120	-		
Iron, Total	96		-		80-120	-		
Lead, Total	100		-		80-120	-		
Magnesium, Total	92		-		80-120	-		
Manganese, Total	96		-		80-120	-		
Nickel, Total	100		-		80-120	-		
Potassium, Total	85		-		80-120	-		
Selenium, Total	107		-		80-120	-		
Silver, Total	95		-		80-120	-		
Sodium, Total	87		-		80-120	-		
Thallium, Total	91		-		80-120	-		
Vanadium, Total	95		-		80-120	-		

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Lab Number:** L1212835

**Project Number:** 170201301

**Report Date:** 07/26/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 02-03 Batch: WG549530-2					
Zinc, Total	101	-	80-120	-	

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Project Number:** 170201301

**Lab Number:** L1212835

**Report Date:** 07/26/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02-03 Batch: WG549711-2					
Aluminum, Dissolved	92	-	80-120	-	
Antimony, Dissolved	89	-	80-120	-	
Arsenic, Dissolved	96	-	80-120	-	
Barium, Dissolved	90	-	80-120	-	
Beryllium, Dissolved	98	-	80-120	-	
Cadmium, Dissolved	99	-	80-120	-	
Calcium, Dissolved	95	-	80-120	-	
Chromium, Dissolved	93	-	80-120	-	
Cobalt, Dissolved	95	-	80-120	-	
Copper, Dissolved	97	-	80-120	-	
Iron, Dissolved	90	-	80-120	-	
Lead, Dissolved	93	-	80-120	-	
Magnesium, Dissolved	90	-	80-120	-	
Manganese, Dissolved	91	-	80-120	-	
Nickel, Dissolved	96	-	80-120	-	
Potassium, Dissolved	88	-	80-120	-	
Selenium, Dissolved	95	-	80-120	-	
Silver, Dissolved	91	-	80-120	-	
Sodium, Dissolved	91	-	80-120	-	
Thallium, Dissolved	86	-	80-120	-	
Vanadium, Dissolved	96	-	80-120	-	

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Project Number:** 170201301

**Lab Number:** L1212835

**Report Date:** 07/26/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02-03 Batch: WG549711-2					
Zinc, Dissolved	97	-	80-120	-	
Total Metals - Westborough Lab Associated sample(s): 02-03 Batch: WG550045-2					
Mercury, Total	108	-	80-120	-	
Dissolved Metals - Westborough Lab Associated sample(s): 02-03 Batch: WG550047-2					
Mercury, Dissolved	115	-	70-130	-	

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Lab Number:** L1212835

**Project Number:** 170201301

**Report Date:** 07/26/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 04-06 Batch: WG550205-2					
Aluminum, Total	94	-	75-125	-	
Antimony, Total	100	-	75-125	-	
Arsenic, Total	104	-	75-125	-	
Barium, Total	94	-	75-125	-	
Beryllium, Total	97	-	75-125	-	
Cadmium, Total	98	-	75-125	-	
Calcium, Total	97	-	75-125	-	
Chromium, Total	94	-	75-125	-	
Cobalt, Total	97	-	75-125	-	
Copper, Total	97	-	75-125	-	
Iron, Total	100	-	75-125	-	
Lead, Total	98	-	75-125	-	
Magnesium, Total	89	-	75-125	-	
Manganese, Total	94	-	75-125	-	
Nickel, Total	94	-	75-125	-	
Potassium, Total	102	-	75-125	-	
Selenium, Total	103	-	75-125	-	
Silver, Total	99	-	75-125	-	
Sodium, Total	100	-	75-125	-	
Thallium, Total	95	-	75-125	-	
Vanadium, Total	97	-	75-125	-	

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Project Number:** 170201301

**Lab Number:** L1212835

**Report Date:** 07/26/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 04-06 Batch: WG550205-2					
Zinc, Total	91	-	75-125	-	
Total Metals - Westborough Lab Associated sample(s): 04-06 Batch: WG550490-2 SRM Lot Number: 0518-10-02					
Mercury, Total	114	-	67-133	-	

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Qual	MSD Found	MSD %Recovery	MSD Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 02-03    QC Batch ID: WG549530-4    QC Sample: L1212740-01    Client ID: MS Sample												
Aluminum, Total	0.039	2	1.97	96	-	-	-	-	80-120	-	-	20
Antimony, Total	0.0009	0.5	0.4756	95	-	-	-	-	80-120	-	-	20
Arsenic, Total	0.0014	0.12	0.1229	101	-	-	-	-	80-120	-	-	20
Barium, Total	0.0172	2	1.890	94	-	-	-	-	80-120	-	-	20
Beryllium, Total	ND	0.05	0.0555	111	-	-	-	-	80-120	-	-	20
Cadmium, Total	0.0002	0.051	0.0527	103	-	-	-	-	80-120	-	-	20
Calcium, Total	20.7	10	30.0	93	-	-	-	-	80-120	-	-	20
Chromium, Total	0.0006J	0.2	0.1941	97	-	-	-	-	80-120	-	-	20
Cobalt, Total	0.0004J	0.5	0.4844	97	-	-	-	-	80-120	-	-	20
Copper, Total	0.0011	0.25	0.2433	97	-	-	-	-	80-120	-	-	20
Iron, Total	2.26	1	3.18	92	-	-	-	-	80-120	-	-	20
Lead, Total	0.0005J	0.51	0.5123	100	-	-	-	-	80-120	-	-	20
Magnesium, Total	3.19	10	12.8	96	-	-	-	-	80-120	-	-	20
Manganese, Total	0.4185	0.5	0.9144	99	-	-	-	-	80-120	-	-	20
Nickel, Total	0.0004J	0.5	0.4819	96	-	-	-	-	80-120	-	-	20
Potassium, Total	0.971	10	9.80	88	-	-	-	-	80-120	-	-	20
Selenium, Total	ND	0.12	0.123	102	-	-	-	-	80-120	-	-	20
Silver, Total	ND	0.05	0.0475	95	-	-	-	-	80-120	-	-	20
Sodium, Total	27.9	10	37.9	100	-	-	-	-	80-120	-	-	20
Thallium, Total	ND	0.12	0.1113	93	-	-	-	-	80-120	-	-	20
Vanadium, Total	0.0006J	0.5	0.4928	98	-	-	-	-	80-120	-	-	20

**Matrix Spike Analysis**  
Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 02-03 QC Batch ID: WG549530-4 QC Sample: L1212740-01 Client ID: MS Sample									
Zinc, Total	0.1108	0.5	0.6268	103	-	-	80-120	-	20

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02-03 QC Batch ID: WG549711-4 QC Sample: L1212835-02 Client ID: LB1(MW)									
Aluminum, Dissolved	0.022	2	1.87	92	-	-	80-120	-	20
Antimony, Dissolved	0.0029	0.5	0.4236	84	-	-	80-120	-	20
Arsenic, Dissolved	0.0012	0.12	0.1145	94	-	-	80-120	-	20
Barium, Dissolved	0.2028	2	1.988	89	-	-	80-120	-	20
Beryllium, Dissolved	ND	0.05	0.0503	101	-	-	80-120	-	20
Cadmium, Dissolved	0.0001J	0.051	0.0505	99	-	-	80-120	-	20
Calcium, Dissolved	129.	10	138	90	-	-	80-120	-	20
Chromium, Dissolved	0.0002J	0.2	0.1864	93	-	-	80-120	-	20
Cobalt, Dissolved	0.0019	0.5	0.4640	92	-	-	80-120	-	20
Copper, Dissolved	0.0012	0.25	0.2267	90	-	-	80-120	-	20
Iron, Dissolved	0.570	1	1.66	109	-	-	80-120	-	20
Lead, Dissolved	ND	0.51	0.4953	97	-	-	80-120	-	20
Magnesium, Dissolved	23.4	10	33.0	96	-	-	80-120	-	20
Manganese, Dissolved	1.222	0.5	1.652	86	-	-	80-120	-	20
Nickel, Dissolved	0.0074	0.5	0.4579	90	-	-	80-120	-	20
Potassium, Dissolved	22.8	10	27.8	50	Q	-	80-120	-	20
Selenium, Dissolved	ND	0.12	0.119	99	-	-	80-120	-	20
Silver, Dissolved	ND	0.05	0.0489	98	-	-	80-120	-	20
Sodium, Dissolved	136.	10	146	100	-	-	80-120	-	20
Thallium, Dissolved	0.00004J	0.12	0.1061	88	-	-	80-120	-	20
Vanadium, Dissolved	ND	0.5	0.4856	97	-	-	80-120	-	20

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02-03 QC Batch ID: WG549711-4 QC Sample: L1212835-02 Client ID: LB1(MW)									
Zinc, Dissolved	0.0221	0.5	0.5060	97	-	-	80-120	-	20
Total Metals - Westborough Lab Associated sample(s): 02-03 QC Batch ID: WG550045-4 QC Sample: L1212720-01 Client ID: MS Sample									
Mercury, Total	0.0001J	0.001	0.0003	30	Q	-	70-130	-	20
Dissolved Metals - Westborough Lab Associated sample(s): 02-03 QC Batch ID: WG550047-4 QC Sample: L1212754-01 Client ID: MS Sample									
Mercury, Dissolved	ND	0.001	0.0013	127	-	-	70-130	-	20

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 04-06 QC Batch ID: WG550205-4 QC Sample: L1212831-01 Client ID: MS Sample									
Aluminum, Total	10000	175	11000	570	Q	-	75-125	-	35
Antimony, Total	4.6	43.9	26	49	Q	-	75-125	-	35
Arsenic, Total	3.5	10.5	13	90		-	75-125	-	35
Barium, Total	35.	175	200	94		-	75-125	-	35
Beryllium, Total	0.45	4.39	4.6	94		-	75-125	-	35
Cadmium, Total	0.39J	4.47	4.4	98		-	75-125	-	35
Calcium, Total	450	877	1300	97		-	75-125	-	35
Chromium, Total	8.1	17.5	26	102		-	75-125	-	35
Cobalt, Total	3.7	43.9	42	87		-	75-125	-	35
Copper, Total	19.	21.9	46	123		-	75-125	-	35
Iron, Total	16000	87.7	17000	1140	Q	-	75-125	-	35
Lead, Total	26.	44.7	62	80		-	75-125	-	35
Magnesium, Total	610	877	1500	101		-	75-125	-	35
Manganese, Total	130	43.9	180	114		-	75-125	-	35
Nickel, Total	8.3	43.9	46	86		-	75-125	-	35
Potassium, Total	420	877	1400	112		-	75-125	-	35
Selenium, Total	ND	10.5	9.1	86		-	75-125	-	35
Silver, Total	ND	26.3	25	95		-	75-125	-	35
Sodium, Total	180	877	1000	93		-	75-125	-	35
Thallium, Total	ND	10.5	8.3	79		-	75-125	-	35
Vanadium, Total	18.	43.9	59	93		-	75-125	-	35

**Matrix Spike Analysis**  
Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212835

Project Number: 170201301

Report Date: 07/26/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 04-06 QC Batch ID: WG550205-4 QC Sample: L1212831-01 Client ID: MS Sample									
Zinc, Total	110	43.9	150	91	-	-	75-125	-	35
Total Metals - Westborough Lab Associated sample(s): 04-06 QC Batch ID: WG550490-4 QC Sample: L1212834-03 Client ID: MS Sample									
Mercury, Total	0.07J	0.192	0.26	136	Q	-	70-130	-	35

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212835

Report Date: 07/26/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 02-03 QC Batch ID: WG549530-3 QC Sample: L1212740-01 Client ID: DUP Sample						
Copper, Total	0.0011	0.0010	mg/l	6		20
Manganese, Total	0.4185	0.4379	mg/l	5		20
Nickel, Total	0.0004J	0.0005J	mg/l	NC		20
Zinc, Total	0.1108	0.1144	mg/l	3		20

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212835

Report Date: 07/26/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 02-03 QC Batch ID: WG549711-3 QC Sample: L1212835-02 Client ID: LB1(MW)					
Aluminum, Dissolved	0.022	0.021	mg/l	1	20
Antimony, Dissolved	0.0029	0.0023	mg/l	25	20
Arsenic, Dissolved	0.0012	0.0013	mg/l	4	20
Barium, Dissolved	0.2028	0.2054	mg/l	1	20
Beryllium, Dissolved	ND	ND	mg/l	NC	20
Cadmium, Dissolved	0.0001J	ND	mg/l	NC	20
Chromium, Dissolved	0.0002J	ND	mg/l	NC	20
Cobalt, Dissolved	0.0019	0.0019	mg/l	3	20
Copper, Dissolved	0.0012	0.0012	mg/l	1	20
Iron, Dissolved	0.570	0.592	mg/l	4	20
Lead, Dissolved	ND	ND	mg/l	NC	20
Magnesium, Dissolved	23.4	23.8	mg/l	2	20
Nickel, Dissolved	0.0074	0.0076	mg/l	2	20
Potassium, Dissolved	22.8	23.2	mg/l	2	20
Selenium, Dissolved	ND	ND	mg/l	NC	20
Silver, Dissolved	ND	ND	mg/l	NC	20
Thallium, Dissolved	0.00004J	ND	mg/l	NC	20
Vanadium, Dissolved	ND	ND	mg/l	NC	20
Zinc, Dissolved	0.0221	0.0213	mg/l	3	20

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212835

Report Date: 07/26/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
<b>Dissolved Metals - Westborough Lab Associated sample(s): 02-03 QC Batch ID: WG549711-3 QC Sample: L1212835-02 Client ID: LB1(MW)</b>					
Calcium, Dissolved	129.	128	mg/l	1	20
Manganese, Dissolved	1.222	1.207	mg/l	1	20
Sodium, Dissolved	136.	134	mg/l	1	20
<b>Total Metals - Westborough Lab Associated sample(s): 02-03 QC Batch ID: WG550045-3 QC Sample: L1212720-01 Client ID: DUP Sample</b>					
Mercury, Total	0.0001J	0.0001J	mg/l	NC	20
<b>Dissolved Metals - Westborough Lab Associated sample(s): 02-03 QC Batch ID: WG550047-3 QC Sample: L1212754-01 Client ID: DUP Sample</b>					
Mercury, Dissolved	ND	ND	mg/l	NC	20

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212835

Report Date: 07/26/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 04-06 QC Batch ID: WG550205-3 QC Sample: L1212831-01 Client ID: DUP Sample					
Aluminum, Total	10000	8600	mg/kg	15	35
Antimony, Total	4.6	6.6	mg/kg	36	Q 35
Arsenic, Total	3.5	4.8	mg/kg	31	35
Barium, Total	35.	36	mg/kg	3	35
Beryllium, Total	0.45	0.38J	mg/kg	NC	35
Cadmium, Total	0.39J	0.34J	mg/kg	NC	35
Calcium, Total	450	430	mg/kg	5	35
Chromium, Total	8.1	12	mg/kg	39	Q 35
Cobalt, Total	3.7	3.9	mg/kg	5	35
Copper, Total	19.	26	mg/kg	31	35
Iron, Total	16000	16000	mg/kg	0	35
Lead, Total	26.	32	mg/kg	21	35
Magnesium, Total	610	860	mg/kg	34	35
Manganese, Total	130	890	mg/kg	149	Q 35
Nickel, Total	8.3	8.3	mg/kg	0	35
Potassium, Total	420	390	mg/kg	7	35
Selenium, Total	ND	ND	mg/kg	NC	35
Silver, Total	ND	ND	mg/kg	NC	35
Sodium, Total	180	460	mg/kg	88	Q 35

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212835

Report Date: 07/26/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 04-06 QC Batch ID: WG550205-3 QC Sample: L1212831-01 Client ID: DUP Sample					
Thallium, Total	ND	ND	mg/kg	NC	35
Vanadium, Total	18.	14	mg/kg	25	35
Zinc, Total	110	120	mg/kg	9	35
Total Metals - Westborough Lab Associated sample(s): 04-06 QC Batch ID: WG550490-3 QC Sample: L1212834-03 Client ID: DUP Sample					
Mercury, Total	0.07J	0.04J	mg/kg	NC	35

# **INORGANICS & MISCELLANEOUS**

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

**Lab ID:** L1212835-04  
**Client ID:** LB5(MW)1-2  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil

**Date Collected:** 07/18/12 10:00  
**Date Received:** 07/18/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89		%	0.10	NA	1	-	07/19/12 19:35	30,2540G	RD



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

**Lab ID:** L1212835-05  
**Client ID:** LB5(MW)10-12  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil

**Date Collected:** 07/18/12 10:30  
**Date Received:** 07/18/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92		%	0.10	NA	1	-	07/19/12 19:35	30,2540G	RD



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**SAMPLE RESULTS**

**Lab ID:** L1212835-06  
**Client ID:** LB5(MW)17-19  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil

**Date Collected:** 07/18/12 11:15  
**Date Received:** 07/18/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86		%	0.10	NA	1	-	07/19/12 19:35	30,2540G	RD



## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212835

Report Date: 07/26/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 04-06 QC Batch ID: WG549641-1 QC Sample: L1212801-01 Client ID: DUP Sample						
Solids, Total	95.	95	%	0		20

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

### Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

#### Cooler Information Custody Seal

##### Cooler

A Absent  
 B Absent

#### Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212835-01A	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1212835-02A	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1212835-02B	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1212835-02C	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1212835-02D	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1212835-02E	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1212835-02F	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8082-1200ML(7)
L1212835-02G	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8082-1200ML(7)
L1212835-02H	Plastic 500ml HNO3 preserved	A	<2	2	Y	Absent	BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),Zn-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1212835-02I	Plastic 500ml unpreserved	A	7	2	Y	Absent	-
L1212835-02X	Plastic 500ml HNO3 preserved spl	A	<2	2	Y	Absent	CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1212835-03A	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)

\*Values in parentheses indicate holding time in days

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212835-03B	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1212835-03C	Vial HCl preserved	A	N/A	2	Y	Absent	NYTCL-8260(14)
L1212835-03D	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1212835-03E	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1212835-03F	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8082-1200ML(7)
L1212835-03G	Amber 1000ml unpreserved	A	7	2	Y	Absent	NYTCL-8082-1200ML(7)
L1212835-03H	Plastic 500ml HNO3 preserved	A	<2	2	Y	Absent	BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1212835-03I	Plastic 500ml unpreserved	A	7	2	Y	Absent	-
L1212835-03X	Plastic 500ml HNO3 preserved spl	A	<2	2	Y	Absent	CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1212835-04A	Vial Large unpreserved	B	N/A	4	Y	Absent	NYTCL-8260(14)
L1212835-04B	Amber 120ml unpreserved	B	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

\*Values in parentheses indicate holding time in days

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212835-04C	Amber 250ml unpreserved	B	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212835-05A	Vial Large unpreserved	B	N/A	4	Y	Absent	NYTCL-8260(14)
L1212835-05B	Amber 120ml unpreserved	B	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212835-05C	Amber 250ml unpreserved	B	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212835-06A	Vial Large unpreserved	B	N/A	4	Y	Absent	NYTCL-8260(14)
L1212835-06B	Amber 120ml unpreserved	B	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

\*Values in parentheses indicate holding time in days



Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212835

Report Date: 07/26/12

**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212835-06C	Amber 250ml unpreserved	B	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

\*Values in parentheses indicate holding time in days

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

## GLOSSARY

### Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

### Data Qualifiers

<b>A</b>	- Spectra identified as "Aldol Condensation Product".
<b>B</b>	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
<b>C</b>	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
<b>D</b>	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
<b>E</b>	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
<b>G</b>	- The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
<b>H</b>	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
<b>I</b>	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
<b>M</b>	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
<b>NJ</b>	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: DU Report with "J" Qualifiers



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

**Data Qualifiers**

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL). This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample.

Report Format: DU Report with "J" Qualifiers

---



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212835  
**Report Date:** 07/26/12

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.





SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

□□□ □a□ □□ir□ □□ar□ □n□□□□n□ir□n□ □na□□□r□i□□□ Certificate/Lab ID: 200307. **NELAP Accredited.**

*Drinking Water* (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6010C, 6020, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9030B, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8081B, 8151A.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 6010B, 6010C, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050, 9065, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, 8151A, 8015B, 8082, 8082A, 8081A, 8081B.)

□□□ □r□□□□□ar□ □n□□□□□n□ir□n□ □na□□r□□□□i□n□ Certificate/Lab ID: MA935. **NELAP Accredited.**

*Drinking Water* (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, 2540G, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ OQA-QAM-025 Rev.7, NJ EPH.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

□□□ □r□ □□ar□ □n□□□□□a□□□ Certificate/Lab ID: 11148. **NELAP Accredited.**

*Drinking Water* (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 624, 8260B, 8270C, 8270D, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012A, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C, 3546, 3580, 3580A, 5030B, 5035.)

Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Certificate/Lab ID : 68-03671. **NELAP Accredited.**  
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 3005A, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**  
Refer to MA-DEP Certificate for Potable and Non-Potable Water.  
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**  
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S<sup>2-</sup> D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Certificate/Lab ID: 460195. **NELAP Accredited.**  
Non-Potable Water (Inorganic Parameters: EPA 3005A,3015,1312,6010B,6010C,SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B, 8015B, 8015C.)

Certificate/Lab ID: L2217.  
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

ing ana ar n in in r r n  
: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. : PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. : Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). : 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix, SO4 in a soil matrix. : Total Petroleum Hydrocarbons, Oil & Grease



# CHAIN OF CUSTODY

PAGE \_\_\_\_ OF \_\_\_\_

WESTBORO, MA  
 TEL: 508-898-9220  
 FAX: 508-898-9193

MANSFIELD, MA  
 TEL: 508-822-9300  
 FAX: 508-822-3288

### Client Information

Client: Langdon Engineering  
 Address: 200 W 31st St 8th Fl  
NY NY 10001  
 Phone: 212 479 5400  
 Fax: \_\_\_\_\_

Email: jahayes@langdon.com

These samples have been previously analyzed by Alpha

Other Project Specific Requirements/Comments/Detection Limits:

### Project Information

Project Name: Riverside Parcel 2  
 Project Location: 1729 West End Ave  
 Project #: 170201201  
 Project Manager: Jason Hayes  
 ALPHA Quote #: \_\_\_\_\_

### Turn-Around Time

Standard  RUSH (only confirmed if pre-approved)  
 Date Due: 7/25/12 Time: \_\_\_\_\_

Date Rec'd in Lab: 7/18/12

7/18/12

ALPHA Job #: 4220834

### Report Information - Data Deliverables

FAX  EMAIL  
 ADEX  Add'l Deliverables

### Billing Information

Same as Client info PO #: \_\_\_\_\_

### Regulatory Requirements/Report Limits

State / Fed Program Criteria

ANALYSIS  
 TCL VOC  
 TAL metals Dissolved  
 TCL SVOC  
 PCB  
 TAL metals Total

### SAMPLE HANDLING

Filtration \_\_\_\_\_  
 Done  
 Not needed  
 Lab to do  
 Preservation  
 Lab to do  
 (Please specify below)

### Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
12835	1 Trip Blank #1	7/18	1515	GW CM	X
	2 LB1 (MW)				X
	2 LB1 (MW)				X
	2 LB1 (MW)				X
	2 LB1 (MW)				X
	2 LB1 (MW)				X
	3 DUP #1	7/18		GW CM	X
	3 DUP #1	7/18		GW CM	X
	3 DUP #1	7/18		GW CM	X

Container Type	Preservative
N	B
P	
A	
A	
P	
C	

Relinquished By: \_\_\_\_\_

Date/Time: 7/18/12 14:30

Received By: \_\_\_\_\_

Date/Time: 7/18/12 16:00

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.



# CHAIN OF CUSTODY

PAGE \_\_\_\_ OF \_\_\_\_

WESTBORO, MA  
TEL: 508-898-9220  
FAX: 508-898-9193

MANSFIELD, MA  
TEL: 508-822-9300  
FAX: 508-822-3288

### Client Information

Client: Lanigan Engineering  
Address: 17-29 Westfield Ave  
WV, WV 10038  
Phone: 212-479-5406  
Fax: \_\_\_\_\_

Email: jahaugs@lanigan.com  
Date Due: 7/25/12 Time: \_\_\_\_\_  
 These samples have been previously analyzed by Alpha  
Other Project Specific Requirements/Comments/Detection Limits: \_\_\_\_\_

### Project Information

Project Name: Riverside Parcel 2  
Project Location: 17-29 Westfield Ave  
Project #: 170201301  
Project Manager: Joson Haugs  
ALPHA Quote #: \_\_\_\_\_

### Billing Information

PO #: \_\_\_\_\_  
 Same as Client Info

### Report Information - Data Deliverables

FAX  EMAIL  
 ADEX  Add'l Deliverables

### Regulatory Requirements/Report Limits

State / Fed Program \_\_\_\_\_ Criteria \_\_\_\_\_

### Turn-Around Time

ASAP  
 RUSH (only confirmed if pre-approved)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials
--------------------------------	-----------	-----------------	-----------------	---------------	--------------------

<del>12834</del>	<del>LB5 (MM) 1-2</del>	<del>7/18</del>	<del>1000</del>	<del>S</del>	<del>CM</del>
<del>12835</del>	<del>LB5 (MM) 1-2</del>		<del>1000</del>		
<del>4</del>	<del>LB5 (MM) 1-2</del>		<del>1000</del>		
<del>5-2</del>	<del>LB5 (MM) 10-12</del>		<del>1030</del>		
<del>5-7</del>	<del>LB5 (MM) 10-12</del>		<del>1030</del>		
<del>5</del>	<del>LB5 (MM) 10-12</del>		<del>1030</del>		
<del>6-3</del>	<del>LB5 (MM) 17-19</del>		<del>1115</del>		
<del>6-3</del>	<del>LB5 (MM) 17-19</del>		<del>1115</del>		
<del>6-3</del>	<del>LB5 (MM) 17-19</del>		<del>1115</del>		
<del>3-4</del>	<del>DOP #1</del>	<del>7/18</del>			

ANALYSIS	DATE	TIME	INITIALS	COMMENTS
TCL SVOC, Pest Heib, PCB				
TAL metals				
TCL VOC				
TAL metals Total gw				

**SAMPLE HANDLING**

Filtration \_\_\_\_\_  
 Done  
 Not needed  
 Lab to do  
 Preservation  
 Lab to do

(Please specify below)  
 Sample Specific Comments \_\_\_\_\_

Container Type GS  
 Preservative \_\_\_\_\_

Relinquished By: \_\_\_\_\_

Date/Time: 7/18/12 16:00

Received By: \_\_\_\_\_

Date/Time: 7/18/12 16:20

S Weick

7/18/12 330

S Weick

7/18/12 2320

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.



## ANALYTICAL REPORT

Lab Number:	L1212732
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Jason Hayes
Phone:	(212) 479-5427
Project Name:	RIVERSIDE PARCEL 2
Project Number:	Not Specified
Report Date:	07/31/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

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320 Forbes Boulevard, Mansfield, MA 02048-1806  
508-822-9300 (Fax) 508-822-3288 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212732  
**Report Date:** 07/31/12

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1212732-01	SG-1	17-29 WEST END AVE	07/17/12 16:01
L1212732-02	SG-2	17-29 WEST END AVE	07/17/12 15:04

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212732  
**Report Date:** 07/31/12

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212732  
**Report Date:** 07/31/12

### Case Narrative (continued)

#### REISSUE

##### Report Submission

This report replaces the report issued July 24, 2012. The report is being re-issued to report the routine TO-15 list instead of the shorter list originally reported.

##### Volatile Organics in Air

Canisters were released from the laboratory on July 12, 2012. The canister certification results are provided as an addendum.

L1212732-01 The RPD of the pre- and post-flow controller calibration check (24% RPD) was outside acceptable limits (20% RPD). The initial flow rate for the flow controller was 33 mL/minute; the final flow rate was 26 mL/minute. The final pressure recorded by the laboratory of the associated canister was -10.9 inches of mercury.

L1212732-01 and -02 have elevated detection limits due to the dilutions required by the elevated concentrations of target compounds in the samples.

L1212732-01 and -02 were diluted and re-analyzed to quantitate the samples within the calibration range. The results should be considered estimated, and are qualified with an E flag, for any compound that exceeded the calibration on the initial analysis. The re-analysis was performed only for the compound that exceeded the calibration range.

WG549580-5: The relative percent difference for 1,2-Dichloroethane (26%) is above the RPD limit of 25%. This compound represented less than 10% of the compounds detected, therefore no further action was taken.

##### Method 3C; Methane

L1212732-01 and -02: Prior to sample analysis, the canisters were pressurized with UHP Nitrogen in order to facilitate the transfer of sample to the Gas Chromatograph. The addition of Nitrogen resulted in a dilution of the

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212732  
**Report Date:** 07/31/12

**Case Narrative (continued)**

samples. The reporting limits have been elevated accordingly.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Christopher J. Anderson

Title: Technical Director/Representative

Date: 07/31/12

**AIR**

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212732**Project Number:** Not Specified**Report Date:** 07/31/12**SAMPLE RESULTS**

Lab ID: L1212732-01 D  
 Client ID: SG-1  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 07/20/12 02:44  
 Analyst: MB

Date Collected: 07/17/12 16:01  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Propylene	5.69	5.00	--	9.79	8.60	--		10
Dichlorodifluoromethane	ND	2.00	--	ND	9.89	--		10
Chloromethane	ND	2.00	--	ND	4.13	--		10
Freon-114	ND	2.00	--	ND	14.0	--		10
Vinyl chloride	ND	2.00	--	ND	5.11	--		10
1,3-Butadiene	ND	2.00	--	ND	4.42	--		10
Bromomethane	ND	2.00	--	ND	7.77	--		10
Chloroethane	ND	2.00	--	ND	5.28	--		10
Ethanol	ND	25.0	--	ND	47.1	--		10
Vinyl bromide	ND	2.00	--	ND	8.74	--		10
Acetone	1310	10.0	--	3110	23.8	--	E	10
Trichlorofluoromethane	ND	2.00	--	ND	11.2	--		10
Isopropanol	13.3	5.00	--	32.7	12.3	--		10
1,1-Dichloroethene	ND	2.00	--	ND	7.93	--		10
Methylene chloride	ND	10.0	--	ND	34.7	--		10
3-Chloropropene	ND	2.00	--	ND	6.26	--		10
Carbon disulfide	7.62	2.00	--	23.7	6.23	--		10
Freon-113	ND	2.00	--	ND	15.3	--		10
trans-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
1,1-Dichloroethane	ND	2.00	--	ND	8.09	--		10
Methyl tert butyl ether	ND	2.00	--	ND	7.21	--		10
Vinyl acetate	ND	2.00	--	ND	7.04	--		10
2-Butanone	15.4	2.00	--	45.4	5.90	--		10
cis-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212732  
**Report Date:** 07/31/12

### SAMPLE RESULTS

Lab ID: L1212732-01 D  
 Client ID: SG-1  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/17/12 16:01  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	5.00	--	ND	18.0	--		10
Chloroform	ND	2.00	--	ND	9.77	--		10
Tetrahydrofuran	ND	2.00	--	ND	5.90	--		10
1,2-Dichloroethane	ND	2.00	--	ND	8.09	--		10
n-Hexane	ND	2.00	--	ND	7.05	--		10
1,1,1-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Benzene	ND	2.00	--	ND	6.39	--		10
Carbon tetrachloride	ND	2.00	--	ND	12.6	--		10
Cyclohexane	ND	2.00	--	ND	6.88	--		10
1,2-Dichloropropane	ND	2.00	--	ND	9.24	--		10
Bromodichloromethane	ND	2.00	--	ND	13.4	--		10
1,4-Dioxane	ND	2.00	--	ND	7.21	--		10
Trichloroethene	ND	2.00	--	ND	10.7	--		10
2,2,4-Trimethylpentane	ND	2.00	--	ND	9.34	--		10
Heptane	ND	2.00	--	ND	8.20	--		10
cis-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
4-Methyl-2-pentanone	ND	2.00	--	ND	8.20	--		10
trans-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
1,1,2-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Toluene	10.6	2.00	--	39.9	7.54	--		10
2-Hexanone	3.34	2.00	--	13.7	8.20	--		10
Dibromochloromethane	ND	2.00	--	ND	17.0	--		10
1,2-Dibromoethane	ND	2.00	--	ND	15.4	--		10
Tetrachloroethene	4.12	2.00	--	27.9	13.6	--		10
Chlorobenzene	ND	2.00	--	ND	9.21	--		10
Ethylbenzene	ND	2.00	--	ND	8.69	--		10
p/m-Xylene	6.69	4.00	--	29.0	17.4	--		10
Bromoform	ND	2.00	--	ND	20.7	--		10



**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212732**Project Number:** Not Specified**Report Date:** 07/31/12**SAMPLE RESULTS**

Lab ID: L1212732-01 D  
 Client ID: SG-1  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/17/12 16:01  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Styrene	ND	2.00	--	ND	8.52	--		10
1,1,2,2-Tetrachloroethane	ND	2.00	--	ND	13.7	--		10
o-Xylene	2.45	2.00	--	10.6	8.69	--		10
4-Ethyltoluene	ND	2.00	--	ND	9.83	--		10
1,3,5-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
1,2,4-Trimethylbenzene	3.80	2.00	--	18.7	9.83	--		10
Benzyl chloride	ND	2.00	--	ND	10.4	--		10
1,3-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,4-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2,4-Trichlorobenzene	ND	2.00	--	ND	14.8	--		10
Hexachlorobutadiene	ND	2.00	--	ND	21.3	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	96		60-140



**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212732**Project Number:** Not Specified**Report Date:** 07/31/12**SAMPLE RESULTS**

Lab ID: L1212732-01 D2  
 Client ID: SG-1  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 07/20/12 10:15  
 Analyst: MB

Date Collected: 07/17/12 16:01  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Acetone	1270	21.6	--	3020	51.3	--		21.61

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	87		60-140



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212732  
**Report Date:** 07/31/12

### SAMPLE RESULTS

Lab ID: L1212732-02 D  
 Client ID: SG-2  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 07/20/12 03:18  
 Analyst: MB

Date Collected: 07/17/12 15:04  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Propylene	63.5	5.00	--	109	8.60	--		10
Dichlorodifluoromethane	ND	2.00	--	ND	9.89	--		10
Chloromethane	ND	2.00	--	ND	4.13	--		10
Freon-114	ND	2.00	--	ND	14.0	--		10
Vinyl chloride	ND	2.00	--	ND	5.11	--		10
1,3-Butadiene	3.37	2.00	--	7.46	4.42	--		10
Bromomethane	ND	2.00	--	ND	7.77	--		10
Chloroethane	ND	2.00	--	ND	5.28	--		10
Ethanol	26.5	25.0	--	49.9	47.1	--		10
Vinyl bromide	ND	2.00	--	ND	8.74	--		10
Acetone	1180	10.0	--	2800	23.8	--	E	10
Trichlorofluoromethane	ND	2.00	--	ND	11.2	--		10
Isopropanol	ND	5.00	--	ND	12.3	--		10
1,1-Dichloroethene	ND	2.00	--	ND	7.93	--		10
Methylene chloride	ND	10.0	--	ND	34.7	--		10
3-Chloropropene	ND	2.00	--	ND	6.26	--		10
Carbon disulfide	24.2	2.00	--	75.4	6.23	--		10
Freon-113	ND	2.00	--	ND	15.3	--		10
trans-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
1,1-Dichloroethane	ND	2.00	--	ND	8.09	--		10
Methyl tert butyl ether	ND	2.00	--	ND	7.21	--		10
Vinyl acetate	ND	2.00	--	ND	7.04	--		10
2-Butanone	13.0	2.00	--	38.3	5.90	--		10
cis-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10



**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212732**Project Number:** Not Specified**Report Date:** 07/31/12**SAMPLE RESULTS**

Lab ID: L1212732-02 D  
 Client ID: SG-2  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/17/12 15:04  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethyl Acetate	ND	5.00	--	ND	18.0	--		10
Chloroform	ND	2.00	--	ND	9.77	--		10
Tetrahydrofuran	ND	2.00	--	ND	5.90	--		10
1,2-Dichloroethane	ND	2.00	--	ND	8.09	--		10
n-Hexane	4.03	2.00	--	14.2	7.05	--		10
1,1,1-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Benzene	2.19	2.00	--	7.00	6.39	--		10
Carbon tetrachloride	ND	2.00	--	ND	12.6	--		10
Cyclohexane	6.27	2.00	--	21.6	6.88	--		10
1,2-Dichloropropane	ND	2.00	--	ND	9.24	--		10
Bromodichloromethane	ND	2.00	--	ND	13.4	--		10
1,4-Dioxane	ND	2.00	--	ND	7.21	--		10
Trichloroethene	ND	2.00	--	ND	10.7	--		10
2,2,4-Trimethylpentane	ND	2.00	--	ND	9.34	--		10
Heptane	2.09	2.00	--	8.56	8.20	--		10
cis-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
4-Methyl-2-pentanone	ND	2.00	--	ND	8.20	--		10
trans-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
1,1,2-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Toluene	11.4	2.00	--	43.0	7.54	--		10
2-Hexanone	2.83	2.00	--	11.6	8.20	--		10
Dibromochloromethane	ND	2.00	--	ND	17.0	--		10
1,2-Dibromoethane	ND	2.00	--	ND	15.4	--		10
Tetrachloroethene	3.16	2.00	--	21.4	13.6	--		10
Chlorobenzene	ND	2.00	--	ND	9.21	--		10
Ethylbenzene	ND	2.00	--	ND	8.69	--		10
p/m-Xylene	6.78	4.00	--	29.4	17.4	--		10
Bromoform	ND	2.00	--	ND	20.7	--		10



**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212732**Project Number:** Not Specified**Report Date:** 07/31/12**SAMPLE RESULTS**

Lab ID: L1212732-02 D  
 Client ID: SG-2  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/17/12 15:04  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Styrene	ND	2.00	--	ND	8.52	--		10
1,1,2,2-Tetrachloroethane	ND	2.00	--	ND	13.7	--		10
o-Xylene	2.46	2.00	--	10.7	8.69	--		10
4-Ethyltoluene	ND	2.00	--	ND	9.83	--		10
1,3,5-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
1,2,4-Trimethylbenzene	3.94	2.00	--	19.4	9.83	--		10
Benzyl chloride	ND	2.00	--	ND	10.4	--		10
1,3-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,4-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2,4-Trichlorobenzene	ND	2.00	--	ND	14.8	--		10
Hexachlorobutadiene	ND	2.00	--	ND	21.3	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	97		60-140



**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212732**Project Number:** Not Specified**Report Date:** 07/31/12**SAMPLE RESULTS**

Lab ID: L1212732-02 D2  
 Client ID: SG-2  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil\_Vapor  
 Analytical Method: 48,TO-15  
 Analytical Date: 07/20/12 10:50  
 Analyst: MB

Date Collected: 07/17/12 15:04  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Acetone	911	18.4	--	2160	43.7	--		18.45

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	96		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	96		60-140



Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212732

Project Number: Not Specified

Report Date: 07/31/12

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/19/12 14:14

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG549580-4								
Propylene	ND	0.500	--	ND	0.860	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.200	--	ND	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212732

Project Number: Not Specified

Report Date: 07/31/12

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/19/12 14:14

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG549580-4								
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212732

Project Number: Not Specified

Report Date: 07/31/12

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15

Analytical Date: 07/19/12 14:14

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab for sample(s): 01-02 Batch: WG549580-4								
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212732

Project Number: Not Specified

Report Date: 07/31/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG549580-3								
Propylene	94		-		70-130	-		
Dichlorodifluoromethane	90		-		70-130	-		
Chloromethane	93		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	88		-		70-130	-		
Vinyl chloride	87		-		70-130	-		
1,3-Butadiene	94		-		70-130	-		
Bromomethane	82		-		70-130	-		
Chloroethane	83		-		70-130	-		
Ethyl Alcohol	87		-		70-130	-		
Vinyl bromide	82		-		70-130	-		
Acetone	92		-		70-130	-		
Trichlorofluoromethane	89		-		70-130	-		
iso-Propyl Alcohol	103		-		70-130	-		
1,1-Dichloroethene	84		-		70-130	-		
Methylene chloride	78		-		70-130	-		
3-Chloropropene	87		-		70-130	-		
Carbon disulfide	91		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	82		-		70-130	-		
trans-1,2-Dichloroethene	75		-		70-130	-		
1,1-Dichloroethane	79		-		70-130	-		
Methyl tert butyl ether	81		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212732

Project Number: Not Specified

Report Date: 07/31/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG549580-3								
Vinyl acetate	94		-		70-130	-		
2-Butanone	92		-		70-130	-		
cis-1,2-Dichloroethene	88		-		70-130	-		
Ethyl Acetate	95		-		70-130	-		
Chloroform	79		-		70-130	-		
Tetrahydrofuran	82		-		70-130	-		
1,2-Dichloroethane	81		-		70-130	-		
n-Hexane	97		-		70-130	-		
1,1,1-Trichloroethane	98		-		70-130	-		
Benzene	84		-		70-130	-		
Carbon tetrachloride	103		-		70-130	-		
Cyclohexane	99		-		70-130	-		
1,2-Dichloropropane	92		-		70-130	-		
Bromodichloromethane	96		-		70-130	-		
1,4-Dioxane	100		-		70-130	-		
Trichloroethene	92		-		70-130	-		
2,2,4-Trimethylpentane	95		-		70-130	-		
Heptane	99		-		70-130	-		
cis-1,3-Dichloropropene	97		-		70-130	-		
4-Methyl-2-pentanone	120		-		70-130	-		
trans-1,3-Dichloropropene	89		-		70-130	-		

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Lab Number:** L1212732

**Project Number:** Not Specified

**Report Date:** 07/31/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG549580-3								
1,1,2-Trichloroethane	96		-		70-130	-		
Toluene	79		-		70-130	-		
2-Hexanone	121		-		70-130	-		
Dibromochloromethane	102		-		70-130	-		
1,2-Dibromoethane	91		-		70-130	-		
Tetrachloroethene	86		-		70-130	-		
Chlorobenzene	86		-		70-130	-		
Ethylbenzene	85		-		70-130	-		
p/m-Xylene	85		-		70-130	-		
Bromoform	94		-		70-130	-		
Styrene	91		-		70-130	-		
1,1,2,2-Tetrachloroethane	101		-		70-130	-		
o-Xylene	83		-		70-130	-		
4-Ethyltoluene	84		-		70-130	-		
1,3,5-Trimethylbenzene	90		-		70-130	-		
1,2,4-Trimethylbenzene	99		-		70-130	-		
Benzyl chloride	116		-		70-130	-		
1,3-Dichlorobenzene	99		-		70-130	-		
1,4-Dichlorobenzene	97		-		70-130	-		
1,2-Dichlorobenzene	102		-		70-130	-		
1,2,4-Trichlorobenzene	120		-		70-130	-		

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Lab Number:** L1212732

**Project Number:** Not Specified

**Report Date:** 07/31/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 Batch: WG549580-3								
Hexachlorobutadiene	112		-		70-130	-		

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: Not Specified

Lab Number: L1212732

Report Date: 07/31/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG549580-5 QC Sample: L1212839-02 Client ID: DUP Sample						
Propylene	ND	ND	ppbV	NC		25
Dichlorodifluoromethane	0.519	0.476	ppbV	9		25
Chloromethane	0.636	0.612	ppbV	4		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	26.7	22.9	ppbV	15		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	17.2	15.1	ppbV	13		25
Trichlorofluoromethane	0.262	0.247	ppbV	6		25
iso-Propyl Alcohol	3.32	2.84	ppbV	16		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: Not Specified

Lab Number: L1212732

Report Date: 07/31/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG549580-5 QC Sample: L1212839-02 Client ID: DUP Sample					
Vinyl acetate	ND	ND	ppbV	NC	25
2-Butanone	0.997	0.830	ppbV	18	25
Ethyl Acetate	ND	ND	ppbV	NC	25
Chloroform	0.339	0.309	ppbV	9	25
Tetrahydrofuran	ND	ND	ppbV	NC	25
1,2-Dichloroethane	0.300	0.230	ppbV	26	25
n-Hexane	0.576	0.522	ppbV	10	25
Benzene	0.239	0.236	ppbV	1	25
Cyclohexane	0.331	0.285	ppbV	15	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
Bromodichloromethane	ND	ND	ppbV	NC	25
1,4-Dioxane	ND	ND	ppbV	NC	25
2,2,4-Trimethylpentane	0.310	0.251	ppbV	21	25
Heptane	0.335	0.290	ppbV	14	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
4-Methyl-2-pentanone	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	2.23	1.92	ppbV	15	25

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: Not Specified

Lab Number: L1212732

Report Date: 07/31/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG549580-5 QC Sample: L1212839-02 Client ID: DUP Sample					
2-Hexanone	ND	ND	ppbV	NC	25
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	0.221	0.206	ppbV	7	25
p/m-Xylene	0.733	0.626	ppbV	16	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	0.277	0.249	ppbV	11	25
4-Ethyltoluene	ND	ND	ppbV	NC	25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC	25
1,2,4-Trimethylbenzene	0.369	0.309	ppbV	18	25
Benzyl chloride	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	0.277	0.240	ppbV	14	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212732**Project Number:** Not Specified**Report Date:** 07/31/12**SAMPLE RESULTS**

**Lab ID:** L1212732-01 D  
**Client ID:** SG-1  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Soil\_Vapor  
**Analytical Method:** 51,3C  
**Analytical Date:** 07/21/12 10:20  
**Analyst:** RY

**Date Collected:** 07/17/12 16:01  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified  
**Extraction Method:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Fixed Gases by GC - Mansfield Lab						
Methane	ND		%	0.216	--	2.161

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212732**Project Number:** Not Specified**Report Date:** 07/31/12**SAMPLE RESULTS**

**Lab ID:** L1212732-02 D  
**Client ID:** SG-2  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Soil\_Vapor  
**Analytical Method:** 51,3C  
**Analytical Date:** 07/21/12 10:54  
**Analyst:** RY

**Date Collected:** 07/17/12 15:04  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified  
**Extraction Method:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Fixed Gases by GC - Mansfield Lab						
Methane	ND		%	0.184	--	1.845

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212732  
**Report Date:** 07/31/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 51,3C  
Analytical Date: 07/21/12 09:52  
Analyst: RY

<b>Parameter</b>	<b>Result</b>	<b>Qualifier</b>	<b>Units</b>	<b>RL</b>	<b>MDL</b>
Fixed Gases by GC - Mansfield Lab for sample(s): 01-02 Batch: WG549969-2					
Methane	ND		%	0.100	--

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Lab Number:** L1212732

**Project Number:** Not Specified

**Report Date:** 07/31/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Fixed Gases by GC - Mansfield Lab Associated sample(s): 01-02 Batch: WG549969-1								
Methane	106		-		80-120	-		

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: Not Specified

Lab Number: L1212732

Report Date: 07/31/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Fixed Gases by GC - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG549969-3 QC Sample: L1212732-01 Client ID: SG-1						
Methane	ND	ND	%	NC		5
Fixed Gases by GC - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG549969-4 QC Sample: L1212732-02 Client ID: SG-2						
Methane	ND	ND	%	NC		5
Fixed Gases by GC - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG549969-5 QC Sample: L1212733-01 Client ID: DUP Sample						
Methane	ND	ND	%	NC		5
Fixed Gases by GC - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG549969-6 QC Sample: L1212844-01 Client ID: DUP Sample						
Methane	ND	ND	%	NC		5

Project Name: RIVERSIDE PARCEL 2

Serial\_No:07311213:12  
Lab Number: L1212732

Project Number:

Report Date: 07/31/12

### Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1212732-01	SG-1	0036	#30 SV	07/12/12	79303		-	-	-	Pass	33	26	24
L1212732-01	SG-1	379	2.7L Can	07/12/12	79303	L1211626-01	Pass	-29.2	-10.9	-	-	-	-
L1212732-02	SG-2	0360	#30 SV	07/12/12	79303		-	-	-	Pass	36	41	13
L1212732-02	SG-2	410	2.7L Can	07/12/12	79303	L1211626-01	Pass	-29.3	-7.4	-	-	-	-

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L1211626  
**Report Date:** 07/31/12

### Air Canister Certification Results

Lab ID: L1211626-01  
 Client ID: CAN 153 SHELF 9  
 Sample Location:  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 07/03/12 18:56  
 Analyst: MB

Date Collected: 06/28/12 14:41  
 Date Received: 06/29/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.860	--		1
Propane	ND	0.200	--	ND	0.361	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.200	--	ND	0.434	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L1211626  
**Report Date:** 07/31/12

### Air Canister Certification Results

Lab ID: L1211626-01  
 Client ID: CAN 153 SHELF 9  
 Sample Location:

Date Collected: 06/28/12 14:41  
 Date Received: 06/29/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	0.200	--	ND	0.704	--		1
2-Butanone	ND	0.200	--	ND	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L1211626  
**Report Date:** 07/31/12

### Air Canister Certification Results

Lab ID: L1211626-01  
 Client ID: CAN 153 SHELF 9  
 Sample Location:

Date Collected: 06/28/12 14:41  
 Date Received: 06/29/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.20	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L1211626  
**Report Date:** 07/31/12

### Air Canister Certification Results

Lab ID: L1211626-01  
 Client ID: CAN 153 SHELF 9  
 Sample Location:

Date Collected: 06/28/12 14:41  
 Date Received: 06/29/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds



**Project Name:** BATCH CANISTER CERTIFICATION**Lab Number:** L1211626**Project Number:** CANISTER QC BAT**Report Date:** 07/31/12**Air Canister Certification Results**

Lab ID: L1211626-01

Date Collected: 06/28/12 14:41

Client ID: CAN 153 SHELF 9

Date Received: 06/29/12

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	92		60-140
chlorobenzene-d5	93		60-140

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L1211626  
**Report Date:** 07/31/12

### Air Canister Certification Results

Lab ID: L1211626-01  
 Client ID: CAN 153 SHELF 9  
 Sample Location:  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 06/29/12 20:55  
 Analyst: RY

Date Collected: 06/28/12 14:41  
 Date Received: 06/29/12  
 Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.050	--	ND	0.247	--		1
Chloromethane	ND	0.500	--	ND	1.03	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	ND	2.00	--	ND	4.75	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.08	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1211626

Project Number: CANISTER QC BAT

Report Date: 07/31/12

## Air Canister Certification Results

Lab ID: L1211626-01

Date Collected: 06/28/12 14:41

Client ID: CAN 153 SHELF 9

Date Received: 06/29/12

Sample Location:

Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Trichloroethene	ND	0.020	--	ND	0.107	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.020	--	ND	0.092	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.500	--	ND	2.46	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.500	--	ND	2.74	--		1
p-Isopropyltoluene	ND	0.500	--	ND	2.74	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.500	--	ND	2.74	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1

**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

**Lab Number:** L1211626  
**Report Date:** 07/31/12

### Air Canister Certification Results

Lab ID: L1211626-01 Date Collected: 06/28/12 14:41  
 Client ID: CAN 153 SHELF 9 Date Received: 06/29/12  
 Sample Location: Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	83		60-140
bromochloromethane	106		60-140
chlorobenzene-d5	87		60-140

# **AIR Petro Can Certification**

**Project Name:** BATCH CANISTER CERTIFICATION**Lab Number:** L1211626**Project Number:** CANISTER QC BAT**Report Date:** 07/31/12**AIR CAN CERTIFICATION RESULTS**

**Lab ID:** L1211626-01  
**Client ID:** CAN 153 SHELF 9  
**Sample Location:** Not Specified  
**Matrix:** Air  
**Analytical Method:** 96,APH  
**Analytical Date:** 06/29/12 20:55  
**Analyst:** RY

**Date Collected:** 06/28/12 14:41  
**Date Received:** 06/29/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Petroleum Hydrocarbons in Air - Mansfield Lab</b>						
1,3-Butadiene	ND		ug/m3	2.0	--	1
Methyl tert butyl ether	ND		ug/m3	2.0	--	1
Benzene	ND		ug/m3	2.0	--	1
Toluene	ND		ug/m3	2.0	--	1
C5-C8 Aliphatics, Adjusted	ND		ug/m3	12	--	1
Ethylbenzene	ND		ug/m3	2.0	--	1
p/m-Xylene	ND		ug/m3	4.0	--	1
o-Xylene	ND		ug/m3	2.0	--	1
Naphthalene	ND		ug/m3	2.0	--	1
C9-C12 Aliphatics, Adjusted	ND		ug/m3	14	--	1
C9-C10 Aromatics Total	ND		ug/m3	10	--	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212732**Project Number:** Not Specified**Report Date:** 07/31/12**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

**Cooler Information Custody Seal****Cooler**

N/A Absent

**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212732-01A	Canister - 2.7 Liter	N/A	N/A		Y	Absent	FIXGAS(30),TO15-LL(30)
L1212732-02A	Canister - 2.7 Liter	N/A	N/A		Y	Absent	FIXGAS(30),TO15-LL(30)

\*Values in parentheses indicate holding time in days

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212732  
**Report Date:** 07/31/12

## GLOSSARY

### Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

### Data Qualifiers

<b>A</b>	- Spectra identified as "Aldol Condensation Product".
<b>B</b>	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
<b>C</b>	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
<b>D</b>	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
<b>E</b>	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
<b>G</b>	- The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
<b>H</b>	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
<b>I</b>	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
<b>M</b>	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
<b>NJ</b>	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: Data Usability Report



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212732  
**Report Date:** 07/31/12

**Data Qualifiers**

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** Not Specified

**Lab Number:** L1212732  
**Report Date:** 07/31/12

## REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.
- 51 Determination of Carbon Dioxide, Methane, Nitrogen and Oxygen from Stationary Sources. Method 3C. Appendix A, Part 60, 40 CFR (Code of Federal Regulations). June 20, 1996.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Ohio Environmental Protection Agency  
 Last revised May 10, 2012 – Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Ohio Environmental Protection Agency Certificate/Lab ID: PH-0141.

*Wastewater/Non-Potable Water* (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable). Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

*Solid Waste/Soil* (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Titanium, Vanadium, Zinc, Total Organic Carbon, Corrosivity, TCLP 1311, SPLP 1312. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

Ohio Environmental Protection Agency Certificate/Lab ID: E87814. **NELAP Accredited.**

*Non-Potable Water* (Inorganic Parameters: SM2320B, SM2540D, SM2540G.)

*Solid & Chemical Materials* (Inorganic Parameters: 6020, 7470, 7471, 9045. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

*Air & Emissions* (EPA TO-15.)

Ohio Environmental Protection Agency Certificate/Lab ID: 03090. **NELAP Accredited.**

*Non-Potable Water* (Inorganic Parameters: EPA 180.1, 245.7, 1631E, 3020A, 6020A, 7470A, 9040, 9050A, SM2320B, 2540D, 2540G, 4500H-B, Organic Parameters: EPA 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 5030B, 8015D, 3570, 8081B, 8082A, 8260B, 8270C, 8270D.)

*Solid & Chemical Materials* (Inorganic Parameters: EPA 1311, 3050B, 3051A, 3060A, 6020A, 7196A, 7470A, 7471B, 7474, 9040B, 9045C, 9060. Organic Parameters: EPA 3540C, 3570, 3580A, 3630C, 3640A, 3660, 3665A, 5035, 8015D, 8081B, 8082A, 8260B, 8270C, 8270D.)

*Biological Tissue* (Inorganic Parameters: EPA 6020A. Organic Parameters: EPA 3570, 3510C, 3610B, 3630C, 3640A, 8270C, 8270D.)

*Air & Emissions* (EPA TO-15.)

Ohio Environmental Protection Agency Certificate/Lab ID: 2206. **NELAP Accredited.**

*Non-Potable Water* (Inorganic Parameters: EPA 180.1, 1631E, 6020A, 7470A, 9040B, 9050A, SM2540D, 2540G, 4500H+B, 2320B. Organic Parameters: EPA 8081B, 8082A, 8270C, 8270D, 8015D.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 1311, 3050B, 3051A, 3060A, 6020A, 7470A, 7471B, 9040B, 9045C, 7196A. Organic Parameters: SW-846 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 8270C, 8015D, 8082A, 8081B.)

Ohio Environmental Protection Agency Certificate/Lab ID: MA015. **NELAP Accredited.**

*Non-Potable Water* (Inorganic Parameters: SW-846 1312, 3020A, SM2320B, SM2540D, 2540G, 4500H-B, EPA 180.1, 1631E, SW-846 7470A, 9040B, 9040C, 6020A, 9050A. Organic Parameters: SW-846 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 8015D, 8081B, 8082A, 8270C, 8270D)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 1311, 1312, 3050B, 3051A, 6020A, 7471B, 7474, 9040B, 9040C, 9045C, 9060. Organic Parameters: SW-846 3540C, 3570, 3580A, 3630C, 3640A, 3660B, 3665A, 8081B, 8082A, 8270C, 8270D, 8015D.)





# AIR ANALYSIS

CHAIN OF CUSTODY

PAGE \_\_\_\_\_ OF \_\_\_\_\_

320 Forbes Blvd, Mansfield, MA 02048  
 TEL: 508-822-9300 FAX: 508-822-3288

**Client Information**

Client: Langan Engineering  
 Address: 360 W 31st St  
NY NY 10001  
 Phone: 212 479 5400  
 Fax:  
 Email: jhayes@langan.com

**Project Information**

Project Name: Riverside Parcel 2  
 Project Location: 17-29 West End Ave  
 Project #: 170701301  
 Project Manager: Jason Hayes  
 ALPHA Quote #:

**Turn-Around Time**

Standard 5 day  RUSH (only confirmed if pre-approved!)

Date Due: \_\_\_\_\_ Time: \_\_\_\_\_

Date Rec'd in Lab:

**Report Information - Data Deliverables**

FAX  
 ADEX  
 Criteria Checker: \_\_\_\_\_  
 (Default based on Regulatory Criteria Indicated)  
 Other Formats: \_\_\_\_\_  
 EMAIL (standard pdf report)  
 Additional Deliverables:  
 Report to: (if different than Project Manager)

ALPHA Job #: L1212732

**Billing Information**

Same as Client info PO #:

**Regulatory Requirements/Report Limits**

State/Fed	Program	Criteria

Other Project Specific Requirements/Comments:

**All Columns Below Must Be Filled Out**

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection						Sample Matrix*	Sampler's Initials	Can Size	I D Can	I D - Flow Controller	ANALYSIS						Sample Comments (i.e. PID)	
		Date	Start Time	End Time	Initial Vacuum	Final Vacuum	TO-14A by TO-15						TO-15 CH <sub>2</sub> 2	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4/TO-10		
<u>L1212732-01</u>	<del>AA</del> <u>SG-1</u>	<u>7/17</u>	<u>1448</u>	<u>1601</u>	<u>28.01</u>	<u>9.77</u>	<u>SV</u>	<u>cm</u>	<u>2.7</u>	<u>379</u>	<u>0036</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>							
<u>-02</u>	<u>SG-2</u>	<u>7/17</u>	<u>1404</u>	<u>1504</u>	<u>29.9</u>	<u>6.25</u>	<u>SV</u>	<u>cm</u>	<u>2.7</u>	<u>410</u>	<u>0360</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>							

**\*SAMPLE MATRIX CODES**

AA = Ambient Air (Indoor/Outdoor)  
 SV = Soil Vapor/Landfill Gas/SVE  
 Other = Please Specify

Container Type

CS

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:

Date/Time

Received By:

Date/Time:

[Signature]  
Jason Hayes  
7/17/10

7/17/10 16:30  
7/17/10 19:50  
7/17/10 23:30  
7/17/10 23:30

[Signature]  
Rec'd by [Signature]  
7/17/10 23:30

7/17/10 16:30  
7/17/10 19:50  
7/17/10 23:30

08:30 rec'd by [Signature] 7/18/10 08:30



## ANALYTICAL REPORT

Lab Number:	L1212729
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Jason Hayes
Phone:	(212) 479-5427
Project Name:	RIVERSIDE PARCEL 2
Project Number:	170201301
Report Date:	07/24/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1212729-01	LB-1 (MW) 1'-2'	17-29 WEST END AVE.	07/16/12 09:00
L1212729-02	LB-1 (MW) 9'-11'	17-29 WEST END AVE.	07/16/12 09:35
L1212729-03	LB-1 (MW) 11'-13'	17-29 WEST END AVE.	07/16/12 10:00
L1212729-04	FIELD BLANK #2	17-29 WEST END AVE.	07/17/12 11:20
L1212729-05	LB-6 (MW) 1-2	17-29 WEST END AVE.	07/17/12 13:30
L1212729-06	LB-6 (MW) 8-10	17-29 WEST END AVE.	07/17/12 13:40
L1212729-07	LB-6 (MW) 14-15	17-29 WEST END AVE.	07/17/12 14:00
L1212729-08	DUP#1	17-29 WEST END AVE.	07/17/12 00:00

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

### Case Narrative (continued)

#### Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Pesticides

L1212729-01 and -05 have elevated detection limits due to the dilutions required by the sample matrices.

#### Metals

L1212729-01, -02, -03 and -05 through -08 have elevated detection limits for all analytes, except Mercury, due to the dilutions required by the sample matrices.

The WG549702-4 MS recovery, performed on L1212729-04, is below the acceptance criteria of Potassium (64%). A post digestion spike was performed with an acceptable recovery of 79%.

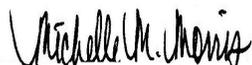
The WG549840-4 MS recoveries for Aluminum (153%), Calcium (51%), Copper (1470%), Iron (17400%), Lead (801%), Manganese (245%) and Zinc (327%), performed on L1212729-01, do not apply because the sample concentrations are greater than four times the spike amount added.

The WG549840-4 MS recoveries, performed on L1212729-01, are outside the acceptance criteria for Antimony (44%), Barium (133%), Chromium (72%), Magnesium (0%) and Potassium (129%). A post digestion spike was performed with acceptable recoveries for Antimony (85%), Barium (91%), Chromium (89%), Magnesium (79%) and Potassium (102%).

The WG549840-3 Laboratory Duplicate RPDs, performed on L1212729-01, are outside the acceptance criteria for Antimony (39%), Copper (89%), Iron (50%), Manganese (53%), Potassium (56%) and Selenium (38%). The elevated RPDs have been attributed to the non-homogeneous nature of the sample utilized for the Laboratory Duplicate.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 07/24/12

# ORGANICS

# VOLATILES

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

**Lab ID:** L1212729-01  
**Client ID:** LB-1 (MW) 1'-2'  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/19/12 13:40  
**Analyst:** BN  
**Percent Solids:** 77%

**Date Collected:** 07/16/12 09:00  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	32	2.6	1
1,1-Dichloroethane	ND		ug/kg	4.9	0.96	1
Chloroform	1.0	J	ug/kg	4.9	1.0	1
Carbon tetrachloride	ND		ug/kg	3.2	0.68	1
1,2-Dichloropropane	ND		ug/kg	11	0.83	1
Dibromochloromethane	ND		ug/kg	3.2	1.0	1
1,1,2-Trichloroethane	ND		ug/kg	4.9	1.3	1
Tetrachloroethene	ND		ug/kg	3.2	0.99	1
Chlorobenzene	ND		ug/kg	3.2	0.60	1
Trichlorofluoromethane	ND		ug/kg	16	1.3	1
1,2-Dichloroethane	ND		ug/kg	3.2	0.74	1
1,1,1-Trichloroethane	ND		ug/kg	3.2	0.88	1
Bromodichloromethane	ND		ug/kg	3.2	1.2	1
trans-1,3-Dichloropropene	ND		ug/kg	3.2	0.98	1
cis-1,3-Dichloropropene	ND		ug/kg	3.2	0.87	1
1,1-Dichloropropene	ND		ug/kg	16	1.5	1
Bromoform	ND		ug/kg	13	1.6	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	3.2	0.78	1
Benzene	ND		ug/kg	3.2	0.96	1
Toluene	ND		ug/kg	4.9	0.78	1
Ethylbenzene	ND		ug/kg	3.2	0.72	1
Chloromethane	ND		ug/kg	16	2.5	1
Bromomethane	ND		ug/kg	6.5	2.1	1
Vinyl chloride	ND		ug/kg	6.5	2.4	1
Chloroethane	ND		ug/kg	6.5	1.4	1
1,1-Dichloroethene	ND		ug/kg	3.2	0.84	1
trans-1,2-Dichloroethene	ND		ug/kg	4.9	1.3	1
Trichloroethene	ND		ug/kg	3.2	0.73	1
1,2-Dichlorobenzene	ND		ug/kg	16	1.2	1
1,3-Dichlorobenzene	ND		ug/kg	16	1.3	1
1,4-Dichlorobenzene	ND		ug/kg	16	1.4	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-01  
 Client ID: LB-1 (MW) 1'-2'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/16/12 09:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	6.5	1.6	1
p/m-Xylene	ND		ug/kg	6.5	1.4	1
o-Xylene	ND		ug/kg	6.5	1.4	1
cis-1,2-Dichloroethene	ND		ug/kg	3.2	0.98	1
Dibromomethane	ND		ug/kg	32	1.4	1
Styrene	ND		ug/kg	6.5	2.4	1
Dichlorodifluoromethane	ND		ug/kg	32	1.3	1
Acetone	ND		ug/kg	32	10.	1
Carbon disulfide	ND		ug/kg	32	1.2	1
2-Butanone	ND		ug/kg	32	12.	1
Vinyl acetate	ND		ug/kg	32	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	32	2.6	1
1,2,3-Trichloropropane	ND		ug/kg	32	1.2	1
2-Hexanone	ND		ug/kg	32	1.3	1
Bromochloromethane	ND		ug/kg	16	0.98	1
2,2-Dichloropropane	ND		ug/kg	16	2.6	1
1,2-Dibromoethane	ND		ug/kg	13	1.3	1
1,3-Dichloropropane	ND		ug/kg	16	1.8	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	3.2	1.1	1
Bromobenzene	ND		ug/kg	16	0.71	1
n-Butylbenzene	ND		ug/kg	3.2	1.0	1
sec-Butylbenzene	ND		ug/kg	3.2	0.89	1
tert-Butylbenzene	ND		ug/kg	16	2.0	1
o-Chlorotoluene	ND		ug/kg	16	1.0	1
p-Chlorotoluene	ND		ug/kg	16	1.2	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	16	2.7	1
Hexachlorobutadiene	ND		ug/kg	16	1.5	1
Isopropylbenzene	ND		ug/kg	3.2	0.57	1
p-Isopropyltoluene	ND		ug/kg	3.2	0.89	1
Naphthalene	ND		ug/kg	16	2.5	1
Acrylonitrile	ND		ug/kg	32	1.2	1
n-Propylbenzene	ND		ug/kg	3.2	0.92	1
1,2,3-Trichlorobenzene	ND		ug/kg	16	1.3	1
1,2,4-Trichlorobenzene	ND		ug/kg	16	2.6	1
1,3,5-Trimethylbenzene	ND		ug/kg	16	2.0	1
1,2,4-Trimethylbenzene	ND		ug/kg	16	1.9	1
1,4-Diethylbenzene	ND		ug/kg	13	0.65	1
4-Ethyltoluene	ND		ug/kg	13	0.31	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	13	0.59	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-01  
 Client ID: LB-1 (MW) 1'-2'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/16/12 09:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	16	1.2	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	16	4.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	107		70-130

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

**Lab ID:** L1212729-02  
**Client ID:** LB-1 (MW) 9'-11'  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/19/12 14:14  
**Analyst:** BN  
**Percent Solids:** 67%

**Date Collected:** 07/16/12 09:35  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	37	3.0	1
1,1-Dichloroethane	ND		ug/kg	5.6	1.1	1
Chloroform	8.3		ug/kg	5.6	1.2	1
Carbon tetrachloride	ND		ug/kg	3.7	0.79	1
1,2-Dichloropropane	ND		ug/kg	13	0.95	1
Dibromochloromethane	ND		ug/kg	3.7	1.1	1
1,1,2-Trichloroethane	ND		ug/kg	5.6	1.5	1
Tetrachloroethene	ND		ug/kg	3.7	1.1	1
Chlorobenzene	ND		ug/kg	3.7	0.69	1
Trichlorofluoromethane	ND		ug/kg	19	1.5	1
1,2-Dichloroethane	ND		ug/kg	3.7	0.85	1
1,1,1-Trichloroethane	ND		ug/kg	3.7	1.0	1
Bromodichloromethane	ND		ug/kg	3.7	1.4	1
trans-1,3-Dichloropropene	ND		ug/kg	3.7	1.1	1
cis-1,3-Dichloropropene	ND		ug/kg	3.7	1.0	1
1,1-Dichloropropene	ND		ug/kg	19	1.7	1
Bromoform	ND		ug/kg	15	1.8	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	3.7	0.90	1
Benzene	ND		ug/kg	3.7	1.1	1
Toluene	ND		ug/kg	5.6	0.90	1
Ethylbenzene	ND		ug/kg	3.7	0.83	1
Chloromethane	ND		ug/kg	19	2.9	1
Bromomethane	ND		ug/kg	7.5	2.4	1
Vinyl chloride	ND		ug/kg	7.5	2.8	1
Chloroethane	ND		ug/kg	7.5	1.6	1
1,1-Dichloroethene	ND		ug/kg	3.7	0.97	1
trans-1,2-Dichloroethene	ND		ug/kg	5.6	1.5	1
Trichloroethene	ND		ug/kg	3.7	0.84	1
1,2-Dichlorobenzene	ND		ug/kg	19	1.4	1
1,3-Dichlorobenzene	ND		ug/kg	19	1.5	1
1,4-Dichlorobenzene	ND		ug/kg	19	1.6	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-02  
 Client ID: LB-1 (MW) 9'-11'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/16/12 09:35  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	7.5	1.8	1
p/m-Xylene	ND		ug/kg	7.5	1.6	1
o-Xylene	ND		ug/kg	7.5	1.6	1
cis-1,2-Dichloroethene	ND		ug/kg	3.7	1.1	1
Dibromomethane	ND		ug/kg	37	1.6	1
Styrene	ND		ug/kg	7.5	2.7	1
Dichlorodifluoromethane	ND		ug/kg	37	1.4	1
Acetone	ND		ug/kg	37	12.	1
Carbon disulfide	ND		ug/kg	37	1.4	1
2-Butanone	ND		ug/kg	37	14.	1
Vinyl acetate	ND		ug/kg	37	2.8	1
4-Methyl-2-pentanone	ND		ug/kg	37	3.0	1
1,2,3-Trichloropropane	ND		ug/kg	37	1.4	1
2-Hexanone	ND		ug/kg	37	1.5	1
Bromochloromethane	ND		ug/kg	19	1.1	1
2,2-Dichloropropane	ND		ug/kg	19	3.0	1
1,2-Dibromoethane	ND		ug/kg	15	1.5	1
1,3-Dichloropropane	ND		ug/kg	19	2.1	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	3.7	1.2	1
Bromobenzene	ND		ug/kg	19	0.82	1
n-Butylbenzene	ND		ug/kg	3.7	1.2	1
sec-Butylbenzene	ND		ug/kg	3.7	1.0	1
tert-Butylbenzene	ND		ug/kg	19	2.2	1
o-Chlorotoluene	ND		ug/kg	19	1.2	1
p-Chlorotoluene	ND		ug/kg	19	1.3	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	19	3.1	1
Hexachlorobutadiene	ND		ug/kg	19	1.7	1
Isopropylbenzene	ND		ug/kg	3.7	0.66	1
p-Isopropyltoluene	ND		ug/kg	3.7	1.0	1
Naphthalene	ND		ug/kg	19	2.9	1
Acrylonitrile	ND		ug/kg	37	1.4	1
n-Propylbenzene	ND		ug/kg	3.7	1.0	1
1,2,3-Trichlorobenzene	ND		ug/kg	19	1.5	1
1,2,4-Trichlorobenzene	ND		ug/kg	19	2.9	1
1,3,5-Trimethylbenzene	ND		ug/kg	19	2.2	1
1,2,4-Trimethylbenzene	ND		ug/kg	19	2.1	1
1,4-Diethylbenzene	ND		ug/kg	15	0.75	1
4-Ethyltoluene	ND		ug/kg	15	0.36	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	15	0.68	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-02  
 Client ID: LB-1 (MW) 9'-11'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/16/12 09:35  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	19	1.4	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	19	5.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	108		70-130

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

**Lab ID:** L1212729-03  
**Client ID:** LB-1 (MW) 11'-13'  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/19/12 14:47  
**Analyst:** BN  
**Percent Solids:** 85%

**Date Collected:** 07/16/12 10:00  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	29	2.4	1
1,1-Dichloroethane	ND		ug/kg	4.4	0.87	1
Chloroform	ND		ug/kg	4.4	0.95	1
Carbon tetrachloride	ND		ug/kg	2.9	0.62	1
1,2-Dichloropropane	ND		ug/kg	10	0.75	1
Dibromochloromethane	ND		ug/kg	2.9	0.90	1
1,1,2-Trichloroethane	ND		ug/kg	4.4	1.2	1
Tetrachloroethene	ND		ug/kg	2.9	0.90	1
Chlorobenzene	ND		ug/kg	2.9	0.55	1
Trichlorofluoromethane	ND		ug/kg	15	1.2	1
1,2-Dichloroethane	ND		ug/kg	2.9	0.67	1
1,1,1-Trichloroethane	ND		ug/kg	2.9	0.79	1
Bromodichloromethane	ND		ug/kg	2.9	1.1	1
trans-1,3-Dichloropropene	ND		ug/kg	2.9	0.88	1
cis-1,3-Dichloropropene	ND		ug/kg	2.9	0.78	1
1,1-Dichloropropene	ND		ug/kg	15	1.3	1
Bromoform	ND		ug/kg	12	1.4	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.9	0.71	1
Benzene	ND		ug/kg	2.9	0.87	1
Toluene	ND		ug/kg	4.4	0.71	1
Ethylbenzene	ND		ug/kg	2.9	0.65	1
Chloromethane	ND		ug/kg	15	2.3	1
Bromomethane	ND		ug/kg	5.9	1.9	1
Vinyl chloride	ND		ug/kg	5.9	2.2	1
Chloroethane	ND		ug/kg	5.9	1.3	1
1,1-Dichloroethene	ND		ug/kg	2.9	0.76	1
trans-1,2-Dichloroethene	ND		ug/kg	4.4	1.2	1
Trichloroethene	ND		ug/kg	2.9	0.66	1
1,2-Dichlorobenzene	ND		ug/kg	15	1.1	1
1,3-Dichlorobenzene	ND		ug/kg	15	1.2	1
1,4-Dichlorobenzene	ND		ug/kg	15	1.2	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-03  
 Client ID: LB-1 (MW) 11'-13'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/16/12 10:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	5.9	1.4	1
p/m-Xylene	ND		ug/kg	5.9	1.3	1
o-Xylene	ND		ug/kg	5.9	1.2	1
cis-1,2-Dichloroethene	ND		ug/kg	2.9	0.89	1
Dibromomethane	ND		ug/kg	29	1.3	1
Styrene	ND		ug/kg	5.9	2.1	1
Dichlorodifluoromethane	ND		ug/kg	29	1.1	1
Acetone	ND		ug/kg	29	9.5	1
Carbon disulfide	ND		ug/kg	29	1.1	1
2-Butanone	ND		ug/kg	29	11.	1
Vinyl acetate	ND		ug/kg	29	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	29	2.4	1
1,2,3-Trichloropropane	ND		ug/kg	29	1.1	1
2-Hexanone	ND		ug/kg	29	1.2	1
Bromochloromethane	ND		ug/kg	15	0.89	1
2,2-Dichloropropane	ND		ug/kg	15	2.3	1
1,2-Dibromoethane	ND		ug/kg	12	1.2	1
1,3-Dichloropropane	ND		ug/kg	15	1.7	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.9	0.96	1
Bromobenzene	ND		ug/kg	15	0.65	1
n-Butylbenzene	ND		ug/kg	2.9	0.92	1
sec-Butylbenzene	ND		ug/kg	2.9	0.81	1
tert-Butylbenzene	ND		ug/kg	15	1.8	1
o-Chlorotoluene	ND		ug/kg	15	0.92	1
p-Chlorotoluene	ND		ug/kg	15	1.1	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	15	2.5	1
Hexachlorobutadiene	ND		ug/kg	15	1.3	1
Isopropylbenzene	ND		ug/kg	2.9	0.52	1
p-Isopropyltoluene	ND		ug/kg	2.9	0.80	1
Naphthalene	ND		ug/kg	15	2.3	1
Acrylonitrile	ND		ug/kg	29	1.1	1
n-Propylbenzene	ND		ug/kg	2.9	0.84	1
1,2,3-Trichlorobenzene	ND		ug/kg	15	1.2	1
1,2,4-Trichlorobenzene	ND		ug/kg	15	2.3	1
1,3,5-Trimethylbenzene	ND		ug/kg	15	1.8	1
1,2,4-Trimethylbenzene	ND		ug/kg	15	1.7	1
1,4-Diethylbenzene	ND		ug/kg	12	0.59	1
4-Ethyltoluene	ND		ug/kg	12	0.28	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	12	0.53	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-03  
 Client ID: LB-1 (MW) 11'-13'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/16/12 10:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	15	1.1	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	15	4.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	106		70-130

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

**Lab ID:** L1212729-04  
**Client ID:** FIELD BLANK #2  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/18/12 19:47  
**Analyst:** PD

**Date Collected:** 07/17/12 11:20  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.16	1
1,2-Dichloropropane	ND		ug/l	1.0	0.30	1
Dibromochloromethane	ND		ug/l	0.50	0.19	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.16	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19	1
Benzene	ND		ug/l	0.50	0.19	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.18	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-04  
 Client ID: FIELD BLANK #2  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 11:20  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.0	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Diethylbenzene	ND		ug/l	2.0	0.70	1
4-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-04  
 Client ID: FIELD BLANK #2  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 11:20  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	94		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-05  
 Client ID: LB-6 (MW) 1-2  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8260B  
 Analytical Date: 07/19/12 15:21  
 Analyst: BN  
 Percent Solids: 92%

Date Collected: 07/17/12 13:30  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	27	2.2	1
1,1-Dichloroethane	ND		ug/kg	4.1	0.80	1
Chloroform	ND		ug/kg	4.1	0.88	1
Carbon tetrachloride	ND		ug/kg	2.7	0.57	1
1,2-Dichloropropane	ND		ug/kg	9.5	0.69	1
Dibromochloromethane	ND		ug/kg	2.7	0.84	1
1,1,2-Trichloroethane	ND		ug/kg	4.1	1.1	1
Tetrachloroethene	ND		ug/kg	2.7	0.83	1
Chlorobenzene	ND		ug/kg	2.7	0.50	1
Trichlorofluoromethane	ND		ug/kg	14	1.1	1
1,2-Dichloroethane	ND		ug/kg	2.7	0.62	1
1,1,1-Trichloroethane	ND		ug/kg	2.7	0.73	1
Bromodichloromethane	ND		ug/kg	2.7	1.0	1
trans-1,3-Dichloropropene	ND		ug/kg	2.7	0.82	1
cis-1,3-Dichloropropene	ND		ug/kg	2.7	0.73	1
1,1-Dichloropropene	ND		ug/kg	14	1.2	1
Bromoform	ND		ug/kg	11	1.3	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.7	0.65	1
Benzene	ND		ug/kg	2.7	0.81	1
Toluene	ND		ug/kg	4.1	0.66	1
Ethylbenzene	ND		ug/kg	2.7	0.60	1
Chloromethane	ND		ug/kg	14	2.1	1
Bromomethane	ND		ug/kg	5.4	1.8	1
Vinyl chloride	ND		ug/kg	5.4	2.0	1
Chloroethane	ND		ug/kg	5.4	1.2	1
1,1-Dichloroethene	ND		ug/kg	2.7	0.70	1
trans-1,2-Dichloroethene	ND		ug/kg	4.1	1.1	1
Trichloroethene	ND		ug/kg	2.7	0.61	1
1,2-Dichlorobenzene	ND		ug/kg	14	0.99	1
1,3-Dichlorobenzene	ND		ug/kg	14	1.1	1
1,4-Dichlorobenzene	ND		ug/kg	14	1.1	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-05  
 Client ID: LB-6 (MW) 1-2  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 13:30  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	5.4	1.3	1
p/m-Xylene	ND		ug/kg	5.4	1.2	1
o-Xylene	ND		ug/kg	5.4	1.1	1
cis-1,2-Dichloroethene	ND		ug/kg	2.7	0.82	1
Dibromomethane	ND		ug/kg	27	1.2	1
Styrene	ND		ug/kg	5.4	2.0	1
Dichlorodifluoromethane	ND		ug/kg	27	1.0	1
Acetone	ND		ug/kg	27	8.8	1
Carbon disulfide	ND		ug/kg	27	1.0	1
2-Butanone	ND		ug/kg	27	10.	1
Vinyl acetate	ND		ug/kg	27	2.0	1
4-Methyl-2-pentanone	ND		ug/kg	27	2.2	1
1,2,3-Trichloropropane	ND		ug/kg	27	1.0	1
2-Hexanone	ND		ug/kg	27	1.1	1
Bromochloromethane	ND		ug/kg	14	0.82	1
2,2-Dichloropropane	ND		ug/kg	14	2.2	1
1,2-Dibromoethane	ND		ug/kg	11	1.1	1
1,3-Dichloropropane	ND		ug/kg	14	1.5	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.7	0.89	1
Bromobenzene	ND		ug/kg	14	0.60	1
n-Butylbenzene	ND		ug/kg	2.7	0.85	1
sec-Butylbenzene	ND		ug/kg	2.7	0.75	1
tert-Butylbenzene	ND		ug/kg	14	1.6	1
o-Chlorotoluene	ND		ug/kg	14	0.85	1
p-Chlorotoluene	ND		ug/kg	14	0.98	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	14	2.3	1
Hexachlorobutadiene	ND		ug/kg	14	1.2	1
Isopropylbenzene	ND		ug/kg	2.7	0.48	1
p-Isopropyltoluene	ND		ug/kg	2.7	0.74	1
Naphthalene	ND		ug/kg	14	2.1	1
Acrylonitrile	ND		ug/kg	27	1.0	1
n-Propylbenzene	ND		ug/kg	2.7	0.77	1
1,2,3-Trichlorobenzene	ND		ug/kg	14	1.1	1
1,2,4-Trichlorobenzene	ND		ug/kg	14	2.1	1
1,3,5-Trimethylbenzene	ND		ug/kg	14	1.6	1
1,2,4-Trimethylbenzene	ND		ug/kg	14	1.6	1
1,4-Diethylbenzene	ND		ug/kg	11	0.54	1
4-Ethyltoluene	ND		ug/kg	11	0.26	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	11	0.49	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-05  
 Client ID: LB-6 (MW) 1-2  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 13:30  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	14	1.0	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	14	4.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	107		70-130

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

**Lab ID:** L1212729-06  
**Client ID:** LB-6 (MW) 8-10  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/19/12 15:54  
**Analyst:** BN  
**Percent Solids:** 85%

**Date Collected:** 07/17/12 13:40  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	2.5	J	ug/kg	29	2.4	1
1,1-Dichloroethane	ND		ug/kg	4.4	0.87	1
Chloroform	ND		ug/kg	4.4	0.95	1
Carbon tetrachloride	ND		ug/kg	2.9	0.62	1
1,2-Dichloropropane	ND		ug/kg	10	0.75	1
Dibromochloromethane	ND		ug/kg	2.9	0.90	1
1,1,2-Trichloroethane	ND		ug/kg	4.4	1.2	1
Tetrachloroethene	ND		ug/kg	2.9	0.90	1
Chlorobenzene	ND		ug/kg	2.9	0.55	1
Trichlorofluoromethane	ND		ug/kg	15	1.2	1
1,2-Dichloroethane	ND		ug/kg	2.9	0.67	1
1,1,1-Trichloroethane	ND		ug/kg	2.9	0.79	1
Bromodichloromethane	ND		ug/kg	2.9	1.1	1
trans-1,3-Dichloropropene	ND		ug/kg	2.9	0.88	1
cis-1,3-Dichloropropene	ND		ug/kg	2.9	0.78	1
1,1-Dichloropropene	ND		ug/kg	15	1.3	1
Bromoform	ND		ug/kg	12	1.4	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.9	0.71	1
Benzene	ND		ug/kg	2.9	0.87	1
Toluene	ND		ug/kg	4.4	0.71	1
Ethylbenzene	ND		ug/kg	2.9	0.65	1
Chloromethane	ND		ug/kg	15	2.3	1
Bromomethane	ND		ug/kg	5.9	1.9	1
Vinyl chloride	ND		ug/kg	5.9	2.2	1
Chloroethane	ND		ug/kg	5.9	1.3	1
1,1-Dichloroethene	ND		ug/kg	2.9	0.76	1
trans-1,2-Dichloroethene	ND		ug/kg	4.4	1.2	1
Trichloroethene	ND		ug/kg	2.9	0.66	1
1,2-Dichlorobenzene	ND		ug/kg	15	1.1	1
1,3-Dichlorobenzene	ND		ug/kg	15	1.2	1
1,4-Dichlorobenzene	ND		ug/kg	15	1.2	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-06  
 Client ID: LB-6 (MW) 8-10  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 13:40  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	5.9	1.4	1
p/m-Xylene	ND		ug/kg	5.9	1.3	1
o-Xylene	ND		ug/kg	5.9	1.2	1
cis-1,2-Dichloroethene	ND		ug/kg	2.9	0.89	1
Dibromomethane	ND		ug/kg	29	1.3	1
Styrene	ND		ug/kg	5.9	2.1	1
Dichlorodifluoromethane	ND		ug/kg	29	1.1	1
Acetone	ND		ug/kg	29	9.5	1
Carbon disulfide	ND		ug/kg	29	1.1	1
2-Butanone	ND		ug/kg	29	11.	1
Vinyl acetate	ND		ug/kg	29	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	29	2.4	1
1,2,3-Trichloropropane	ND		ug/kg	29	1.1	1
2-Hexanone	ND		ug/kg	29	1.2	1
Bromochloromethane	ND		ug/kg	15	0.89	1
2,2-Dichloropropane	ND		ug/kg	15	2.3	1
1,2-Dibromoethane	ND		ug/kg	12	1.2	1
1,3-Dichloropropane	ND		ug/kg	15	1.7	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.9	0.96	1
Bromobenzene	ND		ug/kg	15	0.65	1
n-Butylbenzene	ND		ug/kg	2.9	0.92	1
sec-Butylbenzene	ND		ug/kg	2.9	0.81	1
tert-Butylbenzene	ND		ug/kg	15	1.8	1
o-Chlorotoluene	ND		ug/kg	15	0.92	1
p-Chlorotoluene	ND		ug/kg	15	1.1	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	15	2.5	1
Hexachlorobutadiene	ND		ug/kg	15	1.3	1
Isopropylbenzene	ND		ug/kg	2.9	0.52	1
p-Isopropyltoluene	ND		ug/kg	2.9	0.80	1
Naphthalene	ND		ug/kg	15	2.3	1
Acrylonitrile	ND		ug/kg	29	1.1	1
n-Propylbenzene	ND		ug/kg	2.9	0.84	1
1,2,3-Trichlorobenzene	ND		ug/kg	15	1.2	1
1,2,4-Trichlorobenzene	ND		ug/kg	15	2.3	1
1,3,5-Trimethylbenzene	ND		ug/kg	15	1.8	1
1,2,4-Trimethylbenzene	ND		ug/kg	15	1.7	1
1,4-Diethylbenzene	ND		ug/kg	12	0.59	1
4-Ethyltoluene	ND		ug/kg	12	0.28	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	12	0.53	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-06  
 Client ID: LB-6 (MW) 8-10  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 13:40  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	15	1.1	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	15	4.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	107		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-07  
 Client ID: LB-6 (MW) 14-15  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8260B  
 Analytical Date: 07/19/12 18:08  
 Analyst: BN  
 Percent Solids: 90%

Date Collected: 07/17/12 14:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	28	2.3	1
1,1-Dichloroethane	ND		ug/kg	4.2	0.82	1
Chloroform	ND		ug/kg	4.2	0.90	1
Carbon tetrachloride	ND		ug/kg	2.8	0.59	1
1,2-Dichloropropane	ND		ug/kg	9.7	0.71	1
Dibromochloromethane	ND		ug/kg	2.8	0.86	1
1,1,2-Trichloroethane	ND		ug/kg	4.2	1.1	1
Tetrachloroethene	ND		ug/kg	2.8	0.85	1
Chlorobenzene	ND		ug/kg	2.8	0.52	1
Trichlorofluoromethane	ND		ug/kg	14	1.1	1
1,2-Dichloroethane	ND		ug/kg	2.8	0.63	1
1,1,1-Trichloroethane	ND		ug/kg	2.8	0.75	1
Bromodichloromethane	ND		ug/kg	2.8	1.1	1
trans-1,3-Dichloropropene	ND		ug/kg	2.8	0.84	1
cis-1,3-Dichloropropene	ND		ug/kg	2.8	0.74	1
1,1-Dichloropropene	ND		ug/kg	14	1.3	1
Bromoform	ND		ug/kg	11	1.4	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.8	0.67	1
Benzene	ND		ug/kg	2.8	0.82	1
Toluene	ND		ug/kg	4.2	0.67	1
Ethylbenzene	ND		ug/kg	2.8	0.62	1
Chloromethane	ND		ug/kg	14	2.2	1
Bromomethane	ND		ug/kg	5.6	1.8	1
Vinyl chloride	ND		ug/kg	5.6	2.1	1
Chloroethane	ND		ug/kg	5.6	1.2	1
1,1-Dichloroethene	ND		ug/kg	2.8	0.72	1
trans-1,2-Dichloroethene	ND		ug/kg	4.2	1.1	1
Trichloroethene	ND		ug/kg	2.8	0.62	1
1,2-Dichlorobenzene	ND		ug/kg	14	1.0	1
1,3-Dichlorobenzene	ND		ug/kg	14	1.1	1
1,4-Dichlorobenzene	ND		ug/kg	14	1.2	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-07  
 Client ID: LB-6 (MW) 14-15  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 14:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	5.6	1.4	1
p/m-Xylene	ND		ug/kg	5.6	1.2	1
o-Xylene	ND		ug/kg	5.6	1.2	1
cis-1,2-Dichloroethene	ND		ug/kg	2.8	0.84	1
Dibromomethane	ND		ug/kg	28	1.2	1
Styrene	ND		ug/kg	5.6	2.0	1
Dichlorodifluoromethane	ND		ug/kg	28	1.1	1
Acetone	ND		ug/kg	28	9.0	1
Carbon disulfide	ND		ug/kg	28	1.0	1
2-Butanone	ND		ug/kg	28	11.	1
Vinyl acetate	ND		ug/kg	28	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	28	2.3	1
1,2,3-Trichloropropane	ND		ug/kg	28	1.1	1
2-Hexanone	ND		ug/kg	28	1.1	1
Bromochloromethane	ND		ug/kg	14	0.84	1
2,2-Dichloropropane	ND		ug/kg	14	2.2	1
1,2-Dibromoethane	ND		ug/kg	11	1.1	1
1,3-Dichloropropane	ND		ug/kg	14	1.6	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.8	0.91	1
Bromobenzene	ND		ug/kg	14	0.61	1
n-Butylbenzene	ND		ug/kg	2.8	0.87	1
sec-Butylbenzene	ND		ug/kg	2.8	0.76	1
tert-Butylbenzene	ND		ug/kg	14	1.7	1
o-Chlorotoluene	ND		ug/kg	14	0.87	1
p-Chlorotoluene	ND		ug/kg	14	1.0	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	14	2.3	1
Hexachlorobutadiene	ND		ug/kg	14	1.3	1
Isopropylbenzene	ND		ug/kg	2.8	0.49	1
p-Isopropyltoluene	ND		ug/kg	2.8	0.76	1
Naphthalene	ND		ug/kg	14	2.1	1
Acrylonitrile	ND		ug/kg	28	1.0	1
n-Propylbenzene	ND		ug/kg	2.8	0.79	1
1,2,3-Trichlorobenzene	ND		ug/kg	14	1.1	1
1,2,4-Trichlorobenzene	ND		ug/kg	14	2.2	1
1,3,5-Trimethylbenzene	ND		ug/kg	14	1.7	1
1,2,4-Trimethylbenzene	ND		ug/kg	14	1.6	1
1,4-Diethylbenzene	ND		ug/kg	11	0.56	1
4-Ethyltoluene	ND		ug/kg	11	0.27	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	11	0.50	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-07  
 Client ID: LB-6 (MW) 14-15  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 14:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	14	1.0	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	14	4.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	113		70-130
4-Bromofluorobenzene	110		70-130
Dibromofluoromethane	96		70-130

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

**Lab ID:** L1212729-08  
**Client ID:** DUP#1  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/19/12 18:35  
**Analyst:** BN  
**Percent Solids:** 82%

**Date Collected:** 07/17/12 00:00  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	30	2.5	1
1,1-Dichloroethane	ND		ug/kg	4.6	0.90	1
Chloroform	ND		ug/kg	4.6	0.99	1
Carbon tetrachloride	ND		ug/kg	3.0	0.64	1
1,2-Dichloropropane	ND		ug/kg	11	0.78	1
Dibromochloromethane	ND		ug/kg	3.0	0.94	1
1,1,2-Trichloroethane	ND		ug/kg	4.6	1.2	1
Tetrachloroethene	ND		ug/kg	3.0	0.93	1
Chlorobenzene	ND		ug/kg	3.0	0.57	1
Trichlorofluoromethane	ND		ug/kg	15	1.2	1
1,2-Dichloroethane	ND		ug/kg	3.0	0.69	1
1,1,1-Trichloroethane	ND		ug/kg	3.0	0.82	1
Bromodichloromethane	ND		ug/kg	3.0	1.2	1
trans-1,3-Dichloropropene	ND		ug/kg	3.0	0.92	1
cis-1,3-Dichloropropene	ND		ug/kg	3.0	0.81	1
1,1-Dichloropropene	ND		ug/kg	15	1.4	1
Bromoform	ND		ug/kg	12	1.5	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	3.0	0.73	1
Benzene	ND		ug/kg	3.0	0.91	1
Toluene	ND		ug/kg	4.6	0.74	1
Ethylbenzene	ND		ug/kg	3.0	0.68	1
Chloromethane	ND		ug/kg	15	2.4	1
Bromomethane	ND		ug/kg	6.1	2.0	1
Vinyl chloride	ND		ug/kg	6.1	2.3	1
Chloroethane	ND		ug/kg	6.1	1.3	1
1,1-Dichloroethene	ND		ug/kg	3.0	0.79	1
trans-1,2-Dichloroethene	ND		ug/kg	4.6	1.2	1
Trichloroethene	ND		ug/kg	3.0	0.68	1
1,2-Dichlorobenzene	ND		ug/kg	15	1.1	1
1,3-Dichlorobenzene	ND		ug/kg	15	1.2	1
1,4-Dichlorobenzene	ND		ug/kg	15	1.3	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-08  
 Client ID: DUP#1  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 00:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	6.1	1.5	1
p/m-Xylene	ND		ug/kg	6.1	1.3	1
o-Xylene	ND		ug/kg	6.1	1.3	1
cis-1,2-Dichloroethene	ND		ug/kg	3.0	0.92	1
Dibromomethane	ND		ug/kg	30	1.3	1
Styrene	ND		ug/kg	6.1	2.2	1
Dichlorodifluoromethane	ND		ug/kg	30	1.2	1
Acetone	ND		ug/kg	30	9.9	1
Carbon disulfide	ND		ug/kg	30	1.1	1
2-Butanone	ND		ug/kg	30	12.	1
Vinyl acetate	ND		ug/kg	30	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	30	2.5	1
1,2,3-Trichloropropane	ND		ug/kg	30	1.2	1
2-Hexanone	ND		ug/kg	30	1.2	1
Bromochloromethane	ND		ug/kg	15	0.92	1
2,2-Dichloropropane	ND		ug/kg	15	2.4	1
1,2-Dibromoethane	ND		ug/kg	12	1.2	1
1,3-Dichloropropane	ND		ug/kg	15	1.7	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	3.0	1.0	1
Bromobenzene	ND		ug/kg	15	0.67	1
n-Butylbenzene	ND		ug/kg	3.0	0.96	1
sec-Butylbenzene	ND		ug/kg	3.0	0.84	1
tert-Butylbenzene	ND		ug/kg	15	1.8	1
o-Chlorotoluene	ND		ug/kg	15	0.95	1
p-Chlorotoluene	ND		ug/kg	15	1.1	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	15	2.6	1
Hexachlorobutadiene	ND		ug/kg	15	1.4	1
Isopropylbenzene	ND		ug/kg	3.0	0.54	1
p-Isopropyltoluene	ND		ug/kg	3.0	0.83	1
Naphthalene	ND		ug/kg	15	2.3	1
Acrylonitrile	ND		ug/kg	30	1.1	1
n-Propylbenzene	ND		ug/kg	3.0	0.86	1
1,2,3-Trichlorobenzene	ND		ug/kg	15	1.2	1
1,2,4-Trichlorobenzene	ND		ug/kg	15	2.4	1
1,3,5-Trimethylbenzene	ND		ug/kg	15	1.8	1
1,2,4-Trimethylbenzene	ND		ug/kg	15	1.7	1
1,4-Diethylbenzene	ND		ug/kg	12	0.61	1
4-Ethyltoluene	ND		ug/kg	12	0.30	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	12	0.55	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-08  
 Client ID: DUP#1  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 00:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	15	1.2	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	15	4.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	115		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	95		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/18/12 13:18  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG549463-3					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	1.2	J	ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.16
1,2-Dichloropropane	ND		ug/l	1.0	0.30
Dibromochloromethane	ND		ug/l	0.50	0.19
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.16
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19
Benzene	ND		ug/l	0.50	0.19
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.33
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.18
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.17
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/18/12 13:18  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG549463-3					
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.0
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.0
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/18/12 13:18  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG549463-3					
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Dioxane	ND		ug/l	250	76.
1,4-Diethylbenzene	ND		ug/l	2.0	0.70
4-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Tentatively Identified Compounds

No Tentatively Identified Compounds      ND      ug/l

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	97		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/19/12 09:06  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03,05-06 Batch: WG549663-3					
Methylene chloride	2.2	J	ug/kg	25	2.0
1,1-Dichloroethane	ND		ug/kg	3.8	0.74
Chloroform	ND		ug/kg	3.8	0.81
Carbon tetrachloride	ND		ug/kg	2.5	0.53
1,2-Dichloropropane	ND		ug/kg	8.8	0.64
Dibromochloromethane	ND		ug/kg	2.5	0.77
1,1,2-Trichloroethane	ND		ug/kg	3.8	0.98
Tetrachloroethene	ND		ug/kg	2.5	0.76
Chlorobenzene	ND		ug/kg	2.5	0.46
Trichlorofluoromethane	ND		ug/kg	12	0.98
1,2-Dichloroethane	ND		ug/kg	2.5	0.57
1,1,1-Trichloroethane	ND		ug/kg	2.5	0.67
Bromodichloromethane	ND		ug/kg	2.5	0.96
trans-1,3-Dichloropropene	ND		ug/kg	2.5	0.75
cis-1,3-Dichloropropene	ND		ug/kg	2.5	0.67
1,1-Dichloropropene	ND		ug/kg	12	1.1
Bromoform	ND		ug/kg	10	1.2
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.5	0.60
Benzene	ND		ug/kg	2.5	0.74
Toluene	ND		ug/kg	3.8	0.60
Ethylbenzene	ND		ug/kg	2.5	0.55
Chloromethane	ND		ug/kg	12	2.0
Bromomethane	ND		ug/kg	5.0	1.6
Vinyl chloride	ND		ug/kg	5.0	1.9
Chloroethane	ND		ug/kg	5.0	1.1
1,1-Dichloroethene	ND		ug/kg	2.5	0.65
trans-1,2-Dichloroethene	ND		ug/kg	3.8	0.98
Trichloroethene	ND		ug/kg	2.5	0.56
1,2-Dichlorobenzene	ND		ug/kg	12	0.91
1,3-Dichlorobenzene	ND		ug/kg	12	1.0
1,4-Dichlorobenzene	ND		ug/kg	12	1.0

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/19/12 09:06  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03,05-06 Batch: WG549663-3					
Methyl tert butyl ether	ND		ug/kg	5.0	1.2
p/m-Xylene	ND		ug/kg	5.0	1.1
o-Xylene	ND		ug/kg	5.0	1.0
cis-1,2-Dichloroethene	ND		ug/kg	2.5	0.75
Dibromomethane	ND		ug/kg	25	1.1
Styrene	ND		ug/kg	5.0	1.8
Dichlorodifluoromethane	ND		ug/kg	25	0.97
Acetone	ND		ug/kg	25	8.1
Carbon disulfide	ND		ug/kg	25	0.94
2-Butanone	ND		ug/kg	25	9.7
Vinyl acetate	ND		ug/kg	25	1.9
4-Methyl-2-pentanone	ND		ug/kg	25	2.0
1,2,3-Trichloropropane	ND		ug/kg	25	0.97
2-Hexanone	ND		ug/kg	25	0.99
Bromochloromethane	ND		ug/kg	12	0.76
2,2-Dichloropropane	ND		ug/kg	12	2.0
1,2-Dibromoethane	ND		ug/kg	10	1.0
1,3-Dichloropropane	ND		ug/kg	12	1.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.5	0.82
Bromobenzene	ND		ug/kg	12	0.55
n-Butylbenzene	ND		ug/kg	2.5	0.79
sec-Butylbenzene	ND		ug/kg	2.5	0.69
tert-Butylbenzene	ND		ug/kg	12	1.5
o-Chlorotoluene	ND		ug/kg	12	0.78
p-Chlorotoluene	ND		ug/kg	12	0.90
1,2-Dibromo-3-chloropropane	ND		ug/kg	12	2.1
Hexachlorobutadiene	ND		ug/kg	12	1.1
Isopropylbenzene	ND		ug/kg	2.5	0.44
p-Isopropyltoluene	ND		ug/kg	2.5	0.68
Naphthalene	2.8	J	ug/kg	12	1.9
Acrylonitrile	ND		ug/kg	25	0.94

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/19/12 09:06  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03,05-06 Batch: WG549663-3					
Isopropyl Ether	ND		ug/kg	10	1.0
tert-Butyl Alcohol	ND		ug/kg	150	3.1
n-Propylbenzene	ND		ug/kg	2.5	0.71
1,2,3-Trichlorobenzene	ND		ug/kg	12	1.0
1,2,4-Trichlorobenzene	ND		ug/kg	12	2.0
1,3,5-Trimethylbenzene	ND		ug/kg	12	1.5
1,2,4-Trimethylbenzene	ND		ug/kg	12	1.4
Methyl Acetate	ND		ug/kg	50	50.
Ethyl Acetate	ND		ug/kg	50	50.
Acrolein	ND		ug/kg	62	7.5
Cyclohexane	ND		ug/kg	50	50.
1,4-Dioxane	ND		ug/kg	250	44.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	50	0.99
1,4-Diethylbenzene	ND		ug/kg	10	0.50
4-Ethyltoluene	ND		ug/kg	10	0.24
1,2,4,5-Tetramethylbenzene	ND		ug/kg	10	0.45
Tetrahydrofuran	ND		ug/kg	50	2.8
Ethyl ether	ND		ug/kg	12	0.95
trans-1,4-Dichloro-2-butene	ND		ug/kg	12	3.7
Methyl cyclohexane	ND		ug/kg	10	10.
Ethyl-Tert-Butyl-Ether	ND		ug/kg	10	2.2
Tertiary-Amyl Methyl Ether	ND		ug/kg	10	2.5

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/kg

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
 Analytical Date: 07/19/12 09:06  
 Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03,05-06 Batch: WG549663-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	108		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/19/12 09:07  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07-08 Batch: WG549671-3					
Methylene chloride	ND		ug/kg	25	2.0
1,1-Dichloroethane	ND		ug/kg	3.8	0.74
Chloroform	ND		ug/kg	3.8	0.81
Carbon tetrachloride	ND		ug/kg	2.5	0.53
1,2-Dichloropropane	ND		ug/kg	8.8	0.64
Dibromochloromethane	ND		ug/kg	2.5	0.77
1,1,2-Trichloroethane	ND		ug/kg	3.8	0.98
Tetrachloroethene	ND		ug/kg	2.5	0.76
Chlorobenzene	ND		ug/kg	2.5	0.46
Trichlorofluoromethane	ND		ug/kg	12	0.98
1,2-Dichloroethane	ND		ug/kg	2.5	0.57
1,1,1-Trichloroethane	ND		ug/kg	2.5	0.67
Bromodichloromethane	ND		ug/kg	2.5	0.96
trans-1,3-Dichloropropene	ND		ug/kg	2.5	0.75
cis-1,3-Dichloropropene	ND		ug/kg	2.5	0.67
1,1-Dichloropropene	ND		ug/kg	12	1.1
Bromoform	ND		ug/kg	10	1.2
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.5	0.60
Benzene	ND		ug/kg	2.5	0.74
Toluene	ND		ug/kg	3.8	0.60
Ethylbenzene	ND		ug/kg	2.5	0.55
Chloromethane	ND		ug/kg	12	2.0
Bromomethane	ND		ug/kg	5.0	1.6
Vinyl chloride	ND		ug/kg	5.0	1.9
Chloroethane	ND		ug/kg	5.0	1.1
1,1-Dichloroethene	ND		ug/kg	2.5	0.65
trans-1,2-Dichloroethene	ND		ug/kg	3.8	0.98
Trichloroethene	ND		ug/kg	2.5	0.56
1,2-Dichlorobenzene	ND		ug/kg	12	0.91
1,3-Dichlorobenzene	ND		ug/kg	12	1.0
1,4-Dichlorobenzene	ND		ug/kg	12	1.0

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/19/12 09:07  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07-08 Batch: WG549671-3					
Methyl tert butyl ether	ND		ug/kg	5.0	1.2
p/m-Xylene	ND		ug/kg	5.0	1.1
o-Xylene	ND		ug/kg	5.0	1.0
cis-1,2-Dichloroethene	ND		ug/kg	2.5	0.75
Dibromomethane	ND		ug/kg	25	1.1
Styrene	ND		ug/kg	5.0	1.8
Dichlorodifluoromethane	ND		ug/kg	25	0.97
Acetone	ND		ug/kg	25	8.1
Carbon disulfide	ND		ug/kg	25	0.94
2-Butanone	ND		ug/kg	25	9.7
Vinyl acetate	ND		ug/kg	25	1.9
4-Methyl-2-pentanone	ND		ug/kg	25	2.0
1,2,3-Trichloropropane	ND		ug/kg	25	0.97
2-Hexanone	ND		ug/kg	25	0.99
Bromochloromethane	ND		ug/kg	12	0.76
2,2-Dichloropropane	ND		ug/kg	12	2.0
1,2-Dibromoethane	ND		ug/kg	10	1.0
1,3-Dichloropropane	ND		ug/kg	12	1.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.5	0.82
Bromobenzene	ND		ug/kg	12	0.55
n-Butylbenzene	ND		ug/kg	2.5	0.79
sec-Butylbenzene	ND		ug/kg	2.5	0.69
tert-Butylbenzene	ND		ug/kg	12	1.5
o-Chlorotoluene	ND		ug/kg	12	0.78
p-Chlorotoluene	ND		ug/kg	12	0.90
1,2-Dibromo-3-chloropropane	ND		ug/kg	12	2.1
Hexachlorobutadiene	ND		ug/kg	12	1.1
Isopropylbenzene	ND		ug/kg	2.5	0.44
p-Isopropyltoluene	ND		ug/kg	2.5	0.68
Naphthalene	ND		ug/kg	12	1.9
Acrylonitrile	ND		ug/kg	25	0.94

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/19/12 09:07  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07-08 Batch: WG549671-3					
Isopropyl Ether	ND		ug/kg	10	1.0
tert-Butyl Alcohol	ND		ug/kg	150	3.1
n-Propylbenzene	ND		ug/kg	2.5	0.71
1,2,3-Trichlorobenzene	ND		ug/kg	12	1.0
1,2,4-Trichlorobenzene	ND		ug/kg	12	2.0
1,3,5-Trimethylbenzene	ND		ug/kg	12	1.5
1,2,4-Trimethylbenzene	ND		ug/kg	12	1.4
Methyl Acetate	ND		ug/kg	50	50.
Ethyl Acetate	ND		ug/kg	50	50.
Acrolein	ND		ug/kg	62	7.5
Cyclohexane	ND		ug/kg	50	50.
1,4-Dioxane	ND		ug/kg	250	44.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	50	0.99
1,4-Diethylbenzene	ND		ug/kg	10	0.50
4-Ethyltoluene	ND		ug/kg	10	0.24
1,2,4,5-Tetramethylbenzene	ND		ug/kg	10	0.45
Tetrahydrofuran	ND		ug/kg	50	2.8
Ethyl ether	ND		ug/kg	12	0.95
trans-1,4-Dichloro-2-butene	ND		ug/kg	12	3.7
Methyl cyclohexane	ND		ug/kg	10	10.
Ethyl-Tert-Butyl-Ether	ND		ug/kg	10	2.2
Tertiary-Amyl Methyl Ether	ND		ug/kg	10	2.5
Ethyl Alcohol	ND		ug/kg	2500	520

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B

Analytical Date: 07/19/12 09:07

Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
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Volatile Organics by GC/MS - Westborough Lab for sample(s): 07-08 Batch: WG549671-3					
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Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	113		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	96		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG549463-1 WG549463-2								
Methylene chloride	100		101		70-130	1		20
1,1-Dichloroethane	92		91		70-130	1		20
Chloroform	118		116		70-130	2		20
Carbon tetrachloride	80		86		63-132	7		20
1,2-Dichloropropane	88		88		70-130	0		20
Dibromochloromethane	80		85		63-130	6		20
1,1,2-Trichloroethane	92		94		70-130	2		20
Tetrachloroethene	110		108		70-130	2		20
Chlorobenzene	100		99		75-130	1		20
Trichlorofluoromethane	110		110		62-150	0		20
1,2-Dichloroethane	96		99		70-130	3		20
1,1,1-Trichloroethane	88		92		67-130	4		20
Bromodichloromethane	84		88		67-130	5		20
trans-1,3-Dichloropropene	72		76		70-130	5		20
cis-1,3-Dichloropropene	79		83		70-130	5		20
1,1-Dichloropropene	98		96		70-130	2		20
Bromoform	76		84		54-136	10		20
1,1,2,2-Tetrachloroethane	84		86		67-130	2		20
Benzene	98		98		70-130	0		20
Toluene	98		97		70-130	1		20
Ethylbenzene	100		98		70-130	2		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG549463-1 WG549463-2								
Chloromethane	94		96		64-130	2		20
Bromomethane	105		100		39-139	5		20
Vinyl chloride	104		105		55-140	1		20
Chloroethane	96		95		55-138	1		20
1,1-Dichloroethene	102		102		61-145	0		20
trans-1,2-Dichloroethene	101		100		70-130	1		20
Trichloroethene	101		101		70-130	0		20
1,2-Dichlorobenzene	99		99		70-130	0		20
1,3-Dichlorobenzene	99		99		70-130	0		20
1,4-Dichlorobenzene	97		96		70-130	1		20
Methyl tert butyl ether	95		99		63-130	4		20
p/m-Xylene	101		100		70-130	1		20
o-Xylene	102		101		70-130	1		20
cis-1,2-Dichloroethene	102		104		70-130	2		20
Dibromomethane	99		99		70-130	0		20
1,2,3-Trichloropropane	83		86		64-130	4		20
Acrylonitrile	83		85		70-130	2		20
Styrene	104		104		70-130	0		20
Dichlorodifluoromethane	104		101		36-147	3		20
Acetone	111		125		58-148	12		20
Carbon disulfide	92		92		51-130	0		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG549463-1 WG549463-2								
2-Butanone	90		90		63-138	0		20
Vinyl acetate	81		87		70-130	7		20
4-Methyl-2-pentanone	79		82		59-130	4		20
2-Hexanone	73		76		57-130	4		20
Bromochloromethane	111		110		70-130	1		20
2,2-Dichloropropane	82		88		63-133	7		20
1,2-Dibromoethane	95		98		70-130	3		20
1,3-Dichloropropane	90		92		70-130	2		20
1,1,1,2-Tetrachloroethane	90		93		64-130	3		20
Bromobenzene	104		104		70-130	0		20
n-Butylbenzene	96		92		53-136	4		20
sec-Butylbenzene	100		96		70-130	4		20
tert-Butylbenzene	101		97		70-130	4		20
o-Chlorotoluene	94		94		70-130	0		20
p-Chlorotoluene	94		93		70-130	1		20
1,2-Dibromo-3-chloropropane	63		72		41-144	13		20
Hexachlorobutadiene	108		105		63-130	3		20
Isopropylbenzene	104		102		70-130	2		20
p-Isopropyltoluene	102		98		70-130	4		20
Naphthalene	92		96		70-130	4		20
n-Propylbenzene	95		94		69-130	1		20

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG549463-1 WG549463-2								
1,2,3-Trichlorobenzene	98		99		70-130	1		20
1,2,4-Trichlorobenzene	102		100		70-130	2		20
1,3,5-Trimethylbenzene	100		98		64-130	2		20
1,2,4-Trimethylbenzene	99		98		70-130	1		20
1,4-Dioxane	98		100		56-162	2		20
1,4-Diethylbenzene	102		99		70-130	3		20
4-Ethyltoluene	94		91		70-130	3		20
1,2,4,5-Tetramethylbenzene	98		94		70-130	4		20
Ethyl ether	102		107		59-134	5		20
trans-1,4-Dichloro-2-butene	128		135	Q	70-130	5		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	94		94		70-130
Toluene-d8	97		95		70-130
4-Bromofluorobenzene	91		90		70-130
Dibromofluoromethane	100		101		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,05-06 Batch: WG549663-1 WG549663-2								
Methylene chloride	79		80		70-130	1		30
1,1-Dichloroethane	95		96		70-130	1		30
Chloroform	99		100		70-130	1		30
Carbon tetrachloride	125		124		70-130	1		30
1,2-Dichloropropane	84		89		70-130	6		30
Dibromochloromethane	105		107		70-130	2		30
1,1,2-Trichloroethane	96		99		70-130	3		30
Tetrachloroethene	107		105		70-130	2		30
Chlorobenzene	94		95		70-130	1		30
Trichlorofluoromethane	110		104		70-139	6		30
1,2-Dichloroethane	104		106		70-130	2		30
1,1,1-Trichloroethane	104		104		70-130	0		30
Bromodichloromethane	98		102		70-130	4		30
trans-1,3-Dichloropropene	89		92		70-130	3		30
cis-1,3-Dichloropropene	90		93		70-130	3		30
1,1-Dichloropropene	99		99		70-130	0		30
Bromoform	99		102		70-130	3		30
1,1,2,2-Tetrachloroethane	87		88		70-130	1		30
Benzene	91		92		70-130	1		30
Toluene	94		94		70-130	0		30
Ethylbenzene	96		96		70-130	0		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,05-06 Batch: WG549663-1 WG549663-2								
Chloromethane	85		83		52-130	2		30
Bromomethane	94		94		57-147	0		30
Vinyl chloride	101		97		67-130	4		30
Chloroethane	91		87		50-151	4		30
1,1-Dichloroethene	94		92		65-135	2		30
trans-1,2-Dichloroethene	96		97		70-130	1		30
Trichloroethene	98		98		70-130	0		30
1,2-Dichlorobenzene	93		94		70-130	1		30
1,3-Dichlorobenzene	95		95		70-130	0		30
1,4-Dichlorobenzene	94		95		70-130	1		30
Methyl tert butyl ether	99		103		66-130	4		30
p/m-Xylene	94		95		70-130	1		30
o-Xylene	94		96		70-130	2		30
cis-1,2-Dichloroethene	93		94		70-130	1		30
Dibromomethane	97		99		70-130	2		30
Styrene	94		96		70-130	2		30
Dichlorodifluoromethane	92		84		30-146	9		30
Acetone	99		82		54-140	19		30
Carbon disulfide	87		86		59-130	1		30
2-Butanone	88		84		70-130	5		30
Vinyl acetate	92		95		70-130	3		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,05-06 Batch: WG549663-1 WG549663-2								
4-Methyl-2-pentanone	79		81		70-130	3		30
1,2,3-Trichloropropane	92		94		68-130	2		30
2-Hexanone	89		90		70-130	1		30
Bromochloromethane	94		95		70-130	1		30
2,2-Dichloropropane	101		101		70-130	0		30
1,2-Dibromoethane	105		108		70-130	3		30
1,3-Dichloropropane	96		100		69-130	4		30
1,1,1,2-Tetrachloroethane	105		108		70-130	3		30
Bromobenzene	94		96		70-130	2		30
n-Butylbenzene	102		101		70-130	1		30
sec-Butylbenzene	98		96		70-130	2		30
tert-Butylbenzene	100		99		70-130	1		30
o-Chlorotoluene	96		96		70-130	0		30
p-Chlorotoluene	94		95		70-130	1		30
1,2-Dibromo-3-chloropropane	95		92		68-130	3		30
Hexachlorobutadiene	107		105		67-130	2		30
Isopropylbenzene	99		98		70-130	1		30
p-Isopropyltoluene	102		100		70-130	2		30
Naphthalene	86		90		70-130	5		30
Acrylonitrile	85		84		70-130	1		30
Isopropyl Ether	88		90		66-130	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,05-06 Batch: WG549663-1 WG549663-2								
tert-Butyl Alcohol	92		96		70-130	4		30
n-Propylbenzene	97		96		70-130	1		30
1,2,3-Trichlorobenzene	97		98		70-130	1		30
1,2,4-Trichlorobenzene	100		100		70-130	0		30
1,3,5-Trimethylbenzene	99		98		70-130	1		30
1,2,4-Trimethylbenzene	99		98		70-130	1		30
Methyl Acetate	88		88		70-130	0		30
Ethyl Acetate	94		92		70-130	2		30
Acrolein	82		92		70-130	11		30
Cyclohexane	92		89		70-130	3		30
1,4-Dioxane	81		83		65-136	2		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	101		96		70-130	5		30
1,4-Diethylbenzene	102		101		70-130	1		30
4-Ethyltoluene	97		97		70-130	0		30
1,2,4,5-Tetramethylbenzene	100		102		70-130	2		30
Tetrahydrofuran	82		84		66-130	2		30
Ethyl ether	94		95		67-130	1		30
trans-1,4-Dichloro-2-butene	94		96		70-130	2		30
Methyl cyclohexane	93		90		70-130	3		30
Ethyl-Tert-Butyl-Ether	94		97		70-130	3		30
Tertiary-Amyl Methyl Ether	91		94		70-130	3		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,05-06 Batch: WG549663-1 WG549663-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	119		118		70-130
Toluene-d8	102		105		70-130
4-Bromofluorobenzene	96		96		70-130
Dibromofluoromethane	105		105		70-130

Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07-08 Batch: WG549671-1 WG549671-2								
Methylene chloride	86		81		70-130	6		30
1,1-Dichloroethane	86		82		70-130	5		30
Chloroform	83		79		70-130	5		30
Carbon tetrachloride	85		82		70-130	4		30
1,2-Dichloropropane	83		81		70-130	2		30
Dibromochloromethane	92		92		70-130	0		30
1,1,2-Trichloroethane	93		92		70-130	1		30
Tetrachloroethene	97		93		70-130	4		30
Chlorobenzene	95		93		70-130	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07-08 Batch: WG549671-1 WG549671-2								
Trichlorofluoromethane	84		76		70-139	10		30
1,2-Dichloroethane	82		81		70-130	1		30
1,1,1-Trichloroethane	86		81		70-130	6		30
Bromodichloromethane	81		80		70-130	1		30
trans-1,3-Dichloropropene	92		91		70-130	1		30
cis-1,3-Dichloropropene	80		79		70-130	1		30
1,1-Dichloropropene	84		78		70-130	7		30
Bromoform	88		87		70-130	1		30
1,1,1,2-Tetrachloroethane	99		98		70-130	1		30
Benzene	81		78		70-130	4		30
Toluene	93		90		70-130	3		30
Ethylbenzene	95		92		70-130	3		30
Chloromethane	100		92		52-130	8		30
Bromomethane	103		87		57-147	17		30
Vinyl chloride	98		90		67-130	9		30
Chloroethane	96		89		50-151	8		30
1,1-Dichloroethene	83		80		65-135	4		30
trans-1,2-Dichloroethene	85		80		70-130	6		30
Trichloroethene	84		80		70-130	5		30
1,2-Dichlorobenzene	105		103		70-130	2		30
1,3-Dichlorobenzene	107		104		70-130	3		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07-08 Batch: WG549671-1 WG549671-2								
1,4-Dichlorobenzene	106		103		70-130	3		30
Methyl tert butyl ether	77		75		66-130	3		30
p/m-Xylene	95		94		70-130	1		30
o-Xylene	95		92		70-130	3		30
cis-1,2-Dichloroethene	82		79		70-130	4		30
Dibromomethane	80		77		70-130	4		30
Styrene	94		92		70-130	2		30
Dichlorodifluoromethane	94		84		30-146	11		30
Acetone	106		94		54-140	12		30
Carbon disulfide	87		81		59-130	7		30
2-Butanone	91		87		70-130	4		30
Vinyl acetate	86		84		70-130	2		30
4-Methyl-2-pentanone	75		74		70-130	1		30
1,2,3-Trichloropropane	98		95		68-130	3		30
2-Hexanone	95		93		70-130	2		30
Bromochloromethane	83		82		70-130	1		30
2,2-Dichloropropane	87		82		70-130	6		30
1,2-Dibromoethane	92		91		70-130	1		30
1,3-Dichloropropane	91		90		69-130	1		30
1,1,1,2-Tetrachloroethane	93		93		70-130	0		30
Bromobenzene	104		101		70-130	3		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07-08 Batch: WG549671-1 WG549671-2								
n-Butylbenzene	110		106		70-130	4		30
sec-Butylbenzene	109		104		70-130	5		30
tert-Butylbenzene	108		103		70-130	5		30
o-Chlorotoluene	109		104		70-130	5		30
p-Chlorotoluene	108		104		70-130	4		30
1,2-Dibromo-3-chloropropane	99		98		68-130	1		30
Hexachlorobutadiene	106		100		67-130	6		30
Isopropylbenzene	104		100		70-130	4		30
p-Isopropyltoluene	109		105		70-130	4		30
Naphthalene	97		96		70-130	1		30
Acrylonitrile	85		82		70-130	4		30
Isopropyl Ether	89		87		66-130	2		30
tert-Butyl Alcohol	82		80		70-130	2		30
n-Propylbenzene	106		102		70-130	4		30
1,2,3-Trichlorobenzene	102		99		70-130	3		30
1,2,4-Trichlorobenzene	105		102		70-130	3		30
1,3,5-Trimethylbenzene	108		104		70-130	4		30
1,2,4-Trimethylbenzene	108		104		70-130	4		30
Methyl Acetate	86		81		70-130	6		30
Ethyl Acetate	83		82		70-130	1		30
Acrolein	80		79		70-130	1		30

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07-08 Batch: WG549671-1 WG549671-2								
Cyclohexane	89		83		70-130	7		30
1,4-Dioxane	87		84		65-136	4		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	87		82		70-130	6		30
1,4-Diethylbenzene	109		105		70-130	4		30
4-Ethyltoluene	107		103		70-130	4		30
1,2,4,5-Tetramethylbenzene	104		102		70-130	2		30
Tetrahydrofuran	88		85		66-130	3		30
Ethyl ether	81		81		67-130	0		30
trans-1,4-Dichloro-2-butene	106		103		70-130	3		30
Methyl cyclohexane	84		77		70-130	9		30
Ethyl-Tert-Butyl-Ether	82		80		70-130	2		30
Tertiary-Amyl Methyl Ether	77		76		70-130	1		30
Ethyl Alcohol	112		114		70-130	2		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	104		105		70-130
Toluene-d8	114		114		70-130
4-Bromofluorobenzene	101		101		70-130
Dibromofluoromethane	99		99		70-130

# SEMIVOLATILES

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-01 D  
 Client ID: LB-1 (MW) 1'-2'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/21/12 20:49  
 Analyst: JB  
 Percent Solids: 77%

Date Collected: 07/16/12 09:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/19/12 16:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	390		ug/kg	340	93.	2
1,2,4-Trichlorobenzene	ND		ug/kg	430	120	2
Hexachlorobenzene	ND		ug/kg	260	67.	2
Bis(2-chloroethyl)ether	ND		ug/kg	390	81.	2
2-Chloronaphthalene	ND		ug/kg	430	130	2
1,2-Dichlorobenzene	ND		ug/kg	430	130	2
1,3-Dichlorobenzene	ND		ug/kg	430	130	2
1,4-Dichlorobenzene	ND		ug/kg	430	120	2
3,3'-Dichlorobenzidine	ND		ug/kg	430	160	2
2,4-Dinitrotoluene	ND		ug/kg	430	130	2
2,6-Dinitrotoluene	ND		ug/kg	430	140	2
Fluoranthene	6800		ug/kg	260	56.	2
4-Chlorophenyl phenyl ether	ND		ug/kg	430	76.	2
4-Bromophenyl phenyl ether	ND		ug/kg	430	89.	2
Bis(2-chloroisopropyl)ether	ND		ug/kg	520	120	2
Bis(2-chloroethoxy)methane	ND		ug/kg	460	110	2
Hexachlorobutadiene	ND		ug/kg	430	110	2
Hexachlorocyclopentadiene	ND		ug/kg	1200	340	2
Hexachloroethane	ND		ug/kg	340	62.	2
Isophorone	ND		ug/kg	390	100	2
Naphthalene	250	J	ug/kg	430	140	2
Nitrobenzene	ND		ug/kg	390	120	2
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	340	110	2
n-Nitrosodi-n-propylamine	ND		ug/kg	430	120	2
Bis(2-Ethylhexyl)phthalate	180	J	ug/kg	430	89.	2
Butyl benzyl phthalate	ND		ug/kg	430	120	2
Di-n-butylphthalate	ND		ug/kg	430	73.	2
Di-n-octylphthalate	ND		ug/kg	430	120	2
Diethyl phthalate	ND		ug/kg	430	74.	2
Dimethyl phthalate	ND		ug/kg	430	71.	2
Benzo(a)anthracene	2500		ug/kg	260	85.	2

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-01 D  
 Client ID: LB-1 (MW) 1'-2'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/16/12 09:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Benzo(a)pyrene	2600		ug/kg	340	100	2
Benzo(b)fluoranthene	3400		ug/kg	260	76.	2
Benzo(k)fluoranthene	1200		ug/kg	260	66.	2
Chrysene	2600		ug/kg	260	67.	2
Acenaphthylene	210	J	ug/kg	340	110	2
Anthracene	1400		ug/kg	260	59.	2
Benzo(ghi)perylene	1700		ug/kg	340	110	2
Fluorene	390	J	ug/kg	430	79.	2
Phenanthrene	5200		ug/kg	260	72.	2
Dibenzo(a,h)anthracene	450		ug/kg	260	80.	2
Indeno(1,2,3-cd)Pyrene	2000		ug/kg	340	100	2
Pyrene	5800		ug/kg	260	71.	2
Biphenyl	ND		ug/kg	980	300	2
4-Chloroaniline	ND		ug/kg	430	140	2
2-Nitroaniline	ND		ug/kg	430	79.	2
3-Nitroaniline	ND		ug/kg	430	48.	2
4-Nitroaniline	ND		ug/kg	430	260	2
Dibenzofuran	260	J	ug/kg	430	88.	2
2-Methylnaphthalene	ND		ug/kg	520	170	2
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	430	140	2
Acetophenone	ND		ug/kg	430	140	2
2,4,6-Trichlorophenol	ND		ug/kg	260	79.	2
P-Chloro-M-Cresol	ND		ug/kg	430	88.	2
2-Chlorophenol	ND		ug/kg	430	130	2
2,4-Dichlorophenol	ND		ug/kg	390	120	2
2,4-Dimethylphenol	ND		ug/kg	430	180	2
2-Nitrophenol	ND		ug/kg	930	310	2
4-Nitrophenol	ND		ug/kg	600	180	2
2,4-Dinitrophenol	ND		ug/kg	2100	660	2
4,6-Dinitro-o-cresol	ND		ug/kg	1100	400	2
Pentachlorophenol	ND		ug/kg	340	100	2
Phenol	ND		ug/kg	430	130	2
2-Methylphenol	ND		ug/kg	430	100	2
3-Methylphenol/4-Methylphenol	ND		ug/kg	620	180	2
2,4,5-Trichlorophenol	ND		ug/kg	430	100	2
Benzoic Acid	ND		ug/kg	1400	360	2
Benzyl Alcohol	ND		ug/kg	430	100	2
Carbazole	240	J	ug/kg	430	69.	2

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-01 D  
 Client ID: LB-1 (MW) 1'-2'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/16/12 09:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		25-120
Phenol-d6	64		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	68		30-120
2,4,6-Tribromophenol	82		0-136
4-Terphenyl-d14	82		18-120

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-02  
 Client ID: LB-1 (MW) 9'-11'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/21/12 21:14  
 Analyst: JB  
 Percent Solids: 67%

Date Collected: 07/16/12 09:35  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/19/12 16:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	72	J	ug/kg	190	52.	1
1,2,4-Trichlorobenzene	ND		ug/kg	240	70.	1
Hexachlorobenzene	ND		ug/kg	140	38.	1
Bis(2-chloroethyl)ether	ND		ug/kg	220	46.	1
2-Chloronaphthalene	ND		ug/kg	240	72.	1
1,2-Dichlorobenzene	ND		ug/kg	240	71.	1
1,3-Dichlorobenzene	ND		ug/kg	240	75.	1
1,4-Dichlorobenzene	ND		ug/kg	240	68.	1
3,3'-Dichlorobenzidine	ND		ug/kg	240	87.	1
2,4-Dinitrotoluene	ND		ug/kg	240	72.	1
2,6-Dinitrotoluene	ND		ug/kg	240	79.	1
Fluoranthene	1500		ug/kg	140	32.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	240	42.	1
4-Bromophenyl phenyl ether	ND		ug/kg	240	50.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	290	68.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	260	61.	1
Hexachlorobutadiene	ND		ug/kg	240	64.	1
Hexachlorocyclopentadiene	ND		ug/kg	690	190	1
Hexachloroethane	ND		ug/kg	190	35.	1
Isophorone	ND		ug/kg	220	58.	1
Naphthalene	ND		ug/kg	240	77.	1
Nitrobenzene	ND		ug/kg	220	70.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	190	60.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	240	67.	1
Bis(2-Ethylhexyl)phthalate	200	J	ug/kg	240	50.	1
Butyl benzyl phthalate	ND		ug/kg	240	68.	1
Di-n-butylphthalate	ND		ug/kg	240	41.	1
Di-n-octylphthalate	ND		ug/kg	240	65.	1
Diethyl phthalate	ND		ug/kg	240	42.	1
Dimethyl phthalate	ND		ug/kg	240	40.	1
Benzo(a)anthracene	730		ug/kg	140	48.	1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

## SAMPLE RESULTS

Lab ID: L1212729-02  
 Client ID: LB-1 (MW) 9'-11'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/16/12 09:35  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	690		ug/kg	190	58.	1
Benzo(b)fluoranthene	950		ug/kg	140	43.	1
Benzo(k)fluoranthene	310		ug/kg	140	37.	1
Chrysene	750		ug/kg	140	38.	1
Acenaphthylene	ND		ug/kg	190	63.	1
Anthracene	240		ug/kg	140	33.	1
Benzo(ghi)perylene	410		ug/kg	190	61.	1
Fluorene	ND		ug/kg	240	44.	1
Phenanthrene	1000		ug/kg	140	40.	1
Dibenzo(a,h)anthracene	110	J	ug/kg	140	45.	1
Indeno(1,2,3-cd)Pyrene	500		ug/kg	190	59.	1
Pyrene	1400		ug/kg	140	40.	1
Biphenyl	ND		ug/kg	550	170	1
4-Chloroaniline	ND		ug/kg	240	81.	1
2-Nitroaniline	ND		ug/kg	240	44.	1
3-Nitroaniline	ND		ug/kg	240	27.	1
4-Nitroaniline	ND		ug/kg	240	150	1
Dibenzofuran	ND		ug/kg	240	50.	1
2-Methylnaphthalene	ND		ug/kg	290	95.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	240	77.	1
Acetophenone	ND		ug/kg	240	77.	1
2,4,6-Trichlorophenol	ND		ug/kg	140	44.	1
P-Chloro-M-Cresol	ND		ug/kg	240	49.	1
2-Chlorophenol	ND		ug/kg	240	76.	1
2,4-Dichlorophenol	ND		ug/kg	220	70.	1
2,4-Dimethylphenol	ND		ug/kg	240	100	1
2-Nitrophenol	ND		ug/kg	520	180	1
4-Nitrophenol	ND		ug/kg	340	100	1
2,4-Dinitrophenol	ND		ug/kg	1200	370	1
4,6-Dinitro-o-cresol	ND		ug/kg	630	230	1
Pentachlorophenol	ND		ug/kg	190	57.	1
Phenol	ND		ug/kg	240	76.	1
2-Methylphenol	ND		ug/kg	240	59.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	350	100	1
2,4,5-Trichlorophenol	ND		ug/kg	240	56.	1
Benzoic Acid	ND		ug/kg	780	200	1
Benzyl Alcohol	ND		ug/kg	240	56.	1
Carbazole	73	J	ug/kg	240	39.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-02  
 Client ID: LB-1 (MW) 9'-11'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/16/12 09:35  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	58		25-120
Phenol-d6	58		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	59		30-120
2,4,6-Tribromophenol	82		0-136
4-Terphenyl-d14	71		18-120

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-03  
 Client ID: LB-1 (MW) 11'-13'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/21/12 21:40  
 Analyst: JB  
 Percent Solids: 85%

Date Collected: 07/16/12 10:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/19/12 16:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	90	J	ug/kg	160	42.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	57.	1
Hexachlorobenzene	ND		ug/kg	120	30.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	37.	1
2-Chloronaphthalene	ND		ug/kg	190	58.	1
1,2-Dichlorobenzene	ND		ug/kg	190	57.	1
1,3-Dichlorobenzene	ND		ug/kg	190	60.	1
1,4-Dichlorobenzene	ND		ug/kg	190	55.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	70.	1
2,4-Dinitrotoluene	ND		ug/kg	190	58.	1
2,6-Dinitrotoluene	ND		ug/kg	190	64.	1
Fluoranthene	1200		ug/kg	120	25.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	34.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	40.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	55.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	49.	1
Hexachlorobutadiene	ND		ug/kg	190	52.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	150	1
Hexachloroethane	ND		ug/kg	160	28.	1
Isophorone	ND		ug/kg	180	46.	1
Naphthalene	160	J	ug/kg	190	62.	1
Nitrobenzene	ND		ug/kg	180	57.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	160	49.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	54.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	190	40.	1
Butyl benzyl phthalate	ND		ug/kg	190	55.	1
Di-n-butylphthalate	ND		ug/kg	190	33.	1
Di-n-octylphthalate	ND		ug/kg	190	53.	1
Diethyl phthalate	ND		ug/kg	190	34.	1
Dimethyl phthalate	ND		ug/kg	190	32.	1
Benzo(a)anthracene	590		ug/kg	120	38.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-03  
 Client ID: LB-1 (MW) 11'-13'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/16/12 10:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Benzo(a)pyrene	510		ug/kg	160	46.	1
Benzo(b)fluoranthene	650		ug/kg	120	34.	1
Benzo(k)fluoranthene	220		ug/kg	120	30.	1
Chrysene	590		ug/kg	120	30.	1
Acenaphthylene	70	J	ug/kg	160	50.	1
Anthracene	270		ug/kg	120	27.	1
Benzo(ghi)perylene	240		ug/kg	160	49.	1
Fluorene	120	J	ug/kg	190	36.	1
Phenanthrene	810		ug/kg	120	32.	1
Dibenzo(a,h)anthracene	81	J	ug/kg	120	36.	1
Indeno(1,2,3-cd)Pyrene	310		ug/kg	160	48.	1
Pyrene	1000		ug/kg	120	32.	1
Biphenyl	ND		ug/kg	440	140	1
4-Chloroaniline	ND		ug/kg	190	66.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	22.	1
4-Nitroaniline	ND		ug/kg	190	120	1
Dibenzofuran	120	J	ug/kg	190	40.	1
2-Methylnaphthalene	ND		ug/kg	230	77.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	62.	1
Acetophenone	ND		ug/kg	190	62.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
P-Chloro-M-Cresol	ND		ug/kg	190	40.	1
2-Chlorophenol	ND		ug/kg	190	61.	1
2,4-Dichlorophenol	ND		ug/kg	180	57.	1
2,4-Dimethylphenol	ND		ug/kg	190	80.	1
2-Nitrophenol	ND		ug/kg	420	140	1
4-Nitrophenol	ND		ug/kg	270	83.	1
2,4-Dinitrophenol	ND		ug/kg	930	300	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	180	1
Pentachlorophenol	ND		ug/kg	160	46.	1
Phenol	ND		ug/kg	190	61.	1
2-Methylphenol	ND		ug/kg	190	48.	1
3-Methylphenol/4-Methylphenol	610		ug/kg	280	84.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	45.	1
Benzoic Acid	ND		ug/kg	630	160	1
Benzyl Alcohol	ND		ug/kg	190	45.	1
Carbazole	76	J	ug/kg	190	31.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-03  
 Client ID: LB-1 (MW) 11'-13'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/16/12 10:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		25-120
Phenol-d6	68		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	68		30-120
2,4,6-Tribromophenol	89		0-136
4-Terphenyl-d14	80		18-120

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-04  
 Client ID: FIELD BLANK #2  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8270C  
 Analytical Date: 07/20/12 21:10  
 Analyst: RC

Date Collected: 07/17/12 11:20  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/18/12 17:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/l	2.0	0.55	1
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67	1
Hexachlorobenzene	ND		ug/l	2.0	0.65	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
2-Chloronaphthalene	ND		ug/l	2.0	0.47	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46	1
Fluoranthene	ND		ug/l	2.0	0.51	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40	1
Hexachlorobutadiene	ND		ug/l	2.0	0.81	1
Hexachlorocyclopentadiene	ND		ug/l	20	2.1	1
Hexachloroethane	ND		ug/l	2.0	0.66	1
Isophorone	ND		ug/l	5.0	0.35	1
Naphthalene	ND		ug/l	2.0	0.72	1
Nitrobenzene	ND		ug/l	2.0	0.50	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Butyl benzyl phthalate	ND		ug/l	5.0	0.46	1
Di-n-butylphthalate	ND		ug/l	5.0	0.54	1
Di-n-octylphthalate	ND		ug/l	5.0	0.53	1
Diethyl phthalate	ND		ug/l	5.0	0.45	1
Dimethyl phthalate	ND		ug/l	5.0	0.45	1
Benzo(a)anthracene	ND		ug/l	2.0	0.82	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-04  
 Client ID: FIELD BLANK #2  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 11:20  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Benzo(a)pyrene	ND		ug/l	2.0	0.48	1
Benzo(b)fluoranthene	ND		ug/l	2.0	0.48	1
Benzo(k)fluoranthene	ND		ug/l	2.0	0.48	1
Chrysene	ND		ug/l	2.0	0.56	1
Acenaphthylene	ND		ug/l	2.0	0.50	1
Anthracene	ND		ug/l	2.0	0.47	1
Benzo(ghi)perylene	ND		ug/l	2.0	0.53	1
Fluorene	ND		ug/l	2.0	0.49	1
Phenanthrene	ND		ug/l	2.0	0.49	1
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.48	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	2.0	0.48	1
Pyrene	ND		ug/l	2.0	0.44	1
Biphenyl	ND		ug/l	2.0	0.50	1
4-Chloroaniline	ND		ug/l	5.0	0.83	1
2-Nitroaniline	ND		ug/l	5.0	0.40	1
3-Nitroaniline	ND		ug/l	5.0	0.59	1
4-Nitroaniline	ND		ug/l	5.0	0.55	1
Dibenzofuran	ND		ug/l	2.0	0.47	1
2-Methylnaphthalene	ND		ug/l	2.0	0.55	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65	1
Acetophenone	ND		ug/l	5.0	0.55	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.34	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.43	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.2	1
2-Nitrophenol	ND		ug/l	10	0.48	1
4-Nitrophenol	ND		ug/l	10	1.2	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59	1
Pentachlorophenol	ND		ug/l	10	1.2	1
Phenol	ND		ug/l	5.0	0.26	1
2-Methylphenol	ND		ug/l	5.0	0.53	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.53	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-04  
 Client ID: FIELD BLANK #2  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 11:20  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	110		41-149

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-05  
 Client ID: LB-6 (MW) 1-2  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/19/12 23:50  
 Analyst: JB  
 Percent Solids: 92%

Date Collected: 07/17/12 13:30  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 16:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	140	38.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	52.	1
Hexachlorobenzene	ND		ug/kg	110	28.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	34.	1
2-Chloronaphthalene	ND		ug/kg	180	54.	1
1,2-Dichlorobenzene	ND		ug/kg	180	52.	1
1,3-Dichlorobenzene	ND		ug/kg	180	55.	1
1,4-Dichlorobenzene	ND		ug/kg	180	51.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	64.	1
2,4-Dinitrotoluene	ND		ug/kg	180	53.	1
2,6-Dinitrotoluene	ND		ug/kg	180	59.	1
Fluoranthene	360		ug/kg	110	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	31.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	37.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	50.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	45.	1
Hexachlorobutadiene	ND		ug/kg	180	48.	1
Hexachlorocyclopentadiene	ND		ug/kg	510	140	1
Hexachloroethane	ND		ug/kg	140	26.	1
Isophorone	ND		ug/kg	160	42.	1
Naphthalene	ND		ug/kg	180	57.	1
Nitrobenzene	ND		ug/kg	160	52.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	140	45.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	50.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	37.	1
Butyl benzyl phthalate	ND		ug/kg	180	50.	1
Di-n-butylphthalate	ND		ug/kg	180	30.	1
Di-n-octylphthalate	ND		ug/kg	180	48.	1
Diethyl phthalate	ND		ug/kg	180	31.	1
Dimethyl phthalate	ND		ug/kg	180	29.	1
Benzo(a)anthracene	160		ug/kg	110	35.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-05  
 Client ID: LB-6 (MW) 1-2  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 13:30  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	150		ug/kg	140	42.	1
Benzo(b)fluoranthene	180		ug/kg	110	32.	1
Benzo(k)fluoranthene	72	J	ug/kg	110	27.	1
Chrysene	160		ug/kg	110	28.	1
Acenaphthylene	ND		ug/kg	140	46.	1
Anthracene	75	J	ug/kg	110	25.	1
Benzo(ghi)perylene	79	J	ug/kg	140	45.	1
Fluorene	38	J	ug/kg	180	33.	1
Phenanthrene	320		ug/kg	110	30.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	33.	1
Indeno(1,2,3-cd)Pyrene	88	J	ug/kg	140	44.	1
Pyrene	300		ug/kg	110	29.	1
Biphenyl	ND		ug/kg	410	120	1
4-Chloroaniline	ND		ug/kg	180	60.	1
2-Nitroaniline	ND		ug/kg	180	33.	1
3-Nitroaniline	ND		ug/kg	180	20.	1
4-Nitroaniline	ND		ug/kg	180	110	1
Dibenzofuran	ND		ug/kg	180	37.	1
2-Methylnaphthalene	ND		ug/kg	210	70.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	57.	1
Acetophenone	ND		ug/kg	180	57.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	33.	1
P-Chloro-M-Cresol	ND		ug/kg	180	36.	1
2-Chlorophenol	ND		ug/kg	180	56.	1
2,4-Dichlorophenol	ND		ug/kg	160	52.	1
2,4-Dimethylphenol	ND		ug/kg	180	74.	1
2-Nitrophenol	ND		ug/kg	380	130	1
4-Nitrophenol	ND		ug/kg	250	76.	1
2,4-Dinitrophenol	ND		ug/kg	860	280	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	170	1
Pentachlorophenol	ND		ug/kg	140	42.	1
Phenol	ND		ug/kg	180	56.	1
2-Methylphenol	ND		ug/kg	180	44.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	77.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	41.	1
Benzoic Acid	ND		ug/kg	580	150	1
Benzyl Alcohol	ND		ug/kg	180	41.	1
Carbazole	36	J	ug/kg	180	29.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-05  
 Client ID: LB-6 (MW) 1-2  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 13:30  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	84		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	78		30-120
2,4,6-Tribromophenol	93		0-136
4-Terphenyl-d14	72		18-120

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

**Lab ID:** L1212729-06  
**Client ID:** LB-6 (MW) 8-10  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8270C  
**Analytical Date:** 07/20/12 00:14  
**Analyst:** JB  
**Percent Solids:** 85%

**Date Collected:** 07/17/12 13:40  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 07/18/12 16:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	150	42.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	56.	1
Hexachlorobenzene	ND		ug/kg	120	30.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	37.	1
2-Chloronaphthalene	ND		ug/kg	190	58.	1
1,2-Dichlorobenzene	ND		ug/kg	190	57.	1
1,3-Dichlorobenzene	ND		ug/kg	190	60.	1
1,4-Dichlorobenzene	ND		ug/kg	190	55.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	70.	1
2,4-Dinitrotoluene	ND		ug/kg	190	58.	1
2,6-Dinitrotoluene	ND		ug/kg	190	63.	1
Fluoranthene	ND		ug/kg	120	25.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	34.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	40.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	54.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	48.	1
Hexachlorobutadiene	ND		ug/kg	190	51.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	150	1
Hexachloroethane	ND		ug/kg	150	28.	1
Isophorone	ND		ug/kg	170	46.	1
Naphthalene	ND		ug/kg	190	61.	1
Nitrobenzene	ND		ug/kg	170	56.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	48.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	54.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	190	40.	1
Butyl benzyl phthalate	ND		ug/kg	190	54.	1
Di-n-butylphthalate	ND		ug/kg	190	33.	1
Di-n-octylphthalate	ND		ug/kg	190	52.	1
Diethyl phthalate	ND		ug/kg	190	33.	1
Dimethyl phthalate	ND		ug/kg	190	32.	1
Benzo(a)anthracene	ND		ug/kg	120	38.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-06  
 Client ID: LB-6 (MW) 8-10  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 13:40  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	120	34.	1
Benzo(k)fluoranthene	ND		ug/kg	120	30.	1
Chrysene	ND		ug/kg	120	30.	1
Acenaphthylene	ND		ug/kg	150	50.	1
Anthracene	ND		ug/kg	120	27.	1
Benzo(ghi)perylene	ND		ug/kg	150	49.	1
Fluorene	ND		ug/kg	190	36.	1
Phenanthrene	ND		ug/kg	120	32.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	36.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	47.	1
Pyrene	ND		ug/kg	120	32.	1
Biphenyl	ND		ug/kg	440	130	1
4-Chloroaniline	ND		ug/kg	190	65.	1
2-Nitroaniline	ND		ug/kg	190	35.	1
3-Nitroaniline	ND		ug/kg	190	22.	1
4-Nitroaniline	ND		ug/kg	190	120	1
Dibenzofuran	ND		ug/kg	190	40.	1
2-Methylnaphthalene	ND		ug/kg	230	76.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	61.	1
Acetophenone	ND		ug/kg	190	62.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	35.	1
P-Chloro-M-Cresol	ND		ug/kg	190	39.	1
2-Chlorophenol	ND		ug/kg	190	60.	1
2,4-Dichlorophenol	ND		ug/kg	170	56.	1
2,4-Dimethylphenol	ND		ug/kg	190	80.	1
2-Nitrophenol	ND		ug/kg	420	140	1
4-Nitrophenol	ND		ug/kg	270	82.	1
2,4-Dinitrophenol	ND		ug/kg	930	300	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	180	1
Pentachlorophenol	ND		ug/kg	150	46.	1
Phenol	ND		ug/kg	190	61.	1
2-Methylphenol	ND		ug/kg	190	48.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	83.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	45.	1
Benzoic Acid	ND		ug/kg	620	160	1
Benzyl Alcohol	ND		ug/kg	190	45.	1
Carbazole	ND		ug/kg	190	31.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-06  
 Client ID: LB-6 (MW) 8-10  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 13:40  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	35		25-120
Phenol-d6	40		10-120
Nitrobenzene-d5	55		23-120
2-Fluorobiphenyl	49		30-120
2,4,6-Tribromophenol	40		0-136
4-Terphenyl-d14	43		18-120

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-07  
 Client ID: LB-6 (MW) 14-15  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/20/12 00:40  
 Analyst: JB  
 Percent Solids: 90%

Date Collected: 07/17/12 14:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 16:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	150	40.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	53.	1
Hexachlorobenzene	ND		ug/kg	110	28.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	35.	1
2-Chloronaphthalene	ND		ug/kg	180	55.	1
1,2-Dichlorobenzene	ND		ug/kg	180	54.	1
1,3-Dichlorobenzene	ND		ug/kg	180	57.	1
1,4-Dichlorobenzene	ND		ug/kg	180	52.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	66.	1
2,4-Dinitrotoluene	ND		ug/kg	180	55.	1
2,6-Dinitrotoluene	ND		ug/kg	180	60.	1
Fluoranthene	ND		ug/kg	110	24.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	32.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	38.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	52.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	46.	1
Hexachlorobutadiene	ND		ug/kg	180	49.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	140	1
Hexachloroethane	ND		ug/kg	150	26.	1
Isophorone	ND		ug/kg	160	44.	1
Naphthalene	ND		ug/kg	180	58.	1
Nitrobenzene	ND		ug/kg	160	53.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	46.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	51.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	38.	1
Butyl benzyl phthalate	ND		ug/kg	180	51.	1
Di-n-butylphthalate	ND		ug/kg	180	31.	1
Di-n-octylphthalate	ND		ug/kg	180	49.	1
Diethyl phthalate	ND		ug/kg	180	32.	1
Dimethyl phthalate	ND		ug/kg	180	30.	1
Benzo(a)anthracene	ND		ug/kg	110	36.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-07  
 Client ID: LB-6 (MW) 14-15  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 14:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	150	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	28.	1
Chrysene	ND		ug/kg	110	28.	1
Acenaphthylene	ND		ug/kg	150	48.	1
Anthracene	ND		ug/kg	110	25.	1
Benzo(ghi)perylene	ND		ug/kg	150	46.	1
Fluorene	ND		ug/kg	180	34.	1
Phenanthrene	ND		ug/kg	110	30.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	34.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	45.	1
Pyrene	ND		ug/kg	110	30.	1
Biphenyl	ND		ug/kg	420	130	1
4-Chloroaniline	ND		ug/kg	180	62.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	20.	1
4-Nitroaniline	ND		ug/kg	180	110	1
Dibenzofuran	ND		ug/kg	180	38.	1
2-Methylnaphthalene	ND		ug/kg	220	72.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	58.	1
Acetophenone	ND		ug/kg	180	59.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
P-Chloro-M-Cresol	ND		ug/kg	180	37.	1
2-Chlorophenol	ND		ug/kg	180	57.	1
2,4-Dichlorophenol	ND		ug/kg	160	53.	1
2,4-Dimethylphenol	ND		ug/kg	180	76.	1
2-Nitrophenol	ND		ug/kg	400	130	1
4-Nitrophenol	ND		ug/kg	260	78.	1
2,4-Dinitrophenol	ND		ug/kg	880	280	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	170	1
Pentachlorophenol	ND		ug/kg	150	43.	1
Phenol	ND		ug/kg	180	58.	1
2-Methylphenol	ND		ug/kg	180	45.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	79.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	43.	1
Benzoic Acid	ND		ug/kg	590	160	1
Benzyl Alcohol	ND		ug/kg	180	42.	1
Carbazole	ND		ug/kg	180	29.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-07  
 Client ID: LB-6 (MW) 14-15  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 14:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		25-120
Phenol-d6	68		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	87		0-136
4-Terphenyl-d14	77		18-120

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-08  
 Client ID: DUP#1  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/20/12 01:05  
 Analyst: JB  
 Percent Solids: 82%

Date Collected: 07/17/12 00:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 16:41

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	160	43.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	58.	1
Hexachlorobenzene	ND		ug/kg	120	31.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	38.	1
2-Chloronaphthalene	ND		ug/kg	200	59.	1
1,2-Dichlorobenzene	ND		ug/kg	200	58.	1
1,3-Dichlorobenzene	ND		ug/kg	200	61.	1
1,4-Dichlorobenzene	ND		ug/kg	200	56.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	72.	1
2,4-Dinitrotoluene	ND		ug/kg	200	59.	1
2,6-Dinitrotoluene	ND		ug/kg	200	65.	1
Fluoranthene	ND		ug/kg	120	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	35.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	41.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	56.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	50.	1
Hexachlorobutadiene	ND		ug/kg	200	53.	1
Hexachlorocyclopentadiene	ND		ug/kg	570	160	1
Hexachloroethane	ND		ug/kg	160	29.	1
Isophorone	ND		ug/kg	180	47.	1
Naphthalene	ND		ug/kg	200	63.	1
Nitrobenzene	ND		ug/kg	180	58.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	160	50.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	55.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	200	41.	1
Butyl benzyl phthalate	ND		ug/kg	200	56.	1
Di-n-butylphthalate	ND		ug/kg	200	34.	1
Di-n-octylphthalate	ND		ug/kg	200	53.	1
Diethyl phthalate	ND		ug/kg	200	34.	1
Dimethyl phthalate	ND		ug/kg	200	33.	1
Benzo(a)anthracene	ND		ug/kg	120	39.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-08  
 Client ID: DUP#1  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 00:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Benzo(a)pyrene	ND		ug/kg	160	47.	1
Benzo(b)fluoranthene	ND		ug/kg	120	35.	1
Benzo(k)fluoranthene	ND		ug/kg	120	30.	1
Chrysene	ND		ug/kg	120	31.	1
Acenaphthylene	ND		ug/kg	160	51.	1
Anthracene	ND		ug/kg	120	27.	1
Benzo(ghi)perylene	ND		ug/kg	160	50.	1
Fluorene	ND		ug/kg	200	36.	1
Phenanthrene	ND		ug/kg	120	33.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	37.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	160	48.	1
Pyrene	ND		ug/kg	120	33.	1
Biphenyl	ND		ug/kg	450	140	1
4-Chloroaniline	ND		ug/kg	200	67.	1
2-Nitroaniline	ND		ug/kg	200	36.	1
3-Nitroaniline	ND		ug/kg	200	22.	1
4-Nitroaniline	ND		ug/kg	200	120	1
Dibenzofuran	ND		ug/kg	200	41.	1
2-Methylnaphthalene	ND		ug/kg	240	78.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	63.	1
Acetophenone	ND		ug/kg	200	64.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
P-Chloro-M-Cresol	ND		ug/kg	200	40.	1
2-Chlorophenol	ND		ug/kg	200	62.	1
2,4-Dichlorophenol	ND		ug/kg	180	58.	1
2,4-Dimethylphenol	ND		ug/kg	200	82.	1
2-Nitrophenol	ND		ug/kg	430	140	1
4-Nitrophenol	ND		ug/kg	280	84.	1
2,4-Dinitrophenol	ND		ug/kg	950	310	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	190	1
Pentachlorophenol	ND		ug/kg	160	47.	1
Phenol	ND		ug/kg	200	62.	1
2-Methylphenol	ND		ug/kg	200	49.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	86.	1
2,4,5-Trichlorophenol	ND		ug/kg	200	46.	1
Benzoic Acid	ND		ug/kg	640	170	1
Benzyl Alcohol	ND		ug/kg	200	46.	1
Carbazole	ND		ug/kg	200	32.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-08  
 Client ID: DUP#1  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/17/12 00:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		25-120
Phenol-d6	69		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	74		0-136
4-Terphenyl-d14	65		18-120

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/19/12 19:40  
**Analyst:** JB

**Extraction Method:** EPA 3546  
**Extraction Date:** 07/18/12 16:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05-08 Batch: WG549314-1					
Acenaphthene	ND		ug/kg	130	36.
1,2,4-Trichlorobenzene	ND		ug/kg	160	48.
Hexachlorobenzene	ND		ug/kg	99	26.
Bis(2-chloroethyl)ether	ND		ug/kg	150	31.
2-Chloronaphthalene	ND		ug/kg	160	50.
1,2-Dichlorobenzene	ND		ug/kg	160	49.
1,3-Dichlorobenzene	ND		ug/kg	160	51.
1,4-Dichlorobenzene	ND		ug/kg	160	47.
3,3'-Dichlorobenzidine	ND		ug/kg	160	60.
2,4-Dinitrotoluene	ND		ug/kg	160	50.
2,6-Dinitrotoluene	ND		ug/kg	160	54.
Fluoranthene	ND		ug/kg	99	22.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	29.
4-Bromophenyl phenyl ether	ND		ug/kg	160	34.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	47.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	42.
Hexachlorobutadiene	ND		ug/kg	160	44.
Hexachlorocyclopentadiene	ND		ug/kg	470	130
Hexachloroethane	ND		ug/kg	130	24.
Isophorone	ND		ug/kg	150	39.
Naphthalene	ND		ug/kg	160	52.
Nitrobenzene	ND		ug/kg	150	48.
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	130	42.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	46.
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	160	34.
Butyl benzyl phthalate	ND		ug/kg	160	46.
Di-n-butylphthalate	ND		ug/kg	160	28.
Di-n-octylphthalate	ND		ug/kg	160	45.
Diethyl phthalate	ND		ug/kg	160	29.
Dimethyl phthalate	ND		ug/kg	160	27.
Benzo(a)anthracene	ND		ug/kg	99	33.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/19/12 19:40  
**Analyst:** JB

**Extraction Method:** EPA 3546  
**Extraction Date:** 07/18/12 16:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05-08 Batch: WG549314-1					
Benzo(a)pyrene	ND		ug/kg	130	39.
Benzo(b)fluoranthene	ND		ug/kg	99	29.
Benzo(k)fluoranthene	ND		ug/kg	99	25.
Chrysene	ND		ug/kg	99	26.
Acenaphthylene	ND		ug/kg	130	43.
Anthracene	ND		ug/kg	99	23.
Benzo(ghi)perylene	ND		ug/kg	130	42.
Fluorene	ND		ug/kg	160	30.
Phenanthrene	ND		ug/kg	99	28.
Dibenzo(a,h)anthracene	ND		ug/kg	99	31.
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	130	40.
Pyrene	ND		ug/kg	99	27.
Biphenyl	ND		ug/kg	380	120
4-Chloroaniline	ND		ug/kg	160	56.
2-Nitroaniline	ND		ug/kg	160	30.
3-Nitroaniline	ND		ug/kg	160	18.
4-Nitroaniline	ND		ug/kg	160	100
Dibenzofuran	ND		ug/kg	160	34.
2-Methylnaphthalene	ND		ug/kg	200	65.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	53.
Acetophenone	ND		ug/kg	160	53.
2,4,6-Trichlorophenol	ND		ug/kg	99	30.
P-Chloro-M-Cresol	ND		ug/kg	160	34.
2-Chlorophenol	ND		ug/kg	160	52.
2,4-Dichlorophenol	ND		ug/kg	150	48.
2,4-Dimethylphenol	ND		ug/kg	160	68.
2-Nitrophenol	ND		ug/kg	360	120
4-Nitrophenol	ND		ug/kg	230	70.
2,4-Dinitrophenol	ND		ug/kg	790	260
4,6-Dinitro-o-cresol	ND		ug/kg	430	160
Pentachlorophenol	ND		ug/kg	130	39.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270C  
Analytical Date: 07/19/12 19:40  
Analyst: JB

Extraction Method: EPA 3546  
Extraction Date: 07/18/12 16:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 05-08 Batch: WG549314-1					
Phenol	ND		ug/kg	160	52.
2-Methylphenol	ND		ug/kg	160	41.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	71.
2,4,5-Trichlorophenol	ND		ug/kg	160	38.
Benzoic Acid	ND		ug/kg	540	140
Benzyl Alcohol	ND		ug/kg	160	38.
Carbazole	ND		ug/kg	160	27.

Tentatively Identified Compounds

No Tentatively Identified Compounds      ND      ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	73		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	93		0-136
4-Terphenyl-d14	103		18-120

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/20/12 16:07  
**Analyst:** RC

**Extraction Method:** EPA 3510C  
**Extraction Date:** 07/18/12 17:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG549322-1					
Acenaphthene	ND		ug/l	2.0	0.55
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67
Hexachlorobenzene	ND		ug/l	2.0	0.65
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39
2-Chloronaphthalene	ND		ug/l	2.0	0.47
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46
Fluoranthene	ND		ug/l	2.0	0.51
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40
Hexachlorobutadiene	ND		ug/l	2.0	0.81
Hexachlorocyclopentadiene	ND		ug/l	20	2.1
Hexachloroethane	ND		ug/l	2.0	0.66
Isophorone	ND		ug/l	5.0	0.35
Naphthalene	ND		ug/l	2.0	0.72
Nitrobenzene	ND		ug/l	2.0	0.50
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4
Butyl benzyl phthalate	ND		ug/l	5.0	0.46
Di-n-butylphthalate	ND		ug/l	5.0	0.54
Di-n-octylphthalate	ND		ug/l	5.0	0.53
Diethyl phthalate	ND		ug/l	5.0	0.45
Dimethyl phthalate	ND		ug/l	5.0	0.45
Benzo(a)anthracene	ND		ug/l	2.0	0.82

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270C  
Analytical Date: 07/20/12 16:07  
Analyst: RC

Extraction Method: EPA 3510C  
Extraction Date: 07/18/12 17:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG549322-1					
Benzo(a)pyrene	ND		ug/l	2.0	0.48
Benzo(b)fluoranthene	ND		ug/l	2.0	0.48
Benzo(k)fluoranthene	ND		ug/l	2.0	0.48
Chrysene	ND		ug/l	2.0	0.56
Acenaphthylene	ND		ug/l	2.0	0.50
Anthracene	ND		ug/l	2.0	0.47
Benzo(ghi)perylene	ND		ug/l	2.0	0.53
Fluorene	ND		ug/l	2.0	0.49
Phenanthrene	ND		ug/l	2.0	0.49
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.48
Indeno(1,2,3-cd)Pyrene	ND		ug/l	2.0	0.48
Pyrene	ND		ug/l	2.0	0.44
Biphenyl	ND		ug/l	2.0	0.50
4-Chloroaniline	ND		ug/l	5.0	0.83
2-Nitroaniline	ND		ug/l	5.0	0.40
3-Nitroaniline	ND		ug/l	5.0	0.59
4-Nitroaniline	ND		ug/l	5.0	0.55
Dibenzofuran	ND		ug/l	2.0	0.47
2-Methylnaphthalene	ND		ug/l	2.0	0.55
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65
Acetophenone	ND		ug/l	5.0	0.55
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.34
2,4-Dichlorophenol	ND		ug/l	5.0	0.43
2,4-Dimethylphenol	ND		ug/l	5.0	1.2
2-Nitrophenol	ND		ug/l	10	0.48
4-Nitrophenol	ND		ug/l	10	1.2
2,4-Dinitrophenol	ND		ug/l	20	1.4
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59
Pentachlorophenol	ND		ug/l	10	1.2

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/20/12 16:07  
**Analyst:** RC

**Extraction Method:** EPA 3510C  
**Extraction Date:** 07/18/12 17:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG549322-1					
Phenol	ND		ug/l	5.0	0.26
2-Methylphenol	ND		ug/l	5.0	0.53
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45
Benzoic Acid	ND		ug/l	50	1.0
Benzyl Alcohol	ND		ug/l	2.0	0.47
Carbazole	ND		ug/l	2.0	0.53

**Tentatively Identified Compounds**

No Tentatively Identified Compounds      ND      ug/l

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	55		23-120
2-Fluorobiphenyl	55		15-120
2,4,6-Tribromophenol	81		10-120
4-Terphenyl-d14	101		41-149

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/21/12 16:33  
**Analyst:** JB

**Extraction Method:** EPA 3546  
**Extraction Date:** 07/19/12 16:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG549611-1					
Acenaphthene	ND		ug/kg	130	36.
1,2,4-Trichlorobenzene	ND		ug/kg	170	48.
Hexachlorobenzene	ND		ug/kg	100	26.
Bis(2-chloroethyl)ether	ND		ug/kg	150	31.
2-Chloronaphthalene	ND		ug/kg	170	50.
1,2-Dichlorobenzene	ND		ug/kg	170	49.
1,3-Dichlorobenzene	ND		ug/kg	170	51.
1,4-Dichlorobenzene	ND		ug/kg	170	47.
3,3'-Dichlorobenzidine	ND		ug/kg	170	60.
2,4-Dinitrotoluene	ND		ug/kg	170	50.
2,6-Dinitrotoluene	ND		ug/kg	170	54.
Fluoranthene	ND		ug/kg	100	22.
4-Chlorophenyl phenyl ether	ND		ug/kg	170	29.
4-Bromophenyl phenyl ether	ND		ug/kg	170	34.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	47.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	42.
Hexachlorobutadiene	ND		ug/kg	170	44.
Hexachlorocyclopentadiene	ND		ug/kg	480	130
Hexachloroethane	ND		ug/kg	130	24.
Isophorone	ND		ug/kg	150	40.
Naphthalene	ND		ug/kg	170	53.
Nitrobenzene	ND		ug/kg	150	48.
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	130	42.
n-Nitrosodi-n-propylamine	ND		ug/kg	170	46.
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	170	34.
Butyl benzyl phthalate	ND		ug/kg	170	46.
Di-n-butylphthalate	ND		ug/kg	170	28.
Di-n-octylphthalate	ND		ug/kg	170	45.
Diethyl phthalate	ND		ug/kg	170	29.
Dimethyl phthalate	ND		ug/kg	170	27.
Benzo(a)anthracene	ND		ug/kg	100	33.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270C  
Analytical Date: 07/21/12 16:33  
Analyst: JB

Extraction Method: EPA 3546  
Extraction Date: 07/19/12 16:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG549611-1					
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	100	29.
Benzo(k)fluoranthene	ND		ug/kg	100	26.
Chrysene	ND		ug/kg	100	26.
Acenaphthylene	ND		ug/kg	130	43.
Anthracene	ND		ug/kg	100	23.
Benzo(ghi)perylene	ND		ug/kg	130	42.
Fluorene	ND		ug/kg	170	30.
Phenanthrene	ND		ug/kg	100	28.
Dibenzo(a,h)anthracene	ND		ug/kg	100	31.
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	130	40.
Pyrene	ND		ug/kg	100	27.
Biphenyl	ND		ug/kg	380	120
4-Chloroaniline	ND		ug/kg	170	56.
2-Nitroaniline	ND		ug/kg	170	30.
3-Nitroaniline	ND		ug/kg	170	19.
4-Nitroaniline	ND		ug/kg	170	100
Dibenzofuran	ND		ug/kg	170	34.
2-Methylnaphthalene	ND		ug/kg	200	65.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	170	53.
Acetophenone	ND		ug/kg	170	53.
2,4,6-Trichlorophenol	ND		ug/kg	100	30.
P-Chloro-M-Cresol	ND		ug/kg	170	34.
2-Chlorophenol	ND		ug/kg	170	52.
2,4-Dichlorophenol	ND		ug/kg	150	48.
2,4-Dimethylphenol	ND		ug/kg	170	68.
2-Nitrophenol	ND		ug/kg	360	120
4-Nitrophenol	ND		ug/kg	230	71.
2,4-Dinitrophenol	ND		ug/kg	800	260
4,6-Dinitro-o-cresol	ND		ug/kg	430	160
Pentachlorophenol	ND		ug/kg	130	39.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/21/12 16:33  
**Analyst:** JB

**Extraction Method:** EPA 3546  
**Extraction Date:** 07/19/12 16:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG549611-1					
Phenol	ND		ug/kg	170	52.
2-Methylphenol	ND		ug/kg	170	41.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	72.
2,4,5-Trichlorophenol	ND		ug/kg	170	39.
Benzoic Acid	ND		ug/kg	540	140
Benzyl Alcohol	ND		ug/kg	170	38.
Carbazole	ND		ug/kg	170	27.

Tentatively Identified Compounds

No Tentatively Identified Compounds      ND      ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	107		0-136
4-Terphenyl-d14	102		18-120

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-08 Batch: WG549314-2 WG549314-3								
Acenaphthene	84		76		31-137	10		50
1,2,4-Trichlorobenzene	83		70		38-107	17		50
Hexachlorobenzene	98		94		40-140	4		50
Bis(2-chloroethyl)ether	76		65		40-140	16		50
2-Chloronaphthalene	98		84		40-140	15		50
1,2-Dichlorobenzene	82		74		40-140	10		50
1,3-Dichlorobenzene	80		66		40-140	19		50
1,4-Dichlorobenzene	79		68		28-104	15		50
3,3'-Dichlorobenzidine	81		83		40-140	2		50
2,4-Dinitrotoluene	107	Q	102	Q	28-89	5		50
2,6-Dinitrotoluene	114		106		40-140	7		50
Fluoranthene	93		91		40-140	2		50
4-Chlorophenyl phenyl ether	93		87		40-140	7		50
4-Bromophenyl phenyl ether	95		92		40-140	3		50
Bis(2-chloroisopropyl)ether	84		71		40-140	17		50
Bis(2-chloroethoxy)methane	89		76		40-117	16		50
Hexachlorobutadiene	94		84		40-140	11		50
Hexachlorocyclopentadiene	81		66		40-140	20		50
Hexachloroethane	94		74		40-140	24		50
Isophorone	97		86		40-140	12		50
Naphthalene	83		72		40-140	14		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-08 Batch: WG549314-2 WG549314-3								
Nitrobenzene	86		76		40-140	12		50
NitrosoDiPhenylAmine(NDPA)/DPA	95		89			7		50
n-Nitrosodi-n-propylamine	96		77		32-121	22		50
Bis(2-Ethylhexyl)phthalate	117		115		40-140	2		50
Butyl benzyl phthalate	116		113		40-140	3		50
Di-n-butylphthalate	113		109		40-140	4		50
Di-n-octylphthalate	108		109		40-140	1		50
Diethyl phthalate	107		102		40-140	5		50
Dimethyl phthalate	96		90		40-140	6		50
Benzo(a)anthracene	91		90		40-140	1		50
Benzo(a)pyrene	98		96		40-140	2		50
Benzo(b)fluoranthene	94		93		40-140	1		50
Benzo(k)fluoranthene	91		89		40-140	2		50
Chrysene	83		83		40-140	0		50
Acenaphthylene	102		91		40-140	11		50
Anthracene	91		88		40-140	3		50
Benzo(ghi)perylene	86		85		40-140	1		50
Fluorene	93		86		40-140	8		50
Phenanthrene	86		83		40-140	4		50
Dibenzo(a,h)anthracene	93		91		40-140	2		50
Indeno(1,2,3-cd)Pyrene	96		92		40-140	4		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-08 Batch: WG549314-2 WG549314-3								
Pyrene	92		88		35-142	4		50
Biphenyl	82		76			8		50
4-Chloroaniline	60		56		40-140	7		50
2-Nitroaniline	113		107		47-134	5		50
3-Nitroaniline	72		73		26-129	1		50
4-Nitroaniline	96		90		41-125	6		50
Dibenzofuran	90		82		40-140	9		50
2-Methylnaphthalene	93		81		40-140	14		50
1,2,4,5-Tetrachlorobenzene	80		71		40-117	12		50
Acetophenone	98		85		14-144	14		50
2,4,6-Trichlorophenol	122		109		30-130	11		50
P-Chloro-M-Cresol	112	Q	101		26-103	10		50
2-Chlorophenol	90		78		25-102	14		50
2,4-Dichlorophenol	104		90		30-130	14		50
2,4-Dimethylphenol	108		95		30-130	13		50
2-Nitrophenol	104		87		30-130	18		50
4-Nitrophenol	114		105		11-114	8		50
2,4-Dinitrophenol	79		43		4-130	59	Q	50
4,6-Dinitro-o-cresol	106		100		10-130	6		50
Pentachlorophenol	88		88		17-109	0		50
Phenol	86		72		26-90	18		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-08 Batch: WG549314-2 WG549314-3								
2-Methylphenol	95		81		30-130.	16		50
3-Methylphenol/4-Methylphenol	97		82		30-130	17		50
2,4,5-Trichlorophenol	123		111		30-130	10		50
Benzoic Acid	63		14			127	Q	50
Benzyl Alcohol	101		85		40-140	17		50
Carbazole	90		85		54-128	6		50

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
2-Fluorophenol	89		73		25-120
Phenol-d6	96		78		10-120
Nitrobenzene-d5	100		81		23-120
2-Fluorobiphenyl	98		83		30-120
2,4,6-Tribromophenol	103		97		0-136
4-Terphenyl-d14	106		99		18-120

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG549322-2 WG549322-3								
Acenaphthene	71		76		37-111	7		30
1,2,4-Trichlorobenzene	46		48		39-98	4		30
Hexachlorobenzene	75		80		40-140	6		30
Bis(2-chloroethyl)ether	59		62		40-140	5		30
2-Chloronaphthalene	66		70		40-140	6		30
1,2-Dichlorobenzene	41		44		40-140	7		30
1,3-Dichlorobenzene	40		43		40-140	7		30
1,4-Dichlorobenzene	39		42		36-97	7		30
3,3'-Dichlorobenzidine	76		72		40-140	5		30
2,4-Dinitrotoluene	88		94		24-96	7		30
2,6-Dinitrotoluene	80		87		40-140	8		30
Fluoranthene	81		90		40-140	11		30
4-Chlorophenyl phenyl ether	73		80		40-140	9		30
4-Bromophenyl phenyl ether	74		82		40-140	10		30
Bis(2-chloroisopropyl)ether	63		67		40-140	6		30
Bis(2-chloroethoxy)methane	66		69		40-140	4		30
Hexachlorobutadiene	45		46		40-140	2		30
Hexachlorocyclopentadiene	24	Q	27	Q	40-140	12		30
Hexachloroethane	38	Q	42		40-140	10		30
Isophorone	66		71		40-140	7		30
Naphthalene	55		56		40-140	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG549322-2 WG549322-3								
Nitrobenzene	64		67		40-140	5		30
NitrosoDiPhenylAmine(NDPA)/DPA	74		79		40-140	7		30
n-Nitrosodi-n-propylamine	64		67		29-132	5		30
Bis(2-Ethylhexyl)phthalate	94		104		40-140	10		30
Butyl benzyl phthalate	90		101		40-140	12		30
Di-n-butylphthalate	89		100		40-140	12		30
Di-n-octylphthalate	102		111		40-140	8		30
Diethyl phthalate	82		91		40-140	10		30
Dimethyl phthalate	80		87		40-140	8		30
Benzo(a)anthracene	80		87		40-140	8		30
Benzo(a)pyrene	79		86		40-140	8		30
Benzo(b)fluoranthene	79		87		40-140	10		30
Benzo(k)fluoranthene	88		94		40-140	7		30
Chrysene	78		86		40-140	10		30
Acenaphthylene	68		72		45-123	6		30
Anthracene	79		88		40-140	11		30
Benzo(ghi)perylene	81		91		40-140	12		30
Fluorene	76		83		40-140	9		30
Phenanthrene	80		87		40-140	8		30
Dibenzo(a,h)anthracene	86		95		40-140	10		30
Indeno(1,2,3-cd)Pyrene	88		96		40-140	9		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG549322-2 WG549322-3								
Pyrene	79		88		26-127	11		30
Biphenyl	69		73			6		30
4-Chloroaniline	60		64		40-140	6		30
2-Nitroaniline	81		87		52-143	7		30
3-Nitroaniline	65		71		25-145	9		30
4-Nitroaniline	76		78		51-143	3		30
Dibenzofuran	73		78		40-140	7		30
2-Methylnaphthalene	61		63		40-140	3		30
1,2,4,5-Tetrachlorobenzene	63		66		2-134	5		30
Acetophenone	64		67		39-129	5		30
2,4,6-Trichlorophenol	82		88		30-130	7		30
P-Chloro-M-Cresol	80		87		23-97	8		30
2-Chlorophenol	64		64		27-123	0		30
2,4-Dichlorophenol	72		77		30-130	7		30
2,4-Dimethylphenol	61		61		30-130	0		30
2-Nitrophenol	69		71		30-130	3		30
4-Nitrophenol	54		60		10-80	11		30
2,4-Dinitrophenol	72		87		20-130	19		30
4,6-Dinitro-o-cresol	76		84		20-164	10		30
Pentachlorophenol	67		85		9-103	24		30
Phenol	35		36		12-110	3		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG549322-2 WG549322-3								
2-Methylphenol	60		63		30-130	5		30
3-Methylphenol/4-Methylphenol	63		66		30-130	5		30
2,4,5-Trichlorophenol	82		87		30-130	6		30
Benzoic Acid	25		37			39	Q	30
Benzyl Alcohol	61		65			6		30
Carbazole	81		88		55-144	8		30

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
2-Fluorophenol	48		49		21-120
Phenol-d6	34		33		10-120
Nitrobenzene-d5	66		66		23-120
2-Fluorobiphenyl	69		69		15-120
2,4,6-Tribromophenol	93		97		10-120
4-Terphenyl-d14	91		96		41-149

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG549611-2 WG549611-3								
Acenaphthene	80		79		31-137	1		50
1,2,4-Trichlorobenzene	76		70		38-107	8		50
Hexachlorobenzene	95		90		40-140	5		50
Bis(2-chloroethyl)ether	73		65		40-140	12		50
2-Chloronaphthalene	82		80		40-140	2		50
1,2-Dichlorobenzene	78		68		40-140	14		50
1,3-Dichlorobenzene	74		69		40-140	7		50
1,4-Dichlorobenzene	75		67		28-104	11		50
3,3'-Dichlorobenzidine	68		65		40-140	5		50
2,4-Dinitrotoluene	91	Q	87		28-89	4		50
2,6-Dinitrotoluene	92		87		40-140	6		50
Fluoranthene	87		81		40-140	7		50
4-Chlorophenyl phenyl ether	82		80		40-140	2		50
4-Bromophenyl phenyl ether	88		85		40-140	3		50
Bis(2-chloroisopropyl)ether	41		36	Q	40-140	13		50
Bis(2-chloroethoxy)methane	73		72		40-117	1		50
Hexachlorobutadiene	76		75		40-140	1		50
Hexachlorocyclopentadiene	63		61		40-140	3		50
Hexachloroethane	80		71		40-140	12		50
Isophorone	73		72		40-140	1		50
Naphthalene	77		74		40-140	4		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG549611-2 WG549611-3								
Nitrobenzene	79		71		40-140	11		50
NitrosoDiPhenylAmine(NDPA)/DPA	84		81			4		50
n-Nitrosodi-n-propylamine	75		66		32-121	13		50
Bis(2-Ethylhexyl)phthalate	87		82		40-140	6		50
Butyl benzyl phthalate	92		88		40-140	4		50
Di-n-butylphthalate	89		85		40-140	5		50
Di-n-octylphthalate	96		91		40-140	5		50
Diethyl phthalate	90		85		40-140	6		50
Dimethyl phthalate	85		81		40-140	5		50
Benzo(a)anthracene	82		78		40-140	5		50
Benzo(a)pyrene	83		81		40-140	2		50
Benzo(b)fluoranthene	90		84		40-140	7		50
Benzo(k)fluoranthene	78		77		40-140	1		50
Chrysene	81		77		40-140	5		50
Acenaphthylene	84		82		40-140	2		50
Anthracene	83		81		40-140	2		50
Benzo(ghi)perylene	89		85		40-140	5		50
Fluorene	84		80		40-140	5		50
Phenanthrene	82		79		40-140	4		50
Dibenzo(a,h)anthracene	100		91		40-140	9		50
Indeno(1,2,3-cd)Pyrene	101		94		40-140	7		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG549611-2 WG549611-3								
Pyrene	86		81		35-142	6		50
Biphenyl	81		79			3		50
4-Chloroaniline	58		55		40-140	5		50
2-Nitroaniline	93		94		47-134	1		50
3-Nitroaniline	68		66		26-129	3		50
4-Nitroaniline	85		83		41-125	2		50
Dibenzofuran	82		81		40-140	1		50
2-Methylnaphthalene	81		77		40-140	5		50
1,2,4,5-Tetrachlorobenzene	79		76		40-117	4		50
Acetophenone	83		74		14-144	11		50
2,4,6-Trichlorophenol	86		87		30-130	1		50
P-Chloro-M-Cresol	93		88		26-103	6		50
2-Chlorophenol	90		78		25-102	14		50
2,4-Dichlorophenol	88		88		30-130	0		50
2,4-Dimethylphenol	80		78		30-130	3		50
2-Nitrophenol	87		81		30-130	7		50
4-Nitrophenol	99		98		11-114	1		50
2,4-Dinitrophenol	72		77		4-130	7		50
4,6-Dinitro-o-cresol	86		80		10-130	7		50
Pentachlorophenol	85		80		17-109	6		50
Phenol	75		72		26-90	4		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG549611-2 WG549611-3								
2-Methylphenol	84		74		30-130.	13		50
3-Methylphenol/4-Methylphenol	86		78		30-130	10		50
2,4,5-Trichlorophenol	91		87		30-130	4		50
Benzoic Acid	20		29			37		50
Benzyl Alcohol	84		78		40-140	7		50
Carbazole	89		83		54-128	7		50

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
2-Fluorophenol	86		80		25-120
Phenol-d6	85		76		10-120
Nitrobenzene-d5	80		71		23-120
2-Fluorobiphenyl	78		78		30-120
2,4,6-Tribromophenol	108		107		0-136
4-Terphenyl-d14	98		94		18-120

# PCBS

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-01  
 Client ID: LB-1 (MW) 1'-2'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8082  
 Analytical Date: 07/22/12 13:34  
 Analyst: BA  
 Percent Solids: 77%

Date Collected: 07/16/12 09:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/20/12 01:01  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/20/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/20/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	42.0	8.30	1
Aroclor 1221	ND		ug/kg	42.0	12.7	1
Aroclor 1232	ND		ug/kg	42.0	8.93	1
Aroclor 1242	ND		ug/kg	42.0	7.98	1
Aroclor 1248	ND		ug/kg	42.0	5.08	1
Aroclor 1254	ND		ug/kg	42.0	6.62	1
Aroclor 1260	ND		ug/kg	42.0	7.29	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	81		30-150
Decachlorobiphenyl	74		30-150
2,4,5,6-Tetrachloro-m-xylene	75		30-150
Decachlorobiphenyl	77		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-02  
 Client ID: LB-1 (MW) 9'-11'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8082  
 Analytical Date: 07/22/12 13:46  
 Analyst: BA  
 Percent Solids: 67%

Date Collected: 07/16/12 09:35  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/20/12 01:01  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/20/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/20/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>						
Aroclor 1016	ND		ug/kg	47.2	9.32	1
Aroclor 1221	ND		ug/kg	47.2	14.2	1
Aroclor 1232	ND		ug/kg	47.2	10.0	1
Aroclor 1242	ND		ug/kg	47.2	8.95	1
Aroclor 1248	ND		ug/kg	47.2	5.71	1
Aroclor 1254	ND		ug/kg	47.2	7.44	1
Aroclor 1260	ND		ug/kg	47.2	8.19	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	80		30-150
Decachlorobiphenyl	72		30-150
2,4,5,6-Tetrachloro-m-xylene	75		30-150
Decachlorobiphenyl	85		30-150

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

**Lab ID:** L1212729-03  
**Client ID:** LB-1 (MW) 11'-13'  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8082  
**Analytical Date:** 07/22/12 13:59  
**Analyst:** BA  
**Percent Solids:** 85%

**Date Collected:** 07/16/12 10:00  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 07/20/12 01:01  
**Cleanup Method1:** EPA 3665A  
**Cleanup Date1:** 07/20/12  
**Cleanup Method2:** EPA 3660B  
**Cleanup Date2:** 07/20/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	37.5	7.41	1
Aroclor 1221	ND		ug/kg	37.5	11.3	1
Aroclor 1232	ND		ug/kg	37.5	7.97	1
Aroclor 1242	ND		ug/kg	37.5	7.12	1
Aroclor 1248	ND		ug/kg	37.5	4.54	1
Aroclor 1254	ND		ug/kg	37.5	5.91	1
Aroclor 1260	ND		ug/kg	37.5	6.51	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	66		30-150
Decachlorobiphenyl	58		30-150
2,4,5,6-Tetrachloro-m-xylene	63		30-150
Decachlorobiphenyl	62		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-04  
 Client ID: FIELD BLANK #2  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8082  
 Analytical Date: 07/22/12 16:01  
 Analyst: BA

Date Collected: 07/17/12 11:20  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/20/12 05:21  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/21/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/21/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>						
Aroclor 1016	ND		ug/l	0.083	0.055	1
Aroclor 1221	ND		ug/l	0.083	0.053	1
Aroclor 1232	ND		ug/l	0.083	0.031	1
Aroclor 1242	ND		ug/l	0.083	0.060	1
Aroclor 1248	ND		ug/l	0.083	0.051	1
Aroclor 1254	ND		ug/l	0.083	0.034	1
Aroclor 1260	ND		ug/l	0.083	0.032	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	94		30-150
Decachlorobiphenyl	69		30-150
2,4,5,6-Tetrachloro-m-xylene	87		30-150
Decachlorobiphenyl	57		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-05  
 Client ID: LB-6 (MW) 1-2  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8082  
 Analytical Date: 07/22/12 14:11  
 Analyst: BA  
 Percent Solids: 92%

Date Collected: 07/17/12 13:30  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/20/12 01:01  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/20/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/20/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	34.1	6.74	1
Aroclor 1221	ND		ug/kg	34.1	10.3	1
Aroclor 1232	ND		ug/kg	34.1	7.25	1
Aroclor 1242	ND		ug/kg	34.1	6.47	1
Aroclor 1248	ND		ug/kg	34.1	4.13	1
Aroclor 1254	ND		ug/kg	34.1	5.38	1
Aroclor 1260	ND		ug/kg	34.1	5.92	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	73		30-150
Decachlorobiphenyl	64		30-150
2,4,5,6-Tetrachloro-m-xylene	68		30-150
Decachlorobiphenyl	62		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-06  
 Client ID: LB-6 (MW) 8-10  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8082  
 Analytical Date: 07/22/12 14:23  
 Analyst: BA  
 Percent Solids: 85%

Date Collected: 07/17/12 13:40  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/20/12 01:01  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/20/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/20/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>						
Aroclor 1016	ND		ug/kg	37.9	7.48	1
Aroclor 1221	ND		ug/kg	37.9	11.4	1
Aroclor 1232	ND		ug/kg	37.9	8.05	1
Aroclor 1242	ND		ug/kg	37.9	7.19	1
Aroclor 1248	ND		ug/kg	37.9	4.58	1
Aroclor 1254	ND		ug/kg	37.9	5.97	1
Aroclor 1260	ND		ug/kg	37.9	6.58	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	76		30-150
Decachlorobiphenyl	68		30-150
2,4,5,6-Tetrachloro-m-xylene	73		30-150
Decachlorobiphenyl	66		30-150

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

**Lab ID:** L1212729-07  
**Client ID:** LB-6 (MW) 14-15  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8082  
**Analytical Date:** 07/22/12 14:36  
**Analyst:** BA  
**Percent Solids:** 90%

**Date Collected:** 07/17/12 14:00  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 07/20/12 01:01  
**Cleanup Method1:** EPA 3665A  
**Cleanup Date1:** 07/20/12  
**Cleanup Method2:** EPA 3660B  
**Cleanup Date2:** 07/20/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	35.0	6.91	1
Aroclor 1221	ND		ug/kg	35.0	10.6	1
Aroclor 1232	ND		ug/kg	35.0	7.44	1
Aroclor 1242	ND		ug/kg	35.0	6.64	1
Aroclor 1248	ND		ug/kg	35.0	4.24	1
Aroclor 1254	ND		ug/kg	35.0	5.52	1
Aroclor 1260	ND		ug/kg	35.0	6.08	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	87		30-150
Decachlorobiphenyl	70		30-150
2,4,5,6-Tetrachloro-m-xylene	84		30-150
Decachlorobiphenyl	67		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-08  
 Client ID: DUP#1  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8082  
 Analytical Date: 07/22/12 14:48  
 Analyst: BA  
 Percent Solids: 82%

Date Collected: 07/17/12 00:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/20/12 01:01  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/20/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/20/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	39.3	7.76	1
Aroclor 1221	ND		ug/kg	39.3	11.8	1
Aroclor 1232	ND		ug/kg	39.3	8.34	1
Aroclor 1242	ND		ug/kg	39.3	7.46	1
Aroclor 1248	ND		ug/kg	39.3	4.75	1
Aroclor 1254	ND		ug/kg	39.3	6.19	1
Aroclor 1260	ND		ug/kg	39.3	6.82	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	83		30-150
Decachlorobiphenyl	67		30-150
2,4,5,6-Tetrachloro-m-xylene	81		30-150
Decachlorobiphenyl	65		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis  
 Batch Quality Control**

Analytical Method: 1,8082  
 Analytical Date: 07/22/12 16:50  
 Analyst: BA

Extraction Method: EPA 3546  
 Extraction Date: 07/20/12 01:01  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/20/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/20/12

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-03,05-08 Batch: WG549687-1					
Aroclor 1016	ND		ug/kg	32.6	6.45
Aroclor 1221	ND		ug/kg	32.6	9.85
Aroclor 1232	ND		ug/kg	32.6	6.94
Aroclor 1242	ND		ug/kg	32.6	6.20
Aroclor 1248	ND		ug/kg	32.6	3.95
Aroclor 1254	ND		ug/kg	32.6	5.15
Aroclor 1260	ND		ug/kg	32.6	5.67

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	78		30-150
Decachlorobiphenyl	62		30-150
2,4,5,6-Tetrachloro-m-xylene	73		30-150
Decachlorobiphenyl	65		30-150



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis  
 Batch Quality Control**

Analytical Method: 1,8082  
 Analytical Date: 07/22/12 15:13  
 Analyst: BA

Extraction Method: EPA 3510C  
 Extraction Date: 07/20/12 05:21  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/21/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/21/12

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 04 Batch: WG549700-1					
Aroclor 1016	ND		ug/l	0.083	0.055
Aroclor 1221	ND		ug/l	0.083	0.053
Aroclor 1232	ND		ug/l	0.083	0.031
Aroclor 1242	ND		ug/l	0.083	0.060
Aroclor 1248	ND		ug/l	0.083	0.051
Aroclor 1254	ND		ug/l	0.083	0.034
Aroclor 1260	ND		ug/l	0.083	0.032

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	84		30-150
Decachlorobiphenyl	107		30-150
2,4,5,6-Tetrachloro-m-xylene	78		30-150
Decachlorobiphenyl	88		30-150



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Lab Number:** L1212729

**Project Number:** 170201301

**Report Date:** 07/24/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-03,05-08 Batch: WG549687-2 WG549687-3								
Aroclor 1016	68		55		40-140	21		50
Aroclor 1260	58		47		40-140	21		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	71		64		30-150
Decachlorobiphenyl	60		51		30-150
2,4,5,6-Tetrachloro-m-xylene	70		62		30-150
Decachlorobiphenyl	58		49		30-150

Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 04 Batch: WG549700-2 WG549700-3								
Aroclor 1016	81		79		40-140	2		50
Aroclor 1260	84		79		40-140	6		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	99		86		30-150
Decachlorobiphenyl	104		92		30-150
2,4,5,6-Tetrachloro-m-xylene	92		84		30-150
Decachlorobiphenyl	90		92		30-150

# PESTICIDES

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-01  
 Client ID: LB-1 (MW) 1'-2'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 07/22/12 23:43  
 Analyst: SH  
 Percent Solids: 77%

Date Collected: 07/16/12 09:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 8151A  
 Extraction Date: 07/18/12 21:30  
 Methylation Date: 07/20/12 11:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	212	84.7	1
2,4,5-T	ND		ug/kg	212	60.3	1
2,4,5-TP (Silvex)	ND		ug/kg	212	73.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	188	Q	30-150	A
DCAA	246	Q	30-150	B

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

Lab ID: L1212729-01 D  
 Client ID: LB-1 (MW) 1'-2'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/19/12 18:43  
 Analyst: BW  
 Percent Solids: 77%

Date Collected: 07/16/12 09:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 16:36  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/19/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	19.7	3.86	10
Lindane	ND		ug/kg	8.22	3.67	10
Alpha-BHC	ND		ug/kg	8.22	2.33	10
Beta-BHC	ND		ug/kg	19.7	7.48	10
Heptachlor	ND		ug/kg	9.86	4.42	10
Aldrin	ND		ug/kg	19.7	6.94	10
Heptachlor epoxide	ND		ug/kg	37.0	11.1	10
Endrin	ND		ug/kg	8.22	3.37	10
Endrin ketone	ND		ug/kg	19.7	5.08	10
Dieldrin	ND		ug/kg	12.3	6.16	10
4,4'-DDE	ND		ug/kg	19.7	4.56	10
4,4'-DDD	ND		ug/kg	19.7	7.04	10
4,4'-DDT	ND		ug/kg	37.0	15.9	10
Endosulfan I	ND		ug/kg	19.7	4.66	10
Endosulfan II	ND		ug/kg	19.7	6.59	10
Endosulfan sulfate	ND		ug/kg	8.22	3.76	10
Methoxychlor	ND		ug/kg	37.0	11.5	10
Toxaphene	ND		ug/kg	370	104.	10
trans-Chlordane	ND		ug/kg	24.6	6.51	10
Chlordane	ND		ug/kg	160	65.3	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	113		30-150	A
Decachlorobiphenyl	<b>197</b>	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	111		30-150	B
Decachlorobiphenyl	141		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-02  
 Client ID: LB-1 (MW) 9'-11'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/19/12 17:14  
 Analyst: BW  
 Percent Solids: 67%

Date Collected: 07/16/12 09:35  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 16:36  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/19/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	2.24	0.438	1
Lindane	ND		ug/kg	0.932	0.417	1
Alpha-BHC	ND		ug/kg	0.932	0.265	1
Beta-BHC	ND		ug/kg	2.24	0.848	1
Heptachlor	ND		ug/kg	1.12	0.502	1
Aldrin	ND		ug/kg	2.24	0.788	1
Heptachlor epoxide	ND		ug/kg	4.20	1.26	1
Endrin	ND		ug/kg	0.932	0.382	1
Endrin ketone	ND		ug/kg	2.24	0.576	1
Dieldrin	ND		ug/kg	1.40	0.699	1
4,4'-DDE	ND		ug/kg	2.24	0.517	1
4,4'-DDD	ND		ug/kg	2.24	0.798	1
4,4'-DDT	ND		ug/kg	4.20	1.80	1
Endosulfan I	ND		ug/kg	2.24	0.528	1
Endosulfan II	ND		ug/kg	2.24	0.748	1
Endosulfan sulfate	ND		ug/kg	0.932	0.426	1
Methoxychlor	ND		ug/kg	4.20	1.30	1
Toxaphene	ND		ug/kg	42.0	11.7	1
trans-Chlordane	ND		ug/kg	2.80	0.738	1
Chlordane	ND		ug/kg	18.2	7.41	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	97		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	90		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-02  
 Client ID: LB-1 (MW) 9'-11'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 07/23/12 00:04  
 Analyst: SH  
 Percent Solids: 67%

Date Collected: 07/16/12 09:35  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 8151A  
 Extraction Date: 07/18/12 21:30  
 Methylation Date: 07/20/12 11:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	242	96.8	1
2,4,5-T	ND		ug/kg	242	68.9	1
2,4,5-TP (Silvex)	ND		ug/kg	242	83.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	97		30-150	A
DCAA	118		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-03  
 Client ID: LB-1 (MW) 11'-13'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/19/12 17:26  
 Analyst: BW  
 Percent Solids: 85%

Date Collected: 07/16/12 10:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 16:36  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/19/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	1.77	0.347	1
Lindane	ND		ug/kg	0.738	0.330	1
Alpha-BHC	ND		ug/kg	0.738	0.209	1
Beta-BHC	ND		ug/kg	1.77	0.671	1
Heptachlor	ND		ug/kg	0.885	0.397	1
Aldrin	ND		ug/kg	1.77	0.623	1
Heptachlor epoxide	ND		ug/kg	3.32	0.996	1
Endrin	ND		ug/kg	0.738	0.302	1
Endrin ketone	ND		ug/kg	1.77	0.456	1
Dieldrin	ND		ug/kg	1.11	0.553	1
4,4'-DDE	ND		ug/kg	1.77	0.409	1
4,4'-DDD	ND		ug/kg	1.77	0.631	1
4,4'-DDT	ND		ug/kg	3.32	1.42	1
Endosulfan I	ND		ug/kg	1.77	0.418	1
Endosulfan II	ND		ug/kg	1.77	0.592	1
Endosulfan sulfate	ND		ug/kg	0.738	0.337	1
Methoxychlor	ND		ug/kg	3.32	1.03	1
Toxaphene	ND		ug/kg	33.2	9.29	1
trans-Chlordane	ND		ug/kg	2.21	0.584	1
Chlordane	ND		ug/kg	14.4	5.86	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	78		30-150	A
Decachlorobiphenyl	85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	98		30-150	B
Decachlorobiphenyl	97		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-03  
 Client ID: LB-1 (MW) 11'-13'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 07/23/12 00:24  
 Analyst: SH  
 Percent Solids: 85%

Date Collected: 07/16/12 10:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 8151A  
 Extraction Date: 07/18/12 21:30  
 Methylation Date: 07/20/12 11:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	191	76.5	1
2,4,5-T	ND		ug/kg	191	54.5	1
2,4,5-TP (Silvex)	ND		ug/kg	191	65.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	119		30-150	A
DCAA	177	Q	30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-04  
 Client ID: FIELD BLANK #2  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8081A  
 Analytical Date: 07/22/12 17:58  
 Analyst: BW

Date Collected: 07/17/12 11:20  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/20/12 03:21  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/20/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/l	0.021	0.005	1
Lindane	ND		ug/l	0.021	0.005	1
Alpha-BHC	ND		ug/l	0.021	0.005	1
Beta-BHC	ND		ug/l	0.021	0.006	1
Heptachlor	ND		ug/l	0.021	0.003	1
Aldrin	ND		ug/l	0.021	0.002	1
Heptachlor epoxide	ND		ug/l	0.021	0.004	1
Endrin	ND		ug/l	0.042	0.005	1
Endrin ketone	ND		ug/l	0.042	0.005	1
Dieldrin	ND		ug/l	0.042	0.005	1
4,4'-DDE	ND		ug/l	0.042	0.004	1
4,4'-DDD	ND		ug/l	0.042	0.005	1
4,4'-DDT	ND		ug/l	0.042	0.005	1
Endosulfan I	ND		ug/l	0.021	0.004	1
Endosulfan II	ND		ug/l	0.042	0.005	1
Endosulfan sulfate	ND		ug/l	0.042	0.005	1
Methoxychlor	ND		ug/l	0.210	0.007	1
Toxaphene	ND		ug/l	0.210	0.066	1
trans-Chlordane	ND		ug/l	0.021	0.007	1
Chlordane	ND		ug/l	0.210	0.049	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	49		30-150	B
Decachlorobiphenyl	74		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-04  
 Client ID: FIELD BLANK #2  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8151A  
 Analytical Date: 07/23/12 04:06  
 Analyst: SH

Date Collected: 07/17/12 11:20  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 8151A  
 Extraction Date: 07/21/12 04:27  
 Methylation Date: 07/22/12 02:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/l	10.0	0.544	1
2,4,5-T	ND		ug/l	2.00	0.488	1
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.391	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	102		30-150	A
DCAA	111		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-05  
 Client ID: LB-6 (MW) 1-2  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 07/23/12 00:44  
 Analyst: SH  
 Percent Solids: 92%

Date Collected: 07/17/12 13:30  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 8151A  
 Extraction Date: 07/18/12 21:30  
 Methylation Date: 07/20/12 11:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	181	72.2	1
2,4,5-T	ND		ug/kg	181	51.4	1
2,4,5-TP (Silvex)	ND		ug/kg	181	62.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	113		30-150	A
DCAA	129		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-05 D  
 Client ID: LB-6 (MW) 1-2  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/19/12 18:56  
 Analyst: BW  
 Percent Solids: 92%

Date Collected: 07/17/12 13:30  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 16:36  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/19/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	16.4	3.22	10
Lindane	ND		ug/kg	6.86	3.06	10
Alpha-BHC	ND		ug/kg	6.86	1.95	10
Beta-BHC	ND		ug/kg	16.4	6.24	10
Heptachlor	ND		ug/kg	8.23	3.69	10
Aldrin	ND		ug/kg	16.4	5.79	10
Heptachlor epoxide	ND		ug/kg	30.8	9.26	10
Endrin	ND		ug/kg	6.86	2.81	10
Endrin ketone	ND		ug/kg	16.4	4.24	10
Dieldrin	ND		ug/kg	10.3	5.14	10
4,4'-DDE	ND		ug/kg	16.4	3.81	10
4,4'-DDD	ND		ug/kg	16.4	5.87	10
4,4'-DDT	ND		ug/kg	30.8	13.2	10
Endosulfan I	ND		ug/kg	16.4	3.89	10
Endosulfan II	ND		ug/kg	16.4	5.50	10
Endosulfan sulfate	ND		ug/kg	6.86	3.13	10
Methoxychlor	ND		ug/kg	30.8	9.60	10
Toxaphene	ND		ug/kg	308	86.4	10
trans-Chlordane	ND		ug/kg	20.6	5.43	10
Chlordane	ND		ug/kg	134	54.5	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	117		30-150	A
Decachlorobiphenyl	141		30-150	A
2,4,5,6-Tetrachloro-m-xylene	116		30-150	B
Decachlorobiphenyl	123		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-06  
 Client ID: LB-6 (MW) 8-10  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/19/12 17:39  
 Analyst: BW  
 Percent Solids: 85%

Date Collected: 07/17/12 13:40  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 16:36  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/19/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	1.82	0.356	1
Lindane	ND		ug/kg	0.756	0.338	1
Alpha-BHC	ND		ug/kg	0.756	0.215	1
Beta-BHC	ND		ug/kg	1.82	0.688	1
Heptachlor	ND		ug/kg	0.908	0.407	1
Aldrin	ND		ug/kg	1.82	0.639	1
Heptachlor epoxide	ND		ug/kg	3.40	1.02	1
Endrin	ND		ug/kg	0.756	0.310	1
Endrin ketone	ND		ug/kg	1.82	0.468	1
Dieldrin	ND		ug/kg	1.13	0.567	1
4,4'-DDE	ND		ug/kg	1.82	0.420	1
4,4'-DDD	ND		ug/kg	1.82	0.648	1
4,4'-DDT	ND		ug/kg	3.40	1.46	1
Endosulfan I	ND		ug/kg	1.82	0.429	1
Endosulfan II	ND		ug/kg	1.82	0.607	1
Endosulfan sulfate	ND		ug/kg	0.756	0.346	1
Methoxychlor	ND		ug/kg	3.40	1.06	1
Toxaphene	ND		ug/kg	34.0	9.53	1
trans-Chlordane	ND		ug/kg	2.27	0.599	1
Chlordane	ND		ug/kg	14.8	6.01	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	115		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	100		30-150	B

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

**Lab ID:** L1212729-06  
**Client ID:** LB-6 (MW) 8-10  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8151A  
**Analytical Date:** 07/23/12 01:04  
**Analyst:** SH  
**Percent Solids:** 85%

**Date Collected:** 07/17/12 13:40  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 8151A  
**Extraction Date:** 07/18/12 21:30  
**Methylation Date:** 07/20/12 11:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	195	78.2	1
2,4,5-T	ND		ug/kg	195	55.6	1
2,4,5-TP (Silvex)	ND		ug/kg	195	67.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	104		30-150	A
DCAA	123		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-07  
 Client ID: LB-6 (MW) 14-15  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/19/12 19:21  
 Analyst: BW  
 Percent Solids: 90%

Date Collected: 07/17/12 14:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 16:36  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/19/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	1.67	0.327	1
Lindane	ND		ug/kg	0.696	0.311	1
Alpha-BHC	ND		ug/kg	0.696	0.198	1
Beta-BHC	ND		ug/kg	1.67	0.634	1
Heptachlor	ND		ug/kg	0.835	0.374	1
Aldrin	ND		ug/kg	1.67	0.588	1
Heptachlor epoxide	ND		ug/kg	3.13	0.940	1
Endrin	ND		ug/kg	0.696	0.285	1
Endrin ketone	ND		ug/kg	1.67	0.430	1
Dieldrin	ND		ug/kg	1.04	0.522	1
4,4'-DDE	ND		ug/kg	1.67	0.386	1
4,4'-DDD	ND		ug/kg	1.67	0.596	1
4,4'-DDT	ND		ug/kg	3.13	1.34	1
Endosulfan I	ND		ug/kg	1.67	0.395	1
Endosulfan II	ND		ug/kg	1.67	0.558	1
Endosulfan sulfate	ND		ug/kg	0.696	0.318	1
Methoxychlor	ND		ug/kg	3.13	0.975	1
Toxaphene	ND		ug/kg	31.3	8.77	1
trans-Chlordane	ND		ug/kg	2.09	0.551	1
Chlordane	ND		ug/kg	13.6	5.53	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	100		30-150	A
Decachlorobiphenyl	109		30-150	A
2,4,5,6-Tetrachloro-m-xylene	91		30-150	B
Decachlorobiphenyl	100		30-150	B

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

**Lab ID:** L1212729-07  
**Client ID:** LB-6 (MW) 14-15  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8151A  
**Analytical Date:** 07/23/12 01:24  
**Analyst:** SH  
**Percent Solids:** 90%

**Date Collected:** 07/17/12 14:00  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 8151A  
**Extraction Date:** 07/18/12 21:30  
**Methylation Date:** 07/20/12 11:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	181	72.5	1
2,4,5-T	ND		ug/kg	181	51.6	1
2,4,5-TP (Silvex)	ND		ug/kg	181	62.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	109		30-150	A
DCAA	120		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-08  
 Client ID: DUP#1  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/19/12 19:34  
 Analyst: BW  
 Percent Solids: 82%

Date Collected: 07/17/12 00:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 16:36  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/19/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	1.86	0.363	1
Lindane	ND		ug/kg	0.773	0.346	1
Alpha-BHC	ND		ug/kg	0.773	0.220	1
Beta-BHC	ND		ug/kg	1.86	0.704	1
Heptachlor	ND		ug/kg	0.928	0.416	1
Aldrin	ND		ug/kg	1.86	0.653	1
Heptachlor epoxide	ND		ug/kg	3.48	1.04	1
Endrin	ND		ug/kg	0.773	0.317	1
Endrin ketone	ND		ug/kg	1.86	0.478	1
Dieldrin	ND		ug/kg	1.16	0.580	1
4,4'-DDE	ND		ug/kg	1.86	0.429	1
4,4'-DDD	ND		ug/kg	1.86	0.662	1
4,4'-DDT	ND		ug/kg	3.48	1.49	1
Endosulfan I	ND		ug/kg	1.86	0.438	1
Endosulfan II	ND		ug/kg	1.86	0.620	1
Endosulfan sulfate	ND		ug/kg	0.773	0.353	1
Methoxychlor	ND		ug/kg	3.48	1.08	1
Toxaphene	ND		ug/kg	34.8	9.74	1
trans-Chlordane	ND		ug/kg	2.32	0.612	1
Chlordane	ND		ug/kg	15.1	6.15	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	100		30-150	A
Decachlorobiphenyl	110		30-150	A
2,4,5,6-Tetrachloro-m-xylene	92		30-150	B
Decachlorobiphenyl	101		30-150	B

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212729**Project Number:** 170201301**Report Date:** 07/24/12**SAMPLE RESULTS**

**Lab ID:** L1212729-08  
**Client ID:** DUP#1  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8151A  
**Analytical Date:** 07/23/12 02:05  
**Analyst:** SH  
**Percent Solids:** 82%

**Date Collected:** 07/17/12 00:00  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 8151A  
**Extraction Date:** 07/18/12 21:30  
**Methylation Date:** 07/20/12 11:14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	203	81.3	1
2,4,5-T	ND		ug/kg	203	57.9	1
2,4,5-TP (Silvex)	ND		ug/kg	203	70.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	101		30-150	A
DCAA	113		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8081A  
Analytical Date: 07/19/12 15:19  
Analyst: BW

Extraction Method: EPA 3546  
Extraction Date: 07/18/12 16:36  
Cleanup Method1: EPA 3620B  
Cleanup Date1: 07/19/12

Parameter	Result	Qualifier	Units	RL	MDL
Organochlorine Pesticides by GC - Westborough Lab for sample(s):	01-03,05-08	Batch:	WG549310-1		
Delta-BHC	ND		ug/kg	1.57	0.308
Lindane	ND		ug/kg	0.655	0.293
Alpha-BHC	ND		ug/kg	0.655	0.186
Beta-BHC	ND		ug/kg	1.57	0.596
Heptachlor	ND		ug/kg	0.786	0.352
Aldrin	ND		ug/kg	1.57	0.554
Heptachlor epoxide	ND		ug/kg	2.95	0.885
Endrin	ND		ug/kg	0.655	0.269
Endrin ketone	ND		ug/kg	1.57	0.405
Dieldrin	ND		ug/kg	0.983	0.491
4,4'-DDE	ND		ug/kg	1.57	0.364
4,4'-DDD	ND		ug/kg	1.57	0.561
4,4'-DDT	ND		ug/kg	2.95	1.26
Endosulfan I	ND		ug/kg	1.57	0.372
Endosulfan II	ND		ug/kg	1.57	0.526
Endosulfan sulfate	ND		ug/kg	0.655	0.299
Methoxychlor	ND		ug/kg	2.95	0.917
Toxaphene	ND		ug/kg	29.5	8.26
cis-Chlordane	ND		ug/kg	1.96	0.548
trans-Chlordane	ND		ug/kg	1.96	0.519
Chlordane	ND		ug/kg	12.8	5.21

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	123		30-150	A
Decachlorobiphenyl	134		30-150	A
2,4,5,6-Tetrachloro-m-xylene	109		30-150	B
Decachlorobiphenyl	124		30-150	B

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8151A  
 Analytical Date: 07/22/12 21:02  
 Analyst: SH

Extraction Method: EPA 8151A  
 Extraction Date: 07/18/12 21:30

Methylation Date: 07/20/12 11:14

Parameter	Result	Qualifier	Units	RL	MDL
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-03,05-08 Batch: WG549358-1					
2,4-D	ND		ug/kg	165	66.2
2,4,5-T	ND		ug/kg	165	47.1
2,4,5-TP (Silvex)	ND		ug/kg	165	57.0

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	117		30-150	A
DCAA	142		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8081A  
Analytical Date: 07/22/12 18:23  
Analyst: BW

Extraction Method: EPA 3510C  
Extraction Date: 07/20/12 03:21  
Cleanup Method1: EPA 3620B  
Cleanup Date1: 07/20/12

Parameter	Result	Qualifier	Units	RL	MDL
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 04 Batch: WG549690-1					
Delta-BHC	ND		ug/l	0.020	0.005
Lindane	ND		ug/l	0.020	0.004
Alpha-BHC	ND		ug/l	0.020	0.004
Beta-BHC	ND		ug/l	0.020	0.006
Heptachlor	ND		ug/l	0.020	0.003
Aldrin	ND		ug/l	0.020	0.002
Heptachlor epoxide	ND		ug/l	0.020	0.004
Endrin	ND		ug/l	0.040	0.004
Endrin ketone	ND		ug/l	0.040	0.005
Dieldrin	ND		ug/l	0.040	0.004
4,4'-DDE	ND		ug/l	0.040	0.004
4,4'-DDD	ND		ug/l	0.040	0.005
4,4'-DDT	ND		ug/l	0.040	0.004
Endosulfan I	ND		ug/l	0.020	0.003
Endosulfan II	ND		ug/l	0.040	0.005
Endosulfan sulfate	ND		ug/l	0.040	0.005
Methoxychlor	ND		ug/l	0.200	0.007
Toxaphene	ND		ug/l	0.200	0.063
cis-Chlordane	ND		ug/l	0.020	0.007
trans-Chlordane	ND		ug/l	0.020	0.006
Chlordane	ND		ug/l	0.200	0.046

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	97		30-150	A
2,4,5,6-Tetrachloro-m-xylene	49		30-150	B
Decachlorobiphenyl	99		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8151A  
Analytical Date: 07/23/12 03:05  
Analyst: SH

Extraction Method: EPA 8151A  
Extraction Date: 07/21/12 04:27

Methylation Date: 07/22/12 02:00

Parameter	Result	Qualifier	Units	RL	MDL
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 04 Batch: WG549951-1					
2,4-D	ND		ug/l	10.0	0.544
2,4,5-T	ND		ug/l	2.00	0.488
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.391

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	102		30-150	A
DCAA	115		30-150	B

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03,05-08 Batch: WG549310-2 WG549310-3								
Delta-BHC	85		103		30-150	19		30
Lindane	88		104		30-150	17		30
Alpha-BHC	86		96		30-150	11		30
Beta-BHC	92		104		30-150	12		30
Heptachlor	90		107		30-150	17		30
Aldrin	89		106		30-150	17		30
Heptachlor epoxide	80		97		30-150	19		30
Endrin	94		112		30-150	17		30
Endrin ketone	76		90		30-150	17		30
Dieldrin	86		104		30-150	19		30
4,4'-DDE	83		101		30-150	20		30
4,4'-DDD	86		104		30-150	19		30
4,4'-DDT	82		94		30-150	14		30
Endosulfan I	85		103		30-150	19		30
Endosulfan II	81		98		30-150	19		30
Endosulfan sulfate	86		103		30-150	18		30
Methoxychlor	72		83		30-150	14		30
cis-Chlordane	84		102		30-150	19		30
trans-Chlordane	83		102		30-150	21		30

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03,05-08 Batch: WG549310-2 WG549310-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	96		110		30-150	A
Decachlorobiphenyl	105		119		30-150	A
2,4,5,6-Tetrachloro-m-xylene	85		98		30-150	B
Decachlorobiphenyl	91		106		30-150	B

Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-03,05-08 Batch: WG549358-2 WG549358-3

2,4-D	112		126		30-150	12	30
2,4,5-T	102		116		30-150	13	30
2,4,5-TP (Silvex)	99		111		30-150	11	30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	105		111		30-150	A
DCAA	123		135		30-150	B

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 04 Batch: WG549690-2 WG549690-3								
Delta-BHC	90		89		30-150	1		20
Lindane	85		86		30-150	0		20
Alpha-BHC	86		86		30-150	1		20
Beta-BHC	84		86		30-150	1		20
Heptachlor	84		84		30-150	0		20
Aldrin	76		77		30-150	2		20
Heptachlor epoxide	92		91		30-150	1		20
Endrin	111		109		30-150	2		20
Endrin ketone	100		96		30-150	4		20
Dieldrin	98		97		30-150	1		20
4,4'-DDE	90		88		30-150	2		20
4,4'-DDD	96		94		30-150	2		20
4,4'-DDT	95		91		30-150	4		20
Endosulfan I	95		94		30-150	1		20
Endosulfan II	93		92		30-150	2		20
Endosulfan sulfate	108		106		30-150	2		20
Methoxychlor	107		101		30-150	6		20
cis-Chlordane	91		90		30-150	2		20
trans-Chlordane	92		91		30-150	1		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 04 Batch: WG549690-2 WG549690-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		74		30-150	A
Decachlorobiphenyl	102		97		30-150	A
2,4,5,6-Tetrachloro-m-xylene	51		49		30-150	B
Decachlorobiphenyl	102		98		30-150	B

Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 04 Batch: WG549951-2 WG549951-3								
2,4-D		122		113	30-150	8		25
2,4,5-T		109		103	30-150	6		25
2,4,5-TP (Silvex)		105		100	30-150	5		25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	113		101		30-150	A
DCAA	121		110		30-150	B

## METALS

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-01  
 Client ID: LB-1 (MW) 1'-2'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Percent Solids: 77%

Date Collected: 07/16/12 09:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	6000		mg/kg	10	2.2	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Antimony, Total	5.2		mg/kg	5.1	0.97	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Arsenic, Total	18		mg/kg	1.0	0.35	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Barium, Total	190		mg/kg	1.0	0.09	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Beryllium, Total	0.41	J	mg/kg	0.51	0.04	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Cadmium, Total	0.60	J	mg/kg	1.0	0.06	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Calcium, Total	6400		mg/kg	10	2.2	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Chromium, Total	25		mg/kg	1.0	0.20	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Cobalt, Total	7.5		mg/kg	2.0	0.22	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Copper, Total	360		mg/kg	1.0	0.47	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Iron, Total	30000		mg/kg	5.1	1.8	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Lead, Total	570		mg/kg	5.1	0.28	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Magnesium, Total	3100		mg/kg	10	4.6	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Manganese, Total	210		mg/kg	1.0	0.10	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Mercury, Total	1.3		mg/kg	0.10	0.02	1	07/18/12 21:57	07/19/12 12:03	EPA 7471A	1,7471A	KL
Nickel, Total	17		mg/kg	2.5	0.28	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Potassium, Total	840		mg/kg	250	81.	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Selenium, Total	3.2		mg/kg	2.0	0.33	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Silver, Total	0.35	J	mg/kg	1.0	0.17	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Sodium, Total	590		mg/kg	200	81.	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Thallium, Total	ND		mg/kg	2.0	0.63	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Vanadium, Total	26		mg/kg	1.0	0.23	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG
Zinc, Total	430		mg/kg	5.1	0.55	2	07/21/12 08:37	07/24/12 10:51	EPA 3050B	1,6010B	MG



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-02  
 Client ID: LB-1 (MW) 9'-11'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Percent Solids: 67%

Date Collected: 07/16/12 09:35  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	5100		mg/kg	11	2.5	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Antimony, Total	7.8		mg/kg	5.6	1.1	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Arsenic, Total	7.6		mg/kg	1.1	0.38	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Barium, Total	130		mg/kg	1.1	0.09	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Beryllium, Total	0.25	J	mg/kg	0.56	0.04	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Cadmium, Total	0.14	J	mg/kg	1.1	0.07	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Calcium, Total	13000		mg/kg	11	2.4	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Chromium, Total	12		mg/kg	1.1	0.23	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Cobalt, Total	5.1		mg/kg	2.2	0.24	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Copper, Total	180		mg/kg	1.1	0.52	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Iron, Total	18000		mg/kg	5.6	1.9	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Lead, Total	350		mg/kg	5.6	0.31	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Magnesium, Total	1700		mg/kg	11	5.0	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Manganese, Total	210		mg/kg	1.1	0.11	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Mercury, Total	2.5		mg/kg	0.21	0.04	2	07/21/12 12:37	07/24/12 11:16	EPA 7471A	1,7471A	KL
Nickel, Total	11		mg/kg	2.8	0.31	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Potassium, Total	1700		mg/kg	280	90.	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Selenium, Total	2.4		mg/kg	2.2	0.37	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Silver, Total	0.44	J	mg/kg	1.1	0.18	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Sodium, Total	550		mg/kg	220	89.	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Thallium, Total	ND		mg/kg	2.2	0.70	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Vanadium, Total	16		mg/kg	1.1	0.25	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG
Zinc, Total	150		mg/kg	5.6	0.61	2	07/21/12 08:37	07/24/12 11:02	EPA 3050B	1,6010B	MG



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-03  
 Client ID: LB-1 (MW) 11'-13'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Percent Solids: 85%

Date Collected: 07/16/12 10:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	7900		mg/kg	9.4	2.1	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Antimony, Total	2.1	J	mg/kg	4.7	0.90	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Arsenic, Total	1.3		mg/kg	0.94	0.32	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Barium, Total	53		mg/kg	0.94	0.08	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Beryllium, Total	0.64		mg/kg	0.47	0.03	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Cadmium, Total	ND		mg/kg	0.94	0.06	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Calcium, Total	2000		mg/kg	9.4	2.0	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Chromium, Total	25		mg/kg	0.94	0.19	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Cobalt, Total	7.4		mg/kg	1.9	0.20	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Copper, Total	22		mg/kg	0.94	0.44	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Iron, Total	12000		mg/kg	4.7	1.6	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Lead, Total	15		mg/kg	4.7	0.26	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Magnesium, Total	4500		mg/kg	9.4	4.2	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Manganese, Total	120		mg/kg	0.94	0.10	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Mercury, Total	0.80		mg/kg	0.08	0.02	1	07/21/12 12:37	07/24/12 10:20	EPA 7471A	1,7471A	KL
Nickel, Total	29		mg/kg	2.3	0.26	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Potassium, Total	2400		mg/kg	230	75.	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Selenium, Total	0.39	J	mg/kg	1.9	0.31	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Silver, Total	ND		mg/kg	0.94	0.15	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Sodium, Total	300		mg/kg	190	75.	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Thallium, Total	ND		mg/kg	1.9	0.58	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Vanadium, Total	22		mg/kg	0.94	0.21	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG
Zinc, Total	36		mg/kg	4.7	0.51	2	07/21/12 08:37	07/24/12 11:04	EPA 3050B	1,6010B	MG



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-04  
 Client ID: FIELD BLANK #2  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water

Date Collected: 07/17/12 11:20  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	0.003	J	mg/l	0.010	0.002	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Antimony, Total	0.0007		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Arsenic, Total	0.0008		mg/l	0.0005	0.0002	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Barium, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Beryllium, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Cadmium, Total	ND		mg/l	0.0002	0.0001	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Calcium, Total	ND		mg/l	0.100	0.032	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Chromium, Total	0.0003	J	mg/l	0.0010	0.0002	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Cobalt, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Copper, Total	0.0001	J	mg/l	0.0010	0.0001	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Iron, Total	ND		mg/l	0.050	0.013	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Lead, Total	ND		mg/l	0.0010	0.0002	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Magnesium, Total	ND		mg/l	0.100	0.023	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Manganese, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Mercury, Total	ND		mg/l	0.0002	0.0001	1	07/22/12 15:05	07/23/12 15:01	EPA 7470A	1,7470A	JH
Nickel, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Potassium, Total	ND		mg/l	0.100	0.027	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Selenium, Total	ND		mg/l	0.005	0.0003	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Silver, Total	ND		mg/l	0.0004	0.0001	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Sodium, Total	0.050	J	mg/l	0.100	0.015	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Thallium, Total	ND		mg/l	0.0005	0.00003	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Vanadium, Total	ND		mg/l	0.0050	0.0001	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK
Zinc, Total	ND		mg/l	0.0100	0.0012	1	07/20/12 07:40	07/24/12 12:57	EPA 3005A	1,6020	AK



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-05  
 Client ID: LB-6 (MW) 1-2  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Percent Solids: 92%

Date Collected: 07/17/12 13:30  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	9000		mg/kg	8.1	1.8	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Antimony, Total	2.0	J	mg/kg	4.1	0.78	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Arsenic, Total	4.2		mg/kg	0.81	0.28	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Barium, Total	74		mg/kg	0.81	0.07	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Beryllium, Total	0.42		mg/kg	0.41	0.03	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Cadmium, Total	0.16	J	mg/kg	0.81	0.05	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Calcium, Total	9100		mg/kg	8.1	1.8	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Chromium, Total	17		mg/kg	0.81	0.16	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Cobalt, Total	7.2		mg/kg	1.6	0.18	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Copper, Total	39		mg/kg	0.81	0.38	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Iron, Total	16000		mg/kg	4.1	1.4	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Lead, Total	68		mg/kg	4.1	0.23	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Magnesium, Total	5200		mg/kg	8.1	3.6	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Manganese, Total	340		mg/kg	0.81	0.08	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Mercury, Total	0.06	J	mg/kg	0.08	0.02	1	07/21/12 12:37	07/24/12 10:22	EPA 7471A	1,7471A	KL
Nickel, Total	17		mg/kg	2.0	0.23	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Potassium, Total	2400		mg/kg	200	65.	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Selenium, Total	0.95	J	mg/kg	1.6	0.27	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Silver, Total	ND		mg/kg	0.81	0.13	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Sodium, Total	370		mg/kg	160	65.	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Thallium, Total	ND		mg/kg	1.6	0.51	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Vanadium, Total	23		mg/kg	0.81	0.18	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG
Zinc, Total	98		mg/kg	4.1	0.44	2	07/21/12 08:37	07/24/12 11:07	EPA 3050B	1,6010B	MG



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-06  
 Client ID: LB-6 (MW) 8-10  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Percent Solids: 85%

Date Collected: 07/17/12 13:40  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	8900		mg/kg	8.9	2.0	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Antimony, Total	1.5	J	mg/kg	4.4	0.85	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Arsenic, Total	12		mg/kg	0.89	0.30	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Barium, Total	130		mg/kg	0.89	0.08	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Beryllium, Total	0.47		mg/kg	0.44	0.03	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Cadmium, Total	0.07	J	mg/kg	0.89	0.06	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Calcium, Total	4000		mg/kg	8.9	1.9	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Chromium, Total	12		mg/kg	0.89	0.18	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Cobalt, Total	6.1		mg/kg	1.8	0.19	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Copper, Total	23		mg/kg	0.89	0.41	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Iron, Total	14000		mg/kg	4.4	1.5	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Lead, Total	200		mg/kg	4.4	0.25	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Magnesium, Total	1900		mg/kg	8.9	4.0	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Manganese, Total	220		mg/kg	0.89	0.09	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Mercury, Total	0.07	J	mg/kg	0.10	0.02	1	07/21/12 12:37	07/24/12 10:24	EPA 7471A	1,7471A	KL
Nickel, Total	16		mg/kg	2.2	0.25	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Potassium, Total	710		mg/kg	220	71.	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Selenium, Total	0.92	J	mg/kg	1.8	0.29	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Silver, Total	0.21	J	mg/kg	0.89	0.15	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Sodium, Total	340		mg/kg	180	71.	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Thallium, Total	ND		mg/kg	1.8	0.56	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Vanadium, Total	21		mg/kg	0.89	0.20	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG
Zinc, Total	140		mg/kg	4.4	0.48	2	07/21/12 08:37	07/24/12 11:09	EPA 3050B	1,6010B	MG



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-07  
 Client ID: LB-6 (MW) 14-15  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Percent Solids: 90%

Date Collected: 07/17/12 14:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	9700		mg/kg	8.6	1.9	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Antimony, Total	4.1	J	mg/kg	4.3	0.82	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Arsenic, Total	2.7		mg/kg	0.86	0.29	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Barium, Total	50		mg/kg	0.86	0.07	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Beryllium, Total	0.42	J	mg/kg	0.43	0.03	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Cadmium, Total	0.07	J	mg/kg	0.86	0.05	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Calcium, Total	2200		mg/kg	8.6	1.9	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Chromium, Total	19		mg/kg	0.86	0.17	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Cobalt, Total	6.7		mg/kg	1.7	0.18	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Copper, Total	24		mg/kg	0.86	0.40	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Iron, Total	16000		mg/kg	4.3	1.5	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Lead, Total	28		mg/kg	4.3	0.24	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Magnesium, Total	3500		mg/kg	8.6	3.8	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Manganese, Total	350		mg/kg	0.86	0.09	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Mercury, Total	ND		mg/kg	0.08	0.02	1	07/21/12 12:37	07/24/12 10:26	EPA 7471A	1,7471A	KL
Nickel, Total	16		mg/kg	2.1	0.24	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Potassium, Total	1500		mg/kg	210	68.	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Selenium, Total	0.78	J	mg/kg	1.7	0.28	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Silver, Total	ND		mg/kg	0.86	0.14	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Sodium, Total	310		mg/kg	170	68.	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Thallium, Total	ND		mg/kg	1.7	0.53	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Vanadium, Total	18		mg/kg	0.86	0.19	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG
Zinc, Total	62		mg/kg	4.3	0.46	2	07/21/12 08:37	07/24/12 11:58	EPA 3050B	1,6010B	MG



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

Lab ID: L1212729-08  
 Client ID: DUP#1  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Percent Solids: 82%

Date Collected: 07/17/12 00:00  
 Date Received: 07/17/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	8500		mg/kg	9.5	2.1	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Antimony, Total	1.6	J	mg/kg	4.7	0.90	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Arsenic, Total	3.9		mg/kg	0.95	0.32	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Barium, Total	120		mg/kg	0.95	0.08	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Beryllium, Total	0.42	J	mg/kg	0.47	0.03	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Cadmium, Total	ND		mg/kg	0.95	0.06	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Calcium, Total	4300		mg/kg	9.5	2.0	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Chromium, Total	11		mg/kg	0.95	0.19	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Cobalt, Total	5.5		mg/kg	1.9	0.20	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Copper, Total	13		mg/kg	0.95	0.44	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Iron, Total	10000		mg/kg	4.7	1.6	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Lead, Total	90		mg/kg	4.7	0.26	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Magnesium, Total	2100		mg/kg	9.5	4.2	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Manganese, Total	180		mg/kg	0.95	0.10	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Mercury, Total	0.67		mg/kg	0.08	0.02	1	07/21/12 12:37	07/24/12 10:28	EPA 7471A	1,7471A	KL
Nickel, Total	12		mg/kg	2.4	0.26	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Potassium, Total	590		mg/kg	240	76.	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Selenium, Total	0.55	J	mg/kg	1.9	0.31	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Silver, Total	ND		mg/kg	0.95	0.16	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Sodium, Total	460		mg/kg	190	75.	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Thallium, Total	ND		mg/kg	1.9	0.59	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Vanadium, Total	16		mg/kg	0.95	0.21	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG
Zinc, Total	84		mg/kg	4.7	0.51	2	07/21/12 08:37	07/24/12 12:01	EPA 3050B	1,6010B	MG



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

## Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG549267-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	07/18/12 21:57	07/19/12 11:14	1,7471A	KL

### Prep Information

Digestion Method: EPA 7471A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 04 Batch: WG549702-1										
Aluminum, Total	ND		mg/l	0.010	0.002	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Antimony, Total	0.0003	J	mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Arsenic, Total	0.0004	J	mg/l	0.0005	0.0002	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Barium, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Beryllium, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Cadmium, Total	ND		mg/l	0.0002	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Calcium, Total	ND		mg/l	0.100	0.032	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Chromium, Total	ND		mg/l	0.0010	0.0002	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Cobalt, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Copper, Total	0.0003	J	mg/l	0.0010	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Iron, Total	ND		mg/l	0.050	0.013	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Lead, Total	ND		mg/l	0.0010	0.0002	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Magnesium, Total	ND		mg/l	0.100	0.023	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Manganese, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Nickel, Total	ND		mg/l	0.0005	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Potassium, Total	ND		mg/l	0.100	0.027	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Selenium, Total	ND		mg/l	0.005	0.0003	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Silver, Total	ND		mg/l	0.0004	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Sodium, Total	0.022	J	mg/l	0.100	0.015	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Thallium, Total	ND		mg/l	0.0005	0.00003	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Vanadium, Total	ND		mg/l	0.0050	0.0001	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK
Zinc, Total	ND		mg/l	0.0100	0.0012	1	07/20/12 07:40	07/24/12 12:49	1,6020	AK

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

## Method Blank Analysis Batch Quality Control

### Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-03,05-08 Batch: WG549840-1										
Aluminum, Total	3.0	J	mg/kg	4.0	0.89	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Antimony, Total	ND		mg/kg	2.0	0.38	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Arsenic, Total	ND		mg/kg	0.40	0.14	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Barium, Total	ND		mg/kg	0.40	0.03	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Beryllium, Total	ND		mg/kg	0.20	0.01	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Cadmium, Total	ND		mg/kg	0.40	0.03	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Calcium, Total	2.7	J	mg/kg	4.0	0.87	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Chromium, Total	ND		mg/kg	0.40	0.08	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Cobalt, Total	ND		mg/kg	0.80	0.09	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Copper, Total	ND		mg/kg	0.40	0.18	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Iron, Total	ND		mg/kg	2.0	0.69	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Lead, Total	ND		mg/kg	2.0	0.11	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Magnesium, Total	ND		mg/kg	4.0	1.8	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Manganese, Total	0.05	J	mg/kg	0.40	0.04	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Nickel, Total	ND		mg/kg	1.0	0.11	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Potassium, Total	ND		mg/kg	100	32.	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Selenium, Total	ND		mg/kg	0.80	0.13	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Silver, Total	ND		mg/kg	0.40	0.07	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Sodium, Total	34	J	mg/kg	80	32.	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Thallium, Total	ND		mg/kg	0.80	0.25	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Vanadium, Total	ND		mg/kg	0.40	0.09	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG
Zinc, Total	ND		mg/kg	2.0	0.22	1	07/21/12 08:37	07/24/12 10:39	1,6010B	MG

### Prep Information

Digestion Method: EPA 3050B



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 02-03,05-08 Batch: WG549972-1									
Mercury, Total	ND	mg/kg	0.08	0.02	1	07/21/12 12:37	07/24/12 10:01	1,7471A	KL

### Prep Information

Digestion Method: EPA 7471A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 04 Batch: WG550045-1									
Mercury, Total	ND	mg/l	0.0002	0.0001	1	07/22/12 15:05	07/23/12 14:32	1,7470A	JH

### Prep Information

Digestion Method: EPA 7470A

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Lab Number:** L1212729

**Project Number:** 170201301

**Report Date:** 07/24/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG549267-2 SRM Lot Number: 0518-10-02								
Mercury, Total	111		-		67-133	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 04 Batch: WG549702-2					
Aluminum, Total	91	-	80-120	-	
Antimony, Total	83	-	80-120	-	
Arsenic, Total	82	-	80-120	-	
Barium, Total	92	-	80-120	-	
Beryllium, Total	90	-	80-120	-	
Cadmium, Total	92	-	80-120	-	
Calcium, Total	91	-	80-120	-	
Chromium, Total	92	-	80-120	-	
Cobalt, Total	93	-	80-120	-	
Copper, Total	92	-	80-120	-	
Iron, Total	94	-	80-120	-	
Lead, Total	97	-	80-120	-	
Magnesium, Total	88	-	80-120	-	
Manganese, Total	96	-	80-120	-	
Nickel, Total	94	-	80-120	-	
Potassium, Total	90	-	80-120	-	
Selenium, Total	88	-	80-120	-	
Silver, Total	91	-	80-120	-	
Sodium, Total	93	-	80-120	-	
Thallium, Total	88	-	80-120	-	
Vanadium, Total	95	-	80-120	-	

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Lab Number:** L1212729

**Project Number:** 170201301

**Report Date:** 07/24/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 04 Batch: WG549702-2					
Zinc, Total	90	-	80-120	-	

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-03,05-08 Batch: WG549840-2					
Aluminum, Total	108	-	75-125	-	
Antimony, Total	92	-	75-125	-	
Arsenic, Total	101	-	75-125	-	
Barium, Total	94	-	75-125	-	
Beryllium, Total	94	-	75-125	-	
Cadmium, Total	98	-	75-125	-	
Calcium, Total	94	-	75-125	-	
Chromium, Total	94	-	75-125	-	
Cobalt, Total	97	-	75-125	-	
Copper, Total	97	-	75-125	-	
Iron, Total	94	-	75-125	-	
Lead, Total	100	-	75-125	-	
Magnesium, Total	97	-	75-125	-	
Manganese, Total	97	-	75-125	-	
Nickel, Total	97	-	75-125	-	
Potassium, Total	94	-	75-125	-	
Selenium, Total	96	-	75-125	-	
Silver, Total	99	-	75-125	-	
Sodium, Total	109	-	75-125	-	
Thallium, Total	100	-	75-125	-	
Vanadium, Total	97	-	75-125	-	

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Project Number:** 170201301

**Lab Number:** L1212729

**Report Date:** 07/24/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-03,05-08 Batch: WG549840-2					
Zinc, Total	92	-	75-125	-	
Total Metals - Westborough Lab Associated sample(s): 02-03,05-08 Batch: WG549972-2 SRM Lot Number: 0518-10-02					
Mercury, Total	102	-	67-133	-	
Total Metals - Westborough Lab Associated sample(s): 04 Batch: WG550045-2					
Mercury, Total	108	-	80-120	-	

**Matrix Spike Analysis**  
Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01    QC Batch ID: WG549267-4    QC Sample: L1212548-01    Client ID: MS Sample												
Mercury, Total	0.24	0.179	0.36	67	Q	-	-		70-130	-		35

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 04 QC Batch ID: WG549702-4 QC Sample: L1212729-04 Client ID: FIELD BLANK #2									
Aluminum, Total	0.003J	2	1.74	87	-	-	80-120	-	20
Antimony, Total	0.0007	0.5	0.4264	85	-	-	80-120	-	20
Arsenic, Total	0.0008	0.12	0.0986	81	-	-	80-120	-	20
Barium, Total	ND	2	1.748	87	-	-	80-120	-	20
Beryllium, Total	ND	0.05	0.0421	84	-	-	80-120	-	20
Cadmium, Total	ND	0.051	0.0460	90	-	-	80-120	-	20
Calcium, Total	ND	10	8.42	84	-	-	80-120	-	20
Chromium, Total	0.0003J	0.2	0.1707	85	-	-	80-120	-	20
Cobalt, Total	ND	0.5	0.4379	88	-	-	80-120	-	20
Copper, Total	0.0001J	0.25	0.2217	89	-	-	80-120	-	20
Iron, Total	ND	1	0.852	85	-	-	80-120	-	20
Lead, Total	ND	0.51	0.4733	93	-	-	80-120	-	20
Magnesium, Total	ND	10	8.56	86	-	-	80-120	-	20
Manganese, Total	ND	0.5	0.4471	89	-	-	80-120	-	20
Nickel, Total	ND	0.5	0.4381	88	-	-	80-120	-	20
Potassium, Total	ND	10	6.43	64	Q	-	80-120	-	20
Selenium, Total	ND	0.12	0.098	82	-	-	80-120	-	20
Silver, Total	ND	0.05	0.0435	87	-	-	80-120	-	20
Sodium, Total	0.050J	10	9.06	91	-	-	80-120	-	20
Thallium, Total	ND	0.12	0.1021	85	-	-	80-120	-	20
Vanadium, Total	ND	0.5	0.4370	87	-	-	80-120	-	20

**Matrix Spike Analysis**  
Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Lab Number:** L1212729

**Project Number:** 170201301

**Report Date:** 07/24/12

<b>Parameter</b>	<b>Native Sample</b>	<b>MS Added</b>	<b>MS Found</b>	<b>MS %Recovery</b>	<b>MSD Found</b>	<b>MSD %Recovery</b>	<b>Recovery Limits</b>	<b>RPD</b>	<b>RPD Limits</b>
Total Metals - Westborough Lab Associated sample(s): 04    QC Batch ID: WG549702-4    QC Sample: L1212729-04    Client ID: FIELD BLANK #2									
Zinc, Total	ND	0.5	0.4251	85	-	-	80-120	-	20

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-03,05-08 QC Batch ID: WG549840-4 QC Sample: L1212729-01 Client ID: LB-1 (MW) 1'-2'									
Aluminum, Total	6000	196	6300	153	Q	-	75-125	-	35
Antimony, Total	5.2	48.9	27	44	Q	-	75-125	-	35
Arsenic, Total	18.	11.7	31	111		-	75-125	-	35
Barium, Total	190	196	450	133	Q	-	75-125	-	35
Beryllium, Total	0.41J	4.89	5.0	102		-	75-125	-	35
Cadmium, Total	0.60J	4.99	5.5	110		-	75-125	-	35
Calcium, Total	6400	979	6900	51	Q	-	75-125	-	35
Chromium, Total	25.	19.6	39	72	Q	-	75-125	-	35
Cobalt, Total	7.5	48.9	55	97		-	75-125	-	35
Copper, Total	360	24.5	720	1470	Q	-	75-125	-	35
Iron, Total	30000	97.9	47000	17400	Q	-	75-125	-	35
Lead, Total	570	49.9	970	801	Q	-	75-125	-	35
Magnesium, Total	3100	979	2800	0	Q	-	75-125	-	35
Manganese, Total	210	48.9	330	245	Q	-	75-125	-	35
Nickel, Total	17.	48.9	63	94		-	75-125	-	35
Potassium, Total	840	979	2100	129	Q	-	75-125	-	35
Selenium, Total	3.2	11.7	16	109		-	75-125	-	35
Silver, Total	0.35J	29.4	31	106		-	75-125	-	35
Sodium, Total	590	979	1800	124		-	75-125	-	35
Thallium, Total	ND	11.7	9.4	80		-	75-125	-	35
Vanadium, Total	26.	48.9	67	84		-	75-125	-	35

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-03,05-08 QC Batch ID: WG549840-4 QC Sample: L1212729-01 Client ID: LB-1 (MW) 1'-2'									
Zinc, Total	430	48.9	590	327	Q	-	75-125	-	35
Total Metals - Westborough Lab Associated sample(s): 02-03,05-08 QC Batch ID: WG549972-4 QC Sample: L1212238-01 Client ID: MS Sample									
Mercury, Total	ND	0.15	0.17	113	-	-	70-130	-	35
Total Metals - Westborough Lab Associated sample(s): 04 QC Batch ID: WG550045-4 QC Sample: L1212720-01 Client ID: MS Sample									
Mercury, Total	0.0001J	0.001	0.0003	30	Q	-	70-130	-	20

**Lab Duplicate Analysis**  
Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212729

Report Date: 07/24/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG549267-3 QC Sample: L1212548-01 Client ID: DUP Sample						
Mercury, Total	0.24	0.17	mg/kg	34		35

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212729

Report Date: 07/24/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 04 QC Batch ID: WG549702-3 QC Sample: L1212729-04 Client ID: FIELD BLANK #2					
Aluminum, Total	0.003J	0.003J	mg/l	NC	20
Antimony, Total	0.0007	0.0007	mg/l	3	20
Arsenic, Total	0.0008	0.0009	mg/l	6	20
Barium, Total	ND	ND	mg/l	NC	20
Beryllium, Total	ND	ND	mg/l	NC	20
Cadmium, Total	ND	ND	mg/l	NC	20
Calcium, Total	ND	0.043J	mg/l	NC	20
Chromium, Total	0.0003J	0.0002J	mg/l	NC	20
Cobalt, Total	ND	ND	mg/l	NC	20
Copper, Total	0.0001J	ND	mg/l	NC	20
Iron, Total	ND	ND	mg/l	NC	20
Lead, Total	ND	ND	mg/l	NC	20
Magnesium, Total	ND	ND	mg/l	NC	20
Manganese, Total	ND	ND	mg/l	NC	20
Nickel, Total	ND	ND	mg/l	NC	20
Potassium, Total	ND	ND	mg/l	NC	20
Selenium, Total	ND	ND	mg/l	NC	20
Silver, Total	ND	ND	mg/l	NC	20
Sodium, Total	0.050J	0.025J	mg/l	NC	20

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212729

Report Date: 07/24/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 04 QC Batch ID: WG549702-3 QC Sample: L1212729-04 Client ID: FIELD BLANK #2					
Thallium, Total	ND	ND	mg/l	NC	20
Vanadium, Total	ND	ND	mg/l	NC	20
Zinc, Total	ND	0.0019J	mg/l	NC	20

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212729

Report Date: 07/24/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-03,05-08 QC Batch ID: WG549840-3 QC Sample: L1212729-01 Client ID: LB-1 (MW) 1'-2'					
Aluminum, Total	6000	7000	mg/kg	15	35
Antimony, Total	5.2	7.7	mg/kg	39	Q 35
Arsenic, Total	18.	19	mg/kg	5	35
Barium, Total	190	270	mg/kg	35	35
Beryllium, Total	0.41J	0.38J	mg/kg	NC	35
Cadmium, Total	0.60J	0.88J	mg/kg	NC	35
Calcium, Total	6400	8800	mg/kg	32	35
Chromium, Total	25.	20	mg/kg	22	35
Cobalt, Total	7.5	7.9	mg/kg	5	35
Copper, Total	360	940	mg/kg	89	Q 35
Iron, Total	30000	50000	mg/kg	50	Q 35
Lead, Total	570	690	mg/kg	19	35
Magnesium, Total	3100	2200	mg/kg	34	35
Manganese, Total	210	360	mg/kg	53	Q 35
Nickel, Total	17.	19	mg/kg	11	35
Potassium, Total	840	1500	mg/kg	56	Q 35
Selenium, Total	3.2	4.7	mg/kg	38	Q 35
Silver, Total	0.35J	1.0	mg/kg	NC	35
Sodium, Total	590	770	mg/kg	26	35

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212729

Report Date: 07/24/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
<b>Total Metals - Westborough Lab Associated sample(s): 01-03,05-08 QC Batch ID: WG549840-3 QC Sample: L1212729-01 Client ID: LB-1 (MW) 1'-2'</b>					
Thallium, Total	ND	ND	mg/kg	NC	35
Vanadium, Total	26.	21	mg/kg	21	35
Zinc, Total	430	580	mg/kg	30	35
<b>Total Metals - Westborough Lab Associated sample(s): 02-03,05-08 QC Batch ID: WG549972-3 QC Sample: L1212238-01 Client ID: DUP Sample</b>					
Mercury, Total	ND	ND	mg/kg	NC	35
<b>Total Metals - Westborough Lab Associated sample(s): 04 QC Batch ID: WG550045-3 QC Sample: L1212720-01 Client ID: DUP Sample</b>					
Mercury, Total	0.0001J	0.0001J	mg/l	NC	20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

**Lab ID:** L1212729-01  
**Client ID:** LB-1 (MW) 1'-2'  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil

**Date Collected:** 07/16/12 09:00  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	77		%	0.10	NA	1	-	07/18/12 18:45	30,2540G	RD



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

**Lab ID:** L1212729-02  
**Client ID:** LB-1 (MW) 9'-11'  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil

**Date Collected:** 07/16/12 09:35  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	67		%	0.10	NA	1	-	07/18/12 18:45	30,2540G	RD



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

**Lab ID:** L1212729-03  
**Client ID:** LB-1 (MW) 11'-13'  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil

**Date Collected:** 07/16/12 10:00  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85		%	0.10	NA	1	-	07/18/12 18:45	30,2540G	RD



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

**Lab ID:** L1212729-05  
**Client ID:** LB-6 (MW) 1-2  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil

**Date Collected:** 07/17/12 13:30  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	92		%	0.10	NA	1	-	07/18/12 18:45	30,2540G	RD



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

**Lab ID:** L1212729-06  
**Client ID:** LB-6 (MW) 8-10  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil

**Date Collected:** 07/17/12 13:40  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85		%	0.10	NA	1	-	07/18/12 18:45	30,2540G	RD



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

**Lab ID:** L1212729-07  
**Client ID:** LB-6 (MW) 14-15  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil

**Date Collected:** 07/17/12 14:00  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	90		%	0.10	NA	1	-	07/18/12 18:45	30,2540G	RD



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**SAMPLE RESULTS**

**Lab ID:** L1212729-08  
**Client ID:** DUP#1  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil

**Date Collected:** 07/17/12 00:00  
**Date Received:** 07/17/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82		%	0.10	NA	1	-	07/18/12 18:45	30,2540G	RD



**Lab Duplicate Analysis**  
Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212729

Report Date: 07/24/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-03,05-08 QC Batch ID: WG549341-1 QC Sample: L1212730-06 Client ID: DUP Sample						
Solids, Total	95.	96	%	1		20

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212729

Project Number: 170201301

Report Date: 07/24/12

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

## Cooler Information Custody Seal

## Cooler

A Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212729-01A	Vial Large unpreserved	A	N/A	4	Y	Absent	NYTCL-8260(14)
L1212729-01B	Amber 250ml unpreserved	A	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212729-01C	Amber 250ml unpreserved	A	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212729-02A	Vial Large unpreserved	A	N/A	4	Y	Absent	NYTCL-8260(14)
L1212729-02B	Amber 250ml unpreserved	A	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

\*Values in parentheses indicate holding time in days

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212729-02C	Amber 250ml unpreserved	A	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212729-03A	Vial Large unpreserved	A	N/A	4	Y	Absent	NYTCL-8260(14)
L1212729-03B	Amber 250ml unpreserved	A	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212729-03C	Amber 250ml unpreserved	A	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212729-04A	Vial HCl preserved	A	N/A	4	Y	Absent	NYTCL-8260(14)
L1212729-04B	Vial HCl preserved	A	N/A	4	Y	Absent	NYTCL-8260(14)
L1212729-04C	Vial HCl preserved	A	N/A	4	Y	Absent	NYTCL-8260(14)
L1212729-04D	Amber 1000ml unpreserved	A	7	4	Y	Absent	NYTCL-8270(7)
L1212729-04E	Amber 1000ml unpreserved	A	7	4	Y	Absent	NYTCL-8270(7)
L1212729-04F	Amber 1000ml unpreserved	A	7	4	Y	Absent	NYTCL-8082-1200ML(7)
L1212729-04G	Amber 1000ml unpreserved	A	7	4	Y	Absent	NYTCL-8082-1200ML(7)
L1212729-04H	Amber 1000ml unpreserved	A	7	4	Y	Absent	NYTCL-8081(7)
L1212729-04I	Amber 1000ml unpreserved	A	7	4	Y	Absent	HERB-APA(7)

\*Values in parentheses indicate holding time in days



Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212729

Report Date: 07/24/12

## Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212729-04J	Plastic 500ml HNO3 preserved	A	<2	4	Y	Absent	BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1212729-05A	Vial Large unpreserved	A	N/A	4	Y	Absent	NYTCL-8260(14)
L1212729-05B	Amber 250ml unpreserved	A	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212729-05C	Amber 250ml unpreserved	A	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212729-06A	Vial Large unpreserved	A	N/A	4	Y	Absent	NYTCL-8260(14)
L1212729-06B	Amber 250ml unpreserved	A	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

\*Values in parentheses indicate holding time in days



Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212729

Report Date: 07/24/12

## Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212729-06C	Amber 250ml unpreserved	A	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212729-07A	Vial Large unpreserved	A	N/A	4	Y	Absent	NYTCL-8260(14)
L1212729-07B	Amber 250ml unpreserved	A	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212729-07C	Amber 250ml unpreserved	A	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212729-08A	Vial Large unpreserved	A	N/A	4	Y	Absent	NYTCL-8260(14)
L1212729-08B	Amber 250ml unpreserved	A	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

\*Values in parentheses indicate holding time in days



Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212729

Report Date: 07/24/12

**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212729-08C	Amber 250ml unpreserved	A	N/A	4	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

\*Values in parentheses indicate holding time in days

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

## GLOSSARY

### Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

### Data Qualifiers

<b>A</b>	- Spectra identified as "Aldol Condensation Product".
<b>B</b>	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
<b>C</b>	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
<b>D</b>	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
<b>E</b>	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
<b>G</b>	- The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
<b>H</b>	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
<b>I</b>	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
<b>M</b>	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
<b>NJ</b>	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: DU Report with "J" Qualifiers



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

**Data Qualifiers**

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL). This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample.

Report Format: DU Report with "J" Qualifiers

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**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212729  
**Report Date:** 07/24/12

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



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Last revised May 11, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.  
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

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*Drinking Water* (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223 P/A), E. Coli. – Colilert (SM9223 P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D, Fecal Coliform-EC Medium 9221E).

*Wastewater/Non-Potable Water* (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterolert, E.Coli 9223.

*Solid Waste/Soil* (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics, Acid Extractables (Phenols), Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

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*Drinking Water* (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500CI-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

*Wastewater/Non-Potable Water* (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8082, 8330, 8151A, 8260B, 8270C, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

*Solid Waste/Soil* (Inorganic Parameters: 9010B, 9012A, 9014A, 9030B, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

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*Drinking Water* (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

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*Drinking Water* (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6010C, 6020, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9030B, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8081B, 8151A.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 6010B, 6010C, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050, 9065, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, 8151A, 8015B, 8082, 8082A, 8081A, 8081B.)

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*Drinking Water* (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, 2540G, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ OQA-QAM-025 Rev.7, NJ EPH.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

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*Drinking Water* (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 624, 8260B, 8270C, 8270D, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012A, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C, 3546, 3580, 3580A, 5030B, 5035.)

Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Certificate/Lab ID : 68-03671. **NELAP Accredited.**  
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 3005A, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**  
Refer to MA-DEP Certificate for Potable and Non-Potable Water.  
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**  
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S<sup>2-</sup> D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Certificate/Lab ID: 460195. **NELAP Accredited.**  
Non-Potable Water (Inorganic Parameters: EPA 3005A,3015,1312,6010B,6010C,SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B, 8015B, 8015C.)

Certificate/Lab ID: L2217.  
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

ing ana ar n in in r r n r r i a i n:  
Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix, SO4 in a soil matrix. Total Petroleum Hydrocarbons, Oil & Grease

# CHAIN OF CUSTODY

PAGE \_\_\_\_\_ OF \_\_\_\_\_



WESTBORO, MA  
TEL: 508-898-9220  
FAX: 508-898-9193

MANFIELD, MA  
TEL: 508-822-9300  
FAX: 508-822-3288

## Client Information

Client: Longan Engineering  
Address: 360 W. 31st St 8th Fl  
NY, NY 10001  
Phone: 212-479 5400  
Fax: \_\_\_\_\_

Email: johannes@longan.com

Other Project Specific Requirements/Comments/Detection Limits:

## Project Information

Project Name: Riverside Parcel 17  
Project Location: 17-2A West End Ave  
Project #: 170201301  
Project Manager: Jason Hauges  
ALPHA Quote #: \_\_\_\_\_  
Turn-Around Time \_\_\_\_\_

Standard  RUSH (only confirmed if pre-approved)

Date Due: 7/24/12 Time: \_\_\_\_\_

Date Rec'd in Lab: 7.17.12

## Report Information - Data Deliverables

FAX  EMAIL  
 ADEX  Add'l Deliverables

## Billing Information

Same as Client info  PO #:

## Regulatory Requirements/Report Limits

State / Fed Program \_\_\_\_\_ Criteria \_\_\_\_\_

ANALYSIS  
TCL SVOC, Pest, Herb, PCB  
TAL Metals  
TCL VOC

## SAMPLE HANDLING

Filtration \_\_\_\_\_  
 Done  
 Not needed  
 Lab to do  
 Preservation  
 Lab to do  
(Please specify below)

## Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials							
		Date	Time									
12729.1	LB-1(MNW) 1'-2'	Thiela	900	S	CM	X						
1	LB-1(MNW) 1'-2'		900		CM	X						
1	LB-1(MNW) 1'-2'		900		CM	X						
2	LB-1(MNW) 9'-11'		935		CM	X						
2	LB-1(MNW) 9'-11'		935		CM	X						
2	LB-1(MNW) 9'-11'		935		CM	X						
3	LB-1(MNW) 11'-13'		1000		CM	X						
3	LB-1(MNW) 11'-13'		1000		CM	X						
3	LB-1(MNW) 11'-13'		1000		CM	X						

Container Type \_\_\_\_\_  
Preservative \_\_\_\_\_

Relinquished By: \_\_\_\_\_

Date/Time \_\_\_\_\_

Received By: \_\_\_\_\_

Date/Time \_\_\_\_\_

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

# CHAIN OF CUSTODY

PAGE      OF     

Date Rec'd in Lab: 7.13.12

ALPHA Job #: 112729



WESTBORO, MA  
TEL: 508-898-9220  
FAX: 508-898-9193

MANFIELD, MA  
TEL: 508-822-9300  
FAX: 508-822-3288

### Project Information

Project Name: Riverside Parcel 2

Project Location: 11-29 West End Ave

Project #: 110201301

Project Manager: Jason Hayes

ALPHA Quote #:

Turn-Around Time

### Report Information - Data Deliverables

FAX  EMAIL  
 ADEX  Add'l Deliverables

### Billing Information

Same as Client info PO #:

### Regulatory Requirements/Report Limits

State /Fed Program Criteria

Client: Langan Engineering  
Address: 360 W. 31st St 8th Fl  
NY, NY 10001  
Phone: 212 248 5100  
Fax: 212 248 5100  
Email: jhayes@langan.com

Standard  RUSH (only confirmed if pre-approved)  
Date Due: 7/24/12 Time:

Other Project Specific Requirements/Comments/Detection Limits:

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	Analysis	Sample Handling	Sample Specific Comments
		Date	Time					
12729	Field Blank #2	7/10	1130	W	CM	X		
4	Field Blank #2	7/17	1120	W	CM	X		
4	Field Blank #2	7/17	1120	W	CM	X		
4	Field Blank #2	7/17	1120	W	CM	X		
4	Field Blank #2	7/17	1120	W	CM	X		
4	Field Blank #2	7/17	1120	W	CM	X		
5	LB-6 (NMW) 1-2		1330			X		
5	LB-6 (NMW) 1-2					X		
5	LB-6 (NMW) 1-2					X		
6	LB-6 (NMW) 8-10		1340			X		
6	LB-6 (NMW) 8-10		1340			X		

ANALYSIS	DATE	TIME	INITIALS	COMMENTS
Pest/PCB				
Herb				
TAL metals				
TCL-SVOC				
TCL VOC				

Container Type Preservative

Relinquished By:

Date/Time

Received By:

Date/Time

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.



# NJ CHAIN OF CUSTODY

PAGE \_\_\_\_ OF \_\_\_\_

WESTBORO, MA  
8 Walkup Drive  
TEL: 508-898-9200  
FAX: 508-898-9193

MANFIELD, MA  
320 Forbes Blvd  
TEL: 508-822-9300  
FAX: 508-822-3288

### Client Information

Client: Lanagan  
Address: 3008 W. 31st St  
No: WYNY  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_

Email: john@ssolanagan.com  
 These samples have been previously analyzed by Alpha

For EPH you MUST indicate Category 1 or 2. Please check one of the following:

- Category 1       Category 2

Date Rec'd in Lab: 7-17-12

ALPHA Job #: 112709

**Project Information**  
Project Name: Riverside Parcel 2  
Project Location: 17-29 West End Ave  
Project #: 10201301  
Project Manager: Jason Houges  
ALPHA Quote #: \_\_\_\_\_  
Turn-Around Time \_\_\_\_\_

**Report Type**  
 Data Summary    NU Full  
 NU Reduced    Other \_\_\_\_\_  
**Regulatory Requirements**

**Billing Information**  
 Same as Client info   PO #: \_\_\_\_\_  
**Site Information**  
Is this site impacted by Petroleum?  
Yes / No (circle one)  
(Please Indicate Petroleum Product - See Table 2-1 on reverse side)  
Petroleum Product: \_\_\_\_\_  
Are any samples for waste disposal?  
Yes / No (circle one)  
(Please indicate which samples below in Sample Specific Comments field)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	ANALYSIS		SAMPLE HANDLING	Sample Specific Comments
		Date	Time			Pest/PCB	Herb		
12229.6	LB-6(MWD) 8-10	7/17	1340	W	Om	X	X		
	LB-6(MWD) 14-15	7/17	1400	W	Gm	X	X		
	LB-6 (MWD) 14-15								
	LB-6 (MWD) 14-15								
	DUP #1			W	Om	X	X		
	DUP #1			W	Om	X	X		
	DUP #1			W	Om	X	X		

**Preservative Code:**  
A = None  
B = HCl  
C = HNO3  
D = H2SO4  
E = NaOH  
F = MeOH  
G = NaHSO4  
H = Other

Westboro: Certification No: MA935  
Manfield: Certification No: MA015

Relinquished By: [Signature]      Date/Time: 7/17/12 1630

Container Type: \_\_\_\_\_  
Preservative: \_\_\_\_\_

Received By: [Signature]      Date/Time: 7/17/12 1630

**PLEASE PRINT CLEARLY, LEGIBLY AND COMPLETELY.** Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.



## ANALYTICAL REPORT

Lab Number:	L1212547
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Jason Hayes
Phone:	(212) 479-5427
Project Name:	RIVERSIDE PARCEL 2
Project Number:	170201301
Report Date:	07/20/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

---

Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1212547-01	LB3-1'-2'	17-29 WEST END AVE	07/11/12 14:05
L1212547-02	LB3-5'-6'	17-29 WEST END AVE	07/11/12 14:25
L1212547-03	LB3-9'-11'	17-29 WEST END AVE	07/12/12 07:35
L1212547-04	LB4(MW)-1'-2'	17-29 WEST END AVE	07/12/12 14:00
L1212547-05	LB4(MW)-7'-8'	17-29 WEST END AVE	07/12/12 14:37
L1212547-06	LB4(MW)-11'-12'	17-29 WEST END AVE	07/12/12 15:00

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

### Case Narrative (continued)

#### Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Pesticides

L1212547-01 has elevated detection limits due to the dilution required by the sample matrix.

#### Metals

L1212547-01 through -06 have elevated detection limits for all analytes, except Mercury, due to the dilutions required by the sample matrices.

The WG549482-4 MS recoveries for Aluminum (442%), Calcium (0%), Iron (0%), Lead (434%), Manganese (66%) and Zinc (354%), performed on L1212547-01, do not apply because the sample concentrations are greater than four times the spike amount added.

The WG549482-4 MS recoveries, performed on L1212547-01, are outside the acceptance criteria for Antimony (53%), Copper (177%), Magnesium (398%), Potassium (128%), Sodium (129%) and Vanadium (150%). A post digestion spike was performed with acceptable recoveries for Antimony (76%), Copper (94%), Magnesium (89%), Potassium (104%), Sodium (116%) and Vanadium (87%).

The WG549482-3 Laboratory Duplicate RPDs, performed on L1212547-01, are outside the acceptance criteria for Arsenic (39%), Barium (43%), Cadmium (77%), Calcium (72%), Cobalt (36%), Copper (44%), Lead (75%), Nickel (67%), Sodium (44%), Vanadium (60%) and Zinc (76%). The elevated RPDs have been attributed to the non-homogeneous nature of the sample utilized for the Laboratory Duplicate.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 07/20/12

# ORGANICS

# VOLATILES

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-01  
 Client ID: LB3-1'-2'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8260B  
 Analytical Date: 07/18/12 12:49  
 Analyst: JL  
 Percent Solids: 85%

Date Collected: 07/11/12 14:05  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	6.6	J	ug/kg	29	2.4	1
1,1-Dichloroethane	ND		ug/kg	4.4	0.87	1
Chloroform	ND		ug/kg	4.4	0.95	1
Carbon tetrachloride	ND		ug/kg	2.9	0.62	1
1,2-Dichloropropane	ND		ug/kg	10	0.75	1
Dibromochloromethane	ND		ug/kg	2.9	0.90	1
1,1,2-Trichloroethane	ND		ug/kg	4.4	1.2	1
Tetrachloroethene	ND		ug/kg	2.9	0.90	1
Chlorobenzene	ND		ug/kg	2.9	0.55	1
Trichlorofluoromethane	ND		ug/kg	15	1.2	1
1,2-Dichloroethane	ND		ug/kg	2.9	0.67	1
1,1,1-Trichloroethane	ND		ug/kg	2.9	0.79	1
Bromodichloromethane	ND		ug/kg	2.9	1.1	1
trans-1,3-Dichloropropene	ND		ug/kg	2.9	0.88	1
cis-1,3-Dichloropropene	ND		ug/kg	2.9	0.78	1
1,1-Dichloropropene	ND		ug/kg	15	1.3	1
Bromoform	ND		ug/kg	12	1.4	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.9	0.71	1
Benzene	ND		ug/kg	2.9	0.87	1
Toluene	ND		ug/kg	4.4	0.71	1
Ethylbenzene	ND		ug/kg	2.9	0.65	1
Chloromethane	ND		ug/kg	15	2.3	1
Bromomethane	ND		ug/kg	5.9	1.9	1
Vinyl chloride	ND		ug/kg	5.9	2.2	1
Chloroethane	ND		ug/kg	5.9	1.3	1
1,1-Dichloroethene	ND		ug/kg	2.9	0.76	1
trans-1,2-Dichloroethene	ND		ug/kg	4.4	1.2	1
Trichloroethene	ND		ug/kg	2.9	0.66	1
1,2-Dichlorobenzene	ND		ug/kg	15	1.1	1
1,3-Dichlorobenzene	ND		ug/kg	15	1.2	1
1,4-Dichlorobenzene	ND		ug/kg	15	1.2	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-01  
 Client ID: LB3-1'-2'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/11/12 14:05  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	5.9	1.4	1
p/m-Xylene	ND		ug/kg	5.9	1.3	1
o-Xylene	ND		ug/kg	5.9	1.2	1
cis-1,2-Dichloroethene	ND		ug/kg	2.9	0.89	1
Dibromomethane	ND		ug/kg	29	1.3	1
Styrene	ND		ug/kg	5.9	2.1	1
Dichlorodifluoromethane	ND		ug/kg	29	1.1	1
Acetone	ND		ug/kg	29	9.5	1
Carbon disulfide	ND		ug/kg	29	1.1	1
2-Butanone	ND		ug/kg	29	11.	1
Vinyl acetate	ND		ug/kg	29	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	29	2.4	1
1,2,3-Trichloropropane	ND		ug/kg	29	1.1	1
2-Hexanone	ND		ug/kg	29	1.2	1
Bromochloromethane	ND		ug/kg	15	0.89	1
2,2-Dichloropropane	ND		ug/kg	15	2.3	1
1,2-Dibromoethane	ND		ug/kg	12	1.2	1
1,3-Dichloropropane	ND		ug/kg	15	1.7	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.9	0.96	1
Bromobenzene	ND		ug/kg	15	0.65	1
n-Butylbenzene	ND		ug/kg	2.9	0.92	1
sec-Butylbenzene	ND		ug/kg	2.9	0.81	1
tert-Butylbenzene	ND		ug/kg	15	1.8	1
o-Chlorotoluene	ND		ug/kg	15	0.92	1
p-Chlorotoluene	ND		ug/kg	15	1.1	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	15	2.5	1
Hexachlorobutadiene	ND		ug/kg	15	1.3	1
Isopropylbenzene	ND		ug/kg	2.9	0.52	1
p-Isopropyltoluene	ND		ug/kg	2.9	0.80	1
Naphthalene	ND		ug/kg	15	2.3	1
Acrylonitrile	ND		ug/kg	29	1.1	1
n-Propylbenzene	ND		ug/kg	2.9	0.84	1
1,2,3-Trichlorobenzene	ND		ug/kg	15	1.2	1
1,2,4-Trichlorobenzene	ND		ug/kg	15	2.3	1
1,3,5-Trimethylbenzene	ND		ug/kg	15	1.8	1
1,2,4-Trimethylbenzene	ND		ug/kg	15	1.7	1
1,4-Diethylbenzene	ND		ug/kg	12	0.59	1
4-Ethyltoluene	ND		ug/kg	12	0.28	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	12	0.53	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-01  
 Client ID: LB3-1'-2'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/11/12 14:05  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	15	1.1	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	15	4.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	114		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	98		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-02  
 Client ID: LB3-5'-6'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8260B  
 Analytical Date: 07/19/12 05:22  
 Analyst: JL  
 Percent Solids: 83%

Date Collected: 07/11/12 14:25  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	3.9	J	ug/kg	30	2.4	1
1,1-Dichloroethane	ND		ug/kg	4.5	0.89	1
Chloroform	ND		ug/kg	4.5	0.98	1
Carbon tetrachloride	ND		ug/kg	3.0	0.64	1
1,2-Dichloropropane	ND		ug/kg	10	0.77	1
Dibromochloromethane	ND		ug/kg	3.0	0.93	1
1,1,2-Trichloroethane	ND		ug/kg	4.5	1.2	1
Tetrachloroethene	ND		ug/kg	3.0	0.92	1
Chlorobenzene	ND		ug/kg	3.0	0.56	1
Trichlorofluoromethane	ND		ug/kg	15	1.2	1
1,2-Dichloroethane	ND		ug/kg	3.0	0.68	1
1,1,1-Trichloroethane	ND		ug/kg	3.0	0.81	1
Bromodichloromethane	ND		ug/kg	3.0	1.2	1
trans-1,3-Dichloropropene	ND		ug/kg	3.0	0.90	1
cis-1,3-Dichloropropene	ND		ug/kg	3.0	0.80	1
1,1-Dichloropropene	ND		ug/kg	15	1.4	1
Bromoform	ND		ug/kg	12	1.5	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	3.0	0.72	1
Benzene	ND		ug/kg	3.0	0.90	1
Toluene	ND		ug/kg	4.5	0.73	1
Ethylbenzene	ND		ug/kg	3.0	0.67	1
Chloromethane	ND		ug/kg	15	2.4	1
Bromomethane	ND		ug/kg	6.0	2.0	1
Vinyl chloride	ND		ug/kg	6.0	2.3	1
Chloroethane	ND		ug/kg	6.0	1.3	1
1,1-Dichloroethene	ND		ug/kg	3.0	0.78	1
trans-1,2-Dichloroethene	ND		ug/kg	4.5	1.2	1
Trichloroethene	ND		ug/kg	3.0	0.67	1
1,2-Dichlorobenzene	ND		ug/kg	15	1.1	1
1,3-Dichlorobenzene	ND		ug/kg	15	1.2	1
1,4-Dichlorobenzene	ND		ug/kg	15	1.3	1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

## SAMPLE RESULTS

Lab ID: L1212547-02  
 Client ID: LB3-5'-6'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/11/12 14:25  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	6.0	1.5	1
p/m-Xylene	ND		ug/kg	6.0	1.3	1
o-Xylene	ND		ug/kg	6.0	1.2	1
cis-1,2-Dichloroethene	ND		ug/kg	3.0	0.91	1
Dibromomethane	ND		ug/kg	30	1.3	1
Styrene	ND		ug/kg	6.0	2.2	1
Dichlorodifluoromethane	ND		ug/kg	30	1.2	1
Acetone	ND		ug/kg	30	9.7	1
Carbon disulfide	ND		ug/kg	30	1.1	1
2-Butanone	ND		ug/kg	30	12.	1
Vinyl acetate	ND		ug/kg	30	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	30	2.4	1
1,2,3-Trichloropropane	ND		ug/kg	30	1.2	1
2-Hexanone	ND		ug/kg	30	1.2	1
Bromochloromethane	ND		ug/kg	15	0.91	1
2,2-Dichloropropane	ND		ug/kg	15	2.4	1
1,2-Dibromoethane	ND		ug/kg	12	1.2	1
1,3-Dichloropropane	ND		ug/kg	15	1.7	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	3.0	0.99	1
Bromobenzene	ND		ug/kg	15	0.66	1
n-Butylbenzene	ND		ug/kg	3.0	0.95	1
sec-Butylbenzene	ND		ug/kg	3.0	0.83	1
tert-Butylbenzene	ND		ug/kg	15	1.8	1
o-Chlorotoluene	ND		ug/kg	15	0.94	1
p-Chlorotoluene	ND		ug/kg	15	1.1	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	15	2.5	1
Hexachlorobutadiene	ND		ug/kg	15	1.4	1
Isopropylbenzene	ND		ug/kg	3.0	0.53	1
p-Isopropyltoluene	ND		ug/kg	3.0	0.82	1
Naphthalene	ND		ug/kg	15	2.3	1
Acrylonitrile	ND		ug/kg	30	1.1	1
n-Propylbenzene	ND		ug/kg	3.0	0.86	1
1,2,3-Trichlorobenzene	ND		ug/kg	15	1.2	1
1,2,4-Trichlorobenzene	ND		ug/kg	15	2.4	1
1,3,5-Trimethylbenzene	ND		ug/kg	15	1.8	1
1,2,4-Trimethylbenzene	ND		ug/kg	15	1.7	1
1,4-Diethylbenzene	ND		ug/kg	12	0.60	1
4-Ethyltoluene	ND		ug/kg	12	0.29	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	12	0.54	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-02  
 Client ID: LB3-5'-6'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/11/12 14:25  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	15	1.1	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	15	4.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	103		70-130

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

**Lab ID:** L1212547-03  
**Client ID:** LB3-9'-11'  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Soil  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/19/12 05:57  
**Analyst:** JL  
**Percent Solids:** 81%

**Date Collected:** 07/12/12 07:35  
**Date Received:** 07/13/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	3.3	J	ug/kg	31	2.5	1
1,1-Dichloroethane	ND		ug/kg	4.6	0.91	1
Chloroform	ND		ug/kg	4.6	1.0	1
Carbon tetrachloride	ND		ug/kg	3.1	0.65	1
1,2-Dichloropropane	ND		ug/kg	11	0.79	1
Dibromochloromethane	ND		ug/kg	3.1	0.95	1
1,1,2-Trichloroethane	ND		ug/kg	4.6	1.2	1
Tetrachloroethene	ND		ug/kg	3.1	0.94	1
Chlorobenzene	ND		ug/kg	3.1	0.57	1
Trichlorofluoromethane	ND		ug/kg	15	1.2	1
1,2-Dichloroethane	ND		ug/kg	3.1	0.70	1
1,1,1-Trichloroethane	ND		ug/kg	3.1	0.83	1
Bromodichloromethane	ND		ug/kg	3.1	1.2	1
trans-1,3-Dichloropropene	ND		ug/kg	3.1	0.93	1
cis-1,3-Dichloropropene	ND		ug/kg	3.1	0.82	1
1,1-Dichloropropene	ND		ug/kg	15	1.4	1
Bromoform	ND		ug/kg	12	1.5	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	3.1	0.74	1
Benzene	ND		ug/kg	3.1	0.92	1
Toluene	ND		ug/kg	4.6	0.74	1
Ethylbenzene	ND		ug/kg	3.1	0.68	1
Chloromethane	ND		ug/kg	15	2.4	1
Bromomethane	ND		ug/kg	6.2	2.0	1
Vinyl chloride	ND		ug/kg	6.2	2.3	1
Chloroethane	ND		ug/kg	6.2	1.4	1
1,1-Dichloroethene	ND		ug/kg	3.1	0.80	1
trans-1,2-Dichloroethene	ND		ug/kg	4.6	1.2	1
Trichloroethene	ND		ug/kg	3.1	0.69	1
1,2-Dichlorobenzene	ND		ug/kg	15	1.1	1
1,3-Dichlorobenzene	ND		ug/kg	15	1.2	1
1,4-Dichlorobenzene	ND		ug/kg	15	1.3	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-03  
 Client ID: LB3-9'-11'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/12/12 07:35  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	6.2	1.5	1
p/m-Xylene	ND		ug/kg	6.2	1.3	1
o-Xylene	ND		ug/kg	6.2	1.3	1
cis-1,2-Dichloroethene	ND		ug/kg	3.1	0.93	1
Dibromomethane	ND		ug/kg	31	1.3	1
Styrene	ND		ug/kg	6.2	2.2	1
Dichlorodifluoromethane	ND		ug/kg	31	1.2	1
Acetone	ND		ug/kg	31	10.	1
Carbon disulfide	ND		ug/kg	31	1.2	1
2-Butanone	ND		ug/kg	31	12.	1
Vinyl acetate	ND		ug/kg	31	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	31	2.5	1
1,2,3-Trichloropropane	ND		ug/kg	31	1.2	1
2-Hexanone	ND		ug/kg	31	1.2	1
Bromochloromethane	ND		ug/kg	15	0.93	1
2,2-Dichloropropane	ND		ug/kg	15	2.4	1
1,2-Dibromoethane	ND		ug/kg	12	1.3	1
1,3-Dichloropropane	ND		ug/kg	15	1.7	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	3.1	1.0	1
Bromobenzene	ND		ug/kg	15	0.68	1
n-Butylbenzene	ND		ug/kg	3.1	0.97	1
sec-Butylbenzene	ND		ug/kg	3.1	0.85	1
tert-Butylbenzene	ND		ug/kg	15	1.9	1
o-Chlorotoluene	ND		ug/kg	15	0.97	1
p-Chlorotoluene	ND		ug/kg	15	1.1	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	15	2.6	1
Hexachlorobutadiene	ND		ug/kg	15	1.4	1
Isopropylbenzene	ND		ug/kg	3.1	0.55	1
p-Isopropyltoluene	ND		ug/kg	3.1	0.84	1
Naphthalene	ND		ug/kg	15	2.4	1
Acrylonitrile	ND		ug/kg	31	1.2	1
n-Propylbenzene	ND		ug/kg	3.1	0.88	1
1,2,3-Trichlorobenzene	ND		ug/kg	15	1.2	1
1,2,4-Trichlorobenzene	ND		ug/kg	15	2.4	1
1,3,5-Trimethylbenzene	ND		ug/kg	15	1.8	1
1,2,4-Trimethylbenzene	ND		ug/kg	15	1.8	1
1,4-Diethylbenzene	ND		ug/kg	12	0.62	1
4-Ethyltoluene	ND		ug/kg	12	0.30	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	12	0.56	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-03  
 Client ID: LB3-9'-11'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/12/12 07:35  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	15	1.2	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	15	4.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	106		70-130

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

**Lab ID:** L1212547-04  
**Client ID:** LB4(MW)-1'-2'  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Soil  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/18/12 14:11  
**Analyst:** JL  
**Percent Solids:** 81%

**Date Collected:** 07/12/12 14:00  
**Date Received:** 07/13/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	4.8	J	ug/kg	31	2.5	1
1,1-Dichloroethane	ND		ug/kg	4.6	0.91	1
Chloroform	ND		ug/kg	4.6	1.0	1
Carbon tetrachloride	ND		ug/kg	3.1	0.65	1
1,2-Dichloropropane	ND		ug/kg	11	0.79	1
Dibromochloromethane	ND		ug/kg	3.1	0.95	1
1,1,2-Trichloroethane	ND		ug/kg	4.6	1.2	1
Tetrachloroethene	ND		ug/kg	3.1	0.94	1
Chlorobenzene	ND		ug/kg	3.1	0.57	1
Trichlorofluoromethane	ND		ug/kg	15	1.2	1
1,2-Dichloroethane	ND		ug/kg	3.1	0.70	1
1,1,1-Trichloroethane	ND		ug/kg	3.1	0.83	1
Bromodichloromethane	ND		ug/kg	3.1	1.2	1
trans-1,3-Dichloropropene	ND		ug/kg	3.1	0.93	1
cis-1,3-Dichloropropene	ND		ug/kg	3.1	0.82	1
1,1-Dichloropropene	ND		ug/kg	15	1.4	1
Bromoform	ND		ug/kg	12	1.5	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	3.1	0.74	1
Benzene	ND		ug/kg	3.1	0.92	1
Toluene	ND		ug/kg	4.6	0.74	1
Ethylbenzene	ND		ug/kg	3.1	0.68	1
Chloromethane	ND		ug/kg	15	2.4	1
Bromomethane	ND		ug/kg	6.2	2.0	1
Vinyl chloride	ND		ug/kg	6.2	2.3	1
Chloroethane	ND		ug/kg	6.2	1.4	1
1,1-Dichloroethene	ND		ug/kg	3.1	0.80	1
trans-1,2-Dichloroethene	ND		ug/kg	4.6	1.2	1
Trichloroethene	ND		ug/kg	3.1	0.69	1
1,2-Dichlorobenzene	ND		ug/kg	15	1.1	1
1,3-Dichlorobenzene	ND		ug/kg	15	1.2	1
1,4-Dichlorobenzene	ND		ug/kg	15	1.3	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-04  
 Client ID: LB4(MW)-1'-2'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/12/12 14:00  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	6.2	1.5	1
p/m-Xylene	ND		ug/kg	6.2	1.3	1
o-Xylene	ND		ug/kg	6.2	1.3	1
cis-1,2-Dichloroethene	ND		ug/kg	3.1	0.93	1
Dibromomethane	ND		ug/kg	31	1.3	1
Styrene	ND		ug/kg	6.2	2.2	1
Dichlorodifluoromethane	ND		ug/kg	31	1.2	1
Acetone	ND		ug/kg	31	10.	1
Carbon disulfide	ND		ug/kg	31	1.2	1
2-Butanone	ND		ug/kg	31	12.	1
Vinyl acetate	ND		ug/kg	31	2.3	1
4-Methyl-2-pentanone	ND		ug/kg	31	2.5	1
1,2,3-Trichloropropane	ND		ug/kg	31	1.2	1
2-Hexanone	ND		ug/kg	31	1.2	1
Bromochloromethane	ND		ug/kg	15	0.93	1
2,2-Dichloropropane	ND		ug/kg	15	2.4	1
1,2-Dibromoethane	ND		ug/kg	12	1.3	1
1,3-Dichloropropane	ND		ug/kg	15	1.7	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	3.1	1.0	1
Bromobenzene	ND		ug/kg	15	0.68	1
n-Butylbenzene	ND		ug/kg	3.1	0.97	1
sec-Butylbenzene	ND		ug/kg	3.1	0.85	1
tert-Butylbenzene	ND		ug/kg	15	1.9	1
o-Chlorotoluene	ND		ug/kg	15	0.97	1
p-Chlorotoluene	ND		ug/kg	15	1.1	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	15	2.6	1
Hexachlorobutadiene	ND		ug/kg	15	1.4	1
Isopropylbenzene	ND		ug/kg	3.1	0.55	1
p-Isopropyltoluene	ND		ug/kg	3.1	0.84	1
Naphthalene	ND		ug/kg	15	2.4	1
Acrylonitrile	ND		ug/kg	31	1.2	1
n-Propylbenzene	ND		ug/kg	3.1	0.88	1
1,2,3-Trichlorobenzene	ND		ug/kg	15	1.2	1
1,2,4-Trichlorobenzene	ND		ug/kg	15	2.4	1
1,3,5-Trimethylbenzene	ND		ug/kg	15	1.8	1
1,2,4-Trimethylbenzene	ND		ug/kg	15	1.8	1
1,4-Diethylbenzene	ND		ug/kg	12	0.62	1
4-Ethyltoluene	ND		ug/kg	12	0.30	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	12	0.56	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-04  
 Client ID: LB4(MW)-1'-2'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/12/12 14:00  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	15	1.2	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	15	4.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	113		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	99		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-05  
 Client ID: LB4(MW)-7'-8'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8260B  
 Analytical Date: 07/18/12 14:38  
 Analyst: JL  
 Percent Solids: 84%

Date Collected: 07/12/12 14:37  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	3.9	J	ug/kg	30	2.4	1
1,1-Dichloroethane	ND		ug/kg	4.5	0.88	1
Chloroform	ND		ug/kg	4.5	0.97	1
Carbon tetrachloride	ND		ug/kg	3.0	0.63	1
1,2-Dichloropropane	ND		ug/kg	10	0.76	1
Dibromochloromethane	ND		ug/kg	3.0	0.92	1
1,1,2-Trichloroethane	ND		ug/kg	4.5	1.2	1
Tetrachloroethene	ND		ug/kg	3.0	0.91	1
Chlorobenzene	ND		ug/kg	3.0	0.55	1
Trichlorofluoromethane	ND		ug/kg	15	1.2	1
1,2-Dichloroethane	ND		ug/kg	3.0	0.68	1
1,1,1-Trichloroethane	ND		ug/kg	3.0	0.80	1
Bromodichloromethane	ND		ug/kg	3.0	1.1	1
trans-1,3-Dichloropropene	ND		ug/kg	3.0	0.89	1
cis-1,3-Dichloropropene	ND		ug/kg	3.0	0.80	1
1,1-Dichloropropene	ND		ug/kg	15	1.4	1
Bromoform	ND		ug/kg	12	1.5	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	3.0	0.71	1
Benzene	ND		ug/kg	3.0	0.88	1
Toluene	ND		ug/kg	4.5	0.72	1
Ethylbenzene	ND		ug/kg	3.0	0.66	1
Chloromethane	ND		ug/kg	15	2.3	1
Bromomethane	ND		ug/kg	6.0	1.9	1
Vinyl chloride	ND		ug/kg	6.0	2.2	1
Chloroethane	ND		ug/kg	6.0	1.3	1
1,1-Dichloroethene	ND		ug/kg	3.0	0.77	1
trans-1,2-Dichloroethene	ND		ug/kg	4.5	1.2	1
Trichloroethene	ND		ug/kg	3.0	0.67	1
1,2-Dichlorobenzene	ND		ug/kg	15	1.1	1
1,3-Dichlorobenzene	ND		ug/kg	15	1.2	1
1,4-Dichlorobenzene	ND		ug/kg	15	1.2	1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

## SAMPLE RESULTS

Lab ID: L1212547-05  
 Client ID: LB4(MW)-7'-8'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/12/12 14:37  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	6.0	1.4	1
p/m-Xylene	ND		ug/kg	6.0	1.3	1
o-Xylene	ND		ug/kg	6.0	1.2	1
cis-1,2-Dichloroethene	ND		ug/kg	3.0	0.90	1
Dibromomethane	ND		ug/kg	30	1.3	1
Styrene	ND		ug/kg	6.0	2.2	1
Dichlorodifluoromethane	ND		ug/kg	30	1.2	1
Acetone	ND		ug/kg	30	9.6	1
Carbon disulfide	ND		ug/kg	30	1.1	1
2-Butanone	ND		ug/kg	30	12.	1
Vinyl acetate	ND		ug/kg	30	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	30	2.4	1
1,2,3-Trichloropropane	ND		ug/kg	30	1.2	1
2-Hexanone	ND		ug/kg	30	1.2	1
Bromochloromethane	ND		ug/kg	15	0.90	1
2,2-Dichloropropane	ND		ug/kg	15	2.4	1
1,2-Dibromoethane	ND		ug/kg	12	1.2	1
1,3-Dichloropropane	ND		ug/kg	15	1.7	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	3.0	0.98	1
Bromobenzene	ND		ug/kg	15	0.66	1
n-Butylbenzene	ND		ug/kg	3.0	0.94	1
sec-Butylbenzene	ND		ug/kg	3.0	0.82	1
tert-Butylbenzene	ND		ug/kg	15	1.8	1
o-Chlorotoluene	ND		ug/kg	15	0.93	1
p-Chlorotoluene	ND		ug/kg	15	1.1	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	15	2.5	1
Hexachlorobutadiene	ND		ug/kg	15	1.4	1
Isopropylbenzene	ND		ug/kg	3.0	0.53	1
p-Isopropyltoluene	ND		ug/kg	3.0	0.81	1
Naphthalene	ND		ug/kg	15	2.3	1
Acrylonitrile	ND		ug/kg	30	1.1	1
n-Propylbenzene	ND		ug/kg	3.0	0.84	1
1,2,3-Trichlorobenzene	ND		ug/kg	15	1.2	1
1,2,4-Trichlorobenzene	ND		ug/kg	15	2.4	1
1,3,5-Trimethylbenzene	ND		ug/kg	15	1.8	1
1,2,4-Trimethylbenzene	ND		ug/kg	15	1.7	1
1,4-Diethylbenzene	ND		ug/kg	12	0.60	1
4-Ethyltoluene	ND		ug/kg	12	0.29	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	12	0.54	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-05  
 Client ID: LB4(MW)-7'-8'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/12/12 14:37  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	15	1.1	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	15	4.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	113		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	96		70-130

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

**Lab ID:** L1212547-06  
**Client ID:** LB4(MW)-11'-12'  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Soil  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/19/12 06:32  
**Analyst:** JL  
**Percent Solids:** 75%

**Date Collected:** 07/12/12 15:00  
**Date Received:** 07/13/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	5.0	J	ug/kg	33	2.7	1
1,1-Dichloroethane	ND		ug/kg	5.0	0.98	1
Chloroform	ND		ug/kg	5.0	1.1	1
Carbon tetrachloride	ND		ug/kg	3.3	0.70	1
1,2-Dichloropropane	ND		ug/kg	12	0.85	1
Dibromochloromethane	ND		ug/kg	3.3	1.0	1
1,1,2-Trichloroethane	ND		ug/kg	5.0	1.3	1
Tetrachloroethene	ND		ug/kg	3.3	1.0	1
Chlorobenzene	ND		ug/kg	3.3	0.62	1
Trichlorofluoromethane	ND		ug/kg	17	1.3	1
1,2-Dichloroethane	ND		ug/kg	3.3	0.76	1
1,1,1-Trichloroethane	ND		ug/kg	3.3	0.90	1
Bromodichloromethane	ND		ug/kg	3.3	1.3	1
trans-1,3-Dichloropropene	ND		ug/kg	3.3	1.0	1
cis-1,3-Dichloropropene	ND		ug/kg	3.3	0.89	1
1,1-Dichloropropene	ND		ug/kg	17	1.5	1
Bromoform	ND		ug/kg	13	1.6	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	3.3	0.80	1
Benzene	ND		ug/kg	3.3	0.99	1
Toluene	ND		ug/kg	5.0	0.80	1
Ethylbenzene	ND		ug/kg	3.3	0.74	1
Chloromethane	ND		ug/kg	17	2.6	1
Bromomethane	ND		ug/kg	6.7	2.2	1
Vinyl chloride	ND		ug/kg	6.7	2.5	1
Chloroethane	ND		ug/kg	6.7	1.5	1
1,1-Dichloroethene	ND		ug/kg	3.3	0.87	1
trans-1,2-Dichloroethene	ND		ug/kg	5.0	1.3	1
Trichloroethene	ND		ug/kg	3.3	0.75	1
1,2-Dichlorobenzene	ND		ug/kg	17	1.2	1
1,3-Dichlorobenzene	ND		ug/kg	17	1.3	1
1,4-Dichlorobenzene	ND		ug/kg	17	1.4	1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

## SAMPLE RESULTS

Lab ID: L1212547-06  
 Client ID: LB4(MW)-11'-12'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/12/12 15:00  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	6.7	1.6	1
p/m-Xylene	ND		ug/kg	6.7	1.4	1
o-Xylene	ND		ug/kg	6.7	1.4	1
cis-1,2-Dichloroethene	ND		ug/kg	3.3	1.0	1
Dibromomethane	ND		ug/kg	33	1.4	1
Styrene	ND		ug/kg	6.7	2.4	1
Dichlorodifluoromethane	ND		ug/kg	33	1.3	1
Acetone	ND		ug/kg	33	11.	1
Carbon disulfide	ND		ug/kg	33	1.2	1
2-Butanone	ND		ug/kg	33	13.	1
Vinyl acetate	ND		ug/kg	33	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	33	2.7	1
1,2,3-Trichloropropane	ND		ug/kg	33	1.3	1
2-Hexanone	ND		ug/kg	33	1.3	1
Bromochloromethane	ND		ug/kg	17	1.0	1
2,2-Dichloropropane	ND		ug/kg	17	2.6	1
1,2-Dibromoethane	ND		ug/kg	13	1.4	1
1,3-Dichloropropane	ND		ug/kg	17	1.9	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	3.3	1.1	1
Bromobenzene	ND		ug/kg	17	0.73	1
n-Butylbenzene	ND		ug/kg	3.3	1.0	1
sec-Butylbenzene	ND		ug/kg	3.3	0.92	1
tert-Butylbenzene	ND		ug/kg	17	2.0	1
o-Chlorotoluene	ND		ug/kg	17	1.0	1
p-Chlorotoluene	ND		ug/kg	17	1.2	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	17	2.8	1
Hexachlorobutadiene	ND		ug/kg	17	1.5	1
Isopropylbenzene	ND		ug/kg	3.3	0.59	1
p-Isopropyltoluene	ND		ug/kg	3.3	0.91	1
Naphthalene	ND		ug/kg	17	2.6	1
Acrylonitrile	ND		ug/kg	33	1.2	1
n-Propylbenzene	ND		ug/kg	3.3	0.95	1
1,2,3-Trichlorobenzene	ND		ug/kg	17	1.3	1
1,2,4-Trichlorobenzene	ND		ug/kg	17	2.6	1
1,3,5-Trimethylbenzene	ND		ug/kg	17	2.0	1
1,2,4-Trimethylbenzene	ND		ug/kg	17	1.9	1
1,4-Diethylbenzene	ND		ug/kg	13	0.67	1
4-Ethyltoluene	ND		ug/kg	13	0.32	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	13	0.60	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-06  
 Client ID: LB4(MW)-11'-12'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/12/12 15:00  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	17	1.3	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	17	4.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	104		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/18/12 08:43  
Analyst: JL

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,04-05 Batch: WG549357-3					
Methylene chloride	ND		ug/kg	25	2.0
1,1-Dichloroethane	ND		ug/kg	3.8	0.74
Chloroform	ND		ug/kg	3.8	0.81
Carbon tetrachloride	ND		ug/kg	2.5	0.53
1,2-Dichloropropane	ND		ug/kg	8.8	0.64
Dibromochloromethane	ND		ug/kg	2.5	0.77
1,1,2-Trichloroethane	ND		ug/kg	3.8	0.98
Tetrachloroethene	ND		ug/kg	2.5	0.76
Chlorobenzene	ND		ug/kg	2.5	0.46
Trichlorofluoromethane	ND		ug/kg	12	0.98
1,2-Dichloroethane	ND		ug/kg	2.5	0.57
1,1,1-Trichloroethane	ND		ug/kg	2.5	0.67
Bromodichloromethane	ND		ug/kg	2.5	0.96
trans-1,3-Dichloropropene	ND		ug/kg	2.5	0.75
cis-1,3-Dichloropropene	ND		ug/kg	2.5	0.67
1,1-Dichloropropene	ND		ug/kg	12	1.1
Bromoform	ND		ug/kg	10	1.2
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.5	0.60
Benzene	ND		ug/kg	2.5	0.74
Toluene	ND		ug/kg	3.8	0.60
Ethylbenzene	ND		ug/kg	2.5	0.55
Chloromethane	ND		ug/kg	12	2.0
Bromomethane	ND		ug/kg	5.0	1.6
Vinyl chloride	ND		ug/kg	5.0	1.9
Chloroethane	ND		ug/kg	5.0	1.1
1,1-Dichloroethene	ND		ug/kg	2.5	0.65
trans-1,2-Dichloroethene	ND		ug/kg	3.8	0.98
Trichloroethene	ND		ug/kg	2.5	0.56
1,2-Dichlorobenzene	ND		ug/kg	12	0.91
1,3-Dichlorobenzene	ND		ug/kg	12	1.0
1,4-Dichlorobenzene	ND		ug/kg	12	1.0

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/18/12 08:43  
Analyst: JL

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,04-05 Batch: WG549357-3					
Methyl tert butyl ether	ND		ug/kg	5.0	1.2
p/m-Xylene	ND		ug/kg	5.0	1.1
o-Xylene	ND		ug/kg	5.0	1.0
cis-1,2-Dichloroethene	ND		ug/kg	2.5	0.75
Dibromomethane	ND		ug/kg	25	1.1
Styrene	ND		ug/kg	5.0	1.8
Dichlorodifluoromethane	ND		ug/kg	25	0.97
Acetone	ND		ug/kg	25	8.1
Carbon disulfide	ND		ug/kg	25	0.94
2-Butanone	ND		ug/kg	25	9.7
Vinyl acetate	ND		ug/kg	25	1.9
4-Methyl-2-pentanone	ND		ug/kg	25	2.0
1,2,3-Trichloropropane	ND		ug/kg	25	0.97
2-Hexanone	ND		ug/kg	25	0.99
Bromochloromethane	ND		ug/kg	12	0.76
2,2-Dichloropropane	ND		ug/kg	12	2.0
1,2-Dibromoethane	ND		ug/kg	10	1.0
1,3-Dichloropropane	ND		ug/kg	12	1.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.5	0.82
Bromobenzene	ND		ug/kg	12	0.55
n-Butylbenzene	ND		ug/kg	2.5	0.79
sec-Butylbenzene	ND		ug/kg	2.5	0.69
tert-Butylbenzene	ND		ug/kg	12	1.5
o-Chlorotoluene	ND		ug/kg	12	0.78
p-Chlorotoluene	ND		ug/kg	12	0.90
1,2-Dibromo-3-chloropropane	ND		ug/kg	12	2.1
Hexachlorobutadiene	ND		ug/kg	12	1.1
Isopropylbenzene	ND		ug/kg	2.5	0.44
p-Isopropyltoluene	ND		ug/kg	2.5	0.68
Naphthalene	ND		ug/kg	12	1.9
Acrylonitrile	ND		ug/kg	25	0.94

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/18/12 08:43  
Analyst: JL

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,04-05 Batch: WG549357-3					
Isopropyl Ether	ND		ug/kg	10	1.0
tert-Butyl Alcohol	ND		ug/kg	150	3.1
n-Propylbenzene	ND		ug/kg	2.5	0.71
1,2,3-Trichlorobenzene	ND		ug/kg	12	1.0
1,2,4-Trichlorobenzene	ND		ug/kg	12	2.0
1,3,5-Trimethylbenzene	ND		ug/kg	12	1.5
1,2,4-Trimethylbenzene	ND		ug/kg	12	1.4
Methyl Acetate	ND		ug/kg	50	50.
Ethyl Acetate	ND		ug/kg	50	50.
Acrolein	ND		ug/kg	62	7.5
Cyclohexane	ND		ug/kg	50	50.
1,4-Dioxane	ND		ug/kg	250	44.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	50	0.99
1,4-Diethylbenzene	ND		ug/kg	10	0.50
4-Ethyltoluene	ND		ug/kg	10	0.24
1,2,4,5-Tetramethylbenzene	ND		ug/kg	10	0.45
Tetrahydrofuran	ND		ug/kg	50	2.8
Ethyl ether	ND		ug/kg	12	0.95
trans-1,4-Dichloro-2-butene	ND		ug/kg	12	3.7
Methyl cyclohexane	ND		ug/kg	10	10.
Ethyl-Tert-Butyl-Ether	ND		ug/kg	10	2.2
Tertiary-Amyl Methyl Ether	ND		ug/kg	10	2.5
Ethyl Alcohol	ND		ug/kg	2500	520

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/kg

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
 Analytical Date: 07/18/12 08:43  
 Analyst: JL

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,04-05 Batch: WG549357-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	114		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	97		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/18/12 22:26  
Analyst: JL

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03,06 Batch: WG549477-3					
Methylene chloride	2.2	J	ug/kg	25	2.0
1,1-Dichloroethane	ND		ug/kg	3.8	0.74
Chloroform	ND		ug/kg	3.8	0.81
Carbon tetrachloride	ND		ug/kg	2.5	0.53
1,2-Dichloropropane	ND		ug/kg	8.8	0.64
Dibromochloromethane	ND		ug/kg	2.5	0.77
1,1,2-Trichloroethane	ND		ug/kg	3.8	0.98
Tetrachloroethene	ND		ug/kg	2.5	0.76
Chlorobenzene	ND		ug/kg	2.5	0.46
Trichlorofluoromethane	ND		ug/kg	12	0.98
1,2-Dichloroethane	ND		ug/kg	2.5	0.57
1,1,1-Trichloroethane	ND		ug/kg	2.5	0.67
Bromodichloromethane	ND		ug/kg	2.5	0.96
trans-1,3-Dichloropropene	ND		ug/kg	2.5	0.75
cis-1,3-Dichloropropene	ND		ug/kg	2.5	0.67
1,1-Dichloropropene	ND		ug/kg	12	1.1
Bromoform	ND		ug/kg	10	1.2
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.5	0.60
Benzene	ND		ug/kg	2.5	0.74
Toluene	ND		ug/kg	3.8	0.60
Ethylbenzene	ND		ug/kg	2.5	0.55
Chloromethane	ND		ug/kg	12	2.0
Bromomethane	ND		ug/kg	5.0	1.6
Vinyl chloride	ND		ug/kg	5.0	1.9
Chloroethane	ND		ug/kg	5.0	1.1
1,1-Dichloroethene	ND		ug/kg	2.5	0.65
trans-1,2-Dichloroethene	ND		ug/kg	3.8	0.98
Trichloroethene	ND		ug/kg	2.5	0.56
1,2-Dichlorobenzene	ND		ug/kg	12	0.91
1,3-Dichlorobenzene	ND		ug/kg	12	1.0
1,4-Dichlorobenzene	ND		ug/kg	12	1.0

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/18/12 22:26  
Analyst: JL

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03,06 Batch: WG549477-3					
Methyl tert butyl ether	ND		ug/kg	5.0	1.2
p/m-Xylene	ND		ug/kg	5.0	1.1
o-Xylene	ND		ug/kg	5.0	1.0
cis-1,2-Dichloroethene	ND		ug/kg	2.5	0.75
Dibromomethane	ND		ug/kg	25	1.1
Styrene	ND		ug/kg	5.0	1.8
Dichlorodifluoromethane	ND		ug/kg	25	0.97
Acetone	ND		ug/kg	25	8.1
Carbon disulfide	ND		ug/kg	25	0.94
2-Butanone	ND		ug/kg	25	9.7
Vinyl acetate	ND		ug/kg	25	1.9
4-Methyl-2-pentanone	ND		ug/kg	25	2.0
1,2,3-Trichloropropane	ND		ug/kg	25	0.97
2-Hexanone	ND		ug/kg	25	0.99
Bromochloromethane	ND		ug/kg	12	0.76
2,2-Dichloropropane	ND		ug/kg	12	2.0
1,2-Dibromoethane	ND		ug/kg	10	1.0
1,3-Dichloropropane	ND		ug/kg	12	1.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.5	0.82
Bromobenzene	ND		ug/kg	12	0.55
n-Butylbenzene	ND		ug/kg	2.5	0.79
sec-Butylbenzene	ND		ug/kg	2.5	0.69
tert-Butylbenzene	ND		ug/kg	12	1.5
o-Chlorotoluene	ND		ug/kg	12	0.78
p-Chlorotoluene	ND		ug/kg	12	0.90
1,2-Dibromo-3-chloropropane	ND		ug/kg	12	2.1
Hexachlorobutadiene	ND		ug/kg	12	1.1
Isopropylbenzene	ND		ug/kg	2.5	0.44
p-Isopropyltoluene	ND		ug/kg	2.5	0.68
Naphthalene	ND		ug/kg	12	1.9
Acrylonitrile	ND		ug/kg	25	0.94

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/18/12 22:26  
Analyst: JL

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-03,06 Batch: WG549477-3					
n-Propylbenzene	ND		ug/kg	2.5	0.71
1,2,3-Trichlorobenzene	ND		ug/kg	12	1.0
1,2,4-Trichlorobenzene	ND		ug/kg	12	2.0
1,3,5-Trimethylbenzene	ND		ug/kg	12	1.5
1,2,4-Trimethylbenzene	ND		ug/kg	12	1.4
1,4-Diethylbenzene	ND		ug/kg	10	0.50
4-Ethyltoluene	ND		ug/kg	10	0.24
1,2,4,5-Tetramethylbenzene	ND		ug/kg	10	0.45
Ethyl ether	ND		ug/kg	12	0.95
trans-1,4-Dichloro-2-butene	ND		ug/kg	12	3.7

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/kg

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	105		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04-05 Batch: WG549357-1 WG549357-2								
Methylene chloride	89		85		70-130	5		30
1,1-Dichloroethane	84		81		70-130	4		30
Chloroform	82		79		70-130	4		30
Carbon tetrachloride	85		80		70-130	6		30
1,2-Dichloropropane	82		80		70-130	2		30
Dibromochloromethane	94		90		70-130	4		30
1,1,2-Trichloroethane	96		92		70-130	4		30
Tetrachloroethene	100		90		70-130	11		30
Chlorobenzene	96		90		70-130	6		30
Trichlorofluoromethane	83		76		70-139	9		30
1,2-Dichloroethane	82		81		70-130	1		30
1,1,1-Trichloroethane	85		81		70-130	5		30
Bromodichloromethane	81		79		70-130	3		30
trans-1,3-Dichloropropene	94		91		70-130	3		30
cis-1,3-Dichloropropene	80		79		70-130	1		30
1,1-Dichloropropene	84		78		70-130	7		30
Bromoform	88		90		70-130	2		30
1,1,2,2-Tetrachloroethane	100		102		70-130	2		30
Benzene	80		77		70-130	4		30
Toluene	94		88		70-130	7		30
Ethylbenzene	96		90		70-130	6		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04-05 Batch: WG549357-1 WG549357-2								
Chloromethane	95		89		52-130	7		30
Bromomethane	104		85		57-147	20		30
Vinyl chloride	100		88		67-130	13		30
Chloroethane	97		89		50-151	9		30
1,1-Dichloroethene	86		79		65-135	8		30
trans-1,2-Dichloroethene	83		79		70-130	5		30
Trichloroethene	85		80		70-130	6		30
1,2-Dichlorobenzene	105		102		70-130	3		30
1,3-Dichlorobenzene	107		104		70-130	3		30
1,4-Dichlorobenzene	105		102		70-130	3		30
Methyl tert butyl ether	76		76		66-130	0		30
p/m-Xylene	98		90		70-130	9		30
o-Xylene	95		91		70-130	4		30
cis-1,2-Dichloroethene	83		79		70-130	5		30
Dibromomethane	81		78		70-130	4		30
Styrene	96		90		70-130	6		30
Dichlorodifluoromethane	96		84		30-146	13		30
Acetone	108		100		54-140	8		30
Carbon disulfide	88		80		59-130	10		30
2-Butanone	91		89		70-130	2		30
Vinyl acetate	85		86		70-130	1		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04-05 Batch: WG549357-1 WG549357-2								
4-Methyl-2-pentanone	75		76		70-130	1		30
1,2,3-Trichloropropane	101		98		68-130	3		30
2-Hexanone	98		96		70-130	2		30
Bromochloromethane	86		82		70-130	5		30
2,2-Dichloropropane	87		82		70-130	6		30
1,2-Dibromoethane	93		91		70-130	2		30
1,3-Dichloropropane	92		91		69-130	1		30
1,1,1,2-Tetrachloroethane	95		92		70-130	3		30
Bromobenzene	102		101		70-130	1		30
n-Butylbenzene	111		105		70-130	6		30
sec-Butylbenzene	109		104		70-130	5		30
tert-Butylbenzene	108		104		70-130	4		30
o-Chlorotoluene	108		104		70-130	4		30
p-Chlorotoluene	107		103		70-130	4		30
1,2-Dibromo-3-chloropropane	97		97		68-130	0		30
Hexachlorobutadiene	106		102		67-130	4		30
Isopropylbenzene	104		100		70-130	4		30
p-Isopropyltoluene	112		104		70-130	7		30
Naphthalene	97		99		70-130	2		30
Acrylonitrile	83		84		70-130	1		30
Isopropyl Ether	88		86		66-130	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04-05 Batch: WG549357-1 WG549357-2								
tert-Butyl Alcohol	81		81		70-130	0		30
n-Propylbenzene	106		102		70-130	4		30
1,2,3-Trichlorobenzene	103		102		70-130	1		30
1,2,4-Trichlorobenzene	107		104		70-130	3		30
1,3,5-Trimethylbenzene	108		104		70-130	4		30
1,2,4-Trimethylbenzene	108		102		70-130	6		30
Methyl Acetate	84		87		70-130	4		30
Ethyl Acetate	82		84		70-130	2		30
Acrolein	78		81		70-130	4		30
Cyclohexane	90		83		70-130	8		30
1,4-Dioxane	85		86		65-136	1		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	89		82		70-130	8		30
1,4-Diethylbenzene	110		103		70-130	7		30
4-Ethyltoluene	107		103		70-130	4		30
1,2,4,5-Tetramethylbenzene	106		101		70-130	5		30
Tetrahydrofuran	87		88		66-130	1		30
Ethyl ether	83		84		67-130	1		30
trans-1,4-Dichloro-2-butene	105		107		70-130	2		30
Methyl cyclohexane	87		79		70-130	10		30
Ethyl-Tert-Butyl-Ether	81		81		70-130	0		30
Tertiary-Amyl Methyl Ether	76		77		70-130	1		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04-05 Batch: WG549357-1 WG549357-2								
Ethyl Alcohol	114		116		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	104		106		70-130
Toluene-d8	115		112		70-130
4-Bromofluorobenzene	99		101		70-130
Dibromofluoromethane	98		98		70-130

Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03,06 Batch: WG549477-1 WG549477-2								
Methylene chloride	93		93		70-130	0		30
1,1-Dichloroethane	101		99		70-130	2		30
Chloroform	103		102		70-130	1		30
Carbon tetrachloride	108		105		70-130	3		30
1,2-Dichloropropane	96		95		70-130	1		30
Dibromochloromethane	100		99		70-130	1		30
1,1,2-Trichloroethane	100		99		70-130	1		30
Tetrachloroethene	109		103		70-130	6		30
Chlorobenzene	102		99		70-130	3		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03,06 Batch: WG549477-1 WG549477-2								
Trichlorofluoromethane	103		98		70-139	5		30
1,2-Dichloroethane	106		105		70-130	1		30
1,1,1-Trichloroethane	106		103		70-130	3		30
Bromodichloromethane	100		99		70-130	1		30
trans-1,3-Dichloropropene	87		86		70-130	1		30
cis-1,3-Dichloropropene	96		96		70-130	0		30
1,1-Dichloropropene	104		101		70-130	3		30
Bromoform	94		93		70-130	1		30
1,1,1,2-Tetrachloroethane	94		93		70-130	1		30
Benzene	98		96		70-130	2		30
Toluene	102		98		70-130	4		30
Ethylbenzene	105		101		70-130	4		30
Chloromethane	102		100		52-130	2		30
Bromomethane	107		103		57-147	4		30
Vinyl chloride	112		108		67-130	4		30
Chloroethane	101		100		50-151	1		30
1,1-Dichloroethene	100		97		65-135	3		30
trans-1,2-Dichloroethene	102		101		70-130	1		30
Trichloroethene	102		99		70-130	3		30
1,2-Dichlorobenzene	102		98		70-130	4		30
1,3-Dichlorobenzene	101		99		70-130	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03,06 Batch: WG549477-1 WG549477-2								
1,4-Dichlorobenzene	100		97		70-130	3		30
Methyl tert butyl ether	105		105		66-130	0		30
p/m-Xylene	105		100		70-130	5		30
o-Xylene	105		102		70-130	3		30
cis-1,2-Dichloroethene	104		100		70-130	4		30
Dibromomethane	102		102		70-130	0		30
Styrene	105		102		70-130	3		30
Dichlorodifluoromethane	90		87		30-146	3		30
Acetone	89		90		54-140	1		30
Carbon disulfide	94		92		59-130	2		30
2-Butanone	88		90		70-130	2		30
Vinyl acetate	99		98		70-130	1		30
4-Methyl-2-pentanone	90		92		70-130	2		30
1,2,3-Trichloropropane	96		97		68-130	1		30
2-Hexanone	94		95		70-130	1		30
Bromochloromethane	99		99		70-130	0		30
2,2-Dichloropropane	101		98		70-130	3		30
1,2-Dibromoethane	105		102		70-130	3		30
1,3-Dichloropropane	102		97		69-130	5		30
1,1,1,2-Tetrachloroethane	105		102		70-130	3		30
Bromobenzene	101		99		70-130	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03,06 Batch: WG549477-1 WG549477-2								
n-Butylbenzene	108		102		70-130	6		30
sec-Butylbenzene	106		101		70-130	5		30
tert-Butylbenzene	108		104		70-130	4		30
o-Chlorotoluene	104		100		70-130	4		30
p-Chlorotoluene	102		98		70-130	4		30
1,2-Dibromo-3-chloropropane	96		98		68-130	2		30
Hexachlorobutadiene	109		103		67-130	6		30
Isopropylbenzene	107		104		70-130	3		30
p-Isopropyltoluene	108		103		70-130	5		30
Naphthalene	94		94		70-130	0		30
Acrylonitrile	92		92		70-130	0		30
n-Propylbenzene	105		100		70-130	5		30
1,2,3-Trichlorobenzene	101		99		70-130	2		30
1,2,4-Trichlorobenzene	102		99		70-130	3		30
1,3,5-Trimethylbenzene	106		101		70-130	5		30
1,2,4-Trimethylbenzene	106		102		70-130	4		30
1,4-Diethylbenzene	108		103		70-130	5		30
4-Ethyltoluene	106		101		70-130	5		30
1,2,4,5-Tetramethylbenzene	106		101		70-130	5		30
Ethyl ether	99		97		67-130	2		30
trans-1,4-Dichloro-2-butene	89		89		70-130	0		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-03,06 Batch: WG549477-1 WG549477-2								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	110		111		70-130
Toluene-d8	103		101		70-130
4-Bromofluorobenzene	97		95		70-130
Dibromofluoromethane	106		105		70-130

# SEMIVOLATILES

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-01  
 Client ID: LB3-1'-2'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/18/12 23:50  
 Analyst: RC  
 Percent Solids: 85%

Date Collected: 07/11/12 14:05  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/16/12 22:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	320		ug/kg	160	42.	1
1,2,4-Trichlorobenzene	ND		ug/kg	190	57.	1
Hexachlorobenzene	ND		ug/kg	120	30.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	37.	1
2-Chloronaphthalene	ND		ug/kg	190	58.	1
1,2-Dichlorobenzene	ND		ug/kg	190	57.	1
1,3-Dichlorobenzene	ND		ug/kg	190	60.	1
1,4-Dichlorobenzene	ND		ug/kg	190	55.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	70.	1
2,4-Dinitrotoluene	ND		ug/kg	190	58.	1
2,6-Dinitrotoluene	ND		ug/kg	190	64.	1
Fluoranthene	4600		ug/kg	120	25.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	34.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	40.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	55.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	49.	1
Hexachlorobutadiene	ND		ug/kg	190	52.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	150	1
Hexachloroethane	ND		ug/kg	160	28.	1
Isophorone	ND		ug/kg	180	46.	1
Naphthalene	170	J	ug/kg	190	62.	1
Nitrobenzene	ND		ug/kg	180	57.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	160	49.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	54.	1
Bis(2-Ethylhexyl)phthalate	440		ug/kg	190	40.	1
Butyl benzyl phthalate	ND		ug/kg	190	55.	1
Di-n-butylphthalate	ND		ug/kg	190	33.	1
Di-n-octylphthalate	ND		ug/kg	190	52.	1
Diethyl phthalate	ND		ug/kg	190	34.	1
Dimethyl phthalate	ND		ug/kg	190	32.	1
Benzo(a)anthracene	2000		ug/kg	120	38.	1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

## SAMPLE RESULTS

Lab ID: L1212547-01  
 Client ID: LB3-1'-2'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/11/12 14:05  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	2300		ug/kg	160	46.	1
Benzo(b)fluoranthene	3300		ug/kg	120	34.	1
Benzo(k)fluoranthene	1100		ug/kg	120	30.	1
Chrysene	2100		ug/kg	120	30.	1
Acenaphthylene	500		ug/kg	160	50.	1
Anthracene	1700		ug/kg	120	27.	1
Benzo(ghi)perylene	1000		ug/kg	160	49.	1
Fluorene	460		ug/kg	190	36.	1
Phenanthrene	3800		ug/kg	120	32.	1
Dibenzo(a,h)anthracene	270		ug/kg	120	36.	1
Indeno(1,2,3-cd)Pyrene	1300		ug/kg	160	48.	1
Pyrene	4200		ug/kg	120	32.	1
Biphenyl	ND		ug/kg	440	140	1
4-Chloroaniline	ND		ug/kg	190	65.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	22.	1
4-Nitroaniline	ND		ug/kg	190	120	1
Dibenzofuran	280		ug/kg	190	40.	1
2-Methylnaphthalene	150	J	ug/kg	230	77.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	62.	1
Acetophenone	ND		ug/kg	190	62.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
P-Chloro-M-Cresol	ND		ug/kg	190	40.	1
2-Chlorophenol	ND		ug/kg	190	61.	1
2,4-Dichlorophenol	ND		ug/kg	180	56.	1
2,4-Dimethylphenol	ND		ug/kg	190	80.	1
2-Nitrophenol	ND		ug/kg	420	140	1
4-Nitrophenol	ND		ug/kg	270	83.	1
2,4-Dinitrophenol	ND		ug/kg	930	300	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	180	1
Pentachlorophenol	ND		ug/kg	160	46.	1
Phenol	ND		ug/kg	190	61.	1
2-Methylphenol	ND		ug/kg	190	48.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	84.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	45.	1
Benzoic Acid	ND		ug/kg	630	160	1
Benzyl Alcohol	ND		ug/kg	190	45.	1
Carbazole	440		ug/kg	190	31.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-01  
 Client ID: LB3-1'-2'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/11/12 14:05  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		25-120
Phenol-d6	68		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	68		30-120
2,4,6-Tribromophenol	88		0-136
4-Terphenyl-d14	74		18-120

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-02  
 Client ID: LB3-5'-6'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/19/12 00:15  
 Analyst: RC  
 Percent Solids: 83%

Date Collected: 07/11/12 14:25  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/16/12 22:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	45	J	ug/kg	160	43.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	58.	1
Hexachlorobenzene	ND		ug/kg	120	31.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	38.	1
2-Chloronaphthalene	ND		ug/kg	200	60.	1
1,2-Dichlorobenzene	ND		ug/kg	200	58.	1
1,3-Dichlorobenzene	ND		ug/kg	200	62.	1
1,4-Dichlorobenzene	ND		ug/kg	200	56.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	72.	1
2,4-Dinitrotoluene	ND		ug/kg	200	60.	1
2,6-Dinitrotoluene	ND		ug/kg	200	65.	1
Fluoranthene	610		ug/kg	120	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	35.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	41.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	56.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	50.	1
Hexachlorobutadiene	ND		ug/kg	200	53.	1
Hexachlorocyclopentadiene	ND		ug/kg	570	160	1
Hexachloroethane	ND		ug/kg	160	29.	1
Isophorone	ND		ug/kg	180	47.	1
Naphthalene	140	J	ug/kg	200	63.	1
Nitrobenzene	ND		ug/kg	180	58.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	160	50.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	56.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	200	41.	1
Butyl benzyl phthalate	ND		ug/kg	200	56.	1
Di-n-butylphthalate	ND		ug/kg	200	34.	1
Di-n-octylphthalate	ND		ug/kg	200	54.	1
Diethyl phthalate	ND		ug/kg	200	34.	1
Dimethyl phthalate	ND		ug/kg	200	33.	1
Benzo(a)anthracene	250		ug/kg	120	39.	1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

## SAMPLE RESULTS

Lab ID: L1212547-02  
 Client ID: LB3-5'-6'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/11/12 14:25  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	260		ug/kg	160	47.	1
Benzo(b)fluoranthene	280		ug/kg	120	35.	1
Benzo(k)fluoranthene	100	J	ug/kg	120	31.	1
Chrysene	250		ug/kg	120	31.	1
Acenaphthylene	100	J	ug/kg	160	52.	1
Anthracene	150		ug/kg	120	28.	1
Benzo(ghi)perylene	130	J	ug/kg	160	50.	1
Fluorene	83	J	ug/kg	200	36.	1
Phenanthrene	700		ug/kg	120	33.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	37.	1
Indeno(1,2,3-cd)Pyrene	150	J	ug/kg	160	48.	1
Pyrene	610		ug/kg	120	33.	1
Biphenyl	ND		ug/kg	450	140	1
4-Chloroaniline	ND		ug/kg	200	67.	1
2-Nitroaniline	ND		ug/kg	200	36.	1
3-Nitroaniline	ND		ug/kg	200	22.	1
4-Nitroaniline	ND		ug/kg	200	120	1
Dibenzofuran	54	J	ug/kg	200	41.	1
2-Methylnaphthalene	ND		ug/kg	240	78.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	63.	1
Acetophenone	ND		ug/kg	200	64.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
P-Chloro-M-Cresol	ND		ug/kg	200	41.	1
2-Chlorophenol	ND		ug/kg	200	62.	1
2,4-Dichlorophenol	ND		ug/kg	180	58.	1
2,4-Dimethylphenol	ND		ug/kg	200	82.	1
2-Nitrophenol	ND		ug/kg	430	140	1
4-Nitrophenol	ND		ug/kg	280	85.	1
2,4-Dinitrophenol	ND		ug/kg	950	310	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	190	1
Pentachlorophenol	ND		ug/kg	160	47.	1
Phenol	ND		ug/kg	200	62.	1
2-Methylphenol	ND		ug/kg	200	49.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	86.	1
2,4,5-Trichlorophenol	ND		ug/kg	200	46.	1
Benzoic Acid	ND		ug/kg	640	170	1
Benzyl Alcohol	ND		ug/kg	200	46.	1
Carbazole	56	J	ug/kg	200	32.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-02  
 Client ID: LB3-5'-6'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/11/12 14:25  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		25-120
Phenol-d6	50		10-120
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	50		30-120
2,4,6-Tribromophenol	83		0-136
4-Terphenyl-d14	66		18-120

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-03  
 Client ID: LB3-9'-11'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/19/12 00:40  
 Analyst: RC  
 Percent Solids: 81%

Date Collected: 07/12/12 07:35  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/16/12 22:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	160	43.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	58.	1
Hexachlorobenzene	ND		ug/kg	120	31.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	38.	1
2-Chloronaphthalene	ND		ug/kg	200	60.	1
1,2-Dichlorobenzene	ND		ug/kg	200	59.	1
1,3-Dichlorobenzene	ND		ug/kg	200	62.	1
1,4-Dichlorobenzene	ND		ug/kg	200	57.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	72.	1
2,4-Dinitrotoluene	ND		ug/kg	200	60.	1
2,6-Dinitrotoluene	ND		ug/kg	200	66.	1
Fluoranthene	ND		ug/kg	120	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	35.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	42.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	56.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	50.	1
Hexachlorobutadiene	ND		ug/kg	200	53.	1
Hexachlorocyclopentadiene	ND		ug/kg	570	160	1
Hexachloroethane	ND		ug/kg	160	29.	1
Isophorone	ND		ug/kg	180	48.	1
Naphthalene	ND		ug/kg	200	63.	1
Nitrobenzene	ND		ug/kg	180	58.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	160	50.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	56.	1
Bis(2-Ethylhexyl)phthalate	290		ug/kg	200	41.	1
Butyl benzyl phthalate	ND		ug/kg	200	56.	1
Di-n-butylphthalate	ND		ug/kg	200	34.	1
Di-n-octylphthalate	ND		ug/kg	200	54.	1
Diethyl phthalate	ND		ug/kg	200	35.	1
Dimethyl phthalate	ND		ug/kg	200	33.	1
Benzo(a)anthracene	ND		ug/kg	120	40.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-03  
 Client ID: LB3-9'-11'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/12/12 07:35  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Benzo(a)pyrene	ND		ug/kg	160	48.	1
Benzo(b)fluoranthene	ND		ug/kg	120	35.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1
Chrysene	ND		ug/kg	120	31.	1
Acenaphthylene	ND		ug/kg	160	52.	1
Anthracene	ND		ug/kg	120	28.	1
Benzo(ghi)perylene	ND		ug/kg	160	50.	1
Fluorene	ND		ug/kg	200	37.	1
Phenanthrene	ND		ug/kg	120	33.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	37.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	160	49.	1
Pyrene	ND		ug/kg	120	33.	1
Biphenyl	ND		ug/kg	460	140	1
4-Chloroaniline	ND		ug/kg	200	67.	1
2-Nitroaniline	ND		ug/kg	200	37.	1
3-Nitroaniline	ND		ug/kg	200	22.	1
4-Nitroaniline	ND		ug/kg	200	120	1
Dibenzofuran	ND		ug/kg	200	41.	1
2-Methylnaphthalene	ND		ug/kg	240	79.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	64.	1
Acetophenone	ND		ug/kg	200	64.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
P-Chloro-M-Cresol	ND		ug/kg	200	41.	1
2-Chlorophenol	ND		ug/kg	200	62.	1
2,4-Dichlorophenol	ND		ug/kg	180	58.	1
2,4-Dimethylphenol	ND		ug/kg	200	82.	1
2-Nitrophenol	ND		ug/kg	430	140	1
4-Nitrophenol	ND		ug/kg	280	85.	1
2,4-Dinitrophenol	ND		ug/kg	960	310	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	190	1
Pentachlorophenol	ND		ug/kg	160	47.	1
Phenol	ND		ug/kg	200	63.	1
2-Methylphenol	ND		ug/kg	200	49.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	86.	1
2,4,5-Trichlorophenol	ND		ug/kg	200	46.	1
Benzoic Acid	ND		ug/kg	650	170	1
Benzyl Alcohol	ND		ug/kg	200	46.	1
Carbazole	ND		ug/kg	200	32.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-03

Date Collected: 07/12/12 07:35

Client ID: LB3-9'-11'

Date Received: 07/13/12

Sample Location: 17-29 WEST END AVE

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		25-120
Phenol-d6	63		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	62		30-120
2,4,6-Tribromophenol	87		0-136
4-Terphenyl-d14	73		18-120

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-04  
 Client ID: LB4(MW)-1'-2'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/19/12 01:05  
 Analyst: RC  
 Percent Solids: 81%

Date Collected: 07/12/12 14:00  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/16/12 22:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	160	44.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	59.	1
Hexachlorobenzene	ND		ug/kg	120	31.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	38.	1
2-Chloronaphthalene	ND		ug/kg	200	60.	1
1,2-Dichlorobenzene	ND		ug/kg	200	59.	1
1,3-Dichlorobenzene	ND		ug/kg	200	62.	1
1,4-Dichlorobenzene	ND		ug/kg	200	57.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	73.	1
2,4-Dinitrotoluene	ND		ug/kg	200	60.	1
2,6-Dinitrotoluene	ND		ug/kg	200	66.	1
Fluoranthene	ND		ug/kg	120	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	36.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	42.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	57.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	51.	1
Hexachlorobutadiene	ND		ug/kg	200	54.	1
Hexachlorocyclopentadiene	ND		ug/kg	580	160	1
Hexachloroethane	ND		ug/kg	160	29.	1
Isophorone	ND		ug/kg	180	48.	1
Naphthalene	ND		ug/kg	200	64.	1
Nitrobenzene	ND		ug/kg	180	59.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	160	51.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	56.	1
Bis(2-Ethylhexyl)phthalate	140	J	ug/kg	200	42.	1
Butyl benzyl phthalate	ND		ug/kg	200	56.	1
Di-n-butylphthalate	ND		ug/kg	200	34.	1
Di-n-octylphthalate	ND		ug/kg	200	54.	1
Diethyl phthalate	ND		ug/kg	200	35.	1
Dimethyl phthalate	ND		ug/kg	200	33.	1
Benzo(a)anthracene	ND		ug/kg	120	40.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-04  
 Client ID: LB4(MW)-1'-2'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/12/12 14:00  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Benzo(a)pyrene	ND		ug/kg	160	48.	1
Benzo(b)fluoranthene	ND		ug/kg	120	36.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1
Chrysene	ND		ug/kg	120	31.	1
Acenaphthylene	ND		ug/kg	160	52.	1
Anthracene	ND		ug/kg	120	28.	1
Benzo(ghi)perylene	ND		ug/kg	160	51.	1
Fluorene	ND		ug/kg	200	37.	1
Phenanthrene	ND		ug/kg	120	34.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	37.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	160	49.	1
Pyrene	ND		ug/kg	120	33.	1
Biphenyl	ND		ug/kg	460	140	1
4-Chloroaniline	ND		ug/kg	200	68.	1
2-Nitroaniline	ND		ug/kg	200	37.	1
3-Nitroaniline	ND		ug/kg	200	23.	1
4-Nitroaniline	ND		ug/kg	200	120	1
Dibenzofuran	ND		ug/kg	200	41.	1
2-Methylnaphthalene	ND		ug/kg	240	79.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	64.	1
Acetophenone	ND		ug/kg	200	65.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
P-Chloro-M-Cresol	ND		ug/kg	200	41.	1
2-Chlorophenol	ND		ug/kg	200	63.	1
2,4-Dichlorophenol	ND		ug/kg	180	58.	1
2,4-Dimethylphenol	ND		ug/kg	200	83.	1
2-Nitrophenol	ND		ug/kg	440	150	1
4-Nitrophenol	ND		ug/kg	280	86.	1
2,4-Dinitrophenol	ND		ug/kg	970	310	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	190	1
Pentachlorophenol	ND		ug/kg	160	48.	1
Phenol	ND		ug/kg	200	63.	1
2-Methylphenol	ND		ug/kg	200	50.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	87.	1
2,4,5-Trichlorophenol	ND		ug/kg	200	47.	1
Benzoic Acid	ND		ug/kg	650	170	1
Benzyl Alcohol	ND		ug/kg	200	47.	1
Carbazole	ND		ug/kg	200	32.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-04  
 Client ID: LB4(MW)-1'-2'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/12/12 14:00  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		25-120
Phenol-d6	58		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	56		30-120
2,4,6-Tribromophenol	76		0-136
4-Terphenyl-d14	63		18-120

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-05  
 Client ID: LB4(MW)-7'-8'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/19/12 01:30  
 Analyst: RC  
 Percent Solids: 84%

Date Collected: 07/12/12 14:37  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/16/12 22:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	160	42.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	57.	1
Hexachlorobenzene	ND		ug/kg	120	31.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	37.	1
2-Chloronaphthalene	ND		ug/kg	200	59.	1
1,2-Dichlorobenzene	ND		ug/kg	200	58.	1
1,3-Dichlorobenzene	ND		ug/kg	200	61.	1
1,4-Dichlorobenzene	ND		ug/kg	200	56.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	71.	1
2,4-Dinitrotoluene	ND		ug/kg	200	59.	1
2,6-Dinitrotoluene	ND		ug/kg	200	65.	1
Fluoranthene	ND		ug/kg	120	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	35.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	41.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	56.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	49.	1
Hexachlorobutadiene	ND		ug/kg	200	52.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	160	1
Hexachloroethane	ND		ug/kg	160	28.	1
Isophorone	ND		ug/kg	180	47.	1
Naphthalene	ND		ug/kg	200	62.	1
Nitrobenzene	ND		ug/kg	180	57.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	160	49.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	55.	1
Bis(2-Ethylhexyl)phthalate	140	J	ug/kg	200	41.	1
Butyl benzyl phthalate	ND		ug/kg	200	55.	1
Di-n-butylphthalate	ND		ug/kg	200	34.	1
Di-n-octylphthalate	ND		ug/kg	200	53.	1
Diethyl phthalate	ND		ug/kg	200	34.	1
Dimethyl phthalate	ND		ug/kg	200	32.	1
Benzo(a)anthracene	ND		ug/kg	120	39.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-05  
 Client ID: LB4(MW)-7'-8'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/12/12 14:37  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Benzo(a)pyrene	ND		ug/kg	160	47.	1
Benzo(b)fluoranthene	ND		ug/kg	120	35.	1
Benzo(k)fluoranthene	ND		ug/kg	120	30.	1
Chrysene	ND		ug/kg	120	31.	1
Acenaphthylene	ND		ug/kg	160	51.	1
Anthracene	ND		ug/kg	120	27.	1
Benzo(ghi)perylene	ND		ug/kg	160	50.	1
Fluorene	ND		ug/kg	200	36.	1
Phenanthrene	ND		ug/kg	120	33.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	36.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	160	48.	1
Pyrene	ND		ug/kg	120	32.	1
Biphenyl	ND		ug/kg	450	140	1
4-Chloroaniline	ND		ug/kg	200	66.	1
2-Nitroaniline	ND		ug/kg	200	36.	1
3-Nitroaniline	ND		ug/kg	200	22.	1
4-Nitroaniline	ND		ug/kg	200	120	1
Dibenzofuran	ND		ug/kg	200	40.	1
2-Methylnaphthalene	ND		ug/kg	240	77.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	63.	1
Acetophenone	ND		ug/kg	200	63.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
P-Chloro-M-Cresol	ND		ug/kg	200	40.	1
2-Chlorophenol	ND		ug/kg	200	62.	1
2,4-Dichlorophenol	ND		ug/kg	180	57.	1
2,4-Dimethylphenol	ND		ug/kg	200	81.	1
2-Nitrophenol	ND		ug/kg	420	140	1
4-Nitrophenol	ND		ug/kg	280	84.	1
2,4-Dinitrophenol	ND		ug/kg	940	300	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	180	1
Pentachlorophenol	ND		ug/kg	160	47.	1
Phenol	ND		ug/kg	200	62.	1
2-Methylphenol	ND		ug/kg	200	48.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	85.	1
2,4,5-Trichlorophenol	ND		ug/kg	200	46.	1
Benzoic Acid	ND		ug/kg	640	170	1
Benzyl Alcohol	ND		ug/kg	200	46.	1
Carbazole	ND		ug/kg	200	32.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-05  
 Client ID: LB4(MW)-7'-8'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/12/12 14:37  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		25-120
Phenol-d6	63		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	72		0-136
4-Terphenyl-d14	68		18-120

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-06  
 Client ID: LB4(MW)-11'-12'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/19/12 01:55  
 Analyst: RC  
 Percent Solids: 75%

Date Collected: 07/12/12 15:00  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/16/12 22:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	170	47.	1
1,2,4-Trichlorobenzene	ND		ug/kg	220	63.	1
Hexachlorobenzene	ND		ug/kg	130	34.	1
Bis(2-chloroethyl)ether	ND		ug/kg	200	41.	1
2-Chloronaphthalene	ND		ug/kg	220	65.	1
1,2-Dichlorobenzene	ND		ug/kg	220	64.	1
1,3-Dichlorobenzene	ND		ug/kg	220	67.	1
1,4-Dichlorobenzene	ND		ug/kg	220	62.	1
3,3'-Dichlorobenzidine	ND		ug/kg	220	78.	1
2,4-Dinitrotoluene	ND		ug/kg	220	65.	1
2,6-Dinitrotoluene	ND		ug/kg	220	71.	1
Fluoranthene	ND		ug/kg	130	28.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	220	38.	1
4-Bromophenyl phenyl ether	ND		ug/kg	220	45.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	61.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	54.	1
Hexachlorobutadiene	ND		ug/kg	220	58.	1
Hexachlorocyclopentadiene	ND		ug/kg	620	170	1
Hexachloroethane	ND		ug/kg	170	31.	1
Isophorone	ND		ug/kg	200	52.	1
Naphthalene	ND		ug/kg	220	69.	1
Nitrobenzene	ND		ug/kg	200	63.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	170	54.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	220	61.	1
Bis(2-Ethylhexyl)phthalate	67	J	ug/kg	220	45.	1
Butyl benzyl phthalate	ND		ug/kg	220	61.	1
Di-n-butylphthalate	ND		ug/kg	220	37.	1
Di-n-octylphthalate	ND		ug/kg	220	59.	1
Diethyl phthalate	ND		ug/kg	220	38.	1
Dimethyl phthalate	ND		ug/kg	220	36.	1
Benzo(a)anthracene	ND		ug/kg	130	43.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-06  
 Client ID: LB4(MW)-11'-12'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/12/12 15:00  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Benzo(a)pyrene	ND		ug/kg	170	52.	1
Benzo(b)fluoranthene	ND		ug/kg	130	38.	1
Benzo(k)fluoranthene	ND		ug/kg	130	33.	1
Chrysene	ND		ug/kg	130	34.	1
Acenaphthylene	ND		ug/kg	170	56.	1
Anthracene	ND		ug/kg	130	30.	1
Benzo(ghi)perylene	ND		ug/kg	170	55.	1
Fluorene	ND		ug/kg	220	40.	1
Phenanthrene	ND		ug/kg	130	36.	1
Dibenzo(a,h)anthracene	ND		ug/kg	130	40.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	170	53.	1
Pyrene	ND		ug/kg	130	36.	1
Biphenyl	ND		ug/kg	500	150	1
4-Chloroaniline	ND		ug/kg	220	73.	1
2-Nitroaniline	ND		ug/kg	220	40.	1
3-Nitroaniline	ND		ug/kg	220	24.	1
4-Nitroaniline	ND		ug/kg	220	130	1
Dibenzofuran	ND		ug/kg	220	45.	1
2-Methylnaphthalene	ND		ug/kg	260	86.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	69.	1
Acetophenone	ND		ug/kg	220	70.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	40.	1
P-Chloro-M-Cresol	ND		ug/kg	220	44.	1
2-Chlorophenol	ND		ug/kg	220	68.	1
2,4-Dichlorophenol	ND		ug/kg	200	63.	1
2,4-Dimethylphenol	ND		ug/kg	220	90.	1
2-Nitrophenol	ND		ug/kg	470	160	1
4-Nitrophenol	ND		ug/kg	300	92.	1
2,4-Dinitrophenol	ND		ug/kg	1000	340	1
4,6-Dinitro-o-cresol	ND		ug/kg	560	200	1
Pentachlorophenol	ND		ug/kg	170	51.	1
Phenol	ND		ug/kg	220	68.	1
2-Methylphenol	ND		ug/kg	220	54.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	310	94.	1
2,4,5-Trichlorophenol	ND		ug/kg	220	50.	1
Benzoic Acid	ND		ug/kg	700	180	1
Benzyl Alcohol	ND		ug/kg	220	50.	1
Carbazole	ND		ug/kg	220	35.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-06  
 Client ID: LB4(MW)-11'-12'  
 Sample Location: 17-29 WEST END AVE

Date Collected: 07/12/12 15:00  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		25-120
Phenol-d6	57		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	53		30-120
2,4,6-Tribromophenol	74		0-136
4-Terphenyl-d14	56		18-120

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/18/12 15:14  
**Analyst:** RC

**Extraction Method:** EPA 3546  
**Extraction Date:** 07/16/12 22:18

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG548755-1					
Acenaphthene	ND		ug/kg	130	35.
1,2,4-Trichlorobenzene	ND		ug/kg	160	48.
Hexachlorobenzene	ND		ug/kg	98	26.
Bis(2-chloroethyl)ether	ND		ug/kg	150	31.
2-Chloronaphthalene	ND		ug/kg	160	49.
1,2-Dichlorobenzene	ND		ug/kg	160	48.
1,3-Dichlorobenzene	ND		ug/kg	160	51.
1,4-Dichlorobenzene	ND		ug/kg	160	46.
3,3'-Dichlorobenzidine	ND		ug/kg	160	59.
2,4-Dinitrotoluene	ND		ug/kg	160	49.
2,6-Dinitrotoluene	ND		ug/kg	160	54.
Fluoranthene	ND		ug/kg	98	21.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	29.
4-Bromophenyl phenyl ether	ND		ug/kg	160	34.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	46.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	41.
Hexachlorobutadiene	ND		ug/kg	160	44.
Hexachlorocyclopentadiene	ND		ug/kg	470	130
Hexachloroethane	ND		ug/kg	130	24.
Isophorone	ND		ug/kg	150	39.
Naphthalene	ND		ug/kg	160	52.
Nitrobenzene	ND		ug/kg	150	48.
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	130	41.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	46.
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	160	34.
Butyl benzyl phthalate	ND		ug/kg	160	46.
Di-n-butylphthalate	ND		ug/kg	160	28.
Di-n-octylphthalate	ND		ug/kg	160	44.
Diethyl phthalate	ND		ug/kg	160	28.
Dimethyl phthalate	ND		ug/kg	160	27.
Benzo(a)anthracene	ND		ug/kg	98	32.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/18/12 15:14  
**Analyst:** RC

**Extraction Method:** EPA 3546  
**Extraction Date:** 07/16/12 22:18

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG548755-1					
Benzo(a)pyrene	ND		ug/kg	130	39.
Benzo(b)fluoranthene	ND		ug/kg	98	29.
Benzo(k)fluoranthene	ND		ug/kg	98	25.
Chrysene	ND		ug/kg	98	26.
Acenaphthylene	ND		ug/kg	130	42.
Anthracene	ND		ug/kg	98	23.
Benzo(ghi)perylene	ND		ug/kg	130	41.
Fluorene	ND		ug/kg	160	30.
Phenanthrene	ND		ug/kg	98	27.
Dibenzo(a,h)anthracene	ND		ug/kg	98	30.
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	130	40.
Pyrene	ND		ug/kg	98	27.
Biphenyl	ND		ug/kg	370	110
4-Chloroaniline	ND		ug/kg	160	55.
2-Nitroaniline	ND		ug/kg	160	30.
3-Nitroaniline	ND		ug/kg	160	18.
4-Nitroaniline	ND		ug/kg	160	100
Dibenzofuran	ND		ug/kg	160	34.
2-Methylnaphthalene	ND		ug/kg	200	64.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	52.
Acetophenone	ND		ug/kg	160	53.
2,4,6-Trichlorophenol	ND		ug/kg	98	30.
P-Chloro-M-Cresol	ND		ug/kg	160	33.
2-Chlorophenol	ND		ug/kg	160	51.
2,4-Dichlorophenol	ND		ug/kg	150	48.
2,4-Dimethylphenol	ND		ug/kg	160	68.
2-Nitrophenol	ND		ug/kg	350	120
4-Nitrophenol	ND		ug/kg	230	70.
2,4-Dinitrophenol	ND		ug/kg	790	250
4,6-Dinitro-o-cresol	ND		ug/kg	420	150
Pentachlorophenol	ND		ug/kg	130	39.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270C  
 Analytical Date: 07/18/12 15:14  
 Analyst: RC

Extraction Method: EPA 3546  
 Extraction Date: 07/16/12 22:18

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG548755-1					
Phenol	ND		ug/kg	160	51.
2-Methylphenol	ND		ug/kg	160	40.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	71.
2,4,5-Trichlorophenol	ND		ug/kg	160	38.
Benzoic Acid	ND		ug/kg	530	140
Benzyl Alcohol	ND		ug/kg	160	38.
Carbazole	ND		ug/kg	160	26.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	85		30-120
2,4,6-Tribromophenol	88		0-136
4-Terphenyl-d14	91		18-120

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG548755-2 WG548755-3								
Acenaphthene	81		73		31-137	10		50
1,2,4-Trichlorobenzene	80		75		38-107	6		50
Hexachlorobenzene	91		84		40-140	8		50
Bis(2-chloroethyl)ether	73		68		40-140	7		50
2-Chloronaphthalene	91		86		40-140	6		50
1,2-Dichlorobenzene	81		75		40-140	8		50
1,3-Dichlorobenzene	80		71		40-140	12		50
1,4-Dichlorobenzene	77		73		28-104	5		50
3,3'-Dichlorobenzidine	75		70		40-140	7		50
2,4-Dinitrotoluene	100	Q	90	Q	28-89	11		50
2,6-Dinitrotoluene	101		98		40-140	3		50
Fluoranthene	88		81		40-140	8		50
4-Chlorophenyl phenyl ether	88		80		40-140	10		50
4-Bromophenyl phenyl ether	94		86		40-140	9		50
Bis(2-chloroisopropyl)ether	78		72		40-140	8		50
Bis(2-chloroethoxy)methane	83		77		40-117	8		50
Hexachlorobutadiene	91		90		40-140	1		50
Hexachlorocyclopentadiene	83		74		40-140	11		50
Hexachloroethane	85		77		40-140	10		50
Isophorone	93		83		40-140	11		50
Naphthalene	79		75		40-140	5		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG548755-2 WG548755-3								
Nitrobenzene	80		78		40-140	3		50
NitrosoDiPhenylAmine(NDPA)/DPA	90		82			9		50
n-Nitrosodi-n-propylamine	87		78		32-121	11		50
Bis(2-Ethylhexyl)phthalate	109		103		40-140	6		50
Butyl benzyl phthalate	106		98		40-140	8		50
Di-n-butylphthalate	103		97		40-140	6		50
Di-n-octylphthalate	100		93		40-140	7		50
Diethyl phthalate	97		90		40-140	7		50
Dimethyl phthalate	90		83		40-140	8		50
Benzo(a)anthracene	89		83		40-140	7		50
Benzo(a)pyrene	95		88		40-140	8		50
Benzo(b)fluoranthene	88		83		40-140	6		50
Benzo(k)fluoranthene	91		87		40-140	4		50
Chrysene	86		82		40-140	5		50
Acenaphthylene	93		89		40-140	4		50
Anthracene	88		83		40-140	6		50
Benzo(ghi)perylene	84		78		40-140	7		50
Fluorene	88		82		40-140	7		50
Phenanthrene	84		78		40-140	7		50
Dibenzo(a,h)anthracene	86		83		40-140	4		50
Indeno(1,2,3-cd)Pyrene	87		83		40-140	5		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG548755-2 WG548755-3								
Pyrene	87		81		35-142	7		50
Biphenyl	82		75			9		50
4-Chloroaniline	54		51		40-140	6		50
2-Nitroaniline	100		96		47-134	4		50
3-Nitroaniline	63		57		26-129	10		50
4-Nitroaniline	88		79		41-125	11		50
Dibenzofuran	86		78		40-140	10		50
2-Methylnaphthalene	86		82		40-140	5		50
1,2,4,5-Tetrachlorobenzene	82		77		40-117	6		50
Acetophenone	96		88		14-144	9		50
2,4,6-Trichlorophenol	108		99		30-130	9		50
P-Chloro-M-Cresol	<b>104</b>	Q	97		26-103	7		50
2-Chlorophenol	87		80		25-102	8		50
2,4-Dichlorophenol	97		93		30-130	4		50
2,4-Dimethylphenol	93		88		30-130	6		50
2-Nitrophenol	97		89		30-130	9		50
4-Nitrophenol	103		95		11-114	8		50
2,4-Dinitrophenol	42		43		4-130	2		50
4,6-Dinitro-o-cresol	85		88		10-130	3		50
Pentachlorophenol	86		78		17-109	10		50
Phenol	80		76		26-90	5		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG548755-2 WG548755-3								
2-Methylphenol	89		80		30-130.	11		50
3-Methylphenol/4-Methylphenol	91		86		30-130	6		50
2,4,5-Trichlorophenol	110		106		30-130	4		50
Benzoic Acid	14		15			7		50
Benzyl Alcohol	90		90		40-140	0		50
Carbazole	85		79		54-128	7		50

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
2-Fluorophenol	85		77		25-120
Phenol-d6	88		79		10-120
Nitrobenzene-d5	91		80		23-120
2-Fluorobiphenyl	91		82		30-120
2,4,6-Tribromophenol	100		91		0-136
4-Terphenyl-d14	101		89		18-120

# PCBS

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-01  
 Client ID: LB3-1'-2'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8082  
 Analytical Date: 07/18/12 17:59  
 Analyst: KB  
 Percent Solids: 85%

Date Collected: 07/11/12 14:05  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 03:52  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/18/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/18/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	38.5	7.60	1
Aroclor 1221	ND		ug/kg	38.5	11.6	1
Aroclor 1232	ND		ug/kg	38.5	8.17	1
Aroclor 1242	ND		ug/kg	38.5	7.30	1
Aroclor 1248	ND		ug/kg	38.5	4.65	1
Aroclor 1254	ND		ug/kg	38.5	6.06	1
Aroclor 1260	66.9		ug/kg	38.5	6.68	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	74		30-150
Decachlorobiphenyl	71		30-150
2,4,5,6-Tetrachloro-m-xylene	69		30-150
Decachlorobiphenyl	69		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-02  
 Client ID: LB3-5'-6'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8082  
 Analytical Date: 07/18/12 18:11  
 Analyst: KB  
 Percent Solids: 83%

Date Collected: 07/11/12 14:25  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 03:52  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/18/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/18/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>						
Aroclor 1016	ND		ug/kg	38.1	7.52	1
Aroclor 1221	ND		ug/kg	38.1	11.5	1
Aroclor 1232	ND		ug/kg	38.1	8.09	1
Aroclor 1242	ND		ug/kg	38.1	7.23	1
Aroclor 1248	ND		ug/kg	38.1	4.61	1
Aroclor 1254	ND		ug/kg	38.1	6.01	1
Aroclor 1260	ND		ug/kg	38.1	6.61	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	75		30-150
Decachlorobiphenyl	67		30-150
2,4,5,6-Tetrachloro-m-xylene	73		30-150
Decachlorobiphenyl	72		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-03  
 Client ID: LB3-9'-11'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8082  
 Analytical Date: 07/18/12 18:24  
 Analyst: KB  
 Percent Solids: 81%

Date Collected: 07/12/12 07:35  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 03:52  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/18/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/18/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	40.7	8.03	1
Aroclor 1221	ND		ug/kg	40.7	12.3	1
Aroclor 1232	ND		ug/kg	40.7	8.64	1
Aroclor 1242	ND		ug/kg	40.7	7.72	1
Aroclor 1248	ND		ug/kg	40.7	4.92	1
Aroclor 1254	ND		ug/kg	40.7	6.41	1
Aroclor 1260	ND		ug/kg	40.7	7.06	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	78		30-150
Decachlorobiphenyl	71		30-150
2,4,5,6-Tetrachloro-m-xylene	75		30-150
Decachlorobiphenyl	68		30-150

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

**Lab ID:** L1212547-04  
**Client ID:** LB4(MW)-1'-2'  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Soil  
**Analytical Method:** 1,8082  
**Analytical Date:** 07/18/12 18:36  
**Analyst:** KB  
**Percent Solids:** 81%

**Date Collected:** 07/12/12 14:00  
**Date Received:** 07/13/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 07/18/12 03:52  
**Cleanup Method1:** EPA 3665A  
**Cleanup Date1:** 07/18/12  
**Cleanup Method2:** EPA 3660B  
**Cleanup Date2:** 07/18/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	39.2	7.74	1
Aroclor 1221	ND		ug/kg	39.2	11.8	1
Aroclor 1232	ND		ug/kg	39.2	8.32	1
Aroclor 1242	ND		ug/kg	39.2	7.43	1
Aroclor 1248	ND		ug/kg	39.2	4.74	1
Aroclor 1254	ND		ug/kg	39.2	6.17	1
Aroclor 1260	ND		ug/kg	39.2	6.80	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	58		30-150
Decachlorobiphenyl	52		30-150
2,4,5,6-Tetrachloro-m-xylene	58		30-150
Decachlorobiphenyl	49		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-05  
 Client ID: LB4(MW)-7'-8'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8082  
 Analytical Date: 07/18/12 18:48  
 Analyst: KB  
 Percent Solids: 84%

Date Collected: 07/12/12 14:37  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 03:52  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/18/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/18/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>						
Aroclor 1016	ND		ug/kg	37.6	7.43	1
Aroclor 1221	ND		ug/kg	37.6	11.3	1
Aroclor 1232	ND		ug/kg	37.6	7.99	1
Aroclor 1242	ND		ug/kg	37.6	7.14	1
Aroclor 1248	ND		ug/kg	37.6	4.55	1
Aroclor 1254	ND		ug/kg	37.6	5.93	1
Aroclor 1260	ND		ug/kg	37.6	6.53	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	47		30-150
Decachlorobiphenyl	41		30-150
2,4,5,6-Tetrachloro-m-xylene	45		30-150
Decachlorobiphenyl	37		30-150

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

**Lab ID:** L1212547-06  
**Client ID:** LB4(MW)-11'-12'  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Soil  
**Analytical Method:** 1,8082  
**Analytical Date:** 07/18/12 19:01  
**Analyst:** KB  
**Percent Solids:** 75%

**Date Collected:** 07/12/12 15:00  
**Date Received:** 07/13/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 07/18/12 03:52  
**Cleanup Method1:** EPA 3665A  
**Cleanup Date1:** 07/18/12  
**Cleanup Method2:** EPA 3660B  
**Cleanup Date2:** 07/18/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	43.3	8.55	1
Aroclor 1221	ND		ug/kg	43.3	13.0	1
Aroclor 1232	ND		ug/kg	43.3	9.20	1
Aroclor 1242	ND		ug/kg	43.3	8.22	1
Aroclor 1248	ND		ug/kg	43.3	5.24	1
Aroclor 1254	ND		ug/kg	43.3	6.82	1
Aroclor 1260	ND		ug/kg	43.3	7.51	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	80		30-150
Decachlorobiphenyl	65		30-150
2,4,5,6-Tetrachloro-m-xylene	67		30-150
Decachlorobiphenyl	59		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8082  
 Analytical Date: 07/18/12 19:26  
 Analyst: KB

Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 03:52  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/18/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/18/12

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-06 Batch: WG549068-1					
Aroclor 1016	ND		ug/kg	33.0	6.52
Aroclor 1221	ND		ug/kg	33.0	9.96
Aroclor 1232	ND		ug/kg	33.0	7.01
Aroclor 1242	ND		ug/kg	33.0	6.26
Aroclor 1248	ND		ug/kg	33.0	3.99
Aroclor 1254	ND		ug/kg	33.0	5.20
Aroclor 1260	ND		ug/kg	33.0	5.73

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	97		30-150
Decachlorobiphenyl	78		30-150
2,4,5,6-Tetrachloro-m-xylene	86		30-150
Decachlorobiphenyl	71		30-150

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG549068-2 WG549068-3								
Aroclor 1016	83		87		40-140	5		50
Aroclor 1260	82		87		40-140	6		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	85		90		30-150
Decachlorobiphenyl	78		81		30-150
2,4,5,6-Tetrachloro-m-xylene	83		88		30-150
Decachlorobiphenyl	69		73		30-150

# PESTICIDES

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-01  
 Client ID: LB3-1'-2'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 07/18/12 13:26  
 Analyst: SH  
 Percent Solids: 85%

Date Collected: 07/11/12 14:05  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 8151A  
 Extraction Date: 07/16/12 08:50  
 Methylation Date: 07/17/12 04:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	194	77.5	1
2,4,5-T	ND		ug/kg	194	55.2	1
2,4,5-TP (Silvex)	ND		ug/kg	194	66.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	97		30-150	A
DCAA	103		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-01 D  
 Client ID: LB3-1'-2'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/19/12 09:39  
 Analyst: BW  
 Percent Solids: 85%

Date Collected: 07/11/12 14:05  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 01:33  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/18/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	18.3	3.58	10
Lindane	ND		ug/kg	7.63	3.41	10
Alpha-BHC	ND		ug/kg	7.63	2.17	10
Beta-BHC	ND		ug/kg	18.3	6.94	10
Heptachlor	ND		ug/kg	9.16	4.10	10
Aldrin	ND		ug/kg	18.3	6.45	10
Heptachlor epoxide	ND		ug/kg	34.3	10.3	10
Endrin	ND		ug/kg	7.63	3.13	10
Endrin ketone	ND		ug/kg	18.3	4.72	10
Dieldrin	ND		ug/kg	11.4	5.72	10
4,4'-DDE	ND		ug/kg	18.3	4.23	10
4,4'-DDD	ND		ug/kg	18.3	6.53	10
4,4'-DDT	21.4	J	ug/kg	34.3	14.7	10
Endosulfan I	ND		ug/kg	18.3	4.32	10
Endosulfan II	ND		ug/kg	18.3	6.12	10
Endosulfan sulfate	ND		ug/kg	7.63	3.49	10
Methoxychlor	ND		ug/kg	34.3	10.7	10
Toxaphene	ND		ug/kg	343	96.1	10
trans-Chlordane	ND		ug/kg	22.9	6.04	10
Chlordane	ND		ug/kg	149	60.6	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	100		30-150	A
Decachlorobiphenyl	110		30-150	A
2,4,5,6-Tetrachloro-m-xylene	97		30-150	B
Decachlorobiphenyl	140		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-02  
 Client ID: LB3-5'-6'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/19/12 09:52  
 Analyst: BW  
 Percent Solids: 83%

Date Collected: 07/11/12 14:25  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 01:33  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/18/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	1.89	0.369	1
Lindane	ND		ug/kg	0.786	0.351	1
Alpha-BHC	ND		ug/kg	0.786	0.223	1
Beta-BHC	ND		ug/kg	1.89	0.715	1
Heptachlor	ND		ug/kg	0.943	0.423	1
Aldrin	ND		ug/kg	1.89	0.664	1
Heptachlor epoxide	ND		ug/kg	3.54	1.06	1
Endrin	ND		ug/kg	0.786	0.322	1
Endrin ketone	ND		ug/kg	1.89	0.486	1
Dieldrin	ND		ug/kg	1.18	0.589	1
4,4'-DDE	ND		ug/kg	1.89	0.436	1
4,4'-DDD	ND		ug/kg	1.89	0.673	1
4,4'-DDT	1.99	J	ug/kg	3.54	1.52	1
Endosulfan I	ND		ug/kg	1.89	0.446	1
Endosulfan II	ND		ug/kg	1.89	0.630	1
Endosulfan sulfate	ND		ug/kg	0.786	0.359	1
Methoxychlor	ND		ug/kg	3.54	1.10	1
Toxaphene	ND		ug/kg	35.4	9.90	1
trans-Chlordane	ND		ug/kg	2.36	0.622	1
Chlordane	ND		ug/kg	15.3	6.25	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	101		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	76		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-02  
 Client ID: LB3-5'-6'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 07/18/12 13:47  
 Analyst: SH  
 Percent Solids: 83%

Date Collected: 07/11/12 14:25  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 8151A  
 Extraction Date: 07/16/12 08:50  
 Methylation Date: 07/17/12 04:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	197	78.7	1
2,4,5-T	ND		ug/kg	197	56.0	1
2,4,5-TP (Silvex)	ND		ug/kg	197	67.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	82		30-150	A
DCAA	85		30-150	B

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-03  
 Client ID: LB3-9'-11'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/19/12 10:05  
 Analyst: BW  
 Percent Solids: 81%

Date Collected: 07/12/12 07:35  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 01:33  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/18/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	1.85	0.363	1
Lindane	ND		ug/kg	0.772	0.345	1
Alpha-BHC	ND		ug/kg	0.772	0.219	1
Beta-BHC	ND		ug/kg	1.85	0.702	1
Heptachlor	ND		ug/kg	0.926	0.415	1
Aldrin	ND		ug/kg	1.85	0.652	1
Heptachlor epoxide	ND		ug/kg	3.47	1.04	1
Endrin	ND		ug/kg	0.772	0.316	1
Endrin ketone	ND		ug/kg	1.85	0.477	1
Dieldrin	ND		ug/kg	1.16	0.579	1
4,4'-DDE	ND		ug/kg	1.85	0.428	1
4,4'-DDD	ND		ug/kg	1.85	0.661	1
4,4'-DDT	ND		ug/kg	3.47	1.49	1
Endosulfan I	ND		ug/kg	1.85	0.438	1
Endosulfan II	ND		ug/kg	1.85	0.619	1
Endosulfan sulfate	ND		ug/kg	0.772	0.353	1
Methoxychlor	ND		ug/kg	3.47	1.08	1
Toxaphene	ND		ug/kg	34.7	9.73	1
trans-Chlordane	ND		ug/kg	2.32	0.611	1
Chlordane	ND		ug/kg	15.0	6.14	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	105		30-150	A
Decachlorobiphenyl	106		30-150	A
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	84		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-03  
 Client ID: LB3-9'-11'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 07/18/12 14:08  
 Analyst: SH  
 Percent Solids: 81%

Date Collected: 07/12/12 07:35  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 8151A  
 Extraction Date: 07/16/12 08:50  
 Methylation Date: 07/17/12 04:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	196	78.4	1
2,4,5-T	ND		ug/kg	196	55.8	1
2,4,5-TP (Silvex)	ND		ug/kg	196	67.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	87		30-150	A
DCAA	93		30-150	B

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

Lab ID: L1212547-04  
 Client ID: LB4(MW)-1'-2'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/19/12 10:18  
 Analyst: BW  
 Percent Solids: 81%

Date Collected: 07/12/12 14:00  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 01:33  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/18/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	1.94	0.380	1
Lindane	ND		ug/kg	0.810	0.362	1
Alpha-BHC	ND		ug/kg	0.810	0.230	1
Beta-BHC	ND		ug/kg	1.94	0.737	1
Heptachlor	ND		ug/kg	0.971	0.436	1
Aldrin	ND		ug/kg	1.94	0.684	1
Heptachlor epoxide	ND		ug/kg	3.64	1.09	1
Endrin	ND		ug/kg	0.810	0.332	1
Endrin ketone	ND		ug/kg	1.94	0.500	1
Dieldrin	ND		ug/kg	1.21	0.607	1
4,4'-DDE	ND		ug/kg	1.94	0.449	1
4,4'-DDD	ND		ug/kg	1.94	0.693	1
4,4'-DDT	ND		ug/kg	3.64	1.56	1
Endosulfan I	ND		ug/kg	1.94	0.459	1
Endosulfan II	ND		ug/kg	1.94	0.649	1
Endosulfan sulfate	ND		ug/kg	0.810	0.370	1
Methoxychlor	ND		ug/kg	3.64	1.13	1
Toxaphene	ND		ug/kg	36.4	10.2	1
trans-Chlordane	ND		ug/kg	2.43	0.641	1
Chlordane	ND		ug/kg	15.8	6.44	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	93		30-150	A
Decachlorobiphenyl	85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	76		30-150	B

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

**Lab ID:** L1212547-04  
**Client ID:** LB4(MW)-1'-2'  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Soil  
**Analytical Method:** 1,8151A  
**Analytical Date:** 07/18/12 14:28  
**Analyst:** SH  
**Percent Solids:** 81%

**Date Collected:** 07/12/12 14:00  
**Date Received:** 07/13/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 8151A  
**Extraction Date:** 07/16/12 08:50  
**Methylation Date:** 07/17/12 04:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	193	77.1	1
2,4,5-T	ND		ug/kg	193	54.9	1
2,4,5-TP (Silvex)	ND		ug/kg	193	66.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	103		30-150	A
DCAA	106		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-05  
 Client ID: LB4(MW)-7'-8'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/19/12 10:30  
 Analyst: BW  
 Percent Solids: 84%

Date Collected: 07/12/12 14:37  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/18/12 01:33  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/18/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	1.83	0.359	1
Lindane	ND		ug/kg	0.764	0.342	1
Alpha-BHC	ND		ug/kg	0.764	0.217	1
Beta-BHC	ND		ug/kg	1.83	0.695	1
Heptachlor	ND		ug/kg	0.917	0.411	1
Aldrin	ND		ug/kg	1.83	0.646	1
Heptachlor epoxide	ND		ug/kg	3.44	1.03	1
Endrin	ND		ug/kg	0.764	0.313	1
Endrin ketone	ND		ug/kg	1.83	0.472	1
Dieldrin	ND		ug/kg	1.15	0.573	1
4,4'-DDE	ND		ug/kg	1.83	0.424	1
4,4'-DDD	ND		ug/kg	1.83	0.654	1
4,4'-DDT	ND		ug/kg	3.44	1.47	1
Endosulfan I	ND		ug/kg	1.83	0.433	1
Endosulfan II	ND		ug/kg	1.83	0.613	1
Endosulfan sulfate	ND		ug/kg	0.764	0.349	1
Methoxychlor	ND		ug/kg	3.44	1.07	1
Toxaphene	ND		ug/kg	34.4	9.63	1
trans-Chlordane	ND		ug/kg	2.29	0.605	1
Chlordane	ND		ug/kg	14.9	6.07	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	110		30-150	A
Decachlorobiphenyl	111		30-150	A
2,4,5,6-Tetrachloro-m-xylene	102		30-150	B
Decachlorobiphenyl	100		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-05  
 Client ID: LB4(MW)-7'-8'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 07/18/12 15:09  
 Analyst: SH  
 Percent Solids: 84%

Date Collected: 07/12/12 14:37  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 8151A  
 Extraction Date: 07/16/12 08:50  
 Methylation Date: 07/17/12 04:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	195	78.2	1
2,4,5-T	ND		ug/kg	195	55.6	1
2,4,5-TP (Silvex)	ND		ug/kg	195	67.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	107		30-150	A
DCAA	110		30-150	B

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

**Lab ID:** L1212547-06  
**Client ID:** LB4(MW)-11'-12'  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Soil  
**Analytical Method:** 1,8081A  
**Analytical Date:** 07/19/12 10:43  
**Analyst:** BW  
**Percent Solids:** 75%

**Date Collected:** 07/12/12 15:00  
**Date Received:** 07/13/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 07/18/12 01:33  
**Cleanup Method1:** EPA 3620B  
**Cleanup Date1:** 07/18/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Organochlorine Pesticides by GC - Westborough Lab						
4,4'-DDD	4.15		ug/kg	2.04	0.728	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	100		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	80		30-150	B

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212547**Project Number:** 170201301**Report Date:** 07/20/12**SAMPLE RESULTS**

**Lab ID:** L1212547-06  
**Client ID:** LB4(MW)-11'-12'  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Soil  
**Analytical Method:** 1,8081A  
**Analytical Date:** 07/19/12 10:43  
**Analyst:** BW  
**Percent Solids:** 75%

**Date Collected:** 07/12/12 15:00  
**Date Received:** 07/13/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 07/18/12 01:33  
**Cleanup Method1:** EPA 3620B  
**Cleanup Date1:** 07/18/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	2.04	0.400	1
Lindane	ND		ug/kg	0.850	0.380	1
Alpha-BHC	ND		ug/kg	0.850	0.241	1
Beta-BHC	ND		ug/kg	2.04	0.774	1
Heptachlor	ND		ug/kg	1.02	0.457	1
Aldrin	ND		ug/kg	2.04	0.718	1
Heptachlor epoxide	ND		ug/kg	3.83	1.15	1
Endrin	ND		ug/kg	0.850	0.349	1
Endrin ketone	ND		ug/kg	2.04	0.526	1
Dieldrin	ND		ug/kg	1.28	0.638	1
4,4'-DDE	ND		ug/kg	2.04	0.472	1
4,4'-DDT	7.52		ug/kg	3.83	1.64	1
Endosulfan I	ND		ug/kg	2.04	0.482	1
Endosulfan II	ND		ug/kg	2.04	0.682	1
Endosulfan sulfate	ND		ug/kg	0.850	0.389	1
Methoxychlor	ND		ug/kg	3.83	1.19	1
Toxaphene	ND		ug/kg	38.3	10.7	1
trans-Chlordane	ND		ug/kg	2.55	0.673	1
Chlordane	ND		ug/kg	16.6	6.76	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	95		30-150	A
Decachlorobiphenyl	100		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	80		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-06  
 Client ID: LB4(MW)-11'-12'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 07/18/12 15:30  
 Analyst: SH  
 Percent Solids: 75%

Date Collected: 07/12/12 15:00  
 Date Received: 07/13/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 8151A  
 Extraction Date: 07/16/12 08:50  
 Methylation Date: 07/17/12 04:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	221	88.4	1
2,4,5-T	ND		ug/kg	221	62.9	1
2,4,5-TP (Silvex)	ND		ug/kg	221	76.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	74		30-150	A
DCAA	79		30-150	B

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8151A  
 Analytical Date: 07/17/12 06:39  
 Analyst: SH

Extraction Method: EPA 8151A  
 Extraction Date: 07/16/12 08:50

Methylation Date: 07/17/12 04:10

Parameter	Result	Qualifier	Units	RL	MDL
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-06 Batch: WG548497-1					
2,4-D	ND		ug/kg	162	64.8
2,4,5-T	ND		ug/kg	162	46.1
2,4,5-TP (Silvex)	ND		ug/kg	162	55.8

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	71		30-150	A
DCAA	82		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8081A  
Analytical Date: 07/19/12 11:08  
Analyst: BW

Extraction Method: EPA 3546  
Extraction Date: 07/18/12 01:33  
Cleanup Method1: EPA 3620B  
Cleanup Date1: 07/18/12

Parameter	Result	Qualifier	Units	RL	MDL
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-06 Batch: WG549083-1					
Delta-BHC	ND		ug/kg	1.58	0.309
Lindane	ND		ug/kg	0.657	0.294
Alpha-BHC	ND		ug/kg	0.657	0.186
Beta-BHC	ND		ug/kg	1.58	0.598
Heptachlor	ND		ug/kg	0.788	0.353
Aldrin	ND		ug/kg	1.58	0.555
Heptachlor epoxide	ND		ug/kg	2.96	0.887
Endrin	ND		ug/kg	0.657	0.269
Endrin ketone	ND		ug/kg	1.58	0.406
Dieldrin	ND		ug/kg	0.986	0.493
4,4'-DDE	ND		ug/kg	1.58	0.365
4,4'-DDD	ND		ug/kg	1.58	0.562
4,4'-DDT	ND		ug/kg	2.96	1.27
Endosulfan I	ND		ug/kg	1.58	0.372
Endosulfan II	ND		ug/kg	1.58	0.527
Endosulfan sulfate	ND		ug/kg	0.657	0.300
Methoxychlor	ND		ug/kg	2.96	0.920
Toxaphene	ND		ug/kg	29.6	8.28
cis-Chlordane	ND		ug/kg	1.97	0.549
trans-Chlordane	ND		ug/kg	1.97	0.520
Chlordane	ND		ug/kg	12.8	5.22

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	102		30-150	A
2,4,5,6-Tetrachloro-m-xylene	90		30-150	B
Decachlorobiphenyl	89		30-150	B

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG548497-2 WG548497-3								
2,4-D	85		71		30-150	18		30
2,4,5-T	81		70		30-150	15		30
2,4,5-TP (Silvex)	78		68		30-150	14		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	74		66		30-150	A
DCAA	89		80		30-150	B

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG549083-2 WG549083-3								
Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Delta-BHC	114		92		30-150	21		30
Lindane	116		94		30-150	21		30
Alpha-BHC	115		95		30-150	19		30
Beta-BHC	121		100		30-150	19		30
Heptachlor	119		95		30-150	22		30
Aldrin	118		93		30-150	24		30
Heptachlor epoxide	110		86		30-150	24		30
Endrin	131		99		30-150	28		30
Endrin ketone	101		82		30-150	21		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-06 Batch: WG549083-2 WG549083-3								
Dieldrin	119		91		30-150	27		30
4,4'-DDE	116		87		30-150	29		30
4,4'-DDD	121		91		30-150	28		30
4,4'-DDT	113		86		30-150	27		30
Endosulfan I	117		90		30-150	26		30
Endosulfan II	111		87		30-150	24		30
Endosulfan sulfate	113		91		30-150	22		30
Methoxychlor	98		77		30-150	24		30
cis-Chlordane	113		88		30-150	25		30
trans-Chlordane	116		89		30-150	26		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	116		99		30-150	A
Decachlorobiphenyl	127		107		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		81		30-150	B
Decachlorobiphenyl	93		85		30-150	B

## METALS

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-01  
 Client ID: LB3-1'-2'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Percent Solids: 85%

Date Collected: 07/11/12 14:05  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	4900		mg/kg	450	100	100	07/19/12 10:26	07/20/12 14:13	EPA 3050B	1,6010B	MG
Antimony, Total	3.7	J	mg/kg	4.5	0.85	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Arsenic, Total	9.4		mg/kg	0.89	0.30	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Barium, Total	110		mg/kg	0.89	0.08	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Beryllium, Total	0.34	J	mg/kg	0.45	0.03	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Cadmium, Total	1.6		mg/kg	0.89	0.06	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Calcium, Total	13000		mg/kg	8.9	1.9	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Chromium, Total	20		mg/kg	0.89	0.18	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Cobalt, Total	4.3		mg/kg	1.8	0.19	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Copper, Total	58		mg/kg	0.89	0.41	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Iron, Total	16000		mg/kg	4.5	1.5	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Lead, Total	290		mg/kg	4.5	0.25	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Magnesium, Total	3500		mg/kg	8.9	4.0	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Manganese, Total	260		mg/kg	0.89	0.09	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Mercury, Total	0.55		mg/kg	0.09	0.02	1	07/18/12 21:57	07/19/12 10:33	EPA 7471A	1,7471A	KL
Nickel, Total	29		mg/kg	2.2	0.25	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Potassium, Total	640		mg/kg	220	71.	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Selenium, Total	1.7	J	mg/kg	1.8	0.29	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Silver, Total	0.70	J	mg/kg	0.89	0.15	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Sodium, Total	430		mg/kg	180	71.	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Thallium, Total	ND		mg/kg	1.8	0.56	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Vanadium, Total	92		mg/kg	0.89	0.20	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG
Zinc, Total	220		mg/kg	4.5	0.48	2	07/19/12 10:26	07/19/12 16:06	EPA 3050B	1,6010B	MG



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-02  
 Client ID: LB3-5'-6'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Percent Solids: 83%

Date Collected: 07/11/12 14:25  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	8000		mg/kg	460	100	100	07/19/12 10:26	07/20/12 14:23	EPA 3050B	1,6010B	MG
Antimony, Total	2.4	J	mg/kg	4.6	0.88	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Arsenic, Total	2.4		mg/kg	0.92	0.32	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Barium, Total	45		mg/kg	0.92	0.08	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Beryllium, Total	0.34	J	mg/kg	0.46	0.03	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Cadmium, Total	0.42	J	mg/kg	0.92	0.06	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Calcium, Total	1300		mg/kg	9.2	2.0	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Chromium, Total	12		mg/kg	0.92	0.19	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Cobalt, Total	4.9		mg/kg	1.8	0.20	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Copper, Total	45		mg/kg	0.92	0.43	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Iron, Total	14000		mg/kg	4.6	1.6	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Lead, Total	35		mg/kg	4.6	0.26	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Magnesium, Total	2900		mg/kg	9.2	4.1	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Manganese, Total	98		mg/kg	0.92	0.09	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Mercury, Total	0.54		mg/kg	0.10	0.02	1	07/18/12 21:57	07/19/12 10:34	EPA 7471A	1,7471A	KL
Nickel, Total	16		mg/kg	2.3	0.26	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Potassium, Total	1300		mg/kg	230	74.	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Selenium, Total	0.90	J	mg/kg	1.8	0.30	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Silver, Total	ND		mg/kg	0.92	0.15	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Sodium, Total	280		mg/kg	180	73.	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Thallium, Total	ND		mg/kg	1.8	0.58	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Vanadium, Total	15		mg/kg	0.92	0.20	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG
Zinc, Total	230		mg/kg	4.6	0.50	2	07/19/12 10:26	07/19/12 16:48	EPA 3050B	1,6010B	MG



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-03  
 Client ID: LB3-9'-11'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Percent Solids: 81%

Date Collected: 07/12/12 07:35  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	13000		mg/kg	480	110	100	07/19/12 10:26	07/20/12 14:25	EPA 3050B	1,6010B	MG
Antimony, Total	2.6	J	mg/kg	4.8	0.92	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Arsenic, Total	1.2		mg/kg	0.97	0.33	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Barium, Total	57		mg/kg	0.97	0.08	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Beryllium, Total	0.46	J	mg/kg	0.48	0.03	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Cadmium, Total	ND		mg/kg	0.97	0.06	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Calcium, Total	1400		mg/kg	9.7	2.1	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Chromium, Total	17		mg/kg	0.97	0.20	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Cobalt, Total	9.0		mg/kg	1.9	0.21	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Copper, Total	29		mg/kg	0.97	0.45	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Iron, Total	17000		mg/kg	4.8	1.7	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Lead, Total	12		mg/kg	4.8	0.27	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Magnesium, Total	5000		mg/kg	9.7	4.4	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Manganese, Total	63		mg/kg	0.97	0.10	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Mercury, Total	0.07	J	mg/kg	0.10	0.02	1	07/18/12 21:57	07/19/12 10:36	EPA 7471A	1,7471A	KL
Nickel, Total	22		mg/kg	2.4	0.27	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Potassium, Total	5100		mg/kg	240	77.	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Selenium, Total	1.0	J	mg/kg	1.9	0.32	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Silver, Total	ND		mg/kg	0.97	0.16	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Sodium, Total	280		mg/kg	190	77.	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Thallium, Total	ND		mg/kg	1.9	0.60	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Vanadium, Total	21		mg/kg	0.97	0.22	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG
Zinc, Total	60		mg/kg	4.8	0.52	2	07/19/12 10:26	07/19/12 16:51	EPA 3050B	1,6010B	MG



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-04  
 Client ID: LB4(MW)-1'-2'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Percent Solids: 81%

Date Collected: 07/12/12 14:00  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	5500		mg/kg	470	100	100	07/19/12 10:26	07/20/12 14:27	EPA 3050B	1,6010B	MG
Antimony, Total	1.3	J	mg/kg	4.7	0.90	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Arsenic, Total	1.3		mg/kg	0.94	0.32	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Barium, Total	17		mg/kg	0.94	0.08	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Beryllium, Total	0.22	J	mg/kg	0.47	0.03	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Cadmium, Total	ND		mg/kg	0.94	0.06	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Calcium, Total	1700		mg/kg	9.4	2.0	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Chromium, Total	10		mg/kg	0.94	0.19	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Cobalt, Total	4.3		mg/kg	1.9	0.20	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Copper, Total	12		mg/kg	0.94	0.43	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Iron, Total	12000		mg/kg	4.7	1.6	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Lead, Total	10		mg/kg	4.7	0.26	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Magnesium, Total	1500		mg/kg	9.4	4.2	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Manganese, Total	180		mg/kg	0.94	0.10	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Mercury, Total	ND		mg/kg	0.08	0.02	1	07/18/12 21:57	07/19/12 10:38	EPA 7471A	1,7471A	KL
Nickel, Total	7.6		mg/kg	2.3	0.26	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Potassium, Total	440		mg/kg	230	75.	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Selenium, Total	0.80	J	mg/kg	1.9	0.31	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Silver, Total	ND		mg/kg	0.94	0.15	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Sodium, Total	240		mg/kg	190	74.	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Thallium, Total	ND		mg/kg	1.9	0.58	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Vanadium, Total	22		mg/kg	0.94	0.21	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG
Zinc, Total	19		mg/kg	4.7	0.51	2	07/19/12 10:26	07/19/12 16:53	EPA 3050B	1,6010B	MG



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-05  
 Client ID: LB4(MW)-7'-8'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Percent Solids: 84%

Date Collected: 07/12/12 14:37  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	6600		mg/kg	450	100	100	07/19/12 10:26	07/20/12 15:01	EPA 3050B	1,6010B	MG
Antimony, Total	2.7	J	mg/kg	4.5	0.87	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Arsenic, Total	6.0		mg/kg	0.90	0.31	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Barium, Total	56		mg/kg	0.90	0.08	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Beryllium, Total	0.30	J	mg/kg	0.45	0.03	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Cadmium, Total	0.19	J	mg/kg	0.90	0.06	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Calcium, Total	2300		mg/kg	9.0	2.0	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Chromium, Total	10		mg/kg	0.90	0.18	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Cobalt, Total	6.2		mg/kg	1.8	0.19	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Copper, Total	23		mg/kg	0.90	0.42	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Iron, Total	20000		mg/kg	4.5	1.6	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Lead, Total	120		mg/kg	4.5	0.25	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Magnesium, Total	2300		mg/kg	9.0	4.1	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Manganese, Total	230		mg/kg	0.90	0.09	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Mercury, Total	4.3		mg/kg	0.36	0.08	4	07/18/12 21:57	07/19/12 12:09	EPA 7471A	1,7471A	KL
Nickel, Total	16		mg/kg	2.3	0.25	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Potassium, Total	1200		mg/kg	230	72.	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Selenium, Total	1.2	J	mg/kg	1.8	0.30	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Silver, Total	ND		mg/kg	0.90	0.15	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Sodium, Total	350		mg/kg	180	72.	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Thallium, Total	ND		mg/kg	1.8	0.56	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Vanadium, Total	18		mg/kg	0.90	0.20	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG
Zinc, Total	170		mg/kg	4.5	0.49	2	07/19/12 10:26	07/19/12 16:56	EPA 3050B	1,6010B	MG



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

Lab ID: L1212547-06  
 Client ID: LB4(MW)-11'-12'  
 Sample Location: 17-29 WEST END AVE  
 Matrix: Soil  
 Percent Solids: 75%

Date Collected: 07/12/12 15:00  
 Date Received: 07/13/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	8800		mg/kg	510	110	100	07/19/12 10:26	07/20/12 15:04	EPA 3050B	1,6010B	MG
Antimony, Total	2.2	J	mg/kg	5.1	0.98	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Arsenic, Total	11		mg/kg	1.0	0.35	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Barium, Total	300		mg/kg	1.0	0.09	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Beryllium, Total	0.54		mg/kg	0.51	0.04	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Cadmium, Total	ND		mg/kg	1.0	0.06	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Calcium, Total	3400		mg/kg	10	2.2	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Chromium, Total	15		mg/kg	1.0	0.21	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Cobalt, Total	8.0		mg/kg	2.0	0.22	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Copper, Total	77		mg/kg	1.0	0.47	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Iron, Total	12000		mg/kg	5.1	1.8	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Lead, Total	360		mg/kg	5.1	0.28	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Magnesium, Total	1100		mg/kg	10	4.6	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Manganese, Total	240		mg/kg	1.0	0.10	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Mercury, Total	9.5		mg/kg	0.66	0.14	6	07/18/12 21:57	07/19/12 12:15	EPA 7471A	1,7471A	KL
Nickel, Total	16		mg/kg	2.6	0.28	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Potassium, Total	1100		mg/kg	260	82.	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Selenium, Total	1.6	J	mg/kg	2.0	0.33	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Silver, Total	0.28	J	mg/kg	1.0	0.17	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Sodium, Total	540		mg/kg	200	81.	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Thallium, Total	ND		mg/kg	2.0	0.64	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Vanadium, Total	26		mg/kg	1.0	0.23	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG
Zinc, Total	150		mg/kg	5.1	0.55	2	07/19/12 10:26	07/19/12 16:58	EPA 3050B	1,6010B	MG



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

## Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-06 Batch: WG549262-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	07/18/12 21:57	07/19/12 09:53	1,7471A	KL

### Prep Information

Digestion Method: EPA 7471A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-06 Batch: WG549482-1										
Aluminum, Total	1.3	J	mg/kg	4.0	0.89	1	07/19/12 10:26	07/20/12 14:08	1,6010B	MG
Antimony, Total	ND		mg/kg	2.0	0.38	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Arsenic, Total	ND		mg/kg	0.40	0.14	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Barium, Total	ND		mg/kg	0.40	0.03	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Beryllium, Total	ND		mg/kg	0.20	0.01	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Cadmium, Total	ND		mg/kg	0.40	0.03	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Calcium, Total	0.98	J	mg/kg	4.0	0.87	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Chromium, Total	ND		mg/kg	0.40	0.08	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Cobalt, Total	ND		mg/kg	0.80	0.09	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Copper, Total	ND		mg/kg	0.40	0.18	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Iron, Total	ND		mg/kg	2.0	0.69	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Lead, Total	ND		mg/kg	2.0	0.11	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Magnesium, Total	ND		mg/kg	4.0	1.8	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Manganese, Total	ND		mg/kg	0.40	0.04	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Nickel, Total	ND		mg/kg	1.0	0.11	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Potassium, Total	ND		mg/kg	100	32.	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Selenium, Total	ND		mg/kg	0.80	0.13	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Silver, Total	ND		mg/kg	0.40	0.07	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Sodium, Total	ND		mg/kg	80	32.	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Thallium, Total	ND		mg/kg	0.80	0.25	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Vanadium, Total	ND		mg/kg	0.40	0.09	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG
Zinc, Total	ND		mg/kg	2.0	0.22	1	07/19/12 10:26	07/19/12 16:01	1,6010B	MG

**Project Name:** RIVERSIDE PARCEL 2

**Lab Number:** L1212547

**Project Number:** 170201301

**Report Date:** 07/20/12

## Method Blank Analysis Batch Quality Control

### Prep Information

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Digestion Method: EPA 3050B

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Lab Number:** L1212547

**Project Number:** 170201301

**Report Date:** 07/20/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 Batch: WG549262-2 SRM Lot Number: 0518-10-02								
Mercury, Total	114		-		67-133	-		

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 Batch: WG549482-2					
Aluminum, Total	108	-	75-125	-	
Antimony, Total	89	-	75-125	-	
Arsenic, Total	103	-	75-125	-	
Barium, Total	94	-	75-125	-	
Beryllium, Total	92	-	75-125	-	
Cadmium, Total	95	-	75-125	-	
Calcium, Total	90	-	75-125	-	
Chromium, Total	94	-	75-125	-	
Cobalt, Total	97	-	75-125	-	
Copper, Total	97	-	75-125	-	
Iron, Total	96	-	75-125	-	
Lead, Total	100	-	75-125	-	
Magnesium, Total	97	-	75-125	-	
Manganese, Total	100	-	75-125	-	
Nickel, Total	100	-	75-125	-	
Potassium, Total	93	-	75-125	-	
Selenium, Total	96	-	75-125	-	
Silver, Total	99	-	75-125	-	
Sodium, Total	116	-	75-125	-	
Thallium, Total	105	-	75-125	-	
Vanadium, Total	97	-	75-125	-	

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Lab Number:** L1212547

**Project Number:** 170201301

**Report Date:** 07/20/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 Batch: WG549482-2					
Zinc, Total	92	-	75-125	-	

**Matrix Spike Analysis**  
Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG549262-4 QC Sample: L1212533-03 Client ID: MS Sample												
Mercury, Total	0.06J	0.16	0.22	138	Q	-	-		70-130	-		35

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG549482-4 QC Sample: L1212547-01 Client ID: LB3-1'-2'									
Aluminum, Total	4900	181	5700	442	Q	-	75-125	-	35
Antimony, Total	3.7J	45.2	24	53	Q	-	75-125	-	35
Arsenic, Total	9.4	10.8	23	125		-	75-125	-	35
Barium, Total	110	181	270	88		-	75-125	-	35
Beryllium, Total	0.34J	4.52	4.4	97		-	75-125	-	35
Cadmium, Total	1.6	4.61	6.3	102		-	75-125	-	35
Calcium, Total	13000	904	13000	0	Q	-	75-125	-	35
Chromium, Total	20.	18.1	36	88		-	75-125	-	35
Cobalt, Total	4.3	45.2	49	99		-	75-125	-	35
Copper, Total	58.	22.6	98	177	Q	-	75-125	-	35
Iron, Total	16000	90.4	15000	0	Q	-	75-125	-	35
Lead, Total	290	46.1	490	434	Q	-	75-125	-	35
Magnesium, Total	3500	904	7100	398	Q	-	75-125	-	35
Manganese, Total	260	45.2	290	66	Q	-	75-125	-	35
Nickel, Total	29.	45.2	79	110		-	75-125	-	35
Potassium, Total	640	904	1800	128	Q	-	75-125	-	35
Selenium, Total	1.7J	10.8	11	101		-	75-125	-	35
Silver, Total	0.70J	27.1	28	103		-	75-125	-	35
Sodium, Total	430	904	1600	129	Q	-	75-125	-	35
Thallium, Total	ND	10.8	11	101		-	75-125	-	35
Vanadium, Total	92.	45.2	160	150	Q	-	75-125	-	35

**Matrix Spike Analysis**  
Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG549482-4 QC Sample: L1212547-01 Client ID: LB3-1'-2'									
Zinc, Total	220	45.2	380	354	Q	-	75-125	-	35

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212547

Report Date: 07/20/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG549262-3 QC Sample: L1212533-03 Client ID: DUP Sample						
Mercury, Total	0.06J	0.05J	mg/kg	NC		35

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212547

Report Date: 07/20/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG549482-3 QC Sample: L1212547-01 Client ID: LB3-1'-2'					
Antimony, Total	3.7J	3.8J	mg/kg	NC	35
Arsenic, Total	9.4	14	mg/kg	39	Q 35
Barium, Total	110	170	mg/kg	43	Q 35
Beryllium, Total	0.34J	0.48	mg/kg	NC	35
Cadmium, Total	1.6	3.6	mg/kg	77	Q 35
Calcium, Total	13000	6100	mg/kg	72	Q 35
Chromium, Total	20.	23	mg/kg	14	35
Cobalt, Total	4.3	6.2	mg/kg	36	Q 35
Copper, Total	58.	91	mg/kg	44	Q 35
Iron, Total	16000	16000	mg/kg	0	35
Lead, Total	290	640	mg/kg	75	Q 35
Magnesium, Total	3500	2800	mg/kg	22	35
Manganese, Total	260	270	mg/kg	4	35
Nickel, Total	29.	58	mg/kg	67	Q 35
Potassium, Total	640	900	mg/kg	34	35
Selenium, Total	1.7J	1.9	mg/kg	NC	35
Silver, Total	0.70J	1.8	mg/kg	NC	35
Sodium, Total	430	670	mg/kg	44	Q 35
Thallium, Total	ND	0.91J	mg/kg	NC	35

### Lab Duplicate Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Project Number:** 170201301

**Lab Number:** L1212547

**Report Date:** 07/20/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG549482-3 QC Sample: L1212547-01 Client ID: LB3-1'-2'					
Vanadium, Total	92.	170	mg/kg	60	Q 35
Zinc, Total	220	490	mg/kg	76	Q 35
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG549482-3 QC Sample: L1212547-01 Client ID: LB3-1'-2'					
Aluminum, Total	4900	6000	mg/kg	20	35

# **INORGANICS & MISCELLANEOUS**

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

**Lab ID:** L1212547-01  
**Client ID:** LB3-1'-2'  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Soil

**Date Collected:** 07/11/12 14:05  
**Date Received:** 07/13/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85		%	0.10	NA	1	-	07/16/12 20:20	30,2540G	RD



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

**Lab ID:** L1212547-02  
**Client ID:** LB3-5'-6'  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Soil

**Date Collected:** 07/11/12 14:25  
**Date Received:** 07/13/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83		%	0.10	NA	1	-	07/16/12 20:20	30,2540G	RD



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

**Lab ID:** L1212547-03  
**Client ID:** LB3-9'-11'  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Soil

**Date Collected:** 07/12/12 07:35  
**Date Received:** 07/13/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81		%	0.10	NA	1	-	07/16/12 20:20	30,2540G	RD



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

**Lab ID:** L1212547-04  
**Client ID:** LB4(MW)-1'-2'  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Soil

**Date Collected:** 07/12/12 14:00  
**Date Received:** 07/13/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81		%	0.10	NA	1	-	07/16/12 20:20	30,2540G	RD



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

**Lab ID:** L1212547-05  
**Client ID:** LB4(MW)-7'-8'  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Soil

**Date Collected:** 07/12/12 14:37  
**Date Received:** 07/13/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84		%	0.10	NA	1	-	07/16/12 20:20	30,2540G	RD



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**SAMPLE RESULTS**

**Lab ID:** L1212547-06  
**Client ID:** LB4(MW)-11'-12'  
**Sample Location:** 17-29 WEST END AVE  
**Matrix:** Soil

**Date Collected:** 07/12/12 15:00  
**Date Received:** 07/13/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	75		%	0.10	NA	1	-	07/16/12 20:20	30,2540G	RD



**Lab Duplicate Analysis**  
Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212547

Report Date: 07/20/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG548743-1 QC Sample: L1212539-01 Client ID: DUP Sample						
Solids, Total	94.	95	%	1		20

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212547

Project Number: 170201301

Report Date: 07/20/12

## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

## Cooler Information Custody Seal

## Cooler

A Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212547-01A	Vial Large unpreserved	A	N/A	4.3	Y	Absent	NYTCL-8260(14)
L1212547-01B	Amber 120ml unpreserved	A	N/A	4.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212547-01C	Amber 250ml unpreserved	A	N/A	4.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212547-02A	Vial Large unpreserved	A	N/A	4.3	Y	Absent	NYTCL-8260(14)
L1212547-02B	Amber 120ml unpreserved	A	N/A	4.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

\*Values in parentheses indicate holding time in days

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212547-02C	Amber 250ml unpreserved	A	N/A	4.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212547-03A	Vial Large unpreserved	A	N/A	4.3	Y	Absent	NYTCL-8260(14)
L1212547-03B	Amber 120ml unpreserved	A	N/A	4.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212547-03C	Amber 250ml unpreserved	A	N/A	4.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212547-04A	Vial Large unpreserved	A	N/A	4.3	Y	Absent	NYTCL-8260(14)
L1212547-04B	Amber 120ml unpreserved	A	N/A	4.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

\*Values in parentheses indicate holding time in days



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212547-04C	Amber 250ml unpreserved	A	N/A	4.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212547-05A	Vial Large unpreserved	A	N/A	4.3	Y	Absent	NYTCL-8260(14)
L1212547-05B	Amber 120ml unpreserved	A	N/A	4.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212547-05C	Amber 250ml unpreserved	A	N/A	4.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212547-06A	Vial Large unpreserved	A	N/A	4.3	Y	Absent	NYTCL-8260(14)
L1212547-06B	Amber 120ml unpreserved	A	N/A	4.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

\*Values in parentheses indicate holding time in days



Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212547

Report Date: 07/20/12

**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212547-06C	Amber 250ml unpreserved	A	N/A	4.3	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

**Container Comments**

L1212547-01B

L1212547-02B

L1212547-03B

L1212547-04B

L1212547-05B

L1212547-06B

\*Values in parentheses indicate holding time in days

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

## GLOSSARY

### Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

### Data Qualifiers

<b>A</b>	- Spectra identified as "Aldol Condensation Product".
<b>B</b>	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
<b>C</b>	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
<b>D</b>	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
<b>E</b>	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
<b>G</b>	- The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
<b>H</b>	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
<b>I</b>	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
<b>M</b>	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
<b>NJ</b>	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: DU Report with "J" Qualifiers



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

**Data Qualifiers**

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL). This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample.

Report Format: DU Report with "J" Qualifiers

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**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212547  
**Report Date:** 07/20/12

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.





SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

□□□ □a□ □□ir□ □□ar□ □n□□□□n□ir□n□ □na□□□r□i□□□ Certificate/Lab ID: 200307. **NELAP Accredited.**

*Drinking Water* (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6010C, 6020, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9030B, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8081B, 8151A.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 6010B, 6010C, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050, 9065, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, 8151A, 8015B, 8082, 8082A, 8081A, 8081B.)

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*Drinking Water* (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, 2540G, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ OQA-QAM-025 Rev.7, NJ EPH.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

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*Drinking Water* (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 624, 8260B, 8270C, 8270D, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012A, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C, 3546, 3580, 3580A, 5030B, 5035.)

Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Certificate/Lab ID : 68-03671. **NELAP Accredited.**  
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 3005A, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**  
Refer to MA-DEP Certificate for Potable and Non-Potable Water.  
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**  
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S<sup>2-</sup> D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Certificate/Lab ID: 460195. **NELAP Accredited.**  
Non-Potable Water (Inorganic Parameters: EPA 3005A,3015,1312,6010B,6010C,SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B, 8015B, 8015C.)

Certificate/Lab ID: L2217.  
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

Parameter List:  
Organic Parameters: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. Inorganic Parameters: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. Other Parameters: Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). Soil Parameters: 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix, SO4 in a soil matrix. Other Parameters: Total Petroleum Hydrocarbons, Oil & Grease



# NJ CHAIN OF CUSTODY

PAGE 1 OF 2

WESTBORO, MA  
8 WALKUP DRIVE  
TEL: 508-898-9220  
FAX: 508-898-9133

MANFIELD, MA  
320 FORBES BLVD  
TEL: 508-822-9300  
FAX: 508-822-3288

### Client Information

Client: Langan Engineering  
Address: 360 W. 31st St.  
New York, NY  
Phone: (212) 479-5400  
FAX: (212) 479-5400

Project Name: Riverside Parcel 2  
Project Location: 17-29 West End Ave  
Manhattan, NY  
Project #: 170301301  
Project Manager: Jason Houges  
ALPHA Quote #:  
Turn-Around Time  
Date Due: 7/20/12 Time: 14:00

For EPH you MUST indicate Category 1 or 2. Please check one of the following:  
 Category 1  Category 2

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		

12547.1	LB3-1'-2'	7/11/12	19:05	SOIL	CM	X												
1	LB3-1'-2'					X												
1	LB3-1'-2'					X												
2	LB3-5'-6'		19:25			X												
2	LB3-5'-6'					X												
2	LB3-5'-6'					X												
3	LB3-9'-11'	7/12/12	7:35			X												
3	LB3-9'-11'		7:35			X												
3	LB3-9'-11'		7:35			X												
4	LB4(CMW)-1'-2'		14:00			X												

Preservative Code:  
A = None  
B = HCl  
C = HNO3  
D = H2SO4  
E = MeOH  
F = MeOH  
G = NaHSO4  
H = Other

Westboro: Certification No: MA935  
Manfield: Certification No: MA015

Relinquished By: [Signature]  
Date/Time: 7/13/12 15:28

Container Type: V G G  
Preservative: [Blank]

Received By: [Signature]  
Date/Time: 7/13/12 13:28

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Date Rec'd in Lab: 7/13/12  
ALPHA Job #: 21212547

Report Type:  Data Summary  NJ Full  NJ Reduced  Other  
Regulatory Requirements:  SRS-Residential/Non Residential  SRS-Impact To Groundwater  NJ Ground Water Quality Standards  Other NY Part 375  
Billing Information:  Same as Client info PO #:

ANALYSIS: TCL VOC, TAL Metals, TCLSVOC, Pest/Herb, PCB  
Is this site impacted by Petroleum? Yes/No (circle one)  
Are any samples for waste disposal? Yes/No (circle one)  
SAMPLE HANDLING: Filtration:  Done  Not needed  Lab to do  Preservation  Lab to do

Handwritten notes: NY Part 375, I've checked these, I've checked these



# NJ CHAIN OF CUSTODY

PAGE 2 OF 2

WESTBORO, MA  
8 Walkup Drive  
TEL: 508-898-9220  
FAX: 508-898-9193

MANFIELD, MA  
320 Forbes Blvd  
TEL: 508-822-9300  
FAX: 508-822-3288

### Client Information

Client: Langan Engineering  
Address: 360 West 31st St.  
NY, NY  
Phone: (212) 479-5400  
Fax: KMentel@langan.com  
Email: johannes@langan.com

These samples have been previously analyzed by Alpha

For EPH you MUST indicate Category 1 or 2. Please check one of the following:

Category 1       Category 2

### Report Type

Data Summary     NU Full  
 NU Reduced         Other

Date Rec'd in Lab: 7/13/12

ALPHA Job #: L1212547

### Regulatory Requirements

SRS-Residential/Non Residential  
 SRS-Impact To Groundwater  
 NJ Ground Water Quality Standards  
 Other NY Wire Shred

### Site Information

Is this site impacted by Petroleum?  
Yes / No (circle one)  
*(Please indicate Petroleum Product - See Table 2-1 on reverse side)*  
Petroleum Product: \_\_\_\_\_  
Are any samples for waste disposal?  
Yes / No (circle one)  
*(Please indicate which samples below in Sample Specific Comments field)*

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		

12547	LB4 (MW) -1'-2'	7/12/12	14:00	SOIL	CM
	LB4 (MW) -1'-2'		14:06		
	LB4 (MW) -7'-8'		14:37		
	LB4 (MW) -7'-8'		14:37		
	LB4 (MW) -7'-8'		14:37		
	LB4 (MW) -11'-12'		15:00		
	LB4 (MW) -11'-12'		15:00		

TOTAL #	ANALYSIS		SAMPLE HANDLING
	TCL VOC	TAL Metals	
1	X	X	Filtration _____ <input type="checkbox"/> Done <input type="checkbox"/> Not needed <input type="checkbox"/> Lab to do Preservation _____ <input type="checkbox"/> Lab to do <i>(Please specify below)</i>
1	X	X	
1	X	X	
1	X	X	
1	X	X	
1	X	X	

Westboro: Certification No: MA935  
Mansfield: Certification No: MA015

Container Type: V G G  
Preservative: \_\_\_\_\_

Relinquished By: [Signature]  
Date/Time: 7/13/12 13:08

Received By: [Signature]  
Date/Time: 7/13/12 13:52

Preservative Code:  
A = None  
B = HCl  
C = HNO3  
D = H2SO4  
E = MeOH  
F = MeOH  
G = NH4SO4  
H = Other

FORM NO. 01-14 (rev. 30-AUG-10)

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.



## ANALYTICAL REPORT

Lab Number:	L1212237
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Jason Hayes
Phone:	(212) 479-5427
Project Name:	RIVERSIDE PARCEL 2
Project Number:	170201301
Report Date:	07/19/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

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Eight Walkup Drive, Westborough, MA 01581-1019  
508-898-9220 (Fax) 508-898-9193 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1212237-01	FIELD BLANK #1	17-29 WEST END AVE.	07/10/12 11:45
L1212237-02	LB2-1'-3'	17-29 WEST END AVE.	07/10/12 12:15
L1212237-03	LB2-7'-9'	17-29 WEST END AVE.	07/10/12 12:55
L1212237-04	LB2-9'-13'	17-29 WEST END AVE.	07/10/12 13:40
L1212237-05	TRIP BLANK	17-29 WEST END AVE.	07/10/12 00:00

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

### Case Narrative (continued)

#### Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

#### Sample Receipt

A Trip Blank was listed on the Chain of Custody, but not received in the laboratory.

#### Semivolatile Organics

L1212237-02 has elevated detection limits due to the dilution required by the matrix interferences encountered during the concentration of the sample and the analytical dilution required by the sample matrix.

#### PCBs

L1212237-02 has an elevated detection limit due to limited sample volume available for analysis.

#### Pesticides

L1212237-02 has elevated detection limits due to the dilution required by the sample matrix.

The surrogate recoveries for L1212237-02 are below the acceptance criteria for 2,4,5,6-Tetrachloro-m-xylene and Decachlorobiphenyl (All at 0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

#### Herbicides

L1212237-02 has an elevated detection limit due to limited sample volume available for analysis.

#### Metals

L1212237-01 Field Blank: The sample container was verified as being labeled correctly by the laboratory, and there was no evidence of carry-over on the instrument run; the results are confirmed.

L1212237-02 through -04 have elevated detection limits for all elements, with the exception of Mercury, due to the dilutions required by matrix interferences encountered during analyses.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Elizabeth Simmons

Title: Technical Director/Representative

Date: 07/19/12

# ORGANICS

# VOLATILES

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

**Lab ID:** L1212237-01  
**Client ID:** FIELD BLANK #1  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Water  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/11/12 19:21  
**Analyst:** PD

**Date Collected:** 07/10/12 11:45  
**Date Received:** 07/10/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.16	1
1,2-Dichloropropane	ND		ug/l	1.0	0.30	1
Dibromochloromethane	ND		ug/l	0.50	0.19	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.16	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19	1
Benzene	ND		ug/l	0.50	0.19	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.18	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-01  
 Client ID: FIELD BLANK #1  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/10/12 11:45  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.0	1
Vinyl acetate	ND		ug/l	5.0	1.0	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Diethylbenzene	ND		ug/l	2.0	0.70	1
4-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-01  
 Client ID: FIELD BLANK #1  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/10/12 11:45  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	96		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

Lab ID: L1212237-02  
 Client ID: LB2-1'-3'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8260B  
 Analytical Date: 07/12/12 15:58  
 Analyst: BN  
 Percent Solids: 78%

Date Collected: 07/10/12 12:15  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	32	2.6	1
1,1-Dichloroethane	ND		ug/kg	4.8	0.95	1
Chloroform	ND		ug/kg	4.8	1.0	1
Carbon tetrachloride	ND		ug/kg	3.2	0.68	1
1,2-Dichloropropane	ND		ug/kg	11	0.82	1
Dibromochloromethane	ND		ug/kg	3.2	0.99	1
1,1,2-Trichloroethane	ND		ug/kg	4.8	1.2	1
Tetrachloroethene	ND		ug/kg	3.2	0.98	1
Chlorobenzene	ND		ug/kg	3.2	0.60	1
Trichlorofluoromethane	ND		ug/kg	16	1.2	1
1,2-Dichloroethane	ND		ug/kg	3.2	0.73	1
1,1,1-Trichloroethane	ND		ug/kg	3.2	0.86	1
Bromodichloromethane	ND		ug/kg	3.2	1.2	1
trans-1,3-Dichloropropene	ND		ug/kg	3.2	0.96	1
cis-1,3-Dichloropropene	ND		ug/kg	3.2	0.86	1
1,1-Dichloropropene	ND		ug/kg	16	1.5	1
Bromoform	ND		ug/kg	13	1.6	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	3.2	0.77	1
Benzene	ND		ug/kg	3.2	0.95	1
Toluene	ND		ug/kg	4.8	0.77	1
Ethylbenzene	ND		ug/kg	3.2	0.71	1
Chloromethane	ND		ug/kg	16	2.5	1
Bromomethane	ND		ug/kg	6.4	2.1	1
Vinyl chloride	ND		ug/kg	6.4	2.4	1
Chloroethane	ND		ug/kg	6.4	1.4	1
1,1-Dichloroethene	ND		ug/kg	3.2	0.83	1
trans-1,2-Dichloroethene	ND		ug/kg	4.8	1.2	1
Trichloroethene	ND		ug/kg	3.2	0.72	1
1,2-Dichlorobenzene	ND		ug/kg	16	1.2	1
1,3-Dichlorobenzene	ND		ug/kg	16	1.3	1
1,4-Dichlorobenzene	ND		ug/kg	16	1.3	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-02  
 Client ID: LB2-1'-3'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/10/12 12:15  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	6.4	1.6	1
p/m-Xylene	ND		ug/kg	6.4	1.4	1
o-Xylene	ND		ug/kg	6.4	1.3	1
cis-1,2-Dichloroethene	ND		ug/kg	3.2	0.97	1
Dibromomethane	ND		ug/kg	32	1.4	1
Styrene	ND		ug/kg	6.4	2.3	1
Dichlorodifluoromethane	ND		ug/kg	32	1.2	1
Acetone	ND		ug/kg	32	10.	1
Carbon disulfide	ND		ug/kg	32	1.2	1
2-Butanone	ND		ug/kg	32	12.	1
Vinyl acetate	ND		ug/kg	32	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	32	2.6	1
1,2,3-Trichloropropane	ND		ug/kg	32	1.2	1
2-Hexanone	ND		ug/kg	32	1.3	1
Bromochloromethane	ND		ug/kg	16	0.97	1
2,2-Dichloropropane	ND		ug/kg	16	2.5	1
1,2-Dibromoethane	ND		ug/kg	13	1.3	1
1,3-Dichloropropane	ND		ug/kg	16	1.8	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	3.2	1.0	1
Bromobenzene	ND		ug/kg	16	0.70	1
n-Butylbenzene	ND		ug/kg	3.2	1.0	1
sec-Butylbenzene	ND		ug/kg	3.2	0.88	1
tert-Butylbenzene	ND		ug/kg	16	1.9	1
o-Chlorotoluene	ND		ug/kg	16	1.0	1
p-Chlorotoluene	ND		ug/kg	16	1.2	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	16	2.7	1
Hexachlorobutadiene	ND		ug/kg	16	1.5	1
Isopropylbenzene	ND		ug/kg	3.2	0.57	1
p-Isopropyltoluene	ND		ug/kg	3.2	0.88	1
Naphthalene	ND		ug/kg	16	2.5	1
Acrylonitrile	ND		ug/kg	32	1.2	1
n-Propylbenzene	ND		ug/kg	3.2	0.91	1
1,2,3-Trichlorobenzene	ND		ug/kg	16	1.3	1
1,2,4-Trichlorobenzene	ND		ug/kg	16	2.5	1
1,3,5-Trimethylbenzene	ND		ug/kg	16	1.9	1
1,2,4-Trimethylbenzene	ND		ug/kg	16	1.8	1
1,4-Diethylbenzene	ND		ug/kg	13	0.64	1
4-Ethyltoluene	ND		ug/kg	13	0.31	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	13	0.58	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-02  
 Client ID: LB2-1'-3'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/10/12 12:15  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	16	1.2	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	16	4.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	81		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	94		70-130

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

**Lab ID:** L1212237-03  
**Client ID:** LB2-7'-9'  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/12/12 16:26  
**Analyst:** BN  
**Percent Solids:** 89%

**Date Collected:** 07/10/12 12:55  
**Date Received:** 07/10/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	28	2.3	1
1,1-Dichloroethane	ND		ug/kg	4.2	0.83	1
Chloroform	ND		ug/kg	4.2	0.91	1
Carbon tetrachloride	ND		ug/kg	2.8	0.59	1
1,2-Dichloropropane	ND		ug/kg	9.8	0.72	1
Dibromochloromethane	ND		ug/kg	2.8	0.86	1
1,1,2-Trichloroethane	ND		ug/kg	4.2	1.1	1
Tetrachloroethene	ND		ug/kg	2.8	0.86	1
Chlorobenzene	ND		ug/kg	2.8	0.52	1
Trichlorofluoromethane	ND		ug/kg	14	1.1	1
1,2-Dichloroethane	ND		ug/kg	2.8	0.64	1
1,1,1-Trichloroethane	ND		ug/kg	2.8	0.76	1
Bromodichloromethane	ND		ug/kg	2.8	1.1	1
trans-1,3-Dichloropropene	ND		ug/kg	2.8	0.84	1
cis-1,3-Dichloropropene	ND		ug/kg	2.8	0.75	1
1,1-Dichloropropene	ND		ug/kg	14	1.3	1
Bromoform	ND		ug/kg	11	1.4	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.8	0.67	1
Benzene	ND		ug/kg	2.8	0.83	1
Toluene	ND		ug/kg	4.2	0.68	1
Ethylbenzene	ND		ug/kg	2.8	0.62	1
Chloromethane	ND		ug/kg	14	2.2	1
Bromomethane	ND		ug/kg	5.6	1.8	1
Vinyl chloride	ND		ug/kg	5.6	2.1	1
Chloroethane	ND		ug/kg	5.6	1.2	1
1,1-Dichloroethene	ND		ug/kg	2.8	0.73	1
trans-1,2-Dichloroethene	ND		ug/kg	4.2	1.1	1
Trichloroethene	ND		ug/kg	2.8	0.63	1
1,2-Dichlorobenzene	ND		ug/kg	14	1.0	1
1,3-Dichlorobenzene	ND		ug/kg	14	1.1	1
1,4-Dichlorobenzene	ND		ug/kg	14	1.2	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-03  
 Client ID: LB2-7'-9'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/10/12 12:55  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	5.6	1.4	1
p/m-Xylene	ND		ug/kg	5.6	1.2	1
o-Xylene	ND		ug/kg	5.6	1.2	1
cis-1,2-Dichloroethene	ND		ug/kg	2.8	0.85	1
Dibromomethane	ND		ug/kg	28	1.2	1
Styrene	ND		ug/kg	5.6	2.0	1
Dichlorodifluoromethane	ND		ug/kg	28	1.1	1
Acetone	ND		ug/kg	28	9.1	1
Carbon disulfide	ND		ug/kg	28	1.0	1
2-Butanone	ND		ug/kg	28	11.	1
Vinyl acetate	ND		ug/kg	28	2.1	1
4-Methyl-2-pentanone	ND		ug/kg	28	2.3	1
1,2,3-Trichloropropane	ND		ug/kg	28	1.1	1
2-Hexanone	ND		ug/kg	28	1.1	1
Bromochloromethane	ND		ug/kg	14	0.85	1
2,2-Dichloropropane	ND		ug/kg	14	2.2	1
1,2-Dibromoethane	ND		ug/kg	11	1.1	1
1,3-Dichloropropane	ND		ug/kg	14	1.6	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.8	0.92	1
Bromobenzene	ND		ug/kg	14	0.62	1
n-Butylbenzene	ND		ug/kg	2.8	0.88	1
sec-Butylbenzene	ND		ug/kg	2.8	0.77	1
tert-Butylbenzene	ND		ug/kg	14	1.7	1
o-Chlorotoluene	ND		ug/kg	14	0.88	1
p-Chlorotoluene	ND		ug/kg	14	1.0	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	14	2.4	1
Hexachlorobutadiene	ND		ug/kg	14	1.3	1
Isopropylbenzene	ND		ug/kg	2.8	0.50	1
p-Isopropyltoluene	ND		ug/kg	2.8	0.77	1
Naphthalene	ND		ug/kg	14	2.2	1
Acrylonitrile	ND		ug/kg	28	1.0	1
n-Propylbenzene	ND		ug/kg	2.8	0.80	1
1,2,3-Trichlorobenzene	ND		ug/kg	14	1.1	1
1,2,4-Trichlorobenzene	ND		ug/kg	14	2.2	1
1,3,5-Trimethylbenzene	ND		ug/kg	14	1.7	1
1,2,4-Trimethylbenzene	ND		ug/kg	14	1.6	1
1,4-Diethylbenzene	ND		ug/kg	11	0.56	1
4-Ethyltoluene	ND		ug/kg	11	0.27	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	11	0.51	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-03  
 Client ID: LB2-7'-9'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/10/12 12:55  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	14	1.1	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	14	4.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	82		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	93		70-130

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

**Lab ID:** L1212237-04  
**Client ID:** LB2-9'-13'  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8260B  
**Analytical Date:** 07/12/12 16:53  
**Analyst:** BN  
**Percent Solids:** 76%

**Date Collected:** 07/10/12 13:40  
**Date Received:** 07/10/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	33	2.7	1
1,1-Dichloroethane	ND		ug/kg	4.9	0.97	1
Chloroform	ND		ug/kg	4.9	1.1	1
Carbon tetrachloride	ND		ug/kg	3.3	0.69	1
1,2-Dichloropropane	ND		ug/kg	12	0.84	1
Dibromochloromethane	ND		ug/kg	3.3	1.0	1
1,1,2-Trichloroethane	ND		ug/kg	4.9	1.3	1
Tetrachloroethene	ND		ug/kg	3.3	1.0	1
Chlorobenzene	ND		ug/kg	3.3	0.61	1
Trichlorofluoromethane	ND		ug/kg	16	1.3	1
1,2-Dichloroethane	ND		ug/kg	3.3	0.75	1
1,1,1-Trichloroethane	ND		ug/kg	3.3	0.89	1
Bromodichloromethane	ND		ug/kg	3.3	1.3	1
trans-1,3-Dichloropropene	ND		ug/kg	3.3	0.99	1
cis-1,3-Dichloropropene	ND		ug/kg	3.3	0.88	1
1,1-Dichloropropene	ND		ug/kg	16	1.5	1
Bromoform	ND		ug/kg	13	1.6	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	3.3	0.79	1
Benzene	ND		ug/kg	3.3	0.98	1
Toluene	ND		ug/kg	4.9	0.79	1
Ethylbenzene	ND		ug/kg	3.3	0.73	1
Chloromethane	ND		ug/kg	16	2.6	1
Bromomethane	ND		ug/kg	6.6	2.1	1
Vinyl chloride	ND		ug/kg	6.6	2.5	1
Chloroethane	ND		ug/kg	6.6	1.4	1
1,1-Dichloroethene	ND		ug/kg	3.3	0.85	1
trans-1,2-Dichloroethene	ND		ug/kg	4.9	1.3	1
Trichloroethene	ND		ug/kg	3.3	0.74	1
1,2-Dichlorobenzene	ND		ug/kg	16	1.2	1
1,3-Dichlorobenzene	ND		ug/kg	16	1.3	1
1,4-Dichlorobenzene	ND		ug/kg	16	1.4	1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

## SAMPLE RESULTS

Lab ID: L1212237-04  
 Client ID: LB2-9'-13'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/10/12 13:40  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	6.6	1.6	1
p/m-Xylene	ND		ug/kg	6.6	1.4	1
o-Xylene	ND		ug/kg	6.6	1.4	1
cis-1,2-Dichloroethene	ND		ug/kg	3.3	0.99	1
Dibromomethane	ND		ug/kg	33	1.4	1
Styrene	ND		ug/kg	6.6	2.4	1
Dichlorodifluoromethane	ND		ug/kg	33	1.3	1
Acetone	15	J	ug/kg	33	11.	1
Carbon disulfide	ND		ug/kg	33	1.2	1
2-Butanone	ND		ug/kg	33	13.	1
Vinyl acetate	ND		ug/kg	33	2.5	1
4-Methyl-2-pentanone	ND		ug/kg	33	2.7	1
1,2,3-Trichloropropane	ND		ug/kg	33	1.3	1
2-Hexanone	ND		ug/kg	33	1.3	1
Bromochloromethane	ND		ug/kg	16	0.99	1
2,2-Dichloropropane	ND		ug/kg	16	2.6	1
1,2-Dibromoethane	ND		ug/kg	13	1.3	1
1,3-Dichloropropane	ND		ug/kg	16	1.9	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	3.3	1.1	1
Bromobenzene	ND		ug/kg	16	0.72	1
n-Butylbenzene	ND		ug/kg	3.3	1.0	1
sec-Butylbenzene	ND		ug/kg	3.3	0.91	1
tert-Butylbenzene	ND		ug/kg	16	2.0	1
o-Chlorotoluene	ND		ug/kg	16	1.0	1
p-Chlorotoluene	ND		ug/kg	16	1.2	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	16	2.8	1
Hexachlorobutadiene	ND		ug/kg	16	1.5	1
Isopropylbenzene	ND		ug/kg	3.3	0.58	1
p-Isopropyltoluene	ND		ug/kg	3.3	0.90	1
Naphthalene	ND		ug/kg	16	2.5	1
Acrylonitrile	ND		ug/kg	33	1.2	1
n-Propylbenzene	ND		ug/kg	3.3	0.93	1
1,2,3-Trichlorobenzene	ND		ug/kg	16	1.3	1
1,2,4-Trichlorobenzene	ND		ug/kg	16	2.6	1
1,3,5-Trimethylbenzene	ND		ug/kg	16	2.0	1
1,2,4-Trimethylbenzene	ND		ug/kg	16	1.9	1
1,4-Diethylbenzene	ND		ug/kg	13	0.66	1
4-Ethyltoluene	ND		ug/kg	13	0.32	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	13	0.60	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-04  
 Client ID: LB2-9'-13'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/10/12 13:40  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Ethyl ether	ND		ug/kg	16	1.2	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	16	4.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	81		70-130
Toluene-d8	90		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	93		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/11/12 08:59  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG547711-3					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.16
1,2-Dichloropropane	ND		ug/l	1.0	0.30
Dibromochloromethane	ND		ug/l	0.50	0.19
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.16
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.19
Benzene	ND		ug/l	0.50	0.19
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.33
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.18
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.17
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/11/12 08:59  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG547711-3					
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.0
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.0
Vinyl acetate	ND		ug/l	5.0	1.0
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/11/12 08:59  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG547711-3					
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
1,4-Diethylbenzene	ND		ug/l	2.0	0.70
4-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	92		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	96		70-130

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/12/12 10:55  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG548122-3					
Methylene chloride	4.6	J	ug/kg	25	2.0
1,1-Dichloroethane	ND		ug/kg	3.8	0.74
Chloroform	ND		ug/kg	3.8	0.81
Carbon tetrachloride	ND		ug/kg	2.5	0.53
1,2-Dichloropropane	ND		ug/kg	8.8	0.64
Dibromochloromethane	ND		ug/kg	2.5	0.77
1,1,2-Trichloroethane	ND		ug/kg	3.8	0.98
Tetrachloroethene	ND		ug/kg	2.5	0.76
Chlorobenzene	ND		ug/kg	2.5	0.46
Trichlorofluoromethane	ND		ug/kg	12	0.98
1,2-Dichloroethane	ND		ug/kg	2.5	0.57
1,1,1-Trichloroethane	ND		ug/kg	2.5	0.67
Bromodichloromethane	ND		ug/kg	2.5	0.96
trans-1,3-Dichloropropene	ND		ug/kg	2.5	0.75
cis-1,3-Dichloropropene	ND		ug/kg	2.5	0.67
1,1-Dichloropropene	ND		ug/kg	12	1.1
Bromoform	ND		ug/kg	10	1.2
1,1,2,2-Tetrachloroethane	ND		ug/kg	2.5	0.60
Benzene	ND		ug/kg	2.5	0.74
Toluene	ND		ug/kg	3.8	0.60
Ethylbenzene	ND		ug/kg	2.5	0.55
Chloromethane	ND		ug/kg	12	2.0
Bromomethane	ND		ug/kg	5.0	1.6
Vinyl chloride	ND		ug/kg	5.0	1.9
Chloroethane	ND		ug/kg	5.0	1.1
1,1-Dichloroethene	ND		ug/kg	2.5	0.65
trans-1,2-Dichloroethene	ND		ug/kg	3.8	0.98
Trichloroethene	ND		ug/kg	2.5	0.56
1,2-Dichlorobenzene	ND		ug/kg	12	0.91
1,3-Dichlorobenzene	ND		ug/kg	12	1.0
1,4-Dichlorobenzene	ND		ug/kg	12	1.0

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/12/12 10:55  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG548122-3					
Methyl tert butyl ether	ND		ug/kg	5.0	1.2
p/m-Xylene	ND		ug/kg	5.0	1.1
o-Xylene	ND		ug/kg	5.0	1.0
cis-1,2-Dichloroethene	ND		ug/kg	2.5	0.75
Dibromomethane	ND		ug/kg	25	1.1
Styrene	ND		ug/kg	5.0	1.8
Dichlorodifluoromethane	ND		ug/kg	25	0.97
Acetone	ND		ug/kg	25	8.1
Carbon disulfide	ND		ug/kg	25	0.94
2-Butanone	ND		ug/kg	25	9.7
Vinyl acetate	ND		ug/kg	25	1.9
4-Methyl-2-pentanone	ND		ug/kg	25	2.0
1,2,3-Trichloropropane	ND		ug/kg	25	0.97
2-Hexanone	ND		ug/kg	25	0.99
Bromochloromethane	ND		ug/kg	12	0.76
2,2-Dichloropropane	ND		ug/kg	12	2.0
1,2-Dibromoethane	ND		ug/kg	10	1.0
1,3-Dichloropropane	ND		ug/kg	12	1.4
1,1,1,2-Tetrachloroethane	ND		ug/kg	2.5	0.82
Bromobenzene	ND		ug/kg	12	0.55
n-Butylbenzene	ND		ug/kg	2.5	0.79
sec-Butylbenzene	ND		ug/kg	2.5	0.69
tert-Butylbenzene	ND		ug/kg	12	1.5
o-Chlorotoluene	ND		ug/kg	12	0.78
p-Chlorotoluene	ND		ug/kg	12	0.90
1,2-Dibromo-3-chloropropane	ND		ug/kg	12	2.1
Hexachlorobutadiene	ND		ug/kg	12	1.1
Isopropylbenzene	ND		ug/kg	2.5	0.44
p-Isopropyltoluene	ND		ug/kg	2.5	0.68
Naphthalene	ND		ug/kg	12	1.9
Acrylonitrile	ND		ug/kg	25	0.94

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260B  
Analytical Date: 07/12/12 10:55  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG548122-3					
Isopropyl Ether	ND		ug/kg	10	1.0
tert-Butyl Alcohol	ND		ug/kg	150	3.1
n-Propylbenzene	ND		ug/kg	2.5	0.71
1,2,3-Trichlorobenzene	ND		ug/kg	12	1.0
1,2,4-Trichlorobenzene	ND		ug/kg	12	2.0
1,3,5-Trimethylbenzene	ND		ug/kg	12	1.5
1,2,4-Trimethylbenzene	ND		ug/kg	12	1.4
Methyl Acetate	ND		ug/kg	50	50.
Ethyl Acetate	ND		ug/kg	50	50.
Acrolein	ND		ug/kg	62	7.5
Cyclohexane	ND		ug/kg	50	50.
1,4-Dioxane	ND		ug/kg	250	44.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	50	0.99
1,4-Diethylbenzene	ND		ug/kg	10	0.50
4-Ethyltoluene	ND		ug/kg	10	0.24
1,2,4,5-Tetramethylbenzene	ND		ug/kg	10	0.45
Tetrahydrofuran	ND		ug/kg	50	2.8
Ethyl ether	ND		ug/kg	12	0.95
trans-1,4-Dichloro-2-butene	ND		ug/kg	12	3.7
Methyl cyclohexane	ND		ug/kg	10	10.
Ethyl-Tert-Butyl-Ether	ND		ug/kg	10	2.2
Tertiary-Amyl Methyl Ether	ND		ug/kg	10	2.5

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	83		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	94		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG547711-1 WG547711-2								
Methylene chloride	90		88		70-130	2		20
1,1-Dichloroethane	95		93		70-130	2		20
Chloroform	94		91		70-130	3		20
Carbon tetrachloride	92		89		63-132	3		20
1,2-Dichloropropane	91		90		70-130	1		20
Dibromochloromethane	90		87		63-130	3		20
1,1,2-Trichloroethane	95		92		70-130	3		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	102		102		75-130	0		20
Trichlorofluoromethane	121		115		62-150	5		20
1,2-Dichloroethane	88		85		70-130	3		20
1,1,1-Trichloroethane	91		88		67-130	3		20
Bromodichloromethane	89		84		67-130	6		20
trans-1,3-Dichloropropene	85		86		70-130	1		20
cis-1,3-Dichloropropene	85		81		70-130	5		20
1,1-Dichloropropene	95		93		70-130	2		20
Bromoform	88		82		54-136	7		20
1,1,2,2-Tetrachloroethane	95		93		67-130	2		20
Benzene	97		94		70-130	3		20
Toluene	104		105		70-130	1		20
Ethylbenzene	108		108		70-130	0		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG547711-1 WG547711-2								
Chloromethane	71		72		64-130	1		20
Bromomethane	76		82		39-139	8		20
Vinyl chloride	113		112		55-140	1		20
Chloroethane	115		115		55-138	0		20
1,1-Dichloroethene	99		95		61-145	4		20
trans-1,2-Dichloroethene	93		92		70-130	1		20
Trichloroethene	95		92		70-130	3		20
1,2-Dichlorobenzene	103		99		70-130	4		20
1,3-Dichlorobenzene	108		106		70-130	2		20
1,4-Dichlorobenzene	106		103		70-130	3		20
Methyl tert butyl ether	75		69		63-130	8		20
p/m-Xylene	109		108		70-130	1		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	94		89		70-130	5		20
Dibromomethane	87		84		70-130	4		20
1,2,3-Trichloropropane	97		97		64-130	0		20
Acrylonitrile	79		86		70-130	8		20
Styrene	106		105		70-130	1		20
Dichlorodifluoromethane	96		93		36-147	3		20
Acetone	80		71		58-148	12		20
Carbon disulfide	92		89		51-130	3		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG547711-1 WG547711-2								
2-Butanone	60	Q	58	Q	63-138	3		20
Vinyl acetate	73		75		70-130	3		20
4-Methyl-2-pentanone	60		56	Q	59-130	7		20
2-Hexanone	62		63		57-130	2		20
Bromochloromethane	99		94		70-130	5		20
2,2-Dichloropropane	82		88		63-133	7		20
1,2-Dibromoethane	88		86		70-130	2		20
1,3-Dichloropropane	95		94		70-130	1		20
1,1,1,2-Tetrachloroethane	98		97		64-130	1		20
Bromobenzene	106		99		70-130	7		20
n-Butylbenzene	116		112		53-136	4		20
sec-Butylbenzene	115		112		70-130	3		20
tert-Butylbenzene	112		109		70-130	3		20
o-Chlorotoluene	119		117		70-130	2		20
p-Chlorotoluene	115		111		70-130	4		20
1,2-Dibromo-3-chloropropane	92		88		41-144	4		20
Hexachlorobutadiene	88		80		63-130	10		20
Isopropylbenzene	119		116		70-130	3		20
p-Isopropyltoluene	116		113		70-130	3		20
Naphthalene	74		66	Q	70-130	11		20
n-Propylbenzene	118		115		69-130	3		20

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG547711-1 WG547711-2								
1,2,3-Trichlorobenzene	76		67	Q	70-130	13		20
1,2,4-Trichlorobenzene	84		78		70-130	7		20
1,3,5-Trimethylbenzene	116		113		64-130	3		20
1,2,4-Trimethylbenzene	116		114		70-130	2		20
1,4-Diethylbenzene	104		102		70-130	2		20
4-Ethyltoluene	108		106		70-130	2		20
1,2,4,5-Tetramethylbenzene	103		100		70-130	3		20
Ethyl ether	101		96		59-134	5		20
trans-1,4-Dichloro-2-butene	69	Q	69	Q	70-130	0		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	92		93		70-130
Toluene-d8	104		105		70-130
4-Bromofluorobenzene	96		94		70-130
Dibromofluoromethane	94		96		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG548122-1 WG548122-2								
Methylene chloride	106		103		70-130	3		30
1,1-Dichloroethane	95		94		70-130	1		30
Chloroform	93		93		70-130	0		30
Carbon tetrachloride	90		89		70-130	1		30
1,2-Dichloropropane	96		97		70-130	1		30
Dibromochloromethane	78		79		70-130	1		30
1,1,2-Trichloroethane	84		85		70-130	1		30
Tetrachloroethene	88		88		70-130	0		30
Chlorobenzene	85		86		70-130	1		30
Trichlorofluoromethane	87		85		70-139	2		30
1,2-Dichloroethane	81		81		70-130	0		30
1,1,1-Trichloroethane	91		90		70-130	1		30
Bromodichloromethane	89		90		70-130	1		30
trans-1,3-Dichloropropene	79		80		70-130	1		30
cis-1,3-Dichloropropene	93		94		70-130	1		30
1,1-Dichloropropene	96		95		70-130	1		30
Bromoform	75		75		70-130	0		30
1,1,2,2-Tetrachloroethane	79		78		70-130	1		30
Benzene	100		99		70-130	1		30
Toluene	88		87		70-130	1		30
Ethylbenzene	86		86		70-130	0		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG548122-1 WG548122-2								
Chloromethane	96		94		52-130	2		30
Bromomethane	106		96		57-147	10		30
Vinyl chloride	87		83		67-130	5		30
Chloroethane	76		74		50-151	3		30
1,1-Dichloroethene	101		98		65-135	3		30
trans-1,2-Dichloroethene	101		99		70-130	2		30
Trichloroethene	96		95		70-130	1		30
1,2-Dichlorobenzene	82		80		70-130	2		30
1,3-Dichlorobenzene	83		81		70-130	2		30
1,4-Dichlorobenzene	83		81		70-130	2		30
Methyl tert butyl ether	90		91		66-130	1		30
p/m-Xylene	87		87		70-130	0		30
o-Xylene	87		86		70-130	1		30
cis-1,2-Dichloroethene	100		100		70-130	0		30
Dibromomethane	90		92		70-130	2		30
Styrene	85		85		70-130	0		30
Dichlorodifluoromethane	92		89		30-146	3		30
Acetone	93		91		54-140	2		30
Carbon disulfide	102		100		59-130	2		30
2-Butanone	92		86		70-130	7		30
Vinyl acetate	84		85		70-130	1		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG548122-1 WG548122-2								
4-Methyl-2-pentanone	91		89		70-130	2		30
1,2,3-Trichloropropane	77		76		68-130	1		30
2-Hexanone	75		74		70-130	1		30
Bromochloromethane	96		96		70-130	0		30
2,2-Dichloropropane	90		89		70-130	1		30
1,2-Dibromoethane	83		83		70-130	0		30
1,3-Dichloropropane	83		82		69-130	1		30
1,1,1,2-Tetrachloroethane	81		82		70-130	1		30
Bromobenzene	82		82		70-130	0		30
n-Butylbenzene	83		81		70-130	2		30
sec-Butylbenzene	84		82		70-130	2		30
tert-Butylbenzene	84		82		70-130	2		30
o-Chlorotoluene	84		81		70-130	4		30
p-Chlorotoluene	83		81		70-130	2		30
1,2-Dibromo-3-chloropropane	73		60	Q	68-130	20		30
Hexachlorobutadiene	87		83		67-130	5		30
Isopropylbenzene	85		84		70-130	1		30
p-Isopropyltoluene	82		80		70-130	2		30
Naphthalene	78		77		70-130	1		30
Acrylonitrile	94		94		70-130	0		30
Isopropyl Ether	91		91		66-130	0		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG548122-1 WG548122-2								
tert-Butyl Alcohol	80		81		70-130	1		30
n-Propylbenzene	84		82		70-130	2		30
1,2,3-Trichlorobenzene	81		80		70-130	1		30
1,2,4-Trichlorobenzene	84		82		70-130	2		30
1,3,5-Trimethylbenzene	83		82		70-130	1		30
1,2,4-Trimethylbenzene	82		81		70-130	1		30
Methyl Acetate	82		83		70-130	1		30
Ethyl Acetate	84		84		70-130	0		30
Acrolein	88		92		70-130	4		30
Cyclohexane	109		108		70-130	1		30
1,4-Dioxane	95		99		65-136	4		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	112		108		70-130	4		30
1,4-Diethylbenzene	93		92		70-130	1		30
4-Ethyltoluene	95		95		70-130	0		30
1,2,4,5-Tetramethylbenzene	93		92		70-130	1		30
Tetrahydrofuran	86		84		66-130	2		30
Ethyl ether	86		87		67-130	1		30
trans-1,4-Dichloro-2-butene	65	Q	64	Q	70-130	2		30
Methyl cyclohexane	115		113		70-130	2		30
Ethyl-Tert-Butyl-Ether	91		92		70-130	1		30
Tertiary-Amyl Methyl Ether	92		93		70-130	1		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG548122-1 WG548122-2

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	82		80		70-130
Toluene-d8	92		92		70-130
4-Bromofluorobenzene	99		98		70-130
Dibromofluoromethane	96		97		70-130

# SEMIVOLATILES

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

## SAMPLE RESULTS

Lab ID: L1212237-01  
 Client ID: FIELD BLANK #1  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8270C  
 Analytical Date: 07/12/12 13:57  
 Analyst: RC

Date Collected: 07/10/12 11:45  
 Date Received: 07/10/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/11/12 17:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40	1
Hexachlorocyclopentadiene	ND		ug/l	20	2.1	1
Isophorone	ND		ug/l	5.0	0.35	1
Nitrobenzene	ND		ug/l	2.0	0.50	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4	1
Butyl benzyl phthalate	ND		ug/l	5.0	0.46	1
Di-n-butylphthalate	ND		ug/l	5.0	0.54	1
Di-n-octylphthalate	ND		ug/l	5.0	0.53	1
Diethyl phthalate	ND		ug/l	5.0	0.45	1
Dimethyl phthalate	ND		ug/l	5.0	0.45	1
Biphenyl	ND		ug/l	2.0	0.50	1
4-Chloroaniline	ND		ug/l	5.0	0.83	1
2-Nitroaniline	ND		ug/l	5.0	0.40	1
3-Nitroaniline	ND		ug/l	5.0	0.59	1
4-Nitroaniline	ND		ug/l	5.0	0.55	1
Dibenzofuran	ND		ug/l	2.0	0.47	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65	1
Acetophenone	ND		ug/l	5.0	0.55	1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

## SAMPLE RESULTS

Lab ID: L1212237-01  
 Client ID: FIELD BLANK #1  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/10/12 11:45  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45	1
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50	1
2-Chlorophenol	ND		ug/l	2.0	0.34	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.43	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.2	1
2-Nitrophenol	ND		ug/l	10	0.48	1
4-Nitrophenol	ND		ug/l	10	1.2	1
2,4-Dinitrophenol	ND		ug/l	20	1.4	1
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59	1
Phenol	ND		ug/l	5.0	0.26	1
2-Methylphenol	ND		ug/l	5.0	0.53	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45	1
Benzoic Acid	ND		ug/l	50	1.0	1
Benzyl Alcohol	ND		ug/l	2.0	0.47	1
Carbazole	ND		ug/l	2.0	0.53	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	81		15-120
2,4,6-Tribromophenol	105		10-120
4-Terphenyl-d14	107		41-149

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-01  
 Client ID: FIELD BLANK #1  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8270C  
 Analytical Date: 07/12/12 14:03  
 Analyst: JC

Date Collected: 07/10/12 11:45  
 Date Received: 07/10/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/11/12 17:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS-SIM - Westborough Lab</b>						
Acenaphthene	ND		ug/l	0.20	0.06	1
2-Chloronaphthalene	ND		ug/l	0.20	0.07	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.20	0.06	1
Benzo(a)anthracene	ND		ug/l	0.20	0.06	1
Benzo(a)pyrene	ND		ug/l	0.20	0.07	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07	1
Chrysene	ND		ug/l	0.20	0.05	1
Acenaphthylene	ND		ug/l	0.20	0.05	1
Anthracene	ND		ug/l	0.20	0.06	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.07	1
Fluorene	ND		ug/l	0.20	0.06	1
Phenanthrene	ND		ug/l	0.20	0.06	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07	1
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08	1
Pyrene	ND		ug/l	0.20	0.06	1
2-Methylnaphthalene	ND		ug/l	0.20	0.06	1
Pentachlorophenol	ND		ug/l	0.80	0.19	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.07	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	89		15-120
2,4,6-Tribromophenol	97		10-120
4-Terphenyl-d14	116		41-149

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-02 D  
 Client ID: LB2-1'-3'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/11/12 23:10  
 Analyst: JB  
 Percent Solids: 78%

Date Collected: 07/10/12 12:15  
 Date Received: 07/10/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/11/12 08:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	680	180	4
1,2,4-Trichlorobenzene	ND		ug/kg	840	250	4
Hexachlorobenzene	ND		ug/kg	510	130	4
Bis(2-chloroethyl)ether	ND		ug/kg	760	160	4
2-Chloronaphthalene	ND		ug/kg	840	250	4
1,2-Dichlorobenzene	ND		ug/kg	840	250	4
1,3-Dichlorobenzene	ND		ug/kg	840	260	4
1,4-Dichlorobenzene	ND		ug/kg	840	240	4
3,3'-Dichlorobenzidine	ND		ug/kg	840	300	4
2,4-Dinitrotoluene	ND		ug/kg	840	250	4
2,6-Dinitrotoluene	ND		ug/kg	840	280	4
Fluoranthene	1300		ug/kg	510	110	4
4-Chlorophenyl phenyl ether	ND		ug/kg	840	150	4
4-Bromophenyl phenyl ether	ND		ug/kg	840	180	4
Bis(2-chloroisopropyl)ether	ND		ug/kg	1000	240	4
Bis(2-chloroethoxy)methane	ND		ug/kg	910	210	4
Hexachlorobutadiene	ND		ug/kg	840	220	4
Hexachlorocyclopentadiene	ND		ug/kg	2400	670	4
Hexachloroethane	ND		ug/kg	680	120	4
Isophorone	ND		ug/kg	760	200	4
Naphthalene	ND		ug/kg	840	270	4
Nitrobenzene	ND		ug/kg	760	250	4
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	680	210	4
n-Nitrosodi-n-propylamine	ND		ug/kg	840	240	4
Bis(2-Ethylhexyl)phthalate	500	J	ug/kg	840	180	4
Butyl benzyl phthalate	ND		ug/kg	840	240	4
Di-n-butylphthalate	ND		ug/kg	840	140	4
Di-n-octylphthalate	ND		ug/kg	840	230	4
Diethyl phthalate	ND		ug/kg	840	150	4
Dimethyl phthalate	ND		ug/kg	840	140	4
Benzo(a)anthracene	590		ug/kg	510	170	4

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-02 D  
 Client ID: LB2-1'-3'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/10/12 12:15  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Benzo(a)pyrene	510	J	ug/kg	680	200	4
Benzo(b)fluoranthene	580		ug/kg	510	150	4
Benzo(k)fluoranthene	210	J	ug/kg	510	130	4
Chrysene	600		ug/kg	510	130	4
Acenaphthylene	ND		ug/kg	680	220	4
Anthracene	290	J	ug/kg	510	120	4
Benzo(ghi)perylene	310	J	ug/kg	680	210	4
Fluorene	ND		ug/kg	840	160	4
Phenanthrene	1200		ug/kg	510	140	4
Dibenzo(a,h)anthracene	ND		ug/kg	510	160	4
Indeno(1,2,3-cd)Pyrene	310	J	ug/kg	680	210	4
Pyrene	1400		ug/kg	510	140	4
Biphenyl	ND		ug/kg	1900	590	4
4-Chloroaniline	ND		ug/kg	840	280	4
2-Nitroaniline	ND		ug/kg	840	160	4
3-Nitroaniline	ND		ug/kg	840	95.	4
4-Nitroaniline	ND		ug/kg	840	520	4
Dibenzofuran	ND		ug/kg	840	170	4
2-Methylnaphthalene	ND		ug/kg	1000	330	4
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	840	270	4
Acetophenone	ND		ug/kg	840	270	4
2,4,6-Trichlorophenol	ND		ug/kg	510	160	4
P-Chloro-M-Cresol	ND		ug/kg	840	170	4
2-Chlorophenol	ND		ug/kg	840	260	4
2,4-Dichlorophenol	ND		ug/kg	760	240	4
2,4-Dimethylphenol	ND		ug/kg	840	350	4
2-Nitrophenol	ND		ug/kg	1800	620	4
4-Nitrophenol	ND		ug/kg	1200	360	4
2,4-Dinitrophenol	ND		ug/kg	4000	1300	4
4,6-Dinitro-o-cresol	ND		ug/kg	2200	800	4
Pentachlorophenol	ND		ug/kg	680	200	4
Phenol	ND		ug/kg	840	260	4
2-Methylphenol	ND		ug/kg	840	210	4
3-Methylphenol/4-Methylphenol	ND		ug/kg	1200	360	4
2,4,5-Trichlorophenol	ND		ug/kg	840	200	4
Benzoic Acid	ND		ug/kg	2700	720	4
Benzyl Alcohol	ND		ug/kg	840	200	4
Carbazole	ND		ug/kg	840	140	4

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-02 D  
 Client ID: LB2-1'-3'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/10/12 12:15  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	68		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	75		0-136
4-Terphenyl-d14	57		18-120

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-03  
 Client ID: LB2-7'-9'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/11/12 23:36  
 Analyst: JB  
 Percent Solids: 89%

Date Collected: 07/10/12 12:55  
 Date Received: 07/10/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/11/12 08:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	150	40.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	54.	1
Hexachlorobenzene	ND		ug/kg	110	29.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	35.	1
2-Chloronaphthalene	ND		ug/kg	180	55.	1
1,2-Dichlorobenzene	ND		ug/kg	180	54.	1
1,3-Dichlorobenzene	ND		ug/kg	180	57.	1
1,4-Dichlorobenzene	ND		ug/kg	180	52.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	66.	1
2,4-Dinitrotoluene	ND		ug/kg	180	55.	1
2,6-Dinitrotoluene	ND		ug/kg	180	60.	1
Fluoranthene	ND		ug/kg	110	24.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	32.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	38.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	52.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	46.	1
Hexachlorobutadiene	ND		ug/kg	180	49.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	140	1
Hexachloroethane	ND		ug/kg	150	26.	1
Isophorone	ND		ug/kg	160	44.	1
Naphthalene	ND		ug/kg	180	58.	1
Nitrobenzene	ND		ug/kg	160	54.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	150	46.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	51.	1
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	180	38.	1
Butyl benzyl phthalate	ND		ug/kg	180	52.	1
Di-n-butylphthalate	ND		ug/kg	180	31.	1
Di-n-octylphthalate	ND		ug/kg	180	50.	1
Diethyl phthalate	ND		ug/kg	180	32.	1
Dimethyl phthalate	ND		ug/kg	180	30.	1
Benzo(a)anthracene	ND		ug/kg	110	36.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-03  
 Client ID: LB2-7'-9'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/10/12 12:55  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Benzo(a)pyrene	ND		ug/kg	150	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	28.	1
Chrysene	ND		ug/kg	110	29.	1
Acenaphthylene	ND		ug/kg	150	48.	1
Anthracene	ND		ug/kg	110	25.	1
Benzo(ghi)perylene	ND		ug/kg	150	46.	1
Fluorene	ND		ug/kg	180	34.	1
Phenanthrene	ND		ug/kg	110	31.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	34.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	150	45.	1
Pyrene	ND		ug/kg	110	30.	1
Biphenyl	ND		ug/kg	420	130	1
4-Chloroaniline	ND		ug/kg	180	62.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	21.	1
4-Nitroaniline	ND		ug/kg	180	110	1
Dibenzofuran	ND		ug/kg	180	38.	1
2-Methylnaphthalene	ND		ug/kg	220	72.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	58.	1
Acetophenone	ND		ug/kg	180	59.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
P-Chloro-M-Cresol	ND		ug/kg	180	38.	1
2-Chlorophenol	ND		ug/kg	180	58.	1
2,4-Dichlorophenol	ND		ug/kg	160	53.	1
2,4-Dimethylphenol	ND		ug/kg	180	76.	1
2-Nitrophenol	ND		ug/kg	400	130	1
4-Nitrophenol	ND		ug/kg	260	78.	1
2,4-Dinitrophenol	ND		ug/kg	880	280	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	170	1
Pentachlorophenol	ND		ug/kg	150	44.	1
Phenol	ND		ug/kg	180	58.	1
2-Methylphenol	ND		ug/kg	180	45.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	79.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	43.	1
Benzoic Acid	ND		ug/kg	600	160	1
Benzyl Alcohol	ND		ug/kg	180	43.	1
Carbazole	ND		ug/kg	180	30.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-03  
 Client ID: LB2-7'-9'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/10/12 12:55  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	64		30-120
2,4,6-Tribromophenol	80		0-136
4-Terphenyl-d14	71		18-120

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

Lab ID: L1212237-04  
 Client ID: LB2-9'-13'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8270C  
 Analytical Date: 07/12/12 00:01  
 Analyst: JB  
 Percent Solids: 76%

Date Collected: 07/10/12 13:40  
 Date Received: 07/10/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/11/12 08:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	170	46.	1
1,2,4-Trichlorobenzene	ND		ug/kg	210	63.	1
Hexachlorobenzene	ND		ug/kg	130	34.	1
Bis(2-chloroethyl)ether	ND		ug/kg	190	41.	1
2-Chloronaphthalene	ND		ug/kg	210	64.	1
1,2-Dichlorobenzene	ND		ug/kg	210	63.	1
1,3-Dichlorobenzene	ND		ug/kg	210	66.	1
1,4-Dichlorobenzene	ND		ug/kg	210	61.	1
3,3'-Dichlorobenzidine	ND		ug/kg	210	78.	1
2,4-Dinitrotoluene	ND		ug/kg	210	64.	1
2,6-Dinitrotoluene	ND		ug/kg	210	71.	1
Fluoranthene	77	J	ug/kg	130	28.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	210	38.	1
4-Bromophenyl phenyl ether	ND		ug/kg	210	45.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	61.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	54.	1
Hexachlorobutadiene	ND		ug/kg	210	57.	1
Hexachlorocyclopentadiene	ND		ug/kg	620	170	1
Hexachloroethane	ND		ug/kg	170	31.	1
Isophorone	ND		ug/kg	190	51.	1
Naphthalene	ND		ug/kg	210	68.	1
Nitrobenzene	ND		ug/kg	190	63.	1
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	170	54.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	210	60.	1
Bis(2-Ethylhexyl)phthalate	170	J	ug/kg	210	44.	1
Butyl benzyl phthalate	ND		ug/kg	210	60.	1
Di-n-butylphthalate	ND		ug/kg	210	37.	1
Di-n-octylphthalate	ND		ug/kg	210	58.	1
Diethyl phthalate	ND		ug/kg	210	37.	1
Dimethyl phthalate	ND		ug/kg	210	35.	1
Benzo(a)anthracene	ND		ug/kg	130	42.	1

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

## SAMPLE RESULTS

Lab ID: L1212237-04  
 Client ID: LB2-9'-13'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/10/12 13:40  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(a)pyrene	ND		ug/kg	170	51.	1
Benzo(b)fluoranthene	ND		ug/kg	130	38.	1
Benzo(k)fluoranthene	ND		ug/kg	130	33.	1
Chrysene	41	J	ug/kg	130	33.	1
Acenaphthylene	ND		ug/kg	170	56.	1
Anthracene	ND		ug/kg	130	30.	1
Benzo(ghi)perylene	ND		ug/kg	170	54.	1
Fluorene	ND		ug/kg	210	40.	1
Phenanthrene	84	J	ug/kg	130	36.	1
Dibenzo(a,h)anthracene	ND		ug/kg	130	40.	1
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	170	52.	1
Pyrene	78	J	ug/kg	130	35.	1
Biphenyl	ND		ug/kg	490	150	1
4-Chloroaniline	ND		ug/kg	210	72.	1
2-Nitroaniline	ND		ug/kg	210	39.	1
3-Nitroaniline	ND		ug/kg	210	24.	1
4-Nitroaniline	ND		ug/kg	210	130	1
Dibenzofuran	ND		ug/kg	210	44.	1
2-Methylnaphthalene	ND		ug/kg	260	85.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	210	68.	1
Acetophenone	ND		ug/kg	210	69.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	39.	1
P-Chloro-M-Cresol	ND		ug/kg	210	44.	1
2-Chlorophenol	ND		ug/kg	210	67.	1
2,4-Dichlorophenol	ND		ug/kg	190	62.	1
2,4-Dimethylphenol	ND		ug/kg	210	89.	1
2-Nitrophenol	ND		ug/kg	460	160	1
4-Nitrophenol	ND		ug/kg	300	92.	1
2,4-Dinitrophenol	ND		ug/kg	1000	330	1
4,6-Dinitro-o-cresol	ND		ug/kg	560	200	1
Pentachlorophenol	ND		ug/kg	170	51.	1
Phenol	ND		ug/kg	210	67.	1
2-Methylphenol	ND		ug/kg	210	53.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	310	93.	1
2,4,5-Trichlorophenol	ND		ug/kg	210	50.	1
Benzoic Acid	ND		ug/kg	700	180	1
Benzyl Alcohol	ND		ug/kg	210	50.	1
Carbazole	ND		ug/kg	210	35.	1

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-04  
 Client ID: LB2-9'-13'  
 Sample Location: 17-29 WEST END AVE.

Date Collected: 07/10/12 13:40  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS - Westborough Lab						
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		25-120
Phenol-d6	69		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	58		30-120
2,4,6-Tribromophenol	73		0-136
4-Terphenyl-d14	50		18-120

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/11/12 18:56  
**Analyst:** JB

**Extraction Method:** EPA 3546  
**Extraction Date:** 07/11/12 08:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG547586-1					
Acenaphthene	ND		ug/kg	130	35.
1,2,4-Trichlorobenzene	ND		ug/kg	160	48.
Hexachlorobenzene	ND		ug/kg	98	26.
Bis(2-chloroethyl)ether	ND		ug/kg	150	31.
2-Chloronaphthalene	ND		ug/kg	160	49.
1,2-Dichlorobenzene	ND		ug/kg	160	48.
1,3-Dichlorobenzene	ND		ug/kg	160	51.
1,4-Dichlorobenzene	ND		ug/kg	160	46.
3,3'-Dichlorobenzidine	ND		ug/kg	160	59.
2,4-Dinitrotoluene	ND		ug/kg	160	49.
2,6-Dinitrotoluene	ND		ug/kg	160	54.
Fluoranthene	ND		ug/kg	98	21.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	29.
4-Bromophenyl phenyl ether	ND		ug/kg	160	34.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	46.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	41.
Hexachlorobutadiene	ND		ug/kg	160	44.
Hexachlorocyclopentadiene	ND		ug/kg	470	130
Hexachloroethane	ND		ug/kg	130	24.
Isophorone	ND		ug/kg	150	39.
Naphthalene	ND		ug/kg	160	52.
Nitrobenzene	ND		ug/kg	150	48.
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/kg	130	41.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	46.
Bis(2-Ethylhexyl)phthalate	ND		ug/kg	160	34.
Butyl benzyl phthalate	ND		ug/kg	160	46.
Di-n-butylphthalate	ND		ug/kg	160	28.
Di-n-octylphthalate	ND		ug/kg	160	44.
Diethyl phthalate	ND		ug/kg	160	28.
Dimethyl phthalate	ND		ug/kg	160	27.
Benzo(a)anthracene	ND		ug/kg	98	32.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/11/12 18:56  
**Analyst:** JB

**Extraction Method:** EPA 3546  
**Extraction Date:** 07/11/12 08:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG547586-1					
Benzo(a)pyrene	ND		ug/kg	130	39.
Benzo(b)fluoranthene	ND		ug/kg	98	29.
Benzo(k)fluoranthene	ND		ug/kg	98	25.
Chrysene	ND		ug/kg	98	25.
Acenaphthylene	ND		ug/kg	130	42.
Anthracene	ND		ug/kg	98	23.
Benzo(ghi)perylene	ND		ug/kg	130	41.
Fluorene	ND		ug/kg	160	30.
Phenanthrene	ND		ug/kg	98	27.
Dibenzo(a,h)anthracene	ND		ug/kg	98	30.
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	130	40.
Pyrene	ND		ug/kg	98	27.
Biphenyl	ND		ug/kg	370	110
4-Chloroaniline	ND		ug/kg	160	55.
2-Nitroaniline	ND		ug/kg	160	30.
3-Nitroaniline	ND		ug/kg	160	18.
4-Nitroaniline	ND		ug/kg	160	100
Dibenzofuran	ND		ug/kg	160	34.
2-Methylnaphthalene	ND		ug/kg	200	64.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	52.
Acetophenone	ND		ug/kg	160	52.
2,4,6-Trichlorophenol	ND		ug/kg	98	30.
P-Chloro-M-Cresol	ND		ug/kg	160	33.
2-Chlorophenol	ND		ug/kg	160	51.
2,4-Dichlorophenol	ND		ug/kg	150	48.
2,4-Dimethylphenol	ND		ug/kg	160	67.
2-Nitrophenol	ND		ug/kg	350	120
4-Nitrophenol	ND		ug/kg	230	70.
2,4-Dinitrophenol	ND		ug/kg	780	250
4,6-Dinitro-o-cresol	ND		ug/kg	420	150
Pentachlorophenol	ND		ug/kg	130	39.

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/11/12 18:56  
**Analyst:** JB

**Extraction Method:** EPA 3546  
**Extraction Date:** 07/11/12 08:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG547586-1					
Phenol	ND		ug/kg	160	51.
2-Methylphenol	ND		ug/kg	160	40.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	71.
2,4,5-Trichlorophenol	ND		ug/kg	160	38.
Benzoic Acid	ND		ug/kg	530	140
Benzyl Alcohol	ND		ug/kg	160	38.
Carbazole	ND		ug/kg	160	26.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		25-120
Phenol-d6	72		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	64		30-120
2,4,6-Tribromophenol	73		0-136
4-Terphenyl-d14	86		18-120

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/12/12 12:47  
**Analyst:** RC

**Extraction Method:** EPA 3510C  
**Extraction Date:** 07/11/12 17:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG547799-1					
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.67
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.39
1,2-Dichlorobenzene	ND		ug/l	2.0	0.55
1,3-Dichlorobenzene	ND		ug/l	2.0	0.55
1,4-Dichlorobenzene	ND		ug/l	2.0	0.55
3,3'-Dichlorobenzidine	ND		ug/l	5.0	0.85
2,4-Dinitrotoluene	ND		ug/l	5.0	0.45
2,6-Dinitrotoluene	ND		ug/l	5.0	0.46
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.61
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.67
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.50
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.40
Hexachlorocyclopentadiene	ND		ug/l	20	2.1
Isophorone	ND		ug/l	5.0	0.35
Nitrobenzene	ND		ug/l	2.0	0.50
NitrosoDiPhenylAmine(NDPA)/DPA	ND		ug/l	2.0	0.70
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.39
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	1.4
Butyl benzyl phthalate	ND		ug/l	5.0	0.46
Di-n-butylphthalate	ND		ug/l	5.0	0.54
Di-n-octylphthalate	ND		ug/l	5.0	0.53
Diethyl phthalate	ND		ug/l	5.0	0.45
Dimethyl phthalate	ND		ug/l	5.0	0.45
Biphenyl	ND		ug/l	2.0	0.50
4-Chloroaniline	ND		ug/l	5.0	0.83
2-Nitroaniline	ND		ug/l	5.0	0.40
3-Nitroaniline	ND		ug/l	5.0	0.59
4-Nitroaniline	ND		ug/l	5.0	0.55
Dibenzofuran	ND		ug/l	2.0	0.47
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.65
Acetophenone	ND		ug/l	5.0	0.55

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/12/12 12:47  
**Analyst:** RC

**Extraction Method:** EPA 3510C  
**Extraction Date:** 07/11/12 17:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG547799-1					
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.45
P-Chloro-M-Cresol	ND		ug/l	2.0	0.50
2-Chlorophenol	ND		ug/l	2.0	0.34
2,4-Dichlorophenol	ND		ug/l	5.0	0.43
2,4-Dimethylphenol	ND		ug/l	5.0	1.2
2-Nitrophenol	ND		ug/l	10	0.48
4-Nitrophenol	ND		ug/l	10	1.2
2,4-Dinitrophenol	ND		ug/l	20	1.4
4,6-Dinitro-o-cresol	ND		ug/l	10	0.59
Phenol	ND		ug/l	5.0	0.26
2-Methylphenol	ND		ug/l	5.0	0.53
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.47
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.45
Benzoic Acid	ND		ug/l	50	1.0
Benzyl Alcohol	ND		ug/l	2.0	0.47
Carbazole	ND		ug/l	2.0	0.53

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	59		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	98		10-120
4-Terphenyl-d14	102		41-149

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 1,8270C  
**Analytical Date:** 07/12/12 12:36  
**Analyst:** JC

**Extraction Method:** EPA 3510C  
**Extraction Date:** 07/11/12 17:35

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG547800-1					
Acenaphthene	ND		ug/l	0.20	0.06
2-Chloronaphthalene	ND		ug/l	0.20	0.07
Fluoranthene	ND		ug/l	0.20	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.20	0.06
Benzo(a)anthracene	ND		ug/l	0.20	0.06
Benzo(a)pyrene	ND		ug/l	0.20	0.07
Benzo(b)fluoranthene	ND		ug/l	0.20	0.07
Benzo(k)fluoranthene	ND		ug/l	0.20	0.07
Chrysene	ND		ug/l	0.20	0.05
Acenaphthylene	ND		ug/l	0.20	0.05
Anthracene	ND		ug/l	0.20	0.06
Benzo(ghi)perylene	ND		ug/l	0.20	0.07
Fluorene	ND		ug/l	0.20	0.06
Phenanthrene	ND		ug/l	0.20	0.06
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.07
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	0.08
Pyrene	ND		ug/l	0.20	0.06
2-Methylnaphthalene	ND		ug/l	0.20	0.06
Pentachlorophenol	ND		ug/l	0.80	0.19
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.07

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8270C  
 Analytical Date: 07/12/12 12:36  
 Analyst: JC

Extraction Method: EPA 3510C  
 Extraction Date: 07/11/12 17:35

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG547800-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	88		10-120
4-Terphenyl-d14	106		41-149

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG547586-2 WG547586-3								
Acenaphthene	76		81		31-137	6		50
1,2,4-Trichlorobenzene	62		72		38-107	15		50
Hexachlorobenzene	82		87		40-140	6		50
Bis(2-chloroethyl)ether	68		78		40-140	14		50
2-Chloronaphthalene	77		87		40-140	12		50
1,2-Dichlorobenzene	66		78		40-140	17		50
1,3-Dichlorobenzene	63		76		40-140	19		50
1,4-Dichlorobenzene	64		75		28-104	16		50
3,3'-Dichlorobenzidine	72		73		40-140	1		50
2,4-Dinitrotoluene	90	Q	96	Q	28-89	6		50
2,6-Dinitrotoluene	90		95		40-140	5		50
Fluoranthene	84		86		40-140	2		50
4-Chlorophenyl phenyl ether	80		83		40-140	4		50
4-Bromophenyl phenyl ether	82		86		40-140	5		50
Bis(2-chloroisopropyl)ether	72		87		40-140	19		50
Bis(2-chloroethoxy)methane	73		86		40-117	16		50
Hexachlorobutadiene	62		73		40-140	16		50
Hexachlorocyclopentadiene	53		65		40-140	20		50
Hexachloroethane	65		78		40-140	18		50
Isophorone	77		89		40-140	14		50
Naphthalene	67		79		40-140	16		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG547586-2 WG547586-3								
Nitrobenzene	71		82		40-140	14		50
NitrosoDiPhenylAmine(NDPA)/DPA	85		88			3		50
n-Nitrosodi-n-propylamine	75		90		32-121	18		50
Bis(2-Ethylhexyl)phthalate	90		90		40-140	0		50
Butyl benzyl phthalate	90		95		40-140	5		50
Di-n-butylphthalate	88		90		40-140	2		50
Di-n-octylphthalate	98		96		40-140	2		50
Diethyl phthalate	87		92		40-140	6		50
Dimethyl phthalate	83		86		40-140	4		50
Benzo(a)anthracene	81		81		40-140	0		50
Benzo(a)pyrene	82		82		40-140	0		50
Benzo(b)fluoranthene	86		85		40-140	1		50
Benzo(k)fluoranthene	78		77		40-140	1		50
Chrysene	84		85		40-140	1		50
Acenaphthylene	83		89		40-140	7		50
Anthracene	82		83		40-140	1		50
Benzo(ghi)perylene	83		83		40-140	0		50
Fluorene	82		87		40-140	6		50
Phenanthrene	80		82		40-140	2		50
Dibenzo(a,h)anthracene	86		87		40-140	1		50
Indeno(1,2,3-cd)Pyrene	88		88		40-140	0		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG547586-2 WG547586-3								
Pyrene	84		86		35-142	2		50
Biphenyl	75		80			6		50
4-Chloroaniline	67		78		40-140	15		50
2-Nitroaniline	97		105		47-134	8		50
3-Nitroaniline	74		81		26-129	9		50
4-Nitroaniline	89		95		41-125	7		50
Dibenzofuran	78		83		40-140	6		50
2-Methylnaphthalene	74		86		40-140	15		50
1,2,4,5-Tetrachlorobenzene	70		80		40-117	13		50
Acetophenone	77		90		14-144	16		50
2,4,6-Trichlorophenol	86		93		30-130	8		50
P-Chloro-M-Cresol	93		97		26-103	4		50
2-Chlorophenol	74		89		25-102	18		50
2,4-Dichlorophenol	81		91		30-130	12		50
2,4-Dimethylphenol	79		90		30-130	13		50
2-Nitrophenol	75		87		30-130	15		50
4-Nitrophenol	98		106		11-114	8		50
2,4-Dinitrophenol	64		58		4-130	10		50
4,6-Dinitro-o-cresol	88		91		10-130	3		50
Pentachlorophenol	73		75		17-109	3		50
Phenol	74		87		26-90	16		50

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG547586-2 WG547586-3								
2-Methylphenol	77		90		30-130.	16		50
3-Methylphenol/4-Methylphenol	81		94		30-130	15		50
2,4,5-Trichlorophenol	87		97		30-130	11		50
Benzoic Acid	14		12			15		50
Benzyl Alcohol	80		94		40-140	16		50
Carbazole	84		84		54-128	0		50

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
2-Fluorophenol	78		87		25-120
Phenol-d6	83		95		10-120
Nitrobenzene-d5	76		89		23-120
2-Fluorobiphenyl	79		86		30-120
2,4,6-Tribromophenol	91		87		0-136
4-Terphenyl-d14	94		94		18-120

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG547799-2 WG547799-3								
1,2,4-Trichlorobenzene	70		71		39-98	1		30
Bis(2-chloroethyl)ether	58		60		40-140	3		30
1,2-Dichlorobenzene	61		65		40-140	6		30
1,3-Dichlorobenzene	60		63		40-140	5		30
1,4-Dichlorobenzene	59		64		36-97	8		30
3,3'-Dichlorobenzidine	74		79		40-140	7		30
2,4-Dinitrotoluene	93		96		24-96	3		30
2,6-Dinitrotoluene	97		102		40-140	5		30
4-Chlorophenyl phenyl ether	91		93		40-140	2		30
4-Bromophenyl phenyl ether	103		106		40-140	3		30
Bis(2-chloroisopropyl)ether	48		50		40-140	4		30
Bis(2-chloroethoxy)methane	64		70		40-140	9		30
Hexachlorocyclopentadiene	47		50		40-140	6		30
Isophorone	68		74		40-140	8		30
Nitrobenzene	66		69		40-140	4		30
NitrosoDiPhenylAmine(NDPA)/DPA	83		88		40-140	6		30
n-Nitrosodi-n-propylamine	66		73		29-132	10		30
Bis(2-Ethylhexyl)phthalate	88		91		40-140	3		30
Butyl benzyl phthalate	92		98		40-140	6		30
Di-n-butylphthalate	94		101		40-140	7		30
Di-n-octylphthalate	91		97		40-140	6		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG547799-2 WG547799-3								
Diethyl phthalate	92		98		40-140	6		30
Dimethyl phthalate	89		93		40-140	4		30
Biphenyl	79		82			4		30
4-Chloroaniline	64		59		40-140	8		30
2-Nitroaniline	92		98		52-143	6		30
3-Nitroaniline	74		76		25-145	3		30
4-Nitroaniline	81		88		51-143	8		30
Dibenzofuran	81		88		40-140	8		30
1,2,4,5-Tetrachlorobenzene	81		84		2-134	4		30
Acetophenone	73		75		39-129	3		30
2,4,6-Trichlorophenol	88		95		30-130	8		30
P-Chloro-M-Cresol	85		88		23-97	3		30
2-Chlorophenol	70		72		27-123	3		30
2,4-Dichlorophenol	83		90		30-130	8		30
2,4-Dimethylphenol	74		82		30-130	10		30
2-Nitrophenol	71		78		30-130	9		30
4-Nitrophenol	42		47		10-80	11		30
2,4-Dinitrophenol	78		89		20-130	13		30
4,6-Dinitro-o-cresol	85		97		20-164	13		30
Phenol	33		33		12-110	0		30
2-Methylphenol	65		66		30-130	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG547799-2 WG547799-3								
3-Methylphenol/4-Methylphenol	62		63		30-130	2		30
2,4,5-Trichlorophenol	98		102		30-130	4		30
Benzoic Acid	29		31			7		30
Benzyl Alcohol	64		63			2		30
Carbazole	85		91		55-144	7		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	49		48		21-120
Phenol-d6	32		34		10-120
Nitrobenzene-d5	64		68		23-120
2-Fluorobiphenyl	86		90		15-120
2,4,6-Tribromophenol	108		112		10-120
4-Terphenyl-d14	104		105		41-149

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG547800-2 WG547800-3								
Acenaphthene	90		87		37-111	3		40
2-Chloronaphthalene	103		98		40-140	5		40
Fluoranthene	107		108		40-140	1		40
Hexachlorobutadiene	77		67		40-140	14		40
Naphthalene	88		78		40-140	12		40
Benzo(a)anthracene	116		113		40-140	3		40
Benzo(a)pyrene	86		85		40-140	1		40
Benzo(b)fluoranthene	93		93		40-140	0		40
Benzo(k)fluoranthene	117		113		40-140	3		40
Chrysene	100		99		40-140	1		40
Acenaphthylene	99		92		40-140	7		40
Anthracene	100		101		40-140	1		40
Benzo(ghi)perylene	108		102		40-140	6		40
Fluorene	97		95		40-140	2		40
Phenanthrene	92		92		40-140	0		40
Dibenzo(a,h)anthracene	98		95		40-140	3		40
Indeno(1,2,3-cd)Pyrene	100		95		40-140	5		40
Pyrene	99		100		26-127	1		40
2-Methylnaphthalene	86		79		40-140	8		40
Pentachlorophenol	<b>108</b>	Q	<b>108</b>	Q	9-103	0		40
Hexachlorobenzene	92		91		40-140	1		40

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG547800-2 WG547800-3								
Hexachloroethane	79		66		40-140	18		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	66		58		21-120
Phenol-d6	48		43		10-120
Nitrobenzene-d5	99		86		23-120
2-Fluorobiphenyl	96		89		15-120
2,4,6-Tribromophenol	107		105		10-120
4-Terphenyl-d14	111		109		41-149

# PCBS

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

Lab ID: L1212237-01  
 Client ID: FIELD BLANK #1  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8082  
 Analytical Date: 07/13/12 21:43  
 Analyst: BA

Date Collected: 07/10/12 11:45  
 Date Received: 07/10/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/13/12 02:59  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/13/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/13/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.083	0.055	1
Aroclor 1221	ND		ug/l	0.083	0.053	1
Aroclor 1232	ND		ug/l	0.083	0.031	1
Aroclor 1242	ND		ug/l	0.083	0.060	1
Aroclor 1248	ND		ug/l	0.083	0.051	1
Aroclor 1254	ND		ug/l	0.083	0.034	1
Aroclor 1260	ND		ug/l	0.083	0.032	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	115		30-150
Decachlorobiphenyl	126		30-150
2,4,5,6-Tetrachloro-m-xylene	103		30-150
Decachlorobiphenyl	105		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

Lab ID: L1212237-02  
 Client ID: LB2-1'-3'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8082  
 Analytical Date: 07/12/12 16:19  
 Analyst: BW  
 Percent Solids: 78%

Date Collected: 07/10/12 12:15  
 Date Received: 07/10/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/11/12 17:10  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/12/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/12/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Polychlorinated Biphenyls by GC - Westborough Lab</b>						
Aroclor 1016	ND		ug/kg	56.2	11.1	1
Aroclor 1221	ND		ug/kg	56.2	17.0	1
Aroclor 1232	ND		ug/kg	56.2	11.9	1
Aroclor 1242	ND		ug/kg	56.2	10.7	1
Aroclor 1248	ND		ug/kg	56.2	6.80	1
Aroclor 1254	ND		ug/kg	56.2	8.86	1
Aroclor 1260	ND		ug/kg	56.2	9.76	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	75		30-150
Decachlorobiphenyl	57		30-150
2,4,5,6-Tetrachloro-m-xylene	72		30-150
Decachlorobiphenyl	81		30-150

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

**Lab ID:** L1212237-03  
**Client ID:** LB2-7'-9'  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8082  
**Analytical Date:** 07/12/12 16:33  
**Analyst:** BW  
**Percent Solids:** 89%

**Date Collected:** 07/10/12 12:55  
**Date Received:** 07/10/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3546  
**Extraction Date:** 07/11/12 17:10  
**Cleanup Method1:** EPA 3665A  
**Cleanup Date1:** 07/12/12  
**Cleanup Method2:** EPA 3660B  
**Cleanup Date2:** 07/12/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	35.3	6.96	1
Aroclor 1221	ND		ug/kg	35.3	10.6	1
Aroclor 1232	ND		ug/kg	35.3	7.49	1
Aroclor 1242	ND		ug/kg	35.3	6.69	1
Aroclor 1248	ND		ug/kg	35.3	4.27	1
Aroclor 1254	ND		ug/kg	35.3	5.56	1
Aroclor 1260	ND		ug/kg	35.3	6.12	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	86		30-150
Decachlorobiphenyl	67		30-150
2,4,5,6-Tetrachloro-m-xylene	91		30-150
Decachlorobiphenyl	80		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

Lab ID: L1212237-04  
 Client ID: LB2-9'-13'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8082  
 Analytical Date: 07/12/12 16:46  
 Analyst: BW  
 Percent Solids: 76%

Date Collected: 07/10/12 13:40  
 Date Received: 07/10/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/11/12 17:10  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/12/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/12/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/kg	42.5	8.39	1
Aroclor 1221	ND		ug/kg	42.5	12.8	1
Aroclor 1232	ND		ug/kg	42.5	9.03	1
Aroclor 1242	ND		ug/kg	42.5	8.06	1
Aroclor 1248	ND		ug/kg	42.5	5.14	1
Aroclor 1254	ND		ug/kg	42.5	6.70	1
Aroclor 1260	ND		ug/kg	42.5	7.38	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	77		30-150
Decachlorobiphenyl	64		30-150
2,4,5,6-Tetrachloro-m-xylene	80		30-150
Decachlorobiphenyl	72		30-150

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8082  
 Analytical Date: 07/12/12 17:00  
 Analyst: BW

Extraction Method: EPA 3546  
 Extraction Date: 07/11/12 17:10  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/12/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/12/12

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 02-04 Batch: WG547790-1					
Aroclor 1016	ND		ug/kg	32.8	6.48
Aroclor 1221	ND		ug/kg	32.8	9.90
Aroclor 1232	ND		ug/kg	32.8	6.97
Aroclor 1242	ND		ug/kg	32.8	6.23
Aroclor 1248	ND		ug/kg	32.8	3.97
Aroclor 1254	ND		ug/kg	32.8	5.17
Aroclor 1260	ND		ug/kg	32.8	5.69

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	88		30-150
Decachlorobiphenyl	82		30-150
2,4,5,6-Tetrachloro-m-xylene	93		30-150
Decachlorobiphenyl	88		30-150

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8082  
 Analytical Date: 07/13/12 21:56  
 Analyst: BA

Extraction Method: EPA 3510C  
 Extraction Date: 07/13/12 02:59  
 Cleanup Method1: EPA 3665A  
 Cleanup Date1: 07/13/12  
 Cleanup Method2: EPA 3660B  
 Cleanup Date2: 07/13/12

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG548175-1					
Aroclor 1016	ND		ug/l	0.083	0.055
Aroclor 1221	ND		ug/l	0.083	0.053
Aroclor 1232	ND		ug/l	0.083	0.031
Aroclor 1242	ND		ug/l	0.083	0.060
Aroclor 1248	ND		ug/l	0.083	0.051
Aroclor 1254	ND		ug/l	0.083	0.034
Aroclor 1260	ND		ug/l	0.083	0.032

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	111		30-150
Decachlorobiphenyl	145		30-150
2,4,5,6-Tetrachloro-m-xylene	99		30-150
Decachlorobiphenyl	119		30-150

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 02-04 Batch: WG547790-2 WG547790-3								
Aroclor 1016	81		71		40-140	13		50
Aroclor 1260	79		73		40-140	8		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	86		72		30-150
Decachlorobiphenyl	83		80		30-150
2,4,5,6-Tetrachloro-m-xylene	91		74		30-150
Decachlorobiphenyl	88		81		30-150

Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG548175-2 WG548175-3								
Aroclor 1016	96		103		40-140	7		50
Aroclor 1260	107		111		40-140	4		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	97		114		30-150
Decachlorobiphenyl	128		148		30-150
2,4,5,6-Tetrachloro-m-xylene	87		103		30-150
Decachlorobiphenyl	104		122		30-150

# PESTICIDES

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-01  
 Client ID: FIELD BLANK #1  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8081A  
 Analytical Date: 07/16/12 07:33  
 Analyst: BW

Date Collected: 07/10/12 11:45  
 Date Received: 07/10/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3510C  
 Extraction Date: 07/13/12 02:52  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/13/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/l	0.023	0.005	1
Lindane	ND		ug/l	0.023	0.005	1
Alpha-BHC	ND		ug/l	0.023	0.005	1
Beta-BHC	ND		ug/l	0.023	0.007	1
Heptachlor	ND		ug/l	0.023	0.004	1
Aldrin	ND		ug/l	0.023	0.003	1
Heptachlor epoxide	ND		ug/l	0.023	0.005	1
Endrin	ND		ug/l	0.047	0.005	1
Endrin ketone	ND		ug/l	0.047	0.006	1
Dieldrin	ND		ug/l	0.047	0.005	1
4,4'-DDE	ND		ug/l	0.047	0.004	1
4,4'-DDD	ND		ug/l	0.047	0.005	1
4,4'-DDT	ND		ug/l	0.047	0.005	1
Endosulfan I	ND		ug/l	0.023	0.004	1
Endosulfan II	ND		ug/l	0.047	0.006	1
Endosulfan sulfate	ND		ug/l	0.047	0.006	1
Methoxychlor	ND		ug/l	0.232	0.008	1
Toxaphene	ND		ug/l	0.232	0.073	1
trans-Chlordane	ND		ug/l	0.023	0.007	1
Chlordane	ND		ug/l	0.232	0.054	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	A
Decachlorobiphenyl	90		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	100		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

Lab ID: L1212237-01  
 Client ID: FIELD BLANK #1  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water  
 Analytical Method: 1,8151A  
 Analytical Date: 07/13/12 17:20  
 Analyst: SH

Date Collected: 07/10/12 11:45  
 Date Received: 07/10/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 8151A  
 Extraction Date: 07/12/12 00:07  
 Methylation Date: 07/13/12 04:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/l	10.6	0.579	1
2,4,5-T	ND		ug/l	2.13	0.520	1
2,4,5-TP (Silvex)	ND		ug/l	2.13	0.416	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	79		30-150	A
DCAA	90		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

Lab ID: L1212237-02  
 Client ID: LB2-1'-3'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 07/13/12 12:13  
 Analyst: BW  
 Percent Solids: 78%

Date Collected: 07/10/12 12:15  
 Date Received: 07/10/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 8151A  
 Extraction Date: 07/12/12 01:09  
 Methylation Date: 07/13/12 04:44

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	306	122.	1
2,4,5-T	ND		ug/kg	306	87.2	1
2,4,5-TP (Silvex)	ND		ug/kg	306	106.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	61		30-150	A
DCAA	88		30-150	B

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

Lab ID: L1212237-02 D  
 Client ID: LB2-1'-3'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/12/12 11:54  
 Analyst: BW  
 Percent Solids: 78%

Date Collected: 07/10/12 12:15  
 Date Received: 07/10/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/11/12 10:19  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/12/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	102	19.9	50
Lindane	ND		ug/kg	42.4	19.0	50
Alpha-BHC	ND		ug/kg	42.4	12.0	50
Beta-BHC	ND		ug/kg	102	38.6	50
Heptachlor	ND		ug/kg	50.9	22.8	50
Aldrin	ND		ug/kg	102	35.8	50
Heptachlor epoxide	ND		ug/kg	191	57.3	50
Endrin	ND		ug/kg	42.4	17.4	50
Endrin ketone	ND		ug/kg	102	26.2	50
Dieldrin	ND		ug/kg	63.6	31.8	50
4,4'-DDE	ND		ug/kg	102	23.5	50
4,4'-DDD	ND		ug/kg	102	36.3	50
4,4'-DDT	ND		ug/kg	191	81.9	50
Endosulfan I	ND		ug/kg	102	24.0	50
Endosulfan II	ND		ug/kg	102	34.0	50
Endosulfan sulfate	ND		ug/kg	42.4	19.4	50
Methoxychlor	ND		ug/kg	191	59.4	50
Toxaphene	ND		ug/kg	1910	534.	50
trans-Chlordane	ND		ug/kg	127	33.6	50
Chlordane	ND		ug/kg	827	337.	50

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

Lab ID: L1212237-03  
 Client ID: LB2-7'-9'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/12/12 12:06  
 Analyst: BW  
 Percent Solids: 89%

Date Collected: 07/10/12 12:55  
 Date Received: 07/10/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/11/12 10:19  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/12/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	1.74	0.340	1
Lindane	ND		ug/kg	0.724	0.324	1
Alpha-BHC	ND		ug/kg	0.724	0.206	1
Beta-BHC	ND		ug/kg	1.74	0.659	1
Heptachlor	ND		ug/kg	0.869	0.389	1
Aldrin	ND		ug/kg	1.74	0.612	1
Heptachlor epoxide	ND		ug/kg	3.26	0.977	1
Endrin	ND		ug/kg	0.724	0.297	1
Endrin ketone	ND		ug/kg	1.74	0.447	1
Dieldrin	ND		ug/kg	1.08	0.543	1
4,4'-DDE	ND		ug/kg	1.74	0.402	1
4,4'-DDD	ND		ug/kg	1.74	0.620	1
4,4'-DDT	ND		ug/kg	3.26	1.40	1
Endosulfan I	ND		ug/kg	1.74	0.410	1
Endosulfan II	ND		ug/kg	1.74	0.581	1
Endosulfan sulfate	ND		ug/kg	0.724	0.331	1
Methoxychlor	ND		ug/kg	3.26	1.01	1
Toxaphene	ND		ug/kg	32.6	9.12	1
trans-Chlordane	ND		ug/kg	2.17	0.573	1
Chlordane	ND		ug/kg	14.1	5.76	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		30-150	A
Decachlorobiphenyl	60		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	94		30-150	B

**Project Name:** RIVERSIDE PARCEL 2**Lab Number:** L1212237**Project Number:** 170201301**Report Date:** 07/19/12**SAMPLE RESULTS**

**Lab ID:** L1212237-03  
**Client ID:** LB2-7'-9'  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil  
**Analytical Method:** 1,8151A  
**Analytical Date:** 07/13/12 12:33  
**Analyst:** BW  
**Percent Solids:** 89%

**Date Collected:** 07/10/12 12:55  
**Date Received:** 07/10/12  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 8151A  
**Extraction Date:** 07/12/12 01:09  
**Methylation Date:** 07/13/12 04:44

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	183	73.2	1
2,4,5-T	ND		ug/kg	183	52.1	1
2,4,5-TP (Silvex)	ND		ug/kg	183	63.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	61		30-150	A
DCAA	76		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

Lab ID: L1212237-04  
 Client ID: LB2-9'-13'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8081A  
 Analytical Date: 07/12/12 12:19  
 Analyst: BW  
 Percent Solids: 76%

Date Collected: 07/10/12 13:40  
 Date Received: 07/10/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 3546  
 Extraction Date: 07/11/12 10:19  
 Cleanup Method1: EPA 3620B  
 Cleanup Date1: 07/12/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Organochlorine Pesticides by GC - Westborough Lab</b>						
Delta-BHC	ND		ug/kg	2.01	0.393	1
Lindane	ND		ug/kg	0.836	0.374	1
Alpha-BHC	ND		ug/kg	0.836	0.237	1
Beta-BHC	ND		ug/kg	2.01	0.761	1
Heptachlor	ND		ug/kg	1.00	0.450	1
Aldrin	ND		ug/kg	2.01	0.706	1
Heptachlor epoxide	ND		ug/kg	3.76	1.13	1
Endrin	ND		ug/kg	0.836	0.343	1
Endrin ketone	ND		ug/kg	2.01	0.517	1
Dieldrin	ND		ug/kg	1.25	0.627	1
4,4'-DDE	ND		ug/kg	2.01	0.464	1
4,4'-DDD	ND		ug/kg	2.01	0.716	1
4,4'-DDT	ND		ug/kg	3.76	1.61	1
Endosulfan I	ND		ug/kg	2.01	0.474	1
Endosulfan II	ND		ug/kg	2.01	0.670	1
Endosulfan sulfate	ND		ug/kg	0.836	0.382	1
Methoxychlor	ND		ug/kg	3.76	1.17	1
Toxaphene	ND		ug/kg	37.6	10.5	1
trans-Chlordane	ND		ug/kg	2.51	0.662	1
Chlordane	ND		ug/kg	16.3	6.64	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	96		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	100		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

Lab ID: L1212237-04  
 Client ID: LB2-9'-13'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Analytical Method: 1,8151A  
 Analytical Date: 07/13/12 12:53  
 Analyst: BW  
 Percent Solids: 76%

Date Collected: 07/10/12 13:40  
 Date Received: 07/10/12  
 Field Prep: Not Specified  
 Extraction Method: EPA 8151A  
 Extraction Date: 07/12/12 01:09  
 Methylation Date: 07/13/12 04:44

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Chlorinated Herbicides by GC - Westborough Lab						
2,4-D	ND		ug/kg	214	85.6	1
2,4,5-T	ND		ug/kg	214	60.9	1
2,4,5-TP (Silvex)	ND		ug/kg	214	73.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	60		30-150	A
DCAA	69		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8081A  
Analytical Date: 07/12/12 12:32  
Analyst: BW

Extraction Method: EPA 3546  
Extraction Date: 07/11/12 10:19  
Cleanup Method1: EPA 3620B  
Cleanup Date1: 07/12/12

Parameter	Result	Qualifier	Units	RL	MDL
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 02-04 Batch: WG547633-1					
Delta-BHC	ND		ug/kg	1.55	0.303
Lindane	ND		ug/kg	0.644	0.288
Alpha-BHC	ND		ug/kg	0.644	0.183
Beta-BHC	ND		ug/kg	1.55	0.586
Heptachlor	ND		ug/kg	0.773	0.347
Aldrin	ND		ug/kg	1.55	0.544
Heptachlor epoxide	ND		ug/kg	2.90	0.870
Endrin	ND		ug/kg	0.644	0.264
Endrin ketone	ND		ug/kg	1.55	0.398
Dieldrin	ND		ug/kg	0.966	0.483
4,4'-DDE	ND		ug/kg	1.55	0.358
4,4'-DDD	ND		ug/kg	1.55	0.552
4,4'-DDT	ND		ug/kg	2.90	1.24
Endosulfan I	ND		ug/kg	1.55	0.365
Endosulfan II	ND		ug/kg	1.55	0.517
Endosulfan sulfate	ND		ug/kg	0.644	0.294
Methoxychlor	ND		ug/kg	2.90	0.902
Toxaphene	ND		ug/kg	29.0	8.12
trans-Chlordane	ND		ug/kg	1.93	0.510
Chlordane	ND		ug/kg	12.6	5.12

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	97		30-150	A
Decachlorobiphenyl	71		30-150	A
2,4,5,6-Tetrachloro-m-xylene	68		30-150	B
Decachlorobiphenyl	100		30-150	B

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8151A  
 Analytical Date: 07/13/12 16:19  
 Analyst: SH

Extraction Method: EPA 8151A  
 Extraction Date: 07/12/12 00:07

Methylation Date: 07/13/12 04:56

Parameter	Result	Qualifier	Units	RL	MDL
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01 Batch: WG547845-1					
2,4-D	ND		ug/l	10.0	0.544
2,4,5-T	ND		ug/l	2.00	0.488
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.391

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	80		30-150	A
DCAA	88		30-150	B

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8151A  
 Analytical Date: 07/13/12 10:02  
 Analyst: BW

Extraction Method: EPA 8151A  
 Extraction Date: 07/12/12 01:09

Methylation Date: 07/13/12 04:44

Parameter	Result	Qualifier	Units	RL	MDL
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 02-04 Batch: WG547857-1					
2,4-D	ND		ug/kg	166	66.6
2,4,5-T	ND		ug/kg	166	47.4
2,4,5-TP (Silvex)	ND		ug/kg	166	57.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	48		30-150	A
DCAA	57		30-150	B

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8081A  
Analytical Date: 07/16/12 07:45  
Analyst: BW

Extraction Method: EPA 3510C  
Extraction Date: 07/13/12 02:52  
Cleanup Method1: EPA 3620B  
Cleanup Date1: 07/13/12

Parameter	Result	Qualifier	Units	RL	MDL
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG548174-1					
Delta-BHC	ND		ug/l	0.020	0.005
Lindane	ND		ug/l	0.020	0.004
Alpha-BHC	ND		ug/l	0.020	0.004
Beta-BHC	ND		ug/l	0.020	0.006
Heptachlor	ND		ug/l	0.020	0.003
Aldrin	ND		ug/l	0.020	0.002
Heptachlor epoxide	ND		ug/l	0.020	0.004
Endrin	ND		ug/l	0.040	0.004
Endrin ketone	ND		ug/l	0.040	0.005
Dieldrin	ND		ug/l	0.040	0.004
4,4'-DDE	ND		ug/l	0.040	0.004
4,4'-DDD	ND		ug/l	0.040	0.005
4,4'-DDT	ND		ug/l	0.040	0.004
Endosulfan I	ND		ug/l	0.020	0.003
Endosulfan II	ND		ug/l	0.040	0.005
Endosulfan sulfate	ND		ug/l	0.040	0.005
Methoxychlor	ND		ug/l	0.200	0.007
Toxaphene	ND		ug/l	0.200	0.063
trans-Chlordane	ND		ug/l	0.020	0.006
Chlordane	ND		ug/l	0.200	0.046

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91		30-150	A
Decachlorobiphenyl	101		30-150	A
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	105		30-150	B

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02-04 Batch: WG547633-2 WG547633-3								
Delta-BHC	93		85		30-150	9		30
Lindane	90		83		30-150	8		30
Alpha-BHC	89		83		30-150	7		30
Beta-BHC	96		87		30-150	10		30
Heptachlor	95		89		30-150	7		30
Aldrin	96		90		30-150	6		30
Heptachlor epoxide	97		90		30-150	7		30
Endrin	120		110		30-150	9		30
Endrin ketone	105		95		30-150	10		30
Dieldrin	106		98		30-150	8		30
4,4'-DDE	103		96		30-150	7		30
4,4'-DDD	102		93		30-150	9		30
4,4'-DDT	99		91		30-150	8		30
Endosulfan I	103		96		30-150	7		30
Endosulfan II	101		95		30-150	6		30
Endosulfan sulfate	128		113		30-150	12		30
Methoxychlor	114		101		30-150	12		30
trans-Chlordane	103		95		30-150	8		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 02-04 Batch: WG547633-2 WG547633-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	104		96		30-150	A
Decachlorobiphenyl	75		67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		65		30-150	B
Decachlorobiphenyl	104		94		30-150	B

Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01 Batch: WG547845-2 WG547845-3

2,4-D	95		93		30-150	2	25
2,4,5-T	86		84		30-150	2	25
2,4,5-TP (Silvex)	84		82		30-150	2	25

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	87		85		30-150	A
DCAA	96		107		30-150	B

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 02-04 Batch: WG547857-2 WG547857-3								
2,4-D	67		72		30-150	7		30
2,4,5-T	65		68		30-150	5		30
2,4,5-TP (Silvex)	63		66		30-150	5		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	84		63		30-150	A
DCAA	71		72		30-150	B

Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG548174-2 WG548174-3								
Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Delta-BHC	93		90		30-150	3		20
Lindane	92		89		30-150	3		20
Alpha-BHC	92		88		30-150	4		20
Beta-BHC	91		89		30-150	2		20
Heptachlor	83		77		30-150	8		20
Aldrin	82		74		30-150	10		20
Heptachlor epoxide	102		98		30-150	4		20
Endrin	119		115		30-150	3		20
Endrin ketone	100		99		30-150	1		20

### Lab Control Sample Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG548174-2 WG548174-3								
Dieldrin	110		106		30-150	4		20
4,4'-DDE	109		102		30-150	7		20
4,4'-DDD	91		96		30-150	5		20
4,4'-DDT	102		98		30-150	4		20
Endosulfan I	105		101		30-150	4		20
Endosulfan II	102		100		30-150	2		20
Endosulfan sulfate	117		116		30-150	1		20
Methoxychlor	108		104		30-150	4		20
trans-Chlordane	100		93		30-150	7		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91		90		30-150	A
Decachlorobiphenyl	85		87		30-150	A
2,4,5,6-Tetrachloro-m-xylene	58		58		30-150	B
Decachlorobiphenyl	101		95		30-150	B



## METALS

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

Lab ID: L1212237-01  
 Client ID: FIELD BLANK #1  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Water

Date Collected: 07/10/12 11:45  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	0.003	J	mg/l	0.010	0.002	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Antimony, Total	ND		mg/l	0.0005	0.0001	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Arsenic, Total	0.0003	J	mg/l	0.0005	0.0002	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Barium, Total	0.0003	J	mg/l	0.0005	0.0001	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Beryllium, Total	ND		mg/l	0.0005	0.0001	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Cadmium, Total	ND		mg/l	0.0005	0.0001	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Calcium, Total	0.112		mg/l	0.100	0.032	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Chromium, Total	0.0016		mg/l	0.0010	0.0002	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Cobalt, Total	ND		mg/l	0.0005	0.0001	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Copper, Total	0.0005	J	mg/l	0.0010	0.0001	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Iron, Total	0.242		mg/l	0.050	0.013	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Lead, Total	ND		mg/l	0.0010	0.0002	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Magnesium, Total	ND		mg/l	0.100	0.023	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Manganese, Total	0.0032		mg/l	0.0005	0.0001	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Mercury, Total	ND		mg/l	0.0002	0.0001	1	07/14/12 08:20	07/14/12 12:44	EPA 7470A	1,7470A	KL
Nickel, Total	0.0001	J	mg/l	0.0005	0.0001	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Potassium, Total	ND		mg/l	0.100	0.027	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Selenium, Total	ND		mg/l	0.005	0.0003	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Silver, Total	ND		mg/l	0.0005	0.0001	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Sodium, Total	0.062	J	mg/l	0.100	0.015	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Thallium, Total	ND		mg/l	0.0005	0.00003	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Vanadium, Total	ND		mg/l	0.0050	0.0001	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK
Zinc, Total	0.0022	J	mg/l	0.0100	0.0012	1	07/12/12 13:03	07/14/12 18:08	EPA 3005A	1,6020	AK



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

Lab ID: L1212237-02  
 Client ID: LB2-1'-3'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Percent Solids: 78%

Date Collected: 07/10/12 12:15  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	11000		mg/kg	10	2.3	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Antimony, Total	2.9	J	mg/kg	5.2	0.99	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Arsenic, Total	6.4		mg/kg	1.0	0.35	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Barium, Total	85		mg/kg	1.0	0.09	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Beryllium, Total	0.57		mg/kg	0.52	0.04	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Cadmium, Total	0.20	J	mg/kg	1.0	0.07	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Calcium, Total	22000		mg/kg	10	2.2	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Chromium, Total	34		mg/kg	1.0	0.21	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Cobalt, Total	3.9		mg/kg	2.1	0.22	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Copper, Total	25		mg/kg	1.0	0.48	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Iron, Total	16000		mg/kg	5.2	1.8	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Lead, Total	73		mg/kg	5.2	0.29	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Magnesium, Total	2700		mg/kg	10	4.6	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Manganese, Total	250		mg/kg	1.0	0.10	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Mercury, Total	0.17		mg/kg	0.10	0.02	1	07/16/12 20:30	07/17/12 10:34	EPA 7471A	1,7471A	KL
Nickel, Total	13		mg/kg	2.6	0.29	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Potassium, Total	1000		mg/kg	260	82.	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Selenium, Total	1.0	J	mg/kg	2.1	0.34	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Silver, Total	ND		mg/kg	1.0	0.17	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Sodium, Total	1200		mg/kg	210	82.	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Thallium, Total	ND		mg/kg	2.1	0.64	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Vanadium, Total	18		mg/kg	1.0	0.23	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS
Zinc, Total	63		mg/kg	5.2	0.56	2	07/16/12 13:00	07/17/12 20:45	EPA 3050B	1,6010B	MS



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

Lab ID: L1212237-03  
 Client ID: LB2-7'-9'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Percent Solids: 89%

Date Collected: 07/10/12 12:55  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	6800		mg/kg	8.6	1.9	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Antimony, Total	1.6	J	mg/kg	4.3	0.82	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Arsenic, Total	1.7		mg/kg	0.86	0.29	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Barium, Total	31		mg/kg	0.86	0.07	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Beryllium, Total	0.18	J	mg/kg	0.43	0.03	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Cadmium, Total	ND		mg/kg	0.86	0.05	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Calcium, Total	5000		mg/kg	8.6	1.9	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Chromium, Total	9.3		mg/kg	0.86	0.17	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Cobalt, Total	4.4		mg/kg	1.7	0.18	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Copper, Total	14		mg/kg	0.86	0.40	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Iron, Total	10000		mg/kg	4.3	1.5	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Lead, Total	3.5	J	mg/kg	4.3	0.24	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Magnesium, Total	4000		mg/kg	8.6	3.9	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Manganese, Total	220		mg/kg	0.86	0.09	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Mercury, Total	ND		mg/kg	0.09	0.02	1	07/16/12 20:30	07/17/12 10:35	EPA 7471A	1,7471A	KL
Nickel, Total	9.5		mg/kg	2.2	0.24	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Potassium, Total	1200		mg/kg	220	69.	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Selenium, Total	0.95	J	mg/kg	1.7	0.28	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Silver, Total	ND		mg/kg	0.86	0.14	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Sodium, Total	220		mg/kg	170	68.	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Thallium, Total	ND		mg/kg	1.7	0.54	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Vanadium, Total	14		mg/kg	0.86	0.19	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS
Zinc, Total	23		mg/kg	4.3	0.46	2	07/16/12 13:00	07/17/12 20:48	EPA 3050B	1,6010B	MS



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

Lab ID: L1212237-04  
 Client ID: LB2-9'-13'  
 Sample Location: 17-29 WEST END AVE.  
 Matrix: Soil  
 Percent Solids: 76%

Date Collected: 07/10/12 13:40  
 Date Received: 07/10/12  
 Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Westborough Lab</b>											
Aluminum, Total	26000		mg/kg	10	2.2	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Antimony, Total	5.4		mg/kg	5.0	0.96	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Arsenic, Total	3.0		mg/kg	1.0	0.34	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Barium, Total	270		mg/kg	1.0	0.08	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Beryllium, Total	0.48	J	mg/kg	0.50	0.04	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Cadmium, Total	0.14	J	mg/kg	1.0	0.06	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Calcium, Total	2600		mg/kg	10	2.2	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Chromium, Total	47		mg/kg	1.0	0.20	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Cobalt, Total	20		mg/kg	2.0	0.22	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Copper, Total	55		mg/kg	1.0	0.47	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Iron, Total	39000		mg/kg	5.0	1.7	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Lead, Total	13		mg/kg	5.0	0.28	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Magnesium, Total	13000		mg/kg	10	4.5	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Manganese, Total	400		mg/kg	1.0	0.10	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Mercury, Total	0.04	J	mg/kg	0.09	0.02	1	07/16/12 20:30	07/17/12 10:37	EPA 7471A	1,7471A	KL
Nickel, Total	41		mg/kg	2.5	0.28	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Potassium, Total	13000		mg/kg	250	80.	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Selenium, Total	2.5		mg/kg	2.0	0.33	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Silver, Total	ND		mg/kg	1.0	0.16	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Sodium, Total	620		mg/kg	200	80.	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Thallium, Total	ND		mg/kg	2.0	0.63	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Vanadium, Total	77		mg/kg	1.0	0.22	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS
Zinc, Total	120		mg/kg	5.0	0.54	2	07/16/12 13:00	07/17/12 21:13	EPA 3050B	1,6010B	MS



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

## Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG547975-1										
Aluminum, Total	ND		mg/l	0.010	0.002	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Antimony, Total	ND		mg/l	0.0005	0.0001	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Arsenic, Total	ND		mg/l	0.0005	0.0002	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Barium, Total	ND		mg/l	0.0005	0.0001	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Beryllium, Total	ND		mg/l	0.0005	0.0001	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Cadmium, Total	ND		mg/l	0.0005	0.0001	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Calcium, Total	ND		mg/l	0.100	0.032	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Chromium, Total	ND		mg/l	0.0010	0.0002	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Cobalt, Total	ND		mg/l	0.0005	0.0001	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Copper, Total	ND		mg/l	0.0010	0.0001	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Iron, Total	ND		mg/l	0.050	0.013	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Lead, Total	ND		mg/l	0.0010	0.0002	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Magnesium, Total	ND		mg/l	0.100	0.023	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Manganese, Total	ND		mg/l	0.0005	0.0001	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Nickel, Total	ND		mg/l	0.0005	0.0001	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Potassium, Total	ND		mg/l	0.100	0.027	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Selenium, Total	ND		mg/l	0.005	0.0003	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Silver, Total	ND		mg/l	0.0005	0.0001	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Sodium, Total	0.033	J	mg/l	0.100	0.015	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Thallium, Total	ND		mg/l	0.0005	0.00003	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Vanadium, Total	ND		mg/l	0.0050	0.0001	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK
Zinc, Total	ND		mg/l	0.0100	0.0012	1	07/12/12 13:03	07/14/12 17:23	1,6020	AK

### Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG548357-1										
Mercury, Total	ND		mg/l	0.0002	0.0001	1	07/14/12 08:20	07/14/12 12:10	1,7470A	KL



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

## Method Blank Analysis Batch Quality Control

### Prep Information

Digestion Method: EPA 7470A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 02-04 Batch: WG548592-1									
Aluminum, Total	ND	mg/kg	4.0	0.89	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Antimony, Total	ND	mg/kg	2.0	0.38	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Arsenic, Total	ND	mg/kg	0.40	0.14	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Barium, Total	ND	mg/kg	0.40	0.03	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Beryllium, Total	ND	mg/kg	0.20	0.01	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Cadmium, Total	ND	mg/kg	0.40	0.03	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Calcium, Total	ND	mg/kg	4.0	0.87	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Chromium, Total	ND	mg/kg	0.40	0.08	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Cobalt, Total	ND	mg/kg	0.80	0.09	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Copper, Total	ND	mg/kg	0.40	0.18	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Iron, Total	ND	mg/kg	2.0	0.69	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Lead, Total	ND	mg/kg	2.0	0.11	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Magnesium, Total	ND	mg/kg	4.0	1.8	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Manganese, Total	ND	mg/kg	0.40	0.04	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Nickel, Total	ND	mg/kg	1.0	0.11	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Potassium, Total	ND	mg/kg	100	32.	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Selenium, Total	ND	mg/kg	0.80	0.13	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Silver, Total	ND	mg/kg	0.40	0.07	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Sodium, Total	ND	mg/kg	80	32.	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Thallium, Total	ND	mg/kg	0.80	0.25	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Vanadium, Total	ND	mg/kg	0.40	0.09	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS
Zinc, Total	ND	mg/kg	2.0	0.22	1	07/16/12 13:00	07/17/12 20:11	1,6010B	MS

### Prep Information

Digestion Method: EPA 3050B



Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 02-04 Batch: WG548651-5									
Mercury, Total	ND	mg/kg	0.08	0.02	1	07/16/12 20:30	07/17/12 10:15	1,7471A	KL

### Prep Information

Digestion Method: EPA 7471A

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG547975-2								
Aluminum, Total	95		-		80-120	-		
Antimony, Total	91		-		80-120	-		
Arsenic, Total	105		-		80-120	-		
Barium, Total	97		-		80-120	-		
Beryllium, Total	111		-		80-120	-		
Cadmium, Total	110		-		80-120	-		
Calcium, Total	106		-		80-120	-		
Chromium, Total	99		-		80-120	-		
Cobalt, Total	101		-		80-120	-		
Copper, Total	103		-		80-120	-		
Iron, Total	100		-		80-120	-		
Lead, Total	102		-		80-120	-		
Magnesium, Total	97		-		80-120	-		
Manganese, Total	98		-		80-120	-		
Nickel, Total	103		-		80-120	-		
Potassium, Total	106		-		80-120	-		
Selenium, Total	115		-		80-120	-		
Silver, Total	103		-		80-120	-		
Sodium, Total	101		-		80-120	-		
Thallium, Total	98		-		80-120	-		
Vanadium, Total	102		-		80-120	-		



## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Project Number:** 170201301

**Lab Number:** L1212237

**Report Date:** 07/19/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG547975-2					
Zinc, Total	109	-	80-120	-	
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG548357-2					
Mercury, Total	94	-	80-120	-	

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 02-04 Batch: WG548592-2					
Aluminum, Total	107	-	75-125	-	
Antimony, Total	99	-	75-125	-	
Arsenic, Total	101	-	75-125	-	
Barium, Total	100	-	75-125	-	
Beryllium, Total	102	-	75-125	-	
Cadmium, Total	102	-	75-125	-	
Calcium, Total	100	-	75-125	-	
Chromium, Total	100	-	75-125	-	
Cobalt, Total	99	-	75-125	-	
Copper, Total	102	-	75-125	-	
Iron, Total	100	-	75-125	-	
Lead, Total	100	-	75-125	-	
Magnesium, Total	99	-	75-125	-	
Manganese, Total	99	-	75-125	-	
Nickel, Total	96	-	75-125	-	
Potassium, Total	96	-	75-125	-	
Selenium, Total	100	-	75-125	-	
Silver, Total	102	-	75-125	-	
Sodium, Total	107	-	75-125	-	
Thallium, Total	99	-	75-125	-	
Vanadium, Total	99	-	75-125	-	

## Lab Control Sample Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 02-04 Batch: WG548592-2					
Zinc, Total	96	-	75-125	-	
Total Metals - Westborough Lab Associated sample(s): 02-04 Batch: WG548651-6 SRM Lot Number: 0518-10-02					
Mercury, Total	127	-	67-133	-	

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01    QC Batch ID: WG547975-4    QC Sample: L1211433-01    Client ID: MS Sample												
Aluminum, Total	0.604	2	2.71	105		-	-		80-120	-		20
Antimony, Total	0.0031J	0.5	0.4896	98		-	-		80-120	-		20
Arsenic, Total	ND	0.12	0.1331	111		-	-		80-120	-		20
Barium, Total	0.0413	2	2.016	99		-	-		80-120	-		20
Beryllium, Total	ND	0.05	0.0518	104		-	-		80-120	-		20
Cadmium, Total	ND	0.051	0.0545	107		-	-		80-120	-		20
Calcium, Total	91.0	10	104	130	Q	-	-		80-120	-		20
Chromium, Total	ND	0.2	0.1984	99		-	-		80-120	-		20
Cobalt, Total	ND	0.5	0.5000	100		-	-		80-120	-		20
Copper, Total	0.0024J	0.25	0.2500	100		-	-		80-120	-		20
Iron, Total	1.15	1	2.14	99		-	-		80-120	-		20
Lead, Total	0.0026J	0.51	0.5416	106		-	-		80-120	-		20
Magnesium, Total	221.	10	236	150	Q	-	-		80-120	-		20
Manganese, Total	0.1210	0.5	0.6010	96		-	-		80-120	-		20
Nickel, Total	0.0015J	0.5	0.5032	101		-	-		80-120	-		20
Potassium, Total	71.8	10	86.3	145	Q	-	-		80-120	-		20
Selenium, Total	ND	0.12	0.131	109		-	-		80-120	-		20
Silver, Total	ND	0.05	0.0516	103		-	-		80-120	-		20
Sodium, Total	1840	10	2080	700	Q	-	-		80-120	-		20
Thallium, Total	ND	0.12	0.1217	101		-	-		80-120	-		20
Vanadium, Total	0.0046J	0.5	0.5112	102		-	-		80-120	-		20

**Matrix Spike Analysis**  
Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG547975-4 QC Sample: L1211433-01 Client ID: MS Sample									
Zinc, Total	0.0593J	0.5	0.5774	115	-	-	80-120	-	20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG548357-4 QC Sample: L1212104-02 Client ID: MS Sample									
Mercury, Total	0.0001J	0.001	0.0012	118	-	-	70-130	-	20

### Matrix Spike Analysis Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG548592-4 QC Sample: L1212227-01 Client ID: MS Sample									
Aluminum, Total	30000	172	30000	0	Q	-	75-125	-	35
Antimony, Total	4.0J	43	13	30	Q	-	75-125	-	35
Arsenic, Total	2.0	10.3	12	97		-	75-125	-	35
Barium, Total	1500	172	560	0	Q	-	75-125	-	35
Beryllium, Total	1.2	4.3	5.2	93		-	75-125	-	35
Cadmium, Total	0.92	4.38	4.7	86		-	75-125	-	35
Calcium, Total	9400	860	12000	302	Q	-	75-125	-	35
Chromium, Total	43.	17.2	60	99		-	75-125	-	35
Cobalt, Total	16.	43	55	91		-	75-125	-	35
Copper, Total	110	21.5	120	46	Q	-	75-125	-	35
Iron, Total	28000	86	28000	0	Q	-	75-125	-	35
Lead, Total	68.	43.8	82	32	Q	-	75-125	-	35
Magnesium, Total	12000	860	12000	0	Q	-	75-125	-	35
Manganese, Total	490	43	550	140	Q	-	75-125	-	35
Nickel, Total	33.	43	70	86		-	75-125	-	35
Potassium, Total	11000	860	12000	116		-	75-125	-	35
Selenium, Total	1.8	10.3	10	79		-	75-125	-	35
Silver, Total	0.20J	25.8	26	101		-	75-125	-	35
Sodium, Total	870	860	1800	108		-	75-125	-	35
Thallium, Total	1.5J	10.3	10	97		-	75-125	-	35
Vanadium, Total	52.	43	92	93		-	75-125	-	35

**Matrix Spike Analysis**  
Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Lab Number: L1212237

Project Number: 170201301

Report Date: 07/19/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG548592-4 QC Sample: L1212227-01 Client ID: MS Sample									
Zinc, Total	190	43	220	70	Q	-	75-125	-	35
Total Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG548651-8 QC Sample: L1212227-01 Client ID: MS Sample									
Mercury, Total	0.09	0.171	0.30	124	-	-	70-130	-	35

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212237

Report Date: 07/19/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG547975-3 QC Sample: L1211433-01 Client ID: DUP Sample						
Zinc, Total	0.0593J	0.0603J	mg/l	NC		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG548357-3 QC Sample: L1212104-02 Client ID: DUP Sample						
Mercury, Total	0.0001J	0.0001J	mg/l	NC		20

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212237

Report Date: 07/19/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG548592-3 QC Sample: L1212227-01 Client ID: DUP Sample					
Aluminum, Total	30000	31000	mg/kg	3	35
Antimony, Total	4.0J	4.2J	mg/kg	NC	35
Arsenic, Total	2.0	2.8	mg/kg	33	35
Barium, Total	1500	810	mg/kg	60 Q	35
Beryllium, Total	1.2	1.3	mg/kg	8	35
Cadmium, Total	0.92	0.70J	mg/kg	NC	35
Calcium, Total	9400	7400	mg/kg	24	35
Chromium, Total	43.	39	mg/kg	10	35
Cobalt, Total	16.	14	mg/kg	13	35
Copper, Total	110	85	mg/kg	26	35
Iron, Total	28000	29000	mg/kg	4	35
Lead, Total	68.	60	mg/kg	13	35
Magnesium, Total	12000	10000	mg/kg	18	35
Manganese, Total	490	470	mg/kg	4	35
Nickel, Total	33.	28	mg/kg	16	35
Potassium, Total	11000	9800	mg/kg	12	35
Selenium, Total	1.8	1.4J	mg/kg	NC	35
Silver, Total	0.20J	ND	mg/kg	NC	35
Sodium, Total	870	720	mg/kg	19	35

## Lab Duplicate Analysis

Batch Quality Control

Project Name: RIVERSIDE PARCEL 2

Project Number: 170201301

Lab Number: L1212237

Report Date: 07/19/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
<b>Total Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG548592-3 QC Sample: L1212227-01 Client ID: DUP Sample</b>					
Thallium, Total	1.5J	0.94J	mg/kg	NC	35
Vanadium, Total	52.	54	mg/kg	4	35
Zinc, Total	190	170	mg/kg	11	35
<b>Total Metals - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG548651-7 QC Sample: L1212227-01 Client ID: DUP Sample</b>					
Mercury, Total	0.09	0.07J	mg/kg	NC	35

# **INORGANICS & MISCELLANEOUS**

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

**Lab ID:** L1212237-02  
**Client ID:** LB2-1'-3'  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil

**Date Collected:** 07/10/12 12:15  
**Date Received:** 07/10/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	78		%	0.10	NA	1	-	07/11/12 17:00	30,2540G	RD



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

**Lab ID:** L1212237-03  
**Client ID:** LB2-7'-9'  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil

**Date Collected:** 07/10/12 12:55  
**Date Received:** 07/10/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89		%	0.10	NA	1	-	07/11/12 17:00	30,2540G	RD



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**SAMPLE RESULTS**

**Lab ID:** L1212237-04  
**Client ID:** LB2-9'-13'  
**Sample Location:** 17-29 WEST END AVE.  
**Matrix:** Soil

**Date Collected:** 07/10/12 13:40  
**Date Received:** 07/10/12  
**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	76		%	0.10	NA	1	-	07/11/12 17:00	30,2540G	RD



## Lab Duplicate Analysis

Batch Quality Control

**Project Name:** RIVERSIDE PARCEL 2

**Project Number:** 170201301

**Lab Number:** L1212237

**Report Date:** 07/19/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG547780-1 QC Sample: L1212210-01 Client ID: DUP Sample						
Solids, Total	68.	68	%	0		20

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

### Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

#### Cooler Information Custody Seal

##### Cooler

A Absent

#### Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212237-01A	Vial HCl preserved	A	N/A	5	Y	Absent	NYTCL-8260(14)
L1212237-01B	Vial HCl preserved	A	N/A	5	Y	Absent	NYTCL-8260(14)
L1212237-01C	Vial HCl preserved	A	N/A	5	Y	Absent	NYTCL-8260(14)
L1212237-01D	Amber 1000ml unpreserved	A	7	5	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1212237-01E	Amber 1000ml unpreserved	A	7	5	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1212237-01F	Amber 1000ml unpreserved	A	7	5	Y	Absent	NYTCL-8082-1200ML(7)
L1212237-01G	Amber 1000ml unpreserved	A	7	5	Y	Absent	NYTCL-8082-1200ML(7)
L1212237-01H	Amber 1000ml unpreserved	A	7	5	Y	Absent	HERB-APA(7)
L1212237-01I	Amber 1000ml unpreserved	A	7	5	Y	Absent	NYTCL-8081(7)
L1212237-01J	Plastic 500ml HNO3 preserved	A	<2	5	Y	Absent	BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1212237-02A	Vial Large unpreserved	A	N/A	5	Y	Absent	NYTCL-8260(14)
L1212237-02B	Amber 250ml unpreserved	A	N/A	5	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

\*Values in parentheses indicate holding time in days

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212237-02C	Amber 120ml unpreserved	A	N/A	5	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212237-03A	Vial Large unpreserved	A	N/A	5	Y	Absent	NYTCL-8260(14)
L1212237-03B	Amber 250ml unpreserved	A	N/A	5	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212237-03C	Amber 120ml unpreserved	A	N/A	5	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1212237-04A	Vial Large unpreserved	A	N/A	5	Y	Absent	NYTCL-8260(14)
L1212237-04B	Amber 250ml unpreserved	A	N/A	5	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

\*Values in parentheses indicate holding time in days



**Project Name:** RIVERSIDE PARCEL 2**Project Number:** 170201301**Lab Number:** L1212237**Report Date:** 07/19/12**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1212237-04C	Amber 120ml unpreserved	A	N/A	5	Y	Absent	BE-TI(180),NYTCL-8270(14),AS-TI(180),BA-TI(180),AG-TI(180),HERB-APA(14),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),TS(7),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),NYTCL-8081(14),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),NYTCL-8082(14),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

**Container Comments**

L1212237-01F

L1212237-01G

L1212237-01I

L1212237-04C

\*Values in parentheses indicate holding time in days

**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

## GLOSSARY

### Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

### Data Qualifiers

<b>A</b>	- Spectra identified as "Aldol Condensation Product".
<b>B</b>	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
<b>C</b>	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
<b>D</b>	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
<b>E</b>	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
<b>G</b>	- The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
<b>H</b>	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
<b>I</b>	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
<b>M</b>	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
<b>NJ</b>	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

*Report Format:* DU Report with "J" Qualifiers



**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

**Data Qualifiers**

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL). This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample.

Report Format: DU Report with "J" Qualifiers

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**Project Name:** RIVERSIDE PARCEL 2  
**Project Number:** 170201301

**Lab Number:** L1212237  
**Report Date:** 07/19/12

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.





SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

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*Drinking Water* (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 245.2, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, 245.2, SW-846 6010B, 6010C, 6020, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9030B, 9040B, SM426C, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082, 8081A, 8081B, 8151A.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 6010B, 6010C, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050, 9065, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3550B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, 8151A, 8015B, 8082, 8082A, 8081A, 8081B.)

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*Drinking Water* (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.2, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

*Non-Potable Water* (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, 2540G, EPA 120.1, SM2510B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, 245.2, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ OQA-QAM-025 Rev.7, NJ EPH.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9045C, 9050A, 9065. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

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*Drinking Water* (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

*Non-Potable Water* (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 624, 8260B, 8270C, 8270D, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1010, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012A, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010B, 9030B. Organic Parameters: EPA 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C, 3546, 3580, 3580A, 5030B, 5035.)

Certificate/Lab ID : 666. Organic Parameters: MA-EPH, MA-VPH.

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Certificate/Lab ID : 68-03671. **NELAP Accredited.**  
Drinking Water (Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 1312, 3005A, 200.7, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3050B, 3060A, 6010B, 6010C, 7196A, 7471A, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-H. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330)

Certificate/Lab ID: LAO00065. **NELAP Accredited via NY-DOH.**  
Refer to MA-DEP Certificate for Potable and Non-Potable Water.  
Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**  
Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S<sup>2-</sup> D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Certificate/Lab ID: 460195. **NELAP Accredited.**  
Non-Potable Water (Inorganic Parameters: EPA 3005A,3015,1312,6010B,6010C,SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X. Organic Parameters: EPA 8260B)

Solid & Hazardous Waste (Inorganic Parameters: EPA 3050B, 1311, 1312, 6010B, 6010C, 9030B, 9010B, 9012A, 9014. Organic Parameters: EPA 5035, 5030B, 8260B, 8015B, 8015C.)

Certificate/Lab ID: L2217.  
Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

Parameter List:  
Organic Parameters: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. Inorganic Parameters: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. Other Parameters: Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). Soil Parameters: 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix, SO4 in a soil matrix. Other Parameters: Total Petroleum Hydrocarbons, Oil & Grease





# NJ CHAIN OF CUSTODY

PAGE 2 OF 2

WESTBORO, MA  
8 Walkup Drive  
TEL: 508-898-9220  
FAX: 508-898-9193

MANSFIELD, MA  
320 Forbes Blvd  
TEL: 508-822-9300  
FAX: 508-822-3288

### Client Information

Client: Morgan Engineering  
Address: 360 W. 81st St.  
NY, NY  
Phone: (212) 479-5400  
Fax: \_\_\_\_\_

### Project Information

Project Name: Riverside Parcel 2  
Project Location: 17-2A West End Ave  
Project #: 170201301  
Project Manager: Jason Houges  
ALPHA Quote #: \_\_\_\_\_  
Turn-Around Time \_\_\_\_\_

Standard  RUSH (only confirmed if pre-approved)  
Date Due: 7/11/12 Time: \_\_\_\_\_

These samples have been previously analyzed by Alpha

Category 1  Category 2

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		

12257	3	LB 2 - 7' - 9'	7/10/12	12:55	SOIL	CM
	4	LB2 - 9' - 13'		13:40		
	4	LB2 - 9' - 13'		13:40		
	4	LB2 - 9' - 13'		13:40		
	S	Trip Blank				

Date Rec'd in Lab: 7/10/12

### Report Type

Data Summary  NJ Full  
 NJ Reduced  Other \_\_\_\_\_

### Regulatory Requirements

SRS-Residential/Non Residential  
 SRS-Impact To Groundwater  
 NJ Ground Water Quality Standards  
 Other \_\_\_\_\_

### Billing Information

Same as Client info PO #: \_\_\_\_\_

### Site Information

Is this site impacted by Petroleum?  
Yes / No (circle one)  
(Please indicate Petroleum Product - See Table 2-1 on reverse side)  
Petroleum Product: \_\_\_\_\_  
Are any samples for waste disposal?  
Yes / No (circle one)  
(Please indicate which samples below in Sample Specific Comments field)

ANALYSIS	RESULTS
<del>PCB/PAH</del>	
<del>Metals</del>	
TAL Metals	
TCL SVOC	
TCL VOC	

### Sample Specific Comments

TOTAL # \_\_\_\_\_  
BOTTOM LINE S

### Preservative Code:

- A = None
- B = HCl
- C = HNO3
- D = H2SO4
- E = NaOH
- F = MeOH
- G = NH4SO4
- H = Other

Westboro: Certification No: MA935  
Mansfield: Certification No: MA015

Container Type  
Preservative

Received By: GGV

Date/Time

Relinquished By: [Signature]

Date/Time

Received By: [Signature]

Date/Time

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.