Initial Air Sampling for Lead at the Proposed Fairfield County Jail/Public Safety Facility and Existing Sheriff's Office and MSMJ 334 West Wheeling Street Lancaster, Ohio





Submitted to:
Fairfield County
Board of Commissioners
210 East Main Street
Lancaster, Ohio 43130

Prepared by:
Bennett & Williams Environmental Consultants, Inc.
98 County Line Road West, Suite C
Westerville, Ohio 43082
(614) 882-9122

November 10, 2014

RELIABILITY OF REPORT - DISCLAIMER

Conclusions reached in this report are based upon the objective data available to the CONSULTANTS at the time of forming their opinions and as presented in the report. The accuracy of the report depends upon the accuracy of these data. Every effort is made to evaluate the information by the methods that generally are recognized to constitute the state of the art at the time of rendering the report and conclusions, and the conclusions reached herein represent our opinions. Subsurface conditions are known to vary both in space and time, and there is inherent risk in the extrapolation of data.

THE CONSULTANTS are not responsible for actual conditions proved to be materially at variance with the data that were available to them and upon which they relied, as presented in the report.

The opinions, conclusions and recommendations shown in the report are put forth for a specific and proposed purpose and for the specific site discussed. The CONSULTANTS are not responsible for any other application, whether of purpose or location, of our opinions, conclusions and recommendations other than as specifically indicated in the report.

EXECUTIVE SUMMARY

The July 7, 2014 report, *"Limited Phase II Environmental Site Assessment for the Proposed Fairfield County Jail/Public Safety Facility"* identified concentrations of lead in the fill materials that, when placed into the Adult Lead Methodology (ALM) model indicated that construction worker exposure is subject to 29CFR 1926.62 (Section 5.10.3). These OSHA regulations require that employers with workers who will be occupationally exposed to lead must determine whether an employee is exposed to levels of lead above the air action level of 30 $\mu g/m^3$. These regulations further require initial air monitoring to determine if the action level is exceeded. If initial monitoring shows that the action is not exceeded, then no further air monitoring is necessary. If this initial monitoring shows that an employee may be exposed to levels of lead above the action level, then an air monitoring program and medical surveillance program must be established.

In order to ascertain if lead concentrations pose a risk to construction workers, the County chose to have the initial monitoring for lead conducted prior to the initiation of construction activities. This report presents results of air monitoring for lead in the vicinity of an excavation made into the fill materials specifically to conduct the initial determination of lead exposure. Samples for lead were collected on October 27, 2014.

No lead was recorded in the samples above the laboratory detection limits of 0.324 $\mu g/m^3$. Also, the OSHA air action level for lead of 30 $\mu g/m^3$ was not exceeded. Therefore, because the initial monitoring did not exceed the OSHA air action level for lead, no further air monitoring during excavation and construction activities needs to be performed and no air program must be established.

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SECTION 1
INTRODUCTION

1.1 Introduction

This report presents the results of the air sampling event conducted in the proximity of excavated fill materials under the footprint of the proposed Fairfield County Jail/Public Safety Facility at 334 West Wheeling Street, Lancaster, Ohio on October 27, 2014. These efforts were conducted as a follow-up to the July 7, 2014 report, *"Limited Phase II Environmental Site Assessment for the Proposed Fairfield County Jail/Public Safety Facility"*. This report identified concentrations of lead in the fill materials that, when placed into the Adult Lead Methodology (ALM) model (USEPA, 2003 and 2009), indicated that construction worker exposure is subject to 29CFR 1926.62 (Section 5.10.3).

These OSHA regulations require that employers with workers who will be occupationally exposed to lead must determine whether an employee is exposed to levels of lead above the air action level of 30 $\mu g/m^3$. The initial determination must be made using onsite air monitoring as if the employee is not wearing a respirator. If initial monitoring shows that the action level is not exceeded, then no further air monitoring is necessary. If this initial monitoring shows that an employee may be exposed to levels of lead above the action level, then an air monitoring program and medical surveillance program must be established.

This report presents results of air monitoring for lead in the vicinity of an excavation made into the fill materials specifically to conduct the initial determination of lead exposure. Samples for lead were collected on October 27, 2014.

1.2 Site Location

The footprint of the proposed Fairfield County Jail/Public Safety Facility is situated on four irregular-shaped parcels (current tax parcel numbers 0536001800, 0536001700 (two), and 0536801700) totaling approximately 7.5 acres in size (Figure 1). The property is located within the limits of the City of Lancaster. The site is bounded on the north by West Wheeling Street. Immediately north of Wheeling Street is the Lancaster Miller Park wellfield and water treatment plant. On the west, the site is bounded by the channelized course of the Hocking River (that used to flow through the current site). On the south, the parcels are bounded by the Fairfield County Maintenance Garage (owned by the Fairfield County Commissioners), a former car wash (now owned by the Fairfield County Commissioners), Kings Furniture (property owned by Mitch and Ann D. Endick), Roger Conrad Concrete (property owned by Mary Margaret Kensler), and a billboard (property owned by Jay Nauman), which all front on Lincoln Avenue (US Route 22). On the east, the site is bounded by Memorial Drive (US Route 33), except for the corner of West Wheeling Street and Memorial Drive, which is occupied by Scotts Service Center (an automotive service station, property owned by the Fairfield Paint & Oil Company).

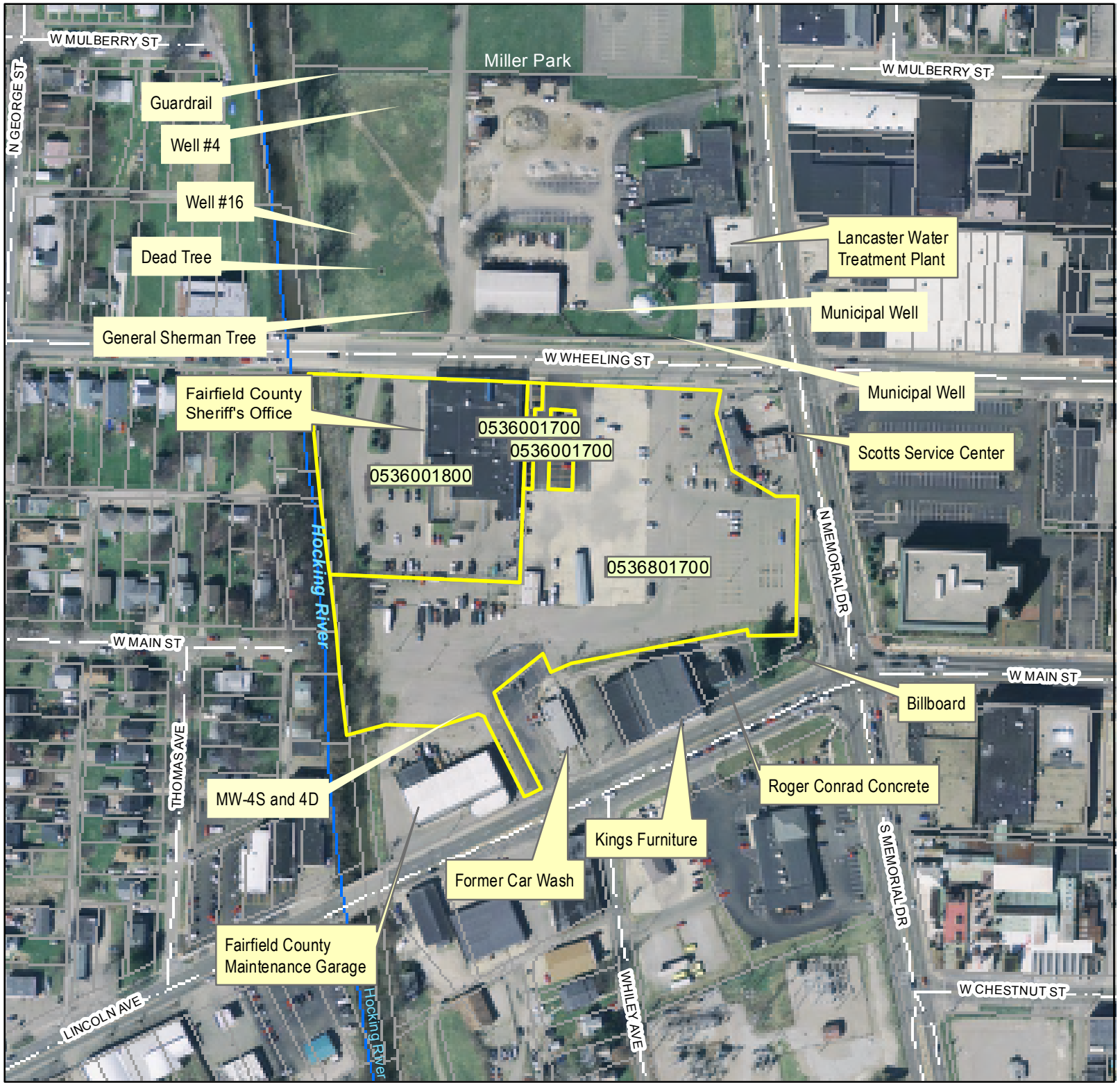


Figure 1.
Site location map of proposed Fairfield County Jail/Public Safety Facility.

N
W E
S

1 inch = 200 feet

0 50 100 200 300 Feet

As shown in Figure 1, the current Fairfield County Sheriff's Office and MSMJ occupies the northwest portion of the site. The remainder of the property is either paved or is a concrete slab where another building was previously located. Both the pavement and the concrete slab are currently used as a parking lot. South of the building, the Fairfield County Sheriff's Office has a small impound lot and a bin for recycling. Small islands of grass and trees for landscaping are present primarily to the west of the current building and along the Hocking River.

1.3 Site Conditions and Previous Investigation

As described in the July 7, 2014 report by Bennett & Williams, *"Limited Phase II Environmental Site Assessment for the Proposed Fairfield County Jail/Public Safety Facility,"* the proposed jail footprint is underlain by between 7.5 feet to 11 feet of fill materials that consist primarily of foundry sand with occasional brick fragments, glass pieces, coal, wood pieces, shale, limestone and sandstone fragments, slag metal (wire) and ceramic tile. Depths of similar fill materials in previous subsurface investigations have been reported to be between 6 and 18 feet. The proposed jail footprint is also located atop the former channel and floodplain of the Hocking River that was channelized and relocated in the late 1800s to its present position just west of the site.

During the subsurface investigation conducted by Bennett & Williams between March 20 and 31, 2014, borings were installed at ten locations and drilled to the bottom of the fill (Figure 2). Of specific importance to this investigation, during drilling, soil samples were collected for the "target analyte list" of metals using EPA analytical Methods 6010B/7471A. Analytical results of the soil for these and other analyses are presented in the July 7, 2014 report.

1.4 Scope of Work Development and Objectives

The *"Limited Phase II Environmental Site Assessment for the Proposed Fairfield County Jail/Public Safety Facility"* report by Bennett & Williams dated July 7, 2014 presented concentrations of lead measured in the fill materials. The maximum depth of excavation expected by the architects is six feet. Therefore, exposure to construction and excavation workers will be limited to the top six feet of soil. To be conservative, the risk assessment in the July 7, 2014 report included depths of fill to eight feet. Table 1 shows the location, depth and concentration of lead in soil in the top eight feet of fill.

Based on these results, it was decided to conduct the initial air monitoring for lead by excavating into the area where the highest concentrations of lead were detected under the initial building footprint. This corresponded to boring BW-1 where the concentration of lead was measured to be 1,100 mg/kg. Note that although boring BW-2 had a higher concentration of lead (1,600 mg/kg), this location is designated by the architects as an expansion area and is not slated for initial construction activities.

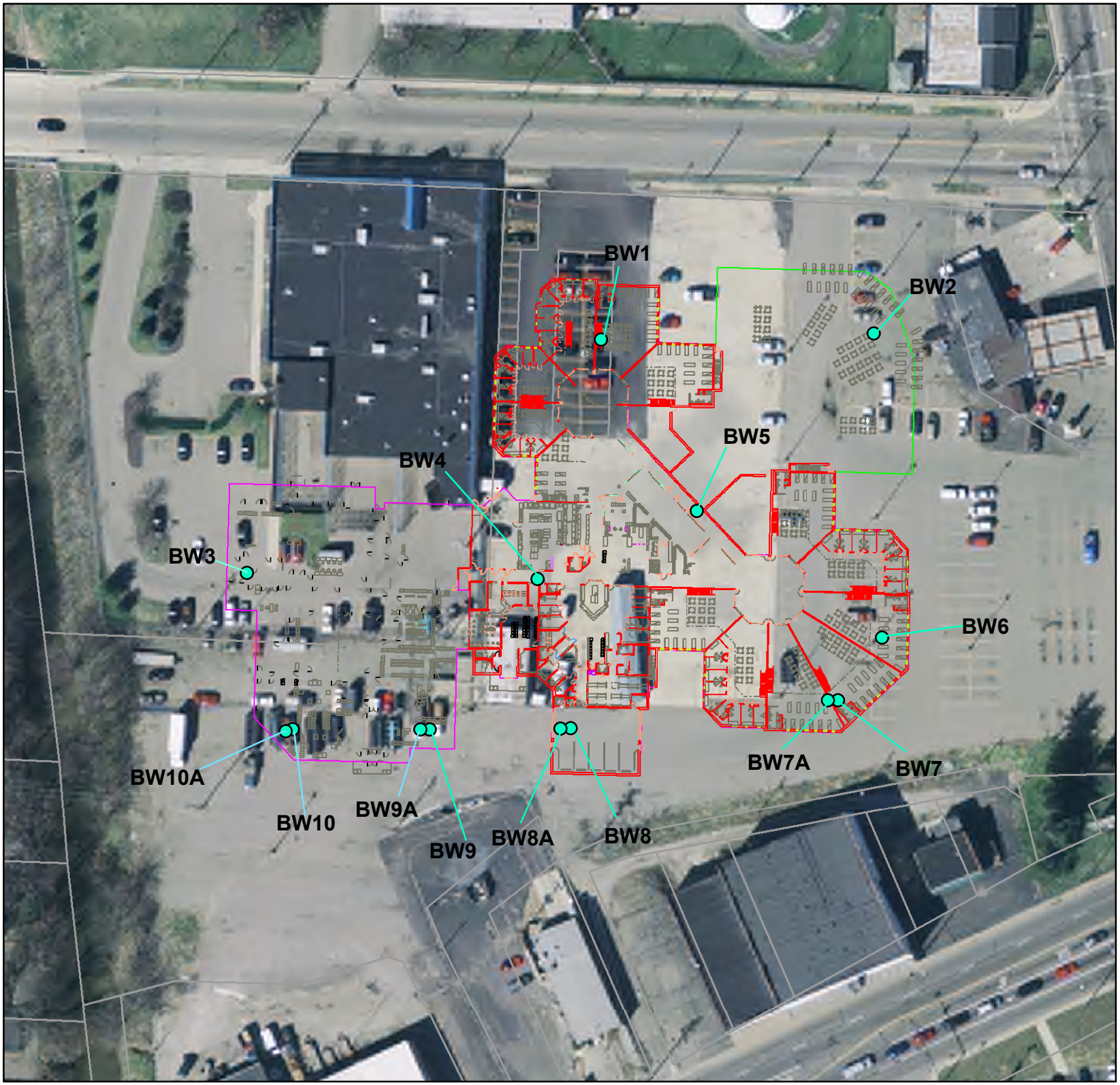


Figure 2.
Soil and groundwater sampling locations from the March 2014 subsurface investigation within the proposed building footprint (Bennett & Williams, July 7, 2014).

Table 1. Location, depth, and concentration of lead in soil in top eight feet of fill.

Boring Location	Depth Below Ground Surface (feet)	Lead Concentration in Soil (mg/kg)
BW-1	4-6	1,100
BW-2	2-4	1,600
BW-3	1.5-2.0	18
BW-3	2-4	41
BW-4	2-4	32
BW-5	1-2	25
BW-6	1-2	9.2
BW-6	4-6	14
BW-7	2-4	44
BW-7	6-8	55
BW-8	4-6	260
BW-8	6-8	230
BW-9	2-4	150
BW-10	2-4	5.9

SECTION 2
SAMPLING PROGRAM

2.1 Introduction

This section describes the sampling program conducted on October 27, 2014 at the proposed jail site and the adjacent Fairfield County Sheriff's Office and MSMJ. The sampling program consisted of air monitoring for lead for an eight hour period during which excavation activities into the fill were conducted.

On October 22, 2014, we met with representatives from Fairfield County to mark the location in the field and to discuss potential underground obstacles when excavating. The excavation was to be located coincident with prior subsurface boring BW-1. The location was marked with paint and the Ohio Utilities Protection Service (OUPS) was called. OUPS must be called at least 48 hours but no more than 10 working days (excluding weekends and legal holidays) before digging. Similar to the previous subsurface investigation at the site, OUPS informed us that their network did not include Lancaster sewer or storm lines. We used the map provided on March 18, 2014 by Jason Westfall, Industrial Pretreatment Coordinator for the City of Lancaster, to recheck for underground sewer and storm lines at the proposed subsurface soil gas probe locations. OUPS did not notify us of potential underground lines at the proposed locations. Similarly, no underground sewer and storm lines were indicated on the map from the City.

The sampling program consisted of two individuals being monitored for eight hours by wearing GilAir 5 pumps pre-calibrated by Test America for a flow rate of 2 L/min connected to a filter media canister for lead supplied by the laboratory. Temperature ranged from 46^{o}F to 77^{o}F by 2:30 in the afternoon. Wind was primarily from the south southwest at approximately 9 mph. On site efforts included simulation of work activities for an eight hour day including:

1) Removal of 4.5 to 5 inches of concrete and 1.125 feet of underlying asphalt by using a gas-powered saw to cut a 10 foot by 10 foot hole in the concrete at the location of boring BW-1. The excavation was centered north to south on the location of BW-1, and extended eight feet west and two feet east of BW-1;

2) Stockpiling of the concrete and asphalt from the saw-cut area on the undisturbed concrete;

3) Excavation of fill materials from the saw-cut area to a depth of six feet and stockpiling of the soil on the undisturbed concrete away from the stockpiled concrete and asphalt using a Kobelco Acera 80CS backhoe with a 24-inch bucket owned and operated by County personnel;

4) Once excavation was complete, walking on and excavating into the stockpiled soil to simulate working in the soil;

5) Refilling of the excavation with the fill materials by placing the fill in lifts and compacting with a vibratory compactor. Also filling of the excavation with over half of the surface concrete and asphalt;

6) Filling of the top six inches of the excavation with concrete from West Side Coal Company; and placing cones and caution tape around the fresh concrete and remaining surface concrete and asphalt pile.

On Tuesday, October 28, 2014, County employees moved the remaining surface concrete and asphalt to temporary storage on the site along the Hocking River south of the recycling area. Appendix A contains pictures of the field activities.

2.2 Sampling Activities

After the eight-hour sample collection, caps were placed on both the inlet and outlet ends of the lead filters. One field blank was collected by opening the caps on the inlet and outlet ports of a new filter and replacing the caps. Labels were attached to the filters and the filters were placed in a plastic bag that was sealed by pressing the plastic ridges together. The samples collected on October 27, 2014 were delivered to the Test America Service Center in Columbus Ohio on October 28, 2014 for shipment via Federal Express to Test America, Phoenix, Arizona for analysis.

SECTION 3
ANALYTICAL RESULTS

3.1 Introduction

The scope of work of this project was to collect initial air samples for lead representative of the exposure that a construction and excavation worker would experience when exposed to the top six feet of the fill materials. Results from lead monitoring during eight hours of excavation and manipulation of fill materials on October 27, 2014 are presented.

3.2 Results

Two samples for lead were collected from two personal air monitors during activities representative of excavation and manipulation of the top six feet of fill materials in the area indicated to have the highest concentration of lead in the subsurface beneath the proposed footprint of the proposed facility. One blank sample was also collected. The samples were analyzed using OSHA Method ID-125G. Table 2 shows the sample ID as well as the concentration of lead in the samples. The results show that lead was not detected above the laboratory reporting limit. Appendix B contains the laboratory results.

Table 2. Measured concentrations of lead in air samples.

Sample Identification	Concentration ($\mu g/m^3$)
MSB-1	<0.324
LAB-1	<0.324
BLB-1	<0.310 (µg/sample)

SECTION 4
SUMMARY AND CONCLUSIONS

Initial sampling for lead in the air was conducted in accordance with 29CFR 1926.62 (Section 5.10.3) on October 27, 2014. Two samples were collected by monitoring air with personal monitors while excavating and manipulating fill materials in the area under the footprint of the proposed Fairfield County Jail/Public Safety Facility where the highest concentrations of lead were indicated. OSHA Method ID 125G was used to analyze the samples.

No lead was recorded in the samples above the laboratory detection limits of 0.324 $\mu g/m^3$. Also, the OSHA air action level for lead of 30 $\mu g/m^3$ was not exceeded. Therefore, because the initial monitoring did not exceed the OSHA air action level for lead, no further air monitoring during excavation and construction activities needs to be performed and no air program must be established.

SECTION 5
REFERENCES

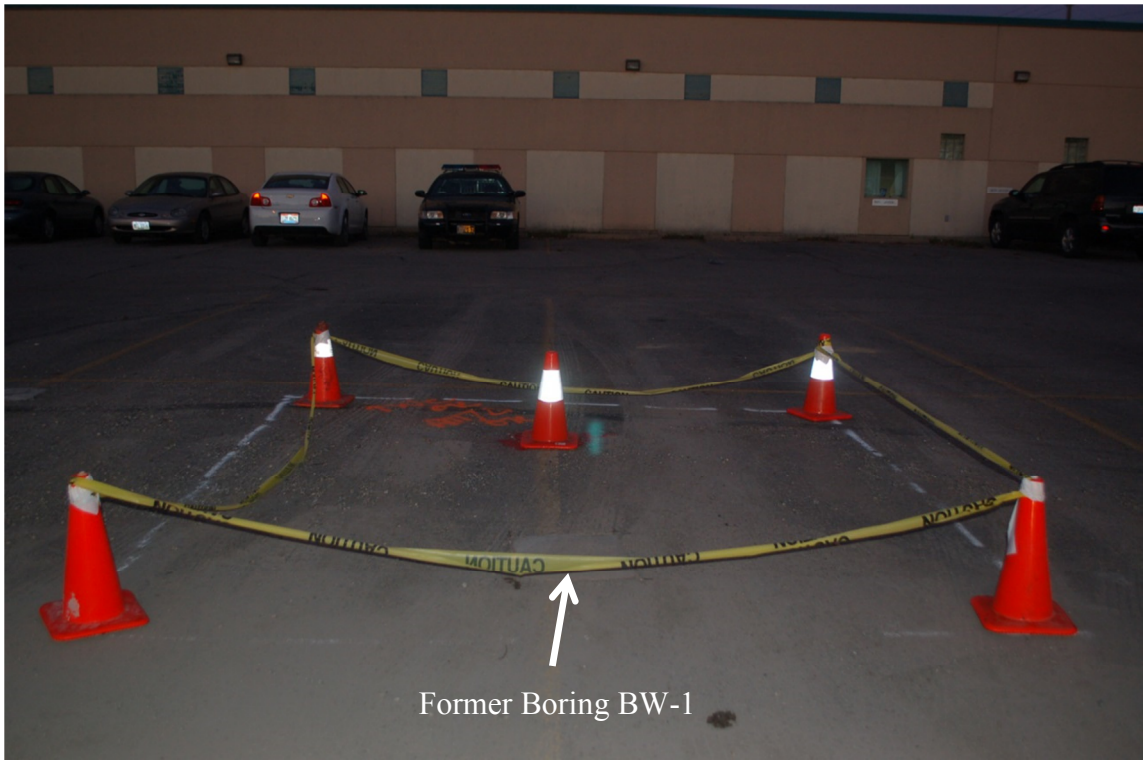
Bennett & Williams, July 7, 2014. Limited Phase II Environmental Site Assessment for the Proposed Fairfield County Jail/Public Safety Facility, 334 West Wheeling Street, Lancaster, Ohio. 601 pp.

USEPA, 2003. Recommendations of the Technical Review Workgroup for Lead for an approach to assessing risks associated with adult exposures to lead in soil. Technical Review Workgroup for Lead, EPA-540-R-03-001, 62 pp.

USEPA, 2009. Transmittal of Update of Adult Lead Methodology's default baseline blood lead concentration and geometric standard deviation parameters. Memorandum from James E. Woolford, Directorm Office of Superfund Remediation and Technology Innovation, OSWER 9200.2-82, 15 pp.

Appendix A

Photographs from Field Activities



A-1. Location of excavation coincident with former boring BW-1 prior to excavation (October 27, 2014).

A-2. Cutting concrete with gas-powered saw (October 27, 2014).

A-3. Removal of concrete and asphalt from excavation (October 27, 2014).

A-4. Surface concrete and asphalt stockpiled during excavation (October 27, 2014).

A-5. Excavation and stockpiled fill materials (October 27, 2014).

A-6. Fill material manipulation after excavation complete (October 27, 2014).

A-7. Personal monitoring equipment (October 27, 2014).

A-8. Compaction of fill materials during filling (October 27, 2014).

A-9. Surface concrete and asphalt placed in excavation (October 27, 2014).

A-10. Excavation re-filled and surrounding concrete broom cleaned (October 27, 2014).

A-11. Remaining concrete and asphalt that could not be placed in the excavation (October 27, 2014).

A-12. Filling top six inches of excavation with concrete (October 27, 2014).

A-13. Excavation filled with concrete and surrounded by cones and caution tape (October 27, 2014).

A-14. Remaining surface concrete with cones and caution tape prior to moving to western portion of the site (October 27, 2014).

Appendix B

Analytical Results of Air Samples For Lead (October 27, 2014)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Phoenix
4625 East Cotton Ctr Blvd
Suite 189
Phoenix, AZ 85040
Tel: (602)437-3340

TestAmerica Job ID: 550-34121-1
TestAmerica Sample Delivery Group: 14-04
Client Project/Site: Fairfield County

For:
Bennett & Williams Env. Consultants Inc.
98 County Line Road West
Suite C
Westerville, Ohio 43082

Attn: Ms. Linda Aller

Authorized for release by:
11/3/2014 4:53:18 PM

Carlene McCutcheon, Project Manager II
(602)659-7612
carlene.mccutcheon@testamericainc.com

Analyses included in this report were performed by TestAmerica Phoenix, 4625 E. Cotton Center Boulevard, Building 3, Suite 189, Phoenix, AZ 85040.

TestAmerica Phoenix (Lab ID 154268) is accredited by the American Industrial Hygiene Association (AIHA) in the industrial hygiene program for the analytical techniques noted on the scope of accreditation for the following methods:

NIOSH 0500, NIOSH 0600, NIOSH 1003, NIOSH 1005, NIOSH 1007, NIOSH 1010, NIOSH 1015, NIOSH 1022, NIOSH 1300, NIOSH 1400, NIOSH 1401, NIOSH 1403, NIOSH 1405, NIOSH 1450, NIOSH 1457, NIOSH 1500, NIOSH 1501, NIOSH 1550, NIOSH 1602, NIOSH 1604, NIOSH 1606, NIOSH 1609, NIOSH 1610, NIOSH 1611, NIOSH 1613, NIOSH 1615, NIOSH 2000, NIOSH 2016, NIOSH 2532, NIOSH 2546, NIOSH 2551, NIOSH 5000, NIOSH 5039, NIOSH 5503, NIOSH 5506, NIOSH 5523, NIOSH 5600, NIOSH 6006, NIOSH 6009, NIOSH 6010, NIOSH 6013, NIOSH 7300, NIOSH 7303, NIOSH 7600, NIOSH 7903, NIOSH 9100, NIOSH 9102, EPA IP-6A, EPA IP-6C, OSHA 7, OSHA 42, OSHA 47, OSHA 48, OSHA 64, OSHA 69, OSHA 111, OSHA ID-121, OSHA ID-125G, OSHA ID-140, OSHA ID-188, OSHA ID-215, OSHA 1001, OSHA 1002, OSHA 1003, OSHA 1004, OSHA 1005, OSHA 1007, OSHA 1009, OSHA 1014 and OSHA Chemical and Sampling Information for Silane. Volatile organic compounds on 3M Organic Vapor Monitors, Assay Technology Passive Monitors and SKC Passive Monitors. Formaldehyde and other aldehydes and ketones on Assay Technology passive monitor and SKC Umex 100 passive sampler by EPA TO-11A and OSHA 1007. Radiello diffusive sampler for hydrogen sulfide.

TestAmerica Phoenix also holds NELAC accreditation through the State of Oregon (AZ100001) for the analytical techniques noted on the scope of accreditation and the State of New York (11898) for NIOSH 6009, NIOSH 7300, EPA TO-10A, EPA TO-11A and EPA TO-17.

Analytical Comments:

Unless otherwise noted, all method blanks and laboratory control spikes met method and/or laboratory quality control objectives for the analyses included in this report.

Unless otherwise noted, sample results have been corrected for method blank values.

NISOH Method 7300 analyses are performed using a modified digestion procedure to eliminate the use of perchloric acid.

Carlene McCutcheon
Project Manager II
11/3/2014 4:53:18 PM

Table of Contents

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 550-34121-1

Laboratory: TestAmerica Phoenix

Narrative

Job Narrative
550-34121-1

Comments
No additional comments.

Receipt
The samples were received on 10/29/2014 9:30 AM; the samples arrived in good condition. The temperature of the cooler at receipt was 20.0º C.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Industrial Hygiene
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Bennett & Williams Env. Consultants Inc.
Project/Site: Fairfield County

TestAmerica Job ID: 550-34121-1
SDG: 14-04

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-34121-1	MSB-1	Air	10/27/14 00:00	10/29/14 09:30
550-34121-2	LAB-1	Air	10/27/14 00:00	10/29/14 09:30
550-34121-3	BLB-1	Air	10/27/14 00:00	10/29/14 09:30

Detection Summary

Client: Bennett & Williams Env. Consultants Inc.
Project/Site: Fairfield County

TestAmerica Job ID: 550-34121-1
SDG: 14-04

Client Sample ID: MSB-1 — Lab Sample ID: 550-34121-1

No Detections.

Client Sample ID: LAB-1 — Lab Sample ID: 550-34121-2

No Detections.

Client Sample ID: BLB-1 — Lab Sample ID: 550-34121-3

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Bennett & Williams Env. Consultants Inc.
Project/Site: Fairfield County

TestAmerica Job ID: 550-34121-1
SDG: 14-04

Client Sample ID: MSB-1

Lab Sample ID: 550-34121-1

Date Collected: 10/27/14 00:00
Matrix: Air
Date Received: 10/29/14 09:30
Sample Air Volume: 957.168 L
Sample Container: IH - MCE, 0.8 micron, 37-mm Filter

Method: OSHA ID-125G - Metals (ICP)

Analyte	Result ug/Sample	Result ug/m3	Result	Qualifier	RL ug/Sample	Prepared	Analyzed	Dil Fac
Lead	<0.310	<0.324			0.310	10/29/14 12:44	10/30/14 10:12	1

Client Sample ID: LAB-1

Lab Sample ID: 550-34121-2

Date Collected: 10/27/14 00:00
Matrix: Air
Date Received: 10/29/14 09:30
Sample Air Volume: 958.224 L
Sample Container: IH - MCE, 0.8 micron, 37-mm Filter

Method: OSHA ID-125G - Metals (ICP)

Analyte	Result ug/Sample	Result ug/m3	Result	Qualifier	RL ug/Sample	Prepared	Analyzed	Dil Fac
Lead	<0.310	<0.324			0.310	10/29/14 12:44	10/30/14 10:15	1

Client Sample ID: BLB-1

Lab Sample ID: 550-34121-3

Date Collected: 10/27/14 00:00
Matrix: Air
Date Received: 10/29/14 09:30
Sample Air Volume: 0 L
Sample Container: IH - MCE, 0.8 micron, 37-mm Filter

Method: OSHA ID-125G - Metals (ICP)

Analyte	Result ug/Sample	Result	Result	Qualifier	RL ug/Sample	Prepared	Analyzed	Dil Fac
Lead	<0.310				0.310	10/29/14 12:44	10/30/14 10:18	1

Client: Bennett & Williams Env. Consultants Inc.
Project/Site: Fairfield County

TestAmerica Job ID: 550-34121-1
SDG: 14-04

Method: OSHA ID-125G - Metals (ICP)

Lab Sample ID: MB 550-48201/1-A
Matrix: Air
Analysis Batch: 48327

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48201

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Lead	<0.310		0.310		ug/Sample		10/29/14 12:44	10/30/14 09:38	1

Lab Sample ID: LCS 550-48201/2-A
Matrix: Air
Analysis Batch: 48327

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48201

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			25.0	23.77		ug/Sample		95	80 - 120		

Lab Sample ID: LCSD 550-48201/3-A
Matrix: Air
Analysis Batch: 48327

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48201

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead			25.0	24.21		ug/Sample		97	80 - 120	2	20

QC Association Summary

Client: Bennett & Williams Env. Consultants Inc.
Project/Site: Fairfield County

TestAmerica Job ID: 550-34121-1
SDG: 14-04

IH - Metals

Prep Batch: 48201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-34121-1	MSB-1	Total/NA	Air	Filter Prep	
550-34121-2	LAB-1	Total/NA	Air	Filter Prep	
550-34121-3	BLB-1	Total/NA	Air	Filter Prep	
LCS 550-48201/2-A	Lab Control Sample	Total/NA	Air	Filter Prep	
LCSD 550-48201/3-A	Lab Control Sample Dup	Total/NA	Air	Filter Prep	
MB 550-48201/1-A	Method Blank	Total/NA	Air	Filter Prep	

Analysis Batch: 48327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-34121-1	MSB-1	Total/NA	Air	OSHA ID-125G	48201
550-34121-2	LAB-1	Total/NA	Air	OSHA ID-125G	48201
550-34121-3	BLB-1	Total/NA	Air	OSHA ID-125G	48201
LCS 550-48201/2-A	Lab Control Sample	Total/NA	Air	OSHA ID-125G	48201
LCSD 550-48201/3-A	Lab Control Sample Dup	Total/NA	Air	OSHA ID-125G	48201
MB 550-48201/1-A	Method Blank	Total/NA	Air	OSHA ID-125G	48201

Lab Chronicle

Client: Bennett & Williams Env. Consultants Inc.
Project/Site: Fairfield County

TestAmerica Job ID: 550-34121-1
SDG: 14-04

Client Sample ID: MSB-1

Lab Sample ID: 550-34121-1

Date Collected: 10/27/14 00:00

Matrix: Air

Date Received: 10/29/14 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Filter Prep			48201	10/29/14 12:44	SGO	TAL PHX
Total/NA	Analysis	OSHA ID-125G		1	48327	10/30/14 10:12	AJC	TAL PHX

Client Sample ID: LAB-1

Lab Sample ID: 550-34121-2

Date Collected: 10/27/14 00:00

Matrix: Air

Date Received: 10/29/14 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Filter Prep			48201	10/29/14 12:44	SGO	TAL PHX
Total/NA	Analysis	OSHA ID-125G		1	48327	10/30/14 10:15	AJC	TAL PHX

Client Sample ID: BLB-1

Lab Sample ID: 550-34121-3

Date Collected: 10/27/14 00:00

Matrix: Air

Date Received: 10/29/14 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Filter Prep			48201	10/29/14 12:44	SGO	TAL PHX
Total/NA	Analysis	OSHA ID-125G		1	48327	10/30/14 10:18	AJC	TAL PHX

Laboratory References:

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Certification Summary

Client: Bennett & Williams Env. Consultants Inc.
Project/Site: Fairfield County

TestAmerica Job ID: 550-34121-1
SDG: 14-04

Laboratory: TestAmerica Phoenix

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
AIHA-LAP, LLC	IHLAP		154268	07-01-15

Method Summary

Client: Bennett & Williams Env. Consultants Inc.
Project/Site: Fairfield County

TestAmerica Job ID: 550-34121-1
SDG: 14-04

Method	Method Description	Protocol	Laboratory
OSHA ID-125G	Metals (ICP)	OSHA	TAL PHX

Protocol References:

OSHA = OSHA Analytical Methods Manual, Occupational Safety And Health Administration.

Laboratory References:

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.; Phoenix Laboratory - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 602.437.3340 Fax 602.454.9303
www.testamericainc.com or Call 1.866.772.5227

11/3/2014

Lab Number: 550-34121

Company: Bennett & Williams Environmental Consultants		Page 1 of 1	
Contact Name: LINDA ALLER		Sampler Name and Phone Number: LINDA ALLER/MATTHEW SWARTZ (614)361-0153	
E-Mail Address: laller@bennettandwilliams.com	Phone: 614-361-0153	Project Name: Fairfield County	
Address: 98 County Line Rd. West, Suite C		Project Number: 14-04	
City, State, Zip: Westerville, Ohio 43082		P.O. Number:	Data Package:
Send Report To: LINDA ALLER	Phone: 614-361-0153	Hardcopy Results: Y (N)	Standard Level II:
E-Mail Address: laller@bennettandwilliams.com		E-Mail Results: (Y) N	Level III:
Send Invoice To: LINDA ALLER	Phone: (614)361-0153	EDD: Y N	Level IV:
E-Mail Address: laller@bennettandwilliams.com			

Sample Receipt

Temperature 20 °C / AMB
Sample Seals Intact: Yes ~~X~~ No
Sample Seals Intact: Yes — No
Total # of Samples: 3

Turn Around Request

_____ Same Day _____ 3 Business Days
_____ 1 Business Day _____ 4 Business Days
_____ 2 Business Days _____ 5 Business Days (Standard)

Rushes are subject to availability. (Surcharges apply)

550-34121 Chain of Custody

Sample Information

Lab # (Internal Use Only)	Media Type: Filter, Passive Badge, Tube or Wipe	Pump ID Number	Flow Rate (Liters/minute)	Sample Identification Name/Number	Collection Date	Start Time	Stop Time	Total Minutes Sampled (Badge Only)	Total Volume (Liters)	Area Wiped in cm2	Sampling Temperature (°C)	Sampling Pressure (mmHg)	Analysis Method(s)/Analyte(s): OSHA 1256 - lead only	*Spoke w/ Kiley Emily about this method (same NIOSH 7300)
-01	Filter	TA204	1.9941	MSB-1	10/27/14	8:44A	4:44p	480	957.168	—	—	—	X	
-02	Filter	TA 002	1.9963	LAB-1	10/27/14	8:44A	4:44p	480	958.224	—	—	—	X	
-03	Filter	—	—	BLB-1	10/27/14	4:59p	4:59p	—	—	—	—	—	X	

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Columbus

240507

Instructions / Special Requirements:

Date:	Time:	Samples Relinquished By:	Received By:
10/28/14	9:18a	Linda K. Aller	Gina Rivera 10-28-14 9:18
10-28-14	15:30	Gina Rivera	
10/29/14	9:30	Fed Ex	

Login Sample Receipt Checklist

Client: Bennett & Williams Env. Consultants Inc.

Job Number: 550-34121-1
SDG Number: 14-04

Login Number: 34121
List Number: 1
Creator: Gravlin, Andrea

List Source: TestAmerica Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	Check done at department level as required.

Measurement Uncertainty Summary

Client: Bennett & Williams Env. Consultants Inc.
Project/Site: Fairfield County

TestAmerica Job ID: 550-34121-1
SDG: 14-04

Analysis Method	Prep Method	Analyte	Percent Uncertainty (+/-)
OSHA ID-125G	Filter Prep	Lead	6.7

The uncertainty values represent an expanded uncertainty using a coverage factor of K = 2 to approximate a 95% confidence interval.